

CENSUS OF IRRIGATION—TEXAS

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	GULF OF MEXICO								
		Rio Grande River					Guadalupe River			
		Total	Total	Direct	Pecos River	Baffins Bay	Nueces River	Total	Direct	San Antonio River
ENTERPRISES AND IRRIGATION WORKS JANUARY 1										
1 Enterprises.....1940..number.....	4,040	4,037	649	520	129	50	569	259	131	128
2 Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	439	439	1,246	1,313	976	25	131	242	134	351
3 Diversion dams.....1940..total number.....	244	243	132	70	62	.....	26	18	12	6
4 1930..total number.....	107	107	40	16	19	.....	17	4	.....	4
5 1920..total number.....	165	165	44	11	26	.....	54	4	.....	4
6 (a) Concrete and masonry.....1940..number.....	76	78	38	9	27	.....	5	5	.....	5
7 (b) Timber.....1940..number.....	4	4	.....	.....	.....	.....	.....	.....	.....	.....
8 (c) Earth and rock.....1940..number.....	136	135	85	53	32	.....	9	12	12	.....
9 (d) Other, mixed, and not reported.....1940..number.....	28	28	11	8	3	.....	12	1	.....	1
10 Main canals and laterals.....1940..total length, miles.....	5,936.1	5,936.1	3,407.7	2,921.7	486.0	3.0	68.1	377.1	65.1	312.0
11 1930..total length, miles.....	4,879	4,879	3,096	2,496	413	.....	54	285	.....	285
12 1920..total length, miles.....	4,473	4,473	2,312	1,640	570	.....	138	142	.....	142
13 (a) Earth.....1940..length, miles.....	4,944	4,944	2,450	2,021	429	3	65	369	65	304
14 (b) Lined.....1940..length, miles.....	992.1	992.1	957.7	900.7	57.0	.....	3.1	8.1	0.1	8.0
15 1940..capacity, c.f.s. ²	24,813	24,808	14,701	10,552	4,049	6	412	772	230	542
16 1930..capacity, c.f.s. ²	21,626	21,626	12,669	10,218	1,903	.....	45	711	.....	711
17 1920..capacity, c.f.s. ²	23,261	23,261	12,530	9,319	2,725	.....	163	1,782	.....	1,782
18 Pipe lines ³.....1940..total length, miles.....	923.1	923.1	742.0	704.6	37.4	3.7	21.8	42.9	24.6	18.3
19 1930..total length, miles.....	319.0	319.0	273.6	264.9	0.1	.....	8.1	6.6	.....	6.6
20 1920..total length, miles.....	157.1	157.1	41.1	40.5	0.6	.....	92.6	10.9	.....	10.9
21 (a) Concrete.....1940..length, miles.....	655.4	655.4	639.3	638.3	1.0	3.3	1.1	5.9	1.7	4.2
22 (b) Metal.....1940..length, miles.....	204.0	204.0	50.1	43.7	6.4	0.2	20.2	35.4	22.4	13.0
23 (c) Wood-stave.....1940..length, miles.....	22.2	22.2	19.6	19.6	.....	.....	0.4	1.1	.....	1.1
24 (d) Other.....1940..length, miles.....	41.5	41.5	33.0	3.0	30.0	0.2	0.1	0.5	0.6	.....
25 Storage dams.....1940..total number.....	194	193	59	53	6	.....	19	6	.....	6
26 1930..total number.....	168	168	41	34	4	.....	30	4	.....	4
27 1920..total number.....	134	134	39	16	9	.....	28	10	.....	10
28 (a) Concrete and masonry.....1940..number.....	47	47	5	2	3	.....	6	3	.....	3
29 (b) Earth and rock.....1940..number.....	134	134	51	49	2	.....	11	3	.....	3
30 (c) Other, mixed, and not reported.....1940..number.....	13	12	3	2	1	.....	2	.....	.....	.....
31 Reservoirs.....1940..total number.....	542	541	112	85	27	14	227	17	3	14
32 (a) 1-99 acre-feet capacity.....1940..number.....	462	461	66	45	21	14	219	13	3	10
33 (b) 100-999 acre-feet capacity.....1940..number.....	38	38	20	19	1	.....	2	.....	.....	.....
34 (c) 1,000 and over acre-feet capacity.....1940..number.....	42	42	26	21	5	.....	6	4	.....	4
35 1940..total capacity, ac.-ft. ⁴	1,405,024	1,405,023	404,251	93,163	311,088	13	21,872	260,613	30	260,583
36 1930..total capacity, ac.-ft. ⁴	325	325	74	64	5	.....	163	13	.....	13
37 1920..total capacity, ac.-ft. ⁴	935,065	935,065	52,572	21,280	30,688	.....	6,840	263,281	.....	263,281
38 Wells, flowing.....1940..number.....	100	100	25	3	22	.....	37	27	1	26
39 1930..number.....	61	61	11	.....	11	.....	30	6	.....	6
40 1920..number.....	135	135	15	.....	14	.....	81	25	.....	25
41 1940..yield, g.p.m. ⁵	39,508	39,508	8,165	155	8,010	.....	15,970	14,993	(b)	14,078
42 1930..yield, g.p.m. ⁵	36,020	36,020	16,000	.....	15,000	.....	16,173	3,580	.....	3,580
43 1920..yield, g.p.m. ⁵	62,364	62,364	9,110	.....	9,050	.....	26,005	15,465	.....	15,465
44 Wells, pumped.....1940..number.....	3,396	3,396	214	137	77	53	499	176	83	93
45 1930..number.....	1,102	1,102	50	3	23	.....	407	27	.....	27
46 1920..number.....	901	901	49	5	42	.....	275	43	.....	43
47 1940..yield, g.p.m. ⁵	2,213,230	2,213,230	103,447	80,561	22,886	8,922	179,010	126,698	62,440	44,240
48 1930..yield, g.p.m. ⁵	614,395	614,395	16,283	2,320	10,275	.....	165,378	16,947	.....	16,947
49 1920..yield, g.p.m. ⁵	556,565	556,565	23,872	2,025	21,509	.....	72,937	12,864	.....	12,864
50 Pumping plants.....1940..total number.....	4,674	4,674	809	722	87	58	690	262	144	118
51 1930..total number.....	1,828	1,828	279	216	26	.....	445	39	.....	39
52 Prime movers.....1940..capacity, hp.....	195,061	195,061	40,786	39,777	1,009	546	13,663	5,268	3,888	1,380
53 1930..capacity, hp.....	95,933	95,933	38,986	37,142	369	.....	12,553	982	.....	982
54 1920..capacity, hp.....	80,511	80,511	22,560	21,770	719	.....	6,533	1,459	.....	1,459
55 (a) Electric.....1940..number.....	834	834	168	131	5	.....	131	21	.....	21
56 1940..capacity, hp.....	46,674	46,674	8,543	8,494	49	40	3,033	1,737	1,079	658
57 (b) Internal-combustion.....1940..number.....	3,314	3,314	534	496	38	36	517	176	112	64
58 1940..capacity, hp.....	124,889	124,889	21,220	20,418	802	464	10,521	3,512	2,796	716
59 (c) Other.....1940..number.....	526	526	107	62	45	17	32	15	11	4
60 1940..capacity, hp.....	23,498	23,498	11,023	10,665	158	42	109	19	13	6
61 Pumps.....1940..total number.....	4,754	4,754	838	754	84	58	690	260	143	117
62 1930..number.....	2,028	2,028	358	282	35	.....	485	42	.....	42
63 1920..number.....	1,641	1,641	232	172	53	.....	342	80	.....	80
64 1940..capacity, g.p.m. ⁵	9,916,225	9,916,225	4,122,466	4,088,747	33,719	10,900	348,102	214,308	156,247	56,061
65 1930..capacity, g.p.m. ⁵	6,494,999	6,494,999	3,325,623	3,077,125	14,100	.....	217,182	34,267	.....	34,267
66 1920..capacity, g.p.m. ⁵	6,825,998	6,825,998	2,414,876	2,383,251	28,253	.....	160,472	31,039	.....	31,039
67 (a) Centrifugal.....1940..number.....	1,604	1,604	551	534	17	8	243	155	78	77
68 1940..capacity, g.p.m. ⁵	6,795,725	6,795,725	3,532,580	3,516,850	15,730	3,370	192,825	147,398	109,903	37,485
69 1940..average capacity, g.p.m. ⁵	4,237	4,237	6,411	6,586	925	421	794	951	1,409	487
70 (b) Turbine.....1940..number.....	2,215	2,215	112	92	20	8	305	47	27	20
71 1940..capacity, g.p.m. ⁵	2,622,843	2,622,843	144,950	129,600	15,450	2,075	141,763	64,400	44,600	19,800
72 1940..average capacity, g.p.m. ⁵	1,184	1,184	1,294	1,408	772	259	465	1,370	1,652	990
73 (c) Plunger.....1940..number.....	791	791	97	53	44	27	120	54	35	19
74 1940..capacity, g.p.m. ⁵	42,715	42,715	1,416	1,047	369	8,036	2,090	1,323	761	761
75 1940..average capacity, g.p.m. ⁵	54	54	15	20	8	112	71	39	38	40
76 (d) Other.....1940..number.....	144	144	78	75	3	15	22	4	3	1
77 1940..capacity, g.p.m. ⁵	464,942	464,942	443,520	441,350	2,170	2,419	4,976	420	415	(b)
78 Pumping lift, from all sources.....1940..average, feet.....	69	69	51	41	108	44	59	49	60	34
79 1930..average, feet.....	55	55	49	50	45	.....	97	32	.....	32
80 1920..average, feet.....	45	45	50	50	53	.....	47	39	.....	39
81 from pumped wells.....1940..average, feet.....	82	82	99	89	117	43	67	55	78	36
82 from surface sources.....1940..average, feet.....	27	27	22	22	32	66	37	35	37	29

¹ Data for unidentified basins for the 1930 and 1920 Censuses are included only in State totals.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.

CENSUS OF IRRIGATION - TEXAS

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WORKS, 1940, 1930, AND 1920

GULF OF MEXICO--Continued																					INDE- PEND- ENT BASIN						
Colorado River			Drazos River			San Jacinto River	Trinity River	Sabine River			Mississippi River					Red River	Sacramento-Salt Lakes										
Total	Direct	Llano River	Total	Direct	Little River			Total	Direct	Neches River	Total	Arkansas River															
												Canadian River															
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)							
472	391	81	1,050	1,044	6	42	71	38	6	32	817	66	34	12	20	751	3	1									
368	442	10	253	255	15	345	972	2,317	3,029	2,184	260	58	55	128	22	278	9	2									
41	39	2	15	15			5	2		2	4	2	2			2	1	3									
15			2				1	1	4		3	1						4									
46											13					13		5									
27	27		2	2							1	1	1					6									
4	4																	7									
7	5	2	13	13			5	2		2	2					2	1	8									
3	3										1	1	1					9									
664.0	661.8	2.2	161.8	151.8			486.0	465.6	117.0	348.6	312.2	12.2	8.2		4.0	300.0		10									
731			42				61	235	15	220	201	2				109		11									
963			206				179	182	75	117	101	4				127		12									
644	643	1	151	151			486	465	117	348	311	12	8		4	299		13									
20.0	18.6	1.2	0.8	0.8			0.6	0.6		0.6	1.2	0.2	0.2			1.0		14									
3,100	3,054	46	1,099	1,096	3		1,203	2,399	261	2,138	1,116	34	16		18	1,082	5	15									
1,791			393				2,297	1,178	106	1,072	1,016	16				1,000		16									
3,925			287				1,022	1,861	481	1,380	113	4				109		17									
38.4	28.7	9.7	14.0	13.0	1.0	2.1	46.0	0.3	0.1	0.2	11.9	7.1	1.5		5.6	4.8		18									
7.9			6.1				9.2	0.4	0.4		0.6					0.6		19									
8.5			2.2				1.5				0.2							20									
2.9	2.9		0.9	0.7	0.2		2.0											21									
29.4	19.8	9.6	12.6	11.8	0.8	2.1	44.0	0.1	0.1		9.9	6.1	1.5		4.6	3.8		22									
0.1		0.1									1.0					1.0		23									
6.0	6.0		0.5	0.5				0.2		0.2	1.0	1.0			1.0			24									
53	50	3	25	24	1	2	5	1	1		23	15	9		6	8	1	25									
53			20				2				4	1				3		26									
53			2				1				2					2		27									
27	27		6	6														28									
25	22	3	18	17	1	2	5	1	1		18	10	9		1	8		29									
1	1		1	1							5	5			5		1	30									
87	60	7	44	43	1	4	11	1	1		44	17	9		8	27	1	31									
57	51	6	41	40	1	4	4	1	1		42	17	9		8	25	1	32									
8	8		2	2			6											33									
2	1	1	1				1				2					2		34									
8,296	4,296	4,000	3,041	3,037	(5)	8	25,215	(5)	(5)		681,709	44	29		15	681,685	(5)	35									
33			20				1				4	1				3		36									
8,828			3,534								600,002	1				600,001		37									
9	2	7	1	1							1					1		38									
13			1															39									
3			3								2					(5)	2	40									
742	(5)	142	(5)	(5)							(5)					(5)		41									
1,255			72															42									
5,400			3,500								2,500					2,500		43									
270	228	42	1,137	1,134	3	52	88	3	1	2	904	73	33	16	24	831		44									
117			171				65				70	9				61		45									
57	150		150								49	3				46		46									
37,555	36,333	1,222	942,099	941,959	140	67,336	13,205	530	(5)	(5)	734,428	24,451	8,117	13,300	3,034	709,877		47									
28,143			121,854				9,772				59,800	1,060				58,740		48									
30,637			136,332								49,760	2,000				47,760		49									
507	435	72	1,201	1,195	6	54	108	61	8	53	934	77	34	10	27	867		50									
374			212				60	7	4	3	72	9				63		51									
18,760	18,440	310	54,435	54,398	37	2,564	8,746	10,295	1,629	8,666	40,008	1,072	380	567	125	38,936		52									
17,507			8,829				2,461	2,887	361	2,526	2,438	125				2,313		53									
13,500			6,276				7,688	7,705	1,856	5,850	3,495	115				3,380		54									
90	90		115	111	4	33	37				184	14	11		3	170		55									
12,855	12,858		7,840	7,823	17	1,619	3,960				7,044	177	138		39	6,867		56									
305	274	31	985	983	2	20	62	40	8	32	639	30	13	14	3	609		57									
4,592	4,325	267	46,404	46,384	(5)	944	686	3,742	1,629	2,113	32,804	853	223	565	70	31,946		58									
112	71	41	101	101			9	21		21	111	33	10	2	21	78		59									
1,300	1,267	43	191	191		(5)	4,100	6,553		6,553	160	37	19	(5)	16	123		60									
545	462	83	1,200	1,194	6	52	110	62	8	54	939	78	36	17	25	861		61									
414			219				69	17	4	13	75	9				66		62									
359			175				39	16	16	23	63	3				60		63									
1,113,973	1,397,942	16,031	1,445,574	1,444,414	1,160	67,936	490,010	1,051,299	49,119	1,002,180	751,657	25,284	8,716	13,305	3,283	726,373		64									
1,308,649			208,075				326,717	421,587	26,500	395,087	59,954	1,060				58,894		65									
912,048			153,585				445,100	2,116,500	187,000	1,929,500	52,280	2,000				50,280		66									
278	258	20	184	160	4	3	94	48	8	40	60	14	9	3	2	46		67									
1,225,510	1,209,800	15,810	554,498	553,448	1,050	1,150	488,360	611,269	49,119	562,150	38,635	4,065	1,845	1,700	(5)	34,600		68									
4,409	4,689	790	3,381	3,459	262	363	5,195	12,735	5,440	14,054	280	205	587	(5)		752		69									
25	25		905	904	1	46	1				752	27	11	12	4	725		70									
169,010	169,010		886,440	886,350	(5)	68,715	(5)	440,000		440,000	707,100	20,675	6,475	11,550	2,680	686,515		71									
6,500	6,500		979	980	(5)	1,450	(5)	36,667		36,667	940	766	569	962	682	947		72									
234	192	42	124	123			9	2		2	123	37	16	2	19	86		73									
17,739	17,534	205	3,354	3,314	(5)	(5)	770	(5)	(5)	(5)	5,757	544	396	(5)	93	5,213		74									
76	81	5	27	27	(5)	(5)	58	(5)	(5)	(5)	47	15	25	(5)	5	61		75									
7	6	1	7	7												4		76									
1,614	1,598	(5)	1,302	1,302	(5)	(5)	580				45					45		77									
43	42	52	85	85	40	76	24	12	7	13	94	93	87	50	139	95		78									
38			54				19	35	12	65	64	200				45		79									
30			63				34	18	14	24	81	80				81		80									
63	62	63	86	86	57	76	22	12	(5)	(5)	96	99	100	50	146	96		81									
26	26	31	23	24	14		27	12	8	12	28	13	14		10	33		82									

*Total capacity of all reservoirs regardless of size

CENSUS OF IRRIGATION - TEXAS

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)		STATE TOTAL	Armstrong	Atascosa	Bailey	Bandera
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*						
1	All farms.....1940..number.....	418,002	408	2,020	820	650
2	.....1930..number.....	495,459	472	1,818	758	574
3	Irrigated farms.....1940..number.....	19,568	6	168	247	8
4	.....1930..number.....	10,861	.....	45	17	6
5	Increase or decrease (-), 1930-1940.....percent.....	80.2	.....	268.9	(1)	33.3
6	Operated by—					
7	(a) Owners and managers.....1940..number.....	12,181	5	60	138	7
8	.....1930..number.....	6,056	.....	29	13	.....
9	(b) Tenants.....1940..number.....	7,387	1	108	109	1
10	.....1930..number.....	4,805	.....	18	4	.....
11	Land in all farms.....1940..acres.....	137,683,372	2 810,482	700,078	452,350	470,042
12	Land in irrigated farms.....1940..acres.....	11,519,780	9,894	8,900	96,302	14,676
13	Average per farm.....1940..acres.....	594	1,614	54	390	1,835
14	(a) Operated by owners and managers.....1940..acres.....	9,572,335	(3)	5,800	53,609	(5)
15	Average per farm.....1940..acres.....	794	(3)	18	425	(5)
16	(b) Operated by tenants.....1940..acres.....	1,947,445	(3)	3,010	37,693	(5)
16	Average per farm.....1940..acres.....	254	(3)	28	346	(5)
17	Approximate land area.....1940..acres.....	168,732,160	581,760	771,840	532,480	480,600
IRRIGATED AND IRRIGABLE AREAS						
18	Area irrigated.....1939..acres.....	1,045,224	535	2,321	5,840	12
19	(a) Cropland harvested.....1939..acres.....	961,765	434	2,164	5,661	8
20	(b) Crop failure.....1939..acres.....	12,589	99	40	29	.....
21	(c) Pasture.....1939..acres.....	70,870	2	117	159	4
22	Area irrigated.....1929..acres.....	798,917	.....	1,452	597	.....
23	.....1919..acres.....	586,120	.....	2,312	2,195	.....
24	Increase or decrease (-), 1929-1939.....percent.....	30.8	.....	58.8	879.7	.....
25	Irrigable area in enterprises.....1940..acres.....	2,180,796	697	3,320	9,824	21
26	.....1930..acres.....	1,666,676	.....	2,370	2,525	.....
27	.....1920*..acres.....	1,687,447	.....	6,445	4,680	.....
28	Excess of irrigable area over the area irrigated.....1940..acres.....	1,135,572	162	999	3,975	9
29	.....1930..acres.....	767,959	.....	918	1,928	.....
30	Area works were capable of supplying with water.....1940..acres.....	1,773,812	656	3,320	9,814	21
31	.....1930..acres.....	1,777,415	.....	2,256	2,525	.....
32	.....1920..acres.....	1,150,542	.....	4,067	3,555	.....
33	Increase or decrease (-), 1930-1940.....percent.....	50.7	.....	47.2	288.7	.....
34	Excess, capability of works over area irrigated.....1940..acres.....	728,588	121	999	3,965	9
35	.....1930..acres.....	378,498	.....	804	1,928	.....
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent.....	9.0	5.5	26.1	6.1	0.1
37	.....1929..percent.....	42.1	.....	22.3	11.9	.....
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	58.9	81.6	69.9	59.6	57.1
39	.....1929..percent.....	67.9	.....	64.4	23.6	.....
CAPITAL INVESTED TO JANUARY 1						
40	Total investment in all enterprises.....1940..dollars.....	66,441,376	9,886	111,477	96,766	800
41	(a) Cost of irrigation works and equipment.....1940..dollars.....	65,684,261	9,886	111,477	96,766	800
42	(b) Investment in water rights (reported).....1940..dollars.....	557,115	.....	.....	.....	.....
43	Total investment in all enterprises.....1930..dollars.....	49,022,164	.....	187,815	30,100	.....
44	.....1920..dollars.....	35,072,739	.....	142,168	73,900	.....
45	Increase or decrease (-), 1930-1940.....percent.....	35.5	.....	-10.6	221.5	.....
46	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars.....	37.46	.....	33.58	9.86	38.10
47	.....1930..dollars.....	41.81	.....	83.25	11.92	.....
48	.....1920..dollars.....	30.48	.....	34.96	20.79	.....
49	Average investment per acre irrigated.....1939..dollars.....	53.57	18.44	48.03	16.54	56.67
50	Estimated final investment in existing enterprises.....1940..dollars.....	67,319,032	10,366	111,477	99,463	800
51	.....1930..dollars.....	59,556,624	.....	199,815	30,100	.....
52	.....1920..dollars.....	39,860,871	.....	146,218	73,900	.....
53	Increase or decrease (-), 1930-1940.....percent.....	13.0	.....	-44.2	230.5	.....
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars.....	30.87	.....	33.58	10.13	.....
55	.....1930..dollars.....	38.01	.....	84.31	11.92	.....
56	.....1920*..dollars.....	23.62	.....	22.69	15.78	.....
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
		Primary	Supplemental			
		Enterprises				
57	Enterprises reporting maintenance and operation.....1939..number.....	3,299	18	5	46	4
58	Area irrigated in these enterprises.....1939..acres.....	1,002,202	51,197	535	2,064	12
59	Cost of maintenance and operation.....1939..dollars.....	3,885,224	32,666	1,073	7,765	97
60	Average cost, per acre irrigated.....1939..dollars.....	3.86	0.64	2.01	3.76	8.08
61	.....1929..dollars.....	4.74	.....	.....	5.12	4.93
62	Total annual charges (reported) ⁵.....1939..dollars.....	3,855,789	230,915	.....	2,838	.....
63	Average annual charge per acre irrigated.....1939..dollars.....	5.61	4.69	.....	4.62	.....
64	Area against which charges were assessed.....1939..acres.....	1,087,092	165,650	.....	749	.....
65	Average annual charge per acre assessed.....1939..dollars.....	3.55	1.39	.....	3.79	.....
66	Total charges collected ⁵.....1939..dollars.....	3,671,948	58,500	.....	625	.....
67	Indebtedness to December 31 (reported) ⁶.....1939..dollars.....	34,699,264	1,342,124	.....	7,729	.....
WATER DELIVERED TO IRRIGATORS						
68	Enterprises reporting water delivered.....1939..number.....	3,610	17	5	54	4
69	Area irrigated in these enterprises.....1939..acres.....	1,017,411	22,907	535	2,241	12
70	Water delivered in these enterprises.....1939..acre-feet.....	2,404,098	32,212	613	4,998	12
71	Average water delivered per acre irrigated.....1939..acre-feet.....	2.4	1.4	1.1	2.2	1.0
72	Average cost of water per acre irrigated.....1939..dollars.....	4.85	1.39	2.01	4.27	8.08
DRAINAGE OF IRRIGATED LAND						
73	Enterprises reporting land drained or needing drainage.....1939..number.....	99	.....	.....	.....	1
74	Irrigable area in these enterprises.....1939..acres.....	857,141	.....	.....	.....	(3)
75	Irrigated area in these enterprises.....1939..acres.....	397,227	.....	.....	.....	(3)
76	Area for which drains have been installed.....1939..acres.....	553,850	.....	.....	.....	(3)
77	Additional area needing drainage.....1939..acres.....	106,837	.....	.....	.....	.....

* Census of Agriculture.

¹ Percent not shown when more than 1,000.² 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 - TEXAS

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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"]

Hear	Brazoria	Brewster	Briscoe	Brooke	Callahan	Cameron	Castro	Chambers	Coke	Coleman	Colorado	
3,661	1,834	265	516	397	1,435	3,243	703	368	756	2,049	2,227	1
3,467	2,163	287	679	513	1,451	2,938	751	577	838	2,563	2,569	2
385	68	22	62	20	7	2,560	174	79	12	13	96	3
156	15	57	.....	14	.....	2,395	.....	22	7	5	42	4
146.8	353.3	-61.4	.....	42.9	.....	8.1	.....	259.1	71.4	160.0	128.6	5
237	18	17	43	20	4	1,297	127	19	8	9	40	6
90	8	42	.....	.....	.....	1,258	.....	10	.....	.....	24	7
116	50	5	19	.....	3	1,293	47	60	4	4	56	8
66	7	15	.....	.....	.....	1,137	.....	12	.....	.....	18	9
573,068	578,969	2,916,372	347,230	2,696,051	472,236	318,629	489,121	200,214	2,661,601	747,419	457,566	10
19,224	42,928	16,482	33,395	48,995	645	213,930	127,952	44,637	41,971	2,243	82,425	11
50	631	749	539	2,450	92	63	735	565	3,498	173	859	12
15,615	21,447	15,152	26,815	48,995	573	104,931	104,321	19,408	36,032	1,848	62,974	13
58	1,192	891	624	2,450	143	81	821	1,021	4,504	205	1,574	14
3,609	21,481	1,330	6,580	.....	72	108,999	23,631	25,228	5,939	395	19,451	15
31	430	260	346	.....	24	84	503	420	1,485	99	347	16
798,080	922,240	3,973,120	567,680	581,120	548,480	565,120	580,840	395,520	585,600	820,480	608,000	17
15,515	37,080	1,113	1,233	349	53	88,273	17,730	32,180	200	167	20,910	18
13,688	36,740	646	1,050	327	53	85,696	17,273	32,180	200	167	20,910	19
296	270	80	103	10	.....	1,515	.....	.....	.....	.....	.....	20
1,559	50	387	80	12	.....	1,082	466	.....	.....	.....	.....	21
5,039	3,796	779	.....	.....	.....	155,804	.....	1,444	.....	.....	18,727	22
12,933	350	596	.....	.....	.....	60,008	.....	29,200	.....	.....	15,321	23
207.9	876.3	42.9	.....	.....	.....	-43.3	.....	(1)	.....	.....	11.7	24
24,901	59,849	1,831	2,773	661	113	209,147	26,939	125,535	399	195	145,937	25
11,152	5,948	1,804	.....	.....	.....	237,308	.....	18,000	.....	.....	136,250	26
59,055	1,000	1,067	.....	.....	.....	178,414	.....	72,200	.....	.....	45,287	27
9,386	22,789	718	1,540	312	60	120,874	9,200	93,355	190	28	125,027	28
36,113	2,152	825	.....	.....	.....	81,504	.....	16,556	.....	.....	116,523	29
21,844	53,849	1,407	2,052	535	113	199,255	26,919	16,500	385	195	55,937	30
30,499	5,548	1,342	.....	.....	.....	210,093	.....	15,000	.....	.....	50,485	31
57,736	1,000	873	.....	.....	.....	120,948	.....	38,700	.....	.....	19,378	32
-15.5	870.6	4.8	.....	.....	.....	-5.2	.....	210.0	.....	.....	10.8	33
9,329	16,789	294	819	186	60	110,082	9,180	14,320	165	28	35,027	34
25,460	1,752	563	.....	.....	.....	54,289	.....	13,566	.....	.....	31,758	35
80.7	86.3	6.8	3.7	0.7	8.2	41.3	13.9	72.1	0.5	7.4	25.4	36
42.6	89.9	0.9	.....	.....	.....	148.5	.....	11.4	.....	.....	84.0	37
92.4	68.8	79.1	60.1	65.2	46.0	44.3	65.9	60.2	54.8	85.6	37.4	38
16.5	68.4	58.0	.....	.....	.....	74.2	.....	9.6	.....	.....	37.1	39
2,112,702	860,563	25,200	26,620	51,592	4,175	8,618,647	238,683	1,160,043	7,525	33,300	665,150	40
2,112,692	846,413	24,800	26,620	51,592	4,175	8,382,352	238,483	1,158,936	7,525	33,300	654,000	41
100	14,150	400	.....	.....	.....	236,295	200	1,107	.....	.....	11,150	42
650,050	102,485	42,675	.....	.....	.....	7,198,289	.....	85,000	.....	.....	485,700	43
4,946,563	10,010	80,955	.....	.....	.....	3,108,489	.....	1,008,802	.....	.....	523,925	44
225.0	739.7	-40.9	.....	.....	.....	19.7	.....	(1)	.....	.....	36.9	45
85.04	15.98	17.91	12.97	96.43	36.95	43.25	8.87	24.95	20.62	170.77	11.69	46
21.31	18.47	31.60	.....	.....	.....	34.26	.....	5.67	.....	.....	9.62	47
85.68	10.01	92.73	.....	.....	.....	25.70	.....	26.07	.....	.....	27.04	48
136.17	23.22	22.61	21.59	147.83	78.77	97.64	13.46	36.05	37.62	199.40	31.81	49
2,113,062	882,195	30,445	26,770	54,592	4,175	8,955,347	241,408	1,160,043	7,525	33,300	665,150	50
653,050	103,735	51,175	.....	.....	.....	11,563,289	.....	85,000	.....	.....	535,700	51
5,146,566	10,010	90,655	.....	.....	.....	4,098,469	.....	1,008,802	.....	.....	523,925	52
223.6	750.4	-40.5	.....	.....	.....	-22.6	.....	(1)	.....	.....	24.2	53
84.83	14.74	16.63	9.65	82.59	36.95	42.82	8.96	9.24	19.29	170.77	4.56	54
15.87	17.44	31.90	.....	.....	.....	48.73	.....	4.72	.....	.....	3.96	55
92.23	10.01	83.40	.....	.....	.....	22.97	.....	13.97	.....	.....	11.57	56
Primary		Sup.	Primary		Sup.	Primary		Sup.	Primary		Sup.	
Enterprises		2	Enterprises		3	Enterprises		4	Enterprises		5	57
64	12	17	17	19	4	132	9	74	4	3	9	58
13,311	36,835	(3)	933	1,229	33	86,961	103	13,483	32,180	200	37	59
95,545	194,235	(3)	4,305	3,465	120	476,035	85	28,602	219,497	340	170	60
2.87	5.27	(3)	4.61	2.82	3.64	5.46	0.69	2.12	6.62	1.70	4.59	61
10.38	4.69	.....	6.04	.....	.....	4.46	.....	.....	20.66	.....	.....	62
46,136	315,700	.....	.....	.....	.....	545,749	.....	279,470	.....	.....	171,244	63
3.77	9.33	.....	.....	.....	.....	8.68	.....	8.68	.....	.....	8.88	64
14,946	33,850	.....	.....	.....	.....	191,080	.....	32,180	.....	.....	19,285	65
2.59	9.33	.....	.....	.....	.....	2.84	.....	8.68	.....	.....	8.88	66
26,956	305,688	200	.....	.....	.....	384,921	.....	279,361	.....	.....	88,511	67
300,807	462,820	46,669	.....	.....	.....	4,178,800	.....	454,448	.....	.....	9,333	68
96	14	20	18	15	4	89	6	99	4	3	11	69
15,297	37,060	(3)	1,113	1,233	33	88,243	235	17,739	32,180	200	167	70
42,434	156,590	(3)	1,425	1,294	56	192,286	295	17,005	135,185	106	477	71
2.8	4.2	(3)	1.3	1.0	2.6	2.2	1.3	1.0	4.2	0.5	2.9	72
3.73	8.78	(3)	4.61	2.82	8.87	6.88	0.83	2.12	8.68	1.70	4.59	73
3	1	.....	.....	.....	.....	8	.....	.....	2	.....	1	74
41	(3)	.....	.....	(3)	.....	127,721	.....	(3)	.....	(3)	.....	75
41	(3)	.....	.....	(3)	.....	52,340	.....	(3)	.....	(3)	.....	76
41	(3)	.....	.....	(3)	.....	119,232	.....	(3)	.....	(3)	.....	77
.....	.....	.....	.....	(3)	.....	7,515	.....	(3)	.....	.....	.....	78

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

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

5 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.

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 — TEXAS

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)		Comal	Concho	Crosby	Dallam	Dallas	Deaf Smith
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1 All farms.....	1940..number.....	732	727	1,288	473	3,510	854
2	1930..number.....	897	1,137	1,739	660	4,830	930
3 Irrigated farms.....	1940..number.....	5	8	180	60	40	250
4	1930..number.....	5	4	.....	.....	19	18
5 Increase or decrease (-), 1930-1940.....	percent.....	.....	100.0	.....	.....	110.5	(1)
6 Operated by—							
7 (a) Owners and managers.....	1940..number.....	5	4	55	25	28	189
8	1930..number.....	.....	.....	.....	.....	.....	15
9 (b) Tenants.....	1940..number.....	.....	4	125	35	12	61
10	1930..number.....	.....	.....	.....	.....	.....	3
11 Land in all farms.....	1940..acres.....	309,811	555,075	452,191	813,966	387,521	693,959
12 Land in irrigated farms.....	1940..acres.....	110	1,626	38,525	76,143	1,133	221,690
13	1940..acres.....	22	203	214	1,269	28	887
14 Average per farm.....	1940..acres.....	110	682	19,230	44,458	828	180,102
15 (a) Operated by owners and managers.....	1940..acres.....	22	170	350	1,778	30	953
16	1940..acres.....	.....	944	19,295	31,685	305	41,588
17 (b) Operated by tenants.....	1940..acres.....	.....	236	154	905	25	982
18 Average per farm.....	1940..acres.....	.....	.....	.....	.....	.....	.....
19 Approximate land area.....	1940..acres.....	362,890	642,560	583,040	856,160	571,520	904,490
IRRIGATED AND IRRIGABLE AREAS							
20 Area irrigated.....	1939..acres.....	105	115	1,103	467	287	28,688
21 (a) Cropland harvested.....	1939..acres.....	63	115	1,024	548	285	27,053
22 (b) Crop failure.....	1939..acres.....	.....	.....	.....	119	2	190
23 (c) Pasture.....	1939..acres.....	42	.....	79	.....	.....	1,455
24 Area irrigated.....	1929..acres.....	.....	.....	.....	.....	.....	537
25	1919..acres.....	.....	.....	.....	.....	.....	6,483
26 Increase or decrease (-), 1929-1939.....	percent.....	.....	.....	.....	.....	.....	(1)
27 Irrigable area in enterprises.....	1940..acres.....	105	117	1,425	1,539	343	48,930
28	1930..acres.....	.....	.....	.....	.....	.....	6,823
29	1920..acres.....	.....	.....	.....	.....	.....	13,341
30 Excess of irrigable area over the area irrigated.....	1940..acres.....	.....	2	322	1,072	56	21,242
31	1930..acres.....	.....	.....	.....	.....	.....	0,286
32	1920..acres.....	.....	.....	.....	.....	.....	40,450
33 Area works were capable of supplying with water.....	1940..acres.....	105	117	1,424	1,539	343	0,660
34	1930..acres.....	.....	.....	.....	.....	.....	11,345
35	1920..acres.....	.....	.....	.....	.....	.....	640.0
36 Increase or decrease (-), 1930-1940.....	percent.....	.....	.....	.....	.....	.....	20,742
37 Excess, capability of works over area irrigated.....	1940..acres.....	.....	2	321	1,072	50	6,143
38	1930..acres.....	.....	.....	.....	.....	.....	.....
39 Proportion which area irrigated is of all lands in irrigated farms.....	1939..percent.....	85.5	7.1	2.9	0.6	25.3	12.9
40	1929..percent.....	.....	.....	.....	.....	.....	5.3
41 Proportion which area irrigated is of area works were capable of supplying with water.....	1939..percent.....	100.0	98.3	77.5	30.9	83.7	58.0
42	1929..percent.....	.....	.....	.....	.....	.....	8.0
CAPITAL INVESTED TO JANUARY 1							
43 Total investment in all enterprises.....	1940..dollars.....	975	1,900	30,775	20,745	32,754	630,140
44 (a) Cost of irrigation works and equipment.....	1940..dollars.....	900	1,900	30,775	20,745	32,754	627,646
45 (b) Investment in water rights (reported).....	1940..dollars.....	75	.....	.....	.....	.....	2,500
46 Total investment in all enterprises.....	1930..dollars.....	.....	.....	.....	.....	.....	225,500
47	1920..dollars.....	.....	.....	.....	.....	.....	290,300
48 Increase or decrease (-), 1930-1940.....	percent.....	.....	.....	.....	.....	.....	179.4
49 Average investment, based on area works were capable of supplying with water, per acre.....	1940..dollars.....	9.29	16.24	21.61	13.48	85.49	12.75
50	1930..dollars.....	.....	.....	.....	.....	.....	33.76
51	1920..dollars.....	.....	.....	.....	.....	.....	25.59
52 Average investment per acre irrigated.....	1939..dollars.....	9.29	16.52	27.90	44.42	114.13	21.97
53 Estimated final investment in existing enterprises.....	1940..dollars.....	1,025	1,900	30,775	22,730	32,854	636,846
54	1930..dollars.....	.....	.....	.....	.....	.....	225,500
55	1920..dollars.....	.....	.....	.....	.....	.....	290,300
56 Increase or decrease (-), 1930-1940.....	percent.....	.....	.....	.....	.....	.....	182.4
57 Average investment, based on estimated final investment and irrigable area, per acre.....	1940..dollars.....	9.76	16.24	21.60	14.77	95.78	12.75
58	1930..dollars.....	.....	.....	.....	.....	.....	33.05
59	1920..dollars.....	.....	.....	.....	.....	.....	21.76
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
60 Enterprises reporting maintenance and operation.....	1939..number.....	4	2	16	9	34	165
61 Area irrigated in these enterprises.....	1939..acres.....	105	(3)	898	466	247	25,955
62 Cost of maintenance and operation.....	1939..dollars.....	127	(3)	3,050	1,455	3,586	67,041
63 Average cost, per acre irrigated.....	1939..dollars.....	1.21	(3)	3.40	3.12	14.52	2.68
64	1929..dollars.....	.....	.....	.....	.....	.....	9.35
65 Total annual charges (reported)?.....	1939..dollars.....	.....	.....	.....	.....	.....	.....
66 Average annual charge per acre irrigated.....	1939..dollars.....	.....	.....	.....	.....	.....	.....
67 Area against which charges were assessed.....	1939..acres.....	.....	.....	.....	.....	.....	.....
68 Average annual charge per acre assessed.....	1939..dollars.....	.....	.....	.....	.....	.....	.....
69 Total charges collected?.....	1939..dollars.....	.....	.....	.....	.....	.....	.....
70 Indebtedness to December 31 (reported)?.....	1939..dollars.....	.....	.....	.....	.....	.....	.....
WATER DELIVERED TO IRRIGATORS							
71 Enterprises reporting water delivered.....	1939..number.....	3	2	20	10	39	167
72 Area irrigated in these enterprises.....	1939..acres.....	31	(3)	1,103	467	287	27,680
73 Water delivered in these enterprises.....	1939..acre-feet.....	31	(3)	1,126	433	750	33,256
74 Average water delivered per acre irrigated.....	1939..acre-feet.....	1.0	(3)	1.0	0.9	2.6	1.2
75 Average cost of water per acre irrigated.....	1939..dollars.....	3.29	.....	3.40	3.12	14.52	2.58
DRAINAGE OF IRRIGATED LAND							
76 Enterprises reporting land drained or needing drainage.....	1939..number.....	.....	.....	.....	.....	8	.....
77 Irrigable area in these enterprises.....	1939..acres.....	.....	.....	.....	.....	80	.....
78 Irrigated area in these enterprises.....	1939..acres.....	.....	.....	.....	.....	54	.....
79 Area for which drains have been installed.....	1939..acres.....	.....	.....	.....	.....	40	.....
80 Additional area needing drainage.....	1939..acres.....	.....	.....	.....	.....	5	.....

* Census of Agriculture.

1 Percent not shown when more than 1,000.

2 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.

3 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 — TEXAS

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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"

Dickens	Dimmit	Donley	Edwards	El Paso	Fisher	Floyd	Fort Bend	Frio	Galveston	Gillespie	Glasscock	
820	442	877	272	1,075	1,487	1,317	3,044	713	900	1,407	148	1
1,228	241	1,064	258	1,263	2,088	1,671	4,258	943	674	1,444	125	2
65	252	8	53	1,001	13	471	58	83	29	236	44	3
.....	106	.....	4	1,150	10	32	25	18	10	.....	.....	4
.....	137.7	.....	(¹)	-13.0	30.0	(¹)	132.0	194.4	190.0	(¹)	.....	5
35	144	3	40	765	12	247	17	40	28	201	32	6
.....	79	.....	.....	779	.....	9	5	11	.....	.....	.....	7
30	108	5	13	236	1	224	41	13	1	35	12	8
.....	27	.....	.....	371	.....	23	20	7	.....	.....	.....	9
320,317	620,614	523,800	1,261,077	325,565	400,141	496,521	404,575	820,645	121,272	2,076,080	2,566,065	10
27,380	144,255	4,017	282,425	122,426	6,737	182,970	27,065	45,826	2,060	130,769	193,298	11
421	872	502	5,329	122	518	388	487	865	71	554	4,393	12
23,327	98,104	1,617	220,378	111,581	(³)	129,035	16,729	37,095	(³)	121,345	167,626	13
666	681	536	5,500	146	(³)	522	984	927	(³)	604	5,238	14
4,053	46,152	2,400	62,047	10,545	(³)	53,935	10,336	8,731	(³)	9,424	25,672	15
135	427	480	4,773	45	(³)	241	252	672	(³)	269	2,139	16
595,200	858,240	581,760	1,328,000	674,560	579,840	635,520	554,880	714,240	275,200	675,200	552,960	17
24	14,305	6	100	61,153	291	39,354	12,209	761	36	48	81	18
23	7,578	6	82	58,978	226	38,291	12,209	362	36	48	15	19
1	188	.....	.....	1,665	23	418	.....	3	.....	.....	.....	20
.....	6,559	.....	18	610	42	645	.....	396	.....	.....	60	21
.....	13,694	.....	.....	65,442	.....	1,733	13,885	1,101	.....	.....	.....	22
.....	5,397	.....	.....	20,259	.....	1,497	.....	655	.....	.....	.....	23
.....	4.5	.....	.....	-6.6	.....	(¹)	-12.1	-30.9	.....	.....	.....	24
28	27,332	47	147	74,708	436	58,782	35,097	1,276	91	61	201	25
.....	18,614	.....	.....	67,000	.....	1,736	34,401	2,466	.....	.....	.....	26
.....	19,782	.....	.....	58,005	.....	5,585	.....	3,369	.....	.....	.....	27
4	13,027	41	47	13,555	145	19,428	22,888	515	55	13	120	28
.....	4,820	.....	.....	1,558	.....	8	20,506	1,365	.....	.....	.....	29
28	26,844	47	147	69,010	416	57,899	32,097	1,276	59	56	195	30
.....	15,966	.....	.....	66,000	.....	1,736	18,501	1,429	.....	.....	.....	31
.....	10,480	.....	.....	25,005	.....	4,877	.....	1,247	.....	.....	.....	32
.....	67.9	.....	.....	4.6	.....	(¹)	73.5	-10.7	.....	.....	.....	33
4	12,639	41	47	7,857	125	18,545	19,888	515	23	8	114	34
.....	2,292	.....	.....	558	.....	3	4,606	328	.....	.....	.....	35
0.1	9.9	0.1	(⁵)	50.0	4.3	21.5	45.1	1.7	1.7	(⁵)	(⁵)	36
.....	51.7	.....	.....	83.4	.....	35.4	64.0	18.6	.....	.....	.....	37
85.7	53.3	12.8	68.0	88.6	70.0	68.0	38.0	59.6	61.0	85.7	41.5	38
.....	85.7	.....	.....	89.2	.....	89.8	75.1	77.0	.....	.....	.....	39
2,554	936,095	800	5,495	2,947,764	12,880	647,541	374,955	78,600	2,817	7,200	30,750	40
2,554	936,715	800	5,295	2,947,764	12,850	647,541	374,570	78,600	2,800	7,200	30,750	41
.....	380	.....	200	.....	10	.....	385	.....	17	.....	.....	42
.....	1,130,625	.....	.....	6,238,245	.....	104,300	241,000	158,880	.....	.....	.....	43
.....	578,670	.....	.....	3,670,550	.....	154,100	.....	147,800	.....	.....	.....	44
.....	-17.2	.....	.....	-54.3	.....	520.8	55.6	50.5	.....	.....	.....	45
91.21	34.87	17.02	37.38	41.27	30.91	11.18	11.68	61.60	47.75	128.57	157.69	46
.....	70.73	.....	.....	94.52	.....	60.08	13.03	111.18	.....	.....	.....	47
.....	55.22	.....	.....	146.79	.....	31.60	.....	118.52	.....	.....	.....	48
106.42	65.44	133.33	54.85	46.57	44.19	16.45	30.71	103.29	78.25	150.00	379.63	49
2,554	936,050	1,100	5,495	2,947,764	12,880	648,191	378,373	78,600	3,617	7,900	31,100	50
.....	1,277,125	.....	.....	6,566,245	.....	104,300	291,000	158,880	.....	.....	.....	51
.....	611,720	.....	.....	5,310,550	.....	154,100	.....	149,300	.....	.....	.....	52
.....	-26.5	.....	.....	-55.1	.....	521.5	30.0	-50.5	.....	.....	.....	53
91.21	34.32	23.40	37.38	39.46	29.72	11.03	10.78	61.60	39.75	129.51	154.73	54
.....	68.61	.....	.....	96.00	.....	60.08	8.46	64.43	.....	.....	.....	55
.....	30.91	.....	.....	91.55	.....	27.59	.....	44.32	.....	.....	.....	56
Primary		Sup.	Primary		Sup.	Primary		Sup.	Primary		Sup.	
Enterprises		1	Enterprises		1	Enterprises		1	Enterprises		1	
21	188	(³)	3	8	(¹)	8	197	12	24	3	10	57
24	13,023	(³)	6	90	61,153	291	35,127	12,209	568	36	33	58
209	39,810	(³)	105	285	146,140	575	99,642	53,645	2,658	95	281	59
8.71	3.06	(³)	17.50	2.97	2.39	1.98	2.84	6.85	4.68	2.64	8.52	60
.....	10.15	.....	.....	.....	2.44	.....	2.57	5.09	6.47	.....	.....	61
.....	2,287	5,940	.....	.....	146,219	.....	.....	100,670	.....	.....	.....	62
.....	5.89	3.80	.....	.....	2.39	.....	.....	9.96	.....	.....	.....	63
.....	959	6,000	.....	.....	69,298	.....	.....	10,107	.....	.....	.....	64
.....	2.38	0.89	.....	.....	2.11	.....	.....	9.96	.....	.....	.....	65
.....	304	5,324	.....	.....	250,955	.....	.....	56,752	100	.....	.....	66
.....	57,600	.....	.....	.....	1,619,000	.....	.....	124,097	23,331	.....	.....	67
21	204	(³)	3	9	(¹)	8	215	12	30	3	12	68
24	14,264	(³)	100	100	61,153	291	38,289	12,209	734	36	48	69
34	20,296	(³)	5	76	181,233	441	44,939	63,475	947	32	108	70
1.4	1.4	(³)	0.8	0.8	3.0	1.5	1.2	5.2	1.3	0.9	2.2	71
8.71	3.03	(³)	17.50	2.97	2.39	1.98	2.83	9.16	4.68	2.64	8.52	72
.....	.....	.....	.....	.....	(¹)	5	.....	(³)	.....	(³)	.....	73
.....	.....	.....	.....	.....	74,708	240	.....	(³)	.....	(³)	.....	74
.....	.....	.....	.....	.....	61,153	156	.....	(³)	.....	(³)	.....	75
.....	.....	.....	.....	.....	69,010	220	.....	(³)	.....	(³)	.....	76
.....	.....	.....	.....	.....	500	20	.....	.....	.....	.....	.....	77

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

² Less than one-tenth of 1 percent.

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

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 - TEXAS

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)		Gray	Guadalupe	Hale	Hansford	Harris	Haskell
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1 All farms.....	1940..number....	633	2,757	1,628	335	6,940	1,539
2	1930..number....	701	3,620	1,729	430	4,131	2,360
3 Irrigated farms.....	1940..number....	9	8	1,115	4	180	16
4	1930..number....	1	1	59	1	32	9
5 Increase or decrease (-), 1930-1940.....	percent.....		700.0	(1)	300.0	462.5	77.8
6 Operated by—							
7 (a) Owners and managers.....	1940..number....	5	8	621	4	130	13
8	1930..number....			18		22	
9 (b) Tenants.....	1940..number....	4		495		50	3
10	1930..number....			41		10	
11 Land in all farms.....	1940..acres.....	548,955	357,056	608,221	503,430	621,904	547,936
12 Land in irrigated farms.....	1940..acres.....	14,050	2,308	438,466	7,787	35,215	2,711
13 Average per farm.....	1940..acres.....	1,561	288	393	1,947	186	169
14 (a) Operated by owners and managers.....	1940..acres.....	10,505	2,308	277,067	7,787	27,423	2,045
15 Average per farm.....	1940..acres.....	2,101	288	446	1,947	211	157
16 (b) Operated by tenants.....	1940..acres.....	3,545		161,419		7,792	666
17 Average per farm.....	1940..acres.....	886		326		155	222
17 Approximate land area.....	1940..acres.....	599,680	457,600	626,560	580,480	1,118,080	568,320
IRRIGATED AND IRRIGABLE AREAS							
18 Area irrigated.....	1939..acres.....	28	224	46,212	103	7,487	139
19 (a) Cropland harvested.....	1939..acres.....	28	204	44,586	103	7,016	90
20 (b) Crop failure.....	1939..acres.....			296		1	
21 (c) Pasture.....	1939..acres.....		20	1,328		470	49
22 Area irrigated.....	1929..acres.....			3,687		4,421	
23	1919..acres.....			3,335		8,000	
24 Increase or decrease (-), 1929-1939.....	percent.....			(1)		69.4	
25 Irrigable area in enterprises.....	1940..acres.....	33	235	71,906	369	15,116	250
26	1930..acres.....			7,322		7,560	
27 1920 ⁴	acres.....			10,162		16,000	
28 Excess of irrigable area over the area irrigated.....	1940..acres.....	5	11	25,694	260	7,629	111
29	1930..acres.....			3,635		3,139	
30 Area works were capable of supplying with water.....	1940..acres.....	33	235	71,182	327	11,708	200
31	1930..acres.....			6,344		5,044	
32	1920..acres.....			8,728		11,000	
33 Increase or decrease (-), 1930-1940.....	percent.....			(1)		132.1	
34 Excess, capability of works over area irrigated.....	1940..acres.....	5	11	24,970	224	4,219	61
35	1930..acres.....			2,657		623	
36 Proportion which area irrigated is of all lands in irrigated farms.....	1939..percent....	0.2	9.7	10.5	1.3	21.3	5.1
37	1929..percent....			19.4		44.5	
38 Proportion which area irrigated is of area works were capable of supplying with water.....	1939..percent....	84.8	95.3	64.9	31.5	64.0	69.5
39	1929..percent....			58.1		87.6	
CAPITAL INVESTED TO JANUARY 1							
40 Total investment in all enterprises.....	1940..dollars....	2,900	4,650	855,953	7,150	279,425	5,736
41 (a) Cost of irrigation works and equipment.....	1940..dollars....	2,900	4,650	855,953	7,150	279,425	5,736
42 (b) Investment in water rights (reported).....	1940..dollars....						
43 Total investment in all enterprises.....	1930..dollars....			317,260		170,920	
44	1920..dollars....			280,630		150,000	
45 Increase or decrease (-), 1930-1940.....	percent.....			169.8		61.7	
46 Average investment, based on area works were capable of supplying with water, per acre.....	1940..dollars....	87.88	19.79	12.02		23.61	
47	1930..dollars....			50.01		33.89	
48	1920..dollars....			32.15		13.64	
49 Average investment per acre irrigated.....	1939..dollars....	103.57	20.76	16.52		36.92	19.68
50 Estimated final investment in existing enterprises.....	1940..dollars....	2,900	5,150	859,320	7,150	283,425	7,036
51	1930..dollars....			321,910		175,920	
52	1920..dollars....			280,630		150,000	
53 Increase or decrease (-), 1930-1940.....	percent.....			166.9		61.1	
54 Average investment, based on estimated final investment and irrigable area, per acre.....	1940..dollars....	87.88	21.91	11.95	19.70	16.75	28.14
55	1930..dollars....			43.96		23.27	
56	1920 ⁴			27.62		9.38	
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
57 Enterprises reporting maintenance and operation.....	1939..number....	3	3	269	3	28	3
58 Area irrigated in these enterprises.....	1939..acres.....	28	224	41,681	100	7,471	139
59 Cost of maintenance and operation.....	1939..dollars....	110	740	118,246	750	41,499	700
60 Average cost, per acre irrigated.....	1939..dollars....	3.93	3.30	2.84	7.50	5.55	5.04
61	1929..dollars....			3.09		6.13	
62 Total annual charges (reported) ²	1939..dollars....						
63 Average annual charge per acre irrigated.....	1939..dollars....						
64 Area against which charges were assessed.....	1939..acres.....						
65 Average annual charge per acre assessed.....	1939..dollars....						
66 Total charges collected.....	1939..dollars....						
67 Indebtedness to December 31 (reported) ³	1939..dollars....						
WATER DELIVERED TO IRRIGATORS							
68 Enterprises reporting water delivered.....	1939..number....	3	3	315	5	29	2
69 Area irrigated in these enterprises.....	1939..acres.....	28	224	46,166	103	7,467	(3)
70 Water delivered in these enterprises.....	1939..acre-feet..	86	502	57,902	232	18,116	(3)
71 Average water delivered per acre irrigated.....	1939..acre-feet..	3.1	2.2	1.3	2.3	2.4	(3)
72 Average cost of water per acre irrigated.....	1939..dollars....	3.93	3.30	2.83	7.50	5.55	(3)
DRAINAGE OF IRRIGATED LAND							
73 Enterprises reporting land drained or needing drainage.....	1939..number....		1			2	
74 Irrigable area in these enterprises.....	1939..acres.....		(3)			(3)	
75 Irrigated area in these enterprises.....	1939..acres.....		(3)			(3)	
76 Area for which drains have been installed.....	1939..acres.....		(3)			(3)	
77 Additional area needing drainage.....	1939..acres.....						

* Census of Agriculture.

¹ Percent not shown when more than 1,000.² 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.³ 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 - TEXAS

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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"]

Days	Hemphill	Hidalgo	Hockley	Howard	Hudspeth	Hutchinson	Irion	Jackson	Jeff Davis	Jefferson	Jim Wells	
1,233 1,467 7 3 133.3	349 414 6	5,094 4,321 4,094 3,150 30.0	1,506 1,344 167	802 1,194 16	140 194 85 115 -26.1	183 161 16	149 160 47 37 27.0	1,258 1,642 13 12 8.3	104 99 42 23 82.6	2,387 1,012 213 112 90.2	1,234 1,302 20 31 -35.5	1 2 3 4 5
6 1 398,530 1,039 148 (3) (3) (3) (3)	5 1 529,786 6,961 1,160 (5) (5) (5) (5)	2,954 2,039 1,140 1,111 687,225 239,980 59 167,006 57 72,974 64	69 98 499,577 43,700 282 21,795 318 21,805 224	13 3 492,099 5,376 336 3,776 290 1,600 533	57 45 28 70 1,869,117 803,646 9,455 787,116 13,809 16,530 590	10 6 392,052 18,212 1,138 672 25,427 848 6,020 1,003	..... ..... ..... ..... 825,695 31,582 50,495 3,884 9,095 1,516 6,155 382	..... ..... ..... ..... 430,117 50,495 821,268 19,554 791,472 24,734 29,796 5,914	..... ..... ..... ..... 21,624,366 821,268 19,554 791,472 24,734 29,796 2,980	..... ..... ..... ..... 317,684 239,884 1,098 182,501 2,607 51,383 359	..... ..... ..... ..... 494,522 4,849 247 4,773 298 176 44	6 7 8 9 10 11 12 13 14 15 16
428,800	581,760	986,240	577,920	583,680	2,901,120	565,760	686,720	546,560	1,445,120	604,800	541,440	17
9 9 37 28 37 28 0.9 24.3	46 46 69 23 59 13 0.7 78.0	198,141 173,766 200 24,175 229,806 160,532 -13.8 311,706 307,671 424,538 113,565 77,865 294,488 284,407 388,538 3.6 96,347 54,601 82.6 130.8 67.3 80.8	2,475 2,361 90 24 4,621 2,146 4,601 2,126 5.7 53.8	12 12 51 39 18 6 0.2 66.7	13,734 13,560 1 173 14,010 23,715 15,290 9,682 4,280 23,080 14,590 58.2 9,346 580 1.7 59.6 59.5 96.0	7 4 3 21 14 21 14 33.3	2,346 2,172 3 171 1,798 2,133 30.5 4,807 1,928 2,417 2,461 130 4,807 1,908 2,062 151.9 28.0 2,461 110 7.4 4.1 48.8 94.2	3,017 3,017 542 2,650 6,074 13.8 5,069 3,989 8,584 2,052 1,339 4,060 3,180 6,749 28.0 1,052 530 6.0 34.3 74.1 83.3	1,158 616 542 385 1,210 200.8 1,811 385 2,034 153 1,811 385 1,851 240.5 163 0.1 1.3 98.3 100.0	41,511 41,511 37,082 74,002 12.0 128,330 146,815 174,000 86,819 109,753 57,885 80,315 97,100 -27.9 16,374 43,253 17.7 60.9 139.4 46.1	400 322 78 614 214 611 211 8.1 65.5	18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39
1,950 1,950												

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

⁵Less than one-tenth of 1 percent.

⁶Data for less than 3 enterprises shown with permission of the enterprise involved.

⁷Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.

⁸Annual 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 - TEXAS

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)		Kendall	Kerr	Kimble	Kinney	Lamb	La Salle
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms.....1940..number.....	739	729	443	127	2,167	453
2	.....1930..number.....	691	591	454	133	2,381	627
3	Irrigated farms.....1940..number.....	119	113	81	15	500	53
4	.....1930..number.....	1	53	21	5	6	36
5	Increase or decrease (-), 1930-1940.....percent.....	(¹)	113.2	285.7	200.0	(¹)	47.2
6	Operated by—						
7	(a) Owners and managers.....1940..number.....	99	91	58	12	321	36
8	.....1930..number.....	20	38	23	3	179	29
9	(b) Tenants.....1940..number.....	20	22	23	3	179	17
10	.....1930..number.....	15	15	15	15	15	7
11	Land in all farms.....1940..acres.....	370,821	2780,973	686,366	700,094	618,240	708,591
12	Land in irrigated farms.....1940..acres.....	68,600	143,534	69,783	89,615	210,070	111,360
13	Average per farm.....1940..acres.....	576	1,270	862	5,974	420	2,101
14	(a) Operated by owners and managers.....1940..acres.....	56,384	136,032	54,190	87,953	170,139	108,798
15	Average per farm.....1940..acres.....	570	1,495	934	7,329	530	3,022
16	(b) Operated by tenants.....1940..acres.....	12,216	7,502	15,593	1,662	39,931	2,562
17	Average per farm.....1940..acres.....	611	341	678	554	223	151
18	Approximate land area.....1940..acres.....	428,800	704,640	815,360	890,240	654,080	960,640
IRRIGATED AND IRRIGABLE AREAS							
19	Area irrigated.....1939..acres.....	109	588	342	1,310	16,497	3,094
20	(a) Cropland harvested.....1939..acres.....	102	552	342	817	15,899	2,534
21	(b) Crop failure.....1939..acres.....	7	34	.....	.....	31	58
22	(c) Pasture.....1939..acres.....	.....	2	.....	493	567	502
23	Area irrigated.....1929..acres.....	.....	338	.....	.....	.....	2,419
24	.....1919..acres.....	.....	.....	.....	.....	.....	2,531
25	Increase or decrease (-), 1929-1939.....percent.....	.....	74.0	.....	.....	.....	28.0
26	Irrigable area in enterprises.....1940..acres.....	184	876	588	1,318	26,603	4,819
27	.....1930..acres.....	.....	727	.....	.....	.....	3,215
28	.....1920 ⁴ ..acres.....	.....	.....	.....	.....	.....	6,574
29	Excess of irrigable area over the area irrigated.....1940..acres.....	75	288	246	8	10,106	1,725
30	.....1930..acres.....	.....	389	.....	.....	.....	796
31	Area works were capable of supplying with water.....1940..acres.....	179	876	584	1,318	26,128	4,794
32	.....1930..acres.....	.....	558	.....	.....	.....	2,812
33	.....1920..acres.....	.....	.....	.....	.....	.....	5,282
34	Increase or decrease (-), 1930-1940.....percent.....	.....	57.0	.....	.....	.....	70.5
35	Excess, capability of works over area irrigated.....1940..acres.....	70	288	242	8	9,631	1,700
36	.....1930..acres.....	.....	220	.....	.....	.....	393
37	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent.....	0.2	0.4	0.5	1.5	7.9	2.8
38	.....1929..percent.....	.....	2.0	.....	.....	.....	14.2
39	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	60.9	67.1	58.6	99.4	63.1	64.5
40	.....1929..percent.....	.....	60.6	.....	.....	.....	86.0
CAPITAL INVESTED TO JANUARY 1							
41	Total investment in all enterprises.....1940..dollars.....	13,727	45,888	19,573	3,471	339,346	171,541
42	(a) Cost of irrigation works and equipment.....1940..dollars.....	13,432	45,452	19,568	3,471	337,948	171,181
43	(b) Investment in water rights (reported).....1940..dollars.....	295	436	5	.....	1,398	360
44	Total investment in all enterprises.....1930..dollars.....	.....	38,872	.....	.....	.....	351,922
45	.....1920..dollars.....	.....	.....	.....	.....	.....	155,450
46	Increase or decrease (-), 1930-1940.....percent.....	.....	18.0	.....	.....	.....	-51.2
47	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars.....	76.69	52.39	39.52	2.63	12.99	35.78
48	.....1930..dollars.....	.....	69.60	.....	.....	.....	124.04
49	.....1920..dollars.....	.....	.....	.....	.....	.....	29.37
50	Average investment per acre irrigated.....1939..dollars.....	125.94	78.04	57.23	2.65	20.57	55.44
51	Estimated final investment in existing enterprises.....1940..dollars.....	14,072	45,958	20,073	3,471	343,070	171,541
52	.....1930..dollars.....	.....	38,872	.....	.....	.....	351,922
53	.....1920..dollars.....	.....	.....	.....	.....	.....	155,450
54	Increase or decrease (-), 1930-1940.....percent.....	.....	18.2	.....	.....	.....	-51.2
55	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars.....	76.48	52.46	34.14	2.63	12.90	35.60
56	.....1930..dollars.....	.....	53.47	.....	.....	.....	103.28
57	.....1920 ⁴ ..dollars.....	.....	.....	.....	.....	.....	23.65
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
58	Enterprises reporting maintenance and operation.....1939..number.....	30	38	25	13	141	50
59	Area irrigated in these enterprises.....1939..acres.....	94	508	340	1,310	16,303	3,081
60	Cost of maintenance and operation.....1939..dollars.....	663	3,015	1,179	289	53,955	7,681
61	Average cost, per acre irrigated.....1939..dollars.....	7.05	5.94	3.47	0.22	3.31	2.49
62	.....1929..dollars.....	.....	17.52	.....	.....	.....	31.83
63	Total annual charges (reported) ⁵.....1939..dollars.....	.....	.....	.....	.....	.....	100
64	Average annual charge per acre irrigated.....1939..dollars.....	.....	.....	.....	.....	.....	0.22
65	Area against which charges were assessed.....1939..acres.....	.....	.....	.....	.....	.....	1,000
66	Average annual charge per acre assessed.....1939..dollars.....	.....	.....	.....	.....	.....	0.10
67	Total charges collected ⁶.....1939..dollars.....	.....	.....	.....	.....	.....	.....
68	Indebtedness to December 31 (reported) ⁷.....1939..dollars.....	.....	.....	.....	.....	.....	.....
WATER DELIVERED TO IRRIGATORS							
69	Enterprises reporting water delivered.....1939..number.....	94	46	27	12	143	50
70	Area irrigated in these enterprises.....1939..acres.....	109	588	342	1,310	16,497	2,646
71	Water delivered in these enterprises.....1939..acre-feet.....	187	945	651	769	18,377	4,425
72	Average water delivered per acre irrigated.....1939..acre-feet.....	1.7	1.6	1.9	0.6	1.1	1.7
73	Average cost of water per acre irrigated.....1939..dollars.....	7.05	5.94	3.47	0.22	3.31	2.80
DRAINAGE OF IRRIGATED LAND							
74	Enterprises reporting land drained or needing drainage.....1939..number.....	.....	.....	.....	.....	.....	.....
75	Irrigable area in these enterprises.....1939..acres.....	.....	.....	.....	.....	.....	.....
76	Irrigated area in these enterprises.....1939..acres.....	.....	.....	.....	.....	.....	.....
77	Area for which drains have been installed.....1939..acres.....	.....	.....	.....	.....	.....	.....
78	Additional area needing drainage.....1939..acres.....	.....	.....	.....	.....	.....	.....

* Census of Agriculture.

¹ Percent not shown when more than 1,000.² 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.³ 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 - TEXAS

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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 all of the counties listed are included under "All other counties"

Liberty	Llano	Lubbock	Lynn	McCulloch	McLennan	Martin	Mason	Matagorda	Maverick	Medina	Menard	Midland	
1,861	666	2,119	1,471	1,096	4,445	779	714	1,614	272	1,719	380	386	1
1,535	720	2,495	2,138	1,519	8,841	776	906	1,673	52	1,590	401	361	1
82	180	616	107	4	22	32	87	54	206	357	57	57	3
31	(1)	(1)	8	23	30	.....	.....	26	19	67	42	1	4
100.0	(1)	(1)	8	-82.6	-26.7	.....	.....	223.1	984.2	432.8	35.7	(1)	5
36	142	354	47	3	18	22	70	51	157	235	42	35	6
12	.....	.....	.....	.....	.....	.....	.....	11	13	38	27	.....	7
26	38	262	60	1	4	10	17	30	49	122	15	22	8
19	.....	.....	.....	.....	.....	.....	.....	15	6	20	15	.....	9
249,323	527,097	509,000	506,580	615,076	565,572	406,896	600,682	524,680	421,664	774,163	2709,791	596,154	10
35,940	183,291	189,751	40,628	2,412	2,466	14,508	77,685	77,685	80,661	61,236	171,772	181,688	11
580	907	276	380	603	112	453	893	929	392	172	3,014	3,383	12
29,162	140,081	101,514	25,269	(5)	1,562	10,339	69,159	58,150	76,401	50,602	164,144	136,761	13
810	986	288	538	(5)	87	470	988	1,101	487	215	3,908	3,907	14
6,778	23,210	67,937	15,359	(5)	904	4,169	8,536	21,845	4,260	10,634	7,628	54,827	15
251	611	259	256	(5)	226	417	502	662	87	87	509	2,497	16
750,720	606,080	570,880	585,800	682,240	662,400	583,040	598,400	730,240	815,560	565,920	584,960	600,320	17
18,833	133	15,325	326	17	232	53	30	31,992	15,260	14,231	3,006	92	18
18,758	87	14,386	268	11	232	53	23	31,842	14,780	12,092	2,608	91	19
75	.....	57	.....	5	.....	.....	1	.....	.....	340	.....	1	20
.....	46	882	58	1	.....	.....	8	150	480	1,799	400	.....	21
15,000	.....	.....	.....	.....	.....	.....	.....	12,894	1,682	4,600	3,481	.....	22
13,500	.....	.....	.....	.....	.....	.....	.....	33,510	2,853	.....	5,003	.....	23
25.6	.....	.....	.....	.....	.....	.....	.....	148.3	669.9	200.4	-13.6	.....	24
78,700	182	24,730	354	25	325	63	34	47,027	45,800	19,354	3,083	163	25
35,000	.....	.....	.....	.....	.....	.....	.....	55,980	4,037	4,600	3,866	.....	26
24,000	.....	.....	.....	.....	.....	.....	.....	164,875	6,513	.....	7,120	.....	27
59,567	49	9,405	28	8	93	10	4	15,035	30,540	5,123	77	61	28
20,000	.....	.....	.....	.....	.....	.....	.....	43,076	2,035	.....	385	.....	29
33,700	181	24,051	354	25	300	53	34	36,027	24,360	19,341	3,083	146	30
34,000	.....	.....	.....	.....	.....	.....	.....	55,960	3,135	4,600	3,744	.....	31
14,000	.....	.....	.....	.....	.....	.....	.....	66,200	3,813	.....	6,564	.....	32
-0.9	.....	.....	.....	.....	.....	.....	.....	-35.6	677.0	320.5	-17.7	.....	33
14,867	48	8,728	28	8	68	.....	4	4,036	9,100	5,110	77	56	34
19,000	.....	.....	.....	.....	.....	.....	.....	43,076	1,153	.....	263	.....	35
52.4	0.1	9.0	0.8	0.7	9.4	0.4	(5)	41.0	18.9	23.2	1.7	(5)	36
49.3	.....	.....	.....	.....	.....	.....	.....	50.5	14.1	67.2	7.7	.....	37
55.9	73.5	63.7	92.1	68	77.3	100.0	88.2	88.8	62.6	73.6	97.5	62.2	38
44.1	.....	.....	.....	.....	.....	.....	.....	23.0	63.2	100.0	93.0	.....	39
488,370	29,175	421,487	9,728	3,500	9,877	2,050	4,140	896,091	4,625,116	2,688,804	31,650	12,163	40
486,718	29,175	416,777	9,728	3,500	9,827	2,060	4,140	849,267	4,625,116	2,688,804	31,650	12,163	41
1,832	.....	4,680	.....	.....	50	.....	.....	46,524	.....	.....	.....	.....	42
405,208	.....	.....	.....	.....	.....	.....	.....	332,918	69,710	2,380,000	38,465	.....	43
732,779	.....	.....	.....	.....	.....	.....	.....	1,323,942	68,078	.....	106,273	.....	44
20.5	.....	.....	.....	.....	.....	.....	.....	189.2	(1)	13.4	-17.7	.....	45
14.49	161.19	17.52	27.48	140.00	32.62	38.68	121.76	24.87	189.87	139.54	10.27	82.18	46
11.62	.....	.....	.....	.....	.....	.....	.....	5.65	20.32	517.39	10.27	.....	47
52.34	.....	.....	.....	.....	.....	.....	.....	19.99	17.40	.....	16.19	.....	48
25.83	219.36	27.50	29.84	205.88	42.57	38.68	139.00	28.01	303.09	189.84	10.53	132.21	49
493,370	30,625	427,727	9,728	3,500	9,827	2,050	4,740	896,091	4,685,042	2,689,154	31,650	12,713	50
455,208	.....	.....	.....	.....	.....	.....	.....	332,918	69,710	2,380,000	42,028	.....	51
732,779	.....	.....	.....	.....	.....	.....	.....	1,323,942	68,078	.....	106,273	.....	52
8.4	.....	.....	.....	.....	.....	.....	.....	189.2	(1)	13.4	-24.7	.....	53
6.27	188.27	17.30	27.48	140.00	30.54	32.54	139.41	19.05	102.29	139.45	10.27	.....	54
13.01	.....	.....	.....	.....	.....	.....	.....	6.85	15.78	517.39	10.27	.....	55
30.53	.....	.....	.....	.....	.....	.....	.....	8.03	10.45	.....	15.21	.....	56
4	31	136	25	(5)	12	3	6	5	.....	.....	.....	.....	57
18,716	104	12,757	326	(5)	212	49	19	31,592	15,210	14,230	2,970	21	58
127,846	1,050	35,439	630	(5)	1,771	476	110	254,110	42,878	31,319	1,742	714	59
6.83	10.10	2.78	1.93	(5)	8.35	9.71	5.78	8.04	2.82	2.20	0.56	7.93	60
7.88	.....	.....	.....	.....	.....	.....	.....	7.86	4.11	4.32	1.04	.....	61
175,747	.....	.....	.....	.....	.....	.....	.....	280,571	129,580	51,544	678	.....	62
9.39	.....	.....	.....	.....	.....	.....	.....	9.00	8.85	3.65	0.31	.....	63
18,716	.....	.....	.....	.....	.....	.....	.....	31,179	23,560	20,784	2,200	.....	64
9.39	.....	.....	.....	.....	.....	.....	.....	9.00	5.50	2.48	0.31	.....	65
115,451	.....	.....	.....	.....	.....	.....	.....	270,574	44,755	37,462	680	.....	66
107,721	.....	.....	.....	.....	.....	.....	.....	643,524	3,957,000	462,527	1,250	.....	67
5	39	160	25	(5)	13	5	11	6	4	.....	.....	.....	68
18,816	133	15,325	326	(5)	232	53	30	31,992	15,260	14,231	1,406	77	69
73,998	118	16,094	320	(5)	597	131	32	224,449	26,010	24,241	3,796	68	70
3.9	0.9	1.0	1.0	(5)	2.6	2.5	1.1	7.0	1.6	1.7	2.7	0.9	71
9.39	10.10	2.78	1.93	(5)	8.35	9.71	5.78	8.91	8.55	3.68	0.92	5.52	72
(5)	2	(5)	1	.....	4	.....	.....	(5)	1	(5)	.....	.....	73
(5)	.....	(5)	.....	.....	140	.....	.....	(5)	.....	(5)	.....	.....	74
(5)	.....	(5)	.....	.....	85	.....	.....	(5)	.....	(5)	.....	.....	75
(5)	.....	(5)	.....	.....	75	.....	.....	(5)	.....	(5)	.....	.....	76
(5)	.....	(5)	.....	.....	35	.....	.....	(5)	.....	(5)	.....	.....	77

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

⁵ Less than one-tenth of 1 percent.

⁶ 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.

⁷ 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 - TEXAS

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)		Mills	Moore	Oldham	Orange	Parmer	Pecos
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms.....1940..number....	1,364	178	177	1,411	915	326
2	.....1930..number....	1,484	174	137	989	618	385
3	Irrigated farms.....1940..number....	25	19	5	67	116	160
4	.....1930..number....	15	.....	1	1	.....	312
5	Increase or decrease (-), 1930-1940.....percent....	66.7	.....	400.0	(1)	.....	-24.5
Operated by—							
6	(a) Owners and managers.....1940..number....	20	10	4	34	70	93
7	.....1930..number....	10	.....	.....	.....	.....	88
8	(b) Tenants.....1940..number....	5	9	1	33	46	67
9	.....1930..number....	5	.....	.....	.....	.....	124
10	Land in all farms.....1940..acres....	447,643	309,491	2 1,189,735	57,221	500,708	2,318,150
11	Land in irrigated farms.....1940..acres....	15,450	41,690	12,917	18,688	56,903	87,610
12	Average per farm.....1940..acres....	618	2,194	2,583	279	481	548
13	(a) Operated by owners and managers.....1940..acres....	9,788	23,003	(3)	10,350	39,116	80,413
14	Average per farm.....1940..acres....	489	2,300	(3)	304	559	865
15	(b) Operated by tenants.....1940..acres....	5,662	18,687	(3)	8,338	17,787	7,197
16	Average per farm.....1940..acres....	1,132	2,076	(3)	253	387	107
17	Approximate land area.....1940..acres....	469,760	583,680	938,240	227,940	549,760	3,031,040
IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated.....1939..acres....	140	22	37	10,611	827	23,316
19	(a) Cropland harvested.....1939..acres....	140	22	20	10,611	817	10,661
20	(b) Crop failure.....1939..acres....	.....	.....	17	.....	.....	605
21	(c) Pasture.....1939..acres....	.....	.....	.....	.....	10	6,080
22	Area irrigated.....1929..acres....	371	.....	.....	.....	.....	16,106
23	.....1919..acres....	.....	.....	.....	.....	.....	22,312
24	Increase or decrease (-), 1929-1939.....percent....	-62.3	.....	.....	.....	.....	44.1
25	Irrigable area in enterprises.....1940..acres....	218	67	52	18,117	2,024	60,408
26	.....1930..acres....	458	.....	.....	.....	.....	44,930
27	.....1920*..acres....	.....	.....	.....	.....	.....	68,653
28	Excess of irrigable area over the area irrigated.....1940..acres....	78	35	13	7,506	1,197	37,262
29	.....1930..acres....	87	.....	.....	.....	.....	26,764
30	Area works were capable of supplying with water.....1940..acres....	215	54	52	18,117	2,024	41,608
31	.....1930..acres....	458	.....	.....	.....	.....	29,088
32	.....1920..acres....	.....	.....	.....	.....	.....	60,450
33	Increase or decrease (-), 1930-1940.....percent....	-53.1	.....	.....	.....	.....	40.2
34	Excess, capability of works over area irrigated.....1940..acres....	75	32	15	7,506	1,197	18,262
35	.....1930..acres....	87	.....	.....	.....	.....	13,522
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent....	0.9	0.1	0.3	56.8	1.5	26.6
37	.....1929..percent....	6.3	.....	.....	.....	.....	24.9
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	65.1	40.7	71.2	56.6	40.9	56.1
39	.....1929..percent....	81.0	.....	.....	.....	.....	54.5
CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises.....1940..dollars....	3,775	9,420	1,550	631,122	28,893	1,228,577
41	(a) Cost of irrigation works and equipment.....1940..dollars....	3,775	9,360	1,550	588,836	28,893	1,220,329
42	(b) Investment in water rights (reported).....1940..dollars....	.....	60	.....	42,286	.....	8,248
43	Total investment in all enterprises.....1930..dollars....	13,912	.....	.....	.....	.....	1,169,035
44	.....1920..dollars....	.....	.....	.....	.....	.....	1,180,335

* Census of Agriculture.

¹Percent not shown when more than 1,000.

¹Percent not shown when more than 1,000.

CENSUS OF IRRIGATION - TEXAS

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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"]

Potter	Presidio	Randall	Real	Reeves	Roberts	Runnels	San Saba	Scurry	Shackelford	Stephens	Sterling	Swisher	
302	490	600	300	277	154	2,103	1,276	1,446	460	810	117	1,035	1
322	532	843	253	327	158	2,644	1,424	1,561	462	765	136	1,021	2
44	326	40	48	191	8	26	79	133	5	7	6	521	3
5	417	5	16	277	.....	41	109	1	4	15	10	.....	4
780.0	-21.8	700.0	200.0	-31.0	.....	-36.6	-23.3	(1)	25.0	-53.3	-10.0	(1)	5
32	123	30	36	99	8	16	57	52	4	3	4	328	6
.....	80	.....	11	77	.....	20	47	.....	.....	.....	.....	.....	7
12	203	10	12	92	.....	10	22	51	1	4	2	196	8
.....	337	.....	5	200	.....	21	56	.....	.....	.....	.....	.....	9
2 662,559	1,881,564	566,945	2 414,386	1,601,050	2 627,883	603,465	649,969	571,444	500,551	592,497	551,775	563,045	10
187,281	375,349	30,457	58,000	103,231	4,788	11,996	96,141	41,149	1,141	1,657	921	278,361	11
4,256	1,151	761	1,208	540	598	461	1,217	309	228	237	154	531	12
181,781	350,527	25,179	46,732	78,576	4,788	10,600	87,226	20,853	(3)	655	(3)	190,927	13
5,681	2,850	839	1,298	794	598	662	1,530	364	(3)	218	(3)	582	14
5,500	24,822	5,278	11,208	24,655	.....	1,396	8,915	11,290	(3)	1,003	(3)	87,434	15
456	122	528	939	258	.....	140	405	221	(3)	250	(3)	446	16
576,640	2,481,280	586,240	400,000	1,664,000	570,880	678,400	718,080	581,760	567,080	593,280	584,960	569,320	17
407	8,895	2,396	458	18,067	80	544	1,077	70	18	61	82	31,442	18
405	6,275	2,141	410	13,803	73	521	814	70	13	61	77	30,040	19
2	1,008	.....	8	3,219	7	.....	3	.....	5	.....	.....	560	20
.....	1,615	255	40	1,045	.....	23	260	.....	.....	.....	5	842	21
.....	3,959	.....	890	16,169	.....	1,548	3,539	.....	.....	.....	.....	830	22
.....	2,150	.....	452	13,286	.....	467	95	.....	.....	.....	.....	.....	23
.....	124.8	.....	-48.5	11.7	.....	-64.0	-60.0	.....	.....	.....	.....	(1)	24
536	12,621	4,205	1,648	21,282	165	1,104	2,064	71	200	168	107	61,450	25
.....	5,169	.....	919	18,154	.....	2,421	4,416	.....	.....	.....	.....	1,213	26
.....	2,550	.....	3,274	26,066	.....	1,535	2,395	.....	.....	.....	.....	.....	27
129	3,726	1,809	1,190	3,215	85	560	987	1	182	107	25	30,008	28
.....	1,210	.....	29	1,885	.....	873	877	.....	.....	.....	.....	383	29
536	12,324	3,995	1,040	20,211	165	1,090	1,660	71	200	168	107	60,912	30
.....	4,734	.....	910	17,064	.....	2,103	4,291	.....	.....	.....	.....	830	31
.....	1,850	.....	3,227	20,553	.....	901	2,321	.....	.....	.....	.....	.....	32
.....	160.3	.....	14.3	18.4	.....	-48.2	-60.4	.....	.....	.....	.....	(1)	33
129	3,426	1,699	562	2,144	85	546	622	1	182	107	25	29,500	34
.....	775	.....	20	893	.....	555	752	.....	.....	.....	.....	.....	35
0.2	2.4	7.9	0.8	17.5	1.7	4.5	1.1	0.2	1.6	3.7	8.9	11.3	36
.....	9.4	.....	7.0	18.4	.....	21.9	9.7	.....	.....	.....	.....	16.0	37
75.9	72.2	60.0	41.0	89.4	48.5	49.9	63.4	98.6	9.0	36.3	76.6	51.0	38
.....	83.6	.....	97.8	94.8	.....	73.6	82.5	.....	.....	.....	.....	100.0	39
9,506	154,335	79,020	9,838	631,662	6,786	22,041	30,472	19,600	1,650	850	2,125	511,236	40
9,506	154,160	79,020	9,559	631,634	6,786	21,080	30,435	19,600	1,650	850	2,125	510,606	41
.....	175	.....	280	28	.....	961	37	.....	.....	.....	.....	630	42
.....	91,850	.....	5,395	446,550	.....	50,749	106,385	.....	.....	.....	.....	42,000	43
.....	10,300	.....	13,700	581,475	.....	41,650	117,256	.....	.....	.....	.....	(1)	44
.....	68.0	.....	82.4	41.5	.....	-55.6	-71.3	.....	.....	.....	.....	.....	45
17.74	12.52	19.78	9.46	31.25	41.13	20.22	17.94	276.06	8.25	5.06	19.86	8.39	46
.....	19.40	.....	5.93	26.17	.....	24.13	24.79	.....	.....	.....	.....	50.60	47
.....	5.57	.....	4.25	28.29	.....	46.23	52.79	.....	.....	.....	.....	.....	48
23.36	17.34	32.98	21.48	34.96	84.82	40.52	25.29	280.00	91.67	13.93	25.91	16.25	49
9,506	157,835	82,175	10,153	634,247	8,786	22,308	30,522	19,600	1,650	850	2,125	519,303	50
.....	101,850	.....	5,395	446,550	.....	41,650	117,256	.....	.....	.....	.....	42,000	51
.....	10,300	.....	13,700	581,475	.....	41,650	117,256	.....	.....	.....	.....	(1)	52
.....	55.1	.....	82.4	42.0	.....	-55.6	-71.5	.....	.....	.....	.....	.....	53
17.74	12.51	19.54	6.17	29.80	53.25	20.20	14.79	276.06	8.25	5.06	19.86	6.45	54
.....	19.70	.....	5.87	24.60	.....	21.33	24.23	.....	.....	.....	.....	34.62	55
.....	4.04	.....	4.18	22.54	.....	27.26	48.96	.....	.....	.....	.....	.....	56
5	100	34	26	35	5	22	23	3	3	1	3	204	57
131	8,419	2,296	154	17,977	(3)	69	518	55	11	(3)	67	29,553	58
535	15,411	7,660	337	28,499	(3)	677	1,270	2,110	208	24	400	75,651	59
4.08	1.83	3.34	2.19	1.59	(3)	9.81	2.45	2.44	3.78	2.18	5.97	2.58	60
.....	4.41	.....	1.69	2.78	.....	5.72	3.04	.....	.....	.....	.....	2.29	61
.....	8,009	.....	.....	18,788	.....	.....	.....	.....	.....	.....	.....	.....	62
.....	1.44	.....	.....	1.35	.....	.....	.....	.....	.....	.....	.....	.....	63
.....	5,571	.....	.....	27,475	.....	.....	.....	.....	.....	.....	.....	.....	64
.....	1.44	.....	.....	0.68	.....	.....	.....	.....	.....	.....	.....	.....	65
.....	1,544	.....	.....	734	.....	.....	.....	.....	.....	.....	.....	.....	66
.....	.....	.....	.....	126,500	33,949	.....	.....	.....	.....	.....	.....	.....	67
6	117	35	22	35	6	25	25	4	2	2	6	221	68
231	7,452	2,296	155	17,564	80	544	747	70	(3)	(3)	82	31,430	69
237	17,656	2,933	417	40,317	375	554	756	151	(3)	(3)	81	33,261	70
1.0	2.4	1.2	2.7	2.3	.....	1.0	1.0	2.2	(3)	(3)	1.0	1.1	71
4.08	1.81	3.34	1.98	1.67	.....	2.45	1.37	3.78	(3)	(3)	5.97	2.58	72
.....	(3)	(3)	(3)	(3)	.....	.....	.....	(3)	.....	.....	.....	.....	73
.....	(3)	(3)	(3)	(3)	.....	.....	.....	(3)	.....	.....	.....	.....	74
.....	(3)	(3)	(3)	(3)	.....	.....	.....	(3)	.....	.....	.....	.....	75
.....	(3)	(3)	(3)	(3)	.....	.....	.....	(3)	.....	.....	.....	.....	76
.....	(3)	(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 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - TEXAS

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, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929

[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)		Tarrant	Taylor	Tarrell	Terry	Tom Green	Uvalde
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms.....1940..number....	3,622	1,871	136	1,305	1,408	755
2	.....1930..number....	3,366	2,233	141	1,458	1,234	731
3	Irrigated farms.....1940..number....	34	15	3	7	227	59
4	.....1930..number....	33	25	2	7	182	35
5	Increase or decrease (-), 1930-1940.....percent....	3.0	-40.0	50.0	.....	24.7	253.3
6	Operated by—						
7	(a) Owners and managers.....1940..number....	27	8	2	7	146	33
8	.....1930..number....	.....	.....	.....	.....	105	11
9	(b) Tenants.....1940..number....	7	7	1	.....	81	20
10	.....1930..number....	.....	.....	.....	.....	77	4
11	Land in all farms.....1940..acres....	458,098	507,411	1,511,100	473,063	2,031,150	2,186,451
12	Land in irrigated farms.....1940..acres....	1,955	19,791	25,119	1,346	95,819	112,117
13	Average per farm.....1940..acres....	58	1,319	8,373	192	422	2,115
14	(a) Operated by owners and managers.....1940..acres....	1,596	19,036	(3)	1,346	65,104	105,037
15	Average per farm.....1940..acres....	59	2,380	(3)	192	440	3,183
16	(b) Operated by tenants.....1940..acres....	359	755	(3)	.....	30,715	7,080
17	Average per farm.....1940..acres....	51	108	(3)	.....	379	364
18	Approximate land area.....1940..acres....	551,280	584,320	1,528,320	574,720	987,520	1,016,320
IRRIGATED AND IRRIGABLE AREAS							
19	Area irrigated.....1939..acres....	534	841	347	104	8,728	1,021
20	(a) Cropland harvested.....1939..acres....	529	441	148	104	7,708	769
21	(b) Crop failure.....1939..acres....	5	.....	65	.....	14	10
22	(c) Pasture.....1939..acres....	.....	400	134	.....	1,006	242
23	Area irrigated.....1929..acres....	.....	.....	.....	.....	10,569	1,693
24	.....1919..acres....	.....	.....	.....	.....	7,103	494
25	Increase or decrease (-), 1929-1939.....percent....	.....	.....	.....	.....	-17.4	-39.7
26	Irrigable area in enterprises.....1940..acres....	650	1,332	675	253	12,592	2,426
27	.....1930..acres....	.....	.....	.....	.....	11,583	2,119
28	.....1920 ⁴ ..acres....	.....	.....	.....	.....	14,718	2,032
29	Excess of irrigable area over the area irrigated.....1940..acres....	116	491	328	149	3,604	1,405
30	.....1930..acres....	.....	.....	.....	.....	1,014	428
31	Area works were capable of supplying with water.....1940..acres....	634	1,332	675	253	12,242	2,376
32	.....1930..acres....	.....	.....	.....	.....	11,575	1,866
33	.....1920 ⁴ ..acres....	.....	.....	.....	.....	10,040	2,032
34	Increase or decrease (-), 1930-1940.....percent....	.....	.....	.....	.....	5.8	20.0
35	Excess, capability of works over area irrigated.....1940..acres....	100	491	328	149	3,514	1,355
36	.....1930..acres....	.....	.....	.....	.....	1,006	183
37	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent....	27.3	4.2	1.4	7.7	9.1	0.9
38	.....1929..percent....	.....	.....	.....	.....	21.9	18.7
39	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	84.2	63.1	51.4	41.1	71.3	43.0
40	.....1929..percent....	.....	.....	.....	.....	81.3	89.5
CAPITAL INVESTED TO JANUARY 1							
41	Total investment in all enterprises.....1940..dollars....	44,880	37,400	3,200	7,662	289,990	28,942
42	(a) Cost of irrigation works and equipment.....1940..dollars....	44,610	37,400	3,200	7,662	289,345	28,942
43	(b) Investment in water rights (reported).....1940..dollars....	-250	.....	.....	.....	651	.....
44	Total investment in all enterprises.....1930..dollars....	.....	.....	.....	.....	261,359	47,060
45	.....1920 ⁴ ..dollars....	.....	.....	.....	.....	401,194	28,550
46	Increase or decrease (-), 1930-1940.....percent....	.....	.....	.....	.....	14.8	-38.5
47	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars....	70.76	28.08	4.74	30.28	24.51	12.18
48	.....1930..dollars....	.....	.....	.....	.....	22.58	24.05
49	.....1920 ⁴ ..dollars....	.....	.....	.....	.....	39.96	14.05
50	Average investment per acre irrigated.....1940..dollars....	84.00	44.47	9.22	73.67	34.37	28.35
51	Estimated final investment in existing enterprises.....1940..dollars....	45,460	37,400	3,200	7,662	301,261	30,077
52	.....1930..dollars....	.....	.....	.....	.....	261,359	47,060
53	.....1920 ⁴ ..dollars....	.....	.....	.....	.....	402,194	28,550
54	Increase or decrease (-), 1930-1940.....percent....	.....	.....	.....	.....	15.3	-36.1
55	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars....	69.94	28.08	4.74	30.28	23.92	12.40
56	.....1930..dollars....	.....	.....	.....	.....	22.58	22.21
57	.....1920 ⁴ ..dollars....	.....	.....	.....	.....	27.33	14.05
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
58	Enterprises reporting maintenance and operation.....1939..number....	20	3	3	(3) 1	138	25
59	Area irrigated in these enterprises.....1939..acres....	375	763	347	(3)	7,989	1,021
60	Cost of maintenance and operation.....1939..dollars....	3,640	1,040	270	(3)	18,609	2,822
61	Average cost, per acre irrigated.....1939..dollars....	9.71	1.38	0.78	(3)	2.33	2.89
62	.....1929..dollars....	.....	.....	.....	.....	2.79	4.04
63	Total annual charges (reported) ⁶.....1939..dollars....	.....	.....	.....	.....	469	.....
64	Average annual charge per acre irrigated.....1939..dollars....	.....	.....	.....	.....	0.20	.....
65	Area against which charges were assessed.....1939..acres....	.....	.....	.....	.....	2,379	.....
66	Average annual charge per acre assessed.....1939..dollars....	.....	.....	.....	.....	0.20	.....
67	Total charges collected ⁷.....1939..dollars....	.....	.....	.....	.....	218	.....
68	Indebtedness to December 31 (reported) ⁷.....1939..dollars....	.....	.....	.....	.....	.....	.....
WATER DELIVERED TO IRRIGATORS							
69	Enterprises reporting water delivered.....1939..number....	26	2	.....	4	135	25
70	Area irrigated in these enterprises.....1939..acres....	478	(3)	.....	104	8,623	1,021
71	Water delivered in these enterprises.....1939..acre-feet....	1,690	(3)	.....	148	14,249	1,398
72	Average water delivered per acre irrigated.....1939..acre-feet....	3.5	(3)	.....	1.4	1.7	1.4
73	Average cost of water per acre irrigated.....1939..dollars....	9.40	(3)	.....	3.33	2.31	2.86
DRAINAGE OF IRRIGATED LAND							
74	Enterprises reporting land drained or needing drainage.....1939..number....	5	.....	.....	.....	.....	.....
75	Irrigable area in these enterprises.....1939..acres....	141	.....	.....	.....	.....	.....
76	Irrigated area in these enterprises.....1939..acres....	109	.....	.....	.....	.....	.....
77	Area for which drains have been installed.....1939..acres....	103	.....	.....	.....	.....	.....
78	Additional area needing drainage.....1939..acres....	17	.....	.....	.....	.....	.....

* Census of Agriculture.

¹ Data between census years not comparable (see headnote).² 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.³ 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 - TEXAS

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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"

Val Verde	Waller	Ward	Webb	Wharton	Wilbarger	Wilson	Zapata	Zavala	All other counties ¹	
309	1,484	169	427	3,746	1,300	2,092	329	316	292,064	1
250	1,463	303	522	3,965	2,139	2,431	358	304	360,650	2
161	12	132	57	139	9	11	8	156	1,123	3
47	5	237	70	106	1	2	1	76	786	4
242.6	140.0	-44.3	-16.6	31.1	800.0	450.0	700.0	105.3	42.9	5
113	9	71	39	71	4	9	5	106	651	6
.....	3	46	56	54	.....	.....	.....	41	652	7
48	3	151	18	68	5	2	3	50	472	8
.....	2	14	52	52	.....	.....	.....	35	618	9
2,096,035	222,165	423,908	1,846,626	481,300	2,842,577	403,370	405,982	791,364	67,015,014	10
804,688	9,080	88,523	199,494	87,423	1,664	3,873	13,079	143,417	1,731,193	11
4,988	757	671	3,500	629	185	352	1,635	919	1,542	12
645,192	6,388	80,461	176,957	54,001	573	(³)	11,880	129,867	1,633,072	13
5,710	710	1,133	4,537	761	168	(³)	2,375	1,225	2,509	14
159,476	2,692	8,062	22,537	33,422	991	(³)	1,199	13,950	98,121	15
3,322	897	132	1,252	492	198	(³)	400	271	208	16
2,074,880	324,480	529,280	2,108,800	690,560	610,560	513,280	691,200	826,880	85,836,160	17
2,968	2,496	18,655	5,717	22,468	47	321	1,026	23,384	36,523	18
1,439	2,496	18,023	5,644	22,468	47	296	1,026	13,374	35,422	19
9	.....	600	15	.....	.....	.....	.....	230	4	20
1,520	.....	32	8	.....	.....	25	.....	9,780	1,397	21
.....	577	13,900	13,208	30,898	.....	.....	.....	13,128	59,911	22
.....	.....	20,000	7,480	19,516	.....	.....	.....	1,642	21,444	23
.....	332.6	34.2	-56.7	-27.3	.....	.....	.....	78.2	-30.4	24
5,863	5,877	62,127	15,063	73,685	47	421	2,519	34,666	89,809	25
.....	1,097	69,295	25,891	109,533	.....	.....	.....	18,091	75,025	26
.....	.....	71,500	31,736	75,612	.....	.....	.....	5,933	66,366	27
2,895	3,181	43,472	9,366	51,217	.....	100	1,493	11,282	52,986	28
.....	520	55,395	12,683	78,635	.....	.....	.....	4,965	22,114	29
5,863	5,877	80,037	12,744	68,585	47	421	1,679	33,297	86,312	30
.....	1,097	24,800	19,188	40,874	.....	.....	.....	15,364	73,481	31
.....	.....	37,000	13,143	40,623	.....	.....	.....	4,645	43,146	32
.....	417.5	142.1	-33.6	67.6	.....	.....	.....	115.7	17.5	33
2,895	3,181	41,382	7,027	46,117	.....	100	653	9,913	49,489	34
.....	520	10,900	5,980	9,976	.....	.....	.....	2,238	20,570	35
0.4	27.5	21.1	2.9	25.7	2.8	8.3	7.8	16.3	2.1	36
.....	34.3	16.5	18.0	71.9	.....	.....	.....	43.2	12.6	37
50.6	44.0	31.1	44.9	32.8	100.0	76.2	61.1	70.2	42.7	38
.....	52.6	56.0	68.8	75.6	.....	.....	.....	85.4	72.0	39
424,425	53,350	1,548,085	421,124	747,154	1,050	8,100	13,805	900,253	6,990,327	40
424,425	53,350	1,547,452	419,249	741,572	1,050	8,100	13,805	897,250	6,990,302	41
.....	.....	633	1,875	5,452	.....	.....	.....	13,003	25	42
.....	28,500	604,500	1,317,254	795,175	.....	.....	.....	916,548	6,027,928	43
.....	.....	370,000	1,088,040	1,543,808	.....	.....	.....	160,850	1,813,537	44
.....	87.2	156.1	-68.0	6.0	.....	.....	.....	-1.8	16.0	45
72.39	9.40	25.79	33.04	10.89	22.34	14.49	8.22	27.04	80.99	46
.....	25.98	24.38	68.65	19.45	.....	.....	.....	59.96	52.03	47
.....	.....	10.00	83.59	38.40	.....	.....	.....	34.63	42.03	48
143.00	21.37	82.98	70.69	33.25	22.34	19.00	13.46	38.50	189.84	49
424,425	53,350	1,563,085	442,624	747,154	1,050	8,100	28,805	914,253	7,098,017	50
.....	28,500	604,500	1,350,354	795,175	.....	.....	.....	1,630,548	6,065,328	51
.....	.....	370,000	1,159,702	1,574,808	.....	.....	.....	160,850	1,868,212	52
.....	87.2	156.6	-67.22	-0.0	.....	.....	.....	-11.3	17.2	53
72.39	9.40	25.16	29.35	10.14	22.34	14.49	11.44	26.37	79.03	54
.....	25.98	8.72	52.15	7.26	.....	.....	.....	59.96	80.71	55
.....	.....	5.17	95.81	20.82	.....	.....	.....	27.11	28.15	56
.....	.....	Primary	Sup.	.....	.....	.....	.....	Primary	Sup.	.....
.....	.....	Enterprises	.....	.....	.....	.....	.....	Enterprises	.....	.....
58	9	4	1	38	29	3	2	102	48	57
2,964	2,156	18,655	(³)	4,053	20,650	(³)	252	20,041	36,088	58
4,120	10,481	30,632	(³)	28,017	135,082	(³)	1,200	56,175	102,368	59
1.39	4.86	1.64	(³)	6.91	6.54	(³)	4.76	2.80	2.84	60
.....	9.03	1.92	.....	12.27	6.06	.....	.....	7.35	5.02	61
2,277	.....	58,156	140,817	.....	148,560	.....	.....	125	7,565	62
3.00	.....	3.01	7.55	.....	8.84	.....	.....	0.54	1.14	63
759	.....	74,317	74,317	.....	16,797	.....	.....	230	8,500	64
3.00	.....	0.76	1.89	.....	8.84	.....	.....	0.54	0.89	65
.....	.....	35,108	16,883	.....	63,061	.....	.....	560	7,661	66
.....	.....	368,900	780,821	.....	45,793	.....	.....	600	82,900	67
59	10	3	.....	82	41	3	5	128	47	68
2,209	2,496	18,655	.....	4,845	22,468	47	321	23,154	36,547	69
6,142	5,918	112,469	.....	11,136	67,140	106	1,038	21,660	35,569	70
2.8	2.4	6.0	.....	2.3	3.9	2.3	3.2	9.4	1.0	71
1.32	4.86	2.93	.....	8.48	8.13	3.24	4.76	2.83	2.69	72
(³)	1	3	.....	(³)	1	(³)	1	(³)	10	73
(³)	(³)	61,037	.....	(³)	(³)	(³)	(³)	(³)	41,466	74
(³)	(³)	18,655	.....	(³)	(³)	(³)	(³)	(³)	6,617	75
.....	.....	17,407	.....	(³)	.....	(³)	(³)	(³)	41,443	76

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

²Does not include data for Nueces and Wichita Counties. Averages for these are 4.71 and 3.27 respectively.

