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...	1,453	27	1,255	88	55	24	4
2	Irrigated farms, 1939.....number...	4,291	.....	1,255	223	560	1,151	1,102
3	Area irrigated, 1939.....acres....	739,863	.....	443,747	79,394	83,426	66,216	67,080
4	(a) From which crops were harvested.....acres....	459,863	.....	251,119	45,183	55,226	51,237	57,098
5	(b) On which crops failed.....acres....	5,298	.....	3,318	68	95	100	1,717
6	(c) Irrigated pasture.....acres....	274,702	.....	189,310	34,143	28,105	14,879	8,265
	CAPITAL INVESTMENT, 1940							
7	Total capital investment in all enterprises.....dollars..	13,393,439	25,293	1,882,129	890,036	1,454,807	1,668,070	7,473,104
8	(a) Cost of irrigation works and equipment.....dollars..	12,868,726	24,968	1,708,104	842,099	1,249,029	1,651,922	7,392,604
9	(b) Investment in water rights.....dollars..	524,713	325	174,025	47,937	205,778	16,148	80,500
10	Area works were capable of supplying with water.....acres....	841,304	1,262	488,411	100,398	90,349	83,653	77,231
11	Average investment per acre irrigated.....dollars..	18.10	.....	4.24	11.21	17.44	25.19	111.41
12	Average investment per acre which the works could supply with water....dollars..	15.92	20.04	3.85	8.87	16.10	19.94	96.76
	MAINTENANCE AND OPERATION, AND CHARGES, 1939							
13	Enterprises reporting maintenance and operation.....number...	1,320	12	1,153	80	51	21	3
14	(a) Area irrigated in these enterprises.....acres....	688,722	.....	405,324	73,747	81,678	61,193	66,780
15	(b) Cost of maintenance and operation.....dollars..	293,859	135	140,417	17,149	25,527	44,812	65,819
16	(c) Average cost per irrigated acre reporting.....dollars..	0.43	.....	0.35	0.23	0.31	0.73	0.99
17	Total annual charges[3].....dollars..	304,084	.....	.....	580	28,427	44,009	231,068
18	Average charge per irrigated acre reporting.....dollars..	1.51	.....	.....	0.32	0.36	0.83	3.46
19	Area against which charges were assessed.....acres....	218,138	.....	.....	1,788	83,745	59,466	73,139
20	Average annual charge per acre assessed.....dollars..	1.39	.....	.....	0.32	0.34	0.74	3.16
21	Total charges collected[3].....dollars..	128,223	.....	.....	23	21,405	24,166	82,629
	INDEBTEDNESS AND ARREARAGE, 1939							
22	Enterprises reporting indebtedness[4].....number...	9	.....	.....	.....	3	4	2
23	(a) Area irrigated in these enterprises.....acres....	72,812	.....	.....	.....	6,000	66,812	
24	(b) Indebtedness.....dollars..	1,194,066	.....	.....	.....	23,500	1,170,566	
25	(c) Average indebtedness per acre irrigated.....dollars..	16.40	.....	.....	.....	3.92	17.52	
26	(d) Cost of irrigation works and equipment.....dollars..	7,088,751	.....	.....	.....	124,217	6,964,534	
27	(e) Investment in water rights.....dollars..	91,898	.....	.....	.....	10,000	81,898	
28	(f) Total investment.....dollars..	7,180,649	.....	.....	.....	134,217	7,046,432	
29	(g) Maintenance and operation.....dollars..	75,795	.....	.....	.....	4,310	71,485	
30	(h) Total annual charges[3].....dollars..	245,417	.....	.....	.....	5,959	239,458	
31	(i) Total charges collected[3].....dollars..	99,744	.....	.....	.....	4,381	95,363	
32	(j) Area against which annual charges were assessed.....acres....	80,745	.....	.....	.....	7,508	73,237	
33	(k) Average indebtedness per acre assessed.....dollars..	14.79	.....	.....	.....	3.13	15.98	
34	(l) Average charges per acre assessed.....dollars..	3.04	.....	.....	.....	0.79	3.27	
35	(m) Average charges per acre irrigated.....dollars..	3.37	.....	.....	.....	0.99	3.58	
	TYPE, 1940							
36	Individual and partnership.....number...	1,356	27	1,243	78	7	1	.....
37	Cooperative (incorporated and unincorporated).....number...	75	.....	7	7	45	15	1
38	Irrigation district.....number...	1	.....	.....	.....	1	.....	.....
39	Commercial.....number...	2	.....	.....	.....	.....	2	.....
40	U. S. Bureau of Reclamation.....number...	1	.....	.....	.....	.....	.....	1
41	U. S. Office of Indian Affairs.....number...	14	.....	2	2	2	6	2
42	All other.....number...	4	.....	3	1	.....	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939							
43	Enterprises reporting pay roll.....number...	60	.....	.....	2	36	19	3
44	Wages and salaries paid and payable for 1939.....dollars..	110,809	.....	.....	18,835		87,651	4,323
45	Persons employed during week ending April 29, 1939.....number...	245	.....	.....	78		108	59
	SOURCE OF WATER SUPPLY, 1939							
46	Streams, gravity.....number...	746	6	616	57	43	20	4
47	Streams, pumped.....number...	11	.....	10	1	.....	.....	.....
48	Wells, pumped.....number...	74	13	61	.....	.....	.....	.....
49	Wells, pumped and flowing; or wells flowing.....number...	109	1	106	1	1	.....	.....
50	Lakes, gravity or pumped.....number...	2	.....	2	.....	.....	.....	.....
51	Streams and springs; or springs.....number...	414	5	377	19	10	3	.....
52	Mixed, streams and wells.....number...	45	2	37	6	.....	.....	.....
53	Other mixed or stored storm water.....number...	52	.....	46	4	1	1	.....

	SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)	TOTAL	IRRIGATED FARMS					
			No farms[1]	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms
1	Enterprises, 1940.....number...	11	[2] 1	5	1	.....	3	[2] 1
2	Irrigated farms, 1939.....number...	462	.....	5	3	.....	138	316
3	Area irrigated, 1939.....acres....	84,722	.....	648		.....	19,074	65,000
	CAPITAL INVESTMENT, 1940							
4	Total capital investment in all enterprises.....dollars..	3,513,351	1,066,179	72,385		.....	1,570,070	804,717
5	(a) Cost of irrigation works and equipment.....dollars..	2,958,841	1,066,179	64,585		.....	1,028,360	799,717
6	(b) Investment in water rights.....dollars..	554,510	.....	7,800		.....	541,710	5,000
7	Area works were capable of supplying with water.....acres....	123,845	28,210	735		.....	21,000	73,900
8	Average investment per acre irrigated.....dollars..	41.47	.....	111.71		.....	82.31	12.38
9	Average investment per acre which the works could supply with water....dollars..	28.37	37.79	98.48		.....	74.77	10.89

[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.

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	
27	665	324	358	70	9	1,297	90	53	12	[2]1	1
.....	711	419	1,234	1,115	812	1,584	483	926	569	729	2
.....	21,161	54,554	258,171	213,289	192,688	361,722	96,920	128,456	95,294	57,471	3
.....	15,374	37,774	152,210	129,156	125,349	212,346	63,567	84,617	51,379	47,954	4
.....	647	642	1,987	85	1,937	2,955	241	385	20	1,717	5
.....	5,140	16,138	103,974	84,048	65,402	146,421	33,112	43,474	43,895	7,800	6
25,293	538,879	428,109	2,384,119	2,730,685	7,236,354	1,066,632	693,673	2,102,608	2,960,038	6,570,488	7
24,968	541,116	405,911	2,121,695	2,538,748	7,236,288	940,425	670,893	1,978,894	2,708,026	6,570,488	8
325	47,763	22,198	262,424	191,937	66	126,207	22,780	123,714	252,012	.....	9
1,262	28,971	64,743	285,538	242,463	218,327	394,929	103,583	161,179	114,825	66,788	10
.....	27.83	7.85	9.23	12.80	37.55	2.95	7.16	16.37	31.06	114.33	11
20.04	20.33	6.61	8.35	11.26	33.14	2.70	6.70	13.05	25.78	98.38	12
12	590	303	343	64	8	1,176	80	51	12	[2]1	13
.....	19,156	50,701	247,845	197,332	173,688	338,321	72,204	125,492	95,294	57,471	14
135	35,276	31,096	86,748	58,393	82,211	103,504	27,142	56,812	49,772	56,629	15
.....	1.84	0.61	0.35	0.30	0.47	0.31	0.38	0.45	0.52	0.99	16
.....	408	207	33,189	51,677	218,603	2,888	6,375	48,972	28,827	217,022	17
.....	3.89	0.32	0.96	0.56	2.94	0.21	0.22	0.68	0.98	3.78	18
.....	105	747	38,680	97,993	80,613	13,589	30,934	75,228	34,557	63,830	19
.....	3.89	0.28	0.86	0.53	2.71	0.21	0.21	0.65	0.83	3.40	20
.....	220	128	19,287	34,332	74,256	1,510	5,033	36,185	11,370	74,125	21
.....	.....	.....	3	5	[2]1	.....	1	6	1	[2]1	22
.....	.....	.....	2,880	12,461	57,471	.....	15,341			57,471	23
.....	.....	.....	2,163	51,334	1,140,569	.....	53,497			1,140,569	24
.....	.....	.....	0.75	4.12	19.85	.....	3.49			19.85	25
.....	.....	.....	112,862	405,401	6,570,488	.....	518,263			6,570,488	26
.....	.....	.....	16	91,882	.....	.....	91,898			.....	27
.....	.....	.....	112,878	497,283	6,570,488	.....	610,161			6,570,488	28
.....	.....	.....	5,297	13,869	56,629	.....	19,166			56,629	29
.....	.....	.....	5,830	22,565	217,022	.....	28,395			217,022	30
.....	.....	.....	5,170	20,449	74,125	.....	25,619			74,125	31
.....	.....	.....	3,043	13,872	63,830	.....	16,915			63,830	32
.....	.....	.....	0.71	3.70	17.87	.....	3.16			17.87	33
.....	.....	.....	1.92	1.60	3.40	.....	1.68			3.40	34
.....	.....	.....	2.02	1.81	3.78	.....	1.85			3.78	35
27	656	320	316	34	3	1,271	67	17	1	.....	36
.....	2	4	35	29	5	18	17	32	8	.....	37
.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	38
.....	.....	.....	.....	2	.....	.....	.....	2	.....	.....	39
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	40
.....	4	.....	6	4	.....	6	4	1	3	.....	41
.....	3	.....	1	.....	.....	2	2	.....	.....	.....	42
.....	1	3	29	25	2	13	17	23	6	[2]1	43
.....	421		43,750	66,638		4,328	11,046	47,776	46,201	1,458	44
.....	1		119	125		41	25	70	52	57	45
6	211	202	260	61	6	643	54	38	10	1	46
.....	7	4	.....	.....	.....	11	.....	.....	.....	.....	47
13	60	1	.....	.....	.....	71	3	.....	.....	.....	48
1	103	3	2	.....	.....	106	1	2	.....	.....	49
.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	50
5	239	93	69	6	2	387	17	8	2	.....	51
2	17	10	15	1	.....	33	10	2	.....	.....	52
.....	26	11	12	2	1	44	5	3	.....	.....	53

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	
[2]1	2	4	.....	2	2	3	2	2	4	.....	1
.....	2	6	.....	82	372	3	4	49	406	.....	2
.....	648		.....	84,074		135	2,513		82,074	.....	3
1,066,179	72,385		.....	2,374,787		1,000	139,885		3,372,466	.....	4
1,066,179	64,585		.....	1,828,077		1,000	132,085		2,825,756	.....	5
.....	7,800		.....	546,710		.....	7,800		546,710	.....	6
28,210	735		.....	94,900		135	2,600		121,110	.....	7
.....	111.71		.....	28.25		7.41	55.63		41.09	.....	8
37.79	98.48		.....	25.02		7.41	53.80		27.85	.....	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.

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

	SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)	TOTAL	IRRIGATED FARMS					
			No farms[1]	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms
	MAINTENANCE AND OPERATION, AND CHARGES, 1939							
10	Enterprises reporting maintenance and operation.....number...	10	.....	5	1	.....	3	[2] 1
11	(a) Area irrigated in these enterprises.....acres....	84,722	.....	648		.....	19,074	65,000
12	(b) Cost of maintenance and operation.....dollars..	38,705	.....	1,077		.....	17,656	19,972
13	(c) Average cost per irrigated acre reporting.....dollars..	0.46	.....	1.66		.....	0.93	0.31
14	Total annual charges[3].....dollars..	87,619	.....	.....	.....	.....	30,534	57,085
15	Average charge per irrigated acre reporting.....dollars..	1.04	.....	.....	.....	.....	1.60	0.88
16	Area against which charges were assessed.....acres....	102,049	.....	.....	.....	.....	21,874	80,175
17	Average annual charge per acre assessed.....dollars..	0.86	.....	.....	.....	.....	1.40	0.71
18	Total charges collected[3].....dollars..	79,069	.....	.....	.....	.....	24,517	54,552
	INDEBTEDNESS AND ARREARAGE, 1939							
19	Enterprises reporting indebtedness[4].....number...	4	[2] 1	.....	.....	.....	[2] 2	[2] 1
20	(a) Area irrigated in these enterprises.....acres....	82,074	.....	.....	.....	.....	17,074	65,000
21	(b) Indebtedness.....dollars..	2,740,249	1,066,179	.....	.....	.....	1,203,570	470,500
22	(c) Average indebtedness per acre irrigated.....dollars..	33.39	.....	.....	.....	.....	70.49	7.24
23	(d) Cost of irrigation works and equipment.....dollars..	2,825,756	1,066,179	.....	.....	.....	959,860	799,717
24	(e) Investment in water rights.....dollars..	546,710	.....	.....	.....	.....	541,710	5,000
25	(f) Total investment.....dollars..	3,372,466	1,066,179	.....	.....	.....	1,501,570	804,717
26	(g) Maintenance and operation.....dollars..	36,788	.....	.....	.....	.....	16,816	19,972
27	(h) Total annual charges[3].....dollars..	85,619	.....	.....	.....	.....	28,534	57,085
28	(i) Total charges collected[3].....dollars..	77,129	.....	.....	.....	.....	22,577	54,552
29	(j) Area against which annual charges were assessed.....acres....	100,049	.....	.....	.....	.....	19,874	80,175
30	(k) Average indebtedness per acre assessed.....dollars..	16.73	.....	.....	.....	.....	60.56	5.87
31	(l) Average charges per acre assessed.....dollars..	0.86	.....	.....	.....	.....	1.44	0.71
32	(m) Average charges per acre irrigated.....dollars..	1.04	.....	.....	.....	.....	1.67	0.88
	TYPE, 1940							
33	Individual and partnership.....number...	6	.....	5	1	.....	.....	.....
34	Cooperative (incorporated and unincorporated).....number...	2	.....	.....	.....	.....	2	.....
35	Irrigation district.....number...	1	.....	.....	.....	.....	.....	1
36	U. S. Bureau of Reclamation.....number...	2	1	.....	.....	.....	1	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939							
37	Enterprises reporting pay roll.....number...	5	[2] 1	.....	.....	.....	3	[2] 1
38	Wages and salaries paid and payable for 1939.....dollars..	49,833	27,916	.....	.....	.....	11,744	10,173
39	Persons employed during week ending April 29, 1939.....number...	30	11	.....	.....	.....	11	8
	SOURCE OF SUPPLEMENTAL WATER SUPPLY, 1939							
40	Wells, pumped or flowing.....number...	4	.....	3	1	.....	.....	.....
41	Streams, gravity or storage.....number...	7	1	2	.....	.....	3	1

[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.

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.			
			Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Annual mean	Departure[1]
Salmon Falls Creek		*Feet*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Degrees F.*	*Degrees F.*
San Jacinto	Elko	5,200	7.17	-0.72	2.22	+0.70	1.40	-0.40	3.05	-0.04	0.50	-0.98	46.0	+2.2
Humboldt River														
Battle Mountain	Lander	4,513	3.57	-2.47	0.93	-0.70	1.28	-0.59	1.01	-0.86	0.35	-0.32	51.0	+1.0
Lovelock	Pershing	3,977	4.78	+0.55	1.61	+0.52	1.76	+0.34	0.44	-0.63	0.97	+0.32	53.2	+2.0
Paradise Valley	Humboldt	4,650	6.62	-2.19	2.53	-0.01	2.14	-1.16	1.11	-0.90	0.84	-0.12	[2]	[2]
Truckee River														
Reno	Washoe	4,532	5.79	-1.84	0.59	-1.39	2.45	-1.08	0.81	-0.58	1.94	+1.21	53.4	+3.5
Tahoe, Calif.	Placer	6,230	18.45	-12.74	4.93	-3.98	8.75	-8.58	1.96	-2.01	2.81	+1.83	44.3	+2.0
Carson River														
Carson City	Ormsby	4,675	6.31	-3.06	1.27	-1.61	2.94	-1.74	0.97	-0.21	1.13	+0.50	51.0	+1.0
Fallon	Churchill	3,965	5.87	+1.15	1.25	+0.02	2.69	+1.24	0.79	-0.57	1.14	+0.46	51.8	+1.1
Walker River														
Bridgeport, Calif. (near)	Mono	6,440	6.87	-3.15	1.63	-0.63	2.84	-1.75	0.69	-1.39	1.71	+0.62	45.9	[2]
Yerington	Lyon	4,375	5.18	+0.63	0.50	-0.47	1.35	-0.05	2.74	+1.31	0.59	-0.16	51.2	+1.4
Meadow Valley Wash														
Caliente	Lincoln	4,407	[3] 0.47	[3] [4] +3.76	[3] 1.29	[3] +0.50	2.52	-0.32	1.52	+0.45	4.14	[4] +3.13	55.0	[2]
Ruby Valley														
Arthur	Elko	6,500	17.69	-0.18	5.85	+1.47	5.88	-0.65	3.08	-1.08	2.88	+0.08	[2]	[2]
Snake Valley														
Lehman Caves Nat'l Monument	White Pine	7,250	13.46	[2]	4.92	[2]	2.96	[2]	1.76	[2]	3.82	[2]	48.2	[2]
Goshute and Steptoe Valleys														
Kimberly	White Pine	7,250	14.13	+0.94	2.81	-0.39	4.66	-0.13	2.68	+0.16	3.98	+1.30	47.1	+1.0
Big Smoky Valley														
Austin	Lander	6,594	13.17	+1.07	3.80	+1.19	4.25	+0.39	2.28	-1.43	2.84	+0.92	47.4	+0.2
Ralston, Monitor, and Hot Creek Valleys														
Goldfield	Esmeralda	5,700	8.79	+2.38	0.54	-0.54	2.76	+0.92	1.85	+0.14	3.64	+1.86	51.5	+0.3
Pahranagat Valley														
Alamo	Lincoln	4,130	8.02	+1.87	1.63	+0.04	2.15	+0.45	1.26	-0.08	2.98	+1.46	58.2	+1.9
Amargosa and Las Vegas Area														
Beatty	Nye	3,310	6.52	+1.69	1.42	+0.19	1.71	-0.16	1.27	+0.22	2.12	+1.44	61.2	+2.7
Las Vegas	Clark	2,033	7.63	+3.01	0.86	-0.14	3.05	+1.51	0.73	+0.16	2.99	+1.48	66.6	+1.6
Searchlight	Clark	3,445	18.20	+10.41	1.98	+0.84	2.82	+0.40	1.32	+0.62	12.08	+8.55	63.0	-0.5
Smith Creek and Dixie Valley														
Mina	Mineral	4,350	3.21	-0.34	0.59	+0.01	1.13	+0.13	0.69	-0.52	0.80	+0.04	53.6	-0.2
Smoke Creek														
Gerlach	Washoe	3,980	3.80	-0.41	1.58	+0.32	0.97	-0.41	0.63	-0.40	0.62	+0.08	52.4	+1.8

[1]Departure from normal. [2]Data not available. [3]Does not include data for October 1938. [4]Does not include data for August 1939.

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	$1,500,000 to $9,999,999	
.....	2	4	.....	2	2	3	2	2	3	.....	10
.....	648		.....	84,074		135	2,513		82,074	.....	11
.....	1,077		.....	37,628		210	1,707		38,788	.....	12
.....	1.66		.....	0.45		1.56	0.68		0.45	.....	13
.....	.....	.....	.....	87,619		.....	.....	87,619		.....	14
.....	.....	.....	.....	1.04		.....	.....	1.04		.....	15
.....	.....	.....	.....	102,049		.....	.....	102,049		.....	16
.....	.....	.....	.....	0.86		.....	.....	0.86		.....	17
.....	.....	.....	.....	79,069		.....	.....	79,069		.....	18
[2]1	.....	.....	.....	[2]1	[2]2	.....	.....	.....	4	.....	19
.....	.....	.....	.....	5,200	76,874	.....	.....	.....	82,074	.....	20
1,066,179	.....	.....	.....	2,000	1,672,070	.....	.....	.....	2,740,249	.....	21
.....	.....	.....	.....	0.38	21.75	.....	.....	.....	33.30	.....	22
1,066,179	.....	.....	.....	175,000	1,584,577	.....	.....	.....	2,825,756	.....	23
.....	.....	.....	.....	125,000	421,710	.....	.....	.....	546,710	.....	24
1,066,179	.....	.....	.....	300,000	2,066,287	.....	.....	.....	3,372,466	.....	25
.....	.....	.....	.....	8,715	28,073	.....	.....	.....	36,788	.....	26
.....	.....	.....	.....	20,433	65,186	.....	.....	.....	85,619	.....	27
.....	.....	.....	.....	22,577	54,552	.....	.....	.....	77,129	.....	28
.....	.....	.....	.....	8,000	92,049	.....	.....	.....	100,049	.....	29
.....	.....	.....	.....	0.25	18.16	.....	.....	.....	16.73	.....	30
.....	.....	.....	.....	2.55	0.71	.....	.....	.....	0.86	.....	31
.....	.....	.....	.....	3.93	0.85	.....	.....	.....	1.04	.....	32
.....	2	4	.....	.....	.....	3	2	1	.....	.....	33
.....	.....	.....	.....	2	.....	.....	.....	1	1	.....	34
.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	35
1	.....	.....	.....	.....	1	.....	.....	.....	2	.....	36
[2]1	.....	.....	.....	2	2	.....	.....	1	4	.....	37
27,916	.....	.....	.....	21,917		.....	.....	49,833		.....	38
11	.....	.....	.....	19		.....	.....	30		.....	39
.....	1	3	.....	.....	.....	1	2	1	.....	.....	40
1	1	1	.....	2	2	2	.....	1	4	.....	41

[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.

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

Precipitation.—The average annual precipitation in Nevada for the calendar year of 1939 was 8.48 inches, a departure of -0.39 inches or 95.6 percent of normal, as reported by the U. S. Weather Bureau. The average snow fall was 28.3 inches. The precipitation was unevenly distributed, most stations in or near Sierra Nevada having large deficiencies and most stations in the south and east portions having excesses above normal. The greatest monthly amount fell at Searchlight, most of it in connection with a tropical disturbance which affected southern California and extreme southern Nevada. The number of days with precipitation was slightly above normal. Days clear, partly cloudy, and cloudy had approximately normal distribution.

There was sufficient water carried over in storage to offset the deficiencies of precipitation over the western mountains and the year was quite favorable for agriculture and range activities.

The average precipitation for the water year (October 1938 through September 1939) at 20 stations listed in State table 18 with complete records, and which are representative of the major drainage basins in Nevada was 8.58 inches, a departure of -3.40 from the average normal precipitation at these stations.

Temperature.—The year 1939 averages 2.0° warmer than normal. Only six years in the 51 years of record have been warmer. January, March, April, May, August, November and December were abnormally warm, December being the third warmest of record. February was the fifth coldest of record. The remaining months had temperatures not far from normal. Total precipitation was somewhat below normal. July, September and October had favorable amounts, March and April had about normal precipitation and the remaining months had totals below normal. The temperature distribution was fairly uniform over the State, all stations having temperature within one degree of normal or higher.

CENSUS OF IRRIGATION — NEVADA

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

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)		STATE TOTAL[1]	COLUMBIA RIVER			
				Snake River			
				Total[2]	Salmon Falls Creek (2)	Bruneau River (3)	East Fork Owyhee River* (4)
	IRRIGATED FARMS AND AREAS						
1	Irrigated farms	1939...number	4,291	247	13	24	172
2	Area irrigated	1939...acres	739,863	64,115	7,221	8,416	20,896
3	(a) Cropland harvested	1939...acres	459,863	46,397	6,201	3,809	12,444
4	(b) Crop failure	1939...acres	5,298	1,167	.....	44	222
5	(c) Pasture	1939...acres	274,702	16,551	1,020	4,563	8,230
6	Area irrigated	1929...acres	486,648	47,457	9,719	3,119	33,639
7		1919...acres	561,447	83,929	.....	1,297	57,632
8	Increase or decrease (-), 1929-1939	percent	52.0	35.1	-25.7	169.8	.....
9	Irrigable area in enterprises	1940...acres	915,689	100,008	10,750	8,896	46,827
10		1930...acres	983,717	63,358	12,457	4,866	45,055
11		1920[3]...acres	1,382,036	196,398	.....	2,708	143,690
12	Excess of irrigable area over the area irrigated	1940...acres	175,826	35,893	3,529	480	25,931
13		1930...acres	197,069	15,901	2,738	1,747	11,416
14		1920[3]...acres	820,589	112,469	.....	1,411	86,058
15	Area works were capable of supplying with water	1940...acres	841,304	71,081	8,930	8,896	21,410
16		1930...acres	736,249	51,571	12,307	3,279	35,005
17		1920...acres	704,708	114,510	.....	2,125	62,385
18	Increase or decrease (-), 1930-1940	percent	14.3	37.8	-27.4	171.3	.....
19	Excess of area works were capable of supplying with water over area irrigated	1940...acres	101,441	6,966	1,709	480	514
20		1930...acres	249,601	4,114	2,588	160	1,366
21		1920...acres	143,261	30,581	.....	828	4,753
22	Proportion which area irrigated is of area works were capable of supplying with water	1939...percent	87.9	90.2	80.9	94.6	97.6
23		1929...percent	66.1	92.0	79.0	95.1	96.1
24		1919...percent	79.7	73.3	.....	61.0	92.4
	CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises	1940...dollars	16,906,790	960,899	138,116	45,935	686,999
26	(a) Cost of irrigation works and equipment	1940...dollars	15,827,567	922,342	101,080	44,935	686,678
27	(b) Investment in water rights (reported)	1940...dollars	1,079,223	38,557	37,036	1,000	321
28	Total investment in irrigation enterprises	1930...dollars	15,457,931	453,192	81,345	48,867	322,880
29		1920...dollars	14,754,280	628,737	.....	42,210	192,772
30	Increase or decrease (-), 1930-1940	percent	9.4	112.0	69.8	-6.0	.....
31	Average investment based on area works were capable of supplying with water, per acre	1940...dollars	20.10	13.52	15.47	5.16	32.09
32		1930...dollars	21.00	8.79	6.61	14.90	9.22
33		1920...dollars	20.94	5.49	.....	19.86	3.09
34	Average investment per acre irrigated	1939...dollars	22.85	14.99	19.13	5.46	32.88
35	Estimated final investment in existing enterprises	1940...dollars	18,129,554	1,365,129	138,116	47,665	1,086,999
36	Average investment based on estimated final investment and irrigable area, per acre	1940...dollars	19.80	13.65	12.85	5.36	23.21
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		Primary Enterprises	Supplemental Enterprises	Primary Enterprises	Supplemental Enterprises	
37	Enterprises reporting maintenance and operation	1939...number	1,341	12	87	1	9	25	21
38	Area irrigated in these enterprises	1939...acres	688,722	84,722	61,850	(4)	5,956	8,416	20,896
39	Cost of maintenance and operation	1939...dollars	293,859	38,705	24,438	(4)	2,877	4,937	10,675
40	Average cost, per acre irrigated	1939...dollars	0.43	0.46	0.40	(4)	0.48	0.59	0.51
41	Total annual charges (reported)[5] [6]	1939...dollars	304,084	87,619	5,116	.....	.....	.....	5,066
42	Average annual charge per acre irrigated	1939...dollars	1.51	1.04	0.78	.....	.....	.....	0.80
43	Area against which charges were assessed	1939...acres	218,138	102,049	6,518	.....	.....	.....	6,318
44	Average annual charge per acre assessed	1939...dollars	1.39	0.86	0.78	.....	.....	.....	0.80
45	Total charges collected[5]	1939...dollars	128,223	79,069	.....	.....	.....	.....	.....
46	Indebtedness to December 31 (reported)[6]	1939...dollars	1,194,066	2,740,249	.....	.....	.....	.....	.....
	WATER DELIVERED TO IRRIGATORS, 1939								
47	Enterprises reporting water delivered	1939...number	1,123	11	32	.....	10	4	11
48	Area irrigated by these enterprises	1939...acres	627,502	84,622	32,153	.....	7,186	5,580	17,352
49	Water delivered	1939...acre-feet	1,871,256	291,980	218,970	.....	21,403	21,424	170,441
50	Average water delivered per acre irrigated	1939...acre-feet	3.0	3.5	6.8	.....	3.0	3.8	9.8
51	Average cost of water per acre irrigated	1939...dollars	0.76	1.05	0.49	.....	0.48	0.37	0.55
52	Average cost of water per acre-foot delivered	1939...dollars	0.25	0.30	0.07	.....	0.16	0.10	0.06
	DRAINAGE OF IRRIGATED LAND								
53	Enterprises reporting land drained or needing drainage	1939...number	37	.....	.....	.....	.....	.....	.....
54	Irrigable area in these enterprises	1939...acres	244,984	.....	.....	.....	.....	.....	.....
55	Irrigated area in these enterprises	1939...acres	180,044	.....	.....	.....	.....	.....	.....
56	Area for which drains have been installed	1939...acres	97,576	.....	.....	.....	.....	.....	.....
57	Additional area needing drainage	1939...acres	21,153	.....	.....	.....	.....	.....	.....

*1930 and 1920 data are totals for the Owyhee River; therefore, percentages are not shown.
[1]Data for unidentified independent basins for the 1930 and 1920 Censuses are included only in State total.
[2]Data for 2 enterprises in Goose Creek Drainage Basin (1) (number refers to separate map) are included with Snake River Drainage Basin total.
[3]For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

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

COLUMBIA RIVER—Con.	HUMBOLDT RIVER								
Snake River—Continued		Upper Humboldt River						Middle Humboldt River	
South Fork Owyhee River (5)	Total	Total	Direct (6)	Lamoille and Rabbit Creeks (7)	North Fork Humboldt River (8)	South Fork Humboldt River (9)	Maggie Creek (10)	Pine Creek (11)	Total
36	499	252	92	44	17	77	4	18	139
26,802	285,026	169,723	54,066	32,752	28,565	35,233	9,901	9,206	93,597
23,163	177,503	96,061	25,410	24,074	16,902	21,824	2,261	5,590	59,809
901	833	451	326	100	25	.....	.....	.....	357
2,738	106,690	73,211	28,330	8,578	11,638	13,409	7,640	3,616	33,431
.....	138,426	.....	.....	.....	9,090	33,795	.....	2,703	.....
.....	197,778	.....	.....	.....	7,940	33,052	.....	3,250	.....
.....	105.9	.....	.....	.....	214.2	4.3	.....	240.6	.....
32,535	333,575	187,800	57,464	40,876	33,090	35,473	9,901	10,996	106,414
.....	343,563	.....	.....	.....	9,311	37,442	.....	4,419	.....
.....	348,573	.....	.....	.....	28,697	48,338	.....	3,530	.....
5,733	48,549	18,077	3,398	8,124	4,525	240	.....	1,790	12,817
.....	205,137	.....	.....	.....	221	3,647	.....	1,716	.....
.....	150,795	.....	.....	.....	20,757	15,286	.....	280	.....
31,015	327,932	186,478	56,314	40,876	33,070	35,473	9,901	10,844	102,241
.....	287,501	.....	.....	.....	7,682	37,442	.....	4,359	.....
.....	231,251	.....	.....	.....	10,470	41,261	.....	3,250	.....
.....	14.1	.....	.....	.....	330.5	-5.3	.....	148.8	.....
4,213	42,906	16,755	2,248	8,124	4,505	240	.....	1,638	8,644
.....	149,075	.....	.....	.....	.....	3,647	.....	1,656	.....
.....	33,473	.....	.....	.....	2,530	8,209	.....	.....	.....
86.4	86.9	91.0	96.0	80.1	86.4	99.3	100.0	84.9	91.5
.....	48.1	.....	.....	.....	.....	90.3	.....	62.0	.....
.....	85.5	.....	.....	.....	75.8	80.1	.....	100.0	.....
89,739	2,948,109	783,543	563,759	24,349	136,757	14,360	4,300	40,018	570,486
89,539	2,212,307	596,603	386,342	24,300	134,257	14,395	4,300	33,069	441,144
200	735,802	186,940	177,417	49	2,500	25	.....	6,949	129,342
.....	2,559,497	.....	.....	.....	20,145	345,400	.....	20,252	.....
.....	1,751,566	.....	.....	.....	57,403	288,162	.....	2,809	.....
.....	15.2	.....	.....	.....	578.9	-95.8	.....	97.6	.....
2.89	8.99	4.20	10.01	0.60	4.14	0.40	0.43	3.69	5.58
.....	8.90	.....	.....	.....	2.62	9.22	.....	4.65	.....
.....	7.57	.....	.....	.....	5.48	6.98	.....	0.86	.....
3.35	10.34	4.62	10.43	0.74	4.79	0.41	0.43	4.35	6.10
92,239	3,051,727	784,943	565,159	24,349	136,757	14,360	4,300	40,018	592,534
2.84	9.15	4.18	9.84	0.60	4.13	0.40	0.43	3.64	5.57
Primary Enterprises	Sup. Enterprises	Primary Enterprises	Sup. Enterprises						Primary Enterprises	Sup. Enterprises
30	1	339	3	228	71	44	17	77	3	16	98	2
25,802	(4)	253,004	17,079	165,144	50,777	32,752	27,565	35,233	9,901	8,918	68,962	(4)
5,947	(4)	56,346	16,966	39,859	13,362	8,881	7,143	5,070	400	5,003	15,300	(4)
0.23	(4)	0.22	0.99	0.24	0.26	0.27	0.26	0.14	0.04	0.56	0.22	(4)
50	.....	6,497	28,534	1,193	943	.....	.....	.....	250	.....	1,000	20,433
0.25	.....	0.40	1.67	0.29	0.38	.....	.....	.....	0.15	.....	0.21	3.93
200	.....	16,834	19,874	4,827	3,196	.....	.....	.....	1,631	.....	4,751	8,000
0.25	.....	0.39	1.44	0.25	0.30	.....	.....	.....	0.15	.....	0.21	2.55
.....	.....	4,502	22,577	723	723	.....	.....	.....	.....	.....	.....	22,577
.....	.....	.....	1,203,570	.....	.....	.....	.....	.....	.....	.....	.....	2,000
5	.....	296	3	188	49	42	5	73	3	16	94	2
1,255	.....	243,936	17,079	138,368	37,013	32,162	16,107	34,944	9,901	8,241	83,862	(4)
2,977	.....	600,013	78,502	388,552	115,157	104,652	60,288	74,807	18,443	15,205	138,165	(4)
2.4	.....	2.5	4.6	2.8	3.1	3.3	3.7	2.1	1.9	1.8	1.6	(4)
0.38	.....	0.27	1.68	0.27	0.38	0.27	0.30	0.14	0.04	0.56	0.23	(4)
0.16	.....	0.11	0.37	0.10	0.12	0.08	0.08	0.07	0.02	0.30	0.14	(4)
.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
.....	.....	32,603	.....	.....	.....	.....	.....	.....	.....	.....	(4)	.....
.....	.....	13,336	.....	.....	.....	.....	.....	.....	.....	.....	(4)	.....
.....	.....	15,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	330	.....	.....	.....	.....	.....	.....	.....	.....	(4)	.....

[4] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[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 41 to 46, inclusive, relate to those enterprises only.

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)	HUMBOLDT RIVER — Continued			
		Middle Humboldt River—Continued			
		Direct (12)	Reese River (13)	Little Humboldt River (14)	Lower Humboldt River (15)
	IRRIGATED FARMS AND AREAS				
1	Irrigated farms....1939...number	48	55	36	108
2	Area irrigated....1939...acres	61,621	15,093	16,883	21,706
3	(a) Cropland harvested....1939...acres	37,614	10,410	11,785	21,633
4	(b) Crop failure....1939...acres	157	200	.....	25
5	(c) Pasture....1939...acres	23,850	4,483	5,098	48
6	Area irrigated....1929...acres	.....	2,952	3,785	.....
7	1919...acres	.....	11,178	6,350	.....
8	Increase or decrease (-), 1929-1939....percent	.....	411.3	346.1	.....
9	Irrigable area in enterprises....1940...acres	69,502	17,616	19,296	39,361
10	1930...acres	.....	3,364	31,370	.....
11	1920[1]...acres	.....	40,769	6,790	.....
12	Excess of irrigable area over the area irrigated..1940...acres	7,881	2,523	2,413	17,655
13	1930...acres	.....	412	27,585	.....
14	1920[1]...acres	.....	29,591	440	.....
15	Area works were capable of supplying with water...1940...acres	67,699	15,670	18,872	39,213
16	1930...acres	.....	3,324	31,370	.....
17	1920...acres	.....	10,898	6,950	.....
18	Increase or decrease (-), 1930-1940....percent	.....	371.4	-39.8	.....
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres	6,078	577	1,989	17,507
20	1930...acres	.....	372	27,585	.....
21	1920...acres	.....	.....	.....	.....
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	91.0	96.3	89.5	55.4
23	1929...percent	.....	88.8	12.1	.....
24	1919...percent	.....	.....	100.0	.....
	CAPITAL INVESTED TO JANUARY 1				
25	Total investment in irrigation enterprises....1940...dollars	471,797	41,899	56,790	1,594,080
26	(a) Cost of irrigation works and equipment....1940...dollars	345,381	38,973	56,790	1,174,560
27	(b) Investment in water rights (reported)....1940...dollars	126,416	2,926	.....	419,520
28	Total investment in irrigation enterprises....1930...dollars	.....	42,975	40,740	.....
29	1920...dollars	.....	79,120	2,544	.....
30	Increase or decrease (-), 1930-1940....percent	.....	-2.5	39.4	.....
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars	6.97	2.67	3.01	40.65
32	1930...dollars	.....	12.93	1.30	.....
33	1920...dollars	.....	7.26	0.40	.....
34	Average investment per acre irrigated....1939...dollars	7.66	2.78	3.36	73.44
35	Estimated final investment in existing enterprises..1940...dollars	472,845	61,899	57,790	1,674,250
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars	6.80	3.51	2.99	42.54
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterprises	Supplemental Enterprises		Primary Enterprises / Supplemental Enterprises
37	Enterprises reporting maintenance and operation...1939...number	39	2	24	35	13	[2] 1
38	Area irrigated in these enterprises....1939...acres	38,961	([3])	13,118	16,883	18,898	11,874
39	Cost of maintenance and operation....1939...dollars	5,621	([3])	5,459	4,220	1,187	8,101
40	Average cost, per acre irrigated....1939...dollars	0.14	([3])	0.42	0.25	0.06	0.68
41	Total annual charges (reported)[4] [5]....1939...dollars	250	20,433	750	.....	4,304	8,101
42	Average annual charge per acre irrigated....1939...dollars	0.15	3.93	0.24	.....	0.59	0.68
43	Area against which charges were assessed....1939...acres	1,631	8,000	3,120	.....	7,256	11,874
44	Average annual charge per acre assessed....1939...dollars	0.15	2.55	0.24	.....	0.59	0.68
45	Total charges collected[4]....1939...dollars	.....	22,577	.....	.....	3,779	.....
46	Indebtedness to December 31 (reported)[5]....1939...dollars	.....	2,000	.....	.....	.....	1,201,570
	WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered....1939...number	39	2	23	32	14	[2] 1
48	Area irrigated by these enterprises....1939...acres	58,545	([3])	13,185	12,132	21,706	11,874
49	Water delivered....1939...acre-feet	88,050	([3])	24,639	25,476	73,296	51,348
50	Average water delivered per acre irrigated....1939...acre-feet	1.5	([3])	1.9	2.1	3.4	4.3
51	Average cost of water per acre irrigated....1939...dollars	0.15	([3])	0.41	0.31	0.61	0.68
52	Average cost of water per acre-foot delivered..1939...dollars	0.10	([3])	0.22	0.15	0.18	0.16
	DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage....1939...number	.....	.....	2	.....	3	.....
54	Irrigable area in these enterprises....1939...acres	.....	.....	([3])	.....	31,138	.....
55	Irrigated area in these enterprises....1939...acres	.....	.....	([3])	.....	11,874	.....
56	Area for which drains have been installed....1939...acres	.....	.....	.....	.....	15,000	.....
57	Additional area needing drainage....1939...acres	.....	.....	([3])	.....	.....	.....

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

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

PYRAMID LAKE																	
			Truckee River														
Total		Direct	Total		Direct		Truckee Canal	Steamboat and Washoe Valleys	Carson River[a]		Truckee-Carson Rivers	LAHONTAN	Total		WALKER LAKE		
		(16)			(17)		(18)	(19)	(20)		(21)						
710		82	628		524		67	37	273		720		411				1
47,751		2,924	44,827		30,567		5,751	8,506	34,994		54,254		73,921				2
30,195		1,188	29,307		20,908		4,801	3,598	21,465		41,797		36,272				3
473		.....	473		131		172	170	158		1,545		66				4
16,783		1,736	15,047		9,528		781	4,738	13,371		7,912		37,583				5
39,026		.....	39,028		30,417		.....	3,214	72,872		.....		75,869				6
20,002		.....	20,002		14,606		.....	3,152	70,980		.....		113,361				7
22.1		.....	14.9		0.5		.....	161.7	.....		.....		-2.6				8
55,731		5,188	50,243		31,228		8,762	10,253	36,398		86,066		86,669				9
47,770		.....	47,770		38,971		.....	3,230	167,851		.....		175,788				10
31,659		.....	34,659		28,040		.....	3,298	226,641		.....		357,937				11
7,980		2,564	5,416		661		3,008	1,747	1,404		31,812		12,748				12
8,742		.....	8,742		8,554		.....	16	94,979		.....		99,919				13
14,657		.....	14,657		13,494		.....	146	155,661		.....		244,573				14
52,419		4,250	48,169		31,228		6,688	10,253	35,893		66,768		84,167				15
43,421		.....	43,424		34,625		.....	3,230	121,784		.....		78,305				16
20,920		.....	20,920		15,436		.....	3,218	99,645		.....		139,207				17
20.7		.....	10.9		-9.8		.....	217.4	.....		.....		7.5				18
1,668		1,326	3,942		661		934	1,747	899		12,514		10,246				19
4,306		.....	4,396		4,208		.....	16	48,912		.....		2,436				20
918		.....	918		830		.....	66	28,665		.....		25,843				21
91.1		68.8	93.1		97.9		86.0	83.0	97.5		81.3		87.8				22
89.9		.....	89.9		87.8		.....	99.5	59.8		.....		96.9				23
95.6		.....	95.6		94.6		.....	97.9	71.2		.....		81.4				24
2,510,348		95,926	2,714,422		2,008,629		648,517	57,276	388,942		6,168,815		1,696,862				25
2,783,415		95,926	2,687,489		1,991,752		648,517	47,220	386,105		6,168,815		1,678,290				26
26,933		.....	26,933		16,877		.....	10,056	2,837		.....		18,572				27
1,814,690		.....	1,814,690		1,572,525		.....	161,400	7,208,111		.....		1,476,954				28
594,187		.....	594,187		485,900		.....	42,070	8,024,300		.....		1,661,484				29
54.9		.....	49.6		27.7		.....	-64.5	.....		.....		14.9				30
53.61		22.57	56.35		64.32		96.97	5.59	10.84		92.39		20.16				31
41.79		.....	41.79		45.42		.....	49.97	59.19		.....		18.86				32
28.40		.....	28.40		31.48		.....	13.07	80.53		.....		11.94				33
58.85		32.81	60.55		65.71		112.71	6.73	11.11		113.70		23.96				34
3,170,419		321,176	2,849,243		2,143,050		648,517	57,676	458,372		6,207,165		1,759,462				35
56.89		58.52	56.71		68.63		74.01	5.63	12.59		72.12		20.30				36
Primary Enterprises	Sup.		Primary Enterprises	Sup.	Primary Enterprises	Sup.			Primary Enterprises	Sup.			Primary Enterprises	Sup.			
69	.....	10	59	.....	39	.....	[b] 2	18	96	3	8		55	3			37
44,664	.....	1,563	43,101	.....	29,736	.....	5,754	7,611	31,691	2,313	54,251		73,251	65,000			38
44,182	.....	3,126	41,056	.....	34,096	.....	5,671	1,289	9,065	1,457	55,956		22,968	19,972			39
0.99	.....	2.00	0.95	.....	1.15	.....	0.99	0.17	0.29	0.63	1.03		0.31	0.31			40
56,546	.....	2,956	53,590	.....	31,449	.....	21,731	410	2,288	2,000	199,540		13,556	57,085			41
1.65	.....	4.51	1.60	.....	1.25	.....	3.78	0.16	0.14	1.00	3.76		0.25	0.88			42
35,275	.....	655	34,620	.....	25,666	.....	6,392	2,562	16,861	2,000	61,687		60,899	80,175			43
1.60	.....	4.51	1.55	.....	1.23	.....	3.40	0.16	0.14	1.00	3.23		0.22	0.71			44
31,508	.....	.....	31,508	.....	23,906	.....	7,422	180	1,467	1,940	66,703		11,255	54,552			45
129,240	1,066,179	.....	129,240	1,066,179	14,798	1,066,179	113,942	500	.....	.....	1,026,627		22,500	470,500			46
73	.....	13	60	.....	37	.....	[b] 2	21	85	3	4		59	3			47
46,809	.....	2,924	43,885	.....	29,955	.....	5,754	8,176	31,401	2,313	53,274		69,645	65,000			48
196,290	.....	8,715	187,575	.....	156,427	.....	19,483	11,665	143,062	2,378	181,455		173,283	210,450			49
4.2	.....	3.0	4.3	.....	5.2	.....	3.4	1.4	4.6	1.0	3.4		2.5	3.2			50
1.39	.....	2.00	1.36	.....	1.19	.....	3.78	0.16	0.29	1.13	3.75		0.29	0.88			51
0.33	.....	0.67	0.32	.....	0.23	.....	1.12	0.12	0.06	1.10	1.10		0.12	0.27			52
8	.....	.....	8	.....	6	.....	[b] 2	.....	2	.....	[b] 2		8	.....			53
33,666	.....	.....	33,666	.....	24,904	.....	8,762	.....	[c]	.....	83,615		76,166	.....			54
30,562	.....	.....	30,562	.....	24,808	.....	5,754	.....	[c]	.....	53,013		66,569	.....			55
12,512	.....	.....	12,512	.....	8,113	.....	4,399	.....	[c]	.....	41,301		27,860	.....			56
6,206	.....	.....	3,206	.....	6,006	.....	200	.....	[c]	.....	3,800		8,975	.....			57

[a] 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.
[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.
[c] Data for 1930 and 1920 include a portion of the Newland Project, U. S. Bureau of Reclamation, therefore percent of increase or decrease not shown.

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)	WALKER LAKE—Continued			
			Walker River		
		Direct	Total	Direct	West Walker River
		(22)		(23)	(24)
	IRRIGATED FARMS AND AREAS				
1	Irrigated farms....1939...number....	77	334	222	100
2	Area irrigated....1939...acres....	3,646	70,275	44,133	18,967
3	(a) Cropland harvested....1939...acres....	814	35,458	23,160	10,415
4	(b) Crop failure....1939...acres....	.....	66	60	.....
5	(c) Pasture....1939...acres....	2,832	34,751	20,913	8,552
6	Area irrigated....1929...acres....	.....	75,869	72,057	.....
7	1919...acres....	.....	113,364	94,240	.....
8	Increase or decrease (-), 1929-1939....percent....	.....	-7.4	-38.8	.....
9	Irrigable area in enterprises....1940...acres....	7,371	79,298	49,881	22,042
10	1930...acres....	.....	175,788	170,420	.....
11	1920[2]...acres....	.....	357,937	294,990	.....
12	Excess of irrigable area over the area irrigated..1940...acres....	3,725	9,023	5,748	3,075
13	1930...acres....	.....	99,919	98,363	.....
14	1920[2]...acres....	.....	244,573	200,750	.....
15	Area works were capable of supplying with water...1940...acres....	5,154	79,013	49,596	22,042
16	1930...acres....	.....	78,305	74,000	.....
17	1920...acres....	.....	139,207	98,500	.....
18	Increase or decrease (-), 1930-1940....percent....	.....	0.9	-33.0	.....
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres....	1,508	8,738	5,463	3,075
20	1930...acres....	.....	2,436	1,943	.....
21	1920...acres....	.....	25,843	4,260	.....
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent....	70.7	88.9	89.0	86.0
23	1929...percent....	.....	96.9	97.4	.....
24	1919...percent....	.....	81.4	95.7	.....
	CAPITAL INVESTED TO JANUARY 1				
25	Total investment in irrigation enterprises....1940...dollars....	218,179	1,478,683	879,400	501,872
26	(a) Cost of irrigation works and equipment....1940...dollars....	215,679	1,462,611	865,051	500,554
27	(b) Investment in water rights (reported)....1940...dollars....	2,500	16,072	14,349	1,318
28	Total investment in irrigation enterprises....1930...dollars....	.....	1,476,954	1,446,454	.....
29	1920...dollars....	.....	1,661,484	1,466,889	.....
30	Increase or decrease (-), 1930-1940....percent....	.....	0.1	-39.2	.....
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars....	42.33	18.71	17.73	22.77
32	1930...dollars....	.....	18.86	19.55	.....
33	1920...dollars....	.....	11.04	14.89	.....
34	Average investment per acre irrigated....1939...dollars....	59.84	21.04	19.93	26.46
35	Estimated final investment in existing enterprises..1940...dollars....	272,179	1,487,283	888,000	501,872
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars....	36.93	18.76	17.80	22.77
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		Primary / Supplemental Enterprises	Primary / Supplemental Enterprises	Primary / Supplemental Enterprises
37	Enterprises reporting maintenance and operation...1939...number....	2	53 / 3	30 / 1	15 / 1
38	Area irrigated in these enterprises....1939...acres....	(4)	69,739 / 65,000	43,787 / (4)	18,957 / (4)
39	Cost of maintenance and operation....1939...dollars....	(4)	18,967 / 19,972	7,367 / (4)	7,495 / (4)
40	Average cost, per acre irrigated....1939...dollars....	(4)	0.27 / 0.31	0.17 / (4)	0.40 / (4)
41	Total annual charges (reported)[5] [6]....1939...dollars....	89	13,467 / 57,085	5,338 / 38,546	8,129 / 14,352
42	Average annual charge per acre irrigated....1939...dollars....	0.03	0.26 / 0.88	0.15 / 0.88	0.55 / 0.90
43	Area against which charges were assessed....1939...acres....	3,498	57,401 / 80,175	39,764 / 54,137	17,637 / 20,158
44	Average annual charge per acre assessed....1939...dollars....	0.03	0.23 / 0.71	0.13 / 0.71	0.46 / 0.71
45	Total charges collected[5]....1939...dollars....	85	11,170 / 54,552	5,251 / 36,836	5,919 / 13,715
46	Indebtedness to December 31 (reported)[6]....1939...dollars....	.....	22,500 / 470,500	..... / 317,696	22,500 / 118,299
	WATER DELIVERED TO IRRIGATORS, 1939				
47	Enterprises reporting water delivered....1939...number....	3	56 / 3	33 / 1	15 / 1
48	Area irrigated by these enterprises....1939...acres....	3,646	65,999 / 65,000	44,133 / (4)	16,526 / (4)
49	Water delivered....1939...acre-feet..	6,754	166,529 / 210,450	97,994 / (4)	56,922 / (4)
50	Average water delivered per acre irrigated....1939...acre-feet..	1.9	2.5 / 3.2	2.2 / (4)	3.4 / (4)
51	Average cost of water per acre irrigated....1939...dollars....	0.03	0.30 / 0.88	0.18 / (4)	0.50 / (4)
52	Average cost of water per acre-foot delivered..1939...dollars....	0.01	0.12 / 0.27	0.08 / (4)	0.14 / (4)
	DRAINAGE OF IRRIGATED LAND				
53	Enterprises reporting land drained or needing drainage....1939...number....	.....	8 /	6 /	2 / .....
54	Irrigable area in these enterprises....1939...acres....	.....	76,166 /	68,226 /	(4) / .....
55	Irrigated area in these enterprises....1939...acres....	.....	66,563 /	60,363 /	(4) / .....
56	Area for which drains have been installed....1939...acres....	.....	27,860 /	25,620 /	(4) / .....
57	Additional area needing drainage....1939...acres....	.....	8,975 /	7,775 /	(4) / .....

[1] Data for 1920 and 1930 Censuses are for Steptoe Creek only; therefore, percentages of increase or decrease are not shown.
[2] For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.
[3] Percent not shown when more than 1,000.

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

WALKER LAKE—Con.		COLORADO RIVER							INDEPENDENT BASINS					
Walker River—Con.				Virgin River										
						Muddy River								
East Walker River		Total	Direct	Total	Direct	Total	Direct	Meadow Valley Wash	Las Vegas Valley	Thousand Spring Creek	Clover Valley	Ruby Valley	Goshute and Steptoe Valleys[1]	Deep Creek	
(25)			(26)		(27)		(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	
12		660	16	533	124	409	230	179	111	14	20	29	62	11	1
7,175		13,880	52	11,263	2,304	8,959	4,099	4,860	2,565	2,775	13,290	29,033	9,253	1,220	2
1,863		10,607	28	9,409	2,181	7,228	3,717	3,511	1,170	2,715	4,231	14,775	5,925	1,135	3
6		111	.....	95	.....	95	16	79	16	.....	.....	.....	73	40	4
5,286		3,162	24	1,759	123	1,636	366	1,270	1,379	60	9,059	14,258	3,855	45	5
.....		12,308	240	2,070	.....	.....	.....	.....	.....	.....	.....	.....	4,557	.....	6
.....		8,546	.....	7,865	.....	.....	.....	.....	.....	.....	.....	.....	3,708	.....	7
.....		12.8	-78.3	444.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
7,375		19,425	234	15,699	3,462	12,237	5,490	6,747	3,492	9,259	14,205	32,407	11,028	1,234	9
.....		21,292	915	2,780	.....	.....	.....	.....	.....	.....	.....	.....	8,279	.....	10
.....		21,342	.....	17,259	.....	.....	.....	.....	.....	.....	.....	.....	12,069	.....	11
200		5,515	182	4,436	1,158	3,278	1,391	1,887	927	6,484	915	3,374	1,775	14	12
.....		8,984	675	710	.....	.....	.....	.....	.....	.....	.....	.....	3,722	.....	13
.....		12,796	.....	9,394	.....	.....	.....	.....	.....	.....	.....	.....	8,361	.....	14
7,375		17,047	194	13,684	2,812	10,872	5,150	5,722	3,169	4,893	14,070	32,407	10,524	1,231	15
.....		14,849	415	2,280	.....	.....	.....	.....	.....	.....	.....	.....	7,468	.....	16
.....		10,338	.....	9,460	.....	.....	.....	.....	.....	.....	.....	.....	3,628	.....	17
.....		14.8	-53.3	500.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18
200		3,167	142	2,421	508	1,913	1,051	862	604	2,118	780	3,374	1,271	14	19
.....		2,541	175	210	.....	.....	.....	.....	.....	.....	.....	.....	2,911	.....	20
.....		1,792	.....	1,595	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21
97.3		81.4	26.8	82.3	81.9	82.4	79.6	84.9	80.9	56.7	94.5	89.6	87.9	98.3	22
.....		82.9	57.8	90.8	.....	.....	.....	.....	.....	.....	.....	.....	61.0	.....	23
.....		82.7	.....	83.1	.....	.....	.....	.....	.....	.....	.....	.....	102.2	.....	24
97,411		597,038	3,677	472,662	68,649	404,013	293,727	110,286	120,699	296,215	7,340	7,620	45,144	13,806	25
97,006		493,817	3,677	370,585	67,633	302,952	213,201	89,751	119,555	296,180	7,170	7,620	42,139	13,806	26
405		103,221	.....	102,077	1,016	101,061	80,526	20,535	1,144	35	170	.....	3,005	.....	27
.....		223,631	37,850	41,000	.....	.....	.....	.....	.....	.....	.....	.....	222,870	.....	28
.....		415,953	.....	357,542	.....	.....	.....	.....	.....	.....	.....	.....	189,986	.....	29
.....		167.0	-90.3	(3)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
13.21		35.02	18.95	34.54	24.41	37.16	57.03	19.27	38.09	60.54	0.52	0.24	4.29	11.19	31
.....		15.06	91.20	17.98	.....	.....	.....	.....	.....	.....	.....	.....	29.84	.....	32
.....		40.24	.....	37.80	.....	.....	.....	.....	.....	.....	.....	.....	52.37	.....	33
13.58		43.01	70.71	41.97	29.80	45.10	71.66	22.69	47.06	106.74	0.55	0.26	4.88	11.32	34
97,411		678,973	5,292	543,912	68,649	475,263	307,377	167,886	129,769	296,215	7,340	7,635	46,384	13,806	35
13.21		34.95	22.62	31.65	19.83	38.84	55.99	24.88	37.16	31.99	0.52	0.24	4.21	11.19	36
Primary Enterprises	Sup.														
8	1	210	15	96	5	91	9	82	99	12	20	25	59	14	37
6,995	(4)	13,109	40	10,823	2,282	8,541	3,779	4,762	2,246	2,775	13,290	28,963	8,939	1,220	38
4,105	(4)	22,194	195	18,108	6,625	11,983	4,780	7,203	3,391	2,887	1,840	2,571	6,419	1,387	39
0.59	(4)	1.69	4.88	1.72	2.90	1.40	1.26	1.51	1.51	1.04	0.14	0.09	0.72	1.14	40
.....	4,187	15,787	.....	15,787	5,372	10,415	9,030	1,385	.....	.....	.....	.....	.....	.....	41
.....	0.79	2.64	.....	2.64	2.62	2.65	2.83	1.89	.....	.....	.....	.....	.....	.....	42
.....	5,880	6,078	.....	6,078	2,053	4,025	3,191	834	.....	.....	.....	.....	.....	.....	43
.....	0.71	2.60	.....	2.60	2.62	2.59	2.83	1.66	.....	.....	.....	.....	.....	.....	44
.....	4,001	10,079	.....	10,079	1,253	8,826	8,504	322	.....	.....	.....	.....	.....	.....	45
.....	34,511	15,699	.....	15,699	463	15,236	15,236	.....	.....	.....	.....	.....	.....	.....	46
8	1	160	12	92	4	88	11	77	56	9	9	21	53	14	47
5,340	(4)	11,340	45	10,069	1,286	8,783	4,099	4,684	1,226	2,460	5,752	28,108	6,970	1,220	48
11,613	(4)	55,593	38	47,951	6,352	41,599	20,270	21,329	7,604	13,266	4,900	30,943	15,869	5,106	49
2.2	(4)	4.9	0.8	4.8	4.9	4.7	4.9	4.6	.....	5.4	0.9	1.1	2.3	4.2	50
0.69	(4)	1.99	4.94	1.90	1.71	1.94	2.55	1.43	2.63	1.15	0.15	0.08	0.88	1.14	51
0.32	(4)	0.41	5.82	0.40	0.35	0.41	0.51	0.31	0.42	0.21	0.17	0.07	0.39	0.27	52
.....	.....	3	.....	3	.....	3	3	.....	.....	.....	.....	2	1	.....	53
.....	.....	905	.....	905	.....	905	905	.....	.....	.....	.....	(4)	(4)	.....	54
.....	.....	552	.....	552	.....	552	552	.....	.....	.....	.....	(4)	(4)	.....	55
.....	.....	20	.....	20	.....	20	20	.....	.....	.....	.....	(4)	.....	.....	56
.....	.....	360	.....	360	.....	360	360	.....	.....	.....	.....	(4)	(4)	.....	57

[4] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[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 41 to 46, inclusive, relate to those enterprises only.

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)	INDEPENDENT BASINS—Continued					
		Snake Valley (36)	Spring Valley (37)	Crescent, Diamond, Grass, and Newark Valleys (38)	Big Smoky Valley (39)	Ralston, Monitor, and Hot Creek Valleys (40)	Railroad Valley (41)
	IRRIGATED FARMS AND AREAS						
1	Irrigated farms....1939...number	15	22	55	27	38	37
2	Area irrigated....1939...acres	2,938	10,932	19,998	6,316	7,681	9,753
3	(a) Cropland harvested....1939...acres	1,414	4,529	11,726	3,134	1,948	6,817
4	(b) Crop failure....1939...acres	28	87	96	17	.....	20
5	(c) Pasture....1939...acres	1,496	6,316	8,176	3,165	5,733	2,916
6	Area irrigated....1929...acres	.....	.....	.....	.....	.....	.....
7	1919...acres	.....	.....	.....	.....	.....	.....
8	Increase or decrease (-), 1929-1939....percent	.....	.....	.....	.....	.....	.....
9	Irrigable area in enterprises....1940...acres	4,962	12,804	21,064	6,557	9,332	10,439
10	1930...acres	.....	.....	.....	.....	.....	.....
11	1920[1]...acres	.....	.....	.....	.....	.....	.....
12	Excess of irrigable area over the area irrigated...1940...acres	2,024	1,872	1,066	241	1,651	686
13	1930...acres	.....	.....	.....	.....	.....	.....
14	1920[1]...acres	.....	.....	.....	.....	.....	.....
15	Area works were capable of supplying with water...1940...acres	4,042	11,564	20,911	6,557	9,217	10,218
16	1930...acres	.....	.....	.....	.....	.....	.....
17	1920...acres	.....	.....	.....	.....	.....	.....
18	Increase or decrease (-), 1930-1940....percent	.....	.....	.....	.....	.....	.....
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres	1,104	632	913	241	1,536	465
20	1930...acres	.....	.....	.....	.....	.....	.....
21	1920...acres	.....	.....	.....	.....	.....	.....
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	75.1	94.5	95.6	96.3	83.3	95.4
23	1929...percent	.....	.....	.....	.....	.....	.....
24	1919...percent	.....	.....	.....	.....	.....	.....
	CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises....1940...dollars	42,406	61,205	154,566	84,334	134,095	24,118
26	(a) Cost of irrigation works and equipment....1940...dollars	25,696	63,245	133,565	74,269	73,170	21,735
27	(b) Investment in water rights (reported)....1940...dollars	16,710	960	21,001	10,065	60,925	2,383
28	Total investment in irrigation enterprises....1930...dollars	.....	.....	.....	.....	.....	.....
29	1920...dollars	.....	.....	.....	.....	.....	.....
30	Increase or decrease (-), 1930-1940....percent	.....	.....	.....	.....	.....	.....
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars	10.79	5.55	7.39	12.86	14.55	2.36
32	1930...dollars	.....	.....	.....	.....	.....	.....
33	1920...dollars	.....	.....	.....	.....	.....	.....
34	Average investment per acre irrigated....1939...dollars	14.37	5.87	7.73	13.35	17.46	2.47
35	Estimated final investment in existing enterprises...1940...dollars	52,136	114,805	158,191	91,084	136,545	26,118
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars	10.75	8.97	7.51	13.89	14.63	2.50
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS				Primary Enterprises	Supplemental Enterprises	
37	Enterprises reporting maintenance and operation...1939...number	17	20	45	24	1	27	24
38	Area irrigated in these enterprises....1939...acres	2,936	8,393	19,606	6,209	(2)	7,609	9,753
39	Cost of maintenance and operation....1939...dollars	2,410	5,090	7,058	2,559	(2)	3,178	2,871
40	Average cost, per acre irrigated....1939...dollars	0.82	0.61	0.36	0.41	(2)	0.42	0.29
41	Total annual charges (reported)[3] [4]....1939...dollars	.....	.....	.....	.....	.....	.....	1,400
42	Average annual charge per acre irrigated....1939...dollars	.....	.....	.....	.....	.....	.....	0.23
43	Area against which charges were assessed....1939...acres	.....	.....	.....	.....	.....	.....	6,000
44	Average annual charge per acre assessed....1939...dollars	.....	.....	.....	.....	.....	.....	0.23
45	Total charges collected[3]....1939...dollars	.....	.....	.....	.....	.....	.....	.....
46	Indebtedness to December 31 (reported)[4]....1939...dollars	.....	.....	.....	.....	.....	.....	.....
	WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered....1939...number	16	22	30	22	1	14	4
48	Area irrigated by these enterprises....1939...acres	2,938	10,932	13,796	5,520	(2)	5,468	6,324
49	Water delivered....1939...acre-feet	5,778	17,918	45,605	15,454	(2)	14,354	18,556
50	Average water delivered per acre irrigated....1939...acre-feet	2.0	1.6	3.3	2.8	(2)	2.6	2.9
51	Average cost of water per acre irrigated....1939...dollars	0.82	0.61	0.40	0.45	(2)	0.48	0.30
52	Average cost of water per acre-foot delivered...1939...dollars	0.42	0.37	0.12	0.16	(2)	0.18	0.10
	DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage....1939...number	.....	1	.....	3	.....	.....	.....
54	Irrigable area in these enterprises....1939...acres	.....	(2)	.....	955	.....	.....	.....
55	Irrigated area in these enterprises....1939...acres	.....	(2)	.....	785	.....	.....	.....
56	Area for which drains have been installed....1939...acres	.....	.....	.....	.....	.....	.....	.....
57	Additional area needing drainage....1939...acres	.....	(2)	.....	130	.....	.....	.....

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

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

	White River (42)	Pahranagat Valley (43)	Amargosa River (44)	Fish Lake Valley (45)	Smith Creek and Dixie Valley (46)	Sonoma-Clear Creeks (47)	Black Rock Desert (48)	Quinn River (49)	Cowhead and Warner Lakes (50)	Surprise Valley (51)	Smoke Creek (52)	Honey Lake (53)	
INDEPENDENT BASINS—Continued													
	92	65	17	13	42	8	53	97	4	16	13	18	1
	5,727	6,302	1,246	3,179	4,449	1,073	6,895	18,777	660	2,458	904	1,063	2
	4,126	3,303	207	899	3,647	728	5,413	12,896	290	1,630	644	795	3
	32	5	125	.....	24	10	295	93	.....	.....	.....	.....	4
	1,569	2,994	914	2,280	778	335	1,187	5,788	370	828	260	268	5
	.....	.....	.....	.....	.....	.....	.....	8,518	.....	.....	.....	.....	6
	.....	.....	.....	.....	.....	.....	.....	9,935	.....	.....	.....	.....	7
	.....	.....	.....	.....	.....	.....	.....	120.4	.....	.....	.....	.....	8
	7,284	7,135	1,715	4,402	5,148	1,440	10,318	21,638	660	2,604	1,037	1,145	9
	.....	.....	.....	.....	.....	.....	.....	11,060	.....	.....	.....	.....	10
	.....	.....	.....	.....	.....	.....	.....	19,635	.....	.....	.....	.....	11
	1,557	833	469	1,223	699	367	3,423	2,861	.....	146	133	82	12
	.....	.....	.....	.....	.....	.....	.....	2,542	.....	.....	.....	.....	13
	.....	.....	.....	.....	.....	.....	.....	9,700	.....	.....	.....	.....	14
	6,359	7,135	1,699	3,767	5,028	1,440	8,672	20,814	660	2,604	1,037	1,145	15
	.....	.....	.....	.....	.....	.....	.....	10,927	.....	.....	.....	.....	16
	.....	.....	.....	.....	.....	.....	.....	13,452	.....	.....	.....	.....	17
	.....	.....	.....	.....	.....	.....	.....	90.5	.....	.....	.....	.....	18
	632	833	453	588	579	367	1,777	2,037	.....	146	133	82	19
	.....	.....	.....	.....	.....	.....	.....	2,409	.....	.....	.....	.....	20
	.....	.....	.....	.....	.....	.....	.....	3,517	.....	.....	.....	.....	21
	90.1	88.3	73.3	84.4	88.5	74.5	79.5	90.2	100.0	94.4	87.2	92.8	22
	.....	.....	.....	.....	.....	.....	.....	78.0	.....	.....	.....	.....	23
	.....	.....	.....	.....	.....	.....	.....	73.9	.....	.....	.....	.....	24
	56,655	51,280	49,120	30,475	54,133	26,090	59,064	41,150	2,110	14,681	19,274	27,896	25
	71,260	50,200	45,350	27,975	51,251	20,420	56,669	39,800	2,110	12,778	18,172	27,896	26
	15,395	1,080	3,770	2,500	2,882	5,670	2,395	1,350	.....	1,903	1,102	.....	27
	.....	.....	.....	.....	.....	.....	.....	68,858	.....	.....	.....	.....	28
	.....	.....	.....	.....	.....	.....	.....	50,548	.....	.....	.....	.....	29
	.....	.....	.....	.....	.....	.....	.....	40.2	.....	.....	.....	.....	30
	13.63	7.19	28.91	8.09	10.77	18.12	6.81	1.98	3.20	5.64	18.59	24.36	31
	.....	.....	.....	.....	.....	.....	.....	6.30	.....	.....	.....	.....	32
	.....	.....	.....	.....	.....	.....	.....	3.76	.....	.....	.....	.....	33
	15.13	8.14	39.42	9.59	12.17	24.32	8.57	2.19	3.20	5.97	21.32	26.24	34
	86,805	51,280	49,120	32,400	55,433	26,090	63,109	59,850	2,110	14,681	19,274	27,896	35
	11.92	7.19	28.64	7.36	10.77	18.12	6.12	2.77	3.20	5.64	18.59	24.36	36
Primary Enterprises	Sup.												
17	1	8	19	12	27	7	34	29	2	14	8	13	37
5,395	(2)	6,142	1,246	3,177	4,114	973	5,446	15,922	(2)	2,358	793	1,061	38
2,490	(2)	1,850	856	1,165	2,721	695	5,925	3,533	(2)	657	445	578	39
0.46	(2)	0.30	0.69	0.37	0.66	0.71	0.98	0.22	(2)	0.28	0.56	0.54	40
1,568	.....	1,124	.....	.....	100	.....	.....	.....	.....	252	252	28	41
0.71	.....	0.31	.....	.....	0.10	.....	.....	.....	.....	0.51	0.51	3.50	42
2,248	.....	3,770	.....	.....	980	.....	.....	.....	.....	490	490	8	43
0.71	.....	0.30	.....	.....	0.10	.....	.....	.....	.....	0.51	0.51	3.50	44
1,950	.....	759	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
13	1	8	14	13	41	6	31	30	3	15	12	14	47
3,283	(2)	6,297	1,205	3,179	4,449	959	6,265	18,721	660	2,458	904	1,063	48
6,109	(2)	17,754	11,459	1,248	15,663	1,300	18,414	32,282	522	4,883	2,316	2,891	49
1.9	(2)	2.8	9.5	0.4	3.5	1.4	2.9	1.7	0.8	2.0	2.6	2.7	50
0.62	(2)	0.31	0.63	0.37	0.66	0.70	1.06	0.22	0.22	0.28	0.56	0.54	51
0.34	(2)	0.11	0.07	0.93	0.19	0.52	0.36	0.13	0.27	0.14	0.22	0.20	52
.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
.....	.....	(2)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
.....	.....	(2)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55
.....	.....	(2)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
.....	.....	(2)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57

[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.

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				
				Snake River				
				Total[2]	Salmon Falls Creek (2)	Bruneau River (3)	East Fork Owyhee River* (4)	South Fork Owyhee River (5)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1	Enterprises	1940..number	[3]1,488	94	11	25	21	35
2	Average size of enterprise based on area works were capable of supplying with water	1940..acres	565	756	812	356	1,020	886
3	Diversion dams	1940..total number	1,896	310	79	78	54	99
4		1930..total number	1,640	296	21	60	214	.....
5		1920..total number	1,523	247	.....	31	181	.....
6	(a) Concrete and masonry	1940..number	95	1	.....	.....	1	.....
7	(b) Timber	1940..number	84	3	.....	.....	.....	3
8	(c) Earth and rock	1940..number	1,077	224	51	66	24	83
9	(d) Other, mixed, and not reported	1940..number	640	82	28	12	29	13
10	Main canals and laterals	1940..total length, miles	2,897.2	449.2	65.0	33.2	93.0	258.0
11		1930..total length, miles	4,155	321	112	51	158	.....
12		1920..total length, miles	4,368	539	.....	34	335	.....
13	(a) Earth	1940..length, miles	2,845	423	39	33	93	258
14	(b) Lined	1940..length, miles	52.2	26.2	26.0	0.2	.....	.....
15		1940..capacity, c.f.s.[4]	22,930	1,380	224	110	635	394
16		1930..capacity, c.f.s.[4]	16,986	1,022	366	117	539	.....
17		1920..capacity, c.f.s.[4]	10,554	680	.....	55	525	.....
18	Pipe lines[5]	1940..total length, miles	104.7	1.1	.....	.....	0.3	0.8
19		1930..total length, miles	90.6	0.6	.....	0.5	0.1	.....
20		1920..total length, miles	33.0	0.7	.....	0.6	0.1	.....
21	(a) Concrete	1940..length, miles	8.7	0.3	.....	.....	0.3	.....
22	(b) Metal	1940..length, miles	77.7	0.8	.....	.....	.....	0.8
23	(c) Wood-stave	1940..length, miles	12.1	.....	.....	.....	.....	.....
24	(d) Other	1940..length, miles	6.2	.....	.....	.....	.....	.....
25	Storage dams	1940..total number	122	2	.....	.....	1	1
26		1930..total number	118	1	.....	.....	1	.....
27		1920..total number	83	3	.....	1	2	.....
28	(a) Concrete and masonry	1940..number	8	2	.....	.....	1	1
29	(b) Earth and rock	1940..number	110	.....	.....	.....	.....	.....
30	(c) Other, mixed, and not reported	1940..number	4	.....	.....	.....	.....	.....
31	Reservoirs	1940..total number	200	2	.....	.....	[6]1	1
32	(a) 1-99 acre-feet capacity	1940..number	168	.....	.....	.....	.....	.....
33	(b) 100-999 acre-feet capacity	1940..number	14	.....	.....	.....	.....	.....
34	(c) 1,000 and over acre-feet capacity	1940..number	18	2	.....	.....	1	1
35		1940..total capacity, ac.-ft.[7]	696,005	(8)	.....	.....	32,000	(8)
36		1930..total number	209	2	.....	1	1	.....
37		1930..total capacity, ac.-ft.	529,369	1,360	.....	160	1,200	.....
38	Wells, flowing	1940..number	322	.....	.....	.....	.....	.....
39		1930..number	274	.....	.....	.....	.....	.....
40		1920..number	123	.....	.....	.....	.....	.....
41		1940..yield, g.p.m.	39,835	.....	.....	.....	.....	.....
42		1930..yield, g.p.m.	19,131	.....	.....	.....	.....	.....
43		1920..yield, g.p.m.	21,942	.....	.....	.....	.....	.....
44	Wells, pumped	1940..number	167	1	.....	.....	.....	1
45		1930..number	147	1	.....	.....	1	.....
46		1920..number	129	1	.....	.....	1	.....
47		1940..yield, g.p.m.	50,938	(8)	.....	.....	.....	(8)
48		1930..yield, g.p.m.	54,162	20	.....	.....	20	.....
49		1920..yield, g.p.m.	6,798	25	.....	.....	25	.....
50	Pumping plants	1940..total number	192	2	.....	.....	.....	2
51		1930..total number	157	1	.....	.....	1	.....
52	Prime movers	1940..capacity, hp.	2,262	(8)	.....	.....	.....	(8)
53		1930..capacity, hp.	2,671	20	.....	.....	20	.....
54		1920..capacity, hp.	409	6	.....	.....	6	.....
55	(a) Electric	1940..number	46	.....	.....	.....	.....	.....
56		1940..capacity, hp.	1,040	.....	.....	.....	.....	.....
57	(b) Internal-combustion	1940..number	103	2	.....	.....	.....	2
58		1940..capacity, hp.	1,060	(8)	.....	.....	.....	(8)
59	(c) Other	1940..number	43	.....	.....	.....	.....	.....
60		1940..capacity, hp.	162	.....	.....	.....	.....	.....
61	Pumps	1940..total number	196	2	.....	.....	.....	2
62		1930..number	173	1	.....	.....	1	.....
63		1920..number	72	1	.....	.....	1	.....
64		1940..capacity, g.p.m.	141,065	(8)	.....	.....	.....	(8)
65		1930..capacity, g.p.m.	115,648	30	.....	.....	30	.....
66		1920..capacity, g.p.m.	35,266	350	.....	.....	350	.....
67	(a) Centrifugal	1940..number	101	2	.....	.....	.....	2
68		1940..capacity, g.p.m.	86,857	(8)	.....	.....	.....	(8)
69		1940..average capacity, g.p.m.	860	(8)	.....	.....	.....	(8)
70	(b) Turbine	1940..number	25	.....	.....	.....	.....	.....
71		1940..capacity, g.p.m.	41,258	.....	.....	.....	.....	.....
72		1940..average capacity, g.p.m.	1,650	.....	.....	.....	.....	.....
73	(c) Plunger	1940..number	62	.....	.....	.....	.....	.....
74		1940..capacity, g.p.m.	1,739	.....	.....	.....	.....	.....
75		1940..average capacity, g.p.m.	28	.....	.....	.....	.....	.....
76	(d) Other	1940..number	8	.....	.....	.....	.....	.....
77		1940..capacity, g.p.m.	11,211	.....	.....	.....	.....	.....
78	Pumping lift, from all sources	1940..average, feet	31	(8)	.....	.....	.....	(8)
79		1930..average, feet	31	10	.....	.....	10	.....
80		1920..average, feet	22	30	.....	.....	30	.....
81	from pumped wells	1940..average, feet	31	(8)	.....	.....	.....	(8)
82	from surface sources	1940..average, feet	31	(8)	.....	.....	.....	(8)

* 1930 and 1920 data are totals for the Owyhee River.

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

[2] Data for 2 enterprises in Goose Creek Drainage Basin (1) (number refers to separate map) are included with Snake River Drainage Basin total.

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

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

WORKS, 1940, 1930, AND 1920

HUMBOLDT RIVER												PYRAMID LAKE		
	Upper Humboldt River							Middle Humboldt River						
Total	Total	Direct (6)	Lamoille and Rabbit Creeks (7)	North Fork Humboldt River (8)	South Fork Humboldt River (9)	Maggie Creek (10)	Pine Creek (11)	Total	Direct (12)	Reese River (13)	Little Humboldt River (14)	Lower Humboldt River (15)	Total	Direct (16)	
358	233	73	44	18	77	3	18	110	48	27	35	15	82	13	1
916	800	771	929	1,837	461	3,300	602	929	1,410	580	539	2,614	639	327	2
750	439	130	58	80	77	22	72	298	75	90	133	13	77	4	3
618	.....	.....	.....	51	30	.....	23	.....	.....	27	27	.....	65	.....	4
715	.....	.....	.....	47	161	.....	.....	.....	.....	47	6	.....	54	.....	5
38	7	3	1	2	.....	.....	1	23	10	.....	13	8	15	1	6
14	4	.....	.....	.....	1	.....	3	8	8	.....	.....	2	7	.....	7
309	158	65	10	38	6	2	28	148	13	65	70	3	41	3	8
389	270	62	38	40	70	20	40	119	44	25	50	.....	14	.....	9
569.0	197.0	91.0	23.0	55.0	13.0	5.0	10.0	304.0	86.0	79.0	139.0	68.0	315.0	21.1	10
1,303	.....	.....	.....	41	300	.....	71	.....	.....	23	41	.....	350	.....	11
1,573	.....	.....	.....	131	383	.....	1	.....	.....	241	4	.....	172	.....	12
568	196	90	23	55	13	5	10	304	86	79	139	68	310	21	13
1.0	1.0	1.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.0	0.1	14
8,481	4,956	1,413	1,378	313	1,363	254	235	2,827	1,733	382	712	698	3,199	146	15
5,253	.....	.....	.....	83	587	.....	76	.....	.....	57	260	.....	3,137	.....	16
1,204	.....	.....	.....	48	297	.....	.....	.....	.....	155	.....	.....	2,465	.....	17
12.3	6.7	.....	.....	0.5	0.2	.....	6.0	3.0	2.7	.....	0.3	2.6	6.5	1.6	18
15.3	.....	.....	.....	.....	.....	.....	1.5	.....	.....	6.2	1.0	.....	0.7	.....	19
15.7	.....	.....	.....	0.4	.....	.....	.....	.....	.....	.....	.....	.....	0.9	.....	20
0.7	.....	.....	.....	.....	.....	.....	.....	0.5	0.5	.....	.....	0.2	0.6	0.6	21
9.3	6.7	.....	.....	0.5	0.2	.....	6.0	2.2	2.2	.....	.....	0.4	2.3	1.0	22
2.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.0	3.1	.....	23
0.3	.....	.....	.....	.....	.....	.....	.....	0.3	.....	.....	0.3	.....	0.5	.....	24
13	2	2	.....	.....	.....	.....	.....	7	7	.....	.....	4	16	.....	25
13	.....	.....	.....	.....	1	.....	2	.....	.....	.....	1	.....	5	.....	26
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	27
3	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	1	1	.....	28
9	1	1	.....	.....	.....	.....	.....	5	5	.....	.....	3	15	.....	29
1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
19	2	2	.....	.....	.....	.....	.....	14	14	.....	.....	3	16	2	31
14	.....	.....	.....	.....	.....	.....	.....	12	12	.....	.....	2	15	2	32
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33
5	2	2	.....	.....	.....	.....	.....	2	2	.....	.....	1	1	.....	34
241,062	(8)	(8)	.....	.....	.....	.....	.....	49,849	49,849	.....	.....	179,180	5,197	(8)	35
21	.....	.....	.....	.....	2	.....	3	.....	.....	1	1	.....	2	.....	36
105,611	.....	.....	.....	.....	2,150	.....	4	.....	.....	200	50	.....	1,100	.....	37
7	2	2	.....	.....	.....	.....	.....	5	3	1	1	.....	.....	.....	38
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	39
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	40
203	(8)	(8)	.....	.....	.....	.....	.....	153	137	(8)	(8)	.....	.....	.....	41
65	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81	.....	42
305	.....	.....	.....	.....	.....	.....	.....	.....	.....	190	.....	.....	.....	.....	43
28	7	7	.....	.....	.....	.....	.....	19	16	1	2	2	5	.....	44
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	45
18	.....	.....	.....	1	1	.....	1	.....	.....	4	.....	.....	1	.....	46
4,770	375	375	.....	.....	.....	.....	.....	3,010	2,610	(8)	(8)	(8)	4,020	.....	47
13,035	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,125	.....	48
2,540	.....	.....	.....	.....	100	.....	10	.....	.....	.....	.....	.....	250	.....	49
29	6	6	.....	.....	.....	.....	.....	21	16	1	4	2	5	.....	50
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	51
189	14	14	.....	.....	.....	.....	.....	138	112	(8)	23	(8)	44	.....	52
627	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47	.....	53
71	.....	.....	.....	8	5	.....	10	.....	.....	.....	.....	.....	6	.....	54
5	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	4	.....	55
40	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	(8)	14	.....	56
18	1	1	.....	.....	.....	.....	.....	16	11	1	4	1	.....	.....	57
139	(8)	(8)	.....	.....	.....	.....	.....	131	105	(8)	23	(8)	.....	.....	58
6	1	1	.....	.....	.....	.....	.....	5	5	.....	.....	.....	1	.....	59
10	(8)	(8)	.....	.....	.....	.....	.....	7	7	.....	.....	.....	(8)	.....	60
29	6	6	.....	.....	.....	.....	.....	21	16	1	4	2	5	.....	61
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	62
19	.....	.....	.....	1	1	.....	1	.....	.....	3	.....	.....	1	.....	63
4,950	355	355	.....	.....	.....	.....	.....	3,210	2,810	(8)	380	(8)	4,020	.....	64
11,770	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,350	.....	65
22,495	.....	.....	.....	.....	100	.....	10	.....	.....	.....	.....	.....	250	.....	66
15	2	2	.....	.....	.....	.....	.....	12	8	.....	4	1	5	.....	67
3,712	(8)	(8)	.....	.....	.....	.....	.....	3,042	1,662	.....	380	(8)	4,020	.....	68
247	(8)	(8)	.....	.....	.....	.....	.....	170	208	.....	95	(8)	804	.....	69
1	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	70
(8)	.....	.....	.....	.....	.....	.....	.....	(8)	(8)	.....	.....	.....	.....	.....	71
(8)	.....	.....	.....	.....	.....	.....	.....	(8)	(8)	.....	.....	.....	.....	.....	72
13	4	4	.....	.....	.....	.....	.....	8	7	1	.....	1	.....	.....	73
488	35	35	.....	.....	.....	.....	.....	418	398	(8)	.....	(8)	.....	.....	74
38	9	9	.....	.....	.....	.....	.....	52	57	(8)	.....	(8)	.....	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
37	36	36	.....	.....	.....	.....	.....	38	42	(8)	15	(8)	10	.....	78
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	.....	79
30	.....	.....	.....	30	12	.....	.....	.....	.....	.....	.....	.....	8	.....	80
37	36	36	.....	.....	.....	.....	.....	38	43	(8)	(8)	(8)	10	.....	81
38	35	35	.....	.....	.....	.....	.....	38	38	.....	.....	.....	.....	.....	82

[5] Includes siphons and farm pipe lines reported.
[6] Data for less than 3 enterprises shown with permission of the enterprise involved.
[7] Total capacity of all reservoirs regardless of size.
[8] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

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)		PYRAMID LAKE—Continued				LAHONTAN
			Truckee River				
		Total	Direct (17)	Truckee Canal (18)	Steamboat and Washoe Valleys (19)	Carson River* (20)	Truckee-Carson Rivers (21)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1						
1	Enterprises....1940..number	69	45	[1]2	22	109	10
2	Average size of enterprise based on area works were capable of supplying with water....1940..acres	698	691	3,344	466	329	6,677
3	Diversion dams....1940..total number	73	38	2	33	91	3
4	1930..total number	65	31	.....	3	52	.....
5	1920..total number	54	23	.....	6	128	.....
6	(a) Concrete and masonry....1940..number	14	9	2	3	15	.....
7	(b) Timber....1940..number	7	5	.....	2	22	1
8	(c) Earth and rock....1940..number	38	16	.....	22	26	1
9	(d) Other, mixed, and not reported..1940..number	14	8	.....	6	28	1
10	Main canals and laterals....1940..total length, miles	293.9	206.8	70.0	17.1	134.0	414.0
11	1930..total length, miles	350	306	.....	5	667	.....
12	1920..total length, miles	172	145	.....	17	510	.....
13	(a) Earth....1940..length, miles	289	203	70	16	132	414
14	(b) Lined....1940..length, miles	4.9	3.8	.....	1.1	2.0	.....
15	1940..capacity, c.f.s.[2]	3,053	2,415	.....	638	1,414	2,088
16	1930..capacity, c.f.s.[2]	3,137	2,939	.....	45	4,247	.....
17	1920..capacity, c.f.s.[2]	2,465	426	.....	2,001	3,853	.....
18	Pipe lines[3]....1940..total length, miles	4.9	0.6	3.8	0.5	10.3	15.4
19	1930..total length, miles	0.7	0.6	.....	.....	21.3	.....
20	1920..total length, miles	0.9	0.7	.....	.....	4.1	.....
21	(a) Concrete....1940..length, miles	.....	.....	.....	.....	1.5	0.6
22	(b) Metal....1940..length, miles	1.3	0.5	0.3	0.5	8.8	4.3
23	(c) Wood-stave....1940..length, miles	3.1	0.1	3.0	.....	.....	6.0
24	(d) Other....1940..length, miles	0.5	.....	0.5	.....	.....	4.5
25	Storage dams....1940..total number	16	4	.....	12	5	1
26	1930..total number	5	.....	.....	2	14	.....
27	1920..total number	5	2	.....	1	12	.....
28	(a) Concrete and masonry....1940..number	1	.....	.....	1	.....	.....
29	(b) Earth and rock....1940..number	15	4	.....	11	5	1
30	(c) Other, mixed, and not reported..1940..number	.....	.....	.....	.....	.....	.....
31	Reservoirs....1940..total number	14	2	.....	12	3	[1]1
32	(a) 1-99 acre-feet capacity....1940..number	13	2	.....	11	1	.....
33	(b) 100-999 acre-feet capacity....1940..number	.....	.....	.....	.....	1	.....
34	(c) 1,000 and over acre-feet capacity....1940..number	1	.....	.....	1	1	1
35	1940..total capacity, ac.-ft.[4]	5,163	(5)	.....	5,126	3,201	273,600
36	1930..total number	2	.....	.....	1	16	.....
37	1930..total capacity, ac.-ft.	1,100	.....	.....	1,000	296,913	.....
38	Wells, flowing....1940..number	.....	.....	.....	.....	1	3
39	1930..number	3	.....	.....	.....	34	.....
40	1920..number	.....	.....	.....	.....	3	.....
41	1940..yield, g.p.m.	.....	.....	.....	.....	(5)	17
42	1930..yield, g.p.m.	81	.....	.....	.....	244	.....
43	1920..yield, g.p.m.	.....	.....	.....	.....	22	.....
44	Wells, pumped....1940..number	5	5	.....	.....	16	.....
45	1930..number	2	1	.....	.....	13	.....
46	1920..number	1	.....	.....	.....	1	.....
47	1940..yield, g.p.m.	4,020	4,020	.....	.....	22,453	.....
48	1930..yield, g.p.m.	1,125	225	.....	.....	18,910	.....
49	1920..yield, g.p.m.	250	.....	.....	.....	50	.....
50	Pumping plants....1940..total number	5	5	.....	.....	27	6
51	1930..total number	3	2	.....	.....	31	.....
52	Prime movers....1940..capacity, hp	44	44	.....	.....	803	422
53	1930..capacity, hp	47	22	.....	.....	1,130	.....
54	1920..capacity, hp	6	.....	.....	.....	134	.....
55	(a) Electric....1940..number	4	4	.....	.....	17	6
56	1940..capacity, hp	14	14	.....	.....	471	422
57	(b) Internal-combustion....1940..number	.....	.....	.....	.....	8	.....
58	1940..capacity, hp	.....	.....	.....	.....	248	.....
59	(c) Other....1940..number	1	1	.....	.....	2	.....
60	1940..capacity, hp	(5)	(5)	.....	.....	(5)	.....
61	Pumps....1940..total number	5	5	.....	.....	27	6
62	1930..number	3	2	.....	.....	32	.....
63	1920..number	1	.....	.....	.....	13	.....
64	1940..capacity, g.p.m.	4,020	4,020	.....	.....	58,903	42,084
65	1930..capacity, g.p.m.	1,350	450	.....	.....	73,465	.....
66	1920..capacity, g.p.m.	250	.....	.....	.....	1,650	.....
67	(a) Centrifugal....1940..number	5	5	.....	.....	16	3
68	1940..capacity, g.p.m.	4,020	4,020	.....	.....	23,975	32,313
69	1940..average capacity, g.p.m.	804	804	.....	.....	1,498	10,771
70	(b) Turbine....1940..number	.....	.....	.....	.....	11	.....
71	1940..capacity, g.p.m.	.....	.....	.....	.....	34,928	.....
72	1940..average capacity, g.p.m.	.....	.....	.....	.....	3,175	.....
73	(c) Plunger....1940..number	.....	.....	.....	.....	.....	.....
74	1940..capacity, g.p.m.	.....	.....	.....	.....	.....	.....
75	1940..average capacity, g.p.m.	.....	.....	.....	.....	.....	.....
76	(d) Other....1940..number	.....	.....	.....	.....	.....	3
77	1940..capacity, g.p.m.	.....	.....	.....	.....	.....	10,771
78	Pumping lift, from all sources....1940..average, feet	10	10	.....	.....	29	24
79	1930..average, feet	20	10	.....	.....	32	.....
80	1920..average, feet	8	.....	.....	.....	12	.....
81	from pumped wells....1940..average, feet	10	10	.....	.....	30	.....
82	from surface sources...1940..average, feet	.....	.....	.....	.....	29	24

* Data for 1930 and 1920 include a portion of the Newland Project, U. S. Bureau of Reclamation.

[1] Data for less than 3 enterprises shown with permission of the enterprises involved.

[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.

WORKS, 1940, 1930, AND 1920—Continued

WALKER LAKE						COLORADO RIVER								INDEPENDENT BASINS		
		Walker River						Virgin River								
										Muddy River						
Total	Direct	Total	Direct	West Walker River	East Walker River	Total	Direct	Total	Direct	Total	Direct	Meadow Valley Wash	Las Vegas Valley	Thousand Spring Creek	Clover Valley	
	(22)		(23)	(24)	(25)		(26)		(27)		(28)	(29)	(30)	(31)	(32)	
67	3	64	35	18	11	224	16	102	6	96	11	85	106	12	20	1
1,256	1,718	1,235	1,417	1,225	670	76	12	134	469	113	468	67	30	408	704	2
53	1	52	30	10	12	82	.....	79	2	77	5	72	3	7	15	3
43	.....	43	38	.....	.....	51	.....	2	.....	.....	.....	.....	.....	.....	.....	4
70	.....	70	44	.....	.....	35	.....	35	.....	.....	.....	.....	.....	.....	.....	5
9	.....	9	7	2	.....	3	.....	2	.....	2	2	.....	1	.....	.....	6
1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	7
25	1	24	7	8	9	63	.....	61	.....	61	2	59	2	7	13	8
18	.....	18	15	.....	3	16	.....	16	2	14	1	13	.....	.....	.....	9
287.7	15.1	272.6	170.0	62.6	40.0	138.0	0.7	129.2	13.0	116.2	17.0	99.2	8.1	51.0	10.0	10
265	.....	265	259	.....	.....	144	3	27	.....	.....	.....	.....	.....	.....	.....	11
655	.....	655	495	.....	.....	196	.....	187	.....	.....	.....	.....	.....	.....	.....	12
281	15	266	164	62	40	137	.....	129	13	116	17	99	8	51	10	13
0.7	0.1	6.6	6.0	0.6	.....	1.0	0.7	0.2	.....	0.2	.....	0.2	0.1	.....	.....	14
1,747	143	1,604	1,043	431	130	292	1	274	23	251	53	198	17	187	390	15
1,315	.....	1,315	1,250	.....	.....	179	5	58	.....	.....	.....	.....	.....	.....	.....	16
1,267	.....	1,267	515	.....	.....	141	.....	119	.....	.....	.....	.....	.....	.....	.....	17
3.1	2.7	0.4	0.4	.....	.....	7.6	.....	5.2	0.1	5.1	0.3	4.8	2.4	6.1	0.8	18
2.7	.....	2.7	0.2	.....	.....	4.1	0.1	.....	.....	.....	.....	.....	.....	.....	.....	19
.....	.....	.....	.....	.....	.....	7.2	.....	4.4	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	2.5	.....	2.3	.....	2.3	0.3	2.0	0.2	0.2	.....	21
2.7	2.7	.....	.....	.....	.....	5.1	.....	2.9	0.1	2.8	.....	2.8	2.2	4.4	0.8	22
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.0	.....	23
0.4	.....	0.4	0.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.5	.....	24
5	1	4	1	3	.....	14	.....	13	3	10	3	7	1	2	.....	25
2	.....	2	2	.....	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	26
14	.....	14	.....	.....	.....	5	.....	5	.....	.....	.....	.....	.....	.....	.....	27
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
5	1	4	1	3	.....	14	.....	13	3	10	3	7	1	2	.....	29
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
5	1	4	1	3	.....	21	.....	15	3	12	3	9	9	2	.....	31
3	.....	3	.....	3	.....	22	.....	13	3	10	1	9	9	.....	.....	32
.....	.....	.....	.....	.....	.....	2	.....	2	.....	2	2	.....	.....	.....	.....	33
2	[1] 1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	34
93,280	13,000	80,280	(5)	280	.....	1,783	.....	1,765	2	1,763	1,701	62	18	(5)	.....	35
3	.....	3	2	.....	.....	15	2	.....	.....	.....	.....	.....	.....	.....	.....	36
92,002	.....	92,002	92,000	.....	.....	2,442	4	.....	.....	.....	.....	.....	.....	.....	.....	37
14	.....	14	1	13	.....	108	1	.....	.....	.....	.....	.....	107	.....	.....	38
16	.....	16	16	.....	.....	15	6	.....	.....	.....	.....	.....	.....	.....	.....	39
26	.....	26	.....	.....	.....	53	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
785	.....	785	(5)	735	.....	15,746	(5)	.....	.....	.....	.....	.....	15,736	.....	.....	41
576	.....	576	576	.....	.....	2,911	661	.....	.....	.....	.....	.....	.....	.....	.....	42
242	.....	242	.....	.....	.....	18,872	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
3	.....	3	3	.....	.....	47	13	11	.....	11	1	10	23	1	3	44
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
71	.....	71	50	.....	.....	7	.....	5	.....	.....	.....	.....	.....	.....	.....	46
900	.....	900	900	.....	.....	5,614	171	1,666	.....	1,666	(5)	916	3,777	(5)	130	47
.....	.....	.....	.....	.....	.....	112	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
5	.....	5	.....	.....	.....	705	.....	230	.....	.....	.....	.....	.....	.....	.....	49
3	.....	3	3	.....	.....	50	15	12	1	11	2	9	23	1	2	50
.....	.....	.....	.....	.....	.....	5	4	.....	.....	.....	.....	.....	.....	.....	.....	51
65	.....	65	65	.....	.....	296	17	89	(5)	56	(5)	48	190	(5)	(5)	52
.....	.....	.....	.....	.....	.....	39	35	.....	.....	.....	.....	.....	.....	.....	.....	53
2	.....	2	.....	.....	.....	72	.....	43	.....	.....	.....	.....	.....	.....	.....	54
2	.....	2	2	.....	.....	10	.....	5	.....	5	1	4	5	.....	.....	55
(5)	.....	(5)	(5)	.....	.....	40	.....	21	.....	21	(5)	13	19	.....	.....	56
1	.....	1	1	.....	.....	28	6	5	1	4	.....	4	17	1	1	57
(5)	.....	(5)	(5)	.....	.....	247	10	67	(5)	34	.....	34	170	(5)	(5)	58
.....	.....	.....	.....	.....	.....	12	9	2	.....	2	1	1	1	.....	1	59
.....	.....	.....	.....	.....	.....	9	7	(5)	.....	(5)	(5)	(5)	(5)	.....	(5)	60
3	.....	3	3	.....	.....	49	15	11	1	10	1	9	23	1	3	61
.....	.....	.....	.....	.....	.....	5	4	.....	.....	.....	.....	.....	.....	.....	.....	62
2	.....	2	.....	.....	.....	9	.....	7	.....	.....	.....	.....	.....	.....	.....	63
6,900	.....	6,900	6,900	.....	.....	9,042	221	4,064	(5)	2,064	(5)	1,364	4,757	(5)	(5)	64
.....	.....	.....	.....	.....	.....	4,562	4,450	.....	.....	.....	.....	.....	.....	.....	.....	65
.....	.....	.....	.....	.....	.....	4,878	.....	2,245	.....	.....	.....	.....	.....	.....	.....	66
3	.....	3	3	.....	.....	32	6	8	1	7	1	6	18	1	2	67
6,900	.....	6,900	6,900	.....	.....	8,047	120	4,048	(5)	2,048	(5)	1,348	3,879	(5)	(5)	68
2,300	.....	2,300	2,300	.....	.....	251	20	506	(5)	293	(5)	225	216	(5)	(5)	69
.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	70
.....	.....	.....	.....	.....	.....	(5)	.....	.....	.....	.....	.....	.....	(5)	.....	.....	71
.....	.....	.....	.....	.....	.....	(5)	.....	.....	.....	.....	.....	.....	(5)	.....	.....	72
.....	.....	.....	.....	.....	.....	13	9	1	.....	1	.....	1	3	.....	1	73
.....	.....	.....	.....	.....	.....	135	101	(5)	.....	(5)	.....	(5)	28	.....	(5)	74
.....	.....	.....	.....	.....	.....	10	11	(5)	.....	(5)	.....	(5)	9	.....	(5)	75
.....	.....	.....	.....	.....	.....	2	.....	2	.....	2	.....	2	.....	.....	.....	76
.....	.....	.....	.....	.....	.....	(5)	.....	(5)	.....	(5)	.....	(5)	.....	.....	.....	77
10	.....	10	10	.....	.....	21	17	21	(5)	21	(5)	20	23	(5)	(5)	78
.....	.....	.....	.....	.....	.....	14	14	.....	.....	.....	.....	.....	.....	.....	.....	79
10	.....	10	.....	.....	.....	21	.....	15	.....	.....	.....	.....	.....	.....	.....	80
5	.....	5	5	.....	.....	22	19	22	.....	22	(5)	21	23	(5)	(5)	81
13	.....	13	13	.....	.....	14	11	17	(5)	18	.....	18	.....	.....	.....	82

[4] Total capacity of all reservoirs regardless of size.
[5] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

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)	INDEPENDENT BASINS—Continued						
		Ruby Valley (33)	Goshute and Steptoe Valleys[1] (34)	Deep Creek (35)	Snake Valley (36)	Spring Valley (37)	Crescent, Diamond, Grass, and Newark Valleys (38)	Big Smoky Valley (39)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1	Enterprises....1940..number	26	63	14	19	22	49	27
2	Average size of enterprise based on area works were capable of supplying with water....1940..acres	1,246	167	88	213	526	427	243
3	Diversion dams....1940..total number	41	45	20	23	20	110	39
4	1930..total number	.....	63	.....	.....	.....	.....	.....
5	1920..total number	.....	14	.....	.....	.....	.....	.....
6	(a) Concrete and masonry....1940..number	.....	.....	.....	.....	.....	.....	.....
7	(b) Timber....1940..number	.....	.....	.....	3	10	.....	.....
8	(c) Earth and rock....1940..number	36	45	20	20	10	105	20
9	(d) Other, mixed, and not reported..1940..number	5	.....	.....	.....	.....	5	19
10	Main canals and laterals....1940..total length, miles	7.0	41.0	18.0	12.0	8.0	20.0	60.0
11	1930..total length, miles	.....	69	.....	.....	.....	.....	.....
12	1920..total length, miles	.....	61	.....	.....	.....	.....	.....
13	(a) Earth....1940..length, miles	7	41	18	12	8	20	51
14	(b) Lined....1940..length, miles	.....	.....	.....	.....	.....	.....	9.0
15	1940..capacity, c.f.s.[2]	433	180	16	134	285	549	212
16	1930..capacity, c.f.s.[2]	.....	68	.....	.....	.....	.....	.....
17	1920..capacity, c.f.s.[2]	.....	47	.....	.....	.....	.....	.....
18	Pipe lines[3]....1940..total length, miles	.....	4.5	0.4	2.3	5.0	4.3	1.0
19	1930..total length, miles	.....	5.8	.....	.....	.....	.....	.....
20	1920..total length, miles	.....	.....	.....	.....	.....	.....	.....
21	(a) Concrete....1940..length, miles	.....	.....	.....	.....	.....	.....	.....
22	(b) Metal....1940..length, miles	.....	4.5	0.4	2.3	5.0	4.3	1.0
23	(c) Wood-stave....1940..length, miles	.....	.....	.....	.....	.....	.....	.....
24	(d) Other....1940..length, miles	.....	.....	.....	.....	.....	.....	.....
25	Storage dams....1940..total number	.....	18	2	.....	1	1	3
26	1930..total number	.....	13	.....	.....	.....	.....	.....
27	1920..total number	.....	1	.....	.....	.....	.....	.....
28	(a) Concrete and masonry....1940..number	.....	.....	1	.....	.....	.....	.....
29	(b) Earth and rock....1940..number	.....	16	1	.....	1	1	3
30	(c) Other, mixed, and not reported..1940..number	.....	2	.....	.....	.....	.....	.....
31	Reservoirs....1940..total number	.....	29	7	4	4	2	3
32	(a) 1-99 acre-feet capacity....1940..number	.....	28	7	4	4	2	2
33	(b) 100-999 acre-feet capacity....1940..number	.....	1	.....	.....	.....	.....	1
34	(c) 1,000 and over acre-feet capacity....1940..number	.....	.....	.....	.....	.....	.....	.....
35	1940..total capacity, ac.-ft.[4]	.....	800	27	19	9	(5)	620
36	1930..total number	.....	26	.....	.....	.....	.....	.....
37	1930..total capacity, ac.-ft.	.....	56	.....	.....	.....	.....	.....
38	Wells, flowing....1940..number	.....	1	2	.....	.....	4	18
39	1930..number	.....	2	.....	.....	.....	.....	.....
40	1920..number	.....	.....	.....	.....	.....	.....	.....
41	1940..yield, g.p.m.	.....	(5)	(5)	.....	.....	950	855
42	1930..yield, g.p.m.	.....	33	.....	.....	.....	.....	.....
43	1920..yield, g.p.m.	.....	.....	.....	.....	.....	.....	.....
44	Wells, pumped....1940..number	.....	6	1	2	4	2	1
45	1930..number	.....	16	.....	.....	.....	.....	.....
46	1920..number	.....	4	.....	.....	.....	.....	.....
47	1940..yield, g.p.m.	.....	815	(5)	(5)	130	(5)	(5)
48	1930..yield, g.p.m.	.....	6,268	.....	.....	.....	.....	.....
49	1920..yield, g.p.m.	.....	503	.....	.....	.....	.....	.....
50	Pumping plants....1940..total number	.....	6	1	2	3	2	1
51	1930..total number	.....	13	.....	.....	.....	.....	.....
52	Prime movers....1940..capacity, hp	.....	22	(5)	(5)	7	(5)	(5)
53	1930..capacity, hp	.....	242	.....	.....	.....	.....	.....
54	1920..capacity, hp	.....	17	.....	.....	.....	.....	.....
55	(a) Electric....1940..number	.....	.....	.....	.....	.....	.....	.....
56	1940..capacity, hp	.....	.....	.....	.....	.....	.....	.....
57	(b) Internal-combustion....1940..number	.....	6	1	2	3	1	1
58	1940..capacity, hp	.....	22	(5)	(5)	7	(5)	(5)
59	(c) Other....1940..number	.....	.....	.....	.....	.....	1	.....
60	1940..capacity, hp	.....	.....	.....	.....	.....	(5)	.....
61	Pumps....1940..total number	.....	6	1	3	4	2	1
62	1930..number	.....	16	.....	.....	.....	.....	.....
63	1920..number	.....	4	.....	.....	.....	.....	.....
64	1940..capacity, g.p.m.	.....	815	(5)	(5)	100	(5)	(5)
65	1930..capacity, g.p.m.	.....	6,338	.....	.....	.....	.....	.....
66	1920..capacity, g.p.m.	.....	1,203	.....	.....	.....	.....	.....
67	(a) Centrifugal....1940..number	.....	1	1	1	1	.....	.....
68	1940..capacity, g.p.m.	.....	(5)	(5)	(5)	(5)	.....	.....
69	1940..average capacity, g.p.m.	.....	(5)	(5)	(5)	(5)	.....	.....
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	.....	5	.....	2	1	1	.....
74	1940..capacity, g.p.m.	.....	315	.....	(5)	(5)	(5)	.....
75	1940..average capacity, g.p.m.	.....	63	.....	(5)	(5)	(5)	.....
76	(d) Other....1940..number	.....	.....	.....	.....	2	.....	1
77	1940..capacity, g.p.m.	.....	.....	.....	.....	(5)	.....	(5)
78	Pumping lift, from all sources....1940..average, feet	.....	66	(5)	(5)	112	(5)	(5)
79	1930..average, feet	.....	22	.....	.....	.....	.....	.....
80	1920..average, feet	.....	23	.....	.....	.....	.....	.....
81	from pumped wells....1940..average, feet	.....	.....	.....	(5)	112	(5)	(5)
82	from surface sources...1940..average, feet	.....	66	(5)	(5)	.....	(5)	.....

[1] Data for 1920 and 1930 Censuses are for Steptoe Creek only.
[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.

WORKS, 1940, 1930, AND 1920—Continued

INDEPENDENT BASINS—Continued														
Ralston, Monitor, and Hot Creek Valleys (40)	Railroad Valley (41)	White River (42)	Pahranagat Valley (43)	Amargosa River (44)	Fish Lake Valley (45)	Smith Creek and Dixie Valley (46)	Sonoma-Clear Creeks (47)	Black Rock Desert (48)	Quinn River (49)	Cowhead and Warner Lakes (50)	Surprise Valley (51)	Smoke Creek (52)	Honey Lake (53)	
34	24	22	9	19	15	41	8	37	39	3	15	12	14	1
271	426	289	793	89	251	123	180	234	534	220	174	86	82	2
23	18	7	6	2	3	70	9	22	35	2	11	2	.....	3
.....	.....	.....	.....	.....	.....	.....	.....	.....	65	.....	.....	.....	.....	4
.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	5
.....	.....	3	4	.....	.....	1	2	2	2	.....	.....	.....	.....	6
2	.....	.....	.....	.....	2	7	2	6	2	.....	.....	.....	.....	7
12	1	4	2	2	1	45	4	11	15	2	11	2	.....	8
9	17	.....	.....	.....	.....	17	1	3	16	.....	.....	.....	.....	9
59.0	17.0	14.0	29.0	4.0	2.3	75.0	10.0	81.0	55.0	.....	6.0	8.0	3.0	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	74	.....	.....	.....	.....	11
.....	.....	.....	.....	.....	.....	.....	.....	.....	38	.....	.....	.....	.....	12
59	17	14	29	4	1	75	10	81	55	.....	6	8	3	13
.....	.....	.....	.....	.....	1.3	.....	.....	.....	.....	.....	.....	.....	.....	14
117	115	109	72	79	52	150	59	241	850	7	41	12	39	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	306	.....	.....	.....	.....	16
.....	.....	.....	.....	.....	.....	.....	.....	.....	98	.....	.....	.....	.....	17
1.6	1.2	3.0	0.6	0.6	.....	12.5	1.8	2.2	.....	.....	.....	.....	0.5	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	4.4	.....	.....	.....	.....	19
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	1.2	.....	0.5	0.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	21
1.6	.....	3.0	0.1	.....	.....	12.5	1.8	2.2	.....	.....	.....	.....	0.5	22
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
2	1	5	3	7	.....	9	.....	4	.....	1	1	1	5	25
.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	26
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	27
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
2	1	5	3	6	.....	8	.....	4	.....	1	1	1	5	29
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	30
7	8	14	3	8	2	22	.....	6	.....	1	2	1	5	31
7	5	13	1	8	2	20	.....	3	.....	.....	1	1	5	32
.....	3	.....	.....	.....	.....	2	.....	2	.....	1	1	.....	.....	33
.....	.....	1	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	34
71	746	4,237	3,361	6	(5)	358	.....	4,341	.....	(5)	(5)	(5)	127	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	36
.....	.....	.....	.....	.....	.....	.....	.....	.....	1,003	.....	.....	.....	.....	37
.....	.....	.....	.....	20	.....	41	.....	26	.....	.....	15	62	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
.....	.....	.....	.....	4,490	.....	1,165	.....	12,430	.....	.....	30	3,069	.....	41
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
.....	.....	.....	.....	1	7	4	2	6	16	.....	.....	4	7	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	46
.....	.....	.....	.....	(5)	1,490	653	(5)	55	3,798	.....	.....	466	1,249	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	850	.....	.....	.....	.....	48
.....	.....	.....	.....	.....	.....	.....	.....	.....	50	.....	.....	.....	.....	49
2	.....	.....	.....	1	8	4	2	8	17	.....	.....	4	8	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	51
(5)	.....	.....	.....	(5)	68	21	(5)	6	117	.....	.....	19	42	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	51	.....	.....	.....	.....	53
.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	55
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(5)	56
2	.....	.....	.....	1	6	3	2	.....	12	.....	.....	1	3	57
(5)	.....	.....	.....	(5)	65	20	(5)	.....	111	.....	.....	(5)	26	58
.....	.....	.....	.....	.....	2	1	.....	6	5	.....	.....	3	3	59
.....	.....	.....	.....	(5)	(5)	.....	.....	6	6	.....	.....	3	3	60
3	.....	.....	.....	1	8	5	2	6	17	.....	.....	4	8	61
.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	62
.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	63
(5)	.....	.....	.....	(5)	1,850	883	(5)	60	3,898	.....	.....	476	1,499	64
.....	.....	.....	.....	.....	.....	.....	.....	.....	1,700	.....	.....	.....	.....	65
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
.....	.....	.....	.....	1	1	4	1	.....	7	.....	.....	1	3	67
.....	.....	.....	.....	(5)	(5)	.....	(5)	.....	1,550	.....	.....	(5)	1,210	68
.....	.....	.....	.....	(5)	(5)	.....	(5)	.....	221	.....	.....	(5)	403	69
.....	.....	.....	.....	.....	3	.....	1	.....	5	.....	.....	.....	[6] 1	70
.....	.....	.....	.....	.....	1,160	.....	(5)	.....	2,170	.....	.....	.....	250	71
.....	.....	.....	.....	.....	387	.....	(5)	.....	434	.....	.....	.....	250	72
3	.....	.....	.....	.....	4	1	.....	6	5	.....	.....	3	4	73
(5)	.....	.....	.....	.....	290	(5)	.....	60	178	.....	.....	26	39	74
(5)	.....	.....	.....	.....	72	(5)	.....	10	36	.....	.....	9	10	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
(5)	.....	.....	.....	(5)	34	17	(5)	30	43	.....	.....	20	34	78
.....	.....	.....	.....	.....	.....	.....	.....	.....	43	.....	.....	.....	.....	79
.....	.....	.....	.....	.....	.....	.....	.....	.....	25	.....	.....	.....	.....	80
.....	.....	.....	.....	(5)	30	.....	(5)	40	43	.....	.....	16	36	81
(5)	.....	.....	.....	.....	60	17	.....	25	.....	.....	.....	32	28	82

[4] Total capacity of all reservoirs regardless of size.
[5] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[6] Data for less than 3 enterprises shown with permission of the enterprise involved.

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		Churchill	Clark	Douglas	
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms	1940...number	3,573		597	362	127	
2		1930...number	3,442		614	294	135	
3	Irrigated farms	1940...number	3,264		562	328	125	
4		1930...number	3,031		581	248	128	
5	Increase or decrease (-), 1930-1940	...percent	7.7		-3.3	32.3	-2.3	
	Operated by—							
6	(a) Owners and managers	1940...number	2,811		456	277	118	
7		1930...number	2,656		487	216	123	
8	(b) Tenants	1940...number	453		106	51	7	
9		1930...number	375		94	32	5	
10	Land in all farms	1940...acres	3,785,106		101,806	24,406	132,838	
11	Land in irrigated farms	1940...acres	3,624,536		99,152	21,753	131,458	
12	Average per farm	1940...acres	1,110		176	66	1,052	
13	(a) Operated by owners and managers	1940...acres	3,426,873		83,910	17,234	128,829	
14	Average per farm	1940...acres	1,219		184	62	1,092	
15	(b) Operated by tenants	1940...acres	197,663		15,242	4,519	2,629	
16	Average per farm	1940...acres	436		144	89	376	
17	Approximate land area	1940...acres	70,273,280		3,140,480	5,073,280	463,360	
	IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated	1939...acres	739,863		56,594	9,060	30,881	
19	(a) Cropland harvested	1939...acres	459,863		46,701	7,112	18,223	
20	(b) Crop failure	1939...acres	5,298		1,619	16	150	
21	(c) Pasture	1939...acres	274,702		8,274	1,932	12,508	
22	Area irrigated	1929...acres	486,648		50,990	8,051	17,516	
23		1919...acres	561,447		41,739	5,206	23,412	
24	Increase or decrease (-), 1929-1939	...percent	52.0		11.0	12.5	76.3	
25	Irrigable area in enterprises	1940...acres	915,689		89,414	12,769	32,206	
26		1930...acres	983,717		131,082	15,877	20,519	
27		1920[2]...acres	1,382,036		171,681	10,512	43,191	
28	Excess of irrigable area over the area irrigated	1940...acres	175,826		32,820	3,709	1,325	
29		1930...acres	497,069		80,092	7,826	3,003	
30	Area works were capable of supplying with water	1940...acres	841,304		69,492	11,416	31,780	
31		1930...acres	736,249		85,534	9,478	20,132	
32		1920...acres	704,708		65,661	6,282	24,472	
33	Increase or decrease (-), 1930-1940	...percent	14.3		-18.8	20.4	57.9	
34	Excess, capability of works over area irrigated	1940...acres	101,441		12,898	2,356	899	
35		1930...acres	249,601		34,544	1,427	2,616	
36	Proportion which area irrigated is of all lands in irrigated farms	1939...percent	20.4		57.1	41.6	23.5	
37		1929...percent	15.7		59.0	35.4	12.0	
38	Proportion which area irrigated is of area works were capable of supplying with water	1939...percent	87.9		81.4	79.4	97.2	
39		1929...percent	66.1		59.6	84.9	87.0	
	CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises	1940...dollars	16,906,790		6,378,327	484,501	334,516	
41	(a) Cost of irrigation works and equipment	1940...dollars	15,827,567		6,377,677	401,541	332,441	
42	(b) Investment in water rights (reported)	1940...dollars	1,079,223		650	82,960	2,075	
43	Total investment in all enterprises	1930...dollars	15,457,931		6,909,969	262,097	177,602	
44		1920...dollars	14,754,280		7,774,129	352,332	94,311	
45	Increase or decrease (-), 1930-1940	...percent	9.4		-7.7	84.9	88.4	
46	Average investment, based on area works were capable of supplying with water, per acre	1940...dollars	20.10		91.79	42.44	10.53	
47		1930...dollars	21.00		80.79	27.65	8.82	
48		1920...dollars	20.94		118.40	56.09	3.85	
49	Average investment per acre irrigated	1939...dollars	22.85		112.70	53.48	10.83	
50	Estimated final investment in existing enterprises	1940...dollars	18,129,554		6,416,977	508,836	340,346	
51		1930...dollars	18,489,603		7,834,849	537,762	177,602	
52		1920...dollars	22,648,747		13,809,936	515,332	109,311	
53	Increase or decrease (-), 1930-1940	...percent	-1.9		-18.1	-5.4	91.6	
54	Average investment, based on estimated final investment and irrigable area, per acre	1940...dollars	19.80		71.77	39.85	10.57	
55		1930...dollars	18.80		59.77	33.87	8.66	
56		1920[2]...dollars	16.39		80.44	49.02	2.53	
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		Primary Enterprises	Supplemental Enterprises			Primary Enterprises	Supplemental Enterprises
57	Enterprises reporting maintenance and operation	1939...number	1,327	10	11	130	79	3
58	Area irrigated in these enterprises	1939...acres	688,722	84,722	56,273	8,407	28,423	2,313
59	Cost of maintenance and operation	1939...dollars	293,859	38,705	57,724	15,156	7,101	1,457
60	Average cost, per acre irrigated	1939...dollars	0.43	0.46	1.03	1.80	0.25	0.63
61		1929...dollars	0.91	.....	2.41	4.23	0.95	.....
62	Total annual charges (reported)[4] [5]	1939...dollars	304,084	87,619	206,080	14,402	1,838	2,000
63	Average annual charge per acre irrigated	1939...dollars	1.51	1.04	3.76	2.75	0.12	1.00
64	Area against which charges were assessed	1939...acres	218,138	102,049	63,611	5,244	15,761	2,000
65	Average annual charge per acre assessed	1939...dollars	1.39	0.86	3.24	2.75	0.12	1.00
66	Total charges collected[4]	1939...dollars	128,223	79,069	68,937	9,757	1,007	1,940
67	Indebtedness to December 31 (reported)[5]	1939...dollars	1,194,066	2,740,249	1,061,009	15,699	.....	.....
	WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered	1939...number	1,116	9	19	84	71	3
69	Area irrigated in these enterprises	1939...acres	627,502	84,622	55,614	6,696	27,490	2,313
70	Water delivered in these enterprises	1939...acre-feet	1,871,256	291,980	190,830	34,418	115,159	2,378
71	Average water delivered per acre irrigated	1939...acre-feet	3.0	3.5	3.4	5.1	4.2	1.0
72	Average cost of water per acre irrigated	1939...dollars	0.76	1.05	3.73	2.41	0.25	1.13
	DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage	1939...number	36	.....	[6]2	3	2	.....
74	Irrigable area in these enterprises	1939...acres	244,984	.....	86,252	905	(1)	.....
75	Irrigated area in these enterprises	1939...acres	180,044	.....	54,745	552	(1)	.....
76	Area for which drains have been installed	1939...acres	97,576	.....	42,684	20	(1)	.....
77	Additional area needing drainage	1939...acres	21,153	.....	3,860	360	(1)	.....