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 - TEXAS

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	Armstrong	Atascosa	Bailey	Bandera	Bexar	Brazoria
FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	2,589,978,936	8,958,491	10,716,385	7,949,641	6,228,843	29,729,522	13,491,181
2	Land and buildings, irrigated farms.....dollars..	248,746,614	173,040	495,441	2,248,836	137,400	2,803,258	1,572,418
Operated by—								
3	(a) Owners and managers.....dollars..	194,702,077	(¹)	286,041	1,445,932	(¹)	2,244,498	893,088
4	(b) Tenants.....dollars..	54,044,537	(¹)	199,400	802,904	(¹)	558,760	679,330
5	Average, land and buildings, per farm.....dollars..	12,711.91	26,840.00	2,984.58	9,101.60	17,175.00	7,281.19	23,123.79
6	per acre in farms.....dollars..	21.41	17.87	55.67	23.35	9.36	145.82	36.63
7	Buildings, irrigated farms reporting value.....number..	16,696	6	138	237	8	380	49
8	Total reported.....dollars..	32,848,639	12,250	99,165	291,255	16,300	664,315	159,593
9	Average, per irrigated farm reporting.....dollars..	1,967.46	2,041.67	718.59	1,226.92	2,037.50	1,746.20	3,262.92
10	per acre on all irrigated farms.....dollars..	2.83	1.26	11.14	3.02	1.11	34.56	3.72
11	Buildings, nonirrigated farms reporting value.....number..	383,227	386	1,794	535	632	3,211	1,653
12	Total reported.....dollars..	385,420,914	830,618	1,539,626	548,730	1,104,710	6,232,080	2,040,116
13	Average, per nonirrigated farm reporting.....dollars..	1,005.72	2,151.86	858.21	1,025.66	1,747.96	1,940.84	1,234.19
14	per acre on all nonirrigated farms.....dollars..	3.06	1.04	2.23	1.54	2.38	11.25	3.81
15	Implements and machinery, irrigated farms reporting value.....number..	16,549	6	129	226	8	379	65
16	Total reported.....dollars..	20,123,837	19,020	77,424	317,990	7,100	251,688	259,735
17	Average, per irrigated farm reporting.....dollars..	1,216.02	3,170.00	600.19	1,407.04	887.50	674.77	3,095.77
18	per acre on all irrigated farms.....dollars..	1.73	1.98	8.70	3.30	0.48	13.09	6.05
19	Implements and machinery, nonirrigated farms reporting value.....number..	337,983	376	1,700	512	607	3,092	1,504
20	Total reported.....dollars..	160,620,275	531,739	724,783	666,582	240,710	1,775,919	930,874
21	Average, per acre, on all nonirrigated farms.....dollars..	1.27	0.66	1.05	1.87	0.52	3.21	1.74
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
22	Enterprises.....1940...number.....	2,408	5	57	95	4	105	17
23	.....1930...number.....	1,736	.....	45	23	4	36	14
24	.....1920...number.....	1,371	.....	35	24	.....	43	1
25	Average size of enterprise based on							
26	irrigable area.....1940...acres.....	536	139	58	103	5	237	3,521
27	.....1930...acres.....	903	.....	53	110	.....	1,143	425
28	.....1920...acres.....	1,231	.....	184	195	.....	1,373	1,000
29	Diversion dams.....1940...number.....	244	.....	.....	.....	1	2	1
30	Main canals and laterals.....1940...length, miles.....	5,936.1	.....	11.6	.....	.....	139.0	95.0
31	.....1930...length, miles.....	4,879	.....	8	.....	.....	192	16
32	.....1920...length, miles.....	4,473	.....	60	50	.....	127	2
33	.....1940...capacity, c.f.s. ⁴	24,813	.....	.....	.....	2	73	146
34	.....1930...capacity, c.f.s. ⁴	21,626	.....	7	.....	.....	86	138
35	.....1920...capacity, c.f.s. ⁴	23,281	.....	25	50	.....	1,702	1
36	Pipe lines ⁵.....1940...length, miles.....	623.1	.....	0.2	.....	0.2	10.9	0.1
37	Storage dams.....1940...number.....	194	.....	2	.....	1	2	1
38	Reservoirs.....1940...number.....	542	3	17	.....	1	6	2
39	.....1930...number.....	325	.....	31	.....	.....	11	.....
40	.....1920...number.....	368	.....	21	.....	.....	11	.....
41	.....1940...capacity, acre-feet.....	1,405,024	5	60	.....	(¹)	7,314	(¹)
42	.....1930...capacity, acre-feet.....	935,085	.....	51	.....	.....	8,631	.....
43	.....1920...capacity, acre-feet.....	382,999	.....	46	.....	.....	260,316	.....
44	Wells, flowing.....1940...number.....	100	.....	25	.....	.....	25	.....
45	.....1930...number.....	61	.....	27	.....	.....	6	.....
46	.....1920...number.....	135	.....	40	.....	.....	23	.....
47	.....1940...yield, g.p.m.....	39,508	.....	9,240	.....	.....	13,878	.....
48	.....1930...yield, g.p.m.....	36,020	.....	14,233	.....	.....	3,520	.....
49	.....1920...yield, g.p.m.....	62,364	.....	16,540	.....	.....	15,410	.....
50	Wells, pumped.....1940...number.....	3,396	5	43	101	1	81	2
51	.....1930...number.....	1,102	.....	20	24	.....	25	6
52	.....1920...number.....	901	.....	10	27	.....	22	.....
53	.....1940...yield, g.p.m.....	2,213,230	2,954	15,245	99,066	(¹)	42,706	(¹)
54	.....1930...yield, g.p.m.....	614,395	.....	8,610	18,800	.....	16,147	5,952
55	.....1920...yield, g.p.m.....	538,565	.....	7,700	24,150	.....	10,820	.....
56	Pumping plants.....1940...number.....	4,074	6	42	101	3	94	17
57	.....1930...number.....	1,828	.....	20	24	.....	36	16
58	.....1920...number.....	1,369	.....	11	24	.....	31	1
59	Prime movers.....1940...capacity, hp.....	195,061	156	606	3,199	8	1,062	715
60	.....1930...capacity, hp.....	95,833	.....	553	520	.....	863	668
61	.....1920...capacity, hp.....	80,511	.....	141	585	.....	693	125
62	Pumps.....1940...capacity, g.p.m.....	9,916,225	3,354	19,343	99,166	630	49,326	87,850
63	.....1930...capacity, g.p.m.....	6,494,969	.....	8,660	18,800	.....	32,787	51,477
64	.....1920...capacity, g.p.m.....	6,825,988	.....	8,900	24,150	.....	14,220	12,000
65	Pumping lift, from all sources.....1940...average, feet.....	69	85	19	45	34	27	18
66	.....1930...average, feet.....	55	.....	12	22	.....	34	23
67	.....1920...average, feet.....	45	.....	51	24	.....	31	14
68	from pumped wells.....1940...average, feet.....	82	85	19	45	(¹)	28	(¹)
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁶								
69	Enterprises reporting pay roll.....number.....	102	.....	2	.....	.....	7	3
70	Irrigated area in these enterprises.....acres.....	680,299	.....	(¹)	.....	.....	10,472	33,850
71	Wages and salaries paid and payable.....dollars..	1,628,198	.....	(¹)	.....	.....	12,786	79,313
72	Persons employed during week ending April 29.....number..	1,698	.....	(¹)	.....	.....	47	74

* 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 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 - TEXAS

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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"]

Brewster	Briscoe	Brooks	Callahan	Cameron	Castro	Chambers	Coke	Coleman	Colorado	Comal	Concho	Crosby	Dallam	
11,915,916	6,015,696	5,360,707	8,006,709	21,368,831	10,373,351	3,543,914	9,077,009	16,106,055	10,185,722	6,390,411	12,416,818	12,185,070	5,242,785	1
192,724	783,525	864,653	35,800	18,459,606	2,931,404	1,106,470	598,434	128,325	1,509,948	19,500	48,920	1,242,444	518,155	2
185,164	633,915	864,653	28,700	12,857,316	2,419,664	492,305	512,684	91,350	1,153,107	19,500	27,690	628,305	307,605	3
7,560	149,610	.....	7,100	5,002,290	511,740	614,165	85,750	36,975	356,741	.....	21,230	618,139	210,550	4
8,760.18	12,637.50	43,232.65	5,114.29	7,127.26	16,847.15	14,005.95	49,869.50	9,871.15	15,727.58	3,900.00	6,115.00	6,902.47	8,635.92	5
11.69	23.46	17.65	55.50	86.29	22.91	24.79	14.26	57.21	18.32	177.27	30.09	32.25	6.81	6
21	62	20	7	2,391	156	60	12	10	63	5	7	175	60	7
53,900	89,131	74,100	12,600	2,039,328	949,600	85,225	37,400	48,875	113,780	7,100	11,700	200,480	95,205	8
2,532.38	1,437.60	3,705.00	1,800.00	1,103.86	2,241.03	1,420.42	3,116.07	4,887.50	1,805.71	1,420.00	1,671.43	1,145.60	1,588.75	9
3.25	2.67	1.51	19.53	12.34	2.73	1.91	0.89	21.79	1.38	64.55	7.20	5.40	1.25	10
217	428	362	1,888	601	472	282	711	1,969	2,013	711	685	1,012	355	11
391,980	409,545	320,097	1,240,984	386,997	821,801	355,169	836,618	2,195,523	1,897,105	1,567,255	1,180,560	1,607,563	543,735	12
1,803.59	1,187.16	894.25	894.08	643.92	1,741.10	1,259.46	1,176.69	1,098.10	992.10	2,201.31	1,698.65	1,588.50	1,531.65	13
0.13	1.59	0.59	2.63	3.70	2.28	2.28	1.35	2.87	5.32	5.06	2.13	3.89	0.74	14
21	57	20	5	2,242	164	78	12	12	90	5	6	155	54	15
18,895	86,626	29,523	1,090	1,621,414	353,135	336,033	14,800	13,553	192,485	4,325	5,100	171,287	77,487	16
899.76	1,519.75	1,476.15	218.00	723.20	2,153.26	4,308.12	1,216.67	1,129.42	2,138.72	805.00	850.00	1,106.08	1,434.94	17
1.15	2.59	0.60	1.69	7.58	2.76	7.53	0.35	6.04	2.34	39.33	3.14	4.45	1.02	18
175	420	326	1,091	573	473	229	551	1,755	1,872	630	609	977	303	19
152,075	408,123	130,512	562,142	276,021	794,855	126,939	428,710	1,197,404	481,267	387,002	645,225	1,467,783	394,176	20
0.05	1.30	0.24	1.19	2.64	2.20	0.82	0.69	1.61	1.38	1.25	1.17	3.65	0.53	21
21	18	22	5	164	101	4	7	11	14	4	4	20	12	22
35	.....	5	.....	26	.....	1	4	5	17	4	3	.....	.....	23
16	.....	.....	.....	17	.....	4	.....	.....	31	.....	.....	.....	.....	24
87	154	30	23	1,275	267	31,394	56	18	10,424	26	29	71	128	25
48	.....	.....	.....	9,127	.....	18,000	.....	.....	7,956	.....	.....	.....	.....	26
68	.....	.....	.....	10,495	.....	18,050	.....	.....	1,461	.....	.....	.....	.....	27
5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	28
5.0	.....	.....	.....	905.3	.....	368.2	0.1	4.0	136.0	.....	0.1	.....	.....	29
7	.....	.....	.....	1,042	.....	45	.....	.....	227	.....	.....	.....	.....	30
6	.....	.....	.....	586	.....	121	.....	.....	78	.....	.....	.....	.....	31
38	.....	.....	3	2,604	.....	250	8	40	1,032	1	7	.....	.....	32
22	.....	.....	.....	4,150	.....	300	.....	.....	356	.....	.....	.....	.....	33
132	.....	.....	.....	3,435	.....	865	.....	.....	523	.....	.....	.....	.....	34
2.5	0.5	3.2	.....	177.9	.....	.....	3.9	2.7	.....	0.5	0.5	.....	.....	35
.....	.....	.....	2	22	.....	1	2	1	1	.....	1	.....	.....	36
6	3	3	2	25	.....	1	2	1	1	.....	1	.....	.....	37
3	.....	.....	.....	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
16	.....	.....	.....	3	.....	1	.....	.....	.....	.....	.....	.....	.....	39
2	2	4	(1)	44,664	.....	(1)	(1)	(1)	(1)	.....	(1)	.....	.....	40
36	.....	.....	.....	13,086	.....	.....	.....	.....	6,000	.....	.....	.....	.....	41
15	.....	.....	.....	1,501	.....	25,000	.....	.....	.....	.....	.....	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
13	17	26	6	3	106	.....	1	.....	16	3	2	20	16	48
8	.....	.....	.....	.....	.....	.....	.....	.....	15	.....	.....	.....	.....	49
15	.....	.....	.....	1	.....	.....	(1)	.....	39	.....	(1)	.....	.....	50
146	12,019	4,467	1,096	463	96,593	.....	.....	.....	14,100	1,200	.....	7,810	13,300	51
158	.....	.....	.....	.....	.....	.....	.....	.....	26,675	.....	.....	.....	.....	52
964	.....	.....	.....	25	.....	.....	.....	.....	25,850	.....	.....	.....	.....	53
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
24	17	27	7	201	108	2	7	13	30	5	4	20	16	55
10	.....	.....	.....	59	.....	2	.....	.....	18	.....	.....	.....	.....	56
15	.....	.....	.....	29	.....	7	.....	.....	44	.....	.....	.....	.....	57
225	911	204	28	10,012	5,610	(1)	70	64	7,883	28	63	459	587	58
146	.....	.....	.....	7,231	.....	1,600	.....	.....	6,993	.....	.....	.....	.....	59
153	.....	.....	.....	5,947	.....	4,672	.....	.....	4,164	.....	.....	.....	.....	60
15,004	12,423	4,242	2,096	1,188,927	100,398	(1)	4,050	3,463	837,200	525	3,145	7,215	13,305	61
7,788	.....	.....	.....	1,224,900	.....	120,000	.....	.....	559,075	.....	.....	.....	.....	62
6,538	.....	.....	.....	867,212	.....	309,200	.....	.....	328,750	.....	.....	.....	.....	63
74	107	31	22	11	104	(1)	24	33	62	53	36	160	50	64
53	.....	.....	.....	21	.....	42	.....	.....	76	.....	.....	.....	.....	65
46	.....	.....	.....	15	.....	25	.....	.....	50	.....	.....	.....	.....	66
108	104	31	28	37	104	.....	(1)	.....	65	57	(1)	190	50	67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	13	.....	4	.....	.....	(1)	2	.....	.....	.....	69
.....	.....	.....	.....	79,512	.....	32,180	.....	.....	(1)	.....	.....	.....	.....	70
.....	.....	.....	.....	292,537	.....	112,813	.....	.....	(1)	.....	.....	.....	.....	71
.....	.....	.....	.....	328	.....	89	.....	.....	(1)	.....	.....	.....	.....	72

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

Includes siphons and farm pipe lines reported.

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

CENSUS OF IRRIGATION - TEXAS

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)		Dallas	Deaf Smith	Dickens	Dimmit	Donley	Edwards	El Paso	Fisher
FARM VALUES, 1940*									
1	Land and buildings, all farms.....dollars..	36,632,161	14,507,226	6,550,510	7,148,068	7,995,135	12,026,182	16,133,701	11,803,377
2	Land and buildings, irrigated farms.....dollars..	307,700	5,114,135	534,709	3,066,612	65,640	2,738,339	15,341,582	193,680
3	Operated by—								
4	(a) Owners and managers.....dollars..	221,850	4,208,915	446,514	2,114,947	40,140	2,240,015	13,222,118	(¹)
5	(b) Tenants.....dollars..	85,750	908,220	108,195	951,665	25,500	498,324	2,119,464	(¹)
6	Average, land and buildings, per farm.....dollars..	7,692.50	20,456.54	8,553.98	12,169.10	8,205.00	51,668.77	16,326.25	15,283.08
7	per acre in farms.....dollars..	271.58	23.07	20.26	21.26	16.34	9.70	125.31	29.49
8	Buildings, irrigated farms reporting value.....number..	39	237	65	223	8	53	945	13
9	Total reported.....dollars..	80,775	668,475	89,700	541,736	9,600	192,011	2,716,536	20,100
10	Average, per irrigated farm reporting.....dollars..	2,071.15	2,812.13	1,880.00	2,429.31	1,200.00	3,632.85	2,874.64	1,546.15
11	per acre on all irrigated farms.....dollars..	71.29	3.01	3.28	3.76	2.39	0.68	22.19	2.08
12	Buildings, nonirrigated farms reporting value.....number..	3,404	401	821	163	849	217	69	1,439
13	Total reported.....dollars..	6,327,111	706,555	863,980	193,065	1,031,170	758,478	276,471	1,730,955
14	Average, per nonirrigated farm reporting.....dollars..	1,858.73	1,761.98	1,052.35	1,184.45	1,214.57	3,495.29	4,006.83	1,202.89
15	per acre on all nonirrigated farms.....dollars..	16.38	0.99	2.95	0.41	1.08	0.78	1.36	3.58
16	Implements and machinery, irrigated farms reporting value.....number..	36	225	54	236	7	51	730	13
17	Total reported.....dollars..	22,775	599,259	58,685	223,022	7,800	50,490	1,097,576	17,950
18	Average, per irrigated farm reporting.....dollars..	599.34	2,663.37	1,086.76	986.82	1,114.29	990.00	1,889.34	1,380.77
19	per acre, on all irrigated farms.....dollars..	20.10	2.70	2.14	1.55	1.94	0.18	8.97	2.66
20	Implements and machinery, nonirrigated farms reporting value.....number..	2,900	410	771	126	811	199	57	1,304
21	Total reported.....dollars..	1,798,346	863,504	672,295	62,190	708,881	204,048	25,331	1,115,381
22	Average, per acre, on all nonirrigated farms.....dollars..	4.65	1.21	2.30	0.13	1.36	0.21	0.12	2.31
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
23	Enterprises.....1940.....number.....	39	193	21	237	3	9	21	8
24	.....1930.....number.....	12	32	.....	147	.....	2	1	8
25	.....1920.....number.....	.....	43	.....	146	.....	.....	2	.....
26	Average size of enterprise based on								
27	irrigable area.....1940.....acres.....	9	259	1	115	16	16	74,708	54
28	.....1930.....acres.....	.....	213	.....	127	.....	.....	67,060	.....
29	.....1920.....acres.....	.....	310	.....	136	.....	.....	29,002	.....
30	Diversion dams.....1940.....number.....	4	.....	.....	1	.....	2	2	1
31	Main canals and laterals.....1940.....length, miles.....	.....	.....	0.5	5.8	.....	1.1	255.7	4.0
32	.....1930.....length, miles.....	.....	.....	.....	4	.....	.....	257	.....
33	.....1920.....length, miles.....	.....	113	.....	5	.....	.....	40	.....
34	.....1940.....capacity, c.f.s.....	10	.....	.....	79	.....	8	1,330	31
35	.....1930.....capacity, c.f.s.....	.....	.....	.....	9	.....	.....	1,720	.....
36	.....1920.....capacity, c.f.s.....	.....	94	.....	39	.....	.....	774	.....
37	Pipe lines.....1940.....length, miles.....	15.0	.....	0.1	4.0	1.0	0.7	.....	3.6
38	Storage dams.....1940.....number.....	4	2	.....	4	.....	.....	.....	4
39	Reservoirs.....1940.....number.....	4	2	.....	105	.....	.....	.....	4
40	.....1930.....number.....	.....	.....	.....	54	.....	.....	.....	.....
41	.....1920.....number.....	.....	.....	.....	153	.....	.....	.....	.....
42	.....1940.....capacity, acre-feet.....	15	(¹)	.....	14,827	.....	.....	.....	108
43	.....1930.....capacity, acre-feet.....	.....	.....	.....	5,047	.....	.....	.....	.....
44	.....1920.....capacity, acre-feet.....	.....	.....	.....	1,600	.....	.....	.....	.....
45	Wells, flowing.....1940.....number.....	.....	1	.....	.....	.....	.....	.....	.....
46	.....1930.....number.....	.....	.....	.....	.....	.....	.....	.....	.....
47	.....1920.....number.....	.....	2	.....	27	.....	.....	.....	.....
48	.....1940.....yield, g.p.m.....	.....	(¹)	.....	.....	.....	.....	.....	.....
49	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
50	.....1920.....yield, g.p.m.....	.....	2,500	.....	6,025	.....	.....	.....	.....
51	Wells, pumped.....1940.....number.....	65	227	21	251	3	3	.....	.....
52	.....1930.....number.....	.....	34	.....	199	.....	.....	.....	.....
53	.....1920.....number.....	.....	44	.....	178	.....	.....	.....	.....
54	.....1940.....yield, g.p.m.....	9,180	204,115	120	81,046	24	315	.....	.....
55	.....1930.....yield, g.p.m.....	.....	39,700	.....	63,425	.....	.....	.....	.....
56	.....1920.....yield, g.p.m.....	.....	46,250	.....	48,460	.....	.....	.....	.....
57	Pumping plants.....1940.....number.....	49	229	21	289	3	7	.....	8
58	.....1930.....number.....	.....	34	.....	108	.....	.....	.....	.....
59	.....1920.....number.....	.....	43	.....	181	.....	.....	.....	.....
60	Prime movers.....1940.....capacity, hp.....	332	11,146	24	5,429	6	30	.....	163
61	.....1930.....capacity, hp.....	.....	1,755	.....	5,920	.....	.....	.....	.....
62	.....1920.....capacity, hp.....	.....	2,340	.....	3,851	.....	.....	.....	.....
63	Pumps.....1940.....capacity, g.p.m.....	12,460	203,370	120	117,151	24	1,916	.....	20,000
64	.....1930.....capacity, g.p.m.....	.....	37,530	.....	66,615	.....	.....	.....	.....
65	.....1920.....capacity, g.p.m.....	.....	48,750	.....	74,900	.....	.....	.....	.....
66	Pumping lift, from all sources.....1940.....average, feet.....	24	95	40	60	132	90	.....	16
67	.....1930.....average, feet.....	.....	65	.....	129	.....	.....	.....	.....
68	.....1920.....average, feet.....	.....	79	.....	39	.....	.....	.....	.....
69	From pumped wells.....1940.....average, feet.....	25	95	40	65	132	187	.....	.....
PAY ROLL AND NUMBER OF EMPLOYEES 1939²									
70	Enterprises reporting pay roll.....number.....	.....	.....	.....	3	.....	.....	21	.....
71	Irrigated area in these enterprises.....acres.....	.....	.....	.....	300	.....	.....	61,153	.....
72	Wages and salaries paid and payable.....dollars..	.....	.....	.....	794	.....	.....	110,150	.....
73	Persons employed during week ending April 29.....number..	.....	.....	.....	5	.....	.....	73	.....

* 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 Data for less than 3 enterprises shown with permission of the enterprise involved.³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION — TEXAS

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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"

Floyd	Fort Bend	Frio	Galveston	Gillespie	Glasscock	Gray	Guadalupe	Hale	Hansford	Harris	Haskell	Heys	Hemphill	
13,971,774	22,296,201	7,437,519	4,309,977	13,727,631	6,313,847	9,945,416	14,810,947	18,197,861	7,736,311	41,269,301	14,988,802	7,501,347	6,155,206	1
5,845,689	1,148,383	826,037	201,420	2,731,551	2,239,588	219,570	106,750	13,035,627	119,488	1,620,171	191,195	69,100	101,300	2
3,916,760	756,713	606,567	(¹)	2,509,351	1,960,098	104,120	106,750	8,265,215	119,488	1,268,015	165,320	(¹)	(¹)	3
1,928,009	391,670	219,470	(¹)	222,200	279,490	115,450	.....	4,770,412	.....	352,156	25,876	(¹)	(¹)	4
12,411.25	19,799.71	15,585.60	6,945.52	11,674.37	50,899.73	24,398.67	13,343.75	11,680.67	29,872.00	9,000.95	11,949.69	9,871.43	15,863.33	5
31.95	42.43	18.03	97.78	20.89	11.69	15.63	46.25	29.73	15.94	46.01	70.63	66.51	14.55	6
494	54	51	29	233	43	9	8	1,094	4	179	16	7	6	7
880,616	134,297	157,975	73,800	527,225	162,566	27,000	19,500	1,833,850	12,950	333,750	46,030	31,300	15,500	8
1,897.68	2,486.98	3,097.55	2,544.63	2,262.77	3,780.37	3,000.00	2,437.50	1,676.28	3,237.50	1,804.53	2,878.12	4,471.43	2,563.33	9
4.81	4.96	3.45	35.83	4.03	0.84	1.92	8.45	1.66	1.66	9.48	16.99	30.13	2.23	10
799	3,297	603	833	1,129	100	616	2,685	451	260	6,037	1,848	1,175	334	11
1,247,925	3,235,287	672,765	1,302,657	2,213,082	267,760	1,293,475	3,654,413	672,430	720,205	9,986,752	2,135,801	1,637,199	614,030	12
1,561.73	981.28	1,115.73	1,563.81	1,960.21	2,577.50	2,099.80	1,361.05	1,490.95	2,770.02	1,500.19	1,155.74	1,410.38	1,898.41	13
3.98	8.57	1.15	10.93	4.06	0.72	2.42	10.30	3.94	1.45	17.02	3.32	4.17	1.17	14
445	55	50	25	229	44	7	7	1,046	4	175	15	7	6	15
628,241	125,101	59,700	18,683	181,165	49,925	12,050	6,935	1,513,807	13,625	271,300	24,220	10,585	3,600	16
1,411.78	2,274.56	1,194.00	747.32	791.11	1,134.66	1,721.43	990.71	1,447.23	3,406.25	1,550.29	1,614.67	1,512.14	600.00	17
3.43	4.62	1.30	9.07	1.39	0.26	0.66	3.00	3.45	1.75	7.70	8.93	10.19	0.52	18
729	3,129	589	732	1,111	100	560	2,558	399	272	5,437	1,746	960	338	19
905,088	1,446,235	376,083	379,887	651,681	128,886	725,618	1,024,498	567,150	748,274	3,039,951	1,679,203	364,476	375,676	20
2.89	3.83	0.64	3.19	1.20	0.35	1.36	2.89	3.32	1.51	5.18	3.08	0.62	0.71	21
225	13	31	3	12	7	3	3	328	6	30	3	3	6	22
29	9	27	6	2	.....	.....	1	61	1	22	3	3	.....	23
47	.....	24	.....	.....	.....	.....	.....	58	.....	1	.....	.....	.....	24
261	2,700	41	30	5	29	11	78	219	60	504	83	12	12	25
60	3,822	91	.....	.....	.....	.....	.....	120	.....	344	.....	.....	.....	26
119	.....	140	.....	.....	.....	.....	.....	175	.....	16,000	.....	.....	.....	27
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
.....	45.0	.....	.....	.....	.....	.....	3.0	2.0	4.0	.....	.....	.....	1.2	29
.....	29	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	30
95	.....	2	.....	.....	.....	.....	.....	108	.....	40	.....	.....	.....	31
1	889	3	.....	3	.....	1	14	.....	16	.....	.....	2	3	32
.....	350	.....	.....	.....	.....	.....	.....	.....	.....	30	.....	.....	.....	33
94	.....	10	.....	.....	.....	.....	.....	113	.....	266	.....	.....	.....	34
1.0	0.3	0.2	1.0	1.1	0.5	0.6	1.3	.....	0.2	1.1	.....	1.6	0.4	35
.....	3	1	1	.....	1	3	.....	.....	.....	.....	.....	.....	.....	36
.....	1	8	2	.....	4	2	.....	6	.....	1	.....	.....	.....	37
.....	3	14	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	38
.....	(¹)	17	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	39
.....	1,800	74	(¹)	.....	452	(¹)	.....	40	.....	(¹)	.....	.....	26	40
.....	.....	23	.....	.....	.....	.....	.....	800	.....	1	.....	.....	.....	41
.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
.....	.....	2,640	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
.....	.....	530	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
.....	.....	1,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
.....	.....	39	3	14	11	3	.....	394	7	38	6	2	6	48
273	9	33	.....	.....	.....	.....	.....	76	.....	25	.....	.....	.....	49
28	9	37	.....	.....	.....	.....	.....	88	.....	.....	.....	.....	.....	50
48	.....	37	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51
231,557	11,700	5,369	146	1,424	1,915	504	.....	358,992	2,958	55,840	2,350	(¹)	878	52
27,500	18,550	10,530	.....	.....	.....	.....	.....	68,529	.....	29,961	.....	.....	.....	53
49,250	.....	7,685	.....	.....	.....	.....	.....	62,797	.....	.....	.....	.....	.....	54
279	20	31	4	14	12	4	3	377	7	38	6	3	7	55
29	11	26	.....	.....	.....	.....	.....	72	.....	24	.....	.....	.....	56
47	.....	27	.....	.....	.....	.....	.....	65	.....	1	.....	.....	.....	57
12,167	5,682	275	11	73	243	32	46	17,481	106	2,094	38	12	22	58
2,165	1,968	352	.....	.....	.....	.....	.....	3,023	.....	1,177	.....	.....	.....	59
1,950	.....	306	.....	.....	.....	.....	.....	3,212	.....	2,400	.....	.....	.....	60
232,702	387,050	6,608	146	2,424	2,141	624	3,650	352,318	3,058	55,040	2,350	370	578	61
27,700	119,050	11,468	.....	.....	.....	.....	.....	70,050	.....	35,883	.....	.....	.....	62
49,250	.....	8,045	.....	.....	.....	.....	.....	62,985	.....	120,000	.....	.....	.....	63
94	64	75	92	84	65	121	28	83	108	73	34	42	34	64
94	27	84	.....	.....	.....	.....	.....	73	.....	65	.....	.....	.....	65
91	.....	63	.....	.....	.....	.....	.....	76	.....	50	.....	.....	.....	66
94	91	78	92	89	85	353	.....	83	106	73	34	(¹)	43	67
.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	10,107	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
.....	19,199	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
.....	54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	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 - TEXAS

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)		Hidalgo	Hockley	Howard	Hudspeth	Hutchinson	Irion	Jackson
FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	40,312,799	14,297,438	8,930,939	6,212,843	4,386,604	8,580,001	9,640,230
2	Land and buildings, irrigated farms.....dollars..	33,196,286	1,553,629	132,800	3,247,680	317,680	684,605	420,660
3	Operated by—							
4	(a) Owners and managers.....dollars..	28,502,267	845,672	112,200	2,909,430	224,980	554,005	196,850
5	(b) Tenants.....dollars..	4,694,019	707,957	20,630	338,200	92,700	130,600	223,810
6	Average, land and buildings, per farm.....dollars..	8,108.52	9,303.17	8,300.00	38,208.12	19,855.00	14,566.06	32,358.46
	per acre in farms.....dollars..	138.33	35.55	24.70	4.04	17.44	21.68	8.33
7	Buildings, irrigated farms reporting value.....number..	2,028	165	16	77	16	47	10
8	Total reported.....dollars..	4,285,647	260,425	22,650	191,075	46,350	87,010	25,550
9	Average, per irrigated farm reporting.....dollars..	2,113.19	1,578.33	1,415.62	2,481.49	2,896.88	1,851.28	2,555.00
10	per acre on all irrigated farms.....dollars..	17.86	5.96	4.21	0.24	2.55	2.76	0.51
11	Buildings, nonirrigated farms reporting value.....number..	1,814	1,287	769	51	146	98	1,227
12	Total reported.....dollars..	643,353	1,408,072	1,063,640	89,355	247,330	233,688	1,394,227
13	Average, per nonirrigated farm reporting.....dollars..	354.66	1,094.07	1,383.15	1,752.08	1,694.04	2,384.57	1,136.29
14	per acre on all nonirrigated farms.....dollars..	1.44	3.09	2.19	0.08	0.66	0.29	3.67
15	Implements and machinery, irrigated farms reporting value.....number..	2,591	159	15	78	16	38	12
16	Total reported.....dollars..	2,207,995	204,902	13,050	198,500	31,925	28,975	44,875
17	Average, per irrigated farm reporting.....dollars..	852.18	1,288.69	870.00	2,544.67	1,995.31	762.50	3,739.58
18	per acre, on all irrigated farms.....dollars..	9.20	4.69	2.43	0.25	1.75	0.92	0.89
19	Implements and machinery, nonirrigated farms reporting value.....number..	770	1,215	697	49	139	94	1,130
20	Total reported.....dollars..	414,903	1,453,408	621,115	52,680	246,082	69,132	584,903
21	Average, per acre, on all nonirrigated farms.....dollars..	0.93	3.19	1.28	0.05	0.66	0.09	1.54
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
22	Enterprises.....1940...number.....	67	38	4	27	4	18	11
23	.....1930...number.....	17			9		15	9
24	.....1920...number.....	9					15	44
25	Average size of enterprise based on							
26	irrigable area.....1940...acres.....	4,652	122	13	912	5	267	461
27	.....1930...acres.....	18,098			2,032		129	443
28	.....1920...acres.....	47,171					161	185
29	Diversion dams.....1940...number.....	3					3	8
30	Main canals and laterals.....1940...length, miles.....	1,234.8	3.0		61.4		21.5	18.1
31	.....1930...length, miles.....	1,168			39		8	1
32	.....1920...length, miles.....	906					37	16
33	.....1940...capacity, c.f.s.....	3,230			274		55	72
34	.....1930...capacity, c.f.s.....	3,702			204		17	2
35	.....1920...capacity, c.f.s.....	3,191					59	315
36	Pipe lines.....1940...length, miles.....	444.5		0.2	4.1	0.4	1.6	1.1
37	Storage dams.....1940...number.....	3	1	4			1	
38	Reservoirs.....1940...number.....	13	1	4			1	
39	.....1930...number.....	8						
40	.....1920...number.....	3					1	
41	.....1940...capacity, acre-feet..	36,502	(1)	100			(1)	
42	.....1930...capacity, acre-feet..	6,335						
43	.....1920...capacity, acre-feet..	3,400						
44	Wells, flowing.....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	Wells, pumped.....1940...number.....	42	42	7	19	3		8
51	.....1930...number.....	4						8
52	.....1920...number.....							1
53	.....1940...yield, g.p.m.....	29,328	34,375	164	32,144	11		14,950
54	.....1930...yield, g.p.m.....	3,480						14,550
55	.....1920...yield, g.p.m.....						1,813	40,600
56							1,500	
57	Pumping plants.....1940...number.....	195	42	7	29	4	16	14
58	.....1930...number.....	31			12		14	9
59	.....1920...number.....	10					12	44
60	Prime movers.....1940...capacity, hp.....	23,100	2,052	15	454	4	185	975
61	.....1930...capacity, hp.....	23,138			222		162	725
62	.....1920...capacity, hp.....	11,110					181	1,868
63	Pumps.....1940...capacity, g.p.m.....	2,698,965	34,375	164	55,919	15	15,900	36,200
64	.....1930...capacity, g.p.m.....	1,633,980			22,025		12,338	26,450
65	.....1920...capacity, g.p.m.....	1,396,576					17,800	54,160
66	Pumping lift, from all sources.....1940...average, feet.....	25	110	25	28	156	16	57
67	.....1930...average, feet.....	22			10		19	24
	.....1920...average, feet.....	21					19	58
	from pumped wells.....1940...average, feet.....	30	112	25	40	156		58
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁵								
68	Enterprises reporting pay roll.....number.....	10			1		1	
69	Irrigated area in these enterprises.....acres.....	191,380			(1)		(1)	
70	Wages and salaries paid and payable.....dollars..	444,667			(1)		(1)	
71	Persons employed during week ending April 29.....number..	497			(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 — TEXAS

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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"

Jeff Davis	Jefferson	Jim Wells	Kendall	Kerr	Kimble	Kinney	Lamb	La Salle	Liberty	Llano	Lubbock	Lynn	McClulloch	
10,132,526	13,527,044	12,803,927	7,028,365	12,530,320	9,415,726	6,820,532	20,508,490	6,800,225	6,174,430	8,968,565	22,484,911	14,909,564	14,342,272	1
5,149,239	4,997,200	169,700	1,397,220	2,554,470	1,029,957	892,652	7,210,209	1,540,396	763,895	2,875,159	7,708,526	1,292,640	87,100	2
4,857,064	3,032,851	154,700	1,304,360	2,376,870	817,724	870,332	5,796,354	1,449,233	606,380	2,474,921	1,882,917	791,630	(1)	3
282,175	1,964,249	15,000	192,860	177,600	212,233	22,320	1,413,855	91,163	157,615	400,235	2,825,609	501,010	(1)	4
122,600.93	23,461.03	8,485.00	11,741.34	22,605.93	12,715.52	59,510.13	14,420.42	29,064.08	12,320.89	15,973.11	12,514.84	12,080.75	16,775.00	5
6.27	21.37	34.29	20.37	17.80	14.76	9.96	34.32	13.83	21.25	17.61	45.41	31.82	27.82	6
42	179	20	119	113	81	15	493	51	49	178	607	105	4	7
165,110	385,164	31,550	399,850	497,416	159,550	43,950	718,368	162,028	128,864	344,300	1,201,083	200,576	8,550	8
3,931.19	2,151.75	1,577.50	3,358.40	4,401.91	1,969.75	2,930.00	1,487.14	3,177.02	2,629.88	1,934.27	1,975.69	1,810.24	2,137.50	9
0.20	1.65	6.38	5.83	3.47	2.29	0.49	9.42	1.45	3.59	2.11	7.08	4.94	3.54	10
56	2,138	1,172	612	604	349	106	1,610	971	1,842	1,463	1,480	1,282	1,065	11
236,675	3,486,044	1,306,655	1,289,679	1,717,716	843,481	264,040	1,005,755	378,979	1,348,839	633,235	2,438,481	1,859,886	1,631,690	12
4,226.34	1,630.52	1,114.89	2,107.32	2,843.90	2,416.85	2,499.43	1,183.70	1,021.51	732.32	1,367.68	1,647.62	1,434.80	1,532.29	13
0.29	41.60	2.67	4.27	2.69	1.41	0.43	4.67	0.64	6.32	1.74	7.19	3.98	2.66	14
35	198	20	117	108	79	13	474	51	54	177	576	99	3	15
37,990	684,637	22,400	85,008	104,205	55,107	17,082	618,606	108,917	218,086	83,253	935,706	153,766	3,690	16
1,083.71	3,457.76	1,120.00	731.69	964.86	697.55	1,314.00	1,305.08	2,096.41	4,055.30	470.36	1,624.40	1,553.19	1,216.67	17
0.05	2.93	4.53	1.25	0.73	0.79	0.19	2.94	0.96	6.09	0.51	5.51	3.78	1.51	18
48	1,383	1,175	589	541	336	99	1,510	367	1,457	453	1,350	1,234	969	19
44,105	629,691	1,100,910	299,436	358,824	193,919	89,625	1,518,600	206,539	396,161	169,258	1,748,712	1,782,544	977,645	20
0.05	7.51	2.25	0.99	0.56	0.33	0.15	3.97	0.35	1.86	0.47	5.15	3.85	1.60	21
39	30	26	36	49	28	13	158	55	6	40	171	25	3	22
17	23	31	1	42	7	1	3	39	2	1	1	15	23	23
12	18	.....	.....	.....	.....	.....	.....	38	2	.....	.....	.....	.....	24
34	4,278	24	5	18	21	101	168	88	13,117	5	145	14	8	25
23	6,383	.....	.....	17	.....	.....	.....	82	17,500	.....	.....	.....	.....	26
170	9,667	.....	.....	.....	.....	.....	.....	173	12,000	.....	.....	.....	.....	27
27	.....	.....	2	4	.....	2	.....	1	.....	2	.....	1	.....	28
6.0	325.6	.....	4.0	2.1	.....	14.2	.....	.....	141.4	.....	.....	1.0	.....	29
3	284	.....	.....	2	.....	.....	.....	.....	60	.....	.....	.....	.....	30
3	146	.....	.....	.....	.....	.....	.....	2	58	.....	.....	.....	.....	31
45	2,137	.....	13	30	34	1,820	.....	65	907	10	1	.....	.....	32
3	1,954	.....	.....	2	.....	.....	.....	.....	2,253	.....	.....	.....	.....	33
10	1,936	.....	.....	.....	.....	.....	.....	3	157	.....	.....	.....	.....	34
1.5	.....	.....	14.3	12.4	2.4	0.1	0.1	11.6	2.5	6.7	4.4	0.1	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	6	1	1	.....	2	.....	36
13	.....	11	6	.....	.....	.....	3	21	7	6	8	4	.....	37
.....	.....	.....	.....	2	.....	.....	.....	17	.....	.....	.....	.....	.....	38
8	1	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	39
10	.....	9	23	.....	.....	.....	5	2,051	1,201	4,002	27	14	.....	40
.....	.....	.....	.....	3	.....	.....	.....	77	.....	.....	.....	.....	.....	41
.....	500	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	.....	42
.....	.....	.....	1	.....	.....	.....	.....	5	.....	.....	.....	.....	2	43
.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	44
.....	.....	.....	(1)	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	4,070	.....	.....	.....	.....	(1)	46
.....	.....	.....	.....	.....	.....	.....	.....	1,410	.....	.....	.....	.....	.....	47
.....	.....	.....	.....	.....	.....	.....	.....	1,000	.....	.....	.....	.....	.....	48
19	2	27	22	17	3	1	171	16	2	34	191	27	1	49
14	1	.....	13	.....	.....	.....	.....	18	.....	.....	.....	.....	.....	50
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51
805	(1)	4,455	423	729	1,054	(1)	167,990	3,469	(1)	142	154,122	4,040	(1)	52
1,765	2,000	.....	.....	618	.....	.....	.....	2,030	.....	.....	.....	.....	.....	53
3,180	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
21	53	27	44	47	22	1	173	58	22	44	197	28	1	55
14	26	.....	.....	37	.....	.....	.....	50	3	.....	.....	.....	.....	56
11	19	.....	.....	.....	.....	.....	.....	43	3	.....	.....	.....	.....	57
51	8,656	187	237	400	229	(1)	9,464	743	7,385	63	8,646	170	(1)	58
71	4,028	.....	.....	333	.....	.....	.....	757	2,074	.....	.....	.....	.....	59
148	6,770	.....	.....	.....	.....	.....	.....	1,184	3,000	.....	.....	.....	.....	60
980	1,002,180	4,388	4,010	11,082	15,230	(1)	174,906	32,723	389,000	175	158,764	4,007	(1)	61
2,280	531,700	.....	.....	11,463	.....	.....	.....	24,205	314,000	.....	.....	.....	.....	62
4,460	2,039,000	.....	.....	.....	.....	.....	.....	45,250	135,000	.....	.....	.....	.....	63
51	13	53	82	58	25	(1)	98	46	44	58	96	70	(1)	64
27	13	.....	.....	35	.....	.....	.....	51	39	.....	.....	.....	.....	65
70	15	.....	.....	.....	.....	.....	.....	23	56	.....	.....	.....	.....	66
57	(1)	53	116	109	37	(1)	98	87	(1)	57	97	70	(1)	67
(1)	4	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	68
(1)	32,269	.....	.....	.....	.....	.....	.....	.....	18,716	.....	.....	.....	.....	69
(1)	80,077	.....	.....	.....	.....	.....	.....	.....	83,084	.....	.....	.....	.....	70
(1)	86	.....	.....	.....	.....	.....	.....	.....	50	.....	.....	.....	.....	71

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

⁴ Includes siphons and farm pipe lines reported.

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

CENSUS OF IRRIGATION - TEXAS

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)		McLennan	Martin	Mason	Matagorda	Maverick	Medina	Menard
FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	25,580,021	7,652,857	10,975,973	11,377,970	4,111,389	14,784,721	11,808,156
2	Land and buildings, irrigated farms.....dollars..	254,930	312,465	1,552,989	1,635,299	1,519,900	2,114,207	2,923,810
Operated by—								
3	(a) Owners and managers.....dollars..	206,950	202,745	1,389,464	1,156,691	1,270,525	1,586,932	2,748,400
4	(b) Tenants.....dollars..	47,980	109,720	163,525	478,608	249,375	527,275	181,440
5	Average, land and buildings, per farm.....dollars..	11,587.73	9,764.53	17,850.45	19,487.85	7,378.16	5,922.15	51,400.70
6	per acre in farms.....dollars..	103.38	21.54	19.99	20.97	18.84	34.53	17.06
7	Buildings, irrigated farms reporting value.....number..	22	32	86	76	192	345	56
8	Total reported.....dollars..	63,050	44,840	250,235	188,991	210,649	371,115	166,600
9	Average, per irrigated farm reporting.....dollars..	2,865.91	1,401.25	2,909.71	2,486.72	1,097.13	1,075.70	2,975.00
10	per acre on all irrigated farms.....dollars..	25.57	3.09	3.22	2.42	2.61	6.06	0.97
11	Buildings, nonirrigated farms reporting value.....number..	4,309	715	596	1,391	55	1,243	316
12	Total reported.....dollars..	5,216,024	809,101	1,113,537	1,081,868	106,690	1,947,484	691,155
13	Average, per nonirrigated farm reporting.....dollars..	1,210.50	1,131.61	1,868.55	777.76	1,939.52	1,566.76	2,187.20
14	per acre on all nonirrigated farms.....dollars..	9.28	2.06	2.13	2.42	0.31	2.73	1.28
15	Implements and machinery, irrigated farms reporting value.....number..	21	28	83	74	150	345	56
16	Total reported.....dollars..	37,305	38,903	66,086	184,187	174,639	177,467	84,730
17	Average, per irrigated farm reporting.....dollars..	1,776.43	1,388.99	796.22	2,218.74	1,119.48	514.40	1,155.25
18	per acre, on all irrigated farms.....dollars..	15.13	2.68	0.85	2.11	2.17	2.90	0.38
19	Implements and machinery, nonirrigated farms reporting value.....number..	3,553	634	586	1,261	45	1,143	290
20	Total reported.....dollars..	2,004,319	787,029	347,529	681,113	70,597	645,903	211,916
21	Average, per acre, on all nonirrigated farms.....dollars..	3.55	1.93	0.66	1.52	0.21	0.91	0.45
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
22	Enterprises.....1940.....number.....	13	5	11	6	6	9	21
23	.....1930.....number.....	23			3	9	1	22
24	.....1920.....number.....				15	5		55
25	Average size of enterprise based on irrigable area.....1940.....acres.....	25	13	3	7,838	7,633	2,150	147
26	.....1930.....acres.....				18,653	449	4,600	176
27	.....1920.....acres.....				10,992	1,303		120
28	Diversion dams.....1940.....number.....				1		1	2
29	Main canals and laterals.....1940.....length, miles.....		1.0		312.0	104.5	169.0	20.3
30	.....1930.....length, miles.....				355	17	82	11
31	.....1920.....length, miles.....				216	37		456
32	.....1940.....capacity, c.f.s. ³			1	737	9	452	108
33	.....1930.....capacity, c.f.s. ³				695	532	600	40
34	.....1920.....capacity, c.f.s. ³				1,772	60		254
35	Pipe lines ⁴.....1940.....length, miles.....	1.8	0.8	0.5		1.4	1.7	0.7
36	Storage dams.....1940.....number.....		2	1	1	2	1	
37	Reservoirs.....1940.....number.....		4		1	1	2	
38	.....1930.....number.....						2	1
39	.....1920.....number.....				1			1
40	.....1940.....capacity, acre-feet.....	4			(¹)	(¹)	(¹)	
41	.....1930.....capacity, acre-feet.....						254,650	20
42	.....1920.....capacity, acre-feet.....				3			100
43	Wells, flowing.....1940.....number.....			7				
44	.....1930.....number.....							
45	.....1920.....number.....				2			
46	.....1940.....yield, g.p.m.....			142				
47	.....1930.....yield, g.p.m.....							
48	.....1920.....yield, g.p.m.....				120			
49	Wells, pumped.....1940.....number.....	26	6	4	1	1	6	5
50	.....1930.....number.....							2
51	.....1920.....number.....				8			3
52	.....1940.....yield, g.p.m.....	5,945	814	14	(¹)	(¹)	2,850	270
53	.....1930.....yield, g.p.m.....							2,470
54	.....1920.....yield, g.p.m.....				8,700			1,040
55	Pumping plants.....1940.....number.....	25	7	4	11	5	9	20
56	.....1930.....number.....				3	10		22
57	.....1920.....number.....				20	7		50
58	Prime movers.....1940.....capacity, hp.....	116	39	4	3,812	133	137	406
59	.....1930.....capacity, hp.....				3,100	455		511
60	.....1920.....capacity, hp.....				4,676	540		567
61	Pumps.....1940.....capacity, g.p.m.....	6,195	814	14	325,730	5,132	3,810	18,582
62	.....1930.....capacity, g.p.m.....				241,800	24,050		30,189
63	.....1920.....capacity, g.p.m.....				442,700	15,600		30,095
64	Pumping lift, from all sources.....1940.....average, feet.....	16	90	95	26	41	60	43
65	.....1930.....average, feet.....				36	52		23
66	.....1920.....average, feet.....				26	50		21
67	from pumped wells.....1940.....average, feet.....	16	90	95	(¹)	(¹)	73	72
PAY ROLL AND NUMBER OF EMPLOYEES 1939 ⁵								
68	Enterprises reporting pay roll.....number.....				3	1	1	2
69	Irrigated area in these enterprises.....acres.....				31,179	(¹)	(¹)	(¹)
70	Wages and salaries paid and payable.....dollars..				51,615	(¹)	(¹)	(¹)
71	Persons employed during week ending April 29.....number..				41	(¹)	(¹)	(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 - TEXAS

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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"

Midland	Mills	Moore	Oldham	Orange	Parmer	Pecos	Potter	Presidio	Randall	Real	Reeves	Roberts	Runnels	
7,862,002	7,247,927	3,638,808	7,785,918	3,169,042	10,207,758	16,045,175	6,026,569	10,407,912	12,339,520	3,576,334	5,548,054	5,447,617	18,534,859	1
2,124,070	315,376	600,462	231,700	600,575	1,345,892	2,181,290	1,321,367	1,905,595	918,911	484,087	1,912,928	47,670	369,575	2
1,491,985	241,576	318,862	(1)	330,925	948,264	1,630,230	1,223,882	1,666,705	747,106	367,598	1,297,225	47,670	320,825	3
632,105	73,800	281,500	(1)	269,650	397,728	551,060	97,475	338,890	171,605	86,489	615,703	.....	48,750	4
37,264.39	12,615.04	31,603.26	46,340.00	8,963.81	11,603.38	13,633.06	30,030.84	5,845.38	22,972.78	10,085.15	10,015.33	5,958.75	14,214.42	5
11.08	20.41	14.40	17.94	32.14	23.65	24.30	7.06	5.08	30.17	8.35	18.53	9.96	30.81	6
55	25	19	5	63	116	139	43	244	40	48	177	7	36	7
116,100	32,020	55,250	9,500	78,675	189,760	231,535	135,516	167,345	188,300	85,810	234,725	10,550	55,800	8
2,110.81	1,280.80	2,907.89	1,900.00	1,248.81	1,722.07	1,665.72	3,151.53	685.84	4,707.50	1,746.04	1,326.13	1,507.14	2,116.15	9
0.61	2.07	1.33	0.74	4.21	3.51	2.64	0.72	0.45	6.18	1.44	2.27	2.20	4.65	10
324	1,302	102	101	1,045	720	150	242	133	532	245	75	125	2,025	11
576,964	1,185,086	191,475	292,245	1,038,681	1,075,835	449,735	697,722	282,216	1,347,923	360,685	138,477	294,460	2,737,155	12
1,780.75	910.67	1,877.21	2,893.51	903.95	1,494.22	2,968.23	2,863.15	2,121.92	2,533.69	1,553.41	1,846.36	2,355.68	1,351.69	13
1.43	2.74	0.71	0.25	26.96	2.42	0.20	1.47	0.19	2.51	1.07	0.09	0.47	4.63	14
52	24	18	5	56	106	140	33	290	37	47	161	8	24	15
60,030	16,635	58,020	14,100	129,730	166,635	229,485	40,688	92,271	78,736	27,481	228,019	11,990	31,874	16
1,154.42	693.12	3,223.33	2,820.00	2,316.61	1,542.62	1,639.18	1,232.97	318.18	2,128.00	584.70	1,416.27	1,495.00	1,328.08	17
0.31	1.08	1.39	1.09	6.94	2.93	2.62	0.22	0.25	2.59	0.47	2.21	2.50	2.66	18
309	1,182	105	129	867	678	134	209	115	535	231	63	122	1,899	19
320,292	456,906	240,955	279,819	300,854	1,207,999	180,568	194,431	92,635	1,031,981	98,441	61,400	231,825	1,728,757	20
0.79	1.06	0.90	0.24	7.81	2.72	0.08	0.41	0.06	1.82	0.28	0.04	0.37	2.82	21
26	9	10	4	3	25	12	8	128	40	28	41	6	35	22
1	10	.....	1	2	.....	8	1	31	3	8	14	.....	40	23
.....	.....	.....	.....	.....	.....	16	.....	3	.....	19	28	.....	17	24
6	24	6	13	6,039	81	5,051	57	99	105	59	519	28	32	25
.....	46	.....	.....	.....	.....	5,616	.....	167	.....	115	1,297	.....	61	26
.....	.....	.....	.....	.....	.....	4,291	.....	650	.....	172	931	.....	90	27
1	.....	.....	.....	.....	.....	21	.....	62	.....	18	5	.....	2	28
2.0	1.0	.....	.....	117.0	.....	257.0	5.0	97.0	.....	15.0	126.0	2.0	2.0	29
.....	1	.....	.....	.....	.....	126	.....	90	.....	10	156	.....	11	30
.....	.....	.....	.....	.....	.....	347	.....	18	.....	31	100	.....	6	31
1	8	1	3	259	.....	597	5	787	9	33	2,235	3	54	32
.....	1	.....	.....	.....	.....	434	.....	148	.....	12	215	.....	6	33
.....	.....	.....	.....	.....	.....	1,372	.....	28	.....	23	399	.....	22	34
0.5	1.3	5.0	.....	.....	0.1	0.1	0.3	0.6	0.9	0.9	.....	0.2	1.0	35
.....	2	5	.....	.....	3	2	.....	16	.....	1	4	1	7	36
.....	5	7	.....	.....	3	2	.....	15	.....	1	5	1	6	37
.....	1	.....	.....	.....	.....	3	.....	.....	.....	.....	1	.....	1	38
.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	1	.....	5	39
.....	59	5	.....	.....	122	(1)	.....	8,213	(1)	(1)	306,455	(1)	217	40
.....	10	.....	.....	.....	.....	24,500	.....	.....	.....	.....	6,155	.....	60	41
.....	.....	.....	.....	.....	.....	56,000	.....	.....	.....	.....	6,155	.....	631	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	.....	.....	43
.....	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	1	.....	.....	44
.....	.....	.....	.....	.....	.....	9	.....	.....	.....	.....	5	.....	.....	45
.....	.....	.....	.....	.....	.....	5,400	.....	155	.....	.....	2,610	.....	.....	46
.....	.....	.....	.....	.....	.....	13,500	.....	.....	.....	.....	1,500	.....	.....	47
.....	.....	.....	.....	.....	.....	7,200	.....	.....	.....	.....	1,850	.....	.....	48
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26	.....	.....	49
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	63
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71

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.

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

CENSUS OF IRRIGATION - TEXAS

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)		San Saba	Scurry	Shackelford	Stephens	Sterling	Swisher	Tarrant	Taylor
FARM VALUES, 1940*									
1	Land and buildings, all farms.....dollars..	12,264,321	10,172,376	7,509,149	5,839,905	5,837,077	12,241,625	29,241,088	12,518,941
2	Land and buildings, irrigated farms.....dollars..	2,043,960	853,345	20,760	22,600	30,990	5,831,132	372,100	420,325
	Operated by—								
3	(a) Owners and managers.....dollars..	1,772,360	580,725	(2)	12,500	(2)	4,786,512	333,350	365,815
4	(b) Tenants.....dollars..	271,600	272,620	(2)	10,100	(2)	2,044,620	38,750	34,410
5	Average, land and buildings, per farm.....dollars..	25,872.91	6,416.13	4,152.00	3,228.57	5,165.00	13,036.51	10,944.12	28,021.67
6	per acre in farms.....dollars..	21.26	20.74	18.19	13.64	33.65	24.54	190.33	21.24
7	Buildings, irrigated farms reporting value.....number..	78	131	5	7	6	509	33	15
8	Total reported.....dollars..	169,162	170,100	5,300	4,800	8,100	1,088,325	119,970	53,175
9	Average, per irrigated farm reporting.....dollars..	2,168.74	1,296.47	1,060.00	685.71	1,350.00	2,096.87	3,635.45	3,545.00
10	per acre on all irrigated farms.....dollars..	1.76	4.13	4.65	2.90	8.79	3.64	61.37	2.63
11	Buildings, nonirrigated farms reporting value.....number..	1,137	1,259	446	732	103	435	3,535	1,801
12	Total reported.....dollars..	1,248,503	1,497,109	721,861	744,240	338,448	651,450	6,821,275	2,110,262
13	Average, per nonirrigated farm reporting.....dollars..	1,068.07	1,189.13	1,618.57	1,016.72	3,285.90	1,487.59	1,826.64	1,171.68
14	per acre on all nonirrigated farms.....dollars..	2.25	2.82	1.29	1.26	0.61	2.29	14.95	4.33
15	Implements and machinery, irrigated farms reporting value.....number..	74	126	4	7	3	473	30	11
16	Total reported.....dollars..	58,848	103,185	760	4,525	3,050	778,761	26,795	21,622
17	Average, per irrigated farm reporting.....dollars..	795.24	818.93	187.50	646.43	1,016.67	1,646.47	892.17	1,768.71
18	per acre, on all irrigated farms.....dollars..	0.61	2.51	0.66	2.73	3.31	2.60	13.69	1.24
19	Implements and machinery, nonirrigated farms reporting value.....number..	975	1,024	387	639	60	347	2,688	1,510
20	Total reported.....dollars..	463,105	802,689	301,421	487,748	62,345	472,494	1,624,409	1,013,829
21	Average, per acre, on all nonirrigated farms.....dollars..	0.84	1.51	0.54	0.83	0.11	1.60	3.56	2.08
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
22	Enterprises.....1940...number.....	28	4	4	5	6	233	28	4
23	.....1930...number.....	86	1	1	8	10	7	32	5
24	.....1920...number.....	31							
25	Average size of enterprise based on irrigable area.....1940...acres.....	74	18	50	34	18	264	23	333
26	.....1930...acres.....	51					173		
27	.....1920...acres.....	77							
28	Diversion dams.....1940...number.....	2				1			10
29	Main canals and laterals.....1940...length, miles.....	10.8	4.0						1.0
30	.....1930...length, miles.....	1							
31	.....1920...length, miles.....	13							
32	.....1940...capacity, c.f.s. ⁴	47	4	6	5	4		36	1
33	.....1930...capacity, c.f.s. ⁴	7							
34	.....1920...capacity, c.f.s. ⁴	30							
35	Pipe lines ⁵.....1940...length, miles.....	1.6			0.4	1.4	0.9	28.9	1.0
36	Storage dams.....1940...number.....	2	1		2				6
37	Reservoirs.....1940...number.....	2	3		2		11		7
38	.....1930...number.....								
39	.....1920...number.....								
40	.....1940...capacity, acre-feet.....	(2)	4		(2)		35		103
41	.....1930...capacity, acre-feet.....								
42	.....1920...capacity, acre-feet.....								
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.....		2			3	247	24	1
50	.....1930...number.....	1					7		
51	.....1920...number.....								
52	.....1940...yield, g.p.m.....		(2)				221,397		(2)
53	.....1930...yield, g.p.m.....	200				550	8,900	4,065	
54	.....1920...yield, g.p.m.....								
55	Pumping plants.....1940...number.....	19	3	3	1	6	263	39	1
56	.....1930...number.....	83					7		
57	.....1920...number.....	32							
58	Prime movers.....1940...capacity, hp.....	285	41	48	(2)	30	12,456	519	(2)
59	.....1930...capacity, hp.....	1,459					430		
60	.....1920...capacity, hp.....	618							
61	Pumps.....1940...capacity, g.p.m.....	15,890	2,070	2,800	(2)	1,300	232,649	17,590	(2)
62	.....1930...capacity, g.p.m.....	84,956					8,900		
63	.....1920...capacity, g.p.m.....	16,570							
64	Pumping lift, from all sources.....1940...average, feet.....	29	33	32	(2)	15	97	23	(2)
65	.....1930...average, feet.....	37					100		
66	.....1920...average, feet.....	40							
67	from pumped wells.....1940...average, feet.....		(2)			16	97	18	(2)
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.

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 — TEXAS

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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"

Terrell	Terry	Tom Green	Uvalde	Val Verde	Waller	Ward	Webb	Wharton	Wilbarger	Wilson	Zapata	Zavala	All other counties ¹	
0,930,121	9,383,585	24,909,070	15,758,873	19,043,008	5,687,530	2,339,896	12,735,827	24,099,863	20,708,576	9,126,996	1,994,855	8,876,181	1,349,673,189	1
189,512	48,940	3,205,253	1,691,173	7,735,501	176,595	1,244,687	3,077,560	2,480,194	73,620	134,720	102,638	2,617,411	2,799,190	2
(²)	48,940	2,255,683	1,547,143	5,919,987	131,155	946,527	2,732,105	1,533,987	31,150	(²)	68,713	2,281,591	18,829,736	3
(²)	.....	946,570	144,030	1,815,514	45,440	288,160	345,455	926,207	42,470	(²)	33,925	335,820	2,869,454	4
63,170.87	6,991.43	14,120.06	31,908.92	48,046.69	14,716.25	9,420.45	53,982.28	17,689.24	8,180.00	12,247.27	12,829.75	16,778.28	18,411.67	5
7.54	36.36	33.45	15.08	9.61	19.45	14.06	15.43	29.14	44.24	34.78	7.83	18.25	12.69	6
3	7	226	50	160	11	121	55	120	0	11	8	148	1,105	7
22,000	8,300	480,941	162,800	473,897	35,190	128,897	294,796	307,545	35,000	17,900	3,625	271,215	3,116,156	8
7,933.93	1,165.71	2,128.06	3,256.00	2,961.61	3,199.09	1,047.08	5,359.93	2,562.88	3,888.89	1,627.27	453.12	1,832.53	2,820.05	9
0.88	6.17	5.02	1.45	0.59	3.88	1.43	1.48	3.52	21.03	4.62	0.28	1.80	1.80	10
120	1,271	1,415	680	143	1,428	30	332	3,428	1,199	2,005	235	142	278,746	11
398,310	1,322,236	2,068,032	1,420,990	612,730	1,058,678	58,685	332,075	3,475,339	1,876,314	1,817,558	42,920	213,945	242,774,311	12
3,918.25	1,040.31	1,806.14	2,089.69	4,284.63	741.37	1,956.17	1,000.23	1,013.81	1,564.90	906.51	182.64	1,506.65	867.84	13
0.27	2.60	2.21	1.32	0.47	4.97	0.17	0.20	8.60	2.23	4.55	0.11	0.33	3.72	14
3	6	210	50	157	11	97	51	132	8	11	8	117	1,031	15
3,350	12,600	228,323	65,369	140,314	60,664	200,814	226,990	356,885	12,200	11,800	15,969	218,838	947,235	16
1,116.67	2,100.00	1,087.25	1,307.38	893.72	5,514.91	2,070.25	4,450.00	2,703.67	1,525.00	1,072.73	1,996.12	1,870.41	918.74	17
0.13	9.36	2.38	0.58	0.17	6.68	2.27	1.14	4.08	7.33	3.05	1.22	1.53	0.55	18
124	1,105	930	638	142	1,206	29	287	3,250	1,073	1,897	253	117	246,278	19
110,210	1,321,297	968,287	473,031	165,964	367,655	40,652	119,096	1,867,560	1,107,276	664,254	41,165	94,732	93,526,232	20
0.07	2.80	1.04	0.44	0.13	1.73	0.12	0.07	4.62	1.32	1.66	0.10	0.15	1.43	21
3	4	160	25	60	10	6	61	43	3	5	6	137	63	22
4	.....	136	22	2	5	3	80	68	1	1	1	83	182	23
.....	.....	50	5	.....	.....	3	58	138	.....	.....	.....	36	262	24
225	63	79	93	98	568	10,354	247	1,714	16	84	420	253	1,426	25
.....	.....	85	96	.....	219	23,098	324	1,811	.....	.....	.....	218	.....	26
.....	.....	294	406	.....	.....	23,833	547	548	.....	.....	.....	165	253	27
2	.....	23	3	6	.....	4	1	.....	.....	.....	.....	1	3	28
1.0	0.1	49.9	3.0	38.6	.....	91.0	4.8	137.0	.....	2.0	2.0	4.6	445.8	29
.....	.....	34	2	.....	127	11	122	.....	.....	.....	.....	.....	319	30
.....	.....	78	9	.....	113	18	86	.....	.....	.....	.....	20	314	31
3	.....	462	21	330	1	1,150	225	571	2	13	21	152	1,167	32
.....	.....	62	1	.....	1,250	60	802	.....	.....	.....	.....	.....	1,466	33
.....	.....	348	18	.....	925	1,666	1,076	.....	.....	.....	.....	35	1,439	34
.....	.....	7.0	1.8	7.4	.....	31.0	42.2	0.1	0.3	.....	0.7	2.1	33.4	35
.....	.....	21	.....	.....	.....	11	.....	.....	.....	1	.....	4	13	36
.....	.....	22	2	19	.....	20	.....	.....	.....	1	.....	72	14	37
.....	.....	24	4	.....	.....	49	.....	.....	.....	.....	.....	39	41	38
.....	.....	11	.....	.....	.....	45	.....	1	.....	.....	.....	18	39	39
.....	.....	1,601	(²)	12	.....	2,176	.....	.....	.....	(²)	.....	4,875	681,981	40
.....	.....	1,482	3	.....	.....	2,562	.....	.....	.....	.....	.....	1,486	803,036	41
.....	.....	6,750	.....	.....	.....	20,248	.....	100	.....	.....	.....	65	9,343	42
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	1	43
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	13	44
.....	.....	.....	.....	.....	.....	(²)	.....	.....	.....	(²)	.....	8	(²)	45
.....	.....	.....	.....	.....	.....	72	.....	.....	.....	.....	.....	.....	1,255	47
.....	.....	.....	.....	.....	.....	.....	.....	1,000	.....	.....	.....	.....	8,159	48
.....	4	121	16	51	8	15	47	.....	2	.....	.....	112	25	49
.....	.....	90	21	.....	4	31	76	.....	.....	.....	.....	100	197	50
.....	.....	7	1	.....	.....	9	192	.....	.....	.....	.....	37	76	51
.....	2,024	19,885	8,618	794	11,850	(²)	4,577	69,925	(²)	.....	.....	61,740	4,176	52
.....	.....	7,086	17,395	.....	4,600	.....	1,633	115,300	.....	.....	.....	51,925	33,363	53
.....	.....	632	50	.....	.....	.....	2,975	180,817	.....	.....	.....	7,942	15,513	54
.....	4	175	28	55	11	1	79	51	3	6	7	202	56	55
.....	.....	198	24	.....	4	.....	122	165	.....	.....	.....	103	269	56
.....	.....	48	2	.....	.....	.....	68	173	.....	.....	.....	37	235	57
.....	132	2,536	373	713	838	(²)	3,595	4,405	9	220	405	5,314	1,283	58
.....	.....	2,083	456	.....	181	.....	6,281	5,790	.....	.....	.....	3,697	4,038	59
.....	.....	1,105	20	.....	.....	.....	3,885	6,531	.....	.....	.....	809	5,918	60
.....	2,024	123,075	12,578	24,033	14,630	(²)	89,182	313,425	1,059	6,300	11,050	135,315	46,778	61
.....	.....	104,611	19,545	.....	4,600	.....	128,178	332,700	.....	.....	.....	85,885	174,055	62
.....	.....	57,020	410	.....	.....	.....	86,950	185,442	.....	.....	.....	20,692	323,418	63
.....	112	46	46	228	95	(²)	74	49	22	56	74	89	48	64
.....	.....	46	37	.....	117	.....	85	33	.....	.....	.....	101	29	65
.....	.....	29	38	.....	.....	.....	72	38	.....	.....	.....	81	36	66
.....	112	69	51	242	100	(²)	128	50	(²)	.....	.....	87	76	67
.....	.....	.....	.....	(²)	1	.....	4	4	.....	.....	.....	(²)	6	68
.....	.....	.....	.....	(²)	.....	.....	18,655	16,797	.....	.....	.....	(²)	35,232	69
.....	.....	.....	.....	(²)	.....	.....	20,081	20,495	.....	.....	.....	(²)	148,555	70
.....	.....	.....	.....	(²)	.....	.....	25	22	.....	.....	.....	(²)	60	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—UTAH

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....	^a 52,701,440	52,597,760	52,597,760	52,597,760	52,597,760	52,597,760	52,597,760
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number...	25,411	30,695	27,159	25,652	21,676	19,387	10,517
Land in all farms.....acres....	7,302,007	6,239,318	5,613,101	5,050,410	3,397,699	4,116,951	1,323,703
Farms irrigated: ¹							
Farms.....number...	22,612	24,332	23,847	22,218	19,709	17,924	9,721
Increase or decrease (-) over preceding census....percent..	² -5.3	.....	7.3	12.7	10.0	84.3	.....
Proportion of all farms.....percent..	89.0	79.3	87.8	86.6	90.9	92.5	92.5
Land in farms.....acres....	4,958,058	(³)	4,137,021	(³)	(³)	(³)	(³)
Proportion of all farm land.....percent..	67.8	(³)	73.7	(³)	(³)	(³)	(³)
Area irrigated.....acres....	⁴ 911,135	⁵ 553,183	⁶ 917,139	(⁷)	(⁷)	629,293	263,473
Increase or decrease (-) over preceding census....percent..	² -0.7	.....	.....	.....	.....	138.8	.....
Proportion of total land area of State.....percent..	1.7	1.1	1.7	.....	.....	1.2	0.5
Proportion of all farm land.....percent..	12.5	9.3	16.3	.....	.....	15.3	19.9
Value of irrigated farms (land and buildings).....dollars..	137,529,004	(³)	109,983,795	(³)	(³)	(³)	(³)
Average per farm.....dollars..	6,082.12	(³)	8,986.12	(³)	(³)	(³)	(³)
Average per acre.....dollars..	27.74	(³)	48.34	(³)	(³)	(³)	(³)
Value of farm implements and machinery.....dollars..	10,761,346	(³)	12,274,514	(³)	(³)	(³)	(³)
Average per farm.....dollars..	475.91	(³)	514.72	(³)	(³)	(³)	(³)
Average per acre.....dollars..	2.17	(³)	2.97	(³)	(³)	(³)	(³)
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number...	2,401	(³)	2,714	2,403	2,472	(³)	(³)
Farms irrigated.....number...	45,320	(³)	(³)	(³)	(³)	(³)	(³)
Area irrigated.....acres....	1,176,116	(³)	1,324,125	1,371,651	999,410	(³)	(³)
Area existing works were capable of supplying with water.....acres....	1,357,714	(³)	1,542,475	1,700,550	1,250,246	(³)	(³)
Area irrigable.....acres....	1,432,593	(³)	1,739,899	⁸ 2,359,244	⁹ 1,947,625	(³)	(³)
Additional area existing works were capable of supplying with water.....acres....	181,598	(³)	218,350	328,899	250,836	(³)	(³)
Additional irrigable area in enterprises not supplied with water.....acres....	256,417	(³)	415,744	⁹ 987,593	⁹ 948,215	(³)	(³)
Investment in irrigation enterprises.....dollars..	41,896,532	(³)	35,669,819	32,037,351	14,028,717	5,865,302	2,780,000
Increase or decrease (-) over preceding census....percent..	² 17.5	(³)	11.3	128.4	139.2	111.0	.....
Average per acre based on area works were capable of supplying with water.....dollars..	30.86	(³)	23.13	18.84	11.22	(³)	(³)
Increase or decrease (-) over preceding census....percent..	² 33.4	(³)	22.8	67.9	.....	.....	.....
Estimated completed cost of existing enterprises.....dollars..	43,380,966	(³)	37,857,011	33,835,641	17,840,775	(³)	(³)
Average per acre based on irrigable area in enterprises.....dollars..	30.26	(³)	21.76	⁹ 14.34	⁹ 9.16	(³)	(³)
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	0.85	(³)	1.00	1.08	0.65	(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 150,042 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. The 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
	Number	Acres	Acres	Acres	Acres	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
All farms.....	25,411	7,302,007	966,088	761,093	150,042	154,358,365	21.14	36,056,891	4.94	11,910,938	1.61
Owners and managers.....	22,035	6,757,650	843,412	653,342	133,675	137,156,954	20.30	32,896,798	4.87	10,653,200	1.59
Tenants.....	3,376	544,357	122,676	105,751	16,367	17,201,411	31.60	3,158,093	5.80	1,257,738	2.37
Irrigated farms, total.....	22,612	4,958,058	875,245	761,093	150,042	137,529,004	27.74	32,428,080	6.54	10,761,346	2.17
Owners and managers.....	19,583	4,547,567	761,402	653,342	133,675	122,156,713	26.28	29,547,594	6.36	9,676,501	2.06
Tenants.....	3,029	310,491	113,843	105,751	16,367	15,372,291	49.51	2,876,486	9.27	1,084,842	3.52
Wholly irrigated farms.....	18,875	3,749,682	654,912	654,912	127,562	107,249,801	28.60	25,826,934	6.89	8,372,976	2.23
Owners and managers.....	16,241	3,492,739	559,885	559,885	113,082	94,451,739	27.04	23,480,180	6.72	7,377,376	2.11
Tenants.....	2,634	256,943	95,027	95,027	14,480	12,798,062	49.81	2,346,754	9.13	995,600	3.87
Partly irrigated farms.....	3,737	1,208,376	220,333	106,181	22,480	30,279,203	25.06	6,599,146	5.46	2,388,370	1.98
Owners and managers.....	3,342	1,154,828	201,517	95,457	20,593	27,704,974	23.99	6,067,414	5.26	2,199,128	1.60
Tenants.....	395	53,548	18,816	10,724	1,887	2,574,229	48.07	531,732	9.93	189,242	3.33
Nonirrigated farms, total.....	2,799	2,343,949	90,843	.....	.....	16,828,361	7.18	3,630,811	1.55	1,179,592	0.50

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 - UTAH

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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.....	2,401	1,432,533	1,357,714	1,176,116	1,324,125	1,371,651	-11.2	1,049,365	1,144,149	1,030,612	2.8	1.16	0.41
Primary sources:													
Streams, gravity.....	1,292	1,099,229	1,031,526	906,958	962,568	1,105,691	-5.8	795,745	884,340	784,457	2.5	0.89	0.36
Streams, pumped.....	64	18,232	15,939	13,445	63,809	10,389	-78.9	11,454	13,395	11,404	3.0	2.70	0.90
Streams, gravity and pumped.....	12	194,850	184,225	161,206	14,200	50	964.8	150,906	151,165	150,865	2.7	1.41	0.52
Wells, pumped.....	173	13,357	11,751	8,925	10,283	7,308	-13.2	8,925	8,109	8,109	3.4	3.71	1.09
Wells, flowing.....	263	7,707	7,468	6,706	8,974	4,908	-25.3	5,688	3,473	3,159	3.8	0.75	0.20
Wells, pumped and flowing.....	6	428	428	307	398	178	-22.9	296	307	296	3.9	2.06	0.53
Lakes, gravity.....	4	937	847	853	5,344	15,218	-81.0	831	785	785	2.2	1.50	0.68
Lakes, pumped.....	5	12,016	12,016	1,371	49,451	11,400	-97.2	671	1,371	671	4.2	4.97	1.18
Springs.....	325	10,870	39,598	35,888	49,593	41,310	-27.6	29,795	31,761	26,394	3.2	0.53	0.17
Springs and streams.....	29	10,153	10,143	9,191	.....	.....	.....	8,185	9,011	7,905	2.0	0.95	0.47
Stored storm water.....	9	897	896	803	3,030	977	-73.5	708	803	708	1.8	0.58	0.32
City water.....	.....	.....	.....	.....	26	25	.....	.....	.....	.....	.....	.....	.....
Sewage.....	3	302	302	297	10	.....	(?)	259	250	259	0.5	0.39	0.78
Streams, gravity; wells, pumped...	10	8,944	8,844	8,271	20	125	(?)	8,271	8,267	8,267	1.6	1.14	0.70
Streams, gravity; wells, flowing...	11	11,784	11,284	10,017	3,500	537	186.2	9,817	9,959	9,259	2.0	1.73	0.85
Streams, pumped; wells, pumped...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waste water, seepage or drainage...	14	1,616	1,616	1,296	.....	.....	.....	1,296	1,246	1,246	5.4	1.39	0.25
Other mixed.....	34	21,211	20,811	20,272	150,671	173,495	-86.5	17,038	19,898	16,839	2.8	1.46	0.51
Other and not reported.....	.....	.....	.....	.....	2,248	40	.....	.....	.....	.....	.....	.....	.....
Supplemental sources: ²													
Streams, gravity and/or storage...	81	399,750	367,247	320,369	.....	.....	.....	255,709	319,907	255,335	1.1	0.49	0.45
Streams, pumped.....	1	.....	.....	.....	75	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped.....	41	2,527	2,308	1,943	816	.....	138.1	1,697	1,614	1,614	1.3	2.55	1.05
Wells, flowing.....	24	733	729	682	81	.....	742.0	641	302	266	3.7	0.78	0.21

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 Percent not shown when more than 1,000. ³ Areas 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
Total.....	Dollars	Percent	Dollars	Dollars	Percent	Dollars	Dollars	Acres	Dollars	Acres	Dollars	Dollars	Acres	Dollars
	41,896,532	100.0	30.86	35,669,819	100.0	23.13	7.73	1,144,100	0.85	1,301,098	1.00	-0.15	1,122,456	1.06
Primary sources:														
Streams, gravity.....	19,726,011	47.1	19.12	24,181,708	67.8	21.54	-2.42	884,291	0.63	951,671	0.82	-0.19	910,594	1.01
Streams, pumped.....	834,571	2.0	52.36	4,355,987	12.2	66.70	-14.34	13,395	2.57	69,740	1.29	1.28	7,444	5.16
Streams, gravity and pumped.....	6,048,221	14.4	32.83	105,650	0.3	7.44	25.39	151,165	1.09	14,200	1.73	-0.64	.....	.....
Wells, pumped.....	345,889	0.8	29.43	418,913	1.2	34.64	-5.21	8,109	3.71	9,931	3.58	0.13	6,212	2.08
Wells, flowing.....	185,723	0.4	24.80	292,817	0.8	31.21	-6.41	3,473	0.85	5,823	1.61	-0.79	756	1.79
Wells, pumped and flowing.....	11,265	(³)	26.32	20,870	0.1	40.29	-13.97	307	2.56	368	3.49	-0.93	27	0.48
Lakes, gravity.....	8,651	(³)	10.21	41,044	0.1	5.23	4.88	785	1.29	5,344	0.48	0.81	13,677	0.25
Lakes, pumped.....	608,585	1.4	50.48	1,317,256	3.7	21.04	29.44	1,671	12.07	49,451	2.63	9.47	26,400	3.58
Springs.....	541,542	1.3	13.68	739,489	2.1	14.10	-0.42	31,761	0.50	46,591	0.65	-0.15	25,858	0.75
Springs and streams.....	88,667	0.2	8.74	.....	.....	.....	.....	9,011	0.78	.....	.....	.....	.....	.....
Stored storm water.....	12,810	(³)	14.80	523,800	1.5	147.82	-133.32	803	0.66	2,950	1.75	-1.19	857	2.23
City water.....	.....	(³)	.....	100	(³)	3.85	.....	.....	.....	26	0.88	.....	.....	.....
Sewage.....	855	(³)	2.83	800	(³)	40.00	-37.17	259	0.39	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped...	64,948	0.2	7.34	2,500	(³)	175.00	-167.66	8,267	0.81	20	19.00	-18.19	85	2.91
Streams, gravity; wells, flowing...	386,750	0.9	34.27	130,000	0.4	26.00	8.27	9,959	1.45	3,500	1.43	0.02	203	0.49
Streams, pumped; wells, pumped...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waste water, seepage or drainage...	25,219	0.1	15.61	.....	.....	.....	.....	1,246	1.11	.....	.....	.....	.....	.....
Other mixed.....	332,197	0.8	15.96	3,400,511	9.5	18.42	-2.46	19,898	1.26	145,642	1.32	-0.06	130,126	0.94
Other and not reported.....	.....	.....	.....	114,566	0.3	50.96	.....	.....	.....	1,841	4.09	.....	17	1.76
Supplemental sources: ⁴														
Streams, gravity and/or storage...	12,602,300	30.1	34.32	.....	(³)	12.75	.....	319,907	0.25	.....	.....	.....	.....	.....
Streams, pumped.....	57,574	0.1	24.95	1,505	(³)	.....	.....	.....	.....	15	5.60	.....	.....	.....
Wells, pumped.....	.....	.....	.....	21,500	0.1	26.35	0.32	1,846	2.21	693	2.09	0.12	.....	.....
Wells, flowing.....	16,754	(³)	22.98	300	(³)	3.70	19.23	302	0.70	2	2.50	-1.80	.....	.....

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 Less than one-tenth of 1 percent. ⁴ Areas 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 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 1,176,116	Acres 322,994	Acres 1,324,125	Acres 1,371,651	Percent -11.2		Acres	Acres	Acres	Acres	Percent
Individual and partnership....	107,537	4,552	172,240	166,897	-37.6	Commercial.....	98,375		² 125,509	² 126,833	-23.4
Cooperative, incorporated....	800,866	84,256	934,680	1,014,649	-8.2	Bureau of Reclamation ²	40,812	193,021	40,000	40,000	2.0
Cooperative, unincorporated...	57,328	56,901		187.9	Office of Indian Affairs ²	78,404		79,474	49,870	-1.3	
Irrigation district.....	23,394	8,000	8,125	21,143	14.3	City and/or sewage.....	4,174	7,730	14,652	25,552	-71.5
Commercial.....	85,600		² 99,834	² 86,911	-3.4	Other.....				3,300	
Bureau of Reclamation ³	38,623	161,455	40,000	42,285	7.3						
Office of Indian Affairs ²	58,594		54,619	25,270	-71.6						
City and/or sewage.....	4,174	7,730	14,627	24,206							
Other.....				3,300							
AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER						IRRIGABLE AREA ⁵					
Total.....	1,357,714	370,284	1,542,475	1,700,550	-12.0	Total.....	1,432,533	403,010	1,739,869	2,359,244	-17.7
Individual and partnership....	142,434	6,800	202,147	195,858	-29.5	Individual and partnership....	152,084	6,877	216,067	261,720	-28.6
Cooperative, incorporated....	906,530	93,168	1,069,593	1,225,084	-9.4	Cooperative, incorporated....	953,289	113,468	1,211,365	1,736,863	-15.2
Cooperative, unincorporated...	82,091	61,785		207.3	Office of Indian Affairs ²	79,549		79,644		55,870	-0.1
Irrigation district.....	24,894	8,000	8,100	24,023		City and/or sewage.....	4,174	7,730	14,652	27,565	-71.5
						Other.....				3,300	

¹ Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text). ² Includes 1 Carey Act enterprise. ³ U. S. Dept. of the Interior. ⁴ Does not include about 23,000 acres to which stored water was supplied under Warren Act. ⁵ For 1920 relates to total area. Irrigable area for that year was not reported. ⁶ For explanation of areas, see text, p. 571.

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		
					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	Irrigated pasture
Total.....	Number 2,401	Number 857	Acres 1,432,533	Acres 1,357,714	Dollars 19.93	Dollars 0.77	Dollars 33.85	Dollars 0.26	Number 45,220	Acres 1,176,116	Acres 980,881	Acres 38,487	Acres 156,714
Individual and partnership.....	1,579	77	152,064	142,434	8.92	1.01	13.18	1.23	2,311	107,537	78,547	5,852	23,138
Cooperative, incorporated.....	618	603	963,289	906,530	17.95	0.73	8.80	0.29	34,062	800,866	688,449	29,997	82,420
Cooperative, unincorporated....	164	141	63,457	62,091	7.19	0.30	19.35	0.12	2,060	57,328	47,410	575	9,331
Irrigation district.....	9	8	29,193	24,894	83.53	2.36	46.88	0.23	1,582	23,394	21,894		1,500
Commercial.....	11	11	99,975	98,375	26.66	0.66			2,060	85,600	82,900	1,300	1,400
U. S. Bureau of Reclamation ²	7	7	40,812	40,812	72.64	0.35	50.43	0.26	1,400	38,623	39,381	763	4,479
U. S. Office of Indian Affairs ³	7	5	79,549	78,404	14.89	1.04			1,013	58,594	24,452		34,142
City and/or sewage.....	6	5	4,174	4,174	55.03	2.48	41.91	0.64	732	4,174	3,639		335
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 For explanation of areas and investment, see text, p. 571.

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 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 41,896,532	Dollars 29,219,904	Dollars 12,676,628	Dollars 39,590,175	Dollars 2,306,357	Dollars 35,659,819	Dollars 32,037,351	Percent 17.5	Dollars 21.52	Dollars 34.23	Dollars 237,969	Dollars 1,484,434
Individual and partnership....	1,428,479	1,338,791	89,688	1,357,374	71,105	3,482,497	2,736,804	59.0	9.40	13.59	3,778	93,199
Cooperative, incorporated....	18,092,636	17,235,428	857,208	17,090,217	1,002,419	16,763,420	20,254,212	18.5	19.01	9.20	144,609	536,350
Cooperative, unincorporated....	1,768,625	471,956	1,296,669	1,641,587	127,038	1,896,590	265,484	39.2	7.60	20.99	1,477	12,075
Irrigation district.....	2,640,455	2,265,455	375,000	2,454,405	186,050	2,720,629	3,638,770	-51.0	91.00	46.88	4,086	15,000
Commercial.....	3,541,088	3,541,088	.....	2,622,393	918,695	5,181,980	3,567,057	145.1	36.00	.....	5,071	11,313
U. S. Bureau of Reclamation ²	12,698,755	2,964,692	9,734,063	12,698,755	.....	827,202	765,354	25.9	72.64	50.43	21,551	428,000
U. S. Office of Indian Affairs ³	1,167,594	1,167,594	.....	1,167,594	.....	197,501	729,090	183.0	14.89	.....	57,397	288,500
City and/or sewage.....	558,900	234,900	324,000	557,850	1,050	.....	20,580	.....	56.28	41.91 ⁴	.....	.....
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Only for enterprises serving 5 or more farms.

² Includes 1 Carey Act enterprise.

³ For explanation of investment, see text, p. 571.

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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 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 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 155	Acres 754,924	Acres 709,144	Dollars 13,766,417	Dollars 7.53	Dollars 9.73	Number 16	Dollars 466,221	Dollars 476,698	Dollars 28.34	Acres 1,488,866	Dollars 1,221,591	Dollars 1,314,787
Partnership.....	2	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	.....	.....	.....	.....	16,051	8,864	3,113
Cooperative, incorporated.....	134	407,607	389,457	1,879,227	2.90	2.73	12	39,871	42,482	2.88	941,905	877,920	865,403
Cooperative, unincorporated.....	5	3,837	3,837	8,806	2.33	2.30	1	.....	.....	.....	101,312	29,368	8,924
Irrigation district.....	4	23,943	23,943	489,042	30.50	30.50	2	403,300	403,300	125.20	34,029	67,291	66,215
Commercial.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87,100	90,262	97,143
Bureau of Reclamation ⁷	7	240,303	233,833	11,026,060	43.57	41.23	1	23,250	30,816	.....	222,463	74,547	227,652
Office of Indian Affairs ⁷	3	79,144	78,074	363,282	4.88	4.65	.....	.....	.....	.....	73,936	58,741	36,659
City and/or sewage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12,070	14,598	9,678
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 \$35.33. ⁴Based on primary enterprises only; State average for supplemental enterprises is \$35.70. ⁵Based on primary enterprises only; State average for supplemental enterprises is \$0.85. ⁶Data for 2 "Partnership" enterprises are included with "Cooperative, unincorporated" 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. ¹⁰Represents construction costs of irrigation works less cancellations and repayments. ¹¹For explanation of areas and investment, see text, p. 571.

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 1,144,100	Dollars 881,814	Acres 322,055	Dollars 84,981	Dollars 0.77	Dollars 0.26	Number 686	Dollars 518,907	Number 2,689
Individual and partnership.....	93,543	94,130	3,794	4,678	1.01	1.23	34	1,680	14
Cooperative, incorporated.....	794,800	579,577	84,256	24,024	0.73	0.29	529	340,584	2,191
Cooperative, unincorporated.....	46,972	14,322	56,820	8,874	0.30	0.12	72	6,421	123
Irrigation district.....	22,784	53,778	8,000	1,859	2.36	0.23	7	20,106	59
Commercial.....	85,600	56,306	.....	.....	0.66	.....	10	36,523	108
U. S. Bureau of Reclamation.....	38,633	13,673	161,455	42,587	0.35	0.26	7	41,334	31
U. S. Office of Indian Affairs.....	57,604	59,670	.....	.....	1.04	.....	² 2	60,755	154
City and/or sewage.....	4,174	10,358	7,730	4,959	2.48	0.64	5	11,006	9
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Only for enterprises serving 5 or more farms.

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

³For explanation of areas and investment, see text, p. 571.

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

TYPE OF ENTERPRISE (For definitions and explanations, see text)	DAMS		CANALS			RESERVOIRS		PIPE LINES	FLOWING WELLS		PUMPED WELLS		PUMPING PLANTS			
	Diver- sion	Storage	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 capacity	Number	Rated capacity
Total.....	Number 1,873	Number 362	Sec.-ft. 34,579	Miles 8,742	Miles 262.5	438	Ac.-ft. 3,417,704	Miles 172.5	1,216	G.p.m. 83,838	286	G.p.m. 122,528	411	Hp. 14,216	409	G.p.m. 835,862
Individual and partnership.....	851	147	3,426	1,192	20.8	216	14,855	34.7	1,105	79,578	273	114,408	345	3,892	344	100,435
Cooperative, incorporated.....	864	166	23,586	5,357	135.5	167	1,118,759	118.3	89	2,270	12	7,130	49	5,724	49	564,127
Cooperative, unincorporated.....	168	13	1,556	395	3.5	20	248,022	4.4	22	1,990	1	900	2	40	2	3,150
Irrigation district.....	6	6	659	153	13.5	2	100,000	4.2	.....	.....	.....	.....	8	3,950	7	56,000
Commercial.....	35	6	1,791	641	1.1	6	1,464,700	1.1	.....	.....	.....	.....	5	350	5	13,600
Bureau of Reclamation ³	7	20	1,332	89	87.1	19	470,760	6.5	.....	.....	.....	.....	1	250	1	6,750
Office of Indian Affairs ³	2	2	2,043	811	.....	2	8	3.0	.....	.....	.....	.....	1	10	1	1,800
City and/or sewage.....	19	6	186	104	1.0	6	600	0.3	.....	.....	.....	.....	.....	.....	.....	.....
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

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
Total.....	Number 1,973	Number 362	Number 1,717	Number 287	Earth and rock.....	Number 778	Number 313	Number	Number 150
Concrete or masonry.....	611	39	314	19	Other and mixed.....	1,663	5	1,237	81
Timber.....	217	2	135	.....	Not reported.....	4	3	31	7

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
	Number	Percent 100.0	G. n. m. 835,862	Percent 100.0	Feet 35		Number	Percent 100.0	Hp. 14,216	Percent 100.0
Total, 1940.....	409	.....	.....	.....	.....	Total, 1940.....	411	.....	.....	.....
Electric motor.....	286	69.9	706,585	84.5	40	Centrifugal pump.....	272	66.2	10,037	76.6
Centrifugal.....	196	47.9	237,339	28.4	32	Electric.....	195	47.4	8,651	60.8
Turbine.....	79	19.3	40,820	4.8	56	Internal-combustion.....	73	17.8	1,104	7.8
Plunger.....	3	0.7	345	(¹)	18	Other.....	4	1.0	282	2.0
Other.....	8	2.0	428,081	51.2	10	Turbine pump.....	95	23.1	1,641	10.8
Internal-combustion engine.....	95	23.2	83,516	10.0	23	Electric.....	78	19.0	1,127	7.9
Centrifugal.....	72	17.6	68,545	8.0	19	Internal-combustion.....	15	3.6	374	2.6
Turbine.....	16	3.9	14,063	1.7	36	Other.....	2	0.5	40	0.3
Plunger.....	3	0.7	170	(¹)	40	Plunger pump.....	14	3.4	99	0.7
Other.....	4	1.0	2,738	0.3	24	Electric.....	4	1.0	25	0.2
Other kinds of motive power.....	11	2.7	36,251	4.3	41	Internal-combustion.....	7	1.7	63	0.4
Centrifugal.....	6	1.5	22,200	2.6	38	Other.....	3	0.7	11	0.1
Turbine.....	3	0.7	14,000	1.7	39	Other and mixed types of pumps.....	30	7.3	2,539	17.9
Plunger.....	2	0.5	51	(¹)	51	Electric.....	16	3.9	1,360	9.6
Other.....	.....	.....	.....	.....	.....	Internal-combustion.....	8	1.9	74	0.5
Mixed kinds of motive power.....	17	4.2	9,510	1.1	33	Other.....	6	1.5	1,105	7.9
Centrifugal.....	11	2.8	4,885	0.5	23	Total, 1930.....	² 429	.....	11,981	.....
Turbine.....	4	1.0	3,850	0.5	52	Increase or decrease (-) 1930-1940.....	-18	.....	2,835	.....
Plunger.....	1	0.2	100	(¹)	50					
Other.....	1	0.2	675	0.1	30					
Total, 1930.....	460	.....	877,942	.....	59					
Increase or decrease (-) 1930-1940..	-51	.....	-42,080	.....	-24					

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 172.5	Miles 159.0	Percent 8.5	Wood-stave:	Miles	Miles	Percent
Concrete:				1 to 12 inches.....	13.3	26.4	-49.6
1 to 12 inches.....	17.8	9.0	97.8	13 to 24 inches.....	0.4	3.9	102.6
13 to 24 inches.....	13.3	.....	.....	Over 24 inches.....	7.5	.....	.....
Over 24 inches.....	9.5	15.0	52.0	Clay and other:			
Metal:				1 to 12 inches.....	44.9	54.2	-17.2
1 to 12 inches.....	43.5	42.9	1.4	13 to 24 inches.....	2.2	.....	.....
13 to 24 inches.....	11.4	.....	.....	Over 24 inches.....	2.9	0.3	(⁴)
Over 24 inches.....	5.8	6.3	173.0				

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 Includes 1 mile clay pipe not segregated by size.

⁴ 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	ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number..	201	228	143	Ratio of area drained to area irrigated in—			
Area irrigable in these enterprises.....acres...	324,771	388,697	¹ 503,212	(a) Enterprises reporting lands drained and/or needing drainage.....percent..	32.0	³ 17.7	¹ 17.0
Area irrigated in these enterprises.....acres...	283,314	(²)	(²)	(b) All irrigation enterprises.....percent..	7.7	5.2	6.2
Area for which drains have been installed.....acres...	90,637	68,656	85,448	Ratio of area drained plus area needing drainage to—			
Additional area needing drainage.....acres...	28,418	88,338	91,976	(a) Irrigable area reporting.....percent..	36.7	40.4	¹ 35.3
				(b) Irrigated area reporting.....percent..	42.0	(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..	2,734,088	3,248,945	3,654,233	2,076,273	1,416,475	2,708,931	657,815	1,832,470	845,302
Area irrigated by these enterprises.....acres.....	944,123	925,100	982,514	693,955	517,459	770,348	250,168	407,641	212,166
Average water per acre irrigated.....acre-feet..	2.9	3.5	3.6	3.0	2.7	3.5	2.6	4.5	4.0
Total water delivered to irrigators.....acre-feet..	2,584,915	430,873	1,718,769	1,044,884	329,441	729,360	1,540,031	101,432	989,409
Area irrigated by these enterprises.....acres.....	1,029,584	175,423	353,424	427,167	136,414	188,406	602,417	39,000	165,018
Average water per acre irrigated.....acre-feet..	2.5	2.4	4.0	2.4	2.4	3.9	2.6	2.6	6.0
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	69,310	.....	.....	7,265	.....	.....	62,045	.....	.....
Area irrigated by these enterprises.....acres.....	19,781	.....	.....	1,690	.....	.....	18,061	.....	.....
Average water per acre irrigated.....acre-feet..	3.5	.....	.....	4.3	.....	.....	3.4	.....	.....
SUPPLEMENTAL ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	298,190	.....	.....	269,046	.....	.....	29,144	.....	.....
Area irrigated by these enterprises.....acres.....	258,754	.....	.....	238,212	.....	.....	20,542	.....	.....
Average water per acre irrigated.....acre-feet..	1.2	.....	.....	1.1	.....	.....	1.4	.....	.....
Total water delivered to irrigators.....acre-feet..	274,066	.....	.....	146,302	.....	.....	127,764	.....	.....
Area irrigated by these enterprises.....acres.....	255,709	.....	.....	134,926	.....	.....	120,783	.....	.....
Average water per acre irrigated.....acre-feet..	1.1	.....	.....	1.1	.....	.....	1.1	.....	.....
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	4,599	.....	.....	.....	.....	.....	4,599	.....	.....
Area irrigated by these enterprises.....acres.....	2,338	.....	.....	.....	.....	.....	2,338	.....	.....
Average water per acre irrigated.....acre-feet..	2.0	.....	.....	.....	.....	.....	2.0	.....	.....

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 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 1,176,116	Percent 100.0	Acres 322,904	Acres 1,324,125	Percent 100.0	Acres 1,371,651	Percent 100.0
Appropriation ²	544,846	46.3	189,884	554,933	41.8	764,738	55.7
Underground.....	9,056	0.8	1,572	19,608	1.5	8,631	0.6
Appropriation and underground.....	2,535	0.2	9	.....	.....	.....	.....
Adjudicated by court.....	614,499	52.3	131,389	650,811	49.2	581,080	42.4
Other mixed and not reported.....	5,180	0.4	140	98,773	7.5	17,202	1.3

¹ Irrigated 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."

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 38,623 acres irrigated in 1939 which were within the Strawberry Valley Project. Areas totaling 161,455 acres which were irrigated with supplemental supplies from the Strawberry Valley, Moon Lake, Ogden River, Salt Lake Basin (Weber River, Echo Dam), and Sanpete Projects, are reported as receiving primary supplies through other enterprises, principally water-user associations.

The investments attributed to the Bureau of Reclamation in State tables 7 and 17 relate to expenditures on the aboved named projects and reflect construction costs incurred by the Bureau of Reclamation. Excluded from the investment are expenditures by the Bureau of Reclamation on the Provo River Project which was under construction in 1939 to provide supplemental water for areas inadequately irrigated by present systems and a supplemental municipal water supply for Salt Lake City, Provo, and Orem, Utah.

CENSUS OF IRRIGATION — UTAH

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.....	2,254	29	1,169	259	470	217	108	4
2	Irrigated farms, 1939.....number.....	45,220		1,169	679	5,335	10,116	24,146	3,775
3	Area irrigated, 1939.....acres.....	1,176,118		73,195	33,124	175,141	257,579	522,029	118,048
4	(a) From which crops were harvested.....acres.....	980,891		52,115	25,964	143,332	216,291	434,813	108,368
5	(b) On which crops failed.....acres.....	38,487		4,013	1,092	6,151	11,981	14,287	963
6	(c) Irrigated pasture.....acres.....	156,748		17,067	6,068	25,658	29,307	72,929	5,719
CAPITAL INVESTMENT, 1940									
7	Total capital investment in all enterprises.....dollars.....	28,219,904	86,528	1,527,459	310,940	2,904,253	5,724,742	11,605,709	7,080,273
8	(a) Cost of irrigation works and equipment.....dollars.....	27,054,537	82,870	1,485,459	299,568	2,723,023	5,268,561	11,043,560	6,158,696
9	(b) Investment in water rights.....dollars.....	2,165,367	3,850	29,000	11,372	181,230	456,181	532,149	921,577
10	Area works were capable of supplying with water.....acres.....	1,357,714	16,113	94,697	41,517	194,436	309,238	576,911	125,612
11	Average investment per acre irrigated.....dollars.....	24.84		20.87	9.39	16.55	22.23	21.62	49.50
12	Average investment per acre which the works could supply with water.....dollars.....	21.52	4.40	16.13	7.49	14.91	18.51	19.61	46.03
MAINTENANCE AND OPERATION, AND CHARGES, 1939									
13	Enterprises reporting maintenance and operation.....number.....	1,850	9	862	230	430	210	105	4
14	(a) Area irrigated in these enterprises.....acres.....	1,144,100		63,080	30,208	164,535	254,798	516,430	115,048
15	(b) Cost of maintenance and operation.....dollars.....	881,814	1,414	73,545	21,408	86,761	157,666	463,029	78,171
16	(c) Average cost per irrigated acre reporting.....dollars.....	0.77		1.17	0.71	0.53	0.62	0.87	0.55
17	Total annual charges.....dollars.....	1,079,113	2,065	865	87	120,682	245,332	608,147	102,275
18	Average charge per irrigated acre reporting.....dollars.....	1.02		0.15	0.57	0.73	0.96	1.18	0.89
19	Area against which charges were assessed.....acres.....	1,128,306	2,750	3,700	167	179,139	276,477	551,025	115,048
20	Average annual charge per acre assessed.....dollars.....	0.93	0.75	0.15	0.40	0.87	0.89	1.10	0.71
21	Total charges collected.....dollars.....	1,106,871	1,478	285	1,301	95,355	211,898	595,530	201,024
INDEBTEDNESS AND ARREARAGE, 1939									
22	Enterprises reporting indebtedness.....number.....	136	2			40	55	36	3
23	(a) Area irrigated in these enterprises.....acres.....	385,488				16,610	74,190	231,085	63,623
24	(b) Indebtedness.....dollars.....	4,329,294	(5)			54,612	262,610	1,371,028	2,639,694
25	(c) Average indebtedness per acre irrigated.....dollars.....	10.46				3.23	3.54	5.94	28.81
26	(d) Cost of irrigation works and equipment.....dollars.....	12,368,450	(8)			465,647	2,137,721	5,619,155	4,132,337
27	(e) Investment in water rights.....dollars.....	468,224	(8)			28,562	155,696	273,341	7,125
28	(f) Total investment.....dollars.....	12,836,674	(8)			494,209	2,293,417	5,892,496	4,139,462
29	(g) Maintenance and operation.....dollars.....	367,499	(5)			12,694	58,043	260,868	33,517
30	(h) Total annual charges.....dollars.....	468,066	(5)			19,201	90,724	324,170	31,923
31	(i) Total charges collected.....dollars.....	569,971	(5)			17,171	84,741	336,157	130,424
32	(j) Area against which annual charges were assessed.....acres.....	419,819	(5)			18,966	82,463	252,617	63,623
33	(k) Average indebtedness per acre assessed.....dollars.....	7.53	(5)			2.79	3.15	5.43	18.42
34	(l) Average charges per acre assessed.....dollars.....	1.04	(5)			1.00	1.10	1.28	0.35
35	(m) Average charges per acre irrigated.....dollars.....	1.22				1.16	1.23	1.40	0.50
36	Enterprises reporting arrearage.....number.....	12	1			3	7	1	
37	(a) Area assessed in these enterprises.....acres.....	15,421	(5)			710	11,581	(5)	
38	(b) Total arrearage.....dollars.....	437,871	(5)			3,293	34,388	(5)	
39	(c) Average arrearage per acre assessed.....dollars.....	28.34	(5)			3.88	2.97	(5)	
40	(d) Indebtedness.....dollars.....	452,618	(5)			3,293	49,085	(5)	
TYPE, 1940									
41	Individual and partnership.....number.....	1,480	25	1,153	230	72			
42	Cooperative (incorporated and unincorporated).....number.....	742	4	12	29	389	211	95	2
43	Irrigation district.....number.....	8		1			2	5	
44	Commercial.....number.....	11				5	2	3	1
45	U. S. Bureau of Reclamation.....number.....	1							1
46	U. S. Office of Indian Affairs.....number.....	7		2		3	1	1	
47	All other.....number.....	5		1		1	1	2	
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939									
48	Enterprises reporting pay roll.....number.....	625	2	1	1	311	202	104	4
49	Wages and salaries paid and payable for 1939.....dollars.....	442,290		383		42,724	89,708	255,074	54,403
50	Persons employed during week ending April 29, 1939.....number.....	2,572		3		487	963	1,000	110
SOURCE OF WATER SUPPLY, 1939									
51	Streams, gravity.....number.....	1,292	13	446	177	378	191	84	3
52	Streams, pumped.....number.....	64	1	39	13	6	2	3	
53	Wells, pumped.....number.....	173	7	157	8	1			
54	Wells, pumped and flowing; or wells flowing.....number.....	269	2	257	9	1			
55	Lakes, gravity or pumped.....number.....	9		4	1	2	1	1	
56	Streams and springs; or springs.....number.....	354	4	224	42	67	13	4	
57	Mixed, streams and wells.....number.....	33		9	1	6	6	10	1
58	Other mixed or stored storm water.....number.....	60	2	33	8	9	4	4	
SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)									
			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.....	147	7	79	15	19	7	17	3
2	Irrigated farms, 1939.....number.....	10,675		79	35	271	405	5,172	4,613
3	Area irrigated, 1939.....acres.....	322,994		2,662	1,115	9,055	8,131	195,853	106,378
CAPITAL INVESTMENT, 1940									
4	Total capital investment in all enterprises.....dollars.....	12,676,628	97,740	83,020	19,457	121,494	138,855	5,222,691	7,013,371
5	(a) Cost of irrigation works and equipment.....dollars.....	12,535,698	96,731	82,904	19,007	110,954	134,580	5,098,691	7,013,371
6	(b) Investment in water rights.....dollars.....	140,930	1,009	716	450	10,540	4,275	124,000	
7	Area works were capable of supplying with water.....acres.....	370,284	5,675	3,058	2,492	11,175	9,443	229,287	109,154
8	Average investment per acre irrigated.....dollars.....	39.25		23.87	17.45	13.42	17.08	26.69	65.93
9	Average investment per acre which the works could supply with water.....dollars.....	34.23	17.22	20.61	7.81	10.87	14.70	22.78	64.25

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 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.

CENSUS OF IRRIGATION - UTAH

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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	
29	1,258	404	426	113	24	.....	1,830	217	165	40	8 2	1
.....	2,176	3,288	13,542	14,540	11,674	.....	9,673	7,535	15,543	9,694	2,775	2
.....	42,739	70,790	295,622	365,605	401,360	.....	257,688	187,414	366,963	294,023	90,048	3
.....	36,058	58,779	245,349	312,211	338,455	.....	210,079	136,128	316,069	234,599	84,006	4
.....	1,426	1,729	11,039	14,661	9,413	.....	7,896	4,377	18,825	6,825	953	5
.....	5,255	10,282	39,236	38,513	63,462	.....	40,193	26,909	32,069	52,498	5,079	6
56,528	997,352	1,155,921	7,063,604	6,654,303	13,282,196	.....	1,827,676	1,802,598	6,228,773	13,455,354	5,905,503	7
62,670	960,433	1,091,831	6,787,989	6,168,426	11,983,208	.....	1,658,886	1,710,821	5,891,002	12,802,777	4,991,051	8
3,653	36,919	64,090	275,635	485,877	1,298,988	.....	168,790	91,777	337,771	652,577	914,452	9
19,113	61,064	79,516	347,028	417,172	437,801	.....	295,903	183,746	411,671	355,582	100,812	10
.....	23.34	16.33	23.87	17.89	30.33	.....	7.09	10.75	16.89	40.71	65.58	11
4.40	16.33	14.54	20.34	15.71	28.00	.....	6.18	9.29	14.90	34.32	58.58	12
9	938	363	404	112	24	.....	1,443	204	161	40	8 2	13
.....	35,488	63,664	283,582	360,006	401,360	.....	234,485	165,180	360,364	294,023	90,048	14
1,414	63,432	53,235	215,011	229,571	319,151	.....	184,702	112,301	230,768	316,716	59,327	15
.....	1.79	0.84	0.76	0.63	0.73	.....	0.70	0.68	0.63	0.96	0.65	16
2,055	9,089	40,548	287,934	350,227	389,250	.....	120,906	141,365	355,814	377,003	81,025	17
.....	1.99	1.23	1.11	0.99	0.97	.....	0.77	0.89	1.00	1.29	0.93	18
2,750	6,388	37,114	282,329	377,130	422,595	.....	168,702	170,720	377,208	321,628	90,018	19
0.75	1.42	1.09	1.02	0.93	0.86	.....	0.72	0.83	0.94	1.08	0.93	20
1,478	7,849	33,044	280,220	313,907	470,373	.....	89,282	124,310	357,114	398,141	138,024	21
2	3	20	68	33	10	.....	28	37	51	19	8 1	22
228	4,025	59,825	109,664	211,746	.....	.....	18,440	37,956	105,041	185,428	38,623	23
15,413	23,042	753,930	314,272	3,222,577	.....	.....	16,532	121,914	445,025	2,061,999	1,682,864	24
67.60	5.72	12.54	2.87	13.44	.....	.....	0.90	3.19	4.25	9.66	43.57	25
48,598	237,420	2,318,553	2,443,897	7,319,992	.....	.....	76,051	325,454	2,114,894	6,887,369	2,064,692	26
3,500	9,270	82,252	195,827	177,375	.....	.....	18,950	17,050	179,997	252,227	.....	27
52,098	246,690	2,400,805	2,639,724	7,497,367	.....	.....	95,001	342,504	2,294,691	7,139,586	2,964,692	28
1,900	7,336	74,319	98,103	185,841	.....	.....	10,658	41,037	84,791	217,340	13,673	29
2,795	11,277	110,682	141,575	201,737	.....	.....	15,438	50,814	139,929	248,212	13,673	30
2,416	12,592	134,357	128,355	292,251	.....	.....	13,360	43,956	170,685	274,546	67,424	31
2,378	5,293	65,395	117,972	228,781	.....	.....	18,010	42,844	111,128	209,214	38,623	32
6.48	4.35	11.43	2.66	8.84	.....	.....	0.79	2.61	4.01	4.68	43.57	33
1.18	2.13	1.08	1.20	0.79	.....	.....	0.86	1.18	1.26	1.05	0.35	34
12.26	2.80	1.87	1.29	0.95	.....	.....	0.87	1.34	1.33	1.34	0.35	35
(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	36
(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	37
(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	38
(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	39
(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	40
25	1,167	228	59	1	.....	.....	1,446	30	4	.....	.....	41
4	84	173	399	105	18	.....	372	152	156	32	.....	42
.....	.....	.....	4	3	1	.....	2	1	2	5	.....	43
.....	.....	2	3	3	3	.....	3	2	3	2	1	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
.....	4	1	1	1	1	.....	4	2	.....	1	.....	46
.....	3	.....	1	1	.....	.....	3	.....	.....	2	.....	47
2	54	128	308	109	24	.....	279	159	146	39	8 2	48
5,359	14,504	100,836	125,326	198,265	.....	.....	45,636	55,959	130,300	169,604	40,591	49
43	163	1,193	705	468	.....	.....	654	432	919	478	89	50
13	516	287	354	104	18	.....	948	166	148	29	1	51
1	40	14	8	1	.....	.....	55	5	2	2	.....	52
7	145	20	1	.....	.....	.....	163	8	2	.....	.....	53
2	255	12	.....	.....	.....	.....	268	1	.....	.....	.....	54
.....	5	.....	3	.....	1	.....	5	2	.....	2	.....	55
4	252	60	.....	2	.....	.....	326	21	6	.....	.....	56
.....	9	4	12	3	5	.....	16	7	4	5	1	57
2	36	7	12	3	.....	.....	49	7	3	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	
7	88	13	18	13	7	8 1	113	10	14	7	3	1
.....	109	105	557	2,489	5,245	2,071	317	692	1,519	4,267	3,780	2
.....	2,531	2,381	12,803	46,616	169,679	86,984	9,982	11,708	32,669	128,787	139,648	3
97,740	78,637	30,796	149,803	1,611,400	8,022,381	2,685,871	110,458	89,399	645,519	3,593,516	8,237,736	4
98,731	77,504	30,603	136,298	1,586,250	7,922,381	2,685,871	99,328	86,896	618,182	3,493,516	8,237,736	5
1,009	1,133	193	25,150	25,150	100,000	.....	11,130	2,503	27,357	100,000	.....	6
5,675	3,463	2,402	17,033	51,558	200,669	89,484	13,860	12,088	39,585	139,078	165,673	7
.....	31.07	12.93	11.70	33.15	47.28	30.88	11.07	7.64	19.64	27.90	58.99	8
17.22	22.71	12.82	8.79	31.25	39.98	30.02	7.97	7.40	16.31	25.84	49.72	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.

CENSUS OF IRRIGATION — UTAH

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...	115	3	58	9	18	7	17	3
11	(a) Area irrigated in these enterprises.....acres.....	322,065		2,168	751	8,974	8,131	195,653	106,378
12	(b) Cost of maintenance and operation.....dollars.....	84,981	3	4,254	373	3,960	2,759	43,363	30,379
13	(c) Average cost per irrigated acre reporting.....dollars.....	0.26		1.96	0.50	0.44	0.34	0.22	0.28
14	Total annual charges ².....dollars.....	142,478		5,240			4,235	6,635	101,288
15	Average charge per irrigated acre reporting.....dollars.....	0.45					0.48	0.82	0.50
16	Area against which charges were assessed.....acres.....	360,560		17,465			9,042	9,443	219,077
17	Average annual charge per acre assessed.....dollars.....	0.40		0.30			0.47	0.70	0.46
18	Total charges collected ³.....dollars.....	207,916		1,697			4,159	11,255	69,314
INDEBTEDNESS AND ARREARAGE, 1939									
19	Enterprises reporting indebtedness ⁴.....number.....	19	1			3	4	9	2
20	(a) Area irrigated in these enterprises.....acres.....	225,690				1,850	5,500	119,692	98,048
21	(b) Indebtedness.....dollars.....	9,437,183	(⁵)			64,739	5,050	2,982,686	6,394,708
22	(c) Average indebtedness per acre irrigated.....dollars.....	41.81				34.99	0.92	24.92	64.72
23	(d) Cost of irrigation works and equipment.....dollars.....	10,626,099	(⁵)			131,606	112,000	3,692,922	6,889,371
24	(e) Investment in water rights.....dollars.....	29,007	(⁵)			7,107	3,900	18,000	
25	(f) Total investment.....dollars.....	10,655,106	(⁵)			138,713	115,900	3,710,922	6,889,371
26	(g) Maintenance and operation.....dollars.....	52,239	(⁵)			989	1,698	24,232	25,320
27	(h) Total annual charges ².....dollars.....	82,861	(⁵)			6,398	5,002	46,382	25,079
28	(i) Total charges collected ³.....dollars.....	190,032	(⁵)			3,907	10,548	54,086	121,491
29	(j) Area against which annual charges were assessed.....acres.....	267,152	(⁵)			19,615	6,812	135,192	105,533
30	(k) Average indebtedness per acre assessed.....dollars.....	35.33	(⁵)			3.30	0.74	22.06	60.50
31	(l) Average charges per acre assessed.....dollars.....	0.31	(⁵)			0.33	0.73	0.34	0.24
32	(m) Average charges per acre irrigated.....dollars.....	0.37				3.46	0.91	0.39	0.25
33	Enterprises reporting arrearage ⁴.....number.....	4	1				1	2	
34	(a) Area assessed in these enterprises.....acres.....	33,308	(⁵)				(⁵)	(⁵)	
35	(b) Total arrearage.....dollars.....	28,350	(⁵)				(⁵)	(⁵)	
36	(c) Average arrearage per acre assessed.....dollars.....	0.85	(⁵)				(⁵)	(⁵)	
37	(d) Indebtedness.....dollars.....	988,896	(⁵)				(⁵)	(⁵)	
TYPE, 1940									
38	Individual and partnership.....number.....	99	4	79	15	1			
39	Cooperative (incorporated and unincorporated).....number.....	40	3			18	7	12	
40	Irrigation district.....number.....	2						1	
41	U. S. Bureau of Reclamation.....number.....	6						4	2
42	All other.....number.....	2							1
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939									
43	Enterprises reporting pay roll.....number.....	41	2			14	6	17	2
44	Wages and salaries paid and payable for 1939.....dollars.....	76,317	(⁵)			9,251	1,436	46,227	19,403
45	Persons employed during week ending April 29, 1939.....number.....	117	(⁵)			31	8	64	14
SOURCE OF SUPPLEMENTAL WATER SUPPLY 1939									
46	Streams, pumped.....number.....	1	1						
47	Wells, pumped or flowing.....number.....	65	2	55	4	4			
48	Streams, gravity or storage.....number.....	81	4	24	11	15	7	17	3

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.

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		
Great Salt Lake														
Ibapah.....	Tooele.....	5,288	12.69	-0.41	3.65	+1.05	3.32	-0.05	3.44	-0.83	2.28	-0.58	46.0	+1.2
Nephi (near).....	Juab.....	(²)	10.95	-1.80	3.03	+0.07	2.23	-1.44	2.11	-1.30	3.58	+0.87	(²)	(²)
Ogden.....	Weber.....	4,458	22.00	+4.43	7.81	+3.19	5.54	+0.06	5.91	+1.21	2.74	-0.03	(²)	(²)
Park Valley.....	Box Elder.....	5,613	8.96	-1.45	2.30	-0.36	2.06	-0.23	2.31	-0.80	2.29	-0.06	48.0	(²)
Payson.....	Utah.....	4,637	14.56	-1.76	4.80	+0.43	2.42	-2.55	3.85	-0.31	3.49	+0.67	(²)	(²)
Salt Lake City.....	Salt Lake.....	4,260	13.89	-2.24	5.29	+1.07	4.30	-0.50	3.35	-1.42	0.95	-1.39	53.9	+2.3
Bear River														
Logan.....	Cache.....	4,778	16.10	-0.43	5.60	+1.42	3.23	-1.77	4.98	+0.22	2.29	-0.30	49.8	+2.2
Woodruff.....	Rich.....	6,343	8.78	-0.96	2.95	+0.84	1.35	-0.76	2.52	-0.22	1.96	-0.82	38.5	-0.2
Sevier River														
Deseret.....	Millard.....	4,541	5.45	-2.71	1.49	-0.42	1.17	-1.08	1.62	-0.69	1.17	-0.52	50.6	+2.0
Fillmore.....	Millard.....	5,100	12.34	-1.96	3.40	-0.20	3.25	-1.20	2.83	-0.80	2.86	+0.24	53.7	+2.0
Panguitch.....	Garfield.....	6,700	12.84	+3.31	1.49	-0.52	2.85	+0.53	1.12	-0.49	7.38	+3.79	43.7	+1.7
Richfield.....	Sevier.....	5,350	7.47	-0.89	1.44	-0.53	1.30	-0.95	1.01	0.78	3.72	+1.37	50.7	+2.2
Colorado River														
Escalante.....	Garfield.....	5,700	12.37	+0.03	2.02	-0.50	3.30	+0.17	0.34	-1.35	6.61	+1.71	(²)	(²)
Hanksville.....	Wayne.....	4,200	4.29	-0.90	0.20	-1.00	1.40	+0.39	0.19	-0.76	2.50	+0.47	53.4	+2.0
Moab.....	Grand.....	4,000	10.46	+0.81	2.12	-0.44	2.87	+0.55	0.75	-1.29	4.72	+1.99	54.8	+0.6
Monticello.....	San Juan.....	7,000	13.55	-3.19	2.23	-2.27	3.89	-0.64	1.03	-1.72	6.40	+1.44	46.5	+1.1
St. George.....	Washington.....	2,880	9.99	+1.13	1.27	-0.84	3.03	+0.13	0.32	-0.94	5.37	+2.78	60.8	+1.4
Green River														
Castle Dale.....	Emery.....	5,500	8.48	-0.37	1.29	-0.69	2.78	+0.80	1.08	-0.60	3.31	+0.12	(²)	(²)
Duchesne.....	Duchesne.....	5,520	9.87	+0.38	1.85	-0.09	2.82	+0.78	1.39	-0.68	3.81	+0.27	45.5	+2.1
Green River.....	Emery.....	4,087	6.73	+0.49	1.69	+0.09	2.12	+0.97	0.51	-0.83	2.41	+0.26	62.0	-0.2
Manila.....	Daggett.....	6,225	8.60	-1.94	3.00	+0.80	1.02	-0.88	2.55	-0.85	2.03	-1.01	(²)	(²)
Price.....	Carbon.....	5,507	12.18	+2.01	2.31	-0.09	3.27	+1.07	1.41	-0.75	5.19	+1.78	(²)	(²)
Beaver River														
Millford.....	Beaver.....	4,982	6.73	-2.24	2.13	-0.03	0.91	-1.83	0.71	-1.35	2.98	+0.97	50.9	+2.1
Coal Creek														
Cedar City.....	Iron.....	5,805	11.98	-1.20	3.24	+0.02	3.52	-0.04	1.74	-0.81	3.48	-0.37	(²)	(²)

¹Departure from normal.²Data not available.

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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
3	61	12	18	13	7	21	81	10	14	7	3
.....	1,842	2,131	12,803	48,616	169,679	86,984	9,043	11,708	32,669	128,787	139,648
3	4,072	1,570	5,734	23,288	42,242	8,072	5,783	5,571	17,860	25,470	30,297
.....	2.21	0.74	0.45	0.48	0.25	0.09	0.64	0.48	0.54	0.20	0.22
5,240	.....	1,134	6,278	61,184	60,812	7,829	1,133	10,724	56,476	26,431	47,714
.....	0.99	0.50	1.26	0.36	0.09	0.19	0.92	1.72	0.21	0.34	0.15
17,465	.....	1,142	14,073	48,832	102,064	86,984	7,202	11,688	50,850	128,787	162,039
0.30	.....	0.99	0.45	1.25	0.32	0.09	0.16	0.92	1.11	0.21	0.29
1,697	.....	1,093	5,541	42,120	51,140	106,325	1,793	5,417	33,161	24,985	142,590
.....	1	1	4	7	5	21	2	2	7	5	3
(5)	.....	(5)	2,700	25,157	110,599	86,984	5,435	10,800	69,807	139,648	19
(5)	.....	(5)	3,935	1,052,632	5,937,234	2,381,206	4,405	77,810	1,421,625	7,933,343	21
(5)	.....	(5)	1.46	41.84	53.63	27.38	0.81	7.20	20.37	56.81	22
(5)	.....	(5)	49,138	1,349,220	6,440,202	2,685,871	32,394	344,632	2,011,337	8,237,736	23
(5)	.....	(5)	9,350	19,150	.....	.....	6,850	22,157	.....	.....	24
(5)	.....	(5)	52,488	1,368,370	8,440,202	2,685,871	39,244	366,789	2,011,337	8,237,736	25
(5)	.....	(5)	1,616	10,104	31,822	8,072	1,888	5,004	15,050	30,297	26
(5)	.....	(5)	1,575	17,260	50,393	7,829	1,677	17,458	16,012	47,714	27
(5)	.....	(5)	2,864	27,392	51,140	106,325	2,826	18,661	24,985	142,560	28
(5)	.....	(5)	4,280	25,179	133,084	86,984	6,725	28,587	69,807	162,039	29
(5)	.....	(5)	0.92	41.61	44.61	27.38	0.66	2.72	20.37	48.96	30
(5)	.....	(5)	0.37	0.68	0.98	0.09	0.25	0.61	0.23	0.29	31
(5)	.....	(5)	0.88	0.68	0.46	0.09	0.31	1.62	0.23	0.34	32
.....	1	.....	.....	2	1	.....	.....	2	2	.....	33
(5)	.....	.....	(5)	(5)	(5)	.....	.....	33,808	.....	.....	34
(5)	.....	.....	(5)	(5)	(5)	.....	.....	28,350	.....	.....	35
(5)	.....	.....	(5)	(5)	(5)	.....	.....	0.85	.....	.....	36
(5)	.....	.....	(5)	(5)	(5)	.....	.....	989,886	.....	.....	37
4	87	6	2	.....	.....	.....	98	1	.....	.....	.....
3	1	7	16	11	2	.....	15	9	14	2	.....
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....
.....	.....	.....	.....	2	3	1	.....	.....	.....	3</	

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

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

⁶ Data for 1 enterprise reporting indebtedness and for 2 enterprises reporting pay roll in the "No farms" group are included with the "5 to 24 farms" group.

Precipitation.—The general annual precipitation in Utah for the calendar year 1939, as shown by the records of the U. S. Weather Bureau at about 117 stations, was 11.49 inches, or 1.46 inches below the 48-year average; it was 3.70 inches below that of 1938, and the least since 1934. The Northwestern Division had 2.32 inches below normal, and the Southern and Eastern Divisions 0.11 below normal. The greatest annual precipitation was 27.31 at Silver Lake (Brighton), which was 15.71 inches below its normal. The next highest amounts were 25.34 inches at Timpanogos Summit and 24.83 inches at Mt. Baldy R. S.

The least annual precipitation was 2.05 inches at Callao; next lowest was 4.33 inches at Deseret and 4.35 inches at Hanksville. The greatest monthly amounts were 8.83 inches at Bryce Canyon and 7.97 inches at Alton during September. The least monthly amount was none at one station in April and July, two stations in August, three stations in December, eight stations in November, and ten stations in June. The greatest 24-hour amounts were 4.09 inches at Bryce Canyon on the 12th, and 2.96 inches at Elkhorn (Ashley) on the 6th of September.

Only fourteen precipitation stations had above normal amounts for the year, and only one, Wendover, was in the northern half of the State. The excess at southern stations was largely the result of the very wet month of September. January, February, June, and October had moderate excesses, September more than twice its normal,

while the spring, midsummer, and late fall months had deficiencies. The greatest deficiency was 15.71 inches at Silver Lake (Brighton), while the greatest excess departure was 2.52 inches at Panguitch.

The average precipitation for the water year (October 1938 through September 1939) at 24 stations listed in State table 18, which are representative of the irrigated areas in the major drainage basins in Utah, was 10.88 inches, a departure of -0.49 from the average precipitation at these stations.

The general average annual snowfall for 1939 in Utah was 49.0 inches, or 1.7 inches below normal.

Temperature.—The general annual temperature for the State as shown by the records of about 81 stations was 49.0°, or 1.0° above the 48-year average. The year was 0.3° warmer than 1938, and was the warmest since 1936. The highest annual temperature for 1939 was 62.4° at Springdale (Zion Park), which was 3.0° above normal. The lowest annual temperature was 37.2° at Silver Lake (Brighton).

The warmest month was July with a mean temperature of 72.4°, or 0.7° above normal. The highest mean monthly temperature in the State was 87.2° recorded at Springdale in July. The mean daily maximum temperature at St. George for July was 102.7°, the highest in the State. The highest temperature observed was 112° at St. George and Wendover on July 13, and at Springdale (Zion Park) on August 16.

CENSUS OF IRRIGATION — UTAH

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

		GREAT SALT LAKE			
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		Direct
					(1)
IRRIGATED FARMS AND AREAS					
1	Irrigated farms.....1939..number.....	45,280	27,253		1,340
2	Area irrigated.....1939..acres.....	1,176,116	548,796		25,282
3	(a) Cropland harvested.....1939..acres.....	990,881	486,265		21,989
4	(b) Crop failure.....1939..acres.....	38,487	10,735		1,229
5	(c) Pasture.....1939..acres.....	156,748	51,796		2,064
6	Area irrigated.....1929..acres.....	1,324,125	593,029		
7	.....1919..acres.....	1,371,651	570,868		
8	Increase or decrease (-), 1929-1939.....percent.....	-11.2	-7.5		
9	Irrigable area in enterprises.....1940..acres.....	1,432,533	630,446		23,227
10	.....1930..acres.....	1,739,869	710,003		
11	.....1920 ² ..acres.....	2,359,244	836,075		
12	Excess of irrigable area over the area irrigated.....1940..acres.....	256,417	81,650		2,945
13	.....1930..acres.....	415,744	116,974		
14	.....1920 ² ..acres.....	987,593	265,207		
15	Area works were capable of supplying with water.....1940..acres.....	1,357,714	599,549		27,153
16	.....1930..acres.....	1,542,475	642,662		
17	.....1920..acres.....	1,700,550	660,283		
18	Increase or decrease (-), 1930-1940.....percent.....	-12.0	-6.7		
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	181,598	50,753		1,871
20	.....1930..acres.....	218,350	49,633		
21	.....1920..acres.....	328,899	89,415		
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	86.6	91.5		93.1
23	.....1929..percent.....	85.8	92.3		
24	.....1919..percent.....	80.7	86.5		
CAPITAL INVESTED TO JANUARY 1					
25	Total investment in irrigation enterprises.....1940..dollars.....	41,896,532	24,555,604		2,409,673
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	39,590,175	23,177,280		2,405,343
27	(b) Investment in water rights (reported).....1940..dollars.....	2,306,357	1,378,324		4,330
28	Total investment in irrigation enterprises.....1930..dollars.....	35,669,819	19,407,237		
29	.....1920..dollars.....	32,037,351	14,102,393		
30	Increase or decrease (-), 1930-1940.....percent.....	17.5	26.5		
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	30.86	40.96		88.74
32	.....1930..dollars.....	23.13	30.20		
33	.....1920..dollars.....	18.84	21.36		
34	Average investment per acre irrigated.....1939..dollars.....	35.62	44.74		95.31
35	Estimated final investment in existing enterprises.....1940..dollars.....	43,380,966	25,223,024		2,572,882
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	30.28	40.01		91.15
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		Primary	Supplemental	Primary	Supplemental
		Enterprises		Enterprises	
37	Enterprises reporting maintenance and operation.....1939..number.....	1,855	118	810	64
38	Area irrigated in these enterprises.....1939..acres.....	1,144,100	322,055	533,596	153,641
39	Cost of maintenance and operation.....1939..dollars.....	881,814	94,981	446,866	58,641
40	Average cost, per acre irrigated.....1939..dollars.....	0.77	0.26	0.84	0.38
41	Total annual charges (reported) ⁴.....1939..dollars.....	1,079,113	142,478	605,952	94,960
42	Average annual charge per acre irrigated.....1939..dollars.....	1.02	0.45	1.20	0.62
43	Area against which charges were assessed.....1939..acres.....	1,129,306	360,560	523,341	160,027
44	Average annual charge per acre assessed.....1939..dollars.....	0.96	0.40	1.16	0.59
45	Total charges collected ⁴.....1939..dollars.....	1,106,871	207,916	666,670	165,561
46	Indebtedness to December 31 (reported) ⁵.....1939..dollars.....	4,329,234	9,437,183	3,408,467	7,437,410
WATER DELIVERED TO IRRIGATORS, 1939					
47	Enterprises reporting water delivered.....1939..number.....	1,864	129	843	80
48	Area irrigated by these enterprises.....1939..acres.....	1,049,365	258,047	475,987	154,024
49	Water delivered.....1939..acre-feet.....	2,654,225	278,665	1,295,794	192,036
50	Average water delivered per acre irrigated.....1939..acre-feet.....	2.5	1.1	2.7	1.2
51	Average cost of water per acre irrigated.....1939..dollars.....	1.03	0.50	1.20	0.63
52	Average cost of water per acre-foot delivered.....1939..dollars.....	0.41	0.46	0.44	0.50
DRAINAGE OF IRRIGATED LAND					
53	Enterprises reporting land drained or needing drainage.....1939..number.....	202		133	10
54	Irrigable area in these enterprises.....1939..acres.....	324,771		202,024	352
55	Irrigated area in these enterprises.....1939..acres.....	283,314		186,156	324
56	Area for which drains have been installed.....1939..acres.....	90,657		47,009	99
57	Additional area needing drainage.....1939..acres.....	28,418		20,717	67

¹Data for 1 enterprise in Deep Creek (Box Elder County) Drainage Basin (47) (number refers to separate map) are included with State totals. Data for unidentified in-
dependent 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.

CENSUS OF IRRIGATION - UTAH

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

GREAT SALT LAKE—Continued											
Bear River				Weber River							
Total	Direct	Little Bear River	Malad River	Total	Direct	Chalk Creek	East Canyon Creek				
	(2)	(3)	(4)		(5)	(6)	(7)				
5,756	2,850	2,867	39	5,469	3,414	115	195	1			
178,656	130,154	47,590	912	109,909	78,297	3,000	4,501	2			
156,048	117,195	38,025	827	98,390	71,014	2,597	4,242	3			
2,844	2,750	94	.....	2,082	1,431	39	.....	4			
19,764	10,209	9,470	85	8,437	5,852	364	259	5			
210,726	99,735	41,889	662	109,827	66,179	.....	5,652	6			
202,691	104,731	46,541	1,189	97,559	44,726	.....	6,202	7			
-15.2	30.5	13.6	37.8	0.1	18.3	.....	-29.4	8			
208,408	157,756	49,650	1,002	130,954	94,662	3,084	4,509	9			
247,782	119,900	48,221	693	135,546	86,389	.....	6,103	10			
272,100	161,328	48,358	1,935	149,081	83,796	.....	6,538	11			
29,752	27,602	2,060	90	21,045	16,365	84	8	12			
37,056	20,165	6,332	31	25,719	20,210	.....	451	13			
69,419	56,597	1,817	746	51,492	39,070	.....	336	14			
199,615	149,885	48,818	912	114,195	80,940	3,083	4,509	15			
222,787	100,149	44,940	683	113,096	69,888	.....	6,028	16			
218,037	117,523	46,890	1,189	112,981	49,341	.....	6,468	17			
-10.4	49.7	8.6	36.5	0.2	21.9	.....	-25.2	18			
20,959	19,731	1,228	.....	4,286	2,643	83	8	19			
12,061	414	3,051	6	4,169	209	.....	376	20			
15,356	12,792	349	.....	15,392	4,615	.....	266	21			
89.5	86.8	97.5	100.0	96.2	96.7	97.3	90.8	22			
94.6	99.6	93.2	90.1	96.3	99.7	.....	93.8	23			
93.0	89.1	99.3	100.0	86.4	90.6	.....	95.9	24			
5,697,045	3,779,619	1,896,160	21,266	7,122,978	4,300,535	53,654	168,825	25			
4,737,778	2,849,236	1,869,921	18,621	7,089,721	4,260,207	52,400	167,107	26			
959,267	930,383	26,239	2,645	54,257	40,329	1,254	1,716	27			
5,016,351	3,446,098	703,436	23,384	4,955,769	3,713,175	.....	45,486	28			
3,430,683	2,150,603	720,363	18,097	2,106,048	1,353,323	.....	74,010	29			
13.6	9.7	169.6	-9.1	43.7	16.8	.....	271.2	30			
28.54	25.22	38.64	23.32	62.38	53.13	17.40	37.44	31			
22.52	34.41	15.05	35.01	43.47	55.93	.....	7.55	32			
15.73	18.30	15.36	15.23	18.64	27.43	.....	11.44	33			
31.89	29.04	39.84	23.32	64.81	54.93	17.88	37.51	34			
5,908,795	3,980,119	1,907,410	21,266	7,359,479	4,316,195	54,654	168,825	35			
28.35	25.23	38.42	21.22	56.20	45.91	17.72	37.44	36			
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.
Enterprises		Enterprises		Enterprises		Enterprises		Enterprises		Enterprises	
138	12	73	11	61	³ 1	4	255	8	176	6	16
178,079	8,094	128,185	2,251	47,034	5,943	860	105,533	82,748	75,802	71,945	2,683
117,980	5,398	88,966	761	27,755	4,637	1,269	89,929	18,625	58,618	5,733	2,419
0.67	0.67	0.69	0.34	0.59	0.79	1.48	0.95	0.20	0.75	0.09	0.94
156,787	5,093	117,758	419	37,615	4,674	1,424	160,598	25,950	110,499	10,025	2,533
0.93	0.54	0.96	0.30	0.83	0.80	1.74	1.65	0.31	1.59	0.14	1.74
173,882	7,959	127,377	2,116	45,685	5,843	820	102,920	86,480	70,875	71,804	1,466
0.60	0.64	0.92	0.20	0.82	0.80	1.74	1.59	0.30	1.56	0.14	1.70
152,471	5,953	117,867	421	33,319	5,532	1,285	170,763	105,338	116,464	96,908	1,444
25,256	929,000	24,180	.....	1,086	923,000	.....	1,154,291	4,169,722	1,031,300	1,969,107	441
122	13	69	12	48	³ 1	5	200	9	171	7	17
148,644	8,175	115,057	2,332	32,695	5,843	892	91,978	82,789	66,636	71,998	2,680
421,829	14,956	318,457	4,893	101,007	10,073	2,165	256,867	76,784	183,510	60,821	7,781
2.8	1.8	2.8	2.1	3.1	1.7	2.4	2.8	0.9	2.8	0.8	2.9
0.98	0.67	1.05	0.34	0.74	0.80	1.59	1.63	0.31	1.62	0.14	1.17
0.35	0.37	0.38	0.16	0.24	0.46	0.65	0.59	0.34	0.59	0.17	0.40
20	.....	7	.....	13	.....	.....	44	.....	41	.....	.....
97,672	.....	75,487	.....	22,085	.....	.....	48,693	.....	45,391	.....	.....
88,816	.....	66,862	.....	21,954	.....	.....	44,044	.....	41,105	.....	.....
17,723	.....	14,638	.....	3,085	.....	.....	14,737	.....	14,322	.....	.....
15,145	.....	13,010	.....	2,135	.....	.....	3,446	.....	1,932	.....	.....

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

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 — UTAH

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)		GREAT SALT LAKE—Continued			
		Weber River—Continued		Jordan River	
		Ogden River	Total	Direct	
		(8)		(9)	
IRRIGATED FARMS AND AREAS					
1	Irrigated farms.....1939..number....	1,745	14,688	6,618	
2	Area irrigated.....1939..acres.....	24,111	234,949	77,469	
3	(a) Cropland harvested.....1939..acres.....	21,537	208,838	68,673	
4	(b) Crop failure.....1939..acres.....	612	4,580	1,133	
5	(c) Pasture.....1939..acres.....	1,962	21,531	7,463	
6	Area irrigated.....1929..acres.....	20,681	272,476	78,708	
7	.....1919..acres.....	21,894	270,598	71,187	
8	Increase or decrease (-), 1929-1939.....percent.....	17.2	-13.8	-1.6	
9	Irrigable area in enterprises.....1940..acres.....	28,699	262,857	93,299	
10	.....1930..acres.....	24,229	326,675	102,379	
11	.....1920 ¹ ..acres.....	27,097	414,894	120,400	
12	Excess of irrigable area over the area irrigated.....1940..acres.....	4,588	27,908	15,830	
13	.....1930..acres.....	3,648	54,199	23,671	
14	.....1920 ¹ ..acres.....	5,213	144,296	49,213	
15	Area works were capable of supplying with water.....1940..acres.....	25,663	258,586	91,617	
16	.....1930..acres.....	23,931	305,879	93,479	
17	.....1920..acres.....	26,852	329,265	94,682	
18	Increase or decrease (-), 1930-1940.....percent.....	7.2	-15.5	-2.0	
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	1,552	23,637	14,148	
20	.....1930..acres.....	3,350	33,403	14,771	
21	.....1920..acres.....	4,968	58,667	13,495	
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	94.0	90.9	84.6	
23	.....1929..percent....	86.0	89.1	84.2	
24	.....1919..percent....	81.5	82.2	84.1	
CAPITAL INVESTED TO JANUARY 1					
25	Total investment in irrigation enterprises.....1940..dollars....	2,599,964	9,325,908	3,246,361	
26	(a) Cost of irrigation works and equipment.....1940..dollars....	2,589,007	8,965,438	3,040,425	
27	(b) Investment in water rights (reported).....1940..dollars....	10,957	360,470	205,936	
28	Total investment in irrigation enterprises.....1930..dollars....	925,756	9,435,117	2,288,208	
29	.....1920..dollars....	423,765	8,565,682	1,288,620	
30	Increase or decrease (-), 1930-1940.....percent.....	160.8	-1.2	41.9	
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	101.31	36.07	35.43	
32	.....1930..dollars....	38.68	30.85	24.48	
33	.....1920..dollars....	15.78	26.01	15.22	
34	Average investment per acre irrigated.....1939..dollars....	107.83	39.69	41.81	
35	Estimated final investment in existing enterprises.....1940..dollars....	2,789,805	9,381,868	3,294,491	
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars....	97.21	35.69	35.31	
		Primary	Supplemental	Primary	Supplemental
		Enterprises		Enterprises	
37	Enterprises reporting maintenance and operation.....1939..number....	51	² 1	297	31
38	Area irrigated in these enterprises.....1939..acres.....	22,727	6,415	228,948	56,566
39	Cost of maintenance and operation.....1939..dollars....	28,440	9,485	221,860	28,188
40	Average cost, per acre irrigated.....1939..dollars....	1.25	1.48	0.97	0.50
41	Total annual charges (reported) ⁴.....1939..dollars....	44,206	15,530	266,079	61,727
42	Average annual charge per acre irrigated.....1939..dollars....	1.82	2.42	1.21	1.10
43	Area against which charges were assessed.....1939..acres.....	26,613	10,200	226,723	56,239
44	Average annual charge per acre assessed.....1939..dollars....	1.66	1.52	1.17	1.10
45	Total charges collected ⁴.....1939..dollars....	45,420	8,340	322,197	46,974
46	Indebtedness to December 31 (reported) ⁵.....1939..dollars....	1,900	2,201,528	2,207,703	542,213
		Primary	Supplemental	Primary	Supplemental
		Enterprises		Enterprises	
47	Enterprises reporting water delivered.....1939..number....	49	² 1	362	42
48	Area irrigated by these enterprises.....1939..acres.....	18,161	6,415	217,808	56,715
49	Water delivered.....1939..acre-feet....	53,092	12,428	568,987	88,461
50	Average water delivered per acre irrigated.....1939..acre-feet....	2.9	1.9	2.6	1.6
51	Average cost of water per acre irrigated.....1939..dollars....	1.91	2.42	1.17	1.10
52	Average cost of water per acre-foot delivered.....1939..dollars....	0.65	1.25	0.45	0.71
DRAINAGE OF IRRIGATED LAND					
53	Enterprises reporting land drained or needing drainage.....1939..number....	3	.....	59	.....
54	Irrigable area in these enterprises.....1939..acres.....	3,202	.....	55,607	.....
55	Irrigated area in these enterprises.....1939..acres.....	2,939	.....	52,972	.....
56	Area for which drains have been installed.....1939..acres.....	415	.....	14,450	.....
57	Additional area needing drainage.....1939..acres.....	1,514	.....	2,069	.....

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

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GREAT SALT LAKE--Continued				SEVIER LAKE			
Jordan River--Continued				Sevier River			
Utah Lake				Upper Sevier River			
Total	Direct	Spanish Fork System	Provo River System	Total	Total	Direct	East Fork Sevier River
	(10)	(11)	(12)			(13)	Total
8,070	573	2,830	4,667	7,415	5,556	2,702	200
157,480	17,146	60,117	80,217	237,569	167,786	93,407	10,715
139,965	15,652	52,733	71,580	208,575	140,143	79,417	8,955
3,447	654	1,474	1,319	8,983	7,998	2,308	145
14,068	840	5,810	7,318	20,011	19,645	11,682	1,015
.....	.....	.....	.....	258,829	.....	.....	.....
.....	.....	.....	.....	325,718	.....	.....	.....
.....	.....	.....	.....	-8.2	.....	.....	.....
169,558	23,463	62,940	83,155	277,779	182,513	103,387	12,040
.....	.....	.....	.....	336,871	.....	.....	.....
.....	.....	.....	.....	630,494	.....	.....	.....
12,078	6,317	2,823	2,938	40,210	24,727	9,980	1,325
.....	.....	.....	.....	77,742	.....	.....	.....
.....	.....	.....	.....	304,766	.....	.....	.....
166,969	21,946	62,679	82,344	270,066	188,240	100,564	11,410
.....	.....	.....	.....	303,757	.....	.....	.....
.....	.....	.....	.....	402,387	.....	.....	.....
.....	.....	.....	.....	-11.1	.....	.....	.....
9,489	4,800	2,582	2,127	32,497	20,454	7,157	895
.....	.....	.....	.....	44,828	.....	.....	.....
.....	.....	.....	.....	76,669	.....	.....	.....
94.3	78.1	95.9	97.4	88.0	80.1	92.9	93.9
.....	.....	.....	.....	85.2	.....	.....	.....
.....	.....	.....	.....	80.9	.....	.....	.....
6,079,547	538,902	3,719,390	1,821,255	6,082,351	3,177,697	1,823,464	111,900
5,925,013	514,680	3,708,722	1,700,631	5,603,973	2,611,399	1,612,579	92,385
154,534	24,242	9,668	120,624	468,378	366,298	310,885	19,515
.....	.....	.....	.....	6,783,638	.....	.....	.....
.....	.....	.....	.....	9,509,836	.....	.....	.....
.....	.....	.....	.....	-10.3	.....	.....	.....
36.41	24.56	59.34	22.12	22.56	16.88	19.13	9.81
.....	.....	.....	.....	22.37	.....	.....	.....
.....	.....	.....	.....	23.63	.....	.....	.....
38.61	31.43	61.87	22.70	25.64	18.94	20.59	10.44
6,087,377	540,172	3,719,590	1,827,515	6,139,536	3,203,207	1,944,439	112,935
35.90	23.02	59.10	21.98	22.10	16.61	18.81	9.36
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.
Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises
210	21	18	42	150	253	207	21
153,588	45,946	16,245	59,183	78,160	228,749	159,736	60,118
101,331	20,725	8,169	29,687	63,475	142,044	102,226	10,349
0.66	0.45	0.50	0.62	0.81	0.24	0.64	0.17
131,862	54,397	18,959	40,551	72,352	205,863	131,124	10,552
0.61	1.19	1.19	0.70	1.01	0.41	0.86	0.18
146,668	45,721	16,432	58,569	71,667	232,363	162,889	60,609
0.90	1.19	1.15	0.69	1.01	0.41	0.89	0.14
164,731	44,090	14,531	80,194	70,006	192,841	119,849	12,546
1,739,937	540,663	1,900	1,687,146	50,891	396,197	208,997	384,367
236	22	19	48	169</			

^b 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 - UTAH

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)		SEVIER LAKE—Continued			
		Sevier River—Continued			
		Upper Sevier River—Continued			Lower Sevier River
		East Fork Sevier River—Continued		San Pitch River	
		Direct (14)	Otter Creek (15)			(16)
		(17)			
IRRIGATED FARMS AND AREAS					
1	Irrigated farms.....1939..number.....	96	104	2,654	1,859
2	Area irrigated.....1939..acres.....	5,253	5,462	83,664	89,783
3	(a) Cropland harvested.....1939..acres.....	4,789	4,166	51,771	68,432
4	(b) Crop failure.....1939..acres.....	75	70	5,545	985
5	(c) Pasture.....1939..acres.....	389	1,226	6,948	364
6	Area irrigated.....1929..acres.....		7,237	65,276	
7	.....1919..acres.....		7,289	77,616	
8	Increase or decrease (-), 1929-1939.....percent.....		-24.5	-2.5	
9	Irrigable area in enterprises.....1940..acres.....	6,291	5,749	77,066	85,266
10	.....1930..acres.....		7,782	82,052	
11	.....1920 ² ..acres.....		7,845	105,519	
12	Excess of irrigable area over the area irrigated.....1940..acres.....	1,038	287	13,422	15,483
13	.....1930..acres.....		545	16,776	
14	.....1920 ² ..acres.....		556	27,903	
15	Area works were capable of supplying with water.....1940..acres.....	5,661	5,749	76,266	81,826
16	.....1930..acres.....		7,782	74,003	
17	.....1920..acres.....		7,889	78,348	
18	Increase or decrease (-), 1930-1940.....percent.....		-26.1	3.1	
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	406	287	12,602	12,043
20	.....1930..acres.....		545	8,727	
21	.....1920..acres.....			732	
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	92.8	95.0	83.5	85.3
23	.....1929..percent.....		93.0	86.2	
24	.....1919..percent.....		100.0	89.1	
CAPITAL INVESTED TO JANUARY 1					
25	Total investment in irrigation enterprises.....1940..dollars.....	22,015	89,885	1,142,333	2,914,054
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	19,765	72,600	1,106,435	2,792,574
27	(b) Investment in water rights (reported).....1940..dollars.....	2,230	17,285	35,898	122,080
28	Total investment in irrigation enterprises.....1930..dollars.....		225,470	1,005,530	
29	.....1920..dollars.....		151,850	1,142,510	
30	Increase or decrease (-), 1930-1940.....percent.....		-60.1	13.6	
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	3.89	15.63	14.98	35.62
32	.....1930..dollars.....		28.97	13.59	
33	.....1920..dollars.....		20.83	14.58	
34	Average investment per acre irrigated.....1939..dollars.....	4.19	16.46	17.94	41.77
35	Estimated final investment in existing enterprises.....1940..dollars.....	22,015	90,920	1,145,833	2,935,329
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	3.50	15.81	14.86	34.43
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		Primary	Supplemental	Primary	Supplemental
		Enterprises		Enterprises	
37	Enterprises reporting maintenance and operation.....1939..number.....	12	2	14	8
38	Area irrigated in these enterprises.....1939..acres.....	4,503	(³)	5,422	18,938
39	Cost of maintenance and operation.....1939..dollars.....	851	(³)	1,067	69,013
40	Average cost, per acre irrigated.....1939..dollars.....	0.19	(³)	0.20	51,316
41	Total annual charges (reported) ⁴.....1939..dollars.....	1,320		3,219	5,460
42	Average annual charge per acre irrigated.....1939..dollars.....	0.35		0.75	1.12
43	Area against which charges were assessed.....1939..acres.....	3,743		4,887	89,474
44	Average annual charge per acre assessed.....1939..dollars.....	0.35		0.66	1.08
45	Total charges collected ⁴.....1939..dollars.....	1,350		3,062	72,992
46	Indebtedness to December 31 (reported) ⁵.....1939..dollars.....	600		5,570	187,200
WATER DELIVERED TO IRRIGATORS, 1939					
47	Enterprises reporting water delivered.....1939..number.....	9	1	15	6
48	Area irrigated by these enterprises.....1939..acres.....	3,731		5,442	44,506
49	Water delivered.....1939..acre-feet.....	15,236	(³)	17,460	71,755
50	Average water delivered per acre irrigated.....1939..acre-feet.....	4.1		3.2	1.6
51	Average cost of water per acre irrigated.....1939..dollars.....	0.40		0.65	0.40
52	Average cost of water per acre-foot delivered.....1939..dollars.....	0.10		0.20	0.25
DRAINAGE OF IRRIGATED LAND					
53	Enterprises reporting land drained or needing drainage.....1939..number.....				
54	Irrigable area in these enterprises.....1939..acres.....		(³)	1	6
55	Irrigated area in these enterprises.....1939..acres.....		(³)		9,231
56	Area for which drains have been installed.....1939..acres.....		(³)		6,689
57	Additional area needing drainage.....1939..acres.....				237
					164

¹ Data for 2 enterprises in White River Drainage Basin (26) (number refers to separate map) are included with Green River "Direct" Drainage Basin (21).

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 — UTAH

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

COLORADO RIVER											
Total	Direct	Dolores River	Green River								
			Total	Direct ¹	Henry's Fork	Brush Creek	Ashley Creek	Duchesne River	Willow Creek		
(18)	(20)	(21)	(21)	(24)	(25)	(26)	(27)	(28)	(29)		
8,632	115	36	6,291	208	21	74	840	2,351	19	1	
324,899	4,995	2,342	203,169	13,990	3,987	5,078	26,813	141,392	1,811	2	
233,502	4,132	2,112	183,670	10,992	3,327	3,806	17,842	80,684	1,379	3	
14,983	638	29	10,549	1,145	.....	1,020	4,527	3,212	56	4	
76,414	226	201	68,970	1,943	860	252	4,174	57,495	374	5	
347,452	1,286	.....	278,072	1,906	.....	.....	23,314	167,022	.....	6	
362,576	9,740	.....	280,877	2,541	.....	.....	26,787	138,445	.....	7	
-5.5	288.5	.....	-5.4	632.7	.....	.....	15.1	-15.3	.....	8	
437,909	6,150	4,481	343,510	20,745	6,822	5,515	40,746	189,534	2,758	9	
518,846	1,561	.....	409,701	4,408	.....	.....	37,519	255,834	.....	10	
706,095	24,615	.....	510,426	3,629	.....	.....	44,087	322,689	.....	11	
113,010	1,163	2,139	80,321	6,765	2,835	437	13,903	48,142	947	12	
171,394	275	.....	131,629	2,500	.....	.....	14,205	88,812	.....	13	
343,519	14,873	.....	229,549	1,088	.....	.....	17,300	184,243	.....	14	
406,890	5,604	2,679	323,318	15,891	6,392	5,205	40,731	176,530	2,733	15	
439,165	1,268	.....	351,500	2,958	.....	.....	29,519	222,094	.....	16	
496,991	15,529	.....	385,612	3,038	.....	.....	41,087	217,609	.....	17	
-7.3	335.8	.....	-8.0	437.2	.....	.....	38.0	-20.5	.....	18	
81,991	608	337	60,129	1,911	2,405	127	13,868	35,138	922	19	
91,713	.....	.....	73,428	1,050	.....	.....	6,205	55,072	.....	20	
134,415	8,789	.....	104,735	497	.....	.....	17,300	79,393	.....	21	
79.8	89.2	87.4	81.4	88.0	82.4	97.6	65.9	80.1	66.3	22	
79.1	100.0	.....	79.1	64.5	.....	.....	79.0	75.2	.....	23	
73.0	52.6	.....	72.8	83.6	.....	.....	60.8	93.6	.....	24	
9,214,146	43,870	51,335	7,599,544	737,273	41,829	92,818	397,061	4,477,764	27,025	25	
9,006,350	41,330	51,030	7,484,153	725,319	40,998	86,645	393,492	4,401,181	25,100	26	
207,798	2,540	305	115,385	11,454	831	6,173	3,599	70,589	1,825	27	
6,734,361	19,300	.....	5,360,798	440,025	.....	.....	402,609	2,977,463	.....	28	
6,577,352	219,489	.....	4,154,690	370,325	.....	.....	374,140	2,428,174	.....	29	
36.8	149.5	.....	41.8	67.6	.....	.....	-1.4	50.4	.....	30	
22.65	8.59	19.16	23.50	46.40	6.54	17.83	9.75	25.37	9.89	31	
15.33	15.01	.....	15.25	148.76	.....	.....	13.64	13.41	.....	32	
13.23	11.85	.....	10.77	123.87	.....	.....	8.49	11.15	.....	33	
26.36	9.64	21.92	28.87	52.74	10.49	16.28	14.79	31.67	14.92	34	
9,920,759	45,270	51,835	8,180,922	774,403	42,554	92,818	417,061	4,955,124	27,275	35	
22.65	8.05	11.46	23.82	37.33	6.24	16.83	10.24	26.14	9.89	36	
Primary	Sup.		Primary	Sup.			Primary	Sup.	Primary	Sup.	
Enterprises			Enterprises				Enterprises		Enterprises		
539	13	56	15	302	13	68	8	10	15	2	18
321,855	50,157	4,935	2,327	280,845	50,157	13,272	3,492	5,007	26,744	(3)	140,901
237,922	7,372	7,692	1,639	179,321	7,372	13,957	1,295	2,225	8,104	(3)	117,717
0.74	0.15	1.56	0.70	0.69	0.15	1.01	0.37	0.44	0.30	(5)	0.84
235,440	30,087	1,740	620	170,949	30,087	5,372	847	2,015	8,978	5,240	108,922
0.62	0.60	0.87	0.82	0.71	0.60	0.73	0.53	0.44	0.34	.....	0.81
317,525	82,765	2,077	760	264,252	82,765	7,450	1,997	4,590	30,596	17,495	153,755
0.74	0.36	0.84	0.82	0.65	0.36	0.72	0.42	0.44	0.29	0.30	0.71
219,948	27,333	1,631	950	168,367	27,333	5,044	2,066	1,210	9,190	1,897	100,344
508,540	1,613,321	.....	.....	434,187	1,613,321	.....	.....	1,200	100	61,894	408,187
521	11	62	17	307	11	67	10	11	14	(3)	128
309,859	50,137	4,996	2,342	256,576	50,137	12,042	2,487	5,078	24,908	(3)	141,042
747,719	59,866	13,082	5,521	608,825	59,866	27,680	13,038	11,645	35,519	(3)	370,436
2.4	1.2	2.6	2.4	2.4	1.2	2.3	5.2	2.3	1.4	(3)	2.6
0.82	0.50	1.57	0.69	0.74	0.50	0.97	0.20	0.45	0.37	(3)	0.81
0.34	0.42	0.60	0.29	0.31	0.42	0.42	0.04	0.20	0.25	(3)	0.31
12	.....	.....	.....	8	.....	(3)	1	.....	.....	.....	6
62,685	.....	.....	.....	53,713	.....	(3)	.....	.....	.....	.....	50,813
45,947	.....	.....	.....	37,761	.....	(3)	.....	.....	.....	.....	36,261
5,562	.....	.....	.....	3,082	.....	(3)	.....	.....	.....	.....	3,082
6,753	.....	.....	.....	5,788	.....	(3)	.....	.....	.....	.....	5,638

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 - UTAH

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)		COLORADO RIVER—Continued					
		Green River—Continued		Fremont River			Escalante River
		Price River	San Rafael River	Total	Direct	Muddy River	
		(30)	(31)		(32)	(33)	(34)
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number....	506	2,272	468	333	125	142
2	Area irrigated.....1939..acres.....	10,154	59,944	26,204	16,267	9,937	3,282
3	(a) Cropland harvested.....1939..acres.....	8,839	53,911	20,987	14,800	6,187	1,520
4	(b) Crop failure.....1939..acres.....	573	14	1,795	595	1,200	363
5	(c) Pasture.....1939..acres.....	722	3,019	3,422	872	2,550	1,390
6	Area irrigated.....1929..acres.....	18,059	53,538	28,655	.....	.....	.....
7	.....1919..acres.....	23,811	77,290	26,513	.....	.....	.....
8	Increase or decrease (-), 1929-1939.....percent....	-43.8	12.0	-8.6	.....	.....	.....
9	Irrigable area in enterprises.....1940..acres.....	13,498	63,892	31,795	17,933	13,862	3,410
10	.....1930..acres.....	24,591	56,259	44,794	.....	.....	.....
11	.....1920 ² ..acres.....	37,191	85,028	42,005	.....	.....	.....
12	Excess of irrigable area over the area irrigated.....1940..acres.....	3,344	3,948	5,591	1,608	3,925	124
13	.....1930..acres.....	6,832	12,721	16,139	.....	.....	.....
14	.....1920 ² ..acres.....	13,380	7,738	15,192	.....	.....	.....
15	Area works were capable of supplying with water.....1940..acres.....	12,033	63,803	27,276	16,739	10,537	3,340
16	.....1930..acres.....	22,953	55,963	29,284	.....	.....	.....
17	.....1920..acres.....	24,848	80,028	34,005	.....	.....	.....
18	Increase or decrease (-), 1930-1940.....percent....	-47.6	14.0	-6.9	.....	.....	.....
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	1,879	3,859	1,072	472	600	58
20	.....1930..acres.....	4,894	2,425	629	.....	.....	.....
21	.....1920..acres.....	1,037	2,738	7,192	.....	.....	.....
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	84.4	94.0	96.1	97.2	94.3	98.3
23	.....1929..percent....	78.7	95.7	97.9	.....	.....	.....
24	.....1919..percent....	95.8	96.6	78.0	.....	.....	.....
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars....	622,544	1,203,230	319,790	151,990	167,800	82,115
26	(a) Cost of irrigation works and equipment.....1940..dollars....	609,794	1,201,160	306,785	140,335	166,450	81,580
27	(b) Investment in water rights (reported).....1940..dollars....	12,750	2,070	13,005	11,655	1,350	536
28	Total investment in irrigation enterprises.....1930..dollars....	1,140,078	258,800	294,065	.....	.....	.....
29	.....1920..dollars....	458,725	289,100	567,050	.....	.....	.....
30	Increase or decrease (-), 1930-1940.....percent....	-45.4	364.9	8.4	.....	.....	.....
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	51.74	18.66	11.72	9.06	15.92	24.59
32	.....1930..dollars....	49.67	4.62	10.07	.....	.....	.....
33	.....1920..dollars....	18.46	3.60	16.68	.....	.....	.....
34	Average investment per acre irrigated.....1939..dollars....	61.31	20.07	12.20	9.34	16.89	25.02
35	Estimated final investment in existing enterprises.....1940..dollars....	655,844	1,215,843	329,290	161,490	167,800	82,215
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars....	48.59	19.03	10.36	9.01	12.11	24.11
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Sup.	Primary	Sup.		
		Enterprises		Enterprises			
37	Enterprises reporting maintenance and operation.....1939..number....	39	1	24	3	23	14
38	Area irrigated in these enterprises.....1939..acres.....	9,674	(3)	59,944	840	26,189	9,937
39	Cost of maintenance and operation.....1939..dollars....	11,592	(3)	23,653	365	8,400	2,620
40	Average cost, per acre irrigated.....1939..dollars....	1.20	(3)	0.39	0.43	0.32	0.26
41	Total annual charges (reported) ⁴.....1939..dollars....	10,626	1,952	34,189	240	7,469	5,766
42	Average annual charge per acre irrigated.....1939..dollars....	1.49	0.24	0.58	0.30	0.34	0.39
43	Area against which charges were assessed.....1939..acres.....	7,301	8,000	58,563	800	21,742	14,820
44	Average annual charge per acre assessed.....1939..dollars....	1.46	0.24	0.68	0.30	0.34	0.39
45	Total charges collected ⁴.....1939..dollars....	10,404	4,317	40,109	250	9,250	5,330
46	Indebtedness to December 31 (reported) ⁵.....1939..dollars....	22,200	2,792	4,500	.....	30,800	800
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number....	39	1	22	2	20	14
48	Area irrigated by these enterprises.....1939..acres.....	9,834	(3)	59,374	(3)	24,774	14,837
49	Water delivered.....1939..acre-feet....	26,311	(3)	120,156	(3)	57,285	37,679
50	Average water delivered per acre irrigated.....1939..acre-feet....	2.7	(3)	2.0	(3)	2.3	2.5
51	Average cost of water per acre irrigated.....1939..dollars....	1.50	(3)	0.60	(3)	0.33	0.38
52	Average cost of water per acre-foot delivered.....1939..dollars....	0.56	(3)	0.30	(3)	0.14	0.15
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number....	(3)	1	.....	.....	(3)	1
54	Irrigable area in these enterprises.....1939..acres.....	(3)	.....	.....	(3)	.....	(3)
55	Irrigated area in these enterprises.....1939..acres.....	(3)	.....	.....	(3)	.....	(3)
56	Area for which drains have been installed.....1939..acres.....	(3)	.....	.....	(3)	.....	(3)
57	Additional area needing drainage.....1939..acres.....	(3)	.....	.....	(3)	.....	(3)

¹Data for 2 enterprises in San Juan River "Direct" Drainage Basin (35) (number refers to separate map) are included with San Juan River Drainage Basin 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.

CENSUS OF IRRIGATION — UTAH

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

COLORADO RIVER—Continued										COLUMBIA RIVER			INDEPENDENT BASINS		
San Juan River					Virgin River				Snake River			Grouse Creek	Deep Creek (Tooele County)	Snake Valley	
Total ¹	Monte- zuma Creek	Cottonwood Wash	Paria River	Kanab Creek	Total	Direct	Ash Creek	Santa Clara River	Total	Raft River	Goose Creek				
	(37)	(38)	(40)	(41)		(42)	(43)	(44)		(45)	(46)	(48)	(49)	(50)	
135	35	82	43	100	1,302	928	149	225	44	40	4	42	68	71	1
4,784	2,395	2,147	831	1,798	17,473	11,663	2,236	3,554	2,456	2,069	387	2,068	1,480	11,061	2
3,490	1,201	2,047	767	1,708	15,076	9,537	2,183	3,356	2,446	2,069	377	1,834	1,333	4,808	3
1,007	1,007	.....	57	.....	546	493	28	25	.....	.....	.....	9	4	1,982	4
1,287	187	100	7	90	1,851	1,653	25	173	10	.....	10	255	143	4,271	5
9,568	.....	.....	.....	.....	19,873	.....	.....	.....	4,724	4,471	253	2,408	2,147	.....	6
9,554	.....	.....	.....	.....	27,106	.....	.....	.....	.....	.....	.....	3,469	1,968	.....	7
-51.5	.....	.....	.....	.....	-12.1	.....	.....	.....	-48.0	-53.7	53.0	-12.0	31.1	.....	8
9,304	2,555	5,229	1,673	2,110	35,467	25,496	2,802	7,169	4,422	3,972	450	2,714	1,590	12,378	9
14,580	.....	.....	.....	.....	32,710	.....	.....	.....	7,059	6,806	253	2,578	2,362	.....	10
26,846	.....	.....	.....	.....	82,450	.....	.....	.....	.....	.....	.....	4,599	4,326	.....	11
4,520	160	3,082	842	312	17,994	13,813	566	3,615	1,966	1,903	63	613	110	1,317	12
4,812	.....	.....	.....	.....	12,837	.....	.....	.....	2,335	2,335	.....	170	215	.....	13
17,092	.....	.....	.....	.....	55,344	.....	.....	.....	.....	.....	.....	1,130	2,343	.....	14
8,104	2,445	5,209	1,641	2,110	32,818	24,467	2,577	5,774	3,302	2,852	450	2,214	1,590	12,151	15
14,480	.....	.....	.....	.....	29,089	.....	.....	.....	5,504	5,251	253	2,578	2,172	.....	16
14,158	.....	.....	.....	.....	35,586	.....	.....	.....	.....	.....	.....	3,439	3,446	.....	17
-44.0	.....	.....	.....	.....	12.8	.....	.....	.....	-40.0	-45.7	77.9	-14.1	26.8	.....	18
3,320	50	3,082	810	312	15,345	12,784	341	2,220	846	783	63	116	110	1,090	19
4,612	.....	.....	.....	.....	9,216	.....	.....	.....	780	780	.....	170	25	.....	20
4,604	.....	.....	.....	.....	8,480	.....	.....	.....	.....	.....	.....	170	1,453	.....	21
59.0	98.0	41.2	50.6	85.2	53.2	47.8	88.8	61.6	74.4	72.5	86.0	94.8	93.1	91.0	22
68.1	.....	.....	.....	.....	68.3	.....	.....	.....	85.8	85.1	100.0	93.4	98.8	.....	23
67.5	.....	.....	.....	.....	76.2	.....	.....	.....	.....	.....	.....	85.3	57.5	.....	24
174,865	20,672	137,195	6,998	65,085	870,534	662,415	44,055	164,061	26,835	26,035	900	12,155	11,516	86,576	25
174,168	20,000	137,170	6,775	64,295	796,228	597,905	43,450	155,473	25,835	25,035	900	12,085	8,515	85,501	26
697	672	25	233	800	74,308	65,110	605	8,591	1,000	1,000	.....	70	3,000	1,075	27
274,632	.....	.....	.....	.....	850,176	.....	.....	.....	34,526	33,326	1,200	27,700	12,377	.....	28
206,458	.....	.....	.....	.....	1,257,981	.....	.....	.....	.....	.....	.....	28,308	8,814	.....	29
-36.3	.....	.....	.....	.....	33.9	.....	.....	.....	-22.0	-21.9	-25.0	-56.1	-6.2	.....	30
21.58	8.45	26.34	4.26	30.85	26.53	27.07	17.10	28.41	8.16	9.13	2.00	5.49	7.24	7.13	31
18.97	.....	.....	.....	.....	22.35	.....	.....	.....	6.27	6.95	4.74	10.74	5.05	.....	32
14.58	.....	.....	.....	.....	35.35	.....	.....	.....	.....	.....	.....	7.79	2.57	.....	33
36.55	8.63	63.90	8.42	36.20	49.82	55.70	19.70	46.16	10.97	12.58	2.33	5.79	7.78	7.83	34
240,970	20,672	137,475	7,158	65,095	918,504	697,485	44,055	176,964	34,935	34,035	900	16,555	24,516	88,642	35
25.90	8.09	26.29	4.28	30.85	25.90	27.36	15.72	24.68	7.90	8.57	2.00	6.14	15.42	7.16	36
15	8	5	11	14	89	56	17	16	8	4	4	7	3	29	37
4,784	2,395	2,147	767	1,755	16,971	11,550	2,071	3,350	1,637	1,250	387	1,918	500	9,190	38
4,646	795	2,774	1,105	2,027	29,676	20,063	2,221	7,390	769	434	325	781	296	4,435	39
0.95	0.33	1.29	1.44	1.15	1.75	1.74	1.07	2.21	0.46	0.35	0.84	0.41	0.59	0.48	40
10,877	398	9,300	420	3,501	32,649	22,719	2,031	7,899	401	401	.....	478	250	1,262	41
2.75	0.24	4.65	0.96	2.74	2.14	2.20	1.13	2.53	0.39	0.39	.....	0.98	0.53	0.30	42
6,882	1,640	5,000	577	1,280	18,116	11,541	2,195	4,380	2,670	2,670	.....	1,255	474	4,240	43
1.55	0.24	1.86	0.73	2.74	1.80	1.97	0.93	1.80	0.15	0.15	.....	0.98	0.53	0.30	44
450	450	.....	475	3,458	29,955	20,348	1,230	8,377	387	387	.....	800	.....	980	45
18,413	.....	2,700	.....	.....	21,149	17,824	.....	3,325	.....	.....	.....	.....	2,266	.....	46
14	8	5	8	10	76	48	14	14	6	3	3	7	3	19	47
4,706	2,395	2,147	498	1,543	13,744	8,133	1,851	2,760	946	609	337	823	1,170	6,481	48
5,121	3,675	1,364	2,111	5,893	47,342	32,125	5,314	9,903	1,452	912	540	1,125	2,555	14,172	49
1.1	1.5	0.6	4.2	3.8	3.4	3.5	2.9	3.6	1.5	1.5	1.6	1.4	2.2	2.2	50
2.35	0.33	4.37	1.54	2.43	2.29	2.37	1.08	2.85	0.84	0.46	0.89	0.29	0.52	0.45	51
2.16	0.22	6.88	0.36	0.64	0.66	0.67	0.38	0.80	0.42	0.31	0.56	0.21	0.21	0.20	52
(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....	.....	.....	.....	53
(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....	.....	.....	.....	54
(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....	.....	.....	.....	55
(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....	.....	.....	.....	56
(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....	.....	.....	.....	57

¹Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.²Annual 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 - UTAH

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)		INDEPENDENT BASINS—Continued					
		Beaver River	Little Salt Lake	Coal Creek	Escalante Desert	Shoal Creek	
		(51)	(52)	(53)	(54)	(55)	
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number.....	723	391	375	66	116	
2	Area irrigated.....1939..acres.....	20,612	8,625	10,289	3,586	3,143	
3	(a) Cropland harvested.....1939..acres.....	17,146	7,670	9,581	3,061	3,118	
4	(b) Crop failure.....1939..acres.....	750	725	238	63	15	
5	(c) Pasture.....1939..acres.....	2,716	230	450	442	10	
6	Area irrigated.....1929..acres.....	25,291		14,488			
7	.....1919..acres.....	28,732		27,206		
8	Increase or decrease (-), 1929-1939.....percent.....	-18.5		-29.1			
9	Irrigable area in enterprises.....1940..acres.....	26,711	10,285	17,694	5,895	3,108	
10	.....1930..acres.....	33,260		21,258		
11	.....1920 ¹ ..acres.....	53,729		60,891		
12	Excess of irrigable area over the area irrigated.....1940..acres.....	6,099	1,660	7,425	2,329	25	
13	.....1930..acres.....	7,969		6,770		
14	.....1920 ¹ ..acres.....	24,997		33,685		
15	Area works were capable of supplying with water.....1940..acres.....	25,518	9,376	17,433	4,915	3,168	
16	.....1930..acres.....	31,132		21,108		
17	.....1920..acres.....	46,469		33,893		
18	Increase or decrease (-), 1930-1940.....percent.....	-18.0		-17.4			
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	4,906	751	7,164	1,349	25	
20	.....1930..acres.....	5,841		6,620		
21	.....1920..acres.....	17,737		6,687		
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	80.8	92.0	58.9	72.6	99.2	
23	.....1929..percent.....	81.2		68.6		
24	.....1919..percent.....	61.8		80.3		
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars.....	1,062,563	143,857	167,554	319,973	199,857	
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	877,867	142,345	162,828	304,125	180,275	
27	(b) Investment in water rights (reported).....1940..dollars.....	184,696	1,512	4,726	15,848	19,582	
28	Total investment in irrigation enterprises.....1930..dollars.....	793,337		182,140			
29	.....1920..dollars.....	842,305		179,171		
30	Increase or decrease (-), 1930-1940.....percent.....	33.9		-8.0			
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	41.64	15.34	9.61	65.10	63.09	
32	.....1930..dollars.....	25.48		8.63		
33	.....1920..dollars.....	18.13		5.29		
34	Average investment per acre irrigated.....1939..dollars.....	51.55	16.68	16.32	89.73	63.59	
35	Estimated final investment in existing enterprises.....1940..dollars.....	1,065,363	176,462	167,554	321,218	199,837	
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	39.88	17.16	9.47	54.49	63.09	
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		Primary	Sup.	Primary	Sup.	Primary	Sup.
		Enterprises		Enterprises		Enterprises	
37	Enterprises reporting maintenance and operation.....1939..number.....	82	7	31	36	47	2
38	Area irrigated in these enterprises.....1939..acres.....	20,196	5,588	8,218	10,201	3,371	(2)
39	Cost of maintenance and operation.....1939..dollars.....	18,315	695	8,770	11,907	6,968	(2)
40	Average cost, per acre irrigated.....1939..dollars.....	0.91	0.12	1.07	1.17	2.05	(2)
41	Total annual charges (reported) ².....1939..dollars.....	11,347	1,264	3,129	7,813	1,530	175
42	Average annual charge per acre irrigated.....1939..dollars.....	0.66	0.23	0.52	0.98	1.16	0.35
43	Area against which charges were assessed.....1939..acres.....	19,673	5,409	6,165	14,655	1,900	500
44	Average annual charge per acre assessed.....1939..dollars.....	0.58	0.23	0.51	0.53	1.18	0.35
45	Total charges collected ³.....1939..dollars.....	7,675	2,316	3,989	7,336	1,625	160
46	Indebtedness to December 31 (reported) ⁴.....1939..dollars.....	1,500	2,085		55		
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number.....	74	5	36	37	43	2
48	Area irrigated by these enterprises.....1939..acres.....	17,686	5,541	8,608	10,269	3,465	(2)
49	Water delivered.....1939..acre-feet.....	41,073	1,319	17,843	17,252	9,837	(2)
50	Average water delivered per acre irrigated.....1939..acre-feet.....	2.3	0.2	2.1	1.7	2.6	(2)
51	Average cost of water per acre irrigated.....1939..dollars.....	1.15	0.30	1.23	1.31	2.07	(2)
52	Average cost of water per acre-foot delivered.....1939..dollars.....	0.50	1.27	0.59	0.78	0.73	(2)
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number.....						
54	Irrigable area in these enterprises.....1939..acres.....						
55	Irrigated area in these enterprises.....1939..acres.....						
56	Area for which drains have been installed.....1939..acres.....						
57	Additional area needing drainage.....1939..acres.....						

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. 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 — UTAH

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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	GREAT SALT LAKE					
		Total	Direct	Bear River			
				Total	Direct	Little Bear River	Malad River
			(1)		(2)	(3)	(4)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1 Enterprises.....1940..number.....	2,408	1,131	171	174	98	70	6
2 Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	564	530	159	1,147	1,529	697	152
3 Diversion dams.....1940..total number.....	1,973	829	84	185	125	59	1
4 1930..total number.....	1,717	805	.....	235	16	99	4
5 1920..total number.....	1,479	576	.....	118	8	47	2
6 (a) Concrete and masonry.....1940..number.....	611	449	50	98	74	24	.....
7 (b) Timber.....1940..number.....	217	71	3	16	12	4	.....
8 (c) Earth and rock.....1940..number.....	778	222	22	59	37	21	1
9 (d) Other, mixed, and not reported.....1940..number.....	367	87	6	12	2	10	.....
10 Main canals and laterals.....1940..total length, miles.....	9,004.5	4,076.6	215.0	1,273.6	917.0	344.6	12.0
11 1930..total length, miles.....	9,237	3,631	.....	940	241	362	17
12 1920..total length, miles.....	11,677	4,503	.....	1,101	398	378	10
13 (a) Earth.....1940..length, miles.....	8,742	3,857	186	1,266	916	338	12
14 (b) Lined.....1940..length, miles.....	262.5	219.6	29.0	7.6	1.0	6.6	.....
15 1940..capacity, c.f.s. ³	34,879	14,046	625	3,690	2,538	1,141	13
16 1930..capacity, c.f.s. ³	30,648	13,465	.....	3,856	2,053	970	24
17 1920..capacity, c.f.s. ³	29,447	13,165	.....	4,253	2,294	1,074	13
18 Pipe lines ⁴.....1940..total length, miles.....	172.5	139.8	28.8	5.5	1.2	1.8	2.5
19 1930..total length, miles.....	159.0	63.2	.....	8.0	1.9	1.7	.....
20 1920..total length, miles.....	154.7	100.3	.....	14.7	1.2	2.0	.....
21 (a) Concrete.....1940..length, miles.....	40.6	40.0	19.9	3.0	.....	0.5	2.5
22 (b) Metal.....1940..length, miles.....	60.7	39.6	6.0	1.3	0.6	0.7	.....
23 (c) Wood-stave.....1940..length, miles.....	21.2	12.6	.....	1.2	0.6	0.6	.....
24 (d) Other.....1940..length, miles.....	50.0	47.6	2.9	.....	.....	.....	.....
25 Storage dams.....1940..total number.....	362	138	9	17	12	3	2
26 1930..total number.....	287	112	.....	25	1	3	.....
27 1920..total number.....	307	71	.....	17	1	6	1
28 (a) Concrete and masonry.....1940..number.....	39	29	.....	2	.....	.....	.....
29 (b) Earth and rock.....1940..number.....	313	107	9	15	10	3	2
30 (c) Other, mixed, and not reported.....1940..number.....	10	2	.....	.....	.....	.....	.....
31 Reservoirs.....1940..total number.....	438	166	37	19	14	3	2
32 (a) 1-99 acre-feet capacity.....1940..number.....	254	94	36	8	6	2	.....
33 (b) 100-999 acre-feet capacity.....1940..number.....	105	51	.....	6	0	.....	.....
34 (c) 1,000 and over acre-feet capacity.....1940..number.....	79	21	1	5	2	1	2
35 1940..total capacity, ac.-ft. ⁵	3,417,704	2,475,625	3,934	1,440,927	1,423,664	15,293	(⁶)
36 1930..total capacity, ac.-ft.	413	128	.....	35	1	4	2
37 1920..total capacity, ac.-ft.	1,093,252	373,106	.....	6,306	50	168	2,001
38 Wells, flowing.....1940..number.....	1,216	799	138	27	12	15	.....
39 1930..number.....	1,683	698	.....	90	.....	53	.....
40 1920..number.....	1,256	395	.....	114	.....	29	2
41 1940..yield, g.p.m.....	83,838	64,451	7,896	1,670	600	1,070	.....
42 1930..yield, g.p.m.....	104,870	34,775	.....	3,795	.....	1,829	.....
43 1920..yield, g.p.m.....	98,371	34,750	.....	5,167	.....	3,025	219
44 Wells, pumped.....1940..number.....	288	86	48	11	8	2	1
45 1930..number.....	346	102	.....	83	.....	1	.....
46 1920..number.....	192	68	.....	57	2	.....	.....
47 1940..yield, g.p.m.....	122,528	29,515	16,226	4,760	2,160	(⁶)	(⁶)
48 1930..yield, g.p.m.....	120,333	31,188	.....	20,326	.....	300	.....
49 1920..yield, g.p.m.....	39,059	16,067	.....	11,597	902	.....	.....
50 Pumping plants.....1940..total number.....	411	162	49	44	36	7	1
51 1930..total number.....	429	173	.....	131	27	7	.....
52 Prime movers.....1940..capacity, hp.....	14,216	10,153	450	1,293	926	352	(⁶)
53 1930..capacity, hp.....	11,381	8,196	.....	1,785	780	104	.....
54 1920..capacity, hp.....	11,392	9,917	.....	2,443	1,678	50	.....
55 (a) Electric.....1940..number.....	293	141	45	38	33	5	.....
56 1940..capacity, hp.....	11,163	9,670	406	961	861	100	.....
57 (b) Internal-combustion.....1940..number.....	103	20	4	5	3	1	1
58 1940..capacity, hp.....	1,615	233	44	72	65	(⁶)	(⁶)
59 1940..number.....	15	7	.....	.....	.....	71	.....
60 1940..capacity, hp.....	1,438	250	.....	250	.....	250	.....
61 Pumps.....1940..total number.....	409	161	49	44	36	7	1
62 1930..number.....	460	204	.....	136	30	7	.....
63 1920..number.....	201	167	.....	103	29	4	.....
64 1940..capacity, g.p.m.....	835,862	686,790	16,217	58,475	46,675	12,200	(⁶)
65 1930..capacity, g.p.m.....	877,942	746,150	.....	82,735	47,334	4,755	.....
66 1920..capacity, g.p.m.....	783,898	686,245	.....	103,370	74,845	3,740	.....
67 (a) Centrifugal.....1940..number.....	285	119	34	37	30	6	1
68 1940..capacity, g.p.m.....	330,989	209,672	8,972	50,950	39,050	11,300	(⁶)
69 1940..average capacity, g.p.m.....	1,161	1,762	264	1,377	1,302	1,883	(⁶)
70 1940..number.....	102	27	14	7	6	1	.....
71 (b) Turbine.....1940..capacity, g.p.m.....	72,733	18,245	7,145	7,525	6,625	(⁶)	(⁶)
72 1940..average capacity, g.p.m.....	713	676	510	1,075	1,104	(⁶)	(⁶)
73 1940..number.....	9	6	.....	.....	.....	.....	.....
74 (c) Plunger.....1940..capacity, g.p.m.....	666	515	.....	.....	.....	.....	.....
75 1940..average capacity, g.p.m.....	74	86	.....	.....	.....	.....	.....
76 (d) Other.....1940..number.....	13	9	1	.....	.....	.....	.....
77 1940..capacity, g.p.m.....	431,494	429,368	(⁶)	.....	.....	.....	.....
78 Pumping lift, from all sources.....1940..average, feet.....	35	40	45	38	36	47	(⁶)
79 1930..average, feet.....	36	41	.....	43	35	28	.....
80 1920..average, feet.....	25	38	.....	42	41	18	.....
81 from pumped wells.....1940..average, feet.....	38	42	46	43	42	(⁶)	(⁶)
82 from surface sources.....1940..average, feet.....	28	37	12	36	34	47	(⁶)

¹Data for 1 enterprise in Deep Creek (Box Elder County) Drainage Basin (47) (number refers to separate map) are included with State totals. Data for unidentified independent basins for the 1930 and 1920 Censuses are included only in State total. ²Includes interdrainage basin projects counted as independent enterprises in each basin into which they extend. For actual number of enterprises see State table 1. 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. ⁷Data for less than 3 enterprises in map with "1" in the enterprise number.

CENSUS OF IRRIGATION - UTAH

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)		GREAT SALT LAKE—Continued						
		Weber River				Jordan River		
		Total	Direct	Chalk Creek	East Canyon Creek	Ogden River	Total	Direct
		(5)	(6)	(7)	(8)		(9)	
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
1	Enterprises.....1940..number.....	312	206	18	25	63	474	171
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	366	393	171	180	407	540	536
3	Diversion dams.....1940..total number.....	207	131	20	16	36	353	105
4	.....1930..total number.....	314	102	.....	24	53	256	44
5	.....1920..total number.....	230	72	.....	38	27	202	67
6	(a) Concrete and masonry.....1940..number.....	60	35	.....	9	16	238	93
7	(b) Timber.....1940..number.....	17	14	.....	1	1	35	4
8	(c) Earth and rock.....1940..number.....	85	56	11	6	10	53	7
9	(d) Other, mixed, and not reported.....1940..number.....	45	24	5	2	11	24	1
10	Main canals and laterals.....1940..total length, miles.....	966.6	666.3	28.0	38.0	231.3	1,621.4	575.4
11	.....1930..total length, miles.....	855	318	.....	33	291	1,336	417
12	.....1920..total length, miles.....	676	227	.....	54	138	2,726	516
13	(a) Earth.....1940..length, miles.....	917	642	28	38	209	1,488	524
14	(b) Lined.....1940..length, miles.....	49.6	27.3	.....	.....	22.3	139.4	51.4
15	.....1940..capacity, c.f.s. ¹	3,546	2,408	109	217	812	6,185	1,065
16	.....1930..capacity, c.f.s. ¹	3,029	2,003	.....	180	450	5,580	1,896
17	.....1920..capacity, c.f.s. ¹	2,823	1,417	.....	179	480	6,069	2,029
18	Pipe lines ².....1940..total length, miles.....	25.0	10.1	.....	.....	14.9	80.5	58.6
19	.....1930..total length, miles.....	20.5	0.3	.....	.....	7.6	34.7	13.8
20	.....1920..total length, miles.....	8.3	1.8	.....	.....	1.8	77.4	2.3
21	(a) Concrete.....1940..length, miles.....	3.6	2.4	.....	.....	1.2	13.5	4.5
22	(b) Metal.....1940..length, miles.....	4.8	3.3	.....	.....	1.5	27.5	20.0
23	(c) Wood-stave.....1940..length, miles.....	8.3	0.9	.....	.....	7.4	3.1	2.1
24	(d) Other.....1940..length, miles.....	8.3	3.5	.....	.....	4.8	36.4	33.8
25	Storage dams.....1940..total number.....	44	30	9	2	3	68	17
26	.....1930..total number.....	38	3	.....	1	6	49	8
27	.....1920..total number.....	16	1	.....	.....	.....	36	6
28	(a) Concrete and masonry.....1940..number.....	1	.....	.....	1	.....	20	12
29	(b) Earth and rock.....1940..number.....	43	30	9	1	3	40	4
30	(c) Other, mixed, and not reported.....1940..number.....	.....	.....	.....	.....	.....	2	1
31	Reservoirs.....1940..total number.....	42	29	9	2	3	68	20
32	(a) 1-99 acre-foot capacity.....1940..number.....	25	16	9	1	2	22	13
33	(b) 100-999 acre-foot capacity.....1940..number.....	7	7	.....	.....	.....	38	7
34	(c) 1,000 and over acre-foot capacity.....1940..number.....	7	5	.....	1	1	5	.....
35	.....1940..total capacity, ac.-ft. ²	152,488	80,761	181	(4)	43,531	878,176	1,635
36	.....1930..total capacity, ac.-ft. ²	34	5	.....	1	1	69	3
37	.....1920..total capacity, ac.-ft. ²	77,358	74,301	.....	9	1	289,442	518
38	Wells, flowing.....1940..number.....	8	5	.....	.....	3	576	206
39	.....1930..number.....	85	.....	.....	.....	9	523	2
40	.....1920..number.....	39	12	.....	.....	9	248	18
41	.....1940..yield, g.p.m.....	218	156	.....	.....	60	54,679	0,576
42	.....1930..yield, g.p.m.....	4,081	.....	.....	.....	1,786	26,899	80
43	.....1920..yield, g.p.m.....	1,358	388	.....	.....	320	28,255	222
44	Wells, pumped.....1940..number.....	4	.....	.....	.....	4	23	13
45	.....1930..number.....	10	.....	.....	.....	3	9	.....
46	.....1920..number.....	6	.....	.....	.....	1	5	.....
47	.....1940..yield, g.p.m.....	1,400	.....	.....	.....	1,400	7,129	2,239
48	.....1930..yield, g.p.m.....	7,385	.....	.....	.....	500	3,475	.....
49	.....1920..yield, g.p.m.....	1,640	.....	.....	.....	230	2,830	.....
50	Pumping plants.....1940..total number.....	13	6	.....	.....	7	56	28
51	.....1930..total number.....	227	44	.....	.....	183	8,193	3,931
52	Prime movers.....1940..capacity, hp.....	376	142	.....	.....	13	6,035	1,632
53	.....1930..capacity, hp.....	232	106	.....	.....	7	7,242	4,301
54	.....1920..capacity, hp.....	24	8	.....	.....	2	18	4
55	(a) Electric.....1940..number.....	10	8	.....	.....	4	43	4
56	.....1940..capacity, hp.....	179	44	.....	.....	135	8,124	3,899
57	(b) Internal-combustion.....1940..number.....	3	.....	.....	.....	3	8	5
58	.....1940..capacity, hp.....	48	.....	.....	.....	48	69	32
59	(c) Other.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
60	.....1940..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
61	Pumps.....1940..total number.....	13	6	.....	.....	7	55	28
62	.....1930..number.....	26	9	.....	.....	3	42	14
63	.....1920..number.....	25	10	.....	.....	1	39	21
64	.....1940..capacity, g.p.m.....	16,300	3,900	.....	.....	12,400	585,798	61,630
65	.....1930..capacity, g.p.m.....	24,606	9,545	.....	.....	500	638,840	545,000
66	.....1920..capacity, g.p.m.....	27,145	6,615	.....	.....	230	555,730	389,000
67	(a) Centrifugal.....1940..number.....	12	5	.....	.....	7	36	21
68	.....1940..capacity, g.p.m.....	16,075	3,675	.....	.....	12,400	133,675	80,185
69	.....1940..average capacity, g.p.m.....	1,340	735	.....	.....	1,771	3,713	2,868
70	(b) Turbine.....1940..number.....	.....	.....	.....	.....	.....	6	3
71	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	3,575	1,225
72	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	596	408
73	(c) Plunger.....1940..number.....	1	1	.....	.....	.....	5	4
74	.....1940..capacity, g.p.m.....	(5)	(5)	.....	.....	.....	290	210
75	.....1940..average capacity, g.p.m.....	(5)	(5)	.....	.....	.....	56	52
76	(d) Other.....1940..number.....	.....	.....	.....	.....	.....	8	.....
77	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	428,255	.....
78	Pumping lift, from all sources.....1940..average, feet.....	19	17	.....	.....	21	44	46
79	.....1930..average, feet.....	20	17	.....	.....	32	56	82
80	.....1920..average, feet.....	16	14	.....	.....	33	38	20
81	from pumped wells.....1940..average, feet.....	17	18	.....	.....	17	41	51
82	from surface sources.....1940..average, feet.....	21	17	.....	.....	28	46	47

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 — UTAH

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WORKS, 1940, 1930, AND 1920—Continued

GREAT SALT LAKE—Continued				SEVIER LAKE								COLORADO RIVER			
Jordan River—Continued				Sevier River								Total	Direct	Dolores River	
Utah Lake				Total	Upper Sevier River					Lower Sevier River					
Total	Direct	Spanish Fork System	Provo River System		Total	Direct	East Fork Sevier River		San Pitch River						
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	
303	23	64	216	351	285	174	33	17	16	78	66	616	62	17	1
551	954	979	381	769	660	578	346	333	359	978	1,240	661	90	158	2
248	40	82	126	310	281	143	36	23	13	102	29	617	45	18	3
.....	.....	.....	.....	184	.....	.....	.....	.....	12	40	.....	345	.....	.....	4
.....	.....	.....	.....	95	.....	.....	.....	.....	2	26	.....	710	36	.....	5
145	29	58	58	37	30	14	6	3	3	10	7	80	2	.....	6
31	.....	5	26	40	39	10	3	2	1	26	1	64	2	.....	7
49	10	12	27	132	115	55	19	12	7	41	17	351	38	17	8
23	1	7	15	101	97	64	8	6	2	25	4	122	3	1	9
1,046.0	90.1	470.8	485.1	1,306.7	954.7	510.0	90.0	42.0	48.0	354.7	352.0	3,163.4	54.5	43.1	10
.....	.....	.....	.....	1,487	.....	.....	.....	.....	38	404	.....	2,812	15	.....	11
.....	.....	.....	.....	2,588	.....	.....	.....	.....	51	773	.....	3,386	156	.....	12
984	81	407	476	1,297	951	507	90	42	48	354	346	3,142	54	49	13
82.0	9.1	63.6	9.1	9.7	3.7	3.0	.....	.....	.....	0.7	6.0	21.4	0.5	0.1	14
5,100	1,416	1,438	2,246	6,780	4,449	2,433	368	208	160	1,648	2,311	11,646	198	171	15
.....	.....	.....	.....	6,088	.....	.....	.....	.....	534	1,081	.....	7,873	38	.....	16
.....	.....	.....	.....	7,762	.....	.....	.....	.....	86	970	.....	6,026	286	.....	17
21.6	9.9	4.5	7.2	15.4	10.3	4.9	3.0	.....	3.0	2.4	5.1	14.5	2.6	.....	18
.....	.....	.....	.....	5.1	.....	.....	.....	.....	.....	0.1	.....	3.9	.....	.....	19
.....	.....	.....	.....	9.0	.....	.....	.....	.....	.....	3.4	.....	12.0	0.6	.....	20
9.0	4.5	1.5	3.0	0.2	0.2	.....	.....	.....	.....	0.2	.....	0.1	.....	.....	21
7.5	3.4	1.3	2.8	8.7	3.7	2.7	.....	.....	.....	1.0	5.0	11.1	2.5	.....	22
2.0	0.5	0.2	1.3	5.6	5.5	2.2	3.0	.....	3.0	0.3	0.1	2.8	0.1	.....	23
3.1	1.5	1.5	0.1	0.9	0.9	.....	.....	.....	.....	0.9	.....	0.5	.....	.....	24
51	4	10	37	76	42	18	5	1	4	19	34	119	3	3	25
.....	.....	.....	.....	51	.....	.....	.....	.....	2	14	.....	64	.....	.....	26
.....	.....	.....	.....	60	.....	.....	.....	.....	3	20	.....	145	5	.....	27
14	1	1	12	3	1	1	.....	.....	.....	.....	2	4	.....	.....	28
36	3	8	25	73	41	17	5	1	4	19	32	110	3	3	29
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	30
48	3	9	36	83	44	18	5	1	4	21	39	120	4	2	31
9	1	2	6	51	18	7	1	.....	1	10	33	56	4	1	32
31	.....	7	24	13	13	4	3	.....	3	6	.....	31	.....	1	33
8	2	.....	6	19	13	7	1	1	.....	5	6	33	.....	.....	34
876,541	860,020	1,350	15,162	465,872	188,006	99,350	57,391	(*)	4,801	31,265	277,866	419,540	90	(*)	35
.....	.....	.....	.....	47	.....	.....	.....	.....	3	14	.....	75	.....	.....	36
.....	.....	.....	.....	511,227	.....	.....	.....	.....	63,800	7,508	.....	125,536	.....	.....	37
368	10	64	294	362	303	290	.....	.....	.....	13	59	.....	.....	.....	38
.....	.....	.....	.....	106	.....	.....	.....	.....	.....	1	.....	2	.....	.....	39
.....	.....	.....	.....	258	.....	.....	.....	.....	6	16	.....	6	.....	.....	40
48,103	918	4,098	43,087	17,694	9,710	9,105	.....	.....	.....	605	7,894	.....	.....	.....	41
.....	.....	.....	.....	10,423	.....	.....	.....	.....	.....	900	.....	70	.....	.....	42
.....	.....	.....	.....	38,863	.....	.....	.....	.....	112	3	.....	196	.....	.....	43
10	.....	2	8	14	12	8	.....	.....	.....	4	2	2	.....	.....	44
.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	1	.....	.....	45
.....	.....	.....	.....	3	.....	.....	.....	.....	.....	1	.....	4	.....	.....	46
4,860	.....	(*)	3,860	7,069	6,369	3,929	.....	.....	.....	2,460	(*)	(*)	.....	.....	47
.....	.....	.....	.....	2,170	.....	.....	.....	.....	.....	1,000	.....	1,360	.....	.....	48
.....	.....	.....	.....	178	.....	.....	.....	.....	.....	150	.....	2,850	.....	.....	49
27	14	.....	13	16	13	9	.....	.....	.....	4	3	47	11	.....	50
4,262	4,000	.....	292	267	232	137	.....	.....	.....	95	35	1,803	235	.....	51
.....	.....	.....	.....	122	.....	.....	.....	.....	.....	25	.....	1,086	55	.....	52
.....	.....	.....	.....	117	.....	.....	.....	.....	.....	5	.....	789	212	.....	53
.....	.....	.....	.....	8	.....	.....	.....	.....	.....	2	.....	12	3	.....	54
24	14	.....	10	5	5	3	.....	.....	.....	3	.....	3	.....	.....	55
4,225	4,000	.....	225	95	95	65	.....	.....	.....	(*)	.....	42	.....	.....	56
3	.....	.....	3	9	7	5	.....	.....	.....	2	2	35	10	.....	57
37	.....	.....	37	146	136	71	.....	.....	.....	(*)	(*)	629	215	.....	58
.....	.....	.....	.....	2	1	1	.....	.....	.....	.....	1	9	1	.....	59
.....	.....	.....	.....	(*)	(*)	(*)	.....	.....	.....	(*)	(*)	1,132	(*)	.....	60
27	14	.....	13	16	13	9	.....	.....	.....	4	3	44	11	.....	61
.....	.....	.....	.....	5	.....	.....	.....	.....	.....	1	.....	13	3	.....	62
.....	.....	.....	.....	10	.....	.....	.....	.....	.....	1	.....	26	10	.....	63
504,168	488,250	.....	15,918	19,058	12,088	9,628	.....	.....	.....	3,360	6,080	60,845	19,200	.....	64
.....	.....	.....	.....	5,770	.....	.....	.....	.....	.....	1,100	.....	19,320	6,350	.....	65
.....	.....	.....	.....	18,318	.....	.....	.....	.....	.....	450	.....	58,027	17,812	.....	66
15	8	.....	7	7	6	6	.....	.....	.....	.....	1	39	11	.....	67
73,460	60,750	.....	12,730	7,525	7,225	7,225	.....	.....	.....	(*)	(*)	58,570	19,200	.....	68
4,899	7,594	.....	1,819	1,075	1,204	1,204	.....	.....	.....	(*)	(*)	1,502	1,745	.....	69
3	.....	.....	3	7	6	2	.....	.....	.....	4	1	2	.....	.....	70
2,350	2,350	.....	2,350	11,160	5,760	(*)	.....	.....	.....	3,360	(*)	(*)	.....	.....	71
783	.....	.....	783	1,594	960	(*)	.....	.....	.....	840	(*)	(*)	.....	.....	72
1	.....	.....	1	1	1	1	.....	.....	.....	.....	.....	1	.....	.....	73
(*)	.....	.....	(*)	(*)	(*)	(*)	.....	.....	.....	.....	.....	(*)	.....	.....	74
(*)	.....	.....	(*)	(*)	(*)	(*)	.....	.....	.....	.....	.....	(*)	.....	.....	75
8	6	.....	2	1	.....	.....	.....	.....	.....	.....	1	2	.....	.....	76
428,258	427,500	.....	(*)	(*)	.....	.....	.....	.....	.....	(*)	(*)	(*)	.....	.....	77
35	56	.....	31	31	35	28	.....	.....	.....	50	16	20	15	.....	78
.....	.....	.....	.....	27	.....	.....	.....	.....	.....	40	.....	25	15	.....	79
.....	.....	.....	.....	30	.....	.....	.....	.....	.....	4	.....	31	19	.....	80
25	.....	.....	25	40	46	41	.....	.....	.....	50	(*)	(*)	.....	.....	81
46	56	.....	40	13	14	14	.....	.....	.....	.....	8	19	15	.....	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 — UTAH

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)		COLORADO RIVER—Continued						
		Green River						
		Total	Direct ¹	Henry's Fork	Brush Creek	Ashley Creek	Duchesne River	Willow Creek
		(21)	(24)	(25)	(26)	(27)	(28)	
ENTERPRISES AND IRRIGATION WORKS								
JANUARY 1								
1	Enterprises.....1940..number.....	342	73	12	11	19	138	18
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	945	218	533	473	2,144	1,279	152
3	Diversion dams.....1940..total number.....	345	57	11	11	18	159	21
4	.....1930..total number.....	167	2	.....	.....	8	66	.....
5	.....1920..total number.....	414	2	.....	.....	109	155	.....
6	(a) Concrete and masonry.....1940..number.....	48	4	1	.....	5	17	.....
7	(b) Timber.....1940..number.....	57	10	.....	2	3	36	4
8	(c) Earth and rock.....1940..number.....	180	36	10	6	4	87	5
9	(d) Other, mixed, and not reported.....1940..number.....	60	7	.....	3	6	19	12
10	Main canals and laterals.....1940..total length, miles.....	2,583.9	154.8	27.0	26.2	85.0	1,871.0	46.0
11	.....1930..total length, miles.....	2,157	20	.....	.....	78	1,583	.....
12	.....1920..total length, miles.....	2,451	29	.....	.....	90	1,314	.....
13	(a) Earth.....1940..length, miles.....	2,588	152	27	26	85	1,889	48
14	(b) Lined.....1940..length, miles.....	5.9	2.8	.....	0.2	.....	2.0	.....
15	.....1940..capacity, c.f.s. ²	9,818	370	113	114	1,002	4,982	65
16	.....1930..capacity, c.f.s. ²	6,264	71	.....	.....	646	4,068	.....
17	.....1920..capacity, c.f.s. ²	4,047	71	.....	.....	113	2,416	.....
18	Pipe lines ⁴.....1940..total length, miles.....	3.9	1.4	.....	0.2	0.2	1.3	.....
19	.....1930..total length, miles.....	0.7	.....	.....	.....	.....	0.6	.....
20	.....1920..total length, miles.....	0.9	0.3	.....	.....	.....	.....	.....
21	(a) Concrete.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
22	(b) Metal.....1940..length, miles.....	1.4	0.7	.....	.....	.....	0.3	.....
23	(c) Wood-stave.....1940..length, miles.....	2.3	0.7	.....	0.2	0.2	1.0	.....
24	(d) Other.....1940..length, miles.....	0.2	.....	.....	.....	.....	.....	.....
25	Storage dams.....1940..total number.....	56	7	3	1	2	30	.....
26	.....1930..total number.....	28	.....	.....	.....	.....	14	.....
27	.....1920..total number.....	11	.....	.....	.....	.....	8	.....
28	(a) Concrete and masonry.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
29	(b) Earth and rock.....1940..number.....	52	6	3	1	2	30	.....
30	(c) Other, mixed, and not reported.....1940..number.....	4	1	.....	.....	.....	.....	.....
31	Reservoirs.....1940..total number.....	54	6	3	1	2	30	.....
32	(a) 1-99 acre-feet capacity.....1940..number.....	6	2	.....	.....	.....	2	.....
33	(b) 100-999 acre-feet capacity.....1940..number.....	18	3	.....	.....	1	7	.....
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	30	1	3	1	1	21	.....
35	.....1940..total capacity, ac.-ft. ³	401,140	2,565	6,900	(?)	(?)	346,851	.....
36	.....1930..total capacity, ac.-ft. ³	39	.....	.....	.....	.....	24	.....
37	.....1920..total capacity, ac.-ft. ³	112,587	.....	.....	.....	.....	39,745	.....
38	Wells, flowing.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
39	.....1930..number.....	1	.....	.....	.....	.....	1	.....
40	.....1920..number.....	.....	.....	.....	.....	.....	.....	.....
41	.....1940..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
42	.....1930..yield, g.p.m.....	30	.....	.....	.....	.....	30	.....
43	.....1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
45	.....1930..number.....	.....	.....	.....	.....	.....	.....	.....
46	.....1920..number.....	1	1	.....	.....	.....	.....	.....
47	.....1940..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
48	.....1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
49	.....1920..yield, g.p.m.....	1,350	1,350	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number.....	30	27	.....	.....	.....	6	1
51	.....1930..total number.....	8	7	.....	.....	.....	.....	.....
52	Prime movers.....1940..capacity, hp.....	1,525	1,420	.....	.....	.....	10	.....
53	.....1930..capacity, hp.....	991	951	.....	.....	.....	.....	.....
54	.....1920..capacity, hp.....	545	537	.....	.....	.....	.....	.....
55	(a) Electric.....1940..number.....	1	1	.....	.....	.....	.....	.....
56	.....1940..capacity, hp.....	(?)	(?)	.....	.....	.....	.....	.....
57	(b) Internal-combustion.....1940..number.....	23	20	.....	.....	.....	1	.....
58	.....1940..capacity, hp.....	406	303	.....	.....	.....	10	.....
59	(c) Other.....1940..number.....	6	6	.....	.....	.....	.....	.....
60	.....1940..capacity, hp.....	1,102	1,102	.....	.....	.....	.....	.....
61	Pumps.....1940..total number.....	28	25	.....	.....	.....	1	.....
62	.....1930..number.....	9	8	.....	.....	.....	.....	.....
63	.....1920..number.....	13	10	.....	.....	.....	2	.....
64	.....1940..capacity, g.p.m.....	48,550	42,450	.....	.....	.....	1,800	.....
65	.....1930..capacity, g.p.m.....	11,470	10,120	.....	.....	.....	.....	.....
66	.....1920..capacity, g.p.m.....	39,315	11,580	.....	.....	.....	27,000	.....
67	(a) Centrifugal.....1940..number.....	28	24	.....	.....	.....	.....	.....
68	.....1940..capacity, g.p.m.....	38,756	34,450	.....	.....	.....	.....	.....
69	.....1940..average capacity, g.p.m.....	1,490	1,435	.....	.....	.....	.....	.....
70	(b) Turbine.....1940..number.....	1	1	.....	.....	.....	.....	.....
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.....	5	1	.....	.....	.....	1	.....
77	.....1940..capacity, g.p.m.....	1,800	.....	.....	.....	.....	1,800	.....
78	Pumping lift, from all sources.....1940..average, feet.....	19	19	.....	.....	.....	8	.....
79	.....1930..average, feet.....	22	24	.....	.....	.....	.....	.....
80	.....1920..average, feet.....	29	26	.....	.....	.....	70	.....
81	from pumped wells.....1940..average, feet.....	.....	.....	.....	.....	.....	.....	.....
82	from surface sources.....1940..average, feet.....	19	19	.....	.....	.....	8	.....

¹Data for 2 enterprises in White River Drainage Basin (28) (number refers to separate map) are included with Green River "Direct" Drainage Basin (21).

²Data for 2 enterprises in San Juan River "Direct" Drainage Basin (35) (number refers to separate map) are included in San Juan River Drainage Basin total.

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.

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[illegible]

⁷Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION—UTAH

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)	COLORADO RIVER—Con.		COLUMBIA RIVER			INDEPENDENT BASINS	
	Virgin River—Continued		Snake River			Grouse Creek	Deep Creek (Tooele County)
	Ash Creek	Santa Clara River	Total	Raft River	Goose Creek		
	(43)	(44)		(45)	(46)	(48)	(49)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1 Enterprises.....1940..number.....	19	24	11	7	4	10	5
2 Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	136	241	300	407	112	221	318
3 Diversion dams.....1940..total number.....	20	28	33	31	2	9	13
4 1930..total number.....	.....	.....	58	44	14	12	1
5 1920..total number.....	.....	.....	.....	.....	.....	14	3
6 (a) Concrete and masonry.....1940..number.....	3	4	4	2	2	.....	.....
7 (b) Timber.....1940..number.....	.....	.....	7	7	.....	.....	11
8 (c) Earth and rock.....1940..number.....	14	14	1	1	.....	8	2
9 (d) Other, mixed, and not reported.....1940..number.....	3	10	21	21	.....	1	.....
10 Main canals and laterals.....1940..total length, miles.....	31.5	56.0	18.0	18.0	.....	23.0	32.0
11 1930..total length, miles.....	.....	.....	33	21	12	35	37
12 1920..total length, miles.....	.....	.....	.....	.....	.....	45	36
13 (a) Earth.....1940..length, miles.....	30	56	18	18	.....	23	32
14 (b) Lined.....1940..length, miles.....	1.5	.....	.....	.....	.....	.....	.....
15 1940..capacity, c.f.s. ¹	81	135	155	130	25	37	51
16 1930..capacity, c.f.s. ¹.....	.....	.....	43	34	9	26	37
17 1920..capacity, c.f.s. ¹.....	.....	.....	.....	.....	.....	35	50
18 Pipe lines ².....1940..total length, miles.....	.....	1.4	.....	.....	.....	.....	.....
19 1930..total length, miles.....	.....	.....	0.7	0.7	.....	.....	.....
20 1920..total length, miles.....	.....	.....	.....	.....	.....	.....	.....
21 (a) Concrete.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
22 (b) Metal.....1940..length, miles.....	.....	1.1	.....	.....	.....	.....	.....
23 (c) Wood-stave.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
24 (d) Other.....1940..length, miles.....	.....	0.3	.....	.....	.....	.....	.....
25 Storage dams.....1940..total number.....	2	8	3	3	.....	2	1
26 1930..total number.....	.....	.....	2	1	1	2	1
27 1920..total number.....	.....	.....	.....	.....	.....	3	.....
28 (a) Concrete and masonry.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
29 (b) Earth and rock.....1940..number.....	2	8	1	1	.....	2	1
30 (c) Other, mixed, and not reported.....1940..number.....	.....	.....	2	2	.....	.....	.....
31 Reservoirs.....1940..total number.....	2	9	3	3	.....	2	1
32 (a) 1-99 acre-feet capacity.....1940..number.....	2	8	2	2	.....	2	1
33 (b) 100-999 acre-feet capacity.....1940..number.....	.....	1	1	1	.....	.....	.....
34 (c) 1,000 and over acre-feet capacity.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
35 1940..total capacity, ac.-ft. ³	(⁴)	708	315	315	.....	(⁴)	(⁴)
36 1930..total capacity, ac.-ft. ³.....	.....	.....	3	3	.....	2	2
37 1920..total capacity, ac.-ft. ³.....	.....	.....	367	367	.....	462	1
38 Wells, flowing.....1940..number.....	.....	.....	.....	.....	.....	1	.....
39 1930..number.....	.....	.....	.....	.....	.....	.....	.....
40 1920..number.....	.....	.....	.....	.....	.....	.....	.....
41 1940..yield, g.p.m.....	.....	.....	.....	.....	.....	(⁴)	.....
42 1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
43 1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
44 Wells, pumped.....1940..number.....	1	1	.....	.....	.....	.....	.....
45 1930..number.....	.....	.....	.....	.....	.....	.....	.....
46 1920..number.....	.....	.....	.....	.....	.....	1	.....
47 1940..yield, g.p.m.....	(⁴)	(⁴)	.....	.....	.....	.....	.....
48 1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
49 1920..yield, g.p.m.....	.....	.....	.....	.....	.....	265	.....
50 Pumping plants.....1940..total number.....	1	1	.....	.....	.....	.....	.....
51 1930..total number.....	.....	.....	.....	.....	.....	.....	.....
52 Prime movers.....1940..capacity, hp.....	(⁴)	(⁴)	.....	.....	.....	.....	.....
53 1930..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
54 1920..capacity, hp.....	.....	.....	.....	.....	.....	6	.....
55 (a) Electric.....1940..number.....	1	1	.....	.....	.....	.....	.....
56 1940..capacity, hp.....	(⁴)	(⁴)	.....	.....	.....	.....	.....
57 (b) Internal-combustion.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
58 1940..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
59 (c) Other.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
60 1940..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
61 Pumps.....1940..total number.....	1	1	.....	.....	.....	.....	.....
62 1930..number.....	.....	.....	.....	.....	.....	.....	.....
63 1920..number.....	.....	.....	.....	.....	.....	3	.....
64 1940..capacity, g.p.m.....	(⁴)	(⁴)	.....	.....	.....	.....	.....
65 1930..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
66 1920..capacity, g.p.m.....	.....	.....	.....	.....	.....	265	.....
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.....	1	.....	.....	.....	.....	.....	.....
71 1940..capacity, g.p.m.....	(⁴)	.....	.....	.....	.....	.....	.....
72 1940..average capacity, g.p.m.....	(⁴)	.....	.....	.....	.....	.....	.....
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)	(⁴)	.....	.....	.....	.....	.....
79 1930..average, feet.....	.....	.....	.....	.....	.....	.....	.....
80 1920..average, feet.....	.....	.....	.....	.....	.....	240	.....
81 from pumped wells.....1940..average, feet.....	(⁴)	(⁴)	.....	.....	.....	.....	.....
82 from surface sources.....1940..average, feet.....	.....	.....	.....	.....	.....	.....	.....

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 — UTAH

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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)		INDEPENDENT BASINS—Continued					
		SNAKE VALLEY	HEAVER RIVER	LITTLE SALT LAKE	COAL CREEK	ESCALANTE DESERT	SHOAL CREEK
		(50)	(51)	(52)	(53)	(54)	(55)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1	Enterprises.....1940..number.....	35	98	40	45	54	12
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	347	260	234	387	91	204
3	Diversion dams.....1940..total number.....	42	53	9	14	27	17
4	.....1930..total number.....	57	57	14	14	27	17
5	.....1920..total number.....	36	36	22	22	27	17
6	(a) Concrete and masonry.....1940..number.....	13	10	4	3	11	11
7	(b) Timber.....1940..number.....	8	15	1	1	1	1
8	(c) Earth and rock.....1940..number.....	17	21	5	8	7	4
9	(d) Other, mixed, and not reported.....1940..number.....	4	7	1	2	20	2
10	Main canals and laterals.....1940..total length, miles.....	62.0	99.4	70.0	66.4	46.0	23.0
11	.....1930..total length, miles.....	238	238	192	192	192	192
12	.....1920..total length, miles.....	439	439	199	199	199	199
13	(a) Earth.....1940..length, miles.....	52	98	70	66	48	23
14	(b) Lined.....1940..length, miles.....	10.0	1.4	0.4	0.4	0.4	0.4
15	.....1940..capacity, c.f.s. ¹	147	1,198	93	260	121	65
16	.....1930..capacity, c.f.s. ¹	794	794	467	467	467	467
17	.....1920..capacity, c.f.s. ¹	775	775	1,158	1,158	1,158	1,158
18	Pipe lines ².....1940..total length, miles.....	0.3	0.2	0.2	1.0	1.3	1.3
19	.....1930..total length, miles.....	1.7	1.7	1.7	1.7	1.7	1.7
20	.....1920..total length, miles.....	1.5	1.5	0.7	0.7	0.7	0.7
21	(a) Concrete.....1940..length, miles.....	0.3	0.3	0.3	0.3	0.3	0.3
22	(b) Metal.....1940..length, miles.....	0.2	0.2	0.2	0.2	0.2	0.2
23	(c) Wood-stave.....1940..length, miles.....	0.2	0.2	0.2	0.2	0.2	0.2
24	(d) Other.....1940..length, miles.....	1.0	1.0	1.0	1.0	1.0	1.0
25	Storage dams.....1940..total number.....	2	8	3	1	6	4
26	.....1930..total number.....	7	7	1	1	1	1
27	.....1920..total number.....	14	14	2	2	2	2
28	(a) Concrete and masonry.....1940..number.....	2	7	3	6	1	1
29	(b) Earth and rock.....1940..number.....	1	1	1	1	1	1
30	(c) Other, mixed, and not reported.....1940..number.....	1	1	1	1	1	1
31	Reservoirs.....1940..total number.....	2	9	36	3	8	5
32	(a) 1-99 acre-feet capacity.....1940..number.....	1	1	34	3	7	2
33	(b) 100-999 acre-feet capacity.....1940..number.....	1	7	2	1	1	1
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	1	1	1	1	1	1
35	.....1940..total capacity, ac.-ft. ³	(4)	28,298	1,639	7	10,029	12,366
36	.....1930..total capacity, ac.-ft. ³	5	5	4	4	4	4
37	.....1920..total capacity, ac.-ft. ³	31,905	31,905	50	50	50	50
38	Wells, flowing.....1940..number.....	1	52	1	1	1	1
39	.....1930..number.....	9	9	1	1	1	1
40	.....1920..number.....	1	1	135	135	135	135
41	.....1940..yield, g.p.m.....	(4)	1,518	(4)	(4)	(4)	(4)
42	.....1930..yield, g.p.m.....	81	81	35	35	35	35
43	.....1920..yield, g.p.m.....	9,955	9,955	9,955	9,955	9,955	9,955
44	Wells, pumped.....1940..number.....	82	30	36	34	2	2
45	.....1930..number.....	90	90	13	13	13	13
46	.....1920..number.....	11	11	41	41	41	41
47	.....1940..yield, g.p.m.....	34,108	12,208	16,030	22,028	(4)	(4)
48	.....1930..yield, g.p.m.....	32,962	32,962	6,969	6,969	6,969	6,969
49	.....1920..yield, g.p.m.....	3,610	3,610	10,500	10,500	10,500	10,500
50	Pumping plants.....1940..total number.....	83	31	36	34	2	2
51	.....1930..total number.....	89	89	12	12	12	12
52	Prime movers.....1940..capacity, hp.....	509	362	521	575	(4)	(4)
53	.....1930..capacity, hp.....	526	526	179	179	179	179
54	.....1920..capacity, hp.....	81	81	270	270	270	270
55	(a) Electric.....1940..number.....	76	27	0	0	0	0
56	.....1940..capacity, hp.....	458	312	423	145	(4)	(4)
57	(b) Internal-combustion.....1940..number.....	7	1	3	24	1	1
58	.....1940..capacity, hp.....	51	50	73	425	(4)	(4)
59	(c) Other.....1940..number.....	2	2	2	1	1	1
60	.....1940..capacity, hp.....	(4)	(4)	(4)	(4)	(4)	(4)
61	Pumps.....1940..total number.....	83	30	36	37	2	2
62	.....1930..number.....	89	89	12	12	12	12
63	.....1920..number.....	9	9	24	24	24	24
64	.....1940..capacity, g.p.m.....	34,308	13,003	18,220	23,978	(4)	(4)
65	.....1930..capacity, g.p.m.....	33,412	33,412	7,139	7,139	7,139	7,139
66	.....1920..capacity, g.p.m.....	4,010	4,010	10,400	10,400	10,400	10,400
67	(a) Centrifugal.....1940..number.....	76	4	15	24	(4)	(4)
68	.....1940..capacity, g.p.m.....	30,807	1,700	7,210	15,335	(4)	(4)
69	.....1940..average capacity, g.p.m.....	405	425	481	639	(4)	(4)
70	(b) Turbine.....1940..number.....	6	26	21	12	(4)	(4)
71	.....1940..capacity, g.p.m.....	3,220	11,303	11,010	8,585	(4)	(4)
72	.....1940..average capacity, g.p.m.....	537	435	524	716	(4)	(4)
73	(c) Plunger.....1940..number.....	1	1	1	1	(4)	(4)
74	.....1940..capacity, g.p.m.....	(4)	(4)	(4)	(4)	(4)	(4)
75	.....1940..average capacity, g.p.m.....	(4)	(4)	(4)	(4)	(4)	(4)
76	(d) Other.....1940..number.....	1	1	1	1	(4)	(4)
77	.....1940..capacity, g.p.m.....	(4)	(4)	(4)	(4)	(4)	(4)
78	Pumping lift, from all sources.....1940..average, feet.....	23	46	46	37	(4)	(4)
79	.....1930..average, feet.....	28	28	38	38	(4)	(4)
80	.....1920..average, feet.....	21	21	47	47	(4)	(4)
81	from pumped wells.....1940..average, feet.....	23	46	46	37	(4)	(4)
82	from surface sources.....1940..average, feet.....	(4)	(4)	(4)	(4)	(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. 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 - UTAH

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,

ITEM (For definitions and explanations, see text)		STATE TOTAL	Beaver	Box Elder	Cache
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*					
1	All farms.....1940..number.....	25,411	329	1,805	2,253
2	.....1930..number.....	27,159	395	1,977	2,372
3	Irrigated farms.....1940..number.....	22,612	308	1,543	1,955
4	.....1930..number.....	23,847	366	1,623	1,982
5	Increase or decrease (-), 1930-1940.....percent.....	-5.2	-15.6	-4.9	-1.0
6	Operated by—				
7	(a) Owners and managers.....1940..number.....	19,583	243	1,323	1,778
8	.....1930..number.....	20,886	313	1,599	1,805
9	(b) Tenants.....1940..number.....	3,029	86	220	177
10	.....1930..number.....	2,961	53	234	187
11	Land in all farms.....1940..acres.....	7,302,007	76,886	688,877	329,062
12	Land in irrigated farms.....1940..acres.....	4,958,058	41,878	401,875	204,525
13	Average per farm.....1940..acres.....	219	136	261	103
14	(a) Operated by owners and managers.....1940..acres.....	4,647,567	34,737	381,243	192,833
15	Average per farm.....1940..acres.....	237	143	288	109
16	(b) Operated by tenants.....1940..acres.....	310,491	7,121	20,732	11,032
17	Average per farm.....1940..acres.....	103	108	94	68
17	Approximate land area.....1939..acres.....	52,701,440	1,655,680	3,580,160	752,000
IRRIGATED AND IRRIGABLE AREAS					
18	Area irrigated.....1939..acres.....	1,176,116	20,594	73,406	82,160
19	(a) Cropland harvested.....1939..acres.....	980,881	17,114	70,610	70,228
20	(b) Crop failure.....1939..acres.....	38,487	754	378	91
21	(c) Pasture.....1939..acres.....	156,748	2,716	2,418	11,838
22	Area irrigated.....1929..acres.....	1,324,125	25,291	76,324	94,952
23	.....1919..acres.....	1,371,651	28,103	86,734	94,705
24	Increase or decrease (-), 1929-1939.....percent.....	-11.2	-18.6	-3.8	-13.5
25	Irrigable area in enterprises.....1940..acres.....	1,432,633	26,736	85,850	87,333
26	.....1930..acres.....	1,739,669	33,260	103,008	103,861
27	.....1920 ¹ ..acres.....	2,359,244	52,180	145,465	100,507
28	Excess of irrigable area over the area irrigated.....1940..acres.....	256,417	6,152	12,444	5,173
29	.....1930..acres.....	415,744	7,969	28,694	14,900
30	Area works were capable of supplying with water.....1940..acres.....	1,357,714	25,543	83,335	84,595
31	.....1930..acres.....	1,642,475	31,132	81,236	105,605
32	.....1920 ¹ ..acres.....	1,700,550	46,826	100,633	98,619
33	Increase or decrease (-), 1930-1940.....percent.....	-12.0	-18.0	-2.5	-20.1
34	Excess, capability of works over area irrigated.....1940..acres.....	181,598	4,959	9,929	2,335
35	.....1930..acres.....	218,350	5,841	4,942	10,653
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent.....	23.7	49.2	18.3	40.1
37	.....1929..percent.....	32.0	40.3	20.9	42.0
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	86.6	80.6	88.1	97.4
39	.....1929..percent.....	85.8	81.2	93.9	89.9
CAPITAL INVESTED TO JANUARY 1					
40	Total investment in all enterprises.....1940..dollars....	41,896,532	1,062,866	5,180,073	2,438,380
41	(a) Cost of irrigation works and equipment.....1940..dollars....	39,590,175	878,217	4,259,395	2,406,891
42	(b) Investment in water rights (reported).....1940..dollars....	2,306,357	184,649	920,678	31,489
43	Total investment in all enterprises.....1930..dollars....	35,669,619	793,337	3,483,384	1,479,506
44	.....1920 ¹ ..dollars....	32,037,351	831,344	1,806,863	1,430,207
45	Increase or decrease (-), 1930-1940.....percent.....	17.5	34.0	48.7	64.8
46	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars....	30.86	41.61	62.16	28.89
47	.....1930..dollars....	23.13	25.48	42.80	14.01
48	.....1920 ¹ ..dollars....	18.84	18.14	17.95	14.86
49	Average investment per acre irrigated.....1939..dollars....	35.62	51.64	70.57	29.68
50	Estimated final investment in existing enterprises.....1940..dollars....	43,380,966	1,065,656	5,340,232	2,449,630
51	.....1930..dollars....	37,857,011	795,087	3,487,084	1,510,598
52	.....1920 ¹ ..dollars....	33,835,641	859,444	2,084,063	1,472,007
53	Increase or decrease (-), 1930-1940.....percent.....	14.6	34.0	53.0	62.2
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars....	30.28	39.86	62.31	28.05
55	.....1930..dollars....	21.76	23.90	33.95	13.75
56	.....1920 ¹ ..dollars....	14.34	16.47	14.08	14.65
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
		Primary	Sup.	Primary	Sup.
		Enterprises	Enterprises	Enterprises	Enterprises
57	Enterprises reporting maintenance and operation.....1939..number.....	1,870	124	82	7
58	Area irrigated in these enterprises.....1939..acres.....	1,144,100	322,055	20,148	5,588
59	Cost of maintenance and operation.....1939..dollars....	881,814	84,981	18,345	695
60	Average cost, per acre irrigated.....1939..dollars....	0.77	0.26	0.91	0.12
61	.....1929..dollars....	1.00	.....	1.05	.....
62	Total annual charges (reported) ³.....1939..dollars....	1,079,113	142,478	11,347	1,264
63	Average annual charge per acre irrigated.....1939..dollars....	1.02	0.45	0.66	0.23
64	Area against which charges were assessed.....1939..acres.....	1,128,306	360,560	19,673	5,409
65	Average annual charge per acre assessed.....1939..dollars....	0.96	0.40	0.58	0.23
66	Total charges collected ⁴.....1939..dollars....	1,106,871	207,916	7,675	2,316
67	Indebtedness to December 31 (reported) ⁴.....1939..dollars....	4,329,234	9,437,183	1,500	2,065
WATER DELIVERED TO IRRIGATORS					
68	Enterprises reporting water delivered.....1939..number.....	1,874	135	74	5
69	Area irrigated in these enterprises.....1939..acres.....	1,049,365	258,047	17,638	5,541
70	Water delivered in these enterprises.....1939..acre-feet....	2,654,225	279,665	41,115	1,319
71	Average water delivered per acre irrigated.....1939..acre-feet....	2.5	1.1	2.3	0.2
72	Average cost of water per acre irrigated.....1939..dollars....	1.03	0.50	1.16	0.30
DRAINAGE OF IRRIGATED LAND					
73	Enterprises reporting land drained or needing drainage.....1939..number.....	204	.....	.....	.....
74	Irrigable area in these enterprises.....1939..acres.....	324,771	.....	10	.....
75	Irrigated area in these enterprises.....1939..acres.....	283,514	.....	60,344	.....
76	Area for which drains have been installed.....1939..acres.....	90,657	.....	51,765	.....
77	Additional area needing drainage.....1939..acres.....	28,416	.....	13,083	.....