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

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

Elko		Esmeralda	Eureka	Humboldt		Lander	Lincoln	Lyon		Nye		Ormsby	
491		25	59	226		54	217	342		141		28	1
518		24	75	195		44	155	339		142		33	2
461		20	51	186		47	180	326		131		22	3
453		14	60	159		40	134	321		111		28	4
1.8		42.9	-10.0	17.0		17.5	34.3	1.6		18.0		-21.4	5
436		18	52	172		44	151	252		118		31	6
418		14	54	140		33	121	259		105		22	7
25		2	2	14		3	29	74		13		1	8
35		.....	6	19		4	13	62		6		6	9
1,715,186		16,289	256,200	420,525		204,029	47,226	179,691		81,315		19,746	10
1,696,998		16,114	255,120	397,601		185,027	44,739	178,434		80,111		19,486	11
3,681		806	4,721	2,138		3,937	249	547		637		886	12
1,671,436		(1)	(1)	370,832		181,417	39,202	147,517		74,128		(1)	13
3,831		(1)	(1)	2,156		4,123	260	585		628		(1)	14
25,562		(1)	(1)	26,760		3,610	5,537	30,917		9,286		(1)	15
1,022		(1)	(1)	1,912		1,203	191	418		711		(1)	16
10,969,600		2,284,800	2,676,480	6,209,280		3,597,440	6,815,360	1,287,680		11,560,930		90,240	17
269,989		3,217	34,967	75,639		31,103	11,122	76,923		29,511		1,785	18
159,048		912	16,375	57,250		18,261	6,798	40,854		14,778		1,277	19
1,613		.....	45	543		209	100	186		151		8	20
109,328		2,305	18,547	17,846		12,630	4,224	35,883		14,712		500	21
172,337		1,449	15,836	35,688		10,333	8,771	81,361		12,522		1,117	22
202,724		1,685	5,086	27,884		10,400	5,826	110,902		11,351		3,146	23
56.7		122.0	120.8	111.9		201.0	26.8	-5.5		136.7		26.0	24
333,010		4,567	42,629	86,572		31,654	13,791	88,049		36,248		1,861	25
248,137		1,946	31,439	109,608		22,475	13,344	189,835		29,734		1,650	26
434,582		9,316	5,404	45,391		28,637	20,366	332,810		70,601		7,410	27
69,021		1,350	7,662	10,933		551	2,669	11,126		6,604		79	28
75,800		497	15,603	73,920		12,142	4,573	108,471		17,212		233	29
298,349		3,870	42,324	81,938		31,654	12,766	86,314		33,087		1,785	30
186,756		1,749	31,080	103,375		23,145	10,099	95,972		26,046		1,695	31
263,403		2,290	5,134	31,695		10,245	10,752	136,475		14,169		4,718	32
59.8		121.3	36.2	-20.7		42.9	26.4	-10.1		27.0		9.2	33
28,360		653	7,357	6,299		551	1,644	9,391		3,443		.....	34
14,419		300	15,244	67,687		11,812	1,328	14,611		13,524		218	35
15.9		20.0	13.7	19.0		16.8	24.9	43.1		35.5		9.2	36
13.2		12.1	10.1	10.9		8.7	32.2	48.8		17.3		15.3	37
90.5		83.1	82.6	92.3		98.3	87.1	89.1		89.6		100.0	38
92.3		82.8	51.0	34.5		43.7	86.9	84.8		48.1		86.7	39
2,014,514		36,185	218,708	196,575		136,030	163,817	1,940,815		296,835		42,889	40
1,795,401		32,385	190,669	192,320		133,801	142,476	1,924,111		218,252		42,759	41
219,113		3,800	28,039	4,255		2,229	21,341	16,704		78,583		130	42
2,053,491		38,550	248,337	470,805		137,450	72,329	2,048,900		311,118		42,900	43
1,447,201		26,849	25,211	271,719		79,332	121,536	1,740,387		260,220		51,777	44
-1.9		-6.1	-11.9	-58.2		-1.0	126.5	-5.3		-4.6		(3)	45
6.75		9.35	5.17	2.40		4.30	12.83	22.49		8.97		24.03	46
11.00		22.04	7.99	4.55		6.21	7.16	21.35		11.94		26.24	47
5.49		11.72	4.91	8.57		7.74	11.58	12.78		18.37		11.61	48
7.46		11.25	6.25	2.60		4.37	14.73	25.23		10.01		21.03	49
2,420,644		39,760	222,381	220,820		136,030	221,417	1,949,415		326,485		106,189	50
2,273,641		40,550	251,287	493,667		138,550	109,929	2,532,900		346,268		42,900	51
1,475,376		26,849	25,211	314,719		79,332	141,936	2,934,907		303,445		55,777	52
6.5		-1.9	-11.5	-55.3		-1.8	114.3	-23.0		-5.7		118.2	53
7.27		8.71	5.22	2.55		4.30	16.06	22.14		9.01		57.13	54
9.16		20.84	7.99	4.50		6.16	7.74	13.34		11.61		26.00	55
3.39		2.88	4.67	6.94		2.77	6.97	8.82		4.90		7.53	56
Primary	Sup.			Primary	Sup.			Primary	Sup.	Primary	Sup.		
Enterprises				Enterprises				Enterprises		Enterprises			
354	1	15	50	118	1	42	88	63	1	95	1	8	57
263,435	(1)	3,200	31,530	51,648	(1)	30,943	10,811	75,765	(1)	27,658	(1)	1,562	58
67,442	(1)	1,211	11,069	14,855	(1)	10,324	8,888	21,183	(1)	9,381	(1)	739	59
0.26	(1)	0.39	0.32	0.29	(1)	0.33	0.82	0.32	(1)	0.34	(1)	0.17	60
0.30	.....	1.12	0.62	0.71	.....	0.85	2.00	0.44	.....	1.45	.....	1.65	61
6,559	.....	.....	.....	.....	.....	750	2,509	28,658	57,085	1,400	.....	160	62
0.53	.....	.....	.....	.....	.....	0.24	0.57	0.52	0.88	0.23	.....	0.12	63
12,973	.....	.....	.....	.....	.....	3,120	4,601	61,869	80,175	6,000	.....	1,100	64
0.51	.....	.....	.....	.....	.....	0.24	0.54	0.46	0.71	0.23	.....	0.12	65
723	.....	.....	.....	.....	.....	.....	1,081	16,358	54,552	.....	.....	430	66
.....	.....	.....	.....	.....	.....	.....	.....	102,060	470,500	.....	.....	.....	67
242	.....	16	50	112	1	40	84	68	1	51	1	1	68
198,588	.....	3,210	31,956	67,115	(1)	28,212	10,941	72,647	(1)	20,521	(1)	1,288	69
638,897	.....	1,329	77,836	105,062	(1)	63,618	38,929	190,113	(1)	63,601	(1)	17,908	70
3.2	.....	0.4	2.4	1.6	(1)	2.3	3.6	2.6	(1)	3.1	(1)	13.9	71
0.28	.....	0.38	0.32	0.32	(1)	0.31	0.78	0.51	(1)	0.39	(1)	0.42	72
2	.....	.....	.....	.....	.....	5	2	9	.....	.....	.....	.....	73
(1)	.....	.....	.....	.....	.....	2,420	(1)	82,291	.....	.....	.....	.....	74
(1)	.....	.....	.....	.....	.....	2,247	(1)	70,585	.....	.....	.....	.....	75
(1)	.....	.....	.....	.....	.....	.....	(1)	30,876	.....	.....	.....	.....	76
(1)	.....	.....	.....	.....	.....	460	(1)	9,115	.....	.....	.....	.....	77

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

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)	Pershing	Washoe	White Pine	All other counties
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*				
1	All farms....1940...number	108	516	189	91
2	1930...number	119	474	183	87
3	Irrigated farms....1940...number	102	475	172	73
4	1930...number	104	393	170	87
5	Increase or decrease (-), 1930-1940....percent	-1.9	20.9	1.2	-16.1
	Operated by—				
6	(a) Owners and managers....1940...number	81	406	138	71
7	1930...number	91	347	151	72
8	(b) Tenants....1940...number	21	69	34	2
9	1930...number	13	46	19	15
10	Land in all farms....1940...acres	88,032	295,347	145,448	53,722
11	Land in irrigated farms....1940...acres	84,896	214,767	142,697	52,880
12	Average per farm....1940...acres	832	452	830	724
13	(a) Operated by owners and managers....1940...acres	67,463	184,786	117,489	(1)
14	Average per farm....1940...acres	833	455	851	(1)
15	(b) Operated by tenants....1940...acres	17,433	29,981	25,208	(1)
16	Average per farm....1940...acres	830	435	741	(1)
17	Approximate land area....1940...acres	3,835,520	4,019,840	5,691,520	2,557,440
	IRRIGATED AND IRRIGABLE AREAS				
18	Area irrigated....1939...acres	28,965	46,564	29,419	3,991
19	(a) Cropland harvested....1939...acres	24,685	28,766	17,701	1,119
20	(b) Crop failure....1939...acres	177	161	317	.....
21	(c) Pasture....1939...acres	4,103	17,637	11,401	2,872
22	Area irrigated....1929...acres	6,753	43,765	17,071	2,788
23	1919...acres	53,628	28,801	24,270	5,384
24	Increase or decrease (-), 1929-1939....percent	328.9	6.4	72.3	43.1
25	Irrigable area in enterprises....1940...acres	47,348	51,960	35,807	7,801
26	1930...acres	76,364	51,758	25,387	14,562
27	1920[2]...acres	62,795	78,274	47,841	13,265
28	Excess of irrigable area over the area irrigated...1940...acres	18,383	5,396	6,388	3,810
29	1930...acres	69,611	7,993	8,316	11,774
30	Area works were capable of supplying with water...1940...acres	47,165	50,722	33,143	5,499
31	1930...acres	63,160	48,727	22,419	7,912
32	1920...acres	61,940	31,610	27,932	7,930
33	Increase or decrease (-), 1930-1940....percent	-25.3	4.1	47.8	-30.8
34	Excess, capability of works over area irrigated...1940...acres	18,200	4,158	3,724	1,508
35	1930...acres	56,407	4,963	5,348	5,154
36	Proportion which area irrigated is of all lands in irrigated farms....1939...percent	34.1	21.7	20.6	7.5
37	1929...percent	7.4	10.6	13.9	12.3
38	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	61.4	91.8	88.8	72.6
39	1929...percent	10.7	89.8	76.1	35.1
	CAPITAL INVESTED TO JANUARY 1				
40	Total investment in all enterprises....1940...dollars	1,948,870	2,223,347	254,832	236,029
41	(a) Cost of irrigation works and equipment....1940...dollars	1,397,780	2,193,359	219,366	233,229
42	(b) Investment in water rights (reported)....1940...dollars	551,090	29,988	35,466	2,800
43	Total investment in all enterprises....1930...dollars	805,697	1,108,347	336,485	433,854
44	1920...dollars	550,952	658,775	1,079,188	214,361
45	Increase or decrease (-), 1930-1940....percent	141.9	100.6	-24.3	-45.6
46	Average investment, based on area works were capable of supplying with water, per acre....1940...dollars	41.32	43.83	7.69	42.92
47	1930...dollars	12.76	22.75	15.01	54.63
48	1920...dollars	8.89	20.84	38.64	27.03
49	Average investment per acre irrigated....1939...dollars	67.28	47.75	8.66	59.14
50	Estimated final investment in existing enterprises...1940...dollars	2,030,040	2,583,418	316,467	290,029
51	1930...dollars	810,697	1,520,392	419,805	965,404
52	1920...dollars	554,952	832,725	1,245,988	222,951
53	Increase or decrease (-), 1930-1940....percent	150.4	69.9	-24.6	-70.0
54	Average investment, based on estimated final investment and irrigable area, per acre....1940...dollars	42.87	49.72	8.84	37.18
55	1930...dollars	10.62	29.38	16.54	66.30
56	1920[2]...dollars	8.84	10.64	26.04	16.77
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary / Supplemental Enterprises	Primary / Supplemental Enterprises	Primary / Supplemental Enterprises	
57	Enterprises reporting maintenance and operation...1939...number	38 / 2	105 /	127 / 1	4
58	Area irrigated in these enterprises....1939...acres	23,147 / (1)	43,184 /	25,846 / (1)	3,857
59	Cost of maintenance and operation....1939...dollars	3,252 / (1)	39,920 /	17,683 / (1)	4,901
60	Average cost, per acre irrigated....1939...dollars	0.14 / (1)	0.92 /	0.68 / (1)	1.27
61	1929...dollars	1.80 /	1.29 /	1.30 /	3.57
62	Total annual charges (reported)[3] [4]....1939...dollars	4,404 / 28,534	35,347 /	1,588 /	89
63	Average annual charge per acre irrigated....1939...dollars	0.53 / 1.67	1.20 /	0.71 /	0.03
64	Area against which charges were assessed....1939...acres	8,236 / 19,874	29,871 /	2,248 /	3,498
65	Average annual charge per acre assessed....1939...dollars	0.53 / 1.44	1.18 /	0.71 /	0.03
66	Total charges collected[3]....1939...dollars	3,779 / 22,577	24,086 /	1,950 /	85
67	Indebtedness to December 31 (reported)[4]....1939...dollars	..... / 1,203,570	15,298 / 1,066,179	..... /	.....
	WATER DELIVERED TO IRRIGATORS				
68	Enterprises reporting water delivered....1939...number	40 / 2	118 /	112 / 1	5
69	Area irrigated in these enterprises....1939...acres	28,962 / (1)	45,920 /	24,321 / (1)	3,991
70	Water delivered in these enterprises....1939...acre-feet	88,636 / (1)	187,007 /	49,875 / (1)	8,008
71	Average water delivered per acre irrigated....1939...acre-feet	3.1 / (1)	4.1 /	2.1 / (1)	2.0
72	Average cost of water per acre irrigated....1939...dollars	0.56 / (1)	0.95 /	0.79 / (1)	0.26
	DRAINAGE OF IRRIGATED LAND				
73	Enterprises reporting land drained or needing drainage....1939...number	3 /	6 /	2 /	.....
74	Irrigable area in these enterprises....1939...acres	31,198 /	24,904 /	(1) /	.....
75	Irrigated area in these enterprises....1939...acres	11,874 /	24,808 /	(1) /	.....
76	Area for which drains have been installed....1939...acres	15,000 /	8,113 /	..... /	.....
77	Additional area needing drainage....1939...acres	..... /	6,006 /	(1) /	.....

*Census of Agriculture. [1]Data are included only in State totals because less than 3 farms or enterprises reported in the 1940 Census. [2]For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. [3]Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons. [4]Annual charges and indebtedness were reported only by enterprises serving 5 or more farms;

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)	THE STATE	Churchill	Clark	Douglas	Elko	Esmeralda	Eureka	Humboldt
	FARM VALUES, 1940*								
1	Land and buildings, all farms....dollars..	47,594,384	3,942,982	1,829,468	5,042,259	10,202,071	310,210	1,613,449	2,780,815
2	Land and buildings, irrigated farms....dollars..	46,392,883	3,860,467	1,658,910	5,029,984	10,095,351	304,210	1,606,598	2,634,283
	Operated by—								
3	(a) Owners and managers....dollars..	42,128,655	3,197,747	1,418,350	4,914,184	9,805,751	(1)	(1)	2,481,083
4	(b) Tenants....dollars..	4,264,228	662,720	240,560	115,800	289,600	(1)	(1)	153,200
5	Average, land and buildings, per farm....dollars..	14,213.51	6,869.16	5,057.65	40,239.87	21,898.81	15,210.50	29,751.81	14,162.81
6	per acre in farms....dollars..	12.80	38.93	76.26	38.26	5.95	18.88	6.30	6.63
7	Buildings, irrigated farms reporting value....number...	3,079	556	262	125	443	20	52	156
8	Total reported....dollars..	8,971,907	861,480	447,115	951,747	1,502,287	78,185	146,900	468,080
9	Average, per irrigated farm reporting....dollars..	2,913.90	1,549.42	1,706.55	7,613.98	3,391.17	3,909.25	2,825.00	3,000.51
10	per acre on all irrigated farms....dollars..	2.48	8.69	20.55	7.24	0.89	4.85	0.58	1.18
11	Buildings, nonirrigated farms reporting value....number...	246	33	25	2	23	1	4	34
12	Total reported....dollars..	368,450	23,460	82,910	(1)	12,300	(1)	2,400	24,790
13	Average, per nonirrigated farm reporting....dollars..	1,497.76	710.91	3,316.40	(1)	534.78	(1)	600.00	729.12
14	per acre on all nonirrigated farms....dollars..	2.29	8.84	31.25	(1)	0.68	(1)	2.22	1.08
15	Implements and machinery, irrigated farms reporting value..number...	2,961	538	287	118	435	17	48	168
16	Total reported....dollars..	3,612,624	423,008	203,521	340,124	696,824	37,000	64,495	275,971
17	Average, per irrigated farm reporting....dollars..	1,220.07	786.26	709.13	2,882.41	1,601.89	2,176.47	1,343.65	1,642.68
18	per acre, on all irrigated farms....dollars..	1.00	4.27	9.36	2.59	0.41	2.30	0.25	0.69
19	Implements and machinery, nonirrigated farms reporting value....number...	177	25	31	.....	11	1	4	27
20	Total reported....dollars..	108,639	12,020	16,900	.....	4,600	(1)	1,550	17,858
21	Average, per acre, on all nonirrigated farms....dollars..	0.68	4.53	6.37	.....	0.25	(1)	1.44	0.78
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
22	Enterprises....1940...number....	[2]1,475	25	140	89	364	20	56	137
23	1930...number....	[2]1,247	24	67	47	378	13	60	141
24	1920...number....	1,015	14	37	78	367	7	24	83
25	Average size of enterprise based on irrigable area....1940...acres....	621	3,577	91	362	915	228	761	632
26	1930...acres....	789	5,462	237	437	656	150	524	777
27	1920[3]..acres....	1,362	12,263	284	554	1,184	1,331	225	720
28	Diversion dams....1940...number....	1,896	8	10	80	731	3	210	206
29	Main canals and laterals....1940...length, miles....	2,897.2	442.0	38.8	119.0	708.2	2.3	40.0	289.0
30	1930...length, miles....	4,155	540	100	70	1,344	23	186	356
31	1920...length, miles....	4,368	381	126	93	1,798	5	3	98
32	1940...capacity, c.f.s.[4]....	22,930	2,108	94	1,268	7,062	56	1,049	2,431
33	1930...capacity, c.f.s.[4]....	16,986	3,507	117	457	3,446	24	601	1,692
34	1920...capacity, c.f.s.[4]....	10,554	3,141	110	460	1,297	31	18	307
35	Pipe lines[5]....1940...length, miles....	104.7	16.4	2.5	8.3	9.5	.....	8.2	2.8
36	Storage dams....1940...number....	122	4	7	6	7	.....	4	3
37	Reservoirs....1940...number....	200	14	15	4	7	2	5	11
38	1930...number....	209	2	22	9	15	7	3	16
39	1920...number....	134	8	13	7	21	.....	.....	16
40	1940...capacity, acre-feet..	696,005	273,683	1,721	83,201	74,735	(1)	58	4,391
41	1930...capacity, acre-feet..	529,369	294,100	135	2,800	54,565	5	4	14,231
42	1920...capacity, acre-feet..	504,428	350,009	214	.....	40,068	.....	.....	7,452
43	Wells, flowing....1940...number....	322	44	108	1	2	.....	4	28
44	1930...number....	274	29	62	5	.....	2	.....	32
45	1920...number....	123	6	53	2	2	.....	.....	20
46	1940...yield, g.p.m....	39,835	1,182	15,746	(1)	(1)	.....	950	12,463
47	1930...yield, g.p.m....	19,131	1,035	8,272	120	.....	1,550	.....	1,750
48	1920...yield, g.p.m....	21,942	615	18,872	22	.....	.....	.....	400
49	Wells, pumped....1940...number....	167	4	38	12	12	7	1	34
50	1930...number....	147	9	8	9	8	11	.....	19
51	1920...number....	129	.....	2	.....	9	.....	.....	13
52	1940...yield, g.p.m....	50,938	653	5,758	17,228	785	1,490	(1)	6,788
53	1930...yield, g.p.m....	54,162	1,515	2,132	17,125	495	365	.....	10,980
54	1920...yield, g.p.m....	6,798	.....	475	.....	645	.....	.....	1,050
55	Pumping plants....1940...number....	192	10	42	23	11	8	1	37
56	1930...number....	157	11	13	20	8	9	.....	19
57	1920...number....	64	1	3	7	9	.....	.....	7
58	Prime movers....1940...capacity, hp....	2,262	443	256	735	32	68	(1)	252
59	1930...capacity, hp....	2,671	315	96	704	40	35	.....	427
60	1920...capacity, hp....	409	6	41	108	32	.....	.....	22
61	Pumps....1940...capacity, g.p.m....	141,065	43,967	8,328	53,678	785	1,850	(1)	7,088
62	1930...capacity, g.p.m....	115,648	34,810	6,883	34,670	505	370	.....	11,830
63	1920...capacity, g.p.m....	35,266	.....	4,633	.....	1,720	.....	.....	20,200
64	Pumping lift, from all sources....1940...average, feet....	31	19	21	31	28	34	(1)	40
65	1930...average, feet....	31	15	13	28	35	42	.....	37
66	1920...average, feet....	22	6	28	16	23	.....	.....	26
67	from pumped wells....1940...average, feet....	31	.....	22	32	30	30	(1)	40
	PAY ROLL AND NUMBER OF EMPLOYEES 1939[6]								
68	Enterprises reporting pay roll....number...	66	[7]1	2	11	1	.....	.....	[7]1
69	Irrigated area in these enterprises....acres....	169,818	53,449	(1)	15,452	(1)	.....	.....	2,834
70	Wages and salaries paid and payable....dollars..	160,642	1,354	(1)	2,807	(1)	.....	.....	4,563
71	Persons employed during week ending April 29....number...	275	53	(1)	6	.....	.....	.....	5

*Census of Agriculture.
[1]Data are included only in State totals because less than 3 farms or 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.
[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.
[7]Data for less than 3 enterprises shown with permission of the enterprise involved.

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

	ITEM (For definitions and explanations, see text)	Lander	Lincoln	Lyon	Nye	Ormsby	Pershing	Washoe	White Pine	All other counties
	FARM VALUES, 1940[a]									
1	Land and buildings, all farms....dollars..	1,012,752	1,002,523	4,544,355	1,040,612	460,132	2,733,260	8,884,162	1,807,344	387,990
2	Land and buildings, irrigated farms....dollars..	980,552	949,643	4,518,555	1,007,492	438,032	2,656,530	8,519,912	1,773,094	359,270
	Operated by—									
3	(a) Owners and managers....dollars..	909,552	806,343	3,908,905	918,792	(1)	2,283,730	7,328,912	1,505,596	(1)
4	(b) Tenants....dollars..	71,000	143,300	609,650	88,700	(1)	372,800	1,191,000	267,498	(1)
5	Average, land and buildings, per farm....dollars..	20,862.81	5,275.79	13,850.60	7,690.78	19,910.55	26,044.41	17,936.66	10,308.69	4,921.51
6	per acre in farms....dollars..	5.30	21.23	25.32	12.08	22.48	31.29	39.67	12.43	6.79
7	Buildings, irrigated farms reporting value....number...	47	163	320	130	22	97	457	163	66
8	Total reported....dollars..	128,565	234,850	877,785	165,415	133,832	275,650	2,367,592	299,729	42,695
9	Average, per irrigated farm reporting....dollars..	2,735.43	1,379.45	2,743.08	1,272.42	6,083.27	2,841.75	5,180.73	1,838.83	646.89
10	per acre on all irrigated farms....dollars..	0.69	5.03	4.92	1.98	6.87	3.25	11.02	2.10	0.81
11	Buildings, nonirrigated farms reporting value....number...	6	23	13	4	6	5	38	15	14
12	Total reported....dollars..	4,900	10,950	11,850	2,500	9,570	19,400	137,485	13,110	6,150
13	Average, per nonirrigated farm reporting....dollars..	816.67	476.09	911.54	625.00	1,595.00	3,880.00	3,618.03	874.00	439.29
14	per acre on all nonirrigated farms....dollars..	0.26	4.40	9.43	2.08	36.81	6.19	1.71	4.77	7.30
15	Implements and machinery, irrigated farms reporting value..number...	46	160	305	123	20	99	372	165	60
16	Total reported....dollars..	98,278	92,727	416,903	98,888	40,725	194,410	453,006	160,550	16,194
17	Average, per irrigated farm reporting....dollars..	2,136.48	579.54	1,366.90	803.97	2,036.25	1,963.74	1,217.76	973.03	269.90
18	per acre, on all irrigated farms....dollars..	0.53	2.07	2.34	1.19	2.09	2.29	2.11	1.13	0.31
19	Implements and machinery, nonirrigated farms reporting value....number...	7	17	10	4	2	6	23	11	8
20	Total reported....dollars..	3,625	8,685	5,045	4,425	(1)	14,850	8,781	4,850	2,500
21	Average, per acre, on all nonirrigated farms....dollars..	0.19	3.49	4.01	3.68	(1)	4.74	0.11	1.69	2.97
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1									
22	Enterprises....1940...number....	44	93	74	105	12	43	124	143	6
23	1930...number....	43	36	28	108	11	47	126	105	13
24	1920...number....	41	49	40	95	20	16	87	50	27
25	Average size of enterprise based on irrigable area....1940...acres....	719	148	1,190	345	155	1,101	419	250	1,300
26	1930...acres....	523	371	6,780	275	150	1,625	411	242	.....
27	1920[2]...acres....	698	416	8,320	743	370	3,925	900	957	492
28	Diversion dams....1940...number....	181	78	63	55	2	75	89	102	3
29	Main canals and laterals....1940...length, miles....	109.0	128.2	316.6	184.0	5.0	145.0	248.0	92.0	30.1
30	1930...length, miles....	108	85	337	205	9	140	389	218	45
31	1920...length, miles....	198	120	572	169	30	156	316	210	93
32	1940...capacity, c.f.s.[3]....	513	270	1,577	728	173	1,464	1,799	686	1,654
33	1930...capacity, c.f.s.[3]....	319	113	2,210	235	135	1,398	936	217	1,578
34	1920...capacity, c.f.s.[3]....	39	47	1,097	423	133	266	2,612	282	291
35	Pipe lines[4]....1940...length, miles....	1.5	5.7	3.8	4.1	2.4	13.5	4.2	16.9	4.9
36	Storage dams....1940...number....	1	10	3	13	.....	10	27	25	2
37	Reservoirs....1940...number....	1	12	3	32	.....	13	28	52	[5]1
38	1930...number....	1	10	2	17	5	16	20	63	1
39	1920...number....	.....	6	3	13	5	3	29	7	3
40	1940...capacity, acre-feet..	(1)	3,423	280	5,527	.....	229,065	5,752	1,007	13,000
41	1930...capacity, acre-feet..	200	3,923	92,000	12,067	13	49,072	3,145	3,107	2
42	1920...capacity, acre-feet..	.....	354	1,500	1,354	50,060	32,003	16,626	4,783	5
43	Wells, flowing....1940...number....	3	.....	14	38	.....	.....	77	3	.....
44	1930...number....	4	.....	16	27	27	.....	67	3	.....
45	1920...number....	1	.....	26	9	1	.....	.....	3	.....
46	1940...yield, g.p.m....	120	.....	785	5,345	.....	.....	3,099	65	.....
47	1930...yield, g.p.m....	65	.....	576	2,595	121	.....	2,294	753	.....
48	1920...yield, g.p.m....	25	.....	242	410	.....	.....	.....	1,356	.....
49	Wells, pumped....1940...number....	1	9	5	2	2	4	22	14	.....
50	1930...number....	1	.....	2	20	2	15	12	25	6
51	1920...number....	5	5	21	7	1	2	1	10	53
52	1940...yield, g.p.m....	(1)	216	2,925	(1)	(1)	3,385	5,790	2,110	.....
53	1930...yield, g.p.m....	30	.....	1,650	1,710	135	7,100	2,965	6,500	1,460
54	1920...yield, g.p.m....	10	230	5	360	50	910	250	2,788	25
55	Pumping plants....1940...number....	1	8	5	4	2	4	23	13	.....
56	1930...number....	3	.....	2	14	2	13	15	23	5
57	1920...number....	4	5	3	8	3	2	2	9	1
58	Prime movers....1940...capacity, hp....	(1)	40	75	28	(1)	87	111	48	.....
59	1930...capacity, hp....	21	.....	63	112	8	312	182	298	58
60	1920...capacity, hp....	10	31	2	35	20	17	12	73	.....
61	Pumps....1940...capacity, g.p.m....	(1)	714	8,925	840	(1)	3,385	6,055	2,080	.....
62	1930...capacity, g.p.m....	415	.....	1,650	1,945	95	5,450	8,945	6,620	1,460
63	1920...capacity, g.p.m....	10	245	.....	350	1,650	915	1,850	3,668	25
64	Pumping lift, from all sources....1940...average, feet....	(1)	19	16	49	(1)	25	24	70	.....
65	1930...average, feet....	10	.....	34	28	66	28	21	43	50
66	1920...average, feet....	.....	16	10	19	10	78	11	21	17
67	from pumped wells....1940...average, feet....	(1)	19	18	(1)	(1)	25	23	89	.....
	PAY ROLL AND NUMBER OF EMPLOYEES 1939[6]									
68	Enterprises reporting pay roll....number...	.....	6	16	2	.....	4	19	2	[5]1
69	Irrigated area in these enterprises....acres....	.....	4,042	40,886	(1)	.....	6,139	28,964	(1)	3,498
70	Wages and salaries paid and payable....dollars..	.....	1,470	18,123	(1)	.....	11,757	76,636	(1)	36,209
71	Persons employed during week ending April 29....number...	.....	.....	37	.....	.....	14	93	(1)	22

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

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....	[7] 77,767,040	78,401,920	78,401,920	78,401,920	78,401,920	78,401,920	78,401,920
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated)....number...	34,105	41,369	31,404	29,844	35,676	12,311	4,458
Land in all farms....acres....	38,860,427	34,397,205	30,822,034	24,409,633	11,270,021	5,130,878	787,882
Farms irrigated:[1]							
Farms....number...	15,811	17,093	14,347	11,390	12,795	9,128	3,085
Increase or decrease (-) over preceding census....percent..	[2] 10.2	19.1	26.0	-11.0	40.2	195.9	.....
Proportion of all farms....percent..	46.4	41.3	45.7	38.2	35.9	74.1	69.2
Land in farms....acres....	7,408,997	([3])	5,024,868	([3])	([3])	([3])	([3])
Proportion of all farm land....percent..	19.1	([3])	16.3	([3])	([3])	([3])	([3])
Area irrigated....acres....	[4] 436,402	[5] 314,319	[6] 371,269	([7])	([7])	203,893	91,745
Increase or decrease (-) over preceding census....percent..	[2] 17.5	.....	.....	.....	.....	122.2	.....
Proportion of total land area of State....percent..	0.6	0.4	0.5	.....	.....	0.3	0.1
Proportion of all farm land....percent..	1.1	0.9	1.2	.....	.....	4.0	11.6
Value of irrigated farms (land and buildings)....dollars..	82,619,776	([3])	87,868,916	([3])	([3])	([3])	([3])
Average per farm....dollars..	5,225.46	([3])	6,124.55	([3])	([3])	([3])	([3])
Average per acre....dollars..	11.15	([3])	17.49	([3])	([3])	([3])	([3])
Value of farm implements and machinery[8]....dollars..	6,937,641	([3])	5,291,569	([3])	([3])	([3])	([3])
Average per farm[8]....dollars..	438.79	([3])	368.83	([3])	([3])	([3])	([3])
Average per acre[8]....dollars..	0.94	([3])	1.05	([3])	([3])	([3])	([3])
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises....number...	2,503	([3])	1,965	2,391	2,786	([3])	([3])
Farms irrigated....number...	31,683	([3])	([3])	([3])	([3])	([3])	([3])
Area irrigated....acres....	554,039	([3])	527,033	538,377	461,718	([3])	([3])
Area existing works were capable of supplying with water....acres....	731,990	([3])	656,669	696,119	644,970	([3])	([3])
Area irrigable....acres....	807,656	([3])	741,245	[9] 961,879	[9] 1,102,297	([3])	([3])
Additional area existing works were capable of supplying with water....acres....	177,951	([3])	129,636	157,742	183,252	([3])	([3])
Additional irrigable area in enterprises not supplied with water....acres....	253,617	([3])	214,212	[9] 423,502	[9] 640,579	([3])	([3])
Investment in irrigation enterprises....dollars..	32,735,997	([3])	19,834,380	18,210,412	9,154,897	4,165,312	511,937
Increase or decrease (-) over preceding census....percent..	[2] 65.0	([3])	8.9	98.9	119.8	713.6	.....
Average per acre based on area works were capable of supplying with water....dollars..	44.72	([3])	30.20	26.16	14.19	([3])	([3])
Increase or decrease (-) over preceding census....percent..	[2] 48.1	([3])	15.4	84.4	.....	.....	.....
Estimated completed cost of existing enterprises....dollars..	36,773,139	([3])	21,942,450	20,440,646	11,640,091	([3])	([3])
Average per acre based on irrigable area in enterprises....dollars..	45.53	([3])	29.60	[9] 21.25	[9] 10.56	([3])	([3])
Average annual cost per acre irrigated for maintenance and operation of irrigation works....dollars..	2.11	([3])	2.15	2.41	1.36	([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 27,051 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. [7] 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	34,105	38,860,427	1,572,507	409,351	27,051	187,525,814	4.83	28,253,456	0.73	15,212,674	0.39
Owners and managers	28,294	34,674,858	1,161,076	312,488	22,775	157,640,909	4.55	24,169,785	0.70	12,340,615	0.36
Tenants	5,811	4,185,569	411,431	96,863	4,276	29,884,905	7.14	4,083,671	0.98	2,872,059	0.69
Irrigated farms, total	15,811	7,408,997	448,203	409,351	27,051	82,619,776	11.15	14,976,063	2.02	6,937,641	0.94
Owners and managers	13,396	6,501,491	343,317	312,488	22,775	67,593,251	10.40	12,774,932	1.96	5,725,157	0.88
Tenants	2,415	907,506	104,886	96,863	4,276	15,026,525	16.56	2,201,131	2.43	1,212,484	1.34
Wholly irrigated farms	14,111	5,259,705	375,753	375,753	20,997	69,341,215	13.18	13,075,756	2.49	6,132,181	1.17
Owners and managers	11,919	4,825,825	285,125	285,125	17,442	57,260,430	11.87	11,210,579	2.32	5,035,730	1.04
Tenants	2,192	433,880	90,628	90,628	3,555	12,080,785	27.84	1,865,177	4.30	1,096,451	2.53
Partly irrigated farms	1,700	2,149,292	72,450	33,598	6,054	13,278,561	6.18	1,900,307	0.88	805,460	0.37
Owners and managers	1,477	1,675,666	58,192	27,363	5,333	10,332,821	6.17	1,564,353	0.93	689,427	0.41
Tenants	223	473,626	14,258	6,235	721	2,945,740	6.22	335,954	0.71	116,033	0.24
Nonirrigated farms, total	18,294	31,451,430	1,124,304	.....	.....	104,906,038	3.34	13,277,393	0.42	8,275,033	0.26

[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.

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					
								Irrigated area reporting—			Quantity delivered per acre[1]	Cost[1]	
	Enterprises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Quantity	Cost	Quantity and cost		Per acre	Per acre-foot
	Number	*Acres*	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*	*Acres*	*Acres*	*Acres*	*Acre-feet*	*Dollars*	*Dollars*
Total	2,503	807,656	731,090	554,039	527,033	538,377	5.1	474,184	519,593	457,878	3.0	2.82	0.92
Primary sources:													
Streams, gravity	1,021	492,792	435,022	343,684	430,099	432,478	-20.1	271,984	325,018	268,350	2.4	1.60	0.68
Streams, pumped	47	6,136	5,903	3,887	6,856	1,890	-43.3	3,875	3,869	3,869	3.0	2.08	0.69
Streams, gravity and pumped	8	110,875	110,675	70,129	.....	.....	.....	70,129	70,089	70,089	6.6	6.76	1.03
Wells, pumped	1,026	108,015	102,953	75,556	30,425	15,709	148.3	74,341	70,741	70,236	2.6	4.26	1.61
Wells, flowing	115	14,953	13,944	11,533	21,838	30,030	-47.2	11,512	4,457	4,457	2.4	1.05	0.44
Wells, pumped and flowing	52	13,986	13,704	11,729	5,855	6,556	100.3	11,729	10,876	10,876	2.5	2.69	1.10
Lakes, gravity	2	410	410	374	385	1,945	-2.9	374	374	374	3.4	0.31	0.09
Lakes, pumped	1												
Springs	86	6,712	5,204	3,136	5,595	10,791	-43.9	1,673	1,976	1,198	2.3	1.46	0.63
Springs and streams	12	5,016	4,986	3,973	.....	.....	.....	2,346	2,655	2,328	1.5	0.39	0.27
Stored storm water	8	1,944	961	650	1,720	6,448	-62.2	619	640	613	2.0	1.92	0.97
City water	2	139	139	114	157	40	-27.4	4	4	4	5.0	1.25	0.25
Sewage	1												
Streams, gravity; wells, pumped	32	3,420	3,401	2,565	1,015	2,026	152.7	2,474	2,536	2,457	2.4	2.89	1.18
Streams, gravity; wells, flowing	2												
Streams, pumped; wells, pumped	4	2,578	2,578	2,423	.....	.....	.....	2,423	2,423	2,423	3.0	0.80	0.40
Waste water, seepage or drainage	5	537	537	376	.....	.....	.....	162	167	162	2.7	0.71	0.26
Other mixed	27	40,743	31,573	23,910	19,501	29,787	22.6	20,539	23,768	20,442	2.4	1.10	0.45
Other and not reported	.....	.....	.....	.....	3,587	677	.....	.....	.....	.....	.....	.....	.....
Supplemental sources:[2]													
Streams, gravity and/or storage	2	132	132	92	20	.....	360.0	66	64	38	1.1	0.53	0.49
Streams, pumped	1												
Wells, pumped	48	5,783	5,780	5,031	.....	.....	.....	5,031	5,019	5,019	1.5	2.01	1.32
Wells, flowing	1			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[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]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	Proportion of total	Average per acre[2]	Amount	Proportion of total	Average per acre[2]		Irrigated area reporting	Average per acre	Irrigated area reporting	Average per acre		Irrigated area reporting	Average per acre
	Dollars	*Percent*	*Dollars*	*Dollars*	*Percent*	*Dollars*	*Dollars*	*Acres*	*Dollars*	*Acres*	*Dollars*	*Dollars*	*Acres*	*Dollars*
Total	32,735,997	100.0	44.72	19,834,380	100.0	30.20	14.52	516,916	2.11	493,229	2.15	-0.04	336,387	2.41
Primary sources:														
Streams, gravity	17,320,656	52.9	39.82	16,314,802	82.2	30.20	9.62	322,341	1.38	419,977	1.87	-0.49	257,818	1.65
Streams, pumped	83,892	0.3	14.21	334,111	1.7	33.18	-18.97	3,869	2.08	6,848	2.01	0.07	1,132	1.30
Streams, gravity and pumped	10,411,418	31.8	94.07	.....	.....	.....	.....	70,089	3.74	.....	.....	.....	.....	.....
Wells, pumped	2,312,580	7.1	22.46	1,312,396	6.6	38.75	-16.29	70,741	4.27	27,586	6.44	-2.17	12,388	7.51
Wells, flowing	420,372	1.3	30.15	877,281	4.4	37.55	-7.40	4,457	1.05	4,648	2.17	-1.12	14,394	2.15
Wells, pumped and flowing	401,119	1.2	29.27	251,863	1.3	36.61	-7.34	10,876	2.69	5,855	3.00	-0.31	4,601	8.99
Lakes, gravity	1,500	(3)	3.66	30,800	0.2	52.65	-48.99	374	0.31	385	4.17	-3.86	1,945	1.41
Lakes, pumped														
Springs	108,467	0.3	20.84	70,155	0.4	9.89	10.95	1,976	1.32	4,013	1.55	-0.23	7,452	1.92
Springs and streams	49,980	0.2	10.02	.....	.....	.....	.....	2,655	0.56	.....	.....	.....	.....	.....
Stored storm water	29,119	0.1	30.30	56,421	0.3	15.17	15.13	640	2.03	1,650	1.91	0.12	6,207	1.67
City water	675	(3)	4.86	375	(3)	2.39	2.47	4	1.25	.....	.....	.....	40	1.25
Sewage														
Streams, gravity; wells, pumped	73,933	0.2	22.41	86,301	0.4	92.30	-69.89	2,535	2.89	655	1.13	1.76	1,319	39.77
Streams, gravity; wells, flowing	3,925	(3)	38.48	2,500	(3)	6.94	31.54	1	10.00	360	0.83	9.17	500	1.00
Streams, pumped; wells, pumped	30,625	0.1	11.88	.....	.....	.....	.....	2,423	0.80	.....	.....	.....	.....	.....
Waste water, seepage or drainage	2,100	(3)	3.91	.....	.....	.....	.....	167	0.80	.....	.....	.....	.....	.....
Other mixed	1,378,932	4.2	43.67	458,835	2.3	17.76	25.91	23,768	0.63	17,723	1.65	-1.02	28,534	4.84
Other and not reported	.....	.....	.....	33,550	0.2	9.22	.....	.....	.....	3,529	3.62	.....	57	4.91
Supplemental sources:[4]														
Streams, gravity and/or storage	2,131	(3)	16.14	5,000	(3)	250.00	-233.86	64	0.59	20	38.15	-37.56	.....	.....
Streams, pumped														
Wells, pumped	104,573	0.3	18.09	.....	.....	.....	.....	5,019	2.01	.....	.....	.....	.....	.....
Wells, flowing				.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1]Based on irrigated area in enterprises reporting cost of maintenance and operation. [2]Based on area works were capable of supplying with water. [3]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 explanations, see text)	CENSUS OF— 1940 Primary enterprises	1940 Supplemental enterprises[1]	1930 Primary enterprises	1920 Primary enterprises	Increase or decrease (-) 1930-40 primary enterprises
AREA IRRIGATED					
Total	*Acres* 554,039	*Acres* 5,123	*Acres* 527,033	*Acres* 538,377	*Percent* 5.1
Individual and partnership	151,366	5,123	130,738	151,351	15.8
Cooperative, incorporated	45,030	.....	233,286	264,610	-27.9
Cooperative, unincorporated	123,156	.....			
Irrigation district	86,675	.....	22,000	15,008	294.0
Commercial	[2] 22,637	.....	16,192	19,871	3.98
Bureau of Reclamation[3] *	98,064	.....	103,090	77,678	-4.9
Office of Indian Affairs[3]	27,111	.....	20,824	9,072	30.2
State	.....	.....	20	77	.....
City and/or sewage	(2)	.....	.....	600	.....
Other	.....	.....	883	110	.....
AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER					
Total	731,990	5,912	656,669	696,119	11.5
Individual and partnership	199,699	5,912	155,802	215,618	28.2
Cooperative, incorporated	57,699	.....	276,581	305,540	-30.7
Cooperative, unincorporated	133,845	.....			
Irrigation district	133,512	.....	37,000	24,808	260.8
Commercial	[2] 32,589	.....	28,212	33,743	15.5

ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF— 1940 Primary enterprises	1940 Supplemental enterprises[1]	1930 Primary enterprises	1920 Primary enterprises	Increase or decrease (-) 1930-40 primary enterprises
AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER—Continued					
Bureau of Reclamation[3] *	*Acres* 115,695	*Acres*	*Acres* 111,035	*Acres* 96,751	*Percent* 4.2
Office of Indian affairs[3]	58,951	.....	41,989	11,372	40.4
State	.....	.....	20	77	.....
City and/or sewage	(2)	.....	.....	600	.....
Other	.....	.....	6,030	7,610	.....
IRRIGABLE AREA[4]					
Total	807,656	5,915	741,245	961,879	9.0
Individual and partnership	208,686	5,915	165,264	313,170	26.3
Cooperative, incorporated	69,361	.....	324,300	404,028	-34.6
Cooperative, unincorporated	142,743	.....			
Irrigation district	139,212	.....	43,500	28,520	220.0
Commercial	[2] 45,196	.....	33,392	67,050	35.3
Bureau of Reclamation[3] *	125,889	.....	113,035	127,226	11.4
Office of Indian Affairs[3]	76,569	.....	55,704	13,570	37.5
State	.....	.....	20	77	.....
City and/or sewage	(2)	.....	.....	600	.....
Other	.....	.....	6,030	7,638	.....

[1] Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text). [2] Data for 1 "City and/or sewage" are included with "Commercial" enterprises in the 1940 Census. [3] U. S. Dept. of the Interior. [4] For 1920 relates to total area. Irrigable area for that year was not reported. * For explanation of areas, see text, p. 418.

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

TYPE OF ENTERPRISE (For definitions and explanations, see text)	ENTERPRISES Total	ENTERPRISES Serving 5 or more farms	AREAS Irrigable	AREAS Works were capable of supplying with water	AVERAGE COST Primary enterprises: Works and equipment per acre[2]	AVERAGE COST Primary enterprises: Maintenance and operation per acre[3]	AVERAGE COST Supplemental enterprises: Works and equipment per acre[2]	AVERAGE COST Supplemental enterprises: Maintenance and operation per acre[3]	AREA IRRIGATED, 1939[1]: Farms served	Total area	Cropland: From which crops were harvested	Cropland: On which crops failed	Irrigated pasture
Total	*Number* 2,503	*Number* 509	*Acres* 807,656	*Acres* 731,990	*Dollars* 43.97	*Dollars* 2.09	*Dollars* 17.40	*Dollars* 2.00	*Number* 31,683	*Acres* 554,039	*Acres* 512,441	*Acres* 21,069	*Acres* 20,529
Individual and partnership	2,015	51	208,686	199,699	21.98	2.97	17.40	2.00	2,922	151,366	140,044	2,967	8,355
Cooperative, incorporated	83	79	69,361	57,699	30.42	0.77	.....	.....	2,557	45,030	39,812	3,530	1,688
Cooperative, unincorporated	361	336	142,743	133,845	22.26	0.85	.....	.....	9,831	123,156	107,834	8,179	7,143
Irrigation district	11	11	139,212	133,512	83.23	3.41	.....	.....	9,452	86,675	83,598	2,157	920
Commercial	5	5	[4] 45,196	[4] 32,589	[4] 25.13	[4] 0.42	.....	.....	[4] 204	[4] 22,637	[4] 21,801	[4] 40	[4] 796
U. S. Bureau of Reclamation *	[5] 2	2	125,889	115,695	67.08	2.12	.....	.....	3,111	98,064	92,602	4,096	1,366
U. S. Office of Indian Affairs	25	24	76,569	58,951	57.22	2.02	.....	.....	3,606	27,111	26,750	100	261
State	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage	1	1	(4)	(4)	(4)	(4)	.....	.....	(4)	(4)	(4)	(4)	(4)
Other	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Reported by enterprises in the Census of Irrigation, 1940, not by the Census of Agriculture. [2] Based on area works were capable of supplying with water and cost of works and equipment exclusive of water right investment. [3] Based on irrigated area in enterprises reporting maintenance and operation in 1939. [4] Data for 1 "City and/or sewage" enterprise are included with "Commercial" enterprises in the 1940 Census. [5] Data for less than 3 enterprises shown with permission of the enterprises involved. * For explanation of areas and investment, see text, p. 418.

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: 1940 Total	1940 Primary enterprises	1940 Supplemental enterprises	1940 Total cost of works and equipment	1940 Investment in water rights	1930	1920	Increase or decrease (-) 1930-40	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER: Primary enterprises	Supplemental enterprises	Capital expenditures during 1939[1]	Estimated investment required to complete works
Total	*Dollars* 32,735,997	*Dollars* 32,629,293	*Dollars* 106,704	*Dollars* 32,290,856	*Dollars* 445,141	*Dollars* 19,834,380	*Dollars* 18,210,412	*Percent* 65.0	*Dollars* 44.58	*Dollars* 18.05	*Dollars* 735,844	*Dollars* 4,037,142
Individual and partnership	4,531,158	4,424,454	106,704	4,491,305	39,853	3,814,458	5,589,372	18.8	22.16	18.05	2,261	58,268
Cooperative, incorporated	1,950,969	1,950,969	.....	1,755,381	195,588	3,016,075	3,558,863	64.9	33.81	.....	135,718	107,925
Cooperative, unincorporated	3,022,191	3,022,191	.....	2,979,069	43,122				22.58	.....	54,439	75,730
Irrigation district	11,165,731	11,165,731	.....	11,112,222	53,509	1,289,180	914,479	766.1	83.63	.....	30,235	8,000
Commercial	[2] 931,994	[2] 931,994	.....	[2] 818,925	[2] 113,069	1,543,000	1,877,842	[2] 39.6	[2] 28.60	.....	.....	[2] 35,000
U. S. Bureau of Reclamation *	7,760,844	7,760,844	.....	7,760,844	.....	8,684,489	5,020,230	-10.6	67.08	.....	144,263	352,969
U. S. Office of Indian Affairs	3,373,110	3,373,110	.....	3,373,110	.....	1,231,928	691,194	173.8	57.22	.....	368,928	3,399,250
State	.....	.....	.....	.....	.....	5,000	18,544	.....	.....	.....	.....	.....
City and/or sewage	(2)	(2)	.....	(2)	(2)	.....	278,299	.....	(2)	.....	.....	(2)
Other	.....	.....	.....	.....	.....	250,250	263,589	.....	.....	.....	.....	.....

[1] Only for enterprises serving 5 or more farms. [2] Data for 1 "City and/or sewage" enterprise are included with "Commercial" enterprises in the 1940 Census. * For explanation of investment, see text, p. 418.

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		
	Enterprises 1940	Area: Irrigable 1940	Area: Works were capable of supplying with water 1940	Total indebtedness 1940	Average per acre assessed 1939	Average per acre works were capable of supplying with water	Enterprises 1940	Total arrearages: Dec. 31 1939	Total arrearages: Dec. 31 1938	Average per acre assessed 1939	Area assessed 1939	Charges made 1939	Charges collected 1939
Total	*Number* 57	*Acres* 417,978	*Acres* 366,615	*Dollars* 16,715,813	*Dollars* 48.68	*Dollars* 45.60	*Number* 6	*Dollars* 560,392	*Dollars* 520,067	*Dollars* 30.40	*Acres* 483,407	*Dollars* 966,767	*Dollars* 1,037,433
Partnership	2	(3)	(3)	(3)	(3)	(3)	.....	.....	(4)	.....	8,603	12,157	1,303
Cooperative, incorporated	8	34,214	25,730	779,302	27.18	30.29	2	} 537,410	[4] 502,208	79.72	53,888	44,999	52,417
Cooperative, unincorporated	11	[3] 12,275	[3] 12,075	[3] 9,134	[3] 0.79	[3] 0.76	1				113,904	98,712	28,737
Irrigation district	7	135,273	129,573	9,294,472	69.23	71.73	2	} 22,982	17,859	1.14	135,404	525,300	637,788
Commercial	4	44,916	32,416	127,861	5.70	3.94	1				[5] 22,536	[5] 21,612	[5] 15,784
Bureau of Reclamation[6] *	[7] 2	125,889	115,695	[8] 5,383,640	45.65	46.53	.....	.....	.....	.....	117,935	216,022	301,404
Office of Indian Affairs[6]	23	65,411	51,126	[9] 1,121,404	39.12	21.93	.....	.....	.....	.....	31,137	47,965	.....
State	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(5)	(5)	(5)
Other	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1]Only for enterprises serving 5 or more farms. No supplemental enterprises reported indebtedness in this State. [2]In payment of principal, interest, and/or other funded obligations. [3]Data for 2 "Partnership" enterprises are included with "Cooperative, unincorporated" enterprises in the 1940 Census. [4]Data for "Partnership" enterprises are included with "Cooperative" enterprises in the 1940 Census. [5]Data for 1 "City and/or sewage" enterprise are included with "Commercial" enterprises in the 1940 Census. [6]U. S. Dept. of the Interior. [7]Data for less than 3 enterprises shown with permission of the enterprises involved. [8]Represents indebtedness of irrigation districts to the U. S. Government. [9]Represents construction costs of irrigation works less cancellations and repayments. *For explanation of areas and investment, see text, p. 418.

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: Irrigated area reporting 1939	Primary Enterprises: Reported cost 1939	Supplemental enterprises: Irrigated area reporting 1939	Supplemental enterprises: Reported cost 1939	Average cost per irrigated acre: Primary enterprises 1939	Average cost per irrigated acre: Supplemental enterprises 1939	Enterprises reporting pay roll	Wages and salaries paid and payable	Employees during week ending April 29
Total	*Acres* 516,916	*Dollars* 1,082,768	*Acres* 5,083	*Dollars* 10,142	*Dollars* 2.09	*Dollars* 2.00	*Number* 205	*Dollars* 718,210	*Number* 1,773
Individual and partnership	133,998	398,142	5,083	10,142	2.97	2.00	22	5,302	221
Cooperative, incorporated	42,097	32,232	.....	.....	0.77	.....	29	41,792	255
Cooperative, unincorporated	108,934	93,090	.....	.....	0.85	.....	115	43,000	441
Irrigation district	84,365	287,753	.....	.....	3.41	.....	8	214,127	231
Commercial	[2] 22,587	[2] 9,479	.....	.....	[2] 0.42	.....	4	[2] 11,802	[2] 15
U. S. Bureau of Reclamation*	98,064	207,905	.....	.....	2.12	.....	2	169,171	114
U. S. Office of Indian Affairs	26,871	54,167	.....	.....	2.02	.....	24	233,016	496
State	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage	(2)	(2)	.....	.....	(2)	.....	1	(2)	(2)
Other	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1]Only for enterprises serving 5 or more farms. [2]Data for 1 "City and/or sewage" enterprise are included with "Commercial" enterprises in the 1940 Census. *For explanation of areas and investment, see text, p. 418.

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			
				Length[1]									Prime movers		Pumps	
	Diversion	Storage	Capacity at main heading	Earth	Lined[2]	Number	Capacity	Length	Number	Yield	Number	Yield	Number	Rated capacity	Number	Rated capacity
Total	*Number* 1,072	*Number* 141	*Sec.-ft.* 16,821	*Miles* 4,567	*Miles* 80.9	502	*Ac.-ft.* 3,280,550	*Miles* 36.5	268	*G.p.m.* 181,076	1,487	*G.p.m.* 1,143,276	1,558	*Hp.* 40,110	1,559	*G.p.m.* 1,309,005
Individual and partnership	576	60	2,906	851	10.1	415	7,525	17.3	255	170,416	1,487	1,143,276	1,549	39,929	1,551	1,289,640
Cooperative, incorporated	67	20	2,788	438	21.4	24	14,313	2.1	.....	.....	.....	.....	1	25	1	1,600
Cooperative, unincorporated	309	14	3,585	1,295	4.2	15	24,543	5.6	1	300	.....	.....	4	66	3	1,515
Irrigation district	14	6	3,703	935	0.2	6	280,228	6.7	.....	.....	.....	.....	4	90	4	16,250
Commercial	[3] 8	4	[3] 827	[3] 101	0.1	4	99,139	0.1	5	10,000	.....	.....	.....	.....	.....	.....
Bureau of Reclamation[4]	4	4	2,400	378	24.9	5	2,834,000	0.1	.....	.....	.....	.....	.....	.....	.....	.....
Office of Indian Affairs[4]	94	33	612	569	20.0	33	20,802	4.6	7	360	.....	.....	.....	.....	.....	.....
State	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage	(3)	.....	(3)	(3)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1]Includes main and lateral canals but not farm ditches. [2]Includes flumes. [3]Data for 1 "City and/or sewage" enterprise are included with "Commercial" enterprises in the 1940 Census. [4]U. S. Dept. of the Interior.

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

MATERIAL	1940		1930	
	Diversion	Storage	Diversion	Storage
	Number	*Number*	*Number*	*Number*
Total	1,072	141	665	69
Concrete or masonry	121	7	56	12
Timber	102	1	59	.....
Earth and rock	475	124	.....	29
Other and mixed	[1] 365	6	[1] 525	23
Not reported	9	3	25	5

[1] Principally temporary dams, replaced annually.

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

PUMPS BY KIND OF POWER EMPLOYED	Pumps	Proportion of total number	Rated capacity of pumps	Proportion of total capacity	Average lift of pumps
	Number	*Percent*	*G.p.m.*	*Percent*	*Feet*
Total, 1940	1,559	100.0	1,309,005	100.0	44
Electric motor	403	25.8	299 719	22.9	46
Centrifugal	141	9.0	113,969	8.7	27
Turbine	257	16.5	182,928	14.0	58
Plunger	2	0.1	22	(1)	28
Other	3	0.2	2,800	0.2	47
Internal-combustion engine	933	59.8	849,360	64.9	44
Centrifugal	389	25.0	344,388	26.3	30
Turbine	512	32.8	495,157	37.8	56
Plunger	22	1.4	1,015	0.1	44
Other	10	0.6	8,800	0.7	40
Other kinds of motive power	46	3.0	9,547	0.7	39
Centrifugal	3	0.2	8,065	0.6	32
Turbine	.....	.....	.....	.....	.....
Plunger	40	2.6	465	(1)	39
Other	3	0.2	1,017	0.1	43
Mixed kinds of motive power	177	11.4	150,379	11.5	41
Centrifugal	59	3.8	45,500	3.5	29
Turbine	96	6.2	103,325	7.9	46
Plunger	20	1.3	404	(1)	54
Other	2	0.1	1,150	0.1	28
Total, 1930	738	.....	555,063	.....	40
Increase or decrease (-) 1930-1940	821	.....	753,942	.....	4

MOTIVE POWER BY TYPE OF PUMP EMPLOYED	Prime movers	Proportion of total number	Rated capacity of movers	Proportion of total capacity
	Number	*Percent*	*Hp.*	*Percent*
Total, 1940	1,558	100.0	40,110	100.0
Centrifugal pump	549	35.2	12,600	31.4
Electric	151	9.7	2,040	5.1
Internal-combustion	393	25.2	10,359	25.8
Other	5	0.3	201	0.5
Turbine pump	814	52.2	24,497	61.1
Electric	284	18.2	5,080	12.7
Internal-combustion	530	34.0	19,417	48.4
Other	.....	.....	.....	.....
Plunger pump	86	5.6	191	0.5
Electric	1	0.1	11	(1)
Internal-combustion	31	2.0	95	0.2
Other	54	3.5	85	0.2
Other and mixed types of pumps	109	7.0	2,822	7.0
Electric	38	2.4	579	1.4
Internal-combustion	65	4.2	2,197	5.5
Other	6	0.4	46	0.1
Total, 1930	[2] 702	.....	14,483	.....
Increase or decrease (-) 1930-1940	856	.....	25,627	.....

[1] Less than one-tenth of 1 percent.

[2] Number of pumping plants.

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

MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940
	1940[1]	1930[2]	
	Miles	*Miles*	*Percent*
Total	36.5	15.2	140.1
Concrete:			
1 to 12 inches	1.4	0.7	100.0
13 to 24 inches	1.5	.....	.....
Over 24 inches	5.8	.....	.....
Metal:			
1 to 12 inches	13.1	9.1	44.0
13 to 24 inches	4.6	0.9	822.2
Over 24 inches	3.7		
Wood-stave:			
1 to 12 inches	1.3	2.1	-38.1
13 to 24 inches	0.6	1.4	50.0
Over 24 inches	1.5		
Clay and other:			
1 to 12 inches	3.0	0.8	275.0
13 to 24 inches	.....	0.2	.....
Over 24 inches	.....		

[1] Includes siphons and farm pipe lines reported.

[2] Pipe sizes were separated at 30 inches in diameter (instead of 24 inches) in the 1930 Census.

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 those of the Elephant Butte Irrigation District of the Rio Grande Project and the Carlsbad Irrigation District of the Carlsbad Project.

The investment attributed to the Bureau of Reclamation in State table 7 relates to construction costs incurred by the Government for irrigation facilities which are charged to lands in New Mexico served by the Rio Grande Project and those of the Carlsbad Project. Excluded from this total are drainage costs and the outlay for Elephant Butte Dam, which is to be repaid from power revenues arising from the operation of a power plant at the dam, and Caballo Dam, both of which serve the Rio Grande Project in New Mexico and Texas. Caballo Dam, which regulates the stream flow, was constructed as a part of canalization project for the Rio Grande under an agreement with Mexico.

The reduction in the amount of the Bureau of Reclamation investment in New Mexico from 1930 to 1940, despite the construction of such works as Alamogordo Dam of the Carlsbad Project and Caballo Dam on the Rio Grande, results from the elimination of drainage costs from the irrigation outlays and from new contracts with the Secretary of the Interior by which the greater part of the costs of Elephant Butte Dam will be repaid by power revenues. Elephant Butte Dam was formerly charged into the irrigation costs of the Rio Grande Project repayable by water users. Neither the tabulations as to areas or investment include the Tucumcari Project being constructed in northeastern New Mexico. This project will be served from Comchas Dam on the Canadian River constructed by the Corps of Engineers.

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

ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number...	155	237	203
Area irrigable in these enterprises.....acres....	331,233	225,730	[1] 212,353
Area irrigated in these enterprises.....acres....	231,795	([2])	([2])
Area for which drains have been installed.....acres....	240,614	60,907	74,783
Additional area needing drainage.....acres....	8,732	49,572	60,277
Ratio of area drained to area irrigated in—			
(a) Enterprises reporting lands drained and/or needing drainage.....percent..	103.8	[3] 27.0	[1] 35.2
(b) All irrigation enterprises.....percent..	43.4	11.6	13.9
Ratio of area drained plus area needing drainage to—			
(a) Irrigable area reporting.....percent..	75.3	48.9	[1] 63.6
(b) Irrigated area reporting.....percent..	107.6	([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.

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..	2,179,011	1,306,639	1,007,575	947,783	750,545	688,428	1,231,228	556,094	319,147
Area irrigated by these enterprises.....acres.....	342,012	224,878	199,859	153,357	120,532	126,090	188,655	104,346	73,769
Average water per acre irrigated.....acre-feet..	6.4	5.8	5.0	6.2	6.2	5.5	6.5	5.3	4.3
Total water delivered to irrigators.....acre-feet..	1,167,655	266,413	274,746	441,408	263,413	212,359	726,247	3,000	62,387
Area irrigated by these enterprises.....acres.....	369,456	127,984	160,996	158,447	125,784	119,013	211,009	2,200	41,983
Average water per acre irrigated.....acre-feet..	3.2	2.1	1.7	2.8	2.1	1.8	3.4	1.4	1.5
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	271,031	.....	.....	6,562	.....	.....	264,469	.....	.....
Area irrigated by these enterprises.....acres.....	104,728	.....	.....	2,688	.....	.....	102,040	.....	.....
Average water per acre irrigated.....acre-feet..	2.6	.....	.....	2.4	.....	.....	2.6	.....	.....
SUPPLEMENTAL ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	.....	.....	.....	.....	.....	.....	.....	.....	.....
Area irrigated by these enterprises.....acres.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Average water per acre irrigated.....acre-feet..	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total water delivered to irrigators.....acre-feet..	72	.....	.....	.....	.....	.....	72	.....	.....
Area irrigated by these enterprises.....acres.....	66	.....	.....	.....	.....	.....	66	.....	.....
Average water per acre irrigated.....acre-feet..	1.1	.....	.....	.....	.....	.....	1.1	.....	.....
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	7,660	.....	.....	.....	.....	.....	7,660	.....	.....
Area irrigated by these enterprises.....acres.....	5,031	.....	.....	.....	.....	.....	5,031	.....	.....
Average water per acre irrigated.....acre-feet..	1.5	.....	.....	.....	.....	.....	1.5	.....	.....

[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						
	Primary enterprises	Proportion of total	Supplemental enterprises[1]	Area irrigated	Proportion of total	Area irrigated	Proportion of total
	Acres	*Percent*	*Acres*	*Acres*	*Percent*	*Acres*	*Percent*
Total.....	554,039	100.0	5,123	527,033	100.0	538,377	100.0
Appropriation[2].....	450,542	81.3	5,041	382,538	72.6	331,057	61.5
Underground.....	35,590	6.4	82	44,820	8.5	52,325	9.7
Appropriation and underground.....	1,238	0.2	.....	.....	.....	.....	.....
Adjudicated by court.....	58,863	10.7	.....	92,335	17.5	91,807	17.1
Other mixed and not reported.....	7,806	1.4	.....	7,340	1.4	63,188	11.7

[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," "Certificate or license from State," and "Riparian."

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...	2,451	67	1,673	206	290	180	33	[2] 2
2	Irrigated farms, 1939.....number...	31,683	.....	1,673	521	3,558	8,229	6,929	10,173
3	Area irrigated, 1939.....acres....	554,039	.....	120,123	23,781	71,578	109,984	88,250	140,323
4	(a) From which crops were harvested.....acres....	512,441	.....	111,817	21,773	63,861	95,692	85,366	134,132
5	(b) On which crops failed.....acres....	21,069	.....	1,920	507	5,015	7,842	1,430	4,355
6	(c) Irrigated pasture.....acres....	20,529	.....	8,386	1,501	2,902	6,450	1,454	1,836
	CAPITAL INVESTMENT, 1940								
7	Total capital investment in all enterprises.....dollars..	32,629,293	73,254	3,660,050	569,631	3,465,872	3,767,938	7,631,709	13,460,839
8	(a) Cost of irrigation works and equipment.....dollars..	32,187,969	72,629	3,631,175	563,276	3,325,495	3,506,790	7,625,765	13,460,839
9	(b) Investment in water rights.....dollars..	441,324	625	28,875	6,355	140,377	259,148	5,944	.....
10	Area works were capable of supplying with water.....acres....	731,990	4,386	161,174	28,283	89,304	136,488	123,439	188,916
11	Average investment per acre irrigated.....dollars..	58.89	.....	30.47	23.95	48.42	34.26	86.48	95.33
12	Average investment per acre which the works could supply with water....dollars..	44.58	16.70	22.71	20.14	38.81	27.61	61.83	71.25
	MAINTENANCE AND OPERATION, AND CHARGES, 1939								
13	Enterprises reporting maintenance and operation.....number...	1,999	4	1,383	179	244	156	31	2
14	(a) Area irrigated in these enterprises.....acres....	516,916	.....	106,663	21,107	64,554	98,169	86,100	140,323
15	(b) Cost of maintenance and operation.....dollars..	1,062,768	170	343,869	45,328	57,237	112,452	106,823	416,889
16	(c) Average cost per irrigated acre reporting.....dollars..	2.09	.....	3.22	2.15	0.89	1.15	1.24	2.97
17	Total annual charges[3].....dollars..	966,767	60	.....	.....	58,863	140,942	151,944	614,958
18	Average charge per irrigated acre reporting.....dollars..	2.47	.....	.....	.....	0.91	1.42	1.73	4.38
19	Area against which charges were assessed.....acres....	483,407	208	.....	.....	66,681	118,766	102,255	195,497
20	Average annual charge per acre assessed.....dollars..	2.00	0.29	.....	.....	0.88	1.19	1.49	3.15
21	Total charges collected[3].....dollars..	1,037,433	.....	.....	.....	10,668	85,314	76,008	865,443
	INDEBTEDNESS AND ARREARAGE, 1939								
22	Enterprises reporting indebtedness[4].....number...	57	.....	.....	.....	11	25	19	2
23	(a) Area irrigated in these enterprises.....acres....	259,117	.....	.....	.....	11,778	34,377	72,639	140,323
24	(b) Indebtedness.....dollars..	16,715,813	.....	.....	.....	762,789	754,183	3,742,413	11,456,428
25	(c) Average indebtedness per acre irrigated.....dollars..	64.51	.....	.....	.....	64.76	21.94	51.52	81.64
26	(d) Cost of irrigation works and equipment.....dollars..	24,168,770	.....	.....	.....	1,417,222	2,564,979	6,725,730	13,460,839
27	(e) Investment in water rights.....dollars..	320,637	.....	.....	.....	78,034	240,659	1,944	.....
28	(f) Total investment.....dollars..	24,489,407	.....	.....	.....	1,495,256	2,805,638	6,727,674	13,460,839
29	(g) Maintenance and operation.....dollars..	591,615	.....	.....	.....	6,547	73,420	94,759	416,889
30	(h) Total annual charges[3].....dollars..	860,424	.....	.....	.....	9,244	93,730	142,492	614,958
31	(i) Total charges collected[3].....dollars..	998,896	.....	.....	.....	764	58,314	74,375	865,443
32	(j) Area against which annual charges were assessed.....acres....	342,484	.....	.....	.....	12,334	47,359	87,294	195,497
33	(k) Average indebtedness per acre assessed.....dollars..	48.68	.....	.....	.....	58.27	15.91	42.87	58.60
34	(l) Average charges per acre assessed.....dollars..	2.51	.....	.....	.....	0.75	1.98	1.63	3.15
35	(m) Average charges per acre irrigated.....dollars..	3.33	.....	.....	.....	0.82	2.77	1.96	4.38
36	Enterprises reporting arrearage[4].....number...	6	.....	.....	.....	3	3	.....	.....
37	(a) Area assessed in these enterprises.....acres....	18,106	.....	.....	.....	3,986	14,120	.....	.....
38	(b) Total arrearage.....dollars..	560,392	.....	.....	.....	555,505	4,887	.....	.....
39	(c) Average arrearage per acre assessed.....dollars..	30.40	.....	.....	.....	136.86	0.35	.....	.....
40	(d) Indebtedness.....dollars..	879,252	.....	.....	.....	702,829	176,423	.....	.....
	TYPE, 1940								
41	Individual and partnership.....number...	1,983	61	1,660	191	44	7	.....	.....
42	Cooperative (incorporated and unincorporated).....number...	444	6	13	14	238	157	16	.....
43	Irrigation district.....number...	11	.....	.....	.....	2	6	2	1
44	Commercial.....number...	5	.....	.....	.....	3	1	1	.....
45	U. S. Bureau of Reclamation.....number...	2	.....	.....	.....	.....	.....	1	1
46	U. S. Office of Indian Affairs.....number...	25	.....	.....	1	2	9	13	.....
47	All other.....number...	1	.....	.....	.....	1	.....	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939								
48	Enterprises reporting pay roll.....number...	205	.....	.....	.....	86	90	27	2
49	Wages and salaries paid and payable for 1939.....dollars..	718,210	.....	.....	.....	44,545	151,197	204,919	317,549
50	Persons employed during week ending April 29, 1939.....number...	1,773	.....	.....	.....	462	578	434	299
	SOURCE OF WATER SUPPLY, 1939								
51	Streams, gravity.....number...	1,021	10	464	90	362	167	27	1
52	Streams, pumped.....number...	47	1	43	3	.....	.....	.....	.....
53	Wells, pumped.....number...	1,026	46	895	77	8	.....	.....	.....
54	Wells, pumped and flowing; or wells flowing.....number...	167	1	141	22	3	.....	.....	.....
55	Lakes, gravity or pumped.....number...	3	.....	2	1	.....	.....	.....	.....
56	Streams and springs; or springs.....number...	98	2	62	7	14	13	.....	.....
57	Mixed, streams and wells.....number...	46	5	36	1	2	.....	1	1
58	Other mixed or stored storm water.....number...	43	2	30	5	1	.....	5	.....

[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.

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	
67	1,627	467	260	24	5	[2] 1	2,101	247	74	26	3	1
.....	3,164	4,509	8,778	3,754	8,798	2,680	11,318	2,574	2,670	3,917	11,204	2
.....	53,196	79,305	157,445	77,489	108,071	78,533	176,012	74,428	56,922	86,823	159,854	3
.....	50,102	71,606	138,308	72,762	106,592	73,071	156,330	67,860	51,884	82,704	153,663	4
.....	1,116	4,305	8,756	2,537	259	4,096	10,963	1,494	2,320	1,937	4,355	5
.....	1,978	3,394	10,381	2,190	1,220	1,366	8,719	5,074	2,718	2,182	1,836	6
73,254	1,871,773	2,068,695	4,222,573	6,410,209	13,908,445	4,074,344	2,383,627	1,855,755	2,604,926	8,637,646	17,147,339	7
72,629	1,848,993	2,011,413	4,166,230	6,180,915	13,833,445	4,074,344	2,332,566	1,838,011	2,370,241	8,499,812	17,147,339	8
625	22,780	57,282	56,343	229,294	75,000	.....	51,061	17,744	234,685	137,834	.....	9
4,386	84,584	95,324	167,946	110,179	158,931	90,640	223,113	88,597	79,568	127,741	213,971	10
.....	35.19	26.09	26.82	82.72	128.00	52.84	13.54	24.93	45.76	99.49	107.27	11
16.70	22.13	21.70	22.47	58.18	87.04	45.78	10.73	20.95	32.74	67.62	80.14	12
4	1,338	394	233	24	5	1	1,691	211	70	24	3	13
.....	45,157	67,464	140,202	77,489	108,071	78,533	147,148	68,809	55,882	85,223	159,854	14
170	164,620	149,395	190,446	107,807	306,616	163,714	267,195	133,987	99,147	121,359	461,080	15
.....	3.65	2.21	1.36	1.39	2.84	2.08	1.82	1.95	1.77	1.42	2.88	16
60	9,058	29,380	99,516	127,949	537,398	163,406	56,264	23,841	49,144	169,944	667,574	17
.....	1.86	1.00	1.01	1.76	4.97	2.08	0.68	0.86	1.40	1.97	4.18	18
208	4,921	30,281	110,642	85,996	158,479	92,880	86,720	28,536	44,270	103,329	220,552	19
0.29	1.84	0.97	0.90	1.49	3.39	1.76	0.65	0.84	1.11	1.64	3.03	20
.....	12,303	7,161	22,431	85,985	623,239	286,294	9,105	7,350	30,501	109,924	880,553	21
.....	3	8	25	15	5	1	10	3	22	19	3	22
.....	222	1,705	19,211	51,375	108,071	78,533	2,382	4,143	18,589	74,149	159,854	23
.....	936	73,717	897,427	1,445,393	11,631,112	2,667,228	4,390	23,835	422,375	2,092,373	14,172,840	24
.....	4.22	43.24	46.71	28.13	107.62	33.96	1.84	5.75	22.72	28.22	88.66	25
.....	5,736	198,878	1,927,567	4,128,780	13,833,445	4,074,344	15,335	30,261	1,137,893	5,837,942	17,147,339	26
.....	.....	36	25,592	220,009	75,000	.....	36	.....	190,292	130,309	.....	27
.....	5,736	198,914	1,953,179	4,348,789	13,908,445	4,074,344	15,371	30,261	1,328,185	5,968,251	17,147,339	28
.....	803	1,061	38,335	81,066	306,616	163,714	1,638	2,472	19,757	106,668	461,080	29
.....	839	1,316	45,268	112,197	537,398	163,406	2,032	5,334	26,911	158,573	667,574	30
.....	.....	407	7,274	81,682	623,239	286,294	407	2,427	9,230	106,279	880,553	31
.....	242	1,075	26,801	63,007	158,479	92,880	2,042	4,163	26,189	89,538	220,552	32
.....	3.87	67.75	31.84	22.94	73.39	28.72	1.98	5.73	16.11	22.88	64.26	33
.....	3.47	1.22	1.69	1.78	3.39	1.76	1.00	1.28	1.03	1.77	3.03	34
.....	3.78	1.31	2.39	2.18	4.97	2.08	1.06	1.29	1.47	2.15	4.18	35
.....	.....	.....	4	2	.....	.....	.....	1	2	3	.....	36
.....	.....	.....	18,106		.....	.....	.....	5,587		12,519	.....	37
.....	.....	.....	560,392		.....	.....	.....	9,423		550,969	.....	38
.....	.....	.....	30.40		.....	.....	.....	1.69		43.21	.....	39
.....	.....	.....	879,252		.....	.....	.....	33,651		845,601	.....	40
61	1,519	294	88	1	.....	.....	1,734	199	29	1	.....	41
6	106	167	152	12	1	.....	362	45	28	9	.....	42
.....	.....	1	4	5	1	.....	3	1	.....	6	1	43
.....	1	.....	1	1	2	.....	1	.....	1	3	.....	44
.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	2	45
.....	1	4	15	5	.....	.....	1	2	15	7	.....	46
.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	47
.....	28	61	90	20	6	1	109	32	38	23	3	48
.....	3,084	29,291	178,189	138,133	235,566	133,947	17,249	15,704	98,497	233,987	352,773	49
.....	116	395	785	241	241	95	512	167	302	474	318	50
10	585	215	188	19	3	1	884	69	45	21	2	51
1	35	8	3	.....	.....	.....	44	2	1	.....	.....	52
46	788	160	31	1	.....	.....	921	93	12	.....	.....	53
1	90	57	19	.....	.....	.....	97	62	8	.....	.....	54
.....	2	.....	1	.....	.....	.....	3	.....	.....	.....	.....	55
2	81	12	3	.....	.....	.....	91	4	3	.....	.....	56
5	24	8	6	2	1	.....	32	11	.....	2	1	57
2	22	7	9	2	1	.....	29	6	5	3	.....	58

[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.

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
1	Enterprises, 1940.....number...	52	.....	44	8	.....	.....	.....	.....
2	Irrigated farms, 1939.....number...	63	.....	44	19	.....	.....	.....	.....
3	Area irrigated, 1939.....acres....	5,123	.....	4,239	884	.....	.....	.....	.....
	CAPITAL INVESTMENT, 1940								
4	Total capital investment in all enterprises.....dollars..	106,704	.....	93,448	13,256	.....	.....	.....	.....
5	(a) Cost of irrigation works and equipment.....dollars..	102,887	.....	91,422	11,465	.....	.....	.....	.....
6	(b) Investment in water rights.....dollars..	3,817	.....	2,026	1,791	.....	.....	.....	.....
7	Area works were capable of supplying with water.....acres....	5,912	.....	4,830	1,082	.....	.....	.....	.....
8	Average investment per acre irrigated.....dollars..	20.83	.....	22.04	15.00	.....	.....	.....	.....
9	Average investment per acre which the works could supply with water....dollars..	18.05	.....	19.35	12.25	.....	.....	.....	.....
	MAINTENANCE AND OPERATION, 1939								
10	Enterprises reporting maintenance and operation.....number...	49	.....	41	8	.....	.....	.....	.....
11	(a) Area irrigated in these enterprises.....acres....	5,083	.....	4,199	884	.....	.....	.....	.....
12	(b) Cost of maintenance and operation.....dollars..	10,142	.....	8,713	1,429	.....	.....	.....	.....
13	(c) Average cost per irrigated acre reporting.....dollars..	2.00	.....	2.08	1.62	.....	.....	.....	.....
	TYPE, 1940								
14	Individual and partnership.....number...	52	.....	44	8	.....	.....	.....	.....
15	All other.....number...	.....	.....	.....	.....	.....	.....	.....	.....
	SOURCE OF SUPPLEMENTAL WATER SUPPLY 1939								
16	Streams, pumped.....number...	1	.....	1	.....	.....	.....	.....	.....
17	Wells, pumped or flowing.....number...	49	.....	42	7	.....	.....	.....	.....
18	Streams, gravity or storage.....number...	2	.....	1	1	.....	.....	.....	.....

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

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

DRAINAGE BASIN AND STATION	County	Elevation of station	PRECIPITATION, OCTOBER 1938—SEPTEMBER 1939										TEMPERATURES, 1939	
			Water year		Oct.-Dec.		Jan.-Mar.		Apr.-June		July-Sept.			
			Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Annual mean	Departure[1]
Rio Grande River		*Feet*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Degrees F.*	*Degrees F.*
Taos	Taos	6,983	7.28	-5.81	2.09	+0.02	1.83	-0.65	0.78	-2.67	2.58	-2.51	46.9	-0.7
Albuquerque	Bernalillo	5,314	7.70	-0.30	1.01	-0.72	1.09	+0.52	1.00	-0.69	4.06	+0.59	55.8	+0.5
Socorro	Socorro	4,600	8.14	-1.91	0.64	-1.45	1.83	+0.29	0.60	-0.96	5.07	+0.21	58.2	+0.5
Agricultural College	Dona Ana	3,863	4.66	-4.20	0.69	-1.19	0.88	-0.25	0.35	-0.86	2.74	-1.90	59.3	-1.7
Pecos River														
Las Vegas	San Miguel	6,400	14.82	-3.22	1.00	-1.31	4.65	+2.79	2.79	-2.35	6.38	-2.35	53.2	+3.2
Fort Sumner	De Baca	4,028	17.95	+0.92	2.03	-1.52	3.99	+2.11	5.19	+0.45	6.74	-0.12	58.6	+0.5
Roswell	Chaves	3,566	12.70	-2.24	1.22	-1.71	2.02	+0.18	2.11	-1.54	7.35	+0.83	60.4	+0.9
Alamogordo	Otero	4,338	11.28	-0.21	1.56	-0.97	2.15	+0.44	0.50	-1.24	7.07	+1.50	61.5	+0.6
Carlsbad	Eddy	3,120	7.77	-5.82	1.55	-1.16	1.01	-0.31	1.52	-1.83	3.69	-2.42	64.0	+1.1
Colorado River														
Crown Point	McKinley	6,800	7.20	-4.42	1.11	-1.01	2.15	+0.17	1.36	-0.58	2.58	-3.00	50.4	-0.1
Shiprock	San Juan	4,950	6.82	-0.84	0.52	-0.86	1.48	-0.03	0.35	-1.16	4.47	+1.21	(2)	(2)
Redrock	Grant	(2)	9.16	-2.86	1.65	-1.01	2.79	+0.50	0.34	-0.73	4.38	-1.62	(2)	(2)
Arkansas River														
Raton (near)	Colfax	6,660	12.24	-4.25	2.90	+0.57	1.80	+0.21	3.81	-1.36	3.73	-3.67	49.0	-0.1
Tucumcari	Quay	4,100	12.56	-5.54	2.17	-0.60	1.81	+0.35	3.82	-2.20	4.76	-3.09	58.1	+0.1
Clayton	Union	5,049	12.84	-3.81	2.16	-0.24	2.46	+0.93	5.06	-1.00	3.16	-3.50	53.7	+0.3
Estancia Valley														
Ancho	Lincoln	6,112	15.95	+3.01	2.16	-0.45	2.13	+0.46	2.67	+0.41	8.99	+2.59	(2)	(2)
Salt Lake and Rita Creek														
Quemado (near)	Catron	6,879	9.72	-4.31	0.83	-1.71	4.71	+2.46	0.96	-1.04	3.22	-4.02	48.2	+1.0
Mimbres Valley														
Fort Bayard	Grant	6,152	12.11	-4.48	2.13	-1.04	2.56	-0.26	0.73	-1.07	6.69	-2.11	55.6	+0.4
Columbus	Luna	4,054	8.40	-1.62	1.18	-0.84	0.64	-0.98	0.77	-0.36	5.81	+0.56	63.5	+0.7
Animas River														
Lordsburg	Hidalgo	4,245	8.30	-1.50	1.51	-0.75	1.19	-0.86	0.42	-0.44	5.18	+0.55	(2)	(2)
Rodeo	Hidalgo	(2)	7.64	-3.80	2.49	+0.10	0.97	-1.05	0.23	-0.69	3.95	-2.16	(2)	(2)

[1] Departure from normal.

[2] Not available.

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

ACRES IRRIGATED							COST OF IRRIGATION WORKS AND EQUIPMENT					
No acres[1]	1 to 99 acres	100 to 299 acres	300 to 1,799 acres	1,800 to 7,499 acres	7,500 to 74,999 acres	75,000 acres and more	Less than $5,000	$5,000 to $14,999	$15,000 to $99,999	$100,000 to $1,499,999	$1,500,000 to $9,999,999	
.....	28	22	2	.....	.....	.....	50	2	.....	.....	.....	1
.....	35	28		.....	.....	.....	63		.....	.....	.....	2
.....	1,104	4,019		.....	.....	.....	5,123		.....	.....	.....	3
.....	41,339	65,365		.....	.....	.....	106,704		.....	.....	.....	4
.....	40,315	62,572		.....	.....	.....	102,887		.....	.....	.....	5
.....	1,024	2,793		.....	.....	.....	3,817		.....	.....	.....	6
.....	1,370	4,542		.....	.....	.....	5,912		.....	.....	.....	7
.....	37.44	16.26		.....	.....	.....	20.83		.....	.....	.....	8
.....	30.17	14.39		.....	.....	.....	18.05		.....	.....	.....	9
.....	25	22	2	.....	.....	.....	47	2	.....	.....	.....	10
.....	1,064	4,019		.....	.....	.....	5,083		.....	.....	.....	11
.....	2,295	7,847		.....	.....	.....	10,142		.....	.....	.....	12
.....	2.16	1.95		.....	.....	.....	2.00		.....	.....	.....	13
.....	28	22	2	.....	.....	.....	50	2	.....	.....	.....	14
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	16
.....	25	22	2	.....	.....	.....	47	2	.....	.....	.....	17
.....	2	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	18

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

Precipitation.—The average annual precipitation in New Mexico for the calendar year 1939 was 13.22 inches, which was 1.21 inches below normal, as reported by the U. S. Weather Bureau. The monthly distribution was very uneven, with excesses of 0.01 inch to 0.81 inch for January, March, April, and September, while the remaining months had deficiencies ranging from 0.02 inch to 0.66 inch. Precipitation for the southern portion of the State was near normal, while most of the deficiency occurred in the northern portion of the State. The wettest month was July, with a State average of 2.45 inches; and the driest was February, with an average of 0.61 inch, although, June, November, and December were almost as dry. The greatest monthly deficiency occurred in August, with a departure of 0.66 inch, and the greatest excess in January, with a departure of 0.81 inch.

The average precipitation for the water year (October 1938 through September 1939) at the 21 stations shown in State table 18, and which are representative of the agricultural areas in the major drainage basins of New Mexico, was 10.25 inches, indicating an average deficiency of -2.72 inches at these stations.

Temperature.—The average temperature for the State was 52.7°, which was normal. January, August, October, and November averaged slightly below normal, while February was 8.2° below normal and had the lowest average for that month for the entire 48 years of record, and the lowest of record for any month except January 1919. March, April, May, June, July, and September averaged from 0.2° to 1.8° above normal, while December was 3.9° above the average and the warmest December since 1933. July was the warmest month with a mean temperature of 72.5°. The highest temperature recorded in the State was 111° at Tularosa in Otero County on June 13, and at Carlsbad in Eddy County on June 15. The lowest was -40° at Gavilan in Rio Arriba County on February 3. Freezing temperature occurred at some station in the State during every month. Considerable damage from frost occurred early in April in the southern Rio Grande and Pecos Valleys when most of the early fruit was killed in those areas.

The greatest annual snowfall was 132 inches at Irvin's Ranch in the Sangre de Cristo Mountains, while maximum totals in other regions were as follows: San Juan Mountains, 104 inches at Selsor Ranch; Sacramentos, 89 inches at White Tail; Sandias, 78 inches at Sandia Park; Datil Mountains, 52 inches at Datil; Jemez, 70 inches at Lee Ranch; Zuni Mountains, 86 inches at McGaffey Ranger Station; and Manzanos, 96 inches at Tajique (near). Snow cover at the end of the year averaged approximately 1.5 inches.

Several local duststorms occurred during the spring months, but none were very severe and the damage from them was negligible. A flash flood in September in Santa Fe County caused damage to a highway bridge estimated at $5,000. Heavy hailstorms in May in Torrance, Dona Ana, and Eddy Counties; in June in San Miguel, Union, Lincoln, Harding, and Guadalupe Counties; in July in San Miguel and Torrance Counties; and in August in Harding, Sandoval, Otero, Eddy, Union, and Valencia Counties resulted in considerable damage to crops, buildings, and livestock with an estimated total loss of $395,775.

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

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	STATE TOTAL[1]	GULF OF MEXICO		
			Total	Mississippi River	
				Arkansas River	
				Total	Cimarron River (2)
	IRRIGATED FARMS AND AREAS				
1	Irrigated farms....1939...number....	31,683	28,306	1,783	34
2	Area irrigated....1939...acres....	554,039	485,594	64,104	5,380
3	(a) Cropland harvested....1939...acres....	512,441	451,361	60,638	4,569
4	(b) Crop failure....1939...acres....	21,069	18,399	1,238	66
5	(c) Pasture....1939...acres....	20,529	15,834	2,228	745
6	Area irrigated....1929...acres....	527,033	451,779	71,335	2,670
7	1919...acres....	538,377	465,188	95,942	5,757
8	Increase or decrease (-), 1929-1939....percent....	5.1	7.5	-10.1	101.5
9	Irrigable area in enterprises....1940...acres....	807,656	694,939	97,542	6,315
10	1930...acres....	741,245	644,813	119,506	4,484
11	1920[3]...acres....	961,879	840,398	193,635	14,173
12	Excess of irrigable area over the area irrigated..1940...acres....	253,617	209,345	33,438	935
13	1930...acres....	214,212	193,034	48,171	1,814
14	1920[3]...acres....	423,502	375,210	97,693	8,416
15	Area works were capable of supplying with water...1940...acres....	731,990	636,522	78,591	5,615
16	1930...acres....	656,669	563,213	113,761	4,461
17	1920...acres....	696,119	608,651	149,330	12,353
18	Increase or decrease (-), 1930-1940....percent....	11.5	13.0	-30.3	25.8
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres....	177,951	150,928	14,487	235
20	1930...acres....	129,536	111,434	41,426	1,791
21	1920...acres....	157,742	143,463	53,388	6,626
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent....	75.7	76.3	81.6	95.8
23	1929...percent....	80.3	80.2	69.3	59.8
24	1919...percent....	77.3	76.4	64.2	46.5
	CAPITAL INVESTED TO JANUARY 1				
25	Total investment in irrigation enterprises....1940...dollars....	32,735,997	28,184,354	1,961,305	148,480
26	(a) Cost of irrigation works and equipment....1940...dollars....	32,290,856	27,965,325	1,866,092	146,250
27	(b) Investment in water rights (reported)....1940...dollars....	445,141	219,029	96,213	2,220
28	Total investment in irrigation enterprises....1930...dollars....	19,834,380	17,458,739	1,948,170	61,605
29	1920...dollars....	18,210,412	15,769,438	5,347,927	308,147
30	Increase or decrease (-), 1930-1940....percent....	65.0	61.4	0.7	141.0
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars....	44.72	44.28	24.96	26.44
32	1930...dollars....	30.20	31.00	17.28	13.80
33	1920...dollars....	26.16	25.91	35.61	24.88
34	Average investment per acre irrigated....1939...dollars....	59.09	58.04	30.60	28.31
35	Estimated final investment in existing enterprises..1940...dollars....	36,773,199	30,744,722	1,995,365	148,680
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars....	45.53	44.24	20.46	23.51
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary / Supplemental Enterprises	Primary / Supplemental Enterprises		
37	Enterprises reporting maintenance and operation...1939...number....	2,001 / 49	1,580 / 34	120	25
38	Area irrigated in these enterprises....1939...acres....	516,916 / 5,063	452,507 / 4,380	61,120	5,198
39	Cost of maintenance and operation....1939...dollars....	1,082,768 / 10,142	898,799 / 7,859	31,455	4,682
40	Average cost, per acre irrigated....1939...dollars....	2.09 / 2.00	1.99 / 1.79	0.51	0.90
41	Total annual charges (reported)[5] [6]....1939...dollars....	966,767	872,851	41,871	
42	Average annual charge per acre irrigated....1939...dollars....	2.47	2.54	0.83	
43	Area against which charges were assessed....1939...acres....	483,407	434,139	59,771	
44	Average annual charge per acre assessed....1939...dollars....	2.00	2.01	0.70	
45	Total charges collected[5]....1939...dollars....	1,037,433	982,855	35,078	
46	Indebtedness to December 31 (reported)[5]....1939...dollars....	16,715,813	16,258,254	218,187	
	WATER DELIVERED TO IRRIGATORS, 1939				
47	Enterprises reporting water delivered....1939...number....	1,946 / 51	1,527 / 35	106	14
48	Area irrigated by these enterprises....1939...acres....	474,184 / 5,097	421,015 / 4,408	57,425	2,445
49	Water delivered....1939...acre-feet..	1,438,686 / 7,732	1,271,567 / 7,068	63,990	3,271
50	Average water delivered per acre irrigated....1939...acre-feet..	3.0 / 1.5	3.0 / 1.6	1.1	1.3
51	Average cost of water per acre irrigated....1939...dollars....	2.80 / 2.00	2.78 / 1.79	0.76	0.58
52	Average cost of water per acre-foot delivered..1939...dollars....	0.92 / 1.32	0.92 / 1.12	0.68	0.44
	DRAINAGE OF IRRIGATED LAND				
53	Enterprises reporting land drained or needing drainage....1939...number....	155	140	3	1
54	Irrigable area in these enterprises....1939...acres....	331,233	313,520	14,884	(4)
55	Irrigated area in these enterprises....1939...acres....	231,795	220,456	8,980	(4)
56	Area for which drains have been installed....1939...acres....	240,614	239,986	20	(4)
57	Additional area needing drainage....1939...acres....	8,732	5,430	1,140	

[1] Data for 2 enterprises in San Augustine Drainage Basin (48) (number refers to separate map) and for 1 enterprise in Sacramento-Salt Lakes Drainage Basin (53) are included with State totals. Data for unidentified basins for the 1930 and 1920 Censuses are included only in State total.

[2] Data for 1 enterprise in Ute Creek Drainage Basin (10) (number refers to separate map) are included with Canadian River "Direct" Drainage Basin (3).

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

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

GULF OF MEXICO—Continued											
Mississippi River—Continued											
Arkansas River—Continued											
Canadian River											
Total	Direct[2] (3)	Vermejo River (4)	Cimarron River (5)	Ocate Creek (6)	Mora River				Carrizo Creek (11)	North Canadian River (12)	
					Total	Direct (7)	Coyote Creek (8)	Sapello Creek (9)			
1,749	73	169	175	21	1,304	798	156	350	3	4	1
58,724	2,477	8,906	20,549	1,012	25,381	16,440	2,384	6,557	59	340	2
56,069	2,400	8,906	19,729	963	23,714	15,184	2,339	6,191	17	340	3
1,172	20	.....	.....	20	1,090	725	25	340	42	.....	4
1,483	57	.....	820	29	577	531	20	26	.....	.....	5
68,665	1,610	8,574	16,007	1,102	34,956	.....	.....	.....	.....	.....	6
90,185	1,757	23,678	31,967	4,861	17,067	.....	.....	.....	.....	.....	7
-14.5	5.39	3.9	28.4	-8.2	-27.4	.....	.....	.....	.....	.....	8
91,227	3,711	14,690	43,335	1,114	27,697	17,295	2,422	7,980	215	465	9
115,022	1,790	15,704	34,357	5,800	44,071	.....	.....	.....	.....	.....	10
179,462	2,389	23,978	70,318	13,908	36,670	.....	.....	.....	.....	.....	11
32,503	1,224	5,784	22,786	102	2,316	855	38	1,423	156	125	12
46,357	180	7,130	18,350	4,698	9,115	.....	.....	.....	.....	.....	13
89,277	632	300	38,351	9,047	19,613	.....	.....	.....	.....	.....	14
72,976	3,621	10,006	30,935	1,012	26,622	17,120	2,422	7,280	215	465	15
108,297	1,790	15,704	31,677	5,800	43,056	.....	.....	.....	.....	.....	16
136,947	2,199	23,878	45,628	13,095	29,528	.....	.....	.....	.....	.....	17
-32.6	102.3	-36.3	-2.7	-82.6	-37.7	.....	.....	.....	.....	.....	18
14,252	1,144	1,100	10,286	.....	1,441	680	38	723	156	125	19
39,632	180	7,130	15,670	4,698	8,100	.....	.....	.....	.....	.....	20
46,762	442	200	13,661	8,234	12,471	.....	.....	.....	.....	.....	21
80.5	68.4	89.0	66.6	100.0	94.6	96.0	98.4	90.1	27.4	73.1	22
63.4	89.9	54.6	50.5	19.0	81.2	.....	.....	.....	.....	.....	23
65.9	79.9	99.2	70.1	37.1	57.8	.....	.....	.....	.....	.....	24
1,812,825	375,286	231,800	1,057,462	5,749	125,633	82,030	3,600	40,003	3,570	13,325	25
1,718,832	374,590	231,700	972,527	5,700	117,465	76,025	3,550	37,890	3,550	13,300	26
93,993	696	100	84,935	49	8,168	6,005	50	2,113	20	25	27
1,886,565	43,900	340,995	719,700	230,350	236,645	.....	.....	.....	.....	.....	28
5,039,780	39,625	1,248,537	2,188,908	319,529	262,575	.....	.....	.....	.....	.....	29
-3.9	754.9	-32.0	46.9	-97.5	-46.9	.....	.....	.....	.....	.....	30
24.84	103.64	23.17	34.29	5.68	4.68	4.79	1.49	5.49	16.60	28.66	31
17.42	24.53	21.71	22.72	39.72	5.50	.....	.....	.....	.....	.....	32
36.80	18.02	52.29	47.97	24.40	8.89	.....	.....	.....	.....	.....	33
30.87	151.51	26.03	51.46	5.68	4.95	4.99	1.51	6.10	60.51	39.19	34
1,846,685	376,786	231,800	1,087,462	5,749	127,993	82,290	3,600	42,103	3,570	13,325	35
20.24	101.53	15.78	25.09	5.16	4.62	4.76	1.49	5.28	16.60	28.66	36
95	20	2	7	6	56	36	5	15	1	3	37
55,922	2,202	(4)	20,549	1,012	23,084	14,780	2,384	5,920	(4)	135	38
26,773	1,642	(4)	14,301	465	4,252	2,539	315	1,398	(4)	112	39
0.48	0.75	(4)	0.70	0.46	0.18	0.17	0.13	0.24	(4)	0.83	40
41,871	470	18,045	18,017	51	5,288	2,070	315	2,903	.....	.....	41
0.83	0.65	2.12	0.88	0.50	0.26	0.17	0.13	0.51	.....	.....	42
59,771	719	14,284	22,834	204	21,730	12,743	2,384	6,603	.....	.....	43
0.70	0.65	1.26	0.79	0.25	0.24	0.16	0.13	0.44	.....	.....	44
35,078	.....	18,363	15,980	.....	735	135	.....	600	.....	.....	45
218,187	.....	72,500	145,687	.....	.....	.....	.....	.....	.....	.....	46
92	28	3	7	5	44	27	4	13	1	4	47
54,980	2,447	8,906	20,549	910	21,824	14,190	2,214	5,420	(4)	340	48
60,719	3,083	10,996	26,021	711	19,096	13,399	1,975	3,722	(4)	810	49
1.1	1.3	1.2	1.3	0.8	0.9	0.9	0.8	0.7	(4)	2.4	50
0.77	0.75	2.03	0.88	0.46	0.15	0.14	0.07	0.21	.....	0.83	51
0.69	0.59	1.65	0.69	0.58	0.17	0.14	0.08	0.30	.....	0.38	52
2	.....	1	.....	.....	1	1	.....	.....	.....	.....	53
(4)	.....	(4)	.....	.....	(4)	(4)	.....	.....	.....	.....	54
(4)	.....	(4)	.....	.....	(4)	(4)	.....	.....	.....	.....	55
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
(4)	.....	(4)	.....	.....	(4)	(4)	.....	.....	.....	.....	57

[4] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[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 41 to 46, inclusive, relate to those enterprises only.

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)	GULF OF MEXICO—Continued							
		Rio Grande							
		Total	Direct (14)	Conejos River: San Antonio River (15)	Costilla Creek (16)	Latir Creek and Red River (17)	Rio Hondo (18)	Rio Pueblo de Taos (19)	Embudo River (20)
	IRRIGATED FARMS AND AREAS								
1	Irrigated farms....1939...number	26,174	13,666	52	280	353	303	1,644	1,239
2	Area irrigated....1939...acres	408,692	163,082	763	2,863	6,312	3,370	16,320	9,432
3	(a) Cropland harvested....1939...acres	378,520	155,262	702	2,525	5,502	2,960	13,149	8,331
4	(b) Crop failure....1939...acres	17,012	5,058	23	40	810	47	2,630	114
5	(c) Pasture....1939...acres	13,160	2,762	38	298	.....	363	541	987
6	Area irrigated....1929...acres	380,444	136,114	.....	4,003	.....	.....	15,856	.....
7	1919...acres	369,246	103,844	.....	4,417	.....	.....	11,780	.....
8	Increase or decrease (-), 1929-1939....percent	7.4	19.8	.....	-28.5	.....	.....	2.9	.....
9	Irrigable area in enterprises....1940...acres	572,398	246,274	793	3,879	7,559	4,709	22,992	9,951
10	1930...acres	525,307	164,672	.....	10,112	.....	.....	21,352	.....
11	1920[1]...acres	646,763	172,747	.....	7,385	.....	.....	12,443	.....
12	Excess of irrigable area over the area irrigated..1940...acres	163,706	83,192	30	1,016	1,247	1,339	6,672	519
13	1930...acres	144,863	28,558	.....	6,109	.....	.....	5,496	.....
14	1920[1]...acres	277,517	68,903	.....	2,968	.....	.....	663	.....
15	Area works were capable of supplying with water...1940...acres	533,880	226,873	793	3,879	7,554	4,709	22,245	9,743
16	1930...acres	450,452	158,486	.....	7,606	.....	.....	16,730	.....
17	1920...acres	459,321	123,464	.....	4,803	.....	.....	11,791	.....
18	Increase or decrease (-), 1930-1940....percent	18.5	43.2	.....	-49.0	.....	.....	33.0	.....
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres	125,188	63,791	30	1,016	1,242	1,339	5,925	311
20	1930...acres	70,008	22,372	.....	3,603	.....	.....	874	.....
21	1920...acres	90,075	19,620	.....	386	.....	.....	11	.....
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	76.6	71.9	96.2	73.8	83.6	71.6	73.4	96.8
23	1929...percent	84.5	85.9	.....	52.6	.....	.....	94.8	.....
24	1919...percent	80.4	84.1	.....	92.0	.....	.....	99.9	.....
	CAPITAL INVESTED TO JANUARY 1								
25	Total investment in irrigation enterprises....1940...dollars	25,816,016	14,120,570	9,650	108,155	159,235	17,000	164,928	50,901
26	(a) Cost of irrigation works and equipment....1940...dollars	25,696,197	14,118,406	9,280	102,437	152,575	16,000	160,649	50,786
27	(b) Investment in water rights (reported)....1940...dollars	119,819	2,164	370	5,718	6,660	1,000	4,279	115
28	Total investment in irrigation enterprises....1930...dollars	15,510,569	7,892,453	.....	910,360	.....	.....	78,879	.....
29	1920...dollars	10,421,511	3,605,725	.....	11,471	.....	.....	19,982	.....
30	Increase or decrease (-), 1930-1940....percent	66.4	78.9	.....	-88.1	.....	.....	109.1	.....
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars	48.36	62.24	12.17	27.88	21.08	3.61	7.41	5.22
32	1930...dollars	34.43	49.80	.....	119.69	.....	.....	4.71	.....
33	1920...dollars	22.69	29.20	.....	2.39	.....	.....	1.69	.....
34	Average investment per acre irrigated....1939...dollars	63.17	86.59	12.65	37.78	25.23	5.04	10.11	5.40
35	Estimated final investment in existing enterprises..1940...dollars	28,327,965	15,233,975	9,650	108,155	209,235	17,000	497,228	61,341
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars	49.49	61.86	12.17	27.88	27.68	3.61	21.63	6.16
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterprises / Sup.	Primary Enterprises / Sup.						
37	Enterprises reporting maintenance and operation...1939...number	1,198 / 34	150 / 1	10	12	5	9	22	45
38	Area irrigated in these enterprises....1939...acres	381,372 / 4,380	161,988 / [3]	763	1,751	5,837	3,227	11,933	7,258
39	Cost of maintenance and operation....1939...dollars	825,086 / 7,859	441,798 / [3]	426	1,625	4,310	1,009	3,744	4,939
40	Average cost, per acre irrigated....1939...dollars	2.16 / 1.79	2.73 / [3]	0.56	0.93	0.74	0.31	0.31	0.68
41	Total annual charges (reported)[4] [5]....1939...dollars	830,980 /	646,419 /	135	2,276	4,511	1,041	3,670	4,635
42	Average annual charge per acre irrigated....1939...dollars	2.83 /	4.03 /	0.24	1.35	0.78	0.32	0.27	0.66
43	Area against which charges were assessed....1939...acres	374,358 /	220,387 /	572	2,666	7,361	3,306	13,504	6,963
44	Average annual charge per acre assessed....1939...dollars	2.22 /	2.93 /	0.24	0.85	0.61	0.31	0.27	0.67
45	Total charges collected[4]....1939...dollars	947,777 /	866,050 /	88	391	5,044	90	1,967	15
46	Indebtedness to December 31 (reported)[5]....1939...dollars	16,040,067 /	11,719,382 /	.....	8,759	.....	.....	86,828	8,882
	WATER DELIVERED TO IRRIGATORS, 1939								
47	Enterprises reporting water delivered....1939...number	1,107 / 35	132 / 1	4	11	4	5	15	18
48	Area irrigated by these enterprises....1939...acres	351,533 / 4,408	148,177 / [3]	573	1,957	5,814	1,190	8,167	2,528
49	Water delivered....1939...acre-feet	1,181,696 / 7,068	683,538 / [3]	1,812	4,072	7,720	2,050	8,859	3,786
50	Average water delivered per acre irrigated....1939...acre-feet	3.4 / 1.6	4.6 / [3]	3.2	2.1	1.3	1.7	1.1	1.5
51	Average cost of water per acre irrigated....1939...dollars	3.07 / 1.79	4.23 / [3]	0.26	1.50	0.78	0.30	0.25	0.33
52	Average cost of water per acre-foot delivered..1939...dollars	0.91 / 1.12	0.92 / [3]	0.08	0.72	0.58	0.17	0.23	0.22
	DRAINAGE OF IRRIGATED LAND								
53	Enterprises reporting land drained or needing drainage....1939...number	135 /	12 /	6	.....	1	.....	1	.....
54	Irrigable area in these enterprises....1939...acres	298,608 /	222,178 /	218	.....	[3]	.....	[3]	.....
55	Irrigated area in these enterprises....1939...acres	211,467 /	148,645 /	190	.....	[3]	.....	[3]	.....
56	Area for which drains have been installed....1939...acres	239,943 /	205,457 /	216	.....	.....	.....	[3]	.....
57	Additional area needing drainage....1939...acres	4,290 /	1,845 /	2	.....	[3]	.....	.....	.....

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

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

GULF OF MEXICO—Continued													
Rio Grande—Continued													
Rio Chama						Rio Puerco				Pecos River			
Total	Direct (21)	Caliente River (22)	Santa Cruz River (23)	Tesuque Creek (24)	Jemez Creek (25)	Total	Direct (26)	San Jose River (27)	Alamosa River (28)	Total	Direct (29)	Gallinas River (30)	
1,532	1,210	322	1,372	823	281	1,281	317	964	90	3,258	2,237	223	1
21,593	18,030	3,563	6,818	6,164	2,542	13,438	3,843	9,595	751	155,244	111,806	7,792	2
17,931	14,786	3,145	6,433	5,581	2,426	9,389	2,927	6,462	718	147,611	106,728	6,893	3
2,161	1,831	330	.....	391	80	3,164	631	2,533	12	2,482	1,475	399	4
1,501	1,413	88	385	192	36	885	285	600	21	5,151	3,603	500	5
25,950	.....	.....	8,405	3,588	.....	15,202	.....	.....	.....	129,121	45,508	4,078	6
26,166	.....	.....	9,171	3,012	.....	14,309	.....	.....	.....	119,040	62,430	4,097	7
-16.8	.....	.....	-18.9	71.8	.....	-11.6	.....	.....	.....	20.2	145.7	91.1	8
30,419	25,641	4,778	7,053	7,574	5,104	26,759	5,875	20,883	771	198,561	141,559	9,792	9
35,049	.....	.....	12,604	5,496	.....	35,128	.....	.....	.....	154,203	57,094	4,177	10
42,235	.....	.....	9,863	3,411	.....	42,877	.....	.....	.....	225,400	102,200	41,810	11
8,826	7,611	1,215	235	1,410	2,562	13,321	2,033	11,288	20	43,317	29,753	2,000	12
9,099	.....	.....	4,199	1,908	.....	19,926	.....	.....	.....	25,062	11,586	99	13
16,059	.....	.....	692	399	.....	28,568	.....	.....	.....	106,360	39,770	37,713	14
25,940	21,862	4,078	7,053	7,154	4,354	24,243	4,890	19,353	771	188,569	136,289	9,792	15
30,450	.....	.....	10,094	4,873	.....	22,345	.....	.....	.....	151,588	56,271	4,177	16
30,237	.....	.....	9,221	3,183	.....	25,991	.....	.....	.....	160,658	77,794	24,201	17
-14.8	.....	.....	-30.1	46.8	.....	9.0	.....	.....	.....	24.4	142.2	134.4	18
4,347	3,832	515	235	990	1,812	10,805	1,047	9,758	20	33,325	24,483	2,000	19
4,500	.....	.....	1,689	1,285	.....	7,043	.....	.....	.....	22,467	10,763	99	20
4,071	.....	.....	50	171	.....	11,682	.....	.....	.....	41,618	15,364	20,104	21
83.2	82.5	.....	96.7	86.2	58.4	55.4	78.6	49.6	97.4	82.3	82.0	79.6	22
85.2	.....	.....	83.3	73.6	.....	68.3	.....	.....	.....	85.2	80.9	97.6	23
86.5	.....	.....	99.5	94.6	.....	55.1	.....	.....	.....	74.1	80.3	16.9	24
124,114	98,672	25,442	493,323	119,765	156,184	922,005	47,672	874,333	12,970	9,357,216	7,148,814	1,022,764	25
122,754	97,484	25,270	493,290	119,141	155,689	876,970	46,525	830,445	12,570	9,305,650	7,121,519	1,022,550	26
1,360	1,188	172	33	624	495	45,035	1,147	43,888	400	51,566	27,295	214	27
133,558	.....	.....	510,745	80,842	.....	548,233	.....	.....	.....	4,977,130	2,002,793	43,850	28
141,891	.....	.....	18,281	16,861	.....	88,109	.....	.....	.....	5,263,454	3,294,504	519,566	29
-7.3	.....	.....	-3.4	48.1	.....	68.2	.....	.....	.....	88.0	256.9	(2)	30
4.78	4.51	6.24	69.95	16.74	35.87	38.03	9.75	45.18	16.82	49.62	52.45	104.45	31
4.40	.....	.....	50.60	16.59	.....	24.65	.....	.....	.....	32.83	35.59	10.50	32
4.69	.....	.....	1.98	5.30	.....	3.39	.....	.....	.....	32.76	42.35	21.47	33
5.75	5.47	7.14	72.36	19.43	61.44	68.61	12.40	91.12	17.27	60.27	63.94	131.26	34
144,639	117,147	27,492	493,323	300,340	311,684	1,257,045	51,712	1,205,333	12,970	9,671,380	7,412,458	1,067,761	35
4.75	4.57	5.75	69.95	39.65	61.07	46.98	8.80	57.72	16.82	48.71	52.36	109.04	36
										Primary Enterprises	Sup.	Primary Enterprises	Sup.		
102	74	28	18	29	16	16	9	7	6	758	33	368	31	10	37
18,779	15,669	3,110	6,790	5,933	2,506	10,648	2,843	7,805	751	143,208	4,361	102,757	4,157	7,738	38
8,348	7,118	1,230	1,999	6,403	1,913	15,556	897	14,659	1,157	331,859	7,849	230,420	7,479	9,758	39
0.44	0.45	0.40	0.29	1.08	0.76	1.46	0.32	1.88	1.54	2.32	1.80	2.24	1.80	1.26	40
7,405	6,505	900	12,656	6,523	1,606	30,048	908	29,140	277	109,778	.....	92,710	.....	8,421	41
0.43	0.45	0.31	1.86	1.10	0.68	2.83	0.32	3.74	0.50	1.89	.....	2.03	.....	1.10	42
18,024	15,079	2,945	6,996	5,944	3,007	18,418	4,226	14,192	554	66,656	.....	51,734	.....	7,979	43
0.41	0.43	0.31	1.81	1.10	0.53	1.63	0.21	2.05	0.50	1.65	.....	1.79	.....	1.06	44
1,054	1,044	10	11,058	674	210	18,712	407	18,305	.....	42,424	.....	38,160	.....	198	45
720	432	288	147,500	64,248	93,071	376,399	118	376,281	.....	3,534,278	.....	3,509,728	.....	.....	46
96	67	29	16	19	11	16	8	8	6	754	34	432	32	8	47
14,743	12,038	2,705	6,428	4,521	334	7,889	2,277	5,612	751	148,461	4,389	108,202	4,185	7,487	48
21,285	18,151	3,134	8,743	6,305	723	7,714	2,160	5,554	1,443	423,636	7,046	333,723	6,609	9,199	49
1.4	1.5	1.2	1.4	1.4	2.2	1.0	0.9	1.0	1.9	2.9	1.6	3.1	1.6	1.2	50
0.32	0.33	0.28	1.89	1.04	0.63	3.76	0.25	4.95	1.69	2.58	1.80	2.57	1.80	1.04	51
0.22	0.22	0.24	1.39	0.74	0.29	3.84	0.26	5.00	0.88	0.90	1.12	0.83	1.14	0.85	52
3	2	1	1	4	.....	.....	.....	.....	.....	107	.....	54	.....	.....	53
2,040	(3)	(3)	(3)	939	.....	.....	.....	.....	.....	68,112	.....	59,221	.....	.....	54
1,597	(3)	(3)	(3)	889	.....	.....	.....	.....	.....	55,232	.....	47,638	.....	.....	55
.....	.....	.....	(3)	10	.....	.....	.....	.....	.....	34,112	.....	27,083	.....	.....	56
400	(3)	(3)	(3)	367	.....	.....	.....	.....	.....	1,546	.....	1,242	.....	.....	57

[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.