* 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 - UTAH

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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

Carbon	Daggett	Davis	Duchesne	Emery	Garfield	Grand	Iron						
454 285 407 235 73.2	68 52 65 47 38.3	1,474 1,481 1,368 1,340 2.1	1,104 1,050 1,042 1,002 4.0	822 758 787 732 7.5	416 513 392 452 -13.3	155 157 139 111 25.2	550 598 449 469 -4.3	1 2 3 4 5					
336 186 71 49 133,576 86,096 212 77,056 229 9,040 127	54 38 11 9 44,590 42,903 660 40,390 748 2,513 228	1,154 1,120 214 220 96,456 68,128 50 59,293 51 8,835 41	843 808 199 104 300,321 257,338 247 231,087 274 26,251 132	681 608 106 124 162,848 142,354 181 126,432 186 15,922 150	353 398 39 54 114,903 96,945 247 92,087 261 4,858 125	115 94 24 17 139,205 61,272 411 57,289 498 3,983 106	422 436 27 33 452,200 338,217 753 331,047 787 6,270 232	6 7 8 9 10 11 12 13 14 15 16					
943,360	488,960	171,520	2,089,400	2,842,880	3,338,880	2,362,880	2,112,000	17					
10,529 9,073 473 983 18,248 21,876 -42.3 12,793 24,936 33,381 2,264 6,688 11,873 23,188 22,458 -48.8 1,944 4,950 12.2 74.5 88.7 78.7	10,691 8,347 1,000 1,344 7,543 6,572 41.7 13,760 12,443 10,600 3,069 4,900 11,362 9,943 10,599 14.3 671 2,400 24.9 31.1 94.1 75.9	36,485 34,158 318 2,019 45,646 19,468 -20.0 39,113 68,138 20,375 2,618 23,482 38,327 50,062 18,536 -23.5 1,832 4,446 53.6 54.0 95.2 91.1	98,800 58,718 2,516 37,566 108,213 90,435 -8.7 131,821 171,259 225,959 38,021 63,046 121,185 143,542 140,100 -15.6 22,395 35,329 38.4 63.6 81.5 75.4	99,957 64,434 1,394 4,069 65,078 91,145 7.5 81,020 90,708 112,943 11,063 25,630 75,655 68,412 98,933 10.6 5,689 3,334 49.1 60.3 92.5 95.1	24,232 17,561 1,630 5,141 23,674 27,097 2.4 28,426 35,649 54,998 4,194 12,175 26,726 27,375 27,953 -2.4 2,494 3,701 25.0 25.9 90.7 86.5	5,567 4,689 657 230 2,747 5,685 102.7 7,330 4,302 11,010 1,763 1,555 6,378 3,852 9,664 -18.1 811 1,135 9.1 12.5 87.3 70.8	23,537 20,998 1,047 1,532 29,398 32,063 -21.5 35,389 46,701 99,475 11,861 16,713 32,993 40,288 38,859 -18.1 9,456 10,288 7.0 12.4 71.3 74.4	18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39					
600,377 586,500 13,877 1,148,628 420,075 -47.6 50.57 49.43 18.70 57.02 633,204 1,157,128 420,075 -45.3 49.50 46.40 12.58	132,860 129,159 3,701 73,200 112,698 81.5 11.69 7.36 10.63 12.43 152,960 93,200 112,698 64.1 11.12 7.49 10.63	2,824,523 2,903,965 20,558 1,987,062 522,313 47.2 76.30 39.67 26.74 80.13 2,927,523 2,009,954 545,313 45.7 74.85 39.50 26.76	3,319,066 3,250,971 68,095 1,844,345 1,432,832 80.0 27.39 12.85 10.23 33.59 3,603,226 1,953,146 1,848,675 84.5 27.33 11.40 8.18	1,884,544 1,876,734 7,810 717,200 781,800 162.8 24.81 10.48 7.90 26.94 1,904,130 792,200 871,800 140.4 23.50 8.73 7.72	256,956 239,469 23,487 365,971 430,190 -29.8 9.61 13.37 15.73 10.60 272,716 526,071 430,199 -48.2 9.50 14.67 7.82	93,055 89,610 3,445 51,725 167,511 79.9 14.59 13.32 17.33 10.72 101,845 56,735 218,211 79.5 13.89 13.18 10.82	680,521 653,923 26,598 773,550 854,295 -12.0 20.63 19.20 21.99 28.91 714,371 852,000 862,370 -16.2 20.20 18.24 8.06	40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56					
Primary Enterprises	Sup. 1	Primary Enterprises	Sup. 9	Primary Enterprises	Sup. 5	Primary Enterprises	Sup. 2	Primary Enterprises	Sup. 2	Primary Enterprises	Sup. 10		
47 9,609 13,235 1.38 1.36 10,178 1.53 6,661 1.53 10,139 19,600	(2) (2) (2) 1,850 0.25 7,400 0.25 3,993 2,582	65 10,691 5,423 0.51 0.54 4,131 2.30 7,947 0.53 4,160	9 20,674 3,928 0.19 3,993 0.19 20,907 0.19 25,310 504,961	5 41,210 5,011 0.12 22,635 0.55 102,789 0.65 21,089 1,316,361	35 99,707 28,282 0.41 0.68 37,312 0.55 66,775 0.56 45,494 37,100	(2) (2) (2) (2) 102 0.17 800 0.17 324 210	75 23,694 13,087 0.55 0.80 19,009 1.03 18,751 1.01 13,000 11,335	(2) (2) (2) (2)	69 5,506 8,773 1.59 2.74 1,740 0.87 2,077 0.84 1,631	111 22,857 29,809 1.26 0.94 14,024 0.88 23,120 0.61 14,631 3,055	10 1,237 2,389 1.93 175 0.35 500 0.35 160	57 58 59 60 61 62 63 64 65 66 67	
48 9,921 26,693 2.7 1.63	(2) (2) (2) (2) (2)	19 9,191 20,615 2.2 0.50	105 30,491 73,940 2.4 2.64	98 20,801 18,437 0.9 0.20	5 41,210 46,348 1.1 0.55	34 68,557 142,943 2.1 0.58	(2) (2) (2) (2) (2)	62 15,776 53,576 3.4 0.59	(2) (2) (2) (2) (2)	74 5,367 13,855 2.6 1.63	118 23,337 46,010 2.0 1.40	10 1,237 1,622 1.5 1.99	68 69 70 71 72
(2) (2) (2)	1	28 24,233 23,592 9,905 643	4 48,736 34,684 3,062 5,098	(2) (2) (2) (2) (2)	2	73 74 75 76 77	

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 - UTAH

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,

ITEM (For definitions and explanations, see text)		Juab	Kane	Millard	Morgan	Piute
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS ¹						
1 All farms.....	1940..number....	395	210	967	247	215
2	1930..number....	496	200	1,243	247	229
3 Irrigated farms.....	1940..number....	305	166	903	235	210
4	1930..number....	381	167	1,186	229	219
5	Increase or decrease (-), 1930-1940.....	-10.9	-0.6	-23.9	2.6	-4.1
Operated by—						
6 (a) Owners and managers.....	1940..number....	272	160	816	208	180
7	1930..number....	347	157	1,043	198	203
8 (b) Tenants.....	1940..number....	33	6	87	27	30
9	1930..number....	34	10	143	31	13
10 Land in all farms.....	1940..acres....	180,851	187,254	287,800	97,152	47,515
11 Land in irrigated farms.....	1940..acres....	110,586	128,622	205,244	89,180	47,197
12	Average per farm.....	363	775	227	354	225
13 (a) Operated by owners and managers.....	1940..acres....	100,075	127,909	194,872	80,339	43,877
14	Average per farm.....	368	799	239	386	244
15 (b) Operated by tenants.....	1940..acres....	10,511	713	10,372	2,841	3,320
16	Average per farm.....	322	119	119	105	111
17 Approximate land area.....	1940..acres....	2,183,680	2,627,200	4,254,720	390,400	481,920
IRRIGATED AND IRRIGABLE AREAS						
18 Area irrigated.....	1939..acres....	17,998	3,431	72,897	9,810	15,720
19 (a) Cropland harvested.....	1939..acres....	13,758	3,223	68,849	9,204	12,249
20 (b) Crop failure.....	1939..acres....	2,751	44	870	76	875
21 (c) Pasture.....	1939..acres....	1,489	164	3,188	440	2,596
22 Area irrigated.....	1929..acres....	13,237	4,170	80,638	11,534	15,475
23	1919..acres....	10,005	4,088	137,980	12,242	8,514
24	Increase or decrease (-), 1929-1939.....	35.4	-17.7	-19.6	10.1	1.6
25 Irrigable area in enterprises.....	1940..acres....	20,605	4,018	87,285	10,159	15,730
26	1930..acres....	25,563	6,210	125,448	12,469	17,017
27	1920..acres....	14,707	7,114	373,926	13,809	10,838
28 Excess of irrigable area over the area irrigated.....	1940..acres....	2,607	587	14,388	349	10
29	1930..acres....	12,259	2,040	34,810	335	1,572
30 Area works were capable of supplying with water.....	1940..acres....	20,035	3,986	84,063	10,025	15,790
31	1930..acres....	18,808	5,210	123,229	11,977	16,945
32	1920..acres....	12,372	4,489	209,694	13,506	10,288
33	Increase or decrease (-), 1930-1940.....	5.8	-23.5	-31.8	-16.3	-3.8
34 Excess, capability of works over area irrigated.....	1940..acres....	2,067	555	11,186	215	10
35	1930..acres....	5,071	1,040	32,591	443	870
36 Proportion which area irrigated is of all lands in irrigated farms.....	1939..percent....	16.3	2.7	35.5	11.8	33.3
37	1929..percent....	11.3	4.4	35.3	10.8	39.1
38 Proportion which area irrigated is of area works were capable of supplying with water.....	1939..percent....	89.7	86.1	86.7	97.9	99.9
39	1929..percent....	70.1	80.0	73.6	96.3	94.7
CAPITAL INVESTED TO JANUARY 1						
40 Total investment in all enterprises.....	1940..dollars....	210,021	91,573	2,902,475	355,049	95,828
41 (a) Cost of irrigation works and equipment.....	1940..dollars....	197,286	90,995	2,780,280	349,925	85,588
42 (b) Investment in water rights (reported).....	1940..dollars....	12,735	878	122,195	5,124	30,240
43 Total investment in all enterprises.....	1930..dollars....	698,527	92,725	1,931,754	324,391	1,684,471
44	1920..dollars....	562,667	150,188	5,148,282	147,278	253,666
45	Increase or decrease (-), 1930-1940.....	-69.9	-1.2	48.0	9.4	-94.3
46 Average investment, based on area works were capable of supplying with water, per acre.....	1940..dollars....	10.47	22.97	34.52	35.42	6.09
47	1930..dollars....	36.83	17.80	15.92	27.08	103.06
48	1920..dollars....	45.48	33.61	24.55	10.90	24.73
49 Average investment per acre irrigated.....	1939..dollars....	11.67	26.69	39.82	36.19	6.10
50 Estimated final investment in existing enterprises.....	1940..dollars....	237,216	92,623	2,911,941	355,049	97,128
51	1930..dollars....	703,239	92,725	1,969,669	331,191	1,685,476
52	1920..dollars....	561,667	152,698	5,210,982	147,378	255,168
53	Increase or decrease (-), 1930-1940.....	-66.3	-0.1	47.8	7.2	-94.2
54 Average investment, based on estimated final investment and irrigable area, per acre.....	1940..dollars....	11.51	23.05	33.36	34.95	6.17
55	1930..dollars....	27.51	14.93	15.70	26.56	98.87
56	1920..dollars....	38.39	21.46	13.94	10.67	23.33
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
		Primary		Sup.	Primary	Sup.
		Enterprises		Enterprises	Enterprises	
57 Enterprises reporting maintenance and operation.....	1939..number....	34	23	53	4	7
58 Area irrigated in these enterprises.....	1939..acres....	15,897	3,320	71,187	51,316	9,334
59 Cost of maintenance and operation.....	1939..dollars....	8,750	4,070	38,863	5,536	8,060
60	1939..dollars....	0.55	1.23	0.55	0.11	0.55
61	1929..dollars....	0.92	2.01	0.87	0.61	0.46
62 Total annual charges (reported) ⁴	1939..dollars....	8,272	5,047	73,001	5,460	7,814
63 Average annual charge per acre irrigated.....	1939..dollars....	0.76	2.00	1.06	0.11	0.09
64 Area against which charges were assessed.....	1939..acres....	11,382	2,520	70,714	51,250	7,581
65 Average annual charge per acre assessed.....	1939..dollars....	0.73	2.00	1.03	0.11	0.09
66 Total charges collected ⁴	1939..dollars....	8,078	4,892	70,972	5,120	9,856
67 Indebtedness to December 31 (reported) ⁵	1939..dollars....	7,366	.....	183,900	.....	18,578
WATER DELIVERED TO IRRIGATORS						
68 Enterprises reporting water delivered.....	1939..number....	25	16	59	4	8
69 Area irrigated in these enterprises.....	1939..acres....	12,780	2,490	71,338	226	9,011
70 Water delivered in these enterprises.....	1939..acre-feet....	18,209	8,110	136,255	832	30,212
71 Average water delivered per acre irrigated.....	1939..acre-feet....	1.4	3.3	1.9	3.7	3.4
72 Average cost of water per acre irrigated.....	1939..dollars....	0.78	2.10	1.05	1.14	1.07
DRAINAGE OF IRRIGATED LAND						
73 Enterprises reporting land drained or needing drainage.....	1939..number....	.....	.....	3	.....	.....
74 Irrigable area in these enterprises.....	1939..acres....	.....	.....	31,500	.....	.....
75 Irrigated area in these enterprises.....	1939..acres....	.....	.....	26,000	.....	.....
76 Area for which drains have been installed.....	1939..acres....	.....	.....	31,500	.....	.....
77 Additional area needing drainage.....	1939..acres....	.....	.....	.....	.....	.....

¹ Census of Agriculture.² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.³ Data for less than 3 enterprises shown with permission of the enterprise involved.

CENSUS OF IRRIGATION - UTAH

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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

Rich	Salt Lake	San Juan	Sanpete	Sevier	Summit	Tooele	Uintah	
249	2,515	675	1,426	959	513	368	1,123	1
273	2,932	442	1,703	1,038	509	434	1,076	2
234	2,050	348	1,291	933	494	261	1,047	3
201	2,443	181	1,558	971	480	349	1,001	4
16.4	-16.1	92.3	-17.1	-3.9	2.9	-25.2	4.6	5
214	1,818	332	1,061	772	439	210	835	6
185	2,135	167	1,363	849	420	318	825	7
20	232	16	230	161	55	45	212	8
16	308	14	195	122	60	31	176	9
540,984	128,486	776,751	396,310	148,705	107,302	154,276	349,751	10
492,176	101,053	294,960	315,322	119,760	104,264	85,663	185,287	11
2,103	49	848	244	128	211	332	177	12
488,507	86,951	290,700	283,394	107,492	93,832	75,641	160,163	13
2,283	48	676	267	139	214	350	192	14
3,669	14,102	4,280	31,928	12,268	10,432	11,022	25,124	15
183	61	266	139	76	100	245	119	16
654,080	468,990	5,045,760	1,022,090	1,236,480	1,190,400	4,423,040	2,828,800	17
43,995	72,608	7,450	80,336	57,186	27,031	9,445	77,344	18
34,228	64,397	5,909	66,133	50,224	23,129	7,743	45,370	19
2,650	1,133	1,017	5,945	445	204	1,054	6,366	20
7,217	7,138	524	8,258	6,517	3,698	648	25,608	21
54,825	93,633	10,895	89,126	65,626	28,451	11,052	88,231	22
42,913	102,051	13,469	90,153	68,838	32,139	9,632	80,789	23
-19.8	-22.4	-31.6	-9.0	-12.9	-5.0	-14.5	-12.3	24
59,905	86,656	14,244	95,924	82,985	29,807	11,129	109,008	25
56,622	120,477	15,982	112,117	72,291	28,544	11,484	130,101	26
50,238	176,122	40,511	127,708	81,543	34,795	17,405	147,608	27
15,910	13,988	6,794	15,588	5,799	2,776	1,694	31,664	28
1,797	26,844	5,087	22,691	6,655	93	432	41,930	29
54,140	84,974	11,116	95,104	61,237	29,399	10,906	105,702	30
56,035	113,002	15,507	97,702	67,991	28,494	11,217	115,631	31
43,503	125,194	23,263	91,885	69,178	32,394	11,453	127,787	32
-3.4	-24.8	-28.3	-2.7	-9.9	3.2	-2.8	-8.6	33
10,145	12,306	3,666	14,768	4,051	2,368	1,461	26,358	34
1,210	19,369	4,612	8,576	2,365	43	165	27,400	35
8.9	71.9	2.5	25.5	47.8	25.9	10.9	41.7	36
23.3	79.7	23.0	22.2	62.0	14.9	9.3	62.2	37
81.3	85.5	67.0	84.5	93.4	91.9	86.6	79.2	38
97.8	82.9	70.3	91.2	96.5	99.8	98.5	76.3	39
280,698	2,277,415	226,575	1,574,262	1,414,572	525,285	171,457	1,694,488	40
270,100	2,082,666	225,428	1,474,777	1,198,289	510,853	167,595	1,632,867	41
10,598	194,549	1,147	99,485	216,303	14,432	3,862	21,621	42
290,735	2,405,028	287,032	1,487,032	959,465	2,248,189	207,806	1,578,849	43
319,225	2,096,630	259,287	1,289,433	2,089,537	229,630	196,263	1,488,111	44
-3.5	-5.3	-21.1	5.8	47.4	-76.6	-17.5	6.7	45
5.18	26.80	20.38	16.55	23.10	17.87	15.72	15.94	46
5.19	21.28	18.51	15.23	14.11	78.90	18.52	13.65	47
7.34	16.75	11.14	14.09	30.12	7.09	11.90	11.65	48
6.38	31.34	30.41	10.60	24.74	10.43	18.15	21.78	49
481,198	2,325,645	292,830	1,577,762	1,417,982	538,670	178,957	1,900,828	50
291,785	2,450,328	290,032	1,553,222	962,465	3,373,977	207,806	1,845,224	51
319,225	2,154,030	319,162	1,346,933	2,209,437	242,839	136,263	1,711,468	52
61.9	-5.1	1.0	1.6	47.3	-84.0	-13.9	3.0	53
8.03	26.84	20.56	16.45	22.51	18.07	16.08	17.44	54
5.15	20.94	18.19	13.85	13.32	118.20	18.10	14.18	55
6.35	12.23	7.88	10.55	27.08	6.98	7.83	11.59	56
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	
Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	
27	1	70	3	32	72	10	85	39
42,355	(3)	71,654	9,017	7,435	74,066	19,768	25,389	8,371
10,311	(3)	99,447	5,550	7,226	37,573	9,283	53,326	1,175
0.24	(3)	1.39	0.62	0.97	0.51	0.47	0.95	0.03
0.18	.....	1.92	.....	0.86	0.65	.....	0.94	.....
8,720	50	110,028	5,460	11,297	48,837	9,757	65,528	1,035
0.23	0.06	1.58	0.61	2.43	0.67	0.50	1.26	0.03
42,629	875	74,940	8,982	7,642	80,635	20,942	54,340	40,467
0.20	0.06	1.51	0.61	1.48	0.61	0.47	1.21	0.03
9,314	50	141,399	500	1,400	42,081	9,796	64,476	3,000
725	.....	67,168	.....	16,413	81,344	375,387	118,844	8,980
26	1	70	3	33	55	7	100	4
33,216	(3)	66,770	9,017	7,972	60,254	6,823	56,993	40,631
74,551	(3)	197,241	25,917	11,268	95,791	3,710	178,293	19,329
2.2	(3)	3.0	2.9	1.5	1.6	0.5	3.1	0.5
0.29	(3)	1.55	0.62	1.86	0.55	0.31	1.20	0.03
(3)	2	7	.....	(3)	12,231	.....	18,331	.....
(3)	.....	229	.....	(3)	8,689	.....	15,522	.....
(3)	.....	214	.....	(3)	437	.....	6,149	.....
(3)	.....	82	.....	(3)	164	.....	784	.....
(3)	2	7	.....	(3)	1	.....	(3)	2
(3)	.....	229	.....	(3)	12,231	.....	18,331	.....
(3)	.....	214	.....	(3)	437	.....	6,149	.....
(3)	.....	82	.....	(3)	164	.....	784	.....

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

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 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - UTAH

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

ITEM (For definitions and explanations, see text)		Utah	Wasatch	Washington	Wayne	Weber	
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms.....1940...number.....	3,055	431	681	259	1,693	
2	.....1930...number.....	3,561	450	656	256	1,776
3	Irrigated farms.....1940...number.....	2,830	415	627	255	1,552	
4	.....1930...number.....	3,191	428	619	243	1,631
5	Increase or decrease (-), 1930-1940.....percent.....	-11.3	-3.0	1.3	4.9	-4.8	
6	Operated by—(a) Owners and managers.....1940...number.....	2,469	378	578	236	1,297	
7	.....1930...number.....	2,874	384	589	228	1,408
8	(b) Tenants.....1940...number.....	361	37	49	19	255	
9	.....1930...number.....	317	44	30	15	225
10	Land in all farms.....1940...acres.....	388,693	257,172	252,547	46,289	1,414,282	
11	Land in irrigated farms.....1940...acres.....	250,875	189,683	194,764	34,272	272,119	
12	Average per farm.....1940...acres.....	89	457	311	134	175	
13	(a) Operated by owners and managers.....1940...acres.....	219,177	186,519	191,829	32,669	259,207	
14	Average per farm.....1940...acres.....	89	493	332	138	200	
15	(b) Operated by tenants.....1940...acres.....	31,698	3,164	2,935	1,603	12,912	
16	Average per farm.....1940...acres.....	88	86	60	84	51	
17	Approximate land area.....1940...acres.....	1,278,720	764,160	1,552,000	1,592,960	351,390	
IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated.....1939...acres.....	119,230	24,659	16,947	16,287	47,744	
19	(a) Cropland harvested.....1939...acres.....	107,404	19,870	15,098	14,800	43,284	
20	(b) Crop failure.....1939...acres.....	1,917	466	514	595	1,521	
21	(c) Pasture.....1939...acres.....	9,909	4,333	1,337	872	2,936	
22	Area irrigated.....1929...acres.....	145,436	23,501	18,747	16,880	44,894	
23	.....1919...acres.....	138,143	22,797	20,838	16,198	56,973
24	Increase or decrease (-), 1929-1939.....percent.....	-18.0	4.9	-9.6	-3.7	6.3	
25	Irrigable area in enterprises.....1940...acres.....	130,433	35,924	34,300	17,933	56,938	
26	.....1930...acres.....	165,723	26,337	35,356	22,020	55,660
27	.....1920 ² ...acres.....	203,065	24,883	43,387	19,690	105,897
28	Excess of irrigable area over the area irrigated.....1940...acres.....	11,203	11,265	17,353	1,666	9,194	
29	.....1930...acres.....	20,287	2,836	16,609	5,130	10,666
30	Area works were capable of supplying with water.....1940...acres.....	127,854	25,674	31,876	16,739	51,321	
31	.....1930...acres.....	158,110	24,567	27,695	17,510	48,552
32	.....1920...acres.....	173,487	22,892	29,077	18,690	70,846
33	Increase or decrease (-), 1930-1940.....percent.....	-19.1	4.5	15.1	-4.4	5.7	
34	Excess, capability of works over area irrigated.....1940...acres.....	8,624	1,015	14,029	472	3,577	
35	.....1930...acres.....	12,674	1,066	8,948	620	3,658
36	Proportion which area irrigated is of all lands in irrigated farms.....1939...percent.....	47.5	13.0	8.7	47.5	17.5	
37	.....1929...percent.....	44.0	26.2	16.8	48.1	25.5
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.....	93.3	96.0	53.2	97.2	93.0	
39	.....1929...percent.....	92.0	95.7	67.7	96.5	92.5
CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises.....1940...dollars.....	5,636,998	342,253	990,771	151,990	4,391,601	
41	(a) Cost of irrigation works and equipment.....1940...dollars.....	5,515,880	321,134	903,508	140,335	4,363,955	
42	(b) Investment in water rights (reported).....1940...dollars.....	121,118	21,119	87,263	11,655	27,646	
43	Total investment in all enterprises.....1930...dollars.....	5,871,486	311,377	639,386	191,115	1,714,137	
44	.....1920...dollars.....	5,880,832	410,198	576,824	453,600	1,756,652
45	Increase or decrease (-), 1930-1940.....percent.....	-4.0	9.9	55.0	-20.5	156.2	
46	Average investment, based on area works were capable of supplying with water, per acre.....1940...dollars.....	44.09	13.33	31.08	9.08	85.57	
47	.....1930...dollars.....	37.14	12.67	23.09	10.91	35.30
48	.....1920...dollars.....	33.90	17.92	19.84	24.27	24.80
49	Average investment per acre irrigated.....1939...dollars.....	47.28	13.88	58.46	9.34	81.98	
50	Estimated final investment in existing enterprises.....1940...dollars.....	5,640,558	371,453	1,037,691	161,490	4,587,442	
51	.....1930...dollars.....	5,874,286	336,877	723,341	203,765	1,718,207
52	.....1920...dollars.....	6,010,982	450,198	628,774	467,200	1,764,392
53	Increase or decrease (-), 1930-1940.....percent.....	-4.0	10.3	43.5	-20.7	167.0	
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940...dollars.....	43.24	10.34	30.25	9.01	80.57	
55	.....1930...dollars.....	35.45	12.79	20.46	9.25	30.92
56	.....1920 ² ...dollars.....	29.88	18.09	14.49	23.73	16.66
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Sup.	Primary	Sup.	Primary	Sup.
		Enterprises		Enterprises		Enterprises	
57	Enterprises reporting maintenance and operation.....1939...number.....	158	19	42	3	90	17
58	Area irrigated in these enterprises.....1939...acres.....	116,078	40,760	23,491	5,186	16,495	16,252
59	Cost of maintenance and operation.....1939...dollars.....	79,608	17,906	18,859	3,119	28,817	5,780
60	Average cost, per acre irrigated.....1939...dollars.....	0.69	0.43	0.72	0.60	1.72	0.36
611929...dollars.....	1.02	0.91	0.84	1.06
62	Total annual charges (reported) ⁴.....1939...dollars.....	107,240	47,857	18,719	5,540	32,751	5,766
63	Average annual charge per acre irrigated.....1939...dollars.....	0.96	1.18	0.83	1.26	2.15	0.39
64	Area against which charges were assessed.....1939...acres.....	113,132	40,535	20,061	5,185	17,876	14,820
65	Average annual charge per acre assessed.....1939...dollars.....	0.85	1.18	0.83	1.26	1.83	0.39
66	Total charges collected ⁴.....1939...dollars.....	141,524	37,045	15,519	7,045	30,150	5,330
67	Indebtedness to December 31 (reported) ⁵.....1939...dollars.....	1,713,326	497,062	23,611	43,801	90,149	800
WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered.....1939...number.....	182	20	44	3	73	14
69	Area irrigated in these enterprises.....1939...acres.....	109,534	40,532	24,112	5,186	13,788	14,837
70	Water delivered in these enterprises.....1939...acre-feet.....	268,999	49,493	78,224	10,655	49,131	37,679
71	Average water delivered per acre irrigated.....1939...acre-feet.....	2.5	1.2	3.2	2.1	3.6	2.5
72	Average cost of water per acre irrigated.....1939...dollars.....	0.93	1.18	0.76	1.26	2.32	0.38
DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage.....1939...number.....	47	2	23
74	Irrigable area in these enterprises.....1939...acres.....	54,388	(5)	24,749
75	Irrigated area in these enterprises.....1939...acres.....	51,885	(5)	20,801
76	Area for which drains have been installed.....1939...acres.....	14,279	(5)	4,993
77	Additional area needing drainage.....1939...acres.....	1,899	(5)	2,821

* 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 For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ³ Data for less than 3 enterprises shown with permission of the enterprises involved. 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. ⁶ Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION - UTAH

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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

ITEM (For definitions and explanations, see text)		STATE TOTAL	Beaver	Box Elder	Cache	Carbon	Daggett	Davis	Duchesne
FARM VALUES, 1940*									
1	Land and buildings, all farms.....dollars..	154,358,365	1,675,430	17,888,763	18,195,509	1,732,947	463,711	10,774,029	3,529,531
2	Land and buildings, irrigated farms.....dollars..	137,529,004	1,679,388	14,392,730	15,821,382	1,581,422	456,161	10,316,499	3,350,076
3	Operated by—								
4	(a) Owners and managers.....dollars..	122,156,713	1,370,918	12,915,008	14,693,488	1,295,312	421,532	8,906,635	2,875,056
5	(b) Tenants.....dollars..	15,372,291	308,470	1,477,742	1,127,894	286,110	34,629	1,411,864	475,020
6	Average, land and buildings, per farm.....dollars..	6,082.12	5,434.91	9,327.77	8,082.78	3,885.56	7,017.86	7,542.76	3,216.04
7	per acre in farms.....dollars..	27.74	40.10	35.81	77.24	18.37	10.63	151.46	12.02
8	Buildings, irrigated farms reporting value.....number..	19,759	232	1,436	1,758	377	65	1,275	984
9	Total reported.....dollars..	32,428,080	222,005	2,866,515	4,054,414	467,010	84,550	2,820,385	641,904
10	Average, per irrigated farm reporting.....dollars..	1,641.08	959.50	1,966.18	2,306.27	1,238.75	1,300.77	2,212.07	652.34
11	per acre on all irrigated farms.....dollars..	6.54	5.32	7.13	19.79	5.42	1.07	41.40	2.49
12	Buildings, nonirrigated farms reporting value.....number..	2,211	7	218	244	40	1	87	50
13	Total reported.....dollars..	3,630,811	6,035	408,695	426,860	40,990	(1)	138,970	51,620
14	Average, per nonirrigated farm reporting.....dollars..	1,642.16	862.14	1,890.71	1,749.43	1,024.75	(1)	1,574.37	1,036.40
15	per acre on all nonirrigated farms.....dollars..	1.55	0.17	1.43	3.41	0.86	(1)	4.84	1.21
16	Implements and machinery, irrigated farms reporting value.....number..	19,094	239	1,364	1,716	326	65	1,096	945
17	Total reported.....dollars..	10,761,346	100,726	1,277,437	1,152,012	300,234	37,525	727,379	367,285
18	Average, per irrigated farm reporting.....dollars..	563.89	421.45	936.54	670.55	614.21	577.31	663.67	386.66
19	per acre, on all irrigated farms.....dollars..	2.17	2.41	3.18	5.62	2.33	0.87	10.68	1.43
20	Implements and machinery, nonirrigated farms reporting value.....number..	1,691	9	201	238	27	1	43	33
21	Total reported.....dollars..	1,179,592	1,660	422,727	199,643	16,330	(1)	15,479	9,212
22	Average, per acre, on all nonirrigated farms.....dollars..	0.60	0.05	1.47	1.60	0.34	(1)	0.55	0.21
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
23	Enterprises.....1940.....number.....	2,430	99	142	116	52	20	135	107
24	.....1930.....number.....	2,731	147	219	162	33	9	280	70
25	.....1920.....number.....	2,403	95	220	133	40	8	187	71
26	Average size of enterprise based on irrigable area.....1940.....acres.....	590	270	605	753	246	688	290	1,232
27	.....1930.....acres.....	637	226	470	678	756	1,363	243	2,447
28	.....1920.....acres.....	982	549	661	756	835	1,325	109	3,183
29	Diversion dams.....1940.....number.....	1,973	52	100	73	51	28	35	121
30	Main canals and laterals.....1940.....length, miles.....	9,004.5	100.4	715.1	463.8	157.9	85.0	295.9	1,291.9
31	.....1930.....length, miles.....	9,237	238	352	563	153	72	219	965
32	.....1920.....length, miles.....	11,677	436	477	573	165	33	144	1,014
33	.....1940.....capacity, c.f.s.*.....	34,579	1,198	1,465	1,329	579	142	1,030	3,530
34	.....1930.....capacity, c.f.s.*.....	30,648	1,092	1,092	1,591	367	133	1,145	2,804
35	.....1920.....capacity, c.f.s.*.....	28,447	750	1,411	1,820	546	153	114	1,588
36	Pipe lines.....1940.....length, miles.....	172.6	0.3	10.6	2.4	0.8	.....	48.2	.....
37	Storage dams.....1940.....number.....	362	8	10	5	8	3	5	19
38	Reservoirs.....1940.....number.....	438	9	10	5	8	3	9	20
39	.....1930.....number.....	413	5	39	6	5	2	41	21
40	.....1920.....number.....	476	7	46	6	2	.....	72	7
41	.....1940.....capacity, acre-feet.....	3,417,704	28,296	1,426,228	16,073	30,738	500	3,350	53,377
42	.....1930.....capacity, acre-feet.....	1,093,252	31,805	5,952	1,764	50,660	6	3,719	13,745
43	.....1920.....capacity, acre-feet.....	1,600,505	40,451	3,597	1,509	1,248	.....	23,135	41,571
44	Wells, flowing.....1940.....number.....	1,216	1	4	27	.....	.....	189	.....
45	.....1930.....number.....	1,693	9	32	59	.....	.....	642	1
46	.....1920.....number.....	1,256	1	32	32	.....	.....	379	.....
47	.....1940.....yield, g.p.m.....	53,638	(1)	190	1,670	.....	.....	5,575	.....
48	.....1930.....yield, g.p.m.....	101,670	81	876	2,919	.....	.....	31,711	90
49	.....1920.....yield, g.p.m.....	95,371	.....	1,880	3,287	.....	.....	5,185	.....
50	Wells, pumped.....1940.....number.....	246	82	52	2	.....	.....	13	.....
51	.....1930.....number.....	102	90	61	1	.....	.....	49	.....
52	.....1920.....number.....	122,528	34,108	17,988	(1)	.....	.....	54	.....
53	.....1940.....yield, g.p.m.....	120,333	32,862	20,026	300	.....	.....	1,846	.....
54	.....1930.....yield, g.p.m.....	99,059	3,610	12,932	.....	.....	.....	5,885	.....
55	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....	4,319	.....
56	Pumping plants.....1940.....number.....	411	83	57	24	.....	.....	18	.....
57	.....1930.....number.....	429	89	84	35	1	.....	54	.....
58	.....1920.....number.....	250	9	71	27	.....	2	50	1
59	Prime movers.....1940.....capacity, hp.....	14,216	509	825	707	.....	.....	2,832	.....
60	.....1930.....capacity, hp.....	11,381	528	944	787	40	.....	630	.....
61	.....1920.....capacity, hp.....	11,392	81	762	1,661	.....	13	179	.....
62	Pumps.....1940.....capacity, g.p.m.....	835,862	34,308	30,837	33,715	.....	.....	39,526	.....
63	.....1930.....capacity, g.p.m.....	877,942	33,412	45,576	37,099	1,350	.....	31,056	.....
64	.....1920.....capacity, g.p.m.....	793,588	4,010	26,205	76,200	.....	965	5,253	27,000
65	Pumping lift, from all sources.....1940.....average, feet.....	35	23	44	37	.....	.....	49	.....
66	.....1930.....average, feet.....	36	25	45	36	6	.....	40	.....
67	.....1920.....average, feet.....	25	21	46	.....	.....	11	6	70
68	from pumped wells.....1940.....average, feet.....	38	23	45	(1)	.....	.....	40	.....
PAY ROLL AND NUMBER OF EMPLOYEES 1939*									
69	Enterprises reporting pay roll.....number.....	689	15	28	58	13	2	42	24
70	Irrigated area in these enterprises.....acres.....	1,009,119	12,492	66,435	75,687	6,361	(1)	39,837	90,857
71	Wages and salaries paid and payable.....dollars..	518,607	3,483	46,094	33,632	7,380	(1)	25,845	56,270
72	Persons employed during week ending April 29.....number..	2,689	35	128	354	34	(1)	153	205

* 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.

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

¶ Includes siphons and farm pipe lines reported.

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

CENSUS OF IRRIGATION — UTAH

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

ITEM (For definitions and explanations, see text)		Emery	Garfield	Grand	Iron	Juab	Kane	Millard	Morgan
FARM VALUES, 1940*									
1	Land and buildings, all farms.....dollars..	2,192,867	1,799,322	761,478	3,685,210	2,242,325	932,202	4,991,359	1,871,205
2	Land and buildings, irrigated farms.....dollars..	2,087,813	1,693,980	698,578	3,149,580	1,649,860	695,250	4,720,341	1,764,655
3	Operated by.....								
4	(a) Owners and managers.....dollars..	1,779,873	1,551,425	499,179	3,035,730	1,489,740	686,700	4,325,084	1,640,285
5	(b) Tenants.....dollars..	307,940	192,555	109,400	113,850	160,130	8,550	395,257	144,369
6	Average, land and buildings, per farm.....dollars..	2,652.86	4,295.87	4,378.26	7,014.65	5,409.38	4,188.25	5,227.40	7,594.28
	per acre in farms.....dollars..	14.67	17.37	9.93	9.31	14.91	5.41	23.00	21.46
7	Buildings, irrigated farms reporting value.....number..	560	304	130	351	226	128	676	223
8	Total reported.....dollars..	435,165	280,335	137,747	451,970	240,630	142,030	745,861	440,879
9	Average, per irrigated farm reporting.....dollars..	777.08	922.15	1,059.59	1,287.66	1,104.56	1,109.61	1,103.34	1,977.04
10	per acre on all irrigated farms.....dollars..	9.06	2.89	2.25	1.34	2.26	1.10	3.63	5.30
11	Buildings, nonirrigated farms reporting value.....number..	26	8	12	61	54	14	38	11
12	Total reported.....dollars..	15,750	3,575	13,750	60,043	42,005	17,100	45,625	15,641
13	Average, per nonirrigated farm reporting.....dollars..	605.77	446.88	1,145.83	984.31	777.87	1,221.43	1,200.65	1,421.91
14	per acre on all nonirrigated farms.....dollars..	0.77	0.20	0.18	0.53	0.60	0.29	0.65	1.12
15	Implements and machinery, irrigated farms reporting value.....number..	684	358	126	395	271	77	776	218
16	Total reported.....dollars..	293,658	173,783	60,035	284,896	149,608	28,038	520,967	158,494
17	Average, per irrigated farm reporting.....dollars..	429.32	485.43	475.47	721.26	552.06	338.16	671.35	727.04
18	per acre, on all irrigated farms.....dollars..	2.06	1.79	0.88	0.84	1.35	0.20	2.54	1.91
19	Implements and machinery, nonirrigated farms reporting value.....number..	10	9	10	65	74	10	41	7
20	Total reported.....dollars..	3,330	3,910	6,395	36,285	54,885	5,425	14,867	2,695
21	Average, per acre, on all nonirrigated farms.....dollars..	0.16	0.22	0.08	0.32	0.78	0.09	0.18	0.19
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
22	Enterprises.....1940...number.....	40	82	76	136	43	28	74	51
23	.....1930...number.....	21	62	17	115	36	20	90	84
24	.....1920...number.....	31	82	37	86	27	25	66	95
25	Average size of enterprise based on irrigable area.....1940...acres.....	2,026	347	96	260	479	144	1,180	199
26	.....1930...acres.....	4,319	578	253	406	710	310	1,394	148
27	.....1920...acres.....	3,643	671	298	1,145	545	285	5,695	145
28	Diversion dams.....1940...number.....	41	114	48	40	71	28	36	59
29	Main canals and laterals.....1940...length, miles.....	273.1	214.3	72.3	185.4	47.7	61.4	386.8	102.0
30	.....1930...length, miles.....	155	238	25	225	209	57	606	135
31	.....1920...length, miles.....	853	278	84	231	125	54	823	182
32	.....1940...capacity, c.f.s. ²	2,965	711	228	492	420	89	2,389	453
33	.....1930...capacity, c.f.s. ²	1,034	535	59	730	702	53	1,714	483
34	.....1920...capacity, c.f.s. ²	1,061	464	150	1,242	156	89	3,560	743
35	Pipe lines.....1940...length, miles.....			2.6	1.2	5.8		7.0	0.1
36	Storage dams.....1940...number.....	12	6	5	6	8	12	29	6
37	Reservoirs.....1940...number.....	10	9	6	44	8	11	34	6
38	.....1930...number.....	8	4	2	50	9	1	9	4
39	.....1920...number.....	9	5	3	66	3	9	21	3
40	.....1940...capacity, acre-feet.....	5,903	23,629	489	11,689	239,395	143	42,559	28,187
41	.....1930...capacity, acre-feet.....	17,093	23,072	232	11,814	254,351	6,480	58,692	28,110
42	.....1920...capacity, acre-feet.....	8,875	24,521	2,752	9,968	3,100	218	672,617	104
43	Wells, flowing.....1940...number.....				83	7		56	
44	.....1930...number.....				24	16		138	
45	.....1920...number.....				199	11		179	
46	.....1940...yield, g.p.m.....				1,648	408		7,594	
47	.....1930...yield, g.p.m.....				550	1,070		26,517	
48	.....1920...yield, g.p.m.....				10,061	942		28,955	
49	Wells, pumped.....1940...number.....		1		101			2	
50	.....1930...number.....				82			6	
51	.....1920...number.....				41	1			
52	.....1940...yield, g.p.m.....		(1)		50,966			(1)	
53	.....1930...yield, g.p.m.....				42,322			2,600	
54	.....1920...yield, g.p.m.....				10,500	28			
55	Pumping plants.....1940...number.....	9	1	21	102			3	
56	.....1930...number.....	1		7	75			9	
57	.....1920...number.....	2		11	31	3		1	
58	Prime movers.....1940...capacity, hp.....	1,218	(1)	323	1,478			35	
59	.....1930...capacity, hp.....	900		77	1,069			105	
60	.....1920...capacity, hp.....	425		227	272	28			
61	Pumps.....1940...capacity, g.p.m.....	25,350	(1)	23,100	55,901			6,080	
62	.....1930...capacity, g.p.m.....	6,600		7,620	55,110			5,700	
63	.....1920...capacity, g.p.m.....	8,000		17,612	10,400	2,468		11,260	
64	Pumping lift, from all sources.....1940...average, feet.....	27	(1)	17	42			16	
65	.....1930...average, feet.....	50		17	40			21	
66	.....1920...average, feet.....	46		18	56	40			
67	from pumped wells.....1940...average, feet.....		(1)		42			(1)	
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁵									
68	Enterprises reporting pay roll.....number.....	9	18	2	17	3	3	16	18
69	Irrigated area in these enterprises.....acres.....	65,677	17,430	(1)	14,237	10,000	1,685	66,692	6,659
70	Wages and salaries paid and payable.....dollars..	8,981	5,940	(1)	6,340	3,978	1,761	28,167	2,931
71	Persons employed during week ending April 29.....number..	68	34	(1)	25	9	14	105	32

* 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 — UTAH

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

Piute	Rich	Salt Lake	San Juan	Sanpete	Sevier	Summit	Tooele	Uintah	Utah	Wasatch	Washington	Wayne	Weber	
1,329,650	3,598,238	15,307,174	1,683,120	6,354,156	5,922,729	3,312,957	1,897,879	4,794,439	16,049,924	3,470,444	3,090,399	1,173,955	13,457,383	1
1,321,180	3,347,538	13,077,218	861,610	5,802,475	5,717,154	3,235,827	1,462,821	4,261,399	14,945,034	3,289,696	2,801,464	1,120,255	12,325,688	2
1,190,480	3,266,398	11,626,493	799,050	4,929,583	4,826,864	2,775,535	1,269,212	3,492,119	13,154,901	3,061,716	2,651,164	1,045,915	10,581,298	3
130,700	81,150	1,450,725	62,560	872,802	890,262	460,262	193,609	769,280	1,780,138	207,890	150,300	74,340	1,744,300	4
6,291.33	14,305.72	6,379.13	2,475.89	4,494.56	6,127.71	6,550.26	5,004.68	4,070.10	5,280.93	7,878.57	4,468.04	4,389.16	7,941.81	5
27.99	6.80	129.41	2.92	18.40	47.74	31.03	16.88	23.00	59.57	17.24	14.38	32.69	45.30	6
151	219	1,972	333	832	785	483	229	1,011	2,348	384	581	229	1,477	7
195,870	357,950	4,976,052	168,623	818,442	975,693	791,065	306,181	929,254	4,023,492	785,747	867,070	238,641	2,951,000	8
1,303.77	1,634.47	2,523.35	506.38	983.70	1,242.92	1,037.03	1,397.03	918.15	1,713.58	2,046.22	1,482.38	1,042.10	1,997.97	9
4.17	0.73	49.24	0.87	2.60	8.15	7.59	3.53	5.01	16.04	4.14	4.45	6.96	10.84	10
3	11	436	301	62	21	18	69	59	175	13	49	3	120	11
1,800	11,550	1,234,147	77,208	70,560	37,775	37,340	67,417	59,365	386,150	51,550	84,115	2,625	231,850	12
600.00	1,050.00	2,830.61	256.00	1,138.06	1,798.81	2,074.44	977.06	853.64	2,206.57	3,965.38	1,716.63	875.00	1,932.08	13
5.66	0.24	44.99	0.16	0.87	1.31	12.29	1.00	0.31	2.80	0.76	1.48	0.22	1.63	14
170	206	1,457	326	1,032	843	435	215	877	2,325	359	558	230	1,393	15
110,220	178,447	640,945	95,509	502,000	488,033	233,993	135,278	375,261	1,098,672	201,002	288,261	98,769	782,869	16
648.35	871.10	439.91	292.07	485.43	578.92	537.89	629.20	427.89	472.55	559.89	516.60	438.87	568.00	17
2.34	0.36	6.34	0.32	1.59	4.08	2.24	1.56	2.63	4.38	1.06	1.48	2.91	2.88	18
2	10	212	277	58	10	10	48	44	101	10	45	2	84	19
(1)	4,850	95,653	89,240	34,340	10,470	6,270	19,915	22,300	41,037	7,900	24,687	(1)	28,422	20
(1)	0.10	3.49	0.19	0.42	0.96	2.06	0.29	0.13	0.30	0.12	0.42	(1)	0.29	21
31	32	94	34	91	115	107	72	100	243	51	115	18	126	22
33	35	135	23	80	64	153	126	60	259	60	134	31	173	23
22	37	135	42	91	82	132	69	42	210	48	126	29	135	24
507	1,872	922	419	1,054	548	279	155	1,090	537	704	298	996	462	25
517	1,618	892	695	1,101	1,129	187	91	2,169	840	439	284	710	321	26
497	1,358	1,305	965	1,403	994	264	252	3,514	967	518	344	679	784	27
35	90	96	44	108	54	102	45	83	158	43	131	20	56	28
113.0	256.0	554.7	91.0	442.7	278.0	220.3	117.5	746.3	905.3	123.2	201.5	81.2	420.8	29
114	147	580	106	512	320	251	140	764	995	235	323	99	399	30
110	210	1,446	197	836	586	255	184	432	1,005	250	306	113	272	31
354	1,420	958	348	1,969	1,605	1,075	298	2,689	3,971	872	503	276	1,251	32
865	1,308	2,501	231	1,695	1,907	914	145	2,051	3,263	745	745	251	791	33
722	1,205	2,530	475	1,159	1,979	665	146	996	2,725	766	527	174	1,517	34
.....	.....	19.5	.....	2.6	5.7	0.7	17.5	3.1	15.9	.....	8.9	0.4	19.2	35
4	9	17	3	20	14	38	8	13	19	26	31	10	6	36
4	11	16	2	22	14	38	36	13	16	25	33	12	5	37
5	7	11	.....	19	18	10	36	5	26	18	25	6	23	38
3	4	14	14	23	16	18	18	.....	32	16	18	10	33	39
123,590	2,254	1,632	(1)	32,117	10,623	87,586	44	18,074	862,089	297,171	13,275	14,488	43,569	40
141,372	2,457	1,359	.....	29,420	21,113	54,462	359	26,030	273,193	11,578	17,590	3,800	2,944	41
55,000	52	3,051	11,895	30,708	87,779	1,810	21	.....	527,715	3,581	10,654	4,003	30,280	42
.....	.....	28	.....	13	290	.....	176	.....	384	.....	.....	.....	8	43
.....	.....	51	.....	15	40	.....	242	.....	312	.....	.....	.....	85	44
.....	.....	30	2	33	46	.....	80	.....	220	.....	.....	.....	33	45
.....	.....	1,221	.....	605	9,105	.....	7,001	.....	47,995	.....	.....	.....	216	46
.....	.....	1,728	.....	1,688	2,885	.....	15,106	.....	15,426	.....	.....	.....	4,081	47
.....	.....	222	90	505	9,395	.....	4,362	.....	27,729	.....	.....	.....	1,358	48
1	.....	1	.....	5	5	.....	4	.....	10	.....	3	.....	4	49
.....	.....	.....	.....	2	.....	.....	17	.....	7	.....	1	.....	10	50
(1)	.....	(1)	.....	1	1	.....	7	.....	4	.....	3	.....	6	51
.....	.....	.....	.....	3,660	1,626	.....	955	.....	4,860	.....	870	.....	1,400	52
.....	.....	.....	.....	1,470	.....	.....	3,683	.....	3,400	.....	300	.....	7,385	53
.....	.....	.....	.....	150	.....	.....	200	1,350	2,830	.....	1,500	.....	1,640	54
1	6	13	.....	5	6	.....	4	11	27	.....	7	.....	13	55
.....	2	5	.....	3	1	.....	16	2	9	.....	1	.....	23	56
.....	2	9	.....	1	3	.....	.....	4	.....	.....	2	.....	22	57
(1)	155	1,011	.....	120	98	.....	34	219	4,262	.....	49	.....	227	58
.....	54	2,562	.....	32	30	.....	72	29	3,150	.....	6	.....	370	59
.....	46	4,323	.....	5	84	.....	6	82	2,919	.....	30	.....	226	60
(1)	8,400	23,825	.....	4,860	7,025	.....	1,020	19,300	504,168	.....	2,045	.....	16,300	61
.....	40	541,400	.....	1,570	1,800	1,000	4,190	2,250	78,225	.....	300	.....	23,605	62
(1)	3,300	524,900	.....	450	4,150	.....	900	3,350	30,830	.....	900	.....	26,245	63
.....	40	.....	.....	47	18	.....	51	13	36	.....	35	.....	19	64
.....	50	61	.....	24	33	.....	10	28	42	.....	40	.....	20	65
(1)	40	34	.....	4	32	.....	12	.....	43	.....	20	.....	17	66
.....	.....	(1)	.....	47	32	.....	51	.....	25	.....	41	.....	17	67
10	15	60	6	54	32	33	12	18	66	18	25	6	66	68
12,166	33,259	70,266	4,478	70,833	50,864	18,301	6,203	67,093	108,098	17,954	13,237	14,420	43,188	69
2,164	3,674	45,799	3,311	28,347	33,254	8,247	2,666	43,697	55,060	9,767	10,976	1,985	35,097	70
12	48	216	29	329	81	115	23	177	124	20	48	27	220	71

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.

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

CENSUS OF IRRIGATION—WASHINGTON

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....	* 42,865,280	42,775,040	42,775,040	42,775,040	42,775,040	42,775,040	42,775,040
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number....	81,686	84,361	70,904	66,288	56,192	33,202	18,056
Land in all farms.....acres....	15,181,815	14,680,097	13,533,778	13,244,720	11,712,235	8,499,297	4,179,190
Farms irrigated: ¹							
Farms.....number....	17,426	18,186	15,949	13,271	7,664	3,513	1,046
Increase or decrease (-) over preceding census.....percent..	² 9.3	.....	20.2	73.2	118.2	235.9	.....
Proportion of all farms.....percent..	21.3	21.6	22.5	20.0	13.6	10.6	5.8
Land in farms.....acres....	2,108,197	(³)	1,923,337	(³)	(³)	(³)	(³)
Proportion of all farm land.....percent..	13.9	(³)	14.2	(³)	(³)	(³)	(³)
Area irrigated.....acres....	⁴ 463,982	⁵ 422,335	⁶ 405,027	(⁷)	(⁷)	135,470	48,799
Increase or decrease (-) over preceding census.....percent..	² 22.0	.....	.....	.....	.....	177.6	.....
Proportion of total land area of State.....percent..	1.2	1.0	0.9	.....	.....	0.3	0.1
Proportion of all farm land.....percent..	3.3	2.9	3.0	.....	.....	1.6	1.2
Value of irrigated farms (land and buildings).....dollars..	121,212,949	(³)	195,394,180	(³)	(³)	(³)	(³)
Average per farm.....dollars..	6,955.87	(³)	12,251.19	(³)	(³)	(³)	(³)
Average per acre.....dollars..	57.50	(³)	101.59	(³)	(³)	(³)	(³)
Value of farm implements and machinery.....dollars..	13,082,573	(³)	13,343,847	(³)	(³)	(³)	(³)
Average per farm.....dollars..	750.75	(³)	836.66	(³)	(³)	(³)	(³)
Average per acre.....dollars..	6.21	(³)	6.94	(³)	(³)	(³)	(³)
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number....	4,120	(³)	2,986	2,692	1,934	(³)	(³)
Farms irrigated.....number....	24,648	(³)	(³)	(³)	(³)	(³)	(³)
Area irrigated.....acres....	615,013	(³)	499,283	529,899	334,376	(³)	(³)
Area existing works were capable of supplying with water.....acres....	731,527	(³)	631,511	637,151	470,514	(³)	(³)
Area irrigable.....acres....	537,096	(³)	915,379	⁹ 836,785	⁹ 817,032	(³)	(³)
Additional area existing works were capable of supplying with water.....acres....	119,514	(³)	132,228	107,252	136,136	(³)	(³)
Additional irrigable area in enterprises not supplied with water.....acres....	222,083	(³)	416,096	⁹ 306,896	⁹ 482,654	(³)	(³)
Investment in irrigation enterprises.....dollars..	58,415,196	(³)	40,561,895	29,299,011	16,219,149	1,722,369	196,660
Increase or decrease (-) over preceding census.....percent..	² 39.1	(³)	38.4	80.6	841.7	775.8	.....
Average per acre based on area works were capable of supplying with water.....dollars..	77.12	(³)	64.23	45.98	34.47	(³)	(³)
Increase or decrease (-) over preceding census.....percent..	² 20.1	(³)	39.7	33.4	.....	.....	.....
Estimated completed cost of existing enterprises.....dollars..	58,141,097	(³)	53,232,477	37,684,591	22,322,856	(³)	(³)
Average per acre based on irrigable area in enterprises.....dollars..	69.46	(³)	58.15	⁹ 45.03	⁹ 27.32	(³)	(³)
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	2.80	(³)	4.14	3.45	3.08	(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 84,821 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. ^{*} The 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 81,686	Acres 15,181,815	Acres 3,599,803	Acres 409,161	Acres 84,821	Dollars 593,366,445	Dollars 39.08	Dollars 154,520,136	Dollars 10.18	Dollars 56,101,147	Dollars 3.70
Owners and managers.....	67,224	12,139,554	2,871,177	303,262	61,132	473,199,299	38.98	132,485,253	10.91	44,379,625	3.66
Tenants.....	14,462	3,042,261	898,526	105,879	23,689	120,167,145	39.50	22,034,883	7.24	11,721,522	3.85
Irrigated farms, total.....	17,426	2,108,197	504,910	409,161	84,821	121,212,949	57.50	36,111,810	17.13	13,082,573	6.21
Owners and managers.....	14,069	1,762,937	382,353	303,262	61,132	100,900,376	57.24	31,613,019	17.93	10,955,063	6.21
Tenants.....	3,357	345,260	121,957	105,879	23,689	20,312,573	58.83	4,498,791	13.03	2,127,510	6.16
Wholly irrigated farms.....	14,273	1,119,045	364,938	364,938	71,215	93,218,122	63.30	26,746,120	25.69	10,237,116	9.15
Owners and managers.....	11,510	890,256	287,687	287,687	50,577	77,159,082	66.97	25,191,137	28.30	8,531,085	9.58
Tenants.....	2,763	228,789	97,251	97,251	20,638	16,059,040	70.19	3,554,983	15.54	1,706,031	7.46
Partly irrigated farms.....	3,153	989,152	139,372	44,223	13,606	27,994,827	28.30	7,365,690	7.45	2,845,457	2.88
Owners and managers.....	2,559	872,651	114,636	35,595	10,555	23,741,294	27.21	6,121,882	7.36	2,429,978	2.78
Tenants.....	594	116,501	24,736	8,628	3,051	4,253,533	36.51	943,808	8.10	421,479	3.62
Nonirrigated farms, total.....	64,260	13,073,618	3,085,493	.....	.....	472,153,496	36.11	118,408,326	9.06	43,018,574	3.29

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 - WASHINGTON

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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 1	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	Acres	Acres	Acres	Acres	Acres	Percent	Acres	Acres	Acres	Acres-feet	Dollars	Dollars
	4,120	837,096	731,527	615,013	499,283	528,899	23.2	590,627	602,594	583,205	5.5	3.57	0.95
Primary sources:													
Streams, gravity.....	1,362	445,246	397,078	329,397	306,185	352,199	7.6	306,939	318,779	301,235	3.9	2.38	0.60
Streams, pumped.....	885	57,192	51,120	44,167	139,738	25,244	-65.4	44,146	43,649	43,628	4.1	0.35	2.25
Streams, gravity and pumped.....	35	294,281	226,781	191,824	4,144	92,702	(²)	191,824	191,820	191,820	5.0	2.23	0.44
Wells, pumped.....	831	24,647	23,290	17,926	19,456	17,504	-7.9	17,845	17,676	17,585	4.5	11.18	2.47
Wells, flowing.....	28	2,791	2,509	2,073	1,436	1,671	44.4	2,072	1,636	1,635	3.2	0.77	0.21
Wells, pumped and flowing.....	.....	.....	.....	.....	103	1,490	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity.....	12	1,501	1,247	968	3,107	3,442	-68.8	968	861	861	6.2	4.84	0.77
Lakes, pumped.....	110	3,534	3,432	2,948	3,395	4,682	-13.2	2,948	2,917	2,917	4.2	16.90	4.02
Springs.....	377	12,319	11,584	5,752	4,038	7,869	42.6	5,661	5,380	5,358	3.1	2.83	0.93
Springs and streams.....	84	4,985	4,741	4,076	.....	.....	.....	2,436	3,977	2,345	2.7	3.50	1.29
Stored storm water.....	3	60	50	35	625	129	-94.4	35	35	35	0.9	7.86	8.33
City water.....	44	.....	.....	.....	46	42	.....	.....	.....	.....	.....	.....	.....
Sewage.....	1	542	540	358	35	.....	.....	346	350	342	1.1	10.01	15.81
Streams, gravity; wells, pumped... Streams, gravity; wells, flowing... Streams, pumped; wells, pumped... Waste water, seepage or drainage... Other mixed..... Other and not reported.....	22 2 18 79 79 1	1,087 1,306 1,074 16,561	1,065 1,271 1,058 15,761	936 1,018 955 12,580	708 16,155 117	2,415 441 19,027 62	29.4 -22.7	936 1,018 915 12,538	936 960 840 12,576	936 960 900	3.5 3.9 1.1 3.9	5.23 12.98 2.57 7.71	1.49 3.31 2.36 1.98
Supplemental sources:³													
Streams, gravity and/or storage... Streams, pumped..... Wells, pumped..... Wells, flowing.....	95 7 30 1	220,068 160 965	217,970 160 879	183,644 145 875	..... 4,600 157 2	..... ..... ..... .....	..... -96.8 450.3	183,524 145 865	10,967 145 850	10,967 145 840	3.8 2.5 2.7	0.40 6.61 4.32	0.10 2.06 1.61

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	Percent	Dollars	Dollars	Percent	Dollars	Dollars	Acres	Dollars	Acres	Dollars	Dollars	Acres	Dollars
	56,418,196	100.0	77.12	40,561,895	100.0	64.23	12.89	602,414	2.80	457,977	4.14	-1.34	465,758	3.46
Primary sources:														
Streams, gravity.....	19,417,319	34.4	50.16	22,549,053	55.8	55.45	-5.29	318,779	1.68	300,194	2.50	-0.82	308,869	2.49
Streams, pumped.....	4,781,231	8.5	93.53	11,170,037	27.5	71.63	21.90	43,649	8.81	138,807	3.94	4.97	23,129	11.16
Streams, gravity and pumped.....	20,513,648	36.4	90.46	280,321	0.7	66.30	34.16	191,820	2.08	4,144	8.24	-6.16	92,574	1.99
Wells, pumped.....	1,486,048	2.6	63.03	1,785,628	4.4	82.24	-19.21	17,496	10.34	18,418	15.43	-5.09	16,159	12.71
Wells, flowing.....	81,184	0.1	32.35	159,630	0.4	78.79	-46.43	1,636	0.77	304	10.92	-10.15	1,076	3.03
Wells, pumped and flowing.....	.....	.....	.....	36,900	(³)	35.28	.....	.....	.....	103	2.91	.....	1,460	1.86
Lakes, gravity.....	155,329	0.3	124.55	260,684	0.6	59.04	65.52	961	2.61	3,087	6.70	-4.09	4,371	3.96
Lakes, pumped.....	296,284	0.5	86.91	568,096	1.4	150.15	-63.24	2,917	15.85	3,232	19.73	-4.08	2,976	13.05
Springs.....	275,428	0.5	23.78	173,304	0.4	16.73	7.06	5,380	2.82	2,868	3.90	-1.08	4,857	7.08
Springs and streams.....	192,933	0.3	40.69	.....	(³)	.....	.....	3,977	2.27	.....	.....	.....	.....	.....
Stored storm water.....	2,250	(³)	45.00	13,370	(³)	19.15	25.85	35	7.86	260	2.44	5.42	65	11.85
City water.....	.....	(³)	.....	420	(³)	9.13	.....	.....	.....	33	33.33	.....	.....	.....
Sewage.....	18,006	(³)	33.34	160	(³)	4.57	26.18	350	16.65	35	1.57	-0.34	.....	.....
Streams, gravity; wells, pumped... Streams, gravity; wells, flowing... Streams, pumped; wells, pumped... Waste water, seepage or drainage... Other mixed..... Other and not reported.....	35,875 86,285 26,736 2,549,058	0.1 0.1 (³) 4.5	33.69 52.16 25.27 161.73	43,836 3,197,338 1,382	0.1 7.8 (³)	45.42 170.10 11.81	-16.82 -7.99	936 960 940 12,578	5.23 12.88 2.51 5.79	685 15,817	8.86 15.89	-3.56 -10.10	2,158 324 7,681	20.70 4.97 6.14
Supplemental sources:⁴														
Streams, gravity and/or storage... Streams, pumped..... Wells, pumped..... Wells, flowing.....	6,485,970 7,204 30,398	11.5 (³) 0.1	29.80 45.02 34.58	..... 320,866 8,370 1,500	..... 0.8 (³) (³)	..... 65.04 59.68 107.14	..... -20.02 -26.99	21,301 145 850	0.31 6.61 4.50	..... 4,347 156 2	..... 13.65 8.09 15.00	..... -6.94 -3.68	....................	....................

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 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 615,013	Acres 184,664	Acres 409,283	Acres 529,869	Percent 23.2		Acres 7,610	Acres 188,677	Acres 20,201	Acres 31,652	Percent -62.3
Individual and partnership....	104,343	10,721	88,015	142,215	18.6	Commercial.....	210,512	188,677	137,288	135,118	53.3
Cooperative, incorporated....	60,508	6,720	92,743	93,192	-9.2	Office of Reclamation ²	139,085		132,080	77,710	4.6
Cooperative, unincorporated....	23,748		97,772	79,818	27.4	State.....	229		245	200	-6.5
Irrigation district.....	124,599	5,347	9,474	21,705	-23.1	City and/or sewage.....	8,853				
Commercial.....	7,290		118,687	122,869	40.8	Other.....				305	
Bureau of Reclamation ²	167,085	161,876	92,367	69,510	28.4						
Office of Indian Affairs ²	118,637		245	200	-35.1	IRRIGABLE AREA ³					
State.....	159			290		Total.....	837,096	221,183	915,379	836,795	-9.6
City and/or sewage.....	8,844										
Other.....						Individual and partnership....	140,099	11,182	121,944	226,671	14.9
						Cooperative, incorporated....	68,855	7,720	115,884	118,539	-17.5
AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER						Cooperative, unincorporated....	26,800				
Total.....	731,527	219,008	631,511	687,151	15.8	Irrigation district.....	151,343	13,614	133,088	134,641	13.7
Individual and partnership....	131,549	11,058	106,290	168,457	23.8	Commercial.....	7,610		32,618	75,292	-76.7
Cooperative, incorporated....	68,466	6,720	112,501	104,699	-18.6	Bureau of Reclamation ²	282,517	188,677	315,600	152,947	-10.5
Cooperative, unincorporated....	25,063					Office of Indian Affairs ²	150,085		196,000	128,200	-23.4
Irrigation district.....	142,161	12,554	122,006	118,009	16.5	State.....	229		245	200	-6.5
						City and/or sewage.....	9,558				
						Other.....				305	

¹Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text). ²U. S. Dept. of the Interior. ³For 1920 relates to total area. Irrigable area for that year was not reported. For explanation of areas, see text, p. 605.

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	
	<i>Number</i>	<i>Number</i>	<i>Acres</i>	<i>Acres</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Number</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
Total.....	4,120	243	837,096	731,527	67.19	2.78	29.81	0.51	24,648	615,013	520,424	6,113	88,476
Individual and partnership....	3,674	22	140,099	131,549	31.18	4.60	6.10	0.59	4,252	104,343	85,926	1,703	16,714
Cooperative, incorporated....	73	60	68,855	66,466	68.58	2.64	9.36	0.12	3,869	60,506	54,846	330	5,332
Cooperative, unincorporated....	78	63	26,800	25,063	13.81	0.73			646	23,748	19,612	234	3,902
Irrigation district.....	66	65	151,343	142,161	87.46	3.62	24.05	0.83	7,573	124,599	111,635	1,665	11,299
Commercial.....	4	4	7,610	7,610	100.63	6.27			408	7,290	5,423		1,867
U. S. Bureau of Reclamation ²	12	12	282,517	210,512	102.50	2.35	32.31		5,727	167,085	133,934	2,181	30,970
U. S. Office of Indian Affairs ²	4	3	150,085	139,085	37.90	1.25			1,904	118,637	100,294		18,343
State.....	4		229	229	72.29	2.36			4	159	144		15
City and/or sewage.....	5	5	9,558	8,853	8.90	2.12			265	8,644	8,610		34
Other.....													

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 exclusive of water right investment. ³Based on irrigated area in enterprises reporting maintenance and operation in 1939. For explanation of areas and investment, see text, p. 605.

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 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							
Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Percent	Dollars	Dollars	Dollars	Dollars	
Total.....	56,415,196	49,881,624	6,533,572	55,678,678	736,518	40,561,895	29,289,011	39.1	68.19	29.63	304,832	1,725,901
Individual and partnership.....	4,246,697	4,178,853	67,844	4,168,738	77,959	4,467,599	4,732,706	-4.9	31.77	6.14	60	144,851
Cooperative, incorporated.....	4,691,822	4,625,022	66,800	4,621,087	70,735	4,162,417	3,949,896	21.2	69.59	9.94	31,385	112,500
Cooperative, unincorporated.....	352,094	352,094		346,171	5,923				14.05		5,202	8,000
Irrigation district.....	13,317,182	13,015,291	301,891	12,735,281	581,901	10,170,631	6,112,628	30.9	91.55	24.05	54,889	489,000
Commercial.....	765,810	765,810		765,810		682,507	2,341,428	12.2	100.63		47,112	
U. S. Bureau of Reclamation ²	27,676,132	21,578,095	6,097,037	27,675,132		15,542,597	10,441,145	78.1	102.50	32.31	9,214	126,530
U. S. Office of Indian Affairs.....	5,271,081	5,271,081		5,271,081		5,492,844	1,658,040	-4.0	37.90		186,980	865,000
State.....	16,555	16,555		16,555		43,300	55,668	-61.8	72.29			
City and/or sewage.....	78,823	78,823		78,823					8.90			
Other.....							7,500					

¹Only for enterprises serving 5 or more farms.

²For explanation of investment, see text, p. 605.

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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 ex- planations, 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 95	Acres 820,492	Acres 726,245	Dollars 22,621,604	Dollars 43.52	Dollars 41.69	Number 17	Dollars 605,398	Dollars 494,978	Dollars 2.73	Acres 582,034	Dollars 1,545,582	Dollars 1,088,155
Partnership.....	1	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	.....	.....	.....	.....	5,152	3,484	1,376
Cooperative, incorporated.....	23	35,878	32,688	213,274	7.46	7.77	3	14,378	16,680	3.42	61,302	178,207	155,208
Cooperative, unincorporated.....	2	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	.....	.....	.....	.....	21,751	18,585	12,967
Irrigation district.....	53	153,608	145,556	4,287,148	31.27	31.25	6	30,160	38,888	1.85	150,866	741,324	726,590
Commercial.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,610	48,991	43,164
Bureau of Reclamation ⁷	12	471,194	399,189	14,262,702	64.56	63.82	8	560,660	439,430	2.79	208,082	420,626	124,585
Office of Indian Affairs ⁷	3	149,985	138,985	3,843,179	32.42	27.65	.....	.....	.....	.....	118,537	147,325	6,248
State.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage.....	1	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	.....	.....	.....	.....	8,644	19,040	16,997
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 \$1.96. ⁴Based on primary enterprises only; State average for supplemental enterprises is \$4.20. ⁵Based on primary enterprises only; no supplemental enterprises reported both arrearage and assessed area. ⁶Data are included only in State totals because less than 3 enterprises reported in the 1910 Census. ⁷U. S. Dept. of the Interior. ⁸Represents indebtedness and arrearages of irrigation districts to the U. S. Government. ⁹Represents construction costs of irrigation works less cancellations and repayments. ¹⁰For explanation of areas and investment, see text, p. 605.

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 603,414	Dollars 1,673,992	Acres 22,296	Dollars 11,314	Dollars 2.78	Dollars 0.51	Number 201	Dollars 784,904	Number 937
Individual and partnership.....	98,551	453,891	10,229	8,055	4.60	0.59	11	1,513	28
Cooperative, incorporated.....	56,506	149,097	6,720	801	2.64	0.12	64	54,814	137
Cooperative, unincorporated.....	21,160	15,355	.....	.....	0.73	.....	42	5,023	4
Irrigation district.....	124,980	449,823	5,347	4,458	3.62	0.83	66	264,480	419
Commercial.....	7,290	45,695	.....	.....	6.27	.....	4	2,307	2
U. S. Bureau of Reclamation ²	167,085	392,991	.....	.....	2.35	.....	11	263,642	204
U. S. Office of Indian Affairs.....	118,837	148,647	.....	.....	1.25	.....	3	162,925	117
State.....	159	376	.....	.....	2.36	.....	.....	.....	.....
City and/or sewage.....	8,644	18,317	.....	.....	2.12	.....	1	(³)	(³)
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Only for enterprises serving 5 or more farms.

²Data for 1 "City and/or sewage" enterprise are included with "Commercial" enterprises in the 1910 Census.

³For explanation of areas and investment, see text, p. 605.

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 1,753	Number 125	Sec.-ft. 15,104	Miles 2,581	Miles 687.6	114	Ac.-ft. 1,165,527	Miles 2,612.7	50	G.p.m. 21,192	1,041	G.p.m. 267,327	2,487	Hp. 37,131	2,488	G.p.m. 953,751
Individual and partnership.....	1,581	97	3,792	863	152.9	83	5,158	1,170.2	49	20,942	1,009	199,475	2,342	18,055	2,346	527,149
Cooperative, incorporated.....	44	4	1,658	279	74.0	5	6,033	225.6	.....	.....	12	33,660	34	4,085	33	71,350
Cooperative, unincorporated.....	74	2	788	160	2.2	2	1,080	38.1	.....	.....	8	9,562	15	515	18	12,892
Irrigation district.....	42	13	3,239	488	240.9	12	64,490	669.5	1	250	11	43,680	56	5,370	55	100,594
Commercial.....	3	.....	150	24	1.5	1	57	52.5	.....	.....	.....	.....	2	400	2	3,350
Bureau of Reclamation ³	4	8	3,040	953	193.1	8	1,088,700	349.3	.....	.....	.....	.....	21	3,079	21	95,450
Office of Indian Affairs ³	5	.....	2,322	789	.....	.....	.....	67.8	.....	.....	.....	.....	7	3,075	7	136,900
State.....	1	1	.....	.....	.....	3	.....	7.2	.....	.....	1	750	7	172	6	6,142
City and/or sewage.....	1	.....	141	25	0.1	.....	.....	32.5	.....	.....	.....	.....	.....	.....	.....	.....
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

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.....	1,755	125	499	100	Earth and rock.....	725	81	.....	52
Concrete or masonry.....	166	21	101	11	Other and mixed.....	1 384	11	1 217	30
Timber.....	453	12	149	.....	Not reported.....	27	.....	32	7

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
	Number	Percent	G. p. m.	Percent	Feet		Number	Percent	Hp.	Percent
Total, 1940.....	2,488	100.0	953,751	100.0	47	Total, 1940.....	2,487	100.0	37,131	100.0
Electric motor.....	2,039	81.9	574,308	60.2	51	Centrifugal pump.....	2,013	80.9	33,230	88.5
Centrifugal.....	1,731	69.5	526,559	55.2	47	Electric.....	1,725	69.4	23,074	61.0
Turbine.....	99	4.0	28,442	3.1	92	Internal-combustion.....	257	10.3	3,788	10.2
Plunger.....	183	7.4	13,807	1.4	64	Other.....	31	1.2	5,468	14.7
Other.....	26	1.0	4,500	0.5	32	Turbine pump.....	112	4.5	1,670	4.5
Internal-combustion engine.....	330	13.3	134,508	14.1	30	Electric.....	91	3.7	1,335	3.6
Centrifugal.....	248	10.0	119,562	12.6	25	Internal-combustion.....	13	0.5	217	0.6
Turbine.....	12	0.5	7,079	0.7	45	Other.....	8	0.3	118	0.3
Plunger.....	54	2.2	3,697	0.4	56	Plunger pump.....	233	9.4	956	2.6
Other.....	16	0.6	4,170	0.4	25	Electric.....	172	6.9	633	1.7
Other kinds of motive power.....	46	1.8	76,799	8.1	45	Internal-combustion.....	49	2.0	288	0.8
Centrifugal.....	22	0.9	72,275	7.7	52	Other.....	12	0.5	35	0.1
Turbine.....	6	0.2	3,950	0.4	36	Other and mixed types of pumps.....	129	5.2	1,275	3.4
Plunger.....	12	0.5	362	(¹)	44	Electric.....	83	3.3	1,001	2.7
Other.....	5	0.2	212	(¹)	43	Internal-combustion.....	34	1.4	267	0.7
Mixed kinds of motive power.....	74	3.0	168,186	17.6	42	Other.....	2 12	0.5	7	(¹)
Centrifugal.....	43	1.7	166,043	17.4	45	Total, 1930.....	³ 1,951	.....	33,187	.....
Turbine.....	17	0.7	1,022	0.1	40	Increase or decrease (-) 1930-1940.....	536	.....	3,944	.....
Plunger.....	14	0.6	1,071	0.1	37					
Other.....	.....	.....	.....	.....	.....
Total, 1930.....	2,023	.....	993,303	.....	59					
Increase or decrease (-) 1930-1940..	465	.....	-39,552	.....	-12					

¹ Less than one-tenth of 1 percent.² Includes water wheels for which no horsepower was 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 2,612.7	Miles 3 1,136.9	Percent 129.8	Wood-stave:	Miles	Miles	Percent
Concrete:				1 to 12 inches.....	474.0	260.6	81.0
1 to 12 inches.....	489.5	139.7	250.4	13 to 24 inches.....	101.4	126.5	42.5
13 to 24 inches.....	103.6	110.0	14.0	Over 24 inches.....	78.9	.....	.....
Over 24 inches.....	21.8	.....	.....	Clay and other:			
Metal:				1 to 12 inches.....	92.1	67.6	36.2
1 to 12 inches.....	1,171.5	290.4	303.4	13 to 24 inches.....	8.5	.....	.....
13 to 24 inches.....	62.5	.....	.....	Over 24 inches.....	3.9	6.0	106.7
Over 24 inches.....	5.0	10.2	561.8				

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 Includes 26.0 miles clay pipe lines not segregated by size; 86.3 miles other materials not segregated by size; and 13.6 miles, 1 to 12 inches in size, material not specified.

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..	208	74	103	Ratio of area drained to area irrigated in—			
Area irrigable in these enterprises.....acres..	448,702	460,861	¹ 218,763	(a) Enterprises reporting lands drained and/or needing drainage.....percent..	59.3	³ 37.3	¹ 36.2
Area irrigated in these enterprises.....acres..	300,382	(²)	(²)	(b) All irrigation enterprises.....percent..	29.0	34.5	14.9
Area for which drains have been installed.....acres..	178,212	172,039	79,168	Ratio of area drained plus area needing drainage to—			
Additional area needing drainage.....acres..	18,673	28,084	43,461	(a) Irrigable area reporting.....percent..	43.9	43.4	¹ 56.1
				(b) Irrigated area reporting.....percent..	65.5	(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..	2,702,120	1,922,946	2,166,818	2,033,320	1,557,214	1,513,616	668,800	365,732	655,202
Area irrigated by these enterprises.....acres.....	474,131	352,994	341,569	361,507	291,521	264,558	112,624	61,473	77,011
Average water per acre irrigated.....acre-feet..	5.7	5.4	6.3	5.6	5.3	5.7	5.9	5.9	8.5
Total water delivered to irrigators.....acre-feet..	2,454,200	686,739	594,479	1,013,980	650,152	139,232	1,440,220	36,587	455,247
Area irrigated by these enterprises.....acres.....	568,182	190,009	174,969	249,791	179,529	77,235	318,391	10,480	97,754
Average water per acre irrigated.....acre-feet..	4.3	3.6	3.4	4.1	3.6	1.8	4.5	3.5	4.7
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	94,351	.....	.....	22,395	.....	.....	71,986	.....	.....
Area irrigated by these enterprises.....acres.....	22,445	.....	.....	4,886	.....	.....	17,559	.....	.....
Average water per acre irrigated.....acre-feet..	4.2	.....	.....	4.6	.....	.....	4.1	.....	.....
SUPPLEMENTAL ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	17,221	.....	.....	4,800	.....	.....	12,421	.....	.....
Area irrigated by these enterprises.....acres.....	8,453	.....	.....	6,600	.....	.....	1,653	.....	.....
Average water per acre irrigated.....acre-feet..	2.0	.....	.....	0.7	.....	.....	6.7	.....	.....
Total water delivered to irrigators.....acre-feet..	701,830	.....	.....	15,120	.....	.....	686,710	.....	.....
Area irrigated by these enterprises.....acres.....	183,668	.....	.....	10,214	.....	.....	173,455	.....	.....
Average water per acre irrigated.....acre-feet..	3.8	.....	.....	1.5	.....	.....	4.0	.....	.....
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	2,322	.....	.....	.....	.....	.....	2,322	.....	.....
Area irrigated by these enterprises.....acres.....	865	.....	.....	.....	.....	.....	865	.....	.....
Average water per acre irrigated.....acre-feet..	2.7	.....	.....	.....	.....	.....	2.7	.....	.....

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 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				
	Acres	Percent	Acres	Acres	Percent	Acres	Percent
Total.....	615,013	100.0	184,664	499,283	100.0	529,899	100.0
Appropriation ²	501,882	81.6	178,144	344,469	68.9	423,545	80.0
Riparian.....	51,326	8.3	2,580	29,285	5.9	17,095	3.2
Appropriation and riparian.....	9,014	1.5	3,993	.....	.....	.....	.....
Underground.....	16,446	2.7	646	17,309	3.5	20,859	3.9
Appropriation and underground.....	284	(³)	.....	.....	.....	.....	.....
Riparian and underground.....	1,214	0.2	118	.....	.....	.....	.....
Adjudicated by court.....	25,661	4.2	81	74,907	15.0	56,309	10.6
Other mixed and not reported.....	9,186	1.5	1,062	33,303	6.7	12,091	2.3

¹ Irrigated 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." ³ Less 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 167,085 acres irrigated in 1939 which were within the Summyside, Tieton, and Kittitas Districts of the Yakima Project and within the Okanogan Irrigation District of the Okanogan Project. These are indicated as separate enterprises under the Bureau of Reclamation and their areas are not duplicated under any other classification. Areas totaling 161,876 acres, classified as irrigated with a supplemental supply from the Yakima Project under the Warren Act or special contracts, include 106,497 acres under the Wapato Division of the Yakima Indian Reservation and a number of small districts are reported as receiving a primary supply through other enterprises, principally the Office of Indian Affairs and irrigation districts.

The investment attributed to the Bureau of Reclamation in State tables 7 and 17 relates to these areas and reflects construction costs incurred by the United States for irrigation facilities which were in operation in 1939. It also includes an investment of \$247,868 expended by

irrigation districts within the Yakima Project. Costs of drainage works and power facilities on the Yakima Project which were not to be repaid directly by water users are excluded. Construction costs of the Roza Division, the Yakima Project which was not in operation in 1939, and data relating to Grand Coulee Dam and the Columbia Basin Irrigation District are omitted. The dam which was under construction on the Columbia River was to store 10,000,000 acre-feet of water for the irrigation of 1,200,000 acres of land in the Upper Columbia Basin, regulate the Columbia River, and provide for the ultimate installation of 1,964,000 kilowatts of electric power. As Grand Coulee Dam was nearing completion, initial operations of the power plant were scheduled to begin in 1941. Construction of the irrigation carriage and distribution facilities was to begin when repayment contracts were signed as required by law. It was anticipated (before the United States entered World War II) that irrigation of the first lands in the Columbia Basin Project would begin in 1945.

CENSUS OF IRRIGATION - WASHINGTON

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...	3,987	31	3,446	272	139	62	34	3
2	Irrigated farms, 1939.....number...	24,648	.....	3,446	679	1,487	3,051	10,122	5,893
3	Area irrigated, 1939.....acres...	615,013	.....	81,153	20,439	44,363	69,285	107,486	204,277
4	(a) From which crops were harvested.....acres...	520,424	.....	67,377	17,278	36,474	59,407	172,703	167,165
5	(b) On which crops failed.....acres...	6,113	.....	659	260	1,343	858	2,055	968
6	(c) Irrigated pasture.....acres...	88,476	.....	13,147	2,901	6,516	9,030	20,728	36,124
CAPITAL INVESTMENT, 1940									
7	Total capital investment in all enterprises.....dollars..	49,881,624	13,272	3,570,184	594,461	1,268,736	4,503,709	28,704,369	11,226,893
8	(a) Cost of irrigation works and equipment.....dollars..	49,149,404	13,107	3,526,030	573,469	1,236,511	4,413,389	28,160,005	11,226,893
9	(b) Investment in water rights.....dollars..	732,220	165	44,154	20,992	32,225	90,320	544,364	.....
10	Area works were capable of supplying with water.....acres...	731,537	454	104,947	23,760	47,995	79,598	226,950	247,893
11	Average investment per acre irrigated.....dollars..	81.11	.....	43.99	29.08	28.60	63.17	146.45	54.95
12	Average investment per acre which the works could supply with water.....dollars..	68.19	29.23	34.02	25.02	26.43	55.24	126.17	45.29
MAINTENANCE AND OPERATION, AND CHARGES, 1939									
13	Enterprises reporting maintenance and operation.....number...	3,742	30	3,235	250	129	61	34	3
14	(a) Area irrigated in these enterprises.....acres...	602,414	.....	76,482	19,313	41,561	65,295	195,486	204,277
15	(b) Cost of maintenance and operation.....dollars..	1,673,962	900	399,133	56,088	79,132	151,121	627,166	360,452
16	(c) Average cost per irrigated acre reporting.....dollars..	2.78	.....	5.22	2.90	1.90	2.25	3.20	1.76
17	Total annual charges.....dollars..	1,512,453	.....	.....	.....	100,794	230,432	831,129	360,101
18	Average charge per irrigated acre reporting.....dollars..	3.04	.....	.....	.....	2.42	3.53	4.25	1.66
19	Area against which charges were assessed.....acres...	573,094	.....	.....	.....	44,921	73,410	226,363	228,400
20	Average annual charge per acre assessed.....dollars..	2.69	.....	.....	.....	2.24	3.14	3.67	1.66
21	Total charges collected.....dollars..	1,062,485	.....	.....	.....	80,174	186,724	705,587	.....
INDEBTEDNESS AND ARREARAGE, 1939									
22	Enterprises reporting indebtedness.....number...	92	.....	.....	.....	20	39	31	3
23	(a) Area irrigated in these enterprises.....acres...	439,839	.....	.....	.....	6,891	41,740	186,031	204,277
24	(b) Indebtedness.....dollars..	21,764,676	.....	.....	.....	183,155	1,385,715	14,853,205	5,372,591
25	(c) Average indebtedness per acre irrigated.....dollars..	49.48	.....	.....	.....	22.23	33.30	79.43	26.30
26	(d) Cost of irrigation works and equipment.....dollars..	42,904,125	.....	.....	.....	7,225	3,981,036	27,269,083	11,226,893
27	(e) Investment in water rights.....dollars..	632,570	.....	.....	.....	7,826	80,586	544,364	.....
28	(f) Total investment.....dollars..	43,536,695	.....	.....	.....	434,740	4,061,616	27,813,447	11,226,893
29	(g) Maintenance and operation.....dollars..	1,070,592	.....	.....	.....	35,829	126,572	553,630	360,452
30	(h) Total annual charges.....dollars..	1,382,790	.....	.....	.....	64,824	159,042	787,623	360,101
31	(i) Total charges collected.....dollars..	928,742	.....	.....	.....	42,989	159,344	726,709	.....
32	(j) Area against which annual charges were assessed.....acres...	500,154	.....	.....	.....	7,423	47,163	217,168	228,400
33	(k) Average indebtedness per acre assessed.....dollars..	43.52	.....	.....	.....	20.63	28.38	68.39	23.62
34	(l) Average charges per acre assessed.....dollars..	2.76	.....	.....	.....	7.39	4.03	3.49	1.66
35	(m) Average charges per acre irrigated.....dollars..	3.14	.....	.....	.....	7.96	4.55	4.05	1.66
36	Enterprises reporting arrearage.....number...	16	.....	.....	.....	4	2	8	2
37	(a) Area assessed in these enterprises.....acres...	219,571	.....	.....	.....	949	3,515	99,224	115,873
38	(b) Total arrearage.....dollars..	598,098	.....	.....	.....	7,828	13,633	202,151	374,476
39	(c) Average arrearage per acre assessed.....dollars..	2.73	.....	.....	.....	8.25	3.86	2.04	3.23
40	(d) Indebtedness.....dollars..	13,451,027	.....	.....	.....	65,006	325,655	11,302,775	1,757,591
TYPE, 1940									
41	Individual and partnership.....number...	3,746	31	3,432	261	22	.....	.....	.....
42	Cooperative (Incorporated and unincorporated).....number...	149	.....	10	9	95	27	8	.....
43	Irrigation district.....number...	64	.....	.....	1	17	27	19	.....
44	Commercial.....number...	4	.....	.....	.....	2	1	1	.....
45	U. S. Bureau of Reclamation.....number...	11	.....	.....	.....	1	3	5	2
46	U. S. Office of Indian Affairs.....number...	4	.....	.....	1	.....	2	.....	1
47	All other.....number...	9	.....	4	.....	2	2	1	.....
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939									
48	Enterprises reporting pay roll.....number...	198	.....	.....	.....	102	59	34	3
49	Wages and salaries paid and payable for 1939.....dollars..	781,924	.....	.....	.....	30,609	73,046	357,063	321,176
50	Persons employed during week ending April 29, 1939.....number...	936	.....	.....	.....	128	181	420	207
SOURCE OF WATER SUPPLY, 1939									
51	Streams, gravity.....number...	1,982	8	1,047	158	104	47	18	2
52	Streams, pumped.....number...	885	7	807	44	16	5	6	.....
53	Wells, pumped.....number...	831	12	782	25	7	3	2	.....
54	Wells, pumped and flowing; or wells flowing.....number...	28	.....	26	.....	.....	.....	.....	.....
55	Lakes, gravity or pumped.....number...	122	.....	109	9	.....	.....	.....	.....
56	Streams and springs; or springs.....number...	461	5	433	19	3	1	.....	.....
57	Mixed, streams and wells.....number...	77	.....	58	8	2	3	5	1
58	Other mixed or stored storm water.....number...	201	1	184	7	3	3	3	.....
SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)									
		TOTAL	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...	133	1	119	8	.....	22	22	21
2	Irrigated farms, 1939.....number...	4,236	.....	119	16	.....	125	460	3,518
3	Area irrigated, 1939.....acres...	184,664	.....	9,928	793	.....	8,333	3,734	131,878
CAPITAL INVESTMENT, 1940									
4	Total capital investment in all enterprises.....dollars..	6,533,572	.....	61,799	6,045	.....	87,591	281,100	6,097,037
5	(a) Cost of irrigation works and equipment.....dollars..	6,529,274	.....	61,401	6,045	.....	84,891	279,900	6,097,037
6	(b) Investment in water rights.....dollars..	4,298	.....	398	.....	.....	2,700	1,200	.....
7	Area works were capable of supplying with water.....acres...	219,009	.....	10,233	825	.....	15,640	3,734	188,677
8	Average investment per acre irrigated.....dollars..	35.38	.....	.....	7.62	.....	10.51	75.28	37.66
9	Average investment per acre which the works could supply with water.....dollars..	29.83	.....	6.04	7.33	.....	5.64	75.28	32.31

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.

CENSUS OF IRRIGATION - WASHINGTON

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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	\$10,000,000 and more			
31	3,536	257	120	34	8	21	3,690	163	91	39	3	21	1		
.....	4,102	1,139	3,594	7,058	6,071	1,784	5,004	994	3,195	8,781	5,883	701	2		
.....	64,868	41,432	78,799	122,342	195,055	112,517	114,646	29,973	67,222	142,372	204,277	56,523	3		
.....	55,912	34,367	63,602	112,424	159,208	94,911	92,960	25,525	56,862	132,922	167,185	44,970	4		
.....	615	378	1,965	485	2,670	.....	1,219	819	1,594	811	968	702	5		
.....	8,341	6,687	13,232	9,433	33,177	17,606	20,467	3,629	8,766	8,639	36,124	10,651	6		
13,272	3,312,452	1,260,636	5,821,222	12,274,930	22,162,112	5,037,000	2,695,866	1,302,433	3,320,930	19,165,568	11,364,240	12,032,567	7		
13,107	3,255,459	1,244,842	5,726,051	12,098,180	21,774,785	5,037,000	2,635,026	1,278,320	3,264,027	18,712,571	11,226,893	12,032,567	8		
165	56,993	15,794	95,171	176,750	387,347	.....	60,840	24,113	56,903	463,017	137,347	.....	9		
454	83,497	51,449	93,595	135,044	235,488	132,000	137,468	34,278	78,782	162,910	247,683	70,186	10		
.....	51.06	30.43	71.59	100.33	113.62	44.77	23.25	48.46	49.40	138.48	55.63	212.88	11		
29.23	39.67	24.50	60.55	90.90	94.11	38.16	19.42	38.00	42.15	116.75	45.85	171.44	12		
30	3,310	245	115	33	8	21	3,456	157	87	38	3	21	13		
.....	60,950	39,568	75,982	118,342	195,055	112,517	107,597	29,550	66,095	138,372	204,277	56,523	14		
900	367,739	137,872	214,235	409,474	401,150	142,622	343,637	117,907	203,970	543,727	360,452	104,299	15		
.....	6.03	3.48	2.73	3.46	2.06	1.27	3.16	3.99	3.08	3.60	1.76	1.85	16		
.....	14,558	67,555	291,007	543,106	484,326	141,771	29,538	31,290	238,379	724,920	425,731	92,595	17		
.....	7.06	6.53	4.24	4.59	2.49	1.26	0.92	1.62	3.82	5.86	2.00	1.64	18		
.....	1,993	11,902	84,662	128,936	233,084	112,517	34,968	20,762	67,399	143,343	238,540	68,082	19		
.....	7.35	5.68	3.44	4.21	2.08	1.26	0.94	1.51	3.54	5.06	1.78	1.35	20		
.....	9,543	52,656	245,034	483,757	271,495	.....	19,278	28,577	200,464	687,370	50,070	96,720	21		
.....	4	16	36	27	8	21	3	10	41	33	4	21	22		
.....	220	3,215	29,245	99,587	195,055	112,517	159	6,506	46,157	117,724	212,770	50,829	23		
.....	9,341	111,339	1,087,524	3,735,896	13,205,688	3,615,000	6,806	30,859	702,138	5,017,985	5,512,501	10,434,297	24		
.....	42.46	34.63	37.19	37.51	67.70	32.13	42.81	4.74	16.51	42.62	25.91	184.60	25		
.....	29,919	380,268	4,627,416	11,054,758	21,774,765	5,037,000	12,279	111,821	1,909,417	15,880,708	12,957,334	12,032,567	26		
.....	100	3,126	65,247	176,750	387,347	.....	100	6,500	35,606	453,017	137,347	.....	27		
.....	30,019	383,394	4,692,633	11,231,508	22,162,112	5,037,000	12,379	118,321	1,845,023	16,333,725	13,094,681	12,032,567	28		
.....	3,758	34,060	160,491	334,511	401,150	142,622	2,518	8,595	134,294	439,952	387,634	104,299	29		
.....	4,328	49,661	238,972	463,732	484,326	141,771	3,367	12,437	202,251	646,389	425,731	92,595	30		
.....	3,517	39,532	204,273	412,925	271,495	.....	2,657	13,344	172,785	593,160	50,070	96,720	31		
.....	272	3,906	40,834	109,541	233,084	112,517	166	7,026	50,442	135,898	238,540	68,082	32		
.....	34.34	28.50	26.63	34.11	56.66	32.13	41.00	4.38	15.11	36.92	23.11	183.26	33		
.....	15.91	12.71	5.85	4.23	2.09	1.26	20.28	1.77	4.01	4.78	1.78	1.36	34		
.....	19.67	15.45	8.17	4.66	2.48	1.26	21.18	1.91	4.38	5.49	2.00	1.64	35		
.....	.....	3	3	6	4	.....	.....	.....	5	8	2.2	2.1	36		
.....	.....	591	3,873	22,867	192,240	.....	.....	.....	9,224	26,392	115,883	68,082	37		
.....	.....	6,828	14,933	60,649	515,988	.....	.....	.....	8,628	74,582	374,476	140,712	38		
.....	.....	11.55	3.86	2.65	2.68	.....	.....	.....	0.94	2.83	3.23	2.07	39		
.....	.....	30,016	360,645	891,278	12,199,088	.....	.....	.....	72,206	1,186,933	1,757,591	10,434,297	40		
31	3,489	203	23	.....	.....	.....	3,598	120	28	.....	.....	.....	41		
.....	36	39	64	10	.....	.....	76	36	28	9	.....	.....	42		
.....	4	13	28	15	4	.....	9	5	29	21	.....	.....	43		
.....	.....	.....	2	.....	.....	.....	2	.....	2	1	.....	.....	44		
.....	1	.....	2	5	3	.....	.....	.....	1	7	2	1	45		
.....	.....	1	.....	2	.....	1	1	.....	1	1	1	.....	46		
.....	6	1	1	.....	1	.....	5	2	2	.....	.....	.....	47		
.....	21	46	89	33	8	21	64	33	60	36	4	21	48		
.....	2,406	14,175	88,006	228,152	292,185	157,000	9,474	14,110	66,601	279,049	347,060	65,430	49		
.....	16	56	310	258	183	113	43	51	164	411	221	46	50		
6	1,091	162	95	21	7	.....	1,261	49	46	21	2	.....	51		
7	829	34	10	5	.....	.....	811	50	16	8	.....	.....	52		
12	795	21	2	1	.....	.....	794	27	8	2	.....	.....	53		
.....	21	6	1	.....	.....	.....	23	3	2	.....	.....	.....	54		
.....	114	5	3	.....	.....	.....	109	7	6	.....	.....	.....	55		
.....	439	14	3	.....	.....	.....	448	10	5	.....	.....	.....	56		
.....	58	9	4	4	1	1	56	9	5	5	1	1	57		
.....	189	6	2	3	.....	.....	187	8	3	3	.....	.....	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	\$10,000,000 and more			
1	90	34	5	2	.....	21	126	3	2	21	21	.....	1		
.....	93	158	54	415	.....	3,518	251	4	125	340	3,518	.....	2		
.....	3,241	5,786	3,547	10,214	.....	161,876	10,066	775	8,333	3,614	161,876	.....	3		
35,658	26,219	34,958	339,700	.....	6,097,037	48,944	23,000	87,591	277,000	6,097,037	.....	4			
35,260	25,019	34,958	337,000	.....	6,097,037	47,346	23,000	84,891	277,000	6,097,037	.....	5			
398	1,200	.....	2,700	.....	.....	1,598	.....	2,700	.....	.....	.....	6			
3,470	5,944	10,804	10,214	.....	188,877	10,353	825	15,540	3,614	188,877	.....	7			
.....	4.53	9.86	33.26	.....	37.66	4.86	29.68	10.51	76.65	37.66	.....	8			
10.28	4.49	3.24	33.26	.....	38.31	4.73	27.88	5.64	76.65	32.31	.....	9			

³ 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.

⁴ Indebtedness and arrearage were reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION — WASHINGTON

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...	125	1	113	7		2	2	
11	(a) Area irrigated in these enterprises.....acres...	22,296		9,616	613		8,333	3,734	
12	(b) Cost of maintenance and operation.....dollars...	11,314		5,839	116		825	4,434	
13	(c) Average cost per irrigated acre reporting.....dollars...	0.51			0.19		0.10	1.10	
14	Total annual charges ².....dollars...	3,129					3,129		
15	Average charge per irrigated acre reporting.....dollars...	1.81					1.81		
16	Area against which charges were assessed.....acres...	8,940					8,940		
17	Average annual charge per acre assessed.....dollars...	0.35					0.35		
18	Total charges collected ².....dollars...	25,670					5,353	20,317	
INDEBTEDNESS AND ARREARAGE, 1939									
19	Enterprises reporting indebtedness.....number...	3					2		1
20	(a) Area irrigated in these enterprises.....acres...	170,208					8,333		161,876
21	(b) Indebtedness.....dollars...	856,928					28,050		828,878
22	(c) Average indebtedness per acre irrigated.....dollars...	5.03					3.37		5.12
23	(d) Cost of irrigation works and equipment.....dollars...	6,181,928					84,991		6,097,037
24	(e) Investment in water rights.....dollars...	2,700					2,700		
25	(f) Total investment.....dollars...	6,184,628					87,691		6,097,037
26	(g) Maintenance and operation.....dollars...	825					825		
27	(h) Total annual charges ².....dollars...	3,129					3,129		
28	(i) Total charges collected ².....dollars...	5,353					5,353		
29	(j) Area against which annual charges were assessed.....acres...	8,940					8,940		
30	(k) Average indebtedness per acre assessed.....dollars...	1.96					1.96		
31	(l) Average charges per acre assessed.....dollars...	0.35					0.35		
32	(m) Average charges per acre irrigated.....dollars...	1.81					1.81		
33	Enterprises reporting arrearage ².....number...	1					1		
34	(a) Total arrearage.....dollars...	7,000					7,000		
35	(b) Indebtedness.....dollars...	10,550					10,550		
TYPE, 1940									
36	Individual and partnership.....number...	128	1	119	8				
37	Cooperative (incorporated and unincorporated).....number...	2					1	1	
38	Irrigation district.....number...	2					1	1	
39	U. S. Bureau of Reclamation.....number...	1							1
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939									
40	Enterprises reporting pay roll.....number...	3					2	1	
41	Wages and salaries paid and payable for 1939.....dollars...	2,980					980	2,000	
42	Persons employed during week ending April 23, 1939.....number...	1						1	
SOURCE OF SUPPLEMENTAL WATER SUPPLY 1939									
43	Streams, pumped.....number...	7		7					
44	Wells, pumped or flowing.....number...	31		30	1				
45	Streams, gravity or storage.....number...	95	1	82	7		2	2	1

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.

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

DRAINAGE BASIN AND STATION	County	Approximate elevation of station	PRECIPITATION, OCTOBER 1938—SEPTEMBER 1939										TEMPERATURES, 1939	
			Water year		Oct.-Dec.		Jan.-Mar.		Apr.-June		July-Sept.			
			Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹	Amount	Departure ¹	Annual mean	Departure ¹
Columbia River														
Colville.....	Stevens.....	Feet 1,635	Inches 13.05	Inches -3.27	Inches 5.07	Inches -0.20	Inches 4.71	Inches 40.52	Inches 2.58	Inches -1.59	Inches 0.69	Inches -2.00	Degrees F. 47.1	Degrees F. 40.7
Ephrata.....	Grant.....	1,275	6.08	-2.22	1.88	-1.04	2.69	+0.30	0.89	-0.93	0.62	-0.55	54.0	43.0
Goldendale.....	Klickitat.....	1,635	18.45	-2.81	9.57	+3.15	6.93	+1.05	1.34	-0.79	0.61	-0.57	51.1	42.9
Okanogan.....	Okanogan.....	910	8.08	-1.45	2.32	-1.39	3.11	+0.61	2.40	+0.51	0.25	-1.18	52.2	+1.9
Prosser.....	Benton.....	875	5.47	-1.92	2.06	-0.75	1.98	-0.25	0.40	-1.04	1.03	+0.12	53.9	+2.1
Ritzville.....	Adams.....	1,825	8.91	-3.71	2.75	-1.08	2.95	-0.38	0.78	-1.47	0.45	-0.78	51.1	+2.1
Spokane.....	Spokane.....	1,879	10.76	-5.86	3.35	-2.10	5.12	-0.01	1.62	-2.21	0.67	-1.54	50.7	+2.5
Walla Walla.....	Walla Walla.....	952	12.38	-4.63	4.61	-1.00	5.15	-0.18	1.70	-2.54	0.92	-0.81	56.2	+3.1
Waterville.....	Douglas.....	2,676	7.25	-3.28	2.57	-1.20	2.57	-0.72	1.44	-0.53	0.67	-0.83	46.6	+2.0
Yakima.....	Yakima.....	1,068	4.83	-3.32	2.13	-0.67	1.71	-0.95	0.65	-1.04	0.34	-0.66	54.3	+3.8
Snake River														
Colfax.....	Whitman.....	1,950	14.70	-4.72	6.15	-0.47	5.87	-0.62	1.93	-2.10	0.75	-1.53	50.5	+3.0
Pomeroy.....	Garfield.....	1,864	14.07	-3.13	5.22	-0.35	6.69	-0.75	1.55	-2.21	0.61	-1.32	52.0	+1.2
Strait of Juan de Fuca and Georgia Strait														
Bellingham (near).....	Whatcom.....	107	34.69	+0.06	14.88	+1.56	11.78	+1.06	5.84	-0.42	2.19	-2.14	49.8	+1.0
Everett.....	Snohomish.....	127	32.17	-3.08	10.41	-2.60	11.16	-0.31	5.80	-0.74	4.70	+0.57	51.4	+1.7
Olympia.....	Thurston.....	69	43.68	-7.66	16.82	-4.65	21.05	+1.71	3.84	-3.25	2.17	-1.47	52.0	+1.3
Seattle.....	King.....	14	24.70	-9.33	8.77	-4.70	10.39	-1.49	3.01	-2.57	2.53	-0.57	54.1	+3.1
Sequim.....	Clallam.....	200	16.11	-0.71	5.25	-1.28	7.15	+2.02	2.81	-0.08	0.80	-1.37	51.4	+3.2
Pacific Slope														
Aberdeen.....	Grays Harbor..	105	77.63	-4.45	31.34	-1.55	32.99	+2.23	8.99	-3.17	4.31	-1.96	50.8	+1.1
Centralia.....	Lewis.....	182	36.53	-5.15	14.10	-3.61	15.81	-0.09	4.06	-3.14	2.56	-1.31	53.2	+2.1
South Bend.....	Pacific.....	150	74.18	-9.54	28.97	-3.97	32.12	+0.65	9.43	-3.45	3.66	-2.77	52.6	+1.7
Vancouver.....	Clark.....	100	28.28	-8.52	10.44	-3.89	11.78	-1.40	3.47	-2.54	2.59	-0.69	54.6	+2.0

¹Departure from normal.

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[illegible]

⁴ Indebtedness and arrearage were reported only by enterprises serving 5 or more farms.

Temperature.—The only stations in the State whose average temperature was below normal were Kosmos and Longview, where the deficiency was but 0.1°. The maximum for the State of 115° in July has been exceeded but twice since 1890 and has been equalled four additional times. February and June were the only months in which the State average temperature was below normal, while January and December were decidedly warmer than normal. Although the highest temperature for any day occurred in July, August averaged the warmest month of the year; and February averaged the coldest and had the lowest single temperature, 27° below zero. Normally January is the coldest month.

CENSUS OF IRRIGATION - WASHINGTON

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)	STATE TOTAL ¹	COLUMBIA RIVER			
		Total	Direct	Clark Fork	
				Total	Direct
			(1)		(2)
IRRIGATED FARMS AND AREAS					
1 Irrigated farms.....1939..number.....	24,648	22,866	1,626	81	81
2 Area irrigated.....1939..acres.....	615,013	592,527	26,166	1,642	1,642
3 (a) Cropland harvested.....1939..acres.....	520,424	507,089	24,316	1,220	1,220
4 (b) Crop failure.....1939..acres.....	6,113	6,109	233	5	5
5 (c) Pasture.....1939..acres.....	88,476	79,329	1,617	417	417
6 Area irrigated.....1929..acres.....	498,283	481,019	10,035	896	.....
7 .....1919..acres.....	529,899	521,462	24,471	308	.....
8 Increase or decrease (-), 1929-1939.....percent.....	23.2	23.2	160.7	83.3	.....
9 Irrigable area in enterprises.....1940..acres.....	837,096	792,166	36,768	3,614	3,614
10 .....1930..acres.....	915,379	882,074	22,546	3,334	.....
11 .....1920 ² ..acres.....	836,795	815,266	49,209	1,431	.....
12 Excess of irrigable area over the area irrigated.....1940..acres.....	222,083	199,639	10,602	1,972	1,972
13 .....1930..acres.....	416,096	401,055	12,511	2,438	.....
14 .....1920 ² ..acres.....	306,896	294,804	24,738	1,125	.....
15 Area works were capable of supplying with water.....1940..acres.....	731,527	690,595	31,281	2,600	2,600
16 .....1930..acres.....	631,511	601,824	13,678	2,705	.....
17 .....1920..acres.....	637,151	621,458	32,492	1,064	.....
18 Increase or decrease (-), 1930-1940.....percent.....	15.8	14.8	128.7	-3.9	.....
19 Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	116,514	98,088	5,115	958	958
20 .....1930..acres.....	132,228	120,805	3,643	1,809	.....
21 .....1920..acres.....	107,252	99,996	8,021	758	.....
22 Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	84.1	85.8	83.6	63.2	63.2
23 .....1929..percent.....	79.1	79.9	73.4	33.1	.....
24 .....1919..percent.....	82.2	83.9	75.3	28.8	.....
CAPITAL INVESTED TO JANUARY 1					
25 Total investment in irrigation enterprises.....1940..dollars.....	56,415,196	55,371,733	3,556,136	67,725	67,725
26 (a) Cost of irrigation works and equipment.....1940..dollars.....	55,678,678	54,640,828	3,484,531	66,970	66,970
27 (b) Investment in water rights (reported).....1940..dollars.....	736,518	731,105	71,605	755	755
28 Total investment in irrigation enterprises.....1930..dollars.....	40,561,895	39,331,909	1,377,002	50,956	.....
29 .....1920..dollars.....	29,299,011	28,090,818	2,229,066	7,293	.....
30 Increase or decrease (-), 1930-1940.....percent.....	39.1	40.7	158.3	32.9	.....
31 Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	77.12	80.18	113.68	26.05	26.05
32 .....1930..dollars.....	64.23	65.39	100.67	18.94	.....
33 .....1920..dollars.....	45.98	46.65	68.60	6.85	.....
34 Average investment per acre irrigated.....1939..dollars.....	91.73	93.45	135.91	41.25	41.25
35 Estimated final investment in existing enterprises.....1940..dollars.....	58,141,007	56,891,620	3,641,732	68,650	68,650
36 Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	69.46	71.82	99.05	19.00	19.00
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
	Primary	Supplemental	Primary	Supplemental	
	Enterprises		Enterprises		
37 Enterprises reporting maintenance and operation.....1939..number.....	3,742	125	3,015	124	780
38 Area irrigated in these enterprises.....1939..acres.....	602,414	22,296	560,083	22,261	24,500
39 Cost of maintenance and operation.....1939..dollars.....	1,673,992	11,314	1,597,619	11,289	242,708
40 Average cost, per acre irrigated.....1939..dollars.....	2.78	0.51	2.75	0.51	9.91
41 Total annual charges (reported) ³.....1939..dollars.....	1,542,453	3,129	1,474,678	3,129	101,805
42 Average annual charge per acre irrigated.....1939..dollars.....	3.04	1.81	3.00	1.81	12.44
43 Area against which charges were assessed.....1939..acres.....	573,094	8,940	548,066	8,940	10,883
44 Average annual charge per acre assessed.....1939..dollars.....	2.69	0.35	2.69	0.35	9.35
45 Total charges collected ³.....1939..dollars.....	1,062,485	25,670	1,010,728	25,670	90,085
46 Indebtedness to December 31 (reported) ⁴.....1939..dollars.....	21,764,676	856,928	21,529,336	856,928	320,853
WATER DELIVERED TO IRRIGATORS, 1939					
47 Enterprises reporting water delivered.....1939..number.....	3,847	130	3,151	129	816
48 Area irrigated by these enterprises.....1939..acres.....	590,627	184,534	571,261	184,499	25,617
49 Water delivered.....1939..acre-feet.....	2,548,581	704,182	2,500,619	704,142	110,206
50 Average water delivered per acre irrigated.....1939..acre-feet.....	4.3	3.8	4.4	3.8	4.3
51 Average cost of water per acre irrigated.....1939..dollars.....	3.35	0.75	3.28	0.75	10.46
52 Average cost of water per acre-foot delivered.....1939..dollars.....	0.78	0.20	0.75	0.20	2.43
DRAINAGE OF IRRIGATED LAND					
53 Enterprises reporting land drained or needing drainage.....1939..number.....	208	61	15	2	2
54 Irrigable area in these enterprises.....1939..acres.....	448,702	442,694	601	(b)	(b)
55 Irrigated area in these enterprises.....1939..acres.....	300,362	296,021	404	(b)	(b)
56 Area for which drains have been installed.....1939..acres.....	178,212	177,194	465	(b)	(b)
57 Additional area needing drainage.....1939..acres.....	18,673	18,395	60	(b)	(b)

¹ Data for unidentified independent basins for the 1930 and 1920 Censuses are included only in State totals.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.

CENSUS OF IRRIGATION—WASHINGTON

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

COLUMBIA RIVER—Continued

Kettle River	Colville River	Spokane River			Sanpoil River	Okanogan River	Methow River	Lake Chelan	Entiat River	
		Total	Direct	Latah Creek						
(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
43	103	1,838	1,826	12	10	979	512	322	187	1
878	3,629	16,924	16,553	371	226	18,765	12,876	5,837	2,861	2
876	3,230	16,114	15,908	206	221	18,150	11,077	5,647	2,499	3
.....	6	285	285	.....	.....	122	65	40	60	4
2	393	525	360	165	5	493	1,743	160	2	5
.....	2,176	18,422	.....	.....	.....	21,462	11,720	.....	1,912	6
.....	6,960	16,453	.....	.....	.....	20,583	12,579	.....	2,054	7
.....	66.8	-8.1	.....	.....	.....	-12.6	9.9	.....	33.9	8
2,066	4,492	19,771	19,400	371	231	26,255	17,043	6,491	2,939	9
.....	3,622	38,220	.....	.....	.....	28,000	19,674	.....	2,154	10
.....	18,200	40,391	.....	.....	.....	42,042	24,017	.....	2,652	11
1,188	863	2,847	2,847	.....	5	7,490	4,168	654	378	12
.....	1,446	19,798	.....	.....	.....	7,538	7,951	.....	242	13
.....	11,240	23,938	.....	.....	.....	21,459	11,438	.....	598	14
1,167	4,288	19,595	19,224	371	226	23,818	15,166	6,348	2,925	15
.....	2,447	30,482	.....	.....	.....	27,790	17,346	.....	2,135	16
.....	13,993	21,075	.....	.....	.....	30,261	16,529	.....	2,251	17
.....	75.2	-35.7	.....	.....	.....	-14.3	-12.6	.....	37.0	18
289	659	2,671	2,671	.....	.....	5,053	2,291	511	364	19
.....	271	12,060	.....	.....	.....	6,328	5,626	.....	223	20
.....	7,033	5,222	.....	.....	.....	9,678	3,950	.....	197	21
75.2	84.6	86.4	86.1	100.0	100.0	78.8	84.9	92.0	87.6	22
.....	88.9	60.4	.....	.....	.....	77.2	67.6	.....	89.6	23
.....	49.7	75.8	.....	.....	.....	68.0	76.1	.....	91.2	24
11,680	39,202	2,387,514	2,378,374	9,140	1,055	3,601,840	681,331	866,494	163,675	25
11,275	37,775	2,375,776	2,366,636	9,140	855	3,577,846	674,473	865,736	163,050	26
405	1,427	11,738	11,738	.....	200	23,994	6,858	758	825	27
.....	353,290	1,352,395	.....	.....	.....	3,233,799	770,183	.....	184,992	28
.....	486,747	1,637,743	.....	.....	.....	2,256,018	483,809	.....	73,889	29
.....	-89.0	76.5	.....	.....	.....	11.4	-11.5	.....	-11.5	30
10.01	9.14	121.84	123.72	24.64	4.67	151.22	44.92	136.50	56.96	31
.....	145.19	44.37	.....	.....	.....	116.37	44.40	.....	86.05	32
.....	34.79	75.56	.....	.....	.....	74.65	28.27	.....	32.82	33
13.30	10.80	141.07	143.68	24.64	4.67	161.94	52.92	148.45	63.91	34
12,680	41,102	2,488,110	2,478,470	9,640	1,055	3,570,947	698,951	873,455	163,725	35
6.14	9.15	125.85	127.76	25.96	4.57	147.44	41.01	134.56	55.71	36
						Primary	Supplemental	Primary	Supplemental	
						Enterprises		Enterprises		
38	80	90	79	11	10	235	4	134	3	
846	3,144	16,620	16,259	361	226	16,314	178	12,709	30	
1,236	2,461	121,617	120,437	1,160	168	97,928	253	22,544	676	
1.46	0.78	7.32	7.41	3.27	0.74	5.35	1.42	1.77	22.53	
.....	151	147,323	147,323	.....	.....	82,720	.....	24,015	.....
.....	0.20	9.57	9.57	.....	.....	6.53	.....	2.94	.....
.....	755	16,830	16,830	.....	.....	15,656	.....	8,501	.....
.....	0.20	8.75	8.75	.....	.....	5.28	.....	2.82	.....
.....	150	142,640	142,640	.....	.....	90,799	.....	23,405	.....
.....	.....	681,066	681,066	.....	.....	675,576	.....	137,940	.....
40	96	97	85	12	10	247	3	137	3	
878	3,578	16,924	16,553	371	226	18,761	59	9,900	80	
2,627	8,938	77,594	76,980	854	904	103,125	129	50,200	124	
3.0	1.8	4.6	2.6	4.0	0.74	5.5	2.2	5.1	4.1	
1.45	0.76	9.34	9.48	3.27	0.74	6.86	1.08	2.33	22.53	
0.49	0.39	2.04	2.05	1.27	0.74	1.25	0.49	0.46	22.53	
.....	5	(5)	(5)	(5)	(5)	2,496	.....	.....	.....
.....	425	(5)	(5)	(5)	(5)	1,694	.....	.....	.....
.....	296	(5)	(5)	(5)	(5)	22	.....	.....	.....
.....	92	(5)	(5)	(5)	(5)	217	.....	.....	.....

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 - WASHINGTON

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)		COLUMBIA RIVER—Continued					
		Wenatchee River		Crab Creek		Yakima River	
		(13)		(14)		Total	
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number.....	1,829		149		13,629	
2	Area irrigated.....1939..acres.....	22,091		6,007		439,191	
3	(a) Cropland harvested.....1939..acres.....	21,934		5,074		362,613	
4	(b) Crop failure.....1939..acres.....	94		39		4,389	
5	(c) Pasture.....1939..acres.....	123		894		66,189	
6	Area irrigated.....1929..acres.....	24,606		1,761		325,299	
7	.....1919..acres.....	23,734		6,038		337,293	
8	Increase or decrease (-), 1929-1939.....percent.....	-10.2		241.1		33.2	
9	Irrigable area in enterprises.....1940..acres.....	27,781		8,043		587,001	
10	.....1930..acres.....	27,548		1,983		636,243	
11	.....1920 ¹ ..acres.....	39,288		10,400		436,797	
12	Excess of irrigable area over the area irrigated.....1940..acres.....	5,690		2,036		163,810	
13	.....1930..acres.....	2,942		222		311,044	
14	.....1920 ¹ ..acres.....	15,554		4,312		99,504	
15	Area works were capable of supplying with water.....1940..acres.....	24,474		7,628		503,375	
16	.....1930..acres.....	25,717		1,885		399,726	
17	.....1920..acres.....	34,568		8,048		353,644	
18	Increase or decrease (-), 1930-1940.....percent.....	-4.8		304.7		25.9	
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	2,383		1,621		70,184	
20	.....1930..acres.....	1,111		124		74,427	
21	.....1920..acres.....	10,834		1,960		16,351	
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	90.3		78.7		86.1	
23	.....1929..percent.....	93.7		93.4		81.4	
24	.....1919..percent.....	68.7		75.6		95.4	
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars.....	2,954,690		250,287		39,033,395	
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	2,844,168		240,092		38,606,392	
27	(b) Investment in water rights (reported).....1940..dollars.....	110,522		10,195		428,003	
28	Total investment in irrigation enterprises.....1930..dollars.....	2,922,367		55,950		25,282,348	
29	.....1920..dollars.....	1,868,541		859,050		14,819,689	
30	Increase or decrease (-), 1930-1940.....percent.....	1.1		347.3		54.4	
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	120.73		32.81		77.54	
32	.....1930..dollars.....	113.64		29.68		63.25	
33	.....1920..dollars.....	54.05		106.74		41.99	
34	Average investment per acre irrigated.....1939..dollars.....	133.75		41.67		90.11	
35	Estimated final investment in existing enterprises.....1940..dollars.....	2,959,227		253,948		40,030,657	
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	106.52		31.57		68.20	
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary		Supplemental		Primary	
		Enterprises		Enterprises		Enterprises	
37	Enterprises reporting maintenance and operation.....1939..number.....	237	4	128	(2) 1	621	105
38	Area irrigated in these enterprises.....1939..acres.....	21,830	3,632	5,780	(5)	426,121	9,867
39	Cost of maintenance and operation.....1939..dollars.....	113,057	4,561	32,006	(2)	766,672	4,728
40	Average cost, per acre irrigated.....1939..dollars.....	5.18	1.26	5.54	(2)	1.86	0.49
41	Total annual charges (reported) ³.....1939..dollars.....	119,083			3,129	848,085	
42	Average annual charge per acre irrigated.....1939..dollars.....	6.73			1.81	2.14	
43	Area against which charges were assessed.....1939..acres.....	19,914			8,940	439,466	
44	Average annual charge per acre assessed.....1939..dollars.....	5.98			0.35	1.93	
45	Total charges collected.....1939..dollars.....	102,351	20,317		2,705	428,989	
46	Indebtedness to December 31 (reported) ⁴.....1939..dollars.....	467,011			17,500	19,734,915	828,678
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number.....	247	4	131	(2) 1	629	109
48	Area irrigated by these enterprises.....1939..acres.....	20,837	3,632	5,738	(5)	419,442	172,040
49	Water delivered.....1939..acre-feet.....	80,266	10,836	28,347	(2)	1,894,813	675,275
50	Average water delivered per acre irrigated.....1939..acre-feet.....	3.9	3.0	4.9	(2)	4.5	3.9
51	Average cost of water per acre irrigated.....1939..dollars.....	7.47	7.11	5.66	(2)	2.15	0.48
52	Average cost of water per acre-foot delivered.....1939..dollars.....	1.94	2.42	1.15	(2)	0.48	0.12
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number.....	(2) 1				23	
54	Irrigable area in these enterprises.....1939..acres.....	(2)				438,032	
55	Irrigated area in these enterprises.....1939..acres.....	(2)				292,634	
56	Area for which drains have been installed.....1939..acres.....	(2)				176,549	
57	Additional area needing drainage.....1939..acres.....					17,922	

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 - WASHINGTON

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

COLUMBIA RIVER-Continued									
Yakima River-Continued				Snake River				Walla Walla River	
Direct	Naches River	Ahtanum Creek	Total	Direct	Grande Ronde River	Asotin Creek	Palouse River		
(15)	(16)	(17)		(18)	(19)	(20)	(21)	(22)	
9,246	3,976	407	480	133	9	316	22	825	1
361,134	56,300	12,757	7,418	2,757	121	3,530	1,040	21,631	2
303,314	61,302	7,997	7,056	2,631	121	3,430	873	17,416	3
3,369	20	1,000	55	33	.....	.....	22	536	4
57,451	4,978	3,700	338	93	.....	100	145	3,879	5
257,220	29,856	8,172	8,715	1,040	.....	3,513	990	16,508	6
254,262	19,864	9,287	11,768	4,047	.....	3,051	1,735	22,270	7
41.6	67.9	56.1	-14.5	68.1	.....	0.5	6.1	18.0	8
500,381	71,957	14,663	8,789	3,596	125	3,875	1,193	26,421	9
507,193	30,514	5,996	10,375	1,719	.....	4,341	1,320	21,729	10
345,373	21,656	9,982	36,295	21,233	.....	4,051	3,645	36,157	11
136,247	15,957	1,906	1,341	839	4	345	153	4,590	12
249,973	558	824	1,660	79	.....	828	340	3,221	13
91,111	1,792	695	24,507	20,186	.....	1,000	1,910	13,887	14
426,851	61,861	14,663	8,618	3,425	125	3,875	1,193	25,243	15
317,165	30,386	8,936	9,894	1,659	.....	4,341	1,150	20,000	16
269,163	20,284	9,342	30,269	20,130	.....	4,051	2,020	29,965	17
34.6	103.6	64.1	-12.3	106.4	.....	-10.7	3.7	26.2	18
62,717	5,561	1,906	1,170	688	4	345	153	3,412	19
59,945	430	764	1,173	19	.....	828	170	1,492	20
14,901	420	55	18,481	16,083	.....	1,000	285	7,695	21
85.3	91.0	87.0	86.4	80.5	96.8	91.1	87.2	86.5	22
81.1	98.6	91.5	88.1	98.9	.....	80.9	85.2	92.5	23
94.5	97.9	99.4	98.9	20.1	.....	75.3	85.9	74.3	24
32,502,040	6,386,795	144,560	908,893	139,957	1,475	722,589	44,872	609,276	25
32,376,491	6,064,341	144,560	900,163	139,777	1,475	714,089	41,822	558,361	26
125,549	302,454	.....	8,730	180	.....	8,500	50	50,895	27
22,644,214	1,746,759	103,747	493,192	74,361	.....	250,331	42,595	551,351	28
13,912,727	458,027	88,443	1,368,296	471,772	.....	606,084	175,100	890,980	29
43.5	265.6	39.3	84.3	88.2	.....	188.7	5.3	10.5	30
76.14	103.24	9.86	105.46	40.86	11.80	186.47	37.61	24.14	31
71.40	57.49	11.61	49.85	44.62	.....	57.67	37.04	27.57	32
51.69	22.58	9.47	46.20	23.44	.....	149.61	86.08	29.73	33
89.26	113.44	11.33	122.03	50.76	12.19	204.70	49.15	27.01	34
33,497,467	6,388,530	144,660	917,116	147,762	1,483	722,589	45,282	612,758	35
68.94	88.78	9.87	104.35	41.09	11.86	186.47	37.06	23.19	36
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.
Enterprises		Enterprises		Enterprises		Enterprises		Enterprises	
501	90	90	5	21	10	143	8	274	5
357,332	9,340	55,278	121	12,621	426	7,261	118	20,959	101
641,253	3,929	138,375	135	7,044	664	63,264	1,020	26,989	236
1.79	0.42	2.46	1.12	0.56	1.56	8.71	8.64	1.29	2.31
673,004	.....	166,561	.....	8,620	.....	46,456	.....	22,278	.....
2.04	.....	3.15	.....	0.72	.....	12.99	.....	1.70	.....
368,048	.....	58,846	.....	12,572	.....	3,897	.....	13,643	.....
1.83	.....	2.83	.....	0.68	.....	11.92	.....	1.63	.....
327,958	.....	92,257	.....	8,774	.....	41,980	.....	22,158	.....
17,464,152	828,878	1,187,732	.....	83,031	.....	.....	.....	68,306	.....
509	93	97	5	23	10	153	9	286	7
352,535	171,493	54,150	121	12,767	426	7,420	121	20,845	126
1,635,310	673,653	224,102	325	25,401	1,297	23,766	443	82,072	297
4.6	3.9	4.1	2.7	2.0	3.0	9.2	3.7	3.9	2.4
2.06	0.42	3.04	1.12	0.76	1.56	8.89	8.64	1.62	2.34
0.44	0.11	0.74	1.12	0.38	1.56	2.78	12.83	0.41	0.99
16	.....	5	.....	2	.....	2	.....	2	.....
387,372	.....	42,032	.....	(2)	.....	(2)	.....	(2)	.....
257,975	.....	27,041	.....	(2)	.....	(2)	.....	(2)	.....
173,476	.....	3,025	.....	(2)	.....	(2)	.....	(2)	.....
16,872	.....	50	.....	(2)	.....	(2)	.....	(2)	.....

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.

CENSUS OF IRRIGATION - WASHINGTON

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			
		Klickitat River	White Salmon River	Lewis River	Cowlitz River
		(23)	(24)	(25)	(26)
IRRIGATED FARMS AND AREAS					
1	Irrigated farms.....1939..number.....	98	110	24	21
2	Area irrigated.....1939..acres.....	7,251	4,717	260	219
3	(a) Cropland harvested.....1939..acres.....	5,986	3,247	204	150
4	(b) Crop failure.....1939..acres.....	200	50		
5	(c) Pasture.....1939..acres.....	1,065	1,420	5	69
6	Area irrigated.....1929..acres.....	6,797	4,034		
7	.....1919..acres.....	12,332	6,247		
8	Increase or decrease (-), 1929-1939.....percent.....	6.7	16.9		
9	Irrigable area in enterprises.....1940..acres.....	7,702	5,482	768	509
10	.....1930..acres.....	7,538	5,609		
11	.....1920 ¹ ..acres.....	19,241	11,958		
12	Excess of irrigable area over the area irrigated.....1940..acres.....	451	768	499	290
13	.....1930..acres.....	741	1,576		
14	.....1920 ¹ ..acres.....	6,909	5,711		
15	Area works were capable of supplying with water.....1940..acres.....	7,702	5,375	372	394
16	.....1930..acres.....	7,004	4,697		
17	.....1920..acres.....	13,440	7,277		
18	Increase or decrease (-), 1930-1940.....percent.....	10.0	14.4		
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	451	858	103	175
20	.....1930..acres.....	207	663		
21	.....1920..acres.....	1,108	1,030		
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	94.1	87.8	72.3	85.6
23	.....1929..percent.....	97.0	85.9		
24	.....1919..percent.....	91.8	85.8		
CAPITAL INVESTED TO JANUARY 1					
25	Total investment in irrigation enterprises.....1940..dollars.....	79,743	137,700	9,835	11,262
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	76,886	136,390	9,705	11,155
27	(b) Investment in water rights (reported).....1940..dollars.....	2,856	1,310	130	87
28	Total investment in irrigation enterprises.....1930..dollars.....	6,126	111,862		
29	.....1920..dollars.....	64,423	91,786		
30	Increase or decrease (-), 1930-1940.....percent.....	(2)	23.1		
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	10.35	25.62	26.44	28.58
32	.....1930..dollars.....	0.87	23.82		
33	.....1920..dollars.....	4.79	12.61		
34	Average investment per acre irrigated.....1939..dollars.....	11.00	29.19	38.86	51.42
35	Estimated final investment in existing enterprises.....1940..dollars.....	84,268	147,930	10,902	14,487
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	10.94	26.97	14.20	29.46
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
		Primary	Sup.	Primary	Sup.
		Enterprises		Enterprises	
37	Enterprises reporting maintenance and operation.....1939..number.....	15	1	20	1
38	Area irrigated in these enterprises.....1939..acres.....	7,241	(3)	4,616	(3)
39	Cost of maintenance and operation.....1939..dollars.....	763	(3)	2,895	(3)
40	Average cost, per acre irrigated.....1939..dollars.....	0.10	(3)	0.63	(3)
41	Total annual charges (reported) ⁴.....1939..dollars.....	3,023		2,495	
42	Average annual charge per acre irrigated.....1939..dollars.....	0.43		0.58	
43	Area against which charges were assessed.....1939..acres.....	6,973		4,862	
44	Average annual charge per acre assessed.....1939..dollars.....	0.43		0.51	
45	Total charges collected ⁴.....1939..dollars.....	320	2,648	2,373	
46	Indebtedness to December 31 (reported) ⁵.....1939..dollars.....		10,550	7,000	
WATER DELIVERED TO IRRIGATORS, 1939					
47	Enterprises reporting water delivered.....1939..number.....	13	1	24	2
48	Area irrigated by these enterprises.....1939..acres.....	7,219	(3)	4,217	(3)
49	Water delivered.....1939..acre-feet.....	7,405	(3)	13,604	(3)
50	Average water delivered per acre irrigated.....1939..acre-feet.....	1.0	(3)	3.2	(3)
51	Average cost of water per acre irrigated.....1939..dollars.....	0.47		0.59	
52	Average cost of water per acre-foot delivered.....1939..dollars.....	0.46		0.18	
DRAINAGE OF IRRIGATED LAND					
53	Enterprises reporting land drained or needing drainage.....1939..number.....				
54	Irrigable area in these enterprises.....1939..acres.....		(3)	1	
55	Irrigated area in these enterprises.....1939..acres.....		(3)		
56	Area for which drains have been installed.....1939..acres.....		(3)		
57	Additional area needing drainage.....1939..acres.....		(3)		

* Data for 4 enterprises (40 acres irrigated) in drainage basin (35), Sumas River, Washington (tributary of the Fraser River, Canada), are included in drainage basin (34), Nooksack River Area.

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.

CENSUS OF IRRIGATION — WASHINGTON

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

STRAIT OF JUAN DE FUCA										GEORGIA STRAIT	PACIFIC SLOPE		
Total	Puget Sound						Skagit and Samish Rivers	Dungeness River	Nooksack River Area	Total	Chehalis River	Other Pacific Slope Streams	
	Total	Direct	Nisqually River	White and Puyallup Rivers	Lake Washington	Snohomish River							
		(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)		(36)	(37)	
1,548	1,072	179	451	376	56	10	9	467	39	195	159	36	
20,248	9,236	1,000	3,899	3,634	590	113	143	10,859	528	1,710	1,381	329	
12,017	6,354	766	2,447	2,575	481	85	90	5,573	463	855	596	259	
4	4	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
8,227	2,878	231	1,452	1,058	109	28	53	5,296	65	855	785	70	
8,960	.....	.....	.....	.....	.....	.....	.....	8,960	.....	.....	.....	.....
6,160	.....	.....	.....	.....	.....	.....	.....	6,160	.....	.....	.....	.....
126.0	.....	.....	.....	.....	.....	.....	.....	21.3	.....	.....	.....	.....
40,942	19,629	6,185	5,808	6,543	905	188	269	21,044	1,140	2,848	2,417	431	
20,142	.....	.....	.....	.....	.....	.....	.....	20,142	.....	.....	.....	.....
12,660	.....	.....	.....	.....	.....	.....	.....	12,660	.....	.....	.....	.....
20,694	10,393	5,185	1,909	2,909	315	75	126	10,175	612	1,138	1,036	102	
11,182	.....	.....	.....	.....	.....	.....	.....	11,182	.....	.....	.....	.....
6,500	.....	.....	.....	.....	.....	.....	.....	6,500	.....	.....	.....	.....
37,367	17,854	5,850	5,808	4,972	886	138	209	19,444	1,024	2,541	2,120	421	
17,007	.....	.....	.....	.....	.....	.....	.....	17,007	.....	.....	.....	.....
9,860	.....	.....	.....	.....	.....	.....	.....	9,860	.....	.....	.....	.....
112.2	.....	.....	.....	.....	.....	.....	.....	10.4	.....	.....	.....	.....
17,119	8,418	4,850	1,909	1,338	296	25	126	8,575	498	831	739	92	
8,647	.....	.....	.....	.....	.....	.....	.....	8,647	.....	.....	.....	.....
3,700	.....	.....	.....	.....	.....	.....	.....	3,700	.....	.....	.....	.....
54.2	52.3	17.1	67.1	73.1	86.6	81.0	53.2	55.9	.....	.....	.....	.....
50.9	.....	.....	.....	.....	.....	.....	.....	50.9	.....	.....	.....	.....
62.5	.....	.....	.....	.....	.....	.....	.....	62.5	.....	.....	.....	.....
934,501	628,122	125,029	265,142	190,215	41,792	5,944	6,805	299,574	27,116	81,846	65,585	16,261	
929,711	625,472	123,107	265,142	189,710	41,598	5,915	6,780	297,459	26,970	81,369	65,134	16,235	
4,790	2,650	1,922	.....	505	194	29	25	2,115	146	477	451	26
296,126	.....	.....	.....	.....	.....	.....	.....	296,126	.....	.....	.....	.....
94,010	.....	.....	.....	.....	.....	.....	.....	94,010	.....	.....	.....	.....
215.6	.....	.....	.....	.....	.....	.....	.....	1.2	.....	.....	.....	.....
25.01	35.58	21.37	45.65	38.26	47.17	43.07	25.30	15.41	26.48	32.21	30.94	38.62	
16.82	.....	.....	.....	.....	.....	.....	.....	16.82	.....	.....	.....	.....
9.53	.....	.....	.....	.....	.....	.....	.....	9.53	.....	.....	.....	.....
46.15	68.01	125.03	68.00	52.34	70.83	52.60	47.59	27.56	51.36	47.86	47.49	49.43	
1,121,362	814,633	143,455	426,642	196,505	42,037	5,994	7,155	299,574	31,586	96,529	79,768	16,761	
27.39	41.50	23.19	79.46	30.03	46.45	31.88	26.60	14.24	27.71	33.89	33.00	38.89	
Primary	Sup.							Primary	Sup.				
Enterprises	Enterprises							Enterprises	Enterprises				
503	1	486	145	42	241	49	8	9	33	191	156	35	
20,141	(3)	9,136	968	3,899	3,592	564	113	10,869	(3)	512	1,378	325	
65,417	(3)	50,925	6,485	10,075	27,084	6,035	1,230	13,925	(3)	2,100	8,856	5,842	
3.25	(3)	5.57	6.70	2.58	7.64	10.70	10.94	1.27	(3)	4.10	5.28	6.20	
67,700	.....	23,773	1,526	11,851	7,695	2,701	.....	43,927	.....	75	.....	.....
4.65	.....	6.36	8.57	3.85	14.80	73.00	.....	4.06	.....	1.00	.....	.....
24,953	.....	6,002	178	5,267	520	37	.....	18,951	.....	75	.....	.....
2.71	.....	3.95	8.57	2.25	14.80	73.00	.....	2.32	.....	1.00	.....	.....
51,657	.....	22,394	.....	12,000	7,695	2,699	.....	20,263	.....	100	.....	.....
235,340	.....	138,500	.....	138,500	.....	.....	.....	96,840	.....	.....	.....	.....
475	1	461	120	42	244	49	6	6	29	192	158	34	
17,208	(3)	8,946	879	3,899	3,542	544	82	8,129	(3)	493	1,655	1,380	
46,376	(3)	15,961	1,471	9,448	3,824	1,082	156	30,350	(3)	511	1,075	834	
2.7	(3)	1.8	1.7	2.4	1.1	2.0	1.9	3.7	(3)	1.0	0.6	0.8	
5.41	(3)	6.03	7.19	3.44	7.67	11.23	13.23	4.73	(3)	4.35	5.38	5.03	
2.01	(3)	3.38	4.30	3.44	7.10	5.75	13.23	4.73	(3)	4.20	8.32	8.34	
54	.....	50	22	3	17	4	4	(3)	1	3	90	86
5,097	.....	4,937	239	4,459	145	13	81	80	.....	268	643	631
3,651	.....	3,596	107	3,322	100	13	54	15	.....	102	588	578
253	.....	203	91	.....	63	12	37	40	.....	152	613	603
276	.....	271	19	200	15	.....	7	.....	.....	2	2	.....
54	.....	50	22	3	17	4	4	(3)	1	3	90	86
5,097	.....	4,937	239	4,459	145	13	81	80	.....	268	643	631
3,651	.....	3,596	107	3,322	100	13	54	15	.....	102	588	578
253	.....	203	91	.....	63	12	37	40	.....	152	613	603
276	.....	271	19	200	15	.....	7	.....	.....	2	2	.....

*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—WASHINGTON

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	Direct (1)	Clark Fork		Kettle River (4)	Colville River (5)
					Total	Direct (2)		
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
1	Enterprises.....1940..number.....	4,120	3,346	825	56	56	40	98
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	178	206	38	46	46	29	44
3	Diversion dams.....1940..total number.....	1,755	1,681	251	44	44	25	59
4	1930..total number.....	498	482	2	9	.....	.....	18
5	1920..total number.....	579	570	9	5	.....	.....	40
6	(a) Concrete and masonry.....1940..number.....	166	164	6	1	1	.....	1
7	(b) Timber.....1940..number.....	453	422	93	12	12	6	16
8	(c) Earth and rock.....1940..number.....	725	702	127	15	15	15	21
9	(d) Other, mixed, and not reported.....1940..number.....	411	393	25	16	16	4	19
10	Main canals and laterals.....1940..total length, miles.....	4,248.6	4,094.6	185.4	37.0	37.0	27.4	38.8
11	1930..total length, miles.....	3,635	3,468	51	15	.....	.....	33
12	1920..total length, miles.....	5,615	5,519	198	12	.....	.....	195
13	(a) Earth.....1940..length, miles.....	3,581	3,446	132	34	34	23	33
14	(b) Lined.....1940..length, miles.....	667.6	648.6	53.4	3.0	3.0	4.4	5.8
15	1940..capacity, c.f.s. ²	15,104	14,072	761	89	89	50	146
16	1930..capacity, c.f.s. ²	14,987	14,443	205	81	.....	.....	61
17	1920..capacity, c.f.s. ²	16,242	15,607	630	99	.....	.....	393
18	Pipe lines ³.....1940..total length, miles.....	2,612.7	2,304.1	542.9	9.7	9.7	1.7	1.8
19	1930..total length, miles.....	1,136.9	1,082.5	148.4	2.5	.....	.....	2.4
20	1920..total length, miles.....	790.0	785.9	162.2	1.0	.....	.....	14.6
21	(a) Concrete.....1940..length, miles.....	614.9	608.8	63.7	.....	.....	.....	.....
22	(b) Metal.....1940..length, miles.....	1,239.0	951.6	338.5	6.4	6.4	0.7	1.1
23	(c) Wood-stave.....1940..length, miles.....	654.3	640.3	126.9	2.0	2.0	.....	0.6
24	(d) Other.....1940..length, miles.....	104.5	103.4	13.8	1.3	1.3	1.0	0.1
25	Storage dams.....1940..total number.....	125	108	31	11	11	.....	1
26	1930..total number.....	100	91	1	1	.....	.....	2
27	1920..total number.....	115	113	18	1	.....	.....	1
28	(a) Concrete and masonry.....1940..number.....	21	16	3	.....	.....	.....	.....
29	(b) Earth and rock.....1940..number.....	81	75	24	2	2	.....	1
30	(c) Other, mixed, and not reported.....1940..number.....	23	17	4	9	9	.....	.....
31	Reservoirs.....1940..total number.....	114	83	23	11	11	.....	1
32	(a) 1-99 acre-feet capacity.....1940..number.....	81	61	19	11	11	.....	1
33	(b) 100-999 acre-feet capacity.....1940..number.....	9	8	4	.....	.....	.....	.....
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	24	24	.....	.....	.....	.....	.....
35	1940..total capacity, ac.-ft. ⁴	1,165,527	1,165,263	1,681	20	20	.....	(⁵)
36	1930..total number.....	78	70	1	1	.....	.....	.....
37	1930..total capacity, ac.-ft.....	699,807	699,764	50	3,060	.....	.....	.....
38	Wells, flowing.....1940..number.....	50	43	16	.....	.....	.....	1
39	1930..number.....	42	42	1	.....	.....	.....	.....
40	1920..number.....	60	59	8	.....	.....	.....	.....
41	1940..yield, g.p.m.....	21,132	19,685	4,070	.....	.....	.....	(⁵)
42	1930..yield, g.p.m.....	27,290	27,290	300	.....	.....	.....	.....
43	1920..yield, g.p.m.....	14,925	14,925	4,390	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	1,041	799	315	.....	.....	.....	.....
45	1930..number.....	1,019	879	11	.....	.....	.....	3
46	1920..number.....	520	517	166	.....	.....	.....	1
47	1940..yield, g.p.m.....	287,327	263,181	70,489	.....	.....	.....	.....
48	1930..yield, g.p.m.....	306,800	269,274	11,325	.....	.....	.....	975
49	1920..yield, g.p.m.....	227,744	227,624	58,223	.....	.....	.....	40
50	Pumping plants.....1940..total number.....	2,487	1,923	607	3	3	1	5
51	1930..total number.....	1,951	1,748	219	.....	.....	.....	3
52	Prime movers.....1940..capacity, hp.....	37,131	34,274	8,523	65	65	(⁵)	16
53	1930..capacity, hp.....	39,187	30,793	6,625	.....	.....	.....	15
54	1920..capacity, hp.....	22,829	22,801	6,451	.....	.....	.....	23
55	(a) Electric.....1940..number.....	2,071	1,622	531	.....	.....	.....	(⁵)
56	1940..capacity, hp.....	26,943	25,239	7,542	.....	.....	.....	2
57	(b) Internal-combustion.....1940..number.....	353	248	75	.....	.....	.....	(⁵)
58	1940..capacity, hp.....	4,560	3,442	984	.....	.....	.....	2
59	(c) Other ⁶.....1940..number.....	63	53	1	3	3	1	(⁵)
60	1940..capacity, hp.....	5,628	5,593	.....	65	65	(⁵)	(⁵)
61	Pumps.....1940..total number.....	2,488	1,917	605	1	1	1	5
62	1930..number.....	2,023	1,819	228	.....	.....	.....	3
63	1920..number.....	1,059	1,050	347	.....	.....	.....	5
64	1940..capacity, g.p.m.....	953,751	874,008	196,667	1,800	1,800	(⁵)	2,096
65	1930..capacity, g.p.m.....	993,303	908,708	215,538	.....	.....	.....	975
66	1920..capacity, g.p.m.....	636,552	635,735	231,463	.....	.....	.....	8,460
67	(a) Centrifugal.....1940..number.....	2,044	1,654	528	.....	.....	1	5
68	1940..capacity, g.p.m.....	884,439	817,962	180,501	.....	.....	(⁵)	2,096
69	1940..average capacity, g.p.m.....	423	495	342	.....	.....	(⁵)	410
70	(b) Turbine.....1940..number.....	117	99	33	.....	.....	.....	.....
71	1940..capacity, g.p.m.....	40,471	39,501	12,279	(⁵)	(⁵)	.....	.....
72	1940..average capacity, g.p.m.....	346	399	372	(⁵)	(⁵)	.....	.....
73	(c) Plunger.....1940..number.....	266	129	36	.....	.....	.....	.....
74	1940..capacity, g.p.m.....	18,988	10,413	2,841	.....	.....	.....	.....
75	1940..average capacity, g.p.m.....	71	81	79	.....	.....	.....	.....
76	(d) Other ⁷.....1940..number.....	61	35	8	.....	.....	.....	.....
77	1940..capacity, g.p.m.....	9,953	6,132	1,046	.....	.....	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	47	55	59	32	32	(⁵)	12
79	1930..average, feet.....	59	59	78	.....	.....	.....	36
80	1920..average, feet.....	60	67	67	.....	.....	.....	58
81	from pumped wells.....1940..average, feet.....	43	46	48	.....	.....	.....	.....
82	from surface sources.....1940..average, feet.....	51	60	71	32	32	(⁵)	12

¹Data for unidentified independent basins for the 1930 and 1920 Censuses are included only in State totals.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.

CENSUS OF IRRIGATION — WASHINGTON

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WORKS, 1940, 1930, AND 1920

COLUMBIA RIVER—Continued													
Spokane River			Sanpoil River	Okanogan River	Methow River	Lake Chelan	Entiat River	Wenatchee River	Crab Creek	Yakima River			
Total	Direct	Latah Creek								Total	Direct	Naches River	Ahtanum Creek
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
100	88	12	10	254	145	95	36	255	134	752	613	106	33
196	218	31	23	94	105	67	81	96	57	669	606	584	444
27	27	.....	4	46	109	25	21	80	32	616	515	90	11
6	.....	.....	.....	16	41	.....	5	42	7	126	21	25	19
15	.....	.....	.....	12	52	.....	5	41	24	105	12	2	10
5	5	.....	.....	2	1	.....	1	6	9	52	38	11	3
8	8	.....	.....	10	74	.....	5	17	14	59	31	28	.....
4	4	.....	.....	28	29	.....	11	52	6	248	199	41	8
10	10	.....	.....	6	5	.....	9	5	3	257	247	10	.....
113.1	113.1	.....	3.0	280.7	236.5	43.1	50.3	146.4	36.3	2,022.8	2,093.7	494.9	34.2
25	.....	.....	.....	195	192	.....	34	187	5	2,285	1,871	160	52
235	.....	.....	.....	280	276	.....	41	213	43	2,226	1,552	134	83
67	67	.....	3	97	207	21	59	81	34	2,404	1,951	419	34
46.1	46.1	.....	.....	183.7	16.5	22.1	11.3	65.4	2.9	218.8	142.7	75.9	0.2
102	90	12	13	719	652	180	132	796	194	9,008	7,542	1,160	306
289	.....	.....	.....	602	1,014	.....	62	686	230	10,155	7,294	923	305
802	.....	.....	.....	552	1,230	.....	85	553	100	7,486	4,823	724	180
164.6	164.6	.....	.....	176.8	19.4	129.3	23.4	401.2	38.7	647.4	527.0	119.7	0.7
98.5	.....	.....	.....	52.7	8.8	.....	6.9	62.1	2.2	380.6	371.0	6.2	0.3
132.7	.....	.....	.....	30.9	4.8	.....	1.5	26.0	34.9	161.1	154.6	4.1	.....
124.4	124.4	.....	.....	17.5	3.4	0.5	0.2	19.8	6.9	337.0	265.2	71.5	0.3
22.1	22.1	.....	.....	112.9	9.5	61.8	19.5	278.5	18.1	28.5	24.4	3.8	0.3
15.8	15.8	.....	.....	38.7	6.3	66.8	3.7	102.9	13.3	207.6	168.1	39.4	0.1
2.3	2.3	.....	.....	7.7	0.2	0.2	.....	.....	0.4	74.3	69.3	5.0	.....
5	5	.....	.....	15	6	5	1	13	6	9	6	3	.....
3	.....	.....	.....	12	10	.....	1	10	3	8	.....	.....	.....
8	.....	.....	.....	11	11	.....	1	6	9	10	7	.....	.....
2	2	.....	.....	1	.....	1	.....	2	5	1	1	.....	.....
3	3	.....	.....	14	6	3	1	8	1	8	5	3	.....
.....	.....	.....	.....	.....	.....	1	.....	3	.....	.....	.....	.....	.....
12	11	1	.....	12	5	2	1	11	2	9	5	4	.....
12	11	1	.....	2	4	.....	.....	7	.....	1	1	.....	.....
.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	9	1	.....	1	3	2	8	4	4	.....
70	69	(5)	.....	43,501	6,138	(5)	(5)	4,523	(5)	1,065,870	828,770	237,100	.....
9	.....	.....	.....	11	8	.....	.....	9	1	8	.....	.....	.....
1,607	.....	.....	.....	43,085	4,374	.....	.....	6,203	70	629,487	628,437	.....	.....
.....
.....	.....	.....	.....	1	.....	.....	.....	1	.....	4	3	.....	2
.....	.....	.....	.....	.....	1	.....	.....	.....	3	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
.....	.....	.....	.....	50	.....	.....	.....	10	.....	3,350	652	(5)	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	60	285	285	.....	.....
49	38	11	.....	105	3	1	1	46	89	87	60	13	14
80	.....	.....	.....	196	2	.....	1	71	14	58	8	2	5
47	.....	.....	.....	48	2	.....	.....	7	111	45	41	1	16
78,643	78,373	1,270	.....	15,330	450	(5)	(5)	2,582	43,249	30,009	22,797	2,065	5,147
74,059	.....	.....	.....	27,970	800	.....	30	6,728	7,835	21,768	1,465	580	1,090
58,604	.....	.....	.....	13,278	115	.....	.....	1,000	36,285	9,680	7,670	335	125
85	70	15	.....	237	37	87	10	182	130	311	281	15	15
95	.....	.....	.....	326	21	.....	16	236	17	152	88	2	9
3,794	3,756	38	.....	2,606	334	1,306	78	1,927	1,534	11,817	11,700	32	85
3,822	.....	.....	.....	4,079	226	.....	93	1,853	161	7,498	6,610	24	93
3,476	.....	.....	.....	1,599	44	.....	18	337	2,321	3,492	3,447	8	2
68	54	14	.....	226	32	74	10	170	65	261	235	14	12
3,624	3,589	35	.....	2,414	283	1,198	78	1,774	1,061	5,993	5,805	23	75
15	14	.....	.....	11	4	13	.....	9	35	24	20	1	3
170	167	(5)	.....	192	51	108	.....	149	473	301	372	(5)	10
2	2	.....	.....	.....	1	.....	.....	3	.....	25	26	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,433	5,433	.....	.....
84	70	14	.....	237	37	.....	10	181	122	310	280	15	15
105	.....	.....	.....	335	22	.....	16	240	17	169	103	2	9
93	.....	.....	.....	119	9	.....	4	40	145	87	78	3	1
78,595	76,600	1,995	.....	58,115	6,787	15,298	1,912	20,963	68,559	347,320	339,376	2,715	5,220
72,534	.....	.....	.....	104,329	7,454	.....	1,920	34,451	10,947	237,533	206,020	580	2,321
68,643	.....	.....	.....	47,993	1,313	.....	310	21,114	63,270	76,976	76,715	1,285	125
65	51	14	.....	233	34	57	10	157	100	287	247	12	87
73,490	71,504	1,995	.....	56,985	6,447	12,935	1,912	19,302	59,500	333,206	327,254	2,525	3,427
1,131	1,402	142	.....	245	190	229	191	123	595	1,248	1,325	210	428
6	6	.....	.....	.....	.....	.....	.....	8	18	27	25	.....	2
3,570	3,570	.....	.....	(5)	.....	(5)	.....	656	5,657	11,639	11,245	.....	(5)
595	595	.....	.....	(5)	.....	(5)	.....	82	314	491	450	.....	(5)
10	10	.....	.....	.....	2	30	.....	15	10	7	5	.....	1
1,251	1,251	.....	.....	(5)	(5)	2,153	.....	965	1,912	597	337	(5)	(5)
125	125	.....	.....	(5)	(5)	72	.....	64	191	65	67	(5)	(5)
3	3	.....	.....	.....	1	.....	.....	9	3	9	3	.....	4
275	275	.....	.....	.....	(5)	.....	.....	(5)	(5)	1,878	540	(5)	1,154
53	59	14	.....	43	73	128	59	73	53	46	48	12	46
77	.....	.....	.....	45	67	.....	64	66	20	38	24	9	39
79	.....	.....	.....	40	56	.....	59	67	65	38	39	55	18
70	80	17	.....	44	.....	(5)	(5)	34	63	53	62	13	48
35	41	10	.....	42	73	131	66	86	31	43	44	10	20

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

Includes water wheels for which no horsepower was reported.

Includes 2 hydraulic rams for which no capacity was reported.

CENSUS OF IRRIGATION — WASHINGTON

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				Walla Walla River	Klickitat River	White Salmon River	
		Total	Direct	Grande Ronde River	Asotin Creek	Palouse River			
ENTERPRISES AND IRRIGATION WORKS JANUARY 1		(18)	(19)	(20)	(21)	(22)	(23)	(24)	
1	Enterprises.....1940..number.....	155	111	9	13	22	304	17	27
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	56	31	14	298	54	83	453	199
3	Diversion dams.....1940..total number.....	95	50	15	21	9	183	32	20
4	1930..total number.....	30	.....	.....	1	12	99	3	11
5	1920..total number.....	48	1	.....	2	13	135	19	19
6	(a) Concrete and masonry.....1940..number.....	12	4	.....	2	6	64	.....	3
7	(b) Timber.....1940..number.....	5	5	.....	.....	.....	53	27	10
8	(c) Earth and rock.....1940..number.....	59	27	15	15	2	57	3	5
9	(d) Other, mixed, and not reported.....1940..number.....	19	14	.....	4	1	8	2	2
10	Main canals and laterals.....1940..total length, miles.....	61.9	19.1	12.1	15.6	15.1	162.0	24.3	32.1
11	1930..total length, miles.....	36	.....	.....	1	23	135	17	35
12	1920..total length, miles.....	137	41	.....	.....	42	1,158	70	114
13	(a) Earth.....1940..length, miles.....	57	18	12	15	14	150	24	30
14	(b) Lined.....1940..length, miles.....	4.9	3.1	0.1	0.6	1.1	2.9	0.3	2.1
15	1940..capacity, c.f.s.....	225	146	8	55	20	585	227	156
16	1930..capacity, c.f.s.....	70	.....	.....	1	23	331	37	109
17	1920..capacity, c.f.s.....	1,075	427	.....	1	219	1,049	352	478
18	Pipe lines ².....1940..total length, miles.....	92.6	34.0	0.2	51.8	6.6	40.8	0.2	5.2
19	1930..total length, miles.....	45.7	10.7	.....	12.5	7.1	18.1	0.7	1.9
20	1920..total length, miles.....	94.1	33.6	.....	48.0	1.4	56.4	2.5	2.5
21	(a) Concrete.....1940..length, miles.....	13.5	8.6	.....	.....	4.8	21.9	.....	.....
22	(b) Metal.....1940..length, miles.....	34.1	16.3	0.2	16.7	0.8	10.8	.....	0.9
23	(c) Wood-stave.....1940..length, miles.....	43.6	8.4	.....	35.1	0.1	7.5	0.1	4.3
24	(d) Other.....1940..length, miles.....	1.4	0.7	.....	.....	0.7	0.6	0.1	.....
25	Storage dams.....1940..total number.....	4	1	.....	.....	3	.....	.....	.....
26	1930..total number.....	2	.....	.....	1	.....	1	.....	1
27	1920..total number.....	9	2	.....	1	5	7	.....	3
28	(a) Concrete and masonry.....1940..number.....	1	1	.....	.....	.....	.....	.....	.....
29	(b) Earth and rock.....1940..number.....	3	.....	.....	.....	3	.....	.....	.....
30	(c) Other, mixed, and not reported.....1940..number.....	.....	.....	.....	.....	.....	.....	.....	.....
31	Reservoirs.....1940..total number.....	4	3	.....	1	.....	.....	.....	.....
32	(a) 1-99 acre-feet capacity.....1940..number.....	4	3	.....	1	.....	.....	.....	.....
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	59	2	.....	(⁴)	.....	.....	.....	.....
36	1930..total capacity, ac.-ft. ³	2	.....	.....	1	.....	2	.....	.....
37	1920..total capacity, ac.-ft. ³	83	.....	.....	80	.....	2	.....	.....
38	Wells, flowing.....1940..number.....	8	1	.....	.....	7	13	.....	.....
39	1930..number.....	7	.....	.....	.....	7	17	.....	.....
40	1920..number.....	8	.....	.....	.....	8	33	.....	.....
41	1940..yield, g.p.m.....	7,165	(⁴)	.....	.....	7,140	7,495	.....	.....
42	1930..yield, g.p.m.....	1,900	.....	.....	.....	1,300	10,600	.....	.....
43	1920..yield, g.p.m.....	1,100	.....	.....	.....	1,100	6,080	.....	.....
44	Wells, pumped.....1940..number.....	10	7	.....	.....	3	82	.....	.....
45	1930..number.....	22	.....	.....	.....	5	86	1	.....
46	1920..number.....	37	35	.....	.....	.....	36	.....	2
47	1940..yield, g.p.m.....	1,710	1,260	.....	.....	450	18,871	.....	.....
48	1930..yield, g.p.m.....	4,656	.....	.....	.....	680	13,580	33	.....
49	1920..yield, g.p.m.....	13,365	13,015	.....	.....	.....	32,510	.....	24
50	Pumping plants.....1940..total number.....	68	51	1	2	14	120	5	2
51	1930..total number.....	80	40	.....	1	11	102	5	.....
52	Prime movers.....1940..capacity, hp.....	1,903	798	(⁴)	(⁴)	65	604	45	(⁴)
53	1930..capacity, hp.....	1,172	785	.....	150	103	763	60	.....
54	1920..capacity, hp.....	3,559	3,186	.....	.....	40	681	26	42
55	(a) Electric.....1940..number.....	35	24	.....	2	9	99	.....	.....
56	1940..capacity, hp.....	755	315	.....	(⁴)	40	449	.....	.....
57	(b) Internal-combustion.....1940..number.....	28	23	1	.....	4	17	3	.....
58	1940..capacity, hp.....	543	479	(⁴)	.....	24	153	40	.....
59	(c) Other ⁵.....1940..number.....	5	4	.....	.....	1	4	2	2
60	1940..capacity, hp.....	5	4	.....	.....	(⁴)	2	(⁴)	(⁴)
61	Pumps.....1940..total number.....	66	50	1	2	13	124	4	2
62	1930..number.....	79	41	.....	1	11	180	5	.....
63	1920..number.....	74	58	.....	.....	3	62	.....	4
64	1940..capacity, g.p.m.....	33,499	26,411	(⁴)	(⁴)	2,838	31,607	3,633	(⁴)
65	1930..capacity, g.p.m.....	79,499	18,624	.....	1,000	5,126	20,286	908	.....
66	1920..capacity, g.p.m.....	47,848	33,177	.....	.....	4,400	20,840	3,875	320
67	(a) Centrifugal.....1940..number.....	56	42	1	2	11	115	3	2
68	1940..capacity, g.p.m.....	30,665	23,595	(⁴)	(⁴)	2,820	31,487	3,300	(⁴)
69	1940..average capacity, g.p.m.....	548	562	(⁴)	(⁴)	256	274	1,100	(⁴)
70	(b) Turbine.....1940..number.....	2	2	.....	.....	.....	.....	.....	.....
71	1940..capacity, g.p.m.....	(⁴)	(⁴)	.....	.....	.....	.....	.....	.....
72	1940..average capacity, g.p.m.....	(⁴)	(⁴)	.....	.....	.....	.....	.....	.....
73	(c) Plunger.....1940..number.....	6	5	.....	.....	1	4	.....	.....
74	1940..capacity, g.p.m.....	219	216	.....	.....	(⁴)	15	.....	.....
75	1940..average capacity, g.p.m.....	36	43	.....	.....	(⁴)	4	.....	.....
76	(d) Other ⁶.....1940..number.....	2	1	.....	.....	1	5	1	.....
77	1940..capacity, g.p.m.....	(⁴)	(⁴)	.....	.....	(⁴)	165	(⁴)	.....
78	Pumping lift, from all sources.....1940..average, feet.....	47	46	(⁴)	(⁴)	33	19	15	(⁴)
79	1930..average, feet.....	48	59	.....	400	26	22	24	.....
80	1920..average, feet.....	46	46	.....	.....	16	21	28	83
81	from pumped wells.....1940..average, feet.....	31	25	.....	.....	40	22	.....	.....
82	from surface sources.....1940..average, feet.....	51	49	(⁴)	(⁴)	29	14	15	(⁴)

⁴ Data for 4 enterprises (40 acres irrigated) in drainage basin (35), Sumas River, Washington (tributary of the Fraser River, Canada), are included in drainage basin (34), Nooksack River Area.

⁵ Total 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.

CENSUS OF IRRIGATION - WASHINGTON

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WORKS, 1940, 1930, AND 1920—Continued

COLUMBIA RIVER—Con.			STRAIT OF JUAN DE FUCA								GEORGIA STRAIT	PACIFIC SLOPE			
Lewis River	Cowlitz River	Total	Puget Sound								Nooksack River Area*	Total	Chehalis River	Other Pacific Slope Streams	
(25)	(26)		Total	Direct	Nisqually River	White and Puyallup Rivers	Lake Washington	Snohomish River	Skagit and Samish Rivers	Dungeness River	(34)		(36)	(37)	
24	19	538	519	159	42	258	51	9	9	10	35	201	164	37	1
16	21	69	34	37	138	19	17	15	30	1,944	29	13	13	11	2
10	2	60	56	36	1	13	2	4		4	4	10	7	3	3
		4								4					4
		6								6					5
		1	1									1		1	6
10		24	21	9	1	6	2	3		3	2	5	4	1	7
	1	18	17	10		6		1		1	2	3	2	1	8
	1	17	17									1	1		9
2.5	0.1	151.8	67.3	8.4	49.5	9.3		0.1		84.5		2.2	2.2		10
		99								99					11
		68								68					12
		133	64	7	39	8				79		2	2		13
2.5	0.1	18.8	13.3	1.4	10.5	1.3		0.1		5.5		0.2	0.2		14
18	13	872	474	132	85	193	58	6	3	395	15	145	125	20	15
		414								414					16
		570								570					17
4.3	4.1	271.6	267.5	51.6	9.1	187.6	17.2	2.0	2.1	2.0	4.9	32.1	27.1	5.0	18
		1.3								1.3					19
		1.0								1.0					20
		5.7	5.6		1.9	3.1	0.4	0.2		0.1		0.4	0.2	0.2	21
4.1	4.1	255.3	253.5	48.6	4.9	182.5	16.5	1.0	1.6	0.2	4.2	27.9	23.9	4.0	22
0.2		9.8	7.6	2.9	2.3	1.3	0.3	0.8	0.5	1.7	0.4	3.8	3.0	0.8	23
		0.8	0.8	0.1		0.7					0.3				24
1		14	14	13		1						3	2	1	25
															26
															27
		4	4	4								1		1	28
1		6	5	5								1	1		29
		5	5	4		1						1	1		30
		15	15	10	1	3	1					6	3	3	31
		14	14	10	1	2	1					6	3	3	32
		1	1			1									33
															34
		242	242	36	(*)	202	(*)					22	13	9	35
															36
		6	6	3		3						1			37
															38
		707	707	200		507					(*)				39
															40
															41
															42
															43
7	4	177	165	52	34	67	11	1	12		22	43	25	18	44
															45
680	88	11,168	10,168	2,703	1,539	3,918	1,608	(*)	990		6,099	5,999	1,150	5,749	46
															47
															48
															49
16	17	363	354	96	39	172	44	3	8	1	30	171	144	27	50
										(*)					51
120	126	1,642	1,549	600	75	641	203	30	87		217	998	718	282	52
															53
10	10	308	302	77	38	146	38	3	6		17	124	119	5	54
33	30	1,263	1,222	505	60	458	159	30	41		99	342	328	14	55
5	7	45	42	14		23	5		2		13	47	25	22	56
86	96	344	292	90		173	29		(*)	(*)	118	656	388	268	57
1		10	10	5	1	3	1								58
(*)		35	35	5	(*)	10	(*)								59
16	17	368	359	100	39	173	44	3	8	1	34	169	143	26	60
															61
															62
2,785	1,702	50,012	48,327	14,467	2,708	22,682	8,585	505	1,385	(*)	9,520	20,211	12,647	7,564	63
															64
															65
12	9	221	212	50	15	122	22	3	8	1	25	144	122	22	66
2,255	1,202	39,230	37,545	12,474	1,580	17,620	5,366	505	1,385	(*)	9,123	18,124	11,108	7,010	67
188	134	178	177	249	105	144	244	188	173	(*)	365	126	91	319	68
		12	12			11	1				2	4	4		69
	(*)	463	463			455	(*)				(*)	337	337		70
	(*)	39	39			41	(*)				(*)	84	84		71
3	4	114	114	41	24	30	18	16			5	18	16	2	72
110	140	7,428	7,428	1,442	1,128	2,176	2,682	141			227	820	802	(*)	73
37	35	65	65	35	47	73	141				45	46	50	(*)	74
1	3	21	21	9			2				2	3	1	2	75
(*)	60	2,891	2,891	551		1,811	(*)					930	(*)	(*)	76
															77
12	13	33	33	45	29	24	30	102	34	(*)	25	12	12	12	78
															79
															80
20	25	36	36	41	32	31	54	(*)	42		22	22	31	12	81
8	10	30	31	50	17	20	36	102	12	(*)	29	9	8	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.

* Includes water wheels for which no horsepower was reported.

* Includes 2 hydraulic rams for which no capacity was reported.

CENSUS OF IRRIGATION—WASHINGTON

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	Asotin	Benton	Chelan	
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms.....1940.....number.....	81,680	651	542	1,673	2,079	
2	.....1930.....number.....	70,904	818	622	1,668	2,218
3	Irrigated farms.....1940.....number.....	17,420	15	330	1,516	1,776	
4	.....1930.....number.....	15,949	22	372	1,510	2,025
5	Increase or decrease (-), 1930-1940.....percent.....	9.3	-31.8	-11.3	0.4	-12.3	
Operated by—							
6	(a) Owners and managers.....1940.....number.....	14,069	11	292	1,260	1,805	
7	.....1930.....number.....	13,129	18	336	1,233	1,897
8	(b) Tenants.....1940.....number.....	3,357	4	38	256	171	
9	.....1930.....number.....	2,820	4	36	277	158
10	Land in all farms.....1940.....acres.....	15,181,815	961,657	329,367	519,602	180,588	
11	Land in irrigated farms.....1940.....acres.....	2,108,197	38,449	77,569	76,012	109,366	
12	Average per farm.....1940.....acres.....	121	2,563	235	50	62	
13	(a) Operated by owners and managers.....1940.....acres.....	1,762,907	36,939	74,973	62,381	98,823	
14	Average per farm.....1940.....acres.....	125	3,358	257	50	61	
15	(b) Operated by tenants.....1940.....acres.....	345,290	1,510	2,595	13,631	10,743	
16	Average per farm.....1940.....acres.....	103	378	68	53	63	
17	Approximate land area.....1940.....acres.....	42,865,280	1,212,800	401,280	1,112,320	1,875,840	
IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated.....1939.....acres.....	615,013	730	3,749	38,332	34,527	
19	(a) Cropland harvested.....1939.....acres.....	520,424	606	3,042	32,028	34,041	
20	(b) Crop failure.....1939.....acres.....	6,113	.....	.....	465	146
21	(c) Pasture.....1939.....acres.....	89,476	124	107	5,839	340	
22	Area irrigated.....1929.....acres.....	499,283	1,183	4,162	30,286	34,071	
23	.....1919.....acres.....	529,889	943	3,474	39,272	38,894
24	Increase or decrease (-), 1929-1939.....percent.....	23.2	-39.3	-9.9	26.6	1.3	
25	Irrigable area in enterprises.....1940.....acres.....	837,096	870	4,106	62,061	42,137	
26	.....1930.....acres.....	916,379	1,362	5,023	54,068	40,951
27	.....1920 ².....acres.....	835,795	1,737	4,684	72,015	65,324
28	Excess of irrigable area over the area irrigated.....1940.....acres.....	222,063	140	357	23,749	7,610	
29	.....1930.....acres.....	416,096	179	861	24,382	6,580
30	Area works were capable of supplying with water.....1940.....acres.....	731,527	870	4,106	49,002	38,582	
31	.....1930.....acres.....	631,511	1,275	5,012	43,816	36,313
32	.....1920.....acres.....	637,151	1,342	4,559	48,851	50,602
33	Increase or decrease (-), 1930-1940.....percent.....	15.8	-31.8	-18.1	11.6	6.2	
34	Excess, capability of works over area irrigated.....1940.....acres.....	116,514	140	357	10,670	4,055	
35	.....1930.....acres.....	132,228	92	850	13,630	2,242
36	Proportion which area irrigated is of all lands in irrigated farms.....1939.....percent.....	29.2	1.9	4.8	50.4	31.6	
37	.....1929.....percent.....	26.0	1.2	9.5	35.3	34.7
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939.....percent.....	84.1	83.9	91.3	78.2	89.5	
39	.....1929.....percent.....	79.1	82.8	83.0	69.0	93.8
CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises.....1940.....dollars....	56,415,196	19,920	724,459	2,777,690	4,400,110	
41	(a) Cost of irrigation works and equipment.....1940.....dollars....	55,678,678	19,920	715,899	2,727,638	4,283,922	
42	(b) Investment in water rights (reported).....1940.....dollars....	736,518	.....	8,560	50,052	116,188
43	Total investment in all enterprises.....1930.....dollars....	40,561,895	47,620	302,321	3,549,863	4,787,525	
44	.....1920.....dollars....	29,299,011	77,350	627,165	2,387,113	3,503,670
45	Increase or decrease (-), 1930-1940.....percent.....	39.1	-58.2	139.7	-21.8	-8.1	
46	Average investment, based on area works were capable of supplying with water, per acre.....1940.....dollars....	77.12	22.90	176.44	56.09	114.05	
47	.....1930.....dollars....	64.23	37.35	60.30	80.83	131.84
48	.....1920.....dollars....	45.98	57.64	137.57	48.86	69.38
49	Average investment per acre irrigated.....1939.....dollars....	91.73	27.29	193.24	72.40	127.44	
50	Estimated final investment in existing enterprises.....1940.....dollars....	58,141,097	19,920	724,467	2,785,968	4,402,398	
51	.....1930.....dollars....	53,232,477	49,620	305,221	3,566,351	5,150,905
52	.....1920.....dollars....	37,684,591	87,750	627,165	3,040,479	4,080,080
53	Increase or decrease (-), 1930-1940.....percent.....	9.2	-59.9	137.4	-21.9	-13.4	
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940.....dollars....	69.46	22.90	176.44	44.87	105.90	
55	.....1930.....dollars....	58.15	36.43	60.76	65.24	125.78
56	.....1920 ².....dollars....	45.03	50.52	133.90	42.22	62.46
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Supplemental			Primary	Supplemental
		Enterprises				Enterprises	
57	Enterprises reporting maintenance and operation.....1939.....number.....	3,746	125	9	23	132	473
58	Area irrigated in these enterprises.....1939.....acres.....	602,414	22,296	710	3,719	37,978	33,581
59	Cost of maintenance and operation.....1939.....dollars....	1,673,062	11,314	1,350	45,123	154,261	246,340
60	Average cost, per acre irrigated.....1939.....dollars....	2.78	0.51	1.90	12.13	4.06	7.27
611929.....dollars....	4.14	5.55	8.81	6.16	10.84
62	Total annual charges (reported) ¹.....1939.....dollars....	1,542,453	3,129	44,450	150,213	223,387
63	Average annual charge per acre irrigated.....1939.....dollars....	3.04	1.81	13.36	4.34	8.90
64	Area against which charges were assessed.....1939.....acres.....	573,094	8,940	3,647	45,039	27,633
65	Average annual charge per acre assessed.....1939.....dollars....	2.69	0.35	12.19	3.34	8.08
66	Total charges collected ¹.....1939.....dollars....	1,062,485	25,070	39,900	104,918	193,510
67	Indebtedness to December 31 (reported) ².....1939.....dollars....	21,764,676	856,928	1,455,044	1,073,109
WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered.....1939.....number.....	3,851	131	12	26	134	498
69	Area irrigated in these enterprises.....1939.....acres.....	590,627	184,534	730	3,749	38,332	32,407
70	Water delivered in these enterprises.....1939.....acre-feet....	2,548,581	704,152	3,183	10,141	248,632	121,068
71	Average water delivered per acre irrigated.....1939.....acre-feet....	4.3	3.8	4.4	2.7	6.5	3.7
72	Average cost of water per acre irrigated.....1939.....dollars....	3.35	0.75	1.90	12.48	4.46	9.81
DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage.....1939.....number.....	210	6	5
74	Irrigable area in these enterprises.....1939.....acres.....	448,702	41,712	177
75	Irrigated area in these enterprises.....1939.....acres.....	300,362	21,884	163
76	Area for which drains have been installed.....1939.....acres.....	178,212	4,423	28
77	Additional area needing drainage.....1939.....acres.....	18,673	1,540	3

*Census of Agriculture.

¹Percent not shown when more than 1,000.

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

CENSUS OF IRRIGATION - WASHINGTON

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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"]

Challam	Clark	Columbia	Cowlitz	Douglas	Ferry	Franklin	Garfield	Grant	Grays Harbor	Island	
1,226	4,528	535	1,625	1,245	553	363	335	600	1,915	1,044	1
729	3,503	544	1,147	1,214	577	354	393	787	1,161	877	2
108	132	92	28	479	116	193	40	161	116	8	3
118	13	120	.....	494	66	137	30	224	4	4	4
-8.5	915.4	-23.3	.....	-3.0	75.8	40.9	33.3	-28.1	(1)	100.0	5
93	110	81	20	425	93	173	31	126	108	8	6
101	.....	100	.....	463	56	109	22	202	.....	.....	7
15	22	11	8	54	23	20	9	35	8	.....	8
17	.....	20	.....	31	8	28	.....	22	.....	.....	9
70,844	209,036	354,754	122,474	872,490	251,437	447,004	379,693	735,134	124,209	54,969	10
7,580	8,805	59,261	3,084	48,618	40,529	21,608	63,082	78,110	7,230	247	11
70	67	644	132	101	349	112	1,577	485	62	31	12
6,439	6,945	58,359	1,942	45,444	34,151	20,858	35,443	39,957	6,308	247	13
60	63	719	97	107	367	121	1,143	317	58	31	14
1,141	1,860	1,002	1,742	3,174	6,378	750	27,639	38,153	822	.....	15
76	85	91	218	59	277	38	3,071	1,090	115	.....	16
1,121,920	405,120	550,400	733,440	1,178,240	1,434,240	807,680	458,960	1,777,280	1,219,200	131,840	17
10,910	1,168	2,565	408	9,074	1,533	3,203	659	5,680	949	35	18
5,614	727	2,455	497	8,995	1,495	2,898	624	5,048	348	35	19
.....	4	.....	.....	29	.....	119	.....	43	.....	.....	20
5,296	437	110	1	49	38	246	35	580	501	.....	21
8,960	.....	2,480	.....	9,608	1,246	2,606	775	7,597	.....	.....	22
6,100	.....	2,109	.....	4,822	701	2,253	883	7,545	.....	.....	23
21.8	.....	3.4	.....	-5.3	23.0	22.9	-15.0	-35.3	.....	.....	24
21,085	1,690	3,085	1,153	11,227	2,864	5,084	808	7,456	1,328	45	25
20,142	.....	2,861	.....	10,535	5,947	4,821	806	9,112	.....	.....	26
12,600	.....	3,532	.....	8,756	7,421	14,268	1,698	12,806	.....	.....	27
10,175	532	630	655	2,153	1,131	1,691	149	1,776	390	10	28
11,182	.....	381	.....	920	4,601	2,215	31	1,515	.....	.....	29
19,485	1,628	3,074	622	10,566	1,741	3,649	808	7,007	1,324	35	30
17,607	.....	2,672	.....	10,061	2,018	4,471	806	8,231	.....	.....	31
9,860	.....	3,063	.....	4,938	2,353	10,014	1,532	9,302	.....	.....	32
10.7	.....	15.0	.....	5.3	-13.7	-18.3	0.3	-14.9	.....	.....	33
8,575	460	509	124	1,522	208	443	149	1,327	375	.....	34
8,647	.....	192	.....	456	772	1,865	31	604	.....	.....	35
143.9	13.3	4.3	13.5	18.7	3.8	14.8	1.0	7.3	13.1	14.2	36
103.1	.....	4.4	.....	26.1	9.4	6.3	3.4	4.6	.....	.....	37
56.0	71.7	83.4	80.1	85.0	88.1	87.8	81.6	81.1	71.7	100.0	38
50.9	.....	92.8	.....	95.6	61.7	58.3	96.2	92.3	.....	.....	39
209,754	65,472	38,409	15,661	1,438,975	15,335	1,162,994	34,900	280,250	29,854	4,175	40
297,639	65,245	37,399	15,049	1,374,605	14,761	1,162,694	34,840	270,055	29,573	4,025	41
2,115	227	1,010	12	64,310	594	300	60	10,195	81	150	42
206,126	.....	78,244	.....	685,382	45,693	528,544	22,340	694,701	.....	.....	43
94,010	.....	61,447	.....	382,330	68,050	362,390	32,700	1,192,739	.....	.....	44
1.2	.....	-50.9	.....	110.0	-66.4	120.0	56.2	-59.7	.....	.....	45
15.38	40.22	12.49	25.18	135.80	8.81	318.98	43.10	40.00	22.40	119.29	46
16.82	.....	29.28	.....	66.12	22.64	118.22	27.72	84.40	.....	.....	47
9.53	.....	20.06	.....	77.44	29.32	36.19	21.07	128.22	.....	.....	48
27.48	56.05	14.87	31.45	166.58	10.00	363.10	52.96	49.34	31.25	119.29	49
298,754	68,072	38,409	18,468	1,453,875	16,385	1,164,994	37,065	281,519	33,972	5,175	50
298,126	.....	78,544	.....	730,066	46,343	787,164	22,340	734,101	.....	.....	51
97,010	.....	64,947	.....	402,008	66,960	637,390	36,000	1,301,729	.....	.....	52
0.5	.....	-51.1	.....	99.1	-86.8	48.0	65.9	-61.7	.....	.....	53
14.22	40.28	12.45	18.02	129.50	6.15	228.70	45.87	37.75	25.56	115.00	54
14.80	.....	27.45	.....	69.37	8.44	163.28	27.72	80.56	.....	.....	55
7.66	.....	18.39	.....	45.91	9.02	44.67	21.20	101.65	.....	.....	56
Primary	Supplemental							Primary	Supplemental		
Enterprises								Enterprises			
13	1	102	54	25	178	85	61	150	1	116	3
10,910	(3)	1,144	2,425	487	8,634	1,420	3,198	4,990	(3)	925	35
13,838	(3)	6,897	1,999	1,172	85,948	1,573	44,129	35,950	(3)	3,779	205
1.27	(3)	6.03	0.82	2.41	9.89	1.11	13.80	7.20	(3)	4.09	5.86
0.82	.....	.....	1.67	.....	15.00	1.51	11.68	16.32	.....	.....	61
43,927	.....	.....	449	.....	37,660	.....	17,948	.....	.....	.....	62
4.06	.....	.....	0.81	.....	8.99	.....	11.45	.....	.....	1.81	63
18,951	.....	.....	560	.....	5,333	.....	2,840	.....	.....	8,940	64
2.32	.....	.....	0.80	.....	7.06	.....	6.11	.....	.....	0.35	65
29,263	.....	.....	443	.....	28,975	.....	16,775	.....	.....	2,705	66
96,840	.....	.....	.....	.....	96,403	.....	47,455	.....	.....	17,500	67
9	1	104	53	26	189	88	62	151	1	118	3
8,170	(3)	1,168	2,354	495	9,025	1,520	3,203	5,182	(3)	906	35
30,391	(3)	1,468	8,085	299	38,150	5,317	19,837	27,458	(3)	485	31
3.7	(3)	1.2	3.4	0.6	4.3	3.5	6.2	5.3	(3)	0.5	0.9
4.71	(3)	6.03	0.85	2.40	11.48	1.11	11.75	7.16	(3)	4.26	5.86
(3)	1	.....	.....	.....	(3)	1	.....	.....	.....	86	73
(3)	.....	341	(3)	.....	(3)	(3)	.....	.....	.....	631	74
(3)	.....	232	(3)	.....	(3)	(3)	.....	.....	.....	578	75
(3)	.....	300	(3)	.....	(3)	.....	.....	.....	.....	603	76
(3)	.....	14	.....	.....	(3)	.....	.....	.....	.....	2	77

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

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 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - WASHINGTON

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, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929

(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)		Jefferson	King	Kitsap	Kittitas	Klickitat
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*						
1	All farms.....1940...number.....	516	5,760	2,102	1,196	1,113
2	.....1930...number.....	272	4,656	1,557	888	1,074
3	Irrigated farms.....1940...number.....	17	191	34	1,074	226
4	.....1930...number.....	11	94	12	664	162
5	Increase or decrease (-), 1930-1940.....percent.....	54.5	103.2	183.3	61.7	39.5
6	Operated by—					
7	(a) Owners and managers.....1940...number.....	15	123	30	804	186
8	.....1930...number.....				525	126
9	(b) Tenants.....1940...number.....	2	68	4	270	40
10	.....1930...number.....				139	36
11	Land in all farms.....1940...acres.....	42,884	152,770	46,196	476,401	733,365
12	Land in irrigated farms.....1940...acres.....	1,807	4,362	968	302,131	60,153
13	Average per farm.....1940...acres.....	106	23	29	261	266
14	(a) Operated by owners and managers.....1940...acres.....	(1)	2,700	904	258,399	54,736
15	Average per farm.....1940...acres.....	(1)	23	30	321	294
16	(b) Operated by tenants.....1940...acres.....	(1)	1,662	94	43,792	5,417
17	Average per farm.....1940...acres.....	(1)	24	24	162	135
17	Approximate land area.....1940...acres.....	1,159,680	1,367,040	257,280	1,481,600	1,223,680
IRRIGATED AND IRRIGABLE AREAS						
18	Area irrigated.....1939...acres.....	103	1,641	118	108,399	13,093
19	(a) Cropland harvested.....1939...acres.....	81	1,343	77	92,969	10,167
20	(b) Crop failure.....1939...acres.....		4		1,631	252
21	(c) Pasture.....1939...acres.....	22	294	41	13,799	2,674
22	Area irrigated.....1929...acres.....				46,031	11,502
23	.....1919...acres.....				81,967	18,978
24	Increase or decrease (-), 1929-1939.....percent.....				135.5	13.8
25	Irrigable area in enterprises.....1940...acres.....	139	2,166	396	148,160	16,728
26	.....1930...acres.....				122,914	20,321
27	.....1920...acres.....				87,775	22,315
28	Excess of irrigable area over the area irrigated.....1940...acres.....	36	525	278	39,761	3,636
29	.....1930...acres.....				76,883	8,819
30	Area works were capable of supplying with water.....1940...acres.....	132	2,064	388	123,150	14,430
31	.....1930...acres.....				63,415	18,607
32	.....1920...acres.....				83,552	21,360
33	Increase or decrease (-), 1930-1940.....percent.....				94.2	-22.4
34	Excess, capability of works over area irrigated.....1940...acres.....	19	423	270	14,751	1,346
35	.....1930...acres.....				17,384	7,105
36	Proportion which area irrigated is of all lands in irrigated farms.....1939...percent.....	5.7	37.6	11.8	35.9	21.8
37	.....1929...percent.....				16.2	17.2
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.....	84.4	79.5	30.4	88.0	90.7
39	.....1929...percent.....				72.6	61.8
CAPITAL INVESTED TO JANUARY 1						
40	Total investment in all enterprises.....1940...dollars.....	2,683	121,525	15,162	13,196,137	263,473
41	(a) Cost of irrigation works and equipment.....1940...dollars.....	2,675	121,257	13,784	13,189,178	258,218
42	(b) Investment in water rights (reported).....1940...dollars.....	8	268	1,378	6,959	5,255
43	Total investment in all enterprises.....1930...dollars.....				7,060,394	190,912
44	.....1920...dollars.....				4,678,707	108,501
45	Increase or decrease (-), 1930-1940.....percent.....				86.9	38.0
46	Average investment, based on area works were capable of supplying with water, per acre.....1940...dollars.....	23.63	58.88	39.08	107.15	18.25
47	.....1930...dollars.....				111.34	10.26
48	.....1920...dollars.....				56.00	9.20
49	Average investment per acre irrigated.....1939...dollars.....	27.99	74.06	128.49	121.74	20.12
50	Estimated final investment in existing enterprises.....1940...dollars.....	3,233	125,850	15,218	13,320,369	281,848
51	.....1930...dollars.....				10,309,879	192,212
52	.....1920...dollars.....				5,008,707	206,851
53	Increase or decrease (-), 1930-1940.....percent.....				29.2	40.6
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940...dollars.....	23.26	58.15	38.43	89.01	16.85
55	.....1930...dollars.....				83.88	9.46
56	.....1920...dollars.....				67.32	6.40
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
57	Enterprises reporting maintenance and operation.....1939...number.....	12	124	36	175	71
58	Area irrigated in these enterprises.....1939...acres.....	94	1,606	108	102,028	12,580
59	Cost of maintenance and operation.....1939...dollars.....	113	15,787	450	142,380	12,799
60	Average cost, per acre irrigated.....1939...dollars.....	1.20	9.83	4.17	1.40	0.99
61	.....1929...dollars.....				2.25	0.73
62	Total annual charges (reported) ³.....1939...dollars.....	10	4,217		155,687	7,606
63	Average annual charge per acre irrigated.....1939...dollars.....	1.00	20.57		1.77	0.64
64	Area against which charges were assessed.....1939...acres.....	10	205		99,635	12,570
65	Average annual charge per acre assessed.....1939...dollars.....	1.00	20.57		1.56	0.61
66	Total charges collected ³.....1939...dollars.....		2,699		156,410	4,781
67	Indebtedness to December 31 (reported) ⁴.....1939...dollars.....				11,081,889	7,000
WATER DELIVERED TO IRRIGATORS						
68	Enterprises reporting water delivered.....1939...number.....		124	24	176	81
69	Area irrigated in these enterprises.....1939...acres.....		1,560	111	97,306	28,547
70	Water delivered in these enterprises.....1939...acre-feet.....		3,269	79	354,161	102,893
71	Average water delivered per acre irrigated.....1939...acre-feet.....		2.1	0.7	3.6	3.6
72	Average cost of water per acre irrigated.....1939...dollars.....		10.18	3.16	1.63	0.10
DRAINAGE OF IRRIGATED LAND						
73	Enterprises reporting land drained or needing drainage.....1939...number.....	1	15	6	4	1
74	Irrigated area in these enterprises.....1939...acres.....	(1)	173	65	94,981	
75	Irrigated area in these enterprises.....1939...acres.....	(1)	120	35	56,830	
76	Area for which drains have been installed.....1939...acres.....	(1)	65	23	1,167	
77	Additional area needing drainage.....1939...acres.....		10	12	6,072	

* 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.

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

CENSUS OF IRRIGATION—WASHINGTON

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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"]

Lewis	Lincoln	Mason	Okanogan	Pacific	Pend Oreille	Pierce	Skagit	Snohomish	Spokane	Stevens	Thurston	
3,941	1,260	769	2,397	710	657	5,622	3,242	6,231	4,999	2,537	2,876	1
3,360	1,497	452	2,326	570	613	4,696	2,721	4,262	4,268	2,623	2,082	2
61	26	22	1,500	36	82	484	14	17	1,101	224	223	3
8	47	12	1,313	.....	38	58	8	27	606	236	141	4
662.5	-44.7	83.3	14.2	.....	115.6	734.5	75.0	-37.0	58.2	-5.1	58.2	5
58	21	20	1,326	35	69	402	12	13	952	181	203	6
.....	38	.....	1,198	.....	33	.....	.....	.....	636	191	134	7
3	5	2	174	1	13	82	2	4	140	43	20	8
9	.....	.....	115	.....	5	.....	.....	.....	60	45	7	9
274,275	1,317,436	43,995	954,261	64,509	116,146	162,747	153,758	168,304	628,680	519,215	177,885	10
4,737	39,241	2,578	334,660	3,861	17,548	15,152	1,733	1,098	34,900	55,836	13,266	11
78	1,509	117	223	107	214	31	124	65	32	249	59	12
4,520	32,020	(1)	315,969	(1)	14,206	11,644	(1)	858	27,767	43,447	12,257	13
78	1,525	(1)	238	(1)	206	29	(1)	66	29	240	60	14
217	7,221	(1)	18,691	(1)	3,342	3,508	(1)	240	7,143	12,389	1,009	15
72	1,414	(1)	107	(1)	257	43	(1)	60	48	288	50	16
1,566,080	1,482,880	618,880	3,368,800	592,000	899,840	1,075,200	1,110,400	1,344,000	1,128,320	1,613,440	460,160	17
467	1,323	107	32,809	206	1,654	4,035	158	102	16,652	5,379	3,261	18
310	1,123	60	30,371	151	1,232	2,622	105	72	15,889	4,862	2,120	19
157	.....	.....	178	.....	5	.....	.....	.....	285	6	.....	20
.....	200	47	2,260	55	417	1,413	53	30	478	511	1,141	21
.....	1,430	.....	36,248	.....	896	.....	.....	.....	18,249	3,077	3,033	22
.....	2,221	.....	35,899	.....	.....	.....	.....	.....	16,154	8,990	.....	23
.....	-7.5	.....	-8.5	.....	84.6	.....	.....	.....	-8.8	74.8	7.5	24
1,107	1,799	348	44,661	251	3,626	12,028	284	133	19,481	6,977	4,768	25
.....	1,895	.....	60,681	.....	3,334	.....	.....	.....	37,992	5,186	5,033	26
.....	3,291	.....	71,760	.....	.....	.....	.....	.....	38,458	28,605	.....	27
.....	476	241	11,852	45	1,672	7,993	126	31	2,829	1,598	1,507	28
.....	465	.....	24,433	.....	2,438	.....	.....	.....	19,743	2,109	2,000	29
.....	951	193	40,235	249	2,612	10,480	284	131	19,305	6,589	4,489	30
.....	1,695	.....	50,011	.....	2,705	.....	.....	.....	30,254	3,602	5,033	31
.....	2,838	.....	52,315	.....	.....	.....	.....	.....	20,905	18,238	.....	32
.....	-1.7	.....	-19.5	.....	-0.4	.....	.....	.....	-36.2	82.9	-10.8	33
.....	343	86	7,426	43	958	6,145	126	29	2,653	1,210	1,228	34
.....	265	.....	13,763	.....	1,809	.....	.....	.....	12,005	525	2,000	35
9.9	3.4	4.2	9.8	5.3	9.4	26.6	9.1	9.3	47.7	9.6	24.6	36
.....	1.9	.....	17.6	.....	8.8	.....	.....	.....	74.0	6.1	61.0	37
49.1	79.4	55.4	81.5	82.7	63.3	38.5	55.6	77.9	86.3	81.6	72.6	38
.....	84.4	.....	72.5	.....	33.1	.....	.....	.....	60.3	85.4	60.3	39
27,139	8,573	7,910	4,372,245	13,505	67,767	207,050	7,805	10,061	2,386,466	140,920	274,057	40
26,857	8,573	7,820	4,340,317	13,505	67,005	206,440	7,780	10,021	2,374,726	139,001	273,770	41
282	.....	90	31,928	.....	782	610	25	40	11,730	1,919	287	42
.....	33,615	.....	4,165,746	.....	50,956	.....	.....	.....	1,346,735	476,384	236,260	43
.....	87,431	.....	2,874,338	.....	.....	.....	.....	.....	1,668,838	641,580	.....	44
.....	-74.5	.....	5.0	.....	33.0	.....	.....	.....	77.4	-70.4	21.1	45
28.54	5.15	40.98	108.67	54.24	25.94	19.76	27.48	76.80	123.62	21.30	61.05	46
.....	19.83	.....	83.30	.....	18.84	.....	.....	.....	44.61	132.26	44.05	47
.....	30.81	.....	54.91	.....	.....	.....	.....	.....	79.49	35.18	.....	48
.....	6.48	.....	139.26	.....	65.56	40.97	51.31	49.40	143.31	26.20	84.04	49
.....	11,883	13,285	4,659,422	14,005	68,692	210,410	8,165	10,061	2,487,046	146,296	461,592	50
.....	34,115	.....	4,480,856	.....	51,381	.....	.....	.....	1,374,635	639,219	226,250	51
.....	88,431	.....	4,797,308	.....	33.7	.....	.....	.....	2,699,368	1,002,930	.....	52
.....	-65.2	.....	3.8	.....	.....	.....	.....	.....	80.9	-77.3	99.6	53
29.82	6.61	38.18	104.33	55.80	18.94	17.49	28.71	75.65	127.67	20.82	94.71	54
.....	18.00	.....	73.99	.....	15.41	.....	.....	.....	36.18	123.26	44.95	55
.....	26.87	.....	66.65	.....	.....	.....	.....	.....	68.41	35.04	.....	56
			Primary	Sup.								
			Enterprises									
36	20	16	406	7	28	46	263	9	10	80	166	37
467	1,323	107	32,132	208	203	1,286	3,988	151	102	16,348	4,829	3,257
2,075	1,370	361	141,399	929	1,856	1,188	23,607	766	660	121,230	4,915	10,236
4.44	1.04	3.37	4.40	4.47	9.14	0.92	5.92	5.07	6.47	7.42	1.02	3.14
.....	4.26	.....	8.78	.....	.....	0.81	.....	.....	.....	6.40	5.72	5.68
.....	.....	.....	124,325	.....	.....	79	7,695	.....	.....	147,323	151	11,851
.....	.....	.....	5.81	.....	.....	0.46	14.80	.....	.....	8.57	0.20	3.95
.....	.....	.....	24,709	.....	.....	790	520	.....	.....	16,830	755	5,267
.....	.....	.....	5.03	.....	.....	0.10	14.80	.....	.....	8.75	0.20	2.25
.....	.....	.....	129,788	.....	.....	.....	7,695	.....	.....	142,640	150	12,000
.....	.....	.....	821,082	.....	.....	.....	.....	.....	.....	681,066	.....	138,500
34	18	16	423	6	27	57	266	9	7	87	189	38
467	1,073	107	29,890	88	204	1,654	3,967	148	71	16,652	5,322	3,261
369	2,238	76	159,774	263	152	3,021	3,069	106	261	77,370	10,191	9,150
0.8	2.1	0.7	5.4	2.9	0.7	1.8	0.8	0.7	3.7	4.6	1.8	2.8
4.40	0.72	3.37	5.62	9.33	9.09	0.97	5.96	5.43	7.17	9.47	1.00	4.17
.....	(1)	2	4	.....	4	.....	19	3	4	.....	5	3
.....	(1)	(1)	2,496	.....	12	(1)	440	80	53	(1)	425	4,128
.....	(1)	(1)	1,694	.....	10	(1)	358	15	42	(1)	296	3,014
.....	(1)	(1)	22	.....	10	(1)	36	40	42	(1)	.....	5
.....	(1)	.....	217	.....	.....	(1)	39	.....	9	(1)	92	201

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 52 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - WASHINGTON

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)		Walla Walla	Whatcom	Whitman	Yakima	All other counties ¹
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*						
1 All farms.....	1940..number.....	1,420	4,703	2,537	6,606	1,277
2	1930..number.....	1,498	4,282	2,631	6,806	1,138
3 Irrigated farms.....	1940..number.....	659	36	46	6,231	12
4	1930..number.....	682	18	45	6,507	31
5 Increase or decrease (-), 1930-40.....	percent.....	-3.4	100.0	2.2	-4.2	-61.3
6 Operated by—(a) Owners and managers.....	1940..number.....	469	30	37	4,636	11
7	1930..number.....	516	.....	38	4,835	250
8 (b) Tenants.....	1940..number.....	190	6	9	1,595	1
9	1930..number.....	166	.....	7	1,572	50
10 Land in all farms.....	1940..acres.....	726,971	196,750	1,351,907	932,495	128,444
11 Land in irrigated farms.....	1940..acres.....	82,987	2,886	72,359	414,277	1,417
12 Average per farm.....	1940..acres.....	126	80	1,573	66	118
13 (a) Operated by owners and managers.....	1940..acres.....	62,926	2,489	71,403	307,159	(2)
14 Average per farm.....	1940..acres.....	134	83	1,930	66	(2)
15 (b) Operated by tenants.....	1940..acres.....	20,061	397	956	107,118	(2)
16 Average per farm.....	1940..acres.....	106	66	106	67	(2)
17 Approximate land area.....	1940..acres.....	824,320	1,376,640	1,386,880	2,734,720	1,354,880
IRRIGATED AND IRRIGABLE AREAS						
18 Area irrigated.....	1939..acres.....	20,363	528	1,419	289,581	.....
19 (a) Cropland harvested.....	1939..acres.....	16,011	463	1,215	240,187	.....
20 (b) Crop failure.....	1939..acres.....	636	.....	55	2,355	.....
21 (c) Pasture.....	1939..acres.....	3,616	65	149	47,042	.....
22 Area irrigated.....	1929..acres.....	18,921	.....	1,813	254,055	957
23	1919..acres.....	23,575	.....	2,099	230,033	2,778
24 Increase or decrease (-), 1929-1939.....	percent.....	7.6	.....	-25.8	14.0	.....
25 Irrigable area in enterprises.....	1940..acres.....	24,700	1,140	1,801	381,473	.....
26	1930..acres.....	22,485	.....	2,340	475,530	1,570
27	1920 ² ..acres.....	45,303	.....	4,138	309,235	10,014
28 Excess of irrigable area over the area irrigated.....	1940..acres.....	4,337	612	482	91,889	.....
29	1930..acres.....	3,544	.....	427	221,475	613
30 Area works were capable of supplying with water.....	1940..acres.....	23,472	1,024	1,791	335,367	.....
31	1930..acres.....	20,453	.....	2,083	299,091	1,280
32	1920..acres.....	39,040	.....	2,636	242,726	7,315
33 Increase or decrease (-), 1930-1940.....	percent.....	14.8	.....	-14.0	11.8	.....
34 Excess, capability of works over area irrigated.....	1940..acres.....	3,109	496	372	45,783	.....
35	1930..acres.....	1,632	.....	170	46,936	323
36 Proportion which area irrigated is of all lands in irrigated farms.....	1939..percent.....	24.5	19.3	2.0	89.9	.....
37	1929..percent.....	23.6	.....	6.2	61.6	6.8
38 Proportion which area irrigated is of area works were capable of supplying with water.....	1939..percent.....	80.8	51.6	70.2	86.3	.....
39	1929..percent.....	92.5	.....	81.8	84.7	74.8
CAPITAL INVESTED TO JANUARY 1						
40 Total investment in all enterprises.....	1940..dollars.....	593,634	27,116	107,592	23,256,428	.....
41 (a) Cost of irrigation works and equipment.....	1940..dollars.....	543,749	26,870	107,482	22,885,436	.....
42 (b) Investment in water rights (reported).....	1940..dollars.....	49,686	146	110	370,992	.....
43 Total investment in all enterprises.....	1930..dollars.....	576,916	.....	85,820	15,215,018	86,190
44	1920..dollars.....	990,667	.....	225,933	8,897,058	248,934
45 Increase or decrease (-), 1930-1940.....	percent.....	3.1	.....	12.6	52.9	.....
46 Average investment, based on area works were capable of supplying with water, per acre.....	1940..dollars.....	25.29	26.48	60.07	69.34	.....
47	1930..dollars.....	28.16	.....	45.66	50.72	67.34
48	1920..dollars.....	25.38	.....	89.09	36.65	34.03
49 Average investment per acre irrigated.....	1939..dollars.....	29.15	51.36	75.82	80.31	.....
50 Estimated final investment in existing enterprises.....	1940..dollars.....	587,116	31,586	113,642	24,129,413	.....
51	1930..dollars.....	587,966	.....	102,820	23,256,538	96,015
52	1920..dollars.....	1,340,767	.....	237,833	10,670,024	291,794
53 Increase or decrease (-), 1930-1940.....	percent.....	1.6	.....	10.8	3.3	.....
54 Average investment, based on estimated final investment and irrigable area, per acre.....	1940..dollars.....	24.18	27.71	59.78	63.25	.....
55	1930..dollars.....	26.17	.....	43.81	49.12	61.16
56	1920 ² ..dollars.....	29.60	.....	57.40	34.50	29.13
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
		Primary	Supplemental		Primary	Supplemental
		Enterprises			Enterprises	
57 Enterprises reporting maintenance and operation.....	1939..number.....	257	5	33	43	27
58 Area irrigated in these enterprises.....	1939..acres.....	19,631	101	512	1,944	1,117
59 Cost of maintenance and operation.....	1939..dollars.....	28,500	236	2,100	7,668	3,872
60 Average cost, per acre irrigated.....	1939..dollars.....	1.45	2.34	4.10	5.70	3.47
61	1929..dollars.....	2.99	.....	.....	8.64	.....
62 Total annual charges (reported) ⁴	1939..dollars.....	23,829	.....	75	542,167	.....
63 Average annual charge per acre irrigated.....	1939..dollars.....	1.87	.....	1.00	1.99	.....
64 Area against which charges were assessed.....	1939..acres.....	13,333	.....	75	294,392	.....
65 Average annual charge per acre assessed.....	1939..dollars.....	1.79	.....	1.00	1.84	.....
66 Total charges collected ⁴	1939..dollars.....	23,795	.....	100	167,643	.....
67 Indebtedness to December 31 (reported) ⁵	1939..dollars.....	68,306	.....	.....	6,197,982	528,876
WATER DELIVERED TO IRRIGATORS						
68 Enterprises reporting water delivered.....	1939..number.....	270	7	29	45	28
69 Area irrigated in these enterprises.....	1939..acres.....	19,688	126	493	1,419	286,926
70 Water delivered in these enterprises.....	1939..acre-feet.....	79,747	297	511	3,674	1,298,540
71 Average water delivered per acre irrigated.....	1939..acre-feet.....	4.1	2.4	1.0	2.6	4.5
72 Average cost of water per acre irrigated.....	1939..dollars.....	1.81	2.34	4.35	5.70	2.05
DRAINAGE OF IRRIGATED LAND						
73 Enterprises reporting land drained or needing drainage.....	1939..number.....	(2) 1	.....	3	2	17
74 Irrigable area in these enterprises.....	1939..acres.....	(2)	.....	268	(2)	301,426
75 Irrigated area in these enterprises.....	1939..acres.....	(2)	.....	102	(2)	213,982
76 Area for which drains have been installed.....	1939..acres.....	(2)	.....	152	(2)	170,996
77 Additional area needing drainage.....	1939..acres.....	(2)	.....	.....	.....	10,850

* 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 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 - WASHINGTON

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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

[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	Adams	Asotin	Benton	Chelan	Clallam	Clark	Columbia
FARM VALUES, 1940*								
1 Land and buildings, all farms.....dollars..	593,366,445	20,904,693	4,679,463	7,875,658	13,745,699	5,652,448	21,455,133	13,280,553
2 Land and buildings, irrigated farms.....dollars..	121,212,949	398,220	1,552,929	5,596,883	12,774,521	1,011,875	1,205,650	966,530
3 Operated by—								
4 (a) Owners and managers.....dollars..	100,900,376	321,270	1,399,129	4,718,268	12,081,698	892,625	931,350	933,080
5 (b) Tenants.....dollars..	20,312,573	16,950	153,800	878,615	692,823	119,350	274,300	33,450
6 Average, land and buildings, per farm.....dollars..	6,955.87	22,548.00	4,705.85	3,691.88	7,192.86	9,369.21	9,133.71	10,505.76
per acre in farms.....dollars..	57.50	8.80	20.02	73.63	116.81	133.49	136.93	16.31
7 Buildings, irrigated farms reporting value.....number...	17,135	14	328	1,490	1,736	107	131	90
8 Total reported.....dollars..	36,111,610	19,096	578,295	1,864,271	4,321,899	283,340	343,210	190,750
9 Average, per irrigated farm reporting.....dollars..	2,107.49	1,364.00	1,763.09	1,251.16	2,489.57	2,648.04	2,619.92	2,119.44
10 per acre on all irrigated farms.....dollars..	17.13	0.50	7.46	24.53	39.52	37.38	38.98	3.32
11 Buildings, nonirrigated farms reporting value.....number...	63,475	625	207	147	294	1,108	4,355	421
12 Total reported.....dollars..	118,408,323	2,089,602	449,410	242,237	312,589	1,617,595	7,368,578	1,267,420
13 Average, per nonirrigated farm reporting.....dollars..	1,865.43	3,359.36	2,171.00	1,647.87	1,063.23	1,459.91	1,691.98	3,010.50
14 per acre on all nonirrigated farms.....dollars..	9.06	2.27	1.78	0.55	4.39	25.57	36.80	4.29
15 Implements and machinery, irrigated farms reporting value.....number...	15,795	14	221	1,419	1,642	89	113	82
16 Total reported.....dollars..	13,082,573	21,953	127,753	686,950	1,382,538	85,598	118,134	68,785
17 Average, per irrigated farm reporting.....dollars..	828.27	1,568.21	578.20	484.11	842.17	961.78	1,045.43	838.84
18 per acre, on all irrigated farms.....dollars..	6.21	0.57	1.05	8.04	12.64	11.29	13.42	1.16
19 Implements and machinery, nonirrigated farms reporting value.....number...	52,562	619	195	138	234	763	3,711	390
20 Total reported.....dollars..	43,018,574	2,531,070	360,825	403,327	94,008	354,783	1,423,352	962,636
21 Average, per acre, on all nonirrigated farms.....dollars..	3.29	2.74	1.43	0.61	1.32	5.61	7.12	3.26
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
22 Enterprises.....1940.....number.....	14,125	12	26	134	500	13	104	56
23 .....1930.....number.....	12,989	20	19	101	545	8	12	67
24 .....1920.....number.....	2,692	26	21	146	379	7	.....	52
25 Average size of enterprise based on								
26 irrigable area.....1940.....acres.....	203	72	158	463	83	1,622	16	55
27 .....1930.....acres.....	306	68	264	286	75	2,518	.....	43
28 .....1920.....acres.....	311	67	223	493	172	1,900	.....	68
29 Diversion dams.....1940.....number.....	1,755	4	36	3	172	5	43	42
30 Main canals and laterals.....1940.....length, miles.....	4,248.6	9.3	28.7	208.7	276.7	84.5	6.8	27.3
31 .....1930.....length, miles.....	3,635	18	3	209	331	99	.....	22
32 .....1920.....length, miles.....	5,615	27	16	336	424	68	.....	51
33 .....1940.....capacity, c.f.s. ⁴	15,104	12	67	727	1,269	401	61	104
34 .....1930.....capacity, c.f.s. ⁴	14,987	19	6	2,072	895	414	.....	63
35 .....1920.....capacity, c.f.s. ⁴	16,242	203	39	962	1,100	570	.....	697
36 Pipe lines ⁵.....1940.....length, miles.....	2,612.7	3.6	52.5	233.7	645.0	2.7	31.8	2.6
37 Storage dams.....1940.....number.....	125	.....	.....	.....	28	.....	4	.....
38 Reservoirs.....1940.....number.....	114	.....	1	.....	23	.....	1	.....
39 .....1930.....number.....	78	.....	2	.....	21	.....	.....	.....
40 .....1920.....number.....	205	4	1	.....	36	.....	.....	1
41 .....1940.....capacity, acre-feet..	1,165,637	.....	(⁶)	.....	8,127	(⁶)	.....	.....
42 .....1930.....capacity, acre-feet..	899,807	.....	83	.....	12,783	.....	.....	.....
43 .....1920.....capacity, acre-feet..	477,789	4	100	.....	11,481	.....	.....	1
44 Wells, flowing.....1940.....number.....	50	1	.....	7	.....	.....	8	.....
45 .....1930.....number.....	42	1	.....	9	4	.....	.....	.....
46 .....1920.....number.....	60	6	.....	7	1	.....	.....	.....
47 .....1940.....yield, g.p.m.....	21,192	(⁶)	.....	2,700	.....	.....	20	.....
48 .....1930.....yield, g.p.m.....	27,200	100	.....	11,900	90	.....	.....	.....
49 .....1920.....yield, g.p.m.....	14,925	160	.....	6,200	10	.....	.....	.....
50 Wells, pumped.....1940.....number.....	1,041	3	.....	80	60	.....	39	2
51 .....1930.....number.....	1,019	7	.....	143	98	.....	.....	.....
52 .....1920.....number.....	520	7	.....	101	13	.....	.....	4
53 .....1940.....yield, g.p.m.....	287,327	1,130	.....	22,540	4,422	.....	5,825	(⁶)
54 .....1930.....yield, g.p.m.....	308,800	6,240	.....	41,230	10,109	.....	.....	.....
.....1920.....yield, g.p.m.....	227,744	5,160	.....	38,807	1,775	.....	.....	130
55 Pumping plants.....1940.....number.....	2,487	4	3	142	350	1	65	2
56 .....1930.....number.....	1,951	6	6	201	399	.....	.....	3
57 .....1920.....number.....	975	12	1	144	138	.....	.....	7
58 Prime movers.....1940.....capacity, hp.....	37,131	44	440	3,383	5,363	(⁶)	308	(⁶)
59 .....1930.....capacity, hp.....	33,187	73	221	4,499	4,722	.....	.....	17
60 .....1920.....capacity, hp.....	22,929	143	5	4,555	1,415	.....	.....	23
61 Pumps.....1940.....capacity, g.p.m.....	963,751	1,730	4,250	117,932	62,170	(⁶)	10,614	(⁶)
62 .....1930.....capacity, g.p.m.....	963,303	6,225	2,505	220,012	80,489	.....	.....	1,203
63 .....1920.....capacity, g.p.m.....	636,552	10,042	200	163,628	45,853	.....	.....	355
64 Pumping lift, from all sources.....1940.....average, feet.....	47	50	166	39	92	(⁶)	14	(⁶)
65 .....1930.....average, feet.....	59	31	131	37	89	.....	.....	14
66 .....1920.....average, feet.....	60	28	8	37	80	.....	.....	18
67 from pumped wells.....1940.....average, feet.....	43	61	.....	35	45	.....	15	(⁶)
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁷								
68 Enterprises reporting pay roll.....number.....	205	.....	2	8	37	8	.....	3
69 Irrigated area in these enterprises.....acres.....	499,904	.....	(⁶)	34,616	24,857	10,829	.....	317
70 Wages and salaries paid and payable.....dollars..	784,904	.....	(⁶)	77,349	77,655	12,667	.....	445
71 Persons employed during week ending April 29.....number...	937	.....	(⁶)	78	111	72	.....	1

*Census of Agriculture. ¹Includes intercounty projects counted as independent enterprises for each county into which they extend. For actual number of enterprises see State table 1. ²For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ³Not revised. 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 - WASHINGTON

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)		Cowlitz	Douglas	Ferry	Franklin	Garfield	Grant	Grays Harbor	Island
FARM VALUES, 1940*									
1	Land and buildings, all farms.....dollars..	7,961,384	14,049,914	2,164,155	6,686,351	9,628,627	9,517,678	8,219,535	4,513,110
2	Land and buildings, irrigated farms.....dollars..	427,400	3,335,289	624,930	897,800	1,006,000	1,417,607	559,850	40,000
3	Operated by—								
4	(a) Owners and managers.....dollars..	279,500	3,112,064	525,000	825,200	715,200	1,116,552	523,150	40,000
5	(b) Tenants.....dollars..	147,900	223,225	99,930	72,600	290,800	301,055	37,700	.....
6	Average, land and buildings, per farm.....dollars..	15,264.29	6,963.03	5,387.33	4,651.81	25,150.00	8,605.01	4,826.29	5,000.00
7	per acre in farms.....dollars..	116.02	68.60	15.42	41.55	15.95	18.15	77.43	161.04
8	Buildings, irrigated farms reporting value.....number..	28	464	113	184	40	159	115	8
9	Total reported.....dollars..	89,100	959,121	143,750	322,395	108,150	319,964	241,100	17,650
10	Average, per irrigated farm reporting.....dollars..	3,182.14	2,064.02	1,272.12	1,752.15	2,703.75	2,012.35	2,122.61	2,206.25
11	per acre on all irrigated farms.....dollars..	24.19	19.71	3.55	14.92	1.71	4.10	39.76	71.46
12	Buildings, nonirrigated farms reporting value.....number..	1,881	712	426	153	287	428	1,769	1,022
13	Total reported.....dollars..	2,477,905	1,144,291	335,025	582,230	944,318	952,062	2,919,457	1,683,145
14	Average, per nonirrigated farm reporting.....dollars..	1,317.53	1,607.15	785.44	3,805.42	3,290.31	2,234.89	1,631.89	1,646.01
15	per acre on all nonirrigated farms.....dollars..	22.78	1.39	1.59	1.37	2.98	1.45	24.06	30.76
16	Implements and machinery, irrigated farms reporting value.....number..	28	393	113	177	39	145	87	4
17	Total reported.....dollars..	43,025	432,438	70,115	126,270	79,715	133,233	62,017	1,100
18	Average, per irrigated farm reporting.....dollars..	1,536.61	1,100.35	620.49	713.39	2,043.97	918.85	712.84	275.00
19	per acre, on all irrigated farms.....dollars..	11.68	8.89	1.73	5.84	1.26	1.71	8.58	4.45
20	Implements and machinery, nonirrigated farms reporting value.....number..	1,691	694	395	148	286	404	1,597	671
21	Total reported.....dollars..	671,906	1,714,621	160,972	727,443	865,821	969,296	800,304	354,541
22	Average, per acre, on all nonirrigated farms.....dollars..	6.18	2.08	0.72	1.71	2.73	1.48	6.84	6.66
ENTERPRISES AND IRRIGATION WORKS									
JANUARY 1									
23	Enterprises.....1940.....number.....	28	191	89	62	37	155	123	3
24	.....1930.....number.....	.....	206	35	60	34	175	1	1
25	.....1920.....number.....	.....	86	45	48	30	172	.....	.....
26	Average size of enterprise based on								
27	irrigable area.....1940.....acres.....	41	59	30	82	22	48	11	15
28	.....1930.....acres.....	.....	51	187	80	24	52	.....	.....
29	.....1920.....acres.....	.....	103	165	297	47	74	.....	.....
30	Diversion dams.....1940.....number.....	3	9	60	.....	12	31	3	2
31	Main canals and laterals.....1940.....length, miles.....	1.1	18.2	52.4	16.1	4.0	15.2	1.0	1.0
32	.....1930.....length, miles.....	.....	28	11	8	.....	11	.....	.....
33	.....1920.....length, miles.....	.....	26	32	10	18	45	.....	.....
34	.....1940.....capacity, c. f. s. ³	19	135	101	122	42	183	89	2
35	.....1930.....capacity, c. f. s. ³.....	.....	87	17	71	.....	267	.....	.....
36	.....1920.....capacity, c. f. s. ³.....	.....	48	119	121	97	113	.....	.....
37	Pipe lines.....1940.....length, miles.....	5.7	244.5	3.7	68.8	5.1	41.8	14.6	.....
38	Storage dams.....1940.....number.....	3	6	.....	.....	.....	7	.....	1
39	Reservoirs.....1940.....number.....	1	5	.....	1	.....	4	2	.....
40	.....1930.....number.....	.....	4	1	1	.....	6	.....	.....
41	.....1920.....number.....	.....	8	2	2	1	18	.....	.....
42	.....1940.....capacity, acre-feet.....	(¹)	56	.....	(¹)	.....	41,276	(¹)	.....
43	.....1930.....capacity, acre-feet.....	.....	5	1	50	.....	74	.....	.....
44	.....1920.....capacity, acre-feet.....	.....	.....	151	2	.....	4,519	.....	.....
45	Wells, flowing.....1940.....number.....	.....	.....	.....	.....	.....	1	.....	.....
46	.....1930.....number.....	.....	.....	.....	.....	.....	.....	.....	.....
47	.....1920.....number.....	.....	2	1	.....	.....	(¹)	.....	.....
48	.....1940.....yield, g. p. m. ....	.....	.....	.....	.....	.....	.....	.....	.....
49	.....1930.....yield, g. p. m. ....	.....	.....	.....	.....	.....	.....	.....	.....
50	.....1920.....yield, g. p. m. ....	.....	190	1,000	.....	.....	.....	.....	.....
51	Wells, pumped.....1940.....number.....	8	96	.....	39	.....	122	9	1
52	.....1930.....number.....	.....	112	.....	28	1	136	.....	.....
53	.....1920.....number.....	.....	22	3	31	1	132	.....	.....
54	.....1940.....yield, g. p. m.	480	21,644	.....	11,255	.....	46,379	435	(¹)
55	.....1930.....yield, g. p. m. ....	.....	43,221	.....	8,875	60	45,251	.....	.....
56	.....1920.....yield, g. p. m. ....	.....	6,865	1,000	13,080	260	39,779	.....	.....
57	Pumping plants.....1940.....number.....	28	195	1	84	12	164	106	1
58	.....1930.....number.....	.....	204	.....	65	16	170	.....	.....
59	.....1920.....number.....	.....	55	3	50	7	164	.....	.....
60	Prime movers.....1940.....capacity, hp.....	326	2,515	(¹)	1,361	165	1,706	302	(¹)
61	.....1930.....capacity, hp.....	.....	2,832	.....	1,200	284	2,650	.....	.....
62	.....1920.....capacity, hp.....	.....	1,452	9	1,100	242	3,084	.....	.....
63	Pumps.....1940.....capacity, g. p. m.	6,801	44,024	(¹)	48,476	7,855	71,419	7,659	(¹)
64	.....1930.....capacity, g. p. m. ....	.....	60,258	.....	97,265	8,694	81,925	.....	.....
65	.....1920.....capacity, g. p. m. ....	.....	38,760	153	36,473	7,750	76,924	.....	.....
66	Pumping lift, from all sources.....1940.....average, feet.....	12	77	(¹)	35	47	57	9	(¹)
67	.....1930.....average, feet.....	.....	72	.....	34	48	74	.....	.....
68	.....1920.....average, feet.....	.....	95	12	48	76	79	.....	.....
69	from pumped wells.....1940.....average, feet.....	25	67	.....	33	.....	63	29	(¹)
PAY ROLL AND NUMBER OF EMPLOYEES									
1939*									
70	Enterprises reporting pay roll.....number.....	.....	8	.....	1	.....	1	.....	.....
71	Irrigated area in these enterprises.....acres.....	.....	4,110	.....	(¹)	.....	(¹)	.....	.....
72	Wages and salaries paid and payable.....dollars..	.....	13,053	.....	(¹)	.....	(¹)	.....	.....
73	Persons employed during week ending April 29.....number..	.....	18	.....	(¹)	.....	.....	.....	.....