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)	GULF OF MEXICO—Continued				COLORADO RIVER				
		Rio Grande—Continued					San Juan River			
		Pecos River—Continued		Colorado River (Texas)	Brazos River	Total				
		Rio Hondo	Rio Penasco				Total	Direct	Los Pinos River	Animas River
		(31)	(32)	(33)	(34)			(35)	(36)	(37)
	IRRIGATED FARMS AND AREAS									
1	Irrigated farms....1939...number	685	113	43	306	2,711	1,863	981	9	679
2	Area irrigated....1939...acres	32,379	3,267	1,967	10,831	49,841	36,178	17,397	149	13,925
3	(a) Cropland harvested....1939...acres	31,057	2,933	1,816	10,387	44,777	32,490	16,347	116	12,440
4	(b) Crop failure....1939...acres	404	204	17	132	1,439	1,421	469	6	.....
5	(c) Pasture....1939...acres	918	130	134	312	3,625	2,267	581	27	1,485
6	Area irrigated....1929...acres	25,010	6,833	.....	.....	55,310	40,253	9,772	160	24,425
7	1919...acres	20,561	13,375	.....	.....	53,808	43,825	12,026	1,260	23,355
8	Increase or decrease (-), 1929-1939....percent	29.5	-52.2	.....	.....	-9.9	-10.1	78.0	-6.9	-43.0
9	Irrigable area in enterprises....1940...acres	38,676	8,534	3,405	21,594	82,874	52,889	30,691	287	15,353
10	1930...acres	27,682	7,993	.....	.....	74,081	53,384	15,881	160	27,425
11	1920[1]...acres	33,118	19,889	.....	.....	86,544	71,608	21,386	2,640	35,370
12	Excess of irrigable area over the area irrigated.1940...acres	6,297	5,267	1,438	10,763	33,033	16,711	13,291	138	1,428
13	1930...acres	2,672	1,160	.....	.....	18,771	13,131	6,109	.....	3,000
14	1920[1]...acres	12,557	6,514	.....	.....	32,736	27,783	9,360	1,380	12,015
15	Area works were capable of supplying with water...1940...acres	37,154	5,334	3,390	20,661	68,997	42,550	21,635	279	14,978
16	1930...acres	27,201	7,993	.....	.....	71,495	51,703	15,075	160	27,325
17	1920...acres	23,525	13,733	.....	.....	60,148	49,655	12,651	1,260	28,455
18	Increase or decrease (-), 1930-1940....percent	36.6	33.3	.....	.....	-3.5	-17.7	43.5	74.4	-45.2
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres	4,775	2,067	1,423	9,830	19,156	6,372	4,238	130	1,053
20	1930...acres	2,191	1,160	.....	.....	16,185	11,450	5,303	.....	2,900
21	1920...acres	2,964	358	.....	.....	6,340	5,830	625	.....	5,100
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	87.1	61.2	58.0	52.4	72.2	85.0	80.4	53.4	93.0
23	1929...percent	91.9	85.5	.....	.....	77.4	77.9	64.8	100.0	89.4
24	1919...percent	87.4	97.4	.....	.....	89.5	88.3	95.1	100.0	82.1
	CAPITAL INVESTED TO JANUARY 1									
25	Total investment in irrigation enterprises....1940...dollars	1,095,808	89,830	45,173	361,860	3,690,983	2,673,568	2,134,345	484	387,141
26	(a) Cost of irrigation works and equipment....1940...dollars	1,092,551	69,030	45,085	358,951	3,674,291	2,665,978	2,131,789	480	384,555
27	(b) Investment in water rights (reported)....1940...dollars	3,257	20,800	88	2,909	16,692	7,590	2,556	4	2,586
28	Total investment in irrigation enterprises....1930...dollars	621,688	107,545	.....	.....	1,719,587	966,516	423,504	1,500	451,420
29	1920...dollars	578,094	222,693	.....	.....	1,786,290	1,715,867	807,700	3,000	824,450
30	Increase or decrease (-), 1930-1940....percent	76.3	16.5	.....	.....	114.6	176.6	404.0	-67.7	-14.2
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars	29.49	16.84	13.33	17.47	53.49	62.83	98.65	1.73	25.85
32	1930...dollars	22.86	13.45	.....	.....	24.05	18.69	28.09	9.38	16.52
33	1920...dollars	24.57	16.22	.....	.....	29.70	34.56	63.84	2.38	28.97
34	Average investment per acre irrigated....1939...dollars	33.84	27.50	22.97	33.41	74.06	73.90	122.68	3.25	27.80
35	Estimated final investment in existing enterprises..1940...dollars	1,101,328	89,830	52,223	369,169	5,082,695	3,754,500	3,077,545	496	388,111
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars	28.48	10.53	15.34	17.10	61.33	70.99	100.28	1.73	25.28
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterprises	Sup.							
37	Enterprises reporting maintenance and operation...1939...number	363	2	17	35	227	204	60	20	7	17
38	Area irrigated in these enterprises....1939...acres	30,229	(4)	2,484	1,589	8,426	47,092	34,321	17,385	149	12,060
39	Cost of maintenance and operation....1939...dollars	89,826	(4)	1,855	5,837	36,421	104,530	87,500	69,940	197	13,605
40	Average cost, per acre irrigated....1939...dollars	2.97	(4)	0.75	3.67	4.32	2.22	2.55	4.02	1.32	1.13
41	Total annual charges (reported)[5] [6]....1939...dollars	7,527	.....	1,120	.....	.....	87,431	78,433	57,136	.....	17,472
42	Average annual charge per acre irrigated....1939...dollars	2.02	.....	0.93	.....	.....	2.06	2.34	3.53	.....	1.31
43	Area against which charges were assessed....1939...acres	3,743	.....	3,200	.....	.....	43,931	34,941	16,517	.....	14,098
44	Average annual charge per acre assessed....1939...dollars	2.01	.....	0.35	.....	.....	1.99	2.24	3.46	.....	1.24
45	Total charges collected[5]....1939...dollars	1,666	.....	2,400	.....	.....	37,038	35,616	24,119	.....	10,497
46	Indebtedness to December 31 (reported)[5]....1939...dollars	550	.....	24,000	.....	.....	455,926	455,394	429,743	.....	950
	WATER DELIVERED TO IRRIGATORS, 1939									
47	Enterprises reporting water delivered....1939...number	298	2	16	31	283	192	45	14	7	12
48	Area irrigated by these enterprises....1939...acres	30,300	(4)	2,472	1,368	10,669	35,609	26,218	14,086	149	9,588
49	Water delivered....1939...acre-feet	75,495	(4)	5,219	1,668	24,243	127,278	98,620	50,930	85	43,712
50	Average water delivered per acre irrigated....1939...acre-feet	2.5	(4)	2.1	1.2	2.3	3.6	3.8	3.6	0.6	4.6
51	Average cost of water per acre irrigated....1939...dollars	3.19	(4)	0.72	2.87	4.32	2.15	2.42	3.51	1.32	1.22
52	Average cost of water per acre-foot delivered..1939...dollars	1.28	(4)	0.34	2.39	1.90	0.60	0.64	0.97	2.32	0.27
	DRAINAGE OF IRRIGATED LAND									
53	Enterprises reporting land drained or needing drainage....1939...number	53	.....	.....	1	1	10	10	6	.....	2
54	Irrigable area in these enterprises....1939...acres	8,891	.....	.....	(4)	(4)	16,989	16,989	13,601	.....	(4)
55	Irrigated area in these enterprises....1939...acres	7,594	.....	.....	(4)	(4)	10,708	10,708	7,435	.....	(4)
56	Area for which drains have been installed....1939...acres	7,029	.....	.....	(4)	(4)	605	605	265	.....	(4)
57	Additional area needing drainage....1939...acres	304	.....	.....	.....	.....	3,172	3,172	2,472	.....	(4)

[1] For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.
[2] Percent not shown when more than 1,000.
[3] Data for less than 3 enterprises shown with permission of the enterprise involved.

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

COLORADO RIVER—Continued						INDEPENDENT BASINS						
San Juan River—Continued		Little Colorado River	Upper Gila River			Salt Lake and Rito Creek	Estancia Valley	Rio Tularosa[5]	Fresnal River	Mimbres Valley	Animas Valley	
La Plata River (38)	Chaco River (39)	Zuni River (42)	Total	Direct (44)	San Francisco River (45)	(47)	(49)	(51)	(52)	(54)	(55)	
74	120	492	356	226	130	13	164	139	81	255	11	1
4,007	700	3,305	10,358	8,166	2,192	149	1,430	2,957	834	12,836	343	2
2,887	700	3,305	8,982	7,011	1,971	55	970	2,670	768	11,490	295	3
946	.....	.....	18	.....	18	1	460	287	20	461	2	4
174	.....	.....	1,358	1,155	203	93	.....	.....	46	885	46	5
4,222	.....	5,684	9,373	7,824	1,442	.....	.....	2,500	1,835	9,042	.....	6
5,830	.....	.....	9,983	6,424	3,162	.....	.....	4,547	1,798	12,557	.....	7
-5.1	.....	-41.9	10.5	4.4	52.0	.....	.....	18.3	-54.6	42.0	.....	8
4,808	1,750	11,260	18,725	9,344	9,381	232	4,775	3,103	947	20,081	647	9
5,628	.....	9,850	10,847	8,539	1,716	.....	.....	2,500	1,884	10,457	.....	10
9,415	.....	.....	14,936	7,037	6,986	.....	.....	6,095	3,598	24,243	.....	11
801	1,050	7,955	8,367	1,178	7,189	83	3,345	146	113	7,245	304	12
1,406	.....	4,166	1,474	715	274	.....	.....	.....	49	1,415	.....	13
3,615	.....	.....	4,953	603	3,824	.....	.....	1,548	1,800	11,686	.....	14
4,808	850	7,910	18,537	9,198	9,339	164	3,259	3,103	840	18,405	642	15
5,468	.....	9,350	10,442	8,539	1,611	.....	.....	2,500	1,870	10,240	.....	16
5,830	.....	.....	10,493	6,587	3,383	.....	.....	4,877	2,331	19,554	.....	17
-12.1	.....	-15.4	77.5	7.7	479.7	.....	.....	24.1	-55.1	79.7	.....	18
801	150	4,605	8,179	1,032	7,147	15	1,829	146	6	5,569	299	19
1,246	.....	3,666	1,069	715	169	.....	.....	.....	35	1,199	.....	20
.....	.....	.....	510	163	221	.....	.....	330	533	6,997	.....	21
83.3	82.4	41.8	55.9	88.8	23.5	90.9	43.9	95.3	99.3	69.7	53.4	22
77.2	.....	60.8	89.8	91.6	89.5	.....	.....	100.0	98.1	88.3	.....	23
100.0	.....	.....	95.1	97.5	93.5	.....	.....	93.2	77.1	64.2	.....	24
68,544	83,054	829,370	188,045	148,887	39,158	3,195	90,990	337,870	98,797	306,986	22,282	25
66,100	83,054	829,370	178,943	142,573	36,370	3,195	90,735	173,982	60,526	301,132	21,130	26
2,444	.....	.....	9,102	6,314	2,788	.....	255	163,888	38,271	5,854	1,152	27
52,595	.....	631,131	121,940	102,050	19,315	.....	.....	20,000	57,370	260,071	.....	28
47,975	.....	.....	70,423	47,182	9,809	.....	.....	33,900	297,724	318,062	.....	29
30.3	.....	31.4	54.2	45.9	102.7	.....	.....	(5)	72.2	18.0	.....	30
14.26	97.71	104.85	10.14	16.19	4.19	19.48	27.92	108.88	117.62	16.68	34.71	31
9.62	.....	67.50	11.68	11.95	11.99	.....	.....	8.00	30.68	25.40	.....	32
8.23	.....	.....	6.71	7.16	2.90	.....	.....	6.95	127.72	16.27	.....	33
17.11	118.65	250.94	18.15	18.23	17.86	21.44	63.63	114.26	118.46	23.92	64.96	34
68,744	219,604	1,133,370	194,825	155,017	39,808	3,720	97,640	402,870	104,012	312,258	24,582	35
14.30	125.49	100.65	10.40	16.59	4.24	16.03	20.45	129.83	109.83	15.55	37.99	36
									Primary Enterprises	Sup. Enterprises	Primary Enterprises	Sup. Enterprises	Primary Enterprises	Sup. Enterprises	
15	[3]1	2	142	83	59	10	6	9	8	2	172	6	9	7	37
4,007	700	(4)	10,266	8,151	2,115	126	1,241	2,677	686	(4)	12,192	64	340	605	38
3,739	19	(4)	14,134	11,308	2,826	263	645	2,939	2,664	(4)	69,936	168	2,852	2,022	39
0.93	0.03	(4)	1.38	1.39	1.34	2.08	0.52	1.10	3.88	(4)	5.74	2.62	8.39	3.34	40
3,804	21	212	8,786	7,805	981	.....	305	3,035	2,081	.....	1,064	.....	.....	.....	41
1.15	0.03	0.09	1.37	1.42	1.07	.....	0.27	1.23	3.45	.....	0.94	.....	.....	.....	42
3,626	700	2,485	6,505	5,574	931	.....	1,140	2,471	603	.....	1,133	.....	.....	.....	43
1.05	0.03	0.09	1.35	1.40	1.05	.....	0.27	1.23	3.45	.....	0.94	.....	.....	.....	44
1,000	.....	.....	1,422	1,422	.....	.....	11,381	4,054	2,105	.....	.....	.....	.....	.....	45
.....	24,701	.....	532	532	.....	.....	.....	1,633	.....	.....	.....	.....	.....	.....	46
12	.....	1	146	84	62	13	8	10	6	2	179	7	9	7	47
2,415	.....	(4)	9,371	7,310	2,061	149	1,366	2,716	741	(4)	12,228	68	312	605	48
3,893	.....	(4)	28,648	23,006	5,642	380	1,843	7,421	2,326	(4)	26,890	69	831	486	49
1.6	.....	(4)	3.1	3.1	2.7	2.6	1.3	2.7	3.1	(4)	2.2	1.0	2.7	0.8	50
0.88	.....	(4)	1.39	1.42	1.27	2.08	0.48	1.28	3.23	(4)	5.83	2.62	9.20	3.34	51
0.55	.....	(4)	0.45	0.45	0.46	0.82	0.34	0.47	1.03	(4)	2.65	2.58	3.45	4.16	52
2	.....	.....	.....	.....	.....	.....	.....	[3]1	2	.....	2	.....	.....	.....	53
(4)	.....	.....	.....	.....	.....	.....	.....	333	(4)	.....	(4)	.....	.....	.....	54
(4)	.....	.....	.....	.....	.....	.....	.....	240	(4)	.....	(4)	.....	.....	.....	55
(4)	.....	.....	.....	.....	.....	.....	.....	.....	(4)	.....	(4)	.....	.....	.....	56
.....	.....	.....	.....	.....	.....	.....	.....	120	(4)	.....	.....	.....	.....	.....	57

[4] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[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 41 to 46, inclusive, relate to those enterprises only.
[7] Data for 1 enterprise in Tularosa Valley Drainage Basin (50) (number refers to separate map) are included with Rio Tularosa Drainage Basin (51).

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					
				Total	Mississippi River				
					Arkansas River				
					Total	Cimarron River (2)	Canadian River		
							Total	Direct[2] (3)	Vermejo River (4)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
1	Enterprises	1940..number	[3]2,505	1,999	146	28	118	29	3
2	Average size of enterprise based on area works were capable of supplying with water	1940..acres	292	318	538	201	618	125	3,335
3	Diversion dams	1940..total number	1,072	827	131	30	101	29	2
4		1930..total number	665	512	88	3	85	4	4
5		1920..total number	1,423	1,254	309	45	264	4	23
6	(a) Concrete and masonry	1940..number	121	101	17	5	12	3	.....
7	(b) Timber	1940..number	102	93	5	.....	5	.....	.....
8	(c) Earth and rock	1940..number	475	362	74	4	70	24	2
9	(d) Other, mixed, and not reported	1940..number	374	271	35	21	14	2	.....
10	Main canals and laterals	1940..total length, miles	4,647.9	3,614.6	464.4	66.1	398.3	57.0	75.0
11		1930..total length, miles	4,466	3,802	587	29	558	16	116
12		1920..total length, miles	5,932	5,139	1,136	162	974	12	150
13	(a) Earth	1940..length, miles	4,567	3,542	441	66	375	57	75
14	(b) Lined	1940..length, miles	80.9	72.6	23.4	0.1	23.3	.....	.....
15		1940..capacity, c.f.s.[4]	16,821	14,152	3,315	194	3,121	159	1,213
16		1930..capacity, c.f.s.[4]	17,479	15,400	5,581	84	5,500	27	3,012
17		1920..capacity, c.f.s.[4]	23,432	17,990	8,463	352	8,111	53	2,357
18	Pipe lines[5]	1940..total length, miles	36.5	25.5	1.5	0.1	1.4	.....	1.3
19		1930..total length, miles	15.2	14.6	3.0	.....	3.0	.....	1.0
20		1920..total length, miles	60.8	49.5	15.0	0.2	14.8	.....	1.1
21	(a) Concrete	1940..length, miles	8.7	8.5	.....	.....	.....	.....	.....
22	(b) Metal	1940..length, miles	21.4	14.6	1.4	0.1	1.3	.....	1.3
23	(c) Wood-stave	1940..length, miles	3.4	1.9	0.1	.....	0.1	.....	.....
24	(d) Other	1940..length, miles	3.0	0.5	.....	.....	.....	.....	.....
25	Storage dams	1940..total number	141	87	25	1	24	2	9
26		1930..total number	69	51	24	2	22	1	9
27		1920..total number	153	130	69	8	61	2	10
28	(a) Concrete and masonry	1940..number	7	7	1	.....	1	.....	.....
29	(b) Earth and rock	1940..number	124	70	18	1	17	2	9
30	(c) Other, mixed, and not reported	1940..number	10	10	6	.....	6	.....	.....
31	Reservoirs	1940..total number	502	300	25	1	24	2	9
32	(a) 1-99 acre-feet capacity	1940..number	437	261	5	1	4	1	.....
33	(b) 100-999 acre-feet capacity	1940..number	38	19	13	.....	13	.....	9
34	(c) 1,000 and over acre-feet capacity	1940..number	27	20	7	.....	7	1	.....
35		1940..total capacity, ac.-ft.[6]	3,280,550	3,260,829	105,644	(7)	105,639	(7)	8,700
36		1930..total number	240	168	25	2	23	2	9
37		1930..total capacity, ac.-ft.	2,945,220	2,932,997	147,969	926	147,043	380	18,340
38	Wells, flowing	1940..number	268	258	.....	.....	.....	.....	.....
39		1930..number	340	339	.....	.....	.....	.....	.....
40		1920..number	556	551	.....	.....	.....	.....	.....
41		1940..yield, g.p.m.	181,076	180,398	.....	.....	.....	.....	.....
42		1930..yield, g.p.m.	223,257	222,257	.....	.....	.....	.....	.....
43		1920..yield, g.p.m.	376,222	375,302	.....	.....	.....	.....	.....
44	Wells, pumped	1940..number	1,487	1,220	3	1	2	1	.....
45		1930..number	680	330	.....	.....	.....	.....	.....
46		1920..number	461	373	7	2	5	.....	2
47		1940..yield, g.p.m.	1,143,276	1,033,280	112	(7)	(7)	(7)	.....
48		1930..yield, g.p.m.	481,898	252,720	.....	.....	.....	.....	.....
49		1920..yield, g.p.m.	265,618	218,674	3,347	36	3,311	.....	.....
50	Pumping plants	1940..total number	1,558	1,285	5	2	3	1	1
51		1930..total number	702	354	.....	.....	.....	.....	.....
52	Prime movers	1940..capacity, hp.	40,110	35,983	39	(7)	8	(7)	(7)
53		1930..capacity, hp.	14,483	7,475	.....	.....	.....	.....	.....
54		1920..capacity, hp.	8,488	6,405	98	32	66	.....	50
55	(a) Electric	1940..number	474	346	.....	.....	.....	.....	.....
56		1940..capacity, hp.	7,710	5,896	.....	.....	.....	.....	.....
57	(b) Internal-combustion	1940..number	1,019	903	2	1	1	.....	1
58		1940..capacity, hp.	32,068	29,801	(7)	(7)	(7)	.....	(7)
59	(c) Other	1940..number	65	36	3	1	2	1	.....
60		1940..capacity, hp.	332	286	5	(7)	(7)	(7)	.....
61	Pumps	1940..total number	1,559	1,291	5	2	3	1	1
62		1930..number	738	382	.....	.....	.....	.....	.....
63		1920..number	491	395	11	4	7	.....	2
64		1940..capacity, g.p.m.	1,309,005	1,193,409	1,712	(7)	206	(7)	(7)
65		1930..capacity, g.p.m.	555,063	324,763	.....	.....	.....	.....	.....
66		1920..capacity, g.p.m.	304,789	257,335	2,054	532	1,522	.....	.....
67	(a) Centrifugal	1940..number	592	532	.....	.....	.....	.....	.....
68		1940..capacity, g.p.m.	511,922	481,037	.....	.....	.....	.....	.....
69		1940..average capacity, g.p.m.	865	904	.....	.....	.....	.....	.....
70	(b) Turbine	1940..number	865	694	1	1	.....	.....	.....
71		1940..capacity, g.p.m.	781,410	697,820	(7)	(7)	.....	.....	.....
72		1940..average capacity, g.p.m.	903	1,006	(7)	(7)	.....	.....	.....
73	(c) Plunger	1940..number	84	48	4	1	3	1	1
74		1940..capacity, g.p.m.	1,906	1,285	212	(7)	206	(7)	(7)
75		1940..average capacity, g.p.m.	23	27	53	(7)	69	(7)	(7)
76	(d) Other	1940..number	18	17	.....	.....	.....	.....	.....
77		1940..capacity, g.p.m.	13,767	13,267	.....	.....	.....	.....	.....
78	Pumping lift, from all sources	1940..average, feet	44	41	40	(7)	49	(7)	(7)
79		1930..average, feet	40	.....	.....	.....	.....	.....	.....
80		1920..average, feet	40	52	52	36	60	.....	100
81	from pumped wells	1940..average, feet	46	42	52	(7)	(7)	(7)	.....
82	from surface sources	1940..average, feet	26	21	23	(7)	28	(7)	(7)

[1] Data for 2 enterprises in San Augustine Drainage Basin (48) (number refers to separate map) and for 1 enterprise in Sacramento-Salt Lakes Drainage Basin (53) are included with State total. Data for unidentified basins for the 1930 and 1920 Censuses are included only in State total.

[2] Data for 1 enterprise in Ute Creek Drainage Basin (10) (number refers to separate map) are included with Canadian River "Direct" Drainage Basin (3).

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

WORKS, 1940, 1930, AND 1920

GULF OF MEXICO—Continued												
Mississippi River—Continued								Rio Grande				
Arkansas River—Continued										Conejos River		
Canadian River—Continued								Total	Direct	San Antonio River	Costilla Creek	
Cimarron River (5)	Ocate Creek (6)	Mora River Total	Mora River Direct (7)	Mora River Coyote Creek (8)	Mora River Sapello Creek (9)	Carrizo Creek (11)	North Canadian River (12)		(14)	(15)	(16)	
7	6	65	40	5	20	4	4	1,503	180	10	15	1
4,405	169	413	428	484	364	54	116	355	1,260	79	259	2
11	6	50	32	4	14	2	1	696	114	3	13	3
9	2	58	.....	.....	.....	.....	.....	421	23	.....	4	4
60	27	108	.....	.....	.....	.....	.....	945	48	.....	48	5
6	.....	3	1	.....	2	.....	.....	84	33	.....	2	6
1	4	.....	.....	.....	.....	.....	.....	88	3	.....	3	7
3	2	36	23	4	9	2	1	288	60	2	4	8
1	.....	11	8	.....	3	.....	.....	236	18	1	4	9
65.0	11.0	184.2	117.1	13.0	54.1	4.1	2.0	3,149.5	1,461.9	8.0	47.0	10
145	35	212	.....	.....	.....	.....	.....	3,215	1,004	.....	39	11
332	93	272	.....	.....	.....	.....	.....	4,003	818	.....	43	12
47	11	179	113	13	53	4	2	3,101	1,444	8	47	13
18.0	.....	5.2	4.1	.....	1.1	0.1	.....	48.5	17.9	.....	.....	14
1,181	45	503	333	37	133	5	15	10,836	5,389	26	290	15
989	117	1,060	.....	.....	.....	.....	.....	9,816	4,349	.....	270	16
2,035	1,217	1,075	.....	.....	.....	.....	.....	9,527	3,007	.....	139	17
.....	.....	0.1	.....	.....	0.1	.....	.....	23.9	13.3	0.1	.....	18
.....	.....	.....	.....	.....	.....	.....	.....	11.6	0.5	.....	.....	19
4.8	1.5	.....	.....	.....	.....	.....	.....	34.5	2.8	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	8.5	5.2	.....	.....	21
.....	.....	.....	.....	.....	.....	.....	.....	13.1	7.3	0.1	.....	22
.....	.....	0.1	.....	.....	0.1	.....	.....	1.8	0.5	.....	.....	23
.....	.....	.....	.....	.....	.....	.....	.....	0.5	0.3	.....	.....	24
6	.....	2	1	.....	1	2	3	62	29	.....	1	25
4	.....	4	.....	.....	.....	.....	.....	27	1	.....	1	26
9	3	12	.....	.....	.....	.....	.....	51	5	.....	.....	27
1	.....	.....	.....	.....	.....	.....	.....	6	2	.....	.....	28
3	.....	1	1	.....	.....	2	.....	52	25	.....	1	29
2	.....	1	.....	.....	1	.....	3	4	2	.....	.....	30
6	.....	2	1	.....	1	2	3	274	40	1	1	31
.....	.....	2	1	.....	1	1	.....	255	37	1	.....	32
.....	.....	.....	.....	.....	.....	1	3	6	.....	.....	.....	33
6	.....	.....	.....	.....	.....	.....	.....	13	3	.....	1	34
93,650	.....	(7)	(7)	.....	(7)	(7)	1,125	3,155,183	2,655,464	(7)	(7)	35
4	.....	3	.....	.....	.....	.....	.....	143	3	.....	1	36
96,400	.....	24,800	.....	.....	.....	.....	.....	2,785,028	2,638,866	.....	15,739	37
.....	.....	.....	.....	.....	.....	.....	.....	258	7	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	339	.....	.....	.....	39
.....	.....	.....	.....	.....	.....	.....	.....	551	.....	.....	.....	40
.....	.....	.....	.....	.....	.....	.....	.....	180,398	153	.....	.....	41
.....	.....	.....	.....	.....	.....	.....	.....	222,257	.....	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	375,302	.....	.....	.....	43
.....	.....	.....	.....	.....	.....	.....	1	840	54	1	.....	44
.....	.....	.....	.....	.....	.....	.....	.....	330	.....	.....	.....	45
.....	.....	1	.....	.....	.....	.....	.....	366	26	.....	.....	46
.....	.....	.....	.....	.....	.....	.....	(7)	721,853	6,133	(7)	.....	47
.....	.....	.....	.....	.....	.....	.....	.....	252,720	.....	.....	.....	48
.....	.....	3,300	.....	.....	.....	.....	.....	215,327	11,356	.....	.....	49
.....	.....	.....	.....	.....	.....	.....	1	905	76	1	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	354	2	.....	.....	51
.....	.....	.....	.....	.....	.....	.....	(7)	25,094	517	(7)	.....	52
.....	.....	.....	.....	.....	.....	.....	.....	7,475	46	.....	.....	53
10	.....	5	.....	.....	.....	.....	.....	6,307	336	.....	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	331	7	.....	.....	55
.....	.....	.....	.....	.....	.....	.....	.....	5,671	81	.....	.....	56
.....	.....	.....	.....	.....	.....	.....	.....	545	46	.....	.....	57
.....	.....	.....	.....	.....	.....	.....	.....	19,343	404	.....	.....	58
.....	.....	.....	.....	.....	.....	.....	1	29	23	1	.....	59
.....	.....	.....	.....	.....	.....	.....	(7)	80	32	(7)	.....	60
.....	.....	.....	.....	.....	.....	.....	1	906	73	1	.....	61
.....	.....	.....	.....	.....	.....	.....	.....	362	2	.....	.....	62
1	.....	2	.....	.....	.....	.....	.....	384	30	.....	.....	63
.....	.....	.....	.....	.....	.....	.....	(7)	862,117	26,420	(7)	.....	64
.....	.....	.....	.....	.....	.....	.....	.....	324,763	2,080	.....	.....	65
1,500	.....	10	.....	.....	.....	.....	.....	255,281	14,828	.....	.....	66
.....	.....	.....	.....	.....	.....	.....	.....	384	38	.....	.....	67
.....	.....	.....	.....	.....	.....	.....	.....	356,912	16,407	.....	.....	68
.....	.....	.....	.....	.....	.....	.....	.....	929	432	.....	.....	69
.....	.....	.....	.....	.....	.....	.....	.....	482	3	.....	.....	70
.....	.....	.....	.....	.....	.....	.....	.....	509,585	9,500	.....	.....	71
.....	.....	.....	.....	.....	.....	.....	.....	1,045	3,167	.....	.....	72
.....	.....	.....	.....	.....	.....	.....	1	36	31	1	.....	73
.....	.....	.....	.....	.....	.....	.....	(7)	553	503	(7)	.....	74
.....	.....	.....	.....	.....	.....	.....	(7)	15	16	(7)	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	4	1	.....	.....	76
.....	.....	.....	.....	.....	.....	.....	.....	1,067	(7)	.....	.....	77
.....	.....	.....	.....	.....	.....	.....	(7)	38	16	(7)	.....	78
.....	.....	.....	.....	.....	.....	.....	.....	29	30	.....	.....	79
22	.....	35	.....	.....	.....	.....	.....	35	33	.....	.....	80
.....	.....	.....	.....	.....	.....	.....	(7)	40	18	(7)	.....	81
.....	.....	.....	.....	.....	.....	.....	.....	21	12	.....	.....	82

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

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 unindentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	GULF OF MEXICO—Continued						
		Rio Grande—Continued						
						Rio Chama		
		Latir Creek and Red River (17)	Rio Hondo (18)	Rio Pueblo de Taos (19)	Embudo River (20)	Total	Direct (21)	Caliente River (22)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1	Enterprises.....1940..number.....	7	11	29	54	128	92	36
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	1,079	428	757	180	208	238	113
3	Diversion dams.....1940..total number.....	4	8	38	34	110	69	41
4	1930..total number.....	.....	.....	18	.....	91	.....	.....
5	1920..total number.....	.....	.....	40	.....	187	.....	.....
6	(a) Concrete and masonry.....1940..number.....	.....	2	.....	2	2	1	1
7	(b) Timber.....1940..number.....	2	.....	9	2	4	3	1
8	(c) Earth and rock.....1940..number.....	1	4	8	10	55	40	15
9	(d) Other, mixed, and not reported..1940..number.....	1	2	21	20	49	25	24
10	Main canals and laterals.....1940..total length, miles.....	45.1	33.0	163.3	126.0	314.0	238.0	78.0
11	1930..total length, miles.....	.....	.....	134	.....	347	.....	.....
12	1920..total length, miles.....	.....	.....	87	.....	378	.....	.....
13	(a) Earth.....1940..length, miles.....	45	33	151	123	314	236	78
14	(b) Lined.....1940..length, miles.....	0.1	.....	12.3	.....	.....	.....	.....
15	1940..capacity, c.f.s.[1].....	160	92	221	282	559	436	123
16	1930..capacity, c.f.s.[1].....	.....	.....	348	.....	789	.....	.....
17	1920..capacity, c.f.s.[1].....	.....	.....	434	.....	832	.....	.....
18	Pipe lines[2].....1940..total length, miles.....	.....	.....	.....	0.2	0.1	0.1	.....
19	1930..total length, miles.....	.....	.....	.....	.....	.....	.....	.....
20	1920..total length, miles.....	.....	.....	.....	.....	.....	.....	.....
21	(a) Concrete.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
22	(b) Metal.....1940..length, miles.....	.....	.....	.....	0.1	0.1	0.1	.....
23	(c) Wood-stave.....1940..length, miles.....	.....	.....	.....	0.1	.....	.....	.....
24	(d) Other.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
25	Storage dams.....1940..total number.....	1	.....	4	.....	1	1	.....
26	1930..total number.....	.....	.....	.....	.....	2	.....	.....
27	1920..total number.....	.....	.....	.....	.....	2	.....	.....
28	(a) Concrete and masonry.....1940..number.....	.....	.....	2	.....	.....	.....	.....
29	(b) Earth and rock.....1940..number.....	1	.....	2	.....	.....	.....	.....
30	(c) Other, mixed, and not reported..1940..number.....	.....	.....	.....	.....	1	1	.....
31	Reservoirs.....1940..total number.....	1	.....	4	1	1	1	.....
32	(a) 1-99 acre-feet capacity.....1940..number.....	.....	.....	3	1	.....	.....	.....
33	(b) 100-999 acre-feet capacity....1940..number.....	1	.....	1	.....	.....	.....	.....
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	.....	.....	.....	.....	1	1	.....
35	1940..total capacity, ac.-ft.[4]..	([5])	.....	201	([5])	([5])	([5])	.....
36	1930..total number.....	.....	.....	.....	.....	3	.....	.....
37	1930..total capacity, ac.-ft....	.....	.....	.....	.....	601	.....	.....
38	Wells, flowing.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
39	1930..number.....	.....	.....	.....	.....	.....	.....	.....
40	1920..number.....	.....	.....	.....	.....	.....	.....	.....
41	1940..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
42	1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
43	1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
44	Wells, pumped.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
45	1930..number.....	.....	.....	.....	.....	.....	.....	.....
46	1920..number.....	.....	.....	.....	.....	.....	.....	.....
47	1940..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
48	1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
49	1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number.....	.....	.....	.....	.....	1	1	.....
51	1930..total number.....	.....	.....	.....	.....	.....	.....	.....
52	Prime movers.....1940..capacity, hp.....	.....	.....	.....	.....	([5])	([5])	.....
53	1930..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
54	1920..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
55	(a) Electric.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
56	1940..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
57	(b) Internal-combustion.....1940..number.....	.....	.....	.....	.....	1	1	.....
58	1940..capacity, hp.....	.....	.....	.....	.....	([5])	([5])	.....
59	(c) Other.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
60	1940..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
61	Pumps.....1940..total number.....	.....	.....	.....	.....	1	1	.....
62	1930..number.....	.....	.....	.....	.....	.....	.....	.....
63	1920..number.....	.....	.....	.....	.....	.....	.....	.....
64	1940..capacity, g.p.m.....	.....	.....	.....	.....	([5])	([5])	.....
65	1930..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
66	1920..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
67	(a) Centrifugal.....1940..number.....	.....	.....	.....	.....	1	1	.....
68	1940..capacity, g.p.m.....	.....	.....	.....	.....	([5])	([5])	.....
69	1940..average capacity, g.p.m..	.....	.....	.....	.....	([5])	([5])	.....
70	(b) Turbine.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
71	1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
72	1940..average capacity, g.p.m..	.....	.....	.....	.....	.....	.....	.....
73	(c) Plunger.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
74	1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
75	1940..average capacity, g.p.m..	.....	.....	.....	.....	.....	.....	.....
76	(d) Other.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
77	1940..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	.....	.....	.....	.....	([5])	([5])	.....
79	1930..average, feet.....	.....	.....	.....	.....	.....	.....	.....
80	1920..average, feet.....	.....	.....	.....	.....	.....	.....	.....
81	from pumped wells.....1940..average, feet.....	.....	.....	.....	.....	.....	.....	.....
82	from surface sources...1940..average, feet.....	.....	.....	.....	.....	([5])	([5])	.....

[1] Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.
[2] Includes siphons and farm pipe lines reported.
[3] Data for less than 3 enterprises shown with permission of the enterprises involved.

WORKS, 1940, 1930, AND 1920—Continued

GULF OF MEXICO—Continued												
Rio Grande—Continued												
			Rio Puerco				Pecos River					
Santa Cruz River (23)	Tesuque Creek (24)	Jemez Creek (25)	Total	Direct (26)	San Jose River (27)	Alamosa River (28)	Total	Direct (29)	Gallinas River (30)	Rio Hondo (31)	Rio Penasco (32)	
19	34	17	23	12	11	6	970	504	11	407	48	1
371	210	256	1,054	408	1,759	128	194	270	890	91	111	2
12	33	19	28	15	13	9	271	71	11	125	64	3
10	15	.....	39	.....	.....	.....	159	20	15	75	24	4
11	18	.....	30	.....	.....	.....	368	169	38	99	16	5
.....	4	.....	2	.....	2	.....	37	9	3	21	4	6
.....	.....	.....	2	1	1	.....	63	4	.....	20	39	7
6	9	8	15	9	6	7	9.9	36	4	59	.....	8
6	20	11	9	5	4	2	72	22	4	25	21	9
75.0	108.3	46.0	184.8	71.0	113.8	25.0	512.1	263.7	64.6	127.4	56.4	10
102	75	.....	262	.....	.....	.....	762	320	44	230	55	11
55	56	.....	257	.....	.....	.....	1,512	524	92	383	270	12
75	108	46	181	71	110	25	498	251	64	127	56	13
.....	0.3	.....	3.8	.....	3.8	.....	14.1	12.7	0.6	0.4	0.4	14
100	127	68	356	133	223	51	3,115	2,178	298	361	278	15
166	98	.....	537	.....	.....	.....	2,017	1,071	243	317	167	16
134	72	.....	215	.....	.....	.....	2,894	1,418	276	547	245	17
.....	1.5	0.4	.....	.....	.....	0.1	8.2	3.4	.....	4.5	0.3	18
.....	1.7	.....	.....	.....	.....	.....	2.3	0.4	.....	0.3	.....	19
0.1	.....	.....	.....	.....	.....	.....	18.2	5.5	0.5	11.0	0.5	20
.....	.....	.....	.....	.....	.....	.....	3.3	0.5	.....	2.7	0.1	21
.....	1.2	.....	.....	.....	.....	0.1	4.2	2.2	.....	1.8	0.2	22
.....	0.1	0.4	.....	.....	.....	.....	0.7	0.7	.....	.....	.....	23
.....	0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
1	3	1	6	.....	6	.....	15	12	1	2	.....	25
1	.....	.....	8	.....	.....	.....	6	2	1	.....	.....	26
.....	.....	.....	9	.....	.....	.....	16	2	5	2	.....	27
1	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	28
.....	3	1	5	.....	5	.....	14	12	.....	2	.....	29
.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	30
1	4	[3]1	6	.....	6	1	212	198	2	12	.....	31
.....	4	1	1	.....	1	1	206	194	.....	12	.....	32
.....	.....	.....	4	.....	4	.....	.....	.....	.....	.....	.....	33
1	.....	.....	1	.....	1	.....	6	4	2	.....	.....	34
(5)	20	75	55,447	.....	55,447	(5)	222,560	198,539	(5)	21	.....	35
1	.....	.....	6	.....	.....	.....	122	3	2	5	.....	36
10,000	.....	.....	53,130	.....	.....	.....	54,955	50,400	70	204	.....	37
.....	.....	.....	.....	.....	.....	.....	251	178	.....	73	.....	38
.....	.....	.....	.....	.....	.....	.....	339	2	.....	76	.....	39
.....	.....	.....	.....	.....	.....	.....	549	286	.....	176	51	40
.....	.....	.....	.....	.....	.....	.....	180,245	122,260	.....	57,985	.....	41
.....	.....	.....	.....	.....	.....	.....	222,257	1,800	.....	46,707	.....	42
.....	.....	.....	.....	.....	.....	.....	375,275	198,415	.....	125,606	30,132	43
.....	.....	2	.....	.....	.....	2	781	446	.....	334	1	44
.....	.....	.....	.....	.....	.....	.....	319	2	.....	111	1	45
.....	.....	.....	.....	.....	.....	.....	245	96	1	79	10	46
.....	.....	(5)	.....	.....	.....	(5)	713,267	431,035	.....	281,632	(5)	47
.....	.....	.....	.....	.....	.....	.....	252,271	4,900	.....	81,031	600	48
.....	.....	.....	.....	.....	.....	.....	153,429	70,598	3	46,585	7,210	49
.....	.....	2	.....	.....	.....	2	823	488	.....	334	1	50
.....	.....	.....	.....	.....	.....	.....	338	26	.....	111	1	51
.....	.....	(5)	.....	.....	.....	(5)	24,513	16,764	.....	7,739	(5)	52
.....	.....	.....	.....	.....	.....	.....	7,405	769	.....	1,673	20	53
.....	.....	.....	.....	.....	.....	.....	4,455	2,379	.....	1,041	216	54
.....	.....	.....	.....	.....	.....	2	322	151	.....	171	.....	55
.....	.....	.....	.....	.....	.....	(5)	5,565	3,190	.....	2,375	.....	56
.....	.....	2	.....	.....	.....	.....	496	335	.....	160	1	57
.....	.....	(5)	.....	.....	.....	.....	18,901	13,532	.....	5,369	(5)	58
.....	.....	.....	.....	.....	.....	.....	5	2	.....	3	.....	59
.....	.....	.....	.....	.....	.....	.....	47	(5)	.....	5	.....	60
.....	.....	2	.....	.....	.....	2	827	492	.....	334	1	61
.....	.....	.....	.....	.....	.....	.....	369	26	.....	130	1	62
.....	.....	.....	1	.....	.....	.....	256	106	1	79	11	63
.....	.....	(5)	.....	.....	.....	(5)	832,687	536,335	.....	295,752	(5)	64
.....	.....	.....	.....	.....	.....	.....	322,234	50,688	.....	80,131	600	65
.....	.....	.....	.....	.....	.....	.....	193,036	96,448	3	57,275	9,000	66
.....	.....	2	.....	.....	.....	.....	343	125	.....	218	.....	67
.....	.....	(5)	.....	.....	.....	.....	338,305	153,425	.....	184,880	.....	68
.....	.....	(5)	.....	.....	.....	.....	986	1,227	.....	848	.....	69
.....	.....	.....	.....	.....	.....	2	477	366	.....	110	1	70
.....	.....	.....	.....	.....	.....	(5)	493,285	382,900	.....	109,785	(5)	71
.....	.....	.....	.....	.....	.....	(5)	1,034	1,046	.....	998	(5)	72
.....	.....	.....	.....	.....	.....	.....	4	1	.....	3	.....	73
.....	.....	.....	.....	.....	.....	.....	40	(5)	.....	30	.....	74
.....	.....	.....	.....	.....	.....	.....	10	(5)	.....	10	.....	75
.....	.....	.....	.....	.....	.....	.....	3	.....	.....	3	.....	76
.....	.....	.....	.....	.....	.....	.....	1,057	.....	.....	1,057	.....	77
.....	.....	(5)	.....	.....	.....	(5)	40	47	.....	29	(5)	78
.....	.....	.....	.....	.....	.....	.....	26	17	.....	24	40	79
.....	.....	.....	96	.....	.....	.....	28	28	75	21	29	80
.....	.....	(5)	.....	.....	.....	(5)	41	50	.....	29	(5)	81
.....	.....	.....	.....	.....	.....	.....	25	25	.....	.....	.....	82

[4]Total capacity of all reservoirs regardless of size.
[5]Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

DRAINAGE BASIN TABLE II.—ENTERPRISES AND IRRIGATION

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	GULF OF MEXICO—Con.		COLORADO RIVER				
					San Juan River			
		Colorado River (Texas) (33)	Brazos River (34)	Total	Total	Direct (35)	Los Pinos River (36)	Animas River (37)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1	Enterprises.....1940..number.....	42	308	223	64	21	7	20
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres.....	81	67	309	665	1,030	40	749
3	Diversion dams.....1940..total number.....	.....	.....	177	70	43	.....	14
4	1930..total number.....	.....	.....	102	40	10	.....	10
5	1920..total number.....	.....	.....	76	44	11	4	14
6	(a) Concrete and masonry.....1940..number.....	.....	.....	10	7	3	.....	.....
7	(b) Timber.....1940..number.....	.....	.....	3	1	.....	.....	1
8	(c) Earth and rock.....1940..number.....	.....	.....	84	6	5	.....	1
9	(d) Other, mixed, and not reported..1940..number.....	.....	.....	80	56	35	.....	12
10	Main canals and laterals.....1940..total length, miles.....	0.5	0.2	864.5	583.6	387.9	.....	141.6
11	1930..total length, miles.....	.....	.....	544	351	94	2	190
12	1920..total length, miles.....	.....	.....	501	360	109	8	177
13	(a) Earth.....1940..length, miles.....	.....	.....	859	579	384	.....	141
14	(b) Lined.....1940..length, miles.....	0.5	0.2	5.5	4.6	3.9	.....	0.6
15	1940..capacity, c.f.s.[2].....	.....	1	2,343	1,584	767	8	645
16	1930..capacity, c.f.s.[2].....	.....	.....	1,839	1,115	345	3	568
17	1920..capacity, c.f.s.[2].....	.....	.....	1,820	1,403	240	32	923
18	Pipe lines[3].....1940..total length, miles.....	.....	0.1	5.2	4.2	3.4	.....	0.7
19	1930..total length, miles.....	.....	.....	0.3	0.3	.....	.....	0.3
20	1920..total length, miles.....	.....	.....	2.5	.....	.....	.....	.....
21	(a) Concrete.....1940..length, miles.....	.....	.....	0.1	.....	.....	.....	.....
22	(b) Metal.....1940..length, miles.....	.....	0.1	3.6	2.7	2.7	.....	.....
23	(c) Wood-stave.....1940..length, miles.....	.....	.....	1.5	1.5	0.7	.....	0.7
24	(d) Other.....1940..length, miles.....	.....	.....	.....	.....	.....	.....	.....
25	Storage dams.....1940..total number.....	.....	.....	35	17	11	.....	.....
26	1930..total number.....	.....	.....	10	3	.....	.....	.....
27	1920..total number.....	.....	.....	13	11	1	.....	.....
28	(a) Concrete and masonry.....1940..number.....	.....	.....	.....	.....	.....	.....	.....
29	(b) Earth and rock.....1940..number.....	.....	.....	35	17	11	.....	.....
30	(c) Other, mixed, and not reported..1940..number.....	.....	.....	.....	.....	.....	.....	.....
31	Reservoirs.....1940..total number.....	1	.....	50	17	11	.....	.....
32	(a) 1-99 acre-feet capacity.....1940..number.....	1	.....	25	.....	.....	.....	.....
33	(b) 100-999 acre-feet capacity....1940..number.....	.....	.....	18	17	11	.....	.....
34	(c) 1,000 and over acre-feet capacity.....1940..number.....	.....	.....	7	.....	.....	.....	.....
35	1940..total capacity, ac.-ft.[4]..	(5)	.....	18,929	8,950	6,850	.....	.....
36	1930..total number.....	.....	.....	8	3	.....	.....	.....
37	1930..total capacity, ac.-ft....	.....	.....	11,184	2,096	.....	.....	.....
38	Wells, flowing.....1940..number.....	.....	.....	10	7	.....	.....	.....
39	1930..number.....	.....	.....	.....	.....	.....	.....	.....
40	1920..number.....	.....	.....	4	4	.....	.....	.....
41	1940..yield, g.p.m.....	.....	.....	678	360	.....	.....	.....
42	1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
43	1920..yield, g.p.m.....	.....	.....	845	845	.....	.....	.....
44	Wells, pumped.....1940..number.....	47	330	19	1	.....	.....	.....
45	1930..number.....	.....	.....	.....	.....	.....	.....	.....
46	1920..number.....	.....	.....	1	1	.....	.....	.....
47	1940..yield, g.p.m.....	39,605	271,710	1,424	(5)	.....	.....	.....
48	1930..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
49	1920..yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number.....	47	328	26	1	.....	.....	.....
51	1930..total number.....	.....	.....	.....	.....	.....	.....	.....
52	Prime movers.....1940..capacity, hp.....	1,302	9,548	146	(5)	.....	.....	.....
53	1930..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
54	1920..capacity, hp.....	.....	.....	.....	.....	.....	.....	.....
55	(a) Electric.....1940..number.....	.....	.....	9	5	.....	.....	.....
56	1940..capacity, hp.....	.....	15	.....	.....	.....	.....	.....
57	(b) Internal-combustion.....1940..number.....	.....	225	.....	.....	.....	.....	.....
58	1940..capacity, hp.....	47	309	12	1	.....	.....	.....
59	(c) Other.....1940..number.....	1,302	9,122	121	(5)	.....	.....	.....
60	1940..capacity, hp.....	.....	4	14	.....	.....	.....	.....
61	Pumps.....1940..total number.....	.....	201	25	.....	.....	.....	.....
62	1930..number.....	47	333	21	1	.....	.....	.....
63	1920..number.....	.....	.....	.....	.....	.....	.....	.....
64	1940..capacity, g.p.m.....	.....	.....	4	2	.....	.....	.....
65	1930..capacity, g.p.m.....	41,355	288,225	3,085	(5)	.....	.....	.....
66	1920..capacity, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
		.....	.....	675	.....	.....	.....	.....
67	(a) Centrifugal.....1940..number.....	7	141	5	1	.....	.....	.....
68	1940..capacity, g.p.m.....	1,950	122,175	2,460	(5)	.....	.....	.....
69	1940..average capacity, g.p.m..	279	866	492	(5)	.....	.....	.....
70	(b) Turbine.....1940..number.....	33	178	.....	.....	.....	.....	.....
71	1940..capacity, g.p.m.....	38,985	153,750	.....	.....	.....	.....	.....
72	1940..average capacity, g.p.m..	1,181	864	.....	.....	.....	.....	.....
73	(c) Plunger.....1940..number.....	7	1	15	.....	.....	.....	.....
74	1940..capacity, g.p.m.....	420	(5)	125	.....	.....	.....	.....
75	1940..average capacity, g.p.m..	60	(5)	8	.....	.....	.....	.....
76	(d) Other.....1940..number.....	.....	13	1	.....	.....	.....	.....
77	1940..capacity, g.p.m.....	.....	12,200	(5)	.....	.....	.....	.....
78	Pumping lift, from all sources.....1940..average, feet.....	55	46	52	(5)	.....	.....	.....
79	1930..average, feet.....	.....	.....	.....	.....	.....	.....	.....
80	1920..average, feet.....	.....	.....	94	170	.....	.....	.....
81	from pumped wells.....1940..average, feet.....	55	46	(5)	.....	.....	.....	.....
82	from surface sources...1940..average, feet.....	.....	.....	50	.....	.....	.....	.....

[1] Data for less than 3 enterprises shown with permission of the enterprises involved.
[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.

WORKS, 1940, 1930, AND 1920—Continued

COLORADO RIVER—Continued						INDEPENDENT BASINS						
San Juan River—Continued		Little Colorado River	Upper Gila River									
La Plata River (38)	Chaco River (39)	Zuni River (42)	Total	Direct (44)	San Francisco River (45)	Salt Lake and Rito Creek (47)	Estancia Valley (49)	Rio Tularosa[6] (51)	Fresnal River (52)	Mimbres Valley (54)	Animas Valley (55)	
15	[1] 1	3	156	89	67	16	11	12	15	208	18	1
321	850	2,637	119	103	139	10	296	259	50	88	36	2
9	4	1	106	49	57	3	4	16	6	37	.....	3
14	.....	5	57	23	33	.....	.....	1	5	38	.....	4
11	.....	.....	32	4	26	.....	.....	6	33	45	.....	5
.....	4	.....	3	3	.....	.....	.....	2	4	4	.....	6
.....	.....	.....	2	.....	2	.....	.....	5	1	.....	.....	7
.....	.....	1	77	33	44	3	4	7	1	13	.....	8
9	.....	.....	24	13	11	.....	.....	2	.....	20	.....	9
43.0	11.1	32.2	248.7	146.7	102.0	2.0	18.1	24.8	25.7	87.0	9.2	10
42	.....	61	132	81	46	.....	.....	14	29	61	.....	11
49	.....	.....	141	77	56	.....	.....	116	73	91	.....	12
43	11	32	248	146	102	2	18	23	25	87	9	13
.....	0.1	0.2	0.7	0.7	.....	.....	0.1	1.8	0.7	.....	0.2	14
149	15	56	703	480	223	10	48	37	61	162	5	15
136	.....	85	639	537	94	.....	.....	40	20	153	.....	16
186	.....	.....	417	299	88	.....	.....	240	205	3,168	.....	17
0.1	.....	.....	1.0	0.7	0.3	.....	.....	2.5	2.0	1.3	.....	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
.....	.....	.....	2.5	0.3	.....	.....	.....	.....	7.7	1.1	.....	20
.....	.....	.....	0.1	0.1	.....	.....	.....	.....	.....	0.1	.....	21
.....	.....	.....	0.9	0.6	0.3	.....	.....	.....	2.0	1.2	.....	22
0.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23
.....	.....	.....	.....	.....	.....	.....	.....	2.5	.....	.....	.....	24
.....	6	7	11	8	3	6	4	4	.....	5	.....	25
1	.....	4	3	.....	2	.....	.....	.....	.....	1	.....	26
1	.....	.....	2	.....	.....	.....	.....	3	.....	5	.....	27
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
.....	6	7	11	8	3	6	4	4	.....	5	.....	29
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
.....	6	7	26	22	4	5	4	4	.....	139	.....	31
.....	.....	.....	25	22	3	5	4	4	.....	138	.....	32
.....	6	.....	1	.....	1	.....	.....	.....	.....	1	.....	33
.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	34
.....	2,100	9,305	674	67	607	56	64	205	.....	467	.....	35
1	.....	4	1	.....	1	.....	.....	.....	.....	58	.....	36
150	.....	8,497	601	.....	601	.....	.....	.....	.....	1,005	.....	37
.....	7	.....	3	3	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	40
.....	360	.....	318	318	.....	.....	.....	.....	.....	.....	.....	41
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75	.....	43
1	.....	.....	18	13	5	5	8	.....	4	213	18	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	154	.....	45
.....	.....	.....	.....	.....	.....	.....	.....	2	.....	85	.....	46
(5)	.....	.....	1,264	1,241	23	342	1,565	.....	1,450	94,843	10,372	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68,096	.....	48
.....	.....	.....	.....	.....	.....	.....	.....	119	.....	46,825	.....	49
1	.....	.....	25	17	8	5	7	.....	4	214	17	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	152	.....	51
(5)	.....	.....	138	70	68	10	37	.....	57	3,566	311	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,115	.....	53
.....	.....	.....	4	.....	.....	.....	.....	9	.....	2,065	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	2	126	.....	55
.....	.....	.....	.....	.....	.....	.....	.....	.....	(5)	1,802	.....	56
1	.....	.....	11	7	4	5	1	.....	2	79	17	57
(5)	.....	.....	113	49	64	10	(5)	.....	(5)	1,750	311	58
.....	.....	.....	14	10	4	.....	6	.....	.....	9	.....	59
.....	.....	.....	25	21	4	.....	7	.....	.....	14	.....	60
1	.....	.....	20	14	6	5	7	.....	4	213	18	61
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	159	.....	62
.....	.....	.....	2	.....	1	.....	.....	2	.....	90	.....	63
(5)	.....	.....	2,925	1,382	1,543	522	715	.....	1,450	98,602	11,222	64
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69,978	.....	65
.....	.....	.....	675	.....	275	.....	.....	119	.....	46,660	.....	66
1	.....	.....	4	2	2	3	.....	.....	.....	43	9	67
(5)	.....	.....	2,300	(5)	(5)	510	.....	.....	.....	22,915	5,000	68
(5)	.....	.....	575	(5)	(5)	170	.....	.....	.....	533	556	69
.....	.....	.....	.....	.....	.....	.....	1	.....	4	159	7	70
.....	.....	.....	.....	.....	.....	.....	(5)	.....	1,450	75,468	6,022	71
.....	.....	.....	.....	.....	.....	.....	(5)	.....	362	475	860	72
.....	.....	.....	15	11	4	2	6	.....	.....	11	2	73
.....	.....	.....	125	82	43	(5)	65	.....	.....	219	(5)	74
.....	.....	.....	8	7	11	(5)	11	.....	.....	20	(5)	75
.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	76
.....	.....	.....	(5)	(5)	.....	.....	.....	.....	.....	.....	.....	77
(5)	.....	.....	54	62	31	36	50	.....	118	64	38	78
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67	.....	79
.....	.....	.....	17	.....	20	.....	.....	68	.....	57	.....	80
(5)	.....	.....	56	60	30	36	50	.....	112	64	38	81
.....	.....	.....	50	68	32	.....	.....	.....	130	60	44	82

[4] Total capacity of all reservoirs regardless of size.
[5] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[6] Data for 1 enterprise in Tularosa Valley Drainage Basin (50) (number refers to separate map) are included with Rio Tularosa Drainage Basin (51).

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		Bernalillo	Catron	Chaves	
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms	1940...number	34,105		1,646	641	979	
2		1930...number	31,404		1,248	438	883	
3	Irrigated farms	1940...number	15,811		1,031	141	645	
4		1930...number	14,347		874	66	587	
5	Increase or decrease (-), 1930-1940	percent	10.2		18.0	113.6	9.9	
	Operated by—							
6	(a) Owners and managers	1940...number	13,396		921	118	426	
7		1930...number	11,477		798	54	362	
8	(b) Tenants	1940...number	2,415		110	23	219	
9		1930...number	2,870		76	12	225	
10	Land in all farms	1940...acres	38,860,427		135,327	1,992,108	2,838,707	
11	Land in irrigated farms	1940...acres	7,408,997		47,741	1,044,889	416,817	
12	Average per farm	1940...acres	469		46	7,411	646	
13	(a) Operated by owners and managers	1940...acres	6,501,491		43,048	1,028,907	339,462	
14	Average per farm	1940...acres	485		47	8,720	797	
15	(b) Operated by tenants	1940...acres	907,506		4,693	15,982	77,355	
16	Average per farm	1940...acres	376		43	695	353	
17	Approximate land area	1940...acres	77,767,040		744,320	4,414,720	3,900,160	
	IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated	1939...acres	554,039		20,588	2,563	72,957	
19	(a) Cropland harvested	1939...acres	512,441		20,511	2,159	68,554	
20	(b) Crop failure	1939...acres	21,069		28	19	898	
21	(c) Pasture	1939...acres	20,529		49	385	3,505	
22	Area irrigated	1929...acres	527,033		15,718	1,474	51,302	
23		1919...acres	538,377		14,536	.....	42,259	
24	Increase or decrease (-), 1929-1939	percent	5.1		31.0	73.9	42.2	
25	Irrigable area in enterprises	1940...acres	807,656		29,489	9,990	86,574	
26		1930...acres	741,245		19,861	1,778	59,739	
27		1920[1]...acres	961,879		19,056	.....	57,785	
28	Excess of irrigable area over the area irrigated	1940...acres	253,617		8,901	7,427	13,617	
29		1930...acres	214,212		4,143	304	8,437	
30	Area works were capable of supplying with water	1940...acres	731,990		20,404	9,845	83,542	
31		1930...acres	656,669		19,323	1,673	58,623	
32		1920...acres	696,119		15,218	.....	47,433	
33	Increase or decrease (-), 1930-1940	percent	11.5		52.2	488.5	42.5	
34	Excess, capability of works over area irrigated	1940...acres	177,951		8,816	7,282	10,585	
35		1930...acres	129,636		3,605	199	7,321	
36	Proportion which area irrigated is of all lands in irrigated farms	1939...percent	7.6		43.1	0.2	17.5	
37		1929...percent	10.5		37.0	3.5	14.6	
38	Proportion which area irrigated is of area works were capable of supplying with water	1939...percent	75.7		70.0	26.0	87.3	
39		1929...percent	80.3		81.3	88.1	87.5	
	CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises	1940...dollars	32,735,997		2,365,233	43,833	2,188,653	
41	(a) Cost of irrigation works and equipment	1940...dollars	32,290,856		2,365,136	41,045	2,172,403	
42	(b) Investment in water rights (reported)	1940...dollars	445,141		97	2,788	16,250	
43	Total investment in all enterprises	1930...dollars	19,834,380		118,277	19,315	1,971,272	
44		1920...dollars	18,210,412		165,784	.....	1,323,948	
45	Increase or decrease (-), 1930-1940	percent	65.0		(2)	126.9	11.0	
46	Average investment, based on area works were capable of supplying with water, per acre	1940...dollars	44.72		80.44	4.45	28.20	
47		1930...dollars	30.20		6.12	11.55	33.63	
48		1920...dollars	26.16		10.89	.....	27.91	
49	Average investment per acre irrigated	1939...dollars	59.09		114.88	17.10	30.00	
50	Estimated final investment in existing enterprises	1940...dollars	36,773,139		2,433,623	44,933	2,198,023	
51		1930...dollars	21,942,450		118,277	19,915	1,971,772	
52		1920...dollars	20,440,646		165,784	.....	1,334,688	
53	Increase or decrease (-), 1930-1940	percent	67.6		(2)	125.6	11.5	
54	Average investment, based on estimated final investment and irrigable area, per acre	1940...dollars	45.53		82.53	4.50	25.39	
55		1930...dollars	29.60		5.96	11.20	33.01	
56		1920[1]...dollars	21.25		8.70	.....	23.10	
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		Primary Enterprises	Supplemental Enterprises			Primary Enterprises	Supplemental Enterprises
57	Enterprises reporting maintenance and operation	1939...number	2,018	49	24	80	408	33
58	Area irrigated in these enterprises	1939...acres	516,916	5,083	20,472	2,465	69,654	4,361
59	Cost of maintenance and operation	1939...dollars	1,082,768	10,142	63,901	3,204	189,960	7,849
60	Average cost, per acre irrigated	1939...dollars	2.09	2.00	3.12	1.30	2.73	1.80
61		1929...dollars	2.15	.....	3.17	2.80	3.13	.....
62	Total annual charges (reported)[3] [4]	1939...dollars	966,767	.....	116,017	981	16,500	.....
63	Average annual charge per acre irrigated	1939...dollars	2.47	.....	5.70	1.07	1.28	.....
64	Area against which charges were assessed	1939...acres	483,407	.....	29,199	931	11,134	.....
65	Average annual charge per acre assessed	1939...dollars	2.00	.....	3.97	1.05	1.48	.....
66	Total charges collected[3]	1939...dollars	1,037,433	.....	144,809	.....	11,917	.....
67	Indebtedness to December 31 (reported)[4]	1939...dollars	16,715,813	.....	2,204,791	.....	3,550	.....
	WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered	1939...number	1,960	51	25	86	448	34
69	Area irrigated in these enterprises	1939...acres	474,184	5,097	18,974	2,432	72,418	4,389
70	Water delivered in these enterprises	1939...acre-feet	1,438,686	7,732	121,354	6,359	194,288	7,048
71	Average water delivered per acre irrigated	1939...acre-feet	3.0	1.5	6.4	2.6	2.7	1.6
72	Average cost of water per acre irrigated	1939...dollars	2.80	2.00	6.07	1.24	2.88	1.80
	DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage	1939...number	162	.....	3	.....	87	.....
74	Irrigable area in these enterprises	1939...acres	331,233	.....	28,933	.....	27,333	.....
75	Irrigated area in these enterprises	1939...acres	231,795	.....	20,190	.....	25,163	.....
76	Area for which drains have been installed	1939...acres	240,614	.....	28,933	.....	20,585	.....
77	Additional area needing drainage	1939...acres	8,732	.....	.....	.....	311	.....

*Census of Agriculture.

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

[2] Percent not shown when more than 1,000.

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

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"]

Colfax	Dona Ana	Eddy	Grant		Guadalupe	Hidalgo		Lea	Lincoln	Luna	McKinley	
659	1,674	655	618		476	228		549	640	308	1,996	1
798	2,129	1,054	576		596	335		610	569	235	996	2
215	1,476	505	283		185	76		75	166	157	440	3
280	2,000	860	233		169	84		93	184	124	238	4
-23.2	-26.2	-41.3	21.5		9.5	-9.5		-19.4	-9.8	26.6	84.9	5
147	1,005	314	202		158	58		62	125	120	434	6
168	1,154	285	123		143	61		.....	130	100	237	7
68	471	191	81		27	18		13	41	37	6	8
112	846	575	110		26	23		.....	54	24	1	9
1,866,677	424,350	1,616,449	1,217,768		963,025	754,621		1,948,537	2,003,681	829,439	1,678,415	10
1,069,197	211,492	354,698	529,709		31,890	40,956		159,207	94,451	98,744	112,256	11
4,973	143	702	1,872		172	539		2,123	569	616	255	12
634,983	182,549	319,526	516,334		29,712	39,382		149,097	91,147	82,017	107,321	13
4,320	182	1,018	2,556		188	679		2,405	729	691	247	14
434,214	28,943	35,172	13,375		2,178	1,674		10,110	3,304	13,827	4,935	15
6,386	61	184	165		81	87		778	81	374	822	16
2,400,500	2,434,560	2,664,320	2,540,800		1,918,720	2,206,080		2,811,520	3,109,760	1,892,480	3,491,840	17
31,344	76,523	54,971	7,521		3,007	2,976		1,967	4,608	10,893	4,005	18
30,377	71,245	53,198	6,452		2,674	2,428		1,816	4,506	10,038	4,005	19
20	4,017	905	4		153	2		17	92	469	.....	20
947	1,261	868	1,065		180	546		134	10	386	.....	21
33,414	75,275	52,432	6,753		3,431	3,623		.....	4,761	6,937	5,684	22
66,187	52,265	51,353	6,987		3,206	2,840		.....	6,128	11,323	6,919	23
-6.2	1.7	4.8	11.4		-12.4	-17.9		.....	-3.2	57.0	-29.5	24
61,038	97,338	79,144	8,550		3,112	3,350		3,405	4,851	18,078	13,010	25
70,026	79,000	61,870	7,935		3,936	3,823		.....	4,842	8,245	9,850	26
117,715	88,023	87,661	7,781		5,102	3,340		.....	11,899	24,786	9,057	27
29,694	20,815	24,173	1,029		105	374		1,438	243	7,185	9,005	28
36,612	3,725	9,438	1,182		505	200		.....	81	1,308	4,166	29
43,854	87,963	72,847	8,421		3,011	3,345		3,390	4,724	16,420	8,760	30
64,346	77,500	60,579	7,592		3,796	3,823		.....	4,804	8,071	9,350	31
90,881	65,057	59,784	7,243		4,800	2,940		.....	6,341	21,143	7,229	32
-31.8	13.5	20.3	10.9		-20.7	-12.5		.....	-1.7	103.4	-6.3	33
12,510	11,440	17,876	900		4	369		1,423	116	5,527	4,755	34
30,932	2,225	8,147	839		365	200		.....	43	1,134	3,666	35
2.9	36.2	15.5	1.4		9.4	7.3		1.2	4.9	11.3	3.6	36
2.9	44.8	15.1	2.6		17.8	38.2		.....	1.8	12.5	5.2	37
71.5	87.0	75.5	89.3		99.9	89.0		58.0	97.5	66.3	45.7	38
51.9	97.1	86.6	88.9		90.4	94.8		.....	99.1	85.9	60.8	39
1,661,205	3,841,764	5,530,699	134,643		256,866	70,051		45,173	46,916	276,431	912,424	40
1,575,677	3,841,601	5,501,466	129,660		252,666	66,683		45,085	45,758	271,427	912,424	41
85,528	163	29,233	4,983		4,200	3,368		88	1,158	5,004	.....	42
1,646,780	6,517,241	2,642,110	50,305		121,450	69,850		.....	31,980	261,191	691,131	43
4,526,888	2,485,908	2,952,707	54,162		87,195	31,935		.....	51,939	422,450	697,280	44
0.9	-41.1	109.3	167.7		111.5	0.3		.....	46.8	5.8	44.6	45
37.88	43.67	75.92	15.99		85.31	20.94		13.33	9.94	16.84	101.16	46
25.59	84.09	43.61	6.63		31.99	18.27		.....	6.66	32.36	67.50	47
49.81	38.21	49.39	7.48		18.17	10.86		.....	8.19	19.98	96.46	48
53.00	50.20	100.61	17.90		85.42	23.54		22.97	10.19	25.38	227.82	49
1,691,205	3,988,944	5,778,218	140,848		265,016	72,351		52,223	47,246	281,703	1,352,974	50
1,776,780	6,676,241	2,663,860	50,305		121,450	69,850		.....	36,180	261,191	881,881	51
4,626,388	2,488,908	3,503,207	56,967		93,195	46,935		.....	52,014	430,350	702,280	52
-4.8	-40.3	116.9	180.0		118.2	3.6		.....	30.6	7.9	53.4	53
27.71	40.98	73.01	16.47		85.16	21.60		15.34	9.74	15.58	103.99	54
25.37	84.51	43.06	6.34		30.86	18.27		.....	7.47	31.68	89.53	55
39.30	28.28	39.96	7.32		18.27	14.05		.....	4.37	12.37	77.54	56
			Primary Enterprises	Supplemental Enterprises		Primary Enterprises	Supplemental Enterprises					
26	10	167	102	6	9	12	7	35	127	143	3	57
31,095	76,523	48,257	7,389	64	3,007	2,973	605	1,589	4,475	10,364	3,205	58
21,107	158,721	111,130	9,303	168	6,923	7,476	2,022	5,837	5,917	69,101	2,915	59
0.68	2.07	2.30	1.26	2.63	2.30	2.51	3.34	3.67	1.32	6.67	0.91	60
1.44	2.76	2.50	1.80	.....	2.57	1.93	.....	.....	2.22	9.30	2.00	61
36,062	158,024	55,681	3,711	.....	6,345	5,028	.....	.....	3,601	130	233	62
1.25	2.07	2.37	0.96	.....	2.23	1.91	.....	.....	1.91	1.00	0.07	63
37,118	89,856	31,005	3,874	.....	2,847	2,703	.....	.....	1,857	130	3,185	64
0.97	1.76	1.80	0.96	.....	2.23	1.86	.....	.....	1.94	1.00	0.07	65
34,343	273,432	17,510	241	.....	135	1,181	.....	.....	366	.....	.....	66
218,187	2,513,259	3,390,482	.....	.....	90	532	.....	.....	.....	.....	24,701	67
34	9	222	104	7	9	11	7	31	33	151	1	68
31,344	76,503	54,417	6,420	68	3,007	2,945	605	1,388	1,893	10,570	(5)	69
38,324	249,262	164,645	18,938	69	5,285	8,431	486	1,668	5,326	23,688	(5)	70
1.2	3.3	3.0	2.9	1.0	1.8	2.9	0.8	1.2	2.8	2.2	(5)	71
1.19	2.07	2.48	1.21	2.62	2.28	2.68	3.34	2.87	2.19	6.71	(5)	72
1	[6] 1	15	2	.....	1	.....	.....	1	2	.....	.....	73
(5)	97,010	33,075	(5)	.....	(5)	.....	.....	(5)	(5)	.....	.....	74
(5)	76,238	24,690	(5)	.....	(5)	.....	.....	(5)	(5)	.....	.....	75
.....	87,585	9,927	(5)	.....	.....	.....	.....	(5)	.....	.....	.....	76
(5)	500	1,017	.....	.....	(5)	.....	.....	.....	(5)	.....	.....	77

[4] Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 62 to 67, inclusive, relate to those enterprises only.
[5] Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.
[6] Data for less than 3 enterprises shown with permission of the enterprise involved.

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)	Mora	Otero		Quay	Rio Arriba	Roosevelt
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*						
1	All farms.....1940...number.....	1,222	656		999	2,622	1,797
2	1930...number.....	1,318	537		1,176	2,492	1,579
3	Irrigated farms.....1940...number.....	501	237		21	1,792	314
4	1930...number.....	658	178		41	1,748	186
5	Increase or decrease (-), 1930-1940.....percent....	-23.9	33.1		-48.8	2.5	68.8
	Operated by—						
6	(a) Owners and managers.....1940...number.....	449	170		16	1,691	225
7	1930...number.....	599	143		.....	1,704	118
8	(b) Tenants.....1940...number.....	52	67		5	101	89
9	1930...number.....	59	35		.....	44	68
10	Land in all farms.....1940...acres.....	868,720	882,426		1,704,163	1,014,558	1,385,930
11	Land in irrigated farms.....1940...acres.....	357,968	92,123		11,480	212,864	34,379
12	Average per farm.....1940...acres.....	715	389		547	119	109
13	(a) Operated by owners and managers.....1940...acres.....	303,945	81,283		8,750	188,914	26,660
14	Average per farm.....1940...acres.....	677	478		547	112	118
15	(b) Operated by tenants.....1940...acres.....	54,023	10,840		2,730	23,950	7,719
16	Average per farm.....1940...acres.....	1,039	162		546	237	87
17	Approximate land area.....1940...acres.....	1,242,880	4,248,320		1,845,120	3,747,200	1,571,200
	IRRIGATED AND IRRIGABLE AREAS						
18	Area irrigated.....1939...acres.....	21,260	4,618		243	35,581	10,872
19	(a) Cropland harvested.....1939...acres.....	19,825	4,233		237	30,226	10,425
20	(b) Crop failure.....1939...acres.....	805	307		.....	2,585	132
21	(c) Pasture.....1939...acres.....	630	78		6	2,770	315
22	Area irrigated.....1929...acres.....	26,137	5,349		.....	41,449	4,823
23	1919...acres.....	17,833	7,556		.....	46,036	.....
24	Increase or decrease (-), 1929-1939.....percent....	-18.7	-13.7		.....	14.2	125.4
25	Irrigable area in enterprises.....1940...acres.....	23,860	4,880		619	47,291	21,694
26	1930...acres.....	31,184	5,658		.....	56,226	5,308
27	1920[3]...acres.....	37,673	12,117		.....	68,691	.....
28	Excess of irrigable area over the area irrigated..1940...acres.....	2,600	262		376	11,710	10,822
29	1930...acres.....	5,047	309		.....	14,777	485
30	Area works were capable of supplying with water...1940...acres.....	22,483	4,773		619	41,283	20,761
31	1930...acres.....	30,139	5,644		.....	49,081	5,248
32	1920...acres.....	29,749	8,565		.....	50,247	.....
33	Increase or decrease (-), 1930-1940.....percent....	-25.4	-15.4		.....	-15.9	295.6
34	Excess, capability of works over area irrigated...1940...acres.....	1,223	155		376	5,702	9,889
35	1930...acres.....	4,002	295		.....	7,632	425
36	Proportion which area irrigated is of all lands in irrigated farms.....1939...percent....	5.9	5.0		2.1	16.7	31.6
37	1929...percent....	7.3	16.2		.....	23.9	21.0
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent....	94.6	96.8		39.3	86.1	52.4
39	1929...percent....	86.7	94.8		.....	84.5	91.9
	CAPITAL INVESTED TO JANUARY 1						
40	Total investment in all enterprises.....1940...dollars....	114,617	442,922		14,694	681,604	363,060
41	(a) Cost of irrigation works and equipment.....1940...dollars....	107,925	240,763		14,694	679,559	360,151
42	(b) Investment in water rights (reported).....1940...dollars....	6,692	202,159		.....	2,045	2,909
43	Total investment in all enterprises.....1930...dollars....	132,700	156,015		.....	404,181	182,433
44	1920...dollars....	316,097	361,284		.....	245,425	.....
45	Increase or decrease (-), 1930-1940.....percent....	-13.6	183.9		.....	68.6	99.0
46	Average investment, based on area works were capable of supplying with water, per acre.....1940...dollars....	5.10	92.80		23.74	16.51	17.49
47	1930...dollars....	4.40	27.64		.....	8.23	34.76
48	1920...dollars....	10.63	42.18		.....	4.88	.....
49	Average investment per acre irrigated.....1939...dollars....	5.39	95.91		60.47	19.16	33.39
50	Estimated final investment in existing enterprises..1940...dollars....	116,877	513,237		15,569	966,539	370,369
51	1930...dollars....	135,700	156,076		.....	447,885	182,683
52	1920...dollars....	327,786	364,489		.....	259,670	.....
53	Increase or decrease (-), 1930-1940.....percent....	-13.9	228.8		.....	115.8	102.7
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940...dollars....	4.90	105.17		25.15	20.44	17.07
55	1930...dollars....	4.35	27.59		.....	7.97	34.42
56	1920[3]...dollars....	8.70	30.08		.....	3.78	.....
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		Primary Enterprises	Supplemental Enterprises			
57	Enterprises reporting maintenance and operation...1939...number.....	49	21	2	8	159	228
58	Area irrigated in these enterprises.....1939...acres.....	19,040	3,407	(5)	243	32,863	8,467
59	Cost of maintenance and operation.....1939...dollars....	3,764	5,706	(5)	509	19,769	36,624
60	Average cost, per acre irrigated.....1939...dollars....	0.20	1.67	(5)	2.09	0.61	4.33
61	1929...dollars....	0.44	2.18	.....	.....	1.16	6.89
62	Total annual charges (reported)[6 7].....1939...dollars....	4,479	5,116	.....	.....	24,497	.....
63	Average annual charge per acre irrigated.....1939...dollars....	0.28	1.66	.....	.....	0.81	.....
64	Area against which charges were assessed.....1939...acres.....	17,023	3,074	.....	.....	31,170	.....
65	Average annual charge per acre assessed.....1939...dollars....	0.26	1.66	.....	.....	78.6	.....
66	Total charges collected[6].....1939...dollars....	735	6,159	.....	.....	8,554	.....
67	Indebtedness to December 31 (reported)[7].....1939...dollars....	2,500	1,633	.....	.....	179,619	.....
	WATER DELIVERED TO IRRIGATORS						
68	Enterprises reporting water delivered.....1939...number.....	37	18	2	8	134	283
69	Area irrigated in these enterprises.....1939...acres.....	17,593	3,482	(5)	243	24,580	10,669
70	Water delivered in these enterprises.....1939...acre-feet..	17,137	9,748	(5)	149	38,894	24,243
71	Average water delivered per acre irrigated.....1939...acre-feet..	1.0	2.8	(5)	0.6	1.6	2.3
72	Average cost of water per acre irrigated.....1939...dollars....	0.15	1.66	(5)	2.09	0.77	4.32
	DRAINAGE OF IRRIGATED LAND						
73	Enterprises reporting land drained or needing drainage.....1939...number.....	1	3	.....	.....	11	1
74	Irrigable area in these enterprises.....1939...acres.....	(5)	718	.....	.....	5,673	(5)
75	Irrigated area in these enterprises.....1939...acres.....	(5)	625	.....	.....	4,982	(5)
76	Area for which drains have been installed.....1939...acres.....	.....	17	.....	.....	316	(5)
77	Additional area needing drainage.....1939...acres.....	(5)	130	.....	.....	577	.....

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

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"]

Sandoval	San Juan	San Miguel	Santa Fe	Sierra		Socorro	Taos	Torrance	Union	Valencia	All other counties[1]	
1,710	2,383	1,482	973	397		798	1,803	1,301	1,035	1,945	2,013	1
1,309	1,422	1,670	687	449		849	1,423	1,055	1,454	1,274	2,243	2
1,197	1,185	433	598	282		510	1,663	53	52	1,435	143	3
998	759	517	488	278		377	1,225	20	29	959	94	4
19.9	56.1	-16.2	22.5	1.4		35.3	35.8	165.0	79.3	49.6	52.1	5
1,117	986	379	568	222		407	1,564	48	43	1,309	92	6
969	557	442	480	223		341	1,179	18	24	892	173	7
80	199	54	10	60		103	99	5	9	126	51	8
29	202	75	8	55		36	46	2	5	67	55	9
402,842	1,628,742	1,595,560[2]	545,677	964,387		936,571	190,309	1,460,421	[2]2,472,803	1,165,394	3,372,820	10
111,430	401,400	183,265	20,054	218,746		59,135	188,252	13,671	640,785	496,836	176,562	11
93	339	423	34	776		116	101	258	12,323	346	1,235	12
108,075	385,150	165,612	17,992	214,318		49,139	165,558	12,311	551,441	486,383	171,575	13
97	391	437	31	965		121	106	256	12,824	372	1,865	14
3,355	16,250	17,653	2,062	4,428		9,996	2,694	1,360	89,344	10,453	4,987	15
42	82	327	200	74		97	27	272	9,927	83	98	16
2,439,040	3,529,600	3,039,360	1,243,520	1,941,760		4,974,080	1,443,840	2,137,600	2,442,880	3,607,680	3,774,080	17
18,630	34,759	19,280	10,403	4,840		13,311	37,123	1,425	5,779	37,022	4,970	18
17,192	31,256	18,015	9,512	4,406		13,034	31,995	965	4,996	33,191	4,970	19
745	1,321	739	484	276		191	3,611	400	108	2,681	.....	20
693	2,182	526	407	158		86	1,517	.....	675	1,150	.....	21
19,621	38,421	22,823	12,612	6,451		7,328	47,128	477	2,525	27,288	3,497	22
23,214	42,470	16,565	10,582	8,491		11,110	59,607	1,085	6,774	19,241	3,810	23
-5.1	-9.5	-15.5	-17.5	-25.0		81.6	-21.7	198.7	128.9	35.7	42.1	24
33,186	49,846	21,677	13,102	7,161		27,869	53,618	4,769	6,995	65,870	7,290	25
32,460	51,236	28,484	17,043	12,854		9,729	99,626	478	4,619	46,468	8,937	26
32,988	68,515	68,806	12,244	18,432		29,780	88,265	1,550	20,056	48,780	11,777	27
14,556	15,067	2,397	2,699	2,321		14,558	16,495	3,344	1,216	28,648	2,920	28
12,839	12,815	5,661	4,431	6,403		2,401	52,198	1	2,124	19,180	5,440	29
31,450	40,790	21,552	11,728	6,053		26,843	46,950	3,254	6,295	64,340	7,290	30
26,015	49,555	28,454	15,160	11,884		8,960	56,678	477	4,629	36,226	8,839	31
26,659	48,195	43,277	10,858	9,533		13,356	67,061	1,165	17,986	32,666	8,733	32
20.9	-17.7	-24.3	-22.6	-49.1		199.6	-17.5	582.2	36.0	77.0	-17.5	33
12,820	6,031	2,272	1,325	1,213		13,532	8,827	1,829	516	27,318	2,920	34
6,394	11,134	5,631	2,548	5,433		1,632	9,460	.....	2,104	8,938	5,342	35
16.7	8.7	10.5	51.9	2.2		22.5	22.1	10.4	0.9	7.5	2.8	36
13.1	54.8	10.0	23.0	2.4		16.1	59.8	8.5	1.0	30.0	0.9	37
59.2	85.2	89.5	88.7	80.0		49.6	79.1	43.8	91.8	57.5	68.2	38
75.4	77.5	80.2	83.2	54.3		81.8	83.4	100.0	54.5	75.3	39.6	39
1,911,964	2,564,775	1,097,378	399,823	286,000		2,106,332	591,528	89,425	166,950	4,264,946	233,058	40
1,910,302	2,557,185	1,094,930	399,125	285,058		2,105,350	576,787	89,170	164,710	4,221,058	233,058	41
1,662	7,590	2,448	698	942		982	17,741	255	2,240	43,888	.....	42
197,152	941,116	226,343	482,182	796,179		101,025	1,217,794	6,625	66,620	725,208	117,905	43
108,419	1,666,875	777,482	69,975	758,484		235,051	160,886	21,100	363,939	194,471	130,728	44
885.0	172.5	384.8	-17.1	-64.1		(4)	-51.2	(4)	150.6	488.1	97.7	45
61.75	62.88	50.92	34.09	47.25		78.47	12.66	27.48	26.52	66.29	31.97	46
7.58	18.99	7.95	31.81	67.00		11.28	21.41	13.89	14.39	20.02	1,334	47
4.07	34.59	1,797	6.44	79.56		17.60	2.40	18.11	20.23	5.95	14.97	48
104.24	73.79	56.92	38.43	59.09		158.24	16.02	62.75	28.89	115.20	46.89	49
2,584,979	3,457,557	1,146,928	698,598	291,375		2,112,382	995,108	96,025	167,150	4,660,081	233,058	50
199,002	943,316	229,463	482,182	797,479		101,025	2,691,979	6,725	66,620	735,458	119,155	51
124,939	2,716,875	788,502	69,975	1,060,459		259,351	177,176	23,600	382,389	227,991	156,728	52
(4)	266.5	399.8	44.9	-63.5		(4)	-63.0	(4)	150.9	533.6	95.6	53
77.89	69.36	52.91	53.32	40.69		75.80	18.56	20.14	23.90	70.75	31.97	54
6.13	18.41	8.06	28.29	62.04		10.38	27.02	14.07	14.33	15.83	13.33	55
3.79	39.65	11.46	5.72	57.53		8.71	2.01	15.23	19.07	4.67	13.31	56
				Primary	Supplemental							
				Enterprises								
33	56	53	60	60	1	11	85	4	29	10	3	57
16,998	32,902	18,008	10,144	4,778	(5)	13,291	28,636	1,236	5,373	35,232	4,970	58
48,835	86,311	12,313	8,422	9,052	(5)	59,572	13,447	580	5,329	111,613	5,427	59
2.87	2.62	0.68	0.83	1.89	(5)	4.48	0.47	0.47	0.99	3.17	1.09	60
1.33	2.07	0.70	0.76	4.51	.....	3.78	0.72	0.62	3.70	3.23	3.69	61
81,645	78,412	10,981	12,003	7,784	.....	106,107	14,227	305	.....	200,898	18,000	62
4.86	2.39	0.62	1.22	2.04	.....	8.03	0.48	0.27	.....	5.70	3.67	63
23,680	34,241	18,243	9,846	4,673	.....	28,130	32,458	1,140	.....	58,090	7,200	64
3.45	2.29	0.60	1.22	1.67	.....	3.77	0.44	0.27	.....	3.42	2.50	65
99,072	35,616	198	4,910	12,862	.....	127,413	7,502	11,381	.....	226,799	12,298	66
1,664,418	430,693	.....	160,158	153,969	.....	1,933,624	148,445	.....	.....	3,547,506	137,656	67
27	42	48	46	58	1	12	46	6	19	9	3	68
9,717	25,499	17,038	7,880	4,005	(5)	13,311	19,124	1,361	2,789	29,592	4,970	69
70,989	97,253	19,462	10,061	10,776	(5)	74,675	25,618	1,841	4,533	157,554	38,175	70
7.3	3.8	1.1	1.3	2.7	(5)	5.6	1.9	1.4	1.6	5.3	7.7	71
7.68	2.44	0.58	1.26	1.82	(5)	7.99	0.51	0.40	0.78	6.56	3.69	72
6	10	1	5	3	.....	2	2	.....	1	2	1	73
21,325	16,989	(5)	2,652	4,454	.....	(5)	(5)	.....	(5)	(5)	(5)	74
11,383	10,708	(5)	2,602	2,465	.....	(5)	(5)	.....	(5)	(5)	(5)	75
21,325	605	.....	40	3,005	.....	(5)	(5)	.....	(5)	(5)	(5)	76
.....	3,172	(5)	397	245	.....	(5)	(5)	.....	.....	.....	.....	77

[1] Percent not shown when more than 1,000.
[5] Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.
[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.

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)	STATE TOTAL	Bernalillo	Catron	Chaves	Colfax	Dona Ana	Eddy	Grant
	FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	187,525,814	5,235,036	3,411,369	13,753,593	9,635,294	16,281,330	9,549,306	9,517,826
2	Land and buildings, irrigated farms.....dollars..	82,619,776	4,365,684	1,110,952	9,171,106	5,637,112	15,432,930	8,023,090	4,826,076
	Operated by—								
3	(a) Owners and managers.....dollars..	67,593,251	3,743,494	1,051,302	7,104,533	3,560,665	12,009,995	6,030,840	4,369,476
4	(b) Tenants.....dollars..	15,026,525	622,200	59,650	2,066,573	2,076,447	3,422,935	1,992,250	456,600
5	Average, land and buildings, per farm.....dollars..	5,225.46	4,234.43	7,879.09	14,218.77	26,219.13	10,455.91	15,887.31	17,053.27
6	per acre in farms.....dollars..	11.15	91.45	1.06	22.00	5.27	72.97	22.62	11.23
7	Buildings, irrigated farms reporting value.....number...	14,236	925	136	613	212	1,396	477	268
8	Total reported.....dollars..	14,976,063	1,337,791	178,348	1,558,080	525,600	2,299,260	1,126,046	751,040
9	Average, per irrigated farm reporting.....dollars..	1,051.99	1,446.26	1,311.38	2,541.74	2,479.25	1,647.03	2,360.68	2,802.39
10	per acre on all irrigated farms.....dollars..	2.02	28.02	0.17	3.74	0.49	10.87	3.17	1.42
11	Buildings, nonirrigated farms reporting value.....number...	17,255	564	489	309	431	95	146	327
12	Total reported.....dollars..	13,277,393	253,897	289,530	351,274	479,625	158,537	214,245	885,521
13	Average, per nonirrigated farm reporting.....dollars..	769.48	450.17	592.09	1,136.81	1,112.82	1,668.81	1,467.43	2,708.02
14	per acre on all nonirrigated farms.....dollars..	0.42	2.90	0.31	0.15	0.60	0.74	0.17	1.29
15	Implements and machinery, irrigated farms reporting value..number...	13,943	769	113	514	205	1,396	452	265
16	Total reported.....dollars..	6,937,641	311,880	74,640	947,221	248,193	1,379,173	731,791	379,697
17	Average, per irrigated farm reporting.....dollars..	531.91	405.57	660.53	1,842.84	1,210.70	987.95	1,619.01	1,432.82
18	per acre, on all irrigated farms.....dollars..	0.94	6.53	0.07	2.27	0.23	6.52	2.06	0.72
19	Implements and machinery, nonirrigated farms reporting value.....number...	15,179	450	410	250	397	77	124	282
20	Total reported.....dollars..	8,275,033	102,718	162,704	175,535	253,425	102,804	88,099	357,618
21	Average, per acre, on all nonirrigated farms.....dollars..	0.26	1.17	0.17	0.07	0.32	0.48	0.07	0.52
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
22	Enterprises.....1940...number.....	[1] 2,522	36	94	498	34	10	241	120
23	1930...number.....	[1] 1,969	21	45	359	30	2	181	69
24	1920...number.....	2,391	44	.....	339	86	12	240	70
25	Average size of enterprise based on irrigable area.....1940...acres.....	320	819	106	174	1,795	9,734	328	71
26	1930...acres.....	376	946	40	166	2,334	39,500	342	115
27	1920[2]..acres.....	402	433	.....	170	1,369	7,335	365	111
28	Diversion dams.....1940...number.....	1,072	25	68	50	40	3	12	71
29	Main canals and laterals.....1940...length, miles.....	4,647.9	192.0	113.0	137.7	189.0	372.8	103.2	158.7
30	1930...length, miles.....	4,466	124	46	165	333	330	266	106
31	1920...length, miles.....	5,932	228	.....	310	612	53	589	108
32	1940...capacity, c.f.s.[3]....	16,821	351	249	1,084	2,539	1,524	871	362
33	1930...capacity, c.f.s.[3]....	17,479	486	94	292	4,376	1,650	1,045	496
34	1920...capacity, c.f.s.[3]....	23,432	137	.....	836	5,889	1,231	1,215	331
35	Pipe lines[4].....1940...length, miles.....	36.5	1.4	0.6	3.8	1.3	0.2	1.6	1.5
36	Storage dams.....1940...number.....	141	4	9	5	16	.....	7	8
37	Reservoirs.....1940...number.....	502	4	11	66	16	.....	135	28
38	1930...number.....	240	1	1	77	18	1	40	.....
39	1920...number.....	328	10	.....	74	38	6	27	10
40	1940...capacity, acre-feet..	3,280,550	176	685	322	104,350	.....	50,187	219
41	1930...capacity, acre-feet..	2,945,220	1	601	1,220	121,983	5	53,264	.....
42	1920...capacity, acre-feet..	2,960,718	1,001	.....	313	65,658	6	81,855	55
43	Wells, flowing.....1940...number.....	268	.....	.....	120	.....	.....	131	3
44	1930...number.....	340	.....	.....	223	.....	.....	116	.....
45	1920...number.....	556	.....	.....	318	.....	.....	230	.....
46	1940...yield, g.p.m.....	181,076	.....	.....	91,775	.....	.....	88,470	318
47	1930...yield, g.p.m.....	223,257	.....	.....	162,277	.....	.....	59,980	.....
48	1920...yield, g.p.m.....	376,222	.....	.....	228,885	.....	.....	146,330	.....
49	Wells, pumped.....1940...number.....	1,487	1	12	563	.....	.....	199	27
50	1930...number.....	680	.....	.....	255	.....	.....	64	5
51	1920...number.....	461	13	.....	143	2	8	48	4
52	1940...yield, g.p.m.....	1,143,276	(5)	374	510,490	.....	.....	190,350	3,055
53	1930...yield, g.p.m.....	481,898	.....	.....	212,231	.....	.....	40,040	920
54	1920...yield, g.p.m.....	265,618	6,261	.....	99,328	.....	1,575	27,118	400
55	Pumping plants.....1940...number.....	1,558	3	16	597	1	7	206	29
56	1930...number.....	702	.....	.....	267	.....	1	71	5
57	1920...number.....	472	12	.....	148	2	8	52	8
58	Prime movers.....1940...capacity, hp.....	40,110	28	85	17,727	(5)	90	6,203	220
59	1930...capacity, hp.....	14,483	.....	.....	5,972	.....	45	1,433	41
60	1920...capacity, hp.....	8,488	126	.....	2,810	60	109	843	32
61	Pumps.....1940...capacity, g.p.m.....	1,309,005	4,522	2,078	602,360	(5)	5,150	210,050	4,178
62	1930...capacity, g.p.m.....	555,063	.....	.....	259,756	.....	2,000	62,478	1,070
63	1920...capacity, g.p.m.....	304,789	6,361	.....	135,605	1,500	2,277	30,633	800
64	Pumping lift, from all sources.....1940...average, feet.....	44	6	40	37	(5)	9	45	38
65	1930...average, feet.....	40	.....	.....	26	.....	53	28	59
66	1920...average, feet.....	40	37	.....	26	61	42	28	35
67	from pumped wells.....1940...average, feet.....	46	(5)	42	38	.....	.....	46	35
	PAY ROLL AND NUMBER OF EMPLOYEES 1939[6]								
68	Enterprises reporting pay roll.....number...	218	6	5	9	5	[7] 1	5	10
69	Irrigated area in these enterprises.....acres....	330,218	20,292	742	12,379	28,774	76,233	23,681	3,737
70	Wages and salaries paid and payable.....dollars..	718,210	56,527	540	6,672	19,682	129,000	59,831	2,452
71	Persons employed during week ending April 29.....number...	1,773	64	9	21	59	93	76	18

* 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.

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"]

Guadalupe	Hidalgo	Lea	Lincoln	Luna	McKinley	Mora	Otero	Quay	Rio Arriba	Roosevelt	Sandoval	San Juan	San Miguel	
2,536,261	2,177,656	7,487,414	5,154,362	3,067,678	2,559,139	4,098,821	3,353,046	8,422,845	5,307,024	10,945,919	2,961,738	5,523,766	5,487,066	1
270,306	537,700	1,218,035	964,586	1,335,410	560,003	2,033,480	1,228,828	117,870	3,429,438	1,568,769	2,149,114	3,938,523	1,346,604	2
233,954	474,600	1,148,885	851,011	1,022,410	524,817	1,790,605	908,738	83,170	3,172,256	1,249,484	1,956,268	3,264,988	1,122,469	3
36,352	63,100	69,150	113,575	313,000	35,156	242,875	320,090	34,700	257,182	319,285	192,946	673,535	224,135	4
1,461.11	7,075.00	16,240.47	5,810.76	8,505.80	1,272.73	4,058.84	5,184.93	5,612.86	1,913.75	4,996.08	1,795.42	3,323.73	3,109.94	5
8.48	13.13	7.65	10.21	13.80	4.98	7.88	13.34	10.27	16.11	45.63	19.28	9.81	7.35	6
168	72	75	163	156	357	475	228	19	1,722	298	627	1,160	384	7
42,481	54,195	156,070	165,495	255,060	200,990	207,603	343,802	24,250	776,391	370,230	419,799	950,614	333,798	8
252.86	752.71	2,080.93	1,015.31	1,635.00	563.00	437.06	1,507.90	1,276.32	450.87	1,242.38	669.54	819.49	869.27	9
1.33	1.32	0.98	1.75	2.64	1.79	0.58	3.73	2.11	3.65	10.77	3.77	2.37	1.82	10
269	150	455	446	150	1,485	683	401	922	794	1,426	438	1,178	989	11
155,994	201,951	703,571	360,216	296,095	405,792	194,707	699,096	918,486	186,521	1,341,592	116,077	262,130	539,740	12
579.90	1,346.34	1,546.31	807.66	1,977.97	333.87	285.08	1,743.38	996.19	234.91	940.81	265.02	222.52	545.74	13
0.17	0.28	0.39	0.19	0.40	0.32	0.38	0.88	0.54	0.23	0.99	0.40	0.21	0.38	14
144	63	69	117	154	402	409	193	21	1,481	281	905	1,039	325	15
23,722	44,162	75,410	67,872	202,960	59,568	104,263	94,996	22,486	284,290	171,605	199,944	384,853	91,866	16
164.74	700.98	1,092.90	580.10	1,317.92	148.18	254.92	492.21	1,070.76	198.71	610.69	220.93	370.41	282.66	17
0.74	1.08	0.47	0.72	2.10	0.53	0.29	1.03	1.96	1.38	4.99	1.79	0.96	0.50	18
230	129	399	381	134	1,324	585	371	841	677	1,272	317	1,076	845	19
86,041	94,315	277,340	182,484	100,035	193,996	102,725	237,871	706,590	129,738	1,128,466	48,280	112,925	171,705	20
0.09	0.13	0.15	0.10	0.14	0.12	0.20	0.30	0.42	0.16	0.83	0.17	0.09	0.12	21
9	21	42	131	167	4	57	62	12	187	309	45	60	65	22
10	5	12	64	130	8	55	30	41	235	159	60	52	69	23
16	5	.....	102	153	15	102	96	.....	274	.....	82	54	101	24
346	160	81	37	108	3,252	419	79	52	253	70	737	831	333	25
394	765	.....	76	63	1,231	567	189	.....	239	33	541	985	413	26
319	668	.....	117	227	604	369	126	.....	251	.....	402	1,269	681	27
6	3	.....	113	4	5	41	66	.....	144	.....	49	61	62	28
41.2	29.2	0.5	83.1	44.0	43.3	157.1	53.5	.....	489.0	0.2	352.0	557.5	164.9	29
59	23	.....	120	20	61	170	59	.....	529	1	242	336	164	30
88	28	.....	266	48	74	276	232	.....	541	.....	346	340	246	31
58	185	.....	291	85	71	480	337	.....	923	1	905	1,549	518	32
85	159	.....	117	51	85	925	77	.....	1,217	2	551	1,071	545	33
82	47	.....	193	3,171	126	1,081	576	.....	1,526	.....	363	1,371	1,459	34
0.3	0.3	.....	1.9	.....	.....	.....	4.5	.....	0.7	0.1	6.0	3.7	0.1	35
1	.....	.....	.....	5	13	1	4	.....	4	.....	5	8	3	36
1	.....	1	.....	136	13	5	4	.....	5	.....	5	8	4	37
.....	.....	.....	2	60	4	2	.....	.....	5	.....	3	1	5	38
.....	.....	.....	3	16	11	16	13	.....	10	.....	5	2	21	39
(5)	.....	(5)	.....	320	11,405	41	205	.....	202,694	.....	177	4,500	21,002	40
.....	.....	.....	1	1,024	8,497	14,060	.....	.....	2,547	.....	476	150	11,270	41
.....	.....	.....	12	37	6,685	672	110	.....	753	.....	44,049	150	38,419	42
.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	43
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	44
.....	.....	.....	.....	1	4	.....	.....	.....	.....	.....	.....	.....	.....	45
.....	.....	.....	.....	.....	360	.....	.....	.....	.....	.....	.....	.....	.....	46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,000	.....	.....	.....	47
.....	.....	.....	.....	75	845	.....	.....	.....	.....	.....	.....	.....	.....	48
.....	18	47	3	202	.....	.....	4	12	.....	332	.....	1	1	49
.....	1	.....	2	155	.....	.....	3	.....	.....	166	.....	.....	.....	50
1	.....	.....	2	156	1	1	4	.....	.....	.....	.....	.....	2	51
.....	10,372	39,605	27	94,623	.....	.....	1,450	8,600	.....	273,360	.....	(5)	(5)	52
.....	50	.....	190	74,391	.....	.....	875	.....	.....	146,400	.....	.....	.....	53
800	.....	.....	18	95,300	.....	3,300	419	.....	.....	.....	.....	.....	3	54
.....	17	47	3	204	.....	.....	4	12	1	330	1	1	1	55
.....	1	.....	2	153	.....	.....	3	.....	.....	166	.....	.....	.....	56
1	.....	.....	4	153	2	2	4	.....	.....	.....	.....	.....	2	57
.....	311	1,302	5	3,472	.....	.....	57	331	(5)	9,578	(5)	(5)	(5)	58
.....	1	.....	21	3,176	.....	.....	22	.....	.....	3,528	.....	.....	.....	59
60	.....	.....	8	3,471	5	5	9	.....	.....	.....	.....	.....	.....	60
.....	11,222	41,355	27	97,403	.....	.....	1,450	9,700	(5)	289,725	(5)	(5)	(5)	61
.....	50	.....	190	76,123	.....	.....	875	.....	.....	146,000	.....	.....	.....	62
800	.....	.....	118	91,010	.....	10	419	.....	.....	.....	.....	.....	3	63
.....	38	55	63	69	.....	.....	118	74	(5)	46	(5)	(5)	(5)	64
.....	40	.....	14	67	.....	.....	35	.....	.....	35	.....	.....	.....	65
20	.....	.....	82	57	170	35	44	.....	.....	.....	.....	.....	62	66
.....	38	55	63	68	.....	.....	112	74	.....	46	.....	(5)	(5)	67
5	2	.....	9	1	3	1	7	.....	38	.....	18	23	3	68
2,589	(5)	.....	1,204	(5)	3,985	(5)	3,314	.....	19,465	.....	16,117	26,638	6,560	69
5,378	(5)	.....	1,825	(5)	50,872	(5)	20,484	.....	15,581	.....	41,180	136,810	2,420	70
100	(5)	.....	13	(5)	81	(5)	38	.....	304	.....	110	279	8	71

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

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)	Santa Fe	Sierra	Socorro	Taos	Torrance	Union	Valencia	All other counties[1]
	FARM VALUES, 1940*								
1	Land and buildings, all farms.....dollars..	3,560,339	2,543,191	3,314,026	2,998,344	5,457,224	7,855,433	5,013,801	19,955,967
2	Land and buildings, irrigated farms.....dollars..	1,961,630	1,160,963	909,768	2,772,800	156,020	1,665,290	3,681,205	1,046,374
	Operated by—								
3	(a) Owners and managers.....dollars..	1,915,230	993,558	719,686	2,618,214	125,920	1,449,954	3,248,545	845,154
4	(b) Tenants.....dollars..	43,400	167,405	190,082	154,586	30,100	215,336	432,660	201,220
5	Average, land and buildings, per farm.....dollars..	3,280.32	4,116.89	1,783.86	1,667.35	2,943.77	32,024.81	2,565.30	7,317.30
6	per acre in farms.....dollars..	97.82	5.31	15.36	16.48	11.41	2.60	7.41	5.93
7	Buildings, irrigated farms reporting value.....number...	562	275	459	1,539	37	49	1,243	141
8	Total reported.....dollars..	613,645	164,126	185,775	720,522	11,585	120,565	927,353	155,540
9	Average, per irrigated farm reporting.....dollars..	1,091.90	596.82	404.74	468.18	313.11	2,460.51	746.06	1,103.12
10	per acre on all irrigated farms.....dollars..	30.60	0.75	3.14	4.28	0.85	0.19	1.87	0.88
11	Buildings, nonirrigated farms reporting value.....number...	347	112	267	125	1,107	939	445	1,766
12	Total reported.....dollars..	349,035	96,189	331,846	71,204	590,614	647,940	133,184	1,952,184
13	Average, per nonirrigated farm reporting.....dollars..	1,005.86	858.83	1,242.87	569.63	533.53	690.03	299.29	1,105.43
14	per acre on all nonirrigated farms.....dollars..	0.66	0.13	0.38	3.23	0.41	0.35	0.20	0.61
15	Implements and machinery, irrigated farms reporting value..number...	413	272	439	1,212	51	49	1,124	135
16	Total reported.....dollars..	120,629	87,510	102,308	243,965	20,582	59,423	285,371	107,261
17	Average, per irrigated farm reporting.....dollars..	292.08	321.73	233.05	196.43	403.57	1,212.71	253.89	788.68
18	per acre, on all irrigated farms.....dollars..	8.02	0.40	1.73	1.45	1.51	0.09	0.57	0.61
19	Implements and machinery, nonirrigated farms reporting value.....number...	257	107	229	85	1,120	799	376	1,635
20	Total reported.....dollars..	168,499	55,192	170,388	18,413	696,170	381,534	118,046	1,851,407
21	Average, per acre, on all nonirrigated farms.....dollars..	0.32	0.07	0.19	0.83	0.48	0.21	0.18	0.58
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1								
22	Enterprises.....1940...number.....	67	70	12	107	9	36	14	3
23	1930...number.....	78	48	22	110	8	17	45	4
24	1920...number.....	102	66	95	168	7	70	46	16
25	Average size of enterprise based on irrigable area.....1940...acres.....	196	102	2,322	501	530	194	4,705	2,430
26	1930...acres.....	218	268	442	906	60	273	1,033	.....
27	1920[2]...acres.....	120	279	313	525	221	287	1,060	256
28	Diversion dams.....1940...number.....	59	27	8	91	4	34	25	1
29	Main canals and laterals.....1940...length, miles.....	182.2	87.0	176.2	390.4	18.1	72.2	413.8	26.1
30	1930...length, miles.....	208	112	104	422	5	38	387	26
31	1920...length, miles.....	153	134	307	376	40	190	308	39
32	1940...capacity, c.f.s.[3]....	261	502	390	1,018	48	208	1,871	140
33	1930...capacity, c.f.s.[3]....	324	600	339	1,475	6	85	1,201	135
34	1920...capacity, c.f.s.[3]....	226	523	814	1,268	2	407	360	198
35	Pipe lines[4].....1940...length, miles.....	2.8	3.7	0.6	0.1	.....	0.1	0.6	0.6
36	Storage dams.....1940...number.....	10	13	1	7	4	6	6	1
37	Reservoirs.....1940...number.....	12	22	2	7	4	6	6	1
38	1930...number.....	1	3	.....	5	.....	3	4	4
39	1920...number.....	8	14	11	3	1	11	6	12
40	1940...capacity, acre-feet..	4,719	2,639,029	(5)	32,725	64	1,291	55,447	(5)
41	1930...capacity, acre-feet..	10,000	2,638,863	.....	27,073	.....	1,126	53,054	5
42	1920...capacity, acre-feet..	160	2,638,862	80,003	1,795	75	76	14	8
43	Wells, flowing.....1940...number.....	.....	7	.....	.....	.....	.....	.....	.....
44	1930...number.....	.....	.....	.....	.....	.....	.....	.....	.....
45	1920...number.....	.....	1	1	.....	.....	.....	.....	1
46	1940...yield, g.p.m.....	.....	159	.....	.....	.....	.....	.....	.....
47	1930...yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....	.....
48	1920...yield, g.p.m.....	.....	20	7	.....	.....	.....	.....	60
49	Wells, pumped.....1940...number.....	4	17	2	2	6	2	.....	2
50	1930...number.....	.....	13	.....	.....	4	.....	.....	12
51	1920...number.....	2	11	8	.....	.....	4	.....	51
52	1940...yield, g.p.m.....	1,747	4,314	(5)	(5)	1,550	(5)	.....	(5)
53	1930...yield, g.p.m.....	.....	479	.....	.....	7	.....	.....	6,315
54	1920...yield, g.p.m.....	.....	1,269	3,600	.....	.....	47	.....	26,180
55	Pumping plants.....1940...number.....	4	59	2	2	5	3	.....	3
56	1930...number.....	.....	17	.....	.....	4	.....	.....	12
57	1920...number.....	1	15	11	.....	.....	5	2	42
58	Prime movers.....1940...capacity, hp.....	56	288	(5)	(5)	35	34	.....	210
59	1930...capacity, hp.....	.....	26	.....	.....	4	.....	.....	214
60	1920...capacity, hp.....	2	59	94	.....	.....	33	20	742
61	Pumps.....1940...capacity, g.p.m.....	3,149	8,549	(5)	(5)	700	1,606	.....	9,750
62	1930...capacity, g.p.m.....	.....	549	.....	.....	7	.....	.....	5,965
63	1920...capacity, g.p.m.....	.....	2,839	3,875	.....	.....	544	2,000	25,995
64	Pumping lift, from all sources.....1940...average, feet.....	27	17	(5)	(5)	68	38	.....	42
65	1930...average, feet.....	.....	74	.....	.....	212	.....	.....	33
66	1920...average, feet.....	1	31	27	.....	.....	50	52	109
67	from pumped wells.....1940...average, feet.....	26	18	(5)	(5)	68	(5)	.....	(5)
	PAY ROLL AND NUMBER OF EMPLOYEES 1939[6]								
68	Enterprises reporting pay roll.....number...	16	5	5	31	1	.....	8	1
69	Irrigated area in these enterprises.....acres....	4,317	3,646	13,221	22,076	(5)	.....	33,289	(5)
70	Wages and salaries paid and payable.....dollars..	6,582	5,901	36,507	6,587	(5)	.....	105,483	(5)
71	Persons employed during week ending April 29.....number...	41	36	51	177	(5)	.....	185	(5)

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

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....	[6] 44,834,560	44,917,120	44,917,120	44,917,120	44,917,120	44,917,120	44,917,120
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number...	73,962	84,606	77,975	77,690	74,360	45,332	27,611
Land in all farms.....acres....	37,936,136	39,118,136	38,637,894	36,214,751	28,426,650	15,542,640	7,660,333
Farms irrigated:[1]							
Farms.....number...	479	273	113	340	69	54	7
Increase or decrease (-) over preceding census....percent..	[2] 323.9	.....	-66.8	392.8	27.8	671.4	.....
Proportion of all farms.....percent..	0.6	0.3	0.1	0.4	0.1	0.1	[3]
Land in farms.....acres....	344,988	[4]	56,654	[4]	[4]	[4]	[4]
Proportion of all farm land.....percent..	0.9	[4]	0.1	[4]	[4]	[4]	[4]
Area irrigated.....acres....	[5] 19,975	[5] 11,759	[7] 10,651	[8]	[8]	4,872	445
Increase or decrease (-) over preceding census....percent..	[2] 87.5	.....	.....	.....	.....	994.8	.....
Proportion of total land area of State.....percent..	[3]	[3]	[3]	.....	.....	[3]	[3]
Proportion of all farm land.....percent..	0.1	[3]	[3]	.....	.....	[3]	[3]
Value of irrigated farms (land and buildings).....dollars..	4,371,806	[4]	1,304,150	[4]	[4]	[4]	[4]
Average per farm.....dollars..	9,126.94	[4]	11,541.15	[4]	[4]	[4]	[4]
Average per acre.....dollars..	12.67	[4]	23.02	[4]	[4]	[4]	[4]
Value of farm implements and machinery[9].....dollars..	616,899	[4]	148,185	[4]	[4]	[4]	[4]
Average per farm[9].....dollars..	1,287.89	[4]	1,311.37	[4]	[4]	[4]	[4]
Average per acre[9].....dollars..	1.79	[4]	2.62	[4]	[4]	[4]	[4]
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number...	80	[4]	23	30	49	[4]	[4]
Farms irrigated.....number...	358	[4]	[4]	[4]	[4]	[4]	[4]
Area irrigated.....acres....	21,615	[4]	9,392	12,072	10,248	[4]	[4]
Area existing works were capable of supplying with water.....acres....	36,522	[4]	24,006	34,235	21,917	[4]	[4]
Area irrigable.....acres....	39,558	[4]	24,860	[10] 57,476	[10] 38,173	[4]	[4]
Additional area existing works were capable of supplying with water.....acres....	14,907	[4]	14,614	22,163	11,669	[4]	[4]
Additional irrigable area in enterprises not supplied with water.....acres....	17,943	[4]	15,468	[10] 45,404	[10] 27,925	[4]	[4]
Investment in irrigation enterprises.....dollars..	1,755,489	[4]	1,267,314	1,857,118	836,482	16,980	[4]
Increase or decrease (-) over preceding census.....percent..	[2] 38.5	[4]	-31.8	122.0	[11]	.....	.....
Average per acre based on area works were capable of supplying with water.....dollars..	48.07	[4]	52.79	54.25	38.17	[4]	[4]
Increase or decrease (-) over preceding census....percent..	[2] -8.9	[4]	-2.7	42.1	.....	.....	.....
Estimated completed cost of existing enterprises.....dollars..	1,785,539	[4]	1,343,911	2,072,766	836,482	[4]	[4]
Average per acre based on irrigable area in enterprises.....dollars..	45.14	[4]	54.06	[10] 36.06	[10] 21.91	[4]	[4]
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	1.41	[4]	1.97	5.50	28.40	[4]	[4]

[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] Less than one-tenth of 1 percent. [4] Not available. [5] Irrigated land from which crops were harvested plus 510 acres of irrigated land used only for pasture. [6] Irrigated land from which crops were harvested. [7] Acreage of irrigated crops including some duplication where 2 or more crops were harvested from same land. [8] Data were secured for crops irrigated but the returns were considered relatively incomplete. [9] Total is for irrigated farms reporting this item. Averages are based on all irrigated farms. [10] For 1930 and 1910 relates to total area in enterprises. Irrigable areas for those years were not reported. [11] Percent not shown when more than 1,000. [6] 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.....	73,962	37,936,136	15,536,632	19,465	510	490,197,358	12.92	140,374,996	3.70	76,876,269	2.03
Owners and managers.....	40,585	23,339,785	9,370,874	13,546	313	315,623,932	13.52	93,981,284	4.03	49,698,711	2.13
Tenants.....	33,377	14,596,351	6,165,758	5,919	197	174,573,426	11.96	46,393,712	3.18	27,177,556	1.86
Irrigated farms, total.....	479	344,988	88,922	19,465	510	4,371,806	12.67	1,200,510	3.48	616,899	1.79
Owners and managers.....	309	262,554	65,686	13,546	313	3,236,068	12.33	850,450	3.24	451,137	1.72
Tenants.....	170	82,434	23,236	5,919	197	1,135,738	13.78	350,060	4.25	165,762	2.01
Wholly irrigated farms.....	158	26,118	11,399	11,399	313	1,425,076	54.56	440,725	16.87	204,328	7.82
Owners and managers.....	99	19,739	7,001	7,001	197	911,026	46.15	290,825	14.73	129,068	6.54
Tenants.....	59	6,379	4,398	4,398	116	514,050	80.58	149,900	23.50	75,260	11.80
Partly irrigated farms.....	321	318,870	77,523	8,066	197	2,946,730	9.24	759,785	2.38	412,571	1.29
Owners and managers.....	210	242,815	58,685	6,545	116	2,325,042	9.58	559,625	2.30	322,069	1.33
Tenants.....	111	76,055	18,838	1,521	81	621,688	8.17	200,160	2.63	90,502	1.19
Nonirrigated farms, total.....	73,483	37,591,148	15,447,710	.....	.....	485,825,552	12.92	139,174,486	3.70	76,259,370	2.03

[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.

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					
								Irrigated area reporting—				Cost[1]	
	Enterprises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Quantity	Cost	Quantity and cost	Quantity delivered per acre[1]	Per acre	Per acre-foot
	Number	*Acres*	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*	*Acres*	*Acres*	*Acres*	*Acre-feet*	*Dollars*	*Dollars*
Total	80	39,558	36,522	21,615	9,392	12,072	130.1	21,302	21,290	20,977	1.8	1.27	0.69
Streams, gravity	10	[2] 29,542	[2] 29,522	[2] 19,073	6,584	9,030	[2] 189.7	[2] 18,773	[2] 19,073	[2] 18,773	[2] 1.9	[2] 1.01	[2] 0.53
Streams, pumped	52	9,691	6,678	2,359	1,669	2,469	41.3	2,359	2,069	2,069	1.2	3.45	2.83
Streams, gravity and pumped	2	([2])	([2])	([2])	.....	.....	.....	([2])	([2])	([2])	([2])	([2])	([2])
Wells, pumped	9	53	53	47	.....	.....	.....	47	47	47	0.4	7.26	17.95
Wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped and flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springs	3	126	126	49	8	.....	512.5	36	14	1	([3])	([3])	([3])
Springs and streams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stored storm water	4	146	143	87	600	508	-85.5	87	87	87	1.2	3.45	2.86
City water	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sewage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped; wells, pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waste water, seepage or drainage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other mixed	.....	.....	.....	.....	.....	65	.....	.....	.....	.....	.....	.....	.....
Other and not reported	.....	.....	.....	.....	531	.....	.....	.....	.....	.....	.....	.....	.....

[1] Based on enterprises reporting both quantity and cost of water, assuming (*a*) that for enterprises serving 1 to 4 farms the cost of water is cost of maintenance and operation, and for enterprises serving 5 or more farms it is total annual charges, and (*b*) that enterprises reporting cost and quantity of water had used the same quantity of water per acre as all enterprises which reported water delivered.
[2] Data for 2 enterprises with "Streams, gravity and pumped" source of supply are included with enterprises reporting "Streams, gravity" source of supply in the 1940 Census.
[3] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

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

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	INVESTMENT							COST OF MAINTENANCE AND OPERATION[1]						
	1940			1930			Average per acre increase or decrease (-) 1930-40	1939		1929		Average per acre increase or decrease (-) 1930-40	1919	
	Amount	Proportion of total	Average per acre[2]	Amount	Proportion of total	Average per acre[2]		Irrigated area reporting	Average per acre	Irrigated area reporting	Average per acre		Irrigated area reporting	Average per acre
	Dollars	*Percent*	*Dollars*	*Dollars*	*Percent*	*Dollars*	*Dollars*	*Acres*	*Dollars*	*Acres*	*Dollars*	*Dollars*	*Acres*	*Dollars*
Total	1,755,489	100.0	48.07	1,267,314	100.0	52.79	-4.72	21,290	1.41	8,773	1.97	-0.56	10,951	5.50
Streams, gravity	[3] 1,519,707	[3] 86.5	[3] 51.48	1,223,603	96.5	59.39	[3] -7.91	[3] 19,073	[3] 1.17	6,584	2.23	[3] -1.05	8,485	3.55
Streams, pumped	226,162	12.9	33.87	10,340	0.8	5.67	28.20	2,069	3.45	1,589	1.59	1.86	2,466	12.21
Streams, gravity and pumped	([3])	([3])	([3])	.....	.....	.....	.....	([3])	([3])	.....	.....	.....	.....	.....
Wells, pumped	3,120	0.2	58.87	.....	.....	.....	.....	47	7.26	.....	.....	.....	.....	.....
Wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped and flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springs	1,275	0.1	10.12	96	([4])	12.00	-1.88	14	0.79	.....	.....	.....	.....	.....
Springs and streams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stored storm water	5,225	0.3	36.54	20,000	1.6	19.23	17.31	87	3.45	600	0.25	3.20	.....	.....
City water	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sewage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped; wells, pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waste water, seepage or drainage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other mixed	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other and not reported	.....	.....	.....	13,275	1.0	25.00	.....	.....	.....	.....	.....	.....	.....	.....

[1] Based on irrigated area in enterprises reporting cost of maintenance and operation.
[2] Based on area works were capable of supplying with water.
[3] Data for 2 enterprises with "Streams, gravity and pumped" source of supply are included with enterprises reporting "Streams, gravity" source of supply in the 1940 Census.
[4] Less than one-tenth of 1 percent.

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

ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF— 1940 Primary enterprises	1940 Supplemental enterprises	1930 Primary enterprises	1920 Primary enterprises	Increase or decrease (-) 1930–40 primary enterprises
AREA IRRIGATED					
Total	Acres 21,615	.....	Acres 9,392	Acres 12,072	Percent 130.1
Individual and partnership	2,232	.....	3,303	3,306	-32.4
Cooperative, incorporated[1]	500	.....	}	.....	{ .....
Cooperative, unincorporated	.....	.....			{ .....
Irrigation district	4,605	.....	.....	.....	.....
Bureau of Reclamation[1 2 *]	14,131	.....	6,089	8,766	132.1
Office of Indian Affairs[2]	147	.....	.....	.....	.....
AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER					
Total	36,522	.....	24,006	34,235	52.1
Individual and partnership	3,996	.....	4,006	7,997	-0.2
Cooperative, incorporated[1]	590	.....	}	.....	{ .....
Cooperative, unincorporated	.....	.....			{ .....
Irrigation district	11,824	.....	.....	.....	.....
Bureau of Reclamation[1 2 *]	19,928	.....	20,000	26,238	-0.4
Office of Indian Affairs[2]	184	.....	.....	.....	.....
IRRIGABLE AREA[3]					
Total	39,558	.....	24,880	57,476	59.1
Individual and partnership	4,710	.....	4,541	11,445	3.7
Cooperative, incorporated[1]	610	.....	}	.....	{ .....
Cooperative, unincorporated	.....	.....			{ .....
Irrigation district	14,124	.....	.....	.....	.....
Bureau of Reclamation[1 2 *]	19,928	.....	20,319	46,031	-1.9
Office of Indian Affairs[2]	186	.....	.....	.....	.....

[1] Data for less than 3 enterprises shown with permission of the enterprises involved. [2] U. S. Dept. of the Interior. [3] For 1920 relates to total area. Irrigable area for that year was not reported. [*] For explanation of areas, see text, p. 447.

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

TYPE OF ENTERPRISE (For definitions and explanations, see text)	ENTERPRISES Total	ENTERPRISES Serving 5 or more farms	AREAS Irrigable	AREAS Works were capable of supplying with water	AVERAGE COST Primary enterprises: Works and equipment per acre[2]	AVERAGE COST Primary enterprises: Maintenance and operation per acre[3]	AVERAGE COST Supplemental enterprises: Works and equipment per acre	AVERAGE COST Supplemental enterprises: Maintenance and operation per acre	AREA IRRIGATED, 1939[1]: Farms served	Total area	Cropland: From which crops were harvested	Cropland: On which crops failed	Irrigated pasture
Total	Number 80	Number 7	Acres 39,558	Acres 36,522	Dollars 47.99	Dollars 1.41	.....	.....	Number 358	Acres 21,615	Acres 21,507	Acres 12	Acres 96
Individual and partnership	67	.....	4,710	3,996	13.10	3.27	.....	.....	65	2,232	2,159	12	61
Cooperative, incorporated[4]	2	1	610	590	96.61	3.40	.....	.....	35	500	500	.....	.....
Cooperative, unincorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Irrigation district	3	3	14,124	11,824	19.83	0.50	.....	.....	34	4,605	4,570	.....	35
U. S. Bureau of Reclamation[4 *]	1	1	19,928	19,928	69.91	1.27	.....	.....	198	14,131	14,131	.....	.....
U. S. Office of Indian Affairs	7	2	186	184	85.82	7.97	.....	.....	26	147	147	.....	.....

[1] Reported by enterprises in the Census of Irrigation, 1940, not by the Census of Agriculture. [2] Based on area works were capable of supplying with water and cost of works and equipment exclusive of water right investment. [3] Based on irrigated area in enterprises reporting maintenance and operation in 1939. [4] Data for less than 3 enterprises shown with permission of the enterprises involved. [*] For explanation of areas and investment, see text, p. 447.

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: 1940 Total	1940 Primary enterprises	1940 Supplemental enterprises	1940 Total cost of works and equipment	1940 Investment in water rights	1930	1920	Increase or decrease (-) 1930–40	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER: Primary enterprises	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER: Supplemental enterprises	Capital expenditures during 1939[1]	Estimated investment required to complete works
Total	Dollars 1,755,489	Dollars 1,755,489	.....	Dollars 1,752,862	Dollars 2,627	Dollars 1,267,314	Dollars 1,857,118	Percent 38.5	Dollars 48.07	.....	Dollars 70,952	Dollars 30,050
Individual and partnership	54,732	54,732	.....	52,335	2,397	55,091	81,693	-0.7	13.70	.....	.....	5,150
Cooperative, incorporated[2]	57,130	57,130	.....	57,000	130	.....	.....	.....	96.83	.....	1,500	12,400
Cooperative, unincorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Irrigation district	234,600	234,600	.....	234,500	100	.....	.....	.....	19.84	.....	67,000	12,500
U. S. Bureau of Reclamation[2 *]	1,393,237	1,393,237	.....	1,393,237	.....	1,212,223	1,775,425	14.9	69.91	.....	.....	.....
U. S. Office of Indian Affairs	15,790	15,790	.....	15,790	.....	.....	.....	.....	85.82	.....	2,452	.....

[1] Only for enterprises serving 5 or more farms. [2] Data for less than 3 enterprises shown with permission of the enterprises involved. [*] For explanation of investment, see text, p. 447.

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		
	Enterprises 1940	Area: Irrigable 1940	Area: Works were capable of supplying with water 1940	Total indebtedness 1940	Average per acre assessed 1939	Average per acre works were capable of supplying with water	Enterprises 1940	Total arrearages: Dec. 31 1939	Total arrearages: Dec. 31 1938	Average per acre assessed 1939	Area assessed 1939	Charges made 1939	Charges collected 1939
	Number	*Acres*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Dollars*	*Dollars*	*Dollars*	*Acres*	*Dollars*	*Dollars*
Total	5	34,177	31,877	1,337,648	57.36	41.96	1	23,854	13,187	1.58	23,425	18,909	14,749
Partnership	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cooperative, incorporated[3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	525	277	278
Cooperative, unincorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Irrigation district	3	14,124	11,824	204,500	23.30	17.30	.....	.....	.....	.....	7,704	3,208	3,201
Bureau of Reclamation[3] [4] [5]	1	19,928	19,928	[5]1,125,708	74.59	56.49	1	[5]23,854	[5]13,187	1.58	15,092	15,092	11,270
Office of Indian Affairs[3] [4]	1	125	125	[6]7,440	84.55	59.52	.....	.....	.....	.....	104	332	.....

[1]Only for enterprises serving 5 or more farms. [2]In payment of principal, interest, and/or other funded obligations. [3]Data for less than 3 enterprises shown with permission of the enterprises involved. [4]U. S. Dept. of the Interior. [5]Represents indebtedness and arrearages of irrigation districts to the U. S. Government. [6]Represents construction costs of irrigation works less cancellations and repayments. [*]For explanation of areas and investment, see text, p. 447.

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: Irrigated area reporting 1939	Primary enterprises: Reported cost 1939	Supplemental enterprises: Irrigated area reporting 1939	Supplemental enterprises: Reported cost 1939	Average cost per irrigated acre: Primary enterprises 1939	Average cost per irrigated acre: Supplemental enterprises 1939	Enterprises reporting pay roll	Wages and salaries paid and payable	Employees during week ending April 29
	Acres	*Dollars*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Dollars*	*Number*
Total	21,290	30,072	.....	.....	1.41	.....	6	14,611	21
Individual and partnership	2,157	7,046	.....	.....	3.27	.....	.....	.....	.....
Cooperative, incorporated[2]	500	1,700	.....	.....	3.40	.....	1	([3])	([3])
Cooperative, unincorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....
Irrigation district	4,355	2,176	.....	.....	0.50	.....	2	([3])	([3])
U. S. Bureau of Reclamation[2] [4]	14,131	17,979	.....	.....	1.27	.....	1	12,466	17
U. S. Office of Indian Affairs[2]	147	1,171	.....	.....	7.97	.....	2	820	.....

[1]Only for enterprises serving 5 or more farms. [2]Data for less than 3 enterprises shown with permission of the enterprises involved. [3]Data are included only in totals because less than 3 enterprises reported in the 1940 Census. [4]For explanation of areas and investment, see text, p. 447.

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			
				Length[1]									Prime movers		Pumps	
	Diversion	Storage	Capacity at main heading	Earth	Lined[2]	Number	Capacity	Length	Number	Yield	Number	Yield	Number	Rated capacity	Number	Rated capacity
	Number	*Number*	*Sec.-ft.*	*Miles*	*Miles*		*Ac.-ft.*	*Miles*		*G.p.m.*		*G.p.m.*		*Hp.*		*G.p.m.*
Total	19	14	616	158	1.2	14	3,946	3.8	....	.....	11	378	83	1,253	83	104,158
Individual and partnership	15	12	152	10	0.2	12	3,226	3.4	....	.....	11	378	59	494	59	39,683
Cooperative, incorporated	2	2	32	21	0.9	2	720	0.2	....	.....	.....	.....	6	82	6	6,825
Cooperative, unincorporated	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
Irrigation district	1	.....	396	29	0.1	.....	.....	0.1	....	.....	.....	.....	4	340	4	43,200
Bureau of Reclamation[3]	.....	.....	.....	[4]95	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
Office of Indian Affairs[3]	1	.....	36	3	.....	.....	.....	0.1	....	.....	.....	.....	14	337	14	14,450

[1]Includes main and lateral canals but not farm ditches. [2]Includes flumes. [3]U. S. Dept. of the Interior. [4]Heading of the Main Canal is in Montana, therefore, capacity not shown in North Dakota.

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 that portion of the Lower Yellowstone Project which lies in McKenzie County, North Dakota. This area is not reported under any other classification.

The investment attributed to the Bureau of Reclamation in State table 7 includes the construction cost of the irrigation features originally charged to North Dakota lands. Drainage costs are not included.

Under the Water Conservation and Utilization Program designed to combat the effect of drought and maintain established agricultural areas, the Bureau of Reclamation has been authorized to construct two new projects in North Dakota. The Buford-Trenton Project in Williams County will irrigate 13,400 acres unsuccessfully dry-farmed, and the Bismarck Project in Burleigh County is to provide water for 4,800 acres also unsuccessfully dry-farmed. The Department of Agriculture is to have charge of the operation and maintenance of both of these projects when they are completed. As these projects were not in operation when the census was taken, no data for them are included.

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

MATERIAL	1940		1930	
	Diversion	Storage	Diversion	Storage
	Number	*Number*	*Number*	*Number*
Total	19	14	9	10
Concrete or masonry	.....	.....	1	2
Timber	1	.....	.....	.....
Earth and rock	14	14	8	8
Other and mixed	[1]4	.....	.....	.....
Not reported	.....	.....	.....	.....

[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
Total, 1940	*Number* 83	*Percent* 100.0	*G.p.m.* 104,158	*Percent* 100.0	*Feet* 17
Electric motor	9	10.8	36,784	35.3	17
Centrifugal	4	4.8	750	0.7	19
Turbine	3	3.6	36,000	34.6	24
Plunger	2	2.4	34	[1]	11
Other	.....	.....	.....	.....	.....
Internal-combustion engine	64	77.2	62,930	60.4	15
Centrifugal	58	70.0	49,560	47.6	14
Turbine	2	2.4	10,200	9.8	19
Plunger	1	1.2	30	[1]	80
Other	3	3.6	3,140	3.0	18
Other kinds of motive power	10	12.0	4,444	4.3	27
Centrifugal	1	1.2	4,000	3.9	22
Turbine	.....	.....	.....	.....	.....
Plunger	9	10.8	444	0.4	28
Other	.....	.....	.....	.....	.....
Mixed kinds of motive power	.....	.....	.....	.....	.....
Centrifugal	.....	.....	.....	.....	.....
Turbine	.....	.....	.....	.....	.....
Plunger	.....	.....	.....	.....	.....
Other	.....	.....	.....	.....	.....
Total, 1930	13	.....	24,900	.....	24
Increase or decrease (-) 1930-1940	70	.....	79,258	.....	-7

MOTIVE POWER BY TYPE OF PUMP EMPLOYED	Prime movers	Proportion of total number	Rated capacity of movers	Proportion of total capacity
Total, 1940	*Number* 83	*Percent* 100.0	*Hp.* 1,253	*Percent* 100.0
Centrifugal pump	58	70.0	703	56.1
Electric	4	4.8	28	2.2
Internal-combustion	53	64.0	650	51.9
Other	1	1.2	25	2.0
Turbine pump	4	4.8	340	27.1
Electric	3	3.6	270	21.5
Internal-combustion	1	1.2	70	5.6
Other	.....	.....	.....	.....
Plunger pump	12	14.4	41	3.3
Electric	2	2.4	2	0.2
Internal-combustion	1	1.2	6	0.5
Other	9	10.8	33	2.6
Other and mixed types of pumps	9	10.8	169	13.5
Electric	.....	.....	.....	.....
Internal-combustion	9	10.8	169	13.5
Other	.....	.....	.....	.....
Total, 1930	[2]13	.....	216	.....
Increase or decrease (-) 1930-1940	70	.....	1,037	.....

[1]Less than one-tenth of 1 percent.

[2]Number of pumping plants.

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

MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940
	1940[1]	1930	
	Miles	*Miles*	*Percent*
Total	3.8	1.2	216.7
Concrete:			
1 to 12 inches	.....	.....	.....
13 to 24 inches	.....	.....	.....
Over 24 inches	0.3	.....	.....
Metal:			
1 to 12 inches	3.3	1.2	175.0
13 to 24 inches	0.1	.....	.....
Over 24 inches	.....	.....	.....
Wood-stave:			
1 to 12 inches	.....	.....	.....
13 to 24 inches	.....	.....	.....
Over 24 inches	.....	.....	.....
Clay and other:			
1 to 12 inches	0.1	.....	.....
13 to 24 inches	.....	.....	.....
Over 24 inches	.....	.....	.....

[1]Includes siphons and farm pipe lines reported.

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

ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number...	9	2	8
Area irrigable in these enterprises.....acres....	26,826	20,359	[1] 49,581
Area irrigated in these enterprises.....acres....	15,277	([2])	([2])
Area for which drains have been installed.....acres....	11,552	3,040	1,613
Additional area needing drainage.....acres....	242	2,000	659
Ratio of area drained to area irrigated in—			
(a) Enterprises reporting lands drained and/or needing drainage.....percent..	75.6	[3] 14.9	[1] 3.3
(b) All irrigation enterprises.....percent..	53.4	32.4	13.4
Ratio of area drained plus area needing drainage to—			
(a) Irrigable area reporting.....percent..	44.0	24.8	[1] 4.6
(b) Irrigated area reporting.....percent..	77.2	([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.

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] [2]	1919[1]	1939	1929[2]	1919	1939	1929[3]	1919[3]
From surface sources reported:									
Total water entering canals.....acre-feet..	87,466	37,025	28,106	79,407	37,025	28,106	8,059	.....	.....
Area irrigated by these enterprises.....acres.....	19,340	6,089	8,766	15,111	6,089	8,766	4,229	.....	.....
Average water per acre irrigated.....acre-feet..	4.5	6.1	3.2	5.3	6.1	3.2	1.9	.....	.....
Total water delivered to irrigators.....acre-feet..	39,289	9,778	11,696	.....	9,778	11,696	39,289	.....	.....
Area irrigated by these enterprises.....acres.....	21,253	6,089	8,766	.....	6,089	8,766	21,253	.....	.....
Average water per acre irrigated.....acre-feet..	1.8	1.6	1.3	.....	1.6	1.3	1.8	.....	.....
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	20	.....	.....	.....	.....	.....	20	.....	.....
Area irrigated by these enterprises.....acres.....	49	.....	.....	.....	.....	.....	49	.....	.....
Average water per acre irrigated.....acre-feet..	0.4	.....	.....	.....	.....	.....	0.4	.....	.....

[1] Data only for enterprises serving 5 or more farms. Water and area for surface and underground sources were not segregated for 1929 and 1919. [2] The quantities of water include only those reported by United States Bureau of Reclamation. [3] Not tabulated.

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				
	Acres	*Percent*	*Acres*	*Acres*	*Percent*	*Acres*	*Percent*
Total.....	21,615	100.0	.....	9,392	100.0	12,072	100.0
Appropriation[1].....	20,419	94.5	.....	7,763	82.7	11,612	96.2
Riparian.....	872	4.0	.....	.....	.....	.....	.....
Underground.....	47	0.2	.....	.....	.....	.....	.....
Adjudicated by court.....	.....	.....	.....	960	10.2	.....	.....
Other mixed and not reported...	277	1.3	.....	669	7.1	460	3.8

[1] "Appropriation" includes water rights published in the 1930 and 1920 Census reports as "Appropriation and use," "Notice filed and posted," "Permit from State," and "Certificate or license from State."

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...	80	5	61	7	5	[2] 1	[2] 1
2	Irrigated farms, 1939.....number...	358	.....	61	18	46	35	198
3	Area irrigated, 1939.....acres....	21,615	.....	1,937	338	4,709	500	14,131
4	(a) From which crops were harvested.....acres....	21,507	.....	1,914	288	4,674	500	14,131
5	(b) On which crops failed.....acres....	12	.....	12	.....	.....	.....	.....
6	(c) Irrigated pasture.....acres....	96	.....	11	50	35	.....	.....
	CAPITAL INVESTMENT, 1940							
7	Total capital investment in all enterprises.....dollars..	1,755,489	3,730	48,457	10,700	243,240	56,125	1,393,237
8	(a) Cost of irrigation works and equipment.....dollars..	1,752,862	3,725	46,110	10,650	243,140	56,000	1,393,237
9	(b) Investment in water rights.....dollars..	2,627	5	2,347	50	100	125	.....
10	Area works were capable of supplying with water.....acres....	36,522	179	3,279	596	11,965	575	19,928
11	Average investment per acre irrigated.....dollars..	81.22	.....	25.02	31.66	51.65	112.25	98.59
12	Average investment per acre which the works could supply with water....dollars..	48.07	20.84	14.79	17.95	20.33	97.61	69.91
	MAINTENANCE AND OPERATION, AND CHARGES, 1939							
13	Enterprises reporting maintenance and operation.....number...	71	.....	58	7	4	[2] 1	[2] 1
14	(a) Area irrigated in these enterprises.....acres....	21,290	.....	1,862	338	4,459	500	14,131
15	(b) Cost of maintenance and operation.....dollars..	30,072	.....	5,646	2,239	2,508	1,700	17,979
16	(c) Average cost per irrigated acre reporting.....dollars..	1.41	.....	3.03	6.62	0.56	3.40	1.27
17	Total annual charges[3].....dollars..	18,909	.....	.....	.....	3,540	277	15,092
18	Average charge per irrigated acre reporting.....dollars..	0.99	.....	.....	.....	0.79	0.55	1.07
19	Area against which charges were assessed.....acres....	23,425	.....	.....	.....	7,808	525	15,092
20	Average annual charge per acre assessed.....dollars..	0.81	.....	.....	.....	0.45	0.53	1.00
21	Total charges collected[3].....dollars..	14,749	.....	.....	.....	3,201	278	11,270
	INDEBTEDNESS AND ARREARAGE, 1939							
22	Enterprises reporting indebtedness[4].....number...	5	.....	.....	.....	4	.....	[2] 1
23	(a) Area irrigated in these enterprises.....acres....	18,824	.....	.....	.....	4,693	.....	14,131
24	(b) Indebtedness.....dollars..	1,337,648	.....	.....	.....	211,940	.....	1,125,708
25	(c) Average indebtedness per acre irrigated.....dollars..	71.06	.....	.....	.....	45.16	.....	79.66
26	(d) Cost of irrigation works and equipment.....dollars..	1,635,177	.....	.....	.....	241,940	.....	1,393,237
27	(e) Investment in water rights.....dollars..	100	.....	.....	.....	100	.....	.....
28	(f) Total investment.....dollars..	1,635,277	.....	.....	.....	242,040	.....	1,393,237
29	(g) Maintenance and operation.....dollars..	20,194	.....	.....	.....	2,215	.....	17,979
30	(h) Total annual charges[3].....dollars..	18,339	.....	.....	.....	3,247	.....	15,092
31	(i) Total charges collected[3].....dollars..	14,471	.....	.....	.....	3,201	.....	11,270
32	(j) Area against which annual charges were assessed.....acres....	22,884	.....	.....	.....	7,792	.....	15,092
33	(k) Average indebtedness per acre assessed.....dollars..	57.36	.....	.....	.....	23.99	.....	74.59
34	(l) Average charges per acre assessed.....dollars..	0.80	.....	.....	.....	0.42	.....	1.00
35	(m) Average charges per acre irrigated.....dollars..	0.99	.....	.....	.....	0.73	.....	1.07
36	Enterprises reporting arrearage[4].....number...	1	.....	.....	.....	.....	.....	1
37	(a) Area assessed in these enterprises.....acres....	15,092	.....	.....	.....	.....	.....	15,092
38	(b) Total arrearage.....dollars..	23,854	.....	.....	.....	.....	.....	23,854
39	(c) Average arrearage per acre assessed.....dollars..	1.58	.....	.....	.....	.....	.....	1.58
40	(d) Indebtedness.....dollars..	1,125,708	.....	.....	.....	.....	.....	1,125,708
	TYPE, 1940							
41	Individual and partnership.....number...	67	4	61	2	.....	.....	.....
42	Cooperative (incorporated, and unincorporated).....number...	2	1	.....	.....	.....	1	.....
43	Irrigation district.....number...	3	.....	.....	.....	3	.....	.....
44	U. S. Bureau of Reclamation.....number...	1	.....	.....	.....	.....	.....	1
45	U. S. Office of Indian Affairs.....number...	7	.....	.....	5	2	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939							
46	Enterprises reporting pay roll.....number...	6	.....	.....	.....	4	[2] 1	[2] 1
47	Wages and salaries paid and payable for 1939.....dollars..	14,611	.....	.....	.....	1,045	1,100	12,466
48	Persons employed during week ending April 29, 1939.....number...	21	.....	.....	.....	1	3	17
	SOURCE OF WATER SUPPLY, 1939							
49	Streams, gravity.....number...	10	.....	7	1	1	.....	1
50	Streams, pumped.....number...	52	4	38	6	4	.....	.....
51	Wells, pumped.....number...	9	.....	9	.....	.....	.....	.....
52	Wells, pumped and flowing; or wells flowing.....number...	.....	.....	.....	.....	.....	.....	.....
53	Lakes, gravity or pumped.....number...	.....	.....	.....	.....	.....	.....	.....
54	Streams and springs; or springs.....number...	3	.....	3	.....	.....	.....	.....
55	Mixed, streams and wells.....number...	2	.....	1	.....	.....	1	.....
56	Other mixed or stored storm water.....number...	4	1	3	.....	.....	.....	.....

[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.

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.			
			Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Annual mean	Departure[1]
Missouri River		*Feet*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Degrees F.*	*Degrees F.*
Williston	Williams	1,878	14.85	+0.05	2.41	+0.39	1.43	-0.21	6.62	-0.07	4.39	-0.06	43.2	+3.9
Medora	Billings	2,271	13.47	-1.84	1.29	-0.35	1.20	-0.70	6.79	+0.04	4.19	-0.83	.....	.....
Bowman	Bowman	2,872	15.55	+0.64	0.81	-0.92	0.83	-0.78	9.08	+2.72	4.83	-0.38	43.5	+1.8
Dunn Center	Dunn	2,191	14.65	-1.80	2.14	+0.31	0.88	-0.84	6.44	-1.08	5.19	-0.19	40.7	-0.2
Mott	Hettinger	2,424	14.21	-2.31	1.29	-0.73	1.25	-0.94	6.32	-0.51	5.35	-0.13	44.6	+3.8
Washburn	McLean	1,731	13.45	-2.15	1.50	-0.48	1.07	-0.41	6.95	+0.30	3.93	-1.56	44.4	+3.8
Bismarck	Burleigh	1,674	14.62	-1.72	1.21	-0.87	1.16	-0.62	7.68	+0.49	4.57	-0.72	43.8	+3.3
Linton	Emmons	1,711	15.72	-0.84	0.54	-1.45	0.27	-1.38	9.75	+2.93	5.16	-0.94	44.2	+2.6
Red River														
Crosby	Divide	1,954	12.39	-2.77	3.32	+1.37	1.58	+0.14	5.50	-0.78	1.99	-3.50	40.8	+2.9
Minot	Ward	1,557	15.94	+0.18	3.37	+1.23	1.49	+0.04	5.70	-0.84	5.38	-0.25	42.5	+3.7
Bottineau	Bottineau	1,638	11.06	-4.97	1.34	-0.70	0.95	-0.47	5.06	-1.10	3.71	-2.70	39.5	+3.3
Carrington	Foster	1,579	14.99	-1.91	1.85	-0.10	1.67	+0.31	7.01	-0.33	4.46	-1.79	40.9	+1.8
Devils Lake	Ramsey	1,478	14.94	-3.11	1.40	-1.11	1.00	-0.75	7.24	+0.13	5.30	-1.38	40.1	+3.1
Ellendale	Dickey	1,451	18.71	-0.48	0.68	-1.51	1.51	-0.43	11.11	+3.27	5.41	-1.81	43.7	+2.1
Langdon	Cavalier	1,615	14.26	-4.04	1.61	-0.08	1.80	-0.19	6.63	+0.06	4.22	-2.93	39.3	+3.9
Valley City	Barnes	1,245	11.79	-6.90	0.88	-1.47	1.19	-0.45	5.65	-2.15	4.07	-2.83	42.8	+2.6
Grand Forks	Grand Forks	830	16.65	-2.97	2.23	-0.59	2.31	+0.50	6.47	-1.09	5.64	-1.79	40.2	+1.6
Wahpeton	Richland	962	17.68	-3.25	1.22	-1.57	1.91	+0.35	10.66	+2.36	3.89	-4.39	44.1	+2.4

[1] Departure from normal.

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	
5	64	6	3	1	[2] 1	.....	74	[2] 1	3	2	1
.....	83	14	48	15	198	.....	84	7	57	210	2
.....	896	1,225	5,363		14,131	.....	2,291	88	19,236		3
.....	873	1,175	5,326		14,131	.....	2,218	88	19,201		4
.....	12	.....	.....		.....	.....	12	.....	.....		5
.....	11	50	35		.....	.....	61	.....	35		6
3,730	57,047	33,750	267,725		1,393,237	.....	64,087	7,440	1,683,962		7
3,725	54,800	33,600	267,500		1,393,237	.....	61,685	7,440	1,663,737		8
5	2,247	150	225		.....	.....	2,402	.....	225		9
179	2,275	1,833	12,307		19,928	.....	4,070	125	32,327		10
.....	63.67	27.55	49.92		98.59	.....	27.97	84.55	87.54		11
20.84	25.08	18.41	21.75		69.91	.....	15.75	59.52	52.09		12
.....	61	5	4		[2] 1	.....	66	[2] 1	4		13
.....	821	975	5,363		14,131	.....	2,216	88	18,986		14
.....	5,527	2,290	4,276		17,979	.....	8,178	39	21,855		15
.....	6.73	2.35	0.80		1.27	.....	3.69	0.44	1.15		16
.....	332	.....	3,485		15,092	.....	293	39	18,577		17
.....	3.19	.....	0.72		1.07	.....	18.31	0.44	0.98		18
.....	104	.....	8,229		15,092	.....	16	88	23,321		19
.....	3.19	.....	0.42		1.00	.....	18.31	0.44	0.80		20
.....	.....	.....	3,479		11,270	.....	.....	.....	14,749		21
.....	[2] 1	4			[2] 1	.....	.....	[2] 1	4		22
.....	88	4,605			14,131	.....	.....	88	18,736		23
.....	7,440	204,500			1,125,708	.....	.....	7,440	1,330,208		24
.....	84.55	44.41			79.66	.....	.....	84.55	71.00		25
.....	7,440	234,500			1,393,237	.....	.....	7,440	1,627,737		26
.....	.....	100			.....	.....	.....	.....	100		27
.....	7,440	234,600			1,393,237	.....	.....	7,440	1,627,837		28
.....	39	2,176			17,979	.....	.....	39	20,155		29
.....	39	3,208			15,092	.....	.....	39	18,300		30
.....	.....	3,201			11,270	.....	.....	.....	14,471		31
.....	88	7,704			15,092	.....	.....	88	22,796		32
.....	84.55	23.30			74.59	.....	.....	84.55	57.26		33
.....	0.44	0.42			1.00	.....	.....	0.44	0.80		34
.....	0.44	0.74			1.07	.....	.....	0.44	0.99		35
.....	.....	.....			1	.....	.....	.....	1		36
.....	.....	.....			15,092	.....	.....	.....	15,092		37
.....	.....	.....			23,854	.....	.....	.....	23,854		38
.....	.....	.....			1.58	.....	.....	.....	1.58		39
.....	.....	.....			1,125,708	.....	.....	.....	1,125,708		40
4	57	5	1	.....	.....	.....	67	.....	.....	.....	41
1	.....	.....	1	.....	.....	.....	1	.....	1	.....	42
.....	.....	1	1	1	.....	.....	.....	.....	2	1	43
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	44
.....	7	.....	.....	.....	.....	.....	6	1	.....	.....	45
.....	2	.....	3		[2] 1	.....	1	[2] 1	4		46
.....	[5]	.....	1,525		12,466	.....	[5]	500	13,991		47
.....	.....	.....	4		17	.....	.....	.....	21		48
.....	5	2	1	1	1	.....	8	.....	1	1	49
4	43	4	1	.....	.....	.....	49	1	1	1	50
.....	9	.....	.....	.....	.....	.....	9	.....	.....	.....	51
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
.....	3	.....	.....	.....	.....	.....	3	.....	.....	.....	54
.....	1	.....	1	.....	.....	.....	1	.....	1	.....	55
1	3	.....	.....	.....	.....	.....	4	.....	.....	.....	56

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

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

Precipitation in North Dakota 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, particularly in the drainage basins tributary to the Red River.

The average annual precipitation for the State over the period 1892 to 1939 inclusive was 16.92 inches. The average precipitations for the calendar years 1938 and 1939 were 15.33, a departure of -1.59, and 14.15, a departure of -2.72 inches, respectively.

In 1939 the precipitation averaged below normal in all sections of the State. Only three months, February, June, and August, had precipitations in excess of the normal. November 1939 was the driest month in the climatological history of North Dakota. Dust storms were light and less frequent than in other years. Due to the fact that June was cool and wet, crops were mostly good throughout the State and hay was plentiful. Livestock was good to excellent.

The mean temperature for the year was above normal at almost every station in the State. February, March, June, and October were the only months with subnormal temperatures. February with a mean temperature of -0.8°, was by far the coldest month of the year and December was the warmest December since State-wide records began in 1892. The frost free season extended from May 11 to September 23 or 25 at most stations, which made the growing season somewhat longer than average.

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

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	STATE TOTAL	LAKE WINNIPEG (CANADA)			MISSISSIPPI RIVER					
			Red River			Missouri River					
			Total	Direct (1)	Assiniboine River (Canada) Souris River (2)	Total	Direct[1] (4)	Little Missouri River (7)	Knife River (8)	Heart River (10)	Cannonball River (11)
	IRRIGATED FARMS AND AREAS										
1	Irrigated farms....1939...number....	358	61	6	55	297	254	5	4	12	22
2	Area irrigated....1939...acres....	21,615	4,493	272	4,221	17,122	16,706	72	28	45	271
3	(a) Cropland harvested....1939...acres....	21,507	4,458	272	4,186	17,049	16,701	72	28	39	209
4	(b) Crop failure....1939...acres....	12	.....	.....	.....	12	.....	.....	.....	.....	12
5	(c) Pasture....1939...acres....	96	35	.....	35	61	5	.....	.....	6	50
6	Area irrigated....1929...acres....	9,392	2,099	.....	1,453	7,293	.....	.....	.....	.....	.....
7	1919...acres....	12,072	.....	.....	.....	12,072	.....	.....	.....	.....	.....
8	Increase or decrease (-), 1929-1939....percent....	130.1	114.1	.....	190.5	134.8	.....	.....	.....	.....	.....
9	Irrigable area in enterprises....1940...acres....	39,558	8,100	455	7,645	31,458	30,157	95	412	115	679
10	1930...acres....	24,860	2,409	.....	1,453	22,451	.....	.....	.....	.....	.....
11	1920[2]...acres....	57,476	.....	.....	.....	57,476	.....	.....	.....	.....	.....
12	Excess of irrigable area over the area irrigated..1940...acres....	17,943	3,607	183	3,424	14,336	13,451	23	384	70	408
13	1930...acres....	15,468	310	.....	.....	15,158	.....	.....	.....	.....	.....
14	1920[2]...acres....	45,404	.....	.....	.....	45,404	.....	.....	.....	.....	.....
15	Area works were capable of supplying with water...1940...acres....	36,522	7,980	335	7,645	28,542	27,637	95	107	115	588
16	1930...acres....	24,006	2,099	.....	1,453	21,907	.....	.....	.....	.....	.....
17	1920...acres....	34,235	.....	.....	.....	34,235	.....	.....	.....	.....	.....
18	Increase or decrease (-), 1930-1940....percent....	52.1	280.2	.....	426.2	30.3	.....	.....	.....	.....	.....
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres....	14,907	3,487	63	3,424	11,420	10,931	23	79	70	317
20	1930...acres....	14,614	.....	.....	.....	14,614	.....	.....	.....	.....	.....
21	1920...acres....	22,163	.....	.....	.....	22,163	.....	.....	.....	.....	.....
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent....	59.2	56.3	81.2	55.2	60.0	60.4	75.8	26.2	39.1	46.1
23	1929...percent....	39.1	100.0	.....	100.0	33.3	.....	.....	.....	.....	.....
24	1919...percent....	35.3	.....	.....	.....	35.3	.....	.....	.....	.....	.....
	CAPITAL INVESTED TO JANUARY 1										
25	Total investment in irrigation enterprises....1940...dollars....	1,755,489	130,566	9,741	120,825	1,624,923	1,604,533	1,839	3,475	5,751	9,325
26	(a) Cost of irrigation works and equipment....1940...dollars....	1,752,862	130,225	9,625	120,600	1,622,637	1,602,367	1,825	3,450	5,735	9,260
27	(b) Investment in water rights (reported)....1940...dollars....	2,627	341	116	225	2,286	2,166	14	25	16	65
28	Total investment in irrigation enterprises....1930...dollars....	1,267,314	20,925	.....	5,775	1,246,389	.....	.....	.....	.....	.....
29	1920...dollars....	1,857,118	.....	.....	.....	1,857,118	.....	.....	.....	.....	.....
30	Increase or decrease (-), 1930-1940....percent....	38.5	524.0	.....	1,992.2	30.4	.....	.....	.....	.....	.....
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars....	48.07	16.36	29.08	15.80	56.93	58.06	19.36	32.48	50.01	15.86
32	1930...dollars....	52.79	9.97	.....	3.97	56.89	.....	.....	.....	.....	.....
33	1920...dollars....	54.25	.....	.....	.....	54.25	.....	.....	.....	.....	.....
34	Average investment per acre irrigated....1939...dollars....	81.22	29.06	35.81	28.62	94.90	96.05	25.54	124.11	127.80	34.41
35	Estimated final investment in existing enterprises..1940...dollars....	1,785,539	142,566	9,741	132,825	1,642,973	1,618,798	1,839	4,375	6,451	11,510
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars....	45.14	17.60	21.41	17.37	52.23	53.68	19.36	10.62	56.10	16.96
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS										
37	Enterprises reporting maintenance and operation...1939...number....	71	13	6	7	58	21	4	3	12	18
38	Area irrigated in these enterprises....1939...acres....	21,290	4,493	272	4,221	16,797	16,421	52	8	45	271
39	Cost of maintenance and operation....1939...dollars....	30,072	5,912	1,816	4,096	24,160	22,424	95	42	612	987
40	Average cost, per acre irrigated....1939...dollars....	1.41	1.32	6.68	0.97	1.44	1.37	1.83	5.25	13.60	3.64
41	Total annual charges (reported)[3] [4]....1939...dollars....	18,909	3,235	.....	3,235	15,674	15,674	.....	.....	.....	.....
42	Average annual charge per acre irrigated....1939...dollars....	0.99	0.83	.....	0.83	1.03	1.03	.....	.....	.....	.....
43	Area against which charges were assessed....1939...acres....	23,425	7,249	.....	7,249	16,176	16,176	.....	.....	.....	.....
44	Average annual charge per acre assessed....1939...dollars....	0.81	0.45	.....	0.45	0.97	0.97	.....	.....	.....	.....
45	Total charges collected[3]....1939...dollars....	14,749	3,479	.....	3,479	11,270	11,270	.....	.....	.....	.....
46	Indebtedness to December 31 (reported)[4]....1939...dollars....	1,337,648	29,500	.....	29,500	1,308,148	1,308,148	.....	.....	.....	.....
	WATER DELIVERED TO IRRIGATORS, 1939										
47	Enterprises reporting water delivered....1939...number....	72	12	5	7	60	21	5	4	12	18
48	Area irrigated by these enterprises....1939...acres....	21,302	4,480	259	4,221	16,822	16,406	72	28	45	271
49	Water delivered....1939...acre-feet..	39,309	6,528	164	6,364	32,781	31,905	46	27	26	377
50	Average water delivered per acre irrigated....1939...acre-feet..	1.8	1.5	0.6	1.5	1.9	1.9	0.6	1.0	0.6	3.2
51	Average cost of water per acre irrigated....1939...dollars....	1.27	1.23	7.01	0.88	1.29	1.21	1.83	5.25	13.60	3.64
52	Average cost of water per acre-foot delivered..1939...dollars....	0.69	0.85	11.07	0.58	0.66	1.22	2.86	5.44	23.54	1.13
	DRAINAGE OF IRRIGATED LAND										
53	Enterprises reporting land drained or needing drainage....1939...number....	9	.....	.....	.....	9	5	.....	.....	2	2
54	Irrigable area in these enterprises....1939...acres....	26,826	.....	.....	.....	26,826	26,766	.....	.....	(5)	(5)
55	Irrigated area in these enterprises....1939...acres....	15,277	.....	.....	.....	15,277	15,261	.....	.....	(5)	(5)
56	Area for which drains have been installed....1939...acres....	11,552	.....	.....	.....	11,552	11,536	.....	.....	(5)	(5)
57	Additional area needing drainage....1939...acres....	242	.....	.....	.....	242	198	.....	.....	(5)	(5)

[1] Data for 2 enterprises in Yellow River Drainage Basin (8) (number refers to separate map) and for 2 enterprises in James River Drainage Basin (5) are included with Missouri River "Direct" Drainage Basin (4). [2] For 1920 relates to total area in enterprises. Irrigable area for that year was not reported. [3] Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons. [4] Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only. [5] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

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	LAKE WINNIPEG (CANADA)			MISSISSIPPI RIVER					
			Red River			Missouri River					
			Total	Direct (1)	Assiniboine River (Canada) Souris River (2)	Total	Direct[1] (4)	Little Missouri River (7)	Knife River (6)	Heart River (10)	Cannonball River (11)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1										
1	Enterprises....1940..number	80	13	6	7	67	24	5	6	12	20
2	Average size of enterprise based on area works were capable of supplying with water....1940..acres	457	814	56	1,092	426	1,152	19	18	10	29
3	Diversion dams....1940..total number	19	5	3	2	14	7	1	3	.....	3
4	1930..total number	9	.....	.....	.....	9	.....	.....	.....	.....	.....
5	1920..total number[2]	26	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	(a) Concrete and masonry....1940..number	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	(b) Timber....1940..number	1	.....	.....	.....	1	.....	.....	1	.....	.....
8	(c) Earth and rock....1940..number	14	5	3	2	9	3	1	2	.....	3
9	(d) Other, mixed, and not reported..1940..number	4	.....	.....	.....	4	4	.....	.....	.....	.....
10	Main canals and laterals....1940..total length, miles	159.2	23.9	.....	23.9	135.3	133.3	.....	1.0	.....	1.0
11	1930..total length, miles	87	1	.....	.....	86	.....	.....	.....	.....	.....
12	1920..total length, miles[2]	151	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	(a) Earth....1940..length, miles	158	23	.....	23	135	133	.....	1	.....	1
14	(b) Lined....1940..length, miles	1.2	0.9	.....	0.9	0.3	0.3	.....	.....	.....	.....
15	1940..capacity, c.f.s.[3]	616	365	15	350	251	192	5	9	10	35
16	1930..capacity, c.f.s.[3]	1,072	2	.....	.....	1,070	.....	.....	.....	.....	.....
17	1920..capacity, c.f.s.[2 3]	836	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	Pipe lines[4]....1940..total length, miles	3.8	1.9	0.5	1.4	1.9	0.6	0.2	.....	0.7	0.4
19	1930..total length, miles	1.2	1.2	.....	.....	.....	.....	.....	.....	.....	.....
20	1920..total length, miles[2]	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
21	(a) Concrete....1940..length, miles	0.3	0.1	.....	0.1	0.2	0.1	.....	.....	.....	0.1
22	(b) Metal....1940..length, miles	3.4	1.8	0.5	1.3	1.6	0.5	0.2	.....	0.6	0.3
23	(c) Wood-stave....1940..length, miles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	(d) Other....1940..length, miles	0.1	.....	.....	.....	0.1	.....	.....	.....	0.1	.....
25	Storage dams....1940..total number	14	2	.....	2	12	2	.....	1	2	7
26	1930..total number	10	.....	.....	.....	10	.....	.....	.....	.....	.....
27	1920..total number[2]	11	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	(a) Concrete and masonry....1940..number	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	(b) Earth and rock....1940..number	14	2	.....	2	12	2	.....	1	2	7
30	(c) Other, mixed, and not reported..1940..number	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31	Reservoirs....1940..total number	14	2	.....	2	12	2	.....	1	2	7
32	(a) 1-99 acre-feet capacity....1940..number	10	.....	.....	.....	10	1	.....	1	2	6
33	(b) 100-999 acre-feet capacity....1940..number	3	[5] 2	.....	[5] 2	1	1	.....	.....	.....	.....
34	(c) 1,000 and over acre-feet capacity....1940..number	1	.....	.....	.....	1	.....	.....	.....	.....	1
35	1940..total capacity, ac.-ft.[6]	3,946	720	.....	720	3,226	(7)	.....	(7)	(7)	2,781
36	1930..total number	8	.....	.....	.....	8	.....	.....	.....	.....	.....
37	1930..total capacity, ac.-ft.	1,466	.....	.....	.....	1,466	.....	.....	.....	.....	.....
38	Wells, flowing....1940..number	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
39	1930..number	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
40	1920..number[2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
41	1940..yield, g.p.m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
42	1930..yield, g.p.m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
43	1920..yield, g.p.m.[2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
44	Wells, pumped....1940..number	11	.....	.....	.....	11	1	.....	.....	4	6
45	1930..number	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
46	1920..number[2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
47	1940..yield, g.p.m.	378	.....	.....	.....	378	(7)	.....	.....	39	39
48	1930..yield, g.p.m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
49	1920..yield, g.p.m.[2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
50	Pumping plants....1940..total number	83	16	6	10	67	26	3	6	14	18
51	1930..total number	13	8	.....	5	5	.....	.....	.....	.....	.....
52	Prime movers....1940..capacity, hp	1,253	274	114	160	979	727	13	71	67	101
53	1930..capacity, hp.	216	153	.....	123	63	.....	.....	.....	.....	.....
54	1920..capacity, hp.[2]	2,068	.....	.....	.....	.....	.....	.....	.....	.....	.....
55	(a) Electric....1940..number	9	1	.....	1	8	3	.....	.....	5	.....
56	1940..capacity, hp.	300	(7)	.....	(7)	292	270	.....	.....	22	.....
57	(b) Internal-combustion....1940..number	64	15	6	9	49	22	3	6	7	11
58	1940..capacity, hp.	895	286	114	152	629	432	13	71	43	70
59	(c) Other....1940..number	10	.....	.....	.....	10	1	.....	.....	2	7
60	1940..capacity, hp.	58	.....	.....	.....	58	(7)	.....	.....	(7)	31
61	Pumps....1940..total number	83	16	6	10	67	26	3	6	14	18
62	1930..number	13	8	.....	5	5	.....	.....	.....	.....	.....
63	1920..number[2]	10	.....	.....	.....	.....	.....	.....	.....	.....	.....
64	1940..capacity, g.p.m.	104,158	26,045	6,270	19,775	78,113	66,000	1,400	3,300	3,104	4,309
65	1930..capacity, g.p.m.	24,900	20,400	.....	14,400	4,500	.....	.....	.....	.....	.....
66	1920..capacity, g.p.m.[2]	51,250	.....	.....	.....	.....	.....	.....	.....	.....	.....
67	(a) Centrifugal....1940..number	63	12	3	9	51	22	3	6	10	10
68	1940..capacity, g.p.m.	54,310	19,975	3,200	16,775	34,335	22,800	1,400	3,300	3,065	3,770
69	1940..average capacity, g.p.m.	862	1,665	1,067	1,864	673	1,036	467	550	306	377
70	(b) Turbine....1940..number	5	[5] 1	.....	[5] 1	4	4	.....	.....	.....	.....
71	1940..capacity, g.p.m.	46,200	3,000	.....	3,000	43,200	43,200	.....	.....	.....	.....
72	1940..average capacity, g.p.m.	9,240	3,000	.....	3,000	10,800	10,800	.....	.....	.....	.....
73	(c) Plunger....1940..number	12	1	1	.....	11	.....	.....	.....	4	7
74	1940..capacity, g.p.m.	508	(7)	(7)	.....	478	.....	.....	.....	39	439
75	1940..average capacity, g.p.m.	42	(7)	(7)	.....	43	.....	.....	.....	10	63
76	(d) Other....1940..number	3	2	2	.....	1	.....	.....	.....	.....	1
77	1940..capacity, g.p.m.	3,140	(7)	(7)	.....	(7)	.....	.....	.....	.....	(7)
78	Pumping lift, from all sources....1940..average, feet	17	21	30	13	16	15	17	16	15	19
79	1930..average, feet	24	13	.....	13	40	.....	.....	.....	.....	.....
80	1920..average, feet[2]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
81	from pumped wells....1940..average, feet	25	.....	.....	.....	25	(7)	.....	.....	11	30
82	from surface sources...1940..average, feet	16	21	30	13	15	14	17	16	16	13

[1] Data for 2 enterprises in Yellow River Drainage basin (8) (number refers to separate map) and for 2 enterprises in James River Drainage Basin (5) are included with Missouri River "Direct" Drainage Basin (4). [2] Not tabulated by drainage basin in 1920. [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 for less than 3 enterprises shown with permission of the enterprises involved. [6] Total capacity of all reservoirs regardless of size. [7] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

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

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

	ITEM (For definitions and explanations, see text)	STATE TOTAL	Billings	Cass	Dunn	Grant	McKenzie	Mercer
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms....1940...number	73,962	471	2,592	1,359	1,233	1,563	1,057
2	1930...number	77,975	531	2,595	1,407	1,511	1,738	1,030
3	Irrigated farms....1940...number	479	7	9	12	21	167	8
4	1930...number	113	.....	.....	1	.....	89	.....
5	Increase or decrease (-), 1930-1940....percent	323.9	.....	.....	(1)	.....	87.6	.....
6	Operated by—(a) Owners and managers....1940...number	309	6	6	10	8	115	3
7	1930...number	85	.....	.....	.....	.....	65	.....
8	(b) Tenants....1940...number	170	1	3	2	13	52	.....
9	1930...number	28	.....	.....	.....	.....	24	.....
10	Land in all farms....1940...acres	37,936,136	352,125	1,093,727	1,009,967	894,049	915,963	628,676
11	Land in irrigated farms....1940...acres	344,988	9,715	4,486	20,540	24,440	50,706	4,023
12	Average per farm....1940...acres	720	1,388	498	1,712	1,164	304	503
13	(a) Operated by owners and managers....1940...acres	262,554	(2)	3,696	(2)	8,015	43,072	4,023
14	Average per farm....1940...acres	850	(2)	616	(2)	1,002	375	503
15	(b) Operated by tenants....1940...acres	82,434	(2)	790	(2)	16,425	7,634	.....
16	Average per farm....1940...acres	485	(2)	263	(2)	1,263	147	.....
17	Approximate land area....1940...acres	44,834,560	728,960	1,119,360	1,323,520	1,070,080	1,798,400	698,880
	IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated....1939...acres	21,615	37	234	43	39	15,361	26
19	(a) Cropland harvested....1939...acres	21,507	37	234	43	31	15,361	26
20	(b) Crop failure....1939...acres	12	.....	.....	.....	2	.....	.....
21	(c) Pasture....1939...acres	96	.....	.....	.....	6	.....	.....
22	Area irrigated....1929...acres	9,392	.....	.....	.....	.....	6,097	.....
23	1919...acres	12,072	.....	.....	.....	.....	6,630	.....
24	Increase or decrease (-), 1929-1939....percent	130.1	.....	.....	.....	.....	151.9	.....
25	Irrigable area in enterprises....1940...acres	39,558	60	245	364	65	27,328	167
26	1930...acres	24,860	.....	.....	.....	.....	20,327	.....
27	1920[3]...acres	57,476	.....	.....	.....	.....	21,424	.....
28	Excess of irrigable area over the area irrigated...1940...acres	17,943	23	11	321	26	11,967	141
29	1930...acres	15,468	.....	.....	.....	.....	14,230	.....
30	Area works were capable of supplying with water...1940...acres	36,522	60	242	59	50	25,028	167
31	1930...acres	24,006	.....	.....	.....	.....	20,008	.....
32	1920...acres	34,235	.....	.....	.....	.....	14,726	.....
33	Increase or decrease (-), 1930-1940....percent	52.1	.....	.....	.....	.....	25.1	.....
34	Excess, capability of works over area irrigated...1940...acres	14,907	23	8	16	11	9,667	141
35	1930...acres	14,614	.....	.....	.....	.....	13,911	.....
36	Proportion which area irrigated is of all lands in irrigated farms....1939...percent	6.3	0.4	5.2	0.2	0.2	30.3	0.6
37	1929...percent	16.6	.....	.....	.....	.....	29.5	.....
38	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	59.2	61.7	96.7	72.9	78.0	61.4	15.6
39	1929...percent	39.1	.....	.....	.....	.....	30.5	.....
	CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises....1940...dollars	1,755,489	1,514	7,416	3,092	3,470	1,568,237	5,542
41	(a) Cost of irrigation works and equipment....1940...dollars	1,752,862	1,500	7,300	3,067	3,460	1,568,237	5,542
42	(b) Investment in water rights (reported)....1940...dollars	2,627	14	116	25	10	.....	.....
43	Total investment in all enterprises....1930...dollars	1,267,314	.....	.....	.....	.....	1,212,319	.....
44	1920...dollars	1,857,118	.....	.....	.....	.....	1,235,209	.....
45	Increase or decrease (-), 1930-1940....percent	38.5	.....	.....	.....	.....	29.4	.....
46	Average investment, based on area works were capable of supplying with water, per acre....1940...dollars	48.07	25.23	30.64	52.41	69.40	62.66	33.19
47	1930...dollars	52.79	.....	.....	.....	.....	60.59	.....
48	1920...dollars	54.25	.....	.....	.....	.....	83.88	.....
49	Average investment per acre irrigated....1939...dollars	81.22	40.92	31.69	71.91	88.97	102.09	213.15
50	Estimated final investment in existing enterprises...1940...dollars	1,785,539	1,514	7,416	3,292	4,705	1,580,737	7,117
51	1930...dollars	1,343,911	.....	.....	.....	.....	1,285,816	.....
52	1920...dollars	2,072,766	.....	.....	.....	.....	1,321,457	.....
53	Increase or decrease (-), 1930-1940....percent	32.9	.....	.....	.....	.....	22.9	.....
54	Average investment, based on estimated final investment and irrigable area, per acre....1940...dollars	45.14	25.23	30.27	9.04	72.38	57.84	42.62
55	1930...dollars	54.06	.....	.....	.....	.....	63.26	.....
56	1920[5]...dollars	36.06	.....	.....	.....	.....	61.68	.....
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
57	Enterprises reporting maintenance and operation...1939...number	73	3	4	4	9	2	3
58	Area irrigated in these enterprises....1939...acres	21,290	17	234	23	39	(2)	26
59	Cost of maintenance and operation....1939...dollars	30,072	70	1,715	48	680	(2)	281
60	Average cost, per acre irrigated....1939...dollars	1.41	4.12	7.33	2.09	17.44	(2)	10.81
61	1929...dollars	1.97	.....	.....	.....	.....	2.34	.....
62	Total annual charges (reported)[4 5]....1939...dollars	18,909	.....	.....	6	.....	15,342	6
63	Average annual charge per acre irrigated....1939...dollars	0.99	.....	.....	0.40	.....	1.02	0.40
64	Area against which charges were assessed....1939...acres	23,425	.....	.....	15	.....	16,072	15
65	Average annual charge per acre assessed....1939...dollars	0.81	.....	.....	0.40	.....	0.95	0.40
66	Total charges collected[4]....1939...dollars	14,749	.....	.....	.....	.....	11,270	.....
67	Indebtedness to December 31 (reported)[5]....1939...dollars	1,337,648	.....	.....	1,267	.....	1,300,708	1,267
	WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered....1939...number	74	4	4	5	9	3	3
69	Area irrigated in these enterprises....1939...acres	21,302	37	234	43	39	15,361	26
70	Water delivered in these enterprises....1939...acre-feet	39,309	26	125	49	18	30,058	54
71	Average water delivered per acre irrigated....1939...acre-feet	1.8	0.7	0.5	1.1	0.5	2.0	2.1
72	Average cost of water per acre irrigated....1939...dollars	1.27	4.12	7.33	2.09	17.44	1.02	10.81
	DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage....1939...number	9	.....	.....	.....	2	2	.....
74	Irrigable area in these enterprises....1939...acres	26,826	.....	.....	.....	(2)	(2)	.....
75	Irrigated area in these enterprises....1939...acres	15,277	.....	.....	.....	(2)	(2)	.....
76	Area for which drains have been installed....1939...acres	11,552	.....	.....	.....	(2)	(2)	.....
77	Additional area needing drainage....1939...acres	242	.....	.....	.....	(2)	.....	.....

*Census of Agriculture. [1]Percent not shown when more than 1,000. [2]Data are included only in State totals because less than 3 farms or 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.

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)	Morton	Sioux	Slope	Stark	Ward	Williams	All other counties[1]
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms.....1940...number.....	1,755	447	589	1,320	2,447	2,080	57,049
2	1930...number.....	1,851	688	737	1,337	2,662	2,288	59,600
3	Irrigated farms.....1940...number.....	9	51	8	21	30	10	126
4	1930...number.....	.....	.....	2	.....	2	7	12
5	Increase or decrease (-), 1930-1940.....percent....	.....	.....	300.0	.....	([2])	42.9	950.0
6	Operated by—(a) Owners and managers.....1940...number.....	7	32	6	17	7	7	80
7	1930...number.....	.....	.....	.....	.....	.....	6	14
8	(b) Tenants.....1940...number.....	2	19	2	4	23	3	46
9	1930...number.....	.....	.....	.....	.....	.....	1	3
10	Land in all farms.....1940...acres.....	1,106,368	371,509	587,430	825,140	1,110,636	1,028,040	28,012,506
11	Land in irrigated farms.....1940...acres.....	889	67,983	9,040	12,862	3,042	10,758	126,504
12	Average per farm.....1940...acres.....	99	1,333	1,130	612	101	1,076	1,004
13	(a) Operated by owners and managers.....1940...acres.....	([3])	48,992	([3])	10,692	2,711	6,402	98,051
14	Average per farm.....1940...acres.....	([3])	1,531	([3])	629	387	915	1,226
15	(b) Operated by tenants.....1940...acres.....	([3])	18,991	([3])	2,170	331	4,356	28,453
16	Average per farm.....1940...acres.....	([3])	1,000	([3])	542	14	1,452	619
17	Approximate land area.....1940...acres.....	1,237,120	719,360	784,640	844,160	1,310,720	1,344,000	31,855,360
	IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated.....1939...acres.....	68	75	217	24	846	282	4,363
19	(a) Cropland harvested.....1939...acres.....	68	69	163	24	846	277	4,328
20	(b) Crop failure.....1939...acres.....	.....	6	4	.....	.....	.....	.....
21	(c) Pasture.....1939...acres.....	.....	.....	50	.....	.....	5	35
22	Area irrigated.....1929...acres.....	.....	.....	.....	.....	.....	1,085	2,210
23	1919...acres.....	.....	.....	.....	.....	.....	5,442	.....
24	Increase or decrease (-), 1929-1939.....percent....	.....	.....	.....	.....	.....	-74.0	97.4
25	Irrigable area in enterprises.....1940...acres.....	162	139	506	66	921	1,475	8,060
26	1930...acres.....	.....	.....	.....	.....	.....	1,848	2,685
27	1920[4]...acres.....	.....	.....	.....	.....	.....	36,052	.....
28	Excess of irrigable area over the area irrigated..1940...acres.....	94	64	289	42	75	1,193	3,697
29	1930...acres.....	.....	.....	.....	.....	.....	753	475
30	Area works were capable of supplying with water...1940...acres.....	132	81	506	66	921	1,305	7,905
31	1930...acres.....	.....	.....	.....	.....	.....	1,633	2,365
32	1920...acres.....	.....	.....	.....	.....	.....	19,509	.....
33	Increase or decrease (-), 1930-1940.....percent....	.....	.....	.....	.....	.....	-20.1	234.2
34	Excess, capability of works over area irrigated...1940...acres.....	64	6	289	42	75	1,023	3,542
35	1930...acres.....	.....	.....	.....	.....	.....	548	155
36	Proportion which area irrigated is of all lands in irrigated farms.....1939...percent....	7.6	0.1	2.4	0.2	27.8	2.6	3.4
37	1929...percent....	.....	.....	.....	.....	.....	17.7	7.4
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent....	51.5	92.6	42.9	36.4	81.9	21.6	55.2
39	1929...percent....	.....	.....	.....	.....	.....	66.4	99.4
	CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises.....1940...dollars....	3,283	10,140	2,450	3,620	61,225	12,600	72,901
41	(a) Cost of irrigation works and equipment.....1940...dollars....	3,250	10,140	2,400	3,620	61,100	10,500	72,746
42	(b) Investment in water rights (reported).....1940...dollars....	32	.....	50	.....	125	2,100	155
43	Total investment in all enterprises.....1930...dollars....	.....	.....	.....	.....	.....	32,400	22,595
44	1920...dollars....	.....	.....	.....	.....	.....	621,909	.....
45	Increase or decrease (-), 1930-1940.....percent....	.....	.....	.....	.....	.....	-61.1	222.6
46	Average investment, based on area works were capable of supplying with water, per acre.....1940...dollars....	24.86	125.19	4.84	54.85	66.48	9.66	8.22
47	1930...dollars....	.....	.....	.....	.....	.....	19.84	9.55
48	1920...dollars....	.....	.....	.....	.....	.....	31.88	.....
49	Average investment per acre irrigated.....1939...dollars....	48.26	135.20	11.29	150.83	72.37	44.68	16.71
50	Estimated final investment in existing enterprises..1940...dollars....	3,582	10,790	2,450	4,120	73,225	12,600	73,991
51	1930...dollars....	.....	.....	.....	.....	.....	32,900	25,195
52	1920...dollars....	.....	.....	.....	.....	.....	751,309	.....
53	Increase or decrease (-), 1930-1940.....percent....	.....	.....	.....	.....	.....	-61.7	193.7
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940...dollars....	22.11	77.63	4.84	62.42	79.51	8.54	9.18
55	1930...dollars....	.....	.....	.....	.....	.....	17.80	9.38
56	1920[4]...dollars....	.....	.....	.....	.....	.....	20.84	.....
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
57	Enterprises reporting maintenance and operation...1939...number.....	8	10	5	5	6	3	11
58	Area irrigated in these enterprises.....1939...acres.....	68	75	217	24	846	247	4,363
59	Cost of maintenance and operation.....1939...dollars....	332	1,423	146	315	2,170	1,550	3,113
60	Average cost, per acre irrigated.....1939...dollars....	4.88	18.97	0.67	13.12	2.57	6.28	0.71
61	1929...dollars....	.....	.....	.....	.....	.....	0.56	1.54
62	Total annual charges (reported)[5] [6].....1939...dollars....	.....	293	.....	.....	277	.....	2,985
63	Average annual charge per acre irrigated.....1939...dollars....	.....	18.31	.....	.....	0.55	.....	0.87
64	Area against which charges were assessed.....1939...acres.....	.....	16	.....	.....	525	.....	6,782
65	Average annual charge per acre assessed.....1939...dollars....	.....	18.31	.....	.....	0.53	.....	0.44
66	Total charges collected[5].....1939...dollars....	.....	.....	.....	.....	278	.....	3,201
67	Indebtedness to December 31 (reported)[6].....1939...dollars....	.....	.....	.....	.....	.....	.....	34,406
	WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered.....1939...number.....	8	10	5	5	6	4	8
69	Area irrigated in these enterprises.....1939...acres.....	68	75	217	24	846	282	4,050
70	Water delivered in these enterprises.....1939...acre-feet..	16	141	826	14	929	406	6,647
71	Average water delivered per acre irrigated.....1939...acre-feet..	0.2	1.9	3.8	0.6	1.1	1.4	1.6
72	Average cost of water per acre irrigated.....1939...dollars....	4.88	18.97	0.67	13.12	0.88	6.28	1.01
	DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage.....1939...number.....	.....	.....	.....	2	.....	1	2
74	Irrigable area in these enterprises.....1939...acres.....	.....	.....	.....	([3])	.....	([3])	([3])
75	Irrigated area in these enterprises.....1939...acres.....	.....	.....	.....	([3])	.....	([3])	([3])
76	Area for which drains have been installed.....1939...acres.....	.....	.....	.....	([3])	.....	([3])	([3])
77	Additional area needing drainage.....1939...acres.....	.....	.....	.....	([3])	.....	([3])	([3])

*Census of Agriculture. [1]Data between census years not comparable (see headnote). [2]Percent not shown when more than 1,000. [3]Data are included only in State totals because less than 3 farms or 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.

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	Billings	Cass	Dunn	Grant	McKenzie	Mercer
	FARM VALUES, 1940*							
1	Land and buildings, all farms....dollars..	490,197,358	1,912,489	34,238,227	7,293,693	6,086,202	8,255,455	5,530,123
2	Land and buildings, irrigated farms....dollars..	4,371,806	40,500	226,720	137,160	130,210	1,614,155	58,270
	Operated by—							
3	(a) Owners and managers....dollars..	3,236,068	(1)	193,700	(1)	46,840	1,131,025	58,270
4	(b) Tenants....dollars..	1,135,738	(1)	33,020	(1)	83,370	483,130	.....
5	Average, land and buildings, per farm....dollars..	9,126.94	5,785.71	25,191.11	11,430.00	6,200.48	9,665.60	7,283.75
6	per acre in farms....dollars..	12.67	4.17	50.54	6.68	5.33	31.83	14.48
7	Buildings, irrigated farms reporting value....number...	469	6	8	12	20	163	8
8	Total reported....dollars..	1,200,510	9,600	36,700	37,000	40,860	425,640	19,250
9	Average, per irrigated farm reporting....dollars..	2,559.72	1,600.00	4,587.50	3,083.33	2,043.00	2,611.29	2,406.25
10	per acre on all irrigated farms....dollars..	3.48	0.99	8.18	1.80	1.67	8.39	4.78
11	Buildings, nonirrigated farms reporting value....number...	68,151	440	2,404	1,272	1,159	1,315	1,018
12	Total reported....dollars..	139,174,486	417,074	9,704,660	1,645,635	1,671,970	1,661,265	1,477,532
13	Average, per nonirrigated farm reporting....dollars..	2,042.15	947.90	4,036.88	1,293.74	1,442.60	1,263.32	1,451.41
14	per acre on all nonirrigated farms....dollars..	3.70	1.22	8.91	1.66	1.92	1.92	2.37
15	Implements and machinery, irrigated farms reporting value..number...	459	7	8	12	21	161	7
16	Total reported....dollars..	616,899	4,600	40,790	22,470	19,050	256,890	8,800
17	Average, per irrigated farm reporting....dollars..	1,344.01	657.14	5,098.75	1,872.50	907.14	1,595.59	1,257.14
18	per acre, on all irrigated farms....dollars..	1.79	0.47	9.09	1.09	0.78	5.07	2.19
19	Implements and machinery, nonirrigated farms reporting value....number...	66,987	441	2,399	1,186	1,145	1,250	1,000
20	Total reported....dollars..	76,259,370	242,867	4,534,153	914,427	803,346	1,154,051	768,080
21	Average, per acre, on all nonirrigated farms....dollars..	2.03	0.71	4.16	0.92	0.92	1.33	1.23
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
22	Enterprises....1940...number....	[2]82	4	4	5	10	3	5
23	1930...number....	23	.....	.....	1	.....	2	.....
24	1920...number....	30	.....	.....	.....	.....	4	.....
25	Average size of enterprise based on irrigable area....1940...acres....	482	15	61	73	6	9,109	33
26	1930...acres....	1,081	.....	.....	.....	.....	10,164	.....
27	1920[3]..acres....	1,916	.....	.....	.....	.....	5,356	.....
28	Diversion dams....1940...number....	19	.....	3	1	1	.....	2
29	Main canals and laterals....1940...length, miles....	159.2	.....	.....	1.0	.....	124.1	.....
30	1930...length, miles....	87	.....	.....	.....	.....	71	.....
31	1920...length, miles....	151	.....	.....	.....	.....	60	.....
32	1940...capacity, c.f.s.[4]....	616	3	13	9	8	96	8
33	1930...capacity, c.f.s.[4]....	1,072	.....	.....	.....	.....	830	.....
34	1920...capacity, c.f.s.[4]....	836	.....	.....	.....	.....	276	.....
35	Pipe lines[5]....1940...length, miles....	3.8	0.2	.....	.....	0.1	0.1	.....
36	Storage dams....1940...number....	14	.....	.....	1	3	.....	.....
37	Reservoirs....1940...number....	14	.....	.....	1	3	.....	.....
38	1930...number....	8	.....	.....	.....	.....	.....	.....
39	1920...number....	9	.....	.....	.....	.....	1	.....
40	1940...capacity, acre-feet..	3,946	.....	.....	(1)	47	.....	.....
41	1930...capacity, acre-feet..	1,466	.....	.....	.....	.....	.....	.....
42	1920...capacity, acre-feet..	1,110	.....	.....	.....	.....	400	.....
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....	11	.....	.....	.....	4	.....	.....
50	1930...number....	.....	.....	.....	.....	.....	.....	.....
51	1920...number....	.....	.....	.....	.....	.....	.....	.....
52	1940...yield, g.p.m....	378	.....	.....	.....	11	.....	.....
53	1930...yield, g.p.m....	.....	.....	.....	.....	.....	.....	.....
54	1920...yield, g.p.m....	.....	.....	.....	.....	.....	.....	.....
55	Pumping plants....1940...number....	83	3	5	5	11	4	6
56	1930...number....	13	.....	.....	.....	.....	.....	.....
57	1920...number....	4	.....	.....	.....	.....	.....	.....
58	Prime movers....1940...capacity, hp....	1,253	13	99	65	50	340	87
59	1930...capacity, hp....	216	.....	.....	.....	.....	.....	.....
60	1920...capacity, hp....	2,068	.....	.....	.....	.....	.....	.....
61	Pumps....1940...capacity, g.p.m....	104,158	1,400	5,270	3,400	1,511	43,200	3,125
62	1930...capacity, g.p.m....	24,900	.....	.....	.....	.....	.....	.....
63	1920...capacity, g.p.m....	51,250	.....	.....	.....	.....	.....	.....
64	Pumping lift, from all sources....1940...average, feet....	17	17	30	13	21	26	18
65	1930...average, feet....	24	.....	.....	.....	.....	.....	.....
66	1920...average, feet....	38	.....	.....	.....	.....	.....	.....
67	from pumped wells....1940...average, feet....	25	.....	.....	.....	35	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES 1939[6]							
68	Enterprises reporting pay roll....number...	8	.....	.....	[7]1	.....	2	[7]1
69	Irrigated area in these enterprises....acres....	19,090	.....	.....	15	.....	(1)	15
70	Wages and salaries paid and payable....dollars..	14,611	.....	.....	85	.....	(1)	85
71	Persons employed during week ending April 29....number...	21	.....	.....	.....	.....	(1)	.....

*Census of Agriculture.
[1]Data are included only in State totals because less than 3 farms or 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.
[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.
[7]Data for less than 3 enterprises shown with permission of the enterprises involved.

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)	Morton	Sioux	Slope	Stark	Ward	Williams	All other counties[1]
	FARM VALUES, 1940*							
1	Land and buildings, all farms.....dollars..	12,559,097	2,224,348	3,142,505	8,665,267	12,818,363	10,869,174	376,602,415
2	Land and buildings, irrigated farms.....dollars..	36,500	296,479	72,220	162,860	256,140	93,985	1,246,607
	Operated by—							
3	(a) Owners and managers.....dollars..	(2)	207,479	(2)	138,800	148,180	67,175	985,209
4	(b) Tenants.....dollars..	(2)	89,000	(2)	24,560	107,960	26,810	261,398
5	Average, land and buildings, per farm.....dollars..	4,055.56	5,813.31	9,027.50	7,755.24	8,538.00	9,398.50	9,893.71
6	per acre in farms.....dollars..	41.06	4.36	7.99	12.66	84.20	8.74	9.85
7	Buildings, irrigated farms reporting value.....number...	9	49	8	21	30	10	125
8	Total reported.....dollars..	14,650	65,300	16,600	56,350	153,600	22,275	302,685
9	Average, per irrigated farm reporting.....dollars..	1,627.78	1,332.65	2,075.00	2,683.33	5,120.00	2,227.50	2,421.48
10	per acre on all irrigated farms.....dollars..	16.48	0.96	1.84	4.38	50.49	2.07	2.39
11	Buildings, nonirrigated farms reporting value.....number...	1,672	377	538	1,226	2,184	1,854	52,602
12	Total reported.....dollars..	3,632,510	347,560	760,936	2,316,580	3,663,410	2,691,374	109,183,980
13	Average, per nonirrigated farm reporting.....dollars..	2,172.55	921.91	1,414.38	1,889.54	1,677.39	1,451.66	2,072.12
14	per acre on all nonirrigated farms.....dollars..	3.29	1.15	1.32	2.85	3.31	2.65	3.92
15	Implements and machinery, irrigated farms reporting value..number...	8	49	8	21	29	10	118
16	Total reported.....dollars..	6,900	39,755	15,870	26,225	17,410	13,855	144,284
17	Average, per irrigated farm reporting.....dollars..	862.50	811.33	1,983.75	1,248.81	600.34	1,385.50	1,222.75
18	per acre, on all irrigated farms.....dollars..	7.76	0.58	1.76	2.04	5.72	1.29	1.14
19	Implements and machinery, nonirrigated farms reporting value.....number...	1,649	361	561	1,238	2,093	1,716	51,848
20	Total reported.....dollars..	1,541,503	204,096	568,623	1,434,481	2,013,169	1,621,545	60,459,029
21	Average, per acre, on all nonirrigated farms.....dollars..	1.39	0.67	0.98	1.77	1.82	1.59	2.17
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
22	Enterprises.....1940...number.....	8	10	5	5	6	4	13
23	1930...number.....	.....	.....	1	.....	2	6	11
24	1920...number.....	.....	.....	.....	.....	.....	26	.....
25	Average size of enterprise based on irrigable area.....1940...acres.....	20	14	101	13	154	369	620
26	1930...acres.....	.....	.....	.....	.....	.....	308	.....
27	1920[3]..acres.....	.....	.....	.....	.....	.....	1,387	.....
28	Diversion dams.....1940...number.....	.....	.....	1	.....	1	2	8
29	Main canals and laterals.....1940...length, miles.....	.....	3.0	.....	.....	23.9	6.2	1.0
30	1930...length, miles.....	.....	.....	.....	.....	.....	14	2
31	1920...length, miles.....	.....	.....	.....	.....	.....	91	.....
32	1940...capacity, c.f.s.[4]....	8	22	14	4	50	34	347
33	1930...capacity, c.f.s.[4]....	.....	.....	.....	.....	.....	228	14
34	1920...capacity, c.f.s.[4]....	.....	.....	.....	.....	.....	560	.....
35	Pipe lines[5].....1940...length, miles.....	.....	0.3	0.1	0.6	1.4	0.1	0.9
36	Storage dams.....1940...number.....	.....	1	4	.....	2	2	1
37	Reservoirs.....1940...number.....	.....	1	4	.....	[6]2	2	1
38	1930...number.....	.....	.....	.....	.....	.....	2	1
39	1920...number.....	.....	.....	.....	.....	.....	6	2
40	1940...capacity, acre-feet..	.....	(2)	2,710	.....	720	8	.....
41	1930...capacity, acre-feet..	.....	.....	.....	.....	.....	(2)	(2)
42	1920...capacity, acre-feet..	.....	.....	.....	.....	.....	983	(2)
43	Wells, flowing.....1940...number.....	.....	.....	.....	.....	.....	710	.....
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.....	1	2	2	1	.....	.....	1
50	1930...number.....	.....	.....	.....	.....	.....	.....	.....
51	1920...number.....	.....	.....	.....	.....	.....	.....	.....
52	1940...yield, g.p.m.....	(2)	(2)	(2)	(2)	.....	.....	(2)
53	1930...yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
54	1920...yield, g.p.m.....	.....	.....	.....	.....	.....	.....	.....
55	Pumping plants.....1940...number.....	8	10	3	6	10	1	11
56	1930...number.....	.....	.....	.....	.....	.....	1	12
57	1920...number.....	.....	.....	.....	.....	.....	4	.....
58	Prime movers.....1940...capacity, hp.....	44	155	4	35	160	(2)	176
59	1930...capacity, hp.....	.....	.....	.....	.....	.....	20	196
60	1920...capacity, hp.....	.....	.....	.....	.....	.....	2,068	.....
61	Pumps.....1940...capacity, g.p.m.....	3,430	7,728	325	1,519	19,775	(2)	9,475
62	1930...capacity, g.p.m.....	.....	.....	.....	.....	.....	1,000	23,900
63	1920...capacity, g.p.m.....	.....	.....	.....	.....	.....	51,250	.....
64	Pumping lift, from all sources.....1940...average, feet.....	13	16	10	16	13	(2)	14
65	1930...average, feet.....	.....	.....	.....	.....	.....	100	16
66	1920...average, feet.....	.....	.....	.....	.....	.....	38	.....
67	from pumped wells.....1940...average, feet.....	(2)	(2)	(2)	(2)	.....	.....	(2)
	PAY ROLL AND NUMBER OF EMPLOYEES 1939[7]							
68	Enterprises reporting pay roll.....number...	.....	[6]1	.....	.....	[6]1	.....	2
69	Irrigated area in these enterprises.....acres....	.....	16	.....	.....	500	.....	(2)
70	Wages and salaries paid and payable.....dollars..	.....	120	.....	.....	1,100	.....	(2)
71	Persons employed during week ending April 29.....number...	.....	.....	.....	.....	3	.....	(2)

* Census of Agriculture.
[1] Data between census years not comparable (see headnote).
[2] Data are included only in State totals because less than 3 farms or 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] Data for less than 3 enterprises shown with permission of the enterprises involved.
[7] Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION — OKLAHOMA

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[1]	1890[2]
Approximate land area of State.....acres....	[4] 44,341,120	[3] 44,396,160	44,421,960	44,424,960	44,424,960	44,424,960	44,424,960
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number...	179,687	213,325	203,866	191,988	190,192	108,000	8,826
Land in all farms.....acres....	34,803,317	35,334,870	33,790,817	31,951,934	28,859,353	22,988,339	1,606,423
Farms irrigated:[4]							
Farms.....number...	275	184	99	73	137	124	[5]
Increase or decrease (-) over preceding census.....percent..	[6] 177.8	.....	35.6	-46.7	10.5	.....	.....
Proportion of all farms.....percent..	0.2	0.1	[7]	[7]	0.1	0.1	.....
Land in farms.....acres....	190,592	[5]	57,367	[5]	[5]	[5]	[5]
Proportion of all farm land.....percent..	0.5	[5]	0.2	[5]	[5]	[5]	[5]
Area irrigated.....acres....	[8] 4,437	[9] 1,361	[10] 2,109	[11]	[11]	2,759	[5]
Increase or decrease (-) over preceding census.....percent..	[6] 110.4	.....	.....	.....	.....	.....	.....
Proportion of total land area of State.....percent..	[7]	[7]	[7]	.....	.....	[7]	.....
Proportion of all farm land.....percent..	[7]	[7]	[7]	.....	.....	[7]	.....
Value of irrigated farms (land and buildings).....dollars..	3,251,114	[5]	1,671,868	[5]	[5]	[5]	[5]
Average per farm.....dollars..	11,822.23	[5]	16,887.54	[5]	[5]	[5]	[5]
Average per acre.....dollars..	17.06	[5]	29.14	[5]	[5]	[5]	[5]
Value of farm implements and machinery[12].....dollars..	324,257	[5]	99,517	[5]	[5]	[5]	[5]
Average per farm[12].....dollars..	1,179.12	[5]	1,005.22	[5]	[5]	[5]	[5]
Average per acre[12].....dollars..	1.70	[5]	1.73	[5]	[5]	[5]	[5]
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number...	120	[5]	77	33	114	[5]	[5]
Farms irrigated.....number...	147	[5]	[5]	[5]	[5]	[5]	[5]
Area irrigated.....acres....	4,160	[5]	1,573	2,969	4,388	[5]	[5]
Area existing works were capable of supplying with water.....acres....	8,624	[5]	7,331	9,672	6,397	[5]	[5]
Area irrigable.....acres....	13,494	[5]	7,344	[13] 11,742	[13] 8,528	[5]	[5]
Additional area existing works were capable of supplying with water.....acres....	4,464	[5]	5,758	6,703	2,009	[5]	[5]
Additional irrigable area in enterprises not supplied with water.....acres....	9,334	[5]	5,771	[13] 8,773	[13] 4,140	[5]	[5]
Investment in irrigation enterprises.....dollars..	272,186	[5]	160,099	151,325	47,200	21,872	[5]
Increase or decrease (-) over preceding census.....percent..	[6] 70.0	[5]	5.8	220.6	115.8	[5]	[5]
Average per acre based on area works were capable of supplying with water.....dollars..	31.56	[5]	21.84	15.65	7.38	[5]	[5]
Increase or decrease (-) over preceding census.....percent..	[6] 44.5	[5]	39.6	112.1	.....	.....	.....
Estimated completed cost of existing enterprises.....dollars..	299,486	[5]	167,909	162,775	47,200	[5]	[5]
Average per acre based on irrigable area in enterprises.....dollars..	22.19	[5]	22.86	[13] 13.86	[13] 5.53	[5]	[5]
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	3.35	[5]	7.62	2.92	0.51	[5]	[5]

[1] Figures for 1900 include Indian Territory. [2] The 1890 figures for land area include Indian Territory; those for number of farms and farm acreage are for Oklahoma Territory alone, no data available for Indian Territory. [3] Due to relocation of the one-hundredth meridian (U. S. Supreme Court decision March 17, 1930) 45 square miles were transferred from Oklahoma to Texas. [4] 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. [5] Not available. [6] Increase or decrease represented by 1940 figures are with reference to 1930 figures, not 1935. [7] Less than one-tenth of 1 percent. [8] Irrigated land from which crops were harvested plus 406 acres of irrigated land used only for pasture. [9] Irrigated land from which crops were harvested. [10] Acreage of irrigated crops including some duplication where 2 or more crops were harvested from same land. [11] Data were secured for crops irrigated but the returns were considered relatively incomplete. [12] Total is for irrigated farms reporting this item. Averages are based on all irrigated farms. [13] For 1920 and 1910 relates to total area in enterprises. Irrigable area for those years were not reported. [4] 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.....	179,687	34,803,317	12,766,219	4,031	406	831,140,748	23.88	141,515,968	4.07	78,448,733	2.25
Owners and managers.....	81,866	20,034,386	6,805,483	2,819	406	495,176,545	24.72	91,660,139	4.58	47,690,049	2.38
Tenants.....	97,821	14,768,931	5,960,736	1,212	.....	335,964,203	22.75	49,855,829	3.38	30,758,684	2.08
Irrigated farms, total.....	275	190,592	30,510	4,031	406	3,251,114	17.06	878,415	4.61	324,257	1.70
Owners and managers.....	205	155,752	24,007	2,819	406	2,631,046	16.89	774,330	4.97	258,271	1.66
Tenants.....	70	34,840	6,503	1,212	.....	620,068	17.80	104,085	2.99	65,986	1.89
Wholly irrigated farms.....	56	44,736	1,068	1,068	346	420,030	9.39	189,685	4.24	37,277	0.83
Owners and managers.....	41	31,367	730	730	346	328,790	10.48	163,800	5.22	33,285	1.06
Tenants.....	15	13,369	338	338	.....	91,240	6.82	25,885	1.94	3,992	0.30
Partly irrigated farms.....	219	145,856	29,442	2,963	60	2,831,084	19.41	688,730	4.72	286,980	1.97
Owners and managers.....	164	124,385	23,277	2,089	60	2,302,256	18.51	610,530	4.91	224,986	1.81
Tenants.....	55	21,471	6,165	874	.....	528,828	24.63	78,200	3.64	61,994	2.89
Nonirrigated farms, total.....	179,412	34,612,725	12,735,709	.....	.....	827,889,634	23.92	140,637,553	4.06	78,124,476	2.25

[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.

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					
								Irrigated area reporting—			Quantity delivered per acre[1]	Cost[1]	
	Enterprises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Quantity	Cost	Quantity and cost		Per acre	Per acre-foot
	Number	*Acres*	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*	*Acres*	*Acres*	*Acres*	*Acre-feet*	*Dollars*	*Dollars*
Total	120	13,494	8,824	4,160	1,573	2,969	164.5	3,974	3,869	3,702	1.4	3.34	2.34
Streams, gravity	11	2,606	2,356	1,631	355	2,522	359.4	1,604	1,631	1,604	0.9	0.63	0.68
Streams, pumped	32	7,033	2,699	1,163	320	188	263.4	1,027	1,158	1,022	1.2	2.96	2.44
Streams, gravity and pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped	39	1,346	1,143	792	63	107	(3)	792	724	724	2.0	6.48	3.31
Wells, flowing	.....	.....	.....	.....	.....	18	.....	.....	.....	.....	.....	.....	.....
Wells, pumped and flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity	1	(2)	(2)	(2)	19	.....	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Lakes, pumped	4	155	95	40	35	.....	14.3	40	40	40	1.0	9.35	9.35
Springs	3	22	22	21	5	6	320.0	21	21	21	2.1	3.67	1.75
Springs and streams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stored storm water	7	104	104	77	.....	.....	.....	77	77	77	2.5	13.64	5.50
City water	18	1,850	1,850	255	235	3	8.5	232	37	33	2.9	12.12	4.21
Sewage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped; wells, pumped	2	(2)	(2)	(2)	.....	.....	.....	(2)	(2)	(2)	(2)	(2)	(2)
Waste water, seepage or drainage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other mixed	3	177	154	85	40	125	112.5	85	85	85	2.4	6.76	2.88
Other and not reported	.....	.....	.....	.....	501	.....	.....	.....	.....	.....	.....	.....	.....

[1] Based on enterprises reporting both quantity and cost of water, assuming (*a*) that for enterprises serving 1 to 4 farms the cost of water is cost of maintenance and operation, and for enterprises serving 5 or more farms it is total annual charges, and (*b*) that enterprises reporting cost and quantity of water had used the same quantity of water per acre as all enterprises which reported water delivered. [2] Data are included only in totals because less than 3 enterprises reported in the 1940 Census. [3] Percent not shown when more than 1,000.

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	Proportion of total	Average per acre[2]	Amount	Proportion of total	Average per acre[2]		Irrigated area reporting	Average per acre	Irrigated area reporting	Average per acre		Irrigated area reporting	Average per acre
	Dollars	*Percent*	*Dollars*	*Dollars*	*Percent*	*Dollars*	*Dollars*	*Acres*	*Dollars*	*Acres*	*Dollars*	*Dollars*	*Acres*	*Dollars*
Total	272,186	100.0	31.56	160,099	100.0	21.84	9.72	3,869	3.35	935	7.62	-4.27	2,626	2.92
Streams, gravity	44,210	16.2	18.76	101,950	63.7	19.83	-1.07	1,631	0.75	255	15.00	-14.25	2,322	1.56
Streams, pumped	67,378	24.8	24.96	9,670	6.0	15.35	9.61	1,158	2.96	320	3.00	-0.04	123	3.74
Streams, gravity and pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wells, pumped	87,265	32.1	76.35	12,225	7.6	185.23	-108.88	724	6.48	61	14.30	-7.82	32	40.76
Wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	55.56
Wells, pumped and flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity	(3)	(3)	(3)	1,000	0.6	52.63	(3)	(3)	(3)	19	5.26	(3)	.....	.....
Lakes, pumped	7,509	2.8	79.04	1,000	0.6	28.57	50.47	40	9.38	.....	.....	.....	.....	.....
Springs	3,480	1.3	158.18	19,000	11.9	37.62	120.56	21	3.67	5	3.00	0.67	6	4.17
Springs and streams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stored storm water	6,000	2.2	57.69	.....	.....	.....	.....	77	13.64	.....	.....	.....	.....	.....
City water	10,044	3.7	5.43	229	0.2	0.97	4.46	37	10.86	235	4.89	5.97	.....	.....
Sewage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, pumped; wells, pumped	(3)	(3)	(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....
Waste water, seepage or drainage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other mixed	5,600	2.1	36.36	2,500	1.6	12.50	23.86	85	6.78	40	5.00	1.78	125	10.00
Other and not reported	.....	.....	.....	12,525	7.8	25.00	.....	.....	.....	.....	.....	.....	.....	.....

[1] Based on irrigated area in enterprises reporting cost of maintenance and operation. [2] Based on area works were capable of supplying with water. [3] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

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

ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF— 1940 Primary enterprises	1940 Supplemental enterprises	1930 Primary enterprises	1920 Primary enterprises	Increase or decrease (-) 1930-40 primary enterprises
AREA IRRIGATED	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*
Total	4,160	.....	1,573	2,969	164.5
Individual and partnership	3,816	.....	1,453	969	162.6
Cooperative, incorporated	.....	.....	120	2,000	.....
Cooperative, unincorporated	.....	.....			.....
Bureau of Reclamation[1] *	.....	.....	.....	.....	.....
Office of Indian Affairs[1]	334	.....	.....	.....	.....
Other federal	10	.....	.....	.....	.....
AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER					
Total	8,624	.....	7,331	9,672	17.6
Individual and partnership	7,961	.....	2,531	2,072	214.5
Cooperative, incorporated	.....	.....	4,800	7,600	.....
Cooperative, unincorporated	.....	.....			.....
Bureau of Reclamation[1] *	.....	.....	.....	.....	.....
Office of Indian Affairs[1]	648	.....	.....	.....	.....
Other federal	15	.....	.....	.....	.....
IRRIGABLE AREA[2]					
Total	13,494	.....	7,344	11,742	83.7
Individual and partnership	12,831	.....	2,544	4,142	404.4
Cooperative, incorporated	.....	.....	4,800	7,600	.....
Cooperative, unincorporated	.....	.....			.....
Bureau of Reclamation[1] *	.....	.....	.....	.....	.....
Office of Indian Affairs[1]	648	.....	.....	.....	.....
Other federal	15	.....	.....	.....	.....

[1] U. S. Dept. of the Interior. [2] For 1920 relates to total area. Irrigable area for that year was not reported. * For explanation of areas, see text, p. 463.

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

TYPE OF ENTERPRISE (For definitions and explanations, see text)	ENTERPRISES Total	ENTERPRISES Serving 5 or more farms	AREAS Irrigable	AREAS Works were capable of supplying with water	AVERAGE COST Primary enterprises: Works and equipment per acre[2]	AVERAGE COST Primary enterprises: Maintenance and operation per acre[3]	AVERAGE COST Supplemental enterprises: Works and equipment per acre	AVERAGE COST Supplemental enterprises: Maintenance and operation per acre	AREA IRRIGATED, 1939[1]: Farms served	Total area	Cropland: From which crops were harvested	Cropland: On which crops failed	Irrigated pasture
	Number	*Number*	*Acres*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Acres*	*Acres*	*Acres*	*Acres*
Total	120	3	13,494	8,624	31.26	3.35	.....	.....	147	4,160	3,603	148	409
Individual and partnership	101	1	12,831	7,961	22.40	3.43	.....	.....	107	3,816	3,259	148	409
Cooperative, incorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cooperative, unincorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
U. S. Bureau of Reclamation*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
U. S. Office of Indian Affairs	18	2	648	648	138.36	2.14	.....	.....	39	334	334	.....	.....
Other federal	[4] 1	.....	15	15	109.27	13.80	.....	.....	1	10	10	.....	.....

[1] Reported by enterprises in the Census of Irrigation, 1940, not by the Census of Agriculture. [2] Based on area works were capable of supplying with water and cost of works and equipment exclusive of water right investment. [3] Based on irrigated area in enterprises reporting maintenance and operation in 1939. [4] Data for less than 3 enterprises shown with permission of the enterprises involved. * For explanation of areas and investment, see text, p. 463.

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: 1940 Total	1940 Primary enterprises	1940 Supplemental enterprises	1940 Total cost of works and equipment	1940 Investment in water rights	1930	1920	Increase or decrease (-) 1930-40	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER: Primary enterprises	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER: Supplemental enterprises	Capital expenditures during 1939[1]	Estimated investment required to complete works
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Percent*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Total	272,186	272,186	.....	269,618	2,568	160,099	151,325	70.0	31.56	.....	.....	27,300
Individual and partnership	180,892	180,892	.....	178,324	2,568	85,099	110,658	112.6	22.72	.....	.....	27,300
Cooperative, incorporated	.....	.....	.....	.....	.....	75,000	40,667	.....	.....	.....	.....	.....
Cooperative, unincorporated	.....	.....	.....	.....	.....				.....	.....	.....	.....
U. S. Bureau of Reclamation*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
U. S. Office of Indian Affairs	89,655	89,655	.....	89,655	.....	.....	.....	.....	138.36	.....	.....	.....
Other federal	1,639	1,639	.....	1,639	.....	.....	.....	.....	109.27	.....	.....	.....

[1] Only for enterprises serving 5 or more farms. * For explanation of investment, see text, p. 463.

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

TYPE OF ENTERPRISE (For definitions and explanations, see text)	INDEBTEDNESS OF ENTERPRISES REPORTING						ARREARAGES OF ENTERPRISES REPORTING[2]				CHARGES OF ENTERPRISES REPORTING		
	Enterprises 1940	Area: Irrigable 1940	Area: Works were capable of supplying with water 1940	Total indebtedness 1940	Average per acre assessed 1939	Average per acre works were capable of supplying with water	Enterprises 1940	Total arrearages: Dec. 31 1939	Total arrearages: Dec. 31 1938	Average per acre assessed 1939	Area assessed 1939	Charges made 1939	Charges collected 1939
	Number	*Acres*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Dollars*	*Dollars*	*Dollars*	*Acres*	*Dollars*	*Dollars*
Total	[3] 2	40	40	15,850	106.79	396.25	.....	.....	.....	.....	719	530	.....
Partnership	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(4)	(4)	.....
Cooperative, incorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cooperative, unincorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bureau of Reclamation[5] *	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Office of Indian Affairs[5]	[3] 2	40	40	[6] 15,850	106.79	396.25	.....	.....	.....	.....	(4)	(4)	.....
Other federal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Only for enterprises serving 5 or more farms. No supplemental enterprises reported indebtedness in this State. [2] In payment of principal, interest, and/or other funded obligations. [3] Data for less than 3 enterprises shown with permission of the enterprises involved. [4] Data are included only in totals because less than 3 enterprises reported in the 1940 Census. [5] U. S. Dept. of the Interior. [6] Represents construction cost of irrigation works less cancellations and repayments. *For explanation of areas and investment, see text, p. 463.

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: Irrigated area reporting 1939	Primary enterprises: Reported cost 1939	Supplemental enterprises: Irrigated area reporting 1939	Supplemental enterprises: Reported cost 1939	Average cost per irrigated acre: Primary enterprises 1939	Average cost per irrigated acre: Supplemental enterprises 1939	Enterprises reporting pay roll	Wages and salaries paid and payable	Employees during week ending April 29
	Acres	*Dollars*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Dollars*	*Number*
Total	3,869	12,973	.....	.....	3.35	.....	.....	.....	.....
Individual and partnership	3,540	12,151	.....	.....	3.43	.....	.....	.....	.....
Cooperative, incorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cooperative, unincorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....
U. S. Bureau of Reclamation*	.....	.....	.....	.....	.....	.....	.....	.....	.....
U. S. Office of Indian Affairs	319	684	.....	.....	2.14	.....	.....	.....	.....
Other federal	10	138	.....	.....	13.80	.....	.....	.....	.....

[1] Only for enterprises serving 5 or more farms. * For explanation of areas and investment, see text, p. 463.

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			
	Diversion	Storage	Capacity at main heading	Length[1]: Earth	Length[1]: Lined[2]	Number	Capacity	Length	Number	Yield	Number	Yield	Prime movers: Number	Prime movers: Rated capacity	Pumps: Number	Pumps: Rated capacity
	Number	*Number*	*Sec.-ft.*	*Miles*	*Miles*		*Ac.-ft.*	*Miles*		*G.p.m.*		*G.p.m.*		*Hp.*		*G.p.m.*
Total	8	21	277	41	1.2	20	900	24.4	....	.....	77	15,486	116	1,037	116	59,280
Individual and partnership	8	17	261	40	1.2	14	829	17.5	....	.....	55	13,886	80	735	80	50,515
Cooperative, incorporated	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
Cooperative, unincorporated	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
Bureau of Reclamation[3]	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
Office of Indian Affairs[3]	.....	4	15	1	.....	6	71	6.6	....	.....	22	1,600	35	272	35	8,015
Other federal	.....	.....	1	.....	.....	.....	.....	0.3	....	.....	.....	.....	1	30	1	750

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

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

MATERIAL	1940		1930	
	Diversion	Storage	Diversion	Storage
	Number	*Number*	*Number*	*Number*
Total	8	21	4	3
Concrete or masonry	1	2	.....	2
Timber	.....	.....	.....	.....
Earth and rock	6	18	4	1
Other and mixed	.....	1	.....	.....
Not reported	1	.....	.....	.....

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* 116	*Percent* 100.0	*G.p.m.* 59,280	*Percent* 100.0	*Feet* 36	Total, 1940	*Number* 116	*Percent* 100.0	*Hp.* 1,037	*Percent* 100.0
Electric motor	32	27.6	7,259	12.2	55	Centrifugal pump	68	58.6	669	64.5
Centrifugal	15	13.0	4,200	7.1	42	Electric	13	11.2	95	9.2
Turbine	10	8.6	2,320	3.9	55	Internal-combustion	55	47.4	574	55.3
Plunger	7	6.0	739	1.2	82	Other	.....	.....	.....	.....
Other	.....	.....	.....	.....	.....	Turbine pump	10	8.6	107	10.3
Internal-combustion engine	65	56.0	49,935	84.2	25	Electric	5	4.3	29	2.8
Centrifugal	56	48.3	45,415	76.6	22	Internal-combustion	5	4.3	78	7.5
Turbine	7	6.0	4,410	7.4	45	Other	.....	.....	.....	.....
Plunger	2	1.7	110	0.2	32	Plunger pump	26	22.4	41	4.0
Other	.....	.....	.....	.....	.....	Electric	7	6.0	21	2.0
Other kinds of motive power	17	14.7	86	0.2	50	Internal-combustion	2	1.7	3	0.3
Centrifugal	.....	.....	.....	.....	.....	Other	17	14.7	17	1.7
Turbine	.....	.....	.....	.....	.....	Other and mixed types of pumps	12	10.4	220	21.2
Plunger	17	14.7	86	0.2	50	Electric	8	6.9	105	10.1
Other	.....	.....	.....	.....	.....	Internal-combustion	4	3.5	115	11.1
Mixed kinds of motive power	2	1.7	2,000	3.4	25	Other	.....	.....	.....	.....
Centrifugal	2	1.7	2,000	3.4	25	Total, 1930	[1]25	.....	229	.....
Turbine	.....	.....	.....	.....	.....	Increase or decrease (-) 1930-1940	91	.....	808	.....
Plunger	.....	.....	.....	.....	.....					
Other	.....	.....	.....	.....	.....					
Total, 1930	30	.....	8,855	.....	33					
Increase or decrease (-) 1930-1940	86	.....	50,425	.....	3					

[1] Number of pumping plants.

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

MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940
	1940[1]	1930	
Total	*Miles* 24.4	*Miles* 0.7	*Percent* [2]
Concrete:			
1 to 12 inches	0.6	.....	.....
13 to 24 inches	.....	.....	.....
Over 24 inches	.....	.....	.....
Metal:			
1 to 12 inches	23.6	0.7	[2]
13 to 24 inches	.....	.....	.....
Over 24 inches	.....	.....	.....
Wood-stave:			
1 to 12 inches	0.1	.....	.....
13 to 24 inches	.....	.....	.....
Over 24 inches	.....	.....	.....
Clay and other:			
1 to 12 inches	0.1	.....	.....
13 to 24 inches	.....	.....	.....
Over 24 inches	.....	.....	.....

[1] Includes siphons and farm pipe lines reported. [2] Percent not shown when more than 1,000.

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

ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage—number	11	4	3
Area irrigable in these enterprises—acres	838	189	[1]1,960
Area irrigated in these enterprises—acres	342	[2]	[2]
Area for which drains have been installed—acres	429	95	.....
Additional area needing drainage—acres	106	50	1,820
Ratio of area drained to area irrigated in—			
(a) Enterprises reporting lands drained and/or needing drainage—percent	125.4	[3]50.3	.....
(b) All irrigation enterprises—percent	10.3	6.0	.....
Ratio of area drained plus area needing drainage to—			
(a) Irrigable area reporting—percent	63.8	76.7	[1]92.9
(b) Irrigated area reporting—percent	156.4	[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.

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

ITEM (For definitions and explanations, see text)	TOTAL			MEASURED			NOT MEASURED		
	1939	1929[1]	1919[1]	1939[2]	1929[1]	1919[1]	1939	1929[1]	1919[1]
From surface sources reported:									
Total water entering canals.....acre-feet..	16	.....	.....	16	.....	.....	.....	.....	.....
Area irrigated by these enterprises.....acres.....	19	.....	.....	19	.....	.....	.....	.....	.....
Average water per acre irrigated.....acre-feet..	0.8	.....	.....	0.8	.....	.....	.....	.....	.....
Total water delivered to irrigators.....acre-feet..	3,836	.....	.....	.....	.....	.....	3,836	.....	.....
Area irrigated by these enterprises.....acres.....	3,069	.....	.....	.....	.....	.....	3,069	.....	.....
Average water per acre irrigated.....acre-feet..	1.2	.....	.....	.....	.....	.....	1.2	.....	.....
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	1,835	.....	.....	7	.....	.....	1,828	.....	.....
Area irrigated by these enterprises.....acres.....	905	.....	.....	15	.....	.....	890	.....	.....
Average water per acre irrigated.....acre-feet..	2.0	.....	.....	0.5	.....	.....	2.1	.....	.....

[1]Not reported. [2]Data only for enterprises serving 5 or more farms.

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				
	Acres	*Percent*	*Acres*	*Acres*	*Percent*	*Acres*	*Percent*
Total	4,160	100.0	.....	1,573	100.0	2,969	100.0
Appropriation[1]	2,294	55.1	.....	742	47.1	560	18.8
Riparian	766	18.4	.....	17	1.1	80	2.7
Underground	576	13.9	.....	78	5.0	120	4.1
Riparian and underground	89	2.1	.....	.....	.....	.....	.....
Adjudicated by court	266	6.4	.....	.....	.....	2,200	74.1
Other mixed and not reported	169	4.1	.....	736	46.8	9	0.3

[1]"Appropriation" includes water rights published in the 1930 and 1920 Census reports as "Appropriation and use," "Notice filed and posted," "Permit from State," and "Certificate or license from State."

BUREAU OF RECLAMATION ACTIVITIES

There were no projects of the United States Bureau of Reclamation in operation in Oklahoma at the time the Irrigation Census of 1940 was taken. Consequently, none of the areas or investment reported in State tables 5, 6, 7, 8, and 9 relate to activities of that agency.

The Bureau has under construction, however, the Lugert-Altus Project on the North Fork of the Red River, which will irrigate about 70,000 acres of productive land that has been unsuccessfully dry-farmed. The project is located in Greer, Kiowa, and Jackson Counties.

The reservoir of 200,000 acre-feet capacity will serve for flood control and also supplement the municipal water supply for the city of Altus. A nonreimbursable allocation for flood control, a Work Projects Administration grant for labor, and the municipal water supply cost to be borne by the city of Altus will materially reduce the cost of irrigation. The estimated over-all cost of the project is $5,600,000, of which $2,520,000 is represented by the flood control and WPA grants, $1,080,000 by the water allocation to the city of Altus, and $2,000,000 by irrigation.

The droughts of the thirties, which had the effect of reducing population in Oklahoma for the first decade since it became a State, has revived interest in irrigation in the State. State authorities and the Bureau of Reclamation are conducting investigations of potential projects at various points, several in connection with flood control projects.

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STATE TABLE 17.—ENTERPRISES, AREA IRRIGATED, CAPITAL INVESTED, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS AND ARREARAGE, TYPE OF ENTERPRISE, PAY ROLL, NUMBER OF EMPLOYEES, AND SOURCE OF WATER SUPPLY; BY SPECIFIED GROUPS OF IRRIGATED FARMS, AREAS IRRIGATED, AND COST OF WORKS: CENSUS OF 1940

	PRIMARY ENTERPRISES (For definitions and explanations, see text)	TOTAL	IRRIGATED FARMS			
			No farms[1]	1 farm	2 to 4 farms	5 to 24 farms
1	Enterprises, 1940.....number...	120	9	97	11	3
2	Irrigated farms, 1939.....number...	147	.....	97	24	26
3	Area irrigated, 1939.....acres....	4,160	.....	2,269	1,157	734
4	(a) From which crops were harvested.....acres....	3,603	.....	2,173	1,057	373
5	(b) On which crops failed.....acres....	148	.....	43	90	15
6	(c) Irrigated pasture.....acres....	409	.....	53	10	346
	CAPITAL INVESTMENT, 1940					
7	Total capital investment in all enterprises.....dollars..	272,186	17,644	168,694	44,498	41,350
8	(a) Cost of irrigation works and equipment.....dollars..	269,618	17,644	166,659	44,465	40,850
9	(b) Investment in water rights.....dollars..	2,568	.....	2,035	33	500
10	Area works were capable of supplying with water.....acres....	8,624	210	3,624	3,750	1,040
11	Average investment per acre irrigated.....dollars..	65.43	.....	74.35	38.46	56.34
12	Average investment per acre which the works could supply with water....dollars..	31.56	84.02	46.55	11.87	39.76
	MAINTENANCE AND OPERATION, AND CHARGES, 1939					
13	Enterprises reporting maintenance and operation.....number...	107	5	90	12	
14	(a) Area irrigated in these enterprises.....acres....	3,869	.....	2,127	1,742	
15	(b) Cost of maintenance and operation.....dollars..	12,973	5	10,714	2,254	
16	(c) Average cost per irrigated acre reporting.....dollars..	3.35	.....	5.04	1.29	
17	Total annual charges[2].....dollars..	530	.....	.....	530	
18	Average charge per irrigated acre reporting.....dollars..	0.74	.....	.....	0.74	
19	Area against which charges were assessed.....acres....	719	.....	.....	719	
20	Average annual charge per acre assessed.....dollars..	0.74	.....	.....	0.74	
21	Total charges collected[2].....dollars..	.....	.....	.....	.....	
	INDEBTEDNESS AND ARREARAGE, 1939					
22	Enterprises reporting indebtedness[3].....number...	[4] 2	.....	.....	.....	2
23	(a) Area irrigated in these enterprises.....acres....	34	.....	.....	.....	34
24	(b) Indebtedness.....dollars..	15,850	.....	.....	.....	15,850
25	(c) Average indebtedness per acre irrigated.....dollars..	466.18	.....	.....	.....	466.18
26	(d) Cost of irrigation works and equipment.....dollars..	15,850	.....	.....	.....	15,850
27	(e) Investment in water rights.....dollars..	.....	.....	.....	.....	.....
28	(f) Total investment.....dollars..	15,850	.....	.....	.....	15,850
29	(g) Maintenance and operation.....dollars..	31	.....	.....	.....	31
30	(h) Total annual charges[2].....dollars..	30	.....	.....	.....	30
31	(i) Total charges collected[2].....dollars..	.....	.....	.....	.....	.....
32	(j) Area against which annual charges were assessed.....acres....	19	.....	.....	.....	19
33	(k) Average indebtedness per acre assessed.....dollars..	106.79	.....	.....	.....	106.79
34	(l) Average charges per acre assessed.....dollars..	1.58	.....	.....	.....	1.58
35	(m) Average charges per acre irrigated.....dollars..	1.58	.....	.....	.....	1.58
	TYPE, 1940					
36	Individual and partnership.....number...	101	7	85	8	1
37	Cooperative (incorporated and unincorporated).....number...	.....	.....	.....	.....	.....
38	U. S. Bureau of Reclamation.....number...	.....	.....	.....	.....	.....
39	U. S. Office of Indian Affairs.....number...	18	2	11	3	2
40	All other.....number...	1	.....	1	.....	.....
	SOURCE OF WATER SUPPLY, 1939					
41	Streams, gravity.....number...	11	1	7	2	1
42	Streams, pumped.....number...	32	1	26	4	1
43	Wells, pumped.....number...	39	3	31	4	1
44	Wells, pumped and flowing; or wells flowing.....number...	.....	.....	.....	.....	.....
45	Lakes, gravity or pumped.....number...	5	1	4	.....	.....
46	Streams and springs; or springs.....number...	3	.....	3	.....	.....
47	Mixed, streams and wells.....number...	2	.....	2	.....	.....
48	Other mixed or stored storm water.....number...	28	3	24	1	.....

[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. [3] Indebtedness was reported only by enterprises serving 5 or more farms. [4] 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 STATION	County	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]
Arkansas River		*Feet*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Degrees F.*	*Degrees F.*
Springer, N. Mex.	Colfax	5,857	14.57	+0.08	2.39	+0.70	1.64	+0.35	3.41	-1.33	7.13	+0.36	50.1	+0.1
Tucumcari, N. Mex.	Quay	4,100	12.56	-5.54	2.17	-0.60	1.81	+0.35	3.82	-2.20	4.76	-3.09	58.1	+0.1
Boise City	Cimarron	4,000	16.11	+0.06	3.44	+0.48	4.31	+2.78	5.83	+0.45	2.53	-3.65	55.4	+1.8
Buffalo	Harper	1,950	16.87	-5.27	1.00	-2.65	4.02	+0.98	9.25	+1.25	2.60	-4.85	61.2	+2.5
Oakwood	Dewey	1,854	21.65	-4.97	2.76	-2.17	5.66	+2.39	8.61	-2.23	4.62	-2.96	61.9	+3.4
Enid	Garfield	1,269	25.45	-5.21	3.01	-2.69	5.60	+1.76	12.36	+0.52	4.48	-4.80	62.8	+3.5
Norman	Cleveland	1,171	25.90	-7.41	2.45	-4.74	5.33	+0.26	13.24	+0.67	4.88	-3.60	62.0	+1.1
Blackwell	Kay	1,020	22.75	-9.02	2.93	-3.07	3.56	-0.52	12.66	+0.95	3.60	-6.38	61.4	+1.6
Bristow	Creek	818	29.65	-6.20	4.67	-3.61	5.43	-0.75	11.65	-0.53	7.90	-1.31	62.2	+0.6
Pawhuska	Osage	885	26.27	-11.86	3.99	-2.92	5.74	-0.02	12.37	-1.91	4.17	-7.01	[2]	[2]
McAlester	Pittsburg	738	32.85	-10.48	4.44	-5.34	9.51	+1.35	11.00	-4.33	7.90	-2.16	[2]	[2]
Miami	Ottawa	801	34.24	-10.19	4.15	-4.69	6.93	-0.78	14.93	+0.30	8.23	-5.02	60.7	+1.7
Sailisaw	Sequoyah	531	31.82	-11.05	6.75	-3.07	9.27	+0.77	12.33	-2.42	3.47	-6.33	63.5	+1.5
Red River														
Canyon, Texas	Randall	3,577	17.87	-2.11	3.60	+0.06	2.51	+0.41	9.32	+3.06	2.44	-5.64	[2]	[2]
Hollis	Harmon	1,610	17.55	-7.18	1.88	-3.81	4.99	+1.95	8.43	-0.24	2.25	-5.08	64.5	+2.1
Cloud Chief	Washita	1,400	22.21	-7.67	2.63	-4.00	4.58	+1.07	9.80	-1.55	5.20	-3.19	63.0	+2.2
Lawton	Comanche	1,111	17.20	-15.54	2.55	-4.70	5.52	+1.37	6.14	-6.52	2.99	-5.69	65.5	+3.8
Sulphur	Murray	1,011	25.09	-12.68	3.98	-4.78	6.76	+0.44	9.83	-4.08	4.52	-4.26	65.1	+2.3
Idabel	McCurtain	504	39.91	-5.09	5.61	-5.01	15.68	+4.39	14.23	-0.06	4.39	-4.41	64.8	+0.9

[1] Departure from normal. [2] Not available.

STATE TABLE 17.—ENTERPRISES, AREA IRRIGATED, CAPITAL INVESTED, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS AND ARREARAGE, TYPE OF ENTERPRISE, PAY ROLL, NUMBER OF EMPLOYEES, AND SOURCE OF WATER SUPPLY, BY SPECIFIED GROUPS OF IRRIGATED FARMS, AREAS IRRIGATED, AND COST OF WORKS, CENSUS OF 1940—Continued

	PRIMARY ENTERPRISES (For definitions and explanations, see text)	ACRES IRRIGATED				COST OF IRRIGATION WORKS AND EQUIPMENT		
		No acres[1]	1 to 99 acres	100 to 299 acres	300 to 1,799 acres	Less than $5,000	$5,000 to $14,999	$15,000 to $99,999
1	Enterprises, 1940.....number...	9	102	7	2	108	9	3
2	Irrigated farms, 1939.....number...	.....	128	11	8	114	25	8
3	Area irrigated, 1939.....acres....	.....	1,885	2,275		2,393	778	989
4	(a) From which crops were harvested.....acres....	.....	1,759	1,844		2,257	718	628
5	(b) On which crops failed.....acres....	.....	73	75		73	60	15
6	(c) Irrigated pasture.....acres....	.....	53	356		63	.....	346
	CAPITAL INVESTMENT, 1940							
7	Total capital investment in all enterprises.....dollars..	17,644	190,972	63,570		125,561	66,125	80,500
8	(a) Cost of irrigation works and equipment.....dollars..	17,644	188,924	63,050		123,503	66,115	80,000
9	(b) Investment in water rights.....dollars..	.....	2,048	520		2,058	10	500
10	Area works were capable of supplying with water.....acres....	210	2,864	5,550		5,568	867	2,189
11	Average investment per acre irrigated.....dollars..	.....	101.31	27.94		52.47	84.99	81.40
12	Average investment per acre which the works could supply with water....dollars..	84.02	66.68	11.45		22.55	76.27	36.77
	MAINTENANCE AND OPERATION, AND CHARGES, 1939							
13	Enterprises reporting maintenance and operation.....number...	5	94	8		96	8	3
14	(a) Area irrigated in these enterprises.....acres....	.....	1,728	2,141		2,117	763	989
15	(b) Cost of maintenance and operation.....dollars..	5	10,029	2,339		10,454	859	1,660
16	(c) Average cost per irrigated acre reporting.....dollars..	.....	6.15	1.09		4.94	1.13	1.68
17	Total annual charges[2].....dollars..	.....	30	500		30	.....	500
18	Average charge per irrigated acre reporting.....dollars..	.....	1.58	0.71		1.58	.....	0.71
19	Area against which charges were assessed.....acres....	.....	19	700		19	.....	700
20	Average annual charge per acre assessed.....dollars..	.....	1.58	0.71		1.58	.....	0.71
21	Total charges collected[2].....dollars..	.....	.....	.....		.....	.....	.....
	INDEBTEDNESS AND ARREARAGE, 1939							
22	Enterprises reporting indebtedness[3].....number...	.....	2	.....	.....	1	1	.....
23	(a) Area irrigated in these enterprises.....acres....	.....	34	.....	.....	19	15	.....
24	(b) Indebtedness.....dollars..	.....	15,850	.....	.....	2,029	13,821	.....
25	(c) Average indebtedness per acre irrigated.....dollars..	.....	466.18	.....	.....	106.79	921.40	.....
26	(d) Cost of irrigation works and equipment.....dollars..	.....	15,850	.....	.....	2,029	13,821	.....
27	(e) Investment in water rights.....dollars..	.....	.....	.....	.....	.....	.....	.....
28	(f) Total investment.....dollars..	.....	15,850	.....	.....	2,029	13,821	.....
29	(g) Maintenance and operation.....dollars..	.....	31	.....	.....	31	.....	.....
30	(h) Total annual charges[2].....dollars..	.....	30	.....	.....	30	.....	.....
31	(i) Total charges collected[2].....dollars..	.....	.....	.....	.....	.....	.....	.....
32	(j) Area against which annual charges were assessed.....acres....	.....	19	.....	.....	19	.....	.....
33	(k) Average indebtedness per acre assessed.....dollars..	.....	106.79	.....	.....	106.79	.....	.....
34	(l) Average charges per acre assessed.....dollars..	.....	1.58	.....	.....	1.58	.....	.....
35	(m) Average charges per acre irrigated.....dollars..	.....	1.58	.....	.....	1.58	.....	.....
	TYPE, 1940							
36	Individual and partnership.....number...	7	86	6	2	95	3	3
37	Cooperative (incorporated and unincorporated).....number...	.....	.....	.....	.....	.....	.....	.....
38	U. S. Bureau of Reclamation.....number...	.....	.....	.....	.....	.....	.....	.....
39	U. S. Office of Indian Affairs.....number...	2	15	1	.....	12	6	.....
40	All other.....number...	.....	1	.....	.....	1	.....	.....
	SOURCE OF WATER SUPPLY, 1939							
41	Streams, gravity.....number...	1	6	2	2	8	2	1
42	Streams, pumped.....number...	1	28	3	.....	29	2	1
43	Wells, pumped.....number...	3	35	1	.....	34	5	.....
44	Wells, pumped and flowing; or wells flowing.....number...	.....	.....	.....	.....	.....	.....	.....
45	Lakes, gravity or pumped.....number...	1	4	.....	.....	5	.....	.....
46	Streams and springs; or springs.....number...	.....	3	.....	.....	3	.....	.....
47	Mixed, streams and wells.....number...	.....	2	.....	.....	1	.....	1
48	Other mixed or stored storm water.....number...	3	24	1	.....	28	.....	.....

[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. [3] Indebtedness was reported only by enterprises serving 5 or more farms.

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

Precipitation in Oklahoma during the calendar year (1938) was slightly above normal (+0.82 inches) and during the calendar year (1939) was considerably below normal (-5.56 inches) as reported by the United States Weather Bureau.

The precipitation during the water year (October 1938 through September 1939) was substantially below normal for the entire State (-8.11 inches) as indicated by the average for 16 typical Oklahoma weather stations shown in State table 18. Five of these typical weather stations in the drainage basins of the tributaries of the Red River show an average deficiency of 9.63 inches for the water year. The Weather Bureau reports further:

"The average precipitation was 26.71 inches, which is 5.56 inches less than the average of the past 48 years. During the last 20 years, only 1936, with an average of 22.69 inches, was drier than this year, and there have been only 7 drier years than 1939, since the record began. September was the driest month, and was also, by far, the driest September on record, the State average precipitation being only 0.33 inch. January, February, and June were the only months with more than normal precipitation, and the latter month was the wettest of the year. Heavy dust storms occurred with much more than usual frequency during the first half of the year. The storm on March 11th covered practically the entire State, and for much of Oklahoma, was reported to have been the heaviest of record.

"The average temperature for the year, 62.7°, was 2.2° above the 48-year average. Only in 1921, 1933, 1934 and 1938 were the annual mean temperatures higher, while the mean this year was only 0.1° lower than last year."

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

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	STATE TOTAL	MISSISSIPPI RIVER (Mississippi River drains entire State; therefore, Mississippi River total for Oklahoma is identical with State Total)				
			Arkansas River				
			Total	Direct (3)	Salt Fork Arkansas River (4)	Cimarron River (5)	Verdigris River (2)
	IRRIGATED FARMS AND AREAS						
1	Irrigated farms....1939...number....	147	102	34	4	22	6
2	Area irrigated....1939...acres....	4,160	3,051	308	84	2,008	24
3	(a) Cropland harvested....1939...acres....	3,603	2,547	308	84	1,546	24
4	(b) Crop failure....1939...acres....	148	148	.....	.....	116	.....
5	(c) Pasture....1939...acres....	409	356	.....	.....	346	.....
6	Area irrigated....1929...acres....	1,573	954	.....	.....	293	.....
7	1919...acres....	2,969	2,843	.....	.....	2,538	.....
8	Increase or decrease (-), 1929-1939....percent....	164.5	219.8	.....	.....	585.3	.....
9	Irrigable area in enterprises....1940...acres....	13,494	9,853	456	147	7,868	27
10	1930...acres....	7,344	5,987	.....	.....	5,088	.....
11	1920[1]..acres....	11,742	11,449	.....	.....	10,929	.....
12	Excess of irrigable area over the area irrigated..1940...acres....	9,334	6,802	148	63	5,960	3
13	1930...acres....	5,771	5,033	.....	.....	4,795	.....
14	1920[1]..acres....	8,773	8,606	.....	.....	8,341	.....
15	Area works were capable of supplying with water...1940...acres....	8,624	5,290	456	97	3,718	27
16	1930...acres....	7,331	5,974	.....	.....	5,076	.....
17	1920...acres....	9,672	9,379	.....	.....	8,879	.....
18	Increase or decrease (-), 1930-1940....percent....	17.6	-11.4	.....	.....	-26.8	.....
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres....	4,464	2,239	148	13	1,710	3
20	1930...acres....	5,758	5,020	.....	.....	4,783	.....
21	1920...acres....	6,703	6,536	.....	.....	6,291	.....
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent....	48.2	57.7	67.5	86.6	54.0	88.9
23	1929...percent....	21.5	16.0	.....	.....	5.8	.....
24	1919...percent....	30.7	30.3	.....	.....	29.1	.....
	CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises....1940...dollars....	272,186	216,335	69,441	4,175	63,110	2,815
26	(a) Cost of irrigation works and equipment....1940...dollars....	269,618	215,687	69,441	4,175	62,600	2,740
27	(b) Investment in water rights (reported)....1940...dollars....	2,568	648	.....	.....	510	75
28	Total investment in irrigation enterprises....1930...dollars....	160,099	134,045	.....	.....	102,750	.....
29	1920...dollars....	151,325	142,597	.....	.....	93,157	.....
30	Increase or decrease (-), 1930-1940....percent....	70.0	61.4	.....	.....	-38.6	.....
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars....	31.56	40.90	152.28	43.04	16.97	104.26
32	1930...dollars....	21.84	22.44	.....	.....	20.24	.....
33	1920...dollars....	15.65	15.20	.....	.....	10.49	.....
34	Average investment per acre irrigated....1939...dollars....	65.43	70.91	225.46	49.70	31.43	117.29
35	Estimated final investment in existing enterprises..1940...dollars....	299,486	240,585	69,441	5,175	80,610	2,815
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars....	22.19	24.42	152.28	35.20	10.12	104.26
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
37	Enterprises reporting maintenance and operation...1939...number....	107	77	20	4	14	6
38	Area irrigated in these enterprises....1939...acres....	3,869	2,982	288	84	2,008	24
39	Cost of maintenance and operation....1939...dollars....	12,973	8,525	1,844	160	1,905	372
40	Average cost per acre irrigated....1939...dollars....	3.35	2.86	6.40	1.90	0.95	15.50
41	Total annual charges (reported)[2] [3]....1939...dollars....	530	500	.....	.....	500	.....
42	Average annual charge per acre irrigated....1939...dollars....	0.74	0.71	.....	.....	0.71	.....
43	Area against which charges were assessed....1939...acres....	719	700	.....	.....	700	.....
44	Average annual charge per acre assessed....1939...dollars....	0.74	0.71	.....	.....	0.71	.....
45	Total charges collected[2]....1939...dollars....	.....	.....	.....	.....	.....	.....
46	Indebtedness to December 31 (reported)[3]....1939...dollars....	15,850	13,821	13,821	.....	.....	.....
	WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered....1939...number....	105	71	20	4	14	6
48	Area irrigated by these enterprises....1939...acres....	3,974	3,020	308	84	2,008	24
49	Water delivered....1939...acre-feet..	5,671	3,738	576	88	1,952	29
50	Average water delivered per acre irrigated....1939...acre-feet..	1.4	1.2	1.9	1.0	1.0	1.2
51	Average cost of water per acre irrigated....1939...dollars....	3.34	2.82	6.40	1.90	0.95	15.50
52	Average cost of water per acre-foot delivered..1939...dollars....	2.34	2.28	3.42	1.82	0.98	12.83
	DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage....1939...number....	11	4	1	.....	.....	.....
54	Irrigable area in these enterprises....1939...acres....	838	293	([4])	.....	.....	.....
55	Irrigated area in these enterprises....1939...acres....	342	157	([4])	.....	.....	.....
56	Area for which drains have been installed....1939...acres....	429	17	([4])	.....	.....	.....
57	Additional area needing drainage....1939...acres....	106	16	.....	.....	.....	.....