* 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.

‡ 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"

³Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

⁴ Includes siphons and farm pipe lines reported.

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

CENSUS OF IRRIGATION—WASHINGTON

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)		Spokane	Stevens	Thurston	Walla Walla	Whatcom	Whitman	Yakima	All other counties ¹
FARM VALUES, 1940*									
1	Land and buildings, all farms.....dollars..	39,372,082	11,499,619	11,415,527	30,104,903	23,351,635	67,978,332	47,514,884	7,327,933
2	Land and buildings, irrigated farms.....dollars..	5,068,680	1,606,700	944,437	8,023,655	412,353	1,166,260	45,031,451	97,100
3	Operated by—								
4	(a) Owners and managers.....dollars..	4,485,934	1,211,300	883,237	4,801,350	345,853	1,120,360	35,409,271	(²)
5	(b) Tenants.....dollars..	600,746	395,400	51,200	1,222,305	66,500	35,900	9,622,180	(²)
6	Average, land and buildings, per farm.....dollars..	4,620.05	7,172.77	4,235.14	9,140.80	11,454.25	25,136.09	7,227.00	8,081.67
7	per acre in farms.....dollars..	145.75	28.78	71.19	72.59	142.88	15.98	108.70	68.53
8	Buildings, irrigated farms reporting value.....number..	1,060	224	216	644	35	46	6,149	12
9	Total reported.....dollars..	2,757,121	430,850	401,150	1,460,155	128,841	151,260	12,288,651	31,800
10	Average, per irrigated farm reporting.....dollars..	2,529.47	1,923.44	1,857.18	2,267.32	3,681.17	3,268.26	1,968.48	2,650.00
11	per acre on all irrigated farms.....dollars..	70.00	7.73	30.24	17.59	44.64	2.09	29.66	22.44
12	Buildings, nonirrigated farms reporting value.....number..	3,851	2,289	2,640	745	4,626	2,422	380	1,251
13	Total reported.....dollars..	7,151,688	2,937,190	4,031,544	2,235,161	6,856,404	7,562,116	521,001	2,576,019
14	Average, per nonirrigated farm reporting.....dollars..	1,857.10	1,284.86	1,527.10	3,000.22	1,914.46	3,130.52	1,447.22	2,059.17
15	per acre on all nonirrigated farms.....dollars..	9.01	6.24	24.49	3.47	45.68	5.93	1.01	20.28
16	Implement and machinery, irrigated farms reporting value.....number..	842	217	188	626	36	44	5,830	12
17	Total reported.....dollars..	409,273	162,156	97,546	572,656	67,629	87,595	4,865,204	7,080
18	Average, per irrigated farm reporting.....dollars..	486.07	747.26	518.86	914.79	1,878.58	1,990.80	834.51	590.00
19	per acre, on all irrigated farms.....dollars..	11.73	2.80	7.35	6.90	23.43	1.21	11.74	5.00
20	Implement and machinery, nonirrigated farms reporting value.....number..	3,385	2,126	2,310	709	3,778	2,273	297	1,074
21	Total reported.....dollars..	3,031,225	985,903	819,494	2,085,320	1,739,373	6,630,878	224,684	569,087
22	Average, per acre, on all nonirrigated farms.....dollars..	3.82	2.08	4.97	3.25	8.97	5.18	0.43	4.48
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
23	Enterprises.....1940.....number.....	90	192	38	285	35	45	465	.....
24	.....1930.....number.....	99	112	4	341	13	43	221	26
25	.....1920.....number.....	107	199	.....	280	.....	29	232	54
26	Average size of enterprise based on								
27	irrigable area.....1940.....acres.....	216	36	125	87	33	42	820	.....
28	.....1930.....acres.....	384	46	1,258	66	.....	54	2,182	.....
29	.....1920.....acres.....	369	144	.....	162	.....	143	1,237	185
30	Diversion dams.....1940.....number.....	22	125	7	161	4	24	228	.....
31	Main canals and laterals.....1940.....length, miles.....	110.1	78.9	50.7	144.7	.....	15.1	1,664.2	.....
32	.....1930.....length, miles.....	25	50	51	135	.....	15	1,772	11
33	.....1920.....length, miles.....	230	269	.....	1,148	.....	31	1,580	50
34	.....1940.....capacity, c.f.s. ⁴	91	247	127	533	15	57	5,802	.....
35	.....1930.....capacity, c.f.s. ⁴	289	75	100	301	.....	15	5,946	23
36	.....1920.....capacity, c.f.s. ⁴	782	477	.....	959	.....	48	5,183	191
37	Pipe lines ⁵.....1940.....length, miles.....	164.6	7.7	13.9	46.3	4.9	22.9	421.4	.....
38	Storage dams.....1940.....number.....	5	3	.....	.....	.....	4	5	.....
39	Reservoirs.....1940.....number.....	12	2	1	.....	.....	3	5	.....
40	.....1930.....number.....	3	1	1	2	.....	.....	5	3
41	.....1920.....number.....	32	7	.....	5	.....	3	10	.....
42	.....1940.....capacity, acre-feet.....	70	(²)	(²)	.....	.....	2	238,150	.....
43	.....1930.....capacity, acre-feet.....	1,607	80	35	2	.....	.....	243,387	5
44	.....1920.....capacity, acre-feet.....	5,663	800	.....	.....	.....	.....	39,000	54
45	Wells, flowing.....1940.....number.....	.....	1	.....	13	1	7	4	.....
46	.....1930.....number.....	.....	.....	.....	17	.....	6	4	.....
47	.....1920.....number.....	.....	.....	.....	33	.....	5	3	1
48	.....1940.....yield, g.p.m.....	.....	(²)	.....	7,495	(²)	7,025	601	.....
49	.....1930.....yield, g.p.m.....	.....	.....	.....	10,600	.....	1,200	3,350	.....
50	.....1920.....yield, g.p.m.....	.....	.....	.....	6,080	.....	1,000	285	.....
51	Wells, pumped.....1940.....number.....	48	3	8	86	22	3	82	.....
52	.....1930.....number.....	80	5	3	114	.....	3	48	22
53	.....1920.....number.....	49	2	.....	45	.....	.....	43	3
54	.....1940.....yield, g.p.m.....	79,403	65	383	19,901	6,089	530	28,189	.....
55	.....1930.....yield, g.p.m.....	74,059	1,500	313	18,628	.....	.....	19,203	3,602
56	.....1920.....yield, g.p.m.....	58,946	45	.....	36,240	.....	.....	8,225	120
57	Pumping plants.....1940.....number.....	83	11	22	126	30	35	267	.....
58	.....1930.....number.....	93	7	3	166	.....	32	117	60
59	.....1920.....number.....	75	9	.....	65	.....	11	51	11
60	Prime movers.....1940.....capacity, hp.....	3,790	26	287	707	217	504	8,018	.....
61	.....1930.....capacity, hp.....	3,732	42	18	955	.....	479	5,460	344
62	.....1920.....capacity, hp.....	3,316	41	.....	2,775	.....	340	1,795	151
63	Pumps.....1940.....capacity, g.p.m.....	75,402	2,200	3,450	35,697	9,520	13,895	245,156	.....
64	.....1930.....capacity, g.p.m.....	69,934	2,105	313	31,169	.....	15,841	150,511	20,858
65	.....1920.....capacity, g.p.m.....	79,688	9,156	.....	25,885	.....	8,434	47,003	1,303
66	Pumping lift, from all sources.....1940.....average, feet.....	54	15	39	20	25	47	46	.....
67	.....1930.....average, feet.....	76	38	80	24	.....	47	39	33
68	.....1920.....average, feet.....	83	48	.....	24	.....	56	38	.....
69	from pumped wells.....1940.....average, feet.....	71	28	48	22	22	32	55	.....
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁶									
70	Enterprises reporting pay roll.....number.....	15	1	1	24	.....	.....	53	.....
71	Irrigated area in these enterprises.....acres.....	15,402	(²)	(²)	12,774	.....	.....	270,569	.....
72	Wages and salaries paid and payable.....dollars..	40,753	(²)	(²)	12,203	.....	.....	372,913	.....
73	Persons employed during week ending April 29.....number..	64	.....	(²)	39	.....	.....	302	.....

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

CENSUS OF IRRIGATION—WYOMING

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....	^a 62,403,840	62,430,720	62,430,720	62,430,720	62,460,160	62,460,160	62,460,160
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number...	15,018	17,487	16,011	15,748	10,987	6,085	3,125
Land in all farms.....acres....	28,025,979	28,161,911	23,525,234	11,809,351	8,543,010	8,124,536	1,830,432
Farms irrigated: ¹							
Farms.....number...	8,637	7,860	7,308	6,449	6,297	3,721	1,917
Increase or decrease (-) over preceding census.....percent...	² 18.2	.....	13.3	2.4	89.2	94.1	.....
Proportion of all farms.....percent...	57.5	44.9	45.6	41.0	57.3	61.1	61.3
Land in farms.....acres....	12,915,523	(³)	9,959,883	(³)	(³)	(³)	(³)
Proportion of all farm land.....percent...	46.1	(³)	42.3	(³)	(³)	(³)	(³)
Area irrigated.....acres....	⁴ 1,284,027	⁵ 773,930	⁶ 978,106	(⁷)	(⁷)	605,878	229,676
Increase or decrease (-) over preceding census.....percent...	² 31.3	.....	.....	.....	.....	163.8	.....
Proportion of total land area of State.....percent...	2.1	1.2	1.6	.....	.....	1.0	0.4
Proportion of all farm land.....percent...	4.3	2.7	4.2	.....	.....	7.5	12.5
Value of irrigated farms (land and buildings).....dollars..	106,524,175	(³)	120,208,187	(³)	(³)	(³)	(³)
Average per farm.....dollars..	12,333.47	(³)	16,448.85	(³)	(³)	(³)	(³)
Average per acre.....dollars..	8.25	(³)	12.07	(³)	(³)	(³)	(³)
Value of farm implements and machinery ⁸.....dollars..	10,873,844	(³)	9,483,869	(³)	(³)	(³)	(³)
Average per farm ⁸.....dollars..	1,258.98	(³)	1,297.74	(³)	(³)	(³)	(³)
Average per acre ⁸.....dollars..	0.84	(³)	0.95	(³)	(³)	(³)	(³)
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number...	3,385	(³)	2,631	3,564	5,577	(³)	(³)
Farms irrigated.....number...	11,527	(³)	(³)	(³)	(³)	(³)	(³)
Area irrigated.....acres....	1,486,498	(³)	1,236,155	1,207,982	1,133,302	(³)	(³)
Area existing works were capable of supplying with water.....acres....	1,913,527	(³)	1,655,008	1,831,039	1,639,510	(³)	(³)
Area irrigable.....acres....	2,277,046	(³)	1,958,147	⁹ 2,564,668	⁹ 2,224,298	(³)	(³)
Additional area existing works were capable of supplying with water.....acres....	427,029	(³)	418,853	623,057	506,208	(³)	(³)
Additional irrigable area in enterprises not supplied with water.....acres....	790,548	(³)	721,992	⁹ 1,356,686	⁹ 1,090,896	(³)	(³)
Investment in irrigation enterprises.....dollars..	11,522,801	(³)	35,153,187	34,326,328	17,700,980	3,973,165	831,427
Increase or decrease (-) over preceding census.....percent...	² 18.1	(³)	2.4	93.9	345.5	377.9	.....
Average per acre based on area works were capable of supplying with water.....dollars..	21.70	(³)	21.24	18.75	10.80	(³)	(³)
Increase or decrease (-) over preceding census.....percent...	² 2.2	(³)	13.3	73.6	.....	.....	.....
Estimated completed cost of existing enterprises.....dollars..	48,539,663	(³)	41,970,416	51,500,288	20,425,890	(³)	(³)
Average per acre based on irrigable area in enterprises.....dollars..	21.32	(³)	21.43	⁹ 20.08	⁹ 9.18	(³)	(³)
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	0.59	(³)	0.84	1.04	0.86	(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 284,374 acres of irrigated land used only for pasture. ⁵Irrigated land from which crops were harvested. ⁶Acreage 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. The land area shown for 1940 represents redeterminations by the Bureau of the Census and, therefore, differs from those 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
	Number	Acres	Acres	Acres	Acres	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
All farms.....	15,018	28,025,979	1,534,800	1,019,653	284,374	159,971,284	5.67	29,335,484	1.05	15,309,847	0.55
Owners and managers.....	11,380	25,482,074	1,210,366	808,952	236,470	133,468,006	5.24	24,463,820	0.96	11,899,304	0.47
Tenants.....	3,638	2,543,905	324,434	210,701	27,904	25,463,288	10.02	4,871,664	1.92	3,410,543	1.30
Irrigated farms, total.....	8,637	12,915,523	1,091,107	1,019,653	284,374	106,524,175	8.25	20,788,056	1.61	10,873,844	0.84
Owners and managers.....	6,427	11,959,999	898,052	808,952	236,470	88,316,333	7.38	17,261,091	1.44	8,364,039	0.70
Tenants.....	2,210	955,523	223,055	210,701	27,904	18,207,842	19.06	3,527,865	3.69	2,509,805	2.63
Wholly irrigated farms.....	7,252	10,595,812	916,123	916,123	232,997	87,203,069	8.23	17,123,152	1.62	9,082,087	0.85
Owners and managers.....	5,336	9,800,969	725,863	725,863	209,963	71,854,510	7.33	14,132,962	1.44	8,060,190	0.71
Tenants.....	1,916	794,843	190,260	190,260	23,034	15,348,559	19.51	2,990,190	3.76	2,131,897	2.68
Partly irrigated farms.....	1,385	2,319,711	174,684	103,530	31,377	19,321,106	8.39	3,665,804	1.58	1,781,757	0.77
Owners and managers.....	1,091	2,159,023	143,189	83,089	26,507	16,461,823	7.62	3,128,129	1.45	1,403,849	0.65
Tenants.....	294	160,688	32,795	20,441	4,870	2,859,283	17.79	537,675	3.35	377,908	2.35
Nonirrigated farms, total.....	6,381	15,110,456	443,693	.....	.....	52,447,119	3.47	8,546,528	0.57	4,436,003	0.29

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.

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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.....	3,985	2,277,046	1,913,527	1,466,496	1,236,155	1,207,982	20.3	1,360,506	1,418,031	1,298,355	2.1	0.69	0.32
Primary sources:													
Streams, gravity.....	2,687	2,167,185	1,842,092	1,430,647	1,173,763	1,155,596	21.9	1,306,099	1,365,992	1,247,682	2.1	0.63	0.30
Streams, pumped.....	99	12,032	10,938	7,860	9,489	1,525	-17.2	7,834	7,704	7,678	1.7	1.80	1.06
Streams, gravity and pumped.....	12	13,286	12,892	11,906	.....	.....	.....	11,908	10,194	10,194	0.9	0.14	0.16
Wells, pumped.....	64	² 4,232	² 3,775	3,008	180	147	(³)	3,008	2,751	2,751	1.0	4.61	2.43
Wells, flowing.....	20	890	791	459	140	19	227.9	436	261	241	1.2	2.09	1.73
Wells, pumped and flowing.....	1	(²)	(³)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity.....	5	1,049	629	591	{ 3,656	355	-83.9	571	566	566	1.1	1.25	1.10
Lakes, pumped.....	2	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....
Springs.....	116	8,721	8,410	7,011	6,289	5,985	11.5	6,588	6,278	5,874	2.8	0.60	0.22
Springs and streams.....	43	23,250	22,888	16,504	.....	.....	.....	16,468	16,291	16,286	1.3	1.31	0.97
Stored storm water.....	32	3,123	2,591	947	974	10,852	-2.8	906	503	518	1.4	1.45	1.05
City water.....	2	152	152	152	{ 65	.....	133.8	152	150	150	0.4	0.23	0.52
Sewage.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped...	6	.....	.....	.....	{ 137	400	(³)	1,775	2,650	1,775	0.8	1.19	1.48
Streams, gravity; wells, flowing...	2	2,701	2,881	2,650	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped; wells, pumped...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waste water, seepage or drainage...	3	180	180	160	.....	.....	.....	160	100	100	3.5	0.55	0.16
Other mixed.....	24	40,245	5,408	4,601	38,497	33,043	-88.0	4,601	4,511	4,511	1.0	0.92	0.86
Other and not reported.....	.....	.....	.....	.....	2,959	60	.....	.....	.....	.....	.....	.....	.....
Supplemental sources: ⁴													
Streams, gravity and/or storage...	61	162,436	160,116	90,656	.....	.....	.....	64,821	88,489	64,302	0.8	0.28	0.35
Streams, pumped.....	4	.....	.....	.....	{ ..... 2,925	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped.....	1	2,974	2,974	2,925	.....	.....	.....	2,925	2,925	2,925	2.6	4.89	3.08
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 for 1 enterprise with "Wells, pumped and flowing" source of supply are included with enterprises reporting "Wells, pumped" source of supply in the 1940 Census. ³Percent not shown when more than 1,000. ⁴Areas 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
Total.....	Dollars	Percent	Dollars	Dollars	Percent	Dollars	Dollars	Acres	Dollars	Acres	Dollars	Dollars	Acres	Dollars
	41,522,801	100.0	21.70	35,153,187	100.0	21.24	0.46	1,421,852	0.59	1,131,867	0.84	-0.25	869,581	1.04
Primary sources:														
Streams, gravity.....	37,446,314	90.1	20.33	32,977,096	93.8	21.08	-0.75	1,369,613	0.55	1,076,560	0.79	-0.24	826,088	1.03
Streams, pumped.....	222,773	0.5	20.37	283,444	0.8	19.06	1.31	7,704	1.82	8,033	1.58	0.24	985	9.91
Streams, gravity and pumped.....	150,200	0.4	11.85	.....	.....	.....	.....	10,194	0.14	.....	.....	.....	.....	.....
Wells, pumped.....	³ 92,075	³ 0.2	³ 24.39	8,250	(⁴)	28.95	-4.58	2,751	4.66	176	34.76	-30.10	123	7.79
Wells, flowing.....	22,613	0.1	25.59	1,000	(⁴)	6.25	22.34	261	2.03	90	1.67	0.36	12	9.56
Wells, pumped and flowing.....	(³)	(³)	(³)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity.....	65,377	0.2	103.94	{ 143,000	0.4	16.26	87.63	586	1.26	{ 3,655	12.97	-11.70	{ 60	0.83
Lakes, pumped.....				{ 1,560	(⁴)	23.64				{ 6	4.17		{ 12	1.20
Springs.....	82,585	0.2	9.82	51,670	0.1	6.82	2.90	6,278	0.58	4,883	0.71	-0.13	2,983	0.60
Springs and streams.....	983,808	2.4	42.80	.....	.....	.....	.....	16,291	0.37	.....	.....	.....	.....	.....
Stored storm water.....	66,608	0.2	25.78	43,348	0.1	26.35	-2.57	563	1.42	692	2.54	-1.12	10,055	0.73
City water.....	1,465	(4)	9.64	{	(4)	30.00	-20.36	150	0.23	{	.....	.....	.....	.....
Sewage.....				2,100									
Streams, gravity; wells, pumped...	103,436	0.2	36.58	{ 1,600	(4)	11.43	27.29	2,650	1.05	{ 137	0.52	0.53	{ 125	1.20
Streams, gravity; wells, flowing...				{ 150	(4)	10.00			
Streams, pumped; wells, pumped...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waste water, seepage or drainage...	5,100	(4)	25.33	.....	.....	.....	.....	100	0.55	.....	.....	.....	.....	.....
Other mixed.....	713,239	1.7	131.89	1,594,994	4.5	29.38	102.51	4,511	0.97	35,781	0.86	0.11	29,153	1.25
Other and not reported.....	.....	.....	.....	44,985	0.1	13.52	.....	.....	.....	2,854	1.14	.....	.....	.....
Supplemental sources: ⁵														
Streams, gravity and/or storage...	1,505,189	3.6	9.40	.....	.....	.....	.....	90,089	0.20	.....	.....	.....	.....	.....
Streams, pumped.....	61,809	0.1	20.78	{	.....	.....	.....	2,925	4.73	{	.....	.....	.....	.....
Wells, pumped.....							
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 for 1 enterprise with "Wells, pumped and flowing" source of supply are included with enterprises reporting "Wells, pumped" source of supply 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 - WYOMING

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			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 1,486,498	Acres 93,581	Acres 1,236,155	Acres 1,207,982	Percent 20.3		Acres	Acres	Acres	Acres	Percent		
Individual and partnership....	816,337	11,376	665,644	724,620	22.6	Commercial.....	56,653		94,760	121,310	-40.2		
Cooperative, incorporated....	320,855	31,867	303,086	286,702	31.0	Bureau of Reclamation ²	170,643	16,321	144,548	93,022	18.1		
Cooperative, unincorporated....	² 76,119	10,633	86,174	22,935	12.2	Office of Indian Affairs ³	52,941		57,668	45,000	-8.2		
Irrigation district.....	96,681	24,307	51,460	53,555	61.4	State.....	(²)			2,120	.....	
Commercial.....	10,931	15,398	21,636	22,000	9.5	City and/or sewage.....	9,807		48,200	72,215	-79.7		
Bureau of Reclamation ²	138,653					Other.....							
Office of Indian Affairs ³	23,681					IRRIGABLE AREA ⁴							
State.....	(²)					Total.....	2,277,046	165,410	1,958,147	2,564,668	16.3		
City and/or sewage.....						Individual and partnership....	1,056,540	15,562	898,108	1,339,116	17.6		
Other.....	3,241		22,069	36,230	-85.3	Cooperative, incorporated....	579,841	32,312	434,902	532,206	² 55.2		
AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER						Cooperative, unincorporated....	² 95,304		134,408	56,617	10.0		
Total.....	1,913,527	163,090	1,655,008	1,831,039	15.6	Irrigation district.....	147,790	55,941	109,760	146,478	-16.3		
Individual and partnership....	995,736	15,492	799,345	1,008,379	24.6	Commercial.....	91,898		236,869	299,789	-3.4		
Cooperative, incorporated....	425,066	32,312	395,079	432,956	² 20.0	Bureau of Reclamation ²	228,918	16,321	78,900	87,640	-18.2		
Cooperative, unincorporated....	² 84,705	13,274	115,408	54,017	2.2	Office of Indian Affairs ³	64,508			2,155	.....	
Irrigation district.....	117,976	85,691				State.....	(²)			2,177	.....	
						City and/or sewage.....				98,190	-81.2		
						Other.....	12,247		65,200				

¹Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text). ²Data for 1 "State" enterprise are included with "Cooperative, unincorporated" enterprises in the 1940 Census. ³U. S. Dept. of the Interior. ⁴For 1920 relates to total area. Irrigable area for that year was not reported. ⁵For explanation of areas, see text, p. 634.

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 3,385	Number 316	Acres 2,277,046	Acres 1,913,527	Dollars 20.64	Dollars 0.57 ¹	Dollars 9.56	Dollars 0.34	Number 11,527	Acres 1,486,498	Acres 1,193,997	Acres 16,650	Acres 275,951
Individual and partnership.....	3,142	89	1,056,540	995,736	7.55	0.41	2.85	0.21	4,088	816,337	622,747	9,214	184,376
Cooperative, incorporated.....	107	103	579,811	425,066	16.26	0.51	5.44	0.11	2,622	320,855	278,084	4,303	38,468
Cooperative, unincorporated.....	86	71	85,304	84,705	6.01	0.27	1.09	0.10	622	76,119	65,018	961	10,140
Irrigation district.....	23	23	147,790	117,976	34.66	0.82	13.41	0.59	1,620	96,681	91,181	1,500	4,000
Commercial.....	8	7	91,898	56,653	52.15	0.66			29	10,931	6,241	190	4,500
U. S. Bureau of Reclamation ²	10	10	228,918	170,643	89.26	1.23	10.81	0.70	2,194	138,653	113,127	357	25,156
U. S. Office of Indian Affairs.....	2	2	64,508	52,941	42.65	2.45			601	23,681	15,687		7,994
State.....	1		(⁴)	(⁴)	(⁴)	(⁴)			(⁴)	(⁴)			
City and/or sewage.....													
Other.....	6	1	12,247	9,807	3.21	0.37			11	3,241	1,912	25	1,304

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 "State" enterprise are included with "Cooperative, unincorporated" enterprises in the 1940 Census. ⁵Data for less than 3 enterprises shown with permission of the enterprises involved. ⁶For explanation of areas and investment, see text, p. 634.

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 41,522,801	Dollars 39,955,803	Dollars 1,566,998	Dollars 41,057,813	Dollars 464,968	Dollars 35,153,187	Dollars 34,326,328	Percent 18.1	Dollars 20.88	Dollars 9.61	Dollars 814,990	Dollars 7,016,562
Individual and partnership.....	7,819,522	7,773,873	45,649	7,557,526	261,996	5,410,053	8,738,886	44.5	7.81	2.95	1,803	181,727
Cooperative, incorporated.....	7,239,250	7,061,745	177,505	7,086,708	152,542	4,786,271	6,701,990	62.4	16.61	5.49	58,503	889,375
Cooperative, unincorporated.....	2,531,806	2,516,621	15,185	2,523,952	7,854				6.10	1.14	8,045	5,650
Irrigation district.....	5,249,158	4,096,984	1,152,174	5,237,808	11,350	2,615,006	1,441,312	100.7	34.73	13.45	446,747	906,500
Commercial.....	2,980,102	2,980,102		2,954,643	25,459	2,299,870	780,562	29.6	52.60		40	185,000
U. S. Bureau of Reclamation.....	15,411,395	15,234,910	176,485	15,407,687	3,728	17,589,985	12,683,870	-12.4	89.28	10.81	281,452	3,345,810
U. S. Office of Indian Affairs..	2,258,000	2,258,000		2,258,000		1,469,642	1,339,887	53.6	42.65		20,000	1,496,800
State.....	(²)	(²)		(²)			15,050		(²)			
City and/or sewage.....							9,980					
Other.....	33,568	33,568		31,509	2,059	982,360	2,434,791	-96.6	3.42		400	6,000

¹Only for enterprises serving 5 or more farms. ²Data for 1 "State" enterprise are included with "Cooperative, unincorporated" enterprises in the 1940 Census. ³For explanation of investment, see text, p. 634.

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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 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 40	Acres 697,738	Acres 584,130	Dollars 16,699,485	Dollars 41.01	Dollars 31.64	Number 8	Dollars 87,800	Dollars 60,888	Dollars 1.93	Acres 935,232	Dollars 662,711	Dollars 472,160
Partnership.....	13	165,689	136,589	502,220	5.74	3.68	2	(⁶)	(⁶)	(⁶)	84,965	23,344	9,814
Cooperative, incorporated.....	1	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	2	(⁶)	(⁶)	(⁶)	408,065	204,301	196,090
Cooperative, unincorporated.....	1	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	1	(⁶)	(⁶)	(⁶)	79,865	18,715	12,950
Irrigation district.....	17	184,633	179,967	1,418,894	5.26	5.19	5	18,421	4,094	0.46	135,852	158,634	112,517
Commercial.....	7	50,000	40,000	97,560	10.50	2.44	1	58,579	50,632	6.31	19,450	8,769	6,908
Bureau of Reclamation ⁸	6	228,918	170,643	⁹ 13,138,281	91.75	76.99	.....	.....	.....	.....	158,598	188,080	110,878
Office of Indian Affairs ⁹	2	64,508	52,941	¹⁰ 1,542,220	32.37	29.13	.....	.....	.....	.....	47,640	59,550	22,674
State.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(⁶)	(⁶)	(⁶)

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 \$5.47. ⁴Based on primary enterprises only; State average for supplemental enterprises is \$0.46. ⁵Data are included only in State totals because less than 3 enterprises reported 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. ⁹Represents construction costs of irrigation works less cancellations and repayments. ¹⁰For explanation of areas and investment, see text, p. 631.

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 1,421,852	Dollars 807,345	Acres 93,014	Dollars 31,923	Dollars 0.57	Dollars 0.34	Number 175	Dollars 392,047	Number 578
Individual and partnership.....	755,309	308,795	10,809	2,223	0.41	0.21	19	5,783	28
Cooperative, incorporated.....	319,855	163,222	31,867	3,613	0.51	0.11	86	79,818	197
Cooperative, unincorporated.....	273,551	119,732	10,633	1,047	0.27	0.10	39	11,346	346
Irrigation district.....	56,881	79,192	24,307	14,261	0.82	0.59	16	48,736	58
Commercial.....	10,931	7,240	.....	.....	0.86	.....	3	3,121	3
U. S. Bureau of Reclamation ²	138,053	170,019	15,399	10,779	1.29	0.70	6	195,705	192
U. S. Office of Indian Affairs.....	23,681	59,000	.....	.....	2.45	.....	2	47,538	54
State.....	(³)	(³)	.....	.....	(³)	.....	.....	.....	.....
City and/or sewage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other.....	3,191	1,175	.....	.....	0.37	.....	1	(³)	(³)

¹Only for enterprises serving 5 or more farms. ²Data for 1 "State" enterprise are included with "Cooperative, unincorporated" enterprises in the 1940 Census. ³Data for 1 "Other" enterprise are included with "Cooperative, unincorporated" enterprises in the 1940 Census. ⁴Data for less than 3 enterprises shown with permission of the enterprises involved. ⁵For explanation of areas and investment, see text, p. 631.

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
Number	Number	Sec.-ft.	Miles	Miles		Ac.-ft.	Miles		G.p.m.		G.p.m.			Hp.		G.p.m.
Total.....	4,205	319	46,386	11,715	47.1	334	3,379,957	70.3	36	3,830	94	60,522	224	4,152	230	209,559
Individual and partnership....	3,974	254	21,712	7,882	28.6	273	179,566	30.2	35	3,636	93	59,172	217	3,633	223	188,366
Cooperative, incorporated....	100	30	8,784	1,400	2.6	31	295,850	7.6	1	194	1	1,350	1	15	1	1,350
Cooperative, unincorporated....	80	5	2,218	429	1.1	4	5,667	3.0	.....	.....	.....	.....	3	11	3	1,050
Irrigation district.....	15	11	3,359	421	1.3	9	161,024	3.1	.....	.....	.....	.....	2	440	2	15,708
Commercial.....	6	6	2,369	153	0.1	6	79,266	0.3	.....	.....	.....	.....	1	45	1	3,000
Bureau of Reclamation ³	5	11	7,440	1,007	12.9	9	2,643,564	18.3	.....	.....	.....	.....	.....	.....	.....	.....
Office of Indian Affairs ⁴	15	2	250	410	0.5	2	15,000	4.3	.....	.....	.....	.....	.....	.....	.....	.....
State.....	.....	.....	(⁵)	.....	.....	.....	.....	(⁵)	.....	.....	.....	.....	(⁵)	(⁵)	(⁵)	(⁵)
City and/or sewage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other.....	11	.....	236	13	.....	.....	.....	0.5	.....	.....	.....	.....	1	8	1	83

¹Includes main and lateral canals but not farm ditches. ²Includes flumes. ³Data for 1 "State" enterprise are included with "Cooperative, unincorporated" enterprises in the 1940 Census. ⁴U. 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 4,205	Number 319	Number 2,406	Number 212	Earth and rock.....	Number 2,673	Number 277	Number 1,824	Number 137
Concrete or masonry.....	257	12	213	22	Other and mixed.....	698	21	52	45
Timber.....	528	3	317	.....	Not reported.....	49	6	.....	8

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 230	Percent 100.0	G. p. m. 209,559	Percent 100.0	Feet 30	Total, 1940.....	Number 224	Percent 100.0	Hp. 4,152	Percent 100.0
Electric motor.....	34	14.8	26,693	12.7	27	Centrifugal pump.....	142	63.4	2,812	67.8
Centrifugal.....	24	10.4	23,953	11.4	22	Electric.....	23	10.3	267	6.4
Turbine.....	3	1.3	2,580	1.2	63	Internal-combustion.....	111	49.5	2,442	58.9
Plunger.....	5	2.2	110	0.1	23	Other.....	8	3.6	103	2.5
Other.....	2	0.9	50	(¹)	40	Turbine pump.....	40	17.8	1,038	25.0
Internal-combustion engine.....	166	72.2	158,280	75.6	27	Electric.....	5	2.2	98	2.4
Centrifugal.....	118	51.3	123,268	60.3	17	Internal-combustion.....	35	15.6	940	22.6
Turbine.....	35	15.2	29,893	14.3	62	Other.....	.....	.....	.....	.....
Plunger.....	11	4.8	479	0.2	36	Plunger pump.....	23	10.3	72	1.7
Other.....	2	0.9	1,640	0.8	14	Electric.....	4	1.8	6	0.1
Other kinds of motive power.....	19	8.2	10,576	5.0	59	Internal-combustion.....	10	4.5	53	1.3
Centrifugal.....	7	3.0	10,375	5.0	19	Other.....	9	4.0	13	0.3
Turbine.....	.....	.....	.....	.....	.....	Other and mixed types of pumps.....	19	8.5	230	5.5
Plunger.....	9	3.9	103	(¹)	81	Electric.....	5	2.2	30	0.7
Other.....	3	1.3	98	(¹)	74	Internal-combustion.....	4	1.8	112	2.7
Mixed kinds of motive power.....	11	4.8	14,010	6.7	26	Other.....	10	4.5	88	2.1
Centrifugal.....	4	1.7	4,960	2.4	17	Total, 1930.....	² 61	.....	912	.....
Turbine.....	6	2.7	8,600	4.1	40	Increase or decrease (-) 1930-1940.....	163	.....	3,240	.....
Plunger.....	.....	.....	.....	.....	.....
Other.....	1	0.4	450	0.2	10					
Total, 1930.....	65	.....	80,906	.....	21					
Increase or decrease (-) 1930-1940..	165	.....	128,651	.....	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	MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940
	1940 ¹	1930 ²			1940 ¹	1930 ²	
Total.....	Miles 70.3	Miles 14.1	Percent 398.6	Wood-stave:	Miles	Miles	Percent
Concrete:				1 to 12 inches.....	9.5	.....	.....
1 to 12 inches.....	1.7	0.1	(³)	13 to 24 inches.....	0.6	.....	.....
13 to 24 inches.....	1.2	.....	.....	Over 24 inches.....	2.9	0.8	337.5
Over 24 inches.....	10.9	2.7	348.1	Clay and other:			
Metal:				1 to 12 inches.....	2.6	.....	.....
1 to 12 inches.....	26.2	6.3	315.9	13 to 24 inches.....	2.3	2.5	15.0
13 to 24 inches.....	5.1	.....	.....	Over 24 inches.....	0.6	.....	.....
Over 24 inches.....	6.7	1.7	594.1				

¹ Includes siphons and farm pipe lines reported when more than 1,000.² Pipe sizes were separated at 30 inches in diameter (instead of 24 inches) in the 1930 Census.³ Percent not shown.

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 138,653 acres irrigated in 1939 which were within the Goshen Irrigation District, North Platte Project; the Shoshone and Deaver Districts and the Willwood Division, Shoshone Project; and the Midvale District, Riverton Project. These districts are indicated as separate enterprises under the Bureau of Reclamation, and their areas are not duplicated under any other classification. Areas totaling 15,398 acres irrigated, received a supplemental supply from the Riverton Project which is under construction, and the Goshen District of the North Platte Project in Wyoming. These areas are reported as also receiving a primary water supply from other enterprises.

The investment attributed to the Bureau of Reclamation in State tables 7 and 17 relates to these areas and reflects construction costs incurred by the United States

for irrigation and power facilities which were charged to Wyoming lands at the time of the irrigation census of 1940. It also includes an investment of about \$30,000 by water users in one project. Costs of drainage works and certain facilities repayable by net power revenues and of storage dams charged to Nebraska or Idaho lands are not included in the Bureau of Reclamation investment in Wyoming. Also, not included are certain power costs in Wyoming not repayable by water users under contracts in effect at the time of the irrigation census. Data relating to the Heart Mountain Division of the Shoshone Project, under construction in 1940; the Kendrick Project on the North Platte River, where power facilities only were in operation when the census was taken; and the Eden Project being constructed on Little and Big Sandy Creeks under the Water Conservation and Utilization Program; are not included in the 1940 Census of Irrigation.

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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	ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number..	145	88	144	Ratio of area drained to area irrigated in—			
Area irrigable in these enterprises.....acres...	843,642	592,041	513,347	(a) Enterprises reporting lands drained and/or needing drainage....percent..	38.4	24.9	13.3
Area irrigated in these enterprises.....acres...	456,730	(²)	(²)	(b) All irrigation enterprises.....percent..	11.8	11.9	5.6
Area for which drains have been installed.....acres...	175,394	147,346	68,086	Ratio of area drained plus area needing drainage to—			
Additional area needing drainage.....acres...	44,997	34,077	75,183	(a) Irrigable area reporting.....percent..	26.1	30.6	27.9
				(b) Irrigated area reporting.....percent..	48.3	(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 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..	3,052,554	1,222,891	1,310,560	1,929,017	513,763	491,047	1,123,637	779,128	819,513
Area irrigated by these enterprises.....acres....	690,188	403,534	545,255	359,030	183,323	230,729	331,119	220,211	314,536
Average water per acre irrigated.....acre-feet..	4.4	3.2	2.4	5.4	2.8	2.1	3.4	3.5	2.6
Total water delivered to irrigators.....acre-feet..	2,825,665	395,362	393,985	935,998	228,552	274,200	1,889,667	166,810	119,785
Area irrigated by these enterprises.....acres....	1,356,583	180,266	186,328	259,313	111,685	128,021	1,097,270	48,581	58,307
Average water per acre irrigated.....acre-feet..	2.1	2.5	2.1	3.6	2.0	2.1	1.7	3.4	2.1
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	7,427	.....	.....	.....	.....	.....	7,427	.....	.....
Area irrigated by these enterprises.....acres....	3,923	.....	.....	.....	.....	.....	3,923	.....	.....
Average water per acre irrigated.....acre-feet..	1.9	.....	.....	.....	.....	.....	1.9	.....	.....
SUPPLEMENTAL ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	73,785	.....	.....	55,888	.....	.....	17,897	.....	.....
Area irrigated by these enterprises.....acres....	68,107	.....	.....	50,056	.....	.....	18,051	.....	.....
Average water per acre irrigated.....acre-feet..	1.1	.....	.....	1.1	.....	.....	1.0	.....	.....
Total water delivered to irrigators.....acre-feet..	56,496	.....	.....	22,838	.....	.....	33,658	.....	.....
Area irrigated by these enterprises.....acres....	67,602	.....	.....	24,077	.....	.....	43,525	.....	.....
Average water per acre irrigated.....acre-feet..	0.8	.....	.....	0.9	.....	.....	0.8	.....	.....
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	25	.....	.....	.....	.....	.....	25	.....	.....
Area irrigated by these enterprises.....acres....	144	.....	.....	.....	.....	.....	144	.....	.....
Average water per acre irrigated.....acre-feet..	0.2	.....	.....	.....	.....	.....	0.2	.....	.....

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				
	Acres	Percent	Acres	Acres	Percent	Acres	Percent
Total.....	1,486,498	100.0	93,581	1,236,155	100.0	1,207,982	100.0
Appropriation ²	1,486,392	99.7	91,991	978,069	79.2	1,009,518	83.6
Underground.....	3,679	0.2	144	320	(³)	278	(³)
Appropriation and underground.....	220	(³)	.....	.....	.....	.....	.....
Adjudicated by court.....	36,107	2.4	1,367	217,805	17.6	162,186	13.4
Other mixed and not reported.....	10,100	0.7	79	39,861	3.2	36,002	3.0

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."

³Less than one-tenth of 1 percent.

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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	Enterprises, 1940.....number...	3,319	73	2,560	404	232	32	18
2	Irrigated farms, 1939.....number...	11,527	.....	2,560	993	2,149	1,416	4,409
3	Area irrigated, 1939.....acres...	1,486,498	.....	558,025	189,901	286,097	128,148	324,327
4	(a) From which crops were harvested.....acres...	1,193,997	.....	414,158	152,631	234,797	111,984	280,427
5	(b) On which crops failed.....acres...	16,550	.....	6,932	1,890	4,366	2,505	857
6	(c) Irrigated pasture.....acres...	276,951	.....	136,935	35,380	46,934	13,659	43,043
CAPITAL INVESTMENT, 1940								
7	Total capital investment in all enterprises.....dollars..	39,955,803	2,150,445	6,122,640	1,699,024	4,793,478	3,771,992	21,418,324
8	(a) Cost of irrigation works and equipment.....dollars..	39,498,204	2,123,708	5,923,703	1,649,673	4,631,098	3,761,325	21,409,694
9	(b) Investment in water rights.....dollars..	457,598	.....	198,937	50,351	162,380	10,564	8,630
10	Area works were capable of supplying with water.....acres...	1,813,527	49,426	681,595	228,793	329,465	214,921	409,327
11	Average investment per acre irrigated.....dollars..	20.88	10.97	8.95	10.97	16.75	29.43	66.04
12	Average investment per acre which the works could supply with water.....dollars..	20.88	49.51	8.96	7.43	14.55	17.55	52.33
MAINTENANCE AND OPERATION, AND CHARGES, 1939								
13	Enterprises reporting maintenance and operation.....number...	2,961	37	2,276	379	219	32	18
14	(a) Area irrigated in these enterprises.....acres...	1,421,852	.....	514,733	181,288	273,356	128,148	324,327
15	(b) Cost of maintenance and operation.....dollars..	507,945	5,587	229,963	57,400	89,931	71,439	353,025
16	(c) Average cost per irrigated acre reporting.....dollars..	0.57	.....	0.45	0.32	0.33	0.56	1.09
17	Total annual charges.....dollars..	631,343	5,574	237	429	112,296	92,649	420,158
18	Average charge per irrigated acre reporting.....dollars..	0.87	.....	0.11	0.28	0.41	0.72	1.30
19	Area against which charges were assessed.....acres...	852,728	9,290	2,160	2,195	312,192	157,948	358,913
20	Average annual charge per acre assessed.....dollars..	0.74	0.60	0.11	0.20	0.36	0.59	1.14
21	Total charges collected.....dollars..	447,354	1,697	1,200	241	74,633	91,469	278,114
INDEBTEDNESS AND ARREARAGE, 1939								
22	Enterprises reporting indebtedness.....number...	35	4 ¹	.....	.....	9	10	15
23	(a) Area irrigated in these enterprises.....acres...	321,662	.....	.....	.....	18,474	51,683	251,805
24	(b) Indebtedness.....dollars..	15,770,071	97,560	.....	.....	217,462	489,706	14,965,233
25	(c) Average indebtedness per acre irrigated.....dollars..	48.98	.....	.....	.....	11.77	9.48	59.43
26	(d) Cost of irrigation works and equipment.....dollars..	24,308,358	1,800,000	.....	.....	449,674	1,738,500	20,320,184
27	(e) Investment in water rights.....dollars..	11,648	.....	.....	.....	1,818	1,170	8,630
28	(f) Total investment.....dollars..	24,320,006	1,800,000	.....	.....	451,522	1,739,670	20,320,814
29	(g) Maintenance and operation.....dollars..	365,666	2,056	.....	.....	9,677	33,530	320,403
30	(h) Total annual charges.....dollars..	455,508	5,574	.....	.....	24,312	48,485	377,137
31	(i) Total charges collected.....dollars..	287,475	1,697	.....	.....	13,465	38,636	233,677
32	(j) Area against which annual charges were assessed.....acres...	384,576	9,290	.....	.....	19,104	65,089	291,033
33	(k) Average indebtedness per acre assessed.....dollars..	41.01	10.50	.....	.....	11.38	7.53	51.41
34	(l) Average charges per acre assessed.....dollars..	1.18	0.60	.....	.....	1.27	0.74	1.30
35	(m) Average charges per acre irrigated.....dollars..	1.41	.....	.....	.....	1.32	0.91	1.50
36	Enterprises reporting arrearage.....number...	6	4 ¹	.....	.....	1	3	1
37	(a) Area assessed in these enterprises.....acres...	41,492	9,290	.....	.....	(5)	16,963	(5)
38	(b) Total arrearage.....dollars..	79,900	58,579	.....	.....	(5)	13,721	(5)
39	(c) Average arrearage per acre assessed.....dollars..	1.93	6.31	.....	.....	(5)	0.81	(5)
40	(d) Indebtedness.....dollars..	208,831	97,560	.....	.....	(5)	69,300	(5)
TYPE, 1940								
41	Individual and partnership.....number...	3,096	64	2,540	396	94	2	.....
42	Cooperative (incorporated and unincorporated).....number...	180	4	12	8	125	25	4
43	Irrigation district.....number...	18	1	.....	.....	6	4	7
44	Commercial.....number...	8	2	2	.....	4	.....	.....
45	U. S. Bureau of Reclamation.....number...	8	2	.....	.....	1	.....	5
46	U. S. Office of Indian Affairs.....number...	2	.....	.....	.....	.....	.....	2
47	All other.....number...	7	6	.....	.....	1	.....	.....
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939								
48	Enterprises reporting pay roll.....number...	163	4 ¹	.....	2	110	32	18
49	Wages and salaries paid and payable for 1939.....dollars..	366,458	1,010	.....	43,660	.....	39,988	302,390
50	Persons employed during week ending April 29, 1939.....number...	587	2	.....	156	.....	104	305
SOURCE OF WATER SUPPLY, 1939								
51	Streams, gravity.....number...	2,887	51	2,170	391	226	32	17
52	Streams, pumped.....number...	99	7	90	1	1	.....	.....
53	Wells, pumped.....number...	64	2	61	1	.....	.....	.....
54	Wells, pumped and flowing; or wells flowing.....number...	21	2	18	.....	1	.....	.....
55	Lakes, gravity or pumped.....number...	7	.....	7	.....	.....	.....	.....
56	Streams and springs; or springs.....number...	159	4	147	6	1	.....	1
57	Mixed, streams and wells.....number...	20	.....	15	3	2	.....	.....
58	Other mixed or stored storm water.....number...	62	7	52	2	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...	66	5	33	11	9	7	4 ¹
2	Irrigated farms, 1939.....number...	583	.....	33	27	118	295	210
3	Area irrigated, 1939.....acres...	93,581	.....	4,270	5,806	41,618	26,489	15,998
CAPITAL INVESTMENT, 1940								
4	Total capital investment in all enterprises.....dollars..	1,568,998	1,002,143	27,536	14,640	135,650	210,554	176,475
5	(a) Cost of irrigation works and equipment.....dollars..	1,559,609	1,000,620	26,935	14,145	133,000	208,004	176,475
6	(b) Investment in water rights.....dollars..	7,389	1,523	1,171	495	2,650	1,550	.....
7	Area works were capable of supplying with water.....acres...	163,090	62,671	7,339	6,618	42,704	27,537	16,321
8	Average investment per acre irrigated.....dollars..	16.74	8.45	2.52	3.26	7.95	11.46	.....
9	Average investment per acre which the works could supply with water.....dollars..	9.61	15.99	3.75	2.25	3.18	7.65	10.81
MAINTENANCE AND OPERATION, AND CHARGES, 1939								
10	Enterprises reporting maintenance and operation.....number...	59	3	28	11	9	7	4 ¹
11	(a) Area irrigated in these enterprises.....acres...	93,014	.....	3,703	5,806	41,618	26,489	15,998
12	(b) Cost of maintenance and operation.....dollars..	31,823	8	1,672	746	2,184	16,535	10,778
13	(c) Average cost per irrigated acre reporting.....dollars..	0.34	.....	0.45	0.13	0.05	0.62	0.70
14	Total annual charges.....dollars..	31,368	.....	.....	.....	3,687	16,092	10,778
15	Average charge per irrigated acre reporting.....dollars..	0.38	.....	.....	.....	0.09	0.68	0.70
16	Area against which charges were assessed.....acres...	82,504	.....	.....	.....	42,169	24,937	15,398
17	Average annual charge per acre assessed.....dollars..	0.38	.....	.....	.....	0.09	0.68	0.70
18	Total charges collected.....dollars..	24,806	10,800	.....	.....	5,194	8,812	.....

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	\$1,500,000 to \$9,999,999	
73	1,390	953	758	125	20	2,790	356	136	31	6	1
.....	1,544	1,289	2,427	1,848	4,319	4,057	1,331	1,288	2,481	2,390	2
.....	59,284	164,369	512,307	390,996	359,562	561,564	270,021	253,506	254,619	146,788	3
.....	49,993	132,565	406,649	290,617	314,173	434,760	208,463	204,725	230,988	116,041	4
.....	1,422	3,311	5,375	4,180	2,262	2,676	2,832	4,035	1,590	357	5
.....	7,849	28,483	100,283	96,199	43,127	119,108	59,698	44,716	23,041	30,390	6
2,150,445	1,227,515	2,687,024	4,600,765	6,668,503	22,621,551	2,902,089	2,698,866	4,249,792	12,317,849	17,787,207	7
2,123,708	1,175,064	2,618,159	4,470,604	6,622,823	22,487,816	2,752,746	2,631,336	4,178,584	12,151,486	17,784,072	8
26,737	52,451	68,805	130,161	45,690	133,705	149,343	67,530	71,238	166,363	3,195	9
48,428	83,628	210,298	607,601	506,310	446,264	672,785	325,035	299,294	378,378	238,035	10
.....	20.71	16.35	8.98	17.06	62.81	5.17	10.00	18.76	46.98	121.18	11
43.51	13.11	12.78	7.57	13.17	50.69	4.31	8.30	14.20	32.55	74.73	12
37	1,196	875	712	121	20	2,458	337	130	30	6	13
.....	52,228	152,347	478,519	379,196	359,562	523,422	253,885	243,138	254,619	146,788	14
5,587	60,232	99,213	147,880	139,578	354,835	198,402	106,820	95,800	203,444	203,179	15
.....	1.15	0.65	0.31	0.37	0.99	0.38	0.42	0.39	0.80	1.08	16
5,574	312	2,313	47,954	150,813	415,377	24,580	37,746	92,504	261,079	215,374	17
.....	1.13	0.66	0.33	0.70	1.18	0.30	0.38	0.58	1.08	1.47	18
9,290	276	5,463	168,314	275,466	393,919	87,127	113,704	195,488	277,902	178,507	19
0.60	1.17	0.44	0.28	0.58	1.05	0.28	0.33	0.47	0.94	1.21	20
1,697	187	995	50,234	114,839	279,402	15,743	24,684	81,240	195,930	129,757	21
41	.....	1	3	16	14	.....	2	11	16	6	22
.....	.....	2,619	70,429	248,914	.....	.....	38,079	137,095	146,788	.....	23
97,560	.....	161,263	513,693	14,997,555	.....	.....	124,122	2,187,830	13,458,110	24	24
.....	.....	61.57	7.29	60.25	.....	.....	3.26	15.96	91.08	.....	25
1,800,000	.....	220,844	1,691,188	20,396,326	.....	.....	387,390	6,136,956	17,784,072	.....	26
.....	.....	348	2,670	8,630	.....	.....	2,200	6,313	3,195	.....	27
1,800,000	.....	221,192	1,893,898	20,404,956	.....	.....	389,530	6,143,269	17,787,207	.....	28
2,056	.....	2,810	49,800	311,000	.....	.....	17,449	145,038	203,179	.....	29
5,574	.....	2,848	89,087	357,999	.....	.....	31,750	208,394	215,374	.....	30
1,697	.....	6,594	54,282	224,922	.....	.....	26,810	130,808	129,757	.....	31
9,290	.....	3,249	86,217	285,820	.....	.....	40,294	165,775	178,507	.....	32
10.60	.....	49.63	5.96	52.47	.....	.....	3.08	13.20	75.39	.....	33
0.60	.....	0.88	1.03	1.25	.....	.....	0.79	1.26	1.21	.....	34
.....	.....	1.09	1.26	1.44	.....	.....	0.83	1.52	1.47	.....	35
41	.....	1	3	16	14	.....	.....	3	2	41	36
.....	.....	.....	16,963	.....	.....	.....	.....	8,163	.....	.....	37
9,290	.....	.....	13,721	.....	.....	.....	.....	10,921	.....	.....	38
58,579	.....	.....	0.81	.....	.....	.....	.....	1.34	.....	.....	39
6.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
97,560	.....	.....	69,300	.....	.....	.....	.....	65,766	.....	.....	40
64	1,380	936	653	62	1	2,719	295	79	3	.....	41
4	5	15	101	48	7	63	57	48	12	.....	42
1	.....	.....	1	10	6	2	1	4	11	.....	43
2	.....	2	1	3	.....	.....	2	3	2	.....	44
2	.....	.....	.....	.....	5	.....	.....	.....	2	.....	45
.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	46
.....	5	.....	1	1	.....	4	1	2	.....	.....	47
41	2	7	76	58	19	36	43	51	27	6	48
1,010	681	18,384	69,637	206,868	5,286	12,519	34,572	106,335	227,746	.....	49
2	21	111	128	305	43	82	82	133	227	.....	50
51	1,076	876	745	121	18	2,403	325	124	29	6	51
7	75	14	2	1	.....	61	4	4	.....	.....	52
2	11	1	.....	.....	.....	61	3	.....	.....	.....	53
2	18	1	.....	.....	.....	20	1	.....	.....	.....	54
.....	5	2	.....	.....	.....	6	.....	1	.....	.....	55
4	116	31	5	2	1	147	10	1	1	.....	56
.....	9	7	4	.....	1	14	2	4	.....	.....	57
7	42	11	1	1	.....	48	11	2	1	.....	58
5	28	9	10	11	3	50	6	8	42	1	59
.....	33	12	69	314	255	102	131	240	210	2	60
.....	1,239	1,474	9,517	43,333	38,018	15,722	21,844	40,617	15,308	3	61
1,002,143	16,027	7,339	66,635	205,579	269,275	41,369	41,550	306,104	1,177,975	4	62
1,000,620	15,265	6,895	65,850	203,504	267,475	39,130	41,000	303,004	1,176,475	5	63
1,523	762	444	785	2,075	1,800	2,239	550	3,100	1,500	6	64
62,671	2,195	3,633	10,549	44,801	38,841	22,899	22,899	40,665	76,657	7	65
.....	12.94	4.98	7.00	4.74	7.08	2.63	1.80	7.54	76.50	8	66
15.99	7.30	1.87	6.32	4.59	6.91	1.81	1.82	7.53	15.37	9	67
3	25	7	10	11	3	43	6	8	42	10	68
.....	1,102	1,044	9,517	43,333	38,018	15,155	21,844	40,617	15,388	11	69
8	869	228	2,432	16,748	11,637	2,649	1,884	16,610	10,780	12	70
.....	0.79	0.22	0.26	0.39	0.31	0.17	0.09	0.41	0.70	13	71
.....	.....	.....	1,533	17,987	11,848	1,337	1,350	17,902	10,779	14	72
.....	.....	.....	0.36	0.45	0.31	0.12	0.08	0.46	0.70	15	73
.....	.....	.....	4,385	40,101	38,018	11,264	16,777	39,065	15,398	16	74
.....	.....	.....	0.35	0.45	0.31	0.12	0.08	0.46	0.70	17	75
10,800	.....	1,998	8,500	758	2,750	1,000	1,588	11,418	10,800	18	76

² Indebtedness and arrearage were reported only by enterprises serving 5 or more farms.⁴ Data for less than 3 enterprises shown with permission of the enterprises involved.⁵ Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION - WYOMING

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
INDEBTEDNESS AND ARREARAGE, 1939								
19	Enterprises reporting indebtedness ².....number...	5	³ 1			³ 2	³ 2	
20	(a) Area irrigated in these enterprises.....acres...	24,307				15,628	8,679	
21	(b) Indebtedness.....dollars...	929,414	845,000			46,500	37,014	
22	(c) Average indebtedness per acre irrigated.....dollars...	38.24				2.98	4.37	
23	(d) Cost of irrigation works and equipment.....dollars...	1,148,724	1,000,000			84,000	64,724	
24	(e) Investment in water rights.....dollars...	3,460	1,500			1,550	400	
25	(f) Total investment.....dollars...	1,152,174	1,001,500			85,550	65,124	
26	(g) Maintenance and operation.....dollars...	14,261	2			359	13,900	
27	(h) Total annual charges ³.....dollars...	16,004				1,442	14,562	
28	(i) Total charges collected ³.....dollars...	19,226	10,800			3,386	5,040	
29	(j) Area against which annual charges were assessed.....acres...	24,355				15,628	8,727	
30	(k) Average indebtedness per acre assessed.....dollars...	3.47				2.98	4.34	
31	(l) Average charges per acre assessed.....dollars...	0.66				0.09	1.87	
32	(m) Average charges per acre irrigated.....dollars...	0.66				0.09	1.68	
33	Enterprises reporting arrearage ².....number...	2	³ 1			³ 1		
34	(a) Area assessed in these enterprises.....acres...	1,508				1,508		
35	(b) Total arrearage.....dollars...	7,900	7,200			700		
36	(c) Average arrearage per acre assessed.....dollars...	0.48				0.46		
37	(d) Indebtedness.....dollars...	852,500	845,000			7,500		
TYPE, 1940								
38	Individual and partnership.....number...	46	2	33	10	1		
39	Cooperative (incorporated and unincorporated).....number...	13	1		1	6	5	
40	Irrigation district.....number...	5	1			2	2	
41	U. S. Bureau of Reclamation.....number...	2	1					1
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939								
42	Enterprises reporting pay roll.....number...	12	³ 1			5	6	
43	Wages and salaries paid and payable for 1939.....dollars...	5,589	1,500			1,250	2,839	
44	Persons employed during week ending April 29, 1939.....number...	11	6			3	2	
SOURCE OF SUPPLEMENTAL WATER SUPPLY, 1939								
45	Streams, pumped.....number...	4		2	1		1	
46	Wells, pumped or flowing.....number...	1		1				
47	Streams, gravity or storage.....number...	61	5	30	10	9	6	

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

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	Depart- ure ¹
			Amount	Depart- ure ¹	Amount	Depart- ure ¹	Amount	Depart- ure ¹	Amount	Depart- ure ¹	Amount	Depart- ure ¹		
Big Horn River		Feet	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Degrees F.	Degrees F.
Lander.....	Fremont.....	5,370	11.04	-1.59	3.47	+0.83	1.98	-0.40	4.40	-1.07	1.19	-0.95	45.6	+3.1
Thermopolis.....	Hot Springs..	4,350	9.17	-4.28	2.16	-0.04	1.69	-0.13	3.93	-2.32	1.39	-1.79	47.4	+2.5
Cody.....	Park.....	4,084	10.16	+0.81	1.83	+0.33	0.96	-0.06	5.32	+1.17	2.05	-0.63	47.8	+3.5
Lovell.....	Big Horn.....	3,825	8.08	+1.48	1.02	-0.03	0.93	-0.01	4.54	+1.74	1.59	-0.22	45.7	+3.1
Average ³			9.61	-0.90	2.12	+0.27	1.39	-0.15	4.55	-0.12	1.56	-0.90	46.9	+3.0
Tongue and Powder Rivers														
Sheridan.....	Sheridan.....	3,773	18.18	+3.12	2.49	+0.15	2.23	-0.48	8.06	+1.45	5.40	+2.00	46.4	+3.0
Nine Mile Creek.....	Johnson.....	5,000	10.33	-1.80	1.68	+0.23	1.42	+0.34	5.92	-0.81	1.31	-1.56	45.3	(²)
Salt Creek (near).....	Natrona.....	4,842	(²)	(²)	2.27	+0.09	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Average ³			14.26	+0.66	2.15	+0.16	1.82	-0.07	6.99	+0.32	3.36	+0.22	45.8	+3.0
Cheyenne River														
Clarkston (near).....	Campbell.....	5,010	11.89	-2.25	1.51	-0.45	1.64	-0.22	6.10	-0.23	2.34	-1.35	44.4	(²)
Colony.....	Crook.....	3,500	11.47	-5.46	1.32	-0.82	1.66	-0.37	4.63	-2.01	3.84	-2.26	48.1	+3.0
Spencer (near).....	Niobrara.....	3,800	9.24	-3.37	0.46	-0.95	0.99	-0.47	3.93	-2.94	4.46	+0.99	(²)	(²)
Average ³			10.77	-3.69	1.10	-0.74	1.44	-0.35	4.69	-1.73	3.55	-0.87	46.2	+3.0
North and South Platte Rivers														
Saratoga.....	Carbon.....	6,700	6.47	-3.83	1.52	-0.60	0.71	-1.39	1.92	-1.26	2.32	-0.58	42.3	+1.1
Laramie.....	Albany.....	7,188	8.00	-2.06	2.09	+0.29	1.65	+0.09	2.87	-0.88	2.39	-1.56	43.9	+3.0
Cheyenne.....	Laramie.....	6,139	11.28	-3.71	2.14	+0.11	3.19	+1.11	4.33	-1.70	1.62	-3.23	46.7	+2.1
Casper (near).....	Natrona.....	5,124	8.30	-6.88	1.47	-1.68	0.96	-1.79	4.09	-1.89	1.78	-1.52	47.3	+0.1
Fort Laramie (near).....	Goshute.....	4,715	7.22	-6.89	1.03	-0.76	1.13	-0.52	2.35	-4.03	2.71	-1.59	48.9	+1.9
Average ³			8.45	-4.67	1.65	-0.53	1.53	-0.50	3.11	-1.95	2.16	-1.69	45.8	+1.6
Green River														
Kendall.....	Sublette.....	7,600	17.40	+0.53	6.99	+3.17	2.85	-1.89	4.33	-0.28	3.23	-0.47	34.8	+1.8
Green River.....	Sweetwater..	6,083	6.59	-0.62	2.75	+1.15	0.93	-0.49	1.78	-0.63	1.13	-0.65	45.4	+2.4
Average ³			12.00	-0.04	4.87	+2.16	1.89	-1.19	3.06	-0.46	2.18	-0.56	40.1	+2.1
Bear River														
Evanston.....	Uinta.....	6,860	7.53	-6.43	2.52	-0.63	1.30	-2.57	1.87	-1.82	1.84	-1.31	40.1	+0.5
Border.....	Lincoln.....	6,085	12.28	-0.30	4.75	+2.04	2.43	-1.28	3.54	+0.11	1.56	-1.17	39.7	+1.8
Average ³			9.90	-3.36	3.64	+0.70	1.86	-1.92	2.70	-0.90	1.70	-1.24	39.9	+1.2
Snake River														
Afton (near).....	Lincoln.....	6,225	15.00	-3.09	3.59	-1.23	3.75	-0.47	4.83	-0.35	2.83	-1.04	(²)	(²)
Moran.....	Teton.....	6,770	21.38	-0.09	6.35	+1.32	7.06	-0.16	5.54	+0.39	2.43	-1.64	34.7	+0.6
Jackson.....	Teton.....	6,244	14.63	-2.89	4.49	+0.39	3.20	-1.57	4.81	+0.53	2.13	-2.34	38.9	+1.5
Average ³			17.00	-2.06	4.81	+0.16	4.67	-0.73	5.06	+0.19	2.46	-1.67	36.8	+1.0

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

CENSUS OF IRRIGATION — WYOMING

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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	
³ 1			³ 1	³ 2	³ 1		³ 1	³	³ 1	19
845,000			1,508	8,679	14,120		6,000	18,307		20
			7,500	37,814	39,000		200	84,214	945,000	21
			4.87	4.37	2.78		0.03	4.60		22
1,000,000			19,000	64,724	66,000		5,000	143,724	1,000,000	23
1,500			50	400	1,500			1,850	1,500	24
1,001,500			18,050	65,124	67,500		5,000	146,674	1,001,500	25
			50	13,900	309		400	13,859	2	26
10,800			1,131	14,562	311		600	16,404		27
			636	5,040	2,750		600	7,828	10,800	28
			1,508	8,727	14,120		6,000	18,355		29
			4.87	4.34	2.76		0.03	4.59		30
			0.75	1.67	0.02		0.10	0.84		31
			0.75	1.66	0.02		0.10	0.84		32
³ 1			³ 1					³ 1	³ 1	33
7,200			1,508					1,508		34
			700					700	7,200	35
845,000			0.46					0.46		36
			7,500					7,500	845,000	37
2	28	9	8	1		44	2			38
1			3	8	1	5	3	5		39
1			1	2	1		1	3		40
1					1	1			1	41
³ 1			(⁶) 1	8	(⁶) 2	3	1	7	³ 1	42
1,500				2,906	(⁶)	518	(⁶)	3,346	1,500	43
6				3	(⁶)	1		4	6	44
	3			1		3		1		45
		1				1				46
5	26	8	10	10	3	46	6	7	2	47

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.

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

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

Precipitation in Wyoming during both the calendar year 1939 and the water year (October 1938 through September 1939), as reported by the United States Weather Bureau, was substantially below normal; for the calendar year precipitation averaged approximately 73 percent of normal. In October and December 1938, and February and June 1939, precipitation was slightly above normal, but in all other months of both calendar and water years the precipitation was deficient.

For the water year, the run-off from principal watersheds, as measured by the United States Geological Survey at representative stations, averaged slightly more than half of normal (53 percent). At the close of 1938 a good supply of water was in most irrigation reservoirs, but because of high temperatures and low humidity in the spring months of 1939, snow in many of the higher mountains

of the southern part of the State melted rapidly and the moisture evaporated instead of finding its way into the streams. As a result, the volume of run-off was low and it was only on account of the large storage carry-over that there was sufficient water for irrigation in several important valleys.

Temperatures in Wyoming during both the calendar year 1939 and the water year (October 1938 through September 1939) were somewhat warmer than normal, only November 1938 and February, June, and August, 1939 showing mean temperatures below normal.

In comparison, the precipitation for the calendar year 1929, when the last previous irrigation census was taken, was almost the normal, the departure for the State being -0.01 inch, while the temperature was colder than usual in most sections.

CENSUS OF IRRIGATION - WYOMING

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	MISSOURI RIVER			
			Total ¹	Yellowstone River		
				Total	Clarks Fork	(12)
IRRIGATED FARMS AND AREAS						
1	Irrigated farms.....1939..number.....	11,527	9,203	6,176	93	
2	Area irrigated.....1939..acres.....	1,486,498	1,066,757	526,919	11,217	
3	(a) Cropland harvested.....1939..acres.....	1,193,997	879,011	444,532	8,706	
4	(b) Crop failure.....1939..acres.....	16,550	13,622	5,131	23	
5	(c) Pasture.....1939..acres.....	275,951	174,124	77,256	2,308	
6	Area irrigated.....1929..acres.....	1,236,155	900,523	428,585	6,658	
7	.....1919..acres.....	1,207,982	869,845	448,671	8,807	
8	Increase or decrease (-), 1929-1939.....percent.....	20.3	18.5	23.5	68.6	
9	Irrigable area in enterprises.....1940..acres.....	2,277,046	1,655,772	799,851	15,723	
10	.....1930..acres.....	1,958,147	1,449,857	750,147	11,035	
11	.....1920 ² ..acres.....	2,584,668	1,895,348	908,053	15,640	
12	Excess of irrigable area over the area irrigated.....1940..acres.....	790,848	589,015	272,932	4,506	
13	.....1930..acres.....	721,992	549,334	323,552	4,377	
14	.....1920 ² ..acres.....	1,356,686	1,025,503	519,362	8,743	
15	Area works were capable of supplying with water.....1940..acres.....	1,913,527	1,410,582	688,184	14,688	
16	.....1930..acres.....	1,855,008	1,217,344	596,983	11,035	
17	.....1920..acres.....	1,831,039	1,308,438	653,949	14,121	
18	Increase or decrease (-), 1930-1940.....percent.....	15.6	15.9	15.3	33.1	
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	427,029	343,825	161,265	3,471	
20	.....1930..acres.....	418,853	316,821	170,368	4,377	
21	.....1920..acres.....	623,057	436,593	205,278	5,224	
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	77.7	75.6	76.6	76.4	
23	.....1929..percent.....	74.7	74.0	71.5	69.3	
24	.....1919..percent.....	66.0	66.5	68.6	63.0	
CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises.....1940..dollars....	41,522,801	37,358,108	21,687,868	309,513	
26	(a) Cost of irrigation works and equipment.....1940..dollars....	41,057,813	37,001,274	21,583,244	306,707	
27	(b) Investment in water rights (reported).....1940..dollars....	464,988	356,834	104,624	2,806	
28	Total investment in irrigation enterprises.....1930..dollars....	35,153,187	31,313,543	19,001,400	71,975	
29	.....1920..dollars....	34,326,328	29,818,236	16,419,213	117,282	
30	Increase or decrease (-), 1930-1940.....percent.....	18.1	19.3	14.1	330.0	
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	21.70	26.48	31.51	21.07	
32	.....1930..dollars....	21.24	25.72	31.83	6.52	
33	.....1920..dollars....	18.75	22.79	25.11	8.31	
34	Average investment per acre irrigated.....1939..dollars....	27.93	35.02	41.16	27.59	
35	Estimated final investment in existing enterprises.....1940..dollars....	48,539,663	43,860,036	27,091,578	311,823	
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars....	21.32	26.49	33.67	19.63	
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		Primary Supplemental	Primary Supplemental	Primary Supplemental		
		Enterprises		Enterprises		
37	Enterprises reporting maintenance and operation.....1939..number.....	2,967	59	2,005	36	62
38	Area irrigated in these enterprises.....1939..acres.....	1,421,852	83,014	1,017,404	62,736	11,098
39	Cost of maintenance and operation.....1939..dollars....	807,345	31,823	683,484	30,168	6,681
40	Average cost, per acre irrigated.....1939..dollars....	0.57	0.34	0.68	0.48	0.62
41	Total annual charges (reported) ⁷.....1939..dollars....	631,343	31,368	578,489	30,600	3,100
42	Average annual charge per acre irrigated.....1939..dollars....	0.87	0.38	0.96	0.55	0.62
43	Area against which charges were assessed.....1939..acres.....	852,728	82,504	689,406	55,908	5,285
44	Average annual charge per acre assessed.....1939..dollars....	0.74	0.38	0.84	0.55	0.59
45	Total charges collected ⁷.....1939..dollars....	447,354	24,806	394,095	22,058	2,441
46	Indebtedness to December 31 (reported) ⁸.....1939..dollars....	15,770,071	928,414	15,273,594	890,414	.....
WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered.....1939..number.....	2,999	55	1,988	34	54
48	Area irrigated by these enterprises.....1939..acres.....	1,360,506	87,746	969,926	57,475	7,668
49	Water delivered.....1939..acre-feet.....	2,833,092	56,521	1,887,138	44,218	25,493
50	Average water delivered per acre irrigated.....1939..acre-feet.....	2.1	0.8	1.9	0.8	3.2
51	Average cost of water per acre irrigated.....1939..dollars....	0.68	0.48	0.79	0.55	0.82
52	Average cost of water per acre-foot delivered.....1939..dollars....	0.31	0.58	0.41	0.72	0.25
DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage.....1939..number.....	145	.....	128	76	2
54	Irrigable area in these enterprises.....1939..acres.....	843,642	.....	730,604	452,645	(⁹)
55	Irrigated area in these enterprises.....1939..acres.....	456,760	.....	419,891	266,876	(⁹)
56	Area for which drains have been installed.....1939..acres.....	175,394	.....	175,368	138,138	(⁹)
57	Additional area needing drainage.....1939..acres.....	44,997	.....	37,270	27,203	(⁹)

¹ Data for 1 enterprise in Niobrara River Drainage Basin (33) (number refers to separate map) are included with Missouri River Total.² Data for 2 enterprises in Little Horn River Drainage Basin (9) (number refers to separate map) are included with Big Horn River "Direct" Drainage Basin (10).³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.⁴ Less than one-tenth of 1 percent.

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MISSOURI RIVER—Continued										
Yellowstone River—Continued										
Big Horn River										
Total	Direct ²	Popo Agie River	Wind River	Owl Creek	Cottonwood Creek	Gooseberry Creek	Nowood Creek	Greybull River		
(10)	(31)	(25)	(44)	(18)	(17)	(19)	(15)			
5,017	945	888	944	129	29	23	173	360	1	
388,984	81,706	48,448	73,157	11,900	2,860	2,779	15,442	48,526	2	
326,993	54,709	36,469	62,781	10,623	2,675	2,549	13,904	37,713	3	
3,716	320	230	440	452	171	190	52	1,779	4	
58,255	6,677	11,749	9,838	825	14	40	1,486	9,034	5	
318,607	47,016	21,131	51,789	16,148	.....	.....	15,251	52,138	6
307,846	44,207	22,073	43,620	11,610	.....	.....	18,416	49,231	7
22.1	31.2	129.3	41.3	-26.3	.....	.....	1.2	-8.9	8
618,163	73,313	88,894	161,230	19,473	4,794	4,823	20,701	70,784	9	
623,351	58,998	31,343	224,983	20,051	.....	.....	21,478	70,308	10
750,281	81,648	34,723	229,338	14,546	.....	.....	26,163	93,543	11
229,199	11,607	40,436	85,073	7,673	1,934	2,044	5,289	22,258	12	
304,744	11,982	10,212	173,194	3,903	.....	.....	6,224	18,170	13
442,415	37,441	12,650	184,718	2,836	.....	.....	7,777	44,312	14
512,460	69,123	77,943	97,588	19,274	4,675	4,823	18,590	65,313	15	
475,301	55,023	26,189	116,788	18,924	.....	.....	19,778	65,331	16
468,198	61,285	34,755	77,122	12,951	.....	.....	22,080	79,194	17
7.8	25.6	197.6	-16.4	1.8	.....	.....	-8.0	(4)	18
123,496	7,417	29,495	24,431	7,374	1,815	2,044	3,148	16,787	19	
156,694	8,007	5,058	64,999	2,776	.....	.....	4,524	13,193	20
160,352	17,078	12,302	33,502	1,341	.....	.....	3,664	29,903	21
75.9	89.3	62.2	75.0	61.7	61.2	57.6	83.1	74.3	22	
67.0	85.4	80.7	44.3	85.3	.....	.....	77.1	79.8	23
65.8	72.1	64.2	56.6	89.6	.....	.....	83.4	62.2	24
19,338,912	1,506,357	2,220,420	6,538,301	210,292	91,036	46,561	268,485	1,590,651	25	
19,268,120	1,501,670	2,210,948	6,526,528	207,299	88,290	45,100	261,246	1,569,748	26	
70,792	4,687	9,472	11,773	2,993	2,748	1,461	7,239	20,908	27	
17,389,656	695,847	235,333	5,949,958	110,235	.....	.....	162,731	413,845	28
14,330,800	1,330,578	349,546	2,101,819	92,915	.....	.....	161,588	503,194	29
11.2	116.5	843.5	9.9	50.8	.....	.....	65.0	284.4	30
37.74	21.79	28.49	67.00	10.81	19.47	9.65	14.44	24.35	31	
36.59	12.65	8.99	50.95	5.83	.....	.....	8.23	6.33	32
30.61	21.71	10.17	27.25	4.09	.....	.....	7.32	6.36	33
49.72	24.41	45.83	89.37	17.67	31.83	16.75	17.39	32.78		

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

7. 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.

⁶ 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 — WYOMING

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					
	Big Horn River—Continued			Tongue River		
	Shell Creek (74)	Shoshone River (11)		Total		
IRRIGATED FARMS AND AREAS						
1 Irrigated farms.....1939...number....	124	1,704		711		
2 Area irrigated.....1939...acres.....	11,361	112,785		72,222		
3 (a) Cropland harvested.....1939...acres.....	10,447	95,123		64,319		
4 (b) Crop failure.....1939...acres.....	42	40		56		
5 (c) Pasture.....1939...acres.....	872	17,622		7,947		
6 Area irrigated.....1929...acres.....	7,110	95,636		52,195		
7 ".....1919...acres.....	11,955	95,091		43,025		
8 Increase or decrease (-), 1929-1939.....percent....	59.8	17.9		39.4		
9 Irrigable area in enterprises.....1940...acres.....	13,705	160,456		86,023		
10 ".....1930...acres.....	13,894	163,768		57,917		
11 ".....1920 ² ...acres.....	24,005	217,998		69,167		
12 Excess of irrigable area over the area irrigated.....1940...acres.....	2,344	47,671		13,801		
13 ".....1930...acres.....	6,784	68,132		5,722		
14 ".....1920 ² ...acres.....	12,050	122,907		26,142		
15 Area works were capable of supplying with water.....1940...acres.....	13,705	141,426		85,687		
16 ".....1930...acres.....	13,765	142,902		55,453		
17 ".....1920...acres.....	23,406	134,431		59,290		
18 Increase or decrease (-), 1930-1940.....percent....	-0.7	-1.0		64.5		
19 Excess of area works were capable of supplying with water over area irrigated.....1940...acres.....	2,344	28,641		13,405		
20 ".....1930...acres.....	6,685	47,266		3,258		
21 ".....1920...acres.....	10,451	39,340		16,265		
22 Proportion which area irrigated is of area works were capable of supplying with water.....1930...percent....	89.9	78.7		84.3		
23 ".....1929...percent....	81.5	66.9		94.1		
24 ".....1919...percent....	53.4	70.7		72.6		
CAPITAL INVESTED TO JANUARY 1						
25 Total investment in irrigation enterprises.....1940...dollars....	133,380	6,733,429		1,109,939		
26 (a) Cost of irrigation works and equipment.....1940...dollars....	130,875	6,720,421		1,086,439		
27 (b) Investment in water rights (reported).....1940...dollars....	2,505	7,008		17,500		
28 Total investment in irrigation enterprises.....1930...dollars....	386,300	9,283,942		723,271		
29 ".....1920...dollars....	390,420	8,702,480		811,125		
30 Increase or decrease (-), 1930-1940.....percent....	-85.5	-27.5		52.6		
31 Average investment based on area works were capable of supplying with water, per acre.....1940...dollars....	9.73	47.61		12.88		
32 ".....1930...dollars....	28.00	64.68		13.04		
33 ".....1920...dollars....	16.98	64.74		13.08		
34 Average investment per acre irrigated.....1939...dollars....	11.74	59.70		15.29		
35 Estimated final investment in existing enterprises.....1940...dollars....	133,380	7,225,179		1,109,904		
36 Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars....	9.73	45.03		12.89		
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
	Primary	Supplemental	Primary	Supplemental	Primary	Supplemental
	Enterprises		Enterprises		Enterprises	
37 Enterprises reporting maintenance and operation.....1939...number....	37	1	66	2	175	8
38 Area irrigated in these enterprises.....1939...acres.....	11,263	(³)	112,701	(³)	70,002	14,562
39 Cost of maintenance and operation.....1939...dollars....	6,448	(³)	114,379	(³)	26,016	2,017
40 Average cost, per acre irrigated.....1939...dollars....	0.57	(³)	1.01	(³)	0.40	0.14
41 Total annual charges (reported) ⁴.....1939...dollars....	4,760		149,423		19,210	1,870
42 Average annual charge per acre irrigated.....1939...dollars....	0.66		1.40		0.37	0.14
43 Area against which charges were assessed.....1939...acres.....	7,209		118,313		54,617	12,898
44 Average annual charge per acre assessed.....1939...dollars....	0.66		1.26		0.35	0.14
45 Total charges collected ⁴.....1939...dollars....	3,180		43,595		18,102	3,168
46 Indebtedness to December 31 (reported) ⁵.....1939...dollars....	2,500		3,388,025		700	
WATER DELIVERED TO IRRIGATORS, 1939						
47 Enterprises reporting water delivered.....1939...number....	37	1	64	2	189	7
48 Area irrigated by these enterprises.....1939...acres.....	10,031	(³)	111,312	(³)	63,722	12,862
49 Water delivered.....1939...acre-feet....	37,619	(³)	367,496	(³)	94,610	16,796
50 Average water delivered per acre irrigated.....1939...acre-feet....	3.7	(³)	3.3	(³)	1.5	1.2
51 Average cost of water per acre irrigated.....1939...dollars....	0.69	(³)	1.39	(³)	0.42	0.15
52 Average cost of water per acre-foot delivered.....1939...dollars....	0.18	(³)	0.42	(³)	0.26	0.12
DRAINAGE OF IRRIGATED LAND						
53 Enterprises reporting land drained or needing drainage.....1939...number....			13		9	
54 Irrigable area in these enterprises.....1939...acres.....			130,661		10,122	
55 Irrigated area in these enterprises.....1939...acres.....			89,863		9,624	
56 Area for which drains have been installed.....1939...acres.....			71,235		442	
57 Additional area needing drainage.....1939...acres.....			14,403		162	

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.

CENSUS OF IRRIGATION - WYOMING

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

MISSOURI RIVER—Continued									
Yellowstone River—Continued									
Tongue River—Continued			Powder River						
Direct	Goose Creek	Total	Direct	South Fork	Middle Fork	Crazy Woman Creek	Clear Creek	Little Powder River	
(5)	(8)		(5)	(24)	(22)	(20)	(7)	(4)	
322	389	355	49	9	47	46	200	4	1
34,767	37,455	54,516	5,065	1,490	8,616	7,796	31,236	293	2
30,483	33,736	44,531	5,039	1,219	7,674	6,156	24,143	293	3
56	.....	1,336	25	271	153	554	333	.....	4
4,228	3,719	8,656	21	.....	789	1,066	6,760	.....	5
8,914	35,455	49,135	4,703	.....	450	2,600	35,295	.....	6
9,805	27,627	88,903	2,465	.....	3,341	21,965	60,648	.....	7
290.0	5.6	11.0	8.1	.....	(1)	189.8	-11.5	.....	8
47,755	38,268	79,942	5,570	3,259	12,043	11,944	46,621	505	9
10,534	38,499	57,844	4,703	.....	450	4,188	38,338	.....	10
11,679	43,817	132,985	4,676	.....	4,271	29,684	71,560	.....	11
13,989	813	25,426	465	1,769	3,427	4,148	15,385	212	12
1,620	3,044	8,709	.....	.....	.....	1,568	3,043	.....	13
1,874	16,180	44,082	2,510	.....	930	7,719	20,912	.....	14
47,470	38,217	75,349	5,530	3,209	11,953	9,342	44,825	490	15
10,534	36,884	55,194	4,703	.....	450	4,146	35,960	.....	16
10,771	37,749	112,340	4,962	.....	3,385	24,151	63,735	.....	17
350.6	3.6	36.5	17.6	.....	(1)	125.3	24.7	.....	18
12,703	762	20,833	445	1,719	3,337	1,546	13,589	197	19
1,620	1,429	6,059	.....	.....	.....	1,546	865	.....	20
966	10,122	23,437	2,497	.....	44	2,186	13,087	.....	21
73.2	98.0	72.4	82.0	46.4	72.1	83.5	69.7	59.8	22
84.6	96.1	88.0	100.0	.....	100.0	62.7	98.2	.....	23
91.0	73.2	79.1	46.7	.....	98.7	90.9	79.5	.....	24
452,339	651,600	935,504	61,114	13,890	87,285	132,930	634,260	6,025	25
440,143	646,296	921,978	60,143	13,800	85,940	130,476	626,305	5,915	26
12,196	5,304	13,526	671	80	1,945	2,455	7,955	110	27
85,814	584,639	816,468	160,000	.....	15,300	23,850	551,489	.....	28
125,555	563,518	1,159,986	162,100	.....	78,500	127,731	553,465	.....	29
527.1	11.5	14.6	-61.8	.....	470.5	487.4	15.0	.....	30
9.53	17.05	12.42	11.05	4.33	7.30	14.23	14.15	12.30	31
8.15	15.85	14.79	34.02	.....	34.00	5.75	15.34	.....	32
11.66	14.93	10.33	30.65	.....	23.18	5.29	8.68	.....	33
13.01	17.40	17.16	12.02	9.32	10.13	17.05	20.31	20.56	34
457,289	651,615	939,204	62,264	14,090	87,585	133,960	635,280	6,025	35
9.58	17.03	11.75	12.22	4.32	6.70	11.22	13.63	11.93	36
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.
Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises
114	1	61	7	165	7	11	6	31	3
33,260	(5)	36,742	10,562	52,123	15,122	4,986	1,329	8,616	7,344
9,670	(5)	18,346	1,583	23,545	1,829	4,622	715	5,685	2,252
0.29	(5)	0.50	0.15	0.45	0.12	0.83	0.54	0.68	0.31
3,352	600	15,858	1,270	9,916	1,856	4,293	.....	951	300
0.19	0.15	0.47	0.14	0.47	0.13	0.90	.....	1.05	0.24
20,651	4,000	33,966	8,898	22,599	14,500	4,759	.....	906	1,250
0.16	0.15	0.47	0.14	0.44	0.13	0.90	.....	1.05	0.24
3,547	938	14,555	2,230	6,548	2,010	4,293	.....	951	300
400	.....	300	.....	.....	.....	.....	.....	.....	.....
128	1	61	6	165	6	17	1	31	3
31,892	(5)	31,830	8,962	54,477	15,161	5,085	(5)	1,451	8,616
49,350	(5)	45,560	2,314	75,943	11,957	10,025	(5)	1,533	10,810
1.5	(5)	1.4	0.3	1.4	0.8	2.0	(5)	1.1	1.3
0.30	(5)	0.53	0.15	0.46	0.13	0.93	.....	0.53	0.68
0.19	(5)	0.37	0.57	0.33	0.17	0.47	.....	0.51	0.54
3	.....	6	.....	7	.....	.....	.....	.....	.....
3,550	.....	6,572	.....	13,108	.....	.....	(5)	(5)	.....
3,279	.....	6,545	.....	5,645	.....	.....	(5)	(5)	.....
45	.....	397	.....	80	.....	.....	.....	.....	.....
62	.....	100	.....	398	.....	.....	.....	.....	.....

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.

CENSUS OF IRRIGATION - WYOMING

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					
		Little Missouri River	Cheyenne River				South Fork
			Total	Belle Fourche River			
				Total	Direct	Redwater Creek	
		(3)			(2)	(1)	(21)
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number.....	2	63	30	17	13	33
2	Area irrigated.....1939..acres.....	(2)	4,722	898	371	527	3,624
3	(a) Cropland harvested.....1939..acres.....	(2)	3,922	765	261	504	3,157
4	(b) Crop failure.....1939..acres.....	(2)	212	15	8	7	197
5	(c) Pasture.....1939..acres.....	(2)	588	118	102	16	470
6	Area irrigated.....1929..acres.....		3,503	457	457		3,046
7	.....1919..acres.....	60	7,872	1,966	1,966		5,906
8	Increase or decrease (-), 1929-1939.....percent.....		34.8	96.5	-18.8		25.5
9	Irrigable area in enterprises.....1940..acres.....	(2)	10,974	2,804	2,058	746	8,170
10	.....1930..acres.....		7,678	657	657		7,021
11	.....1920 ⁵ ..acres.....	60	16,818	5,054	5,054		11,764
12	Excess of irrigable area over the area irrigated.....1940..acres.....	(2)	6,252	1,906	1,687	219	4,546
13	.....1930..acres.....		4,176	200	200		3,975
14	.....1920 ⁵ ..acres.....		8,946	3,088	3,088		5,858
15	Area works were capable of supplying with water.....1940..acres.....	(2)	9,392	2,072	1,488	584	7,320
16	.....1930..acres.....		4,475	632	632		3,843
17	.....1920..acres.....	60	11,531	3,621	3,621		7,910
18	Increase or decrease (-), 1930-1940.....percent.....		109.9	227.8	135.4		90.5
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	(2)	4,670	1,174	1,117	57	3,496
20	.....1930..acres.....		972	175	175		797
21	.....1920..acres.....		3,659	1,655	1,655		2,004
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	(2)	50.3	43.3	24.9	90.2	52.2
23	.....1929..percent.....		78.3	72.3	72.3		70.3
24	.....1919..percent.....	100.0	68.3	54.3	54.3		74.7
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars.....		6,673	97,523	38,186	28,393	59,337
26	(a) Cost of irrigation works and equipment.....1940..dollars.....		6,558	94,431	37,249	27,676	57,182
27	(b) Investment in water rights (reported).....1940..dollars.....		115	3,092	937	717	220
28	Total investment in irrigation enterprises.....1930..dollars.....			36,965	3,100	3,100	
29	.....1920..dollars.....		726	242,886	76,066	76,066	
30	Increase or decrease (-), 1930-1940.....percent.....			163.8	(4)	815.9	
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....		15.70	10.38	18.43	19.08	16.77
32	.....1930..dollars.....			8.26	4.91	4.91	
33	.....1920..dollars.....		12.10	21.06	21.01	21.01	
34	Average investment per acre irrigated.....1939..dollars.....		25.18	20.65	42.52	76.53	18.58
35	Estimated final investment in existing enterprises.....1940..dollars.....		11,673	107,963	45,511	35,168	10,343
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....		16.21	9.84	16.23	17.09	13.80
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
37	Enterprises reporting maintenance and operation.....1939..number.....	4	51	26	19	9	23
38	Area irrigated in these enterprises.....1939..acres.....	250	3,810	846	319	527	2,904
39	Cost of maintenance and operation.....1939..dollars.....	103	2,731	920	613	307	1,811
40	Average cost, per acre irrigated.....1939..dollars.....	0.41	0.72	1.09	1.92	0.58	0.61
41	Total annual charges (reported) ⁵.....1939..dollars.....		76	76		76	
42	Average annual charge per acre irrigated.....1939..dollars.....		0.48	0.48		0.48	
43	Area against which charges were assessed.....1939..acres.....		160	160		160	
44	Average annual charge per acre assessed.....1939..dollars.....		0.48	0.48		0.48	
45	Total charges collected ⁶.....1939..dollars.....						
46	Indebtedness to December 31 (reported) ⁶.....1939..dollars.....						
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number.....	2	56	26	17	9	30
48	Area irrigated by these enterprises.....1939..acres.....	(2)	4,657	898	371	527	3,759
49	Water delivered.....1939..acre-feet.....	(2)	4,539	887	303	584	3,652
50	Average water delivered per acre irrigated.....1939..acre-feet.....	(2)	1.0	1.0	0.8	1.1	1.0
51	Average cost of water per acre irrigated.....1939..dollars.....	(2)	0.69	0.96	1.60	0.68	0.61
52	Average cost of water per acre-foot delivered.....1939..dollars.....	(2)	0.71	0.98	1.95	0.63	0.63
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number.....						
54	Irrigable area in these enterprises.....1939..acres.....						
55	Irrigated area in these enterprises.....1939..acres.....						
56	Area for which drains have been installed.....1939..acres.....						
57	Additional area needing drainage.....1939..acres.....						

¹Data for 2 enterprises in Great Divide Drainage Basin (50) (number refers to separate map) are included with North Platte River "Direct" Drainage Basin (32).²Data are included only in 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 - WYOMING

645

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

MISSOURI RIVER—Continued									
North Platte River									
Total	Direct ¹	Beaver Creek	Encampment Creek	Spring Creek	Pass Creek	Medicine Bow River			
	(32)	(62)	(61)	(60)	(56)	Total	Direct		
							(61)		
2,869	1,350	24	78	26	24	115	47	1	
519,685	169,515	6,498	17,925	13,688	13,425	75,003	27,453	2	
416,215	139,108	4,676	11,079	7,085	9,953	60,128	21,956	3	
7,710	2,784	8	40	40	.....	600	.....	4	
95,760	27,533	1,814	6,806	6,563	3,472	14,275	5,497	5	
452,752	81,313	3,132	6,906	10,925	14,681	37,829	36,879	6	
402,993	56,794	2,621	7,053	13,123	8,557	55,157	54,500	7	
14.8	108.5	107.5	159.6	26.4	-8.6	101.2	-25.6	8	
824,698	213,477	7,761	19,052	15,489	14,506	149,747	28,043	9	
671,716	104,952	4,176	11,592	13,197	18,243	44,816	44,416	10	
889,419	120,195	3,666	10,173	16,702	12,500	140,711	139,599	11	
305,013	43,962	1,263	1,127	1,801	1,081	74,744	590	12	
218,964	23,639	1,044	4,676	2,372	3,562	7,537	7,537	13	
486,426	63,401	1,045	3,120	5,579	3,943	85,554	85,099	14	
693,455	195,093	7,479	19,052	15,003	14,291	81,146	27,981	15	
596,125	100,287	4,176	11,522	13,197	17,860	42,671	42,271	16	
628,233	76,966	3,186	7,293	18,177	11,373	67,760	67,103	17	
16.3	94.5	79.1	65.4	13.7	-20.0	90.2	-39.8	18	
173,770	25,578	981	1,127	1,315	866	6,143	528	19	
143,373	18,974	1,044	4,616	2,372	3,179	5,392	5,392	20	
225,240	20,172	565	240	5,054	2,816	12,623	12,603	21	
74.9	86.9	86.9	94.1	91.2	93.9	92.4	96.1	22	
75.9	81.1	75.0	59.9	82.0	82.2	87.4	87.2	23	
64.1	73.8	62.3	86.7	72.2	75.2	81.4	81.2	24	
15,217,505	6,218,592	74,625	240,270	107,690	53,497	1,482,988	181,484	25	
14,983,866	6,183,781	71,650	234,190	105,000	51,275	1,347,399	176,769	26	
233,639	34,811	2,975	6,080	2,690	2,222	135,689	4,715	27	
12,007,608	5,241,418	11,427	75,925	62,731	47,555	440,825	434,525	28	
12,931,901	5,920,923	37,497	72,692	191,290	50,051	354,434	346,684	29	
26.7	18.6	563.1	216.5	71.7	12.5	236.4	-58.3	30	
21.04	31.88	9.98	12.61	7.18	3.74	18.28	6.49	31	
20.14	52.26	2.74	6.59	4.75	2.66	10.33	10.29	32	
20.58	76.93	11.77	9.97	10.14	4.40	5.23	5.17	33	
29.28	36.68	11.48	13.40	7.87	3.98	19.77	6.61	34	
16,293,033	6,291,240	78,125	247,270	107,690	53,847	1,883,863	181,609	35	
19.76	29.47	10.07	12.98	6.95	3.71	11.24	6.48	36	
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.
Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises
865	9	273	3	23	1	42	1	17	20
486,012	22,522	154,373	17,519	6,473	(2)	17,431	(2)	11,440	12,825
237,307	11,954	106,343	10,978	2,515	(2)	2,792	(2)	1,730	2,671
0.49	0.53	0.69	0.63	0.39	(2)	0.16	(2)	0.15	0.21
159,813	11,181	77,484	10,829	.....	352	505	.....	.....	.....
0.75	0.62	0.89	0.63	.....	0.36	0.10	.....	.....	.....
243,365	18,275	91,962	17,175	.....	1,100	5,194	.....	.....	.....
0.66	0.61	0.84	0.63	.....	0.32	0.10	.....	.....	.....
147,189	402	84,133	50	.....	352	203	.....	.....	.....
4,488,891	.....	4,276,624	.....	.....	.....	.....	.....	.....	.....
804	8	260	3	24	1	44	1	19	17
462,607	18,822	154,133	17,519	6,498	(2)	15,482	(2)	13,688	11,174
697,789	9,605	291,357	9,044	11,081	(2)	24,778	(2)	18,995	21,077
1.5	0.5	1.9	0.5	1.7	(2)	1.6	(2)	1.4	1.9
0.55	0.62	0.76	0.63	0.39	(2)	0.18	(2)	0.15	0.23
0.37	1.21	0.40	1.21	0.23	(2)	0.11	(2)	0.11	0.12
48	.....	13	.....	.....	.....	(2)	1	(2)	1
277,015	.....	78,238	.....	.....	.....	(2)	.....	(2)	.....
152,351	.....	61,659	.....	.....	.....	(2)	.....	(2)	.....
37,050	.....	16,809	.....	.....	.....	(2)	.....	(2)	.....
10,012	.....	2,730	.....	.....	.....	(2)	.....	(2)	.....

¹ Percent not shown when more than 1,000.

² 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.