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

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)	MISSISSIPPI RIVER—Continued					
		Arkansas River—Continued			Red River		
		Canadian River					
		Total	Direct (7)	North Canadian River (6)	Total	Direct (9)	Washita River (10)
	IRRIGATED FARMS AND AREAS						
1	Irrigated farms....1939...number	36	8	28	45	28	17
2	Area irrigated....1939...acres	627	83	544	1,109	841	268
3	(a) Cropland harvested....1939...acres	585	83	502	1,056	841	215
4	(b) Crop failure....1939...acres	32	.....	32	.....	.....	.....
5	(c) Pasture....1939...acres	10	.....	10	53	.....	53
6	Area irrigated....1929...acres	319	.....	.....	619	.....	.....
7	1919...acres	251	.....	.....	126	.....	.....
8	Increase or decrease (-), 1929-1939....percent	96.6	.....	.....	79.2	.....	.....
9	Irrigable area in enterprises....1940...acres	1,255	128	1,127	3,641	2,875	766
10	1930...acres	556	.....	.....	1,357	.....	.....
11	1920[1]...acres	502	.....	.....	293	.....	.....
12	Excess of irrigable area over the area irrigated...1940...acres	628	45	583	2,532	2,034	498
13	1930...acres	237	.....	.....	738	.....	.....
14	1920[1]...acres	251	.....	.....	167	.....	.....
15	Area works were capable of supplying with water...1940...acres	992	128	864	3,334	2,830	504
16	1930...acres	556	.....	.....	1,357	.....	.....
17	1920...acres	495	.....	.....	293	.....	.....
18	Increase or decrease (-), 1930-1940....percent	78.4	.....	.....	145.7	.....	.....
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres	365	45	320	2,225	1,989	236
20	1930...acres	237	.....	.....	738	.....	.....
21	1920...acres	244	.....	.....	167	.....	.....
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	63.2	64.8	63.0	33.3	29.7	53.2
23	1929...percent	57.4	.....	.....	45.6	.....	.....
24	1919...percent	50.7	.....	.....	43.0	.....	.....
	CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises....1940...dollars	76,794	7,812	68,982	55,851	24,919	30,932
26	(a) Cost of irrigation works and equipment....1940...dollars	76,731	7,812	68,919	53,931	23,899	30,032
27	(b) Investment in water rights (reported)....1940...dollars	63	.....	63	1,920	1,020	900
28	Total investment in irrigation enterprises....1930...dollars	13,195	.....	.....	26,054	.....	.....
29	1920...dollars	46,234	.....	.....	8,728	.....	.....
30	Increase or decrease (-), 1930-1940....percent	482.0	.....	.....	114.4	.....	.....
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars	77.41	61.03	79.84	16.75	8.81	61.37
32	1930...dollars	23.73	.....	.....	19.20	.....	.....
33	1920...dollars	93.40	.....	.....	29.79	.....	.....
34	Average investment per acre irrigated....1939...dollars	122.48	94.12	126.81	50.36	29.63	115.42
35	Estimated final investment in existing enterprises...1940...dollars	82,544	10,562	71,982	58,901	26,394	32,507
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars	65.77	82.52	63.87	16.18	9.18	42.44
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
37	Enterprises reporting maintenance and operation...1939...number	33	9	24	30	16	14
38	Area irrigated in these enterprises....1939...acres	578	83	495	887	620	267
39	Cost of maintenance and operation....1939...dollars	4,244	414	3,830	4,448	3,104	1,344
40	Average cost per acre irrigated....1939...dollars	7.34	4.99	7.74	5.01	5.01	5.03
41	Total annual charges (reported)[2 3]....1939...dollars	.....	.....	.....	30	30	.....
42	Average annual charge per acre irrigated....1939...dollars	.....	.....	.....	1.58	1.58	.....
43	Area against which charges were assessed....1939...acres	.....	.....	.....	19	19	.....
44	Average annual charge per acre assessed....1939...dollars	.....	.....	.....	1.58	1.58	.....
45	Total charges collected[2]....1939...dollars	.....	.....	.....	.....	.....	.....
46	Indebtedness to December 31 (reported)[3]....1939...dollars	.....	.....	.....	2,029	2,029	.....
	WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered....1939...number	27	4	23	34	19	15
48	Area irrigated by these enterprises....1939...acres	596	56	540	954	686	268
49	Water delivered....1939...acre-feet	1,093	37	1,056	1,933	1,514	419
50	Average water delivered per acre irrigated....1939...acre-feet	1.8	0.7	2.0	2.0	2.2	1.6
51	Average cost of water per acre irrigated....1939...dollars	7.39	3.79	7.80	5.39	5.58	5.03
52	Average cost of water per acre-foot delivered...1939...dollars	4.03	5.73	3.99	2.66	2.53	3.22
	DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage....1939...number	3	1	2	7	2	5
54	Irrigable area in these enterprises....1939...acres	287	[4]	[4]	545	[4]	205
55	Irrigated area in these enterprises....1939...acres	151	[4]	[4]	185	[4]	39
56	Area for which drains have been installed....1939...acres	12	.....	[4]	412	[4]	92
57	Additional area needing drainage....1939...acres	16	[4]	[4]	90	[4]	70

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

CENSUS OF IRRIGATION – OKLAHOMA

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	MISSISSIPPI RIVER (Mississippi River drains entire State; therefore, Mississippi River total for Oklahoma is identical with State Total)				
			Arkansas River				
			Total	Direct (3)	Salt Fork Arkansas River (4)	Cimarron River (5)	Verdigris River (2)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1						
1	Enterprises....1940..number	120	81	23	4	14	6
2	Average size of enterprise based on area works were capable of supplying with water....1940..acres	72	65	20	24	266	1
3	Diversion dams....1940..total number	8	6	.....	1	2	.....
4	1930..total number	4	2	.....	.....	2	.....
5	1920..total number	7	7	.....	.....	7	.....
6	(a) Concrete and masonry....1940..number	1	1	.....	.....	1	.....
7	(b) Timber....1940..number	.....	.....	.....	.....	.....	.....
8	(c) Earth and rock....1940..number	6	4	.....	1	1	.....
9	(d) Other, mixed, and not reported..1940..number	1	1	.....	.....	.....	.....
10	Main canals and laterals....1940..total length, miles	42.2	36.2	2.0	1.1	31.0	.....
11	1930..total length, miles	24	21	.....	.....	20	.....
12	1920..total length, miles	57	56	.....	.....	52	.....
13	(a) Earth....1940..length, miles	41	35	2	1	30	.....
14	(b) Lined....1940..length, miles	1.2	1.2	.....	0.1	1.0	.....
15	1940..capacity, c.f.s.[1]	277	215	11	15	174	3
16	1930..capacity, c.f.s.[1]	77	68	.....	.....	66	.....
17	1920..capacity, c.f.s.[1]	344	290	.....	.....	282	.....
18	Pipe lines[2]....1940..total length, miles	24.4	19.5	11.2	0.2	.....	0.5
19	1930..total length, miles	0.7	0.4	.....	.....	0.2	.....
20	1920..total length, miles	4.3	4.3	.....	.....	.....	.....
21	(a) Concrete....1940..length, miles	0.6	.....	.....	.....	.....	.....
22	(b) Metal....1940..length, miles	23.6	19.4	11.2	0.2	.....	0.5
23	(c) Wood-stave....1940..length, miles	0.1	0.1	.....	.....	.....	.....
24	(d) Other, mixed, and not reported..1940..length, miles	0.1	.....	.....	.....	.....	.....
25	Storage dams....1940..total number	21	14	2	2	5	1
26	1930..total number	3	2	.....	.....	1	.....
27	1920..total number	3	2	.....	.....	.....	.....
28	(a) Concrete and masonry....1940..number	2	1	.....	.....	1	.....
29	(b) Earth and rock....1940..number	18	12	1	2	4	1
30	(c) Other, mixed, and not reported..1940..number	1	1	1	.....	.....	.....
31	Reservoirs....1940..total number	20	15	4	2	4	1
32	(a) 1-99 acre-feet capacity....1940..number	19	14	4	2	3	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]	900	854	37	[4]	733	[4]
36	1930..total number	7	6	.....	.....	4	.....
37	1930..total capacity, ac.-ft.	293	281	.....	.....	271	.....
38	Wells, flowing....1940..number	.....	.....	.....	.....	.....	.....
39	1930..number	.....	.....	.....	.....	.....	.....
40	1920..number	1	.....	.....	.....	.....	.....
41	1940..yield, g.p.m.	.....	.....	.....	.....	.....	.....
42	1930..yield, g.p.m.	.....	.....	.....	.....	.....	.....
43	1920..yield, g.p.m.	100	.....	.....	.....	.....	.....
44	Wells, pumped....1940..number	77	58	29	1	2	.....
45	1930..number	18	16	.....	.....	4	.....
46	1920..number	19	19	.....	.....	5	.....
47	1940..yield, g.p.m.	15,486	12,315	2,370	[4]	[4]	.....
48	1930..yield, g.p.m.	2,715	2,625	.....	.....	530	.....
49	1920..yield, g.p.m.	3,643	3,643	.....	.....	2,485	.....
50	Pumping plants....1940..total number	116	77	33	3	9	3
51	1930..total number	25	16	.....	.....	4	.....
52	Prime movers....1940..capacity, hp.	1,037	808	111	14	187	10
53	1930..capacity, hp.	229	145	.....	.....	31	.....
54	1920..capacity, hp.	184	120	.....	.....	33	.....
55	(a) Electric....1940..number	33	22	9	.....	.....	2
56	1940..capacity, hp.	250	167	51	.....	.....	[4]
57	(b) Internal-combustion....1940..number	66	39	10	2	9	1
58	1940..capacity, hp.	770	423	46	[4]	187	[4]
59	(c) Other....1940..number	17	16	14	1	.....	.....
60	1940..capacity, hp.	17	16	14	[4]	.....	.....
61	Pumps....1940..total number	116	77	33	3	9	3
62	1930..number	30	21	.....	.....	7	.....
63	1920..number	26	22	.....	.....	4	.....
64	/ 1940..capacity, g.p.m.	59,280	32,083	4,910	960	13,700	150
65	1930..capacity, g.p.m.	8,855	3,425	.....	.....	680	.....
66	1920..capacity, g.p.m.	7,668	4,668	.....	.....	1,485	.....
67	(a) Centrifugal....1940..number	73	43	14	2	7	2
68	1940..capacity, g.p.m.	51,615	27,190	4,130	[4]	11,700	[4]
69	1940..average capacity, g.p.m.	707	632	295	[4]	1,671	[4]
70	(b) Turbine....1940..number	17	11	3	.....	2	.....
71	1940..capacity, g.p.m.	6,730	4,310	560	.....	[4]	.....
72	1940..average capacity, g.p.m.	396	392	187	.....	[4]	.....
73	(c) Plunger....1940..number	26	23	16	1	.....	1
74	1940..capacity, g.p.m.	935	583	220	[4]	.....	[4]
75	1940..average capacity, g.p.m.	36	25	14	[4]	.....	[4]
76	(d) Other....1940..number	.....	.....	.....	.....	.....	.....
77	1940..capacity, g.p.m.	.....	.....	.....	.....	.....	.....
78	Pumping lift, from all sources....1940..average, feet	36	40	47	27	20	11
79	1930..average, feet	33	35	.....	.....	24	.....
80	1920..average, feet	59	69	.....	.....	28	.....
81	from pumped wells....1940..average, feet	48	46	46	[4]	[4]	.....
82	from surface sources...1940..average, feet	26	30	52	20	17	11

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

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)	MISSISSIPPI RIVER—Continued					
		Arkansas River—Continued			Red River		
		Canadian River					
		Total	Direct (7)	North Canadian River (6)	Total	Direct (9)	Washita River (10)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1						
1	Enterprises.....1940..number	34	9	25	39	23	16
2	Average size of enterprise based on area works were capable of supplying with water.....1940..acres	29	14	35	85	123	32
3	Diversion dams.....1940..total number	3	3	.....	2	2	.....
4	1930..total number	.....	.....	.....	2	.....	.....
5	1920..total number	.....	.....	.....	.....	.....	.....
6	(a) Concrete and masonry.....1940..number	.....	.....	.....	.....	.....	.....
7	(b) Timber.....1940..number	.....	.....	.....	.....	.....	.....
8	(c) Earth and rock.....1940..number	2	2	.....	2	2	.....
9	(d) Other, mixed, and not reported..1940..number	1	1	.....	.....	.....	.....
10	Main canals and laterals.....1940..total length, miles	2.1	2.1	.....	6.0	1.0	5.0
11	1930..total length, miles	1	.....	.....	3	.....	.....
12	1920..total length, miles	4	.....	.....	1	.....	.....
13	(a) Earth.....1940..length, miles	2	2	.....	6	1	5
14	(b) Lined.....1940..length, miles	0.1	0.1	.....	.....	.....	.....
15	1940..capacity, c.f.s.[1]	12	8	4	62	41	21
16	1930..capacity, c.f.s.[1]	2	.....	.....	9	.....	.....
17	1920..capacity, c.f.s.[1]	8	.....	.....	54	.....	.....
18	Pipe lines[2].....1940..total length, miles	7.6	1.3	6.3	4.9	2.2	2.7
19	1930..total length, miles	0.2	.....	.....	0.3	.....	.....
20	1920..total length, miles	4.0	.....	.....	.....	.....	.....
21	(a) Concrete.....1940..length, miles	.....	.....	.....	0.6	0.3	0.3
22	(b) Metal.....1940..length, miles	7.5	1.3	6.2	4.2	1.9	2.3
23	(c) Wood-stave.....1940..length, miles	0.1	.....	0.1	.....	.....	.....
24	(d) Other.....1940..length, miles	.....	.....	.....	0.1	.....	0.1
25	Storage dams.....1940..total number	4	2	2	7	2	5
26	1930..total number	1	.....	.....	1	.....	.....
27	1920..total number	2	.....	.....	1	.....	.....
28	(a) Concrete and masonry.....1940..number	.....	.....	.....	1	.....	1
29	(b) Earth and rock.....1940..number	4	2	2	6	2	4
30	(c) Other, mixed, and not reported..1940..number	.....	.....	.....	.....	.....	.....
31	Reservoirs.....1940..total number	4	2	2	5	2	3
32	(a) 1-99 acre-feet capacity.....1940..number	4	2	2	5	2	3
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]..	68	(4)	(4)	46	(4)	5
36	1930..total number	1	.....	.....	1	.....	.....
37	1930..total capacity, ac.-ft.	1	.....	.....	12	.....	.....
38	Wells, flowing.....1940..number	.....	.....	.....	.....	.....	.....
39	1930..number	.....	.....	.....	.....	.....	.....
40	1920..number	.....	.....	.....	1	.....	.....
41	1940..yield, g.p.m.	.....	.....	.....	.....	.....	.....
42	1930..yield, g.p.m.	.....	.....	.....	.....	.....	.....
43	1920..yield, g.p.m.	.....	.....	.....	100	.....	.....
44	Wells, pumped.....1940..number	28	.....	26	19	16	3
45	1930..number	3	.....	.....	2	.....	.....
46	1920..number	12	.....	.....	.....	.....	.....
47	1940..yield, g.p.m.	8,435	.....	8,435	3,171	2,570	601
48	1930..yield, g.p.m.	645	.....	.....	90	.....	.....
49	1920..yield, g.p.m.	1,106	.....	.....	.....	.....	.....
50	Pumping plants.....1940..total number	29	2	27	39	25	14
51	1930..total number	6	.....	.....	9	.....	.....
52	Prime movers.....1940..capacity, hp	284	(4)	274	431	269	162
53	1930..capacity, hp	45	.....	.....	84	.....	.....
54	1920..capacity, hp	78	.....	.....	64	.....	.....
55	(a) Electric.....1940..number	11	[5]1	10	11	5	6
56	1940..capacity, hp	111	8	103	83	18	65
57	(b) Internal-combustion.....1940..number	17	1	16	27	20	7
58	1940..capacity, hp	172	(4)	170	347	251	96
59	(c) Other.....1940..number	1	.....	1	1	.....	1
60	1940..capacity, hp	(4)	.....	(4)	(4)	.....	(4)
61	Pumps.....1940..total number	29	2	27	39	25	14
62	1930..number	5	.....	.....	9	.....	.....
63	1920..number	16	.....	.....	4	.....	.....
64	1940..capacity, g.p.m.	12,363	(4)	11,763	27,197	16,420	10,777
65	1930..capacity, g.p.m.	1,295	.....	.....	5,430	.....	.....
66	1920..capacity, g.p.m.	3,141	.....	.....	3,000	.....	.....
67	(a) Centrifugal.....1940..number	18	2	16	30	20	10
68	1940..capacity, g.p.m.	10,310	(4)	9,710	24,425	14,300	10,125
69	1940..average capacity, g.p.m..	573	(4)	607	814	715	1,012
70	(b) Turbine.....1940..number	6	.....	6	6	5	[5]1
71	1940..capacity, g.p.m.	1,750	.....	1,750	2,420	2,120	300
72	1940..average capacity, g.p.m..	292	.....	292	403	424	300
73	(c) Plunger.....1940..number	5	.....	5	3	.....	3
74	1940..capacity, g.p.m.	303	.....	303	352	.....	352
75	1940..average capacity, g.p.m..	61	.....	61	117	.....	117
76	(d) Other.....1940..number	.....	.....	.....	.....	.....	.....
77	1940..capacity, g.p.m.	.....	.....	.....	.....	.....	.....
78	Pumping lift, from all sources.....1940..average, feet	45	(4)	47	31	24	40
79	1930..average, feet	45	.....	.....	30	.....	.....
80	1920..average, feet	89	.....	.....	30	.....	.....
81	from pumped wells.....1940..average, feet	49	.....	49	57	35	93
82	from surface sources...1940..average, feet	37	(4)	39	22	21	24

[1] Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources. [2] Includes siphons and farm pipe lines reported. [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. [5] Data for less than 3 enterprises shown with permission of the enterprises involved.

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	Alfalfa	Caddo	Canadian	Carter	Cimarron	Cotton
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms....1940...number....	179,687	2,012	4,425	2,436	2,517	605	1,544
2	1930...number....	203,866	2,328	5,961	2,961	2,195	887	2,045
3	Irrigated farms....1940...number....	275	3	6	5	6	20	15
4	1930...number....	99	3	.....	.....	4	8	1
5	Increase or decrease (-), 1930-1940....percent....	177.8	.....	.....	.....	50.0	150.0	(2)
	Operated by—							
6	(a) Owners and managers....1940...number....	205	3	5	5	6	12	9
7	1930...number....	69	.....	.....	.....	.....	8	.....
8	(b) Tenants....1940...number....	70	.....	1	.....	.....	8	6
9	1930...number....	30	.....	.....	.....	.....	.....	.....
10	Land in all farms....1940...acres....	34,803,317	507,276	800,543	525,564	345,222	929,453	385,803
11	Land in irrigated farms....1940...acres....	190,592	720	3,526	1,356	170	82,990	4,983
12	Average per farm....1940...acres....	693	240	588	271	28	4,150	332
13	(a) Operated by owners and managers....1940...acres....	155,752	720	(3)	1,356	170	72,882	3,516
14	Average per farm....1940...acres....	760	240	(3)	271	28	6,074	391
15	(b) Operated by tenants....1940...acres....	34,840	.....	(3)	.....	.....	10,108	1,467
16	Average per farm....1940...acres....	498	.....	(3)	.....	.....	1,264	244
17	Approximate land area....1940...acres....	44,341,120	565,760	816,000	566,400	530,560	1,172,480	402,560
	IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated....1939...acres....	4,160	24	141	18	42	1,548	189
19	(a) Cropland harvested....1939...acres....	3,603	24	91	18	39	1,086	189
20	(b) Crop failure....1939...acres....	148	.....	.....	.....	.....	116	.....
21	(c) Pasture....1939...acres....	409	.....	50	.....	3	346	.....
22	Area irrigated....1929...acres....	1,573	.....	.....	.....	.....	146	.....
23	1919...acres....	2,969	.....	.....	.....	.....	315	.....
24	Increase or decrease (-), 1929-1939....percent....	164.5	.....	.....	.....	.....	960.3	.....
25	Irrigable area in enterprises....1940...acres....	13,494	37	246	45	55	2,302	196
26	1930...acres....	7,344	.....	.....	.....	.....	226	.....
27	1920[4]...acres....	11,742	.....	.....	.....	.....	2,255	.....
28	Excess of irrigable area over the area irrigated..1940...acres....	9,334	13	105	27	13	754	7
29	1930...acres....	5,771	.....	.....	.....	.....	80	.....
30	Area works were capable of supplying with water...1940...acres....	8,624	37	246	45	55	2,052	194
31	1930...acres....	7,331	.....	.....	.....	.....	226	.....
32	1920...acres....	9,672	.....	.....	.....	.....	905	.....
33	Increase or decrease (-), 1930-1940....percent....	17.6	.....	.....	.....	.....	808.0	.....
34	Excess, capability of works over area irrigated...1940...acres....	4,464	13	105	27	13	504	5
35	1930...acres....	5,758	.....	.....	.....	.....	80	.....
36	Proportion which area irrigated is of all lands in irrigated farms....1939...percent....	2.2	3.3	4.0	1.3	24.7	1.9	3.8
37	1929...percent....	2.7	.....	.....	.....	.....	0.4	.....
38	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent....	48.2	64.9	57.3	40.0	76.4	75.4	97.4
39	1929...percent....	21.5	.....	.....	.....	.....	64.6	.....
	CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises....1940...dollars....	272,186	575	9,787	11,039	5,300	44,910	6,150
41	(a) Cost of irrigation works and equipment....1940...dollars....	269,618	575	9,787	11,039	4,400	44,400	6,150
42	(b) Investment in water rights (reported)....1940...dollars....	2,568	.....	.....	.....	900	510	.....
43	Total investment in all enterprises....1930...dollars....	190,099	.....	.....	.....	.....	26,125	.....
44	1920...dollars....	151,325	.....	.....	.....	.....	33,680	.....
45	Increase or decrease (-), 1930-1940....percent....	70.0	.....	.....	.....	.....	71.9	.....
46	Average investment, based on area works were capable of supplying with water, per acre....1940...dollars....	31.56	15.54	39.78	245.31	96.36	21.89	31.70
47	1930...dollars....	21.84	.....	.....	.....	.....	115.60	.....
48	1920...dollars....	15.65	.....	.....	.....	.....	37.22	.....
49	Average investment per acre irrigated....1939...dollars....	65.43	23.96	69.41	613.28	126.19	29.01	32.54
50	Estimated final investment in existing enterprises..1940...dollars....	299,486	575	10,087	11,039	5,300	40,410	6,150
51	1930...dollars....	167,909	.....	.....	.....	.....	26,125	.....
52	1920...dollars....	162,775	.....	.....	.....	.....	42,680	.....
53	Increase or decrease (-), 1930-1940....percent....	78.4	.....	.....	.....	.....	77.6	.....
54	Average investment, based on estimated final investment and irrigable area, per acre....1940...dollars....	22.19	15.54	41.00	245.31	96.36	20.16	31.38
55	1930...dollars....	22.86	.....	.....	.....	.....	115.60	.....
56	1920[4]...dollars....	13.86	.....	.....	.....	.....	18.93	.....
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
57	Enterprises reporting maintenance and operation...1939...number....	107	3	4	3	4	10	4
58	Area irrigated in these enterprises....1939...acres....	3,869	24	140	18	42	1,548	189
59	Cost of maintenance and operation....1939...dollars....	12,973	60	273	181	650	1,285	826
60	Average cost per acre irrigated....1939...dollars....	3.35	2.50	1.95	10.06	15.48	0.83	4.37
61	1929...dollars....	7.62	.....	.....	.....	.....	2.43	.....
62	Total annual charges (reported)[6 7]....1939...dollars....	530	.....	.....	.....	.....	500	.....
63	Average annual charge per acre irrigated....1939...dollars....	0.74	.....	.....	.....	.....	0.71	.....
64	Area against which charges were assessed....1939...acres....	719	.....	.....	.....	.....	700	.....
65	Average annual charge per acre assessed....1939...dollars....	0.74	.....	.....	.....	.....	0.71	.....
66	Total charges collected[6]....1939...dollars....	.....	.....	.....	.....	.....	.....	.....
67	Indebtedness to December 31 (reported)[7]....1939...dollars....	15,650	.....	.....	.....	.....	.....	.....
	WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered....1939...number....	105	3	5	[5]2	4	10	4
69	Area irrigated in these enterprises....1939...acres....	3,974	24	141	18	42	1,548	189
70	Water delivered in these enterprises....1939...acre-feet..	5,671	35	196	9	78	1,482	399
71	Average water delivered per acre irrigated....1939...acre-feet..	1.4	1.5	1.4	0.5	1.9	1.0	2.1
72	Average cost of water per acre irrigated....1939...dollars....	3.34	2.50	1.95	10.00	15.48	0.83	4.37
	DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage....1939...number....	11	.....	.....	.....	3	.....	.....
74	Irrigable area in these enterprises....1939...acres....	838	.....	.....	.....	50	.....	.....
75	Irrigated area in these enterprises....1939...acres....	342	.....	.....	.....	38	.....	.....
76	Area for which drains have been installed....1939...acres....	429	.....	.....	.....	11	.....	.....
77	Additional area needing drainage....1939...acres....	106	.....	.....	.....	.....	.....	.....

*Census of Agriculture.
[1]Data between census years not comparable (see headnote).
[2]Percent not shown when more than 1,000.
[3]Data are included only in State totals because less than 3 farms or enterprises reported in the 1940 Census.

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"]

Custer	Ellis	Harper	Jackson	Kay	Muskogee	Oklahoma	Osage	Potta-watomie	Texas	Tillman	Tulsa	All other counties[1]	
2,290	1,443	945	2,048	2,663	3,614	3,424	2,464	3,595	1,408	2,119	2,689	137,446	1
2,988	1,685	1,204	2,849	2,849	4,487	3,111	2,354	3,760	2,020	2,769	2,489	151,930	2
3	7	8	13	5	3	21	4	5	20	4	12	115	3
.....	.....	2	8	1	1	13	1	3	6	1	1	46	4
.....	.....	300.0	62.5	400.0	200.0	61.5	300.0	66.7	233.3	300.0	(8)	150.0	5
2	6	7	8	3	3	15	4	5	15	2	7	88	6
.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	58	7
1	1	1	5	2	.....	6	.....	.....	5	2	5	27	8
.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	25	9
594,852	703,892	605,054	470,017	562,703	392,569	338,698	1,156,106	422,366	1,153,916	530,930	284,091	24,094,262	10
1,467	5,410	11,164	2,212	234	465	311	7,854	432	15,672	960	897	49,769	11
469	773	1,396	170	47	155	15	1,964	86	784	240	75	433	12
(3)	(3)	(3)	1,253	(3)	465	189	7,854	432	11,872	(3)	620	38,038	13
(3)	(3)	(3)	157	(3)	155	13	1,964	86	791	(3)	89	432	14
(3)	(3)	(3)	959	(3)	.....	122	.....	.....	3,800	(3)	277	11,731	15
(3)	(3)	(3)	192	(3)	.....	20	.....	.....	760	(3)	55	434	16
639,360	782,080	661,760	499,200	604,160	526,080	453,760	1,467,520	511,360	1,315,840	551,040	366,080	31,909,120	17
55	56	570	308	60	33	53	19	13	87	43	178	723	18
55	56	560	308	60	33	53	19	13	55	43	178	723	19
.....	.....	.....	.....	.....	.....	.....	.....	.....	32	.....	.....	.....	20
.....	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21
.....	.....	.....	420	.....	.....	.....	.....	.....	.....	.....	.....	1,007	22
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,654	23
.....	.....	.....	-26.7	.....	.....	.....	.....	.....	.....	.....	.....	-28.2	24
277	66	5,880	2,015	66	96	65	33	73	132	140	178	1,592	25
.....	.....	.....	585	.....	.....	.....	.....	.....	.....	.....	.....	6,533	26
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,487	27
222	10	5,310	1,707	6	63	12	14	60	45	97	.....	869	28
.....	.....	.....	165	.....	.....	.....	.....	.....	.....	.....	.....	5,526	29
85	66	1,790	1,992	66	96	65	33	13	119	120	178	1,972	30
.....	.....	.....	585	.....	.....	.....	.....	.....	.....	.....	.....	6,520	31
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,767	32
.....	.....	.....	240.5	.....	.....	.....	.....	.....	.....	.....	.....	-79.0	33
30	10	1,220	1,684	6	63	12	14	.....	32	77	.....	869	34
.....	.....	.....	165	.....	.....	.....	.....	.....	.....	.....	.....	5,513	35
3.7	1.0	5.1	13.9	25.6	7.1	17.0	0.2	3.0	0.6	4.5	19.8	1.5	36
.....	.....	.....	44.0	.....	.....	.....	.....	.....	.....	.....	.....	5.9	37
64.7	84.8	31.8	15.5	90.9	34.4	81.5	57.6	100.0	73.1	35.8	100.0	52.7	38
.....	.....	.....	71.8	.....	.....	.....	.....	.....	.....	.....	.....	15.4	39
8,685	3,400	19,210	6,720	30,145	7,324	4,590	5,317	1,400	1,978	3,300	11,800	90,556	40
8,685	3,400	19,200	5,700	30,145	7,324	4,590	5,242	1,400	1,950	3,300	11,800	90,531	41
.....	.....	10	1,020	.....	.....	.....	75	.....	28	.....	.....	25	42
.....	.....	.....	4,504	.....	.....	.....	.....	.....	.....	.....	.....	129,470	43
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	117,645	44
.....	.....	.....	49.2	.....	.....	.....	.....	.....	.....	.....	.....	-30.1	45
102.18	51.52	10.73	3.37	456.74	76.29	70.62	161.12	107.69	16.62	27.50	66.29	66.00	46
.....	.....	.....	7.70	.....	.....	.....	.....	.....	.....	.....	.....	19.86	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.42	48
157.91	60.71	33.70	21.82	502.42	221.04	86.60	279.84	107.69	22.74	78.74	66.29	125.25	49
11,460	3,650	35,710	7,020	30,145	7,324	5,090	5,317	1,400	1,978	4,325	11,800	94,706	50
.....	.....	.....	4,504	.....	.....	.....	.....	.....	.....	.....	.....	137,280	51
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	120,035	52
.....	.....	.....	55.9	.....	.....	.....	.....	.....	.....	.....	.....	-31.0	53
41.37	55.30	6.07	3.48	456.74	76.29	78.31	161.12	19.18	14.98	30.80	66.29	59.49	54
.....	.....	.....	7.70	.....	.....	.....	.....	.....	.....	.....	.....	21.01	55
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.66	56
4	6	4	6	[5] 2	4	6	4	3	4	2	10	24	57
55	56	570	144	45	28	53	19	13	87	(3)	178	620	58
378	376	845	872	51	172	508	265	151	395	(3)	1,550	3,860	59
6.87	6.71	1.48	6.06	1.13	6.14	9.58	13.95	11.62	4.54	(3)	8.71	6.23	60
.....	.....	.....	3.45	.....	.....	.....	.....	.....	.....	.....	.....	14.34	61
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	62
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.58	63
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	64
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.58	65
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
.....	.....	.....	.....	13,821	.....	.....	.....	.....	.....	.....	.....	2,029	67
3	2	4	8	3	4	5	4	3	4	3	10	24	68
55	(3)	570	308	60	33	49	19	13	87	43	178	568	69
125	(3)	525	787	29	49	137	7	8	75	88	478	1,136	70
2.3	(3)	0.9	2.6	0.5	1.5	2.8	0.4	0.6	0.9	2.0	2.7	2.0	71
6.85	(3)	1.48	6.06	1.13	6.11	10.35	13.95	11.62	4.54	6.88	8.71	7.14	72
.....	.....	1	.....	.....	1	1	.....	.....	.....	1	.....	4	73
.....	.....	(3)	.....	.....	(3)	(3)	.....	.....	.....	(3)	.....	490	74
.....	.....	(3)	.....	.....	(3)	(3)	.....	.....	.....	(3)	.....	152	75
.....	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	(3)	.....	381	76
.....	.....	(3)	.....	.....	.....	.....	.....	.....	.....	(3)	.....	76	77

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

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)	STATE TOTAL	Alfalfa	Caddo	Canadian	Carter	Cimarron	Cotton
	FARM VALUES, 1940*							
1	Land and buildings, all farms....dollars..	831,140,748	25,363,523	24,069,651	23,875,846	7,609,785	5,539,236	9,355,579
2	Land and buildings, irrigated farms....dollars..	3,251,114	28,000	104,400	140,675	108,000	251,950	144,848
	Operated by—							
3	(a) Owners and managers....dollars..	2,631,046	28,000	(2)	140,675	108,000	213,970	98,820
4	(b) Tenants....dollars..	620,068	.....	(2)	.....	.....	37,980	46,028
5	Average, land and buildings, per farm....dollars..	11,822.23	9,333.33	17,400.00	28,135.00	18,000.00	12,597.50	9,856.53
6	per acre in farms....dollars..	17.06	38.89	29.61	103.74	635.29	3.04	29.07
7	Buildings, irrigated farms reporting value....number...	268	3	6	5	6	19	13
8	Total reported....dollars..	878,415	6,000	22,500	41,115	82,500	42,775	17,900
9	Average, per irrigated farm reporting....dollars..	3,277.67	2,000.00	3,750.00	8,223.00	13,750.00	2,251.32	1,376.92
10	per acre on all irrigated farms....dollars..	4.61	8.33	6.38	30.32	485.29	0.52	3.59
11	Buildings, nonirrigated farms reporting value....number...	173,242	1,889	4,306	2,339	2,433	491	1,465
12	Total reported....dollars..	140,637,553	3,094,667	3,841,231	3,660,158	1,387,860	526,311	1,270,034
13	Average, per nonirrigated farm reporting....dollars..	811.80	1,638.26	892.06	1,564.84	570.43	1,071.92	868.92
14	per acre on all nonirrigated farms....dollars..	4.06	6.11	4.82	6.98	4.02	0.62	3.33
15	Implements and machinery, irrigated farms reporting value..number...	245	3	5	5	5	19	14
16	Total reported....dollars..	324,257	4,250	13,700	24,700	4,965	24,417	15,085
17	Average, per irrigated farm reporting....dollars..	1,323.50	1,416.67	2,740.00	4,940.00	993.00	1,285.11	1,077.50
18	per acre, on all irrigated farms....dollars..	1.70	5.90	3.89	18.22	29.21	0.29	3.03
19	Implements and machinery, nonirrigated farms reporting value....number...	152,490	1,737	3,839	2,114	2,044	513	1,323
20	Total reported....dollars..	78,124,476	2,392,643	2,159,364	1,993,711	435,763	653,414	995,141
21	Average, per acre, on all nonirrigated farms....dollars..	2.26	4.72	2.71	3.80	1.26	0.77	2.01
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
22	Enterprises....1940...number....	120	3	5	3	4	10	4
23	1930...number....	77	2	.....	.....	4	5	1
24	1920...number....	33	.....	.....	.....	.....	6	.....
25	Average size of enterprise based on irrigable area....1940...acres....	112	12	49	15	14	230	49
26	1930...acres....	95	.....	.....	.....	.....	45	.....
27	1920[3]...acres....	356	.....	.....	.....	.....	376	.....
28	Diversion dams....1940...number....	8	.....	.....	.....	.....	2	.....
29	Main canals and laterals....1940...length, miles....	42.2	0.1	.....	.....	4.0	11.0	.....
30	1930...length, miles....	24	.....	.....	.....	.....	3	.....
31	1920...length, miles....	57	.....	.....	.....	.....	15	.....
32	1940...capacity, c.f.s.[4]....	277	1	10	2	4	106	11
33	1930...capacity, c.f.s.[4]....	77	.....	.....	.....	.....	5	.....
34	1920...capacity, c.f.s.[4]....	344	.....	.....	.....	.....	123	.....
35	Pipe lines[5]....1940...length, miles....	24.4	0.1	1.4	1.0	0.4	.....	0.4
36	Storage dams....1940...number....	21	2	.....	.....	2	5	.....
37	Reservoirs....1940...number....	20	2	.....	.....	.....	4	.....
38	1930...number....	7	.....	.....	.....	.....	4	.....
39	1920...number....	8	.....	.....	.....	.....	.....	.....
40	1940...capacity, acre-feet..	900	(2)	.....	.....	.....	733	.....
41	1930...capacity, acre-feet..	293	.....	.....	.....	.....	271	.....
42	1920...capacity, acre-feet..	52	.....	.....	.....	.....	.....	.....
43	Wells, flowing....1940...number....	.....	.....	.....	.....	.....	.....	.....
44	1930...number....	.....	.....	.....	.....	.....	.....	.....
45	1920...number....	1	.....	.....	.....	.....	.....	.....
46	1940...yield, g.p.m....	.....	.....	.....	.....	.....	.....	.....
47	1930...yield, g.p.m....	.....	.....	.....	.....	.....	.....	.....
48	1920...yield, g.p.m....	100	.....	.....	.....	.....	.....	.....
49	Wells, pumped....1940...number....	77	1	1	[6] 2	1	.....	10
50	1930...number....	18	.....	.....	.....	.....	3	.....
51	1920...number....	19	.....	.....	.....	.....	1	.....
52	1940...yield, g.p.m....	15,486	(2)	(2)	400	(2)	.....	1,000
53	1930...yield, g.p.m....	2,715	.....	.....	.....	.....	30	.....
54	1920...yield, g.p.m....	3,643	.....	.....	.....	.....	1,600	.....
55	Pumping plants....1940...number....	116	2	6	4	3	4	6
56	1930...number....	25	.....	.....	.....	.....	2	.....
57	1920...number....	22	.....	.....	.....	.....	1	.....
58	Prime movers....1940...capacity, hp....	1,037	(2)	88	45	9	58	56
59	1930...capacity, hp....	229	.....	.....	.....	.....	3	.....
60	1920...capacity, hp....	184	.....	.....	.....	.....	8	.....
61	Pumps....1940...capacity, g.p.m....	59,280	(2)	4,852	1,250	650	6,200	4,700
62	1930...capacity, g.p.m....	8,855	.....	.....	.....	.....	30	.....
63	1920...capacity, g.p.m....	7,668	.....	.....	.....	.....	600	.....
64	Pumping lift, from all sources....1940...average, feet....	36	(2)	46	76	44	16	23
65	1930...average, feet....	33	.....	.....	.....	.....	26	.....
66	1920...average, feet....	59	.....	.....	.....	.....	16	.....
67	from pumped wells....1940...average, feet....	48	(2)	(2)	71	(2)	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES 1939[7]							
68	Enterprises reporting pay roll....number...	.....	.....	.....	.....	.....	.....	.....
69	Irrigated area in these enterprises....acres....	.....	.....	.....	.....	.....	.....	.....
70	Wages and salaries paid and payable....dollars..	.....	.....	.....	.....	.....	.....	.....
71	Persons employed during week ending April 29....number...	.....	.....	.....	.....	.....	.....	.....

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

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"]

Custer	Ellis	Harper	Jackson	Kay	Muskogee	Oklahoma	Osage	Potta-watomie	Texas	Tillman	Tulsa	All other counties[1]	
16,904,442	8,449,315	7,061,913	14,973,705	25,736,628	9,887,597	22,227,807	18,688,425	10,622,823	14,228,978	23,294,943	15,210,910	548,039,642	1
40,000	54,280	129,580	104,640	46,700	82,730	148,906	228,600	35,100	128,850	58,000	76,950	1,338,905	2
(2)	(2)	(2)	62,740	(2)	82,730	114,856	228,600	35,100	95,200	(2)	36,000	1,042,695	3
(2)	(2)	(2)	41,900	(2)	.....	34,050	.....	.....	33,650	(2)	40,950	296,210	4
13,333.33	7,754.29	16,197.50	8,049.23	9,340.00	27,576.67	7,090.76	57,150.00	7,020.00	6,442.50	14,500.00	6,412.50	11,642.65	5
27.27	10.03	11.61	47.31	199.57	177.91	478.80	29.11	81.25	8.22	60.42	85.79	26.90	6
3	7	8	13	4	3	21	4	5	20	4	12	112	7
3,450	8,800	15,800	24,100	29,550	29,500	63,220	30,400	20,500	25,950	9,300	26,950	378,105	8
1,150.00	1,257.14	1,975.00	1,853.85	7,387.50	9,833.33	3,010.48	7,600.00	4,100.00	1,297.50	2,325.00	2,245.83	3,375.94	9
2.35	1.63	1.42	10.90	126.28	63.44	203.28	3.87	47.45	1.66	9.69	30.04	7.60	10
2,187	1,369	867	1,965	2,559	3,516	3,324	2,403	3,514	1,269	2,001	2,623	132,732	11
2,680,914	1,378,930	990,894	1,844,720	3,910,865	2,266,871	5,531,258	3,802,778	2,445,738	1,828,270	2,819,453	4,001,996	93,354,505	12
1,225.84	1,007.25	1,142.90	938.79	1,528.28	644.73	1,664.04	1,582.51	696.00	1,440.72	1,409.02	1,525.73	703.38	13
4.52	1.97	1.67	3.94	6.95	5.78	16.35	3.31	5.80	1.61	5.32	14.13	3.88	14
3	6	8	13	3	3	13	4	4	20	4	11	102	15
2,370	4,275	13,300	19,475	5,550	11,350	6,740	5,300	2,700	17,730	4,395	12,342	131,613	16
790.00	712.50	1,662.50	1,498.08	1,850.00	3,783.33	518.46	1,325.00	675.00	886.50	1,098.75	1,122.00	1,290.32	17
1.62	0.79	1.19	8.80	23.72	24.41	21.67	0.67	6.25	1.13	4.58	13.76	2.64	18
2,077	1,177	839	1,849	2,309	3,216	2,342	1,926	2,940	1,218	1,800	2,417	116,810	19
2,174,127	1,099,940	864,058	1,544,995	2,475,562	931,757	1,097,115	1,181,588	925,521	1,475,342	2,194,739	1,143,680	52,386,016	20
3.66	1.57	1.45	3.30	4.40	2.38	3.24	1.03	2.19	1.30	4.14	4.04	2.18	21
4	6	4	8	3	6	6	4	3	4	5	10	28	22
.....	.....	1	7	1	1	13	1	3	1	1	1	35	23
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27	24
69	11	1,470	252	22	16	11	8	24	33	28	18	57	25
.....	.....	.....	84	.....	.....	.....	.....	.....	.....	.....	.....	.....	26
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	351	27
.....	3	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1	28
1.0	1.1	20.0	1.0	.....	2.0	.....	.....	.....	.....	.....	.....	2.0	29
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21	30
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	31
3	6	68	18	.....	9	.....	2	.....	.....	1	1	35	32
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72	33
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	221	34
0.2	.....	.....	1.0	2.6	3.1	1.4	0.5	1.2	.....	.....	3.0	7.2	35
1	.....	.....	1	2	.....	.....	1	1	.....	.....	.....	6	36
1	.....	.....	1	[6] 2	.....	.....	2	.....	1	.....	.....	7	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	39
(2)	.....	.....	(2)	6	.....	.....	(2)	.....	(2)	.....	.....	110	40
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	41
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
[6] 1	.....	4	.....	16	.....	2	[6] 2	.....	7	4	10	100	48
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	49
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	50
400	.....	2,660	.....	380	.....	(2)	70	.....	1,100	1,420	1,570	18	51
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,253	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,685	53
												2,043	54
3	.....	7	6	17	2	5	2	1	4	5	10	29	55
.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	18	56
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21	57
35	.....	139	47	39	(2)	10	(2)	(2)	24	47	28	390	58
.....	.....	.....	60	.....	.....	.....	.....	.....	.....	.....	.....	166	59
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	176	60
4,300	.....	7,660	5,100	520	(2)	740	(2)	(2)	1,800	2,920	1,620	15,278	61
.....	.....	.....	3,900	.....	.....	.....	.....	.....	.....	.....	.....	4,925	62
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,068	63
33	.....	28	19	78	(2)	60	(2)	(2)	22	31	26	39	64
.....	.....	.....	19	.....	.....	.....	.....	.....	.....	.....	.....	38	65
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62	66
70	.....	27	.....	78	.....	(2)	60	.....	22	35	28	47	67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71

[4] Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.
[5] Includes siphons and farm pipe lines reported.
[6] Data for less than 3 enterprises are shown with permission of the enterprises involved.
[7] Pay roll and number of employees reported only by enterprises serving 5 or more farms.

CENSUS OF IRRIGATION — OREGON

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....	[4] 61,664,000	61,188,480	61,188,480	61,188,480	61,188,480	61,188,480	61,188,480
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated)....number...	61,829	64,826	55,153	50,206	45,502	35,837	25,530
Land in all farms....acres....	17,988,307	17,357,549	16,548,678	13,542,318	11,685,110	10,071,328	6,909,888
Farms irrigated:[1]							
Farms....number...	16,159	13,243	11,387	9,154	6,669	4,636	3,150
Increase or decrease (-) over preceding census....percent..	[2] 41.9	.....	24.4	37.3	43.9	47.2	.....
Proportion of all farms....percent..	26.1	20.4	20.6	18.2	14.7	12.9	12.3
Land in farms....acres....	8,730,104	[3]	6,306,825	[3]	[3]	[3]	[3]
Proportion of all farm land....percent..	48.5	[3]	38.1	[3]	[3]	[3]	[3]
Area irrigated....acres....	[4] 1,030,228	[5] 578,838	[6] 637,967	[7]	[7]	388,310	177,944
Increase or decrease (-) over preceding census....percent..	[2] 61.5	.....	.....	.....	.....	118.2	.....
Proportion of total land area of State....percent..	1.7	0.9	1.0	.....	.....	0.6	0.3
Proportion of all farm land....percent..	5.7	3.3	3.9	.....	.....	3.9	2.6
Value of irrigated farms (land and buildings)....dollars..	152,701,476	[3]	160,937,926	[3]	[3]	[3]	[3]
Average per farm....dollars..	9,449.93	[3]	14,133.48	[3]	[3]	[3]	[3]
Average per acre....dollars..	17.49	[3]	25.52	[3]	[3]	[3]	[3]
Value of farm implements and machinery[8]....dollars..	15,346,736	[3]	10,981,075	[3]	[3]	[3]	[3]
Average per farm[8]....dollars..	949.73	[3]	964.35	[3]	[3]	[3]	[3]
Average per acre[8]....dollars..	1.76	[3]	1.74	[3]	[3]	[3]	[3]
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises....number...	5,884	[3]	4,066	4,710	3,745	[3]	[3]
Farms irrigated....number...	19,389	[3]	[3]	[3]	[3]	[3]	[3]
Area irrigated....acres....	1,049,176	[3]	898,713	986,162	686,129	[3]	[3]
Area existing works were capable of supplying with water....acres....	1,261,081	[3]	1,158,210	1,344,046	830,526	[3]	[3]
Area irrigable....acres....	1,441,417	[3]	1,478,128	[9] 1,925,987	[9] 2,527,208	[3]	[3]
Additional area existing works were capable of supplying with water....acres....	211,905	[3]	259,497	357,884	144,397	[3]	[3]
Additional irrigable area in enterprises not supplied with water....acres....	392,241	[3]	579,415	[9] 939,825	[9] 1,841,079	[3]	[3]
Investment in irrigation enterprises....dollars..	50,961,251	[3]	38,754,548	28,929,151	12,760,214	1,843,771	825,660
Increase or decrease (-) over preceding census....percent..	[2] 31.5	[3]	34.0	126.7	592.1	123.3	.....
Average per acre based on area works were capable of supplying with water....dollars..	40.41	[3]	33.46	21.52	15.36	[3]	[3]
Increase or decrease (-) over preceding census....percent..	[2] 20.8	[3]	55.5	40.1	.....	.....	.....
Estimated completed cost of existing enterprises....dollars..	53,884,430	[3]	60,039,939	41,585,742	39,216,619	[3]	[3]
Average per acre based on irrigable area in enterprises....dollars..	37.38	[3]	40.62	[9] 21.59	[9] 15.52	[3]	[3]
Average annual cost per acre irrigated for maintenance and operation of irrigation works....dollars..	1.25	[3]	1.41	1.19	0.75	[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 299,546 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. [4] 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.....	61,829	17,988,307	2,824,316	730,682	299,546	476,817,354	26.51	115,245,583	6.41	44,607,932	2.48
Owners and managers.....	50,552	15,548,863	2,273,134	612,191	264,849	396,802,291	25.52	99,425,228	6.39	37,196,120	2.39
Tenants.....	11,277	2,439,444	551,182	118,491	34,697	80,015,063	32.80	15,820,355	6.49	7,411,812	3.04
Irrigated farms, total.....	16,159	8,730,104	989,378	730,682	299,546	152,701,476	17.49	33,570,300	3.85	15,346,736	1.76
Owners and managers.....	13,345	7,968,948	836,900	612,191	264,849	131,641,303	16.52	29,582,709	3.71	13,280,611	1.67
Tenants.....	2,814	761,156	152,478	118,491	34,697	21,060,173	27.67	3,987,591	5.24	2,066,125	2.71
Wholly irrigated farms.....	10,551	4,332,604	588,183	588,183	228,577	85,468,774	19.73	19,223,279	4.44	8,763,433	2.02
Owners and managers.....	8,667	3,891,331	488,447	488,447	203,338	72,839,962	18.70	16,861,881	4.33	7,540,262	1.94
Tenants.....	1,884	438,273	99,736	99,736	25,239	12,628,812	28.81	2,361,398	5.39	1,223,171	2.79
Partly irrigated farms.....	5,608	4,397,500	401,195	142,499	70,969	67,232,702	15.29	14,347,021	3.26	6,583,303	1.50
Owners and managers.....	4,678	4,074,617	348,453	123,744	61,511	58,801,341	14.43	12,720,828	3.12	5,740,349	1.41
Tenants.....	930	322,883	52,742	18,755	9,458	8,431,361	26.11	1,626,193	5.04	842,954	2.61
Nonirrigated farms, total.....	45,670	9,258,203	1,834,938	.....	.....	324,115,878	35.01	81,675,283	8.82	29,261,196	3.16

[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.

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					
								Irrigated area reporting—			Quantity delivered per acre[1]	Cost[1]	
	Enterprises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Quantity	Cost	Quantity and cost		Per acre	Per acre-foot
	Number	*Acres*	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*	*Acres*	*Acres*	*Acres*	*Acre-feet*	*Dollars*	*Dollars*
Total	5,884	1,441,417	1,261,081	1,049,176	898,713	986,162	16.7	925,920	983,423	892,684	3.5	1.45	0.42
Primary sources:													
Streams, gravity	3,172	1,090,191	927,233	786,059	674,396	786,354	16.6	696,432	733,371	669,621	3.1	0.99	0.31
Streams, pumped	976	64,245	59,955	45,008	50,537	64,576	-10.9	43,987	43,438	42,580	2.5	4.86	1.96
Streams, gravity and pumped	63	174,763	166,279	132,382	14,636	253	804.5	113,411	132,038	113,107	4.8	1.99	0.41
Wells, pumped	621	12,315	11,805	8,173	3,804	1,993	114.9	8,081	7,891	7,819	2.1	6.38	3.10
Wells, flowing	8	253	209	155	87	72	78.2	124	115	114	2.9	0.32	0.11
Wells, pumped and flowing	.....	.....	.....	.....	.....	340	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity	21	7,071	6,541	5,254	10,490	5,750	-50.7	4,666	4,929	4,191	2.2	0.77	0.35
Lakes, pumped	42	4,434	4,373	3,298	6,092	1,620	-45.9	3,298	3,208	3,208	1.2	1.73	1.45
Springs	500	19,936	19,453	15,274	6,973	9,584	119.0	11,386	13,585	10,295	2.2	0.83	0.38
Springs and streams	150	27,736	27,381	20,773	.....	.....	.....	15,305	15,234	14,293	2.7	0.32	0.12
Stored storm water	14	2,141	1,691	1,014	1,501	3,763	-32.4	1,014	872	872	1.5	0.41	0.27
City water	12	126	126	73	4	258	(2)	48	46	45	2.7	13.24	4.89
Sewage	.....	.....	.....	.....	35	10	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped	37	7,308	6,100	4,416	994	105	344.3	3,427	4,416	3,427	1.9	2.30	1.19
Streams, gravity; wells, flowing	10	6,973	6,679	6,585	2,328	200	182.9	6,585	6,585	6,585	1.4	0.19	0.14
Streams, pumped; wells, pumped	38	1,588	1,468	1,043	.....	.....	.....	1,043	1,003	1,003	2.9	5.49	1.88
Waste water, seepage or drainage	64	2,721	2,526	2,283	.....	.....	.....	2,210	2,033	2,033	2.6	2.00	0.77
Other mixed	60	19,614	19,262	17,386	124,002	111,137	-86.0	14,903	14,659	13,191	3.3	1.72	0.52
Other and not reported	.....	.....	.....	.....	2,834	147	.....	.....	.....	.....	.....	.....	.....
Supplemental sources:[3]													
Streams, gravity and/or storage	27	158,971	138,212	101,843	.....	.....	.....	79,950	94,536	79,915	2.2	0.89	0.41
Streams, pumped	11	2,453	2,453	2,424	7,887	.....	-69.5	363	2,404	343	1.6	2.57	1.62
Wells, pumped	58	906	893	703	612	.....	14.9	656	703	656	5.6	6.43	1.14
Wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[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	Proportion of total	Average per acre[2]	Amount	Proportion of total	Average per acre[2]		Irrigated area reporting	Average per acre	Irrigated area reporting	Average per acre		Irrigated area reporting	Average per acre
	Dollars	*Percent*	*Dollars*	*Dollars*	*Percent*	*Dollars*	*Dollars*	*Acres*	*Dollars*	*Acres*	*Dollars*	*Dollars*	*Acres*	*Dollars*
Total	50,961,251	100.0	40.41	38,754,548	100.0	33.46	6.95	982,940	1.25	863,685	1.41	-0.16	801,891	1.19
Primary sources:														
Streams, gravity	23,386,278	45.9	25.22	23,940,310	61.8	28.05	-2.83	732,888	0.72	645,238	0.90	-0.18	631,124	1.00
Streams, pumped	1,824,836	3.6	30.44	4,468,284	11.5	53.43	-22.99	43,438	4.14	50,014	5.72	-1.58	50,087	3.09
Streams, gravity and pumped	18,977,045	37.2	114.13	347,067	0.9	23.77	90.36	132,038	2.50	12,376	1.54	0.96	253	2.55
Wells, pumped	499,877	1.0	42.34	246,833	0.6	59.06	-16.72	7,891	6.42	3,711	10.72	-4.30	1,419	8.04
Wells, flowing	4,820	(3)	23.06	7,972	(3)	65.88	-42.82	115	0.36	87	0.63	-0.27	66	9.47
Wells, pumped and flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	18.00
Lakes, gravity	58,615	0.1	8.96	245,802	0.6	13.62	-4.56	4,929	0.72	10,490	0.57	0.15	1,736	0.90
Lakes, pumped	59,040	0.1	13.50	185,600	0.5	17.92	-4.42	3,208	1.73	6,061	2.16	-0.43	457	2.52
Springs	523,473	1.0	26.91	89,648	0.2	7.95	18.96	13,585	0.69	6,543	1.00	-0.31	6,735	0.92
Springs and streams	169,632	0.3	6.20	.....	.....	.....	.....	15,234	0.31	.....	.....	.....	.....	.....
Stored storm water	21,565	(3)	12.75	39,785	0.1	16.07	-3.32	872	0.41	1,501	0.30	0.11	3,287	1.28
City water	5,485	(3)	43.53	30	(3)	7.50	36.03	46	13.35	4	7.50	5.85	252	23.89
Sewage	.....	.....	.....	10	(3)	0.28	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped	183,680	0.4	30.11	32,292	0.1	27.89	2.22	4,416	2.48	994	5.58	-3.10	95	17.89
Streams, gravity; wells flowing	24,226	(3)	3.63	6,425	(3)	2.67	0.96	6,585	0.19	2,328	0.14	0.05	200	4.00
Streams, pumped; wells, pumped	38,168	0.1	26.00	.....	.....	.....	.....	1,003	5.43	.....	.....	.....	.....	.....
Waste water, seepage or drainage	32,362	0.1	13.81	.....	.....	.....	.....	2,033	2.00	.....	.....	.....	.....	.....
Other mixed	917,211	1.8	47.62	8,893,269	22.9	57.95	-10.33	14,659	1.57	123,586	1.94	-0.37	97,014	1.13
Other and not reported	.....	.....	.....	19,171	(3)	6.71	.....	.....	.....	752	1.80	.....	147	0.78
Supplemental sources:[4]														
Streams, gravity and/or storage	4,178,629	8.2	30.23	.....	.....	.....	.....	94,536	0.69	.....	.....	.....	.....	.....
Streams, pumped	15,062	(3)	6.14	229,690	0.6	20.74	-14.60	2,404	0.04	7,887	2.48	-1.84	.....	.....
Wells, pumped	41,247	0.1	46.19	1,460	(3)	2.38	43.81	703	6.73	612	0.29	6.44	.....	.....
Wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Based on irrigated area in enterprises reporting cost of maintenance and operation. [2] Based on area works were capable of supplying with water. [3] 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).

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

ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF— 1940 Primary enterprises	1940 Supplemental enterprises[1]	1930 Primary enterprises	1920 Primary enterprises	Increase or decrease (-) 1930–40 primary enterprises
AREA IRRIGATED	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*
Total	1,049,176	104,970	898,713	986,162	16.7
Individual and partnership	543,612	16,363	450,841	590,626	20.6
Cooperative, incorporated	114,087	1,530	[2] 184,940	186,037	-14.5
Cooperative, unincorporated	44,087	2,035			
Irrigation district	204,271	.....	160,974	92,081	26.9
Commercial	7,123	.....	12,619	27,338	-43.6
Bureau of Reclamation[3] *	130,403	85,042	61,829	54,981	110.9
Office of Indian Affairs[3]	5,168	.....	4,135	4,000	25.0
State	.....	.....	325	.....	.....
City and/or sewage	425	.....	.....	330	-98.2
Other		.....	23,050	30,769	
AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER					
Total	1,261,081	141,558	1,158,210	1,344,046	8.9
Individual and partnership	650,375	17,206	539,903	689,723	20.5
Cooperative, incorporated	125,416	4,584	[2] 222,189	236,171	-21.6
Cooperative, unincorporated	48,829	2,035			
Irrigation district	233,836	.....	240,019	198,540	-2.6

ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF— 1940 Primary enterprises	1940 Supplemental enterprises[1]	1930 Primary enterprises	1920 Primary enterprises	Increase or decrease (-) 1930–40 primary enterprises
AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER—Continued	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*
Commercial	16,988	.....	21,517	67,169	-21.0
Bureau of Reclamation[3] *	175,171	117,733	85,612	76,525	104.6
Office of Indian Affairs[3]	9,822	.....	13,345	7,600	-26.4
State	.....	.....	325	300	.....
City and/or sewage	644	.....	.....	340	-98.2
Other		.....	35,300	67,684	
IRRIGABLE AREA[4]					
Total	1,441,417	162,330	1,478,128	1,925,987	-2.5
Individual and partnership	675,595	17,244	624,617	828,471	8.2
Cooperative, incorporated	128,874	4,584	[2] 288,948	329,241	-38.0
Cooperative, unincorporated	50,133	2,035			
Irrigation district	271,897	.....	279,576	271,172	-2.7
Commercial	84,988	.....	29,567	150,289	187.4
Bureau of Reclamation[3] *	178,418	138,467	182,950	171,444	-2.5
Office of Indian Affairs[3]	50,868	.....	15,345	9,600	231.5
State	.....	.....	325	300	.....
City and/or sewage	644	.....	.....	390	-98.9
Other		.....	56,800	165,080	

[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] For 1920 relates to total area. Irrigable area for that year was not reported. * For explanation of areas, see text, p. 479.

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

TYPE OF ENTERPRISE (For definitions and explanations, see text)	ENTERPRISES Total	ENTERPRISES Serving 5 or more farms	AREAS Irrigable	AREAS Works were capable of supplying with water	AVERAGE COST Primary enterprises: Works and equipment per acre[2]	AVERAGE COST Primary enterprises: Maintenance and operation per acre[3]	AVERAGE COST Supplemental enterprises: Works and equipment per acre[2]	AVERAGE COST Supplemental enterprises: Maintenance and operation per acre[3]
	Number	*Number*	*Acres*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Total	5,884	327	1,441,417	1,261,081	36.61	1.18	29.91	0.73
Individual and partnership	5,616	94	675,595	650,375	8.10	0.72	9.86	0.41
Cooperative, incorporated	102	94	128,874	125,416	32.56	0.76	4.58	0.20
Cooperative, unincorporated	90	68	50,133	48,829	9.72	0.36	4.42	0.24
Irrigation district	39	38	271,897	233,836	53.90	1.98	.....	.....
Commercial	7	7	84,988	16,988	23.46	2.68	.....	.....
U. S. Bureau of Reclamation*	19	19	178,418	175,171	131.12	2.13	34.27	0.82
U. S. Office of Indian Affairs	7	5	50,868	9,822	35.36	1.52	.....	.....
State	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage	2	2	644	644	34.69	7.13	.....	.....
Other	2	.....					.....	.....

TYPE OF ENTERPRISE (For definitions and explanations, see text)	AREA IRRIGATED, 1939[1] Farms served	Total area	Cropland: From which crops were harvested	Cropland: On which crops failed	Irrigated pasture
	Number	*Acres*	*Acres*	*Acres*	*Acres*
Total	19,389	1,049,176	790,925	13,781	244,470
Individual and partnership	6,762	543,612	367,743	4,338	171,531
Cooperative, incorporated	2,596	114,087	93,411	375	20,301
Cooperative, unincorporated	817	44,087	33,907	.....	10,180
Irrigation district	6,206	204,271	177,757	2,299	24,215
Commercial	280	7,123	6,428	.....	695
U. S. Bureau of Reclamation*	2,598	130,403	108,039	6,739	15,625
U. S. Office of Indian Affairs	113	5,168	3,215	30	1,923
State	.....	.....	.....	.....	.....
City and/or sewage	17	425	425	.....	.....
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. * For explanation of areas and investment, see text, p. 479.

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: 1940 Total	1940 Primary enterprises	1940 Supplemental enterprises	1940 Total cost of works and equipment	1940 Investment in water rights	1930	1920	Increase or decrease (-) 1930–40
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Percent*
Total	50,961,251	46,726,313	4,234,938	50,399,668	561,583	38,754,548	28,929,151	31.5
Individual and partnership	5,592,899	5,422,518	170,381	5,437,542	155,357	4,871,362	6,584,382	14.8
Cooperative, incorporated	4,242,235	4,221,235	21,000	4,104,837	137,398	[2] 6,286,247	3,143,698	-24.7
Cooperative, unincorporated	490,755	481,755	9,000	483,608	7,147			
Irrigation district	12,821,775	12,821,775	.....	12,602,599	219,176	13,983,618	6,313,753	-8.3
Commercial	441,013	441,013	.....	398,513	42,500	1,606,957	3,281,034	-72.6
U. S. Bureau of Reclamation*	27,002,875	22,968,318	4,034,557	27,002,875	.....	11,408,297	5,956,950	136.7
U. S. Office of Indian Affairs	347,360	347,360	.....	347,355	5	257,317	230,038	35.0
State	.....	.....	.....	.....	.....	9,550	10,107	.....
City and/or sewage	22,339	22,339	.....	22,339	.....	.....	171,068	-93.3
Other			.....		.....	331,000	3,232,121	

TYPE OF ENTERPRISE (For definitions and explanations, see text)	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER: Primary enterprises	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER: Supplemental enterprises	Capital expenditures during 1939[1]	Estimated investment required to complete works
	Dollars	*Dollars*	*Dollars*	*Dollars*
Total	37.05	29.92	296,948	2,923,179
Individual and partnership	8.34	9.90	259	273,913
Cooperative, incorporated	33.66	4.58	11,358	265,200
Cooperative, unincorporated	9.87	4.42	955	2,290
Irrigation district	54.83	.....	113,746	297,905
Commercial	25.96	.....	1,044	51,000
U. S. Bureau of Reclamation*	131.12	34.27	154,588	395,371
U. S. Office of Indian Affairs	35.37	.....	14,998	1,636,500
State	.....	.....	.....	.....
City and/or sewage	.....	.....	.....	.....
Other	34.69	.....	.....	.....

[1] Only for enterprises serving 5 or more farms. [2] Includes 1 Carey Act enterprise. * For explanation of investment, see text, p. 479.

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		
	Enterprises 1940	Area: Irrigable 1940	Area: Works were capable of supplying with water 1940	Total indebtedness 1940	Average per acre assessed 1939[3]	Average per acre works were capable of supplying with water[4]	Enterprises 1940	Total arrearages: Dec. 31 1939	Total arrearages: Dec. 31 1938	Average per acre assessed 1939[5]	Area assessed 1939	Charges made 1939	Charges collected 1939
Total	*Number* 73	*Acres* 599,008	*Acres* 429,854	*Dollars* 14,329,768	*Dollars* 36.06	*Dollars* 33.43	*Number* 13	*Dollars* 1,800,973	*Dollars* 1,588,681	*Dollars* 22.64	*Acres* 686,561	*Dollars* 994,245	*Dollars* 929,350
Partnership	1	[6]	[6]	[6]	[6]	[6]	.....	.....	.....	.....	49,982	13,612	4,316
Cooperative, incorporated	22	67,212	64,524	447,164	7.15	6.93	3	3,930	5,366	0.44	123,808	101,654	89,498
Cooperative, unincorporated	2	[6]	[6]	[6]	[6]	[6]	.....	.....	.....	.....	35,592	12,531	2,069
Irrigation district	31	249,996	212,606	4,955,383	23.73	23.31	6	1,673,643	1,470,609	36.18	226,034	612,883	661,319
Commercial	3	81,000	14,000	146,724	22.23	10.48	1				[7] 7,944	[7] 19,384	[7] 10,490
Bureau of Reclamation[8]	9	151,883	128,389	[9] 8,449,199	83.85	73.75	3	[9] 123,400	[9] 112,706	5.09	240,334	231,347	160,109
Office of Indian Affairs[8]	5	46,354	7,772	[10] 328,128	100.69	42.22	.....	.....	.....	.....	2,867	2,834	1,749
State	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(7)	(7)	(7)
Other	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Only for enterprises serving 5 or more farms. Enterprises and areas shown are totals for primary and supplemental enterprises reporting. [2] In payment of principal, interest, and/or other funded obligations. [3] Based on primary enterprises only; State average for supplemental enterprises is $34.82. [4] Based on primary enterprises only; State average for supplemental enterprises is $31.72. [5] Based on primary enterprises only; no supplemental enterprises reported arrearage. [6] Data are included only in State total because less than 3 enterprises reported in the 1940 Census. [7] Data for 1 "City and/or sewage" enterprise are included with "Commercial" enterprises in the 1940 Census. [8] U. S. Dept. of the Interior. [9] Represents indebtedness and arrearages of irrigation districts to the U. S. Government. [10] Represents construction costs of irrigation works less cancellations and repayments. [*] For explanation of areas and investment, see text, p. 479.

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: Irrigated area reporting 1939	Primary enterprises: Reported cost 1939	Supplemental enterprises: Irrigated area reporting 1939	Supplemental enterprises: Reported cost 1939	Average cost per irrigated acre: Primary enterprises 1939	Average cost per irrigated acre: Supplemental enterprises 1939	Enterprises reporting pay roll	Wages and salaries paid and payable	Employees during week ending April 29
Total	*Acres* 982,940	*Dollars* 1,157,018	*Acres* 97,643	*Dollars* 71,049	*Dollars* 1.18	*Dollars* 0.73	*Number* 185	*Dollars* 621,247	*Number* 1,094
Individual and partnership	488,921	352,611	16,286	6,738	0.72	0.41	33	6,199	58
Cooperative, incorporated	113,605	86,682	1,530	303	0.76	0.20	70	42,262	162
Cooperative, unincorporated	36,604	13,106	2,035	482	0.36	0.24	23	3,225	51
Irrigation district	202,971	402,571	.....	.....	1.98	.....	35	281,315	531
Commercial	7,123	19,096	.....	.....	2.68	.....	7	13,861	36
U. S. Bureau of Reclamation[*]	130,403	277,250	77,792	63,526	2.13	0.82	15	262,501	236
U. S. Office of Indian Affairs	3,198	4,872	.....	.....	1.52	.....	[2] 2	11,884	20
State	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage	115	820	.....	.....	7.13	.....	.....	.....	.....
Other			.....	.....		.....	.....	.....	.....

[1] Only for enterprises serving 5 or more farms. [2] Data for less than 3 enterprises shown with permission of the enterprises involved. [*] For explanation of areas and investment, see text, p. 479.

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

TYPE OF ENTERPRISE (For definitions and explanations, see text)	DAMS: Diversion	DAMS: Storage	CANALS: Capacity at main heading	CANALS: Length[1] Earth	CANALS: Length[1] Lined[2]	RESERVOIRS: Number	RESERVOIRS: Capacity	PIPE LINES: Length	FLOWING WELLS: Number	FLOWING WELLS: Yield	PUMPED WELLS: Number	PUMPED WELLS: Yield	PUMPING PLANTS: Prime movers: Number	PUMPING PLANTS: Prime movers: Rated capacity	PUMPING PLANTS: Pumps: Number	PUMPING PLANTS: Pumps: Rated capacity
Total	*Number* 5,097	*Number* 247	*Sec.-ft.* 37,290	*Miles* 8,222	*Miles* 296.0	257	*Ac.-ft.* 2,212,315	*Miles* 665.2	76	*G.p.m.* 3,396	901	*G.p.m.* 209,289	2,275	*Hp.* 29,527	2,265	*G.p.m.* 1,510,958
Individual and partnership	4,802	203	19,151	3,968	78.9	214	93,338	514.6	76	3,396	896	206,439	2,193	17,167	2,183	1,002,582
Cooperative, incorporated	97	15	4,956	732	19.0	13	124,355	13.4	....	.....	.....	.....	13	1,730	13	117,385
Cooperative, unincorporated	91	3	1,211	264	8.5	3	4,635	1.8	....	.....	1	60	6	115	6	9,570
Irrigation district	76	14	6,008	2,048	51.9	15	236,887	42.8	....	.....	.....	.....	40	5,213	40	210,075
Commercial	5	1	248	117	1.6	1	400	3.5	....	.....	2	1,600	2	100	2	1,600
Bureau of Reclamation[3]	10	9	5,382	1,010	134.0	9	1,748,300	77.7	....	.....	.....	.....	16	5,060	16	165,006
Office of Indiam Affairs[3]	12	2	327	80	1.1	2	4,400	0.8	....	.....	1	800	3	70	3	4,230
State	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage	4	.....	7	3	.....	.....	.....	10.6	...	.....	1	390	2	42	2	500
Other		.....			.....	.....	.....		...	.....						

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

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

MATERIAL	1940		1930	
	Diversion	Storage	Diversion	Storage
	Number	*Number*	*Number*	*Number*
Total	5,097	247	3,806	167
Concrete or masonry	663	33	422	24
Timber	877	23	529	.....
Earth and rock	2,220	156	.....	61
Other and mixed	[1] 1,266	29	[1] 2,754	73
Not reported	71	6	101	9

[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
	Number	*Percent*	*G.p.m.*	*Percent*	*Feet*
Total, 1940	2,265	100.0	1,510,958	100.0	27
Electric motor	**1,179**	**52.1**	**858,647**	**56.8**	**32**
Centrifugal	932	41.2	757,885	50.2	23
Turbine	103	4.6	88,024	5.8	64
Plunger	116	5.1	6,059	0.4	72
Other	28	1.2	6,679	0.4	39
Internal-combustion engine	**968**	**42.7**	**480,152**	**31.8**	**20**
Centrifugal	822	36.3	411,768	27.3	17
Turbine	53	2.3	36,563	2.4	46
Plunger	63	2.8	7,077	0.5	38
Other	30	1.3	24,744	1.6	17
Other kinds of motive power	**27**	**1.2**	**24,247**	**1.6**	**47**
Centrifugal	9	0.4	16,660	1.1	27
Turbine	3	0.1	7,382	0.5	71
Plunger	13	0.6	164	[1]	55
Other	2	0.1	41	[1]	52
Mixed kinds of motive power	**91**	**4.0**	**147,912**	**9.8**	**25**
Centrifugal	69	3.0	106,038	7.0	23
Turbine	6	0.3	10,360	0.7	20
Plunger	9	0.4	589	[1]	35
Other	7	0.3	30,925	2.0	29
Total, 1930	1,157	.....	1,022,213	.....	27
Increase or decrease (-) 1930-1940	1,108	.....	488,745	.....	.....

MOTIVE POWER BY TYPE OF PUMP EMPLOYED	Prime movers	Proportion of total number	Rated capacity of movers	Proportion of total capacity
	Number	*Percent*	*Hp.*	*Percent*
Total, 1940	2,275	100.0	29,527	100.0
Centrifugal pump	**1,775**	**78.0**	**24,807**	**84.0**
Electric	929	40.8	14,642	49.5
Internal-combustion	832	36.6	7,787	26.4
Other	14	0.6	2,378	8.1
Turbine pump	**145**	**6.4**	**2,340**	**7.9**
Electric	92	4.1	1,345	4.5
Internal-combustion	51	2.2	964	3.3
Other	2	0.1	31	0.1
Plunger pump	**180**	**7.9**	**533**	**1.8**
Electric	108	4.8	267	0.9
Internal-combustion	58	2.5	248	0.8
Other	[2] 14	0.6	18	0.1
Other and mixed types of pumps	**175**	**7.7**	**1,847**	**6.3**
Electric	92	4.1	826	2.8
Internal-combustion	58	2.5	618	2.1
Other	[2] 25	1.1	403	1.4
Total, 1930	[3] 1,091	.....	21,257	.....
Increase or decrease (-) 1930-1940	1,184	.....	8,270	.....

[1] Less than one-tenth of 1 percent. [2] Includes a portion of 30 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
	1940[1]	1930[2]	
	Miles	*Miles*	*Percent*
Total	665.2	[3] 225.3	195.3
Concrete:			
1 to 12 inches	61.8	30.6	102.0
13 to 24 inches	26.9	30.9	16.5
Over 24 inches	9.1		
Metal:			
1 to 12 inches	438.5	72.9	501.5
13 to 24 inches	33.1	7.8	550.0
Over 24 inches	17.6		
Wood-stave:			
1 to 12 inches	36.3	41.0	-11.5
13 to 24 inches	19.4	27.4	14.6
Over 24 inches	12.0		
Clay and other:			
1 to 12 inches	5.8	0.9	544.4
13 to 24 inches	0.1	.....	.....
Over 24 inches	4.6		

[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 2.0 miles wood pipe lines not segregated by size; 5.2 miles 1 to 12 inches and 6.6 miles 13 to 30 inches in diameter, pipe lines not segregated by material.

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

ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage...number	274	182	176
Area irrigable in these enterprises...acres	338,991	436,425	[1] 347,750
Area irrigated in these enterprises...acres	265,771	(2)	(2)
Area for which drains have been installed..acres	126,698	230,413	93,799
Additional area needing drainage...acres	18,786	94,866	46,115
Ratio of area drained to area irrigated in—			
(a) Enterprises reporting lands drained and/or needing drainage...percent	47.7	[3] 52.8	[1] 27.0
(b) All irrigation enterprises...percent	12.1	25.6	9.5
Ratio of area drained plus area needing drainage to—			
(a) Irrigable area reporting...percent	42.9	74.5	[1] 40.2
(b) Irrigated area reporting...percent	54.7	(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.

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..	2,595,022	1,715,553	2,237,727	1,999,155	1,111,684	1,016,713	595,867	603,869	1,221,014
Area irrigated by these enterprises.....acres.....	493,654	360,007	498,843	380,214	212,678	212,100	113,440	147,329	286,743
Average water per acre irrigated.....acre-feet..	5.3	4.8	4.5	5.3	5.2	4.8	5.3	4.1	4.3
Total water delivered to irrigators.....acre-feet..	2,992,612	572,347	458,880	1,166,420	526,439	159,035	1,826,192	45,908	299,845
Area irrigated by these enterprises.....acres.....	912,102	186,198	206,448	279,585	166,215	109,326	632,517	19,983	97,122
Average water per acre irrigated.....acre-feet..	3.3	3.1	2.2	4.2	3.2	1.5	2.9	2.3	3.1
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	27,994	.....	.....	87	.....	.....	27,907	.....	.....
Area irrigated by these enterprises.....acres.....	13,818	.....	.....	214	.....	.....	13,604	.....	.....
Average water per acre irrigated.....acre-feet..	2.0	.....	.....	0.4	.....	.....	2.1	.....	.....
SUPPLEMENTAL ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	25,412	.....	.....	22,840	.....	.....	2,572	.....	.....
Area irrigated by these enterprises.....acres.....	20,581	.....	.....	17,776	.....	.....	2,805	.....	.....
Average water per acre irrigated.....acre-feet..	1.2	.....	.....	1.3	.....	.....	0.9	.....	.....
Total water delivered to irrigators.....acre-feet..	172,481	.....	.....	1,071	.....	.....	171,410	.....	.....
Area irrigated by these enterprises.....acres.....	80,313	.....	.....	1,530	.....	.....	78,783	.....	.....
Average water per acre irrigated.....acre-feet..	2.1	.....	.....	0.7	.....	.....	2.2	.....	.....
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	3,701	.....	.....	.....	.....	.....	3,701	.....	.....
Area irrigated by these enterprises.....acres.....	656	.....	.....	.....	.....	.....	656	.....	.....
Average water per acre irrigated.....acre-feet..	5.6	.....	.....	.....	.....	.....	5.6	.....	.....

[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						
	Primary enterprises	Proportion of total	Supplemental enterprises[1]	Area irrigated	Proportion of total	Area irrigated	Proportion of total
	Acres	*Percent*	*Acres*	*Acres*	*Percent*	*Acres*	*Percent*
Total	1,049,176	100.0	104,970	898,713	100.0	986,162	100.0
Appropriation[2]	594,555	56.7	51,664	355,657	39.6	647,623	65.7
Riparian	47,628	4.5	32	92,546	10.3	14,277	1.5
Appropriation and riparian	68,965	6.6	39,271	.....	.....	.....	.....
Underground	7,468	0.7	703	3,963	0.4	3,235	0.3
Appropriation and underground	8,418	0.8	.....	.....	.....	.....	.....
Riparian and underground	2,948	0.3	.....	.....	.....	.....	.....
Adjudicated by court	303,378	28.9	13,116	399,451	44.4	293,913	29.8
Other mixed and not reported	15,816	1.5	184	47,096	5.3	27,114	2.7

[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 130,403 acres irrigated in 1939 with a primary water supply within the Vale and Umatilla Projects and the areas located within Oregon of the Klamath, Owyhee, and Boise Projects, and their statistics are not duplicated under any other type of enterprise. Areas totalling 85,042 acres irrigated in Oregon in 1939 with a supplemental water supply from works constructed by the Bureau of Reclamation are served by the Burnt River, Baker, Stanfield, Klamath, Umatilla, and McKay Reservoir Projects. These lands are also reported as receiving a primary water supply through other types of enterprises, mostly irrigation districts.

The investment attributed to the Bureau of Reclamation in State tables 7 and 17 relates to the above enterprises and reflects construction costs by the Bureau of Reclamation together with additional costs incurred by certain non-Federal irrigation enterprises now receiving a primary water supply from facilities constructed by the Bureau of Reclamation.

Data on the Deschutes Project in North Central Oregon, under construction by the Bureau of Reclamation in 1939, were not included in the 1940 Census of Irrigation.

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

	PRIMARY ENTERPRISES (For definitions and explanations, see text)	TOTAL	IRRIGATED FARMS						
			No farms[1]	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms	1,000 farms and more
1	Enterprises, 1940.....number...	5,788	84	5,019	373	230	58	23	1
2	Irrigated farms, 1939.....number...	19,389	.....	5,019	946	2,312	2,799	8,313	
3	Area irrigated, 1939.....acres....	1,049,176	.....	434,393	63,453	136,540	151,118	263,672	
4	(a) From which crops were harvested.....acres....	790,925	.....	277,927	48,378	110,802	126,139	227,679	
5	(b) On which crops failed.....acres....	13,781	.....	3,824	194	589	2,451	6,723	
6	(c) Irrigated pasture.....acres....	244,470	.....	152,642	14,881	25,149	22,528	29,270	
	CAPITAL INVESTMENT, 1940								
7	Total capital investment in all enterprises.....dollars..	46,726,313	85,337	4,179,057	663,966	3,580,789	7,900,963	30,316,201	
8	(a) Cost of irrigation works and equipment.....dollars..	46,165,446	83,150	4,037,054	653,362	3,470,725	7,680,692	30,240,473	
9	(b) Investment in water rights.....dollars..	560,867	2,187	142,003	10,604	110,064	220,281	75,728	
10	Area works were capable of supplying with water.....acres....	1,261,081	5,947	520,372	75,465	164,903	173,186	321,208	
11	Average investment per acre irrigated.....dollars..	44.54	.....	9.62	10.46	26.29	52.28	114.98	
12	Average investment per acre which the works could supply with water..dollars..	37.05	14.35	8.03	8.80	21.71	45.62	94.38	
	MAINTENANCE AND OPERATION, AND CHARGES, 1939								
13	Enterprises reporting maintenance and operation.....number...	5,178	44	4,514	346	194	56	23	1
14	(a) Area irrigated in these enterprises.....acres....	982,940	.....	404,592	59,237	116,906	138,529	263,676	
15	(b) Cost of maintenance and operation.....dollars..	1,157,018	571	309,924	40,958	57,677	202,619	545,269	
16	(c) Average cost per irrigated acre reporting.....dollars..	1.18	.....	0.77	0.69	0.49	1.46	2.07	
17	Total annual charges[2].....dollars..	921,724	.....	.....	.....	69,997	252,116	599,611	
18	Average charge per irrigated acre reporting.....dollars..	1.73	.....	.....	.....	0.60	1.67	2.27	
19	Area against which charges were assessed.....acres....	587,585	.....	.....	.....	126,976	150,224	310,385	
20	Average annual charge per acre assessed.....dollars..	1.57	.....	.....	.....	0.55	1.68	1.93	
21	Total charges collected[2].....dollars..	920,583	.....	.....	.....	42,645	220,427	657,511	
	INDEBTEDNESS AND ARREARAGE, 1939								
22	Enterprises reporting indebtedness[3].....number...	71	.....	.....	.....	19	33	18	1
23	(a) Area irrigated in these enterprises.....acres....	334,717	.....	.....	.....	18,287	108,589	207,841	
24	(b) Indebtedness.....dollars..	13,560,102	.....	.....	.....	490,495	1,872,052	11,197,555	
25	(c) Average indebtedness per acre irrigated.....dollars..	40.51	.....	.....	.....	26.82	17.24	53.88	
26	(d) Cost of irrigation works and equipment.....dollars..	25,623,399	.....	.....	.....	951,838	4,584,428	20,087,133	
27	(e) Investment in water rights.....dollars..	292,940	.....	.....	.....	6,645	210,567	75,728	
28	(f) Total investment.....dollars..	25,916,339	.....	.....	.....	958,483	4,794,995	20,162,861	
29	(g) Maintenance and operation.....dollars..	553,167	.....	.....	.....	11,743	157,916	383,508	
30	(h) Total annual charges[2].....dollars..	769,038	.....	.....	.....	22,393	211,043	535,602	
31	(i) Total charges collected[2].....dollars..	799,218	.....	.....	.....	19,548	184,140	595,530	
32	(j) Area against which annual charges were assessed.....acres....	374,937	.....	.....	.....	18,851	117,974	238,112	
33	(k) Average indebtedness per acre assessed.....dollars..	36.06	.....	.....	.....	23.93	15.87	47.03	
34	(l) Average charges per acre assessed.....dollars..	2.05	.....	.....	.....	1.19	1.79	2.25	
35	(m) Average charges per acre irrigated.....dollars..	2.31	.....	.....	.....	1.37	1.94	2.58	
36	Enterprises reporting arrearage[3].....number...	13	.....	.....	.....	3	5	5	.....
37	(a) Area assessed in these enterprises.....acres....	79,551	.....	.....	.....	3,030	37,778	38,743	.....
38	(b) Total arrearage.....dollars..	1,800,973	.....	.....	.....	195,952	64,128	1,540,893	.....
39	(c) Average arrearage per acre assessed.....dollars..	22.64	.....	.....	.....	64.67	1.70	39.77	.....
40	(d) Indebtedness.....dollars..	4,196,344	.....	.....	.....	366,500	242,679	3,587,165	.....
	TYPE, 1940								
41	Individual and partnership.....number...	5,529	83	5,006	351	86	3	.....	.....
42	Cooperative (incorporated and unincorporated).....number...	188	.....	11	19	127	28	3	.....
43	Irrigation district.....number...	39	1	.....	1	7	15	14	1
44	Commercial.....number...	7	.....	.....	.....	3	4	.....	.....
45	U. S. Bureau of Reclamation.....number...	14	.....	.....	.....	2	6	6	.....
46	U. S. Office of Indian Affairs.....number...	7	.....	.....	2	3	2	.....	.....
47	All other.....number...	4	.....	2	.....	2	.....	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939								
48	Enterprises reporting pay roll.....number...	181	.....	.....	.....	104	53	23	1
49	Wages and salaries paid and payable for 1939.....dollars..	617,781	.....	.....	.....	26,463	122,823	468,495	
50	Persons employed during week ending April 29, 1939.....number...	1,086	.....	.....	.....	171	233	682	
	SOURCE OF WATER SUPPLY, 1939								
51	Streams, gravity.....number...	3,172	46	2,552	302	212	44	16	.....
52	Streams, pumped.....number...	976	15	924	26	4	7	.....	.....
53	Wells, pumped.....number...	621	12	594	13	2	.....	.....	.....
54	Wells, pumped and flowing; or wells flowing.....number...	8	.....	8	.....	.....	.....	.....	.....
55	Lakes, gravity or pumped.....number...	63	2	57	4	.....	.....	.....	.....
56	Streams and springs; or springs.....number...	650	4	628	13	5	.....	.....	.....
57	Mixed, streams and wells.....number...	148	1	123	6	5	6	6	1
58	Other mixed or stored storm water.....number...	150	4	133	9	2	1	1	.....

	SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)	TOTAL	IRRIGATED FARMS						
			No farms[1]	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms	1,000 farms and more
1	Enterprises, 1940.....number...	96	9	73	3	4	2	5	.....
2	Irrigated farms, 1939.....number...	1,262	.....	73	6	33	61	1,089	.....
3	Area irrigated, 1939.....acres....	104,970	.....	1,684	60	11,279		91,947	.....
	CAPITAL INVESTMENT, 1940								
4	Total capital investment in all enterprises.....dollars..	4,234,938	11,728	48,811	1,350	304,592		3,868,457	.....
5	(a) Cost of irrigation works and equipment.....dollars..	4,234,222	11,650	48,223	1,350	304,592		3,868,407	.....
6	(b) Investment in water rights.....dollars..	716	78	588	.....	.....		50	.....
7	Area works were capable of supplying with water.....acres....	141,558	3,101	2,096	61	11,333		124,967	.....
8	Average investment per acre irrigated.....dollars..	40.34	.....	28.99	22.50	27.01		42.07	.....
9	Average investment per acre which the works could supply with water..dollars..	29.92	3.78	23.29	22.13	26.88		30.96	.....
	MAINTENANCE AND OPERATION, AND CHARGES, 1939								
10	Enterprises reporting maintenance and operation.....number...	86	4	69	3	4	1	5	.....
11	(a) Area irrigated in these enterprises.....acres....	97,643	.....	1,607	60	4,029		91,947	.....
12	(b) Cost of maintenance and operation.....dollars..	71,049	189	5,566	318	650		64,326	.....
13	(c) Average cost per irrigated acre reporting.....dollars..	0.73	.....	3.46	5.30	0.16		0.70	.....
14	Total annual charges[2].....dollars..	72,521	180	.....	.....	625		71,716	.....
15	Average charge per irrigated acre reporting.....dollars..	0.76	.....	.....	.....	0.16		0.78	.....
16	Area against which charges were assessed.....acres....	98,976	3,000	.....	.....	4,029		91,947	.....
17	Average annual charge per acre assessed.....dollars..	0.73	0.06	.....	.....	0.16		0.78	.....
18	Total charges collected[2].....dollars..	8,967	.....	.....	.....	457		8,510	.....

[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.

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	
84	4,458	759	411	57	20	5,500	168	71	43	6	1
.....	5,129	1,592	2,963	3,581	6,124	7,387	1,327	1,575	6,559	2,541	2
.....	102,340	124,515	280,245	204,928	337,148	428,024	94,244	131,633	263,425	131,850	3
.....	76,993	97,177	214,506	153,051	249,198	311,907	71,105	83,463	206,052	118,398	4
.....	820	1,338	1,401	3,638	6,584	3,667	886	128	2,950	6,150	5
.....	24,527	26,000	64,338	48,239	81,366	112,450	22,253	48,042	54,423	7,302	6
85,337	2,357,882	1,075,619	5,165,244	9,952,510	28,089,721	3,255,493	1,248,882	2,724,250	18,238,630	21,259,058	7
83,150	2,316,855	1,045,881	5,077,676	9,650,913	27,990,971	3,186,152	1,214,339	2,622,037	17,883,860	21,259,058	8
2,187	41,027	29,738	87,568	301,597	98,750	69,341	34,543	102,213	354,770	.....	9
5,947	145,024	142,420	323,017	239,053	405,620	502,104	105,276	177,944	313,246	162,511	10
.....	23.04	8.64	18.43	48.57	83.32	7.61	13.25	20.70	69.24	161.24	11
14.35	16.26	7.55	15.99	41.63	69.25	6.48	11.86	15.31	58.22	130.82	12
44	3,985	697	380	53	19	4,908	155	67	42	6	13
.....	93,294	114,576	255,639	194,786	324,645	387,927	84,760	127,481	250,918	131,854	14
571	207,316	72,173	137,353	280,859	458,746	306,875	59,628	83,594	451,178	255,803	15
.....	2.22	0.63	0.54	1.44	1.41	0.79	0.70	0.66	1.80	1.94	16
.....	4,302	9,300	97,444	357,198	453,480	20,818	26,084	94,392	581,558	198,872	17
.....	2.75	0.78	0.87	2.23	1.84	0.35	0.58	1.36	2.57	1.51	18
.....	1,645	13,750	120,717	182,383	269,090	60,421	50,269	78,780	233,656	164,450	19
.....	2.62	0.68	0.81	1.96	1.69	0.34	0.52	1.20	2.49	1.21	20
.....	2,302	4,516	70,817	403,217	439,791	11,287	10,889	79,361	639,364	179,682	21
.....	2	1	28	29	11	9	5	23	29	5	22
.....	414		26,184	123,842	184,277	8,966	6,102	45,701	180,914	93,034	23
.....	8,600		1,046,267	5,058,986	7,446,249	12,435	20,559	447,372	7,000,975	6,078,761	24
.....	20.77		39.96	40.85	40.41	1.39	3.37	9.79	38.70	65.34	25
.....	14,500		1,742,120	8,139,422	15,727,357	30,027	52,332	1,074,225	12,709,077	11,757,738	26
.....	5,000		51,693	197,497	38,750	120	5,090	72,960	214,770	.....	27
.....	19,500		1,793,813	8,336,919	15,766,107	30,147	57,422	1,147,185	12,923,847	11,757,738	28
.....	850		36,123	229,536	286,658	4,080	3,571	50,878	371,449	123,189	29
.....	897		54,354	298,896	414,891	5,256	3,974	76,925	500,506	182,377	30
.....	245		48,728	351,000	399,245	3,461	3,940	68,661	559,068	163,188	31
.....	1,250		29,133	141,494	203,060	9,004	8,928	51,253	196,276	109,476	32
.....	6.88		34.56	35.75	36.67	1.38	0.87	8.21	35.67	55.53	33
.....	0.72		1.87	2.11	2.04	0.58	0.45	1.50	2.55	1.67	34
.....	2.17		2.24	2.41	2.25	0.59	0.68	1.75	2.77	1.96	35
.....	.....	.....	3	8	2	.....	1	4	7	[4]1	36
.....	.....	.....	3,030	76,521		.....	13,678		56,845	9,028	37
.....	.....	.....	195,952	1,605,021		.....	21,680		1,710,558	68,735	38
.....	.....	.....	64.67	20.97		.....	1.59		30.09	7.61	39
.....	.....	.....	366,500	3,829,844		.....	82,028		3,072,173	1,042,143	40
83	4,423	709	292	16	6	5,384	113	28	4	.....	41
.....	32	45	92	16	3	108	50	26	3	1	42
1	.....	.....	14	17	7	3	1	11	22	2	43
.....	.....	3	3	2	.....	1	1	3	2	.....	44
.....	.....	.....	4	6	4	.....	.....	.....	11	3	45
.....	1	.....	6	.....	.....	1	2	3	1	.....	46
.....	2	2	.....	.....	.....	3	1	.....	.....	.....	47
.....	10	29	88	41	13	56	42	37	40	6	48
.....	1,078	3,172	85,127	181,728	346,676	8,254	8,433	79,277	281,318	240,499	49
49	8	51	261	232	534	108	90	147	340	401	50
46	2,079	644	349	40	14	2,972	119	53	24	4	51
15	904	40	13	4	.....	947	20	6	3	.....	52
12	600	8	1	.....	.....	613	8	.....	.....	.....	53
.....	8	.....	.....	.....	.....	8	.....	.....	.....	.....	54
2	48	5	7	1	.....	59	1	3	.....	.....	55
4	599	25	19	3	.....	640	5	4	1	.....	56
1	99	24	11	7	6	121	9	3	13	2	57
4	121	12	11	2	.....	140	6	2	2	.....	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	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	
9	73	3	4	2	5	86	4	.....	5	[4]1	1
.....	76	3	54	40	1,089	115	29	.....	890	228	2
.....	1,235	509	11,279		91,947	2,951	2,822	.....	89,358	9,839	3
11,728	48,636	1,525	304,592		3,868,457	51,389	33,500	.....	2,118,982	2,031,067	4
11,650	48,048	1,525	304,592		3,868,407	50,723	33,500	.....	2,118,932	2,031,067	5
78	588	.....	.....		50	666	.....	.....	50	.....	6
3,101	1,648	509	11,333		124,967	3,519	5,822	.....	118,118	14,099	7
.....	39.38	3.00	27.01		42.07	17.41	11.87	.....	33.71	206.43	8
3.78	29.51	3.00	26.88		30.96	14.60	5.75	.....	17.94	144.06	9
4	69	3	4	1	5	77	4	.....	4	[4]1	10
.....	1,158	509	4,029		91,947	2,874	2,822	.....	82,108	9,839	11
189	5,359	525	650		64,326	5,829	894	.....	52,320	11,806	12
.....	4.63	1.03	0.16		0.70	2.03	0.32	.....	0.64	1.20	13
189	.....	.....	625		71,716	91	714	.....	59,910	11,806	14
.....	.....	.....	0.16		0.78	0.07	0.25	.....	0.73	1.20	15
3,000	.....	.....	4,029		91,947	1,224	5,805	.....	82,108	9,839	16
0.06	.....	.....	0.16		0.78	0.07	0.12	.....	0.73	1.20	17
.....	.....	.....	457		8,510	.....	457	.....	8,510	.....	18

[3] 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 enterprise involved.

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
	INDEBTEDNESS AND ARREARAGE, 1939								
19	Enterprises reporting indebtedness[2]...number...	[3] 2	.....	.....	.....	.....	[3] 1	[3] 1	.....
20	(a) Area irrigated in these enterprises...acres...	24,266	.....	.....	.....	.....	7,250	17,016	.....
21	(b) Indebtedness...dollars..	769,666	.....	.....	.....	.....	177,166	592,500	.....
22	(c) Average indebtedness per acre irrigated...dollars..	31.72	.....	.....	.....	.....	24.44	34.82	.....
23	(d) Cost of irrigation works and equipment...dollars..	881,592	.....	.....	.....	.....	281,592	600,000	.....
24	(e) Total investment...dollars..	881,592	.....	.....	.....	.....	281,592	600,000	.....
25	(f) Maintenance and operation...dollars..	2,796	.....	.....	.....	.....	.....	2,796	.....
26	(g) Total annual charges[4]...dollars..	10,186	.....	.....	.....	.....	.....	10,186	.....
27	(h) Total charges collected[4]...dollars..	8,510	.....	.....	.....	.....	.....	8,510	.....
28	(i) Area against which annual charges were assessed...acres...	17,016	.....	.....	.....	.....	.....	17,016	.....
29	(j) Average indebtedness per acre assessed...dollars..	34.82	.....	.....	.....	.....	.....	34.82	.....
30	(k) Average charges per acre assessed...dollars..	0.60	.....	.....	.....	.....	.....	0.60	.....
31	(l) Average charges per acre irrigated...dollars..	0.60	.....	.....	.....	.....	.....	0.60	.....
	TYPE, 1940								
32	Individual and partnership...number...	87	8	73	3	2	.....	1	.....
33	Cooperative (incorporated and unincorporated)...number...	4	1	.....	.....	2	1	.....	.....
34	U. S. Bureau of Reclamation...number...	5	.....	.....	.....	.....	1	4	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939								
35	Enterprises reporting pay roll...number...	4	1	.....	.....	.....	1	2	.....
36	Wages and salaries paid and payable for 1939...dollars..	3,466	([5])	.....	.....	.....	([5])	([5])	.....
37	Persons employed during week ending April 29, 1939...number...	8	.....	.....	.....	.....	([5])	([5])	.....
	SOURCE OF SUPPLEMENTAL WATER SUPPLY, 1939								
38	Streams, pumped...number...	11	1	8	1	1	.....	.....	.....
39	Wells, pumped or flowing...number...	58	6	50	2	.....	.....	.....	.....
40	Streams, gravity or storage...number...	27	2	15	.....	3	2	5	.....

[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 STATION	County	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 Direct		*Feet*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Degrees F.*	*Degrees F.*
Astoria	Clatsop	10	72.76	-3.81	26.97	-2.89	34.90	+5.34	7.74	-3.78	3.15	-2.48	51.9	+0.7
Snake River														
Danner	Malheur	4,000	8.27	([2])	3.30	([2])	2.90	-0.30	0.97	-1.61	1.10	+0.40	47.6	+1.7
Harper	Malheur	2,156	5.25	-2.98	1.47	-0.98	2.04	-0.46	1.01	-1.41	0.73	-0.13	49.2	+1.0
Baker	Baker	3,445	6.21	-6.96	1.77	-1.89	1.49	-2.23	1.76	-2.22	1.19	-0.62	47.9	+2.6
Wallowa	Wallowa	2,935	11.18	-5.47	5.03	+0.09	3.05	-1.81	2.04	-2.33	1.06	-1.42	47.1	+2.0
Walla Walla River														
Milton	Umatilla	1,100	9.99	-4.29	2.58	-1.90	4.51	+0.09	2.28	-1.42	0.62	-1.06	54.4	+1.4
Umatilla River														
Echo	Umatilla	601	7.22	-2.80	2.06	-1.60	3.50	+0.26	0.77	-1.25	0.89	-0.21	55.3	+1.5
John Day River														
Prairie City	Grant	3,425	14.37	-0.88	4.50	-0.04	4.95	+0.19	3.68	-0.23	1.24	-0.80	50.7	+2.4
Ukiah	Umatilla	3,340	14.02	-3.92	5.13	-0.35	4.98	+0.13	3.21	-2.23	0.70	-1.47	45.0	+2.0
Deschutes River														
Bend	Deschutes	3,623	7.96	-4.95	2.27	-1.89	2.83	-1.67	2.03	-0.81	0.83	-0.58	49.8	+2.9
Antelope	Wasco	2,630	7.72	-3.19	3.08	-0.52	2.19	-1.11	1.71	-1.31	0.74	-0.25	50.1	+1.7
Hood River														
Parkdale	Hood River	1,740	29.90	-9.91	12.51	-4.60	14.37	-1.64	2.25	-2.33	0.77	-1.34	49.2	+2.2
Willamette River														
Oakridge	Lane	1,313	31.26	-7.36	11.33	-2.71	14.30	-0.58	4.19	-2.93	1.44	-1.14	54.6	+1.7
Corvallis	Benton	266	25.10	-15.17	10.51	-5.95	9.96	-6.09	2.63	-2.64	2.00	-0.49	54.9	+2.7
Detroit	Marion	1,450	62.37	-5.76	25.49	-1.20	29.10	+2.36	4.97	-5.44	2.81	-1.48	50.0	([3])
Hillsboro	Washington	203	26.26	([4])	11.04	([3])	11.20	-2.17	2.18	-2.71	1.84	-0.14	52.6	+0.7
Umpqua River														
Roseburg	Douglas	479	24.69	-8.22	8.80	-3.81	10.80	-2.28	3.21	-2.08	1.88	-0.05	55.6	+2.2
Rogue River														
Jacksonville	Jackson	1,640	18.70	-5.90	7.01	-2.68	7.15	-2.47	3.46	-0.38	1.08	-0.37	53.9	+1.2
Klamath River														
Sand Creek	Klamath	4,682	24.76	-0.04	10.63	+0.85	7.11	-3.40	2.83	-0.61	4.19	+3.12	42.2	+0.7
Klamath Falls	Klamath	4,100	9.02	-3.18	3.43	-1.19	3.58	-0.84	0.90	-1.18	1.11	+0.03	50.1	+2.2
Malheur Lake														
Harney Branch Experiment Station	Harney	4,139	5.59	-4.40	2.16	-0.90	2.23	-1.29	0.54	-1.91	0.66	-0.30	45.7	+1.7
Trout Creek														
Andrews (near)	Harney	4,100	5.74	-1.67	2.62	+0.50	1.75	-0.38	0.88	-1.28	0.49	-0.41	50.0	+1.0
Lake Albert														
Valley Falls	Lake	4,326	9.16	-2.55	3.16	+0.01	2.52	-1.38	2.45	-0.80	1.03	-0.38	48.1	+0.9
Silver Lake														
Lake	Lake	4,200	5.69	-2.04	1.92	-0.05	1.25	-0.83	1.81	-0.48	0.71	-0.68	46.4	+1.8

[1] Departure from normal. [2] Data for November 1938 not available. [3] Data not available. [4] Data for October 1938 not available.

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

ACRES IRRIGATED						COST OF IRRIGATION WORKS AND EQUIPMENT					
No acres[4]	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	
.....	.....	.....	.....	[3] 1	[3] 1	.....	.....	.....	[3] 2	.....	19
.....	.....	.....	.....	7,250	17,016	.....	.....	.....	24,266	.....	20
.....	.....	.....	.....	177,166	592,500	.....	.....	.....	769,666	.....	21
.....	.....	.....	.....	22.44	34.82	.....	.....	.....	31.72	.....	22
.....	.....	.....	.....	281,592	600,000	.....	.....	.....	881,592	.....	23
.....	.....	.....	.....	281,592	600,000	.....	.....	.....	881,592	.....	24
.....	.....	.....	.....	.....	2,796	.....	.....	.....	2,796	.....	25
.....	.....	.....	.....	.....	10,186	.....	.....	.....	10,186	.....	26
.....	.....	.....	.....	.....	8,510	.....	.....	.....	8,510	.....	27
.....	.....	.....	.....	.....	17,016	.....	.....	.....	17,016	.....	28
.....	.....	.....	.....	.....	34.82	.....	.....	.....	34.82	.....	29
.....	.....	.....	.....	.....	0.60	.....	.....	.....	0.60	.....	30
.....	.....	.....	.....	.....	0.60	.....	.....	.....	0.60	.....	31
8	73	3	2	.....	1	85	1	.....	1	.....	32
1	.....	.....	2	1	.....	1	3	.....	.....	.....	33
.....	.....	.....	.....	1	4	.....	.....	.....	4	1	34
1	.....	.....	1	.....	2	1	1	.....	2	.....	35
[5]	.....	.....	[5]	.....	[5]	[5]	[5]	.....	[5]	.....	36
.....	.....	.....	[5]	.....	[5]	[5]	.....	.....	[5]	.....	37
1	8	1	.....	1	.....	10	1	.....	.....	.....	38
6	52	.....	.....	.....	.....	57	1	.....	.....	.....	39
2	13	2	4	1	5	19	2	.....	5	1	40

[4] 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.
[5] Data are included only in State total because less than 3 enterprises reported in the 1940 Census.

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

The year 1939 as a whole for the State of Oregon was dry and warm; since State-wide records were begun in 1890 only 3 years have been warmer and 4 years drier, according to the U. S. Weather Bureau.

Precipitation.—The average annual precipitation for the calendar year at 179 stations was 20.77 inches, a departure of -5.33 inches from the normal. For the Western Division the annual average was 43.90 inches, a departure of -9.93 inches, and for the Eastern Division, 10.50 inches, a departure of -3.31 inches.

The average precipitation for the water year (October 1938 through September 1939) at 22 stations listed in State table 18 with complete records, and which are representative of the major drainage basins in Oregon, was 18.55 inches, a departure of -5.01 inches from the average normal precipitation at these stations. The average precipitation at the 16 stations located west of the Cascade Range was 10.86 inches, a departure of -3.70 inches, and for the 6 stations representative of the Pacific Slope the average precipitation was 33.94 inches, a departure of -7.70 inches from the water year normal for these stations.

The average snowfall for the year was: Western Division, 19.6 inches; Eastern Division, 45.3 inches; State, 33.7 inches. The average number of days with 0.01 inch, or more, was: Western Division, 135; Eastern Division, 67; State 97.

Temperature.—The average temperature was above normal in July, August, and September, with several periods of unusual warmth; new high temperature records were established at several eastern stations late in July and the maximum for the month was within 2° of the record for the State. The first half of July had frequent rains, but there was little after that till near the close of August. There was a shortage of water for irrigation and for livestock and pasturage became dry and short. Conditions were favorable for the rapid spread of forest fires.

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

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	STATE TOTAL[1]	COLUMBIA RIVER		
			Total	Direct (1)	Snake River Total
	IRRIGATED FARMS AND AREAS				
1	Irrigated farms ... 1939 ... number	19,389	12,726	117	5,577
2	Area irrigated ... 1939 ... acres	1,049,176	622,694	1,801	362,501
3	(a) Cropland harvested ... 1939 ... acres	790,925	518,295	1,147	293,374
4	(b) Crop failure ... 1939 ... acres	13,781	11,661	18	6,778
5	(c) Pasture ... 1939 ... acres	244,470	92,728	636	62,349
6	Area irrigated ... 1929 ... acres	898,713	504,956	.....	288,928
7	1919 ... acres	986,162	638,223	92	394,205
8	Increase or decrease (-), 1929-1939 ... percent	16.7	23.3	.....	25.5
9	Irrigable area in enterprises ... 1940 ... acres	1,441,417	873,078	2,153	463,934
10	1930 ... acres	1,478,128	880,067	.....	514,972
11	1920[2] ... acres	1,925,987	1,145,451	223	628,588
12	Excess of irrigable area over the area irrigated ... 1940 ... acres	392,241	250,394	352	101,433
13	1930 ... acres	579,415	375,111	.....	226,044
14	1920[2] ... acres	939,825	507,228	131	234,383
15	Area works were capable of supplying with water ... 1940 ... acres	1,261,081	745,507	2,056	434,254
16	1930 ... acres	1,158,210	658,449	.....	370,026
17	1920 ... acres	1,344,046	846,918	123	489,719
18	Increase or decrease (-), 1930-1940 ... percent	8.9	13.2	.....	17.4
19	Excess of area works were capable of supplying with water over area irrigated ... 1940 ... acres	211,905	122,823	255	71,753
20	1930 ... acres	259,497	153,493	.....	81,098
21	1920 ... acres	357,884	208,695	31	95,514
22	Proportion which area irrigated is of area works were capable of supplying with water ... 1939 ... percent	83.2	83.5	87.6	83.5
23	1929 ... percent	77.6	76.7	.....	78.1
24	1919 ... percent	73.4	75.4	74.8	80.5
	CAPITAL INVESTED TO JANUARY 1				
25	Total investment in irrigation enterprises ... 1940 ... dollars	50,961,251	37,565,199	106,703	24,982,561
26	(a) Cost of irrigation works and equipment ... 1940 ... dollars	50,399,668	37,294,025	106,148	24,868,171
27	(b) Investment in water rights (reported) ... 1940 ... dollars	561,583	271,174	555	114,390
28	Total investment in irrigation enterprises ... 1930 ... dollars	38,754,548	23,937,566	.....	11,994,581
29	1920 ... dollars	28,929,151	18,480,068	11,150	7,093,652
30	Increase or decrease (-), 1930-1940 ... percent	31.5	56.9	.....	108.3
31	Average investment based on area works were capable of supplying with water, per acre ... 1940 ... dollars	40.41	50.39	51.90	57.53
32	1930 ... dollars	33.46	36.35	.....	32.42
33	1920 ... dollars	21.52	21.82	90.65	14.49
34	Average investment per acre irrigated ... 1939 ... dollars	48.57	60.33	59.25	68.92
35	Estimated final investment in existing enterprises ... 1940 ... dollars	53,884,430	38,649,014	108,048	25,622,624
36	Average investment based on estimated final investment and irrigable area, per acre ... 1940 ... dollars	37.38	44.27	50.18	55.23
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary / Supplemental Enterprises	Primary / Supplemental Enterprises		Primary / Supplemental Enterprises
37	Enterprises reporting maintenance and operation ... 1939 ... number	5,185 / 87	3,789 / 80	85	1,396 / 24
38	Area irrigated in these enterprises ... 1939 ... acres	982,940 / 97,843	581,462 / 56,163	1,575	331,550 / 45,527
39	Cost of maintenance and operation ... 1939 ... dollars	1,157,018 / 71,049	730,315 / 28,821	7,946	344,759 / 12,202
40	Average cost, per acre irrigated ... 1939 ... dollars	1.18 / 0.73	1.26 / 0.51	5.05	1.04 / 0.27
41	Total annual charges (reported)[4] [5] ... 1939 ... dollars	921,724 / 72,521	519,291 / 30,855	2,689	174,240 / 19,049
42	Average annual charge per acre irrigated ... 1939 ... dollars	1.77 / 0.76	1.41 / 0.56	9.81	0.77 / 0.42
43	Area against which charges were assessed ... 1939 ... acres	587,585 / 98,976	427,320 / 57,694	274	260,130 / 47,855
44	Average annual charge per acre assessed ... 1939 ... dollars	1.57 / 0.73	1.22 / 0.53	9.81	0.67 / 0.40
45	Total charges collected[4] ... 1939 ... dollars	920,583 / 8,967	465,206 / 8,510	2,098	150,867 / 8,510
46	Indebtedness to December 31 (reported)[5] ... 1939 ... dollars	13,560,102 / 769,666	10,043,368 / 769,666	.....	5,913,415 / 769,666
	WATER DELIVERED TO IRRIGATORS, 1939				
47	Enterprises reporting water delivered ... 1939 ... number	5,345 / 74	3,942 / 68	91	1,450 / 19
48	Area irrigated by these enterprises ... 1939 ... acres	925,920 / 80,969	566,211 / 41,504	1,685	319,225 / 30,917
49	Water delivered ... 1939 ... acre-feet	3,029,606 / 176,182	1,989,116 / 97,438	2,441	1,059,655 / 45,967
50	Average water delivered per acre irrigated ... 1939 ... acre-feet	3.3 / 2.2	3.5 / 2.3	1.4	3.3 / 1.5
51	Average cost of water per acre irrigated ... 1939 ... dollars	1.25 / 0.94	1.33 / 0.83	5.82	0.69 / 0.60
52	Average cost of water per acre-foot delivered ... 1939 ... dollars	0.41 / 0.43	0.38 / 0.35	4.01	0.21 / 0.40
	DRAINAGE OF IRRIGATED LAND				
53	Enterprises reporting land drained or needing drainage ... 1939 ... number	276 /	209 /	7	56 / .....
54	Irrigable area in these enterprises ... 1939 ... acres	338,991 /	193,747 /	249	145,573 / .....
55	Irrigated area in these enterprises ... 1939 ... acres	265,771 /	148,156 /	183	111,666 / .....
56	Area for which drains have been installed ... 1939 ... acres	126,698 /	49,242 /	21	43,462 / .....
57	Additional area needing drainage ... 1939 ... acres	18,786 /	10,391 /	154	6,106 / .....

[1] Data for 2 enterprises in Whitehorse Creek Drainage Basin (60) (number refers to separate map) included in State totals only. Data for unidentified independent basins for the 1930 and 1920 Censuses are included only in State total.

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

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

COLUMBIA RIVER—Continued														
Snake River—Continued														
Owyhee River							Malheur River							
Direct	Total		Direct		Jordan Creek		Total		Direct		Bully Creek		Willow Creek	
(2)			(3)		(5)				(6)		(7)		(8)	
877	1,056		964		92		1,066		965		37		64	1
38,160	67,273		57,017		10,256		74,262		65,213		3,848		5,201	2
30,364	57,040		49,486		7,554		61,836		54,105		3,343		4,388	3
460	3,405		1,542		1,863		1,975		1,384		338		253	4
7,336	6,828		5,989		839		10,451		9,724		167		560	5
31,814	18,165		.....		.....		32,122		.....		.....		.....	6
22,199	36,295		.....		.....		52,850		.....		.....		.....	7
19.9	270.3		.....		.....		131.2		.....		.....		.....	8
45,655	88,275		75,831		12,444		93,585		80,154		4,513		8,918	9
39,347	114,389		.....		.....		109,463		.....		.....		.....	10
31,925	78,311		.....		.....		117,688		.....		.....		.....	11
7,495	21,002		18,814		2,188		19,323		14,941		665		3,717	12
7,533	96,224		.....		.....		71,341		.....		.....		.....	13
9,726	42,016		.....		.....		64,838		.....		.....		.....	14
44,124	88,120		75,676		12,444		92,535		79,109		4,513		8,913	15
35,881	27,133		.....		.....		77,574		.....		.....		.....	16
25,469	42,093		.....		.....		79,618		.....		.....		.....	17
23.0	224.8		.....		.....		19.3		.....		.....		.....	18
5,964	20,847		18,659		2,188		18,273		13,806		665		3,712	19
4,067	8,968		.....		.....		45,452		.....		.....		.....	20
3,270	5,798		.....		.....		26,768		.....		.....		.....	21
86.5	76.3		75.3		82.4		80.3		82.4		85.3		58.4	22
88.7	66.9		.....		.....		41.4		.....		.....		.....	23
87.2	86.2		.....		.....		66.4		.....		.....		.....	24
2,348,898	10,843,102		10,387,682		455,420		8,905,106		8,016,813		29,860		858,633	25
2,344,355	10,842,088		10,386,763		455,325		8,807,181		8,008,888		29,660		768,633	26
4,543	1,014		919		95		97,925		7,925		.....		90,000	27
1,169,589	2,838,913		.....		.....		5,512,944		.....		.....		.....	28
909,478	1,154,185		.....		.....		2,027,683		.....		.....		.....	29
100.8	281.9		.....		.....		61.5		.....		.....		.....	30
53.23	123.05		137.27		36.60		96.24		101.34		6.57		96.33	31
32.60	104.63		.....		.....		71.07		.....		.....		.....	32
35.71	27.42		.....		.....		25.47		.....		.....		.....	33
61.55	161.18		182.19		44.41		119.91		122.93		7.71		165.09	34
2,397,033	11,086,657		10,631,237		455,420		9,197,076		8,058,763		29,660		1,108,653	35
52.50	125.59		140.20		36.60		98.28		100.54		6.57		124.33	36
Primary Enterprises	Sup.	Primary Enterprises	Sup.	Primary Enterprises	Sup.		Primary Enterprises	Sup.			Primary Enterprises	Sup.		
268	3	52	5	40	5	12	179	1	107		33	1	39	37
36,920	1,669	64,069	11,769	56,275	11,769	7,794	72,999	(3)	64,113		3,848	(3)	5,038	38
56,237	138	153,294	8,125	138,696	8,125	14,598	71,485	(3)	65,214		974	(3)	5,297	39
1.52	0.08	2.39	0.69	2.46	0.69	1.87	0.98	(3)	1.02		0.25	(3)	1.05	40
36,199	123	46,684	7,715	32,067	7,715	14,617	46,952	.....	43,732		.....	.....	3,220	41
1.61	0.08	0.82	0.66	0.63	0.66	2.27	0.94	.....	0.91		.....	.....	1.89	42
23,424	1,530	72,436	11,690	65,659	11,690	6,777	60,397	.....	57,597		.....	.....	2,800	43
1.55	0.08	0.64	0.66	0.49	0.66	2.16	0.78	.....	0.76		.....	.....	1.15	44
38,354	.....	44,933	.....	31,966	.....	12,967	37,739	.....	34,531		.....	.....	3,208	45
120,792	.....	739,000	.....	309,000	.....	430,000	4,949,246	.....	4,949,246		.....	.....	.....	46
283	3	60	3	47	3	13	176	1	105		32	1	39	47
36,614	1,669	61,119	11,743	57,017	11,743	4,102	73,056	(3)	61,119		3,744	(3)	5,199	48
135,962	1,533	292,976	21,210	285,339	21,210	7,637	250,123	(3)	236,339		4,208	(3)	9,576	49
3.7	0.9	4.8	1.8	5.0	1.8	1.9	3.4	(3)	3.7		1.1	(3)	1.8	50
1.68	0.08	0.64	0.68	0.64	0.68	0.46	0.76	(3)	0.76		0.24	(3)	1.15	51
0.45	0.09	0.13	0.38	0.13	0.38	0.25	0.22	(3)	0.21		0.21	(3)	0.62	52
36	.....	3	.....	3	.....	.....	7	.....	6		.....	.....	1	53
18,647	.....	68,073	.....	68,073	.....	.....	56,654	.....	56,554		.....	.....	(3)	54
14,857	.....	50,632	.....	50,632	.....	.....	44,089	.....	44,049		.....	.....	(3)	55
8,011	.....	14,787	.....	14,787	.....	.....	20,603	.....	20,593		.....	.....	(3)	56
1,318	.....	2,470	.....	2,470	.....	.....	2,085	.....	2,085		.....	.....	.....	57

[3] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[4] Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
[5] Annual charges and indebtedness were reported only by enterprises serving 5 or more farms, and items 41 to 46, inclusive, relate to those enterprises only.