³ 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 — WYOMING

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					
		North Platte River—Continued					
		Medicine Bow River—Continued					
		Little Medicine Bow River				Sweetwater River (38)	
		Rock Creek (71)	Total	Direct (73)	Sheep Creek (72)	Muddy Creek (68)	
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number.....	40	28	8	14	6	44
2	Area irrigated.....1939..acres.....	40,090	7,450	1,805	2,625	3,030	15,796
3	(a) Cropland harvested.....1939..acres.....	31,782	6,390	1,555	2,505	2,330	7,536
4	(b) Crop failure.....1939..acres.....	600	.....	.....	.....	.....	181
5	(c) Pasture.....1939..acres.....	7,708	1,070	250	120	700	7,679
6	Area irrigated.....1929..acres.....	.....	400	.....	.....	400	6,508
7	.....1919..acres.....	.....	657	.....	.....	657	5,448
8	Increase or decrease (-), 1929-1939.....percent.....	.....	(¹)	.....	.....	657.5	142.8
9	Irrigable area in enterprises.....1940..acres.....	113,174	8,530	2,720	2,780	3,030	18,002
10	.....1930..acres.....	.....	400	.....	.....	400	8,697
11	.....1920 ² ..acres.....	.....	1,112	.....	.....	1,112	14,166
12	Excess of irrigable area over the area irrigated.....1940..acres.....	73,064	1,070	915	155	.....	2,206
13	.....1930..acres.....	.....	.....	.....	.....	.....	2,181
14	.....1920 ² ..acres.....	.....	455	.....	.....	455	8,718
15	Area works were capable of supplying with water.....1940..acres.....	45,320	7,845	2,090	2,725	3,030	17,741
16	.....1930..acres.....	.....	400	.....	.....	400	8,519
17	.....1920.....	.....	677	.....	.....	677	10,593
18	Increase or decrease (-), 1930-1940.....percent.....	.....	(¹)	.....	.....	657.5	108.3
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	5,230	385	285	100	.....	1,945
20	.....1930..acres.....	.....	.....	.....	.....	.....	2,013
21	.....1920.....	.....	20	.....	.....	20	5,145
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	88.5	95.1	86.4	96.3	100.0	89.0
23	.....1929.....	.....	100.0	.....	.....	100.0	76.4
24	.....1919.....	.....	97.0	.....	.....	97.0	51.4
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars.....	1,254,703	46,801	14,835	14,981	16,985	167,112
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	1,126,000	44,630	14,450	14,550	15,630	156,775
27	(b) Investment in water rights (reported).....1940..dollars.....	128,703	2,171	385	431	1,355	11,337
28	Total investment in irrigation enterprises.....1930..dollars.....	.....	6,000	.....	.....	6,000	78,200
29	.....1920.....	.....	7,770	.....	.....	7,770	87,322
30	Increase or decrease (-), 1930-1940.....percent.....	.....	680.0	.....	.....	183.1	113.7
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	27.69	5.97	7.10	5.50	5.61	9.42
32	.....1930.....	.....	15.00	.....	.....	15.00	9.18
33	.....1920.....	.....	11.48	.....	.....	11.48	8.24
34	Average investment per acre irrigated.....1939..dollars.....	31.30	6.27	8.22	5.71	5.61	10.58
35	Estimated final investment in existing enterprises.....1940..dollars.....	1,454,703	47,551	15,035	15,531	16,985	174,212
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	12.85	5.57	5.53	5.59	5.61	9.68
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
37	Enterprises reporting maintenance and operation.....1939..number.....	20	27	8	14	5	30
38	Area irrigated in these enterprises.....1939..acres.....	39,925	7,450	1,805	2,625	3,020	9,700
39	Cost of maintenance and operation.....1939..dollars.....	8,430	3,016	1,100	1,595	321	3,726
40	Average cost, per acre irrigated.....1939..dollars.....	0.24	0.40	0.61	0.61	0.11	0.38
41	Total annual charges (reported) ⁴.....1939..dollars.....	8,084	.....	.....	.....	.....	.....
42	Average annual charge per acre irrigated.....1939..dollars.....	0.39	.....	.....	.....	.....	.....
43	Area against which charges were assessed.....1939..acres.....	21,458	.....	.....	.....	.....	.....
44	Average annual charge per acre assessed.....1939..dollars.....	0.38	.....	.....	.....	.....	.....
45	Total charges collected ⁵.....1939..dollars.....	4,865	.....	.....	.....	.....	.....
46	Indebtedness to December 31 (reported) ⁶.....1939..dollars.....	.....	.....	.....	.....	.....	.....
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number.....	11	28	8	14	6	42
48	Area irrigated by these enterprises.....1939..acres.....	26,753	7,460	1,805	2,625	3,030	15,265
49	Water delivered.....1939..acre-feet.....	28,499	8,695	1,434	985	5,246	23,478
50	Average water delivered per acre irrigated.....1939..acre-feet.....	1.1	1.2	0.8	0.4	2.1	1.5
51	Average cost of water per acre irrigated.....1939..dollars.....	0.39	0.40	0.61	0.61	0.11	0.35
52	Average cost of water per acre-foot delivered.....1939..dollars.....	0.37	0.35	0.77	1.62	0.05	0.23
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number.....	(³) 1	.....	.....	.....	.....	.....
54	Irrigable area in these enterprises.....1939..acres.....	(³)	.....	.....	.....	.....	.....
55	Irrigated area in these enterprises.....1939..acres.....	(³)	.....	.....	.....	.....	.....
56	Area for which drains have been installed.....1939..acres.....	(³)	.....	.....	.....	.....	.....
57	Additional area needing drainage.....1939..acres.....	.....	.....	.....	.....	.....	.....

¹Percent not shown when more than 1,000.²For 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.

CENSUS OF IRRIGATION -- WYOMING

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

MISSOURI RIVER--Continued												
North Platte River--Continued												
Box Elder Creek	La Prele Creek	La Bonte Creek	Laramie River						Rawhide Creek	Horse Creek		
			Total	Direct	Little Laramie River	Sybilie Creek	North Laramie River	Chugwater Creek				
(37)	(36)	(35)		(64)	(63)	(55)	(52)	(54)	(34)	(53)		
23	122	35	838	599	108	28	55	48	3	187		
2,519	10,678	6,631	164,276	91,305	51,465	4,238	6,647	10,531	340	23,391		
2,444	9,967	6,370	135,033	80,920	33,666	4,232	5,818	10,341	340	22,066		
30	280	68	2,674	1,962	20	6	536	150	.....	1,005		
45	431	193	28,569	8,507	17,759	.....	263	40	.....	380		
3,742	16,549	4,383	179,019	98,510	43,942	5,237	5,979	6,139	225	28,594		
4,648	9,103	4,376	149,999	72,400	30,860	6,183	6,858	5,914	2,045	28,369		
-32.7	-35.5	51.3	-8.2	-7.2	17.1	-19.1	11.2	71.5	51.1	-21.0		
3,390	16,599	7,854	325,997	227,254	61,448	5,271	10,704	21,320	340	32,484		
8,486	17,462	4,876	315,207	215,907	51,177	5,934	11,474	7,648	225	34,688		
7,916	21,697	6,526	366,928	171,654	42,852	9,518	20,144	9,853	3,651	71,158		
871	5,921	1,223	161,721	135,859	9,983	1,033	4,057	10,789	.....	9,063		
4,744	913	493	136,168	117,597	7,235	697	5,495	1,509	.....	5,094		
3,268	12,594	2,149	216,929	99,154	11,932	3,356	13,280	3,939	1,606	42,819		
3,252	16,432	7,369	284,045	189,140	60,508	5,271	7,806	20,920	340	32,212		
8,468	16,908	4,826	257,351	168,297	50,972	5,387	6,360	7,108	225	30,920		
7,696	15,690	5,756	291,993	122,956	33,144	8,044	11,749	9,258	2,481	38,702		
-51.7	-2.8	52.7	10.4	12.5	18.7	-2.2	22.7	194.3	51.1	4.2		
733	5,754	738	119,769	98,145	9,043	1,033	1,159	10,389	.....	8,821		
4,744	359	443	78,332	69,787	7,030	150	381	969	.....	1,326		
3,048	6,587	1,380	141,994	50,556	2,284	1,861	4,891	3,344	436	11,333		
77.5	65.0	90.0	57.8	48.2	85.1	80.4	85.2	50.3	100.0	72.6		
44.1	97.9	90.8	69.6	58.5	86.2	97.2	94.0	86.4	100.0	95.7		
60.4	58.0	76.0	51.4	58.9	93.1	76.9	58.4	63.9	82.4	71.5		
22,983	1,081,526	145,549	4,490,920	3,121,930	263,087	48,587	795,429	261,907	2,660	1,119,093		
22,028	1,086,550	140,300	4,467,208	3,116,030	252,925	46,420	793,369	258,474	2,460	1,116,250		
955	4,976	5,249	23,712	5,910	10,162	2,147	2,060	3,433	200	2,843		
176,245	331,825	28,655	4,198,500	3,365,261	273,861	24,935	276,120	118,648	3,200	627,600		
104,676	327,411	71,826	4,334,896	923,041	48,753	65,041	396,708	83,155	27,330	536,476		
-87.0	228.9	407.9	7.0	-7.8	-3.9	94.8	188.1	120.7	-16.9	78.3		
7.07	66.43	19.75	15.81	16.47	4.35	9.21	101.90	12.52	7.82	34.74		
20.77	19.63	5.94	16.31	20.11	5.37	4.63	43.42	16.69	14.22	20.30		
13.60	20.87	12.48	14.65	7.51	1.47	8.09	33.77	8.98	11.02	13.51		
9.12	102.22	21.95	27.34	34.16	5.11	11.46	119.67	24.87	7.82	47.84		
23,663	1,091,526	145,549	5,272,645	3,872,505	263,087	51,567	797,079	266,407	2,660	1,120,443		
6.98	65.76	18.57	16.17	17.04	4.28	9.78	74.47	13.53	7.82	34.49		
24	23	34	Primary	Sup.	90	72	24	47	19	3	Primary	Sup.
			Enterprises								Enterprises	
2,489	9,784	6,431	158,441	(3)	89,987	(3)	47,404	3,948	6,571	10,531	340	22,061
1,757	12,965	8,065	87,392	(3)	50,024	(3)	5,512	1,642	3,012	4,202	285	10,784
0.71	1.33	1.25	0.43	(3)	0.56	(3)	0.18	0.42	0.46	0.40	0.84	0.49
.....	10,020	.....	45,333	.....	43,655	.....	822	.....	.....	856	.....	18,012
.....	1.39	.....	0.59	.....	0.64	.....	0.13	.....	.....	0.41	.....	1.81
.....	12,000	.....	92,812	.....	84,432	.....	6,280	.....	.....	2,100	.....	12,915
.....	0.84	.....	0.49	.....	0.52	.....	0.13	.....	.....	0.41	.....	1.39
.....	10,020	.....	40,057	.....	38,435	.....	822	.....	.....	800	.....	7,515
.....	.....	.....	89,490	.....	99,490	.....	.....	.....	.....	.....	.....	12,877
17	22	8	255	1	97	1	75	23	46	14	1	38
1,792	10,105	1,953	162,998	(3)	91,351	(3)	51,315	4,122	6,335	9,873	(3)	20,361
2,125	20,651	1,920	198,985	(3)	115,889	(3)	57,609	2,958	7,062	15,447	(3)	26,482
1.2	2.0	1.0	1.2	(3)	1.3	(3)	1.1	0.7	1.1	1.6	(3)	1.3
0.65	1.28	0.86	0.42	(3)	0.55	(3)	0.19	0.36	0.32	0.42	(3)	1.20
0.54	0.63	0.87	0.34	(3)	0.43	(3)	0.17	0.50	0.28	0.27	(3)	0.92
.....	1	.....	29	.....	6	.....	23	.....	.....	.....	.....	(3)
.....	(3)	170,077	153,959	16,118	(3)
.....	(3)	71,347	56,225	15,122	(3)
.....	(3)	18,341	2,455	15,896	(3)
.....	7,242	7,240	2	(3)
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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 - WYOMING

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				COLORADO RIVER	
		South Platte River				Green River	
		Total	Cache la Poudre River	Crow Creek	Lodgepole Creek	Total	Direct
			(70)	(66)	(65)			(40)
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number....	92	31	22	39	1,110	111
2	Area irrigated.....1939..acres.....	15,066	3,597	5,575	5,894	273,971	45,000
3	(a) Cropland harvested.....1939..acres.....	14,092	3,427	4,835	5,830	193,470	32,655
4	(b) Crop failure.....1939..acres.....	569	.....	505	64	2,697	137
5	(c) Pasture.....1939..acres.....	405	170	235	.....	77,814	12,218
6	Area irrigated.....1929..acres.....	17,340	10,794	4,951	1,595	228,699	25,791
7	.....1919..acres.....	9,804	5,449	2,580	1,775	211,507	20,285
8	Increase or decrease (-), 1929-1939.....percent....	-13.1	-66.7	12.6	269.5	19.8	74.5
9	Irrigable area in enterprises.....1940..acres.....	19,349	3,607	5,894	9,908	448,422	81,253
10	.....1930..acres.....	19,748	10,991	6,717	2,040	360,974	33,880
11	.....1920 ² ..acres.....	21,553	5,779	5,590	10,184	473,116	32,492
12	Excess of irrigable area over the area irrigated..1940..acres.....	4,283	10	259	4,014	174,451	36,253
13	.....1930..acres.....	2,408	197	1,766	445	132,275	13,089
14	.....1920 ² ..acres.....	11,749	330	3,010	8,409	261,609	12,207
15	Area works were capable of supplying with water..1940..acres.....	18,946	3,607	5,794	9,545	337,027	56,401
16	.....1930..acres.....	19,393	10,991	6,677	1,725	304,057	28,985
17	.....1920..acres.....	14,230	5,659	4,867	3,694	353,731	28,034
18	Increase or decrease (-), 1930-1940.....percent....	-2.3	-67.2	-13.2	453.3	10.8	94.6
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	3,890	10	219	3,651	63,056	11,401
20	.....1930..acres.....	2,053	197	1,728	130	75,358	3,194
21	.....1920..acres.....	4,416	210	2,287	1,919	142,224	7,749
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	79.5	99.5	96.2	61.7	81.3	79.8
23	.....1929..percent....	89.4	98.2	74.2	92.5	75.2	89.0
24	.....1919..percent....	68.6	96.3	53.0	48.1	59.8	72.4
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars....	345,830	93,863	153,861	98,115	3,205,108	555,860
26	(a) Cost of irrigation works and equipment.....1940..dollars....	330,675	92,746	140,514	97,415	3,120,886	518,910
27	(b) Investment in water rights (reported).....1940..dollars....	15,154	1,117	13,347	700	84,222	36,950
28	Total investment in irrigation enterprises.....1930..dollars....	264,466	112,845	136,346	15,275	2,121,930	190,463
29	.....1920..dollars....	212,945	74,989	48,919	89,037	3,064,797	170,841
30	Increase or decrease (-), 1930-1940.....percent....	30.8	-16.8	12.8	542.3	51.0	191.9
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	18.25	26.02	26.56	10.28	9.51	9.86
32	.....1930..dollars....	13.94	10.27	20.42	8.86	6.98	6.57
33	.....1920..dollars....	14.98	13.25	10.05	24.10	8.66	6.09
34	Average investment per acre irrigated.....1939..dollars....	22.95	26.09	25.60	16.65	11.70	12.35
35	Estimated final investment in existing enterprises..1940..dollars....	353,089	93,863	155,061	104,165	3,707,046	593,540
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars....	18.25	26.02	26.58	10.51	8.27	7.30
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						Primary Enterprises	Sup. Enterprises
37	Enterprises reporting maintenance and operation..1939..number....	57	14	7	36	620	15
38	Area irrigated in these enterprises.....1939..acres.....	9,493	2,962	790	5,711	265,613	22,161
39	Cost of maintenance and operation.....1939..dollars....	14,494	1,264	537	12,693	89,242	1,259
40	Average cost, per acre irrigated.....1939..dollars....	1.53	0.43	0.68	2.22	0.34	0.06
41	Total annual charges (reported) ⁵.....1939..dollars....	759	759	.....	.....	24,049	411
42	Average annual charge per acre irrigated.....1939..dollars....	0.56	0.56	.....	.....	0.42	0.02
43	Area against which charges were assessed.....1939..acres.....	1,350	1,350	.....	.....	90,270	19,130
44	Average annual charge per acre assessed.....1939..dollars....	0.56	0.56	.....	.....	0.27	0.02
45	Total charges collected ⁶.....1939..dollars....	.....	.....	.....	.....	40,476	2,750
46	Indebtedness to December 31 (reported) ⁶.....1939..dollars....	.....	.....	.....	.....	414,915	39,000
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number....	81	22	21	38	628	13
48	Area irrigated by these enterprises.....1939..acres.....	14,949	3,580	5,475	5,894	257,989	2,104
49	Water delivered.....1939..acre-feet....	16,591	2,083	5,084	9,424	611,792	4,703
50	Average water delivered per acre irrigated.....1939..acre-feet....	1.1	0.6	0.9	1.6	2.4	2.2
51	Average cost of water per acre irrigated.....1939..dollars....	1.53	0.43	0.68	2.22	0.34	0.15
52	Average cost of water per acre-foot delivered..1939..dollars....	1.39	0.73	0.73	1.39	0.14	0.07
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number....	3	2	1	.....	12	.....
54	Irrigable area in these enterprises.....1939..acres.....	764	(4)	(4)	.....	97,846	.....
55	Irrigated area in these enterprises.....1939..acres.....	564	(4)	(4)	.....	21,938	.....
56	Area for which drains have been installed.....1939..acres.....	.....	.....	.....	.....	26	.....
57	Additional area needing drainage.....1939..acres.....	55	(4)	(4)	.....	2,450	.....

¹Data for 1 enterprise in Cottonwood Creek Drainage Basin (57) (number refers to separate map) are included with Blacks Fork "Direct" Drainage Basin (48).²Percent not shown when more than 1,000.³For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

CENSUS OF IRRIGATION — WYOMING

649

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

COLORADO RIVER—Continued									
Green River—Continued									
Horse Creek	Cottonwood Creek	New Fork	South Piney Creek	La Barge Creek	Fontenelle Creek	Sandy Creek	Bitter Creek	Blacks Fork	
								Total	Direct ¹
(20)	(75)	(30)	(41)	(42)	(43)	(39)	(49)		(48)
14	27	155	35	20	17	85	24	408	336
13,515	25,345	46,724	26,881	6,773	4,824	12,737	1,350	59,038	43,790
8,857	16,916	34,041	18,619	5,843	4,060	9,274	1,142	38,723	27,551
.....	.....	.....	60	.....	.....	.....	14	1,977	1,477
4,558	8,429	12,683	8,202	930	764	3,463	194	18,338	14,762
5,982	9,189	48,003	1,472	4,053	1,607	.....	878	61,397	.....
15,520	17,437	27,743	11,928	5,459	4,428	.....	2,395	65,880	.....
125.9	175.8	-2.7	(²)	65.9	200.2	.....	53.8	-3.8	.....
15,528	26,807	71,121	29,848	6,768	5,167	49,023	1,625	118,567	99,219
8,855	12,667	77,099	2,970	4,898	1,680	.....	1,956	87,650	.....
21,670	32,317	53,918	30,824	11,700	5,658	.....	12,495	175,870	.....
2,013	1,462	24,397	2,967	25	243	36,286	275	59,528	55,429
2,873	3,478	29,096	1,498	815	73	.....	478	26,253	.....
6,150	14,880	26,175	18,896	6,241	1,430	.....	10,100	109,990	.....
15,528	26,807	61,768	29,848	6,768	4,867	21,474	1,617	74,007	55,157
6,935	10,594	63,967	1,800	4,898	1,680	.....	1,028	76,876	.....
19,453	29,293	43,614	29,397	7,725	5,033	.....	11,447	104,305	.....
123.9	153.0	-3.4	(²)	38.8	195.7	.....	57.6	-3.7	.....
2,013	1,462	15,042	2,967	25	143	8,737	267	14,969	11,967
953	1,405	15,964	328	815	73	.....	148	15,478	.....
3,933	11,846	16,871	14,469	2,269	605	.....	9,032	38,325	.....
87.0	94.5	75.6	90.1	99.6	97.1	59.3	83.5	79.8	79.4
86.3	86.7	75.0	81.8	83.4	95.7	.....	85.6	79.9	.....
79.8	59.5	63.6	45.2	70.7	88.0	.....	20.9	69.3	.....
29,355	232,850	530,590	165,445	36,650	33,390	933,490	59,304	345,317	220,731
27,600	227,550	515,050	162,395	35,900	32,400	931,925	58,650	334,204	213,209
1,755	5,300	15,540	3,050	750	990	1,565	654	11,113	7,522
19,823	29,641	533,415	7,830	28,900	12,000	.....	6,445	208,495	.....
51,163	450,827	293,043	85,728	39,150	33,000	.....	93,158	566,776	.....
48.1	685.6	-0.5	(²)	26.8	165.0	.....	820.2	65.6	.....
1.89	8.39	8.59	5.54	5.39	6.72	43.47	36.68	4.57	4.00
2.86	2.80	8.34	4.35	5.90	7.50	.....	6.28	2.71	.....
2.63	15.60	6.72	3.25	5.07	6.56	.....	8.14	5.43	.....
2.17	9.19	11.36	6.15	5.41	6.92	73.20	43.93	5.85	.....
29,355	232,850	544,860	165,445	36,650	33,390	1,159,990	59,404	555,887	428,121
1.89	8.69	7.66	5.54	5.39	6.46	23.64	36.56	4.69	4.31
	Primary	Sup.	Primary	Sup.				Primary	Sup.
	Enterprises		Enterprises					Enterprises	
11	21	1	128	5	28	14	19	16	24
13,515	25,345	(⁴)	45,522	19,903	26,881	6,773	4,764	12,737	1,350
2,950	10,750	(⁴)	11,129	549	6,193	3,650	3,355	12,337	2,336
0.22	0.42	(⁴)	0.24	0.03	0.23	0.54	0.71	0.99	1.73
.....	.....	.....	2,811	411	.....	300	.....	7,226	.....
.....	.....	.....	0.32	0.02	.....	0.16	.....	0.79	.....
.....	.....	.....	13,106	19,120	.....	1,902	.....	13,098	.....
.....	.....	.....	0.21	0.02	.....	0.16	.....	0.55	.....
.....	.....	.....	2,675	2,750	.....	.....	.....	7,201	.....
.....	.....	.....	17,296	39,000	.....	.....	.....	377,370	.....
11	20	.....	132	5	28	13	10	16	24
13,515	24,480	.....	44,781	1,033	26,881	4,871	4,754	12,737	1,350
40,762	36,063	.....	159,769	2,447	60,294	6,955	7,404	23,711	3,168
3.0	1.5	.....	3.6	2.4	2.2	1.4	1.6	1.9	2.3
0.22	0.44	.....	0.26	0.18	0.23	0.69	0.71	0.67	1.73
0.07	0.30	0.07	0.08	0.10	0.48	0.45	0.36	0.74
.....	8	(⁴)	1
.....	7,976	(⁴)	3
.....	5,299	(⁴)	47,000
.....	26	(⁴)	7,500
.....	525	(⁴)	425
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⁴Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

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 41 to 46, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - WYOMING

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)		COLORADO RIVER—Continued				GREAT SALT LAKE	
		Green River—Continued				Bear River	
		Blacks Fork—Continued		Henry's Fork	Little Snake River (Yampa)		
		Muddy Creek (47)	Hams Fork (45)					(58)	(59)
IRRIGATED FARMS AND AREAS							
1	Irrigated farms.....1939..number.....	23	49	98	109	256	
2	Area irrigated.....1939..acres.....	5,002	10,246	16,890	14,894	62,803	
3	(a) Cropland harvested.....1939..acres.....	3,112	8,060	10,016	13,324	49,054	
4	(b) Crop failure.....1939..acres.....	500	.....	429	80	91	
5	(c) Pasture.....1939..acres.....	1,390	2,186	6,445	1,490	13,658	
6	Area irrigated.....1929..acres.....	.....	.....	15,884	11,719	47,379	
7	.....1919..acres.....	.....	.....	8,298	13,463	63,665	
8	Increase or decrease (-), 1929-1939.....percent.....	.....	.....	6.3	27.1	32.6	
9	Irrigable area in enterprises.....1940..acres.....	7,242	12,106	24,632	17,753	59,690	
10	.....1930..acres.....	.....	.....	26,598	12,049	59,351	
11	.....1920 ¹ ..acres.....	.....	.....	25,940	18,038	91,842	
12	Excess of irrigable area over the area irrigated.....1940..acres.....	2,240	1,860	8,042	2,859	5,887	
13	.....1930..acres.....	.....	.....	10,714	330	11,972	
14	.....1920 ¹ ..acres.....	.....	.....	17,642	4,575	28,177	
15	Area works were capable of supplying with water.....1940..acres.....	6,933	11,917	21,410	16,404	67,026	
16	.....1930..acres.....	.....	.....	18,677	12,049	56,221	
17	.....1920..acres.....	.....	.....	23,694	16,358	82,470	
18	Increase or decrease (-), 1930-1940.....percent.....	.....	.....	14.6	36.1	19.2	
19	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	1,931	1,671	4,520	1,510	4,223	
20	.....1930..acres.....	.....	.....	2,793	330	8,842	
21	.....1920..acres.....	.....	.....	15,396	2,895	18,806	
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	72.1	86.0	78.9	90.8	93.7	
23	.....1929..percent.....	.....	.....	85.0	97.3	84.3	
24	.....1919..percent.....	.....	.....	35.0	82.3	77.2	
CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises.....1940..dollars.....	74,857	49,729	165,857	116,970	538,271	
26	(a) Cost of irrigation works and equipment.....1940..dollars.....	73,810	47,185	162,732	113,570	530,695	
27	(b) Investment in water rights (reported).....1940..dollars.....	1,047	2,544	3,125	3,400	7,576	
28	Total investment in irrigation enterprises.....1930..dollars.....	.....	.....	111,750	110,950	201,574	
29	.....1920..dollars.....	.....	.....	77,320	274,302	679,405	
30	Increase or decrease (-), 1930-1940.....percent.....	.....	.....	48.4	5.4	167.0	
31	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars.....	10.80	4.17	7.75	7.13	8.03	
32	.....1930..dollars.....	.....	.....	5.98	9.21	3.59	
33	.....1920..dollars.....	.....	.....	3.26	15.77	8.24	
34	Average investment per acre irrigated.....1939..dollars.....	14.97	4.85	9.82	7.85	8.57	
35	Estimated final investment in existing enterprises.....1940..dollars.....	74,857	52,909	175,255	121,420	540,371	
36	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars.....	10.34	4.37	7.03	6.84	7.87	
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS				Primary Supplemental		Primary Supplemental	
				Enterprises		Enterprises	
37	Enterprises reporting maintenance and operation.....1939..number.....	9	42	55	1	45	93
38	Area irrigated in these enterprises.....1939..acres.....	4,872	10,246	16,490	(5)	14,805	60,761
39	Cost of maintenance and operation.....1939..dollars.....	1,151	3,999	4,223	(5)	6,106	11,422
40	Average cost, per acre irrigated.....1939..dollars.....	0.24	0.39	0.26	(5)	0.41	0.19
41	Total annual charges (reported) ⁶.....1939..dollars.....	600	.....	1,900	.....	3,523	16,243
42	Average annual charge per acre irrigated.....1939..dollars.....	0.33	.....	0.61	.....	0.61	0.67
43	Area against which charges were assessed.....1939..acres.....	2,400	.....	6,796	.....	6,382	24,065
44	Average annual charge per acre assessed.....1939..dollars.....	0.25	.....	0.28	.....	0.55	0.67
45	Total charges collected ⁶.....1939..dollars.....	.....	.....	23,537	.....	3,535	3,942
46	Indebtedness to December 31 (reported) ⁷.....1939..dollars.....	.....	.....	20,000	.....	249	42,000
WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered.....1939..number.....	10	37	54	(5) 1	45	98
48	Area irrigated by these enterprises.....1939..acres.....	4,863	9,362	15,280	(5)	13,741	62,377
49	Water delivered.....1939..acre-feet.....	7,355	20,072	30,389	(5)	24,352	117,206
50	Average water delivered per acre irrigated.....1939..acre-feet.....	1.5	2.1	2.0	(5)	1.8	1.9
51	Average cost of water per acre irrigated.....1939..dollars.....	0.24	0.36	0.19	(5)	0.55	0.37
52	Average cost of water per acre-foot delivered.....1939..dollars.....	0.16	0.18	0.10	(5)	0.31	0.19
DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage.....1939..number.....	.....	.....	.....	.....	4	.....
54	Irrigable area in these enterprises.....1939..acres.....	.....	.....	.....	.....	14,762	.....
55	Irrigated area in these enterprises.....1939..acres.....	.....	.....	.....	.....	14,558	.....
56	Area for which drains have been installed.....1939..acres.....	.....	.....	.....	.....	.....	.....
57	Additional area needing drainage.....1939..acres.....	.....	.....	.....	.....	5,252	.....

¹Data for 1930 and 1920 not available because tributaries of South Fork of the Snake River were not identified.

²Data for 2 enterprises in Henry's Fork "Direct" Drainage Basin (59) (number refers to separate map) are included with Teton River Drainage Basin (13).

³Percent not shown when more than 1,000.

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

CENSUS OF IRRIGATION — WYOMING

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

COLUMBIA RIVER										
Snake River										
Total	South Fork						Henry's Fork			
	Total ¹	Direct (14)	Gros Ventre River (26)	Grays River (28)	Salt River (27)	Teton River ² (13)				
958	921	186	48	5	682	37				
82,957	79,500	22,978	8,223	251	48,048	3,457				
72,462	69,132	19,809	8,065	133	41,155	3,300				
150	145	28	.....	.....	117	5				
10,355	10,193	3,141	158	118	6,776	162				
59,554	.....	1,250	6,158	.....	36,853	.....			
62,985	.....	912	12,981	.....	34,538	.....			
39.3	.....	(3)	33.5	.....	50.3	.....			
104,162	100,016	32,887	10,917	293	55,619	4,146				
87,965	.....	2,438	9,549	.....	49,016	.....			
104,362	.....	2,202	19,023	.....	57,288	.....			
21,195	20,516	9,909	2,694	42	7,871	679				
28,411	.....	1,188	3,391	.....	12,153	.....			
41,397	.....	1,290	8,062	.....	22,850	.....			
98,892	94,920	30,404	9,782	263	54,471	3,972				
77,386	.....	1,577	5,725	.....	46,233	.....			
86,400	.....	1,879	14,490	.....	46,234	.....			
27.8	.....	(3)	45.5	.....	17.8	.....			
15,925	15,420	7,426	1,559	12	6,423	505				
17,832	.....	627	567	.....	9,370	.....			
23,435	.....	967	1,529	.....	11,896	.....			
83.9	83.8	75.6	84.1	95.4	88.2	87.3				
77.0	.....	66.6	91.6	.....	79.7	.....			
72.9	.....	48.6	88.4	.....	74.3	.....			
421,314	410,880	82,372	45,420	1,170	281,918	10,434				
404,953	395,423	77,280	43,890	1,025	273,188	9,535				
16,356	15,457	5,092	1,460	145	8,730	899				
1,516,140	.....	1,273,820	21,275	.....	111,988	.....			
763,890	.....	500,202	49,871	.....	149,207	.....			
-72.2	.....	-83.5	113.5	.....	153.1	.....			
4.26	4.33	2.71	4.64	4.45	5.18	2.63				
19.59	.....	678.12	3116	.....	2.41	.....			
8.84	.....	266.21	3.45	.....	3.23	.....			
5.08	5.17	3.56	5.52	4.66	5.87	3.01				
432,210	421,676	87,728	46,755	2,170	285,023	10,534				
4.15	4.22	2.67	4.28	7.41	5.10	2.54				
Primary	Supplemental	Primary	Supplemental	Primary	Supplemental	Primary	Supplemental	Primary	Supplemental	
Enterprises		Enterprises		Enterprises		Enterprises		Enterprises		
249	7	236	5	104	17	110	4	13	2	37
78,174	7,707	74,822	7,633	20,580	8,051	45,940	4,267	3,352	(5)	38
13,197	386	12,813	385	4,999	1,410	6,309	60	384	(5)	39
0.17	0.05	0.17	0.05	0.24	0.18	0.14	0.01	0.11	(5)	40
12,562	357	12,183	357	250	550	11,383	20	379	.....	41
0.27	0.05	0.28	0.05	0.14	0.13	0.31	(5)	0.13	.....	42
48,987	7,476	46,000	7,476	2,017	4,252	39,731	4,110	2,987	.....	43
0.26	0.05	0.26	0.05	0.12	0.13	0.29	(5)	0.13	.....	44
8,841	.....	8,745	.....	.....	.....	8,745	.....	96	.....	45
39,562	.....	39,562	.....	.....	.....	39,562	.....	.....	.....	46
285	7	271	5	123	21	122	4	14	2	47
70,214	7,757	66,747	7,633	19,947	8,223	38,326	4,267	3,467	(5)	48
216,956	7,200	209,737	6,850	74,710	29,050	105,949	550	7,219	(5)	49
3.1	0.9	3.1	0.9	3.7	3.5	2.7	0.2	2.1	(5)	50
0.23	0.05	0.24	0.05	0.26	0.18	0.38	0.01	0.12	(5)	51
0.07	0.06	0.08	0.06	0.07	0.05	0.09	0.07	0.06	(5)	52
(5)	1	(5)	1	(5)	1	(5)	1	(5)	1	53
(5)	.....	(5)	.....	(5)	.....	(5)	.....	(5)	.....	54
(5)	.....	(5)	.....	(5)	.....	(5)	.....	(5)	.....	55
(5)	.....	(5)	.....	(5)	.....	(5)	.....	(5)	.....	56
(5)	.....	(5)	.....	(5)	.....	(5)	.....	(5)	.....	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.

⁴Less than 1 cent.

CENSUS OF IRRIGATION - WYOMING

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 ¹	Yellowstone River					
				Total	Clarks Fork (12)	Big Horn River			
						Total	Direct ² (10)	Pope Agie River (31)	Wind River (25)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
1	Enterprises.....1940..number.....	3,391	2,308	1,168	61	685	97	127	109
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	564	611	589	230	748	713	614	595
3	Diversion dams.....1940..total number.....	4,205	2,965	960	104	458	70	51	56
4	1930..total number.....	2,406	1,452	402	2	290	13	16	50
5	1920..total number.....	2,066	1,546	565	.....	266	12	37	7
6	(a) Concrete and masonry.....1940..number.....	257	215	83	.....	49	6	23	10
7	(b) Timber.....1940..number.....	528	329	91	36	31	6	2	13
8	(c) Earth and rock.....1940..number.....	2,673	1,916	540	20	224	28	22	17
9	(d) Other, mixed, and not reported.....1940..number.....	747	505	246	48	154	30	4	16
10	Main canals and laterals.....1940..total length, miles.....	11,762.1	8,793.3	4,219.4	77.3	2,987.1	307.5	689.1	420.8
11	1930..total length, miles.....	10,775	7,563	4,020	48	3,166	149	244	949
12	1920..total length, miles.....	12,051	8,603	4,150	18	2,725	233	304	246
13	(a) Earth.....1940..length, miles.....	11,715	8,748	4,193	77	2,966	305	688	416
14	(b) Lined.....1940..length, miles.....	47.1	45.3	26.4	0.3	21.1	2.5	1.1	4.8
15	1940..capacity, c.f.s. ⁴	46,366	32,972	16,472	347	11,907	1,432	893	3,179
16	1930..capacity, c.f.s. ⁴	35,811	25,549	13,603	415	11,084	623	721	4,070
17	1920..capacity, c.f.s. ⁴	39,009	27,977	12,459	38	8,202	758	605	1,005
18	Pipe lines ⁵.....1940..total length, miles.....	70.3	67.6	50.2	0.5	42.1	10.2	5.5	2.0
19	1930..total length, miles.....	14.1	11.7	2.5	0.3	2.2	.....	0.8	0.4
20	1920..total length, miles.....	17.9	13.7	10.4	.....	9.9	4.9	2.0	.....
21	(a) Concrete.....1940..length, miles.....	13.8	13.6	9.1	0.3	8.6	.....	.....	0.7
22	(b) Metal.....1940..length, miles.....	36.0	36.1	27.9	0.2	20.5	8.5	4.5	1.3
23	(c) Wood-stave.....1940..length, miles.....	13.0	12.5	10.3	.....	10.2	1.5	0.9	.....
24	(d) Other.....1940..length, miles.....	5.5	5.4	2.9	.....	2.8	0.2	0.2	.....
25	Storage dams.....1940..total number.....	319	253	103	2	42	12	3	7
26	1930..total number.....	212	186	46	.....	29	2	.....	5
27	1920..total number.....	301	252	79	.....	30	1	.....	1
28	(a) Concrete and masonry.....1940..number.....	12	11	3	.....	1	.....	.....	.....
29	(b) Earth and rock.....1940..number.....	277	224	98	2	40	12	2	7
30	(c) Other, mixed, and not reported.....1940..number.....	30	18	2	.....	1	.....	1	.....
31	Reservoirs.....1940..total number.....	334	275	107	2	51	21	3	6
32	(a) 1-99 acre-feet capacity.....1940..number.....	179	152	55	1	22	15	.....	.....
33	(b) 100-999 acre-feet capacity.....1940..number.....	81	66	22	.....	13	8	.....	2
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	74	57	30	1	16	.....	3	4
35	1940..total capacity, ac.-ft. ⁶	3,379,957	2,370,251	809,238	(?)	731,701	1,730	7,086	198,750
36	1930..total capacity, ac.-ft. ⁶	214	182	61	.....	40	4	.....	5
37	1920..total capacity, ac.-ft. ⁶	3,051,745	2,145,073	558,543	.....	502,075	246	.....	38,435
38	Wells, flowing.....1940..number.....	36	32	19	.....	14	10	1	.....
39	1930..number.....	6	5	4	.....	4	2	.....	.....
40	1920..number.....	7	5	3	.....	1	.....	.....	.....
41	1940..yield, g.p.m.....	3,830	3,769	2,464	.....	2,286	1,086	(?)	.....
42	1930..yield, g.p.m.....	2,205	2,065	1,955	.....	1,955	950	.....	.....
43	1920..yield, g.p.m.....	46	46	6	.....	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	94	89	21	.....	8	6	.....	.....
45	1930..number.....	11	8	.....	.....	.....	.....	.....	.....
46	1920..number.....	16	16	4	.....	1	1	.....	.....
47	1940..yield, g.p.m.....	60,522	60,440	4,075	.....	2,565	1,565	.....	.....
48	1930..yield, g.p.m.....	8,280	7,870	.....	.....	.....	.....	.....	.....
49	1920..yield, g.p.m.....	8,020	8,020	855	.....	850	950	.....	.....
50	Pumping plants.....1940..total number.....	224	210	78	.....	38	18	.....	.....
51	1930..total number.....	61	52	9	.....	5	5	.....	.....
52	Prime movers.....1940..capacity, hp.....	4,152	4,057	1,427	.....	902	216	.....	.....
53	1930..capacity, hp.....	912	878	148	.....	93	93	.....	.....
54	1920..capacity, hp.....	1,304	1,260	792	.....	368	319	3	.....
55	(a) Electric.....1940..number.....	37	36	20	.....	14	11	.....	.....
56	1940..capacity, hp.....	401	396	158	.....	131	105	.....	.....
57	(b) Internal-combustion.....1940..number.....	160	151	51	.....	23	7	.....	.....
58	1940..capacity, hp.....	3,547	3,475	1,268	.....	769	111	.....	.....
59	(c) Other.....1940..number.....	27	23	7	.....	1	.....	.....	.....
60	1940..capacity, hp.....	204	193	11	(?)	.....	.....	.....	.....
61	Pumps.....1940..total number.....	230	218	84	.....	38	18	1	.....
62	1930..number.....	65	58	10	.....	5	5	.....	.....
63	1920..number.....	70	65	30	.....	22	17	1	.....
64	1940..capacity, g.p.m.....	209,659	206,137	66,753	.....	46,623	12,415	260	.....
65	1930..capacity, g.p.m.....	86,905	83,071	11,160	.....	4,240	4,240	.....	.....
66	1920..capacity, g.p.m.....	39,725	38,220	15,955	.....	9,860	6,890	175	.....
67	(a) Centrifugal.....1940..number.....	153	147	65	.....	33	14	1	.....
68	1940..capacity, g.p.m.....	165,556	163,256	64,448	.....	46,338	12,150	(?)	.....
69	1940..average capacity, g.p.m.....	1,082	1,111	992	.....	1,404	868	(?)	.....
70	(b) Turbine.....1940..number.....	44	44	3	.....	1	.....	.....	.....
71	1940..capacity, g.p.m.....	41,073	41,073	1,710	(?)	.....	(?)	.....	.....
72	1940..average capacity, g.p.m.....	933	933	570	(?)	.....	(?)	.....	.....
73	(c) Plunger.....1940..number.....	25	20	14	.....	2	.....	.....	.....
74	1940..capacity, g.p.m.....	682	610	545	(?)	.....	(?)	.....	.....
75	1940..average capacity, g.p.m.....	28	30	39	(?)	.....	(?)	.....	.....
76	(d) Other.....1940..number.....	8	7	2	.....	2	.....	.....	.....
77	1940..capacity, g.p.m.....	2,238	1,198	50	(?)	.....	(?)	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	30	29	29	.....	29	33	10	.....
79	1930..average, feet.....	21	21	24	.....	9	9	.....	.....
80	1920..average, feet.....	31	31	42	.....	40	43	12	.....
81	from pumped wells.....1940..average, feet.....	46	46	53	.....	41	54	.....	.....
82	from surface sources.....1940..average, feet.....	20	18	21	.....	26	24	10	.....

¹Data for 1 enterprise in Niobrara River Drainage Basin (33) (number refers to separate map) are included with Missouri River Total.

²Data for 2 enterprises in Little Horn River Drainage Basin (9) (number refers to separate map) are included with Big Horn River "Direct" Drainage Basin (10).

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 — WYOMING

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WORKS, 1940, 1930, AND 1920

MISSOURI RIVER—Continued													
Yellowstone River—Continued													
Big Horn River—Continued							Tongue River			Powder River			
Owl Creek (44)	Cottonwood Creek (18)	Gooseberry Creek (17)	Nowood Creek (19)	Greybull River (15)	Shell Creek (74)	Shoshone River (11)	Total	Direct (6)	Goose Creek (8)	Total	Direct (5)	South Fork (24)	Middle Fork (22)
54	23	15	87	53	39	71	210	139	71	209	19	9	31
357	203	322	193	1,232	351	1,992	408	342	538	361	291	357	386
42	22	14	69	67	42	25	161	119	42	237	13	5	33
20	.....	.....	68	26	4	24	56	6	30	54	1	.....	4
6	.....	.....	21	46	31	38	160	20	91	135	1	.....	19
.....	1	.....	.....	1	.....	8	28	19	9	6	.....	.....	6
1	.....	1	.....	3	2	3	13	8	5	11	.....	.....	11
35	17	7	28	50	14	6	95	73	22	201	13	5	5
6	4	6	41	13	26	8	25	19	6	19	.....	.....	17
122.0	33.0	58.1	176.4	245.2	128.1	806.9	600.7	377.2	223.5	554.3	32.2	15.0	118.2
135	.....	.....	171	304	133	877	407	70	249	332	23	.....	8
105	.....	.....	211	398	165	775	550	108	287	778	20	.....	51
122	33	58	176	245	128	798	599	376	223	551	32	15	117
.....	.....	0.1	1.4	0.2	2.1	8.9	1.7	1.2	0.5	3.3	0.2	.....	1.2
663	228	137	514	2,022	263	3,573	2,065	978	1,087	2,153	109	52	206
342	.....	.....	367	882	189	3,529	1,053	200	723	1,007	100	.....	8
279	.....	.....	388	1,276	433	3,079	1,534	359	874	2,509	72	.....	60
0.3	.....	.....	4.1	0.6	4.1	15.3	4.1	3.1	1.0	3.5	0.2	1.1	0.5
.....	.....	.....	.....	.....	.....	1.0	.....	.....	.....	.....	.....	.....	.....
0.1	.....	.....	0.2	.....	0.2	2.5	0.2	.....	.....	0.3	.....	.....	.....
.....	.....	.....	0.5	0.1	.....	7.3	0.2	0.1	0.1	.....	.....	.....	.....
0.1	.....	.....	2.1	0.4	.....	3.6	3.9	3.0	0.9	3.3	0.2	1.1	0.5
0.2	.....	.....	1.2	.....	4.1	2.4	.....	.....	.....	0.1	.....	.....	.....
.....	.....	.....	0.3	0.1	.....	2.0	.....	.....	.....	0.1	.....	.....	.....
2	2	.....	4	2	3	7	34	10	15	25	6	3	.....
.....	.....	.....	4	.....	3	4	7	1	.....	9	.....	.....	.....
.....	.....	.....	5	1	5	9	25	.....	21	19	.....	.....	.....
.....	.....	.....	.....	.....	.....	1	1	1	.....	1	.....	.....	.....
2	2	.....	4	2	3	6	33	18	15	23	6	3	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
4	2	.....	2	2	3	8	29	16	13	25	5	4	2
3	.....	.....	.....	.....	2	2	17	11	6	15	4	3	32
1	1	.....	2	.....	.....	1	2	.....	2	7	1	1	33
.....	1	.....	.....	2	1	5	10	5	5	3	.....	.....	34
921	(?)	.....	(?)	(?)	3,220	463,515	43,479	30,085	13,394	32,510	510	234	(?)
2	.....	.....	10	.....	1	5	11	1	8	9	.....	.....	36
400	.....	.....	1,120	.....	1,610	459,570	47,544	25	47,510	4,924	.....	.....	37
1	.....	.....	.....	.....	.....	.....	1	1	.....	4	4	.....	38
1	.....	.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	39
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
(?)	.....	.....	(?)	.....	.....	.....	(?)	(?)	.....	149	149	.....	41
1,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
1	.....	.....	1	.....	.....	.....	4	3	1	9	5	.....	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
(?)	.....	.....	(?)	.....	.....	.....	2	.....	(?)	1	.....	.....	46
.....	.....	.....	.....	.....	.....	.....	300	295	(?)	1,210	85	.....	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	48
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49
4	3	.....	9	1	.....	3	22	13	9	19	6	.....	1
469	61	.....	128	(?)	.....	8	274	147	127	251	58	.....	(?)
.....	.....	.....	26	.....	.....	.....	22	.....	.....	33	.....	.....	53
.....	.....	.....	.....	.....	.....	.....	75	.....	.....	349	24	.....	54
.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	55
.....	(?)	.....	.....	.....	.....	(?)	27	(?)	18	.....	.....	.....	56
4	2	.....	9	1	.....	.....	15	11	4	13	1	.....	1
469	(?)	.....	128	(?)	.....	.....	246	137	109	243	(?)	.....	(?)
.....	.....	.....	.....	.....	.....	.....	1	1	.....	5	5	.....	58
.....	.....	.....	.....	.....	.....	.....	(?)	(?)	.....	8	8	.....	60
4	3	.....	9	1	.....	.....	22	13	9	24	6	.....	1
.....	.....	.....	.....	.....	.....	.....	1	.....	.....	4	.....	.....	62
.....	.....	.....	.....	.....	.....	.....	2	.....	.....	6	2	.....	63
17,208	7,720	.....	7,300	(?)	.....	620	13,140	10,470	2,670	6,990	185	.....	(?)
.....	.....	.....	.....	.....	.....	.....	435	.....	.....	6,505	.....	.....	64
.....	.....	.....	1,200	.....	.....	.....	4,700	.....	3,000	1,305	800	.....	65
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
4	3	.....	9	1	.....	1	18	10	8	14	1	.....	67
17,208	7,720	.....	7,300	(?)	.....	(?)	12,840	10,185	2,655	5,270	(?)	.....	68
4,902	2,573	.....	811	(?)	.....	(?)	713	1,018	332	376	(?)	.....	69
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	70
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(?)	.....	(?)	71
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72
.....	.....	.....	.....	.....	.....	.....	4	3	1	8	5	.....	73
.....	.....	.....	.....	.....	.....	.....	300	295	(?)	190	85	.....	74
.....	.....	.....	.....	.....	.....	.....	75	95	(?)	24	17	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
38	24	.....	23	(?)	.....	30	19	21	16	41	94	.....	(?)
.....	.....	.....	.....	.....	.....	.....	8	.....	.....	54	.....	.....	79
(?)	.....	.....	58	.....	.....	.....	30	.....	.....	51	26	.....	80
.....	.....	.....	.....	.....	.....	.....	26	33	(?)	75	110	.....	81
50	24	.....	25	(?)	.....	30	17	17	18	13	12	.....	(?)

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 — WYOMING

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			Little Missouri River (3)	Cheyenne River			
		Powder River—Continued				Total	Belle Fourche River		
		Crazy Woman Creek (20)	Clear Creek (7)	Little Powder River (4)			Total	Direct	Redwater Creek (1)
		(20)	(7)	(4)	(3)			(2)	(1)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
1	Enterprises.....1940..number.....	43	100	7	5	71	34	25	9
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	217	448	70	85	132	61	60	65
3	Diversion dams.....1940..total number.....	38	135	13	9	56	34	26	8
4	.....1930..total number.....	9	12	.....	.....	23	5	5	.....
5	.....1920..total number.....	17	46	.....	.....	71	24	24	.....
6	(a) Concrete and masonry.....1940..number.....	1	5	.....	.....	3	1	.....	1
7	(b) Timber.....1940..number.....	.....	.....	.....	.....	1	1	.....	1
8	(c) Earth and rock.....1940..number.....	37	128	13	1	50	30	25	5
9	(d) Other, mixed, and not reported.....1940..number.....	.....	2	.....	8	2	2	1	1
10	Main canals and laterals.....1940..total length, miles.....	96.4	286.5	6.0	6.0	87.2	35.2	27.2	8.0
11	.....1930..total length, miles.....	41	234	.....	.....	46	6	6	.....
12	.....1920..total length, miles.....	123	406	.....	1	264	94	94	.....
13	(a) Earth.....1940..length, miles.....	96	285	6	6	87	35	27	8
14	(b) Lined.....1940..length, miles.....	0.4	1.5	.....	.....	0.2	0.2	0.2	.....
15	.....1940..capacity, c.f.s. ²	306	1,219	261	23	225	93	64	29
16	.....1930..capacity, c.f.s. ²	50	741	.....	.....	72	5	5	.....
17	.....1920..capacity, c.f.s. ²	525	1,468	.....	.....	1,203	397	397	.....
18	Pipe lines ³.....1940..total length, miles.....	0.5	1.1	0.1	.....	1.4	0.8	0.4	0.4
19	.....1930..total length, miles.....	.....	.....	.....	.....	.....	.....	.....	.....
20	.....1920..total length, miles.....	.....	0.3	.....	.....	0.2	.....	.....	.....
21	(a) Concrete.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....	.....
22	(b) Metal.....1940..length, miles.....	0.5	0.9	0.1	.....	0.4	0.3	0.2	0.1
23	(c) Wood-stave.....1940..length, miles.....	.....	0.1	.....	.....	0.5	.....	.....	.....
24	(d) Other.....1940..length, miles.....	.....	0.1	.....	.....	0.5	0.5	0.2	0.3
25	Storage dams.....1940..total number.....	8	5	3	4	14	4	4	.....
26	.....1930..total number.....	3	3	.....	.....	10	4	4	.....
27	.....1920..total number.....	2	9	.....	1	40	25	25	.....
28	(a) Concrete and masonry.....1940..number.....	.....	1	.....	.....	.....	.....	.....	.....
29	(b) Earth and rock.....1940..number.....	8	3	3	4	14	4	4	.....
30	(c) Other, mixed, and not reported.....1940..number.....	.....	1	.....	.....	.....	.....	.....	.....
31	Reservoirs.....1940..total number.....	7	4	3	5	16	6	6	.....
32	(a) 1-99 acre-feet capacity.....1940..number.....	5	.....	1	4	7	4	4	.....
33	(b) 100-999 acre-feet capacity.....1940..number.....	2	1	2	1	8	2	2	.....
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	.....	3	.....	.....	1	.....	.....	.....
35	.....1940..total capacity, ac.-ft. ⁴	675	30,395	595	634	4,382	427	427	.....
36	.....1930..total capacity, ac.-ft.	3	2	.....	.....	4	1	1	.....
37	.....1920..total capacity, ac.-ft.	567	4,354	.....	.....	1,976	40	40	.....
38	Wells, flowing.....1940..number.....	.....	.....	.....	.....	3	2	2	.....
39	.....1930..number.....	.....	.....	.....	.....	1	1	1	.....
40	.....1920..number.....	.....	.....	.....	.....	.....	.....	.....	.....
41	.....1940..yield, g.p.m.....	.....	.....	.....	.....	210	(⁵)	(⁵)	.....
42	.....1930..yield, g.p.m.....	.....	.....	.....	.....	120	120	120	.....
43	.....1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	2	2	.....	.....	1	1	1	.....
45	.....1930..number.....	.....	.....	.....	.....	.....	.....	.....	.....
46	.....1920..number.....	.....	.....	.....	.....	.....	.....	.....	.....
47	.....1940..yield, g.p.m.....	(⁵)	(⁵)	.....	(⁵)	1	(⁵)	(⁵)	.....
48	.....1930..yield, g.p.m.....	.....	.....	.....	.....	.....	(⁵)	(⁵)	.....
49	.....1920..yield, g.p.m.....	.....	.....	.....	.....	2,000	2,000	2,000	.....
50	Pumping plants.....1940..total number.....	7	4	.....	.....	17	4	4	.....
51	.....1930..total number.....	.....	.....	.....	.....	1	.....	.....	.....
52	Prime movers.....1940..capacity, hp.....	142	31	.....	.....	340	42	42	.....
53	.....1930..capacity, hp.....	.....	298	.....	.....	119	103	103	.....
54	.....1920..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....	.....
55	(a) Electric.....1940..number.....	.....	.....	.....	.....	.....	.....	.....	.....
56	.....1940..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....	.....
57	(b) Internal-combustion.....1940..number.....	7	4	.....	.....	16	3	3	.....
58	.....1940..capacity, hp.....	142	31	.....	.....	339	41	41	.....
59	(c) Other.....1940..number.....	.....	.....	.....	.....	1	1	1	.....
60	.....1940..capacity, hp.....	.....	.....	.....	(⁵)	(⁵)	(⁵)	(⁵)	.....
61	Pumps.....1940..total number.....	7	10	.....	.....	18	4	4	.....
62	.....1930..number.....	.....	.....	.....	.....	1	.....	.....	.....
63	.....1920..number.....	.....	2	.....	.....	5	4	4	.....
64	.....1940..capacity, g.p.m.....	3,670	1,665	.....	.....	19,144	954	954	.....
65	.....1930..capacity, g.p.m.....	.....	.....	.....	.....	1,100	.....	.....	.....
66	.....1920..capacity, g.p.m.....	.....	200	.....	.....	4,491	3,391	3,391	.....
67	(a) Centrifugal.....1940..number.....	5	8	.....	.....	17	3	3	.....
68	.....1940..capacity, g.p.m.....	3,590	1,580	.....	.....	19,140	950	950	.....
69	.....1940..average capacity, g.p.m.,	718	188	.....	.....	1,126	317	317	.....
70	(b) Turbine.....1940..number.....	.....	1	.....	.....	.....	.....	.....	.....
71	.....1940..capacity, g.p.m.....	.....	(⁵)	.....	.....	.....	.....	.....	.....
72	.....1940..average capacity, g.p.m.,	.....	(⁵)	.....	.....	.....	.....	.....	.....
73	(c) Plunger.....1940..number.....	2	1	.....	.....	1	1	1	.....
74	.....1940..capacity, g.p.m.....	(⁵)	(⁵)	.....	(⁵)	(⁵)	(⁵)	(⁵)	.....
75	.....1940..average capacity, g.p.m.,	(⁵)	(⁵)	.....	(⁵)	(⁵)	(⁵)	(⁵)	.....
76	(d) Other.....1940..number.....	.....	.....	.....	.....	.....	.....	.....	.....
77	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	12	16	.....	.....	15	16	16	.....
79	.....1930..average, feet.....	.....	.....	.....	.....	12	.....	.....	.....
80	.....1920..average, feet.....	.....	54	.....	.....	18	20	20	.....
81	from pumped wells.....1940..average, feet.....	(⁵)	(⁵)	.....	(⁵)	(⁵)	(⁵)	(⁵)	.....
82	from surface sources.....1940..average, feet.....	11	16	.....	.....	13	13	13	.....

¹Data for 2 enterprises in Great Divide Drainage Basin (50) (number refers to separate map) are included with North Platte River "Direct" Drainage Basin (32).

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 — WYOMING

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WORKS, 1940, 1930, AND 1920—Continued

MISSOURI RIVER—Continued												
North Platte River												
Cheyenne River—Con.	South Fork	Total	Direct ¹	Beaver Creek	Encampment Creek	Spring Creek	Pass Creek	Medicine Bow River				
								Total	Direct	Rock Creek	Little Medicine Bow River	
											Total	Direct	Sheep Creek
(21)	(32)	(32)	(31)	(30)	(56)	(51)	(71)	(72)	(73)	(72)		
37	979	311	25	47	19	21	90	40	22	28	8	14
198	708	627	299	405	790	681	902	700	2,060	280	261	195
22	1,747	380	45	88	48	50	215	111	74	30	9	13
18	853	14	14	16	32	37	87	66	.....	1	.....	.....
47	865	24	12	13	3	3	113	112	.....	1	.....	.....
2	125	12	.....	1	1	.....	3	1	2	.....	.....	.....
.....	236	26	3	13	13	17	123	79	44	.....	.....	.....
20	1,137	277	35	50	11	5	83	27	28	28	7	13
.....	249	65	7	24	23	23	6	4	.....	2	2	.....
52.0	4,351.8	1,353.4	91.0	167.0	92.0	102.0	456.5	199.1	181.3	76.1	19.0	37.1
40	3,314	578	22	58	55	42	347	344	.....	3	.....	.....
170	3,980	487	63	59	124	93	479	472	.....	7	.....	.....
52	4,334	1,349	81	167	92	102	451	194	181	76	19	37
.....	17.8	4.4	.....	.....	.....	.....	5.5	5.1	0.3	0.1	.....	0.1
132	15,985	6,416	188	402	337	384	1,387	487	788	132	41	45
67	11,644	2,261	47	211	202	123	663	654	.....	9	.....	.....
806	13,878	3,134	50	106	343	293	939	927	.....	12	.....	.....
0.6	13.2	7.9	.....	.....	.....	.....	1.3	0.1	1.2	.....	.....	.....
.....	9.2	6.7	.....	.....	.....	.....	0.5	0.5	.....	.....	.....	.....
0.2	3.1	0.2	.....	0.1	.....	.....	1.5	1.0	.....	0.5	.....	.....
.....	4.3	3.3	.....	.....	.....	.....	0.2	.....	0.2	.....	.....	.....
0.1	5.7	4.0	.....	.....	.....	.....	0.1	0.1	.....	.....	.....	.....
0.5	1.2	0.2	.....	.....	.....	.....	1.0	.....	1.0	.....	.....	.....
.....	2.0	0.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	117	34	10	.....	.....	2	6	2	3	1	.....	.....
6	99	3	3	.....	.....	1	4	4	.....	.....	.....	.....
15	113	4	2	1	2	.....	13	13	.....	.....	.....	.....
.....	8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	98	28	10	.....	.....	2	6	2	3	1	.....	.....
.....	16	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	132	51	11	2	.....	2	6	1	4	1	.....	.....
3	83	39	6	2	.....	1	2	1	1	.....	.....	.....
6	23	5	5	.....	.....	1	1	.....	.....	1	.....	.....
1	26	7	.....	.....	.....	.....	3	.....	3	.....	.....	.....
3,955	1,550,380	1,186,759	1,348	(5)	.....	(5)	10,295	(5)	10,040	(5)	.....	.....
3	98	3	3	.....	.....	2	1	2	.....	.....	.....	.....
1,936	1,575,815	1,260,570	288	.....	832	4	3,337	3,337	.....	.....	.....	.....
1	8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....
(5)	751	(5)	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
.....	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	24	17	.....	.....	.....	.....	1	1	.....	.....	.....	.....
.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	9	2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
.....	16,041	13,968	.....	.....	.....	.....	(5)	3	(5)	3	.....	.....
.....	370	365	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	4,330	3,180	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	68	57	.....	.....	.....	.....	1	1	.....	.....	.....	.....
1	36	21	.....	.....	.....	.....	(5)	1	(5)	1	.....	.....
298	1,095	1,029	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	614	477	.....	.....	.....	.....	2	2	.....	.....	.....	.....
16	329	240	.....	.....	.....	.....	33	33	.....	.....	.....	.....
.....	8	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	107	96	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	49	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
298	895	855	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	11	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	93	78	.....	.....	.....	.....	(5)	1	(5)	1	.....	.....
14	68	57	.....	.....	.....	.....	1	1	.....	.....	.....	.....
1	39	22	.....	.....	.....	.....	1	1	.....	.....	.....	.....
1	28	11	.....	.....	.....	1	12	12	.....	.....	.....	.....
18,190	76,287	71,331	.....	.....	.....	.....	(5)	(5)	.....	.....	.....	.....
1,100	62,991	51,752	.....	.....	.....	.....	450	450	.....	.....	.....	.....
1,100	17,039	14,602	.....	.....	.....	.....	787	787	.....	.....	.....	.....
14	56	48	.....	.....	.....	.....	1	1	.....	.....	.....	.....
18,190	70,718	66,325	.....	.....	.....	.....	(5)	(5)	.....	.....	.....	.....
1,299	1,283	1,382	.....	.....	.....	.....	(5)	(5)	.....	.....	.....	.....
.....	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	4,400	3,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	1,100	1,283	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	41	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	10	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	1,128	1,120	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	16	16	.....	.....	.....	.....	(5)	(5)	.....	.....	.....	.....
12	20	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	22	25	.....	.....	.....	.....	18	18	.....	.....	.....	.....
.....	19	19	.....	.....	.....	.....	(5)	(5)	.....	.....	.....	.....
13	15	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Total capacity of all reservoirs regardless of size.² Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION - WYOMING

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							
		North Platte River—Continued							
		Medicine Bow River—Con.	Sweetwater River (38)	Box Elder Creek (37)	La Prele Creek (36)	La Bonte Creek (35)	Laramie River		
		Little Medicine Bow River—Con.					Total	Direct	Little Laramie River (63)
		Muddy Creek (68)							
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
1	Enterprises.....1940..number.....	6	46	25	26	35	283	107	78
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	505	386	130	632	211	1,004	1,771	776
3	Diversion dams.....1940..total number.....	8	90	29	56	71	556	217	151
4	.....1930..total number.....	1	21	7	4	9	368	62	63
5	.....1920..total number.....	1	42	13	11	40	358	40	42
6	(a) Concrete and masonry.....1940..number.....	3	48	3	6	21	12	3	4
7	(b) Timber.....1940..number.....	2	2	.....	6	13	20	2	17
8	(c) Earth and rock.....1940..number.....	8	38	22	36	29	456	183	105
9	(d) Other, mixed, and not reported.....1940..number.....	2	4	4	8	8	68	29	25
10	Main canals and laterals.....1940..total length, miles.....	20.0	206.3	50.0	231.1	115.5	1,261.5	614.0	299.1
11	.....1930..total length, miles.....	3	100	87	192	50	1,100	494	206
12	.....1920..total length, miles.....	7	161	84	143	100	1,243	515	165
13	(a) Earth.....1940..length, miles.....	20	206	50	231	113	1,257	613	209
14	(b) Lined.....1940..length, miles.....	0.3	0.1	0.1	2.5	4.5	1.0	0.1	0.1
15	.....1940..capacity, c.f.s. ¹	46	300	273	242	167	5,239	3,694	885
16	.....1930..capacity, c.f.s. ¹	9	215	21	306	98	5,584	4,347	614
17	.....1920..capacity, c.f.s. ¹	12	174	44	326	54	5,933	1,718	435
18	Pipe lines ².....1940..total length, miles.....	0.2	0.6	0.1	.....	.....	1.8	1.0	0.6
19	.....1930..total length, miles.....	0.5	.....	.....	.....	.....	0.4	0.3	.....
20	.....1920..total length, miles.....	.....	.....	.....	.....	.....	0.8	0.5	0.2
21	(c) Concrete.....1940..length, miles.....	.....	0.2	.....	.....	.....	1.0	0.5	0.4
22	(b) Metal.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....	.....
23	(c) Wood-stave.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....	.....
24	(d) Other.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....	.....
25	Storage dams.....1940..total number.....	1	4	1	1	.....	50	20	4
26	.....1930..total number.....	.....	9	3	4	.....	20	5	.....
27	.....1920..total number.....	.....	1	3	3	.....	40	7	.....
28	(a) Concrete and masonry.....1940..number.....	.....	.....	.....	1	.....	5	2	.....
29	(b) Earth and rock.....1940..number.....	1	4	1	.....	.....	38	17	1
30	(c) Other, mixed, and not reported.....1940..number.....	.....	.....	.....	.....	.....	7	1	3
31	Reservoirs.....1940..total number.....	1	8	1	1	.....	44	21	2
32	(a) 1-99 acre-feet capacity.....1940..number.....	.....	5	1	.....	.....	25	9	2
33	(b) 100-999 acre-feet capacity.....1940..number.....	1	3	.....	.....	.....	8	7	.....
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	.....	.....	.....	.....	.....	11	5	.....
35	.....1940..total capacity, ac.-ft. ²	(⁴)	1,806	(⁴)	(⁴)	.....	326,235	312,189	(⁴)
36	.....1930..total capacity, ac.-ft.....	.....	6	3	1	.....	23	5	2
37	.....1920..total capacity, ac.-ft.....	.....	796	600	20,000	.....	249,223	236,500	200
38	Wells, flowing.....1940..number.....	.....	.....	.....	.....	.....	7	7	.....
39	.....1930..number.....	.....	.....	.....	.....	.....	.....	.....	.....
40	.....1920..number.....	.....	.....	1	.....	.....	.....	.....	.....
41	.....1940..yield, g.p.m.....	.....	.....	.....	.....	.....	750	750	.....
42	.....1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
43	.....1920..yield, g.p.m.....	.....	.....	40	.....	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	.....	.....	.....	.....	.....	6	4	.....
45	.....1930..number.....	.....	.....	.....	.....	.....	.....	.....	.....
46	.....1920..number.....	.....	.....	.....	.....	.....	2	.....	.....
47	.....1940..yield, g.p.m.....	.....	.....	.....	.....	.....	1,998	1,593	.....
48	.....1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
49	.....1920..yield, g.p.m.....	.....	.....	.....	.....	.....	1,150	.....	.....
50	Pumping plants.....1940..total number.....	.....	.....	.....	.....	.....	9	6	.....
51	.....1930..total number.....	.....	1	.....	.....	.....	54	43	.....
52	Prime movers.....1940..capacity, hp.....	.....	30	.....	.....	.....	6	.....	.....
53	.....1930..capacity, hp.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
54	.....1920..capacity, hp.....	.....	.....	.....	.....	.....	5	4	.....
55	(a) Electric.....1940..number.....	.....	.....	.....	.....	.....	40	32	.....
56	.....1940..capacity, hp.....	.....	.....	.....	.....	.....	3	1	.....
57	(b) Internal-combustion.....1940..number.....	.....	.....	.....	.....	.....	13	(⁴)	.....
58	.....1940..capacity, hp.....	.....	.....	.....	.....	.....	9	6	.....
59	(c) Other.....1940..number.....	.....	.....	.....	.....	.....	3	1	.....
60	.....1940..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....	.....
61	Pumps.....1940..total number.....	.....	1	.....	.....	.....	3	1	.....
62	.....1930..number.....	.....	.....	.....	.....	.....	2,881	2,468	.....
63	.....1920..number.....	.....	.....	.....	.....	.....	1,650	500	.....
64	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	6	5	.....
65	.....1930..capacity, g.p.m.....	.....	1,200	.....	.....	.....	2,318	1,918	.....
66	.....1920..capacity, g.p.m.....	.....	.....	.....	.....	.....	396	394	.....
67	(a) Centrifugal.....1940..number.....	.....	.....	.....	.....	.....	1	1	.....
68	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
69	(b) Turbine.....1940..number.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
70	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
71	(c) Plunger.....1940..number.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
72	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
73	(d) Other.....1940..number.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
74	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
75	.....1930..average capacity, g.p.m.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
76	.....1920..average capacity, g.p.m.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
77	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	(⁴)	(⁴)	.....
78	Pumping lift, from all sources.....1940..average, feet.....	.....	.....	.....	.....	.....	19	19	.....
79	.....1930..average, feet.....	.....	15	.....	.....	.....	.....	.....	.....
80	.....1920..average, feet.....	.....	.....	.....	.....	.....	13	10	.....
81	from pumped wells.....1940..average, feet.....	.....	.....	.....	.....	.....	20	20	.....
82	from surface sources.....1940..average, feet.....	.....	.....	.....	.....	.....	18	18	.....

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 - WYOMING

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WORKS, 1940, 1930, AND 1920—Continued

MISSOURI RIVER—Continued									COLORADO RIVER		
North Platte River—Continued					South Platte River				Green River		
Laramie River—Continued			Rawhide Creek (34)	Horse Creek (53)	Total	Cache la Poudre River (70)	Crow Creek (66)	Lodgepole Creek (65)	Total	Direct (40)	Horse Creek (29)
Sybillie Creek (55)	North Laramie River (52)	Chugwater Creek (54)									
29	50	19	3	48	84	24	22	38	676	105	11
182	156	1,101	113	671	226	277	263	251	499	537	1,412
77	68	49	4	115	192	109	45	36	788	72	6
55	56	41	2	83	171	82	72	17	714	74	11
98	101	37	13	46	42	25	8	9	361	23	6
.....	3	2	.....	18	4	.....	1	3	19	.....	6
.....	.....	1	.....	.....	1	.....	.....	.....	156	15	3
66	64	38	4	91	187	109	44	34	461	53	3
11	1	2	.....	6	.....	.....	.....	.....	152	4	.....
55.0	123.2	170.2	2.0	223.5	127.9	53.0	35.7	39.2	1,991.0	269.2	53.0
55	97	74	3	215	177	84	64	29	2,323	349	97
122	101	107	22	210	204	97	47	60	2,411	180	82
55	120	170	2	223	127	53	35	39	1,990	269	53
.....	3.2	0.2	.....	0.5	0.9	.....	0.7	0.2	1.0	0.2	.....
113	264	283	5	643	266	76	97	93	7,995	1,540	239
87	194	101	27	589	324	139	169	26	7,552	1,452	64
297	462	152	42	774	429	58	115	256	7,495	1,403	403
.....	0.1	0.1	.....	2.0	2.8	.....	1.7	1.1	1.4	.....	.....
.....
.....	.....	.....	.....	0.1	.....	.....	.....	.....	0.2	0.1	.....
.....	.....	0.1	.....	.....	0.2	.....	0.2	.....	.....	.....	.....
.....	0.1	.....	.....	0.4	2.1	.....	1.5	0.6	1.4	.....	.....
.....	.....	.....	.....	.....	0.5	.....	.....	0.5	.....	.....	.....
.....	.....	.....	.....	1.6	.....	.....	.....	.....	.....	.....	.....
11	12	3	.....	9	14	9	4	1	58	9	.....
.....	6	3	.....	16	20	10	5	5	18	1	.....
11	6	10	2	26	22	7	4	11	40	1	.....
.....	3	.....	.....	1	.....	.....	.....	.....	1	.....	.....
11	6	3	.....	4	14	9	4	1	46	9	.....
.....	3	.....	.....	4	.....	.....	.....	.....	11	.....	.....
11	7	3	.....	6	14	9	3	2	51	8	.....
11	1	2	.....	2	2	.....	.....	2	26	8	.....
.....	.....	1	.....	.....	12	9	3	.....	12	.....	.....
.....	6	.....	.....	4	.....	.....	.....	.....	13	.....	.....
277	13,476	193	.....	23,393	5,527	3,672	1,825	(*)	141,841	240	.....
1	5	4	.....	14	16	10	4	2	22	.....	.....
20	6,574	235	.....	29,654	8,064	6,238	1,817	9	57,354	.....	.....
.....	.....	.....	.....	.....	2	1	1	.....	4	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....
.....	.....	.....	.....	.....	(*)	(*)	(*)	.....	61	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	120	.....	.....
1	1	.....	.....	.....	43	.....	3	40	5	.....	.....
.....	.....	.....	.....	.....	6	.....	.....	6	3	.....	.....
.....	1	1	.....	.....	40,320	.....	340	39,980	82	.....	.....
(*)	(*)	.....	.....	.....	7,500	.....	.....	7,500	410	.....	.....
.....	700	450	.....	.....	735	.....	.....	735	.....	.....	.....
1	2	.....	.....	1	47	.....	7	40	12	7	.....
(*)	(*)	.....	.....	(*)	6	.....	.....	6	9	.....	.....
.....	.....	.....	.....	.....	1,195	.....	85	1,110	80	50	.....
.....	.....	.....	.....	.....	100	.....	.....	100	34	29	.....
.....	.....	6	.....	.....	20	.....	.....	20	44	22	.....
.....	.....	.....	.....	1	8	.....	3	5	1	.....	.....
.....	.....	.....	.....	(*)	131	.....	26	105	(*)	(*)	.....
.....	.....	.....	.....	.....	35	.....	3	32	7	3	.....
.....	(*)	.....	.....	.....	986	.....	56	930	54	39	.....
1	.....	.....	.....	.....	4	.....	1	3	4	3	.....
(*)	(*)	.....	.....	.....	78	.....	(*)	75	21	6	.....
1	.....	.....	.....	.....	48	.....	7	41	10	4	.....
.....	.....	.....	.....	.....	6	.....	.....	6	9	6	.....
.....	.....	.....	.....	.....	2	.....	.....	2	5	4	.....
(*)	(*)	.....	.....	(*)	43,953	.....	3,973	39,980	3,222	2,140	.....
.....	.....	.....	.....	.....	7,800	.....	.....	7,800	3,834	3,424	.....
.....	700	450	.....	.....	735	.....	.....	735	1,505	1,505	.....
.....	.....	.....	.....	.....	9	.....	4	5	4	3	.....
.....	(*)	.....	.....	(*)	8,950	.....	3,850	5,100	2,100	1,100	.....
.....	(*)	.....	.....	(*)	994	.....	962	1,020	525	367	.....
.....	.....	.....	.....	.....	37	.....	1	36	.....	.....	.....
.....	.....	.....	.....	.....	34,663	.....	(*)	34,880	.....	.....	.....
.....	.....	.....	.....	.....	945	.....	(*)	969	.....	.....	.....
1	.....	.....	.....	.....	1	.....	1	.....	5	.....	.....
(*)	.....	.....	.....	.....	(*)	.....	(*)	.....	82	.....	.....
(*)	.....	.....	.....	.....	(*)	.....	(*)	.....	16	.....	.....
.....	.....	.....	.....	.....	1	.....	1	.....	1	1	.....
.....	(*)	(*)	(*)	(*)	(*)
(*)	(*)	.....	.....	(*)	58	.....	45	61	41	16	.....
.....	.....	.....	.....	.....	26	.....	.....	26	18	12	.....
.....	.....	.....	.....	.....	12	.....	.....	12	34	39	.....
(*)	(*)	.....	.....	(*)	62	.....	69	61	.....	.....	.....
.....	.....	.....	.....	.....	28	.....	28	.....	41	16	.....

*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 - WYOMING

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)		COLORADO RIVER—Continued						
		Green River—Continued						
		Cottonwood Creek (75)	New Fork (30)	South Piney Creek (41)	La Barge Creek (42)	Fontenelle Creek (43)	Sandy Creek (39)	Bitter Creek (49)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
1	Enterprises.....1940..number.....	22	143	28	14	20	16	34
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	1,218	432	1,066	486	248	1,342	67
3	Diversion dams.....1940..total number.....	35	105	50	19	29	12	10
4	.....1930..total number.....	28	83	10	14	5	.....	13
5	.....1920..total number.....	19	9	26	22	20	.....	3
6	(a) Concrete and masonry.....1940..number.....	2	1	.....	.....	2	2	.....
7	(b) Timber.....1940..number.....	28	10	40	3	1	1	.....
8	(c) Earth and rock.....1940..number.....	1	83	6	3	6	6	5
9	(d) Other, mixed, and not reported.....1940..number.....	4	11	4	13	20	3	5
10	Main canals and laterals.....1940..total length, miles.....	158.0	349.5	84.0	49.0	63.0	166.0	10.0
11	.....1930..total length, miles.....	136	368	14	54	18	.....	14
12	.....1920..total length, miles.....	206	327	279	46	41	.....	32
13	(a) Earth.....1940..length, miles.....	158	349	84	49	63	166	10
14	(b) Lined.....1940..length, miles.....	.....	0.5	.....	.....	.....	.....	.....
15	.....1940..capacity, c.f.s. ⁴	218	1,921	336	151	114	775	56
16	.....1930..capacity, c.f.s. ⁴	411	1,228	145	142	24	.....	9
17	.....1920..capacity, c.f.s. ⁴	485	1,011	221	131	73	.....	25
18	Pipe lines ⁵.....1940..total length, miles.....	.....	.....	.....	.....	.....	0.1	1.3
19	.....1930..total length, miles.....	.....	.....	.....	.....	.....	.....	.....
20	.....1920..total length, miles.....	.....	.....	.....	.....	.....	.....	.....
21	(a) Concrete.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
22	(b) Metal.....1940..length, miles.....	.....	.....	.....	.....	.....	0.1	1.3
23	(c) Wood-stave.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
24	(d) Other.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
25	Storage dams.....1940..total number.....	.....	9	2	.....	.....	3	12
26	.....1930..total number.....	.....	4	.....	.....	.....	.....	2
27	.....1920..total number.....	.....	2	1	.....	.....	.....	1
28	(a) Concrete and masonry.....1940..number.....	.....	1	.....	.....	.....	.....	.....
29	(b) Earth and rock.....1940..number.....	.....	3	1	.....	.....	3	11
30	(c) Other, mixed, and not reported.....1940..number.....	.....	5	1	.....	.....	.....	1
31	Reservoirs.....1940..total number.....	.....	9	2	.....	.....	3	10
32	(a) 1-99 acre-feet capacity.....1940..number.....	.....	.....	.....	.....	.....	1	9
33	(b) 100-999 acre-feet capacity.....1940..number.....	.....	3	.....	.....	.....	1	.....
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	.....	6	2	.....	.....	1	1
35	.....1940..total capacity, ac.-ft. ⁷.....	.....	67,755	(⁸)	.....	.....	16,764	4,326
36	.....1930..total capacity, ac.-ft. ⁷.....	.....	4	.....	.....	.....	.....	4
37	.....1920..total capacity, ac.-ft. ⁷.....	.....	31,670	.....	.....	.....	.....	300
38	Wells, flowing.....1940..number.....	.....	.....	.....	.....	.....	.....	2
39	.....1930..number.....	.....	.....	.....	.....	.....	.....	1
40	.....1920..number.....	.....	.....	.....	.....	.....	.....	2
41	.....1940..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	(⁸)
42	.....1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	120
43	.....1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	.....	.....	.....	.....	.....	.....	5
45	.....1930..number.....	.....	.....	.....	.....	.....	.....	2
46	.....1920..number.....	.....	.....	.....	.....	.....	.....	.....
47	.....1940..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	82
48	.....1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	350
49	.....1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number.....	.....	.....	.....	.....	.....	1	4
51	.....1930..total number.....	.....	.....	.....	.....	.....	.....	2
52	Prime movers.....1940..capacity, hp.....	.....	.....	.....	.....	.....	(⁸)	15
53	.....1930..capacity, hp.....	.....	.....	.....	.....	.....	.....	4
54	.....1920..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
55	(a) Electric.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
56	.....1940..capacity, hp.....	.....	.....	.....	.....	.....	.....	4
57	(b) Internal-combustion.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
58	.....1940..capacity, hp.....	.....	.....	.....	.....	.....	.....	15
59	(c) Other.....1940..number.....	.....	.....	.....	.....	.....	1	.....
60	.....1940..capacity, hp.....	.....	.....	.....	.....	.....	(⁸)	5
61	Pumps.....1940..total number.....	.....	.....	.....	.....	.....	1	5
62	.....1930..number.....	.....	.....	.....	.....	.....	.....	2
63	.....1920..number.....	.....	.....	.....	.....	.....	.....	.....
64	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	(⁸)	82
65	.....1930..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	350
66	.....1920..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
67	(a) Centrifugal.....1940..number.....	.....	.....	.....	.....	.....	1	.....
68	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	(⁸)	.....
69	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	(⁸)	.....
70	(b) Turbine.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
71	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
72	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
73	(c) Plunger.....1940..number.....	.....	.....	.....	.....	.....	.....	5
74	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	82
75	.....1940..average capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	16
76	(d) Other.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
77	.....1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	.....	.....	.....	.....	.....	(⁸)	66
79	.....1930..average, feet.....	.....	.....	.....	.....	.....	.....	20
80	.....1920..average, feet.....	.....	.....	.....	.....	.....	.....	.....
81	from pumped wells.....1940..average, feet.....	.....	.....	.....	.....	.....	.....	.....
82	from surface sources.....1940..average, feet.....	.....	.....	.....	.....	.....	(⁸)	66

¹ Data for 1 enterprise in Cottonwood Creek Drainage Basin (57) (number refers to separate map) are included with Blacks Fork "Direct" Drainage Basin (48).

² Data for 1930 and 1920 not available because tributaries of South Fork of the Snake River were not identified.

³ Data for 2 enterprises in Henrys Fork "Direct" Drainage Basin (69) (number refers to separate map) are included with Teton River Drainage Basin (13).

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

CENSUS OF IRRIGATION — WYOMING

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WORKS, 1940, 1930, AND 1920—Continued

COLORADO RIVER—Continued						GREAT SALT LAKE	COLUMBIA RIVER							
Green River—Continued							Snake River							
Blacks Fork				Henrys Fork	Little Snake River (Yampa)		Bear River	Total	South Fork				Henrys Fork	
Total	Direct ¹	Muddy Creek	Hams Fork						Total ²	Direct	Gros Venture River	Grays River		Salt River	Teton River^{3}
	(48)	(47)	(45)	(58)	(59)	(46)			(11)	(26)	(28)	(27)	(13)	
188	135	11	42	58	47	102	305	285	128	22	5	130	20	1
394	409	630	284	369	349	657	324	339	238	445	53	419	199	2
280	312	19	49	118	52	139	313	294	137	15	4	138	19	3
271	271	.....	.....	7	4	87	153	.....	3	5	.....	62	.....	4
156	156	.....	.....	45	8	54	105	.....	1	34	.....	50	.....	5
11	2	7	2	1	.....	3	20	.....	4	.....	.....	15	1	6
38	37	.....	1	17	.....	5	38	.....	3	2	.....	30	3	7
196	140	10	46	51	48	111	185	175	90	11	4	70	10	8
35	33	2	.....	49	1	20	70	65	40	2	.....	23	5	9
475.3	326.0	66.2	83.1	174.0	140.0	356.2	621.6	593.6	256.2	68.1	4.0	263.3	28.0	10
492	492	.....	.....	158	100	380	509	.....	16	73	.....	215	.....	11
646	646	.....	.....	185	128	420	617	.....	12	115	.....	351	.....	12
475	326	66	83	174	140	356	621	593	258	68	4	263	28	13
0.3	.....	0.2	0.1	.....	.....	0.2	0.6	0.6	0.2	0.1	.....	0.3	.....	14
1,947	1,619	97	231	260	439	1,566	3,833	2,921	901	355	12	1,653	912	15
1,351	1,351	.....	.....	345	377	611	1,699	.....	30	423	.....	753	.....	16
1,867	1,867	.....	.....	301	289	1,306	2,231	.....	42	221	.....	1,355	.....	17
.....	.....	.....	.....	.....	.....	1.1	0.2	0.2	.....	.....	.....	0.2	.....	18
.....	.....	.....	.....	.....	.....	0.4	2.0	.....	.....	.....	.....	2.0	.....	19
.....	.....	.....	.....	.....	0.1	4.0	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	0.2	0.2	.....	.....	.....	0.2	.....	21
.....	.....	.....	.....	.....	.....	0.5	.....	.....	.....	.....	.....	.....	.....	22
.....	.....	.....	.....	.....	.....	0.5	.....	.....	.....	.....	.....	.....	.....	23
.....	.....	.....	.....	.....	.....	0.1	.....	.....	.....	.....	.....	.....	.....	24
19	5	4	10	3	1	2	6	5	3	.....	.....	2	.....	25
4	4	.....	.....	1	.....	4	4	.....	1	.....	.....	1	.....	26
9	9	.....	.....	22	.....	7	2	.....	.....	.....	.....	2	.....	27
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
15	3	4	8	3	1	2	5	4	3	.....	.....	1	.....	29
4	2	.....	2	.....	.....	.....	1	1	.....	.....	.....	1	.....	30
16	5	4	7	2	1	2	6	5	3	.....	.....	2	.....	31
7	1	.....	6	1	.....	1	1	1	.....	.....	.....	1	.....	32
6	3	3	.....	1	1	2	1	1	.....	.....	.....	1	.....	33
3	1	1	1	.....	.....	.....	4	3	3	.....	.....	.....	1	34
45,728	18,672	25,966	1,090	(⁵)	(⁵)	(⁵)	866,985	851,761	851,360	.....	.....	(⁵)	15,201	35
5	5	.....	.....	1	1	6	4	.....	1	.....	.....	1	.....	36
1,307	1,307	.....	.....	80	400	931	848,387	.....	847,000	.....	.....	800	.....	37
2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39
(⁵)	.....	.....	(⁵)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
60	60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49
.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	50
1	1	.....	.....	.....	.....	(⁵)	.....	.....	.....	.....	.....	.....	.....	51
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
.....	.....	.....	.....	.....	.....	(⁵)	2	.....	.....	.....	.....	.....	.....	58
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61
1	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	62
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	63
.....	.....	.....	.....	.....	.....	(⁵)	.....	.....	.....	.....	.....	.....	.....	64
60	60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
.....	.....	.....	.....	.....	.....	(⁵)	2	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	.....	.....	(⁵)	.....	.....	.....	.....	.....	.....	.....	69
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
.....	.....	.....	.....	.....	.....	(⁵)	.....	.....	.....	.....	.....	.....	.....	78
34	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
.....	.....	.....	.....	.....	.....	(⁵)	.....	.....	.....	.....	.....	.....	.....	82

¹ Includes siphons and farm pipe lines reported.² Data for less than 3 enterprises shown with permission of the enterprise involved.³ Total capacity of all reservoirs regardless of size.⁴ Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

CENSUS OF IRRIGATION — WYOMING

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

ITEM (For definitions and explanations, see text)		STATE TOTAL	Albany	Big Horn	Campbell
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*					
1	All farms.....1940..number....	15,018	458	1,051	852
2	.....1930..number....	16,011	548	948	1,310
3	Irrigated farms.....1940..number....	8,637	323	1,003	13
4	.....1930..number....	7,308	327	863	2
5	Increase or decrease (-), 1930-1940.....percent....	18.2	-1.2	16.2	550.0
6	Operated by—(a) Owners and managers.....1940..number....	8,427	261	741	13
7	.....1930..number....	5,426	252	624	.....
8	(b) Tenants.....1940..number....	2,210	63	262	.....
9	.....1930..number....	1,882	75	239	2
10	Land in all farms.....1940..acres....	28,025,979	1,468,810	488,120	2,988,976
11	Land in irrigated farms.....1940..acres....	12,815,523	1,265,524	436,871	95,936
12	Average per farm.....1940..acres....	1,495	3,921	436	7,380
13	(a) Operated by owners and managers.....1940..acres....	11,569,992	1,136,277	371,883	95,936
14	Average per farm.....1940..acres....	1,861	4,354	502	7,380
15	(b) Operated by tenants.....1940..acres....	955,531	130,247	64,868	.....
16	Average per farm.....1940..acres....	432	2,101	248	.....
17	Approximate land area.....1940..acres....	62,403,840	2,816,000	2,632,640	3,043,200
IRRIGATED AND IRRIGABLE AREAS					
18	Area irrigated.....1939..acres....	1,485,498	127,506	110,198	492
19	(a) Cropland harvested.....1939..acres....	1,193,897	97,625	89,270	462
20	(b) Crop failure.....1939..acres....	16,550	1,901	1,870	.....
21	(c) Pasture.....1939..acres....	275,951	28,080	19,120	40
22	Area irrigated.....1929..acres....	1,236,155	123,570	104,889	440
23	.....1919..acres....	1,207,982	114,248	109,754	1,066
24	Increase or decrease (-), 1929-1939.....percent....	20.3	3.2	5.1	11.8
25	Irrigable area in enterprises.....1940..acres....	2,277,040	341,673	163,082	1,287
26	.....1930..acres....	1,958,147	218,800	170,163	440
27	.....1920 ^b ..acres....	2,564,668	332,455	213,937	3,278
28	Excess of irrigable area over the area irrigated.....1940..acres....	790,548	214,167	52,884	765
29	.....1930..acres....	721,992	95,230	65,274	.....
30	Area works were capable of supplying with water.....1940..acres....	1,913,537	234,893	139,752	1,192
31	.....1930..acres....	1,655,008	182,829	145,783	440
32	.....1920..acres....	1,931,039	218,270	161,941	2,220
33	Increase or decrease (-), 1930-1940.....percent....	15.6	28.5	-4.1	170.9
34	Excess, capability of works over area irrigated.....1940..acres....	427,029	107,987	29,554	700
35	.....1930..acres....	418,853	59,259	40,894	.....
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent....	11.5	10.1	25.2	0.5
37	.....1929..percent....	12.4	11.3	61.0	2.0
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	77.7	54.3	78.9	41.3
39	.....1929..percent....	74.7	67.5	71.9	100.0
CAPITAL INVESTED TO JANUARY 1					
40	Total investment in all enterprises.....1940..dollars....	41,522,801	4,358,118	4,228,044	14,353
41	(a) Cost of irrigation works and equipment.....1940..dollars....	41,057,813	4,212,518	4,211,876	13,873
42	(b) Investment in water rights (reported).....1940..dollars....	464,988	145,600	16,168	480
43	Total investment in all enterprises.....1930..dollars....	35,153,187	3,480,280	3,734,074	5,300
44	.....1920..dollars....	34,326,328	3,975,710	4,495,690	85,100
45	Increase or decrease (-), 1930-1940.....percent....	18.1	25.2	13.2	170.8
46	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars....	21.70	18.55	30.25	12.04
47	.....1930..dollars....	21.24	19.04	25.51	12.04
48	.....1920..dollars....	18.75	18.21	27.86	38.33
49	Average investment per acre irrigated.....1939..dollars....	27.93	34.18	38.37	29.17
50	Estimated final investment in existing enterprises.....1940..dollars....	48,539,663	5,310,818	4,238,744	16,853
51	.....1930..dollars....	41,970,416	3,633,005	3,929,582	5,300
52	.....1920..dollars....	51,500,288	3,998,180	6,104,440	88,100
53	Increase or decrease (-), 1930-1940.....percent....	15.7	46.2	7.9	218.0
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars....	21.32	15.54	25.99	13.41
55	.....1930..dollars....	21.43	16.60	23.09	12.04
56	.....1920 ^b ..dollars....	20.08	12.03	28.53	26.88
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
		Primary	Sup.	Primary	Sup.
		Enterprises		Enterprises	
57	Enterprises reporting maintenance and operation.....1939..number....	2,977	82	250	118
58	Area irrigated in these enterprises.....1939..acres....	1,421,852	93,014	122,631	197
59	Cost of maintenance and operation.....1939..dollars....	807,945	31,923	44,548	282
60	Average cost, per acre irrigated.....1939..dollars....	0.57	0.34	0.36	1.43
61	.....1929..dollars....	0.84	.....	0.33	0.45
62	Total annual charges (reported) ⁴.....1939..dollars....	831,349	31,955	25,247	109,181
63	Average annual charge per acre irrigated.....1939..dollars....	0.57	0.38	0.56	1.09
64	Area against which charges were assessed.....1939..acres....	852,729	82,604	56,513	117,017
65	Average annual charge per acre assessed.....1939..dollars....	0.74	0.38	0.45	0.93
66	Total charges collected ⁴.....1939..dollars....	447,354	24,806	16,752	54,981
67	Indebtedness to December 31 (reported) ⁵.....1939..dollars....	15,770,071	929,414	99,490	1,007,041
WATER DELIVERED TO IRRIGATORS					
68	Enterprises reporting water delivered.....1939..number....	3,006	55	287	111
69	Area irrigated in these enterprises.....1939..acres....	1,360,506	87,746	126,150	197
70	Water delivered in these enterprises.....1939..acre-feet....	2,833,092	56,521	133,699	332
71	Average water delivered per acre irrigated.....1939..acre-feet....	2.1	0.8	1.06	1.7
72	Average cost of water per acre irrigated.....1939..dollars....	0.66	0.48	0.38	1.43
DRAINAGE OF IRRIGATED LAND					
73	Enterprises reporting land drained or needing drainage.....1939..number....	150	.....	34	23
74	Irrigable area in these enterprises.....1939..acres....	843,612	.....	117,342	111,718
75	Irrigated area in these enterprises.....1939..acres....	453,760	.....	23,171	73,618
76	Area for which drains have been installed.....1939..acres....	175,394	.....	17,471	48,480
77	Additional area needing drainage.....1939..acres....	44,987	.....	2,277	10,205

* Census of Agriculture. ¹ Includes 1,975,840 acres in Yellowstone National Park (part of) not shown in detail. ² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ³ Data are included only in State 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 62 to 67, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION - WYOMING

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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

ITEM (For definitions and explanations, see text)		Carbon	Converse	Crook	Fremont ¹	Goshen
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*						
1	All farms.....1940...number.....	524	522	808	1,542	1,328
2	.....1930...number.....	500	811	953	942	1,487
3	Irrigated farms.....1940...number.....	392	197	26	1,333	758
4	.....1930...number.....	358	171	13	833	654
5	Increase or decrease (-), 1930-1940.....percent.....	9.5	15.2	100.0	60.0	18.9
6	Operated by—(a) Owners and managers.....1940...number.....	343	145	18	1,010	397
7	.....1930...number.....	296	134	8	580	349
8	(b) Tenants.....1940...number.....	49	51	7	323	351
9	.....1930...number.....	62	37	5	253	305
10	Land in all farms.....1940...acres.....	2,616,371	2,168,465	1,493,834	1,011,990	1,097,556
11	Land in irrigated farms.....1940...acres.....	2,000,500	764,401	92,950	698,665	323,050
12	Average per farm.....1940...acres.....	5,103	3,880	3,575	524	427
13	(a) Operated by owners and managers.....1940...acres.....	1,876,051	732,817	79,559	638,090	234,801
14	Average per farm.....1940...acres.....	5,470	5,019	4,187	832	591
15	(b) Operated by tenants.....1940...acres.....	124,449	31,584	13,391	60,575	89,148
16	Average per farm.....1940...acres.....	2,540	619	1,913	188	247
17	Approximate land area.....1940...acres.....	5,087,600	2,666,880	1,854,080	5,916,160	1,427,200
IRRIGATED AND IRRIGABLE AREAS						
18	Area irrigated.....1939...acres.....	105,340	30,417	926	135,517	96,018
19	(a) Cropland harvested.....1939...acres.....	116,025	28,358	818	107,006	84,264
20	(b) Crop failure.....1939...acres.....	954	675	15	993	2,049
21	Pasture.....1939...acres.....	48,361	1,384	93	27,518	9,105
22	Area irrigated.....1929...acres.....	121,534	37,396	457	78,985	87,842
23	.....1919...acres.....	121,293	30,821	951	115,007	55,481
24	Increase or decrease (-), 1929-1939.....percent.....	36.0	-18.7	102.6	71.6	9.3
25	Irrigable area in enterprises.....1940...acres.....	187,889	44,437	2,593	267,359	113,512
26	.....1930...acres.....	155,885	46,400	657	265,225	108,251
27	.....1920...acres.....	193,532	53,592	1,925	370,472	138,452
28	Excess of irrigable area over the area irrigated.....1940...acres.....	22,549	14,020	1,637	131,842	17,491
29	.....1930...acres.....	31,351	9,002	200	186,240	20,408
30	Area works were capable of supplying with water.....1940...acres.....	179,469	41,925	1,716	192,110	112,684
31	.....1930...acres.....	152,789	43,603	832	151,500	105,033
32	.....1920...acres.....	150,455	43,818	1,689	197,406	85,142
33	Increase or decrease (-), 1930-1940.....percent.....	17.5	-9.6	171.5	20.8	7.5
34	Excess, capability of works over area irrigated.....1940...acres.....	11,129	11,508	790	56,593	16,866
35	.....1930...acres.....	31,255	8,105	175	72,515	17,191
36	Proportion which area irrigated is of all lands in irrigated farms.....1939...percent.....	8.3	4.0	1.0	19.4	29.6
37	.....1929...percent.....	8.3	9.1	1.7	11.7	32.0
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.....	92.1	72.6	54.0	70.5	85.1
39	.....1929...percent.....	79.5	86.0	72.3	62.1	83.6
CAPITAL INVESTED TO JANUARY 1						
40	Total investment in all enterprises.....1940...dollars.....	1,558,948	1,481,539	35,161	8,927,587	6,058,054
41	(a) Cost of irrigation works and equipment.....1940...dollars.....	1,511,498	1,472,250	34,484	8,900,801	6,054,820
42	(b) Investment in water rights (reported).....1940...dollars.....	47,450	12,289	677	26,786	3,234
43	Total investment in all enterprises.....1930...dollars.....	831,209	915,028	3,100	5,269,771	5,499,544
44	.....1920...dollars.....	1,193,535	862,217	20,912	3,794,769	3,080,421
45	Increase or decrease (-), 1930-1940.....percent.....	87.6	62.2	1,034.2	42.4	10.2
46	Average investment, based on area works were capable of supplying with water, per acre.....1940...dollars.....	8.09	35.41	20.49	46.47	53.07
47	.....1930...dollars.....	5.14	21.03	4.90	41.38	52.36
48	.....1920...dollars.....	7.93	19.68	12.38	19.17	13.23
49	Average investment per acre irrigated.....1939...dollars.....	9.43	48.81	37.07	65.88	63.09
50	Estimated final investment in existing enterprises.....1940...dollars.....	1,629,473	1,488,632	43,366	13,779,697	6,059,979
51	.....1930...dollars.....	860,309	939,428	3,200	12,365,371	5,505,344
52	.....1920...dollars.....	1,253,535	911,867	20,912	11,616,044	6,506,902
53	Increase or decrease (-), 1930-1940.....percent.....	89.4	58.5	1,255.8	11.4	10.1
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940...dollars.....	8.67	33.50	16.73	51.51	53.30
55	.....1930...dollars.....	5.52	20.25	4.87	46.92	50.86
56	.....1920...dollars.....	6.45	17.07	10.66	31.44	47.65
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
		Primary	Sup.		Primary	Sup.
		Enterprises			Enterprises	
57	Enterprises reporting maintenance and operation.....1939...number.....	298	5	120	249	5
58	Area irrigated in these enterprises.....1939...acres.....	148,284	3,294	28,556	127,380	6,131
59	Cost of maintenance and operation.....1939...dollars.....	35,241	702	33,802	151,862	515
60	Average cost, per acre irrigated.....1939...dollars.....	0.21	0.21	1.18	1.19	0.08
61	.....1929...dollars.....	0.53	.....	1.15	1.33	.....
62	Total annual charges (reported) ⁴.....1939...dollars.....	4,743	402	13,504	134,015	60,927
63	Average annual charge per acre irrigated.....1939...dollars.....	0.21	0.15	1.37	1.37	1.02
64	Area against which charges were assessed.....1939...acres.....	20,338	2,877	14,080	126,240	6,000
65	Average annual charge per acre assessed.....1939...dollars.....	0.23	0.14	0.92	1.06	0.95
66	Total charges collected.....1939...dollars.....	1,454	402	13,520	87,871	87,062
67	Indebtedness to December 31 (reported) ⁵.....1939...dollars.....	249	.....	.....	7,167,037	200
WATER DELIVERED TO IRRIGATORS						
68	Enterprises reporting water delivered.....1939...number.....	293	5	70	265	5
69	Area irrigated in these enterprises.....1939...acres.....	134,650	3,294	22,287	127,380	6,131
70	Water delivered in these enterprises.....1939...acre-feet.....	213,448	1,936	49,212	331,393	1,716
71	Average water delivered per acre irrigated.....1939...acre-feet.....	1.6	0.6	2.2	2.5	0.9
72	Average cost of water per acre irrigated.....1939...dollars.....	0.28	0.21	1.13	1.23	1.02
DRAINAGE OF IRRIGATED LAND						
73	Enterprises reporting land drained or needing drainage.....1939...number.....	4	.....	2	22	6
74	Irrigable area in these enterprises.....1939...acres.....	5,208	.....	.....	201,386	72,801
75	Irrigated area in these enterprises.....1939...acres.....	4,922	.....	.....	86,046	61,325
76	Area for which drains have been installed.....1939...acres.....	550	.....	.....	24,185	16,089
77	Additional area needing drainage.....1939...acres.....	420	.....	.....	6,508	2,070

* Census of Agriculture. ¹ Part taken to form part of Sublette in 1923. ² For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ³ Data are included only in State totals because less than 3 enterprises reported in the 1940 Census. ⁴ Annual charges may include cost 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 — WYOMING

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

ITEM (For definitions and explanations, see text)		Hot Springs	Johnson	Laramie	Lincoln ¹	Natrona	Niobrara
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms.....1940..number.....	246	505	900	808	359	539
2	.....1930..number.....	229	536	996	666	389	727
3	Irrigated farms.....1940..number.....	185	273	111	673	111	16
4	.....1930..number.....	171	237	94	534	119	3
5	Increase or decrease (-), 1930-1940.....percent.....	8.2	15.2	18.1	26.0	-6.7	433.3
6	Operated by—(a) Owners and managers.....1940..number.....	121	189	99	612	99	14
7	.....1930..number.....	141	173	74	484	103	3
8	(b) Tenants.....1940..number.....	64	84	12	61	12	2
9	.....1930..number.....	30	64	30	50	16	.....
10	Land in all farms.....1940..acres.....	308,335	1,829,388	1,565,639	501,872	1,804,659	1,378,761
11	Land in irrigated farms.....1940..acres.....	197,168	902,790	752,785	417,579	743,200	82,394
12	Average per farm.....1940..acres.....	1,066	3,307	6,782	820	6,696	5,150
13	(a) Operated by owners and managers.....1940..acres.....	179,697	848,767	748,258	395,022	720,381	(²)
14	Average per farm.....1940..acres.....	1,485	4,491	7,538	645	7,277	(²)
15	(b) Operated by tenants.....1940..acres.....	17,471	54,023	6,527	22,557	22,819	(²)
16	Average per farm.....1940..acres.....	273	643	544	370	1,802	(²)
17	Approximate land area.....1940..acres.....	1,294,080	2,672,000	1,729,920	2,624,640	3,418,890	1,672,320
IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated.....1939..acres.....	16,171	46,732	26,454	100,135	25,481	850
19	(a) Cropland harvested.....1939..acres.....	16,699	37,227	24,760	84,643	20,948	730
20	(b) Crop failure.....1939..acres.....	592	1,209	969	117	639	40
21	(c) Pasture.....1939..acres.....	880	8,296	725	15,375	3,894	100
22	Area irrigated.....1929..acres.....	21,675	30,437	28,393	73,650	14,657	367
23	.....1919..acres.....	16,443	63,383	24,165	108,428	10,385	799
24	Increase or decrease (-), 1929-1939.....percent.....	-16.2	53.6	-8.8	36.0	73.8	131.6
25	Irrigable area in enterprises.....1940..acres.....	28,437	64,708	35,716	112,885	30,486	2,161
26	.....1930..acres.....	27,570	34,633	34,176	97,873	24,482	778
27	.....1920 ³ ..acres.....	23,333	97,830	80,590	288,057	21,618	1,427
28	Excess of irrigable area over the area irrigated.....1940..acres.....	10,266	17,974	9,282	12,730	5,005	1,331
29	.....1930..acres.....	5,895	4,186	5,793	24,323	9,806	411
30	Area works were capable of supplying with water.....1940..acres.....	28,000	60,191	34,833	110,004	29,145	2,161
31	.....1930..acres.....	26,023	32,361	30,441	92,954	22,702	578
32	.....1920 ³ ..acres.....	21,125	82,933	29,990	245,723	14,920	1,102
33	Increase or decrease (-), 1930-1940.....percent.....	7.6	86.0	14.4	18.3	28.4	277.3
34	Excess, capability of works over area irrigated.....1940..acres.....	9,829	13,459	8,379	9,869	3,664	1,331
35	.....1930..acres.....	4,348	1,924	2,058	19,304	8,045	211
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent.....	9.2	5.2	3.5	24.0	3.4	1.0
37	.....1929..percent.....	11.1	4.1	4.6	19.9	2.9	1.6
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	64.9	77.6	75.9	81.0	87.4	39.0
39	.....1929..percent.....	83.3	94.1	93.2	79.2	64.6	63.5
CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises.....1940..dollars.....	380,544	534,651	432,811	717,171	311,007	12,230
41	(a) Cost of irrigation works and equipment.....1940..dollars.....	374,602	522,599	416,206	702,301	294,612	11,420
42	(b) Investment in water rights (reported).....1940..dollars.....	5,942	12,052	16,605	14,870	16,195	810
43	Total investment in all enterprises.....1930..dollars.....	181,315	458,210	403,226	327,399	234,967	4,829
44	.....1920 ³ ..dollars.....	141,450	861,860	267,893	1,604,382	2,207,139	23,195
45	Increase or decrease (-), 1930-1940.....percent.....	109.9	16.7	7.3	119.1	32.4	153.3
46	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars.....	13.59	8.88	12.43	6.52	10.67	5.61
47	.....1930..dollars.....	6.97	14.16	13.25	3.52	10.35	8.35
48	.....1920 ³ ..dollars.....	6.70	10.99	8.93	(⁴)	(⁴)	21.05
49	Average investment per acre irrigated.....1939..dollars.....	20.94	11.44	16.36	7.16	12.21	14.39
50	Estimated final investment in existing enterprises.....1940..dollars.....	382,044	537,761	441,061	726,556	321,767	12,295
51	.....1930..dollars.....	191,515	458,610	405,226	332,799	238,442	4,898
52	.....1920 ³ ..dollars.....	146,450	878,536	268,893	1,741,382	2,208,139	27,170
53	Increase or decrease (-), 1930-1940.....percent.....	99.5	17.3	8.8	119.3	34.9	154.6
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars.....	13.43	8.31	12.35	6.44	10.55	5.64
55	.....1930..dollars.....	6.95	13.24	11.86	3.40	9.75	6.21
56	.....1920 ³ ..dollars.....	6.28	8.98	5.31	(⁴)	(⁴)	19.04
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
		Primary	Sup.	Primary	Sup.	Primary	Sup.
57	Enterprises reporting maintenance and operation.....1939..number.....	95	⁵ 2	144	8	69	290
58	Area irrigated in these enterprises.....1939..acres.....	17,970	4,187	44,941	13,322	19,693	96,625
59	Cost of maintenance and operation.....1939..dollars.....	11,055	13,550	17,490	1,110	20,771	23,086
60	Average cost, per acre irrigated.....1939..dollars.....	0.62	3.24	0.39	0.08	1.05	0.24
61	.....1929..dollars.....	0.46	0.94	0.94	0.08	0.35	0.01
62	Total annual charges (reported).....1939..dollars.....	4,118	15,093	6,851	1,138	769	24,510
63	Average annual charge per acre irrigated.....1939..dollars.....	0.50	3.60	0.40	0.09	0.56	0.53
64	Area against which charges were assessed.....1939..acres.....	10,820	4,233	18,348	12,700	1,350	49,593
65	Average annual charge per acre assessed.....1939..dollars.....	0.38	3.56	0.37	0.09	0.56	0.49
66	Total charges collected.....1939..dollars.....	.....	5,076	6,524	1,136	.....	11,672
67	Indebtedness to December 31 (reported) ⁷.....1939..dollars.....	.....	45,214	.....	.....	.....	81,562
WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered.....1939..number.....	95	⁵ 2	155	7	96	240
69	Area irrigated in these enterprises.....1939..acres.....	18,146	4,187	46,732	13,361	26,349	87,587
70	Water delivered in these enterprises.....1939..acre-feet.....	25,787	4,800	62,709	10,427	35,043	211,104
71	Average water delivered per acre irrigated.....1939..acre-feet.....	1.4	1.1	1.3	0.8	1.3	2.4
72	Average cost of water per acre irrigated.....1939..dollars.....	0.61	3.80	0.40	0.10	1.05	0.42
DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage.....1939..number.....	4	.....	4	.....	2	3
74	Irrigable area in these enterprises.....1939..acres.....	4,674	.....	2,964	.....	(⁸)	13,974
75	Irrigated area in these enterprises.....1939..acres.....	1,696	.....	2,000	.....	(⁸)	13,770
76	Area for which drains have been installed.....1939..acres.....	90	.....	.....	.....	(⁸)	.....
77	Additional area needing drainage.....1939..acres.....	251	.....	353	.....	(⁸)	5,202

* Census of Agriculture. ¹ Parts taken from Teton and part of Sublette in 1923. ² Data are included only in State totals because less than 3 farms or less than 3 enterprises reported in the 1940 Census. ³ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. ⁴ Average not shown because part of land served by storage works lies in another State. ⁵ Data for less than 3 enterprises shown with permission of the enterprises involved. ⁶ Annual charges may include cost of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons. ⁷ 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. ⁸ Less than 1 cent.

CENSUS OF IRRIGATION - WYOMING

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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

ITEM (For definitions and explanations, see text)		Park	Platte	Sheridan	Sublette ²
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS *					
1	All farms.....1940..number.....	916	778	1,019	312
2	.....1930..number.....	688	1,148	826	292
3	Irrigated farms.....1940..number.....	854	445	609	282
4	.....1930..number.....	652	485	465	262
5	Increase or decrease (-), 1930-1940.....percent.....	31.0	-8.2	31.0	7.6
6	Operated by—(a) Owners and managers.....1940..number.....	634	240	396	256
7	.....1930..number.....	489	304	286	235
8	(b) Tenants.....1940..number.....	220	205	213	23
9	.....1930..number.....	163	151	179	27
10	Land in all farms.....1940..acres.....	702,281	³ 1,528,491	1,318,290	576,372
11	Land in irrigated farms.....1940..acres.....	687,796	1,082,033	763,747	542,393
12	Average per farm.....1940..acres.....	782	2,432	1,254	1,923
13	(a) Operated by owners and managers.....1940..acres.....	615,513	1,012,812	658,443	525,808
14	Average per farm.....1940..acres.....	971	4,220	1,663	2,030
15	(b) Operated by tenants.....1940..acres.....	52,283	69,221	105,304	16,585
16	Average per farm.....1940..acres.....	238	338	494	721
17	Approximate land area.....1940..acres.....	3,338,880	1,352,960	1,619,840	3,120,640
IRRIGATED AND IRRIGABLE AREAS					
18	Area irrigated.....1939..acres.....	102,423	71,582	70,883	160,570
19	(a) Cropland harvested.....1939..acres.....	87,511	69,103	71,355	112,723
20	(b) Crop failure.....1939..acres.....	113	667	56	63
21	(c) Pasture.....1939..acres.....	14,999	1,812	8,472	47,784
22	Area irrigated.....1929..acres.....	81,202	67,946	70,435	125,744
23	.....1919..acres.....	77,627	66,753	68,311	.....
24	Increase or decrease (-), 1929-1939.....percent.....	26.1	6.3	13.4	27.7
25	Irrigable area in enterprises.....1940..acres.....	132,872	91,428	100,681	229,065
26	.....1930..acres.....	119,895	116,123	77,538	198,287
27	.....1920 ⁴ ..acres.....	180,716	131,082	108,667	.....
28	Excess of irrigable area over the area irrigated.....1940..acres.....	30,449	19,846	20,798	68,495
29	.....1930..acres.....	38,693	48,777	7,603	72,543
30	Area works were capable of supplying with water.....1940..acres.....	129,626	88,218	100,332	195,224
31	.....1930..acres.....	116,684	91,032	75,086	161,139
32	.....1920 ⁴ ..acres.....	121,465	108,639	90,188	.....
33	Increase or decrease (-), 1930-1940.....percent.....	11.0	-3.1	33.6	21.2
34	Excess, capability of works over area irrigated.....1940..acres.....	27,103	16,636	20,449	34,654
35	.....1930..acres.....	35,482	23,686	4,661	35,394
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent.....	15.3	6.6	10.5	29.6
37	.....1929..percent.....	18.6	7.2	14.2	32.0
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	79.1	81.1	79.6	82.2
39	.....1929..percent.....	69.6	74.0	92.8	78.0
CAPITAL INVESTED TO JANUARY 1					
40	Total investment in all enterprises.....1940..dollars.....	4,835,612	1,410,560	1,510,851	1,515,126
41	(a) Cost of irrigation works and equipment.....1940..dollars.....	4,811,691	1,401,825	1,462,122	1,453,306
42	(b) Investment in water rights (reported).....1940..dollars.....	23,921	8,735	18,729	61,820
43	Total investment in all enterprises.....1930..dollars.....	6,642,442	989,310	1,099,049	949,868
44	.....1920 ⁴ ..dollars.....	5,640,280	1,642,906	1,096,497	.....
45	Increase or decrease (-), 1930-1940.....percent.....	-27.2	42.6	37.5	59.5
46	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars.....	37.33	15.99	15.06	7.76
47	.....1930..dollars.....	56.93	10.87	14.84	5.89
48	.....1920 ⁴ ..dollars.....	46.44	15.12	12.16	.....
49	Average investment per acre irrigated.....1939..dollars.....	48.15	19.71	18.81	9.44
50	Estimated final investment in existing enterprises.....1940..dollars.....	5,327,922	1,441,435	1,516,066	1,566,645
51	.....1930..dollars.....	6,758,356	1,036,480	1,149,149	981,868
52	.....1920 ⁴ ..dollars.....	9,862,433	1,907,605	1,040,157	.....
53	Increase or decrease (-), 1930-1940.....percent.....	-21.2	39.1	31.9	59.6
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars.....	40.10	15.77	15.06	6.84
55	.....1930..dollars.....	56.37	8.92	14.74	4.95
56	.....1920 ⁴ ..dollars.....	54.57	14.52	9.57	.....
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					
		Primary	Sup.	Primary	Sup.
	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises
57	Enterprises reporting maintenance and operation.....1939..number.....	150	2	85	1
58	Area irrigated in these enterprises.....1939..acres.....	100,374	(⁵)	70,691	(⁵)
59	Cost of maintenance and operation.....1939..dollars.....	87,110	(⁵)	37,881	(⁵)
60	Average cost, per acre irrigated.....1939..dollars.....	0.87	(⁵)	0.54	(⁵)
61	.....1929..dollars.....	0.88	.....	1.41	.....
62	Total annual charges (reported) ⁶.....1939..dollars.....	86,686	.....	28,116	.....
63	Average annual charge per acre irrigated.....1939..dollars.....	1.19	.....	0.54	.....
64	Area against which charges were assessed.....1939..acres.....	80,256	.....	56,694	.....
65	Average annual charge per acre assessed.....1939..dollars.....	1.11	.....	0.50	.....
66	Total charges collected ⁶.....1939..dollars.....	36,874	1,620	28,116	.....
67	Indebtedness to December 31 (reported) ⁷.....1939..dollars.....	2,416,951	126,750	.....	.....
WATER DELIVERED TO IRRIGATORS					
68	Enterprises reporting water delivered.....1939..number.....	144	1	72	1
69	Area irrigated in these enterprises.....1939..acres.....	98,817	(⁵)	69,566	(⁵)
70	Water delivered in these enterprises.....1939..acre-feet.....	315,717	(⁵)	95,622	(⁵)
71	Average water delivered per acre irrigated.....1939..acre-feet.....	3.2	(⁵)	1.4	(⁵)
72	Average cost of water per acre irrigated.....1939..dollars.....	1.07	(⁵)	0.53	(⁵)
DRAINAGE OF IRRIGATED LAND					
73	Enterprises reporting land drained or needing drainage.....1939..number.....	11	2	11	8
74	Irrigable area in these enterprises.....1939..acres.....	77,311	(⁵)	20,167	.....
75	Irrigated area in these enterprises.....1939..acres.....	59,622	(⁵)	13,389	.....
76	Area for which drains have been installed.....1939..acres.....	45,865	(⁵)	442	.....
77	Additional area needing drainage.....1939..acres.....	7,853	(⁵)	207	.....

* Census of Agriculture. ¹Part annexed to Yellowstone National Park, and part of Yellowstone National Park annexed in 1929. ²Organized from parts of Fremont and Lincoln in 1923. 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. ⁴For 1920 acreage 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 those enterprises only.

CENSUS OF IRRIGATION—WYOMING

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

ITEM (For definitions and explanations, see text)		Sweetwater	Teton ¹	Uinta	Washakie	Weston			
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS *									
1	All farms.....1940..number.....	256	201	368	306	396			
2	.....1930..number.....	258	280	435	326	616		
3	Irrigated farms.....1940..number.....	189	168	376	281	19			
4	.....1930..number.....	173	207	376	285	24		
5	Increase or decrease (-), 1930-1940.....percent.....	9.2	-18.8	.....	-1.4	20.8		
6	Operated by—(a) Owners and managers.....1940..number.....	161	134	336	186	17			
7	.....1930..number.....	151	184	337	200	19		
8	(b) Tenants.....1940..number.....	28	34	40	95	2			
9	.....1930..number.....	22	23	39	85	5		
10	Land in all farms.....1940..acres.....	1,304,990	100,447	443,593	179,755	1,169,064			
11	Land in irrigated farms.....1940..acres.....	267,532	92,883	436,488	165,228	121,710			
12	Average per farm.....1940..acres.....	1,416	553	1,161	598	6,406			
13	(a) Operated by owners and managers.....1940..acres.....	256,401	81,989	418,629	142,214	(²)			
14	Average per farm.....1940..acres.....	1,593	612	1,246	765	(²)			
15	(b) Operated by tenants.....1940..acres.....	11,131	10,894	17,859	23,014	(²)			
16	Average per farm.....1940..acres.....	398	320	446	242	(²)			
17	Approximate land area.....1940..acres.....	6,714,880	1,801,600	1,324,800	1,447,680	1,541,120			
IRRIGATED AND IRRIGABLE AREAS									
18	Area irrigated.....1939..acres.....	22,075	30,995	91,192	40,418	3,123			
19	(a) Cropland harvested.....1939..acres.....	17,779	27,973	58,664	37,888	2,486			
20	(b) Crop failure.....1939..acres.....	370	30	2,268	265	157			
21	(c) Pasture.....1939..acres.....	3,926	2,992	30,260	2,265	470			
22	Area irrigated.....1929..acres.....	19,756	18,652	86,122	39,661	2,953			
23	.....1919..acres.....	14,010	.....	102,695	41,179	6,263	
24	Increase or decrease (-), 1929-1939.....percent.....	11.7	66.2	5.9	1.9	5.8			
25	Irrigable area in enterprises.....1940..acres.....	75,069	43,838	152,614	49,793	5,513			
26	.....1930..acres.....	51,705	32,673	115,614	53,747	6,762		
27	.....1920 ³ ..acres.....	57,591	.....	222,643	60,349	12,542	
28	Excess of irrigable area over the area irrigated.....1940..acres.....	52,994	12,843	61,422	9,375	2,390			
29	.....1930..acres.....	31,949	14,021	29,492	14,085	3,799		
30	Area works were capable of supplying with water.....1940..acres.....	34,074	40,076	107,573	45,296	4,913			
31	.....1930..acres.....	43,685	26,282	101,567	48,382	3,574		
32	.....1920.....acres.....	46,805	.....	148,553	50,597	8,618	
33	Increase or decrease (-), 1930-1940.....percent.....	22.0	52.5	5.9	-6.4	37.5			
34	Excess, capability of works over area irrigated.....1940..acres.....	11,999	9,081	16,381	4,878	1,790			
35	.....1930..acres.....	23,829	7,630	15,445	8,721	621		
36	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent.....	8.3	33.4	20.9	24.5	2.6			
37	.....1929..percent.....	4.7	23.7	25.8	22.1	2.6		
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent.....	64.8	77.3	84.8	89.2	63.6			
39	.....1929..percent.....	45.2	71.0	84.8	82.0	82.6		
CAPITAL INVESTED TO JANUARY 1									
40	Total investment in all enterprises.....1940..dollars.....	1,184,571	124,082	535,777	1,309,750	43,255			
41	(a) Cost of irrigation works and equipment.....1940..dollars.....	1,179,272	117,320	519,771	1,306,782	41,675			
42	(b) Investment in water rights (reported).....1940..dollars.....	5,299	6,762	16,006	2,968	1,580			
43	Total investment in all enterprises.....1930..dollars.....	790,190	1,381,282	280,955	640,099	31,740			
44	.....1920.....dollars.....	892,577	.....	729,264	859,652	170,920	
45	Increase or decrease (-), 1930-1940.....percent.....	49.9	-91.0	90.7	104.6	36.3			
46	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars.....	34.76	3.10	4.98	28.92	8.80			
47	.....1930..dollars.....	18.09	(⁴)	2.77	13.23	8.88		
48	.....1920.....dollars.....	19.07	.....	4.91	16.89	19.83	
49	Average investment per acre irrigated.....1939..dollars.....	53.66	4.00	5.88	32.41	13.86			
50	Estimated final investment in existing enterprises.....1940..dollars.....	1,426,469	130,873	741,667	1,352,275	47,255			
51	.....1930..dollars.....	802,946	1,384,483	288,355	655,099	40,740		
52	.....1920.....dollars.....	910,727	.....	744,344	921,952	219,560	
53	Increase or decrease (-), 1930-1940.....percent.....	77.7	-90.5	157.2	106.4	16.0			
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars.....	19.00	2.99	4.86	27.16	8.57			
55	.....1930..dollars.....	15.53	(⁴)	2.49	12.19	6.03		
56	.....1920 ³ ..dollars.....	15.81	.....	3.34	15.28	17.51	
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS									
		Primary	Sup.	Primary	Sup.	Primary	Sup.		
		Enterprises	Enterprises	Enterprises	Enterprises	Enterprises	Enterprises		
57	Enterprises reporting maintenance and operation.....1939..number.....	102	1	103	3	189	8	83	17
58	Area irrigated in these enterprises.....1939..acres.....	22,075	(²)	28,310	3,440	88,009	1,139	40,358	2,623
59	Cost of maintenance and operation.....1939..dollars.....	22,348	(²)	6,343	336	15,072	205	57,425	1,301
60	Average cost, per acre irrigated.....1939..dollars.....	1.01	(²)	0.22	0.10	0.17	0.18	1.42	0.50
611929..dollars.....	1.66	0.36	0.18	1.92	0.91
62	Total annual charges (reported) ⁵.....1939..dollars.....	9,056	1,179	337	10,160	51,711
63	Average annual charge per acre irrigated.....1939..dollars.....	0.74	0.13	0.10	0.24	1.70
64	Area against which charges were assessed.....1939..acres.....	19,807	9,256	3,366	59,981	31,340
65	Average annual charge per acre assessed.....1939..dollars.....	0.46	0.13	0.10	0.17	1.65
66	Total charges collected ⁶.....1939..dollars.....	30,668	96	4,643	47,450
67	Indebtedness to December 31 (reported) ⁶.....1939..dollars.....	393,596	193,964
WATER DELIVERED TO IRRIGATORS									
68	Enterprises reporting water delivered.....1939..number.....	100	1	127	3	199	8	78	18
69	Area irrigated in these enterprises.....1939..acres.....	20,475	(²)	27,961	3,490	84,541	1,319	29,439	3,123
70	Water delivered in these enterprises.....1939..acre-feet.....	39,910	(²)	102,381	6,350	149,701	2,510	77,167	2,885
71	Average water delivered per acre irrigated.....1939..acre-feet.....	1.9	(²)	3.7	1.8	1.8	1.9	2.6	0.9
72	Average cost of water per acre irrigated.....1939..dollars.....	0.82	(²)	0.24	0.10	0.21	0.18	1.83	0.50
DRAINAGE OF IRRIGATED LAND									
73	Enterprises reporting land drained or needing drainage.....1939..number.....	(²)	2	(²)	1	4	5
74	Irrigable area in these enterprises.....1939..acres.....	(²)	(²)	47,788	34,125
75	Irrigated area in these enterprises.....1939..acres.....	(²)	(²)	5,288	30,125
76	Area for which drains have been installed.....1939..acres.....	(²)	(²)	19,006
77	Additional area needing drainage.....1939..acres.....	(²)	(²)	475	1,825

*Census of Agriculture. ¹Organized from part of Lincoln in 1923. 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. ⁴Average not shown because part of land served by storage works lies in another State. 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 - WYOMING

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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

ITEM (For definitions and explanations, see text)	STATE TOTAL	Albany	Big Horn	Campbell	Carbon	Converse
FARM VALUES, 1940*						
1 Land and buildings, all farms.....dollars..	158,971,294	6,518,436	7,455,943	9,600,555	10,549,825	7,300,382
2 Land and buildings, irrigated farms.....dollars..	108,524,176	5,775,017	7,309,798	232,072	9,278,061	3,625,175
3 Operated by—						
4 (a) Owners and managers.....dollars..	88,318,333	5,139,340	5,418,673	292,072	8,491,881	3,209,565
5 (b) Tenants.....dollars..	18,207,842	835,677	1,790,125	.....	786,200	325,610
6 Average, land and buildings, per farm.....dollars..	12,333.47	17,879.31	7,187.24	22,487.08	23,888.37	18,401.90
per acre in farms.....dollars..	8.25	4.56	16.50	3.04	4.94	4.74
7 Buildings, irrigated farms reporting value.....number..	8,429	322	960	13	383	196
8 Total reported.....dollars..	20,788,956	1,101,829	1,600,161	49,925	1,044,430	505,240
9 Average, per irrigated farm reporting.....dollars..	2,466.36	3,421.83	1,666.83	3,840.38	2,726.97	2,577.78
10 per acre on all irrigated farms.....dollars..	1.61	0.87	3.66	0.52	0.52	0.66
11 Buildings, nonirrigated farms reporting value.....number..	6,117	132	38	823	127	319
12 Total reported.....dollars..	8,546,528	218,675	43,500	1,200,834	186,089	403,849
13 Average, per nonirrigated farm reporting.....dollars..	1,397.18	1,656.63	1,144.74	1,458.09	1,307.54	1,265.98
14 per acre on all nonirrigated farms.....dollars..	0.57	1.08	0.85	0.42	0.27	0.29
15 Implements and machinery, irrigated farms reporting value.....number..	7,742	308	938	13	379	193
16 Total reported.....dollars..	10,873,844	367,314	1,360,300	17,895	636,629	248,765
17 Average, per irrigated farm reporting.....dollars..	1,404.53	1,192.58	1,450.21	1,376.54	1,679.50	1,288.94
18 per acre, on all irrigated farms.....dollars..	0.84	0.29	3.11	0.19	0.32	0.33
19 Implements and machinery, nonirrigated farms reporting value.....number..	5,578	105	25	787	118	306
20 Total reported.....dollars..	4,436,003	43,706	16,000	636,490	135,383	216,518
21 Average, per acre, on all nonirrigated farms.....dollars..	0.23	0.22	0.31	0.22	0.22	0.15
ENTERPRISES AND IRRIGATION WORKS JANUARY 1						
22 Enterprises.....1940.....number.....	1,340	272	125	21	337	133
23 .....1930.....number.....	1,637	232	115	3	270	83
24 .....1920.....number.....	3,504	303	198	19	380	118
25 Average size of enterprise based on irrigable area.....1940.....acres.....	669	1,256	1,304	60	558	334
26 .....1930.....acres.....	743	943	1,480	147	577	559
27 .....1920.....acres.....	720	1,607	1,080	173	509	454
28 Diversion dams.....1940.....number.....	4,206	589	115	29	679	153
29 Main canals and laterals.....1940.....length, miles.....	11,762.1	1,052.7	864.6	18.0	1,368.0	490.5
30 .....1930.....length, miles.....	10,778	1,017	725	.....	777	449
31 .....1920.....length, miles.....	12,051	923	800	34	1,186	481
32 .....1940.....capacity, c.f.s. 2.....	46,366	5,150	2,173	61	4,155	950
33 .....1930.....capacity, c.f.s. 3.....	35,811	4,893	2,715	.....	2,441	746
34 .....1920.....capacity, c.f.s. 3.....	39,008	4,669	2,904	109	3,057	2,259
35 Pipe lines 4.....1940.....length, miles.....	70.3	4.0	19.3	0.1	0.1	2.6
36 Storage dams.....1940.....number.....	319	39	6	5	90	6
37 Reservoirs.....1940.....number.....	334	34	5	6	46	6
38 .....1930.....number.....	214	9	5	1	20	4
39 .....1920.....number.....	374	12	14	14	25	10
40 .....1940.....capacity, acre-feet.....	3,379,867	314,514	4,776	650	5,065	20,880
41 .....1930.....capacity, acre-feet.....	3,051,745	119,580	1,808	1	4,593	20,600
42 .....1920.....capacity, acre-feet.....	2,911,748	132,114	2,293	2,439	10,336	20,788
43 Wells, flowing.....1940.....number.....	36	7	.....	.....	.....	1
44 .....1930.....number.....	6	.....	.....	.....	.....	1
45 .....1920.....number.....	7	.....	.....	.....	.....	(5)
46 .....1940.....yield, g.p.m.....	3,830	750	.....	.....	.....	.....
47 .....1930.....yield, g.p.m.....	2,205	.....	.....	.....	.....	40
48 .....1920.....yield, g.p.m.....	46	.....	1	3	3	2
49 Wells, pumped.....1940.....number.....	94	.....	.....	.....	.....	.....
50 .....1930.....number.....	11	.....	.....	.....	.....	1
51 .....1920.....number.....	16	.....	1	2	5	(5)
52 .....1940.....yield, g.p.m.....	60,622	1,298	(5)	74	87	.....
53 .....1930.....yield, g.p.m.....	8,290	.....	.....	.....	.....	.....
54 .....1920.....yield, g.p.m.....	8,020	.....	900	2,005	.....	180
55 Pumping plants.....1940.....number.....	224	7	6	3	4	21
56 .....1930.....number.....	61	.....	1	.....	3	9
57 .....1920.....number.....	57	.....	6	2	8	3
58 Prime movers.....1940.....capacity, hp.....	4,152	38	116	5	8	495
59 .....1930.....capacity, hp.....	912	.....	45	.....	51	400
60 .....1920.....capacity, hp.....	1,304	.....	232	82	40	51
61 Pumps.....1940.....capacity, g.p.m.....	209,559	1,379	5,600	74	3,087	33,249
62 .....1930.....capacity, g.p.m.....	86,905	.....	1,000	.....	3,850	44,620
63 .....1920.....capacity, g.p.m.....	39,725	.....	2,250	2,005	1,287	1,782
64 Pumping lift, from all sources.....1940.....average, feet.....	30	25	.....	.....	6	18
65 .....1930.....average, feet.....	21	.....	12	.....	18	20
66 .....1920.....average, feet.....	31	.....	14	.....	17	35
67 from pumped wells.....1940.....average, feet.....	46	18	(5)	113	8	(5)
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁶						
68 Enterprises reporting pay roll.....number.....	184	9	25	.....	5	3
69 Irrigated area in these enterprises.....acres.....	637,201	37,037	90,354	.....	10,894	9,880
70 Wages and salaries paid and payable.....dollars..	392,047	7,227	32,485	.....	840	11,620
71 Persons employed during week ending April 29.....number..	578	14	69	.....	6	12

* 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.

⁴ Includes siphons and farm pipe lines reported.

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

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

CENSUS OF IRRIGATION—WYOMING

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

ITEM (For definitions and explanations, see text)		Crook	Fremont ¹	Goshen	Hot Springs	Johnson	Laramie
FARM VALUES, 1940*							
1	Land and buildings, all farms.....dollars..	6,601,608	9,831,635	11,135,121	2,144,277	7,602,608	8,029,415
2	Land and buildings, irrigated farms.....dollars..	481,811	8,964,627	7,091,666	1,783,188	5,357,537	5,707,551
3	Operated by—						
4	(a) Owners and managers.....dollars..	422,459	7,588,232	3,801,311	1,401,885	4,516,052	3,873,951
5	(b) Tenants.....dollars..	59,352	1,376,395	3,160,355	381,293	841,515	133,600
6	Average, land and buildings, per farm.....dollars..	18,531.13	6,725.15	9,355.76	9,038.85	19,034.79	33,401.30
	per acre in farms.....dollars..	5.18	12.83	21.89	9.04	5.93	4.03
7	Buildings, irrigated farms reporting value.....number..	26	1,312	732	184	262	109
8	Total reported.....dollars..	69,455	1,834,633	1,355,917	342,558	986,780	640,985
9	Average, per irrigated farm reporting.....dollars..	2,659.81	1,474.57	1,852.35	1,861.73	3,765.34	5,875.09
10	per acre on all irrigated farms.....dollars..	0.74	2.77	4.19	1.74	1.09	0.85
11	Buildings, nonirrigated farms reporting value.....number..	768	182	635	54	311	780
12	Total reported.....dollars..	876,592	189,740	612,471	48,180	278,835	1,443,647
13	Average, per nonirrigated farm reporting.....dollars..	1,141.40	1,042.53	1,144.81	892.22	1,321.49	1,850.83
14	per acre on all nonirrigated farms.....dollars..	0.63	0.31	0.79	0.43	0.30	1.78
15	Implements and machinery, irrigated farms reporting value.....number..	24	922	673	172	200	104
16	Total reported.....dollars..	41,260	1,011,496	1,117,844	177,119	392,543	179,426
17	Average, per irrigated farm reporting.....dollars..	1,719.17	1,097.07	1,660.99	1,029.70	1,509.78	1,725.25
18	per acre, on all irrigated farms.....dollars..	0.44	1.45	3.45	0.90	0.43	0.24
19	Implements and machinery, nonirrigated farms reporting value.....number..	735	99	498	43	203	711
20	Total reported.....dollars..	548,232	78,160	448,059	21,540	134,755	670,527
21	Average, per acre, on all nonirrigated farms.....dollars..	0.39	0.25	0.58	0.19	0.15	0.82
ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
22	Enterprises.....1940.....number.....	30	304	58	100	176	98
23	.....1930.....number.....	8	208	29	92	59	95
24	.....1920.....number.....	29	385	69	72	160	90
25	Average size of enterprise based on						
26	irrigable area.....1940.....acres.....	86	879	1,957	284	368	364
27	.....1930.....acres.....	82	1,275	3,733	300	587	300
28	.....1920.....acres.....	66	962	2,007	324	652	562
29	Diversion dams.....1940.....number.....	33	192	46	69	202	254
30	Main canals and laterals.....1940.....length, miles.....	25.2	1,315.0	687.2	189.1	452.7	255.4
31	.....1930.....length, miles.....	6	1,302	610	218	261	298
32	.....1920.....length, miles.....	43	1,376	431	179	626	278
33	.....1940.....capacity, c.f.s. ^a	68	4,396	4,775	979	1,710	544
34	.....1930.....capacity, c.f.s. ^a	5	4,359	2,278	529	783	566
35	.....1920.....capacity, c.f.s. ^a	350	4,323	1,603	431	1,724	618
36	Pipe lines ^b.....1940.....length, miles.....	0.8	9.0	3.9	0.4	2.0	3.8
37	Storage dams.....1940.....number.....	5	21	12	5	18	15
38	Reservoirs.....1940.....number.....	7	29	9	7	17	15
39	.....1930.....number.....	1	11	10	7	8	24
40	.....1920.....number.....	13	31	30	9	8	28
41	.....1940.....capacity, acre-feet.....	641	207,715	26,693	2,625	34,300	5,597
42	.....1930.....capacity, acre-feet.....	40	38,898	29,600	621	7,382	6,585
43	.....1920.....capacity, acre-feet.....	56	6,314	27,728	488	3,871	3,932
44	Wells, flowing.....1940.....number.....	2	6	.....	5	0	2
45	.....1930.....number.....	1	.....	.....	4	.....	.....
46	.....1920.....number.....	.....	1	.....	.....	.....	.....
47	.....1940.....yield, g.p.m.....	(^c)	398	.....	1,808	118	(^c)
48	.....1930.....yield, g.p.m.....	120	.....	.....	1,935	.....	.....
49	.....1920.....yield, g.p.m.....	.....	.....	.....	.....	.....	.....
50	Wells, pumped.....1940.....number.....	1	1	4	6	6	43
51	.....1930.....number.....	.....	.....	.....	.....	.....	6
52	.....1920.....number.....	.....	.....	.....	.....	.....	2
53	.....1940.....yield, g.p.m.....	(^c)	(^c)	3,450	965	1,136	40,320
54	.....1930.....yield, g.p.m.....	.....	.....	.....	.....	.....	7,500
55	.....1920.....yield, g.p.m.....	.....	.....	.....	50	.....	735
56	Pumping plants.....1940.....number.....	4	1	6	21	13	46
57	.....1930.....number.....	.....	.....	.....	4	2	6
58	.....1920.....number.....	3	5	.....	6	3	2
59	Prime movers.....1940.....capacity, hp.....	42	(^d)	98	693	232	1,187
60	.....1930.....capacity, hp.....	.....	.....	.....	48	30	100
61	.....1920.....capacity, hp.....	23	82	.....	58	49	20
62	Pumps.....1940.....capacity, g.p.m.....	954	(^e)	5,525	33,293	5,396	43,870
63	.....1930.....capacity, g.p.m.....	.....	.....	.....	3,240	6,500	7,800
64	.....1920.....capacity, g.p.m.....	1,391	2,480	.....	4,020	1,100	735
65	Pumping lift, from all sources.....1940.....average, feet.....	18	(^c)	17	36	28	58
66	.....1930.....average, feet.....	.....	.....	.....	8	7	26
67	.....1920.....average, feet.....	13	90	.....	26	33	12
	from pumped wells.....1940.....average, feet.....	(^c)	(^c)	19	51	52	52
PAY ROLL AND NUMBER OF EMPLOYEES 1939¹⁰							
68	Enterprises reporting pay roll.....number.....	.....	12	13	4	11	.....
69	Irrigated area in these enterprises.....acres.....	.....	84,190	89,261	5,712	17,148	.....
70	Wages and salaries paid and payable.....dollars..	.....	189,228	58,890	1,815	3,784	.....
71	Persons employed during week ending April 29.....number..	.....	170	77	.....	14	.....

* Census of Agriculture.

¹ Part taken to form part of Sublette in 1923.² Parts taken to form Teton and part of Sublette in 1923.³ Part annexed to Yellowstone National Park, and part of Yellowstone National Park annexed in 1929.⁴ Organized from parts of Fremont and Lincoln in 1923.⁵ Organized from part of Lincoln in 1923.

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Lincoln ²	Natrona	Niobrara	Park ³	Platte	Sheridan	Sublette ⁴	Sweetwater	Teton ⁵	Uinta	Washakie	Weston	
6,265,657 5,688,407	4,833,501 2,515,997	4,950,260 278,959	9,330,260 9,010,370	7,529,015 5,504,867	14,439,390 11,455,607	5,586,030 5,431,076	3,231,030 1,954,209	2,828,877 2,687,445	3,890,354 3,891,943	4,282,432 4,171,702	4,238,166 448,040	1 2
5,261,857 426,550 8,452.31 12.62	(⁶) (⁶) 22,666.64 3.39	267,599 11,360 17,494.04 3.39	7,049,615 1,930,755 10,550.78 13.49	4,073,797 1,431,070 12,370.49 5.09	8,699,909 2,585,098 18,810.52 15.00	5,243,676 187,400 19,259.13 10.01	1,708,729 245,480 10,359.73 7.30	2,405,100 202,315 15,877.65 28.72	3,593,433 238,510 10,141.34 8.78	2,955,650 1,215,052 14,845.91 25.25	(⁶) (⁵) 23,581.05 3.68	3 4 5 6
635 1,121,938 1,766,831 2.69 126 91,525 726.39 1.09	111 499,350 4,498.05 0.07 246 445,963 1,812.85 0.42	16 41,400 2,587.60 0.50 503 657,331 1,306.82 0.51	842 2,298,980 2,731.54 3.44 58 145,645 2,511.12 4.22	432 898,756 2,080.45 0.83 311 432,645 1,391.14 0.87	602 2,872,471 4,771.55 3.76 394 694,950 1,793.83 1.25	279 855,455 3,069.73 1.58 29 27,475 947.41 0.81	183 273,695 1,495.05 1.02 41 53,895 1,314.51 0.05	163 198,525 3,003.16 5.37 30 37,590 1,253.00 4.97	368 763,498 2,074.72 1.75 19 14,675 772.37 2.07	277 955,135 3,451.97 5.79 24 23,930 997.08 1.66	19 75,800 3,989.47 0.62 11 436,523 1,194.89 0.42	7 8 9 10 11 12 13 14
601 635,636 1,057.63 1.52	103 217,243 2,109.16 0.29	16 22,424 1,401.50 0.27	612 1,257,628 1,548.80 1.68	417 452,021 1,083.98 0.42	581 983,949 1,692.51 1.29	255 335,830 1,316.98 0.62	173 179,554 1,037.88 0.67	161 231,606 1,438.55 2.49	345 302,743 877.52 0.69	273 677,174 2,480.49 4.10	19 28,145 1,481.32 0.23	15 16 17 18
88 57,806 0.69	204 107,473 0.16	491 346,057 0.27	51 36,290 1.11	294 247,789 0.55	343 264,911 0.48	12 10,425 0.31	34 34,130 0.03	28 11,835 1.50	16 5,670 0.80	22 13,965 0.96	332 288,231 0.28	19 20 21
256 201 586	110 98 61	15 6 7	160 79 202	96 143 178	230 102 203	315 287	108 93 82	139 140	218 183 308	85 91 70	18 17 54	22 23 24
441 487 492 289 603.6 523 1,718 2,764 1,374 5,299 1.2	277 290 359 110 177.6 59 156 592 145 298 2.5	145 130 204 5 19.0 9 7 32 9 161	830 1,618 695 172 746.9 795 849 3,699 2,974 2,559 4.2	952 812 738 123 468.2 313 712 712 1,091 1,899 0.2	438 764 535 176 698.5 541 712 2,209 1,306 2,189 4.7	727 691 281 972.6 1,370 273 4,753 5,277 0.1	695 556 702 60 272.3 255 273 632 550 606 1.3	315 239 138 297.3 248 2,109 767	700 632 723 390 695.2 719 817 2,792 1,424 2,474 0.1	586 572 862 59 252.7 212 224 1,164 424 559 3.4	306 297 232 12 39.0 36 188 87 83 899 0.6	25 26 27 28 29 30 31 32 33 34 35
13 10 6 14 1,530 940 847,718 2	15 98 61 17 1,076,107 1,197,533 1,081,294 1	4 3 3 4 514 875 457	10 79 202 24 518,083 463,570 463,641	18 23 14 24 91,897 203,788 270,895	33 102 203 28 40,856 45,290 11,252 2	12 287 28 972.6 1,370 273 4,753 5,277 0.1	28 93 82 37,187 23,630 19,505 2	4 140 28 297.3 248 2,109 767	11 183 308 45,538 2,098 2,884 2	3 91 70 (⁶) 1,204 60 2	3 17 54 3,099 1,933 3,724 1	36 37 38 39 40 41 42 43
(⁶) 6 2 6,382												

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

⁷ For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

⁶Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

⁹ Includes siphons and farm pipe lines reported.

¹⁰ Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION—FLORIDA

STATE TABLE 1.—IRRIGATION SUMMARY FOR THE STATE: 1935 AND 1940

ITEM (For definitions and explanations, see text)	CENSUS OF—	
	1940	1935
Approximate land area of State.....acres....	* 34,727,680	35,111,040
CENSUS OF AGRICULTURE		
All farms (irrigated and nonirrigated).....number...	62,248	72,857
Land in all farms.....acres....	8,337,708	6,018,406
Farms irrigated: ¹		
Farms.....number...	3,947	2,751
Proportion of all farms.....percent..	6.3	3.8
Land in farms.....acres....	596,139	(²)
Proportion of all farm land.....percent..	7.1	(²)
Area irrigated.....acres....	³ 126,191	⁴ 65,832
Proportion of total land area of State.....percent..	0.4	0.2
Proportion of all farm land.....percent..	1.5	1.1
Value of irrigated farms (land and buildings).....dollars..	77,835,579	(²)
Average per farm.....dollars....	19,720.19	(²)
Average per acre.....dollars....	130.57	(²)
Value of farm implements and machinery ⁵.....dollars..	4,685,526	(²)
Average per farm.....dollars....	1,187.11	(²)
Average per acre ⁶.....dollars....	7.86	(²)
CENSUS OF IRRIGATION		
Irrigation enterprises:		
Enterprises.....number...	3,628	
Farms irrigated.....number...	3,930	
Area irrigated.....acres....	132,362	
Area existing works were capable of supplying with water.....acres....	175,813	
Area irrigable.....acres....	188,537	
Additional area existing works were capable of supplying with water.....acres....	43,451	
Additional irrigable area in enterprises not supplied with water.....acres....	56,195	
Investment in irrigation enterprises.....dollars..	7,055,921	
Average per acre based on area works were capable of supplying with water.....dollars..	40.13	
Estimated completed cost of existing enterprises.....dollars..	7,228,453	
Average per acre based on irrigable area in enterprises.....dollars..	38.34	
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	3.29	

¹Relates to farms reporting irrigated cropland harvested and/or irrigated pasture.²Not available.³Irrigated land from which crops were harvested plus 2,509 acres of irrigated land used only for pasture.⁴Irrigated land from which crops were harvested.⁵Total is for irrigated farms reporting this item. Averages are based on all irrigated farms.⁶The land area shown for 1940 represents redeterminations by the Bureau of the Census and, therefore, differs from that shown for 1935.

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
	Number	Acres	Acres	Acres	Acres	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
All farms.....	62,248	8,337,708	1,679,622	123,682	2,509	324,377,874	38.90	68,211,007	8.18	20,382,246	2.44
Owners and managers.....	46,580	6,994,698	1,265,744	113,518	2,168	294,370,042	42.08	60,920,616	8.71	17,873,906	2.66
Tenants.....	15,668	1,343,010	413,878	10,164	340	30,007,832	23.34	7,290,391	5.43	2,509,340	1.87
Irrigated farms, total.....	3,947	596,139	171,564	123,682	2,509	77,835,579	130.57	10,863,687	18.26	4,685,526	7.36
Owners and managers.....	3,490	575,825	159,651	113,518	2,168	74,622,653	129.59	10,451,380	18.75	4,346,849	7.55
Tenants.....	457	20,314	11,913	10,164	340	3,212,926	158.16	432,307	21.28	338,677	16.67
Wholly irrigated farms.....	2,480	253,365	81,608	81,608	523	38,195,637	150.74	5,783,379	22.82	2,419,123	9.55
Owners and managers.....	2,144	240,430	72,936	72,936	401	36,086,845	150.09	5,515,157	22.94	2,169,159	9.02
Tenants.....	336	12,935	8,672	8,672	122	2,108,782	162.78	268,222	20.70	249,964	19.29
Partly irrigated farms.....	1,467	342,754	89,956	42,074	1,986	38,639,942	115.65	5,100,308	14.88	2,266,403	6.61
Owners and managers.....	1,346	335,395	86,715	40,582	1,768	38,535,608	114.90	4,936,223	14.72	2,177,690	6.49
Tenants.....	121	7,359	3,241	1,492	218	1,104,134	150.04	164,085	22.30	88,713	12.06
Nonirrigated farms, total.....	58,301	7,741,569	1,508,058			246,542,295	31.85	57,327,320	7.41	15,696,720	2.03

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 - FLORIDA

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

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	1940				INVESTMENT, 1940			COST OF MAINTENANCE AND OPERATION, 1939 ¹		DELIVERY OF WATER TO IRRIGATORS, 1939					
	Enter-prises	Irri-gable area	Area works were capable of supplying with water	Irrigated area 1939	Amount	Pro-portion of total	Aver-age per acre ²	Irrigated area reporting	Aver-age per acre	Irrigated area reporting—				Cost ³	
										Quantity	Cost	Quantity and cost	Quantity delivered per acre ⁴	Per acre	Per acre-foot
	Number	Acres	Acres	Acres	Dollars	Percent	Dollars	Acres	Dollars	Acres	Acres	Acres	Acres-foot	Dollars	Dollars
Total.....	3,628	188,557	175,813	132,362	*7,055,921	100.0	40.13	112,515	3.29	111,375	112,728	101,917	1.7	3.29	1.89
Streams, gravity.....	1	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Streams, pumped.....	21	11,874	6,278	4,778	173,085	2.5	27.57	4,759	2.74	4,761	4,759	4,759	7.4	2.74	0.37
Wells, pumped.....	1,006	37,283	26,946	20,589	1,798,023	25.5	60.73	17,614	6.18	18,912	17,614	16,846	1.4	6.31	4.63
Wells, flowing.....	1,743	60,154	57,812	44,944	2,320,738	32.9	40.14	38,127	1.45	32,704	36,127	29,369	1.6	1.22	0.77
Wells, pumped and flowing.....	68	5,501	5,490	4,626	505,827	7.2	92.14	4,063	3.69	4,027	4,063	3,637	1.6	3.73	2.36
Lakes, gravity.....	3	30	30	28	1,823	(6)	60.77	28	8.06	28	28	28	0.9	8.06	9.05
Lakes, pumped.....	534	42,504	41,147	29,916	1,412,756	20.0	34.33	27,487	4.45	28,474	27,487	26,753	1.0	4.48	4.34
Springs.....	2	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
City water.....	25	533	530	510	11,184	0.2	21.10	105	12.07	476	318	314	0.8	6.04	7.46
Sewage.....	1	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Streams, gravity; wells, pumped...	1	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Streams, pumped; wells, pumped...	3	3,019	3,019	719	19,000	0.3	6.29	19	21.05	19	19	19	3.2	21.05	6.67
Waste water, seepage or drainage...	82	29,481	26,454	18,876	472,432	6.7	17.86	14,161	1.47	15,832	14,161	14,161	2.5	1.47	0.59
Other mixed.....	47	8,073	8,073	7,347	320,748	4.5	39.73	6,136	3.94	6,126	6,126	6,115	1.0	3.93	4.01

¹Based on irrigated area in enterprises reporting cost of maintenance and operation. ²Based on area works were capable of supplying with water. ³Based 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. ⁴Data are included only in State totals because less than 3 enterprises reported. ⁵Less than one-tenth of 1 percent. Includes data for 1 supplemental enterprise (see text for explanation of supplemental enterprises).

STATE TABLE 4.—ENTERPRISES, AREAS, AVERAGE COSTS, AND AREA IRRIGATED, CENSUS OF 1940, 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	Works and equipment per acre ²	Maintenance and operation per acre ³	Farms served	Total area	Cropland			Irrigated pasture
									From which crops were harvested	On which crops failed		
	Number	Number	Acres	Acres	Dollars	Dollars	Number	Acres	Acres	Acres	Acres	Acres
Total.....	3,628	18	188,557	175,813	40.13	3.29	3,930	132,362	125,474	4,204	2,684	
Individual and partnership.....	3,578	3	177,187	164,443	41.15	3.20	3,731	123,996	117,108	4,204	2,684	
Cooperative, incorporated.....	27	2	6,603	6,603	27.12	2.89	58	4,498	4,498			
Cooperative, unincorporated.....	12	2	2,407	2,407	25.16	3.50	23	1,788	1,788			
Commercial.....	10	10	2,360	2,360	20.77	9.93	115	2,080	2,080			
Other.....	1	1	(4)	(4)	(4)	(4)	(4)	(4)	(4)			

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 "Other" enterprise are included with "Individual and partnership" enterprises in the 1940 Census. Includes data for 1 supplemental enterprise (see text for explanation of supplemental enterprises).

STATE TABLE 5.—AREAS, INVESTMENT, COST OF MAINTENANCE AND OPERATION, PAY ROLL, AND NUMBER OF EMPLOYEES, CENSUS OF 1940, BY TYPE OF ENTERPRISE

TYPE OF ENTERPRISE (For definitions and explanations, see text)	AREAS			INVESTMENT ¹		Estimated investment required to complete works	COST OF MAINTENANCE AND OPERATION			PAY ROLL AND EMPLOYEES, 1939 ²		
	Irrigated	Works were capable of supplying with water	Irrigable	Total	Average per acre works were capable of supplying water		Irrigated area reporting 1939	Reported cost 1939	Average cost per irrigated acre 1939	Enter-prises reporting pay roll	Wages and salaries paid and payable	Employees during week ending April 29
Total.....	Acres 132,362	Acres 175,813	Acres 188,557	Dollars *7,055,921	Dollars *40.13	Dollars 172,532	Acres 112,515	Dollars *370,340	Dollars *3.29	Number *3	Dollars *5,288	Number *5
Individual and partnership.....	^{\$} 123,996	^{\$} 164,443	^{\$} 177,187	^{\$} 6,767,239	^{\$} 41.15	167,681	104,808	335,256	3.20			
Cooperative, incorporated.....	4,498	6,603	6,603	179,089	27.12		4,491	13,000	2.89	1	(^{\$})	(^{\$})
Cooperative, unincorporated.....	1,788	2,407	2,407	60,567	25.16	4,851	1,436	5,023	3.50			
Commercial.....	2,080	2,360	2,360	49,026	20.77		1,717	17,051	9.93	2	(^{\$})	(^{\$})
Other.....	(^{\$})	(^{\$})	(^{\$})	(^{\$})	(^{\$})							

¹Enumerated as cost of irrigation works and equipment to December 31, 1939. ²Only for enterprises serving 5 or more farms. ³Data for 1 "Other" enterprise are included with "Individual and partnership" enterprises. ⁴Data are included only in State totals because less than 3 enterprises reported. Includes data for 1 supplemental enterprise (see text for explanation of supplemental enterprises).

CENSUS OF IRRIGATION - FLORIDA

STATE TABLE 6.—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								Number	Rated capac- ity	Number	Rated capac- ity
Number 3	Number 5	Sac.-ft. 1,947	Miles 74	Miles	7	Ac.-ft. 19,419	Miles 4,259.9	4,631	G.p.m. 994,828	1,686	G.p.m. 482,144	2,321	Hp. 29,588	2,349	G.p.m. 2,104,450	
Total.....																
Individual and partnership....	3	5	1,876	67	.....	7	19,419	4,207.4	4,600	991,528	1,664	471,634	2,342	27,010	2,269	1,923,450
Cooperative, incorporated.....	.....	.....	38	.....	.....	.....	.....	32.0	.....	.....	10	6,060	47	1,757	49	146,300
Cooperative, unincorporated...	.....	.....	20	.....	.....	.....	.....	16.4	31	3,300	11	3,650	22	489	21	12,900
Commercial.....	.....	.....	13	7	.....	.....	.....	4.1	.....	.....	1	600	10	332	10	21,800
Other.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Includes main and lateral canals but not farm ditches.² Mostly tile reported in subirrigation systems.

STATE TABLE 7.—PUMPING PLANTS, BY KIND OF MOTIVE POWER AND TYPE OF PUMP, 1940

PUMPS BY KIND OF POWER EMPLOYED					Pumps	Propor- tion of total number	Rated capacity of pumps	Propor- tion of total capacity	Average lift of pumps
					Number	Percent	G.p.m.	Percent	Feet
Total.....					2,349	100.0	2,104,450	100.0	20
Electric motor.....					293	12.5	145,084	6.9	25
Centrifugal.....					196	8.4	120,709	5.7	18
Turbine.....					40	1.7	18,318	0.9	52
Plunger.....					48	2.0	3,532	0.2	29
Other.....					9	0.4	2,525	0.1	30
Internal-combustion engine.....					1,934	82.3	1,870,064	88.8	19
Centrifugal.....					1,575	67.0	863,483	41.0	18
Turbine.....					147	6.3	348,211	16.5	39
Plunger.....					103	4.4	14,108	0.7	22
Other.....					109	4.6	644,262	30.6	14
Other kinds of motive power.....					15	0.6	1,605	0.1	16
Centrifugal.....					1	(¹)	800	(¹)	10
Turbine.....					.....	.....	.....	.....	.....
Plunger.....					12	0.5	540	(¹)	17
Other.....					2	0.1	265	(¹)	12
Mixed kinds of motive power.....					107	4.6	87,697	4.2	21
Centrifugal.....					77	3.2	29,732	1.1	19
Turbine.....					13	0.6	62,510	3.0	41
Plunger.....					13	0.6	975	(¹)	11
Other.....					4	0.2	480	(¹)	18

MOTIVE POWER BY TYPE OF PUMP EMPLOYED					Prime movers	Propor- tion of total number	Rated capacity of movers	Propor- tion of total capacity
					Number	Percent	Hp.	Percent
Total.....					2,321	100.0	29,588	100.0
Centrifugal pump.....					1,772	76.3	19,716	66.6
Electric.....					221	9.5	2,951	10.0
Internal-combustion.....					1,550	66.8	16,745	56.5
Other.....					1	(¹)	20	0.1
Turbine pump.....					180	8.2	4,220	14.3
Electric.....					44	1.9	1,152	3.9
Internal-combustion.....					134	5.8	3,032	10.3
Other.....					12	0.5	36	0.1
Plunger pump.....					143	6.2	589	2.0
Electric.....					46	2.0	156	0.5
Internal-combustion.....					95	4.1	426	1.4
Other.....					2	0.1	7	(¹)
Other and mixed types of pumps.....					216	9.3	5,063	17.1
Electric.....					26	1.6	373	1.3
Internal-combustion.....					180	7.7	4,690	15.8
Other.....					.....	.....	.....	.....

¹ Less than one-tenth of 1 percent.

CENSUS OF IRRIGATION — FLORIDA

STATE TABLE 8.—PIPE LINES, BY MATERIAL, SIZE, AND LENGTH, 1940

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MATERIAL AND SIZE (DIAMETER)	Length ¹
Total.....	Miles 4,259.9
Concrete:	
1 to 12 inches.....	131.9
13 to 24 inches.....	0.7
Over 24 inches.....	
Metal:	
1 to 12 inches.....	964.0
13 to 24 inches.....	7.2
Over 24 inches.....	0.5
Wood-stave:	
1 to 12 inches.....	5.3
13 to 24 inches.....	
Over 24 inches.....	
Clay and other:	
1 to 12 inches.....	² 3,147.1
13 to 24 inches.....	9.2
Over 24 inches.....	

¹ Includes siphons and farm pipe lines reported.

² Mostly tile reported in subirrigation systems.

STATE TABLE 9.—DAMS, BY MATERIAL, 1940

MATERIAL	Diversion	Storage
	Number	Number
Total.....	3	5
Concrete or masonry.....	1	1
Timber.....	2	
Earth and rock.....		4

STATE TABLE 10.—WATER USED, BY SOURCE OF SUPPLY, 1939

ITEM (For definitions and explanations, see text)	Quantity used
From surface sources reported:	
Total water entering canals.....acre-feet..	¹ 2,842
Area irrigated by these enterprises.....acres.....	¹ 3,186
Average water per acre irrigated.....acre-feet..	¹ 0.9
Total water delivered to irrigators.....acre-feet..	² 68,566
Area irrigated by these enterprises.....acres.....	36,391
Average water per acre irrigated.....acre-feet..	1.9
From underground sources reported:	
Total water delivered to irrigators.....acre-feet..	² 125,953
Area irrigated by these enterprises.....acres.....	74,984
Average water per acre irrigated.....acre-feet..	1.7

¹ Data only for enterprises serving 5 or more farms.

² Quantities of water shown are estimates, no measured water was reported.

STATE TABLE 11.—AREA WITHIN IRRIGATION ENTERPRISES FOR WHICH DRAINS HAVE BEEN INSTALLED, AND ADDITIONAL AREA IN NEED OF DRAINAGE, 1940

ITEM	Area
Enterprises reporting land drained or needing drainage.....number..	847
Area irrigable in these enterprises.....acres...	73,383
Area irrigated in these enterprises.....acres...	46,323
Area for which drains have been installed.....acres...	53,275
Additional area needing drainage.....acres...	5,573
ITEM	Percent
Ratio of area drained to area irrigated in—	
(a) Enterprises reporting lands drained and/or needing drainage.....percent..	115.0
(b) All irrigation enterprises.....percent..	40.2
Ratio of area drained plus area needing drainage to—	
(a) Irrigable area reporting.....percent..	80.2
(b) Irrigated area reporting.....percent..	127.0

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STATE TABLE 12.—ENTERPRISES, AREA IRRIGATED, CAPITAL INVESTED, MAINTENANCE 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
1	Enterprises, 1940.....number...	3,628	104	3,368	140
2	Irrigated farms, 1939.....number...	3,930		3,368	341
3	Area irrigated, 1939.....acres....	132,362		114,666	12,185
4	(a) From which crops were harvested.....acres....	125,474		108,930	11,043
5	(b) On which crops failed.....acres....	4,204		3,070	1,134
6	(c) Irrigated pasture.....acres....	2,684		2,676	8
CAPITAL INVESTMENT, 1940					
7	Total capital investment in all enterprises.....dollars..	7,055,921	130,509	6,121,545	736,512
8	Area works were capable of supplying with water.....acres....	175,813	3,273	149,040	15,634
9	Average investment per acre irrigated.....dollars....	53.31		53.39	60.44
10	Average investment per acre which the works could supply with water.....dollars..	40.13	39.87	41.07	47.11
MAINTENANCE AND OPERATION, 1939					
11	Enterprises reporting maintenance and operation.....number...	2,944	58	2,749	124
12	(a) Area irrigated in these enterprises.....acres....	112,515		97,379	11,636
13	(b) Cost of maintenance and operation.....dollars....	370,940	8,711	304,866	41,222
14	(c) Average cost per irrigated acre reporting.....dollars..	3.29		8.13	3.80
TYPE, 1940					
15	Individual and partnership.....number...	3,578	101	3,339	136
16	Cooperative (incorporated and unincorporated).....number...	39	2	28	1
17	Commercial.....number.....	10	1		
18	All other.....number.....	1			
PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939					
19	Enterprises reporting pay roll.....number...	3	1		
20	Wages and salaries paid and payable for 1939.....dollars..	5,288	(²)		
21	Persons employed during week ending April 29, 1939.....number...	5			
SOURCE OF WATER SUPPLY, 1939					
22	Streams, gravity.....number.....	1		1	
23	Streams, pumped.....number.....	21	1	17	2
24	Wells, pumped.....number.....	1,096	63	999	34
25	Wells, pumped and flowing; or wells flowing.....number...	1,811	26	1,743	41
26	Lakes, gravity or pumped.....number.....	537	10	471	47
27	Streams and springs; or springs.....number.....	2		2	
28	Mixed, streams and wells.....number.....	4	1	3	
29	Other mixed or stored storm water.....number.....	156	3	132	16

¹Relates to enterprises reporting no irrigation in 1939 but having works capable of supplying water in 1940.²Enumerated as cost of irrigation works and equipment to December 31, 1939.

STATE TABLE 13.—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	Depart- ure ¹
			Amount	Depart- ture ¹	Amount	Depart- ture ¹	Amount	Depart- ture ¹	Amount	Depart- ture ¹	Amount	Depart- ture ¹		
St. Johns River														
Jacksonville.....	Duval.....	Feet 18	Inches 51.39	+1.65	Inches 12.36	+2.00	Inches 5.66	-3.00	Inches 13.78	+2.05	Inches 19.57	-0.30	Degrees F. 70.7	Degrees F. +1.4
Ocala.....	Marion.....	84	54.37	+1.20	2.50	-5.36	4.91	-4.45	16.36	+2.39	30.60	+8.62	72.3	+2.3
Orlando.....	Orange.....	106	54.94	+2.59	5.67	-2.98	3.31	-4.52	25.48	+11.30	20.48	-1.23	72.3	+0.3
Palatka.....	Putnam.....	50	52.38	-0.42	8.38	+0.70	5.77	-3.32	13.71	-1.84	24.47	+4.04	71.4	+0.5
Sanford.....	Seminole.....	25	54.05	+3.51	5.02	-3.68	2.48	-4.92	19.32	+5.63	27.23	+6.51	73.3	+1.6
North Everglades														
Fort Myers.....	Lee.....	8	60.88	+8.49	4.17	-3.20	1.36	-4.31	27.86	+12.94	27.49	+3.06	74.7	+1.3
Fort Pierce.....	St. Lucie.....	5	42.82	-6.97	11.78	+0.14	2.05	-5.61	14.36	+1.78	14.63	-3.28	(²)	(²)
Kissimmee.....	Osceola.....	69	57.45	+7.39	5.15	-3.09	3.18	-4.89	23.42	+9.79	25.70	+5.58	72.3	+0.1
Moore Haven.....	Glades.....	22	48.79	-1.16	5.55	-0.67	1.32	-4.18	11.17	-5.21	30.75	+8.90	73.4	+0.6
Okeechobee.....	Okeechobee.....	27	55.17	+7.23	7.80	+0.17	3.06	-2.87	22.05	+8.10	22.26	+1.83	73.2	+0.5
South Everglades														
Everglades.....	Collier.....	6	50.09	-3.85	7.26	+1.46	2.02	-2.75	12.06	-4.14	28.75	+1.58	76.0	+1.1
Homestead.....	Dade.....	8	52.08	-10.54	7.56	-6.84	1.58	-4.35	19.75	+1.29	23.17	-0.64	74.0	-0.2
North Gulf of Mexico Slope														
Pensacola.....	Escambia.....	11	59.06	+1.15	3.88	-8.67	9.29	-3.91	17.59	+5.51	28.24	+8.12	68.0	+0.3
Tallahassee.....	Leon.....	152	71.93	+16.35	5.80	-4.15	12.15	-0.39	28.55	+14.79	25.43	+6.10	69.0	+1.3
Suwannee River														
Lake City.....	Columbia.....	197	44.58	-5.30	3.19	-4.75	6.27	-3.98	13.56	+0.41	21.56	+3.02	69.7	+0.6
Withlacoochee River														
Brooksville.....	Hernando.....	275	56.05	+0.29	7.32	-0.87	3.40	-5.12	18.10	+3.31	27.23	+2.97	72.8	+1.7
Rushnell.....	Sumter.....	75	46.80	(²)	4.89	(²)	1.89	(²)	13.05	(²)	26.97	(²)	69.9	(²)
Tampa Bay														
Clearwater.....	Pinellas.....	34	58.58	(²)	11.32	(²)	4.24	(²)	19.68	(²)	23.14	(²)	73.7	(²)
Tampa.....	Hillsborough..	23	55.91	+6.55	7.93	+1.05	3.25	-4.43	17.22	+4.97	27.51	+4.96	73.1	+1.3
Peace Creek														
Arcadia.....	De Soto.....	56	62.58	+12.42	7.66	+0.60	2.73	-4.17	28.24	+14.90	23.95	+1.09	73.5	+0.7
Bartow.....	Polk.....	115	59.60	+4.19	8.98	+1.49	2.26	-6.04	26.09	+10.51	22.17	-1.77	72.5	+0.3

¹Departure from normal.²Data not available.

CENSUS OF IRRIGATION - FLORIDA

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

IRRIGATED FARMS—Con.		ACRES IRRIGATED					COST OF IRRIGATION WORKS AND EQUIPMENT				
5 to 24 farms	25 to 99 farms	No acres ¹ *	1 to 99 acres	100 to 299 acres	300 to 1,799 acres	1,800 to 7,499 acres	Less than \$5,000	\$5,000 to \$14,999	\$15,000 to \$49,999	\$50,000 to \$1,499,999	
15 189	1 33	104	3,286 3,437	177 327	56 160	5 6	3,345 3,539	227 318	53 67	3 6	1 2
5,511 5,511			52,126 60,431	26,060 26,551	32,011 29,841	10,165 8,351	84,853 81,427	27,123 25,428	17,392 15,725	2,904 2,894	3 4
			789 906	806 403	1,795 375	814 1,000	1,747 1,679	690 1,005	1,667	100	5 6
67,355 7,866 12.22 8.56	130,509 3,273	4,599,651 3,273	1,255,974 32,553	788,213 42,743	281,574 13,250	3,401,522 112,545	1,666,565 34,685	1,539,894 24,437	448,000 4,146		7 8
			74.04 54.75	44.76 58.58	24.62 18.44	37.70 21.25	40.09 30.22	61.44 48.05	88.54 63.01	149.63 108.06	9 10
13 3,498 12,531 3.58	58 8,711	2,682 53,891 213,950 3.97	155 24,651 76,951 3.12	44 23,808 62,947 2.64	5 10,165 7,781 0.77	2,699 72,523 216,141 2.98	196 23,719 81,585 3.44	46 13,279 65,069 4.90	3 2,994 7,545 2.52		11 12 13 14
2 4 9	101 2 1	3,267 19 1	161 9 7	44 9 2	5 1 1	3,312 24 8	214 12 1	49 3 1	3 1 1		15 16 17 18
(3) (3)	(3) (3)	(3) (3)	(3) (3)	(3) (3)	(3) (3)	(3) (3)	(3) (3)	(3) (3)	(3) (3)	(3) (3)	19 20 21
1 63 1	1 26	14 992 1,708	1 37 62	4 4 13	1 1 1	16 1,031 1,689	3 54 100	1 10 22	1 1 1	1 1 1	22 23 24 25
9 2 1 4	10 2 1 3	459 2 2 107	52 2 2 25	15 1 1 19	1 1 1 2	474 2 3 129	56 1 14	7 1 12	1 1 1	1 1 1	26 27 28 29

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

*Includes data for 1 supplemental enterprise (see text for explanation of supplemental enterprises).

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

GENERAL WEATHER SUMMARY

1938

January was cool and dry, as reported by the U. S. Weather Bureau. Cold weather on the 27-29th overspread the State, with freezing as far south as Homestead. Tender truck was damaged extensively, but citrus damage was small. February, March, and April were warm and dry. Dry weather beginning with December 1937 lasted until near the end of May 1938, the rainfall for this period being about half the normal for the whole State, and considerable less than half for the southern division. Development of spring truck was checked, and citrus groves suffered severely. Leaves were wilting, fruit dropping, and young trees were dying. Abundant rains during the last week of May and the first week in June forced the heaviest June bloom in many years, much of which matured good fruit. In northern Florida, the drought was less severe, cotton made good growth, corn made a good crop, and tobacco matured a large crop of excellent quality.

1939

The dry weather of the closing months of 1938 continued into 1939, January, February, and March being warm and dry. Average temperatures were higher in three previous Februaries, but a maximum of 94° in February has been equalled once only and never exceeded. April was very wet, rainfall averaging about 150 percent of normal. May also was rather wet, heavy rains occurring in Tampa damaging streets and a sewer project, with some wind damage to trees and roofs. June, July, and August rainfall averaged above normal, the August average being the third highest of record and about 150 percent of normal. Heavy rains occurred again in the Tampa area in July, damaging streets and bridge approaches. The final four months of the year were dry, with temperatures varying only slightly from normal except for October which was warm.

Precipitation.—The United States Weather Bureau reports the precipitation in Florida for the "Northern Division" in which De Land, Volusia County, and Ocala, Marion County, are the two most southern stations and a "Southern Division" in which Sanford, Seminole County, and Bushnell, Sumter

County, are the two most northern stations. The greater part of the irrigated lands in Florida is located in the "Southern Division."

COMPARATIVE ANNUAL DATA FOR APPROXIMATELY 92 STATIONS

Year	Remarks	Average North (41 Stations)	Average South (51 Stations)	Average State
		Inches	Inches	Inches
1939.....	Census year.....	54.65	54.22	54.54
1938.....	.....	44.86	41.41	43.17
1927.....	Driest year.....	42.80	38.74	40.78
1912.....	Wettest year.....	67.35	63.19	65.27
Period....	49 years.....	53.32	52.14	52.73

State table 13 shows precipitation in Florida for the water year (October 1938 through September 1939) at 21 Weather Bureau stations located in typical major drainage basins. With the exception of Pensacola, Tallahassee, Lake City, and Ocala located in northwestern Florida, all the stations shown are in or near irrigated areas.

The average rainfall for the water year at 19 of these stations which had complete records, with departures, was 54.94 inches, a departure of +2.36 inches from normal. However, the average rainfall for the 3 months of October, November, and December, 1938, was 6.73 inches, a departure of -1.88 inches, and for the months of January, February, and March, 1939, the average was 4.00 inches, a departure of -4.06 inches from the normal for these 3 months at the 19 stations. Since the principal planting and growing season for many of Florida's most valuable crops is the first 6 months of the water year, the distribution and amount of rainfall during that period indicates the need for irrigation more than the total for either a calendar or water year. The precipitation received during the last half of the water year (April through September), even during the driest of years is usually sufficient to maintain growth and provide replenishment of both underground and surface waters to meet the needs of irrigation during the winter dry season. Therefore, the amount and distribution of rainfall during the last half of the water year are minor factors in determining the need for irrigation in Florida.

CENSUS OF IRRIGATION — FLORIDA

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

ITEM (For definitions and explanations, see text. A map index-number is shown in parentheses for each drainage basin)		STATE TOTAL	St. Marys River ¹	St. Johns River and North Atlantic Slope ²	Kissimmee and Caloosa- hatchee Rivers	Everglades	Withla- coochee River	Tampa Bay	Peace Creek
			(1)	(2)	(3)	(4)	(13)	(14)	(15)
IRRIGATED FARMS AND AREAS									
1	Irrigated farms.....1939..number....	3,930	3	953	1,095	306	103	829	642
2	Area irrigated.....1939..acres.....	132,362	33	26,266	39,749	23,962	1,285	18,411	22,656
3	(a) Cropland harvested.....1939..acres.....	125,474	33	25,890	36,906	21,282	1,256	18,113	22,054
4	(b) Crop failure.....1939..acres.....	4,204	.....	378	883	2,588	29	159	166
5	(c) Pasture.....1939..acres.....	2,684	.....	57	1,960	92	.....	139	436
6	Irrigable area in enterprises.....1940..acres.....	188,957	43	32,884	57,752	36,831	1,529	25,445	34,073
7	Excess of irrigable area over the area irrigated...1940..acres.....	56,195	10	6,618	18,003	12,869	244	7,034	11,417
8	Area works were capable of supplying with water...1940..acres.....	175,813	43	32,474	53,181	30,758	1,528	23,985	33,844
9	Excess of area works were capable of supplying with water over area irrigated.....1940..acres.....	43,451	10	6,208	13,432	6,796	243	5,574	11,188
10	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	75.3	76.7	80.9	74.7	77.9	84.1	76.8	66.3
CAPITAL INVESTED TO JANUARY 1									
11	Total investment in irrigation enterprises ³.....1940..dollars....	7,055,821	5,625	2,634,891	1,058,740	685,870	134,491	1,394,274	1,141,830
12	Average investment based on area works were capable of supplying with water, per acre.....1940..dollars....	40.13	135.47	81.14	19.91	22.30	85.02	58.13	33.74
13	Average investment per acre irrigated.....1939..dollars....	53.31	176.52	100.32	26.64	28.62	104.66	75.73	50.40
14	Estimated final investment in existing enterprises.....1940..dollars....	7,228,453	5,625	2,676,632	1,066,066	753,180	136,446	1,408,944	1,161,160
15	Average investment based on estimated final investment and irrigable area, per acre.....1940..dollars....	38.34	135.47	81.40	18.81	20.45	89.24	55.37	34.08
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS									
16	Enterprises reporting maintenance and operation....1939..number....	2,944	3	720	811	200	61	589	460
17	Area irrigated in these enterprises.....1939..acres.....	112,515	33	23,680	36,020	20,437	1,071	14,154	16,820
18	Cost of maintenance and operation.....1939..dollars....	370,340	1,160	96,400	57,428	46,254	11,006	66,607	91,465
19	Average cost, per acre irrigated.....1939..dollars....	3.29	35.15	4.04	1.59	2.26	10.28	4.71	5.41
WATER DELIVERED TO IRRIGATORS, 1939									
20	Enterprises reporting water delivered.....1939..number....	2,878	3	704	784	253	100	601	433
21	Area irrigated by these enterprises.....1939..acres.....	111,375	33	23,346	32,476	22,542	1,269	15,042	16,667
22	Water delivered.....1939..acre-feet....	194,519	100	30,723	50,897	72,576	2,879	20,424	16,820
23	Average water delivered per acre irrigated.....1939..acre-feet....	1.7	3.0	1.3	1.6	3.2	2.3	1.4	1.0
24	Average cost of water per acre irrigated.....1939..dollars....	3.29	35.15	3.67	1.72	1.94	10.28	5.17	5.88
25	Average cost of water per acre-foot delivered.....1939..dollars....	1.89	11.60	2.79	1.10	0.57	4.53	3.81	5.79
DRAINAGE OF IRRIGATED LAND									
26	Enterprises reporting land drained or needing drainage.....1939..number....	847	.....	244	441	76	5	55	25
27	Irrigable area in these enterprises.....1939..acres.....	73,363	.....	6,307	30,814	27,901	381	2,691	5,276
28	Irrigated area in these enterprises.....1939..acres.....	46,323	.....	5,422	18,716	17,132	384	1,629	2,740
29	Area for which drains have been installed.....1939..acres.....	53,275	.....	5,000	24,778	19,494	260	2,148	1,595
30	Additional area needing drainage.....1939..acres.....	5,573	.....	224	834	4,210	106	97	102

¹ Data for 1 enterprise in Aucilla River Drainage Basin (11) (number refers to separate map) are included with St. Marys River Drainage Basin (1).

² Data for Suwannee River Drainage Basin (12) (number refers to separate map) are included with St. Johns River and North Atlantic Slope Drainage Basin (2).

³ Enumerated as cost of irrigation works and equipment to December 31, 1939.

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

ITEM (For definitions and explanations, see text. A map index-number is shown in parentheses for each drainage basin)		STATE TOTAL	St. Marys River ¹	St. Johns River and North Atlantic Slope ²	Kissimmee and Caloosa- hatchee Rivers	Everglades	Withla- coochee River	Tampa Bay	Peace Creek
			(1)	(2)	(3)	(4)	(13)	(14)	(15)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
1	Enterprises.....1940..number.....	3,628	3	842	1,038	269	102	811	563
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	48	14	39	51	114	15	30	60
3	Diversion dams.....1940..total number.....	3			2			1	
4	(a) Concrete and masonry.....1940..number.....	1						1	
5	(b) Timber.....1940..number.....	2			2				
6	(c) Earth and rock.....1940..number.....								
7	(d) Other, mixed, and not reported.....1940..number.....								
8	Main canals and laterals.....1940..total length, miles.....	74.0		2.0	57.0	8.0	2.0	5.0	
9	(a) Earth.....1940..length, miles.....	74		2	57	8	2	5	
10	(b) Lined.....1940..length, miles.....								
11	1940..capacity, c.f.s. ³	1,947	1	293	669	429	16	124	415
12	Pipe lines ⁴.....1940..total length, miles.....	4,259.9	2.5	3,106.4	64.8	34.8	42.8	728.0	280.6
13	(a) Concrete.....1940..length, miles.....	132.6		16.9	1.4	0.5	3.2	108.5	2.1
14	(b) Metal.....1940..length, miles.....	971.7	2.5	245.5	49.0	33.4	38.4	340.2	262.7
15	(c) Wood-stave.....1940..length, miles.....	5.3		0.5		0.5	1.2	0.1	3.0
16	(d) Other.....1940..length, miles.....	3,150.3		2,843.5	14.4	0.4		270.2	12.8
17	Storage dams.....1940..total number.....	5		1	3				1
18	(a) Concrete and masonry.....1940..number.....	1		1					
19	(b) Earth and rock.....1940..number.....	4			3				1
20	(c) Other, mixed, and not reported.....1940..number.....								
21	Reservoirs.....1940..total number.....	7		4	2				1
22	(a) 1-99 acre-feet capacity.....1940..number.....	5		3	1				1
23	(b) 100-999 acre-feet capacity.....1940..number.....	1		1					
24	(c) 1,000 and over acre-feet capacity.....1940..number.....	1			1				
25	1940..total capacity, ac.-ft. ⁵	19,419		216	(⁶)				(⁶)
26	Wells, flowing.....1940..number.....	4,631		2,015	1,480	1		763	372
27	1940..yield, g.p.m.....	994,828		324,765	368,125	(⁶)		221,823	80,090
28	Wells, pumped.....1940..number.....	1,666	3	360	47	209	127	546	394
29	1940..yield, g.p.m.....	482,144	550	92,236	12,598	64,800	30,900	171,113	109,947
30	Pumping plants.....1940..total number.....	2,321	5	577	127	369	126	603	514
31	Prime movers.....1940..capacity, hp.....	29,588	58	6,298	3,053	5,952	961	5,392	7,874
32	(a) Electric.....1940..number.....	347	(⁶)	109	21	49	21	86	60
33	1940..capacity, hp.....	4,632		991	683	343	239	1,022	1,329
34	(b) Internal-combustion.....1940..number.....	1,959	4	465	105	317	105	512	451
35	1940..capacity, hp.....	24,893	33	5,302	2,369	5,002	722	4,332	6,533
36	(c) Other.....1940..number.....	15		3	1	3		5	3
37	1940..capacity, hp.....	63		5	(⁶)	7		38	12
38	Pumps.....1940..total number.....	2,349	5	593	127	372	127	606	517
39	1940..capacity, g.p.m.....	2,104,450	1,065	227,653	320,478	1,029,146	38,462	211,843	275,803
40	(a) Centrifugal.....1940..number.....	1,849	3	514	77	196	120	496	443
41	1940..capacity, g.p.m.....	1,008,724	1,015	203,407	46,800	294,474	37,462	177,564	248,002
42	1940..average capacity, g.p.m.....	546	338	396	603	1,502	312	358	560
43	(b) Turbine.....1940..number.....	200		31	25	59	2	53	29
44	1940..capacity, g.p.m.....	429,039		17,735	82,750	285,951	(⁶)	26,053	16,250
45	1940..average capacity, g.p.m.....	2,145		572	3,183	4,947	(⁶)	492	560
46	(c) Plunger.....1940..number.....	176	2	32	10	38	4	52	38
47	1940..capacity, g.p.m.....	19,155	(⁶)	2,204	928	2,271	550	5,451	7,701
48	1940..average capacity, g.p.m.....	109	(⁶)	69	93	60	138	105	203
49	(d) Other.....1940..number.....	124		16	14	79	1	7	7
50	1940..capacity, g.p.m.....	647,532		4,307	190,000	446,450	(⁶)	2,775	3,850
51	Pumping lift, from all sources.....1940..average, feet.....	20	30	19	28	13	14	21	24
52	from pumped wells.....1940..average, feet.....	21	15	17	30	17	14	22	25
53	from surface sources.....1940..average, feet.....	19	35	20	27	5	17	15	23

¹Data for 1 enterprise in Aucilla River Drainage Basin (11) (number refers to separate map) are included with St. Marys River Drainage Basin (1).

²Data for Suwannee River Drainage Basin (12) (number refers to separate map) are included with St. Johns River and North Atlantic Slope Drainage Basin (2).

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.

CENSUS OF IRRIGATION — FLORIDA

COUNTY TABLE I.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940; IRRIGATED AREA, 1939;
IN IRRIGATED FARMS, 1940; WATER DELIVERED TO

ITEM (For definitions and explanations, see text)	STATE TOTAL	Alachua	Broward	Charlotte	Dade	De Soto	Duval	Flagler
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS²								
1 All farms.....1940..number.....	62,248	2,108	946	102	1,439	604	1,436	107
2 Irrigated farms.....1940..number.....	3,047	10	86	23	168	103	28	34
3 Operated by—								
4 (a) Owners and managers.....1940..number.....	3,490	9	38	15	112	97	26	34
4 (b) Tenants.....1940..number.....	457	1	48	8	56	6	2	.....
5 Land in all farms.....1940..acres.....	8,337,708	268,818	77,559	38,094	70,503	146,201	61,067	30,786
6 Land in irrigated farms.....1940..acres.....	598,139	754	23,759	1,605	11,283	25,637	750	22,978
7 Average per farm.....1940..acres.....	151	(1) 75	276	70	67	249	27	676
8 (a) Operated by owners and managers.....1940..acres.....	575,825	(1) 19,847	803	9,553	25,199	(1) 22,978	(1) 22,978	676
9 Average per farm.....1940..acres.....	165	(1) 522	54	85	260	(1) 676	(1) 676	.....
10 (b) Operated by tenants.....1940..acres.....	20,314	(1) 3,912	802	1,730	438	(1) 438	(1) 438	.....
11 Average per farm.....1940..acres.....	44	(1) 82	100	31	73	(1) 73	(1) 73	.....
12 Approximate land area.....1940..acres.....	34,727,680	570,880	779,520	451,200	1,314,560	414,720	497,280	309,120
IRRIGATED AND IRRIGABLE AREAS								
13 Area irrigated.....1939..acres.....	132,382	263	10,081	981	1,721	3,099	198	721
14 (a) Cropland harvested.....1939..acres.....	125,474	263	8,506	626	1,656	2,968	193	670
15 (b) Crop failure.....1939..acres.....	4,204	.....	1,260	11	22	73	.....	20
16 (c) Pasture.....1939..acres.....	2,684	.....	15	344	43	58	2	22
17 Irrigable area in enterprises.....1940..acres.....	188,657	383	12,626	2,462	2,500	4,634	282	1,138
18 Excess of irrigable area over the area irrigated....1940..acres.....	56,195	120	2,545	1,481	779	1,535	87	417
19 Area works were capable of supplying with water....1940..acres.....	175,813	323	11,599	2,462	2,460	4,505	252	1,113
20 Excess, capability of works over area irrigated....1940..acres.....	43,451	60	1,518	1,481	739	1,406	57	392
21 Proportion which area irrigated is of all lands in irrigated farms.....1939..percent....	22.2	34.0	42.4	61.1	15.3	12.1	26.0	3.1
22 Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	75.3	81.4	86.9	39.8	70.0	68.8	77.4	64.8
CAPITAL INVESTED TO JANUARY 1								
23 Total investment in all enterprises ².....1940..dollars....	7,055,921	11,000	411,047	24,136	86,556	150,069	27,307	12,669
24 Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars....	40.13	34.06	35.44	9.80	35.19	33.31	108.36	11.38
25 Average investment per acre irrigated.....1939..dollars....	53.31	41.83	40.77	24.60	50.29	48.42	140.04	17.57
26 Estimated final investment in existing enterprises..1940..dollars....	7,228,453	11,000	428,197	24,236	93,316	154,669	27,857	13,119
27 Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars....	38.34	28.72	33.91	9.84	37.33	33.38	98.78	11.53
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS								
28 Enterprises reporting maintenance and operation....1939..number....	2,944	5	36	22	80	97	15	35
29 Area irrigated in these enterprises.....1939..acres.....	112,515	134	7,412	731	1,286	2,835	66	611
30 Cost of maintenance and operation.....1939..dollars....	370,340	754	21,394	404	8,618	6,450	326	508
31 Average cost, per acre irrigated.....1939..dollars....	3.29	5.63	2.89	0.55	6.70	2.28	4.94	0.83
WATER DELIVERED TO IRRIGATORS								
32 Enterprises reporting water delivered.....1939..number....	2,878	6	43	14	122	70	9	32
33 Area irrigated in these enterprises.....1939..acres.....	111,375	263	9,086	522	1,675	2,217	35	628
34 Water delivered in these enterprises.....1939..acre-feet..	194,519	468	30,899	1,183	2,495	2,437	60	548
35 Average water delivered per acre irrigated.....1939..acre-feet..	1.7	1.8	3.4	2.3	1.5	1.1	1.7	0.9
36 Average cost of water per acre irrigated.....1939..dollars....	3.29	5.63	1.72	0.55	6.70	2.94	7.03	0.83
DRAINAGE OF IRRIGATED LAND								
37 Enterprises reporting land drained or needing drainage.....1939..number....	847	(1) 1	40	6	3	4	(1) 1	.....
38 Irrigable area in these enterprises.....1939..acres.....	73,383	(1) 12,207	289	109	140	(1) 140	(1) 140	.....
39 Irrigated area in these enterprises.....1939..acres.....	46,323	(1) 10,002	124	56	95	(1) 95	(1) 95	.....
40 Area for which drains have been installed.....1939..acres.....	53,275	(1) 10,133	125	90	18	(1) 18	(1) 18	.....
41 Additional area needing drainage.....1939..acres.....	5,673	.....	191	1	19	21	.....	.....

² 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.

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IRRIGABLE AREA AND CAPITAL INVESTED, 1940; MAINTENANCE AND OPERATION, 1939; LAND
IRRIGATORS AND DRAINAGE OF IRRIGATED LAND, 1939

Hardee	Hendry	Highlands	Hills- borough	Indian River	Lake	Lee	Manatee	Marion	Martin	Orange	Osceola	Palm Beach	Pasco	Pinellas	
1,132	156	389	3,630	742	2,017	291	676	2,146	117	2,399	412	808	1,107	732	1
102	17	15	331	582	138	107	350	11	9	251	8	89	31	88	2
86	15	14	294	570	134	77	258	11	6	214	7	74	31	84	3
16	2	1	47	12	4	30	92	.....	3	7	1	15	.....	4	4
149,812	324,161	334,038	181,408	112,877	113,524	20,084	57,695	220,050	37,204	209,835	488,588	80,175	106,428	28,607	5
6,667	1,403	1,317	18,188	60,502	13,997	8,898	21,751	12,245	10,035	23,932	439	23,645	4,146	8,586	6
65	83	88	55	104	101	83	62	1,113	1,115	95	55	266	134	97	7
6,347	(1)	(1)	16,059	59,739	13,933	7,804	20,347	12,245	9,330	23,665	(1)	22,198	4,146	8,519	8
74	(1)	(1)	57	105	104	101	79	1,113	1,555	97	(1)	300	134	101	9
320	(1)	(1)	2,129	763	64	1,094	1,404	.....	705	267	(1)	1,447	.....	47	10
20	(1)	(1)	45	64	16	36	15	.....	235	36	(1)	96	.....	12	11
403,200	759,680	666,240	665,600	327,040	637,440	503,040	448,640	1,034,880	357,760	586,210	848,000	1,265,920	480,640	168,960	12
787	286	1,038	4,062	16,238	4,032	4,974	8,977	868	3,599	8,341	303	10,244	1,025	3,436	13
753	266	1,038	4,005	15,068	4,032	4,768	8,739	668	2,435	8,158	303	9,718	1,025	3,436	14
23	.....	.....	27	40	.....	70	131	.....	1,164	163	.....	492	.....	.....	15
6	20	.....	30	1,190	.....	146	107	.....	.....	.....	.....	34	.....	.....	16
1,677	629	1,604	6,605	23,847	4,858	5,740	12,369	673	10,620	11,589	303	16,774	1,106	3,798	17
890	343	566	2,543	7,349	826	766	3,392	5	7,021	3,248	.....	6,530	171	362	18
1,653	629	1,508	5,334	22,081	4,816	5,740	12,226	670	5,024	11,559	303	14,768	1,106	3,752	19
896	343	470	1,272	5,793	784	766	3,249	2	1,425	3,218	.....	4,524	171	316	20
11.8	20.4	76.8	22.3	26.9	28.8	55.9	41.3	5.5	35.9	34.9	69.0	43.3	24.7	40.1	21
47.8	45.5	68.8	76.2	73.8	83.7	86.7	73.4	99.7	71.6	72.2	100.0	69.4	85.7	91.6	22
44,379	27,831	49,538	400,696	398,164	136,257	86,290	697,512	26,188	140,500	767,183	10,900	156,267	31,175	173,833	23
26.85	44.25	32.85	76.81	18.02	28.29	15.03	57.05	39.09	27.97	66.37	35.97	10.58	26.07	46.33	24
56.39	97.31	47.72	100.86	24.43	33.79	17.35	77.70	39.20	39.04	91.98	35.97	15.25	30.41	50.59	25
45,579	26,056	54,538	422,841	398,664	136,510	86,690	697,687	26,188	197,000	770,514	10,900	156,667	31,325	174,733	26
27.18	44.60	34.00	64.02	16.86	28.10	15.10	56.41	38.91	18.55	66.49	35.97	9.52	26.10	46.01	27
75	12	10	290	510	86	65	212	11	5	175	7	80	16	48	28
676	212	975	2,874	15,246	3,608	2,985	7,018	650	3,599	8,111	303	9,878	949	2,598	29
3,798	505	4,816	20,386	18,133	19,285	713	25,391	2,376	11,595	34,556	1,124	13,182	7,800	10,490	30
5.62	2.38	4.94	7.00	1.19	5.35	0.24	3.62	3.66	3.22	4.26	3.71	1.33	8.22	4.04	31
80	5	12	322	445	96	5	185	12	5	186	7	82	16	53	32
717	114	1,024	3,960	14,470	3,882	456	6,596	668	3,599	8,258	303	9,885	949	2,709	33
661	41	1,141	4,772	27,768	2,908	631	11,441	651	33,471	7,856	265	14,090	1,015	2,184	34
0.9	0.4	1.1	1.2	1.9	0.7	1.4	1.7	1.0	9.3	1.0	0.9	1.4	1.1	0.8	35
5.63	3.62	4.94	7.08	1.14	5.42	1.29	4.40	3.66	3.22	4.17	3.71	1.33	8.22	3.98	36
(1)	1	.....	4	21	341	62	23	.....	5	12	.....	32	(1)	8	37
(1)	.....	181	283	18,006	(1)	3,866	1,476	.....	10,620	379	.....	10,785	(1)	857	38
(1)	.....	74	190	11,371	(1)	3,220	867	.....	3,599	237	.....	5,274	(1)	832	39
(1)	.....	31	188	15,285	(1)	3,672	1,317	.....	8,024	178	.....	7,471	(1)	619	40
.....	.....	.....	41	116	(1)	15	20	.....	3,700	.....	.....	1,000	(1)	22	41

² Enumerated as cost of irrigation works and equipment to December 31, 1939.

CENSUS OF IRRIGATION — FLORIDA

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

ITEM (For definitions and explanations, see text)		Polk	Putnam	St. Johns	St. Lucie	Sarasota	Seminole	Sumter	Volusia	All other counties
FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*										
1	All farms.....1940..number....	4,273	850	348	588	181	760	804	1,518	29,360
2	Irrigated farms.....1940..number....	340	52	47	204	62	317	89	66	89
3	Operated by—									
4	(a) Owners and managers.....1940..number....	320	51	46	285	47	287	86	57	85
5	(b) Tenants.....1940..number....	20	1	1	9	15	30	13	9	4
6	Land in all farms.....1940..acres....	458,825	69,073	39,946	154,668	228,082	65,744	101,610	263,286	3,813,087
7	Land in irrigated farms.....1940..acres....	131,782	5,798	3,313	78,042	6,439	23,771	14,432	8,322	18,842
8	Average per farm.....1940..acres....	388	112	70	272	104	75	146	126	223
9	(a) Operated by owners and managers.....1940..acres....	131,023	(1)	(1)	78,012	5,909	23,082	13,615	7,971	19,102
10	Average per farm.....1940..acres....	409	(1)	(1)	277	126	80	158	140	225
11	(b) Operated by tenants.....1940..acres....	759	(1)	(1)	930	530	689	817	351	740
12	Average per farm.....1940..acres....	38	(1)	(1)	103	35	23	63	39	185
12	Approximate land area.....1940..acres....	1,191,040	513,820	389,760	376,320	375,040	205,440	359,040	713,600	17,112,960
IRRIGATED AND IRRIGABLE AREAS										
13	Area irrigated.....1939..acres....	17,658	2,136	1,798	12,440	4,392	6,788	694	1,188	137
14	(a) Cropland harvested.....1939..acres....	17,654	2,117	1,798	11,417	4,392	6,670	665	1,116	137
15	(b) Crop failure.....1939..acres....	64	.....	.....	418	.....	109	29	.....	.....
16	(c) Pasture.....1939..acres....	30	18	.....	604	.....	9	.....	5	.....
17	Irrigable area in enterprises.....1940..acres....	26,028	2,670	1,966	15,063	6,496	7,660	876	1,525	166
18	Excess of irrigable area over the area irrigated...1940..acres....	8,370	534	168	2,623	2,104	872	182	337	28
19	Area works were capable of supplying with water....1940..acres....	25,985	2,661	1,906	14,740	6,463	7,514	875	1,520	166
20	Excess, capability of works over area irrigated....1940..acres....	8,327	525	108	2,300	2,071	726	181	332	29
21	Proportion which area irrigated is of all lands in irrigated farms.....1939..percent....	13.4	36.8	54.3	15.6	68.2	28.6	4.8	14.3	0.7
22	Proportion which area irrigated is of area works were capable of supplying with water.....1939..percent....	68.0	80.3	94.3	84.4	68.0	60.3	79.3	78.2	62.5
CAPITAL INVESTED TO JANUARY 1										
23	Total investment in all enterprises.....1940..dollars....	1,061,401	64,538	28,275	231,796	93,070	1,467,892	112,795	77,532	10,025
24	Average investment, based on area works were capable of supplying with water, per acre.....1940..dollars....	40.85	24.25	14.83	15.73	14.40	199.36	128.91	51.01	60.39
25	Average investment per acre irrigated.....1939..dollars....	60.11	30.21	15.73	18.63	21.19	220.68	162.53	65.26	73.18
26	Estimated final investment in existing enterprises.....1940..dollars....	1,079,132	64,538	28,275	232,196	93,570	1,535,199	114,550	77,682	10,025
27	Average investment, based on estimated final investment and irrigable area, per acre.....1940..dollars....	41.46	24.17	14.38	15.41	14.40	200.42	130.76	50.94	60.39
MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS										
28	Enterprises reporting maintenance and operation....1939..number....	285	44	43	276	45	250	52	51	6
29	Area irrigated in these enterprises.....1939..acres....	14,939	1,785	1,679	12,387	1,341	5,884	496	1,169	62
30	Cost of maintenance and operation.....1939..dollars....	95,330	2,820	271	13,692	3,507	29,242	5,588	5,795	1,600
31	Average cost, per acre irrigated.....1939..dollars....	6.38	1.58	0.16	1.11	2.62	4.97	11.27	4.96	18.29
WATER DELIVERED TO IRRIGATORS										
32	Enterprises reporting water delivered.....1939..number....	282	49	47	281	51	204	81	58	8
33	Area irrigated in these enterprises.....1939..acres....	15,247	2,126	1,798	12,439	1,439	4,467	694	1,032	137
34	Water delivered in these enterprises.....1939..acre-feet..	15,480	2,594	2,671	10,699	1,182	11,539	1,814	1,172	343
35	Average water delivered per acre irrigated.....1939..acre-feet..	1.0	1.2	1.5	0.9	0.8	2.6	2.7	1.1	2.5
36	Average cost of water per acre irrigated.....1939..dollars....	6.60	1.59	0.16	1.11	2.94	3.39	11.27	5.42	18.29
DRAINAGE OF IRRIGATED LAND										
37	Enterprises reporting land drained or needing drainage.....1939..number....	9	1	.....	31	8	223	4	4	.....
38	Irrigable area in these enterprises.....1939..acres....	3,656	(1)	.....	3,041	1,172	5,144	81	304	.....
39	Irrigated area in these enterprises.....1939..acres....	1,351	(1)	.....	2,352	1,143	4,580	84	304	.....
40	Area for which drains have been installed.....1939..acres....	257	(1)	.....	2,666	1,152	4,364	60	106	.....
41	Additional area needing drainage.....1939..acres....	74	.....	.....	3	20	209	6	.....	.....

* 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 Enumerated as cost of irrigation works and equipment to December 31, 1939.

CENSUS OF IRRIGATION — FLORIDA

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

ITEM (For definitions and explanations, see text)		STATE TOTAL	Alachua	Broward	Charlotte	Dade	De Soto	Duval	Flagler
FARM VALUES, 1940*									
1	Land and buildings, all farms.....dollars..	324,377,874	5,413,999	5,380,151	294,652	12,875,719	3,070,109	6,705,377	691,850
2	Land and buildings, irrigated farms.....dollars..	77,835,579	188,650	1,708,140	93,237	3,266,625	1,138,100	364,810	346,800
3	Operated by—								
4	(a) Owners and managers.....dollars..	74,622,653	(1)	1,415,098	82,000	3,017,900	1,097,400	(1)	346,800
5	(b) Tenants.....dollars..	3,212,926	(1)	293,042	31,237	268,725	40,700	(1)	.....
6	Average, land and buildings, per farm.....dollars..	19,720.19	18,865.00	19,862.09	4,053.78	19,563.21	11,049.51	13,028.93	10,200.00
7	per acre in farms.....dollars..	130.57	250.20	71.89	58.09	291.29	44.39	496.41	15.09
8	Buildings, irrigated farms reporting value.....number..	3,320	9	35	21	160	83	27	34
9	Total reported.....dollars..	10,883,687	18,050	101,859	19,540	852,895	167,550	119,200	73,050
10	Average, per irrigated farm reporting.....dollars..	3,278.22	1,783.33	2,910.26	930.48	5,330.59	2,018.67	4,414.81	2,148.53
11	per acre on all irrigated farms.....dollars..	18.26	21.29	4.29	12.17	75.59	6.54	168.93	3.18
12	Buildings, nonirrigated farms reporting value.....number..	51,591	1,995	283	71	608	421	1,373	71
13	Total reported.....dollars..	57,327,320	1,649,759	619,060	44,550	2,150,743	440,017	2,949,633	109,350
14	Average, per nonirrigated farm reporting.....dollars..	1,111.19	836.95	2,187.49	627.46	2,368.66	1,045.17	2,148.31	1,540.14
15	per acre on all nonirrigated farms.....dollars..	7.41	6.39	11.51	1.22	36.32	3.65	48.90	14.00
16	Implements and machinery, irrigated farms reporting value.....number..	2,850	9	73	16	144	65	27	32
17	Total reported.....dollars..	4,665,526	9,915	234,328	5,235	246,437	80,370	37,785	73,035
18	Average, per irrigated farm reporting.....dollars..	1,644.04	1,101.67	3,209.97	327.19	1,711.37	1,236.46	1,399.44	2,282.24
19	per acre, on all irrigated farms.....dollars..	7.86	13.15	9.86	3.26	21.84	3.13	60.38	3.18
20	Implements and machinery, nonirrigated farms reporting value.....number..	41,515	1,606	678	55	828	286	1,051	67
21	Total reported.....dollars..	15,696,720	604,767	549,701	18,953	971,060	98,381	496,827	56,008
22	Average, per acre, on all nonirrigated farms.....dollars..	2.03	2.34	10.22	0.52	16.40	0.82	8.24	7.17
ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
23	Enterprises.....1940..number.....	3,628	7	46	32	133	127	26	37
24	Average size of enterprise based on irrigable area.....1940..acres.....	52	55	274	77	19	35	11	31
25	Diversion dams.....1940..number.....	3	.....	.....	.....	.....	.....	.....	.....
26	Main canals and laterals.....1940..length, miles.....	74.0	.....	8.0	.....	.....	.....	.....	.....
27	.....1940..capacity, c.f.s. ²	1,947	.....	37	2	.....	.....	.....	.....
28	Pipe lines ³.....1940..length, miles.....	4,259.9	1.5	0.9	1.1	21.1	17.9	11.9	1.2
29	Storage dams.....1940..number.....	5	.....	.....	1	.....	.....	.....	.....
30	Reservoirs.....1940..number.....	7	.....	.....	1	.....	.....	.....	.....
31	.....1940..capacity, acre-feet.....	19,419	.....	.....	(1)	.....	.....	.....	.....
32	Wells, flowing.....1940..number.....	4,631	.....	.....	37	.....	92	22	41
33	.....1940..yield, g.p.m.....	994,828	.....	.....	16,140	.....	30,800	5,190	13,800
34	Wells, pumped.....1940..number.....	1,696	14	11	3	140	118	4	18
35	.....1940..yield, g.p.m.....	482,144	3,470	13,275	580	38,260	41,832	105	7,000
36	Pumping plants.....1940..number.....	2,321	14	98	4	140	97	4	15
37	Prime movers.....1940..capacity, hp.....	28,588	172	2,399	17	1,037	1,015	10	45
38	Pumps.....1940..capacity, g.p.m.....	2,104,450	8,470	451,401	1,665	37,780	41,993	105	7,020
39	Pumping lift, from all sources.....1940..average, feet.....	20	14	6	26	17	20	11	8
40	from pumped wells.....1940..average, feet.....	21	15	14	48	17	20	11	8
PAY ROLL AND NUMBER OF EMPLOYEES 1939 ⁴									
41	Enterprises reporting pay roll.....number.....	3	.....	(1)	1	.....	.....	.....	.....
42	Irrigated area in these enterprises.....acres.....	542	.....	(1)	.....	.....	.....	.....	.....
43	Wages and salaries paid and payable.....dollars.....	5,288	.....	(1)	.....	.....	.....	.....	.....
44	Persons employed during week ending April 29.....number.....	5	.....	(1)	.....	.....	.....	.....	.....

*Census of Agriculture.

¹Data are included only in State totals because less than 3 farms or less than 3 enterprises reported in the 1940 Census.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.⁴Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION - FLORIDA

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

ITEM (For definitions and explanations, see text)		Hardee	Hendry	Highlands	Hills- borough	Indian River	Lake	Lee	Manatee	Marion
FARM VALUES, 1940*										
1	Land and buildings, all farms.....dollars..	3,769,337	9,806,675	7,549,179	15,321,851	8,869,041	19,426,203	2,752,908	5,542,887	8,142,236
2	Land and buildings, irrigated farms.....dollars..	702,325	158,580	458,700	3,136,398	8,031,591	3,428,530	1,559,295	1,070,745	874,608
3	Operated by—									
4	(a) Owners and managers.....dollars..	667,700	(¹)	(¹)	2,851,826	7,853,066	3,420,530	1,409,245	3,713,420	874,606
5	(b) Tenants.....dollars..	34,625	(¹)	(¹)	284,472	178,525	8,000	150,050	357,325	.....
6	Average, land and buildings, per farm.....dollars..	6,885.54	9,328.24	30,580.00	9,475.22	13,799.98	24,844.42	14,572.85	11,630.70	79,500.64
7	per acre in farms.....dollars..	105.34	113.03	348.29	172.44	132.75	244.65	175.24	187.15	71.43
8	Buildings, irrigated farms reporting value.....number..	100	17	11	315	410	107	94	311	11
9	Total reported.....dollars..	157,440	24,165	44,500	687,992	1,095,692	465,285	259,345	763,700	80,423
10	Average, per irrigated farm reporting.....dollars..	1,574.40	1,439.12	4,045.45	2,184.10	2,672.42	4,348.16	2,758.99	2,465.27	7,311.16
11	per acre on all irrigated farms.....dollars..	23.61	17.44	33.79	37.83	18.11	33.24	29.15	35.25	6.57
12	Buildings, nonirrigated farms reporting value.....number..	982	112	242	3,143	96	1,073	164	295	2,016
13	Total reported.....dollars..	701,759	575,350	543,229	3,025,126	105,615	2,275,735	316,237	435,750	2,098,616
14	Average, per nonirrigated farm reporting.....dollars..	806.27	5,137.05	2,241.75	1,248.85	1,100.16	2,120.63	1,928.27	1,477.12	1,039.95
15	per acre on all nonirrigated farms.....dollars..	5.53	1.78	1.63	24.05	2.02	22.87	26.17	12.12	10.10
16	Implements and machinery, irrigated farms reporting value.....number..	91	14	12	281	269	94	75	260	11
17	Total reported.....dollars..	60,405	8,690	33,275	293,220	217,452	188,076	165,683	312,187	43,438
18	Average, per irrigated farm reporting.....dollars..	663.79	620.71	2,772.92	1,043.49	808.37	2,000.81	2,309.11	1,300.60	3,918.91
19	per acre, on all irrigated farms.....dollars..	9.06	6.19	25.27	16.12	3.59	13.44	18.62	11.35	3.55
20	Implements and machinery, nonirrigated farms reporting value.....number..	784	93	134	2,478	73	708	98	185	1,871
21	Total reported.....dollars..	227,694	1,046,823	203,665	900,366	14,271	381,570	58,212	82,150	700,136
22	Average, per acre, on all nonirrigated farms.....dollars..	1.59	3.24	0.61	5.52	0.27	3.63	4.82	2.29	3.37
ENTERPRISES AND IRRIGATION WORKS JANUARY 1										
23	Enterprises.....1940..number.....	92	18	14	374	583	101	94	325	12
24	Average size of enterprise based on irrigable area.....1940..acres.....	18	35	115	18	11	48	61	38	56
25	Diversion dams.....1940..number.....	.....	.....	.....	1	.....	.....	.....	.....	.....
26	Main canals and laterals.....1940..length, miles.....	.....	.....	.....	5.0	52.0	.....	.....	.....	.....
27	.....1940..capacity, c.f.s. ².....	.....	.....	.....	86	420	6	.....	.....	16
28	Pipe lines ³.....1940..length, miles.....	4.7	13.0	6.8	183.9	.....	45.7	8.0	477.1	9.1
29	Storage dams.....1940..number.....	.....	.....	.....	.....	2	.....	1	.....	.....
30	Reservoirs.....1940..number.....	.....	.....	.....	.....	1	.....	1	.....	.....
31	.....1940..capacity, acre-feet.....	.....	.....	.....	.....	(¹)	.....	(¹)	.....	.....
32	Wells, flowing.....1940..number.....	4	18	.....	283	845	3	178	499	.....
33	.....1940..yield, g.p.m.....	800	5,500	.....	39,620	231,810	145	46,725	182,150	.....
34	Wells, pumped.....1940..number.....	138	.....	5	256	6	39	3	187	14
35	.....1940..yield, g.p.m.....	22,396	.....	1,780	74,309	380	16,515	1,090	60,885	1,213
36	Pumping plants.....1940..number.....	102	7	15	308	18	103	4	169	13
37	Prime movers.....1940..capacity, hp.....	648	134	263	2,083	870	632	54	1,116	214
38	Pumps.....1940..capacity, g.p.m.....	23,516	5,630	8,130	92,099	180,380	48,935	1,300	60,675	6,386
39	Pumping lift, from all sources.....1940..average, feet.....	24	17	39	21	9	26	27	13	32
40	.....1940..average, feet.....	24	.....	23	23	15	22	32	13	76
PAY ROLL AND NUMBER OF EMPLOYEES 1939⁴										
41	Enterprises reporting pay roll.....number.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
42	Irrigated area in these enterprises.....acres.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
43	Wages and salaries paid and payable.....dollars.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
44	Persons employed during week ending April 29.....number.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Census of Agriculture.

¹Data are included only in State totals because less than 3 farms or less than 3 enterprises reported in the 1940 Census.²Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.

CENSUS OF IRRIGATION - FLORIDA

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1940; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939—Continued

Martin	Orange	Osceola	Palm Beach	Pasco	Pinellas	Polk	Putnam	St. Johns	St. Lucie	Sarasota	Seminole	Sumter	Volusia	All other counties	
893,950	27,941,315	3,156,748	8,416,260	5,720,613	8,566,467	48,201,424	4,150,439	1,553,620	7,527,819	2,630,111	8,197,266	1,770,105	11,527,303	68,214,166	1
360,960	8,550,524	84,855	2,468,155	694,100	2,962,995	17,037,251	780,209	353,300	5,140,750	1,066,946	5,037,178	309,905	1,483,372	1,338,647	2
313,980	8,410,124	(1)	2,338,855	694,100	2,921,995	16,659,451	(1)	(1)	5,096,100	1,411,296	4,735,228	273,905	1,395,237	1,310,147	3
47,000	140,400	(2)	149,300	.....	41,000	377,800	(1)	(2)	44,650	255,050	301,950	36,000	58,075	28,500	4
40,105.67	34,065.83	10,806.88	27,958.80	22,390.32	33,670.40	50,106.56	15,004.02	7,517.02	17,485.54	23,876.55	15,890.15	3,130.35	22,475.33	15,040.98	5
35.97	357.28	193.29	105.23	167.41	345.90	129.28	134.54	106.64	64.31	258.79	211.90	21.47	178.25	67.47	6
8	197	8	81	29	82	267	50	45	218	58	238	96	65	85	7
39,800	1,100,761	11,300	452,034	60,070	321,997	1,370,568	200,809	102,500	633,386	197,732	841,770	80,925	212,769	322,300	8
4,975.00	5,587.62	1,412.50	5,580.67	2,070.69	3,926.79	5,133.21	4,016.18	2,277.78	2,919.20	3,530.93	2,922.81	842.97	8,273.37	3,791.76	9
3.97	46.00	25.74	19.12	14.48	37.59	10.40	34.63	30.94	7.95	30.71	35.41	5.61	25.57	16.24	10
83	1,455	377	481	987	573	2,562	727	295	204	117	384	665	1,223	28,212	11
122,405	3,364,714	566,611	915,430	1,113,623	1,421,627	3,694,538	1,110,145	449,416	427,721	216,665	788,774	433,655	2,390,750	21,371,697	12
1,474.76	2,312.52	1,502.95	1,903.18	1,123.29	2,481.02	1,442.05	1,527.02	1,523.44	2,095.67	1,851.84	2,051.10	652.11	1,063.79	753.99	13
4.51	18.10	1.16	16.19	10.89	70.94	11.30	17.55	14.67	5.72	0.97	18.79	4.97	9.41	5.61	14
9	149	7	88	22	72	206	51	46	158	57	278	94	64	76	15
73,480	308,274	5,075	320,151	23,740	123,718	618,104	100,596	83,234	212,592	137,304	400,819	45,760	82,620	140,349	16
8,161.44	2,068.95	725.00	3,638.19	1,079.09	1,718.31	3,000.50	1,975.47	1,809.11	1,345.52	2,408.84	1,441.70	486.81	1,294.06	1,846.70	17
7.32	12.88	11.56	13.54	5.73	11.11	4.69	17.35	25.12	2.36	21.32	16.86	3.17	9.05	7.07	18
82	736	257	677	537	375	1,618	586	255	110	88	206	325	908	23,370	19
43,680	419,734	104,844	941,993	222,245	272,067	668,580	262,645	139,094	63,145	49,860	145,250	143,159	411,101	5,396,689	20
1.61	2.26	0.21	16.66	2.17	12.58	2.04	4.15	4.51	0.89	0.22	3.46	1.64	1.61	1.42	21
5	189	7	84	20	69	336	53	47	282	90	304	91	62	8	22
2,124	61	43	200	60	64	77	50	42	53	108	25	10	25	21	23
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
5.0	2.0	.....	.....	2.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25
478	241	2	82	12	10	422	5	.....	12	89	6	.....	19	1	26
1.0	819.5	7.1	11.5	12.4	47.2	279.4	7.5	8.4	8.2	1.5	2,187.7	36.3	23.8	4.5	27
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	28
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(1)	1	29
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
.....	9	1	.....	.....	.....	4	145	52	442	209	1,760	.....	7	.....	31
.....	2,420	(1)	.....	.....	.....	230	25,978	5,090	84,940	27,520	275,217	.....	725	.....	32
.....	53	11	48	5	65	179	4	.....	19	5	139	123	64	16	33
.....	19,067	1,625	10,115	1,325	27,380	57,683	448	.....	1,788	2,400	24,295	30,490	18,298	4,200	34
16	219	6	119	21	73	381	8	.....	25	19	122	113	73	15	35
810	3,421	111	1,866	235	1,457	7,749	70	.....	109	352	887	876	443	133	36
235,500	98,900	2,175	387,815	9,155	34,790	213,393	2,798	.....	10,308	44,450	33,020	32,380	20,172	4,147	37
5	20	17	9	21	34	27	16	.....	15	11	18	13	13	19	38
.....	29	18	16	35	38	31	17	.....	17	21	9	13	14	15	39
.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	40
.....	(1)	.....	.....	.....	.....	(1)	.....	.....	.....	.....	.....	.....	.....	.....	41
.....	(1)	.....	.....	.....	.....	(1)	.....	.....	.....	.....	.....	.....	.....	.....	42
.....	(1)	.....	.....	.....	.....	(1)	.....	.....	.....	.....	.....	.....	.....	.....	43

³ Includes siphons and farm pipe lines reported.

⁴ Pay roll and number of employees reported only by enterprises serving 5 or more farms.