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

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	COLUMBIA RIVER—Continued							
		Snake River—Continued						Grande Ronde River	
		Burnt River (9)		Powder River (10)		Imnaha River (11)		Total	
	IRRIGATED FARMS AND AREAS								
1	Irrigated farms....1939...number	215		1,001		73		1,289	
2	Area irrigated....1939...acres	23,475		93,161		1,469		64,701	
3	(a) Cropland harvested....1939...acres	20,490		72,901		1,273		49,470	
4	(b) Crop failure....1939...acres	113		818		.....		7	
5	(c) Pasture....1939...acres	2,872		19,442		196		15,224	
6	Area irrigated....1929...acres	18,519		104,089		6,838		57,655	
7	1919...acres	34,287		146,036		4,828		79,191	
8	Increase or decrease (-), 1929-1939....percent	26.8		-10.5		-78.5		12.2	
9	Irrigable area in enterprises....1940...acres	27,978		130,087		1,778		76,576	
10	1930...acres	40,686		120,742		8,528		65,227	
11	1920[1]...acres	54,467		188,463		10,146		98,774	
12	Excess of irrigable area over the area irrigated..1940...acres	4,503		36,926		309		11,875	
13	1930...acres	22,167		16,653		1,690		7,572	
14	1920[1]...acres	20,180		42,427		5,318		19,583	
15	Area works were capable of supplying with water...1940...acres	24,725		108,198		1,740		74,812	
16	1930...acres	20,076		116,492		8,190		63,174	
17	1920...acres	37,506		165,826		6,069		87,191	
18	Increase or decrease (-), 1930-1940....percent	23.2		-7.1		-78.8		18.4	
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres	1,250		15,037		271		10,111	
20	1930...acres	1,557		12,403		1,352		5,519	
21	1920...acres	3,219		19,790		1,241		8,000	
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	94.9		86.1		84.4		86.5	
23	1929...percent	92.2		89.4		83.5		91.3	
24	1919...percent	91.4		88.1		79.6		90.8	
	CAPITAL INVESTED TO JANUARY 1								
25	Total investment in irrigation enterprises....1940...dollars	910,472		1,328,075		23,157		623,751	
26	(a) Cost of irrigation works and equipment....1940...dollars	908,122		1,323,546		22,672		620,207	
27	(b) Investment in water rights (reported)....1940...dollars	2,350		4,529		485		3,544	
28	Total investment in irrigation enterprises....1930...dollars	255,199		1,290,723		203,301		386,759	
29	1920...dollars	639,491		1,552,987		206,378		471,436	
30	Increase or decrease (-), 1930-1940....percent	256.8		2.9		-88.6		61.3	
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars	36.82		12.27		13.31		8.34	
32	1930...dollars	12.71		11.08		24.82		6.12	
33	1920...dollars	17.05		9.37		34.01		5.41	
34	Average investment per acre irrigated....1939...dollars	38.78		14.26		15.76		9.64	
35	Estimated final investment in existing enterprises..1940...dollars	961,797		1,331,091		24,063		624,907	
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars	34.38		10.23		13.53		8.16	
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterprises	Sup. Enterprises	Primary Enterprises	Sup. Enterprises	Primary Enterprises	Sup. Enterprises	Primary Enterprises	Sup. Enterprises
37	Enterprises reporting maintenance and operation...1939...number	83	[2] 1	348	6	62	1	404	7
38	Area irrigated in these enterprises....1939...acres	10,324	17,016	87,175	729	1,457	([3])	58,606	14,276
39	Cost of maintenance and operation....1939...dollars	4,351	2,796	33,265	125	1,378	([3])	24,740	1,003
40	Average cost, per acre irrigated....1939...dollars	0.42	0.16	0.38	0.17	0.95	([3])	0.42	0.07
41	Total annual charges (reported)[4] [5]....1939...dollars	1,019	10,186	21,954	45	.....	.....	21,432	980
42	Average annual charge per acre irrigated....1939...dollars	0.37	0.60	0.42	0.10	.....	.....	0.49	0.07
43	Area against which charges were assessed....1939...acres	2,760	17,016	52,583	464	.....	.....	48,530	17,155
44	Average annual charge per acre assessed....1939...dollars	0.37	0.60	0.42	0.10	.....	.....	0.44	0.06
45	Total charges collected[4]....1939...dollars	.....	8,510	13,648	.....	.....	.....	16,193	.....
46	Indebtedness to December 31 (reported)[5]....1939...dollars	.....	592,500	48,455	177,166	.....	.....	55,922	.....
	WATER DELIVERED TO IRRIGATORS, 1939								
47	Enterprises reporting water delivered....1939...number	91	[2] 1	361	5	62	1	417	5
48	Area irrigated by these enterprises....1939...acres	10,832	17,016	79,032	297	1,469	([3])	57,103	124
49	Water delivered....1939...acre-feet	20,421	22,500	169,877	320	4,788	([3])	185,508	293
50	Average water delivered per acre irrigated....1939...acre-feet	1.9	1.3	2.1	1.1	3.3	([3])	3.2	2.4
51	Average cost of water per acre irrigated....1939...dollars	0.41	0.60	0.36	0.30	0.95	([3])	0.50	0.17
52	Average cost of water per acre-foot delivered..1939...dollars	0.22	0.45	0.17	0.28	0.20	([3])	0.15	0.07
	DRAINAGE OF IRRIGATED LAND								
53	Enterprises reporting land drained or needing drainage....1939...number	.....	.....	1	.....	.....	.....	9	.....
54	Irrigable area in these enterprises....1939...acres	.....	.....	([3])	.....	.....	.....	2,195	.....
55	Irrigated area in these enterprises....1939...acres	.....	.....	([3])	.....	.....	.....	2,084	.....
56	Area for which drains have been installed....1939...acres	.....	.....	([3])	.....	.....	.....	57	.....
57	Additional area needing drainage....1939...acres	.....	.....	.....	.....	.....	.....	233	.....

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

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

	COLUMBIA RIVER—Continued												
	Snake River—Continued				Umatilla River								
	Grande Ronde River—Continued												
	Direct	Wallowa River	Joseph Creek	Walla Walla River	Total	Direct		Birch Creek	Butter Creek				
	(12)	(13)	(14)	(15)		(16)		(17)	(18)				
1	560	701	28	848	907	817		55	35				
2	17,183	46,196	1,022	15,765	37,016	30,476		2,559	3,981				
3	15,422	33,294	754	13,277	28,563	23,457		2,369	2,737				
4	7	.....	.....	34	4,277	3,883		.....	394				
5	2,054	12,902	268	2,454	4,176	3,136		190	850				
6	.....	.....	.....	11,123	35,795	.....		.....	.....				
7	.....	.....	.....	17,514	43,571	.....		.....	.....				
8	.....	.....	.....	41.7	3.4	.....		.....	.....				
9	25,174	50,301	1,101	20,022	50,783	42,250		2,832	5,701				
10	.....	.....	.....	14,359	57,038	.....		.....	.....				
11	.....	.....	.....	18,457	99,012	.....		.....	.....				
12	7,691	4,105	79	4,257	13,767	11,774		273	1,720				
13	.....	.....	.....	3,236	21,243	.....		.....	.....				
14	.....	.....	.....	943	55,441	.....		.....	.....				
15	23,595	50,116	1,101	19,758	47,915	40,392		2,728	4,795				
16	.....	.....	.....	11,526	48,284	.....		.....	.....				
17	.....	.....	.....	17,780	83,341	.....		.....	.....				
18	.....	.....	.....	71.4	-0.8	.....		.....	.....				
19	6,112	3,920	79	3,993	10,899	9,916		169	814				
20	.....	.....	.....	403	12,489	.....		.....	.....				
21	.....	.....	.....	266	39,770	.....		.....	.....				
22	74.1	92.2	92.8	79.8	77.3	75.5		93.8	83.0				
23	.....	.....	.....	96.5	74.1	.....		.....	.....				
24	.....	.....	.....	98.5	52.3	.....		.....	.....				
25	150,152	466,458	7,141	350,857	5,705,027	5,652,710		23,447	28,870				
26	148,906	464,371	6,930	334,320	5,651,105	5,599,210		23,095	28,800				
27	1,246	2,087	211	16,537	53,922	53,500		352	70				
28	.....	.....	.....	195,702	3,752,200	.....		.....	.....				
29	.....	.....	.....	280,934	4,308,892	.....		.....	.....				
30	.....	.....	.....	79.3	52.0	.....		.....	.....				
31	6.36	9.31	6.49	17.76	119.07	139.95		8.59	6.02				
32	.....	.....	.....	16.98	77.71	.....		.....	.....				
33	.....	.....	.....	15.80	51.70	.....		.....	.....				
34	8.59	10.10	6.99	22.26	154.12	185.48		9.16	7.25				
35	150,691	467,075	7,141	354,537	5,733,304	5,679,387		23,447	30,470				
36	5.99	9.29	6.49	17.71	112.90	134.42		8.28	5.34				
	Primary Enterprises	Sup. Enterprises	Primary Enterprises	Sup. Enterprises		Primary Enterprises	Sup. Enterprises	Primary Enterprises	Sup. Enterprises				
37	195	2	185	5	24	256	52	125	3	49	3	43	33
38	13,327	(3)	44,397	14,187	942	14,311	700	35,584	9,935	29,357	9,935	2,298	3,929
39	6,359	(3)	17,775	995	615	20,294	4,677	48,971	11,932	44,175	11,932	3,033	2,763
40	0.48	(3)	0.40	0.07	0.65	1.40	6.68	1.40	1.20	1.50	1.20	1.32	0.70
41	3,384	.....	18,032	980	16	8,806	.....	58,417	11,806	59,317	11,806	100	.....
42	0.38	.....	0.51	0.07	0.08	1.19	.....	2.20	1.20	2.21	1.20	0.58	.....
43	10,700	.....	37,630	17,155	200	7,442	.....	33,516	9,839	33,344	9,839	172	.....
44	0.32	.....	0.48	0.06	0.08	1.18	.....	1.77	1.20	1.78	1.20	0.58	.....
45	990	.....	15,203	.....	.....	9,093	.....	62,389	.....	62,389	.....	.....	.....
46	.....	.....	55,922	.....	.....	15,000	.....	1,892,002	.....	1,892,002	.....	.....	.....
47	208	3	186	2	23	263	45	143	3	64	3	45	34
48	16,141	92	39,940	(3)	1,022	11,339	651	36,906	9,935	30,366	9,935	2,559	3,981
49	32,853	167	149,804	(3)	2,851	76,043	3,688	208,920	47,782	189,472	47,782	8,675	10,173
50	2.0	1.8	3.8	(3)	2.8	6.7	5.7	5.6	4.8	6.2	4.8	3.4	2.6
51	0.45	0.09	0.52	(3)	0.61	1.30	6.39	1.93	1.20	2.14	1.20	1.32	0.70
52	0.22	0.05	0.14	(3)	0.22	0.19	1.13	0.34	0.25	0.34	0.25	0.39	0.28
53	3	.....	6	.....	.....	1	.....	5	.....	5	.....	.....	.....
54	511	.....	1,684	.....	.....	(3)	.....	33,608	.....	33,608	.....	.....	.....
55	501	.....	1,583	.....	.....	(3)	.....	23,656	.....	23,656	.....	.....	.....
56	47	.....	10	.....	.....	.....	.....	3,219	.....	3,219	.....	.....	.....
57	80	.....	153	.....	.....	(3)	.....	2,660	.....	2,660	.....	.....	.....

[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.

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						
			John Day River			Deschutes River		
		Willow Creek (19)	Total	Direct (20)	Rock Creek (21)	Total	Direct (22)	Squaw Creek (23)
	IRRIGATED FARMS AND AREAS							
1	Irrigated farms....1939...number....	106	718	673	45	1,717	1,118	87
2	Area irrigated....1939...acres....	4,337	43,736	42,319	1,417	104,087	59,559	7,660
3	(a) Cropland harvested....1939...acres....	3,986	36,711	35,388	1,323	94,231	56,476	6,189
4	(b) Crop failure....1939...acres....	.....	83	83	.....	388	43	288
5	(c) Pasture....1939...acres....	351	6,942	6,848	94	9,468	3,040	1,212
6	Area irrigated....1929...acres....	5,382	40,495	.....	.....	94,015	.....	.....
7	1919...acres....	5,553	36,141	.....	.....	111,916	.....	.....
8	Increase or decrease (-), 1929-1939....percent....	-19.4	8.0	.....	.....	10.7	.....	.....
9	Irrigable area in enterprises....1940...acres....	4,996	49,839	47,973	1,866	130,224	75,871	11,456
10	1930...acres....	6,265	45,211	.....	.....	181,445	.....	.....
11	1920[1]...acres....	7,159	48,191	.....	.....	291,014	.....	.....
12	Excess of irrigable area over the area irrigated...1940...acres....	659	6,103	5,654	449	26,137	16,312	3,776
13	1930...acres....	883	4,716	.....	.....	87,430	.....	.....
14	1920[1]...acres....	1,606	12,050	.....	.....	179,098	.....	.....
15	Area works were capable of supplying with water...1940...acres....	4,922	47,814	46,045	1,769	112,412	62,864	9,375
16	1930...acres....	6,060	44,384	.....	.....	139,444	.....	.....
17	1920...acres....	6,618	41,492	.....	.....	174,790	.....	.....
18	Increase or decrease (-), 1930-1940....percent....	-18.8	7.7	.....	.....	-19.4	.....	.....
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres....	585	4,078	3,726	352	8,325	3,305	1,695
20	1930...acres....	678	3,869	.....	.....	45,429	.....	.....
21	1920...acres....	1,065	5,351	.....	.....	62,874	.....	.....
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent....	88.1	91.5	91.9	80.1	92.6	94.7	81.9
23	1929...percent....	88.8	91.2	.....	.....	67.4	.....	.....
24	1919...percent....	83.9	87.1	.....	.....	64.0	.....	.....
	CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises....1940...dollars....	51,042	433,991	407,133	26,858	3,743,928	2,732,828	193,682
26	(a) Cost of irrigation works and equipment....1940...dollars....	50,690	424,301	397,740	26,561	3,732,239	2,732,786	193,650
27	(b) Investment in water rights (reported)....1940...dollars....	352	9,690	9,393	297	11,689	42	32
28	Total investment in irrigation enterprises....1930...dollars....	79,547	436,492	.....	.....	6,046,877	.....	.....
29	1920...dollars....	60,139	510,248	.....	.....	5,078,636	.....	.....
30	Increase or decrease (-), 1930-1940....percent....	-35.8	-0.6	.....	.....	-38.1	.....	.....
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars....	10.37	9.08	8.84	15.18	33.31	43.47	20.66
32	1930...dollars....	13.13	9.83	.....	.....	43.36	.....	.....
33	1920...dollars....	9.09	12.30	.....	.....	29.06	.....	.....
34	Average investment per acre irrigated....1939...dollars....	11.77	9.92	9.62	18.95	35.97	45.68	25.22
35	Estimated final investment in existing enterprises...1940...dollars....	53,417	456,596	427,538	29,058	3,853,513	2,816,163	193,682
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars....	10.69	9.16	8.91	15.57	29.59	37.12	16.91
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
37	Enterprises reporting maintenance and operation...1939...number....	74	555	523	32	235	67	9
38	Area irrigated in these enterprises....1939...acres....	3,851	42,680	41,399	1,281	100,502	59,043	5,809
39	Cost of maintenance and operation....1939...dollars....	4,066	29,240	27,743	1,497	115,542	79,095	6,031
40	Average cost, per acre irrigated....1939...dollars....	1.06	0.69	0.67	1.17	1.15	1.34	1.04
41	Total annual charges (reported)[2] [4]....1939...dollars....	20	1,835	1,810	25	194,020	141,026	10,062
42	Average annual charge per acre irrigated....1939...dollars....	0.19	0.45	0.48	0.10	2.56	2.57	1.82
43	Area against which charges were assessed....1939...acres....	106	4,113	3,867	246	85,624	62,478	7,001
44	Average annual charge per acre assessed....1939...dollars....	0.19	0.45	0.47	0.10	2.27	2.26	1.44
45	Total charges collected[3]....1939...dollars....	.....	67	67	.....	168,128	123,559	5,107
46	Indebtedness to December 31 (reported)[4]....1939...dollars....	.....	.....	.....	.....	1,896,081	1,509,417	65,134
	WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered....1939...number....	78	577	538	39	236	73	7
48	Area irrigated by these enterprises....1939...acres....	4,056	41,344	39,927	1,417	100,783	58,839	5,733
49	Water delivered....1939...acre-feet..	6,867	117,073	113,732	3,341	400,246	310,204	19,402
50	Average water delivered per acre irrigated....1939...acre-feet..	1.7	2.8	2.8	2.4	4.0	5.3	3.4
51	Average cost of water per acre irrigated....1939...dollars....	1.10	0.68	0.66	1.17	2.11	2.48	1.79
52	Average cost of water per acre-foot delivered...1939...dollars....	0.66	0.24	0.23	0.50	0.53	0.47	0.53
	DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage....1939...number....	.....	6	6	.....	3	1	.....
54	Irrigable area in these enterprises....1939...acres....	.....	442	442	.....	8,514	[2]	.....
55	Irrigated area in these enterprises....1939...acres....	.....	435	435	.....	8,513	[2]	.....
56	Area for which drains have been installed....1939...acres....	.....	212	212	.....	5	.....	.....
57	Additional area needing drainage....1939...acres....	.....	10	10	.....	506	[2]	.....

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

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

COLUMBIA RIVER—Continued												
Deschutes River—Con.					Willamette River							
Crooked River	White River	Fifteenmile Creek	Hood River	Sandy River	Total	Direct	Calapooya River	Santiam River	Luckiamute River	Yamhill River	Molalla River	
(24)	(25)	(26)	(27)	(28)		(29)	(30)	(31)	(32)	(33)	(34)	
312	200	84	1,374	23	1,355	618	29	202	24	112	203	1
32,205	4,643	1,985	25,066	310	26,080	11,474	592	4,749	623	2,205	2,894	2
27,529	4,046	1,663	24,172	286	20,835	9,422	428	4,183	398	1,502	2,242	3
.....	57	23	1	7	52	12	.....	7	.....	12	6	4
4,676	540	299	893	17	5,143	2,040	164	559	225	691	646	5
.....	.....	.....	22,370	.....	4,250	.....	.....	.....	.....	.....	.....	6
.....	.....	.....	19,765	.....	2,692	.....	.....	.....	.....	.....	.....	7
.....	.....	.....	12.1	.....	513.6	.....	.....	.....	.....	.....	.....	8
36,429	6,468	2,650	30,963	396	117,118	34,892	937	66,201	1,313	3,474	4,801	9
.....	.....	.....	31,240	.....	25,919	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	39,660	.....	4,656	.....	.....	.....	.....	.....	.....	11
4,224	1,825	665	5,897	86	91,038	23,418	345	61,452	690	1,269	1,907	12
.....	.....	.....	8,870	.....	21,669	.....	.....	.....	.....	.....	.....	13
.....	.....	.....	19,895	.....	1,764	.....	.....	.....	.....	.....	.....	14
34,319	5,854	2,632	27,391	364	45,989	20,497	784	11,018	1,252	2,908	4,505	15
.....	.....	.....	28,352	.....	7,022	.....	.....	.....	.....	.....	.....	16
.....	.....	.....	21,101	.....	4,302	.....	.....	.....	.....	.....	.....	17
.....	.....	.....	-3.4	.....	554.9	.....	.....	.....	.....	.....	.....	18
2,114	1,211	647	2,325	54	19,909	9,023	192	6,269	629	703	1,611	19
.....	.....	.....	5,982	.....	2,772	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	1,336	.....	1,410	.....	.....	.....	.....	.....	.....	21
93.8	79.3	75.4	91.5	85.2	56.7	56.0	75.5	43.1	49.8	75.8	64.2	22
.....	.....	.....	78.9	.....	60.5	.....	.....	.....	.....	.....	.....	23
.....	.....	.....	93.7	.....	67.2	.....	.....	.....	.....	.....	.....	24
648,608	168,810	46,660	871,919	30,162	1,242,349	582,029	15,651	217,707	22,890	80,663	118,962	25
645,623	160,180	46,055	862,751	29,985	1,188,260	537,379	15,541	212,238	22,713	79,596	117,907	26
2,985	8,630	605	9,168	177	54,089	44,650	110	5,469	177	1,067	1,055	27
.....	.....	.....	957,875	.....	311,911	.....	.....	.....	.....	.....	.....	28
.....	.....	.....	907,269	.....	100,561	.....	.....	.....	.....	.....	.....	29
.....	.....	.....	-9.0	.....	298.3	.....	.....	.....	.....	.....	.....	30
18.90	28.84	17.73	31.83	82.86	27.01	28.40	19.96	19.76	18.28	27.74	26.41	31
.....	.....	.....	33.79	.....	44.42	.....	.....	.....	.....	.....	.....	32
.....	.....	.....	38.26	.....	23.38	.....	.....	.....	.....	.....	.....	33
20.14	36.36	23.51	34.78	97.30	47.64	50.73	26.44	45.84	36.74	36.58	41.11	34
662,868	180,810	46,775	922,344	31,037	1,466,819	670,432	17,490	287,996	25,310	93,040	129,734	35
18.20	27.95	17.65	29.79	78.38	12.52	19.21	18.67	4.35	19.28	28.78	27.02	36
			Primary Enterprises	Sup.								
136	23	43	54	1	22	944	489	25	76	15	84	121	37
31,007	4,643	1,925	24,709	(2)	308	24,467	10,961	452	4,387	513	2,132	2,706	38
26,683	3,733	2,167	39,475	(2)	1,967	115,068	56,407	1,663	14,146	2,858	9,180	16,541	39
0.86	0.80	1.13	1.60	(2)	6.45	4.70	5.15	3.68	3.22	5.57	4.31	6.11	40
37,165	5,767	564	66,605	.....	.....	11,095	4,513	.....	5,200	.....	149	594	41
3.19	1.56	0.98	2.79	.....	.....	2.32	5.19	.....	1.89	.....	0.85	0.69	42
11,645	4,500	922	28,676	.....	.....	6,517	1,470	.....	3,586	.....	175	1,157	43
3.19	1.28	0.61	2.32	.....	.....	1.70	3.07	.....	1.45	.....	0.85	0.51	44
32,312	7,150	526	69,591	.....	.....	2,447	2,100	.....	.....	.....	.....	347	45
321,180	350	.....	191,146	.....	.....	135,724	85,000	.....	50,724	.....	.....	.....	46
135	21	47	76	1	21	960	506	28	74	21	81	124	47
31,779	4,432	1,700	25,046	(2)	294	23,833	10,986	590	4,315	607	2,129	2,708	48
62,138	8,502	2,452	78,688	(2)	437	36,894	15,719	819	7,337	1,436	2,757	5,815	49
2.0	1.9	1.4	3.1	(2)	1.5	1.5	1.4	1.0	1.7	2.4	1.3	2.1	50
1.57	1.41	1.15	2.75	(2)	5.95	4.88	5.29	3.68	3.27	5.57	4.23	6.46	51
0.80	0.74	0.79	0.88	(2)	4.00	3.15	3.70	3.51	1.92	2.35	3.27	3.01	52
2	.....	2	14	.....	4	111	17	.....	.....	1	10	37	53
(2)	.....	(2)	230	.....	57	4,881	284	.....	.....	(2)	243	1,365	54
(2)	.....	(2)	203	.....	49	3,336	233	.....	.....	(2)	155	945	55
(2)	.....	(2)	58	.....	47	2,207	124	.....	.....	(2)	125	520	56
(2)	.....	.....	13	.....	.....	857	34	.....	.....	.....	8	64	57

[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.

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-basins 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—Con.	PACIFIC SLOPE			
			Willamette River—Con.		Rogue River		
			Tualatin River (35)	Clackamas River (36)	Total	Total	Direct (37)
	IRRIGATED FARMS AND AREAS						
1	Irrigated farms	1939...number	115	52	4,809	4,359	2,342
2	Area irrigated	1939...acres	3,185	358	71,884	64,944	21,255
3	(a) Cropland harvested	1939...acres	2,409	301	52,627	49,163	15,681
4	(b) Crop failure	1939...acres	15	.....	97	79	40
5	(c) Pasture	1939...acres	761	57	19,160	15,702	5,534
6	Area irrigated	1929...acres	.....	.....	60,693	58,960	11,931
7		1919...acres	.....	.....	40,703	38,569	3,256
8	Increase or decrease (-), 1929-1939	...percent	.....	.....	18.4	10.1	78.1
9	Irrigable area in enterprises	1940...acres	4,711	789	88,266	77,253	27,873
10		1930...acres	.....	.....	85,324	81,714	20,123
11		1920[2]...acres	.....	.....	139,826	131,131	14,160
12	Excess of irrigable area over the area irrigated	1940...acres	1,526	431	16,382	12,309	6,618
13		1930...acres	.....	.....	24,631	22,754	8,192
14		1920[2]...acres	.....	.....	99,123	92,562	10,910
15	Area works were capable of supplying with water	1940...acres	4,329	696	84,743	74,680	26,239
16		1930...acres	.....	.....	77,877	74,651	14,630
17		1920...acres	.....	.....	56,469	52,816	4,673
18	Increase or decrease (-), 1930-1940	...percent	.....	.....	8.8	(3)	76.9
19	Excess of area works were capable of supplying with water over area irrigated	1940...acres	1,144	338	12,859	9,736	4,994
20		1930...acres	.....	.....	17,184	15,691	2,905
21		1920...acres	.....	.....	15,766	14,247	1,417
22	Proportion which area irrigated is of area works were capable of supplying with water	1939...percent	73.6	51.4	8.48	87.0	81.0
23		1929...percent	.....	.....	77.9	79.0	80.4
24		1919...percent	.....	.....	72.1	73.0	69.7
	CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises	1940...dollars	167,613	36,834	5,305,470	5,031,147	2,164,329
26	(a) Cost of irrigation works and equipment	1940...dollars	166,288	36,598	5,275,788	5,004,744	2,160,076
27	(b) Investment in water rights (reported)	1940...dollars	1,325	236	29,682	26,403	4,253
28	Total investment in irrigation enterprises	1930...dollars	.....	.....	5,230,947	5,144,992	1,605,192
29		1920...dollars	.....	.....	1,975,189	1,783,989	165,665
30	Increase or decrease (-), 1930-1940	...percent	.....	.....	1.4	-2.2	34.8
31	Average investment based on area works were capable of supplying with water, per acre	1940...dollars	38.72	52.92	62.61	67.37	82.49
32		1930...dollars	.....	.....	67.17	68.92	108.20
33		1920...dollars	.....	.....	34.98	33.78	35.45
34	Average investment per acre irrigated	1939...dollars	52.63	102.89	73.81	77.47	101.83
35	Estimated final investment in existing enterprises	1940...dollars	205,568	37,249	5,424,154	5,122,161	2,238,433
36	Average investment based on estimated final investment and irrigable area, per acre	1940...dollars	43.64	47.21	61.45	66.30	80.31
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS				Primary Enterprises	Sup. Enterprises	Primary Enterprises	Sup. Enterprises	
37	Enterprises reporting maintenance and operation	1939...number	97	37	877	.....	515	.....	177
38	Area irrigated in these enterprises	1939...acres	2,987	329	69,730	.....	63,275	.....	20,076
39	Cost of maintenance and operation	1939...dollars	12,199	2,074	210,832	.....	187,578	.....	97,822
40	Average cost, per acre irrigated	1939...dollars	4.08	6.30	3.02	.....	2.96	.....	4.60
41	Total annual charges (reported)[5] [6]	1939...dollars	.....	640	213,245	.....	212,756	.....	115,076
42	Average annual charge per acre irrigated	1939...dollars	.....	4.96	4.44	.....	4.49	.....	6.95
43	Area against which charges were assessed	1939...acres	.....	129	52,436	.....	51,733	.....	19,421
44	Average annual charge per acre assessed	1939...dollars	.....	4.96	4.07	.....	4.11	.....	5.97
45	Total charges collected[5]	1939...dollars	.....	.....	271,460	.....	271,297	.....	114,907
46	Indebtedness to December 31 (reported)[6]	1939...dollars	.....	.....	1,236,206	.....	1,236,206	.....	373,510
	WATER DELIVERED TO IRRIGATORS, 1939								
47	Enterprises reporting water delivered	1939...number	90	36	907	1	541	1	189
48	Area irrigated by these enterprises	1939...acres	2,152	346	66,815	(4)	60,521	(4)	18,834
49	Water delivered	1939...acre-feet	2,851	360	211,639	(4)	202,690	(4)	88,687
50	Average water delivered per acre irrigated	1939...acre-feet	1.3	1.0	3.2	(4)	3.3	(4)	4.7
51	Average cost of water per acre irrigated	1939...dollars	4.50	6.37	3.70	.....	3.69	.....	6.18
52	Average cost of water per acre-foot delivered	1939...dollars	3.40	6.12	1.17	.....	1.10	.....	1.31
	DRAINAGE OF IRRIGATED LAND								
53	Enterprises reporting land drained or needing drainage	1939...number	42	4	26	.....	5	.....	2
54	Irrigable area in these enterprises	1939...acres	2,660	314	13,325	.....	12,531	.....	(4)
55	Irrigated area in these enterprises	1939...acres	1,876	112	12,379	.....	11,867	.....	(4)
56	Area for which drains have been installed	1939...acres	1,351	72	651	.....	444	.....	(4)
57	Additional area needing drainage	1939...acres	751	.....	333	.....	218	.....	(4)

[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] Less than one-tenth of 1 percent.
[4] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

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

PACIFIC SLOPE—Continued							KLAMATH RIVER						
Rogue River—Continued									Upper Klamath Lake				
									Williamson River				
Little Butte Creek	Bear Creek	Evans Creek	Applegate River	Illinois River	Umpqua River	Other Pacific Slope streams	Total		Direct		Total		
(38)	(39)	(40)	(41)	(42)	(43)	(44)			(45)				
100	1,404	67	294	152	196	254	1,273		464		80		1
3,263	24,683	1,303	9,384	5,056	2,906	4,034	162,866		78,705		34,394		2
2,541	18,971	1,217	7,522	3,291	2,098	1,366	92,467		43,292		11,310		3
.....	1	.....	25	13	17	1	1,584		909		.....		4
722	5,711	86	1,837	1,812	791	2,667	68,815		34,504		23,084		5
11,726	14,863	1,215	9,266	4,328	.....	1,733	126,105		1,841		7,587		6
6,706	8,319	1,333	10,659	4,961	.....	2,134	90,570		3,185		7,800		7
-72.2	66.1	7.2	1.3	16.8	.....	132.8	29.2		(1)		353.3		8
3,299	27,169	1,454	10,375	7,083	5,200	5,813	233,874		98,684		69,488		9
12,247	20,425	1,517	12,620	6,079	.....	3,610	198,432		4,777		15,871		10
54,383	28,275	2,746	17,335	8,705	.....	8,695	239,940		5,910		10,150		11
36	2,486	151	991	2,027	2,294	1,779	71,008		19,979		35,094		12
521	5,563	302	3,354	1,751	.....	1,877	72,327		2,936		8,284		13
47,677	19,956	1,413	6,676	3,744	.....	6,561	149,370		2,725		2,350		14
3,299	27,161	1,410	10,207	6,361	4,755	5,308	186,018		86,661		36,914		15
12,171	20,293	1,482	11,871	5,836	.....	3,226	169,699		3,672		13,616		16
8,417	14,573	1,614	13,012	6,323	.....	3,653	135,099		5,800		9,980		17
-72.9	33.8	-4.9	-14.0	9.0	.....	64.5	9.6		(1)		171.1		18
36	2,478	107	823	1,308	1,849	1,274	33,152		7,956		2,520		19
445	5,431	267	2,605	1,508	.....	1,493	43,594		1,831		6,029		20
1,711	6,254	281	2,353	1,362	.....	1,519	44,529		2,615		2,180		21
98.9	90.9	92.4	91.9	79.4	61.1	76.0	87.6		90.8		93.2		22
96.3	73.2	82.0	78.1	74.2	.....	53.7	74.3		50.1		55.7		23
79.7	57.1	82.6	81.9	78.5	.....	58.4	67.0		54.9		78.2		24
9,221	2,692,456	21,859	91,884	51,398	114,266	160,057	5,136,003		1,464,349		415,089		25
9,180	2,674,250	21,179	91,279	48,780	112,880	158,164	4,955,757		1,439,756		404,034		26
41	18,206	680	605	2,618	1,386	1,893	180,246		24,593		11,055		27
1,219,886	1,475,733	22,504	166,953	203,421	.....	85,955	5,238,426		61,700		259,900		28
604,794	615,878	40,836	180,894	87,966	.....	181,200	3,811,932		43,141		32,368		29
-99.2	82.4	-2.9	-45.0	-74.7	.....	86.2	-2.0		(1)		59.7		30
2.80	99.13	15.50	9.00	8.08	24.03	30.15	27.61		16.90		11.24		31
100.23	72.72	15.18	14.06	34.86	.....	26.64	30.87		16.80		19.09		32
71.85	42.26	25.30	13.90	13.91	.....	52.34	28.22		7.44		3.24		33
2.83	109.08	16.78	9.79	10.17	30.32	39.68	31.54		18.61		12.07		34
9,221	2,692,656	22,284	96,659	62,908	126,768	175,225	6,828,833		1,581,699		1,970,289		35
2.80	99.11	15.33	9.32	8.88	24.38	30.14	29.20		16.03		28.35		36
Primary	Sup.						Primary	Sup.	Primary	Sup.	Primary	Sup.	
Enterprises							Enterprises		Enterprises		Enterprises		
43	.....	82	21	95	97	144	218	161	7	69	2	27	1	37
3,081	.....	24,466	1,241	8,931	4,580	2,774	3,081	153,945	41,480	71,191	(4)	33,042	(4)	38
1,452	.....	78,166	874	6,146	3,118	8,186	15,068	161,615	42,228	58,525	(4)	12,578	(4)	39
0.47	.....	3.19	0.70	0.69	0.68	2.95	4.09	1.05	1.02	0.82	(4)	0.38	(4)	40
1,103	.....	91,294	531	3,692	160	489	.....	175,133	41,666	61,919	4,554	2,482	.....	41
1.26	.....	3.98	0.67	0.62	1.07	0.78	.....	1.98	1.01	1.55	0.77	0.58	.....	42
878	.....	23,976	847	6,408	200	703	.....	93,950	41,282	40,784	5,939	5,182	.....	43
1.26	.....	3.81	0.63	0.58	0.80	0.70	.....	1.86	1.01	1.50	0.77	0.48	.....	44
1,002	.....	153,051	656	1,681	.....	163	.....	168,224	457	54,584	457	2,049	.....	45
100	.....	862,596	.....	.....	.....	.....	.....	1,904,668	.....	476,013	.....	253,848	.....	46
47	1	86	21	90	108	147	219	158	5	74	7 1	19	1	47
3,163	(4)	24,227	1,169	8,239	4,889	2,660	3,634	148,309	39,445	70,967	3,902	28,090	(4)	48
5,578	(4)	49,551	4,151	25,776	28,747	4,178	4,771	450,887	78,729	239,083	13,870	74,067	(4)	49
1.8	(4)	2.0	3.6	3.1	5.9	1.6	1.3	3.0	2.0	3.4	3.6	2.6	(4)	50
0.41	.....	3.87	0.84	0.70	0.65	3.11	4.36	1.35	1.06	1.10	1.05	0.21	(4)	51
0.23	.....	1.89	0.24	0.23	0.11	1.98	3.62	0.44	0.53	0.33	0.30	0.08	(4)	52
.....	.....	1	.....	.....	2	5	16	37	.....	19	.....	3	.....	53
.....	.....	(4)	.....	.....	(4)	203	591	112,758	.....	57,589	.....	4,729	.....	54
.....	.....	(4)	.....	.....	(4)	59	453	86,166	.....	45,004	.....	2,807	.....	55
.....	.....	.....	.....	.....	(4)	7	200	71,955	.....	41,733	.....	760	.....	56
.....	.....	(4)	.....	.....	(4)	70	45	8,004	.....	2,014	.....	842	.....	57

[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 41 to 46, inclusive, relate to those enterprises only.
[7] Data for less than 3 enterprises shown with permission of the enterprise involved.

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)	KLAMATH RIVER—Continued			SACRAMENTO RIVER	INDEPENDENT BASINS
		Upper Klamath Lake—Continued			Pit River	Malheur Lake
		Williamson River—Continued				
		Direct (46)	Sprague River (47)	Lost River (48)	Goose Lake (49)	Total
	IRRIGATED FARMS AND AREAS					
1	Irrigated farms....1939...number	47	33	729	176	215
2	Area irrigated....1939...acres	3,812	30,582	49,767	21,922	79,902
3	(a) Cropland harvested....1939...acres	2,720	8,590	37,865	19,136	47,943
4	(b) Crop failure....1939...acres	.....	.....	675	.....	250
5	(c) Pasture....1939...acres	1,092	21,992	11,227	2,786	31,709
6	Area irrigated....1929...acres	.....	7,587	60,450	.....	107,727
7	1919...acres	.....	7,800	58,568	.....	86,198
8	Increase or decrease (-), 1929-1939....percent	.....	303.1	-17.7	.....	-25.8
9	Irrigable area in enterprises....1940...acres	8,808	60,680	65,702	24,235	112,933
10	1930...acres	.....	15,871	77,170	.....	169,497
11	1920[1]...acres	.....	10,150	194,748	.....	199,968
12	Excess of irrigable area over the area irrigated..1940...acres	4,996	30,098	15,935	2,313	33,031
13	1930...acres	.....	8,284	16,720	.....	61,770
14	1920[1]...acres	.....	2,350	136,180	.....	113,770
15	Area works were capable of supplying with water...1940...acres	5,399	31,515	62,443	23,998	112,845
16	1930...acres	.....	13,616	75,857	.....	118,023
17	1920...acres	.....	9,980	95,304	.....	141,217
18	Increase or decrease (-), 1930-1940....percent	.....	131.5	-17.7	.....	-4.4
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres	1,587	933	12,676	2,076	32,943
20	1930...acres	.....	6,029	15,407	.....	10,296
21	1920...acres	.....	2,180	36,736	.....	55,019
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	70.6	97.0	79.7	91.3	70.8
23	1929...percent	.....	55.7	79.7	.....	91.3
24	1919...percent	.....	78.2	61.5	.....	61.0
	CAPITAL INVESTED TO JANUARY 1					
25	Total investment in irrigation enterprises....1940...dollars	263,521	151,568	3,256,565	1,533,323	329,102
26	(a) Cost of irrigation works and equipment....1940...dollars	263,521	140,513	3,111,967	1,528,572	314,248
27	(b) Investment in water rights (reported)....1940...dollars	.....	11,055	144,598	4,751	14,854
28	Total investment in irrigation enterprises....1930...dollars	.....	259,900	4,295,740	.....	1,884,114
29	1920...dollars	.....	32,368	3,451,383	.....	1,137,612
30	Increase or decrease (-), 1930-1940....percent	.....	-41.7	-24.2	.....	-82.5
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars	48.81	4.81	52.15	63.89	2.92
32	1930...dollars	.....	19.09	56.63	.....	15.96
33	1920...dollars	.....	3.24	38.21	.....	8.06
34	Average investment per acre irrigated....1939...dollars	69.13	4.96	65.44	69.94	4.12
35	Estimated final investment in existing enterprises..1940...dollars	313,721	1,656,568	3,276,845	1,535,473	336,612
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars	35.62	27.30	49.87	63.36	2.98
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterprises	Supplemental Enterprises		Primary Enterprises	Supplemental Enterprises		
37	Enterprises reporting maintenance and operation...1939...number	6	1	21	65	4	82	152
38	Area irrigated in these enterprises....1939...acres	3,760	(2)	29,282	49,712	35,539	19,441	76,573
39	Cost of maintenance and operation....1939...dollars	6,562	(2)	6,016	90,512	37,625	15,115	19,561
40	Average cost, per acre irrigated....1939...dollars	1.75	(2)	0.21	1.82	1.06	0.78	0.26
41	Total annual charges (reported)[3] [4]....1939...dollars	2,182	.....	300	111,332	37,112	12,000	392
42	Average annual charge per acre irrigated....1939...dollars	1.70	.....	0.10	2.49	1.05	1.58	0.15
43	Area against which charges were assessed....1939...acres	2,182	.....	3,000	47,984	35,345	8,000	2,629
44	Average annual charge per acre assessed....1939...dollars	1.00	.....	0.10	2.32	1.05	1.50	0.15
45	Total charges collected[3]....1939...dollars	1,749	.....	300	111,591	.....	14,031	.....
46	Indebtedness to December 31 (reported)[4]....1939...dollars	241,014	.....	12,832	1,174,809	.....	16,360	4,500
	WATER DELIVERED TO IRRIGATORS, 1939							
47	Enterprises reporting water delivered....1939...number	4	1	15	65	3	73	147
48	Area irrigated by these enterprises....1939...acres	1,952	(2)	26,138	49,252	35,539	17,547	69,778
49	Water delivered....1939...acre-feet	7,591	(2)	66,476	137,737	64,845	47,418	158,015
50	Average water delivered per acre irrigated....1939...acre-feet	3.9	(2)	2.5	2.8	1.8	2.7	2.3
51	Average cost of water per acre irrigated....1939...dollars	1.30	(2)	0.13	2.34	1.06	0.85	0.26
52	Average cost of water per acre-foot delivered..1939...dollars	0.33	(2)	0.05	0.84	0.58	0.31	0.12
	DRAINAGE OF IRRIGATED LAND							
53	Enterprises reporting land drained or needing drainage....1939...number	2	.....	1	15	.....	3	.....
54	Irrigable area in these enterprises....1939...acres	(2)	.....	(2)	50,440	.....	230	.....
55	Irrigated area in these enterprises....1939...acres	(2)	.....	(2)	38,355	.....	139	.....
56	Area for which drains have been installed....1939...acres	.....	.....	(2)	29,462	.....	.....	.....
57	Additional area needing drainage....1939...acres	(2)	.....	(2)	5,148	.....	58	.....

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

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

INDEPENDENT BASINS—Continued													
Malheur Lake—Continued											Quinn River		
Silvies River	Harney Lake			Donner und Blitzen River	Benjamin Lake	Silver Lake	Summer Lake	Lake Abert	Cowhead and Warner Lakes	Trout Creek	McDermitt Creek	Tennile Creek	
	Total	Direct	Silver Creek										
(50)		(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(61)	(62)	
164	10	3	7	41	3	20	23	31	55	38	7	11	1
53,156	9,182	1,150	8,032	17,564	160	6,315	3,508	27,389	33,467	9,381	2,970	4,149	2
30,182	3,552	560	2,992	14,209	160	3,786	2,678	20,749	19,561	7,870	2,370	1,004	3
210	40	40	.....	.....	.....	.....	.....	.....	10	44	.....	135	4
22,764	5,590	550	5,040	3,355	.....	2,529	830	6,640	13,896	1,467	600	2,410	5
28,727	.....	.....	.....	79,000	.....	.....	.....	.....	.....	.....	.....	.....	6
64,842	.....	.....	.....	21,356	.....	.....	.....	.....	.....	.....	.....	.....	7
85.0	.....	.....	.....	-77.8	.....	.....	.....	.....	.....	.....	.....	.....	8
80,373	14,750	1,470	13,280	17,810	170	14,609	4,823	28,691	39,574	11,011	3,014	4,189	9
59,997	.....	.....	.....	109,500	.....	.....	.....	.....	.....	.....	.....	.....	10
102,258	42,779	.....	42,779	54,931	.....	.....	.....	.....	.....	.....	.....	.....	11
27,217	5,568	320	5,248	246	10	8,294	1,315	1,302	6,107	1,630	44	40	12
31,270	.....	.....	.....	30,500	.....	.....	.....	.....	.....	.....	.....	.....	13
37,416	42,779	.....	42,779	33,575	.....	.....	.....	.....	.....	.....	.....	.....	14
80,285	14,750	1,470	13,280	17,810	170	14,609	4,823	28,691	38,914	10,614	3,010	4,189	15
33,523	.....	.....	.....	84,500	.....	.....	.....	.....	.....	.....	.....	.....	16
95,867	17,394	.....	17,394	27,956	.....	.....	.....	.....	.....	.....	.....	.....	17
139.5	.....	.....	.....	-78.9	.....	.....	.....	.....	.....	.....	.....	.....	18
27,129	5,568	320	5,248	246	10	8,294	1,315	1,302	5,447	1,233	40	40	19
4,706	.....	.....	.....	5,500	.....	.....	.....	.....	.....	.....	.....	.....	20
31,025	17,394	.....	17,394	6,600	.....	.....	.....	.....	.....	.....	.....	.....	21
66.2	62.3	78.2	60.5	98.6	94.1	43.2	72.7	95.5	86.0	88.4	98.7	99.0	22
85.7	.....	.....	.....	93.5	.....	.....	.....	.....	.....	.....	.....	.....	23
67.6	.....	.....	.....	76.4	.....	.....	.....	.....	.....	.....	.....	.....	24
207,402	80,220	4,050	76,170	41,480	1,725	296,927	365,585	237,348	116,568	47,230	11,371	10,900	25
203,848	70,220	4,050	66,170	40,180	1,725	291,927	365,585	186,935	111,165	47,185	11,356	10,900	26
3,554	10,000	.....	10,000	1,300	.....	5,000	.....	50,413	5,403	45	15	.....	27
80,114	.....	.....	.....	1,804,000	.....	.....	.....	.....	.....	.....	.....	.....	28
1,005,862	.....	.....	.....	131,750	.....	.....	.....	.....	.....	.....	.....	.....	29
158.9	.....	.....	.....	-97.7	.....	.....	.....	.....	.....	.....	.....	.....	30
2.58	5.44	2.76	5.74	2.33	10.15	20.32	75.80	8.27	3.00	4.45	3.78	2.60	31
2.39	.....	.....	.....	21.35	.....	.....	.....	.....	.....	.....	.....	.....	32
10.49	.....	.....	.....	4.71	.....	.....	.....	.....	.....	.....	.....	.....	33
3.90	8.74	3.52	9.48	2.36	10.78	47.02	104.21	8.67	3.48	5.03	3.83	2.63	34
213,952	80,220	4,050	76,170	42,440	1,725	296,927	365,585	247,348	123,108	48,880	11,371	10,900	35
2.66	5.44	2.76	5.74	2.38	10.15	20.32	75.80	8.62	3.11	4.44	3.77	2.60	36
104	8	2	6	40	3	8	4	14	41	34	7	11	37
52,297	8,712	(3)	7,872	15,564	160	2,635	3,122	25,928	30,912	9,334	2,970	4,149	38
13,232	1,093	(3)	1,057	5,236	478	1,455	1,613	5,784	6,130	2,325	560	875	39
0.25	0.13	(3)	0.13	0.34	2.99	0.55	0.52	0.22	0.20	0.25	0.19	0.21	40
392	.....	.....	.....	.....	.....	400	963	300	.....	.....	.....	.....	41
0.15	.....	.....	.....	.....	.....	0.50	0.77	0.25	.....	.....	.....	.....	42
2,629	.....	.....	.....	.....	.....	800	1,250	1,200	.....	.....	.....	.....	43
0.15	.....	.....	.....	.....	.....	0.50	0.77	0.25	.....	.....	.....	.....	44
.....	.....	.....	.....	.....	.....	400	962	300	.....	.....	.....	.....	45
4,500	.....	.....	.....	.....	.....	322,000	33,000	.....	.....	.....	.....	.....	46
98	10	3	7	39	3	7	1	15	35	37	7	11	47
45,212	9,182	1,150	8,032	15,384	160	2,495	(3)	23,724	7,582	9,351	2,970	4,149	48
99,333	25,874	1,140	24,734	32,808	405	7,079	(3)	103,685	14,729	12,302	7,685	5,700	49
2.2	2.8	1.0	3.1	2.1	2.5	2.8	(3)	3.9	1.9	1.3	2.6	1.4	50
0.27	0.13	0.04	0.13	0.33	2.99	0.52	(3)	0.22	0.52	0.25	0.19	0.21	51
0.12	0.04	0.04	0.04	0.15	1.18	0.18	(3)	0.06	0.27	0.19	0.07	0.15	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	53
.....	.....	.....	.....	.....	.....	.....	.....	.....	(3)	.....	.....	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	(3)	.....	.....	.....	55
.....	.....	.....	.....	.....	.....	.....	.....	.....	(3)	.....	.....	.....	56
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57

[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.

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)	Snake River Total	Snake River Direct (2)	Owyhee River Total
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1						
1	Enterprises....1940..number	[2] 5,891	4,315	103	1,546	297	66
2	Average size of enterprise based on area works were capable of supplying with water....1940..acres	214	173	20	281	149	1,335
3	Diversion dams....1940..total number	5,097	3,827	13	1,925	283	56
4	1930..total number	3,806	2,700	.....	1,201	2	95
5	1920..total number	3,285	2,458	.....	1,162	.....	96
6	(a) Concrete and masonry....1940..number	663	564	2	160	18	5
7	(b) Timber....1940..number	877	563	8	308	42	1
8	(c) Earth and rock....1940..number	2,220	1,757	2	990	101	44
9	(d) Other, mixed, and not reported..1940..number	1,337	943	1	467	122	6
10	Main canals and laterals....1940..total length, miles	8,518.0	5,948.6	11.3	2,772.5	266.7	473.0
11	1930..total length, miles	8,177	5,651	.....	2,634	112	199
12	1920..total length, miles	9,071	6,556	1	3,610	112	247
13	(a) Earth....1940..length, miles	8,222	5,707	9	2,720	264	459
14	(b) Lined....1940..length, miles	296.0	241.6	2.3	52.5	2.7	14.0
15	1940..capacity, c.f.s.[3]	37,290	22,796	69	13,295	1,337	2,567
16	1930..capacity, c.f.s.[3]	25,906	17,120	.....	9,209	554	535
17	1920..capacity, c.f.s.[3]	28,897	19,161	2	10,917	330	1,555
18	Pipe lines[4]....1940..total length, miles	665.2	531.4	41.5	57.9	15.4	23.0
19	1930..total length, miles	225.3	204.2	.....	32.0	15.4	1.5
20	1920..total length, miles	159.6	132.2	2.5	29.2	14.4	2.4
21	(a) Concrete....1940..length, miles	97.8	86.9	0.8	24.9	9.0	9.7
22	(b) Metal....1940..length, miles	489.2	385.7	40.4	13.4	1.4	5.1
23	(c) Wood-stave....1940..length, miles	67.7	49.4	0.3	19.6	5.0	8.2
24	(d) Other....1940..length, miles	10.5	9.4	.....	.....	.....	.....
25	Storage dams....1940..total number	247	146	1	86	9	12
26	1930..total number	167	118	.....	73	2	14
27	1920..total number	309	168	.....	103	.....	18
28	(a) Concrete and masonry....1940..number	33	18	.....	10	1	1
29	(b) Earth and rock....1940..number	156	86	1	54	2	10
30	(c) Other, mixed, and not reported..1940..number	58	42	.....	22	6	1
31	Reservoirs....1940..total number	257	153	1	94	10	14
32	(a) 1-99 acre-feet capacity....1940..number	153	92	1	44	3	3
33	(b) 100-999 acre-feet capacity....1940..number	51	35	.....	31	6	7
34	(c) 1,000 and over acre-feet capacity....1940..number	50	26	.....	19	1	4
35	1940..total capacity, ac.-ft.[5]	2,212,315	1,426,761	([6])	1,170,186	6,050	766,146
36	1930..total number	120	80	.....	58	1	14
37	1930..total capacity, ac.-ft.	1,698,428	987,123	.....	783,260	6,000	391,053
38	Wells, flowing....1940..number	76	12	.....	6	.....	3
39	1930..number	59	15	.....	6	.....	.....
40	1920..number	65	19	.....	12	.....	4
41	1940..yield, g.p.m.	3,396	1,165	.....	275	.....	25
42	1930..yield, g.p.m.	6,535	2,005	.....	1,505	.....	.....
43	1920..yield, g.p.m.	11,968	1,182	.....	1,102	.....	787
44	Wells, pumped....1940..number	901	843	38	117	16	2
45	1930..number	558	535	.....	93	3	.....
46	1920..number	208	178	9	39	.....	2
47	1940..yield, g.p.m.	209,289	195,294	4,110	36,877	7,192	([6])
48	1930..yield, g.p.m.	136,669	121,217	.....	31,714	1,375	.....
49	1920..yield, g.p.m.	47,026	32,077	178	9,818	.....	240
50	Pumping plants....1940..total number	2,275	1,764	83	289	116	29
51	1930..total number	1,091	931	.....	266	78	75
52	Prime movers....1940..capacity, hp.	29,527	19,674	549	8,636	3,823	3,697
53	1930..capacity, hp.	21,257	12,666	.....	7,928	5,978	546
54	1920..capacity, hp.	13,769	11,470	42	9,289	5,594	1,312
55	(a) Electric....1940..number	1,221	936	59	177	91	16
56	1940..capacity, hp.	17,080	11,841	331	7,500	3,520	3,386
57	(b) Internal-combustion....1940..number	999	784	21	93	24	3
58	1940..capacity, hp.	9,617	7,348	218	746	303	41
59	(c) Other[7]....1940..number	55	44	.....	19	1	10
60	1940..capacity, hp.	2,830	485	.....	390	.....	270
61	Pumps....1940..total number	2,265	1,753	82	276	116	21
62	1930..number	1,157	978	.....	292	101	77
63	1920..number	614	442	12	190	60	60
64	1940..capacity, g.p.m.	1,510,958	969,794	14,607	419,949	181,530	169,089
65	1930..capacity, g.p.m.	1,022,213	600,215	.....	292,378	188,085	36,894
66	1920..capacity, g.p.m.	600,045	491,607	2,418	377,160	185,022	80,153
67	(a) Centrifugal....1940..number	1,832	1,426	31	239	103	18
68	1940..capacity, g.p.m.	1,392,951	865,699	9,196	392,506	171,491	161,257
69	1940..average capacity, g.p.m.	705	607	297	1,642	1,665	8,959
70	(b) Turbine....1940..number	165	125	12	21	10	3
71	1940..capacity, g.p.m.	142,329	85,324	2,762	24,792	8,594	7,832
72	1940..average capacity, g.p.m.	863	683	230	1,181	859	2,611
73	(c) Plunger....1940..number	201	154	35	7	.....	.....
74	1940..capacity, g.p.m.	13,889	10,450	2,574	291	.....	.....
75	1940..average capacity, g.p.m.	69	68	74	42	.....	.....
76	(d) Other....1940..number	67	48	4	9	3	.....
77	1940..capacity, g.p.m.	62,389	8,321	135	2,360	1,445	.....
78	Pumping lift, from all sources....1940..average, feet	27	28	88	20	20	28
79	1930..average, feet	27	27	.....	22	27	18
80	1920..average, feet	28	28	45	24	31	28
81	from pumped wells....1940..average, feet	35	35	143	19	20	([6])
82	from surface sources...1940..average, feet	22	22	41	21	20	29

[1] Data for 2 enterprises in Whitehorse Creek Drainage Basin (60) (number refers to separate map) are included only in State totals. Data for unidentified independent basins for the 1930 and 1920 Censuses are included only in State totals.

[2] Includes interdrainage basin projects counted as independent enterprises in each basin into which they extend. For actual number of enterprises see State table I.

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

WORKS, 1940, 1930, AND 1920

COLUMBIA RIVER—Continued													
Snake River—Continued													
Owyhee River—Continued		Malheur River				Burnt River	Powder River	Imnaha River	Grande Ronde River				
Direct (3)	Jordan Creek (5)	Total	Direct (6)	Bully Creek (7)	Willow Creek (8)	(9)	(10)	(11)	Total	Direct (12)	Wallowa River (13)	Joseph Creek (14)	
52	14	186	108	34	44	97	392	64	444	221	198	25	1
1,455	889	498	732	133	203	255	276	27	168	107	253	44	2
44	12	351	199	38	114	273	512	103	347	102	196	49	3
.....	.....	331	.....	.....	.....	184	342	70	175	.....	.....	.....	4
.....	.....	256	.....	.....	.....	213	291	34	203	.....	.....	.....	5
4	1	20	14	1	5	.....	83	1	33	18	14	1	6
.....	1	33	14	18	1	13	101	5	110	24	85	1	7
35	9	230	120	12	98	241	182	28	161	54	67	43	8
5	1	68	51	7	10	19	143	69	40	6	30	4	9
397.7	75.3	755.6	606.5	48.0	101.1	294.1	515.2	69.7	398.2	164.5	214.5	19.2	10
.....	.....	420	.....	.....	.....	268	1,009	75	323	.....	.....	.....	11
.....	.....	624	.....	.....	.....	414	1,335	86	631	.....	.....	.....	12
384	75	740	599	48	93	285	512	67	393	163	211	19	13
13.7	0.3	15.6	7.5	.....	8.1	9.1	3.2	2.7	5.2	1.5	3.5	0.2	14
2,096	471	3,720	1,839	212	1,669	607	2,795	96	2,173	653	1,488	32	15
.....	.....	2,642	.....	.....	.....	458	2,722	212	1,551	.....	.....	.....	16
.....	.....	2,022	.....	.....	.....	781	3,754	102	1,883	.....	.....	.....	17
22.8	0.2	3.0	2.9	.....	0.1	6.3	2.9	1.6	5.7	4.8	0.7	0.2	18
.....	.....	4.3	.....	.....	.....	1.1	6.7	.....	.....	.....	.....	.....	19
.....	.....	2.0	.....	.....	.....	1.0	7.9	0.1	1.1	.....	.....	.....	20
9.7	.....	.....	.....	.....	.....	6.0	.....	.....	0.2	0.2	.....	.....	21
5.1	.....	0.4	0.4	.....	.....	0.2	1.0	0.6	4.7	3.9	0.6	0.2	22
8.0	0.2	2.6	2.5	.....	0.1	0.1	1.9	1.0	0.8	0.7	0.1	.....	23
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
11	1	11	7	1	3	9	30	.....	15	6	9	.....	25
.....	.....	11	.....	.....	.....	9	22	.....	10	.....	.....	.....	26
.....	.....	34	.....	.....	.....	8	19	1	19	.....	.....	.....	27
1	.....	3	2	.....	1	.....	4	.....	1	.....	1	.....	28
9	1	8	5	1	2	6	21	.....	7	4	3	.....	29
1	.....	.....	.....	.....	.....	3	5	.....	7	2	5	.....	30
13	1	18	7	1	10	8	30	.....	14	9	5	.....	31
3	.....	9	1	.....	8	.....	18	.....	11	9	2	.....	32
7	.....	5	4	1	.....	6	6	.....	1	.....	1	.....	33
3	1	4	2	.....	2	2	6	.....	2	.....	2	.....	34
722,146	(6)	300,931	250,780	(6)	50,031	28,910	28,745	.....	49,404	50	49,354	.....	35
.....	.....	10	.....	.....	.....	5	19	.....	6	.....	.....	.....	36
.....	.....	234,323	.....	.....	.....	104,120	3,314	.....	41,766	.....	.....	.....	37
3	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	38
.....	.....	2	.....	.....	.....	1	3	.....	.....	.....	.....	.....	39
.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	.....	.....	40
25	.....	.....	.....	.....	.....	.....	250	.....	.....	.....	.....	.....	41
.....	.....	280	.....	.....	.....	76	1,150	.....	.....	.....	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	315	.....	.....	.....	.....	.....	43
2	.....	4	.....	.....	4	1	24	.....	70	67	3	.....	44
.....	.....	1	.....	.....	.....	1	30	.....	58	.....	.....	.....	45
.....	.....	2	.....	.....	.....	.....	13	.....	20	.....	.....	.....	46
(6)	.....	1,346	.....	.....	1,346	(6)	6,710	.....	20,849	20,713	136	.....	47
.....	.....	25	.....	.....	.....	150	10,020	.....	20,144	.....	.....	.....	48
.....	.....	60	.....	.....	.....	.....	4,780	.....	4,203	.....	.....	.....	49
29	.....	17	6	.....	11	2	36	2	87	79	8	.....	50
.....	.....	12	.....	.....	.....	1	32	1	67	.....	.....	.....	51
3,697	.....	290	187	.....	103	(6)	484	(6)	316	302	14	.....	52
.....	.....	652	.....	.....	.....	2	377	6	367	.....	.....	.....	53
.....	.....	521	.....	.....	.....	24	1,601	23	189	.....	.....	.....	54
16	.....	7	2	.....	5	.....	20	.....	43	37	6	.....	55
3,386	.....	55	(6)	.....	10	.....	431	.....	108	98	10	.....	56
3	.....	9	3	.....	6	2	14	1	40	39	1	.....	57
41	.....	160	67	.....	93	(6)	52	(6)	164	160	(6)	.....	58
10	.....	1	1	.....	.....	.....	2	1	4	3	1	.....	59
270	.....	(6)	(6)	.....	.....	.....	(6)	.....	44	44	.....	.....	60
21	.....	14	6	.....	8	2	36	1	86	78	8	.....	61
.....	.....	12	.....	.....	.....	1	33	1	67	.....	.....	.....	62
.....	.....	10	.....	.....	.....	3	14	4	35	.....	.....	.....	63
169,089	.....	17,046	15,700	.....	1,346	(6)	15,590	(6)	33,564	33,133	431	.....	64
.....	.....	28,420	.....	.....	.....	150	14,025	300	23,504	.....	.....	.....	65
.....	.....	30,010	.....	.....	.....	965	69,132	500	10,743	.....	.....	.....	66
18	.....	9	5	.....	4	2	29	1	77	72	5	.....	67
161,257	.....	16,475	15,675	.....	800	(6)	7,905	(6)	32,248	31,898	350	.....	68
8,959	.....	1,831	3,135	.....	200	(6)	273	(6)	419	443	70	.....	69
3	.....	.....	.....	.....	.....	.....	5	.....	3	1	2	.....	70
7,832	.....	.....	.....	.....	.....	.....	7,590	.....	776	(6)	(6)	.....	71
2,611	.....	.....	.....	.....	.....	.....	1,518	.....	259	(6)	(6)	.....	72
.....	.....	2	1	.....	1	.....	2	.....	3	3	.....	.....	73
.....	.....	(6)	(6)	.....	(6)	.....	(6)	.....	155	155	.....	.....	74
.....	.....	(6)	(6)	.....	(6)	.....	(6)	.....	52	52	.....	.....	75
.....	.....	3	.....	.....	3	.....	.....	.....	3	2	1	.....	76
.....	.....	530	.....	.....	530	.....	.....	.....	365	(6)	(6)	.....	77
28	.....	19	20	.....	18	(6)	27	(6)	17	15	35	.....	78
.....	.....	25	.....	.....	.....	14	25	20	18	.....	.....	.....	79
.....	.....	17	.....	.....	.....	17	33	40	12	.....	.....	.....	80
(6)	.....	21	.....	.....	21	.....	25	.....	17	16	34	.....	81
29	.....	16	20	.....	9	(6)	32	(6)	19	11	35	.....	82

[4] Includes siphons and farm pipe lines reported.
[5] Total capacity of all reservoirs regardless of size.
[6] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[7] Includes water wheels for which no horsepower was reported.

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 unindentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	COLUMBIA RIVER—Continued					
			Umatilla River				
		Walla Walla River (15)	Total	Direct (16)	Birch Creek (17)	Butter Creek (18)	Willow Creek (19)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1						
1	Enterprises....1940..number	349	147	67	45	35	83
2	Average size of enterprise based on area works were capable of supplying with water....1940..acres	57	326	603	61	137	59
3	Diversion dams....1940..total number	204	164	51	53	60	128
4	1930..total number	27	179	.....	.....	.....	117
5	1920..total number	101	139	.....	.....	.....	71
6	(a) Concrete and masonry....1940..number	124	94	35	22	37	78
7	(b) Timber....1940..number	12	11	2	6	3	17
8	(c) Earth and rock....1940..number	54	40	10	16	14	9
9	(d) Other, mixed, and not reported..1940..number	14	19	4	9	6	24
10	Main canals and laterals....1940..total length, miles	92.1	376.2	305.2	60.0	11.0	95.4
11	1930..total length, miles	95	416	.....	.....	.....	101
12	1920..total length, miles	206	461	.....	.....	.....	105
13	(a) Earth....1940..length, miles	85	258	187	60	11	93
14	(b) Lined....1940..length, miles	7.1	118.2	118.2	.....	.....	2.4
15	1940..capacity, c.f.s.[1]	727	1,639	1,387	113	139	133
16	1930..capacity, c.f.s.[1]	261	1,804	.....	.....	.....	171
17	1920..capacity, c.f.s.[1]	404	2,007	.....	.....	.....	110
18	Pipe lines[2]....1940..total length, miles	18.4	64.1	63.3	0.8	.....	1.6
19	1930..total length, miles	2.4	43.4	.....	.....	.....	0.1
20	1920..total length, miles	23.6	14.3	.....	.....	.....	0.3
21	(a) Concrete....1940..length, miles	13.1	18.7	18.2	0.5	.....	0.2
22	(b) Metal....1940..length, miles	4.8	37.7	37.6	0.1	.....	0.9
23	(c) Wood-stave....1940..length, miles	0.3	7.7	7.5	0.2	.....	0.5
24	(d) Other....1940..length, miles	0.2	.....	.....	.....	.....	.....
25	Storage dams....1940..total number	.....	2	2	.....	.....	.....
26	1930..total number	.....	6	.....	.....	.....	1
27	1920..total number	7	10	.....	.....	.....	7
28	(a) Concrete and masonry....1940..number	.....	1	1	.....	.....	.....
29	(b) Earth and rock....1940..number	.....	1	1	.....	.....	.....
30	(c) Other, mixed, and not reported..1940..number	.....	.....	.....	.....	.....	.....
31	Reservoirs....1940..total number	.....	4	4	.....	.....	.....
32	(a) 1-99 acre-feet capacity....1940..number	.....	2	2	.....	.....	.....
33	(b) 100-999 acre-feet capacity....1940..number	.....	.....	.....	.....	.....	.....
34	(c) 1,000 and over acre-feet capacity....1940..number	.....	2	2	.....	.....	.....
35	1940..total capacity, ac.-ft.[3]	.....	123,012	123,012	.....	.....	.....
36	1930..total number	.....	3	.....	.....	.....	.....
37	1930..total capacity, ac.-ft.	.....	52,412	.....	.....	.....	.....
38	Wells, flowing....1940..number	.....	.....	.....	.....	.....	.....
39	1930..number	1	.....	.....	.....	.....	.....
40	1920..number	1	2	.....	.....	.....	.....
41	1940..yield, g.p.m.	.....	.....	.....	.....	.....	.....
42	1930..yield, g.p.m.	125	.....	.....	.....	.....	.....
43	1920..yield, g.p.m.	.....	.....	.....	.....	.....	.....
44	Wells, pumped....1940..number	200	8	7	1	.....	.....
45	1930..number	178	11	.....	.....	.....	2
46	1920..number	88	6	.....	.....	.....	.....
47	1940..yield, g.p.m.	39,212	2,200	2,000	(4)	.....	.....
48	1930..yield, g.p.m.	42,462	2,460	.....	.....	.....	2
49	1920..yield, g.p.m.	19,325	171	.....	.....	.....	.....
50	Pumping plants....1940..total number	221	19	17	2	.....	3
51	1930..total number	190	26	.....	.....	.....	2
52	Prime movers....1940..capacity, hp.	953	177	170	(4)	.....	24
53	1930..capacity, hp.	860	268	.....	.....	.....	4
54	1920..capacity, hp.	467	115	.....	.....	.....	2
55	(a) Electric....1940..number	201	11	9	2	.....	1
56	1940..capacity, hp.	812	90	83	(4)	.....	(4)
57	(b) Internal-combustion....1940..number	19	8	8	.....	.....	2
58	1940..capacity, hp.	139	87	87	.....	.....	(4)
59	(c) Other[5]....1940..number	1	.....	.....	.....	.....	.....
60	1940..capacity, hp.	(4)	.....	.....	.....	.....	.....
61	Pumps....1940..total number	221	19	17	2	.....	3
62	1930..number	190	27	.....	.....	.....	2
63	1920..number	93	13	.....	.....	.....	1
64	1940..capacity, g.p.m.	42,489	15,070	14,570	(4)	.....	956
65	1930..capacity, g.p.m.	46,264	13,790	.....	.....	.....	2
66	1920..capacity, g.p.m.	19,425	4,246	.....	.....	.....	200
67	(a) Centrifugal....1940..number	205	17	15	2	.....	.....
68	1940..capacity, g.p.m.	38,296	11,870	11,370	(4)	.....	.....
69	1940..average capacity, g.p.m..	187	698	758	(4)	.....	.....
70	(b) Turbine....1940..number	15	2	2	.....	.....	.....
71	1940..capacity, g.p.m.	4,175	(4)	(4)	.....	.....	.....
72	1940..average capacity, g.p.m..	278	(4)	(4)	.....	.....	.....
73	(c) Plunger....1940..number	1	.....	.....	.....	.....	2
74	1940..capacity, g.p.m.	(4)	.....	.....	.....	.....	(4)
75	1940..average capacity, g.p.m..	(4)	.....	.....	.....	.....	(4)
76	(d) Other....1940..number	.....	.....	.....	.....	.....	1
77	1940..capacity, g.p.m.	.....	.....	.....	.....	.....	(4)
78	Pumping lift, from all sources....1940..average, feet	32	20	18	(4)	.....	27
79	1930..average, feet	28	25	.....	.....	.....	65
80	1920..average, feet	25	34	.....	.....	.....	12
81	from pumped wells....1940..average, feet	33	19	19	(4)	.....	.....
82	from surface sources...1940..average, feet	27	20	18	(4)	.....	27

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

WORKS, 1940, 1930, AND 1920—Continued

COLUMBIA RIVER—Continued													
John Day River			Deschutes River					Fifteenmile Creek	Hood River	Sandy River	Willamette River		
Total	Direct	Rock Creek	Total	Direct	Squaw Creek	Crooked River	White River				Total	Direct	
	(20)	(21)		(22)	(23)	(24)	(25)	(26)	(27)	(28)		(29)	
597	558	39	266	86	13	144	23	54	83	23	1,064	529	1
80	33	45	423	731	721	238	255	49	330	16	43	39	2
712	680	32	404	66	28	288	23	62	38	5	172	60	3
712	.....	.....	224	.....	.....	.....	.....	.....	30	.....	68	.....	4
504	.....	.....	361	.....	.....	.....	.....	.....	34	.....	15	.....	5
45	27	18	27	12	.....	13	2	18	7	.....	9	1	6
57	49	8	40	4	4	28	4	11	10	2	87	31	7
457	453	4	123	35	2	77	9	16	20	3	43	14	8
153	151	2	214	15	22	170	7	17	1	.....	33	14	9
373.5	863.7	9.8	1,488.1	946.4	84.1	306.4	151.2	82.2	170.2	.....	187.1	32.0	10
689	.....	.....	1,413	.....	.....	.....	.....	.....	208	.....	38	.....	11
707	.....	.....	1,101	.....	.....	.....	.....	.....	220	.....	58	.....	12
671	662	9	1,470	935	84	300	151	82	147	.....	172	26	13
2.5	1.7	0.8	18.1	11.4	0.1	6.4	0.2	0.2	23.2	.....	15.1	6.0	14
1,791	1,733	58	3,000	1,981	301	595	123	77	691	12	136.2	458	15
952	.....	.....	4,166	.....	.....	.....	.....	.....	432	.....	72	.....	16
1,052	.....	.....	4,023	.....	.....	.....	.....	.....	435	.....	148	.....	17
19.4	18.8	0.6	9.1	7.2	.....	1.9	.....	3.1	23.5	14.3	278.5	180.6	18
1.9	.....	.....	12.4	.....	.....	.....	.....	.....	44.4	.....	43.6	.....	19
5.7	.....	.....	8.5	.....	.....	.....	.....	.....	38.6	.....	3.2	.....	20
0.6	0.6	.....	0.8	0.8	.....	.....	.....	2.0	3.8	.....	22.0	8.8	21
14.3	13.7	0.6	5.0	4.0	.....	1.0	.....	0.8	7.6	14.2	246.6	167.0	22
.....	.....	.....	3.2	2.3	.....	0.9	.....	0.1	11.4	0.1	6.2	3.9	23
4.5	4.5	.....	0.1	0.1	.....	.....	.....	0.2	0.7	.....	3.7	0.9	24
10	10	.....	13	3	4	6	.....	.....	3	.....	31	7	25
6	.....	.....	10	.....	.....	.....	.....	.....	3	.....	15	.....	26
8	.....	.....	25	.....	.....	.....	.....	.....	5	.....	.....	.....	27
2	2	.....	1	1	.....	.....	.....	.....	1	.....	3	2	28
7	7	.....	12	2	4	6	.....	.....	2	.....	9	1	29
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	4	30
5	4	1	16	4	3	9	.....	.....	5	.....	28	5	31
4	3	1	10	2	1	7	.....	.....	3	.....	28	5	32
.....	.....	.....	2	1	.....	1	.....	.....	2	.....	.....	.....	33
1	1	.....	4	1	2	1	.....	.....	.....	.....	.....	.....	34
1,606	1,605	(4)	130,974	80,402	2,605	48,067	.....	.....	803	.....	165	31	35
5	.....	.....	8	.....	.....	.....	.....	.....	.....	.....	3	.....	36
1,609	.....	.....	148,829	.....	.....	.....	.....	.....	.....	.....	1,010	.....	37
3	3	.....	1	1	.....	.....	.....	.....	.....	.....	2	1	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	39
.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	40
200	200	.....	(4)	(4)	.....	.....	.....	.....	.....	.....	(4)	(4)	41
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	150	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	.....	43
13	13	.....	12	10	.....	2	.....	1	.....	11	443	321	44
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	187	.....	45
6	.....	.....	3	.....	.....	.....	.....	.....	1	.....	15	.....	46
1,500	1,500	.....	3,118	1,688	.....	(4)	.....	(4)	.....	545	107,502	81,352	47
.....	.....	.....	13	.....	.....	.....	.....	.....	.....	.....	40,367	.....	48
475	.....	.....	386	.....	.....	.....	.....	.....	17	.....	1,369	.....	49
73	64	9	31	21	.....	10	.....	6	5	24	1,010	528	50
30	.....	.....	26	.....	.....	.....	.....	.....	3	.....	292	.....	51
876	798	78	364	198	.....	166	.....	65	26	122	7,882	3,889	52
385	.....	.....	823	.....	.....	.....	.....	.....	3	.....	2,032	.....	53
413	.....	.....	764	.....	.....	.....	.....	.....	36	.....	220	.....	54
6	5	1	7	1	.....	6	.....	4	4	20	446	259	55
45	43	(4)	166	(4)	.....	126	.....	12	24	91	2,768	1,438	56
63	55	8	16	12	.....	4	.....	2	1	4	552	263	57
825	749	76	185	145	.....	40	.....	(4)	(4)	31	5,040	2,425	58
4	4	.....	8	8	.....	.....	.....	.....	.....	.....	12	6	59
6	6	.....	13	13	.....	.....	.....	.....	.....	.....	74	26	60
73	64	9	39	19	.....	10	.....	6	7	25	1,012	528	61
30	.....	.....	26	.....	.....	.....	.....	.....	3	.....	311	.....	62
47	.....	.....	26	.....	.....	.....	.....	.....	5	.....	32	.....	63
68,453	61,318	7,135	20,931	8,546	.....	12,385	.....	362	585	3,016	382,816	157,046	64
40,420	.....	.....	36,331	.....	.....	.....	.....	.....	271	.....	160,749	.....	65
41,280	.....	.....	36,564	.....	.....	.....	.....	.....	765	.....	7,813	.....	66
46	38	8	21	13	.....	8	.....	5	4	8	850	451	67
60,080	52,970	7,110	18,493	7,458	.....	11,035	.....	812	455	1,935	332,056	142,305	68
1,306	1,394	889	881	574	.....	1,379	.....	162	114	242	391	316	69
15	15	.....	1	.....	.....	1	.....	.....	.....	4	55	21	70
7,595	7,595	.....	(4)	.....	.....	(4)	.....	.....	.....	645	41,405	8,748	71
506	506	.....	(4)	.....	.....	(4)	.....	.....	.....	161	753	417	72
7	6	1	4	4	.....	.....	.....	1	1	9	87	47	73
205	180	(4)	330	330	.....	.....	.....	(4)	(4)	340	6,536	3,893	74
29	30	(4)	82	82	.....	.....	.....	(4)	(4)	38	75	83	75
5	5	.....	3	2	.....	1	.....	.....	2	4	20	9	76
573	573	.....	1,358	(4)	.....	(4)	.....	.....	(4)	96	2,819	2,100	77
42	44	26	28	33	.....	20	.....	52	62	60	22	20	78
19	.....	.....	27	.....	.....	.....	.....	.....	32	.....	22	.....	79
25	.....	.....	38	.....	.....	.....	.....	.....	70	.....	24	.....	80
133	133	.....	29	37	.....	(4)	.....	(4)	.....	102	25	22	81
23	23	26	28	31	.....	23	.....	57	62	27	20	19	82

[4] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[5] Includes water wheels for which no horsepower was reported.

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						
		Willamette River—Continued						
		Calapooya River (30)	Santiam River (31)	Luckiamute River (32)	Yamhill River (33)	Molalla River (34)	Tualatin River (35)	Clackamas River (36)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
1	Enterprises....1940..number	29	86	23	99	141	116	41
2	Average size of enterprise based on area works were capable of supplying with water....1940..acres	27	128	54	29	32	37	17
3	Diversion dams....1940..total number	4	10	8	18	31	35	6
4	1930..total number	.....	.....	.....	.....	.....	.....	.....
5	1920..total number	.....	.....	.....	.....	.....	.....	.....
6	(a) Concrete and masonry....1940..number	.....	.....	.....	2	2	4	.....
7	(b) Timber....1940..number	3	6	2	14	14	17	.....
8	(c) Earth and rock....1940..number	1	4	6	2	2	9	5
9	(d) Other, mixed, and not reported..1940..number	.....	.....	.....	.....	13	5	1
10	Main canals and laterals....1940..total length, miles	8.8	97.7	2.5	13.1	10.9	20.3	1.8
11	1930..total length, miles	.....	.....	.....	.....	.....	.....	.....
12	1920..total length, miles	.....	.....	.....	.....	.....	.....	.....
13	(a) Earth....1940..length, miles	8	97	1	11	10	18	1
14	(b) Lined....1940..length, miles	0.8	0.7	1.5	2.1	0.9	2.3	0.8
15	1940..capacity, c.f.s.[1]	93	285	28	128	162	183	25
16	1930..capacity, c.f.s.[1]	.....	.....	.....	.....	.....	.....	.....
17	1920..capacity, c.f.s.[1]	.....	.....	.....	.....	.....	.....	.....
18	Pipe lines[2]....1940..total length, miles	5.6	14.4	3.0	16.1	25.7	25.8	7.3
19	1930..total length, miles	.....	.....	.....	.....	.....	.....	.....
20	1920..total length, miles	.....	.....	.....	.....	.....	.....	.....
21	(a) Concrete....1940..length, miles	0.1	0.9	0.3	1.7	1.7	8.1	0.4
22	(b) Metal....1940..length, miles	4.8	12.0	2.4	14.0	23.4	16.6	6.4
23	(c) Wood-stave....1940..length, miles	0.1	0.2	0.3	0.1	0.5	1.1	.....
24	(d) Other....1940..length, miles	0.6	1.3	.....	0.3	0.1	.....	0.5
25	Storage dams....1940..total number	.....	.....	1	1	9	9	4
26	1930..total number	.....	.....	.....	.....	.....	.....	.....
27	1920..total number	.....	.....	.....	.....	.....	.....	.....
28	(a) Concrete and masonry....1940..number	.....	.....	1	.....	.....	.....	.....
29	(b) Earth and rock....1940..number	.....	.....	.....	1	2	2	3
30	(c) Other, mixed, and not reported..1940..number	.....	.....	.....	.....	7	7	1
31	Reservoirs....1940..total number	1	1	1	1	7	9	3
32	(a) 1-99 acre-feet capacity....1940..number	1	1	1	1	7	9	3
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]	(4)	(4)	(4)	(4)	28	82	16
36	1930..total number	.....	.....	.....	.....	.....	.....	.....
37	1930..total capacity, ac.-ft.	.....	.....	.....	.....	.....	.....	.....
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	11	43	7	12	29	5	15
45	1930..number	.....	.....	.....	.....	.....	.....	.....
46	1920..number	.....	.....	.....	.....	.....	.....	.....
47	1940..yield, g.p.m.	2,080	11,049	3,500	3,895	4,231	197	1,198
48	1930..yield, g.p.m.	.....	.....	.....	.....	.....	.....	.....
49	1920..yield, g.p.m.	.....	.....	.....	.....	.....	.....	.....
50	Pumping plants....1940..total number	26	76	19	71	152	102	36
51	1930..total number	.....	.....	.....	.....	.....	.....	.....
52	Prime movers....1940..capacity, hp	190	539	249	846	878	1,117	174
53	1930..capacity, hp	.....	.....	.....	.....	.....	.....	.....
54	1920..capacity, hp	.....	.....	.....	.....	.....	.....	.....
55	(a) Electric....1940..number	6	25	3	22	47	60	24
56	1940..capacity, hp	27	132	48	132	230	659	102
57	(b) Internal-combustion....1940..number	19	51	14	49	104	41	11
58	1940..capacity, hp	160	407	174	714	646	443	71
59	(c) Other[5]....1940..number	1	.....	2	.....	1	1	1
60	1940..capacity, hp	(4)	.....	(4)	.....	(4)	(4)	(4)
61	Pumps....1940..total number	26	78	20	70	152	102	36
62	1930..number	.....	.....	.....	.....	.....	.....	.....
63	1920..number	.....	.....	.....	.....	.....	.....	.....
64	1940..capacity, g.p.m.	10,764	23,506	11,190	31,436	37,591	107,704	3,579
65	1930..capacity, g.p.m.	.....	.....	.....	.....	.....	.....	.....
66	1920..capacity, g.p.m.	.....	.....	.....	.....	.....	.....	.....
67	(a) Centrifugal....1940..number	22	65	19	66	126	88	13
68	1940..capacity, g.p.m.	9,029	19,566	10,110	29,306	34,950	84,630	2,160
69	1940..average capacity, g.p.m.	410	301	532	444	277	962	166
70	(b) Turbine....1940..number	1	10	1	2	9	6	5
71	1940..capacity, g.p.m.	(4)	3,460	(4)	(4)	1,606	22,600	911
72	1940..average capacity, g.p.m.	(4)	346	(4)	(4)	178	3,767	182
73	(c) Plunger....1940..number	3	1	.....	2	12	7	15
74	1940..capacity, g.p.m.	835	(4)	.....	(4)	904	314	480
75	1940..average capacity, g.p.m.	278	(4)	.....	(4)	75	45	32
76	(d) Other....1940..number	.....	2	.....	.....	5	1	3
77	1940..capacity, g.p.m.	.....	(4)	.....	.....	131	(4)	28
78	Pumping lift, from all sources....1940..average, feet	16	15	31	27	18	25	53
79	1930..average, feet	.....	.....	.....	.....	.....	.....	.....
80	1920..average, feet	.....	.....	.....	.....	.....	.....	.....
81	from pumped wells....1940..average, feet	20	18	16	19	25	101	85
82	from surface sources...1940..average, feet	15	13	34	28	17	21	28

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

WORKS, 1940, 1930, AND 1920—Continued

Total	PACIFIC SLOPE									KLAMATH RIVER		
	Rogue River							Umpqua River	Other Pacific Slope streams	Total	Direct	
	Total	Direct	Little Butte Creek	Bear Creek	Evans Creek	Applegate River	Illinois River					
		(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)		(45)	
986	578	199	50	90	24	103	112	157	351	187	84	1
86	129	132	66	302	59	99	57	30	21	995	1,032	2
431	294	114	9	54	18	64	35	68	69	100	40	3
405	339	8	30	46	13	110	90	.....	66	67	6	4
335	257	8	13	29	32	55	87	.....	78	57	4	5
42	42	7	3	22	2	7	1	.....	.....	10	3	6
123	69	27	.....	5	4	21	12	19	35	46	20	7
181	148	67	6	27	11	22	15	13	20	26	15	8
85	35	13	.....	.....	1	14	7	36	14	18	2	9
1,067.5	976.7	366.0	46.3	306.6	20.6	134.1	103.1	55.9	34.9	822.8	323.9	10
1,188	1,129	137	316	169	16	201	106	.....	59	756	22	11
1,066	954	41	158	196	44	249	137	.....	112	555	43	12
1,029	944	351	45	297	20	133	98	52	33	512	322	13
38.5	32.7	15.0	1.3	9.6	0.6	1.1	5.1	3.9	1.9	10.8	1.9	14
2,326[4]	1,867	680	178	242	37	357	373	197	362	6,607	3,184	15
1,813	1,710	322	172	327	49	461	237	.....	103	3,049	114	16
2,216	1,978	149	161	512	66	434	400	.....	238	3,162	62	17
118.6	39.0	20.5	0.3	15.0	0.9	1.2	1.1	29.3	50.3	10.5	4.5	18
16.3	10.0	5.4	2.1	0.6	.....	1.3	0.3	.....	6.3	3.5	0.1	19
23.7	20.5	7.1	0.8	6.3	0.5	2.1	1.0	.....	3.2	3.0	1.7	20
8.0	3.9	0.8	.....	2.7	0.2	0.2	.....	3.2	0.9	1.5	0.7	21
92.9	22.9	11.6	0.3	8.6	0.6	0.7	1.1	24.5	45.5	7.8	3.6	22
17.0	12.2	8.1	.....	3.7	0.1	0.3	.....	1.3	3.5	0.8	0.2	23
0.7	.....	.....	.....	.....	.....	.....	.....	0.3	0.4	0.4	.....	24
45	31	11	1	2	1	7	9	9	5	27	6	25
20	14	2	2	3	.....	6	1	.....	6	10	.....	26
26	18	.....	2	6	.....	4	3	.....	8	18	.....	27
10	10	2	.....	.....	1	.....	7	.....	.....	3	2	28
23	19	9	1	2	.....	5	2	1	3	22	3	29
12	2	.....	.....	.....	.....	2	.....	8	2	2	1	30
43	32	15	1	1	1	6	8	4	7	31	10	31
40	29	15	.....	.....	1	5	8	4	7	12	4	32
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	1	33
3	3	.....	1	1	.....	1	.....	.....	.....	8	5	34
21,714	21,624	227	(4)	(4)	(4)	1,132	13	16	74	654,954	552,558	35
16	11	1	2	3	.....	5	.....	.....	5	9	.....	36
45,948	45,924	5	21,000	24,225	.....	694	.....	.....	24	561,106	.....	37
4	2	1	.....	1	.....	.....	.....	.....	2	.....	.....	38
1	1	.....	.....	.....	.....	.....	.....	.....	.....	25	.....	39
4	3	.....	.....	.....	.....	.....	.....	.....	1	1	.....	40
53	(4)	(4)	.....	(4)	.....	.....	.....	.....	(4)	.....	.....	41
2	2	.....	.....	.....	.....	.....	.....	.....	.....	41	.....	42
10,000	10,000	.....	.....	.....	.....	.....	.....	.....	.....	35	.....	43
37	21	11	.....	7	.....	.....	3	6	10	8	5	44
13	13	1	2	6	.....	1	.....	.....	.....	.....	.....	45
23	23	11	.....	9	.....	.....	2	.....	.....	2	.....	46
4,345	2,790	635	.....	1,425	.....	.....	730	1,125	430	2,040	800	47
6,292	6,292	1,800	540	3,780	.....	175	.....	.....	.....	.....	.....	48
11,499	11,499	6,964	.....	1,133	.....	.....	402	.....	.....	1,600	.....	49
362	118	77	3	27	2	4	5	83	161	131	44	50
91	70	30	3	17	5	8	.....	.....	21	56	17	51
5,246	3,596	3,352	7	131	(4)	25	71	629	1,021	4,309	1,404	52
4,817	4,501	4,132	7	79	63	175	.....	.....	316	3,620	440	53
789	723	347	9	120	77	93	32	.....	66	1,301	453	54
172	54	40	.....	12	.....	.....	2	31	87	107	34	55
1,491	898	836	.....	53	.....	.....	(4)	159	434	3,695	1,079	56
181	59	32	3	15	2	4	3	52	70	22	9	57
1,536	486	304	7	78	(4)	25	62	470	580	488	324	58
9	5	5	.....	.....	.....	.....	.....	.....	4	2	1	59
2,219	2,212	2,212	.....	.....	.....	.....	.....	.....	7	(4)	(4)	60
364	116	75	3	27	2	4	5	85	163	130	43	61
92	70	31	3	16	5	8	.....	.....	22	73	19	62
121	111	44	1	36	5	8	8	.....	10	36	15	63
194,352	122,682	103,108	1,650	12,719	(4)	1,690	2,690	31,639	40,031	323,971	121,705	64
99,809	73,224	49,645	550	6,510	1,150	12,825	.....	.....	26,585	309,289	34,147	65
41,852	38,147	16,597	.....	8,138	1,175	3,200	3,067	.....	3,705	62,475	30,755	66
306	96	61	3	22	1	4	5	69	141	91	29	67
186,848	118,496	102,097	1,650	9,769	(4)	1,690	2,690	29,667	38,685	224,669	65,985	68
611	1,234	1,674	550	444	(4)	422	538	430	274	2,469	2,275	69
7	4	1	.....	3	.....	.....	.....	2	1	25	8	70
3,160	2,650	(4)	.....	2,150	.....	.....	.....	(4)	(4)	46,145	11,210	71
451	662	(4)	.....	717	.....	.....	.....	(4)	(4)	1,846	1,401	72
40	11	10	.....	.....	1	.....	.....	12	17	6	1	73
3,176	638	413	.....	.....	(4)	.....	.....	1,582	956	257	(4)	74
79	58	41	.....	.....	(4)	.....	.....	132	56	43	(4)	75
11	5	3	.....	2	.....	.....	.....	2	4	8	5	76
1,168	898	98	.....	(4)	.....	.....	.....	(4)	260	52,900	44,500	77
22	22	27	10	11	(4)	14	14	25	21	21	21	78
28	30	36	38	16	43	38	.....	.....	19	30	33	79
28	26	30	23	23	29	26	11	.....	49	31	31	80
24	25	38	.....	15	.....	.....	10	20	26	36	33	81
22	21	26	10	10	(4)	14	15	26	20	19	19	82

[4] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[5] Includes water wheels for which no horsepower was reported.

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)	KLAMATH RIVER—Continued				SACRAMENTO RIVER	INDEPENDENT BASINS
		Upper Klamath Lake				Pit River	Malheur Lake
		Williamson River					
		Total	Direct (46)	Sprague River (47)	Lost River (48)	Goose Lake (49)	Total
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1						
1	Enterprises....1940..number	31	8	23	72	90	158
2	Average size of enterprise based on area works were capable of supplying with water....1940..acres	1,191	675	1,370	867	267	714
3	Diversion dams....1940..total number	49	10	39	11	124	306
4	1930..total number	9	.....	9	13	.....	106
5	1920..total number	9	.....	9	8	.....	274
6	(a) Concrete and masonry....1940..number	1	1	.....	6	5	17
7	(b) Timber....1940..number	26	7	19	.....	42	73
8	(c) Earth and rock....1940..number	10	1	9	1	28	98
9	(d) Other, mixed, and not reported..1940..number	12	1	11	4	49	118
10	Main canals and laterals....1940..total length, miles	130.7	49.7	81.0	368.2	82.7	344.1
11	1930..total length, miles	38	.....	38	436	.....	157
12	1920..total length, miles	42	.....	42	303	.....	473
13	(a) Earth....1940..length, miles	127	49	78	363	80	344
14	(b) Lined....1940..length, miles	3.7	0.7	3.0	5.2	2.7	0.1
15	1940..capacity, c.f.s.[1]	1,156	243	913	2,267	761	2,312
16	1930..capacity, c.f.s.[1]	327	.....	327	1,008	.....	926
17	1920..capacity, c.f.s.[1]	212	.....	212	1,889	.....	1,513
18	Pipe lines[2]....1940..total length, miles	1.0	0.4	0.6	5.0	0.2	1.0
19	1930..total length, miles	0.5	.....	0.5	2.2	.....	.....
20	1920..total length, miles	.....	.....	.....	0.6	.....	.....
21	(a) Concrete....1940..length, miles	.....	.....	.....	0.8	.....	0.2
22	(b) Metal....1940..length, miles	0.9	0.4	0.5	3.3	0.2	0.8
23	(c) Wood-stave....1940..length, miles	.....	.....	.....	0.6	.....	.....
24	(d) Other, mixed, and not reported..1940..length, miles	0.1	.....	0.1	0.3	.....	.....
25	Storage dams....1940..total number	13	.....	13	8	3	6
26	1930..total number	6	.....	6	3	.....	4
27	1920..total number	5	.....	5	13	.....	79
28	(a) Concrete and masonry....1940..number	.....	.....	.....	1	.....	1
29	(b) Earth and rock....1940..number	13	.....	13	6	3	4
30	(c) Other....1940..number	.....	.....	.....	1	.....	1
31	Reservoirs....1940..total number	13	.....	13	8	5	6
32	(a) 1-99 acre-feet capacity....1940..number	6	.....	6	2	2	2
33	(b) 100-999 acre-feet capacity....1940..number	6	.....	6	4	.....	3
34	(c) 1,000 and over acre-feet capacity....1940..number	1	.....	1	2	3	1
35	1940..total capacity, ac.-ft.[3]	2,325	.....	2,325	100,071	70,005	4,832
36	1930..total number	6	.....	6	2	.....	.....
37	1930..total capacity, ac.-ft.	1,062	.....	1,062	560,000	.....	.....
38	Wells, flowing....1940..number	.....	.....	.....	.....	4	3
39	1930..number	.....	.....	.....	.....	.....	.....
40	1920..number	.....	.....	.....	.....	.....	2
41	1940..yield, g.p.m.	.....	.....	.....	.....	35	30
42	1930..yield, g.p.m.	.....	.....	.....	.....	.....	.....
43	1920..yield, g.p.m.	.....	.....	.....	.....	.....	12
44	Wells, pumped....1940..number	1	1	.....	2	3	4
45	1930..number	.....	.....	.....	.....	.....	6
46	1920..number	.....	.....	.....	2	.....	4
47	1940..yield, g.p.m.	(4)	(4)	.....	(4)	235	2,425
48	1930..yield, g.p.m.	.....	.....	.....	.....	.....	2,460
49	1920..yield, g.p.m.	.....	.....	.....	1,600	.....	1,650
50	Pumping plants....1940..total number	5	1	4	82	4	5
51	1930..total number	.....	.....	.....	26	.....	6
52	Prime movers....1940..capacity, hp	87	(4)	86	2,818	6	70
53	1930..capacity, hp	.....	.....	.....	2,480	.....	66
54	1920..capacity, hp	.....	.....	.....	786	.....	32
55	(a) Electric....1940..number	1	1	.....	72	3	3
56	1940..capacity, hp	(4)	(4)	.....	2,615	3	50
57	(b) Internal-combustion....1940..number	4	.....	4	9	1	2
58	1940..capacity, hp	86	.....	86	78	(4)	(4)
59	(c) Other[5]....1940..number	.....	.....	.....	[6] 1	.....	.....
60	1940..capacity, hp	.....	.....	.....	125	.....	.....
61	Pumps....1940..total number	5	1	4	82	4	5
62	1930..number	.....	.....	.....	38	.....	7
63	1920..number	.....	.....	.....	16	.....	6
64	1940..capacity, g.p.m.	13,070	(4)	13,000	189,196	241	4,200
65	1930..capacity, g.p.m.	.....	.....	.....	207,742	.....	2,950
66	1920..capacity, g.p.m.	.....	.....	.....	21,100	.....	1,815
67	(a) Centrifugal....1940..number	3	.....	3	59	3	2
68	1940..capacity, g.p.m.	5,000	.....	5,000	153,684	235	(4)
69	1940..average capacity, g.p.m.	1,667	.....	1,667	2,605	78	(4)
70	(b) Turbine....1940..number	.....	.....	.....	17	.....	3
71	1940..capacity, g.p.m.	.....	.....	.....	34,935	.....	2,100
72	1940..average capacity, g.p.m.	.....	.....	.....	2,055	.....	700
73	(c) Plunger....1940..number	1	1	.....	4	1	.....
74	1940..capacity, g.p.m.	(4)	(4)	.....	177	(4)	.....
75	1940..average capacity, g.p.m.	(4)	(4)	.....	44	(4)	.....
76	(d) Other....1940..number	1	.....	1	2	.....	.....
77	1940..capacity, g.p.m.	(4)	.....	(4)	(4)	.....	.....
78	Pumping lift, from all sources....1940..average, feet	9	(4)	9	22	21	45
79	1930..average, feet	.....	.....	.....	33	.....	23
80	1920..average, feet	.....	.....	.....	22	.....	18
81	from pumped wells....1940..average, feet	(4)	(4)	.....	(4)	21	61
82	from surface sources...1940..average, feet	9	.....	9	20	.....	12

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

WORKS, 1940, 1930, AND 1920—Continued

INDEPENDENT BASINS—Continued													
Malheur Lake—Continued											Quinn River		
	Harney Lake												
Silvies River	Total	Direct	Silver Creek	Donner und Blitzen River	Benjamin Lake	Silver Lake	Summer Lake	Lake Abert	Cowhead and Warner Lakes	Trout Creek	McDermitt Creek	Tennile Creek	
(50)		(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(61)	(62)	
107	10	3	7	41	3	14	8	20	52	38	7	11	1
750	1,475	490	1,897	434	57	1,044	603	1,435	748	279	490	381	2
186	15	2	13	105	4	11	12	68	79	80	16	27	3
102	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	4
206	24	.....	24	44	.....	.....	.....	.....	.....	.....	.....	.....	5
13	.....	.....	.....	4	.....	.....	.....	.....	9	14	2	.....	6
39	9	.....	9	25	.....	2	.....	18	8	2	.....	.....	7
47	5	2	3	46	4	3	1	7	45	34	7	27	8
87	1	.....	1	30	.....	6	11	43	17	30	7	.....	9
279.1	26.0	.....	26.0	39.0	.....	11.6	11.1	46.0	70.6	48.0	22.0	40.0	10
98	.....	.....	.....	59	.....	.....	.....	.....	.....	.....	.....	.....	11
274	41	.....	41	158	.....	.....	.....	.....	.....	.....	.....	.....	12
279	26	.....	26	39	.....	11	11	46	69	48	22	40	13
0.1	.....	.....	.....	.....	.....	0.6	0.1	.....	1.6	.....	.....	.....	14
1,055	246	42	204	1,011	9	114	114	1,214	646	221	32	82	15
622	.....	.....	.....	304	.....	.....	.....	.....	.....	.....	.....	.....	16
876	398	.....	398	239	.....	.....	.....	.....	.....	.....	.....	.....	17
.....	0.2	.....	0.2	0.8	.....	.....	0.6	.....	2.7	0.2	.....	.....	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	0.2	.....	.....	.....	.....	1.2	.....	.....	.....	21
.....	0.2	.....	0.2	0.6	.....	.....	0.1	.....	1.5	0.2	.....	.....	22
.....	.....	.....	.....	.....	.....	.....	0.5	.....	.....	.....	.....	.....	23
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
2	3	1	2	1	.....	1	3	1	13	2	.....	.....	25
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26
72	1	.....	1	6	.....	.....	.....	.....	.....	.....	.....	.....	27
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	28
1	3	1	2	.....	.....	1	3	1	13	.....	.....	.....	29
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	30
2	3	1	2	1	.....	1	3	1	12	2	.....	.....	31
1	1	.....	1	.....	.....	.....	3	.....	1	1	.....	.....	32
.....	2	1	1	1	.....	.....	.....	1	3	1	.....	.....	33
1	.....	.....	.....	.....	.....	1	.....	.....	8	.....	.....	.....	34
(4)	660	(4)	(4)	(4)	.....	(4)	85	(4)	15,042	(4)	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
.....	2	1	1	1	.....	.....	2	2	2	47	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39
.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	40
.....	(4)	(4)	(4)	(4)	.....	.....	(4)	(4)	(4)	1,653	.....	.....	41
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
.....	2	.....	2	10	.....	.....	.....	.....	.....	.....	.....	.....	43
4	.....	.....	.....	.....	1	4	1	.....	.....	.....	.....	.....	44
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
2	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
2,425	.....	.....	.....	.....	(4)	3,550	(4)	.....	.....	.....	.....	.....	47
2,460	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
1,200	450	.....	450	.....	.....	.....	.....	.....	.....	.....	.....	.....	49
5	.....	.....	.....	.....	1	4	1	.....	3	.....	.....	.....	50
6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51
70	.....	.....	.....	.....	(4)	75	(4)	.....	82	.....	.....	.....	52
66	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
26	6	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55
50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
2	.....	.....	.....	.....	1	4	1	.....	3	.....	.....	.....	57
(4)	.....	.....	.....	.....	(4)	75	(4)	.....	82	.....	.....	.....	58
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
5	.....	.....	.....	.....	1	4	1	.....	3	.....	.....	.....	61
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
2	3	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	63
4,200	.....	.....	.....	.....	(4)	4,400	(4)	.....	12,000	.....	.....	.....	64
2,950	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65
1,265	550	.....	550	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
2	.....	.....	.....	.....	1	.....	.....	.....	3	.....	.....	.....	67
(4)	.....	.....	.....	.....	(4)	.....	.....	.....	12,000	.....	.....	.....	68
(4)	.....	.....	.....	.....	(4)	.....	.....	.....	4,000	.....	.....	.....	69
3	.....	.....	.....	.....	.....	4	1	.....	.....	.....	.....	.....	70
2,100	.....	.....	.....	.....	.....	4,400	(4)	.....	.....	.....	.....	.....	71
700	.....	.....	.....	.....	.....	1,100	(4)	.....	.....	.....	.....	.....	72
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
45	.....	.....	.....	.....	(4)	32	(4)	.....	4	.....	.....	.....	78
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
22	15	.....	15	16	.....	.....	.....	.....	.....	.....	.....	.....	80
61	.....	.....	.....	.....	(4)	32	(4)	.....	.....	.....	.....	.....	81
12	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	82

[4] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[5] Includes water wheels for which no horsepower was reported.
[6] Data for less than 3 enterprises shown with permission of the enterprise involved.

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		Baker		Benton	Clackamas	Columbia
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS[4]							
1	All farms....1940...number....	61,829		1,259		1,507	5,475	2,060
2	1930...number....	55,153		1,383		1,340	4,747	1,667
3	Irrigated farms....1940...number....	16,159		1,050		110	196	16
4	1930...number....	11,387		1,113		21	51	5
5	Increase or decrease (-), 1930-1940....percent....	41.9		-5.7		423.8	284.3	220.0
	Operated by—							
6	(a) Owners and managers....1940...number....	13,345		759		90	159	16
7	1930...number....	9,339		824		16	41	.....
8	(b) Tenants....1940...number....	2,814		291		20	37	.....
9	1930...number....	2,048		289		5	10	.....
10	Land in all farms....1940...acres....	17,988,307		795,435		221,054	301,231	138,085
11	Land in irrigated farms....1940...acres....	8,730,104		636,368		19,903	15,419	3,818
12	Average per farm....1940...acres....	540		606		181	79	239
13	(a) Operated by owners and managers....1940...acres....	7,968,948		556,424		17,694	13,384	3,818
14	Average per farm....1940...acres....	597		733		197	84	239
15	(b) Operated by tenants....1940...acres....	761,156		79,944		2,209	2,035	.....
16	Average per farm....1940...acres....	270		275		110	55	.....
17	Approximate land area....1940...acres....	61,664,000		1,973,760		414,080	1,209,600	413,440
	IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated....1939...acres....	1,049,176		121,591		1,251	2,278	648
19	(a) Cropland harvested....1939...acres....	790,925		94,887		856	1,643	160
20	(b) Crop failure....1939...acres....	13,781		974		1	.....	.....
21	(c) Pasture....1939...acres....	244,470		25,730		394	635	488
22	Area irrigated....1929...acres....	898,713		119,478		171	566	.....
23	1919...acres....	986,162		171,490		.....	.....	.....
24	Increase or decrease (-), 1929-1939....percent....	16.7		1.8		631.6	302.5	.....
25	Irrigable area in enterprises....1940...acres....	1,441,417		162,647		2,068	4,153	739
26	1930...acres....	1,478,128		159,981		380	999	.....
27	1920[2]...acres....	1,925,987		259,361		.....	.....	.....
28	Excess of irrigable area over the area irrigated...1940...acres....	392,241		41,056		817	1,875	91
29	1930...acres....	579,415		40,503		209	433	.....
30	Area works were capable of supplying with water...1940...acres....	1,261,081		136,875		1,963	3,775	735
31	1930...acres....	1,158,210		134,621		238	989	.....
32	1920...acres....	1,344,046		218,671		.....	.....	.....
33	Increase or decrease (-), 1930-1940....percent....	8.9		1.7		724.8	281.7	.....
34	Excess, capability of works over area irrigated...1940...acres....	211,905		15,284		712	1,497	87
35	1930...acres....	259,497		15,143		67	423	.....
36	Proportion which area irrigated is of all lands in irrigated farms....1939...percent....	12.0		19.1		6.3	14.8	17.0
37	1929...percent....	14.2		21.2		5.2	22.7	.....
38	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent....	83.2		88.8		63.7	60.3	88.2
39	1929...percent....	77.6		88.8		71.8	57.2	.....
	CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises....1940...dollars....	50,961,251		1,909,544		52,091	119,540	10,025
41	(a) Cost of irrigation works and equipment....1940...dollars....	50,399,668		1,900,861		51,674	118,400	10,840
42	(b) Investment in water rights (reported)....1940...dollars....	561,583		8,683		417	1,140	85
43	Total investment in all enterprises....1930...dollars....	38,754,548		1,533,692		8,215	26,230	.....
44	1920...dollars....	28,929,151		2,153,639		.....	.....	.....
45	Increase or decrease (-), 1930-1940....percent....	31.5		24.5		534.1	355.7	.....
46	Average investment, based on area works were capable of supplying with water, per acre....1940...dollars....	40.41		13.95		26.54	31.67	14.86
47	1930...dollars....	33.46		11.39		34.52	26.52	.....
48	1920...dollars....	21.52		9.85		.....	.....	.....
49	Average investment per acre irrigated....1939...dollars....	48.57		15.70		41.64	52.48	16.86
50	Estimated final investment in existing enterprises...1940...dollars....	53,884,430		1,964,785		57,286	130,202	11,425
51	1930...dollars....	60,039,939		1,722,042		9,415	26,580	.....
52	1920...dollars....	41,585,742		2,941,589		.....	.....	.....
53	Increase or decrease (-), 1930-1940....percent....	-10.3		14.1		508.5	389.8	.....
54	Average investment, based on estimated final investment and irrigable area, per acre....1940...dollars....	37.38		12.08		27.70	31.35	15.46
55	1930...dollars....	40.62		10.76		24.78	26.61	.....
56	1920[2]...dollars....	21.59		11.34		.....	.....	.....
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterprises	Supplemental	Primary Enterprises	Supplemental			
57	Enterprises reporting maintenance and operation...1939...number....	5,192	86	529	8	75	144	12
58	Area irrigated in these enterprises....1939...acres....	982,940	97,643	103,045	18,950	1,187	2,217	648
59	Cost of maintenance and operation....1939...dollars....	1,157,018	71,049	41,059	3,014	6,460	10,029	1,986
60	Average cost, per acre irrigated....1939...dollars....	1.18	0.73	0.40	0.16	5.44	4.52	3.06
61	1929...dollars....	1.41	.....	0.60	.....	4.82	5.12	.....
62	Total annual charges (reported)[4 5]....1939...dollars....	921,724	72,521	23,049	10,309	.....	916	.....
63	Average annual charge per acre irrigated....1939...dollars....	1.77	0.76	0.42	0.56	.....	1.00	.....
64	Area against which charges were assessed....1939...acres....	587,585	98,976	56,153	18,546	.....	1,217	.....
65	Average annual charge per acre assessed....1939...dollars....	1.57	0.73	0.41	0.56	.....	0.75	.....
66	Total charges collected[4]....1939...dollars....	920,583	8,967	14,407	8,510	.....	347	.....
67	Indebtedness to December 31 (reported)[5]....1939...dollars....	13,560,102	769,666	48,455	592,500	.....	.....	.....
	WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered....1939...number....	5,354	73	551	8	72	133	12
69	Area irrigated in these enterprises....1939...acres....	925,920	80,969	94,587	18,950	1,102	2,104	648
70	Water delivered in these enterprises....1939...acre-feet..	3,020,606	176,182	213,132	24,298	2,521	3,640	958
71	Average water delivered per acre irrigated....1939...acre-feet..	3.3	2.2	2.3	1.3	2.3	1.7	1.5
72	Average cost of water per acre irrigated....1939...dollars....	1.35	0.94	0.38	0.55	5.78	4.79	3.06
	DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage....1939...number....	275	.....	7	.....	3	13	1
74	Irrigable area in these enterprises....1939...acres....	338,991	.....	704	.....	59	1,179	[3]
75	Irrigated area in these enterprises....1939...acres....	265,771	.....	580	.....	37	645	[3]
76	Area for which drains have been installed....1939...acres....	126,698	.....	51	.....	27	156	.....
77	Additional area needing drainage....1939...acres....	18,786	.....	25	.....	12	56	[3]

[4] Census of Agriculture.
[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.

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"]

	Coos	Crook	Deschutes	Douglas	Gilliam	Grant	Harney	Hood River	Jackson	Jefferson	Josephine	Klamath	
	1,953	495	1,047	2,734	292	580	436	1,142	2,702	227	1,944	1,552	1
	1,305	489	824	2,488	353	632	603	967	2,214	335	1,164	1,197	2
	136	400	940	243	76	473	294	1,037	1,577	54	1,256	1,045	3
	9	324	712	125	49	358	213	906	1,384	39	740	753	4
	(1)	23.5	32.0	94.4	55.1	32.1	38.0	14.5	13.9	38.5	69.7	38.8	5
	120	331	757	214	61	412	252	923	1,371	46	1,108	902	6
	.....	237	584	111	41	318	164	845	1,249	33	658	626	7
	16	69	183	29	15	61	42	114	206	8	148	143	8
	.....	87	128	14	8	40	49	61	135	6	82	127	9
	282,375	817,898	185,146	625,632	812,636	913,606	874,450	39,666	316,364	697,232	125,206	773,522	10
	32,777	650,733	128,762	59,342	193,465	798,802	711,423	34,039	207,149	324,371	75,433	595,182	11
	241	1,627	137	244	2,546	1,689	2,420	33	131	6,007	60	570	12
	30,400	613,378	109,253	49,530	180,623	749,263	648,887	30,448	182,739	322,533	65,352	555,035	13
	253	1,853	144	231	2,961	1,819	2,575	33	133	7,012	59	616	14
	2,377	37,355	19,509	9,812	12,842	49,539	62,536	3,591	24,410	1,838	10,081	39,547	15
	149	541	107	338	856	812	1,489	32	118	230	68	277	16
	1,031,040	1,907,200	1,946,240	3,239,680	775,040	2,900,480	6,484,480	338,560	1,802,880	1,148,160	1,040,000	3,822,720	17
	1,373	42,015	51,122	2,947	1,891	42,016	100,065	25,074	45,284	3,462	20,336	145,157	18
	460	37,399	48,481	2,129	1,769	34,229	62,493	24,180	35,139	2,133	14,571	91,755	19
	.....	.....	290	17	.....	.....	347	1	39	42	40	1,584	20
	913	4,616	2,351	801	122	7,787	37,225	893	10,106	1,287	5,725	51,818	21
	.....	35,810	48,056	1,445	1,589	35,895	126,496	22,370	40,213	5,207	19,475	125,049	22
	.....	42,708	57,293	1,901	3,298	32,409	119,429	19,765	24,002	3,320	14,903	90,993	23
	.....	17.3	6.4	103.9	19.0	17.1	-20.9	12.1	12.6	-33.5	4.4	16.1	24
	2,173	48,305	62,311	5,299	2,503	44,795	141,533	30,983	52,159	4,704	25,904	215,235	25
	.....	47,088	94,336	3,128	2,285	38,997	205,933	31,240	52,854	5,529	29,867	197,097	26
	.....	62,449	176,387	8,370	4,621	42,079	224,301	39,660	107,195	6,171	25,127	239,478	27
	800	6,290	11,189	2,352	612	2,779	41,468	5,909	6,875	1,242	5,568	70,078	28
	.....	11,278	46,280	1,683	696	3,102	79,437	8,870	12,641	322	10,392	72,048	29
	1,962	44,070	53,839	4,799	2,390	43,885	139,969	27,411	50,422	4,664	24,940	168,338	30
	.....	44,829	82,984	2,830	1,834	38,699	153,832	28,952	50,448	5,475	25,140	168,434	31
	.....	52,757	106,246	3,328	3,810	38,728	157,588	21,101	34,931	3,943	18,294	135,449	32
	.....	-1.7	-35.1	69.6	30.3	13.4	-9.0	-3.3	-0.1	-14.8	-0.8	-0.1	33
	589	2,055	2,717	1,852	499	1,869	39,904	2,337	5,138	1,202	4,604	23,171	34
	.....	9,019	34,928	1,385	245	2,804	27,336	5,982	10,235	268	5,665	43,385	35
	4.2	6.5	39.7	5.0	1.0	5.3	14.1	73.7	21.9	1.1	27.0	24.4	36
	.....	7.9	50.6	2.4	1.8	6.2	32.1	66.3	23.6	1.5	33.2	38.3	37
	70.0	95.3	95.0	61.4	79.1	95.7	71.5	91.5	89.8	74.2	81.5	86.2	38
	.....	79.9	57.9	51.1	86.6	92.8	82.2	78.9	79.7	95.1	77.5	74.2	39
	65,213	846,604	2,576,293	115,126	38,071	339,071	516,925	873,419	3,428,249	69,681	1,604,573	5,067,488	40
	64,134	843,953	2,576,268	113,690	37,706	332,373	499,946	864,251	3,406,382	69,568	1,599,945	4,897,487	41
	1,079	2,651	25	1,446	365	6,698	16,979	9,168	21,867	13	4,628	170,001	42
	.....	2,859,630	2,625,021	73,520	50,306	275,763	2,013,634	957,875	3,408,561	49,565	1,750,516	5,298,971	43
	.....	1,789,917	2,758,084	188,894	110,909	261,332	1,260,776	807,142	1,462,938	84,300	265,575	3,802,551	44
	.....	-70.4	-1.9	56.6	-24.3	23.0	-74.3	-8.8	0.6	40.4	-8.3	-4.4	45
	33.24	19.21	47.85	23.99	15.93	7.73	3.69	31.56	67.99	14.92	64.94	30.10	46
	.....	63.79	31.63	25.98	27.43	7.12	13.09	33.76	67.56	9.05	69.63	31.46	47
	.....	33.93	25.96	56.76	29.11	6.75	8.13	38.25	41.88	21.38	14.52	28.07	48
	47.50	20.15	50.39	39.07	20.13	8.07	5.17	34.83	75.71	20.10	76.90	34.91	49
	73,801	860,854	2,576,353	128,858	44,346	339,106	530,935	923,844	3,501,784	74,891	1,622,102	6,754,268	50
	.....	3,061,630	2,652,421	74,470	62,906	277,117	2,368,534	1,037,175	3,418,426	50,665	1,780,366	6,604,003	51
	.....	2,115,043	4,747,115	294,994	111,409	266,507	2,036,296	1,174,817	4,807,783	85,943	285,645	5,566,847	52
	.....	-71.9	-2.9	73.0	-29.5	22.4	-77.6	-10.9	2.4	47.8	-8.9	2.3	53
	33.96	17.82	41.35	24.32	17.72	7.57	3.75	29.82	67.14	15.92	62.62	31.38	54
	.....	65.02	28.12	23.81	27.53	7.11	11.50	33.20	64.68	9.16	59.61	33.51	55
	.....	33.87	26.91	35.24	24.11	6.33	9.08	29.62	44.86	13.93	11.37	23.25	56
								Primary Enterprises	Sup.	Primary Enterprises	Sup.	Primary Enterprises	Sup.
	94	129	16	147	50	397	245	55	1	287	.....	32	247	148	6	57
	1,293	40,817	49,033	2,815	1,674	41,429	96,689	24,717	(3)	44,161	.....	3,298	19,790	136,236	41,460	58
	7,784	32,815	74,062	8,307	2,886	19,153	24,427	39,650	(3)	109,838	.....	2,541	78,178	159,417	42,228	59
	6.02	0.60	1.51	2.95	1.72	0.46	0.25	1.60	(3)	2.49	.....	0.77	3.95	1.17	1.02	60
	.....	1.56	1.92	3.17	3.12	0.52	0.52	2.42	.....	3.88	.....	0.81	3.38	1.03	.....	61
	.....	67,315	119,849	489	25	1,810	793	66,605	.....	130,526	.....	661	82,230	175,133	41,666	62
	.....	3.01	2.47	0.78	0.10	0.48	0.16	2.79	.....	3.73	.....	0.79	6.64	1.98	1.01	63
	.....	23,705	56,027	703	246	3,867	4,865	28,676	.....	36,963	.....	863	14,770	93,950	41,282	64
	.....	2.84	2.14	0.70	0.10	0.47	0.16	2.32	.....	3.53	.....	0.77	5.57	1.86	1.01	65
	.....	52,102	108,356	163	.....	67	137	69,501	.....	182,910	.....	520	88,387	168,224	457	66
	.....	329,416	1,523,135	.....	.....	.....	4,500	191,146	.....	923,414	.....	2,080	312,792	1,904,668	.....	67
	100	128	14	150	59	401	241	77	1	296	1	37	264	143	4	68
	1,256	41,589	48,944	2,701	1,891	39,965	89,992	25,054	(3)	41,093	(3)	3,205	20,104	130,380	39,445	69
	1,508	118,281	260,775	4,229	4,570	114,618	197,671	78,708	(3)	99,870	(3)	6,537	103,608	400,342	78,729	70
	1.2	2.8	5.3	1.6	2.4	2.9	2.2	3.1	(3)	2.4	(3)	2.0	5.2	3.1	2.0	71
	6.29	1.93	2.47	3.11	1.71	0.45	0.26	2.76	(3)	3.19	.....	0.93	4.59	1.53	1.06	72
	7	2	.....	5	.....	4	1	14	.....	3	.....	.....	2	36	.....	73
	224	(3)	.....	203	.....	352	(3)	230	.....	12,277	.....	.....	(3)	112,758	.....	74
	170	(3)	.....	59	.....	352	(3)	203	.....	11,723	.....	.....	(3)	86,166	.....	75
	112	(3)	.....	7	.....	172	.....	58	.....	404	.....	.....	(3)	71,955	.....	76
	1	(3)	.....	70	.....	.....	(3)	13	.....	182	.....	.....	(3)	8,004	.....	77

[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.

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)	Lake	Lane	Lincoln	Linn	Malheur	Marion	Morrow
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS*							
1	All farms.....1940...number.....	484	4,454	972	3,325	2,545	4,785	540
2	1930...number.....	485	4,069	732	3,074	1,345	4,821	628
3	Irrigated farms.....1940...number.....	317	370	30	191	2,258	307	259
4	1930...number.....	276	122	5	18	1,042	166	250
5	Increase or decrease (-), 1930-1940.....percent....	14.9	203.3	500.0	961.1	116.7	84.9	3.6
	Operated by—							
6	(a) Owners and managers.....1940...number.....	264	321	24	158	1,787	220	204
7	1930...number.....	226	110	.....	.....	732	118	199
8	(b) Tenants.....1940...number.....	53	49	6	33	471	87	55
9	1930...number.....	50	12	.....	.....	310	48	51
10	Land in all farms.....1940...acres.....	863,205	509,056	110,735	484,800	900,641	376,815	968,382
11	Land in irrigated farms.....1940...acres.....	698,326	46,785	5,972	33,435	666,098	37,458	511,961
12	Average per farm.....1940...acres.....	2,203	126	199	175	295	122	1,977
13	(a) Operated by owners and managers.....1940...acres.....	601,290	37,974	5,017	28,936	585,490	29,688	476,301
14	Average per farm.....1940...acres.....	2,278	118	209	183	328	135	2,335
15	(b) Operated by tenants.....1940...acres.....	97,036	8,811	955	4,499	80,608	7,770	35,660
16	Average per farm.....1940...acres.....	1,831	180	159	136	171	89	618
17	Approximate land area.....1940...acres.....	5,282,800	2,940,160	643,840	1,468,160	6,316,800	750,720	1,317,760
	IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated.....1939...acres.....	110,339	4,732	242	2,093	153,843	6,641	10,196
19	(a) Cropland harvested.....1939...acres.....	66,430	3,558	129	1,612	130,574	5,938	9,655
20	(b) Crop failure.....1939...acres.....	.....	7	.....	9	5,882	6	55
21	(c) Pasture.....1939...acres.....	43,909	1,167	113	472	17,387	697	486
22	Area irrigated.....1929...acres.....	70,417	1,104	.....	.....	93,008	1,475	11,898
23	1919...acres.....	99,220	.....	.....	.....	109,463	.....	10,031
24	Increase or decrease (-), 1929-1939.....percent....	56.7	328.6	.....	.....	65.4	350.2	-14.3
25	Irrigable area in enterprises.....1940...acres.....	126,432	24,247	469	6,063	197,842	67,138	13,346
26	1930...acres.....	103,876	20,151	.....	.....	263,237	3,017	16,075
27	1920[3]...acres.....	183,997	.....	.....	.....	219,475	.....	19,941
28	Excess of irrigable area over the area irrigated..1940...acres.....	16,093	19,515	227	3,970	43,999	60,497	3,150
29	1930...acres.....	33,459	19,047	.....	.....	170,229	1,542	4,177
30	Area works were capable of supplying with water...1940...acres.....	124,740	10,493	404	5,684	196,848	11,822	12,670
31	1930...acres.....	94,317	2,719	.....	.....	145,757	1,938	15,855
32	1920...acres.....	149,467	.....	.....	.....	143,266	.....	15,561
33	Increase or decrease (-), 1930-1940.....percent....	32.3	285.9	.....	.....	35.1	510.0	-20.1
34	Excess, capability of works over area irrigated...1940...acres.....	14,401	5,761	162	3,591	43,005	5,181	2,474
35	1930...acres.....	29,900	1,615	.....	.....	52,749	463	3,967
36	Proportion which area irrigated is of all lands in irrigated farms.....1939...percent....	15.8	10.1	4.1	6.3	23.1	17.7	2.0
37	1929...percent....	14.4	9.4	.....	.....	23.0	11.7	1.8
38	Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent....	88.5	45.1	59.9	36.8	78.2	56.2	80.5
39	1929...percent....	74.7	40.6	.....	.....	63.8	76.1	75.0
	CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises.....1940...dollars....	2,621,301	369,768	6,029	112,588	21,841,296	259,217	1,164,589
41	(a) Cost of irrigation works and equipment.....1940...dollars....	2,545,546	326,684	5,894	112,000	21,742,707	253,218	1,164,237
42	(b) Investment in water rights (reported).....1940...dollars....	75,755	43,084	135	588	98,589	5,999	352
43	Total investment in all enterprises.....1930...dollars....	2,318,721	111,151	.....	.....	9,688,384	101,050	1,008,907
44	1920...dollars....	3,504,761	.....	.....	.....	4,057,373	.....	1,393,045
45	Increase or decrease (-), 1930-1940.....percent....	13.0	232.7	.....	.....	125.4	156.5	15.4
46	Average investment, based on area works were capable of supplying with water, per acre.....1940...dollars....	21.01	35.24	14.92	19.81	110.96	21.93	91.92
47	1930...dollars....	24.58	40.88	.....	.....	66.47	52.14	63.59
48	1920...dollars....	23.45	.....	.....	.....	28.32	.....	89.52
49	Average investment per acre irrigated.....1939...dollars....	23.76	78.14	24.91	53.79	141.97	39.03	114.22
50	Estimated final investment in existing enterprises..1940...dollars....	2,644,941	442,910	6,929	185,817	22,419,756	265,957	1,166,589
51	1930...dollars....	2,323,346	262,661	.....	.....	27,903,254	109,915	1,011,377
52	1920...dollars....	3,896,381	.....	.....	.....	4,835,543	.....	1,629,878
53	Increase or decrease (-), 1930-1940.....percent....	13.8	68.6	.....	.....	-19.7	142.0	15.3
54	Average investment, based on estimated final investment and irrigable area, per acre.....1940...dollars....	20.92	18.27	14.77	30.65	113.32	3.96	87.41
55	1930...dollars....	22.37	13.03	.....	.....	106.00	36.43	62.92
56	1920[5]...dollars....	21.18	.....	.....	.....	22.03	.....	81.68
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS					Primary Enterprises	Sup.	
57	Enterprises reporting maintenance and operation...1939...number.....	147	269	20	100	285	6	139	87
58	Area irrigated in these enterprises.....1939...acres.....	99,776	4,516	195	1,907	148,995	11,814	5,988	9,678
59	Cost of maintenance and operation.....1939...dollars....	31,613	29,345	599	9,433	271,431	8,135	26,549	11,591
60	Average cost, per acre irrigated.....1939...dollars....	0.32	6.50	3.07	4.95	1.82	0.69	4.43	1.20
61	1929...dollars....	0.92	10.46	.....	.....	2.66	.....	10.60	1.66
62	Total annual charges (reported)[4] [5].....1939...dollars....	13,663	4,512	.....	.....	128,128	7,715	5,518	7,630
63	Average annual charge per acre irrigated.....1939...dollars....	1.26	5.19	.....	.....	1.09	0.66	1.96	1.52
64	Area against which charges were assessed.....1939...acres.....	11,250	1,470	.....	.....	146,723	11,690	3,655	6,448
65	Average annual charge per acre assessed.....1939...dollars....	1.21	3.07	.....	.....	0.87	0.66	1.51	1.18
66	Total charges collected[4].....1939...dollars....	15,693	2,100	.....	.....	120,130	.....	.....	7,020
67	Indebtedness to December 31 (reported) [5].....1939...dollars....	371,360	85,000	.....	.....	5,809,038	.....	50,724	552,743
	WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered.....1939...number.....	131	288	21	99	298	4	156	93
69	Area irrigated in these enterprises.....1939...acres.....	73,346	4,549	237	2,011	146,150	11,788	6,195	9,915
70	Water delivered in these enterprises.....1939...acre-feet..	228,039	5,358	264	2,067	612,002	21,255	12,411	43,084
71	Average water delivered per acre irrigated.....1939...acre-feet..	3.1	1.2	1.1	1.0	4.2	1.8	2.0	4.3
72	Average cost of water per acre irrigated.....1939...dollars....	0.39	6.67	3.13	5.06	1.00	0.68	4.57	1.29
	DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage.....1939...number.....	4	5	3	.....	38	.....	37	[6]1
74	Irrigable area in these enterprises.....1939...acres.....	19,161	119	110	.....	142,435	.....	606	6,732
75	Irrigated area in these enterprises.....1939...acres.....	19,070	116	36	.....	108,763	.....	492	4,914
76	Area for which drains have been installed.....1939...acres.....	4,850	19	56	.....	43,354	.....	499	.....
77	Additional area needing drainage.....1939...acres.....	58	14	14	.....	5,833	.....	16	1,900

*Census of Agriculture.
[1]Data between census years not comparable (see headnote).
[2]Percent not shown when more than 1,000.
[3]For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

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"]

Multnomah	Polk	Sherman	Tillamook	Umatilla	Union	Wallowa	Wasco	Washington	Wheeler	Yamhill	All other counties[1]	
2,260	1,743	343	960	2,312	1,255	989	1,007	4,348	249	2,817	1,036	1
1,733	1,882	369	811	2,265	1,276	952	1,076	3,917	294	2,690	1,036	2
87	83	20	81	1,325	554	618	345	111	151	128	21	3
76	12	8	17	1,166	491	459	293	47	122	10	5	4
14.5	591.7	150.0	376.5	13.6	12.8	34.6	17.7	136.2	23.8	(2)	320.0	5
58	70	11	64	1,063	470	479	284	97	135	97	18	6
.....	9	.....	.....	962	398	339	241	.....	114	.....	144	7
29	13	9	17	262	84	139	61	14	16	31	3	8
.....	3	.....	.....	204	93	120	52	.....	8	.....	56	9
79,770	222,622	462,375	90,259	1,609,180	471,173	579,063	875,843	244,957	772,850	290,947	156,086	10
6,594	18,118	14,371	10,924	778,711	217,013	302,604	242,257	13,454	612,760	20,325	5,952	11
76	218	719	135	588	392	490	702	121	4,058	159	283	12
4,122	15,756	9,559	8,562	742,359	201,725	262,664	212,801	12,234	583,877	15,928	5,304	13
71	225	869	134	698	429	548	749	126	4,325	164	295	14
2,472	2,362	4,812	2,362	36,352	15,288	39,940	29,456	1,220	28,883	4,397	648	15
85	182	535	139	139	182	287	483	87	1,805	142	216	16
271,360	472,960	531,200	713,600	2,067,840	1,300,480	2,033,920	1,527,680	458,240	1,092,480	453,760	1,562,880	17
823	3,018	202	1,763	46,907	29,691	49,123	8,945	3,114	7,517	3,255	222	18
691	2,394	193	396	36,174	25,349	35,751	7,832	2,479	6,833	2,529	124	19
19	3	7	.....	4,256	14	.....	122	15	39	12	.....	20
113	621	2	1,367	6,477	4,328	13,372	991	620	645	714	98	21
.....	635	.....	.....	39,968	38,379	43,146	9,559	.....	6,351	.....	953	22
.....	.....	.....	.....	56,050	53,183	52,445	9,382	.....	7,475	.....	7,402	23
.....	375.3	.....	.....	17.4	-22.6	13.9	-6.4	.....	18.4	.....	-76.7	24
1,202	4,482	242	2,107	62,515	39,251	53,558	17,179	4,487	10,030	4,913	303	25
.....	933	.....	.....	60,932	41,846	49,226	40,044	.....	7,691	.....	1,386	26
.....	.....	.....	.....	104,015	69,414	64,513	48,742	.....	11,005	.....	9,686	27
379	1,464	40	344	15,608	9,560	4,535	8,234	1,373	2,513	1,658	81	28
.....	398	.....	.....	20,964	3,467	6,080	30,485	.....	1,340	.....	433	29
1,114	4,175	229	1,960	60,001	37,538	53,406	11,927	4,180	9,167	4,303	293	30
.....	775	.....	.....	49,550	40,874	47,642	11,536	.....	7,413	.....	1,119	31
.....	.....	.....	.....	91,543	61,444	56,601	13,611	.....	8,692	.....	9,015	32
.....	438.7	.....	.....	21.1	-7.9	12.1	3.4	.....	23.7	.....	-73.8	33
291	1,157	27	197	13,094	7,947	4,283	2,982	1,066	1,650	1,048	71	34
.....	140	.....	.....	9,582	2,495	4,496	1,977	.....	1,062	.....	166	35
12.5	16.7	1.4	16.1	6.0	13.7	16.2	3.7	23.1	1.2	16.0	3.7	36
.....	14.3	.....	.....	8.3	24.0	17.5	4.8	.....	1.4	.....	4.8	37
73.9	72.3	88.2	89.9	78.2	78.9	92.0	75.0	74.5	82.0	75.6	75.8	38
.....	81.9	.....	.....	80.7	93.9	90.6	82.9	.....	85.7	.....	85.2	39
60,074	74,172	22,218	64,538	4,942,227	566,153	501,122	370,794	160,448	81,084	102,191	8,729	40
59,847	73,473	22,177	64,165	4,871,728	564,173	498,333	360,981	159,203	78,090	101,084	8,660	41
227	699	41	373	70,499	1,980	2,789	9,813	1,245	2,994	1,107	69	42
.....	46,042	.....	.....	3,012,147	286,335	456,513	600,910	.....	103,899	.....	58,990	43
.....	.....	.....	.....	3,309,599	260,912	497,791	486,627	.....	159,590	.....	293,396	44
.....	61.1	.....	.....	64.1	97.7	3.0	-38.3	.....	-22.0	.....	-85.2	45
53.93	17.77	97.02	32.93	82.37	15.04	9.38	31.09	38.38	8.85	23.75	29.79	46
.....	59.41	.....	.....	60.79	7.00	10.21	52.09	.....	14.02	.....	52.72	47
.....	.....	.....	.....	36.15	4.25	8.79	35.75	.....	18.36	.....	32.55	48
72.99	24.58	109.99	36.61	105.36	19.07	10.20	41.45	51.52	10.79	31.40	39.32	49
61,799	80,992	23,593	66,713	4,973,184	566,757	503,080	469,709	196,778	88,869	115,768	9,449	50
.....	56,442	.....	.....	3,555,772	291,385	492,403	717,140	.....	103,899	.....	66,595	51
.....	.....	.....	.....	4,428,916	262,522	618,521	998,752	.....	167,495	.....	314,746	52
.....	43.5	.....	.....	39.9	94.5	2.2	-34.5	.....	-14.5	.....	-85.8	53
51.41	18.07	97.49	31.66	79.55	14.44	9.38	27.94	43.86	8.86	23.56	31.18	54
.....	60.50	.....	.....	58.36	6.96	10.00	17.91	.....	13.51	.....	48.05	55
.....	.....	.....	.....	42.58	3.78	9.59	20.49	.....	15.22	.....	32.49	56
				Primary Enterprises / Sup.	Primary Enterprises / Sup.	Primary Enterprises / Sup.						
45	59	16	68	367 / 55	235 / 4	292 / 6	140	93	126	89	8	57
645	2,890	202	1,595	44,199 / 10,635	24,085 / 553	46,972 / 14,210	8,686	2,834	7,333	3,179	216	58
3,247	11,359	961	4,491	62,520 / 16,609	8,794 / 53	20,235 / 1,000	13,398	11,322	9,091	11,481	1,026	59
5.03	3.93	4.76	2.82	1.41 / 1.56	0.36 / 0.10	0.43 / 0.07	1.54	4.00	1.24	3.61	4.75	60
.....	4.94	.....	.....	2.06 /	0.44 /	0.58 /	3.31	.....	1.81	.....	14.84	61
1,525	51	.....	.....	60,613 / 11,806	4,614 / 45	18,048 / 980	7,923	.....	.....	98	.....	62
25.42	0.85	.....	.....	2.06 / 1.20	0.30 / 0.10	0.51 / 0.07	1.58	.....	.....	0.85	.....	63
60	60	.....	.....	34,616 / 9,839	17,188 / 464	37,830 / 17,155	6,165	.....	.....	115	.....	64
25.42	0.85	.....	.....	1.75 / 1.20	0.27 / 0.10	0.48 / 0.06	1.29	.....	.....	0.85	.....	65
1,525	.....	.....	.....	64,462 /	990 /	15,203 /	8,249	.....	.....	.....	.....	66
.....	.....	.....	.....	1,354,259 /	..... / 177,166	55,922 /	41,450	.....	.....	.....	.....	67
47	66	14	59	391 / 48	256 / 4	292 / 3	153	86	131	87	8	68
680	2,992	190	1,529	42,470 / 10,586	27,368 / 124	42,667 / 55	8,414	1,999	7,186	3,189	218	69
1,143	5,209	338	2,112	248,470 / 51,470	52,219 / 222	158,075 / 192	15,486	2,481	16,916	3,758	206	70
1.7	1.7	1.8	1.4	5.9 / 4.9	1.9 / 1.8	3.7 / 3.5	1.8	1.2	2.4	1.2	0.9	71
7.14	3.90	4.07	3.14	1.83 / 1.52	0.35 / 0.09	0.54 / 0.33	1.91	4.41	1.25	3.59	4.70	72
5	6	2	4	7 /	3 /	6 /	3	38	.....	10	5	73
67	310	(7)	127	27,108 /	511 /	1,684 /	41	2,385	.....	243	203	74
53	189	(7)	117	18,889 /	501 /	1,583 /	33	1,722	.....	155	151	75
52	109	(7)	27	3,219 /	47 /	10 /	11	1,277	.....	125	16	76
.....	20	(7)	19	855 /	80 /	153 /	2	731	.....	8	63	77

[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 62 to 67, inclusive, relate to those enterprises only.
[3] Data for less than 3 enterprises shown with permission of the enterprise involved.
[4] Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.

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	Baker	Benton	Clackamas	Columbia	Coos
	FARM VALUES, 1940[a]						
1	Land and buildings, all farms....dollars..	476,817,354	12,419,255	10,959,243	29,730,859	8,118,086	9,593,609
2	Land and buildings, irrigated farms....dollars..	152,701,478	11,424,759	960,165	1,706,415	389,400	1,317,150
	Operated by—						
3	(a) Owners and managers....dollars..	131,641,303	8,690,829	831,365	1,436,115	389,400	1,144,350
4	(b) Tenants....dollars..	21,060,173	2,733,930	128,800	270,300	.....	172,800
5	Average, land and buildings, per farm....dollars..	9,449.93	10,860.72	8,728.77	8,706.20	24,337.50	9,684.93
6	per acre in farms....dollars..	17.49	17.95	48.24	110.67	101.99	40.19
7	Buildings, irrigated farms reporting value....number...	14,822	1,026	110	193	16	136
8	Total reported....dollars..	33,570,300	2,185,045	238,102	496,450	78,650	315,010
9	Average, per irrigated farm reporting....dollars..	2,264.90	2,129.67	2,164.56	2,572.28	4,915.62	2,316.25
10	per acre on all irrigated farms....dollars..	3.85	3.43	11.96	32.20	20.60	9.61
11	Buildings, nonirrigated farms reporting value....number...	45,667	200	1,373	5,213	2,027	1,775
12	Total reported....dollars..	81,675,283	191,765	2,588,334	9,417,592	2,524,121	2,297,871
13	Average, per nonirrigated farm reporting....dollars..	1,788.50	958.82	1,885.17	1,806.56	1,245.25	1,294.58
14	per acre on all nonirrigated farms....dollars..	8.82	1.21	12.87	32.95	18.80	9.21
15	Implements and machinery, irrigated farms reporting value..number..	13,395	973	97	186	14	124
16	Total reported....dollars..	15,346,736	849,483	100,020	195,340	24,985	122,203
17	Average, per irrigated farm reporting....dollars..	1,145.71	873.06	1,031.13	1,050.22	1,784.64	985.51
18	per acre, on all irrigated farms....dollars..	1.76	1.33	5.03	12.67	6.54	3.73
19	Implements and machinery, nonirrigated farms reporting value....number...	38,054	169	1,091	4,456	1,487	1,371
20	Total reported....dollars..	29,261,196	88,349	958,884	2,241,588	686,607	612,113
21	Average, per acre, on all nonirrigated farms....dollars..	3.16	0.56	4.77	7.84	4.96	2.45
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1						
22	Enterprises....1940...number....	[1] 5,898	585	86	154	12	105
23	1930...number....	[1] 4,071	561	15	20	2	4
24	1920...number....	4,710	825	.....	.....	.....	.....
25	Average size of enterprise based on irrigable area....1940...acres....	244	278	24	27	62	21
26	1930...acres....	363	285	25	50	.....	.....
27	1920[2]..acres....	409	314	.....	.....	.....	.....
28	Diversion dams....1940...number....	5,097	957	23	26	2	19
29	Main canals and laterals....1940...length, miles....	8,518.0	814.8	15.2	10.3	1.7	8.0
30	1930...length, miles....	8,177	1,247	5	9	.....	.....
31	1920...length, miles....	9,071	1,662	.....	.....	.....	.....
32	1940...capacity, c.f.s.[3]....	37,290	3,950	121	136	13	118
33	1930...capacity, c.f.s.[3]....	25,906	3,193	5	15	.....	.....
34	1920...capacity, c.f.s.[3]....	28,897	3,925	.....	.....	.....	.....
35	Pipe lines[4]....1940...length, miles....	665.2	9.7	15.0	30.4	2.0	24.5
36	Storage dams....1940...number....	247	38	1	17	1	4
37	Reservoirs....1940...number....	257	39	.....	10	1	7
38	1930...number....	120	27	.....	1	.....	.....
39	1920...number....	266	53	.....	.....	.....	.....
40	1940...capacity, acre-feet..	2,212,315	42,264	.....	46	(5)	74
41	1930...capacity, acre-feet..	1,698,428	110,088	.....	2	.....	.....
42	1920...capacity, acre-feet..	1,905,037	36,145	.....	.....	.....	.....
43	Wells, flowing....1940...number....	76	3	.....	1	.....	2
44	1930...number....	59	4	.....	4	.....	.....
45	1920...number....	65	8	.....	.....	.....	.....
46	1940...yield, g.p.m....	3,396	250	.....	(5)	.....	(5)
47	1930...yield, g.p.m....	6,535	1,225	.....	150	.....	.....
48	1920...yield, g.p.m....	11,968	315	.....	.....	.....	.....
49	Wells, pumped....1940...number....	901	25	21	46	.....	7
50	1930...number....	558	31	5	8	.....	.....
51	1920...number....	208	13	.....	.....	.....	.....
52	1940...yield, g.p.m....	209,289	6,740	7,757	3,724	.....	170
53	1930...yield, g.p.m....	136,669	10,170	725	323	.....	.....
54	1920...yield, g.p.m....	47,026	4,780	.....	.....	.....	.....
55	Pumping plants....1940...number....	2,275	40	53	136	11	83
56	1930...number....	1,091	35	9	15	.....	.....
57	1920...number....	573	19	.....	.....	.....	.....
58	Prime movers....1940...capacity, hp....	29,527	554	581	770	89	565
59	1930...capacity, hp....	21,257	405	95	89	.....	.....
60	1920...capacity, hp....	13,769	1,668	.....	.....	.....	.....
61	Pumps....1940...capacity, g.p.m....	1,510,958	21,044	24,872	23,301	4,754	20,070
62	1930...capacity, g.p.m....	1,022,213	14,900	5,905	1,449	.....	.....
63	1920...capacity, g.p.m....	600,045	71,297	.....	.....	.....	.....
64	Pumping lift, from all sources....1940...average, feet....	27	29	18	37	32	24
65	1930...average, feet....	27	26	13	47	.....	.....
66	1920...average, feet....	28	31	.....	.....	.....	.....
67	from pumped wells....1940...average, feet....	35	25	19	59	.....	36
	PAY ROLL AND NUMBER OF EMPLOYEES 1939[6]						
68	Enterprises reporting pay roll....number...	194	32	.....	3	.....	.....
69	Irrigated area in these enterprises....acres....	501,227	47,618	.....	818	.....	.....
70	Wages and salaries paid and payable....dollars..	621,247	10,821	.....	491	.....	.....
71	Persons employed during week ending April 20....number...	1,094	81	.....	.....	.....	.....

[a] 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.

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"]

Crook	Deschutes	Douglas	Gilliam	Grant	Harney	Hood River	Jackson	Jefferson	Josephine	Klamath	Lake	
5,266,573	4,846,549	17,318,703	7,164,374	6,782,231	6,118,480	6,689,387	16,995,945	3,751,029	7,486,940	17,673,961	6,708,459	1
4,795,732	4,589,424	2,062,808	1,475,123	6,052,435	5,419,469	6,345,257	12,133,740	1,579,081	5,711,208	14,999,552	6,046,911	2
4,248,547	3,823,374	1,780,355	1,250,163	5,581,710	4,892,694	5,959,167	10,832,520	1,537,346	5,064,670	13,548,322	5,390,311	3
547,185	756,050	282,453	224,960	470,725	526,775	386,090	1,301,220	41,735	646,538	1,451,230	656,600	4
11,989.33	4,882.37	8,488.92	19,409.51	12,795.85	18,433.57	6,118.86	7,694.19	29,242.24	4,547.14	14,353.64	19,075.43	5
7.37	35.64	34.76	7.62	7.58	7.62	186.41	58.57	4.87	75.71	25.20	8.66	6
396	926	242	76	461	289	1,015	1,544	52	1,238	1,011	313	7
833,515	1,304,694	519,761	200,265	929,744	641,080	2,519,869	3,494,263	268,360	1,878,575	3,066,546	734,860	8
2,104.84	1,408.96	2,147.77	2,635.07	2,016.80	2,218.27	2,482.63	2,263.12	5,160.77	1,517.43	3,033.18	2,347.80	9
1.28	10.13	8.76	1.04	1.16	0.90	74.03	16.87	0.83	24.90	5.15	1.05	10
93	100	2,455	198	106	134	99	1,093	168	672	469	158	11
86,359	74,605	3,771,774	642,073	121,035	170,740	133,975	1,498,018	251,094	537,350	801,193	151,565	12
928.59	746.95	1,536.36	3,242.79	1,141.84	1,274.18	1,347.22	1,370.56	1,494.61	799.63	1,708.30	959.27	13
0.52	1.32	6.66	1.04	1.05	1.05	23.70	13.71	0.67	10.80	4.49	0.92	14
379	857	226	72	452	276	836	1,278	53	997	931	295	15
484,611	590,571	183,456	139,171	513,454	392,911	804,187	1,006,485	81,275	492,865	2,011,441	471,030	16
1,278.66	689.11	811.75	1,932.93	1,135.96	1,423.59	961.95	787.55	1,533.49	494.35	2,160.52	1,596.71	17
0.74	4.59	3.09	0.72	0.64	0.55	23.63	4.86	0.25	6.53	3.38	0.67	18
87	90	1,981	192	102	115	73	796	150	433	388	133	19
39,760	43,241	1,059,743	788,374	80,175	59,946	25,287	356,379	280,215	131,156	346,682	89,220	20
0.24	0.77	1.87	1.27	0.70	0.37	4.49	3.26	0.75	2.64	1.94	0.54	21
137	23	160	61	413	255	84	324	42	273	173	182	22
104	30	73	39	301	134	55	255	26	196	144	153	23
158	38	93	52	289	328	77	345	51	309	90	149	24
353	2,709	33	41	108	555	369	161	112	95	1,244	695	25
453	3,145	43	59	130	1,537	568	207	213	152	1,369	679	26
395	4,642	90	89	146	684	515	311	121	81	2,661	1,235	27
274	39	69	42	503	491	38	183	43	115	82	306	28
355.4	845.6	55.9	24.7	671.9	446.9	170.2	643.6	64.4	395.1	804.8	254.0	29
511	701	54	31	513	251	208	817	33	334	733	276	30
424	397	107	65	557	566	220	637	85	331	558	365	31
569	1,799	200	91	1,572	2,869	692	941	388	954	5,911	3,483	32
1,254	2,638	99	63	918	1,718	432	942	101	780	3,034	2,247	33
734	2,898	234	64	801	1,752	435	1,048	117	952	3,135	2,767	34
1.9	0.9	29.4	1.3	7.7	2.4	24.3	22.1	1.3	17.3	10.1	2.3	35
6	4	9	2	7	12	3	9	.....	23	20	28	36
9	3	4	1	2	13	5	7	.....	26	24	29	37
2	1	3	.....	4	6	.....	6	2	5	5	10	38
3	4	4	1	8	32	5	23	1	24	14	17	39
48,067	2,505	16	(5)	(5)	6,157	803	33,780	.....	344	721,169	105,237	40
47,528	100	3	.....	9	3,910	.....	45,875	701	49	640,046	88,561	41
47,101	5,123	10,005	.....	36,896	133,765	13	35,871	700	11	926,361	77,513	42
.....	.....	.....	3	.....	53	.....	1	.....	1	.....	10	43
.....	.....	.....	.....	.....	9	.....	.....	.....	1	25	9	44
.....	.....	1	.....	.....	32	3	.....	.....	3	1	9	45
.....	.....	.....	200	.....	1,708	.....	(5)	.....	(5)	.....	495	46
.....	.....	.....	.....	.....	99	.....	.....	.....	2	41	4,388	47
.....	.....	.....	.....	.....	179	10	.....	.....	10,000	35	572	48
2	.....	6	.....	11	4	.....	16	3	7	6	9	49
.....	.....	.....	.....	.....	6	.....	11	.....	2	.....	4	50
2	.....	.....	1	1	5	1	12	1	11	2	1	51
(5)	.....	1,125	.....	1,170	2,425	.....	1,784	30	1,026	2,020	5,185	52
.....	.....	.....	.....	.....	2,460	.....	4,417	.....	1,875	.....	6,700	53
371	.....	.....	20	30	1,650	17	10,133	15	1,366	1,600	200	54
10	1	85	15	19	5	6	68	8	52	129	13	55
11	3	13	3	4	6	3	42	11	28	56	6	56
11	1	9	8	2	9	5	51	6	51	31	6	57
166	(5)	644	189	111	70	29	464	84	3,134	4,307	228	58
181	601	169	29	40	66	3	373	95	4,128	3,620	82	59
430	200	56	41	12	38	36	345	9	378	1,303	171	60
12,385	(5)	33,089	13,335	3,253	4,200	660	25,695	4,228	97,007	323,951	18,641	61
16,324	16,502	7,855	2,625	2,370	2,950	271	21,647	14,340	51,577	309,289	9,200	62
23,121	7,500	3,225	1,710	22,530	1,615	755	18,410	240	19,737	62,475	2,296	63
20	(5)	25	27	93	45	64	19	35	26	20	28	64
18	77	24	13	26	23	32	30	19	32	30	24	65
32	120	54	21	28	18	70	28	10	24	26	44	66
(5)	.....	20	.....	136	61	.....	21	37	40	38	32	67
3	8	2	.....	6	1	9	22	2	12	14	3	68
21,559	49,744	(5)	.....	2,862	(5)	23,689	34,025	(5)	11,771	86,048	9,660	69
19,829	59,502	(5)	.....	863	(5)	25,061	73,969	(5)	28,977	75,335	7,246	70
34	213	.....	.....	8	.....	39	90	(5)	97	88	14	71

[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.

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)	Lane	Lincoln	Linn	Malheur	Marion	Morrow
	FARM VALUES, 1940*						
1	Land and buildings, all farms....dollars..	28,223,172	3,746,837	21,222,449	14,579,441	38,293,980	7,922,180
2	Land and buildings, irrigated farms....dollars..	4,324,825	206,458	2,131,322	13,593,603	5,147,912	3,288,152
	Operated by—						
3	(a) Owners and managers....dollars..	3,666,651	153,958	1,837,842	10,968,368	4,062,122	2,898,202
4	(b) Tenants....dollars..	658,174	52,500	293,480	2,625,235	1,085,790	389,950
5	Average, land and buildings, per farm....dollars..	11,688.72	6,881.93	11,158.75	6,020.20	16,768.44	12,695.57
6	per acre in farms....dollars..	92.44	34.57	63.75	20.41	137.43	6.42
7	Buildings, irrigated farms reporting value....number...	365	28	190	1,186	292	255
8	Total reported....dollars..	1,188,891	71,788	521,499	2,469,496	1,092,806	533,045
9	Average, per irrigated farm reporting....dollars..	3,257.24	2,563.86	2,744.73	2,082.21	3,742.79	2,090.37
10	per acre on all irrigated farms....dollars..	25.41	12.02	15.60	3.71	29.18	1.04
11	Buildings, nonirrigated farms reporting value....number...	4,007	931	3,103	1,250	4,388	261
12	Total reported....dollars..	6,852,231	1,135,117	5,330,626	156,852	9,212,377	584,980
13	Average, per nonirrigated farm reporting....dollars..	1,710.07	1,219.24	1,717.89	125.48	2,099.45	2,241.30
14	per acre on all nonirrigated farms....dollars..	14.82	10.84	11.81	0.67	27.15	1.28
15	Implements and machinery, irrigated farms reporting value..number...	340	30	172	1,078	293	237
16	Total reported....dollars..	431,226	22,100	297,458	1,778,266	511,372	244,549
17	Average, per irrigated farm reporting....dollars..	1,268.31	736.67	1,729.41	1,647.74	1,745.30	1,031.85
18	per acre, on all irrigated farms....dollars..	9.22	3.70	8.90	2.67	13.65	0.48
19	Implements and machinery, nonirrigated farms reporting value....number...	3,280	686	2,680	1,209	3,840	246
20	Total reported....dollars..	1,848,359	242,970	2,499,766	119,826	2,897,188	716,556
21	Average, per acre, on all nonirrigated farms....dollars..	4.00	2.32	5.54	0.51	8.54	1.57
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1						
22	Enterprises....1940...number....	294	22	107	320	170	99
23	1930...number....	116	1	12	357	106	107
24	1920...number....	....	....	....	364	....	109
25	Average size of enterprise based on irrigable area....1940...acres....	82	21	57	618	395	135
26	1930...acres....	174	....	....	737	28	150
27	1920[2]...acres....	....	....	....	620	....	163
28	Diversion dams....1940...number....	34	10	6	344	28	158
29	Main canals and laterals....1940...length, miles....	19.5	10.1	28.4	1,287.9	86.1	137.4
30	1930...length, miles....	7	....	....	799	15	187
31	1920...length, miles....	....	....	....	902	....	169
32	1940...capacity, c.f.s.[3]....	205	25	214	6,402	328	156
33	1930...capacity, c.f.s.[3]....	20	....	....	3,734	30	564
34	1920...capacity, c.f.s.[3]....	....	....	....	4,013	....	551
35	Pipe lines[4]....1940...length, miles....	120.5	1.2	20.0	40.5	34.1	14.6
36	Storage dams....1940...number....	....	....	....	20	4	....
37	Reservoirs....1940...number....	2	....	1	28	5	....
38	1930...number....	1	....	....	29	1	....
39	1920...number....	....	....	....	43	....	....
40	1940...capacity, acre-feet..	(5)	....	(5)	1,059,804	22	....
41	1930...capacity, acre-feet..	8	....	....	644,216	1,000	....
42	1920...capacity, acre-feet..	....	....	....	317,979	....	....
43	Wells, flowing....1940...number....	....	....	....	....	....	....
44	1930...number....	....	....	....	2	....	....
45	1920...number....	....	....	....	4	....	....
46	1940...yield, g.p.m....	....	....	....	....	....	....
47	1930...yield, g.p.m....	....	....	....	280	....	....
48	1920...yield, g.p.m....	....	....	....	787	....	....
49	Wells, pumped....1940...number....	205	....	54	22	55	....
50	1930...number....	127	....	....	4	26	2
51	1920...number....	....	....	....	5	....	....
52	1940...yield, g.p.m....	42,288	....	14,044	9,288	10,979	....
53	1930...yield, g.p.m....	28,736	....	....	1,400	4,787	2
54	1920...yield, g.p.m....	....	....	....	835	....	....
55	Pumping plants....1940...number....	297	12	97	157	185	2
56	1930...number....	108	....	....	163	133	2
57	1920...number....	....	....	....	117	....	2
58	Prime movers....1940...capacity, hp....	1,543	70	590	7,726	1,333	(5)
59	1930...capacity, hp....	808	....	....	7,136	668	4
60	1920...capacity, hp....	....	....	....	7,409	....	22
61	Pumps....1940...capacity, g.p.m....	70,059	3,937	34,147	363,035	48,781	(5)
62	1930...capacity, g.p.m....	48,944	....	....	259,624	28,081	2
63	1920...capacity, g.p.m....	....	....	....	294,620	....	1,700
64	Pumping lift, from all sources....1940...average, feet....	15	20	16	20	18	(5)
65	1930...average, feet....	17	....	....	22	24	65
66	1920...average, feet....	....	....	....	27	....	18
67	from pumped wells....1940...average, feet....	16	....	18	21	28	....
	PAY ROLL AND NUMBER OF EMPLOYEES 1939[6]						
68	Enterprises reporting pay roll....number...	1	....	1	17	2	[7] 1
69	Irrigated area in these enterprises....acres....	(5)	....	....	116,469	(5)	4,914
70	Wages and salaries paid and payable....dollars..	(5)	....	(5)	222,202	(5)	3,740
71	Persons employed during week ending April 29....number...	(5)	....	(5)	224	(5)	4

*Census of Agriculture.

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

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

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

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"]

Multnomah	Polk	Sherman	Tillamook	Umatilla	Union	Wallowa	Wasco	Washington	Wheeler	Yamhill	All other counties[1]	
15,883,281	15,225,759	10,507,217	9,600,904	37,658,315	12,143,862	8,788,961	10,960,912	30,515,555	3,062,704	21,318,949	6,539,193	1
1,394,782	2,172,150	163,750	1,172,400	9,941,716	5,420,677	6,549,581	3,628,104	2,064,019	2,378,867	1,825,229	289,300	2
990,022	2,057,650	115,750	928,800	8,543,319	4,860,477	5,127,636	3,141,644	1,895,679	2,281,687	1,440,958	269,300	3
404,760	114,500	48,000	243,600	1,398,397	560,200	1,421,945	486,460	168,340	97,180	384,271	20,000	4
16,031.98	26,170.48	8,187.50	14,474.07	7,503.18	9,784.62	10,598.03	10,516.24	18,594.77	15,754.09	14,259.60	13,776.19	5
211.52	119.89	11.39	107.32	12.77	24.98	21.64	14.98	153.41	3.88	89.80	48.61	6
85	83	19	80	1,301	543	607	341	110	149	123	21	7
336,584	507,925	44,750	259,500	2,379,297	1,251,625	1,389,948	707,852	373,670	327,125	356,495	53,125	8
3,959.81	6,119.58	2,355.26	3,243.75	1,828.82	2,305.02	2,289.86	2,075.81	3,397.00	2,195.47	2,898.33	2,529.76	9
51.04	26.03	3.11	23.76	3.06	5.77	4.59	2.92	27.77	0.53	17.54	8.93	10
2,108	1,614	308	859	957	673	363	640	4,157	93	2,627	995	11
5,015,308	3,444,121	1,106,219	2,043,895	2,510,906	1,379,090	406,200	1,304,867	8,688,690	115,458	4,965,114	2,164,368	12
2,379.18	2,133.90	3,591.62	2,379.39	2,623.73	2,049.17	1,119.01	2,038.85	2,090.13	1,241.48	1,890.03	2,175.24	13
68.54	16.84	2.47	25.76	3.02	5.43	1.47	2.06	37.53	0.72	18.35	14.42	14
73	74	20	78	1,184	504	566	314	103	145	119	19	15
147,932	198,119	17,592	104,000	1,040,391	501,671	603,037	376,017	161,879	182,155	243,059	24,425	16
2,026.47	2,677.28	879.60	1,333.33	878.71	995.38	1,065.44	1,197.51	1,571.64	1,256.24	2,042.51	1,285.53	17
22.43	10.93	1.22	9.52	1.34	2.31	1.99	1.55	12.03	0.30	11.96	4.10	18
1,664	1,382	288	744	843	614	336	582	3,364	85	2,342	755	19
1,089,956	1,332,891	1,176,334	499,371	2,488,307	710,218	310,832	750,446	2,281,137	58,901	1,845,747	524,672	20
14.89	6.52	2.63	6.29	3.00	2.79	1.12	1.18	9.85	0.37	6.82	3.49	21
54	69	16	78	482	278	309	167	113	136	104	11	22
22	12	6	16	489	241	157	171	3	132	6	5	23
.....	.....	.....	.....	497	311	230	148	.....	156	.....	101	24
22	65	15	27	130	141	174	103	40	74	47	28	25
.....	78	.....	.....	125	174	314	234	.....	58	.....	.....	26
.....	.....	.....	.....	209	223	280	329	.....	71	.....	96	27
7	24	3	24	342	154	364	111	34	231	10	1	28
1.0	8.1	4.4	7.4	416.9	266.6	311.4	283.1	20.3	98.3	8.6	.....	29
.....	.....	.....	.....	421	325	268	222	.....	201	.....	9	30
.....	.....	.....	.....	591	501	424	259	.....	195	.....	56	31
38	88	8	71	2,321	1,001	1,663	347	175	301	131	9	32
.....	.....	.....	.....	1,039	627	1,293	225	.....	128	.....	7	33
.....	.....	.....	.....	1,932	1,381	1,398	328	.....	271	.....	161	34
31.5	15.2	3.2	19.1	69.6	3.5	4.2	38.4	24.0	2.5	18.3	2.2	35
1	4	.....	.....	2	14	9	3	5	1	.....	.....	36
1	4	1	.....	4	16	5	4	5	1	.....	.....	37
.....	.....	.....	.....	3	3	3	5	.....	1	.....	2	38
.....	.....	.....	.....	8	1	7	10	.....	1	.....	7	39
(5)	58	(5)	.....	123,012	17,481	49,354	404	18	(5)	.....	.....	40
.....	.....	.....	.....	52,412	36	41,760	20,503	.....	1,600	.....	21	41
.....	.....	.....	.....	69,700	20	205,430	1	.....	2,400	.....	3	42
.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	43
.....	.....	.....	.....	1	.....	.....	4	.....	.....	.....	.....	44
.....	.....	.....	.....	3	.....	.....	1	.....	.....	.....	.....	45
.....	.....	(5)	.....	.....	.....	.....	.....	(5)	.....	.....	.....	46
.....	.....	.....	.....	125	.....	.....	225	.....	.....	.....	.....	47
.....	.....	.....	.....	.....	.....	.....	70	.....	.....	.....	.....	48
18	24	7	1	208	67	3	36	5	.....	32	1	49
.....	12	.....	.....	189	58	.....	57	.....	.....	.....	16	50
.....	.....	.....	.....	94	20	.....	20	.....	.....	.....	19	51
2,033	16,820	1,658	(5)	41,412	20,713	136	2,490	197	.....	11,645	(5)	52
.....	3,600	.....	.....	44,922	20,144	.....	3,357	.....	.....	.....	3,051	53
.....	.....	.....	.....	19,496	4,203	.....	516	.....	.....	.....	1,794	54
52	61	11	47	241	80	12	65	97	26	91	8	55
.....	14	.....	.....	216	66	3	80	.....	15	.....	46	56
.....	.....	.....	.....	103	34	5	41	.....	21	.....	41	57
318	761	69	245	1,131	303	53	571	1,076	371	1,296	66	58
.....	264	.....	.....	1,128	367	36	325	.....	188	.....	367	59
.....	.....	.....	.....	582	186	26	273	.....	266	.....	318	60
9,415	39,400	2,048	9,753	57,819	33,223	2,647	22,875	104,684	34,585	40,641	2,168	61
.....	72,625	.....	.....	60,054	23,454	1,150	15,879	.....	14,425	.....	26,771	62
.....	.....	.....	.....	23,671	10,578	665	8,974	.....	14,195	.....	10,531	63
59	30	29	16	31	15	32	103	24	19	27	10	64
.....	20	.....	.....	27	19	25	63	.....	18	.....	23	65
.....	.....	.....	.....	26	12	32	49	.....	21	.....	26	66
102	27	37	(5)	32	16	34	146	101	.....	23	(5)	67
.....	1	.....	.....	15	10	20	8	.....	.....	1	.....	68
.....	(5)	.....	.....	27,162	7,805	46,811	3,970	.....	.....	(6)	.....	69
.....	(5)	.....	.....	31,083	1,419	8,135	9,946	.....	.....	(5)	.....	70
.....	.....	.....	.....	37	15	40	36	.....	.....	.....	.....	71

[1] 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.
[7] Data for less than 3 enterprises shown with permission of the enterprise involved.

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....	*48,983,040	49,195,520	49,195,520	49,195,520	49,195,520	49,195,520	49,195,520
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated).....number...	72,454	83,303	83,157	74,637	77,644	52,622	50,158
Land in all farms.....acres....	39,473,584	37,101,871	36,470,083	34,636,491	26,016,892	19,070,616	11,306,400
Farms irrigated:[1]							
Farms.....number...	967	974	763	1,198	500	606	151
Increase or decrease (-) over preceding census....percent..	[2] 26.7	.....	-36.3	139.6	-17.5	220.6	.....
Proportion of all farms.....percent..	1.3	1.2	0.9	1.6	0.6	1.2	0.4
Land in farms.....acres....	1,021,659	(3)	379,270	(3)	(3)	(3)	(3)
Proportion of all farm land.....percent..	2.6	(3)	1.0	(3)	(3)	(3)	(3)
Area irrigated.....acres....	[4] 54,073	[5] 56,565	[6] 59,361	(7)	(7)	43,676	15,717
Increase or decrease (-) over preceding census....percent..	[2] -8.9	.....	.....	.....	.....	177.9	.....
Proportion of total land area of State.....percent..	0.1	0.1	0.1	.....	.....	0.1	(8)
Proportion of all farm land.....percent..	0.1	0.2	0.2	.....	.....	0.2	0.1
Value of irrigated farms (land and buildings).....dollars..	9,972,519	(3)	10,520,455	(3)	(3)	(3)	(3)
Average per farm.....dollars..	10,312.84	(3)	13,788.28	(3)	(3)	(3)	(3)
Average per acre.....dollars..	9.76	(3)	27.74	(3)	(3)	(3)	(3)
Value of farm implements and machinery[9].....dollars..	1,164,804	(3)	1,055,845	(3)	(3)	(3)	(3)
Average per farm[9].....dollars..	1,204.55	(3)	1,383.81	(3)	(3)	(3)	(3)
Average per acre[9].....dollars..	1.14	(3)	2.78	(3)	(3)	(3)	(3)
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises.....number...	274	(3)	121	292	395	(3)	(3)
Farms irrigated.....number...	1,298	(3)	(3)	(3)	(3)	(3)	(3)
Area irrigated.....acres....	60,198	(3)	67,107	100,682	63,248	(3)	(3)
Area existing works were capable of supplying with water.....acres....	121,847	(3)	109,550	150,914	128,481	(3)	(3)
Area irrigable.....acres....	123,961	(3)	122,510	[10] 188,382	[10] 201,625	(3)	(3)
Additional area existing works were capable of supplying with water.....acres....	61,649	(3)	42,443	50,232	65,233	(3)	(3)
Additional irrigable area in enterprises not supplied with water.....acres....	63,763	(3)	55,403	[10] 87,700	[10] 138,377	(3)	(3)
Investment in irrigation enterprises.....dollars..	5,395,610	(3)	4,502,117	5,465,248	3,043,140	284,747	63,968
Increase or decrease (-) over preceding census.....percent..	[2] 19.8	(3)	-17.6	79.6	968.7	345.1	.....
Average per acre based on area works were capable of supplying with water.....dollars..	44.28	(3)	41.10	36.21	23.69	(3)	(3)
Increase or decrease (-) over preceding census....percent..	[2] 7.7	(3)	13.5	52.8	.....	.....	.....
Estimated completed cost of existing enterprises.....dollars..	5,432,934	(3)	5,174,417	5,500,748	3,800,556	(3)	(3)
Average per acre based on irrigable area in enterprises.....dollars..	43.83	(3)	42.24	[10] 29.20	[10] 18.85	(3)	(3)
Average annual cost per acre irrigated for maintenance and operation of irrigation works.....dollars..	1.28	(3)	1.33	1.26	0.64	(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 4,333 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] Less than one-tenth of 1 percent. [9] Total is for irrigated farms reporting this item. Averages are based on all irrigated farms. [10] 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 Total	CROPLAND HARVESTED 1939 Irrigated[1]	Irrigated pasture 1939	VALUE OF FARMS (land and buildings) Total	VALUE OF FARMS (land and buildings) Average per acre[2]	VALUE OF BUILDINGS Total	VALUE OF BUILDINGS Average per acre[2]	VALUE OF IMPLEMENTS AND MACHINERY Total	VALUE OF IMPLEMENTS AND MACHINERY Average per acre[2]
	Number	*Acres*	*Acres*	*Acres*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
All farms.....	72,454	39,473,584	12,297,291	49,740	4,333	505,452,178	12.80	133,751,853	3.39	59,969,394	1.52
Owners and managers.....	34,056	24,195,839	6,125,597	29,608	3,128	270,320,333	11.17	73,528,607	3.04	32,427,348	1.34
Tenants.....	38,398	15,277,745	6,171,694	20,132	1,205	235,131,845	15.39	60,223,246	3.94	27,542,046	1.80
Irrigated farms, total.....	967	1,021,659	94,483	49,740	4,333	9,972,519	9.76	2,173,503	2.13	1,164,804	1.14
Owners and managers.....	586	863,702	62,852	29,608	3,128	7,699,778	8.91	1,583,478	1.83	792,637	0.92
Tenants.....	381	157,957	31,631	20,132	1,205	2,272,741	14.39	590,025	3.74	372,167	2.36
Wholly irrigated farms.....	505	332,801	32,919	32,919	1,930	3,794,098	11.40	956,640	2.87	551,010	1.66
Owners and managers.....	379	269,709	19,149	19,149	1,135	2,734,673	10.14	654,815	2.43	336,673	1.25
Tenants.....	226	63,092	13,770	13,770	795	1,059,425	16.79	301,825	4.78	214,337	3.40
Partly irrigated farms.....	462	688,858	61,564	16,821	2,403	6,178,421	8.97	1,216,863	1.77	613,794	0.89
Owners and managers.....	307	593,993	43,703	10,459	1,993	4,965,105	8.36	928,663	1.56	455,964	0.77
Tenants.....	155	94,865	17,861	6,362	410	1,213,316	12.79	288,200	3.04	157,830	1.66
Nonirrigated farms, total.....	71,487	38,451,925	12,202,808	.....	.....	495,479,659	12.89	131,578,350	3.42	58,804,590	1.53

[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.

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					
								Irrigated area reporting—			Quantity delivered per acre[1]	Cost[1]	
	Enterprises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Quantity	Cost	Quantity and cost		Per acre	Per acre-foot
Total	*Number* 274	*Acres* 123,961	*Acres* 121,847	*Acres* 60,198	*Acres* 67,107	*Acres* 100,682	*Percent* -10.3	*Acres* 52,345	*Acres* 56,426	*Acres* 51,386	*Acre-feet* 1.1	*Dollars* 2.72	*Dollars* 2.43
Streams, gravity	145	38,163	38,047	20,445	65,855	92,191	-69.0	14,919	18,009	14,532	1.6	0.63	0.40
Streams, pumped	55	4,574	3,658	1,723	61	869	(*)	1,568	1,631	1,476	1.3	4.67	3.68
Streams, gravity and pumped	7	73,899	73,749	34,913	.....	.....	.....	34,863	34,716	34,666	0.9	3.51	3.81
Wells, pumped	6	122	112	108	.....	.....	.....	108	33	33	0.4	14.55	34.20
Wells, flowing	11	788	648	593	526	130	12.3	30	428	.....	.....	.....	.....
Wells, pumped and flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity	1	(2)	(2)	(2)	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, pumped	.....	.....	.....	.....	.....	170	.....	.....	(2)	.....	.....	.....	.....
Springs	8	818	738	737	25	326	(*)	15	368	15	2.4	3.60	1.50
Springs and streams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stored storm water	29	2,125	1,917	790	150	2,312	426.7	570	419	419	0.9	0.63	0.66
City water	1	(2)	(2)	(2)	.....	.....	.....	.....	(2)	.....	.....	.....	.....
Sewage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped	.....	.....	.....	.....	.....	500	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, flowing	1	(2)	(2)	(2)	160	20	(2)	.....	(2)	.....	.....	.....	.....
Streams, pumped; wells, pumped	2	(2)	(2)	(2)	.....	.....	.....	(2)	(2)	(2)	(2)	(2)	(2)
Waste water, seepage or drainage	2	(2)	(2)	(2)	.....	.....	.....	(2)	(2)	(2)	(2)	(2)	(2)
Other mixed	6	447	402	278	.....	3,864	.....	106	251	79	2.0	5.82	2.80
Other and not reported	.....	.....	.....	.....	328	.....	.....	.....	.....	.....	.....	.....	.....

[1] Based on enterprises reporting both quantity and cost of water, assuming (a) that for enterprises serving 1 to 4 farms the cost of water is cost of maintenance and operation, and for enterprises serving 5 or more farms it is total annual charges, and (b) that enterprises reporting cost and quantity of water had used the same quantity of water per acre as all enterprises which reported water delivered.
[2] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[*] Percent not shown when more than 1,000.

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	Proportion of total	Average per acre[2]	Amount	Proportion of total	Average per acre[2]		Irrigated area reporting	Average per acre	Irrigated area reporting	Average per acre		Irrigated area reporting	Average per acre
Total	*Dollars* 5,395,610	*Percent* 100.0	*Dollars* 44.28	*Dollars* 4,502,117	*Percent* 100.0	*Dollars* 41.10	*Dollars* 3.18	*Acres* 56,426	*Dollars* 1.28	*Acres* 65,783	*Dollars* 1.33	*Dollars* -0.05	*Acres* 88,329	*Dollars* 1.26
Streams, gravity	395,541	7.3	10.40	4,469,744	99.3	41.44	-31.04	18,009	0.51	61,945	1.34	-0.80	83,672	1.21
Streams, pumped	103,110	1.9	28.19	11,423	0.2	46.43	-18.24	1,631	4.73	60	8.17	-3.44	807	4.03
Streams, gravity and pumped	4,822,232	89.4	65.39	.....	.....	.....	.....	34,716	1.46	.....	.....	.....	.....	.....
Wells, pumped	6,000	0.1	53.57	.....	.....	.....	.....	33	14.55	.....	.....	.....	.....	.....
Wells, flowing	15,250	0.3	23.53	6,000	0.1	11.26	12.27	428	1.24	460	0.33	0.91	.....	.....
Wells, pumped and flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lakes, gravity	(3)	(3)	(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....
Lakes, pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springs	5,125	0.1	6.94	725	(4)	29.00	-22.06	368	0.98	8	6.88	-5.90	31	17.74
Springs and streams	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stored storm water	19,989	0.4	10.43	4,150	0.1	10.61	-0.18	119	1.05	150	0.70	0.35	1,303	2.78
City water	(3)	(3)	(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....
Sewage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, pumped	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Streams, gravity; wells, flowing	(3)	(3)	(3)	1,600	(4)	10.00	(3)	(3)	(3)	160	0.09	(3)	.....	.....
Streams, pumped; wells, pumped	(3)	(3)	(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....
Waste water, seepage or drainage	(3)	(3)	(3)	.....	.....	.....	.....	(3)	(3)	.....	.....	.....	.....	.....
Other mixed	10,352	0.2	25.75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other and not reported	.....	.....	.....	8,475	0.2	25.84	.....	251	2.17	.....	.....	.....	2,616	1.14

[1] Based on irrigated area in enterprises reporting cost of maintenance and operation.
[2] Based on area works were capable of supplying with water.
[3] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[4] Less than one-tenth of 1 percent.

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CENSUS OF IRRIGATION — SOUTH DAKOTA

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

ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF— 1940 Primary enterprises	1940 Supplemental enterprises	1930 Primary enterprises	1920 Primary enterprises	Increase or decrease (-) 1930-40 primary enterprises
AREA IRRIGATED	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*
Total	60,198	.....	67,107	100,682	-10.3
Individual and partnership	[1] 10,628	.....	11,268	31,664	[1] -5.7
Cooperative, incorporated	12,329	.....	19,646	10,080	-20.0
Cooperative, unincorporated	2,204	.....			
Commercial	.....	.....	.....	2,280	.....
Bureau of Reclamation[2] *	34,222	.....	36,193	56,638	-5.4
Office of Indian Affairs[2]	815	.....	.....	20	.....
State	([1])	.....	.....	.....	.....
AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER					
Total	121,847	.....	109,550	150,914	11.2
Individual and partnership	[1] 26,103	.....	14,174	56,032	[1] 84.2
Cooperative, incorporated	18,523	.....	30,876	10,615	2.9
Cooperative, unincorporated	2,948	.....			
Commercial	.....	.....	.....	1,600	.....
Bureau of Reclamation[2] *	72,504	.....	74,500	82,592	-2.7
Office of Indian Affairs[2]	1,769	.....	.....	75	.....
State	([1])	.....	.....	.....	.....
IRRIGABLE AREA[3]					
Total	123,961	.....	122,510	188,382	1.2
Individual and partnership	[1] 28,024	.....	19,034	76,683	[1] 47.2
Cooperative, incorporated	18,523	.....	22,276	11,410	-3.4
Cooperative, unincorporated	2,998	.....			
Commercial	.....	.....	.....	2,280	.....
Bureau of Reclamation[2] *	72,504	.....	81,200	97,934	-10.7
Office of Indian Affairs[2]	1,912	.....	.....	75	.....
State	([1])	.....	.....	.....	.....

[1]Data for 1 "State" enterprise are included with "Individual and partnership" enterprises in the 1940 Census. [2]U. S. Dept. of the Interior. [3]For 1920 relates to total area. Irrigable area for that year was not reported. *For explanation of areas, see text, p. 513.

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

TYPE OF ENTERPRISE (For definitions and explanations, see text)	ENTERPRISES: Total	ENTERPRISES: Serving 5 or more farms	AREAS: Irrigable	AREAS: Works were capable of supplying with water	AVERAGE COST: Primary enterprises: Works and equipment per acre[2]	AVERAGE COST: Primary enterprises: Maintenance and operation per acre[3]	AVERAGE COST: Supplemental enterprises: Works and equipment per acre	AVERAGE COST: Supplemental enterprises: Maintenance and operation per acre	AREA IRRIGATED, 1939[1]: Farms served	AREA IRRIGATED, 1939[1]: Total area	AREA IRRIGATED, 1939[1]: Cropland: From which crops were harvested	AREA IRRIGATED, 1939[1]: Cropland: On which crops failed	AREA IRRIGATED, 1939[1]: Irrigated pasture
	Number	*Number*	*Acres*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Acres*	*Acres*	*Acres*	*Acres*
Total	274	26	123,961	121,847	44.19	1.38	.....	.....	1,298	60,198	50,424	2,286	7,488
Individual and partnership	233	7	[4] 28,024	[4] 26,103	[4] 9.13	1.80	.....	.....	257	[4] 10,628	[4] 8,311	961	1,356
Cooperative, incorporated	13	9	18,523	18,523	11.11	0.32	.....	.....	115	12,329	9,104	1,310	1,855
Cooperative, unincorporated	8	6	2,998	2,948	14.33	0.38	.....	.....	91	2,204	2,134	.....	70
Commercial	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
U. S. Bureau of Reclamation[5] *	1	1	72,504	72,504	63.84	1.47	.....	.....	676	34,222	30,015	.....	4,207
U. S. Office of Indian Affairs	18	3	1,912	1,769	151.94	3.05	.....	.....	158	815	800	15	.....
State	1	.....	([4])	([4])	([4])	.....	.....	.....	1	([4])	([4])	.....	.....

[1]Reported by enterprises in the Census of Irrigation, 1940, not by the Census of Agriculture. [2]Based on area works were capable of supplying with water and cost of works and equipment exclusive of water right investment. [3]Based on irrigated area in enterprises reporting maintenance and operation in 1939. [4]Data for 1 "State" enterprise are included with "Individual and partnership" enterprises in the 1940 Census. [5]Data for less than 3 enterprises shown with permission of the enterprises involved. *For explanation of areas and investment, see text, p. 513.

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: 1940: Total	1940: Primary enterprises	1940: Supplemental enterprises	1940: Total cost of works and equipment	1940: Investment in water rights	1930	1920	Increase or decrease (-) 1930-40	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER: Primary enterprises	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER: Supplemental enterprises	Capital expenditures during 1939[1]	Estimated investment required to complete works
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Percent*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Total	5,395,610	5,395,610	.....	5,383,865	11,745	4,502,117	5,465,248	19.8	44.28	.....	170,857	37,321
Individual and partnership	[2] 241,939	[2] 241,939	.....	[2] 238,240	[2] 3,699	237,424	743,880	[2] 1.9	[2] 9.27	.....	1,078	26,150
Cooperative, incorporated	209,129	209,129	.....	205,725	3,404	196,953	240,030	30.0	11.29	.....	2,500	.....
Cooperative, unincorporated	46,892	46,892	.....	42,250	4,642				15.91	.....	130	.....
Commercial	.....	.....	.....	.....	.....	.....	15,058	.....	.....	.....	.....	.....
U. S. Bureau of Reclamation[3] *	4,628,868	4,628,868	.....	4,628,868	.....	4,067,740	4,464,780	13.8	63.84	.....	105,000	.....
U. S. Office of Indian Affairs	268,782	268,782	.....	268,782	.....	.....	1,500	.....	151.94	.....	62,149	11,174
State	([2])	([2])	.....	([2])	.....	.....	.....	.....	([2])	.....	.....	.....

[1]Only for enterprises serving 5 or more farms. [2]Data for 1 "State" enterprise are included with "Individual and partnership" enterprises in the 1940 Census. [3]Data for less than 3 enterprises shown with permission of the enterprises involved. *For explanation of investment, see text, p. 513.

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		
		Area						Total arrearages					
	Enterprises 1940	Irrigable 1940	Works were capable of supplying with water 1940	Total indebtedness 1940	Average per acre assessed 1939	Average per acre works were capable of supplying with water	Enterprises 1940	Dec. 31 1939	Dec. 31 1938	Average per acre assessed 1939	Area assessed 1939	Charges made 1939	Charges collected 1939
	Number	*Acres*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Dollars*	*Dollars*	*Dollars*	*Acres*	*Dollars*	*Dollars*
Total	3	72,771	72,771	4,600,023	66.62	63.21	1	66,992	57,507	1.27	73,040	131,490	83,883
Partnership	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,332	960	417
Cooperative, incorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16,020	7,396	7,424
Cooperative, unincorporated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,414	1,301	1,271
Commercial	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bureau of Reclamation[3 4 *]	1	72,504	72,504	[5] 4,577,395	66.64	63.13	1	[5] 66,992	[6] 57,507	1.27	52,830	121,509	74,771
Office of Indian Affairs[3 4]	2	267	267	[6] 22,628	199.15	84.75	.....	.....	.....	.....	444	324	.....
State	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Only for enterprises serving 5 or more farms. [2] In payment of principal, interest, and/or other funded obligations. [3] U. S. Dept. of the Interior. [4] Data for less than 3 enterprises shown with permission of the enterprises involved. [5] Represents indebtedness and arrearages of irrigation districts to the U. S. Government. [6] Represents construction costs of irrigation works less cancellations and repayments. [*] For explanation of areas and investment, see text, p. 513.

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			
	Acres	*Dollars*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Dollars*	*Number*
Total	56,426	71,986	.....	.....	1.28	.....	17	60,964	111
Individual and partnership	8,447	15,202	.....	.....	1.80	.....	2	(2)	.....
Cooperative, incorporated	10,879	3,535	.....	.....	0.32	.....	7	1,804	29
Cooperative, unincorporated	2,169	822	.....	.....	0.38	.....	5	[2] 939	20
Commercial	.....	.....	.....	.....	.....	.....	.....	.....	.....
U. S. Bureau of Reclamation[3 *]	34,222	50,264	.....	.....	1.47	.....	1	38,812	31
U. S. Office of Indian Affairs[3]	709	2,163	.....	.....	3.05	.....	2	19,349	31
State	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Only for enterprises serving 5 or more farms. [2] Data for 2 "Individual and partnership" enterprises are included with "Cooperative, unincorporated" enterprises. [3] Data for less than 3 enterprises shown with permission of the enterprises involved. [*] For explanation of areas and investment, see text, p. 513.

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			
				Length[1]									Prime movers		Pumps	
	Diversion	Storage	Capacity at main heading	Earth	Lined[2]	Number	Capacity	Length	Number	Yield	Number	Yield	Number	Rated capacity	Number	Rated capacity
	Number	*Number*	*Sec.-ft.*	*Miles*	*Miles*		*Ac.-ft.*	*Miles*		*G.p.m.*		*G.p.m.*		*Hp.*		*G.p.m.*
Total	258	74	1,948	1,038	11.3	82	209,785	17.3	19	5,377	16	1,039	119	2,060	127	103,050
Individual and partnership	237	66	669	219	2.5	74	3,307	5.1	18	5,375	10	460	62	1,105	69	56,906
Cooperative, incorporated	11	.....	432	81	0.1	.....	.....	0.1	....	.....	2	9	1	1	2	9
Cooperative, unincorporated	7	.....	101	23	0.3	.....	.....	0.4	....	.....	1	120	1	5	1	120
Commercial	.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
Bureau of Reclamation[3]	1	1	650	657	8.4	1	197,000	6.4	....	.....	.....	.....	1	125	1	1,500
Office of Indian Affairs[3]	2	7	93	58	.....	7	9,478	5.3	1	2	3	450	53	804	53	40,015
State	.....	.....	3	.....	.....	.....	.....	.....	....	.....	.....	.....	1	20	1	1,500

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

BUREAU OF RECLAMATION AREAS AND INVESTMENT

The areas credited to the United States Bureau of Reclamation in State tables 5, 6, 8, and 9 relate to the Belle Fourche Project in Meade and Butte Counties. This acreage is not reported under any other classification.

The investment attributed to the Bureau of Reclamation in State table 7 includes the total cost to the United States of the irrigation system of the Belle Fourche Project. The outlay for the drainage system of the project is not included.

Under the Water Conservation and Utilization Program provided for by various acts of the Congress for combating the effects of drought and maintaining established agricultural areas, the Bureau of Reclamation has been authorized to construct two additional projects in South Dakota. One, the Rapid Valley Project in Pennington County, will provide supplemental water for 12,000 acres now inadequately irrigated; the other, the Angostura Project in Fall River County, which will provide irrigation water for 16,210 acres. As these projects were not in operation when the census was taken, no data on them are included.

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

MATERIAL	1940		1930	
	Diversion	Storage	Diversion	Storage
	Number	*Number*	*Number*	*Number*
Total	258	74	91	10
Concrete or masonry	13	2	3	.....
Timber	19	.....	4	.....
Earth and rock	198	69	.....	9
Other and mixed	[1] 23	2	[1] 43	.....
Not reported	5	1	41	1

[1] Principally temporary dams, replaced annually.

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

PUMPS BY KIND OF POWER EMPLOYED	Pumps	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	127	100.0	103,050	100.0	20	Total, 1940	119	100.0	2,060	100.0
Electric motor	8	6.3	5,644	5.5	41	**Centrifugal pump**	106	89.1	1,928	93.6
Centrifugal	4	3.1	5,453	5.3	26	Electric	3	2.5	190	9.2
Turbine	.....	.....	.....	.....	.....	Internal-combustion	102	85.7	1,730	84.0
Plunger	4	3.1	191	0.2	59	Other	1	0.9	8	0.4
Other	.....	.....	.....	.....	.....					
						Turbine pump	6	5.0	72	3.5
Internal-combustion engine	114	89.8	93,706	90.9	18	Electric	.....	.....	.....	.....
Centrifugal	105	82.7	92,780	90.0	17	Internal-combustion	6	5.0	72	3.5
Turbine	6	4.7	320	0.3	19	Other	.....	.....	.....	.....
Plunger	1	0.8	6	.....	75					
Other	2	1.6	600	0.6	8	**Plunger pump**	4	3.4	9	0.4
						Electric	3	2.5	8	0.4
Other kinds of motive power	1	0.8	1,900	1.8	4	Internal-combustion	1	0.9	1	.....
Centrifugal	1	0.8	1,900	1.8	4	Other	.....	.....	.....	.....
Turbine	.....	.....	.....	.....	.....					
Plunger	.....	.....	.....	.....	.....	**Other and mixed types of pumps**	3	2.5	51	2.5
Other	.....	.....	.....	.....	.....	Electric	2	1.7	41	2.0
						Internal-combustion	1	0.8	10	0.5
Mixed kinds of motive power	4	3.1	1,800	1.8	11	Other	.....	.....	.....	.....
Centrifugal	3	2.3	1,350	1.3	10					
Turbine	.....	.....	.....	.....	.....	Total, 1930	[1] 8	.....	92	.....
Plunger	.....	.....	.....	.....	.....					
Other	1	0.8	450	0.5	12	Increase or decrease (-) 1930-1940	111	.....	1,968	.....
Total, 1930	8	.....	4,027	.....	27					
Increase or decrease (-) 1930-1940	119	.....	99,023	.....	-7					

[1] Number of pumping plants.

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

MATERIAL AND SIZE (DIAMETER)	LENGTH		Increase or decrease (-) 1930-1940
	1940[1]	1930[2]	
	Miles	*Miles*	*Percent*
Total	17.3	8.9	94.4
Concrete:			
1 to 12 inches	2.0	.....	.....
13 to 24 inches	1.1	1.1	266.4
Over 24 inches	2.6		
Metal:			
1 to 12 inches	10.0	2.9	244.8
13 to 24 inches	0.2	0.7	42.9
Over 24 inches	0.8		
Wood-stave:			
1 to 12 inches	0.5	.....	.....
13 to 24 inches	.....	1.8	.....
Over 24 inches	.....		
Clay and other:			
1 to 12 inches	.....	2.3	.....
13 to 24 inches	0.1	0.1	.....
Over 24 inches	.....		

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

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

ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number...	15	9	17
Area irrigable in these enterprises.....acres....	74,640	79,729	[1] 106,129
Area irrigated in these enterprises.....acres....	36,072	([2])	([2])
Area for which drains have been installed.....acres....	25,906	4,353	2,109
Additional area needing drainage.....acres....	5,509	6,100	4,714
Ratio of area drained to area irrigated in—			
(a) Enterprises reporting lands drained and/or needing drainage.....percent..	71.8	[3] 5.4	[1] 2.0
(b) All irrigation enterprises.....percent..	43.0	6.5	2.1
Ratio of area drained plus area needing drainage to—			
(a) Irrigable area reporting.....percent..	42.1	13.1	[1] 6.4
(b) Irrigated area reporting.....percent..	87.1	([2])	([2])

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

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]
From surface sources reported:									
Total water entering canals.....acre-feet..	96,132	176,844	168,186	83,704	167,604	121,487	12,428	19,240	46,699
Area irrigated by these enterprises.....acres.....	46,840	47,035	67,366	38,289	43,769	56,638	8,551	3,266	10,728
Average water per acre irrigated.....acre-feet..	2.1	3.8	2.5	2.2	3.6	2.1	1.5	5.9	4.4
Total water delivered to irrigators.....acre-feet..	58,740	46,520	83,574	39,261	.....	81,568	19,479	46,520	2,006
Area irrigated by these enterprises.....acres.....	52,207	36,193	59,618	40,232	.....	56,638	11,975	36,193	2,980
Average water per acre irrigated.....acre-feet..	1.1	1.3	1.4	1.0	.....	1.4	1.6	1.3	0.7
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	57	.....	.....	.....	.....	.....	57	.....	.....
Area irrigated by these enterprises.....acres.....	138	.....	.....	.....	.....	.....	138	.....	.....
Average water per acre irrigated.....acre-feet..	0.4	.....	.....	.....	.....	.....	0.4	.....	.....

[1] Data only for enterprises serving 5 or more farms. Water and area for surface and underground sources 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				
	Acres	*Percent*	*Acres*	*Acres*	*Percent*	*Acres*	*Percent*
Total.....	60,198	100.0	.....	67,107	100.0	100,682	100.0
Appropriation[1].....	45,247	75.2	.....	47,664	71.0	89,940	89.3
Riparian.....	3,689	6.1	.....	3,365	5.0	1,599	1.6
Appropriation and riparian.....	2,929	4.9	.....	.....	.....	.....	.....
Underground.....	684	1.1	.....	529	0.8	130	0.1
Riparian and underground.....	172	0.3	.....	.....	.....	.....	.....
Adjudicated by court.....	4,236	7.0	.....	11,665	17.4	7,651	7.6
Other mixed and not reported...	3,241	5.4	.....	3,884	5.8	1,362	1.4

[1] "Appropriation" includes water rights published in the 1930 and 1920 Census reports as "Appropriation and use," "Notice filed and posted," "Permit from State," and "Certificate or license from State."

STATE TABLE 17.—ENTERPRISES, AREA IRRIGATED, CAPITAL INVESTED, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS AND ARREARAGE, TYPE OF ENTERPRISE, PAY ROLL, NUMBER OF EMPLOYEES, AND SOURCE OF WATER SUPPLY; BY SPECIFIED GROUPS OF IRRIGATED FARMS, AREAS IRRIGATED, AND COST OF WORKS: CENSUS OF 1940

	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...	274	44	186	18	22	2	2
2	Irrigated farms, 1939.....number...	1,298	.....	186	50	199	67	796
3	Area irrigated, 1939.....acres....	60,198	.....	7,424	2,915	10,704	39,155	
4	(a) From which crops were harvested.....acres....	50,424	.....	5,691	2,279	7,906	34,548	
5	(b) On which crops failed.....acres....	2,286	.....	584	253	1,449	.....	
6	(c) Irrigated pasture.....acres....	7,488	.....	1,149	383	1,349	4,607	
	CAPITAL INVESTMENT, 1940							
7	Total capital investment in all enterprises.....dollars..	5,395,610	78,203	166,222	37,453	209,497	4,904,235	
8	(a) Cost of irrigation works and equipment.....dollars..	5,383,865	77,993	163,929	36,953	204,255	4,900,735	
9	(b) Investment in water rights.....dollars..	11,745	210	2,293	500	5,242	3,500	
10	Area works were capable of supplying with water.....acres....	121,847	9,151	14,190	4,631	15,840	78,035	
11	Average investment per acre irrigated.....dollars..	89.63	.....	32.92	12.85	19.57	125.25	
12	Average investment per acre which the works could supply with water.....dollars..	44.28	8.55	11.71	8.09	13.23	62.85	
	MAINTENANCE AND OPERATION, AND CHARGES, 1939							
13	Enterprises reporting maintenance and operation.....number...	181	24	119	15	19	2	2
14	(a) Area irrigated in these enterprises.....acres....	56,426	.....	5,686	1,728	9,857	39,155	
15	(b) Cost of maintenance and operation.....dollars..	71,986	927	13,543	1,816	3,813	51,887	
16	(c) Average cost per irrigated acre reporting.....dollars..	1.28	.....	2.38	1.05	0.39	1.33	
17	Total annual charges[2].....dollars..	131,490	22	.....	.....	8,001	123,467	
18	Average charge per irrigated acre reporting.....dollars..	2.68	.....	.....	.....	0.81	3.15	
19	Area against which charges were assessed.....acres....	73,040	2,200	.....	.....	12,677	58,163	
20	Average annual charge per acre assessed.....dollars..	1.80	0.01	.....	.....	0.63	2.12	
21	Total charges collected[2].....dollars..	83,883	22	.....	.....	7,252	76,609	
	INDEBTEDNESS AND ARREARAGE, 1939							
22	Enterprises reporting indebtedness[3].....number...	3	.....	.....	.....	[4] 2	.....	[4] 1
23	(a) Area irrigated in these enterprises.....acres....	34,371	.....	.....	.....	149	.....	34,222
24	(b) Indebtedness.....dollars..	4,600,023	.....	.....	.....	22,628	.....	4,577,395
25	(c) Average indebtedness per acre irrigated.....dollars..	133.83	.....	.....	.....	151.87	.....	133.76
26	(d) Cost of irrigation works and equipment.....dollars..	4,651,496	.....	.....	.....	22,628	.....	4,628,868
27	(e) Investment in water rights.....dollars..	.....	.....	.....	.....	.....	.....	.....
28	(f) Total investment.....dollars..	4,651,496	.....	.....	.....	22,628	.....	4,628,868
29	(g) Maintenance and operation.....dollars..	50,304	.....	.....	.....	40	.....	50,264
30	(h) Total annual charges[2].....dollars..	121,549	.....	.....	.....	40	.....	121,509
31	(i) Total charges collected[2].....dollars..	74,771	.....	.....	.....	.....	.....	74,771
32	(j) Area against which annual charges were assessed.....acres....	52,915	.....	.....	.....	85	.....	52,830
33	(k) Average indebtedness per acre assessed.....dollars..	86.93	.....	.....	.....	266.21	.....	86.64
34	(l) Average charges per acre assessed.....dollars..	2.30	.....	.....	.....	0.47	.....	2.30
35	(m) Average charges per acre irrigated.....dollars..	3.54	.....	.....	.....	0.27	.....	3.55
36	Enterprises reporting arrearage[3].....number...	1	.....	.....	.....	.....	.....	1
37	(a) Area assessed in these enterprises.....acres....	52,830	.....	.....	.....	.....	.....	52,830
38	(b) Total arrearage.....dollars..	66,992	.....	.....	.....	.....	.....	66,992
39	(c) Average arrearage per acre assessed.....dollars..	1.27	.....	.....	.....	.....	.....	1.27
40	(d) Indebtedness.....dollars..	4,577,395	.....	.....	.....	.....	.....	4,577,395
	TYPE, 1940							
41	Individual and partnership.....number...	233	38	177	11	7	.....	.....
42	Cooperative (incorporated and unincorporated).....number...	21	1	3	2	13	2	.....
43	Commercial.....number...	.....	.....	.....	.....	.....	.....	.....
44	U. S. Bureau of Reclamation.....number...	1	.....	.....	.....	.....	.....	1
45	U. S. Office of Indian Affairs.....number...	18	5	5	5	2	.....	1
46	All other.....number...	1	.....	1	.....	.....	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939							
47	Enterprises reporting pay roll.....number...	17	3	.....	.....	11	2	1
48	Wages and salaries paid and payable for 1939.....dollars..	60,964	19,371	.....	.....	2,194	39,399	
49	Persons employed during week ending April 29, 1939.....number...	114	42	.....	.....	35	37	
	SOURCE OF WATER SUPPLY, 1939							
50	Streams, gravity.....number...	145	26	85	12	20	2	.....
51	Streams, pumped.....number...	55	6	44	5	.....	.....	.....
52	Wells, pumped.....number...	6	.....	6	.....	.....	.....	.....
53	Wells, pumped and flowing; or wells flowing.....number...	11	.....	11	.....	.....	.....	.....
54	Lakes, gravity or pumped.....number...	1	.....	1	.....	.....	.....	.....
55	Streams and springs; or springs.....number...	8	.....	8	.....	.....	.....	.....
56	Mixed, streams and wells.....number...	10	.....	6	.....	2	.....	2
57	Other mixed or stored storm water.....number...	38	12	25	1	.....	.....	.....

[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.
[3] 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.

STATE TABLE 17.—ENTERPRISES, AREA IRRIGATED, CAPITAL INVESTED, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS AND ARREARAGE, TYPE OF ENTERPRISE, PAY ROLL, NUMBER OF EMPLOYEES, AND SOURCE OF WATER SUPPLY; BY SPECIFIED GROUPS OF IRRIGATED FARMS, AREAS IRRIGATED, AND COST OF WORKS: CENSUS OF 1940—Continued

	PRIMARY ENTERPRISES (For definitions and explanations, see text)	ACRES IRRIGATED					
		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
1	Enterprises, 1940.....number...	44	181	27	20	1	[2] 1
2	Irrigated farms, 1939.....number...	.....	232	62	296	32	676
3	Area irrigated, 1939.....acres....	.....	4,467	4,191	17,318		34,222
4	(a) From which crops were harvested.....acres....	.....	3,735	3,087	13,587		30,015
5	(b) On which crops failed.....acres....	.....	111	670	1,505		.....
6	(c) Irrigated pasture.....acres....	.....	621	434	2,226		4,207
	CAPITAL INVESTMENT, 1940						
7	Total capital investment in all enterprises.....dollars..	78,203	186,308	77,822	424,409		4,628,868
8	(a) Cost of irrigation works and equipment.....dollars..	77,993	184,896	76,464	415,644		4,628,868
9	(b) Investment in water rights.....dollars..	210	1,412	1,358	8,765		.....
10	Area works were capable of supplying with water.....acres....	9,151	9,425	7,417	23,350		72,504
11	Average investment per acre irrigated.....dollars..	.....	41.71	18.57	24.51		135.26
12	Average investment per acre which the works could supply with water.....dollars..	8.55	19.77	10.49	18.18		63.84
	MAINTENANCE AND OPERATION, AND CHARGES, 1939						
13	Enterprises reporting maintenance and operation.....number...	24	115	24	16	1	[2] 1
14	(a) Area irrigated in these enterprises.....acres....	.....	3,295	3,824	15,085		34,222
15	(b) Cost of maintenance and operation.....dollars..	927	10,698	3,962	6,135		50,264
16	(c) Average cost per irrigated acre reporting.....dollars..	.....	3.53	1.04	0.41		1.47
17	Total annual charges[3].....dollars..	22	249	441	9,269		121,509
18	Average charge per irrigated acre reporting.....dollars..	.....	1.09	0.74	0.66		3.55
19	Area against which charges were assessed.....acres....	2,200	229	599	17,182		52,830
20	Average annual charge per acre assessed.....dollars..	0.01	1.09	0.74	0.54		2.30
21	Total charges collected[3].....dollars..	22	59	211	8,820		74,771
	INDEBTEDNESS AND ARREARAGE, 1939						
22	Enterprises reporting indebtedness[4].....number...	.....	[2] 2	.....	.....	.....	[2] 1
23	(a) Area irrigated in these enterprises.....acres....	.....	149	.....	.....	.....	34,222
24	(b) Indebtedness.....dollars..	.....	22,628	.....	.....	.....	4,577,395
25	(c) Average indebtedness per acre irrigated.....dollars..	.....	151.87	.....	.....	.....	133.76
26	(d) Cost of irrigation works and equipment.....dollars..	.....	22,628	.....	.....	.....	4,628,868
27	(e) Investment in water rights.....dollars..	.....	.....	.....	.....	.....	.....
28	(f) Total investment.....dollars..	.....	22,628	.....	.....	.....	4,628,868
29	(g) Maintenance and operation.....dollars..	.....	40	.....	.....	.....	50,264
30	(h) Total annual charges[3].....dollars..	.....	40	.....	.....	.....	121,509
31	(i) Total charges collected[3].....dollars..	.....	.....	.....	.....	.....	74,771
32	(j) Area against which annual charges were assessed.....acres....	.....	85	.....	.....	.....	52,830
33	(k) Average indebtedness per acre assessed.....dollars..	.....	266.21	.....	.....	.....	86.64
34	(l) Average charges per acre assessed.....dollars..	.....	0.47	.....	.....	.....	2.30
35	(m) Average charges per acre irrigated.....dollars..	.....	0.27	.....	.....	.....	3.55
36	Enterprises reporting arrearage[4].....number...	.....	.....	.....	.....	.....	[2] 1
37	(a) Area assessed in these enterprises.....acres....	.....	.....	.....	.....	.....	52,830
38	(b) Total arrearage.....dollars..	.....	.....	.....	.....	.....	66,992
39	(c) Average arrearage per acre assessed.....dollars..	.....	.....	.....	.....	.....	1.27
40	(d) Indebtedness.....dollars..	.....	.....	.....	.....	.....	4,577,395
	TYPE, 1940						
41	Individual and partnership.....number...	38	164	24	7	.....	.....
42	Cooperative (incorporated and unincorporated).....number...	1	5	2	12	1	.....
43	Commercial.....number...	.....	.....	.....	.....	.....	.....
44	U. S. Bureau of Reclamation.....number...	.....	.....	.....	.....	.....	1
45	U. S Office of Indian Affairs.....number...	5	11	1	1	.....	.....
46	All other.....number...	.....	1	.....	.....	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939						
47	Enterprises reporting pay roll.....number...	3	2	2	8	1	[2] 1
48	Wages and salaries paid and payable for 1939.....dollars..	19,371	[5]	[5]	1,949	[5]	38,812
49	Persons employed during week ending April 29, 1939.....number...	42	.....	[5]	35	[5]	34
	SOURCE OF WATER SUPPLY, 1939						
50	Streams, gravity.....number...	26	85	17	16	1	.....
51	Streams, pumped.....number...	6	46	3	.....	.....	.....
52	Wells, pumped.....number...	.....	6	.....	.....	.....	.....
53	Wells, pumped and flowing; or wells flowing.....number...	.....	10	1	.....	.....	.....
54	Lakes, gravity or pumped.....number...	.....	1	.....	.....	.....	.....
55	Streams and springs; or springs.....number...	.....	6	.....	2	.....	.....
56	Mixed, streams and wells.....number...	.....	5	2	2	.....	1
57	Other mixed or stored storm water.....number...	12	22	4	.....	.....	.....

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

STATE TABLE 17.—ENTERPRISES, AREA IRRIGATED, CAPITAL INVESTED, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS AND ARREARAGE, TYPE OF ENTERPRISE, PAY ROLL, NUMBER OF EMPLOYEES, AND SOURCE OF WATER SUPPLY; BY SPECIFIED GROUPS OF IRRIGATED FARMS, AREAS IRRIGATED, AND COST OF WORKS: CENSUS OF 1940—Continued

	PRIMARY ENTERPRISES (For definitions and explanations, see text)	COST OF IRRIGATION WORKS AND EQUIPMENT				
		Less than $5,000	$5,000 to $14,999	$15,000 to $99,999	$100,000 to $1,499,999	$1,500,000 to $9,999,999
1	Enterprises, 1940.....number...	239	22	11	[1] 1	[1] 1
2	Irrigated farms, 1939.....number...	286	69	147	120	676
3	Area irrigated, 1939.....acres....	11,021	3,962	10,634	359	34,222
4	(a) From which crops were harvested.....acres....	8,365	3,111	8,574	359	30,015
5	(b) On which crops failed.....acres....	824	402	1,060	.....	.....
6	(c) Irrigated pasture.....acres....	1,832	449	1,000	.....	4,207
	CAPITAL INVESTMENT, 1940					
7	Total capital investment in all enterprises.....dollars..	150,568	170,836	278,471	166,867	4,628,868
8	(a) Cost of irrigation works and equipment.....dollars..	146,168	169,291	272,671	166,867	4,628,868
9	(b) Investment in water rights.....dollars..	4,400	1,545	5,800	.....	.....
10	Area works were capable of supplying with water.....acres....	21,671	12,244	14,917	511	72,504
11	Average investment per acre irrigated.....dollars..	13.66	43.12	26.19	464.81	135.26
12	Average investment per acre which the works could supply with water.....dollars..	6.95	13.95	18.67	326.55	63.84
	MAINTENANCE AND OPERATION, AND CHARGES, 1939					
13	Enterprises reporting maintenance and operation.....number...	149	19	11	[1] 1	[1] 1
14	(a) Area irrigated in these enterprises.....acres....	7,355	3,856	10,634	359	34,222
15	(b) Cost of maintenance and operation.....dollars..	14,393	3,601	3,444	284	50,261
16	(c) Average cost per irrigated acre reporting.....dollars..	1.96	0.93	0.32	0.79	1.47
17	Total annual charges[2].....dollars..	484	1,395	7,818	284	121,509
18	Average charge per irrigated acre reporting.....dollars..	0.55	0.50	0.71	0.79	3.55
19	Area against which charges were assessed.....acres....	884	6,133	12,834	359	52,830
20	Average annual charge per acre assessed.....dollars..	0.55	0.23	0.61	0.79	2.30
21	Total charges collected[2].....dollars..	351	1,276	7,482	.....	74,771
	INDEBTEDNESS AND ARREARAGE, 1939					
22	Enterprises reporting indebtedness[3].....number...	.....	[1] 1	[1] 1	.....	[1] 1
23	(a) Area irrigated in these enterprises.....acres....	.....	64	85	.....	34,222
24	(b) Indebtedness.....dollars..	.....	5,700	16,928	.....	4,577,395
25	(c) Average indebtedness per acre irrigated.....dollars..	.....	89.06	199.15	.....	133.76
26	(d) Cost of irrigation works and equipment.....dollars..	.....	5,700	16,928	.....	4,628,868
27	(e) Investment in water rights.....dollars..	.....	.....	.....	.....	.....
28	(f) Total investment.....dollars..	.....	5,700	16,928	.....	4,628,868
29	(g) Maintenance and operation.....dollars..	.....	.....	40	.....	50,261
30	(h) Total annual charges[2].....dollars..	.....	.....	40	.....	121,509
31	(i) Total charges collected[2].....dollars..	.....	.....	.....	.....	74,771
32	(j) Area against which annual charges were assessed.....acres....	.....	.....	85	.....	52,830
33	(k) Average indebtedness per acre assessed.....dollars..	.....	.....	199.15	.....	86.64
34	(l) Average charges per acre assessed.....dollars..	.....	.....	0.47	.....	2.30
35	(m) Average charges per acre irrigated.....dollars..	.....	.....	0.47	.....	3.55
36	Enterprises reporting arrearage[3].....number...	.....	.....	.....	.....	[1] 1
37	(a) Area assessed in these enterprises.....acres....	.....	.....	.....	.....	52,830
38	(b) Total arrearage.....dollars..	.....	.....	.....	.....	66,992
39	(c) Average arrearage per acre assessed.....dollars..	.....	.....	.....	.....	1.27
40	(d) Indebtedness.....dollars..	.....	.....	.....	.....	4,577,395
	TYPE, 1940					
41	Individual and partnership.....number...	220	11	2	.....	.....
42	Cooperative (incorporated and unincorporated).....number...	9	5	7	.....	.....
43	Commercial.....number...	.....	.....	.....	.....	.....
44	U. S. Bureau of Reclamation.....number...	.....	.....	.....	.....	1
45	U. S. Office of Indian Affairs.....number...	9	6	2	1	.....
46	All other.....number...	1	.....	.....	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939					
47	Enterprises reporting pay roll.....number...	4	5	7	.....	[1] 1
48	Wages and salaries paid and payable for 1939.....dollars..	354	9,582	12,216	.....	38,812
49	Persons employed during week ending April 29, 1939.....number...	14	17	49	.....	34
	SOURCE OF WATER SUPPLY, 1939					
50	Streams, gravity.....number...	125	11	9	.....	.....
51	Streams, pumped.....number...	48	6	1	.....	.....
52	Wells, pumped.....number...	6	.....	.....	.....	.....
53	Wells, pumped and flowing; or wells flowing.....number...	10	1	.....	.....	.....
54	Lakes, gravity or pumped.....number...	1	.....	.....	.....	.....
55	Streams and springs; or springs.....number...	8	.....	.....	.....	.....
56	Mixed, streams and wells.....number...	5	2	1	1	1
57	Other mixed or stored storm water.....number...	36	2	.....	.....	.....

[1] Data for less than 3 enterprises shown with permission of the enterprises involved.

[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.

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

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.			
			Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Annual mean	Departure[1]
Missouri River		*Feet*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Degrees F.*	*Degrees F.*
Belle Fourche	Butte	3,018	9.17	-5.49	0.70	-1.14	0.41	-1.10	3.87	-2.69	4.19	-0.62	48.3	+3.2
Ardmore	Fall River	3,557	12.73	-2.49	1.39	-0.46	1.97	+0.66	5.32	-2.08	4.05	-0.61	48.9	+3.6
Ludlow	Harding	3,200	14.73	+1.76	0.90	-0.56	0.87	-0.19	5.63	-0.76	7.33	+3.27	45.4	+1.7
Rapid City	Pennington	3,231	10.31	-7.67	0.94	-0.93	1.57	-0.33	3.94	-4.98	3.86	-1.43	50.2	+4.1
Pine Ridge	Shannon	3,200	12.30	-5.21	0.54	-1.70	1.69	+0.24	6.55	-1.39	3.52	-2.36	49.8	+3.8
Bison	Perkins	2,600	9.54	-6.93	0.81	-0.83	1.52	-0.17	5.36	-1.56	1.83	-4.37	46.1	+2.(
Cottonwood	Jackson	2,414	8.37	-7.27	1.19	-0.62	0.77	-0.46	3.59	-3.63	2.82	-2.56	49.6	+3.3
Dupree	Ziebach	2,353	11.06	-5.81	0.61	-1.84	1.47	-0.82	6.63	-0.02	2.35	-3.13	48.3	+2.6
McIntosh	Corson	2,272	13.14	-4.99	0.68	-1.30	1.05	-0.84	6.70	-1.89	4.71	-0.96	46.2	+4.6
Timber Lake	Dewey	2,161	12.61	-7.35	0.81	-1.23	1.08	-1.03	8.84	-0.17	1.88	-4.92	46.6	+2.8
Mobridge	Walworth	1,653	11.78	-6.09	0.89	-1.21	0.88	-1.39	7.80	-0.04	2.41	-3.45	48.4	+3.5
Pierre	Hughes	1,552	13.11	-3.59	0.70	-1.09	2.07	+0.29	6.93	-0.33	3.41	-2.46	51.6	+5.2
Pollock	Campbell	1,606	11.99	-4.67	0.65	-1.44	0.87	-1.06	8.53	+1.44	2.14	-3.61	45.1	+2.8
Kennebec	Lyman	1,691	15.42	-2.18	0.56	-1.69	3.25	+1.43	8.68	+0.97	2.93	-2.89	50.7	+4.1
Redfield	Spink	1,295	16.06	-3.22	0.80	-1.72	3.63	+1.79	9.70	+1.75	1.93	-5.04	48.7	+4.7
Aberdeen	Brown	1,299	22.13	-2.65	1.18	-2.16	2.15	-0.71	11.93	+1.78	6.87	-1.56	45.0	+1.8
Wagner	Charles Mix	1,441	17.20	-8.34	0.63	-3.06	3.24	+0.14	7.31	-2.48	6.02	-2.94	52.6	+4.0
Mitchell	Davison	1,293	17.10	-6.02	0.35	-2.45	1.66	-0.60	8.53	-1.35	6.56	-1.62	50.6	+4.4
Britton	Marshall	1,352	15.40	-4.84	0.92	-1.62	1.89	+0.21	9.87	+1.61	2.72	-5.04	45.5	+2.6
Watertown	Codington	1,734	20.73	-0.69	0.79	-1.87	2.77	+1.00	11.19	+2.02	5.98	-1.84	45.8	+3.7
Vermillion	Clay	1,222	15.92	-9.54	2.24	-1.39	2.19	-0.37	5.61	-3.98	5.88	-3.80	51.4	+2.4
Sioux Falls	Minnehaha	1,425	26.34	-0.08	2.89	-0.80	2.99	+0.58	12.30	+1.53	8.16	-1.39	49.5	+3.7

[1]Departure from normal.

Precipitation in South Dakota during both the calendar year (1939) and especially for the water year (October 1938 through September 1939), as reported by the United States Weather Bureau, was substantially below normal in all parts of the State.

The average annual precipitation for the State as computed by the Weather Bureau is 17.50 inches for 1938 and 15.71 inches for 1939, and the departures are -1.44 inches for 1938 and -3.16 inches for 1939. However, the departure for the water year 1939 for the 22 representative stations shown in the accompanying State table number 18 ranged from +1.76 inches (one station only above normal) to -9.54 inches, with an average for these stations of -4.70 inches. The Weather Bureau reports further:

"High temperatures and deficient moisture in May were detrimental to crops and grain headed short. Much wheat and rye acreage was plowed under to be reseeded to other crops. Grasshoppers began hatching in great numbers. High wind and heavy hail damaged property in several southern counties on the 22d. June, the wettest month of the year, was favorable for crops, and the top soil over the greater portion of the State was moistened to depths of 1½ to over 5 feet. High winds and hailstorms, the worst of the year, caused extensive property damage in the eastern half on the 7th and 16th and in scattered counties on the 27th. June rains arrived too late to benefit winter grains, but late seeded spring grains made a wonderful growth and were filling well.

"Corn was hip high and much was laid by. Grasshopper damage was slight. July weather was favorable for harvesting and threshing but trying on growing crops, especially in the western half. High damaging winds occurred from the 4th to 13th and again on the 20th. Heavy hail damaged property in the central section on the 2d and in southern counties on the 5-6th and on the 30th. Corn commenced to shrink badly, due to continuous heat, drought, and grasshopper infestation. Small grain harvest was completed with good returns in the northeast quarter but disappointing elsewhere. Range and gardens deteriorated. The water situation became acute in the western half, and much stock was shipped out. Conditions did not improve in August. No change from high temperature and deficient moisture occurred in September and October. The first killing frost of the season occurred the closing week of September, except for a number of south-central points where it was delayed until October 14. The ground generally was too hard and dry for fall plowing and seeding. Haying progressed and a plentiful supply of winter rough feed was assured, except in the southwest section. It was estimated that the crop of cane and sorghums was two and one-half times the record 1938 production. Corn dried out early, and final returns were much better than anticipated. The potato crop was fair. Only a fair crop of sugar beets was harvested in the western irrigated area."

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	MISSISSIPPI RIVER (Mississippi River drains entire State; therefore, Mississippi River total for South Dakota is identical with State total)				
				Missouri River			
			Total	Direct (5)	Little Missouri River (7)	Grand River (6)	Moreau River (8)
	IRRIGATED FARMS AND AREAS						
1	Irrigated farms....1939...number....	1,298	1,298	25	5	17	127
2	Area irrigated....1939...acres....	60,198	60,198	776	262	566	631
3	(a) Cropland harvested....1939...acres....	50,424	50,424	745	237	564	602
4	(b) Crop failure....1939...acres....	2,286	2,286	31	.....	2	29
5	(c) Pasture....1939...acres....	7,488	7,488	.....	25	.....	.....
6	Area irrigated....1929...acres....	67,107	67,107	5	.....	.....	60
7	1919...acres....	100,682	100,682	.....	640	.....	305
8	Increase or decrease (-), 1929-1939....percent....	-10.3	-10.3	(1)	.....	.....	951.7
9	Irrigable area in enterprises....1940...acres....	123,961	123,961	1,529	402	1,097	1,222
10	1930...acres....	122,510	122,510	13	.....	.....	60
11	1920[2]...acres....	188,382	188,382	600	4,133	.....	3,094
12	Excess of irrigable area over the area irrigated..1940...acres....	63,763	63,763	753	140	531	591
13	1930...acres....	55,403	55,403	8	.....	.....	.....
14	1920[2]...acres....	87,700	87,700	600	3,493	.....	2,789
15	Area works were capable of supplying with water...1940...acres....	121,847	121,847	1,246	352	697	1,027
16	1930...acres....	109,550	109,550	8	.....	.....	60
17	1920...acres....	150,914	150,914	150	3,323	.....	1,721
18	Increase or decrease (-), 1930-1940....percent....	11.2	11.2	(1)	.....	.....	(1)
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres....	61,649	61,649	470	90	131	396
20	1930...acres....	42,443	42,443	3	.....	.....	.....
21	1920...acres....	50,232	50,232	150	2,683	.....	1,416
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent....	49.4	49.4	62.3	74.4	81.2	61.4
23	1929...percent....	61.3	61.3	62.5	.....	.....	100.0
24	1919...percent....	66.7	66.7	.....	19.3	.....	17.7
	CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises....1940...dollars....	5,395,610	5,395,610	62,110	5,025	26,883	175,843
26	(a) Cost of irrigation works and equipment....1940...dollars....	5,383,865	5,383,865	62,110	5,025	26,880	175,797
27	(b) Investment in water rights (reported)....1940...dollars....	11,745	11,745	.....	.....	3	46
28	Total investment in irrigation enterprises....1930...dollars....	4,502,117	4,502,117	600	.....	.....	60
29	1920...dollars....	5,465,248	5,465,248	3,512	55,818	.....	40,927
30	Increase or decrease (-), 1930-1940....percent....	19.8	19.8	(1)	.....	.....	(1)
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars....	44.28	44.28	49.85	14.28	38.57	171.22
32	1930...dollars....	41.10	41.10	75.00	.....	.....	1.00
33	1920...dollars....	36.21	36.21	23.41	16.80	.....	23.78
34	Average investment per acre irrigated....1939...dollars....	89.63	89.63	80.04	19.18	47.50	278.67
35	Estimated final investment in existing enterprises..1940...dollars....	5,432,934	5,432,934	74,210	5,900	27,783	180,143
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars....	43.83	43.83	48.53	14.68	25.33	147.42
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS						
37	Enterprises reporting maintenance and operation...1939...number....	181	181	17	4	11	8
38	Area irrigated in these enterprises....1939...acres....	56,426	56,426	599	150	396	604
39	Cost of maintenance and operation....1939...dollars....	71,986	71,986	1,985	215	1,772	1,138
40	Average cost, per acre irrigated....1939...dollars....	1.28	1.28	3.31	1.43	4.47	1.88
41	Total annual charges (reported)[3] [4]....1939...dollars....	131,490	131,490	.....	.....	.....	284
42	Average annual charge per acre irrigated....1939...dollars....	2.68	2.68	.....	.....	.....	0.79
43	Area against which charges were assessed....1939...acres....	73,040	73,040	.....	.....	.....	359
44	Average annual charge per acre assessed....1939...dollars....	1.80	1.80	.....	.....	.....	0.79
45	Total charges collected[3]....1939...dollars....	83,883	83,883	.....	.....	.....	.....
46	Indebtedness to December 31 (reported)[4]....1939...dollars....	4,600,023	4,600,023	.....	.....	.....	.....
	WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered....1939...number....	167	167	9	4	10	7
48	Area irrigated by these enterprises....1939...acres....	52,345	52,345	235	237	246	596
49	Water delivered....1939...acre-feet..	58,797	58,797	610	284	383	881
50	Average water delivered per acre irrigated....1939...acre-feet..	1.1	1.1	2.6	1.2	1.6	1.5
51	Average cost of water per acre irrigated....1939...dollars....	2.72	2.72	7.52	1.52	5.98	1.41
52	Average cost of water per acre-foot delivered..1939...dollars....	2.43	2.43	2.90	1.27	3.84	0.96
	DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage....1939...number....	15	15	[5]1	2	2	.....
54	Irrigable area in these enterprises....1939...acres....	74,640	74,640	210	(6)	(6)	.....
55	Irrigated area in these enterprises....1939...acres....	36,072	36,072	101	(6)	(6)	.....
56	Area for which drains have been installed....1939...acres....	25,906	25,906	20	(6)	(6)	.....
57	Additional area needing drainage....1939...acres....	5,509	5,509	10	.....	.....	.....

[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] 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.

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

MISSISSIPPI RIVER—Continued																
Missouri River—Continued																
Cheyenne River											White River					
			Belle Fourche River			South Fork Cheyenne River										
Total	Direct (10)	Cherry Creek (11)	Total	Direct (12)	Redwater Creek (13)	Total	Direct (26)	Battle and Spring Creeks (24)	Rapid and Box Elder Creeks (15)	Elk Creek (14)	Total	Direct (22)	South Fork White River (20)	James River (4)	Big Sioux River (3)	
1,080	5	5	853	744	109	217	44	20	117	36	32	9	23	8	4	1
56,187	350	25	43,055	39,391	3,664	12,757	3,173	764	8,495	325	1,397	468	929	286	93	2
46,520	127	25	37,722	34,495	3,227	8,646	2,245	327	6,024	50	1,377	452	925	286	93	3
2,220	205	.....	386	185	201	1,629	154	247	1,228	.....	4	.....	4	.....	.....	4
7,447	18	.....	4,947	4,711	236	2,482	774	190	1,243	275	16	16	.....	.....	.....	5
66,031	.....	.....	51,342	.....	.....	14,678	.....	.....	.....	.....	4	.....	.....	.....	.....	6
99,333	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
-14.9	.....	.....	-16.1	.....	.....	-13.1	.....	.....	.....	.....	(1)	.....	.....	.....	.....	8
115,968	1,072	147	84,707	79,058	5,649	30,042	6,938	5,455	15,176	2,473	3,328	2,152	1,176	292	123	9
120,984	.....	.....	97,159	.....	.....	23,624	.....	.....	.....	.....	4	.....	.....	.....	.....	10
176,715	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
59,781	722	122	41,652	39,667	1,985	17,285	3,765	4,691	6,681	2,148	1,931	1,684	247	6	30	12
54,953	.....	.....	45,817	.....	.....	8,946	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
77,382	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
115,175	806	141	84,453	78,890	5,563	29,775	6,768	5,455	15,086	2,466	2,945	1,852	1,093	292	113	15
108,324	.....	.....	90,359	.....	.....	17,864	.....	.....	.....	.....	4	.....	.....	.....	.....	16
143,847	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17
6.3	.....	.....	-6.5	.....	.....	66.7	.....	.....	.....	.....	(1)	.....	.....	.....	.....	18
58,988	456	116	41,398	39,499	1,899	17,018	3,595	4,691	6,591	2,141	1,648	1,384	164	6	20	19
42,203	.....	.....	39,017	.....	.....	3,186	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
44,514	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21
48.8	43.4	17.7	51.0	49.9	65.9	42.8	46.9	14.0	56.3	13.2	47.4	25.3	65.0	97.9	82.3	22
61.0	.....	.....	56.8	.....	.....	82.2	.....	.....	.....	.....	100.0	.....	.....	.....	.....	23
69.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
5,050,244	1,550	2,115	4,820,812	4,729,420	91,392	225,767	41,284	29,363	134,820	20,300	56,499	28,986	27,513	9,025	9,981	25
5,038,853	1,550	2,115	4,815,495	4,729,418	86,077	219,683	39,450	29,123	130,820	20,300	56,194	28,681	27,513	9,025	9,981	26
11,391	.....	.....	5,317	2	5,315	6,074	1,834	240	4,000	.....	305	305	.....	.....	.....	27
4,476,175	.....	.....	4,273,434	.....	.....	196,491	.....	.....	.....	.....	207	.....	.....	.....	.....	28
5,277,782	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29
12.8	.....	.....	12.8	.....	.....	14.9	.....	.....	.....	.....	(1)	.....	.....	.....	.....	30
43.85	1.92	15.00	57.08	59.95	16.43	7.58	6.10	5.38	8.94	8.23	19.18	15.65	25.17	30.91	88.33	31
41.32	.....	.....	47.29	.....	.....	11.00	.....	.....	.....	.....	51.75	.....	.....	.....	.....	32
38.69	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33
89.88	4.43	84.60	111.97	120.06	24.94	17.70	13.01	38.43	15.87	62.46	40.44	61.94	29.62	31.56	107.32	34
5,065,169	3,200	2,530	4,821,652	4,730,260	91,392	237,787	51,934	29,363	135,020	21,470	60,549	32,486	28,063	9,025	10,155	35
43.68	2.99	17.21	56.92	59.83	16.18	7.92	7.49	5.38	8.90	8.68	18.19	15.10	23.86	30.91	82.56	36
117	5	10	34	12	22	68	21	25	17	5	14	10	4	6	4	37
53,476	350	25	42,420	39,229	3,191	10,681	1,900	685	8,006	90	884	468	416	224	93	38
63,457	755	159	54,057	52,587	1,470	8,486	4,397	973	2,775	341	2,066	1,571	495	562	791	39
1.19	2.16	6.36	1.27	1.34	0.46	0.79	2.31	1.42	0.35	3.79	2.34	3.36	1.19	2.51	8.51	40
131,166	.....	.....	124,049	122,908	1,141	7,117	550	22	6,545	.....	40	.....	40	.....	.....	41
2.70	.....	.....	3.06	3.16	0.73	0.88	1.49	.....	0.85	.....	0.47	.....	0.47	.....	.....	42
72,596	.....	.....	59,483	57,924	1,559	13,113	370	2,200	10,543	.....	85	.....	85	.....	.....	43
1.81	.....	.....	2.09	2.12	0.73	0.54	1.49	0.01	0.62	.....	0.47	.....	0.47	.....	.....	44
83,883	.....	.....	77,002	76,285	717	6,881	450	22	6,409	.....	.....	.....	.....	.....	.....	45
4,577,395	.....	.....	4,577,395	4,577,395	.....	.....	.....	.....	.....	.....	22,628	.....	22,628	.....	.....	46
115	5	5	25	14	11	80	12	18	15	35	12	7	5	7	3	47
50,085	350	25	41,207	39,017	2,190	8,503	1,160	741	6,327	275	622	382	240	236	88	48
55,605	384	36	40,756	36,139	4,617	14,429	3,099	345	10,875	110	662	436	226	313	59	49
1.1	1.1	1.4	1.0	0.9	2.1	1.7	2.7	0.5	1.7	0.4	1.1	1.1	0.9	1.3	0.7	50
2.69	2.16	5.20	3.03	3.17	0.57	0.96	2.40	0.69	0.74	1.56	3.48	3.72	2.55	2.05	8.98	51
2.42	1.97	3.61	3.07	3.42	0.27	0.57	0.90	1.99	0.43	3.89	3.27	3.26	2.71	1.55	13.39	52
5	.....	1	2	2	.....	2	.....	.....	2	.....	2	.....	2	2	[5]1	53
74,097	.....	(6)	(6)	(6)	.....	(6)	.....	.....	(6)	.....	(6)	.....	(6)	(6)	78	54
35,787	.....	.....	(6)	(6)	.....	(6)	.....	.....	(6)	.....	(6)	.....	(6)	(6)	58	55
25,750	.....	.....	(6)	(6)	.....	(6)	.....	.....	(6)	.....	(6)	.....	(6)	(6)	.....	56
5,483	.....	(6)	(6)	(6)	.....	(6)	.....	.....	(6)	.....	(6)	.....	(6)	.....	11	57

[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 for less than 3 enterprises shown with permission of the enterprise involved.
[6] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

DRAINAGE BASIN TABLE II.—ENTERPRISES AND IRRIGATION

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	STATE TOTAL	MISSISSIPPI RIVER (Mississippi River drains entire State; therefore, Mississippi River total for South Dakota is identical with State total)				
				Missouri River			
			Total	Direct (5)	Little Missouri River (7)	Grand River (6)	Moreau River (8)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1						
1	Enterprises....1940..number	274	274	22	5	13	9
2	Average size of enterprise based on area works were capable of supplying with water....1940..acres	445	445	57	70	54	114
3	Diversion dams....1940..total number	258	258	3	2	17	6
4	1930..total number	91	91	.....	.....	.....	1
5	1920..total number	207	207	.....	9	.....	3
6	(a) Concrete and masonry....1940..number	13	13	.....	.....	2	.....
7	(b) Timber....1940..number	19	19	.....	.....	.....	.....
8	(c) Earth and rock....1940..number	198	198	3	2	15	6
9	(d) Other, mixed, and not reported..1940..number	28	28	.....	.....	.....	.....
10	Main canals and laterals....1940..total length, miles	1,049.3	1,049.3	25.0	5.0	7.0	28.3
11	1930..total length, miles	1,082	1,082	.....	.....	.....	.....
12	1920..total length, miles	1,258	1,258	3	47	.....	28
13	(a) Earth....1940..length, miles	1,038	1,038	25	5	7	28
14	(b) Lined....1940..length, miles	11.3	11.3	.....	.....	.....	0.3
15	1940..capacity, c.f.s.[1]	1,948	1,948	45	19	24	75
16	1930..capacity, c.f.s.[1]	1,995	1,995	.....	.....	.....	.....
17	1920..capacity, c.f.s.[1]	5,427	5,427	3	90	.....	33
18	Pipe lines[2]....1940..total length, miles	17.3	17.3	2.8	.....	0.5	0.1
19	1930..total length, miles	8.9	8.9	.....	.....	.....	.....
20	1920..total length, miles	7.2	7.2	.....	0.1	.....	0.3
21	(a) Concrete....1940..length, miles	5.7	5.7	.....	.....	.....	.....
22	(b) Metal....1940..length, miles	11.0	11.0	2.8	.....	0.5	0.1
23	(c) Wood-stave....1940..length, miles	0.5	0.5	.....	.....	.....	.....
24	(d) Other....1940..length, miles	0.1	0.1	.....	.....	.....	.....
25	Storage dams....1940..total number	74	74	5	2	6	10
26	1930..total number	10	10	.....	.....	.....	.....
27	1920..total number	182	182	.....	16	.....	55
28	(a) Concrete and masonry....1940..number	2	2	.....	.....	1	.....
29	(b) Earth and rock....1940..number	69	69	5	2	5	10
30	(c) Other, mixed, and not reported..1940..number	3	3	.....	.....	.....	.....
31	Reservoirs....1940..total number	82	82	5	2	6	10
32	(a) 1-99 acre-feet capacity....1940..number	68	68	4	2	4	5
33	(b) 100-999 acre-feet capacity....1940..number	11	11	.....	.....	2	4
34	(c) 1,000 and over acre-feet capacity....1940..number	3	3	1	.....	.....	1
35	1940..total capacity, ac.-ft.[3]	209,785	209,785	6,097	(4)	535	3,110
36	1930..total number	5	5	.....	.....	.....	.....
37	1930..total capacity, ac.-ft.	203,124	203,124	.....	.....	.....	.....
38	Wells, flowing....1940..number	19	19	12	.....	.....	.....
39	1930..number	13	13	.....	.....	.....	.....
40	1920..number	4	4	.....	.....	.....	.....
41	1940..yield, g.p.m.	5,377	5,377	3,485	.....	.....	.....
42	1930..yield, g.p.m.	4,825	4,825	.....	.....	.....	.....
43	1920..yield, g.p.m.	2,750	2,750	.....	.....	.....	.....
44	Wells, pumped....1940..number	16	16	3	.....	.....	.....
45	1930..number	1	1	.....	.....	.....	.....
46	1920..number	1	1	.....	.....	.....	.....
47	1940..yield, g.p.m.	1,039	1,039	450	.....	.....	.....
48	1930..yield, g.p.m.	375	375	.....	.....	.....	.....
49	1920..yield, g.p.m.	800	800	.....	.....	.....	.....
50	Pumping plants....1940..total number	119	119	21	3	7	14
51	1930..total number	8	8	2	.....	.....	.....
52	Prime movers....1940..capacity, hp	2,060	2,060	368	70	132	231
53	1930..capacity, hp	92	92	7	.....	.....	.....
54	1920..capacity, hp	498	498	40	175	.....	60
55	(a) Electric....1940..number	8	8	1	.....	.....	.....
56	1940..capacity, hp	239	239	(4)	.....	.....	.....
57	(b) Internal-combustion....1940..number	110	110	20	3	7	14
58	1940..capacity, hp	1,813	1,813	328	70	132	231
59	(c) Other....1940..number	1	1	.....	.....	.....	.....
60	1940..capacity, hp	(4)	(4)	.....	.....	.....	.....
61	Pumps....1940..total number	127	127	28	3	7	14
62	1930..number	8	8	2	.....	.....	.....
63	1920..number	25	25	1	4	.....	3
64	1940..capacity, g.p.m.	103,050	103,050	13,820	5,700	4,625	13,790
65	1930..capacity, g.p.m.	4,027	4,027	110	.....	.....	.....
66	1920..capacity, g.p.m.	23,320	23,320	1,500	8,000	.....	1,800
67	(a) Centrifugal....1940..number	113	113	25	3	7	14
68	1940..capacity, g.p.m.	101,483	101,483	13,250	5,700	4,625	13,790
69	1940..average capacity, g.p.m.	898	898	530	1,900	661	985
70	(b) Turbine....1940..number	6	6	2	.....	.....	.....
71	1940..capacity, g.p.m.	320	320	(4)	.....	.....	.....
72	1940..average capacity, g.p.m.	53	53	(4)	.....	.....	.....
73	(c) Plunger....1940..number	5	5	.....	.....	.....	.....
74	1940..capacity, g.p.m.	197	197	.....	.....	.....	.....
75	1940..average capacity, g.p.m.	39	39	.....	.....	.....	.....
76	(d) Other....1940..number	3	3	1	.....	.....	.....
77	1940..capacity, g.p.m.	1,050	1,050	(4)	.....	.....	.....
78	Pumping lift, from all sources....1940..average, feet	20	20	16	13	12	33
79	1930..average, feet	27	27	8	.....	.....	.....
80	1920..average, feet	21	21	25	32	.....	30
81	from pumped wells....1940..average, feet	55	55	.....	.....	.....	.....
82	from surface sources...1940..average, feet	17	17	16	13	12	33

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

WORKS, 1940, 1930, AND 1920

MISSISSIPPI RIVER—Continued																
Missouri River—Continued																
Cheyenne River											White River					
			Belle Fourche River			South Fork Cheyenne River										
Total	Direct (10)	Cherry Creek (11)	Total	Direct (12)	Redwater Creek (13)	Total	Direct (26)	Battle and Spring Creeks (24)	Rapid and Box Elder Creeks (15)	Elk Creek (14)	Total	Direct (22)	South Fork White River (20)	James River (4)	Big Sioux River (3)	
194	5	15	49	24	25	125	25	34	25	41	19	10	9	8	4	1
591	161	9	1,724	3,287	223	238	271	160	603	60	155	185	121	36	28	2
215	10	18	33	16	17	154	20	63	26	45	14	2	12	.....	1	3
85	.....	.....	52	.....	.....	32	.....	.....	.....	.....	1	.....	.....	.....	.....	4
182	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
11	.....	.....	6	6	.....	5	.....	1	2	2	.....	.....	.....	.....	.....	6
19	.....	.....	7	.....	7	12	1	9	2	.....	.....	.....	.....	.....	.....	7
159	10	18	11	6	5	120	15	45	17	43	12	2	10	.....	1	8
26	.....	.....	9	4	5	17	4	8	5	.....	2	.....	2	.....	.....	9
965.0	5.0	6.0	760.6	713.5	47.1	193.4	54.0	47.0	67.4	25.0	18.0	14.0	4.0	.....	1.0	10
1,077	.....	.....	967	.....	.....	109	.....	.....	.....	.....	1	.....	.....	.....	.....	11
1,148	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
954	5	6	751	705	46	192	54	46	67	25	18	14	4	.....	1	13
11.0	.....	.....	9.6	8.5	1.1	1.4	.....	1.0	0.4	.....	.....	.....	.....	.....	.....	14
1,684	13	15	926	798	128	730	122	139	369	100	78	47	31	16	7	15
1,939	.....	.....	1,469	.....	.....	469	.....	.....	.....	.....	2	.....	.....	.....	.....	16
5,210	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17
8.3	.....	0.6	6.7	6.6	0.1	1.0	0.1	0.8	0.1	.....	1.5	0.2	1.3	1.2	2.9	18
8.4	.....	.....	7.2	.....	.....	0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
6.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
5.7	.....	.....	5.7	5.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21
2.3	.....	0.6	0.7	0.7	.....	1.0	0.1	0.8	0.1	.....	1.2	0.2	1.0	1.2	2.9	22
0.2	.....	.....	0.2	0.2	.....	.....	.....	.....	.....	.....	0.3	.....	0.3	.....	.....	23
0.1	.....	.....	0.1	.....	0.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
47	.....	2	20	16	4	25	3	10	2	10	3	1	2	1	.....	25
9	.....	.....	2	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	26
95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
1	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
43	.....	2	17	14	3	24	3	9	2	10	3	1	2	1	.....	29
3	.....	.....	2	1	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	30
55	.....	3	22	16	6	30	3	11	2	14	3	1	2	1	.....	31
51	.....	3	21	15	6	27	2	11	.....	14	1	1	.....	1	.....	32
3	.....	.....	.....	.....	.....	3	1	.....	2	.....	2	.....	2	.....	.....	33
1	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34
198,957	.....	5	197,320	197,270	50	1,632	210	92	(4)	110	1,001	(4)	(4)	(4)	.....	35
4	.....	.....	1	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	36
203,121	.....	.....	203,000	.....	.....	121	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
6	.....	.....	4	.....	4	2	2	.....	.....	.....	.....	.....	.....	.....	1	38
8	.....	.....	7	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	39
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
1,890	.....	.....	1,750	.....	1,750	(4)	(4)	.....	.....	.....	.....	.....	.....	.....	(4)	41
2,885	.....	.....	2,855	.....	.....	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
2,750	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
3	.....	.....	.....	.....	.....	3	2	.....	1	.....	1	.....	1	6	3	44
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
140	.....	.....	.....	.....	.....	140	(4)	.....	(4)	.....	(4)	.....	(4)	209	185	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49
29	6	1	8	8	.....	14	11	1	2	.....	27	12	15	12	6	50
4	.....	.....	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	51
599	138	(4)	243	243	.....	216	168	(4)	(4)	.....	416	275	141	206	38	52
64	.....	.....	22	.....	.....	42	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
173	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
[5] 1	.....	.....	[5] 1	[5] 1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3	55
125	.....	.....	125	125	.....	.....	.....	.....	.....	.....	.....	.....	.....	66	8	56
27	6	1	6	6	.....	14	11	1	2	.....	27	12	15	9	3	57
466	138	(4)	110	110	.....	216	168	(4)	(4)	.....	416	275	141	140	30	58
1	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
(4)	.....	.....	(4)	(4)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
29	6	1	9	9	.....	14	11	1	2	.....	27	12	15	13	6	61
4	.....	.....	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	63
32,580	7,200	(4)	14,150	14,150	.....	11,210	9,540	(4)	(4)	.....	23,591	12,760	10,831	6,329	2,615	64
2,480	.....	.....	1,360	.....	.....	1,120	.....	.....	.....	.....	.....	.....	.....	.....	.....	65
9,550	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
27	5	1	7	7	.....	14	11	1	2	.....	26	12	14	8	3	67
31,980	7,200	(4)	13,550	13,550	.....	11,210	9,540	(4)	(4)	.....	23,585	12,760	10,825	6,123	2,430	68
1,184	1,440	(4)	1,936	1,936	.....	801	867	(4)	(4)	.....	907	1,063	773	765	810	69
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	70
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	200	.....	71
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	.....	72
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	1	3	73
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(4)	.....	(4)	(4)	185	74
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(4)	.....	(4)	(4)	62	75
2	.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
(4)	.....	.....	(4)	(4)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77
15	16	(4)	18	18	.....	14	13	(4)	(4)	.....	30	28	34	17	58	78
39	.....	.....	35	.....	.....	41	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80
22	.....	.....	.....	.....	.....	22	.....	.....	(4)	.....	(4)	.....	(4)	30	74	81
15	16	(4)	18	18	.....	13	13	(4)	(4)	.....	26	28	21	16	25	82

[4] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
[5] Data for less than 3 enterprises shown with permission of the enterprises involved.

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 1930 data are not shown may have had irrigation in that year; 1930 and 1920

	ITEM (For definitions and explanations, see text)	STATE TOTAL	Beadle	Bennett	Butte	Charles Mix	Corson	Custer
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS[9]							
1	All farms....1940...number	72,454	1,724	559	800	1,927	923	554
2	1930...number	83,157	2,078	831	982	2,241	1,543	629
3	Irrigated farms....1940...number	967	5	8	478	11	10	25
4	1930...number	763	.....	.....	524	2	.....	13
5	Increase or decrease (-), 1930-1940....percent	26.7	.....	.....	-8.8	450.0	.....	92.3
	Operated by—							
6	(a) Owners and managers....1940...number	586	3	7	246	8	6	18
7	1930...number	453	.....	.....	276	.....	.....	10
8	(b) Tenants....1940...number	381	2	1	232	3	4	7
9	1930...number	310	.....	.....	248	.....	.....	3
10	Land in all farms....1940...acres	39,473,584	715,469	647,427	1,132,961	665,845	967,781	526,219
11	Land in irrigated farms....1940...acres	1,021,659	997	43,650	281,847	7,266	7,620	39,179
12	Average per farm....1940...acres	1,057	199	5,481	590	661	762	1,567
13	(a) Operated by owners and managers....1940...acres	863,702	(3)	(3)	216,010	6,606	4,740	33,024
14	Average per farm....1940...acres	1,474	(3)	(3)	878	826	790	1,835
15	(b) Operated by tenants....1940...acres	157,957	(3)	(3)	65,837	660	2,880	6,155
16	Average per farm....1940...acres	415	(3)	(3)	284	220	720	879
17	Approximate land area....1940...acres	48,983,040	807,040	759,680	1,440,640	723,840	1,616,000	993,280
	IRRIGATED AND IRRIGABLE AREAS							
18	Area irrigated....1939...acres	60,198	137	780	38,460	255	55	941
19	(a) Cropland harvested....1939...acres	50,424	137	780	33,685	235	53	675
20	(b) Crop failure....1939...acres	2,286	.....	.....	195	20	2	50
21	(c) Pasture....1939...acres	7,488	.....	.....	4,580	.....	.....	216
22	Area irrigated....1929...acres	67,107	.....	.....	43,419	.....	.....	3,715
23	1919...acres	100,682	.....	.....	57,856	.....	.....	5,527
24	Increase or decrease (-), 1929-1939....percent	-10.3	.....	.....	-11.4	.....	.....	-74.7
25	Irrigable area in enterprises....1940...acres	123,961	143	864	76,001	324	61	6,330
26	1930...acres	122,510	.....	.....	85,791	.....	.....	4,065
27	1920[4]...acres	188,382	.....	.....	89,353	.....	.....	11,080
28	Excess of irrigable area over the area irrigated...1940...acres	63,763	6	104	37,541	69	6	5,389
29	1930...acres	55,403	.....	.....	42,372	.....	.....	350
30	Area works were capable of supplying with water...1940...acres	121,847	143	804	76,001	324	61	6,330
31	1930...acres	109,550	.....	.....	79,091	.....	.....	3,715
32	1920...acres	150,914	.....	.....	82,073	.....	.....	9,018
33	Increase or decrease (-), 1930-1940....percent	11.2	.....	.....	-3.9	.....	.....	70.4
34	Excess, capability of works over area irrigated...1940...acres	61,649	6	24	37,541	69	6	5,389
35	1930...acres	42,443	.....	.....	35,672	.....	.....	.....
36	Proportion which area irrigated is of all lands in irrigated farms....1939...percent	5.9	13.7	1.8	13.6	3.5	0.7	3.4
37	1929...percent	17.7	.....	.....	21.4	.....	.....	16.8
38	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	49.4	95.8	97.0	50.6	78.7	90.2	14.9
39	1929...percent	61.3	.....	.....	54.9	.....	.....	100.0
	CAPITAL INVESTED TO JANUARY 1							
40	Total investment in all enterprises....1940...dollars	5,395,610	1,600	5,525	4,509,595	11,493	14,900	39,415
41	(a) Cost of irrigation works and equipment....1940...dollars	5,383,865	1,600	5,525	4,509,579	11,493	14,900	39,200
42	(b) Investment in water rights (reported)....1940...dollars	11,745	.....	.....	16	.....	.....	215
43	Total investment in all enterprises....1930...dollars	4,502,117	.....	.....	3,989,174	.....	.....	9,150
44	1920...dollars	5,465,248	.....	.....	4,349,699	.....	.....	118,501
45	Increase or decrease (-), 1930-1940....percent	19.8	.....	.....	13.0	.....	.....	330.8
46	Average investment, based on area works were capable of supplying with water, per acre....1940...dollars	44.28	11.19	6.87	59.34	35.47	244.26	6.23
47	1930...dollars	41.10	.....	.....	50.44	.....	.....	2.46
48	1920...dollars	36.21	.....	.....	53.00	.....	.....	13.14
49	Average investment per acre irrigated....1939...dollars	89.63	11.68	7.08	117.25	45.07	270.91	41.89
50	Estimated final investment in existing enterprises...1940...dollars	5,432,934	1,600	6,075	4,509,595	12,493	14,900	39,415
51	1930...dollars	5,174,417	.....	.....	4,648,174	.....	.....	9,150
52	1920...dollars	5,500,748	.....	.....	4,350,849	.....	.....	127,951
53	Increase or decrease (-), 1930-1940....percent	5.0	.....	.....	-3.0	.....	.....	330.8
54	Average investment, based on estimated final investment and irrigable area, per acre....1940...dollars	43.83	11.19	6.87	59.34	38.56	244.26	6.23
55	1930...dollars	42.24	.....	.....	54.18	.....	.....	2.25
56	1920[4]...dollars	29.20	.....	.....	48.69	.....	.....	11.55
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS							
57	Enterprises reporting maintenance and operation...1939...number	184	3	3	9	4	5	27
58	Area irrigated in these enterprises....1939...acres	56,426	137	331	38,380	78	55	873
59	Cost of maintenance and operation....1939...dollars	71,986	433	505	49,747	170	785	1,538
60	Average cost, per acre irrigated....1939...dollars	1.28	3.16	1.53	1.30	2.18	14.27	1.76
61	1929...dollars	1.33	.....	.....	1.76	.....	.....	0.22
62	Total annual charges (reported)[5 6]....1939...dollars	131,490	.....	.....	118,042	.....	.....	22
63	Average annual charge per acre irrigated....1939...dollars	2.68	.....	.....	3.12	.....	.....	.....
64	Area against which charges were assessed....1939...acres	73,040	.....	.....	56,181	.....	.....	2,200
65	Average annual charge per acre assessed....1939...dollars	1.80	.....	.....	2.10	.....	.....	0.01
66	Total charges collected[5]....1939...dollars	83,883	.....	.....	72,447	.....	.....	22
67	Indebtedness to December 31 (reported)[6]....1939...dollars	4,600,023	.....	.....	4,348,525	.....	.....	.....
	WATER DELIVERED TO IRRIGATORS							
68	Enterprises reporting water delivered....1939...number	170	2	3	8	2	5	19
69	Area irrigated in these enterprises....1939...acres	52,345	(3)	91	38,224	(3)	55	687
70	Water delivered in these enterprises....1939...acre-feet	58,797	(3)	68	35,491	(3)	112	480
71	Average water delivered per acre irrigated....1939...acre-feet	1.1	(3)	0.7	0.9	(3)	2.0	0.7
72	Average cost of water per acre irrigated....1939...dollars	2.72	(3)	23.18	3.09	(3)	14.27	1.17
	DRAINAGE OF IRRIGATED LAND							
73	Enterprises reporting land drained or needing drainage....1939...number	16	2	1	2	.....	.....	.....
74	Irrigable area in these enterprises....1939...acres	74,640	(3)	(3)	(3)	.....	.....	.....
75	Irrigated area in these enterprises....1939...acres	36,072	(3)	(3)	(3)	.....	.....	.....
76	Area for which drains have been installed....1939...acres	25,906	(3)	(3)	(3)	.....	.....	.....
77	Additional area needing drainage....1939...acres	5,509	.....	.....	(3)	.....	.....	.....

[9] Census of Agriculture.
[4] Data not comparable between census years (see headnote).
[5] Percent not shown when more than 1,000.
[3] Data are included only in State totals because less than 3 farms or enterprises reported in the 1940 Census.

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"]

Fall River	Harding	Hughes	Jones	Lawrence	Lyman	Meade	Mellette	Minnehaha	Pennington	Perkins	Yankton	All other counties[4]	
587	569	435	414	469	801	1,365	587	2,458	1,085	1,097	1,519	54,581	1
821	772	590	530	411	1,145	1,819	855	2,423	1,303	1,502	1,616	61,066	2
33	9	3	3	87	6	74	10	9	68	15	6	107	3
18	2	2	.....	87	5	22	.....	.....	78	2	.....	8	4
83.3	.....	.....	.....	.....	.....	236.4	.....	.....	-12.8	650.0	.....	(8)	5
27	8	2	3	47	5	50	8	9	56	12	6	65	6
13	.....	.....	.....	65	.....	19	.....	.....	55	.....	.....	15	7
6	1	1	.....	40	1	24	2	.....	12	3	.....	42	8
5	.....	.....	.....	22	.....	3	.....	.....	23	.....	.....	6	9
849,454	1,555,237	382,322	487,000	173,320	916,030	1,996,876	790,170	500,158	1,009,068	1,344,365	309,975	24,503,907	10
70,507	51,312	3,678	6,100	30,628	19,066	129,805	12,708	516	120,736	40,545	2,465	152,834	11
2,137	5,701	1,226	2,033	352	3,178	1,754	1,271	57	1,776	2,703	411	1,428	12
65,429	40,312	(8)	6,100	16,774	18,591	111,580	12,023	516	111,293	37,945	2,465	132,689	13
2,423	5,039	(8)	2,033	357	3,718	2,232	1,503	57	1,987	3,162	411	2,041	14
5,078	(8)	(8)	.....	13,854	(8)	18,225	(8)	.....	9,443	2,600	.....	20,145	15
846	(8)	(8)	.....	346	(8)	759	(8)	.....	787	867	.....	480	16
1,118,720	1,717,120	487,680	622,720	512,000	1,078,400	2,218,240	835,840	521,600	1,776,640	1,834,240	335,360	29,584,000	17
2,574	588	115	261	2,863	381	2,132	94	35	9,063	429	65	970	18
1,672	563	115	261	2,551	381	1,605	90	35	6,278	400	65	843	19
154	.....	.....	.....	181	.....	10	4	.....	1,530	29	.....	111	20
748	25	.....	.....	131	.....	517	.....	.....	1,255	.....	.....	16	21
1,388	.....	.....	.....	6,798	.....	1,125	.....	.....	9,575	.....	.....	1,087	22
2,891	928	.....	.....	6,219	.....	9,969	.....	.....	16,994	222	.....	76	23
85.4	.....	.....	.....	-57.9	.....	89.5	.....	.....	-5.3	.....	.....	.....	24
5,334	1,139	268	850	5,123	792	6,400	175	45	16,252	969	65	2,776	25
7,424	.....	.....	.....	7,208	.....	4,160	.....	.....	12,135	.....	.....	1,727	26
11,778	8,415	.....	.....	14,261	.....	26,873	.....	.....	23,750	2,059	.....	813	27
2,760	551	153	589	2,260	411	4,268	81	10	7,219	540	.....	1,806	28
6,036	.....	.....	.....	410	.....	3,035	.....	.....	2,560	.....	.....	640	29
5,274	689	159	550	5,037	652	6,163	172	35	16,082	774	65	2,532	30
3,314	.....	.....	.....	7,108	.....	4,160	.....	.....	10,835	.....	.....	1,327	31
7,358	5,442	.....	.....	8,516	.....	15,233	.....	.....	22,029	892	.....	363	32
59.1	.....	.....	.....	-29.1	.....	48.1	.....	.....	48.4	.....	.....	.....	33
2,700	101	44	289	2,174	271	4,031	78	.....	7,019	345	.....	1,562	34
1,926	.....	.....	.....	310	.....	3,035	.....	.....	1,260	.....	.....	240	35
3.7	1.1	3.1	4.3	9.8	2.0	1.6	0.7	6.8	7.5	1.1	2.6	0.6	36
6.3	.....	.....	.....	23.7	.....	9.4	.....	.....	16.8	.....	.....	3.3	37
48.8	85.8	72.3	47.5	56.8	58.4	34.6	54.7	100.0	56.4	55.4	100.0	38.8	38
41.9	.....	.....	.....	95.6	.....	27.0	.....	.....	88.4	.....	.....	81.9	39
27,884	14,728	14,180	2,805	72,987	35,356	261,370	6,260	4,510	138,748	10,411	2,225	221,618	40
26,350	14,725	14,180	2,500	67,686	35,356	261,370	6,260	4,510	134,423	10,365	2,225	221,618	41
1,534	3	.....	305	5,301	.....	.....	.....	.....	4,325	46	.....	.....	42
56,735	.....	.....	.....	57,540	.....	226,720	.....	.....	130,606	.....	.....	32,192	43
107,076	137,540	.....	.....	70,704	.....	453,344	.....	.....	182,314	35,270	.....	10,800	44
-50.9	.....	.....	.....	26.8	.....	15.3	.....	.....	6.2	.....	.....	.....	45
5.29	21.38	89.18	5.10	14.49	54.23	42.41	36.40	128.86	8.63	13.45	34.23	87.53	46
17.12	.....	.....	.....	8.10	.....	54.50	.....	.....	12.05	.....	.....	24.26	47
14.55	25.27	.....	.....	8.00	.....	29.76	.....	.....	8.28	39.99	.....	29.75	48
10.83	25.05	123.50	10.75	25.49	92.80	122.59	66.60	128.86	15.81	24.27	34.23	228,47	49
37,884	16,103	22,180	5,805	72,987	37,956	263,870	6,260	4,510	139,698	13,586	2,225	225,792	50
66,735	.....	.....	.....	57,540	.....	226,720	.....	.....	130,606	.....	.....	35,492	51
107,276	149,540	.....	.....	70,704	.....	460,894	.....	.....	185,264	37,470	.....	10,800	52
-43.2	.....	.....	.....	26.8	.....	16.4	.....	.....	7.0	.....	.....	.....	53
7.10	14.14	82.76	6.83	14.25	47.92	41.23	35.77	100.22	8.58	14.02	34.23	81.34	54
8.99	.....	.....	.....	7.98	.....	54.50	.....	.....	10.76	.....	.....	20.55	55
9.11	17.77	.....	.....	4.96	.....	17.15	.....	.....	7.80	18.20	.....	13.28	56
14	7	3	3	23	4	22	2	3	23	8	1	20	57
1,301	306	115	261	2,390	381	1,809	(8)	35	8,569	402	(8)	970	58
2,582	325	337	900	1,280	606	3,654	(8)	451	4,500	1,138	(8)	2,735	59
1.98	1.06	2.93	3.45	0.54	1.59	2.02	(8)	12.89	0.53	2.83	(8)	2.82	60
0.46	.....	.....	.....	0.29	.....	2.11	.....	.....	0.48	.....	.....	1.37	61
550	.....	.....	.....	917	.....	5,090	.....	.....	6,545	.....	.....	324	62
1.49	.....	.....	.....	0.84	.....	3.81	.....	.....	0.85	.....	.....	0.73	63
370	.....	.....	.....	1,089	.....	2,213	.....	.....	10,543	.....	.....	444	64
1.49	.....	.....	.....	0.84	.....	2.80	.....	.....	0.62	.....	.....	0.73	65
450	.....	.....	.....	717	.....	3,838	.....	.....	6,409	.....	.....	.....	66
.....	.....	.....	.....	.....	.....	228,870	5,700	.....	.....	.....	.....	16,928	67
6	7	2	3	9	7 1	53	3	2	20	7	3	15	68
803	393	(8)	261	1,271	41	2,032	94	(8)	6,914	244	65	884	69
2,745	497	(8)	296	3,481	60	1,941	166	(8)	11,316	311	52	1,011	70
3.4	1.3	(8)	1.1	2.7	1.5	1.0	2.0	(8)	1.6	1.3	0.8	1.1	71
1.42	1.07	(8)	3.45	0.71	3.54	3.31	7.50	(8)	0.94	2.48	25.00	2.92	72
.....	2	7 1	.....	.....	.....	2	1	.....	2	1	.....	2	73
.....	(8)	210	.....	.....	.....	(8)	(8)	.....	(8)	(8)	.....	(8)	74
.....	(8)	101	.....	.....	.....	(8)	(8)	.....	(8)	(8)	.....	(8)	75
.....	(8)	20	.....	.....	.....	(8)	.....	.....	(8)	(8)	.....	(8)	76
.....	.....	10	.....	.....	.....	(8)	(8)	.....	(8)	.....	.....	.....	77

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

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	Beadle	Bennett	Butte	Charles Mix	Corson	Custer
	FARM VALUES, 1940*							
1	Land and buildings, all farms....dollars..	505,452,178	8,315,925	3,991,668	5,336,406	9,933,518	4,186,105	3,001,485
2	Land and buildings, irrigated farms....dollars..	9,972,519	178,445	275,900	3,109,683	74,200	57,162	243,025
	Operated by—							
3	(a) Owners and managers....dollars..	7,699,778	170,445	274,900	1,931,233	67,000	41,042	181,425
4	(b) Tenants....dollars..	2,272,741	(2)	(2)	1,178,450	7,200	16,120	61,600
5	Average, land and buildings, per farm....dollars..	10,312.84	35,689.00	34,487.50	6,505.61	6,745.45	5,716.20	9,721.00
6	per acre in farms....dollars..	9.76	178.98	6.29	11.03	10.21	7.50	6.20
7	Buildings, irrigated farms reporting value....number...	935	5	7	469	11	9	25
8	Total reported....dollars..	2,173,503	45,056	15,200	880,155	11,250	18,000	44,950
9	Average, per irrigated farm reporting....dollars..	2,324.60	9,011.20	2,171.43	1,876.66	1,022.73	2,000.00	1,798.00
10	per acre on all irrigated farms....dollars..	2.13	45.19	0.35	3.12	1.55	2.36	1.15
11	Buildings, nonirrigated farms reporting value....number...	67,742	1,595	509	316	1,849	838	515
12	Total reported....dollars..	131,578,350	2,635,603	381,150	442,160	2,468,553	645,660	569,761
13	Average, per nonirrigated farm reporting....dollars..	1,942.35	1,652.42	748.82	1,399.24	1,335.07	770.48	1,106.33
14	per acre on all nonirrigated farms....dollars..	3.42	3.69	0.63	0.52	3.75	0.67	1.17
15	Implements and machinery, irrigated farms reporting value..number...	908	5	8	459	10	9	23
16	Total reported....dollars..	1,164,804	14,956	13,775	588,062	9,300	9,975	16,700
17	Average, per irrigated farm reporting....dollars..	1,282.82	2,991.20	1,721.88	1,281.18	930.00	1,108.33	726.09
18	per acre, on all irrigated farms....dollars..	1.14	15.00	0.31	2.09	1.28	1.31	0.43
19	Implements and machinery, nonirrigated farms reporting value....number...	65,568	1,528	496	289	1,676	824	490
20	Total reported....dollars..	58,804,590	1,108,046	358,424	209,597	1,172,711	515,036	289,682
21	Average, per acre, on all nonirrigated farms....dollars..	1.53	1.55	0.59	0.25	1.78	0.54	0.55
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
22	Enterprises....1940...number....	[3] 277	[3] 3	6	11	9	5	36
23	1930...number....	[3] 122	....	....	10	1	....	8
24	1920...number....	292	....	....	21	....	....	61
25	Average size of enterprise based on irrigable area....1940...acres....	448	48	147	6,909	36	12	176
26	1930...acres....	1,004	....	....	8,579	....	....	508
27	1920[4]...acres....	645	....	....	4,255	....	....	182
28	Diversion dams....1940...number....	258	....	10	8	....	1	65
29	Main canals and laterals....1940...length, miles....	1,049.3	....	1.0	681.1	....	3.0	53.0
30	1930...length, miles....	1,082	....	....	695	....	....	27
31	1920...length, miles....	1,258	....	....	529	....	....	132
32	1940...capacity, c.f.s.[5]....	1,948	8	14	783	10	9	152
33	1930...capacity, c.f.s.[5]....	1,995	....	....	826	....	....	50
34	1920...capacity, c.f.s.[5]....	5,427	....	....	1,908	....	....	317
35	Pipe lines[6]....1940...length, miles....	17.3	....	0.4	6.4	....	....	0.8
36	Storage dams....1940...number....	74	....	....	3	....	2	9
37	Reservoirs....1940...number....	82	....	....	3	....	2	9
38	1930...number....	5	....	....	1	....	....	....
39	1920...number....	119	....	....	13	....	....	19
40	1940...capacity, acre-feet..	209,785	....	....	197,030	....	(2)	90
41	1930...capacity, acre-feet..	203,124	....	....	203,000	....	....	....
42	1920...capacity, acre-feet..	212,264	....	....	204,386	....	....	939
43	Wells, flowing....1940...number....	19	....	....	....	7	....	....
44	1930...number....	13	....	....	3	....	....	1
45	1920...number....	4	....	....	....	....	....	....
46	1940...yield, g.p.m....	5,377	....	....	....	1,185	....	....
47	1930...yield, g.p.m....	4,825	....	....	30	....	....	30
48	1920...yield, g.p.m....	2,750	....	....	....	....	....	....
49	Wells, pumped....1940...number....	16	....	1	....	....	....	....
50	1930...number....	1	....	....	....	....	....	....
51	1920...number....	1	....	....	....	....	....	....
52	1940...yield, g.p.m....	1,039	....	(2)	....	....	....	....
53	1930...yield, g.p.m....	375	....	....	....	....	....	....
54	1920...yield, g.p.m....	800	....	....	....	....	....	....
55	Pumping plants....1940...number....	119	4	5	3	5	5	1
56	1930...number....	8	....	....	1	....	....	....
57	1920...number....	25	....	....	3	....	....	3
58	Prime movers....1940...capacity, hp....	2,060	85	11	143	55	90	(2)
59	1930...capacity, hp....	92	....	....	20	....	....	....
60	1920...capacity, hp....	498	....	....	21	....	....	28
61	Pumps....1940...capacity, g.p.m....	103,050	3,170	1,316	7,000	4,250	3,450	(2)
62	1930...capacity, g.p.m....	4,027	....	....	1,200	....	....	....
63	1920...capacity, g.p.m....	23,320	....	....	1,750	....	....	2,170
64	Pumping lift, from all sources....1940...average, feet....	20	12	44	20	25	8	(2)
65	1930...average, feet....	27	....	....	14	....	....	....
66	1920...average, feet....	21	....	....	16	....	....	14
67	from pumped wells....1940...average, feet....	55	....	(2)	....	....	....	....
	PAY ROLL AND NUMBER OF EMPLOYEES 1939[7]							
68	Enterprises reporting pay roll....number...	18	....	....	2	....	....	1
69	Irrigated area in these enterprises....acres....	44,939	....	....	(2)	....	....	....
70	Wages and salaries paid and payable....dollars..	60,964	....	....	(2)	....	....	(2)
71	Persons employed during week ending April 29....number...	114	....	....	(2)	....	....	(2)

* Census of Agriculture.
[1] Data between census years not comparable (see headnote).
[2] Data are included only in State totals because less than 3 farms or enterprises reported in the 1940 Census.
[3] Includes intercounty projects counted as independent enterprises for each county into which they extend. For actual number of enterprises see State table 1.
[4] For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

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"]

Fall River	Harding	Hughes	Jones	Lawrence	Lyman	Meade	Mellette	Minnehaha	Pennington	Perkins	Yankton	All other counties[1]	
3,733,765	3,843,034	1,760,179	2,004,994	3,266,219	4,853,373	7,822,211	2,313,207	29,111,936	6,206,611	4,699,509	12,797,737	388,274,296	1
357,493	132,332	36,545	25,200	919,520	47,320	589,815	78,965	204,050	1,375,315	129,975	933,990	1,223,584	2
316,093	118,332	(2)	25,200	517,980	41,350	476,680	72,365	204,050	1,139,615	120,855	933,990	1,033,773	3
41,400	(2)	(2)	.....	401,540	(2)	93,155	(2)	.....	235,700	9,120	.....	189,811	4
10,833.12	14,703.56	12,181.67	8,400.00	10,569.20	7,886.67	7,700.20	7,896.50	22,672.22	20,225.22	8,665.00	155,665.00	11,435.36	5
5.07	2.58	9.94	4.13	30.02	2.48	4.39	6.21	395.45	11.39	3.21	378.90	8.01	6
31	9	3	3	86	6	70	10	9	66	14	5	97	7
43,300	24,000	9,275	7,000	236,290	8,800	124,950	26,910	100,750	243,300	33,750	59,000	241,567	8
1,396.77	2,666.67	3,091.67	2,333.33	2,747.56	1,466.67	1,785.00	2,691.00	11,194.44	3,686.36	2,410.71	11,800.00	2,490.38	9
0.61	0.47	2.52	1.15	7.71	0.46	0.96	2.12	195.25	2.02	0.83	23.94	1.58	10
536	544	396	354	380	737	1,237	545	2,408	975	1,022	1,459	51,527	11
577,615	710,650	391,400	349,645	694,330	1,014,066	1,581,465	339,745	8,961,197	1,107,605	1,247,482	3,489,310	103,970,953	12
1,077.64	1,306.34	988.38	987.70	1,827.18	1,375.94	1,278.47	623.39	3,721.43	1,136.01	1,220.63	2,391.58	2,017.80	13
0.74	0.47	1.03	0.73	4.87	1.13	0.85	0.44	17.94	1.25	0.98	11.35	4.27	14
30	8	2	3	76	5	68	9	8	66	15	4	100	15
31,628	8,920	(2)	4,675	99,450	3,000	64,655	3,895	14,025	90,050	24,805	40,000	125,133	16
1,054.27	1,115.00	(2)	1,558.33	1,308.55	600.00	950.81	432.78	1,753.12	1,364.39	1,653.67	10,000.00	1,251.33	17
0.45	0.17	(2)	0.77	3.25	0.16	0.50	0.31	27.18	0.75	0.61	16.23	0.82	18
514	530	393	371	360	731	1,140	521	2,276	894	983	1,404	50,148	19
346,623	388,902	245,240	311,926	250,566	700,058	768,509	250,366	2,787,470	583,208	676,081	1,246,022	46,616,123	20
0.44	0.26	0.65	0.85	1.76	0.78	0.41	0.32	5.58	0.66	0.52	4.05	1.91	21
18	10	3	3	26	4	75	3	3	30	9	3	20	22
13	3	2	.....	51	5	1	.....	.....	18	2	.....	8	23
24	.....	.....	.....	48	.....	43	.....	.....	40	.....	.....	55	24
296	114	89	283	197	198	85	58	15	543	108	22	139	25
571	.....	.....	.....	141	.....	4,160	.....	.....	674	.....	.....	.....	26
491	.....	.....	.....	297	.....	625	.....	.....	594	.....	.....	205	27
18	13	.....	.....	18	2	75	.....	.....	25	8	.....	15	28
40.0	9.0	6.0	4.0	42.1	13.0	68.4	1.0	.....	75.4	6.3	.....	46.0	29
25	.....	.....	.....	257	.....	15	.....	.....	57	.....	.....	6	30
83	.....	.....	.....	86	.....	170	.....	.....	150	.....	.....	108	31
96	30	3	18	115	20	150	20	1	386	50	4	79	32
84	.....	.....	.....	353	.....	290	.....	.....	335	.....	.....	57	33
107	.....	.....	.....	322	.....	655	.....	.....	1,904	.....	.....	214	34
0.1	0.2	2.8	.....	0.1	0.2	0.8	0.7	0.9	0.1	0.1	.....	3.7	35
3	6	.....	.....	5	4	25	2	.....	2	7	.....	6	36
3	6	.....	.....	7	4	30	2	.....	3	7	.....	6	37
1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	1	38
10	.....	.....	.....	3	.....	19	.....	.....	4	.....	.....	51	39
210	300	.....	.....	550	97	355	(2)	.....	722	862	.....	8,973	40
120	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	3	41
189	.....	.....	.....	46	.....	294	.....	.....	87	.....	.....	6,323	42
2	.....	.....	.....	4	5	.....	.....	.....	.....	.....	.....	1	43
.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	5	44
.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	45
(2)	.....	.....	.....	1,750	2,300	.....	.....	.....	.....	.....	.....	(2)	46
.....	.....	.....	.....	2,825	.....	.....	.....	.....	.....	.....	.....	1,940	47
.....	.....	.....	.....	2,750	.....	.....	.....	.....	.....	.....	.....	.....	48
2	.....	3	.....	.....	.....	.....	.....	3	1	.....	6	.....	49
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	51
(2)	.....	450	.....	.....	.....	.....	.....	185	(2)	.....	209	.....	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	375	53
.....	.....	.....	.....	.....	.....	.....	.....	.....	800	.....	.....	.....	54
6	3	6	4	.....	3	7	7	3	9	3	6	39	55
2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	4	56
2	.....	.....	.....	.....	.....	2	.....	.....	4	.....	.....	11	57
87	70	117	115	.....	110	122	90	8	172	63	81	614	58
42	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	28	59
30	.....	.....	.....	.....	.....	30	.....	.....	64	.....	.....	325	60
6,440	5,700	2,850	7,500	.....	2,350	8,370	6,325	185	7,970	2,540	1,709	31,125	61
1,120	.....	.....	.....	160	.....	.....	.....	.....	.....	.....	.....	1,547	62
1,000	.....	.....	.....	.....	.....	1,900	.....	.....	2,730	.....	.....	13,770	63
12	13	14	17	.....	40	15	20	74	16	34	24	18	64
41	.....	.....	.....	35	.....	.....	.....	.....	.....	.....	.....	20	65
28	.....	.....	.....	.....	.....	12	.....	.....	13	.....	.....	.....	66
.....	.....	.....	.....	.....	.....	.....	.....	74	(2)	.....	30	.....	67
1	.....	.....	.....	3	[3]1	1	.....	.....	8	.....	.....	1	68
(2)	.....	.....	.....	989	.....	(2)	.....	.....	5,388	.....	.....	.....	69
(2)	.....	.....	.....	218	10,599	(2)	.....	.....	1,601	.....	.....	(2)	70
(2)	.....	.....	.....	14	31	.....	.....	.....	15	.....	.....	.....	71

[1] Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.
[2] Includes siphons and farm pipe lines reported.
[3] Pay roll and number of employees reported only by enterprises serving 5 or more farms.
[4] Data for less than 3 enterprises shown with permission of the enterprise involved.

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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....	*168,732,160	[1] 167,963,520	167,934,720	167,934,720	167,934,720	167,934,720	167,934,720
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated)....number...	418,002	501,017	495,489	436,033	417,770	352,190	228,126
Land in all farms....acres....	137,683,372	137,597,389	124,707,130	114,020,621	112,435,067	125,807,017	51,406,937
Farms irrigated:[2]							
Farms....number...	[3] 19,568	16,435	10,861	5,974	5,238	1,325	[4] 623
Increase or decrease (-) over preceding census....percent..	[5] 80.2	.....	81.8	14.1	295.3	112.7	.....
Proportion of all farms....percent..	4.7	3.3	2.2	1.4	1.3	0.4	0.3
Land in farms....acres....	11,619,780	([6])	1,899,240	([6])	([6])	([6])	([6])
Proportion of all farm land....percent..	8.4	([6])	1.5	([6])	([6])	([6])	([6])
Area irrigated....acres....	[7] 894,638	[8] 568,533	[9] 594,287	([10])	([10])	49,652	18,419
Increase or decrease (-) over preceding census....percent..	[5] 50.5	.....	.....	.....	.....	169.6	.....
Proportion of total land area of State....percent..	0.5	0.3	0.4	.....	.....	([11])	([11])
Proportion of all farm land....percent..	0.6	0.4	0.5	.....	.....	([11])	([11])
Value of irrigated farms (land and buildings)....dollars..	248,746,614	([6])	180,145,521	([6])	([6])	([6])	([6])
Average per farm....dollars..	12,711.91	([6])	16,586.46	([6])	([6])	([6])	([6])
Average per acre....dollars..	21.41	([6])	94.85	([6])	([6])	([6])	([6])
Value of farm implements and machinery[12]....dollars..	20,123,937	([6])	9,995,783	([6])	([6])	([6])	([6])
Average per farm[12]....dollars..	1,028.41	([6])	920.34	([6])	([6])	([6])	([6])
Average per acre[12]....dollars..	1.73	([6])	5.26	([6])	([6])	([6])	([6])
CENSUS OF IRRIGATION							
Irrigation enterprises:							
Enterprises....number...	4,040	([6])	1,728	1,371	2,772	([6])	([6])
Farms irrigated....number...	[3] 30,670	([6])	([6])	([6])	([6])	([6])	([6])
Area irrigated....acres....	1,045,224	([6])	798,917	586,120	451,130	([6])	([6])
Area existing works were capable of supplying with water....acres....	1,773,812	([6])	1,177,415	1,150,542	690,991	([6])	([6])
Area irrigable....acres....	2,180,796	([6])	1,566,876	[13] 1,687,447	[13] 1,253,173	([6])	([6])
Additional area existing works were capable of supplying with water....acres....	728,588	([6])	378,498	564,422	239,861	([6])	([6])
Additional irrigable area in enterprises not supplied with water....acres....	1,135,572	([6])	767,959	[13] 1,101,327	[13] 802,043	([6])	([6])
Investment in irrigation enterprises....dollars..	66,441,376	([6])	49,022,164	35,072,739	13,487,347	1,027,608	([6])
Increase or decrease (-) over preceding census....percent..	[5] 35.5	([6])	39.8	160.0	([14])	.....	.....
Average per acre based on area works were capable of supplying with water....dollars..	37.46	([6])	41.64	30.48	19.52	([6])	([6])
Increase or decrease (-) over preceding census....percent..	[5] -10.0	([6])	36.6	56.1	.....	.....	.....
Estimated completed cost of existing enterprises....dollars..	67,319,032	([6])	59,555,624	39,860,871	14,754,172	([6])	([6])
Average per acre based on irrigable area in enterprises....dollars..	30.87	([6])	38.01	[13] 23.62	[13] 11.77	([6])	([6])
Average annual cost per acre irrigated for maintenance and operation of irrigation works....dollars..	3.89	([6])	4.74	6.92	3.25	([6])	([6])

[1] Due to relocation of the one-hundredth meridian (U. S. Supreme Court decision, March 17, 1939), 28,800 acres were transferred to Texas from Oklahoma. [2] 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. [3] Difference in number of farms between the Census of Agriculture and the Census of Irrigation is in part due to some large enterprises reporting ownership tracts and/or water users rather than number of farms as defined by the Census. See text also. [4] Exclusive of number of rice irrigators, whose acreage covered only 178 acres in the State. [5] Increase or decrease represented by 1940 figures are with reference to 1930 figures, not 1935. [6] Not available. [7] Irrigated land from which crops were harvested plus 50,799 acres of irrigated land used only for pasture. [8] Irrigated land from which crops were harvested. [9] Acreage of irrigated crops including some duplication where 2 or more crops were harvested from same land. [10] Data were secured for crops irrigated but the returns were considered relatively incomplete. [11] Less than one-tenth of 1 percent. [12] Total is for irrigated farms reporting this item. Averages are based on all irrigated farms. [13] For 1920 and 1910 relates to total area in enterprises. Irrigable areas for those years were not reported. [14] Percent not shown when more than 1,000. * 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	418,002	137,683,372	26,044,008	843,839	50,799	2,589,978,936	18.81	418,269,553	3.04	180,744,212	1.31
Owners and managers	213,540	97,431,128	14,046,709	536,086	36,773	1,701,988,851	17.47	288,369,708	2.96	111,798,875	1.15
Tenants	204,462	40,252,244	11,997,299	307,753	14,026	887,990,085	22.06	129,899,845	3.23	68,947,337	1.71
Irrigated farms, total	19,568	11,619,780	1,950,600	843,839	50,799	248,746,614	21.41	32,848,639	2.83	20,123,937	1.73
Owners and managers	12,181	9,672,335	1,268,823	536,086	36,773	194,702,077	20.13	26,503,742	2.74	13,821,252	1.43
Tenants	7,387	1,947,445	681,777	307,753	14,026	54,044,537	27.75	6,344,897	3.26	6,302,685	3.24
Wholly irrigated farms	11,205	5,147,715	577,721	577,721	27,958	120,537,584	23.42	15,301,239	2.97	9,193,125	1.79
Owners and managers	6,967	4,293,884	353,057	353,057	20,245	94,896,250	22.10	12,653,579	2.95	6,172,865	1.44
Tenants	4,238	853,831	224,664	224,664	7,713	25,641,334	30.03	2,647,660	3.10	3,020,260	3.54
Partly irrigated farms	8,363	6,472,065	1,372,879	266,118	22,841	128,209,030	19.81	17,547,400	2.71	10,930,812	1.69
Owners and managers	5,214	5,378,451	915,766	183,029	16,528	99,805,827	18.56	13,850,163	2.58	7,648,417	1.42
Tenants	3,149	1,093,614	457,113	83,089	6,313	28,403,203	25.97	3,697,237	3.38	3,282,395	3.00
Nonirrigated farms, total	398,434	126,063,592	24,093,408	.....	.....	2,341,232,322	18.57	385,420,914	3.06	160,620,275	1.27

[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.

STATE TABLE 3.—NUMBER OF ENTERPRISES, IRRIGABLE AREA, AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1940; AREA IRRIGATED, 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					
								Irrigated area reporting—			Quantity delivered per acre[1]	Cost[1]	
	Enterprises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Quantity	Cost	Quantity and cost		Per acre	Per acre-foot
	Number	*Acres*	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*	*Acres*	*Acres*	*Acres*	*Acre-feet*	*Dollars*	*Dollars*
Total	4,040	2,180,796	1,773,812	1,045,224	798,917	586,120	30.8	1,017,411	1,002,679	979,854	2.5	4.94	2.01
Primary sources:													
Streams, gravity	127	348,652	299,120	191,124	168,246	73,982	13.6	172,589	169,291	171,663	2.8	2.98	1.05
Streams, pumped	717	1,281,370	955,541	525,547	527,700	421,538	-0.4	523,739	520,297	519,423	2.8	6.42	2.31
Streams, gravity and pumped	17	33,719	15,694	12,007	3,200	350	275.2	12,007	12,007	12,007	2.5	7.45	3.02
Wells, pumped	2,833	438,390	429,992	262,774	60,793	39,483	332.2	260,004	231,088	231,236	1.3	3.10	2.35
Wells, flowing	65	4,163	4,163	2,949	1,831	3,256	61.1	2,860	1,902	1,299	1.7	2.44	1.46
Wells, pumped and flowing	6	1,258	1,258	1,141	.....	1,727	.....	1,141	1,125	1,125	2.7	1.90	0.72
Lakes, gravity	7	964	619	199	.....	.....	.....	198	83	83	0.8	0.23	0.29
Lakes, pumped	52	9,859	8,898	4,406	1,861	597	136.8	4,389	4,215	4,215	2.2	2.40	1.09
Springs	84	12,319	12,300	9,715	9,328	8,686	4.1	8,377	9,449	8,143	1.6	0.70	0.44
Springs and streams	2	(2)	(2)	(2)	.....	.....	.....	(2)	(2)	(2)	(2)	(2)	(2)
Stored storm water	25	4,275	4,275	2,622	298	11,572	779.9	750	2,551	720	1.1	1.20	1.11
City water	3	9	9	9	.....	.....	.....	9	.....	.....	1.0	.....	.....
Sewage	17	1,944	1,679	1,499	2,070	260	-27.6	898	559	194	3.8	5.33	1.40
Streams, gravity; wells, pumped	15	2,964	2,954	1,956	850	454	130.1	1,345	1,375	1,320	1.6	3.58	2.19
Streams, gravity; wells, flowing	1	(2)	(2)	(2)	.....	45	.....	(2)	(2)	(2)	(2)	(2)	(2)
Streams, pumped; wells, pumped	20	11,167	10,667	7,858	.....	.....	.....	7,849	7,242	7,233	1.2	3.76	3.05
Waste water, seepage or drainage	6	5,555	5,455	903	.....	.....	.....	763	763	763	17.7	4.52	0.26
Other mixed	24	12,549	12,549	8,884	19,247	24,170	-53.8	8,802	8,801	8,799	1.2	3.34	2.80
Not reported	.....	.....	.....	.....	3,493	.....	.....	.....	.....	.....	.....	.....	.....
Supplemental sources:[3]													
Streams, gravity and/or storage	5	165,156	136,776	65,047	.....	.....	.....	20,945	49,467	20,945	1.4	1.30	0.98
Streams, pumped	12	3,287	2,995	1,802	254	.....	609.4	1,802	1,670	1,670	2.0	2.50	1.23
Wells, pumped	2	(4)	(4)	(4)	.....	.....	.....	(4)	(4)	(4)	(4)	(4)	(4)
Wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Based on enterprises reporting both quantity and cost of water, assuming (a) that for enterprises serving 1 to 4 farms the cost of water is cost of maintenance and operation, and for enterprises serving 5 or more farms it is total annual charges, and (b) that enterprises reporting cost and quantity of water had used the same quantity of water per acre as all enterprises which reported water delivered. [2] Data are included only in State totals because less than 3 enterprises reported in the 1940 Census. [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). [4] Data are not shown because less than 3 enterprises reported in the 1940 Census.

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

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	INVESTMENT							COST OF MAINTENANCE AND OPERATION[1]						
	1940			1930			Average per acre increase or decrease (-) 1930-40	1939		1929		Average per acre increase or decrease (-) 1930-40	1919	
	Amount	Proportion of total	Average per acre[2]	Amount	Proportion of total	Average per acre[2]		Irrigated area reporting	Average per acre	Irrigated area reporting	Average per acre		Irrigated area reporting	Average per acre
	Dollars	*Percent*	*Dollars*	*Dollars*	*Percent*	*Dollars*	*Dollars*	*Acres*	*Dollars*	*Acres*	*Dollars*	*Dollars*	*Acres*	*Dollars*
Total	66,441,376	100.0	37.46	49,022,164	100.0	41.64	-4.18	1,002,202	3.69	772,160	4.74	-0.85	558,306	6.92
Primary sources:														
Streams, gravity	19,205,590	28.9	64.21	16,336,367	33.3	67.13	-2.92	189,291	2.02	164,199	3.14	-1.12	66,906	1.98
Streams, pumped	36,391,597	54.8	38.08	26,286,985	53.6	32.80	5.28	519,820	4.99	524,847	4.96	0.03	412,118	7.55
Streams, gravity and pumped	281,287	0.4	17.92	229,067	0.5	48.74	-30.82	12,007	6.08	200	8.00	-1.92	350	8.57
Wells, pumped	6,437,794	9.7	15.01	3,879,881	7.9	47.15	-32.14	231,988	3.10	49,053	8.50	-5.40	31,749	11.07
Wells, flowing	191,399	0.3	45.98	205,672	0.4	86.69	-40.71	1,302	1.71	828	0.83	0.88	1,528	4.45
Wells, pumped and flowing	25,395	(3)	20.98	.....	.....	.....	.....	1,125	1.90	.....	.....	.....	1,253	16.69
Lakes, gravity	23,625	(3)	38.17	.....	.....	.....	.....	83	0.23	.....	.....	.....	.....	.....
Lakes, pumped	168,872	0.3	24.48	51,737	0.1	20.19	4.29	4,215	2.41	1,836	3.69	-1.28	517	6.32
Springs	91,151	0.1	7.41	376,015	0.8	35.73	-28.32	9,449	0.98	9,106	1.70	-0.72	8,217	2.72
Springs and streams	(4)	(4)	(4)	.....	.....	.....	.....	(4)	(4)	.....	.....	.....	.....	.....
Stored storm water	15,305	(3)	3.58	18,400	(3)	48.17	-44.59	2,551	0.53	.....	.....	.....	11,386	5.51
City water	160	(3)	17.78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sewage	105,151	0.2	62.63	101,000	0.2	48.79	13.84	559	3.67	2,010	2.05	1.62	.....	.....
Streams, gravity; wells, pumped	62,360	0.1	21.11	43,887	0.1	51.03	-29.92	1,375	3.54	847	8.84	-5.30	454	16.83
Streams, gravity; wells, flowing	(4)	(4)	(4)	.....	.....	.....	.....	(4)	(4)	.....	.....	.....	.....	.....
Streams, pumped; wells, pumped	354,127	0.5	33.20	.....	.....	.....	.....	7,242	3.79	.....	.....	.....	.....	.....
Waste water, seepage or drainage	113,870	0.2	20.87	.....	.....	.....	.....	763	4.52	.....	.....	.....	.....	.....
Other mixed	411,305	0.6	32.78	1,350,425	2.8	57.96	-25.18	8,801	2.03	19,224	4.61	-2.58	23,828	5.95
Not reported	.....	.....	.....	139,720	0.3	40.00	.....	.....	.....	.....	.....	.....	.....	.....
Supplemental sources:[5]														
Streams, gravity and/or storage	2,127,041	3.2	15.55	.....	.....	.....	.....	49,467	0.57	.....	.....	.....	.....	.....
Streams, pumped	12,147	(3)	5.07	2,008	(3)	1.18	3.89	1,670	2.50	254	7.87	-5.37	.....	.....
Wells, pumped	(6)	(6)	(6)	.....	.....	.....	.....	(6)	(6)	.....	.....	.....	.....	.....
Wells, flowing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

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

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

ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF— 1940 Primary enterprises	1940 Supplemental enterprises[1]	1930 Primary enterprises	1920 Primary enterprises	Increase or decrease (-) 1930-40 primary enterprises
AREA IRRIGATED	*Acres*	*Acres*	*Acres*	*Acres*	*Percent*
Total	1,045,224	66,909	798,917	586,120	30.8
Individual and partnership	349,774	1,826	132,291	110,680	164.4
Cooperative, incorporated	49,663	.....	58,691	103,378	1.0
Cooperative, unincorporated	9,640	(2)			
Irrigation district	382,458	(2)	452,461	88,571	-15.5
Commercial	190,763	(2)	69,996	252,892	112.0
Bureau of Reclamation[3] *	61,153	12,681	65,442	20,284	-6.6
State	322	.....	36	65	794.4
City and/or sewage	1,451	.....	.....	250	.....
AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER					
Total	1,773,812	139,231	1,177,415	1,150,542	50.7
Individual and partnership	563,686	2,655	189,739	216,351	197.1
Cooperative, incorporated	76,100	.....	117,815	256,304	-23.4
Cooperative, unincorporated	14,141	(2)			

ITEM AND TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF— 1940 Primary enterprises	1940 Supplemental enterprises[1]	1930 Primary enterprises	1920 Primary enterprises	Increase or decrease (-) 1930-40 primary enterprises
AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER—Continued					
Irrigation district	*Acres* 696,415	*Acres* (2)	*Acres* 604,595	*Acres* 170,548	*Percent* 15.2
Commercial	348,392	(2)	199,230	481,899	74.9
Bureau of Reclamation[3] *	69,010	17,119	66,000	25,070	4.6
State	445	.....	36	120	(4)
City and/or sewage	5,623	.....	.....	250	.....
IRRIGABLE AREA[5]					
Total	2,180,796	168,503	1,566,876	1,687,447	39.2
Individual and partnership	582,525	3,547	219,877	328,461	164.9
Cooperative, incorporated	96,600	.....	184,047	294,761	-39.5
Cooperative, unincorporated	14,741	(2)			
Irrigation district	769,607	(2)	728,286	266,674	5.7
Commercial	636,332	(2)	367,630	738,685	73.1
Bureau of Reclamation[3] *	74,708	17,119	67,000	58,106	11.5
State	445	.....	36	120	(4)
City and/or sewage	5,838	.....	.....	640	.....

[1] Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text). [2] Data are included only in State totals because less than 3 enterprises reported in the 1940 Census. [3] U. S. Dept. of the Interior. [4] Percent not shown when more than 1,000. [5] For 1920 relates to total area. Irrigable area for that year was not reported. *For explanation of areas, see text, p. 532.

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

TYPE OF ENTERPRISE (For definitions and explanations, see text)	ENTERPRISES Total	ENTERPRISES Serving 5 or more farms	AREAS Irrigable	AREAS Works were capable of supplying with water	AVERAGE COST Primary enterprises: Works and equipment per acre[2]	AVERAGE COST Primary enterprises: Maintenance and operation per acre[3]	AVERAGE COST Supplemental enterprises: Works and equipment per acre[2]	AVERAGE COST Supplemental enterprises: Maintenance and operation per acre[3]	AREA IRRIGATED, 1939[1]: Farms served	Total area	Cropland: From which crops were harvested	Cropland: On which crops failed	Irrigated pasture
	Number	*Number*	*Acres*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Acres*	*Acres*	*Acres*	*Acres*
Total	4,040	108	2,180,796	1,773,812	35.94	3.86	15.37	0.49	30,670	1,045,224	961,765	12,589	70,670
Individual and partnership	3,924	16	582,525	563,686	16.06	2.98	4.95	2.23	4,099	349,774	312,703	4,257	32,814
Cooperative, incorporated	15	12	96,600	76,100	23.62	5.09	.....	.....	348	49,663	49,118	81	464
Cooperative, unincorporated	23	15	14,741	14,141	9.53	1.12	(4)	(4)	136	9,640	5,752	750	3,138
Irrigation district	41	40	769,607	696,415	80.29	3.51	(4)	(4)	21,268	382,458	346,444	5,912	30,102
Commercial	23	19	636,332	348,392	22.10	6.24	(4)	(4)	1,773	190,763	187,043	12	3,708
U. S. Bureau of Reclamation*	[5]2	2	74,708	69,010	41.27	2.39	17.52	1.10	3,000	61,153	58,978	1,565	610
State	4	1	445	445	30.42	4.93	.....	.....	9	322	322	.....	.....
City and/or sewage	8	1	5,838	5,623	37.26	5.62	.....	.....	37	1,451	1,405	12	34

[1] Reported by enterprises in the Census of Irrigation, 1940, not by the Census of Agriculture. [2] Based on area works were capable of supplying with water and cost of works and equipment exclusive of water right investment. [3] Based on irrigated area in enterprises reporting maintenance and operation in 1939. [4] Data are included only in State totals because less than 3 enterprises reported in the 1940 Census. [5] Data for less than 3 enterprises shown with permission of the enterprises involved. *For explanation of areas and investment, see text, p. 532.

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: 1940 Total	1940 Primary enterprises	1940 Supplemental enterprises	1940 Total cost of works and equipment	1940 Investment in water rights	1930	1920	Increase or decrease (-) 1930-40	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER: Primary enterprises	Supplemental enterprises	Capital expenditures during 1939[1]	Estimated investment required to complete works
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Percent*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Total	66,441,376	64,300,488	2,140,888	65,884,261	557,115	49,022,164	35,072,739	35.5	36.25	15.38	2,575,967	877,656
Individual and partnership	9,105,016	9,091,669	13,347	9,068,756	36,260	9,371,780	8,256,568	-2.8	16.13	5.03	1,140	155,285
Cooperative, incorporated	1,798,140	1,798,140	.....	1,797,197	943	3,459,486	3,821,844	-44.1	23.63	.....	27,452	20,000
Cooperative, unincorporated	136,760	134,760	(2)	136,760	.....				9.53	(2)	300	.....
Irrigation district	42,700,333	42,369,323	(2)	42,317,338	382,995	26,543,073	5,449,142	60.9	60.84	(2)	2,283,148	599,371
Commercial	9,330,311	7,835,780	(2)	9,193,410	136,901	3,404,080	13,825,409	174.1	22.49	(2)	247,927	3,000
U. S. Bureau of Reclamation*	3,147,764	2,847,764	300,000	3,147,764	.....	6,238,245	3,673,476	-49.5	41.27	17.52	15,000	100,000
State	13,552	13,552	.....	13,536	16	5,500	6,802	146.4	30.45	.....	.....	.....
City and/or sewage	209,500	209,500	.....	209,500	.....	.....	39,498	.....	37.26	.....	1,000	.....

[1] Only for enterprises serving 5 or more farms. [2] Data are included only in State totals because less than 3 enterprises reported in the 1940 Census. *For explanation of investment, see text, p. 532.

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

TYPE OF ENTERPRISE (For definitions and explanations, see text)	INDEBTEDNESS OF ENTERPRISES REPORTING					ARREARAGES OF ENTERPRISES REPORTING[2]				CHARGES OF ENTERPRISES REPORTING (totals, as reported)		
	Enterprises 1940	Area: Irrigable 1940	Area: Works were capable of supplying with water 1940	Total indebtedness 1940	Average per acre assessed 1939[3]	Average per acre works were capable of supplying with water[4]	Enterprises 1940	Total arrearages: Dec. 31 1939	Total arrearages: Dec. 31 1938	Average per acre assessed 1939[5]	Area assessed 1939	Charges made 1939	Charges collected 1939
	Number	*Acres*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Dollars*	*Dollars*	*Dollars*	*Acres*	*Dollars*	*Dollars*
Total	60	1,532,436	1,140,250	36,041,388	34.02	33.98	14	730,703	647,425	2.45	1,252,742	4,086,704	3,730,448
Partnership	3	3,363	3,363	100,032	36.80	29.74	.....	.....	.....	.....	5,713	14,830	6,156
Cooperative, incorporated	8	93,566	73,566	659,240	12.41	8.96	.....	.....	(6)	.....	54,393	339,892	298,860
Cooperative, unincorporated	2						2	(6)	.....	(6)	6,079	6,595	3,478
Irrigation district	36	775,822	712,654	28,278,993	37.78	41.27	10	606,323	543,003	2.44	774,047	1,756,866	1,824,234
Commercial	10	584,977	281,657	5,184,123	27.07	20.78	2	(6)	(6)	(6)	330,104	1,805,375	1,320,019
Bureau of Reclamation[7] *	[8] 1	74,708	69,010	[9] 1,819,000	26.25	26.36	.....	.....	.....	.....	81,979	160,146	277,701
State	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
City and/or sewage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	427	3,000	.....

[1] Only for enterprises serving 5 or more farms. Enterprises and areas shown are totals for primary and supplemental enterprises reporting. [2] In payment of principal, interest, and/or other funded obligations. [3] Based on primary enterprises only; State average for supplemental enterprises is $8.32. [4] Based on primary enterprises only; State average for supplemental enterprises is $11.26. [5] Based on primary enterprises only; State average for supplemental enterprises not shown 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. [7] U. S. Dept. of the Interior. [8] Data for less than 3 enterprises shown with permission of the enterprises involved. [9] Represents indebtedness of irrigation districts to the U. S. Government. * For explanation of areas and investment, see text, p. 532.

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: Irrigated area reporting 1939	Primary enterprises: Reported cost 1939	Supplemental enterprises: Irrigated area reporting 1939	Supplemental enterprises: Reported cost 1939	Average cost per irrigated acre: Primary enterprises 1939	Average cost per irrigated acre: Supplemental enterprises 1939	Enterprises reporting pay roll	Wages and salaries paid and payable	Employees during week ending April 29
	Acres	*Dollars*	*Acres*	*Dollars*	*Dollars*	*Dollars*	*Number*	*Dollars*	*Number*
Total	1,002,202	3,865,224	51,197	32,666	3.86	0.64	82	1,628,198	1,698
Individual and partnership	308,959	920,467	1,694	3,783	2.98	2.23	8	6,650	53
Cooperative, incorporated	49,663	252,898	.....	.....	5.09	.....	11	[2] 77,657	[2] 150
Cooperative, unincorporated	8,038	8,994	(3)	(3)	1.12	(3)	7	2,919	10
Irrigation district	382,458	1,340,757	(3)	(3)	3.51	(3)	36	949,798	1,006
Commercial	190,763	1,189,616	(3)	(3)	6.24	(3)	18	480,824	397
U. S. Bureau of Reclamation*	61,153	146,140	12,681	13,927	2.39	1.10	1	110,150	73
State	307	1,512	.....	.....	4.93	.....	.....	.....	.....
City and/or sewage	861	4,840	.....	.....	5.62	.....	1	(2)	(2)

[1] Only for enterprises serving 5 or more farms. [2] Data for 1 "City and/or sewage" enterprise are included with "Cooperative, incorporated" enterprises in the 1940 Census. [3] Data are included only in State totals because less than 3 enterprises reported in the 1940 Census. * For explanation of areas and investment, see text, p. 532.

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			
	Diversion	Storage	Capacity at main heading	Length[1]: Earth	Length[1]: Lined[2]	Number	Capacity	Length	Number	Yield	Number	Yield	Prime movers: Number	Prime movers: Rated capacity	Pumps: Number	Pumps: Rated capacity
	Number	*Number*	*Sec.-ft.*	*Miles*	*Miles*		*Ac.-ft.*	*Miles*		*G.p.m.*		*G.p.m.*		*Hp.*		*G.p.m.*
Total	244	194	24,813	4,944	992.1	542	1,405,024	923.1	100	39,508	3,396	2,213,230	4,674	195,061	4,754	9,916,225
Individual and partnership	212	150	3,482	415	55.1	472	26,547	243.3	96	36,418	3,363	2,190,730	4,270	125,667	4,344	3,361,204
Cooperative, incorporated	5	3	1,460	388	0.6	4	25,908	2.0	2	1,640	3	2,000	19	4,905	19	435,400
Cooperative, unincorporated	7	1	394	71	.....	1	105	0.3	2	1,450	11	10,700	21	534	21	36,750
Irrigation district	13	26	10,226	2,370	915.7	37	1,032,516	664.8	....	.....	.....	.....	240	26,383	245	3,166,032
Commercial	5	6	7,857	1,438	10.7	17	312,607	5.9	....	.....	16	7,700	107	37,247	108	2,907,389
Bureau of Reclamation[3]	2	.....	1,330	247	8.7	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
State	.....	.....	5	.....	0.1	.....	.....	0.4	....	.....	3	2,100	7	127	7	4,200
City and/or sewage	.....	8	59	15	1.2	11	7,341	6.4	....	.....	.....	.....	10	198	10	5,250

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

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

MATERIAL	1940		1930	
	Diversion	Storage	Diversion	Storage
	Number	*Number*	*Number*	*Number*
Total	244	194	107	168
Concrete or masonry	76	47	43	60
Timber	4	.....	4	.....
Earth and rock	136	134	.....	75
Other and mixed	[1] 27	11	[1] 55	14
Not reported	1	2	5	19

[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
	Number	*Percent*	*G.p.m.*	*Percent*	*Feet*
Total, 1940	4,754	100.0	9,916,225	100.0	69
Electric motor	**719**	**15.1**	**1,658,843**	**16.7**	**66**
Centrifugal	269	5.7	1,199,773	12.1	32
Turbine	314	6.6	417,560	4.2	84
Plunger	98	2.1	8,350	0.1	79
Other	38	0.8	33,160	0.3	39
Internal-combustion engine	**3,220**	**67.7**	**4,138,520**	**41.7**	**66**
Centrifugal	1,152	24.2	2,045,791	20.6	25
Turbine	1,762	37.1	1,649,228	16.6	90
Plunger	290	4.8	26,727	0.3	74
Other	76	1.6	416,774	4.2	38
Other kinds of motive power	**419**	**8.8**	**970,940**	**9.8**	**101**
Centrifugal	20	0.4	961,523	9.7	30
Turbine	2	([1])	3,400	([1])	60
Plunger[2]	379	8.0	4,326	([1])	106
Other	18	0.4	1,691	([1])	51
Mixed kinds of motive power	**396**	**8.3**	**3,147,922**	**31.7**	**67**
Centrifugal	163	3.4	2,588,638	26.1	33
Turbine	137	2.9	552,655	5.6	84
Plunger[2]	84	1.8	3,312	([1])	76
Other	12	0.3	3,317	([1])	38
Total, 1930	2,028	.....	6,494,990	.....	55
Increase or decrease (-) 1930-1940	2,726	.....	3,421,226	.....	14

MOTIVE POWER BY TYPE OF PUMP EMPLOYED	Prime movers	Proportion of total number	Rated capacity of movers	Proportion of total capacity
	Number	*Percent*	*Hp.*	*Percent*
Total, 1940	4,674	100.0	195,061	100.0
Centrifugal pump	**1,414**	**30.3**	**72,928**	**37.4**
Electric	302	6.5	27,417	14.1
Internal-combustion	1,082	23.2	29,804	15.3
Other	30	0.6	15,707	8.1
Turbine pump	**2,123**	**45.4**	**97,884**	**50.2**
Electric	342	7.3	12,158	6.2
Internal-combustion	1,773	37.9	85,402	43.8
Other	8	0.2	324	0.2
Plunger pump[2]	**734**	**15.7**	**3,212**	**1.6**
Electric	76	1.6	560	0.3
Internal-combustion	230	4.9	1,942	1.0
Other	428	9.2	710	0.4
Other and mixed types of pumps	**403**	**8.6**	**21,037**	**10.8**
Electric	114	2.4	6,539	3.4
Internal-combustion	229	4.9	7,741	4.0
Other	60	1.3	6,757	3.5
Total, 1930	[3] 1,828	.....	95,933	.....
Increase or decrease (-) 1930-1940	2,846	.....	99,128	.....

[1] Less than one-tenth of 1 percent. [2] Many of these pumps are operated by windmills. [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
	1940[1]	1930[2]	
	Miles	*Miles*	*Percent*
Total	923.1	[3] 319.0	189.4
Concrete:			
1 to 12 inches	155.6	24.0	548.3
13 to 24 inches	434.6	118.8	320.7
Over 24 inches	65.2		
Metal:			
1 to 12 inches	189.9	53.9	252.3
13 to 24 inches	13.3	4.7	200.0
Over 24 inches	0.8		
Wood-stave:			
1 to 12 inches	6.0	25.2	-76.2
13 to 24 inches	16.0	30.8	-47.4
Over 24 inches	0.2		
Clay and other:			
1 to 12 inches	38.4	1.6	([4])
13 to 24 inches	2.3	.....	.....
Over 24 inches	0.8		

[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 7.0 miles of concrete pipe lines not segregated by size, and 53.0 miles of pipe lines not segregated by size or material. [4] Percent not shown when more than 1,000.

BUREAU OF RECLAMATION AREAS AND INVESTMENT

The area credited to the United States Bureau of Reclamation in State tables 5, 6, 8, and 9 include that of El Paso Water Improvement District No. 1 of the Rio Grande Project. This area is not reported under any other classification. An area totalling 12,681 acres, irrigated with a supplemental supply from the Rio Grande Project, is reported as receiving a primary supply through other enterprises.

The investment attributed to the Bureau of Reclamation in State tables 8 and 17 relates to these areas and relates to construction costs by the Government of irrigation facilities both for lands within the El Paso District and those receiving supplemental water. The reduction in the investment of the Bureau of Reclamation in Texas from the 1930 total is due to new contracts between the Secretary of the Interior and the water users in New Mexico and Texas served by the Rio Grande Project, and the exclusion of drainage costs from the irrigation investment. Under these contracts, the major part of the cost of Elephant Butte Dam, which with Caballo Dam serves the project, is to be repaid by power revenues from a power plant at Elephant Butte Dam in New Mexico which began operating in the winter of 1940-41. The principal costs of Caballo Dam, which regulates the Rio Grande flow, are nonreimbursable. It was constructed as a part of the Rio Grande canalization plan under an agreement with Mexico.

The Bureau of Reclamation has under construction on the Colorado River in Texas the Marshall Ford Dam, near Austin. This dam will serve principally for flood control but will also improve the water supply for irrigation of rice lands downstream. However, none of the costs, approximately $25,000,000, have so far been allocated to irrigation.

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

ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainage.....number...	95	150	166
Area irrigable in these enterprises.....acres....	857,141	814,833	[1] 650,822
Area irrigated in these enterprises.....acres....	397,227	([2])	([2])
Area for which drains have been installed.....acres....	553,850	345,926	272,437
Additional area needing drainage.....acres....	106,837	135,936	154,532
Ratio of area drained to area irrigated in—			
(a) Enterprises reporting lands drained and/or needing drainage.....percent..	139.4	[3] 42.5	[1] 41.9
(b) All irrigation enterprises.....percent..	100.0	43.3	46.5
Ratio of area drained plus area needing drainage to—			
(a) Irrigable area reporting.....percent..	77.1	59.1	[1] 65.6
(b) Irrigated area reporting.....percent..	166.3	([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.

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..	2,759,935	1,678,388	1,586,840	1,514,718	897,623	204,919	1,245,217	780,765	1,381,921
Area irrigated by these enterprises.....acres.....	532,886	501,558	247,619	268,964	185,952	47,325	263,922	315,606	200,294
Average water per acre irrigated.....acre-feet..	5.2	3.3	6.4	5.6	4.8	4.3	4.7	2.5	6.9
Total water delivered to irrigators.....acre-feet..	2,028,835	723,768	385,540	262,120	197,185	100,869	1,766,715	526,583	284,671
Area irrigated by these enterprises.....acres.....	743,816	427,419	167,005	91,309	75,138	48,533	652,507	352,281	118,472
Average water per acre irrigated.....acre-feet..	2.7	1.7	2.3	2.9	2.6	2.1	2.7	1.5	2.4
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	375,263	.....	.....	3,150	.....	.....	372,113	.....	.....
Area irrigated by these enterprises.....acres.....	273,595	.....	.....	1,725	.....	.....	271,870	.....	.....
Average water per acre irrigated.....acre-feet..	1.4	.....	.....	1.8	.....	.....	1.4	.....	.....
SUPPLEMENTAL ENTERPRISES									
From surface sources reported:									
Total water entering canals.....acre-feet..	176,428	.....	.....	.....	.....	.....	176,428	.....	.....
Area irrigated by these enterprises.....acres.....	36,522	.....	.....	.....	.....	.....	36,522	.....	.....
Average water per acre irrigated.....acre-feet..	4.8	.....	.....	.....	.....	.....	4.8	.....	.....
Total water delivered to irrigators.....acre-feet..	32,146	.....	.....	11,381	.....	.....	20,765	.....	.....
Area irrigated by these enterprises.....acres.....	22,747	.....	.....	12,681	.....	.....	10,066	.....	.....
Average water per acre irrigated.....acre-feet..	1.4	.....	.....	0.9	.....	.....	2.1	.....	.....
From underground sources reported:									
Total water delivered to irrigators.....acre-feet..	66	.....	.....	.....	.....	.....	66	.....	.....
Area irrigated by these enterprises.....acres.....	60	.....	.....	.....	.....	.....	60	.....	.....
Average water per acre irrigated.....acre-feet..	1.1	.....	.....	.....	.....	.....	1.1	.....	.....

[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						
	Primary enterprises	Proportion of total	Supplemental enterprises[1]	Area irrigated	Proportion of total	Area irrigated	Proportion of total
	Acres	*Percent*	*Acres*	*Acres*	*Percent*	*Acres*	*Percent*
Total.....	1,045,224	100.0	66,909	798,917	100.0	586,120	100.0
Appropriation[2].....	590,640	56.5	49,322	588,626	73.7	416,054	70.9
Riparian.....	66,197	6.3	1,712	48,008	6.0	72,396	12.4
Appropriation and riparian.....	75,016	7.2	15,815	.....	.....	.....	.....
Underground.....	268,352	25.7	60	61,744	7.7	44,649	7.6
Appropriation and underground.....	2,228	0.2	.....	.....	.....	.....	.....
Riparian and underground.....	10,165	1.0	.....	.....	.....	.....	.....
Adjudicated by court.....	26,037	2.5	.....	49,097	6.2	2,755	0.5
Other mixed and not reported.....	6,589	0.6	.....	51,442	6.4	50,266	8.6

[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."

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...	4,021	307	3,368	245	48	25	18	10
2	Irrigated farms, 1939.....number...	30,670	.....	3,368	599	529	1,154	5,727	19,293
3	Area irrigated, 1939.....acres....	1,045,224	.....	317,561	39,503	39,591	112,230	243,253	293,086
4	(a) From which crops were harvested.....acres....	961,765	.....	278,856	37,004	35,774	110,398	236,835	262,898
5	(b) On which crops failed.....acres....	12,589	.....	3,558	327	1,166	1,276	4,147	2,115
6	(c) Irrigated pasture.....acres....	70,870	.....	35,147	2,172	2,651	556	2,271	28,073
	CAPITAL INVESTMENT, 1940								
7	Total capital investment in all enterprises.....dollars..	64,300,488	928,841	8,571,169	815,745	918,835	5,367,765	23,705,739	23,992,394
8	(a) Cost of irrigation works and equipment.....dollars..	63,744,493	922,281	8,335,973	813,631	916,225	5,236,749	23,527,240	23,992,394
9	(b) Investment in water rights.....dollars..	555,995	6,560	235,196	2,114	2,610	131,016	178,499	.....
10	Area works were capable of supplying with water.....acres....	1,773,812	31,367	489,511	58,069	80,683	215,310	464,596	434,276
11	Average investment per acre irrigated.....dollars..	61.52	.....	26.99	20.65	23.21	47.83	97.45	81.86
12	Average investment per acre which the works could supply with water..dollars..	36.25	29.61	17.51	14.05	11.39	24.93	51.02	55.25
	MAINTENANCE AND OPERATION, AND CHARGES, 1939								
13	Enterprises reporting maintenance and operation.....number...	3,277	111	2,863	209	41	25	18	10
14	(a) Area irrigated in these enterprises.....acres....	1,002,202	.....	280,676	35,242	37,715	112,230	243,253	293,086
15	(b) Cost of maintenance and operation.....dollars..	3,865,224	18,860	862,426	84,371	155,560	472,290	1,276,000	995,717
16	(c) Average cost per irrigated acre reporting.....dollars..	3.86	.....	3.07	2.39	4.12	4.21	5.25	3.40
17	Total annual charges[2].....dollars..	3,855,789	3,087	.....	.....	207,441	736,433	1,680,884	1,227,944
18	Average charge per irrigated acre reporting.....dollars..	5.61	.....	.....	.....	5.43	6.56	6.91	4.19
19	Area against which charges were assessed.....acres....	1,087,092	5,500	.....	.....	39,384	235,913	350,010	456,285
20	Average annual charge per acre assessed.....dollars..	3.55	0.56	.....	.....	5.27	3.12	4.80	2.69
21	Total charges collected[2].....dollars..	3,671,948	350	.....	.....	66,420	674,041	1,532,661	1,398,466
	INDEBTEDNESS AND ARREARAGE, 1939								
22	Enterprises reporting indebtedness[3].....number...	57	1	.....	.....	11	19	16	10
23	(a) Area irrigated in these enterprises.....acres....	627,161	.....	.....	.....	14,628	97,090	222,357	293,086
24	(b) Indebtedness.....dollars..	34,699,284	(4)	.....	.....	[4] 883,951	2,909,965	18,723,277	12,182,071
25	(c) Average indebtedness per acre irrigated.....dollars..	55.33	.....	.....	.....	[4] 60.43	29.97	84.20	41.56
26	(d) Cost of irrigation works and equipment.....dollars..	52,172,371	(4)	.....	.....	[4] 681,368	4,639,369	22,859,240	23,992,394
27	(e) Investment in water rights.....dollars..	310,600	.....	.....	.....	1,585	130,516	178,499	.....
28	(f) Total investment.....dollars..	52,482,971	(4)	.....	.....	[4] 682,953	4,769,885	23,037,739	23,992,394
29	(g) Maintenance and operation.....dollars..	2,624,390	.....	.....	.....	68,581	426,456	1,133,636	995,717
30	(h) Total annual charges[2].....dollars..	3,456,739	.....	.....	.....	69,397	657,090	1,502,308	1,227,944
31	(i) Total charges collected[2].....dollars..	3,592,495	.....	.....	.....	55,655	605,713	1,532,661	1,398,466
32	(j) Area against which annual charges were assessed.....acres....	998,093	.....	.....	.....	14,698	197,996	329,114	456,285
33	(k) Average indebtedness per acre assessed.....dollars..	34.02	.....	.....	.....	9.61	14.70	56.89	26.70
34	(l) Average charges per acre assessed.....dollars..	3.46	.....	.....	.....	4.72	3.32	4.56	2.69
35	(m) Average charges per acre irrigated.....dollars..	5.51	.....	.....	.....	4.74	6.77	6.76	4.19
36	Enterprises reporting arrearage[3].....number...	13	1	.....	.....	2	6	4	.....
37	(o) Area assessed in these enterprises.....acres....	185,600	.....	.....	.....	477	42,466	142,657	.....
38	(b) Total arrearage.....dollars.	660,944	(4)	.....	.....	[4] 207,780	201,661	251,503	.....
39	(c) Average arrearage per acre assessed.....dollars..	2.45	.....	.....	.....	[4] 435.60	4.75	1.76	.....
40	(d) Indebtedness.....dollars..	12,026,612	(4)	.....	.....	[4] 747,842	859,860	10,418,910	.....
	TYPE, 1940								
41	Individual and partnership.....number...	3,910	303	3,350	240	17	.....	.....	.....
42	Cooperative (incorporated and unincorporated).....number...	37	2	5	3	21	6	.....	.....
43	Irrigation district.....number...	39	2	1	.....	1	15	11	9
44	Commercial.....number...	22	.....	3	1	8	3	7	.....
45	U. S. Bureau of Reclamation.....number...	1	.....	.....	.....	.....	.....	.....	1
46	All other.....number...	12	.....	9	1	1	1	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939								
47	Enterprises reporting pay roll.....number...	80	1	.....	.....	28	23	18	10
48	Wages and salaries paid and payable for 1939.....dollars..	1,622,840	(4)	.....	.....	[4] 43,447	210,574	711,146	657,673
49	Persons employed during week ending April 29, 1939.....number...	1,686	(4)	.....	.....	[4] 155	245	522	764
	SOURCE OF WATER SUPPLY, 1939								
50	Streams, gravity.....number...	127	6	87	7	14	8	3	2
51	Streams, pumped.....number...	717	123	497	47	18	11	13	8
52	Wells, pumped.....number...	2,833	169	2,494	161	8	1	.....	.....
53	Wells, pumped and flowing; or wells flowing.....number...	71	1	50	15	5	.....	.....	.....
54	Lakes, gravity or pumped.....number...	59	5	48	6	.....	.....	.....	.....
55	Streams and springs; or springs.....number...	86	2	79	2	1	.....	2	.....
56	Mixed, streams and wells.....number...	53	1	46	3	1	2	.....	.....
57	Other mixed or stored storm water.....number...	75	.....	67	4	1	3	.....	.....

	SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)	TOTAL	IRRIGATED FARMS						
			No farms[1]	1 farm	2 to 4 farms	5 to 24 farms	25 to 99 farms	100 to 999 farms	1,000 farms and more
1	Enterprises, 1940.....number...	19	1	13	1	.....	2	2	.....
2	Irrigated farms, 1939.....number...	593	.....	13	2	.....	128	450	.....
3	Area irrigated, 1939.....acres....	66,909	.....	2,126		.....	64,783		.....
	CAPITAL INVESTMENT, 1940								
4	Total capital investment in all enterprises.....dollars..	2,140,888		15,347		.....	2,125,541		.....
5	(a) Cost of irrigation works and equipment.....dollars..	2,139,768		15,145		.....	2,124,623		.....
6	(b) Investment in water rights.....dollars..	1,120	.....	202		.....	918		.....
7	Area works were capable of supplying with water.....acres....	139,231	.....	2,955		.....	136,276		.....
8	Average investment per acre irrigated.....dollars..	32.00	.....	7.22		.....	32.81		.....
9	Average investment per acre which the works could supply with water..dollars..	15.38	.....	5.19		.....	15.60		.....
	MAINTENANCE AND OPERATION, AND CHARGES, 1939								
10	Enterprises reporting maintenance and operation.....number...	14	.....	11	.....	.....	1	2	.....
11	(a) Area irrigated in these enterprises.....acres....	51,197	.....	1,994	.....	.....	49,203		.....
12	(b) Cost of maintenance and operation.....dollars..	32,666	.....	4,683	.....	.....	27,983		.....
13	(c) Average cost per irrigated acre reporting.....dollars..	0.64	.....	2.35	.....	.....	0.57		.....
14	Total annual charges[2].....dollars..	230,915	.....	.....	.....	.....	230,915		.....
15	Average charge per irrigated acre reporting.....dollars..	4.69	.....	.....	.....	.....	4.69		.....
16	Area against which charges were assessed.....acres....	165,650	.....	.....	.....	.....	165,650		.....
17	Average annual charge per acre assessed.....dollars..	1.39	.....	.....	.....	.....	1.39		.....
18	Total charges collected[2].....dollars..	58,500	.....	.....	.....	.....	58,500		.....

[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.

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	
307	2,426	959	274	27	28	3,606	293	71	40	11	1
.....	2,742	1,217	901	1,688	24,122	3,633	571	473	10,099	15,694	2
.....	66,247	159,812	134,122	106,797	578,246	264,849	69,005	72,291	305,914	333,165	3
.....	59,618	146,528	115,390	98,302	541,927	240,187	58,357	64,900	296,444	301,877	4
.....	1,216	1,934	1,766	760	6,893	4,132	326	296	5,720	2,115	5
.....	5,413	11,350	16,966	7,715	29,426	20,530	10,322	7,095	3,750	29,173	6
928,841	3,545,531	3,003,759	3,287,583	8,316,639	45,218,135	5,344,121	2,185,914	2,124,205	18,391,490	36,254,758	7
922,281	3,530,652	2,991,106	3,201,654	8,113,396	44,965,404	5,321,219	2,175,938	2,078,194	17,914,384	36,254,758	8
6,560	14,879	12,653	85,929	203,243	232,731	22,902	9,976	46,011	477,106	.....	9
31,367	149,059	229,647	184,929	288,046	890,764	436,395	101,800	122,954	562,601	530,062	10
.....	53.52	15.80	24.51	77.87	78.20	20.18	31.68	29.38	60.12	108.82	11
29.61	23.79	13.08	17.78	28.87	50.76	13.25	21.47	17.28	31.57	68.40	12
111	2,035	836	240	27	28	2,922	247	58	39	11	13
.....	57,279	140,487	119,393	106,797	578,246	230,728	63,466	68,929	305,914	333,165	14
18,860	242,871	406,896	287,443	451,799	2,457,255	657,681	201,445	294,127	1,597,923	1,114,048	15
.....	4.24	2.90	2.41	4.23	4.25	2.85	3.17	4.27	5.22	3.34	16
3,087	4,376	5,900	102,324	502,976	3,237,126	7,069	15,322	286,685	2,014,809	1,531,904	17
.....	7.12	3.24	4.98	5.88	5.60	1.44	1.99	7.02	6.71	4.60	18
5,500	630	2,391	30,331	254,102	794,138	4,932	7,711	64,473	490,614	519,562	19
0.56	6.95	2.47	3.37	1.98	4.08	1.43	1.99	4.45	4.11	2.95	20
360	813	2,121	76,657	356,867	3,235,130	1,824	7,688	148,057	1,705,993	1,508,386	21
1	1	2	11	15	27	4	1	10	31	11	22
392			8,966	59,694	558,109	1,305		29,770	262,921	333,165	23
745,162			985,564	7,161,228	25,807,310	5,297		116,749	9,783,031	24,794,187	24
1,900.92			109.92	119.97	46.24	4.06		3.92	37.21	74.42	25
336,301			796,840	6,714,826	44,324,404	13,300		411,911	15,493,402	36,254,758	26
873			68,103	8,893	232,731	78		26,766	283,756	.....	27
337,174			864,943	6,723,719	44,557,135	12,378		438,677	15,777,158	36,254,758	28
.....	200		36,192	271,902	2,316,096	853		165,979	1,343,510	1,114,048	29
.....	595		83,984	311,333	3,060,827	1,680		206,882	1,710,273	1,531,904	30
.....	560		68,266	288,539	3,235,130	533		145,911	1,637,665	1,808,386	31
.....	407		18,189	205,496	774,001	1,320		33,236	444,175	519,362	32
.....	5.95		54.18	34.85	33.34	4.01		3.51	20.35	47.74	33
.....	1.46		4.62	1.52	3.95	1.27		6.22	3.86	2.95	34
.....	1.52		9.37	5.22	5.48	1.29		6.95	6.53	4.60	35
1	.....	1	6	2	3	2	.....	1	8	2	36
.....	.....	(5)	13,208	(5)	67,917	(5)	.....	(5)	85,786	(5)	37
(5)	.....	(5)	200,311	(5)	85,433	(5)	.....	(5)	471,024	(5)	38
.....	.....	(5)	15.17	(5)	1.26	(5)	.....	(5)	3.08	(5)	39
(5)	.....	(5)	861,160	(5)	4,731,974	(5)	.....	(5)	2,342,576	(5)	40
303	2,411	949	242	5	.....	3,581	281	45	3	.....	41
2	6	6	17	3	3	16	8	11	2	.....	42
2	.....	1	7	13	16	.....	1	5	24	9	43
.....	1	2	5	6	8	3	2	6	10	1	44
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	45
.....	8	1	3	.....	.....	6	1	4	1	.....	46
1	6	6	19	20	28	11	8	15	35	11	47
2,646		825	26,922	308,109	1,284,339	3,648	4,736	69,935	702,081	842,440	48
38		24	56	203	1,365	66	18	120	674	808	49
6	76	14	19	6	6	102	7	7	7	4	50
123	425	87	47	15	20	630	28	25	27	7	51
169	1,663	824	176	1	.....	2,587	226	20	.....	.....	52
1	59	9	2	.....	.....	59	9	3	.....	.....	53
5	44	5	5	.....	.....	53	2	4	.....	.....	54
2	74	3	5	1	1	81	3	1	1	.....	55
1	28	10	12	1	1	31	14	6	2	.....	56
.....	57	7	8	3	.....	63	4	5	3	.....	57

ACRES IRRIGATED						COST OF IRRIGATION WORKS AND EQUIPMENT					
No acres[1]	1 to 99 acres	100 to 299 acres	300 to 1,799 acres	1,800 to 7,499 acres	7,500 to 74,999 acres	Less than $5,000	$5,000 to $14,999	$15,000 to $99,999	$100,000 to $1,499,999	$1,500,000 to $9,999,999	
1	8	4	2	.....	4	15	.....	1	3	.....	1
.....	9	4	2	.....	578	15	.....	66	512	.....	2
.....	304	1,822		.....	64,783	2,126	.....	64,783		.....	3
4,047		11,300		.....	2,125,541	15,347	.....	2,125,541		.....	4
3,845		11,300		.....	2,124,623	15,145	.....	2,124,623		.....	5
202		.....		.....	918	202	.....	918		.....	6
505		2,450		.....	136,276	2,955	.....	136,276		.....	7
13.31		6.20		.....	32.81	7.22	.....	32.81		.....	8
8.01		4.61		.....	15.60	5.19	.....	15.60		.....	9
.....	5	4	2	.....	3	11	.....	.....	3	.....	10
.....	172	1,822		.....	49,203	1,994	.....	.....	49,203	.....	11
.....	210	4,473		.....	27,983	4,683	.....	.....	27,983	.....	12
.....	1.22	2.45		.....	0.57	2.35	.....	.....	0.57	.....	13
.....	.....	.....	.....	.....	230,915	.....	.....	.....	230,915	.....	14
.....	.....	.....	.....	.....	4.69	.....	.....	.....	4.69	.....	15
.....	.....	.....	.....	.....	165,650	.....	.....	.....	165,650	.....	16
.....	.....	.....	.....	.....	1.39	.....	.....	.....	1.39	.....	17
.....	.....	.....	.....	.....	58,500	.....	.....	300	58,200	.....	18

[3] Indebtedness and arrearage were reported only by enterprises serving 5 or more farms.
[4] Data for 1 "No farms" enterprise are included with "5 to 24 farms" enterprises in the 1940 Census.
[5] Data are included only in State total because less than 3 enterprises reported in the 1940 Census.

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
	INDEBTEDNESS AND ARREARAGE, 1939								
19	Enterprises reporting indebtedness[2]....number...	3	.....	.....	.....	.....	1	2	.....
20	(a) Area irrigated in these enterprises....acres....	52,102	.....	.....	.....	.....	52,102		.....
21	(b) Indebtedness....dollars..	1,342,124	.....	.....	.....	.....	1,342,124		.....
22	(c) Average indebtedness per acre irrigated....dollars..	25.76	.....	.....	.....	.....	25.76		.....
23	(d) Cost of irrigation works and equipment....dollars..	1,824,623	.....	.....	.....	.....	1,824,623		.....
24	(e) Investment in water rights....dollars..	918	.....	.....	.....	.....	918		.....
25	(f) Total investment....dollars..	1,825,541	.....	.....	.....	.....	1,825,541		.....
26	(g) Maintenance and operation....dollars..	14,056	.....	.....	.....	.....	14,056		.....
27	(h) Total annual charges[3]....dollars..	216,988	.....	.....	.....	.....	216,988		.....
28	(i) Total charges collected[3]....dollars..	37,754	.....	.....	.....	.....	37,754		.....
29	(j) Area against which annual charges were assessed....acres....	152,969	.....	.....	.....	.....	152,969		.....
30	(k) Average indebtedness per acre assessed....dollars..	8.32	.....	.....	.....	.....	8.32		.....
31	(l) Average charges per acre assessed....dollars..	1.42	.....	.....	.....	.....	1.42		.....
32	(m) Average charges per acre irrigated....dollars..	5.94	.....	.....	.....	.....	5.94		.....
33	Enterprises reporting arrearage[2]....number...	[4]1	.....	.....	.....	.....	.....	[4]1	.....
	TYPE, 1940								
34	Individual and partnership....number...	14	1	12	1	.....	.....	.....	.....
35	Cooperative (incorporated and unincorporated)....number...	1	.....	1	.....	.....	.....	.....	.....
36	Irrigation district....number...	2	.....	.....	.....	.....	1	1	.....
37	Commercial....number...	1	.....	.....	.....	.....	.....	1	.....
38	U. S. Bureau of Reclamation....number...	1	.....	.....	.....	.....	1	.....	.....
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939								
39	Enterprises reporting pay roll....number...	[4]2	.....	.....	.....	.....	.....	[4]2	.....
	SOURCE OF SUPPLEMENTAL WATER SUPPLY, 1939								
40	Streams, pumped....number...	12	.....	11	1	.....	.....	.....	.....
41	Wells, pumped or flowing....number...	2	1	1	.....	.....	.....	.....	.....
42	Streams, gravity or storage....number...	5	.....	1	.....	.....	2	2	.....

[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.

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.			
			Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Amount	Departure[1]	Annual mean	Departure[1]
Rio Grande River		*Feet*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Inches*	*Degrees F.*	*Degrees F.*
El Paso	El Paso	3,710	4.51	-4.65	0.47	-1.35	1.17	-0.06	0.46	-0.71	2.41	-2.53	64.8	+1.5
Fort Davis	Jeff Davis	4,800	14.19	-1.13	2.66	+0.22	2.41	+1.27	2.46	-1.11	6.66	-1.51	.....	.....
Fort Stockton	Pecos	3,050	10.69	-3.80	1.73	-1.11	3.50	+2.00	1.66	-2.49	3.80	-2.20	66.8	+1.7
Del Rio	Val Verde	957	13.07	-6.83	1.12	-2.64	2.35	+0.53	3.38	-3.84	6.22	-0.88	70.4	+0.8
Rio Grande	Starr	168	13.19	-3.34	0.77	-2.81	1.60	-0.84	4.82	-0.57	6.00	+0.88	73.0	-1.0
Brownsville	Cameron	35	28.73	+1.33	3.45	-3.38	2.05	-1.92	16.58	+10.01	6.65	-3.38	73.6	+0.5
Baffins Bay														
Hebbronville	Jim Hogg	550	19.69	-0.87	4.76	+0.68	1.24	-1.75	6.50	-0.57	7.19	+0.77	.....	.....
Neuces River														
Uvalde	Uvalde	937	19.47	-6.02	1.69	-3.14	2.73	-0.46	3.24	-7.12	11.81	+4.70	71.4	+1.2
Cotulla	La Salle	425	19.70	-1.78	3.64	-0.54	1.53	-2.05	8.84	+1.07	5.69	-0.26	.....	.....
George West	Live Oak	161	18.98	-4.22	5.10	-1.64	2.10	-1.78	4.06	-1.69	7.72	+0.89	.....	.....
Guadalupe River														
Boerne	Kendall	1,412	21.68	-12.08	1.93	-6.67	5.05	-0.64	4.62	-6.19	10.08	+1.42	67.6	+1.8
Hallettsville	Lavaca	235	34.70	-0.15	6.49	-3.20	5.97	-1.31	10.02	-0.19	12.22	+4.55	69.5	-0.4
Goliad	Goliad	164	24.55	-6.44	4.84	-3.47	3.17	-2.65	5.24	-3.58	11.30	+3.26	.....	.....
Colorado River														
Lovington, N. Mex	Lea	3,900	13.04	-2.13	0.74	-2.20	1.94	+0.64	4.60	+0.67	5.76	-1.24	60.3	+0.3
Seminole	Gaines	3,275	13.35	-2.33	1.57	-1.75	2.18	+0.43	4.67	+0.02	4.93	-1.03	63.0	+2.1
San Angelo	Tom Green	1,847	14.70	-6.51	2.23	-2.44	2.07	-0.76	5.07	-2.00	5.33	-1.31	66.1	+1.3
Llano	Llano	1,040	17.67	-6.58	1.14	-4.87	4.32	+0.08	5.99	-2.44	6.22	+0.65	68.2	+1.1
Columbus	Colorado	206	34.45	-3.98	9.55	-1.51	8.79	+0.55	6.28	-4.76	9.83	+1.74	.....	.....
Brazos River														
Portales, N. Mex	Roosevelt	4,004	17.44	-4.09	3.14	-3.15	2.34	+1.05	4.86	-1.29	7.10	-0.70	57.0	+0.1
Lubbock	Lubbock	3,242	10.80	-8.73	0.81	-2.98	2.73	+1.07	2.77	-3.94	4.49	-2.88	61.7	+2.1
Abilene	Taylor	1,726	19.33	-5.84	2.67	-2.52	2.78	-0.48	10.96	+1.30	2.92	-4.14	66.9	+2.9
Hamilton	Hamilton	.....	24.58	-5.92	2.78	-4.18	7.42	+2.44	10.73	-0.88	3.67	-3.30	.....	.....
Cameron	Milam	393	24.96	-10.52	3.88	-5.45	8.92	+0.86	9.38	-1.68	2.78	-4.25	.....	.....
Richmond	Fort Bend	.....	38.56	-3.35	7.29	-3.60	5.58	-3.02	9.85	-1.88	15.84	+5.15	.....	.....
San Jacinto River														
Houston	Harris	41	36.38	-10.67	7.03	-4.76	9.60	-0.78	7.54	-5.11	12.21	-0.02	70.4	+1.3
Trinity River														
Weatherford	Parker	1,010	22.48	-8.77	3.10	-3.77	5.57	+0.18	11.37	-0.40	2.44	-4.78	65.6	+1.5
Corsicana	Navarro	445	29.79	-6.17	4.76	-4.43	10.33	+2.78	11.09	-0.54	3.61	-3.98	68.3	+2.0
Palestine	Anderson	492	31.19	-9.54	6.02	-4.40	11.53	+1.56	10.12	-2.46	3.52	-4.24	67.4	+1.4
Huntsville	Walker	400	48.05	+3.62	11.58	-0.39	14.39	+3.59	17.06	+3.35	5.02	-2.93	68.4	+1.2
Liberty	Liberty	38	43.98	-5.61	7.89	-6.85	15.93	+5.62	7.22	-6.88	12.94	+1.50	69.0	-0.2
Sabine River														
Greenville	Hunt	550	32.19	-5.08	4.54	-4.37	12.00	+4.48	10.13	-2.00	5.52	-3.19	65.9	+0.8
Marshall	Harrison	375	39.25	-9.97	9.89	-2.47	15.77	+2.15	9.04	-4.48	4.55	-5.17	68.0	+1.8
Lufkin	Angelina	.....	[2]45.15	[2]+4.26	[2]10.75	[2]+4.24	20.14	+8.45	6.48	-6.43	7.78	-2.00	67.7	0.0
Orange	Orange	.....	39.53	-10.68	7.84	-4.60	8.53	-2.88	10.87	-1.84	12.29	-1.36	.....	.....
Canadian River (Arkansas River)														
Clayton, N. Mex	Union	5,049	12.84	-3.81	2.16	-0.24	2.46	+0.93	5.06	-1.00	3.16	-3.50	53.7	+0.3
Dalhart	Dallam	3,998	16.00	-3.30	3.07	+0.21	2.85	+1.44	5.47	-2.90	4.61	-2.05	55.0	+0.6
Red River														
Dimmitt (near)	Castro	3,865	14.39	-4.68	2.97	-0.62	2.74	+1.35	6.09	-0.24	2.59	-5.17	.....	.....
Crowell	Foard	.....	18.79	-5.93	2.10	-3.16	5.44	+2.18	7.13	-2.12	4.12	-2.83	.....	.....
Henrietta	Clay	915	17.49	-9.96	2.75	-3.38	6.65	+2.65	5.91	-4.18	2.18	-5.05	65.6	+2.0
Sherman	Grayson	745	34.98	-2.02	3.34	-5.14	12.38	+5.31	12.58	+0.47	6.68	-2.66	65.8	+1.6
Sacramento-Salt Lakes														
Van Horn	Culberson	4,010	([3])	([3])	([3])	([3])	1.19	([3])	2.11	([3])	7.20	([3])	.....	.....
Valentine	Jeff Davis	4,421	9.82	([3])	1.72	([3])	1.68	([3])	1.46	([3])	4.96	([3])	.....	.....

[1]Departure from normal. [2]Does not include data for December 1938. [3]Data not available.

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

ACRES IRRIGATED						COST OF IRRIGATION WORKS AND EQUIPMENT					
No acres[1]	1 to 99 acres	100 to 299 acres	300 to 1,799 acres	1,800 to 7,499 acres	7,500 to 74,999 acres	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	.....	.....	1	2	.....	19
.....	.....	.....	.....	.....	52,102	.....	.....	52,102		.....	20
.....	.....	.....	.....	.....	1,342,124	.....	.....	1,342,124		.....	21
.....	.....	.....	.....	.....	25.76	.....	.....	25.76		.....	22
.....	.....	.....	.....	.....	1,824,623	.....	.....	1,824,623		.....	23
.....	.....	.....	.....	.....	918	.....	.....	918		.....	24
.....	.....	.....	.....	.....	1,825,541	.....	.....	1,825,541		.....	25
.....	.....	.....	.....	.....	14,056	.....	.....	14,056		.....	26
.....	.....	.....	.....	.....	216,988	.....	.....	216,988		.....	27
.....	.....	.....	.....	.....	37,754	.....	.....	37,754		.....	28
.....	.....	.....	.....	.....	152,969	.....	.....	152,969		.....	29
.....	.....	.....	.....	.....	8.32	.....	.....	8.31		.....	30
.....	.....	.....	.....	.....	1.42	.....	.....	1.42		.....	31
.....	.....	.....	.....	.....	5.94	.....	.....	5.94		.....	32
.....	.....	.....	.....	.....	[4]1	.....	.....	.....	[4]1	.....	33
1	8	4	1	.....	.....	14	.....	.....	.....	.....	34
.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	2	.....	.....	1	1	.....	36
.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	37
.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	38
.....	.....	.....	.....	.....	[4]2	.....	.....	.....	[4]2	.....	39
.....	7	3	2	.....	.....	12	.....	.....	.....	.....	40
1	1	.....	.....	.....	.....	2	.....	.....	.....	.....	41
.....	.....	1	.....	.....	4	1	.....	1	3	.....	42

[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]Data are not shown because less than 3 enterprises reported in the 1940 Census.

CLIMATOLOGICAL INFLUENCES ON WATER SUPPLIES

Precipitation.—The average amount of precipitation, 24.69 inches, was 5.49 inches below normal in Texas for the calendar year 1939, as reported by the U. S. Weather Bureau. Precipitation averaged below normal in all divisions. Annual amounts and departures from normal (in inches) for the three divisions were as follows: Western, 14.75, minus 3.02; middle, 20.99, minus 5.92; eastern, 36.87, minus 4.98. Annual amounts of precipitation ranged from 51.32 inches at Bronson, Sabine County, to 5.91 inches at El Paso, El Paso County. The greatest monthly amount of precipitation was 15.50 inches at Angleton, Brazoria County, in July, and the greatest amount in 24 consecutive hours was 11.55 inches at Richmond, Fort Bend County, on July 12. The number of stations reporting no rain during the several months was as follows: February, 8; March, 4; April, 6; July, 1; and September, 27.

The average precipitation for the water year (October 1938 through September 1939) at the 39 stations shown in State table 18 with full records, and which are representative of the major drainage basins in Texas, was 23.31 inches, indicating an average deficiency of -5.19 inches at these stations.

Local storms occurred frequently during the first half of the year, but were less numerous thereafter. Total damage from tornadoes, straight-line winds, and hail amounted to over $2,000,000; 7 persons were killed and 130 were injured.

Temperature.—The average temperature for the State for 1939, 67.1°, was 0.9° above normal. Sunshine was deficient during March and November; excessive during May and September; ample during the other months of the year. Temperatures averaged above normal in all divisions. The highest annual mean temperature was 74.7° at Harlingen, Cameron County, and at Mercedes, Hidalgo County, and the lowest mean was 55.0° at Dalhart, Dallam County. The highest temperature recorded during the year was 114° at Seymour, Baylor County, on July 8; at Encinal, La Salle County, on July 9; and at Cleburne, Johnson County, on September 2. The lowest temperature reported was 9° below zero at Muleshoe, Bailey County, on December 27.

The weather was generally unfavorable for crops during the year. Prospects early in the year were good, but continued dry weather and unusually high temperatures during the middle and latter portions of the summer caused a decline in the expected quality and quantity of most crops. Early cotton matured in mostly good condition, but late cotton was poor to only fair, with much premature opening, blooming on top, and shedding reported in west-central and north-central districts. Little top crop was harvested. Spring wheat was in mostly good condition when harvested, except in the northwestern portion of the State, where poor to only fair. Germination of winter wheat was hindered by lack of moisture, with condition only fair as the year closed. Early corn made good progress and matured in good condition, but late corn wilted badly under high temperatures and matured in poor condition. Truck was in fair to good condition in upper coast areas and in irrigated sections of extreme south, but only poor to fair elsewhere. Ranges dried rapidly during the latter part of the year, necessitating much livestock feeding. Range cattle were beginning to show the effects of subnormal grazing and lack of sufficient range water by the end of the year. After a late start, rice made rapid progress and was in fair to good condition when harvested.

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

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	STATE TOTAL[1]	GULF OF MEXICO			
			Total		Rio Grande River	
					Total	
	IRRIGATED FARMS AND AREAS					
1	Irrigated farms....1939...number....	30,670	30,667		24,059	
2	Area irrigated....1939...acres....	1,045,224	1,045,200		462,703	
3	(a) Cropland harvested....1939...acres....	961,765	961,741		415,442	
4	(b) Crop failure....1939...acres....	12,589	12,589		8,882	
5	(c) Pasture....1939...acres....	70,870	70,870		38,379	
6	Area irrigated....1929...acres....	798,917	798,917		537,327	
7	1919...acres....	586,120	586,120		315,693	
8	Increase or decrease (-), 1929-1939....percent....	30.8	30.8		-13.9	
9	Irrigable area in enterprises....1940...acres....	2,180,796	2,180,768		892,827	
10	1930...acres....	1,566,876	1,566,876		806,935	
11	1920[2]...acres....	1,687,447	1,687,447		883,708	
12	Excess of irrigable area over the area irrigated..1940...acres....	1,135,572	1,135,568		430,124	
13	1930...acres....	767,959	767,959		269,608	
14	1920[2]...acres....	1,101,327	1,101,327		568,015	
15	Area works were capable of supplying with water...1940...acres....	1,773,812	1,773,784		808,569	
16	1930...acres....	1,177,415	1,177,415		682,547	
17	1920...acres....	1,150,542	1,150,542		681,502	
18	Increase or decrease (-), 1930-1940....percent....	50.7	50.7		18.5	
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres....	728,588	728,584		345,866	
20	1930...acres....	378,498	378,498		145,220	
21	1920...acres....	564,422	564,422		386,809	
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent....	58.9	58.9		57.2	
23	1929...percent....	67.9	67.9		78.7	
24	1919...percent....	50.9	50.9		46.3	
	CAPITAL INVESTED TO JANUARY 1					
25	Total investment in irrigation enterprises....1940...dollars....	66,441,376	66,440,776		41,083,420	
26	(a) Cost of irrigation works and equipment....1940...dollars....	65,884,261	65,883,661		40,682,060	
27	(b) Investment in water rights (reported)....1940...dollars....	557,115	557,115		401,360	
28	Total investment in irrigation enterprises....1930...dollars....	49,022,164	49,022,164		30,690,311	
29	1920...dollars....	35,072,739	35,072,739		18,925,769	
30	Increase or decrease (-), 1930-1940....percent....	35.5	35.5		33.9	
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars....	37.46	37.46		50.81	
32	1930...dollars....	41.64	41.64		44.96	
33	1920...dollars....	30.48	30.48		27.77	
34	Average investment per acre irrigated....1939...dollars....	63.57	63.57		88.79	
35	Estimated final investment in existing enterprises..1940...dollars....	67,319,032	67,318,432		41,845,571	
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars....	30.87	30.87		46.87	
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterprises	Supplemental Enterprises	Primary Enterprises	Supplemental Enterprises	Primary Enterprises	Supplemental Enterprises
37	Enterprises reporting maintenance and operation...1939...number....	3,277	14	3,277	14	519	10
38	Area irrigated in these enterprises....1939...acres....	1,002,202	51,197	1,002,202	51,197	456,710	42,049
39	Cost of maintenance and operation....1939...dollars....	3,865,224	32,666	3,865,224	32,666	1,595,735	28,696
40	Average cost, per acre irrigated....1939...dollars....	3.86	0.64	3.86	0.64	3.49	0.68
41	Total annual charges (reported)[4 5]....1939...dollars....	3,855,789	230,915	3,855,789	230,915	1,896,624	218,010
42	Average annual charge per acre irrigated....1939...dollars....	5.61	4.69	5.61	4.69	4.54	5.29
43	Area against which charges were assessed....1939...acres....	1,087,092	165,650	1,087,092	165,650	805,100	151,150
44	Average annual charge per acre assessed....1939...dollars....	3.55	1.39	3.55	1.39	2.36	1.44
45	Total charges collected[4]....1939...dollars....	3,671,948	58,500	3,671,948	58,500	1,859,800	45,215
46	Indebtedness to December 31 (reported)[5]....1939...dollars....	34,699,264	1,342,124	34,699,264	1,342,124	26,679,351	1,131,624
	WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered....1939...number....	3,593	16	3,592	16	497	12
48	Area irrigated by these enterprises....1939...acres....	1,017,411	22,807	1,017,391	22,807	443,030	13,659
49	Water delivered....1939...acre-feet..	2,404,098	32,212	2,403,998	32,212	940,788	12,641
50	Average water delivered per acre irrigated....1939...acre-feet..	2.4	1.4	2.4	1.4	2.1	0.9
51	Average cost of water per acre irrigated....1939...dollars....	4.85	1.39	4.85	1.39	4.51	1.16
52	Average cost of water per acre-foot delivered..1939...dollars....	2.05	0.98	2.05	0.98	2.12	1.26
	DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage....1939...number....	95	.....	95	.....	31	.....
54	Irrigable area in these enterprises....1939...acres....	857,141	.....	857,141	.....	654,763	.....
55	Irrigated area in these enterprises....1939...acres....	397,227	.....	397,227	.....	335,765	.....
56	Area for which drains have been installed....1939...acres....	553,850	.....	553,850	.....	438,687	.....
57	Additional area needing drainage....1939...acres....	106,837	.....	106,837	.....	66,270	.....

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

CENSUS OF IRRIGATION — TEXAS

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

GULF OF MEXICO—Continued											
Rio Grande River—Continued				Guadalupe River			Colorado River			Brazos River	
Direct (1)	Pecos River (2)	Baffins Bay	Nueces River (4)	Total	Direct (5)	San Antonio River (6)	Total	Direct (7)	Llano River (8)	Total	
23,312	747	50	800	1,494	148	1,346	884	803	81	1,243	1
400,405	62,298	849	49,082	43,133	12,821	30,312	83,479	82,954	525	163,324	2
365,730	49,712	749	30,709	38,965	12,716	26,249	81,268	80,796	472	158,309	3
4,333	4,549	88	511	885	41	644	27	26	1	1,079	4
30,342	8,037	12	17,862	3,483	64	3,419	2,194	2,132	52	3,936	5
459,557	46,677	.....	38,787	9,686	.....	9,686	61,888	.....	.....	21,560	6
254,186	57,418	.....	13,763	13,179	.....	13,179	71,278	.....	.....	7,535	7
-12.9	33.5	.....	26.5	345.3	.....	212.9	34.9	.....	.....	657.5	8
741,491	151,336	1,475	79,949	74,728	29,719	45,009	269,423	268,599	824	281,241	9
620,665	132,981	.....	52,859	46,838	.....	45,838	224,368	.....	.....	47,417	10
705,270	172,043	.....	50,006	61,789	.....	61,789	277,268	.....	.....	22,896	11
341,088	89,038	626	30,867	31,595	16,898	14,697	185,944	185,645	299	117,917	12
161,108	86,284	.....	14,072	36,152	.....	36,152	162,480	.....	.....	25,857	13
451,084	114,625	.....	36,253	48,610	.....	48,610	205,990	.....	.....	15,361	14
682,704	125,865	1,246	77,396	62,566	17,619	44,947	173,601	172,782	819	266,168	15
574,817	72,054	.....	45,708	35,146	.....	35,146	140,626	.....	.....	30,061	16
555,761	120,492	.....	31,977	60,177	.....	60,177	125,666	.....	.....	19,560	17
18.8	74.7	.....	69.3	78.0	.....	27.9	23.4	.....	.....	785.4	18
282,299	63,567	397	28,314	19,433	4,798	14,635	90,122	89,828	294	102,844	19
115,260	25,377	.....	6,921	25,460	.....	25,460	78,738	.....	.....	8,501	20
301,575	63,074	.....	18,224	46,998	.....	46,998	54,388	.....	.....	12,025	21
58.6	49.5	68.1	63.4	68.9	72.8	67.4	48.1	48.0	64.1	61.4	22
79.9	64.8	.....	84.9	27.6	.....	27.6	44.0	.....	.....	71.7	23
45.7	47.7	.....	43.0	21.9	.....	21.9	56.7	.....	.....	38.5	24
37,584,986	3,498,434	107,512	2,434,960	5,178,837	315,393	4,863,444	2,738,613	2,684,325	54,288	3,439,288	25
37,192,994	3,489,066	102,512	2,420,737	5,176,566	313,442	4,863,124	2,673,835	2,619,552	54,283	3,418,229	26
391,992	9,368	5,000	14,223	2,271	1,951	320	64,778	64,773	5	21,059	27
27,068,049	2,243,187	.....	3,071,489	3,038,635	.....	3,038,635	1,914,643	.....	.....	657,655	28
16,208,058	2,219,595	.....	1,326,555	5,087,542	.....	5,087,542	3,560,916	.....	.....	569,543	29
38.9	56.0	.....	-20.7	70.4	.....	60.1	43.0	.....	.....	423.0	30
55.05	27.80	86.29	31.46	82.77	17.90	108.20	15.78	15.54	66.29	12.92	31
47.09	31.13	.....	67.20	86.46	.....	86.46	13.62	.....	.....	21.87	32
29.16	18.42	.....	41.48	84.54	.....	84.54	28.34	.....	.....	29.12	33
93.87	56.16	.....	19.61	120.07	24.60	160.45	32.81	32.36	103.41	21.06	34
38,299,562	3,546,009	113,012	2,452,725	5,180,162	316,038	4,864,124	2,744,443	2,697,605	56,838	3,491,716	35
51.65	23.43	76.62	30.68	69.32	10.63	108.07	10.19	10.01	68.98	12.42	36
Primary Enterprises	Sup. Enterprises	Primary Enterprises	Sup. Enterprises		Primary Enterprises	Sup. Enterprises				Primary Enterprises	Sup. Enterprises
417	9	102	1	44	477	2	181	99	82	376	312	64	853	2	37
394,878	13,527	61,832	(3)	682	43,682	(3)	38,930	10,892	28,038	81,194	80,711	483	148,852	(3)	38
1,509,929	15,737	85,806	(3)	11,198	134,951	(3)	151,324	83,204	68,120	482,785	480,286	2,499	552,577	(3)	39
3.82	1.16	1.39	(3)	16.42	3.09	(3)	3.89	7.64	2.43	5.95	5.95	5.17	3.71	(3)	40
1,791,813	13,927	104,811	204,083	.....	10,846	12,905	121,722	28,115	92,607	572,689	572,689	.....	416,370	.....	41
4.85	1.10	2.17	7.16	.....	2.12	1.61	4.31	9.00	3.70	8.27	8.27	.....	9.47	.....	42
646,862	12,681	158,238	138,469	.....	6,964	14,500	39,339	3,235	36,104	69,253	69,253	.....	43,857	.....	43
2.77	1.10	0.66	1.47	.....	1.56	0.89	3.09	9.00	2.57	8.27	8.27	.....	9.47	.....	44
1,806,742	20,746	53,058	24,469	.....	21,397	12,985	94,188	29,115	65,073	394,202	394,202	.....	362,440	300	45
26,047,451	.....	631,900	1,131,624	.....	176,620	140,500	782,793	11,750	771,043	688,162	688,162	.....	536,947	70,000	46
401	12	96	.....	41	532	2	244	125	119	407	328	79	972	2	47
383,866	13,659	59,164	.....	680	47,973	(3)	42,833	12,739	30,094	80,486	79,961	525	161,925	(3)	48
714,024	12,641	226,764	.....	1,069	56,506	(3)	108,129	40,156	67,973	363,833	362,996	837	351,355	(3)	49
1.9	0.9	3.8	.....	1.6	1.2	(3)	2.5	3.2	2.3	4.5	4.5	1.6	2.2	(3)	50
4.90	1.16	2.01	.....	5.82	2.90	(3)	4.43	6.33	3.70	7.74	7.76	5.17	4.78	(3)	51
2.63	1.26	5.24	.....	3.70	2.46	(3)	1.76	2.01	1.64	1.71	1.71	3.25	2.21	(3)	52
23	.....	8	.....	2	1	.....	5	1	4	6	6	.....	20	.....	53
548,108	.....	106,655	.....	(3)	(3)	.....	195	(3)	45	473	473	.....	42,407	.....	54
307,145	.....	28,520	.....	(3)	(3)	.....	195	(3)	45	435	435	.....	22,033	.....	55
438,577	.....	110	.....	(3)	(3)	.....	195	(3)	45	147	147	.....	22,097	.....	56
31,357	.....	34,913	.....	(3)	.....	.....	.....	.....	.....	.....	.....	.....	300	.....	57

[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.

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

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	GULF OF MEXICO—Continued					
		Brazos River—Continued		San Jacinto River	Trinity River	Sabine River	
		Direct	Little River			Total	Direct
		(9)	(10)	(11)	(12)		(13)
	IRRIGATED FARMS AND AREAS						
1	Irrigated farms....1939...number....	1,237	6	41	267	321	72
2	Area irrigated....1939...acres....	163,253	71	9,365	47,061	56,806	10,618
3	(a) Cropland harvested....1939...acres....	158,240	69	8,819	47,054	56,806	10,618
4	(b) Crop failure....1939...acres....	1,078	1	76	7	.....	.....
5	(c) Pasture....1939...acres....	3,935	1	470	.....	.....	.....
6	Area irrigated....1929...acres....	.....	.....	.....	15,724	28,387	162
7	1919...acres....	.....	.....	.....	42,770	77,722	12,822
8	Increase or decrease (-), 1929-1939....percent....	.....	.....	.....	199.8	100.1	[1]
9	Irrigable area in enterprises....1940...acres....	281,149	92	14,649	186,041	165,512	18,137
10	1930...acres....	.....	.....	.....	36,248	133,429	8,166
11	1920[2]...acres....	.....	.....	.....	96,320	174,268	24,468
12	Excess of irrigable area over the area irrigated..1940...acres....	117,896	21	5,284	138,980	108,706	7,519
13	1930...acres....	.....	.....	.....	20,524	105,042	8,004
14	1920[2]...acres....	.....	.....	.....	53,550	96,546	11,646
15	Area works were capable of supplying with water...1940...acres....	266,076	92	14,507	69,025	88,032	18,137
16	1930...acres....	.....	.....	.....	35,131	68,429	8,166
17	1920...acres....	.....	.....	.....	52,720	102,508	20,508
18	Increase or decrease (-), 1930-1940....percent....	.....	.....	.....	96.5	28.6	122.1
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres....	102,823	21	5,142	21,964	31,226	7,519
20	1930...acres....	.....	.....	.....	19,407	40,042	8,004
21	1920...acres....	.....	.....	.....	9,950	24,786	7,686
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent....	61.4	77.2	64.6	68.2	64.5	58.5
23	1929...percent....	.....	.....	.....	44.8	41.5	2.0
24	1919...percent....	.....	.....	.....	81.1	75.8	62.5
	CAPITAL INVESTED TO JANUARY 1						
25	Total investment in irrigation enterprises....1940...dollars....	3,432,853	6,435	313,892	909,643	3,571,189	631,622
26	(a) Cost of irrigation works and equipment....1940...dollars....	3,411,794	6,435	313,875	906,634	3,528,867	589,336
27	(b) Investment in water rights (reported)....1940...dollars....	21,059	.....	17	3,009	42,322	42,286
28	Total investment in irrigation enterprises....1930...dollars....	.....	.....	.....	480,470	2,808,088	112,960
29	1920...dollars....	.....	.....	.....	1,743,621	1,942,705	345,935
30	Increase or decrease (-), 1930-1940....percent....	.....	.....	.....	89.3	27.2	459.2
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars....	12.90	69.95	21.64	13.18	40.57	34.83
32	1930...dollars....	.....	.....	.....	13.68	41.04	13.83
33	1920...dollars....	.....	.....	.....	33.07	18.95	16.87
34	Average investment per acre irrigated....1939...dollars....	21.03	90.63	33.52	19.33	62.87	59.49
35	Estimated final investment in existing enterprises..1940...dollars....	3,485,281	6,435	319,692	910,343	3,571,689	631,622
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars....	12.40	69.95	21.82	4.89	21.58	34.83
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterprises	Supplemental Enterprises				
37	Enterprises reporting maintenance and operation...1939...number....	848	2	5	39	57	37	5
38	Area irrigated in these enterprises....1939...acres....	148,785	[3]	67	9,249	46,845	56,766	10,578
39	Cost of maintenance and operation....1939...dollars....	552,280	[3]	297	53,592	342,140	235,080	29,840
40	Average cost, per acre irrigated....1939...dollars....	3.71	[3]	4.43	5.79	7.30	4.14	2.82
41	Total annual charges (reported)[4] [5]....1939...dollars....	416,370	.....	.....	.....	415,841	361,845	73,500
42	Average annual charge per acre irrigated....1939...dollars....	9.47	.....	.....	.....	9.00	7.63	7.00
43	Area against which charges were assessed....1939...acres....	43,957	.....	.....	.....	46,225	47,440	10,500
44	Average annual charge per acre assessed....1939...dollars....	9.47	.....	.....	.....	9.00	7.69	7.00
45	Total charges collected[4]....1939...dollars....	362,440	300	.....	.....	310,888	378,643	71,138
46	Indebtedness to December 31 (reported)[5]....1939...dollars....	586,947	70,000	.....	.....	89,672	2,150,031	483,750
	WATER DELIVERED TO IRRIGATORS, 1939						
47	Enterprises reporting water delivered....1939...number....	969	2	3	41	68	35	5
48	Area irrigated by these enterprises....1939...acres....	161,906	[3]	19	9,365	46,988	56,760	10,578
49	Water delivered....1939...acre-feet..	351,315	[3]	40	22,634	192,405	223,225	30,129
50	Average water delivered per acre irrigated....1939...acre-feet..	2.2	[3]	2.1	2.4	4.1	3.9	2.8
51	Average cost of water per acre irrigated....1939...dollars....	4.78	[3]	4.80	5.79	9.03	6.63	6.96
52	Average cost of water per acre-foot delivered..1939...dollars....	2.21	[3]	2.25	2.40	2.20	1.89	2.44
	DRAINAGE OF IRRIGATED LAND						
53	Enterprises reporting land drained or needing drainage....1939...number....	18	.....	2	4	15	3	.....
54	Irrigable area in these enterprises....1939...acres....	42,379	.....	[3]	2,125	150,221	1,410	.....
55	Irrigated area in these enterprises....1939...acres....	22,025	.....	[3]	565	33,163	1,032	.....
56	Area for which drains have been installed....1939...acres....	22,085	.....	[3]	1,075	85,143	1,206	.....
57	Additional area needing drainage....1939...acres....	300	.....	.....	.....	40,022	.....	.....

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

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

	ITEM (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A map index-number is shown in parentheses for each drainage basin)	GULF OF MEXICO—Continued							INDEPENDENT BASIN
		Sabine River—Con.	Mississippi River						
				Arkansas River					
				Canadian River					
		Neches River (14)	Total	Total	Direct (16)	Mustang Creek (17)	North Canadian River (18)	Red River (19)	Sacramento-Salt Lakes (21)
	IRRIGATED FARMS AND AREAS								
1	Irrigated farms....1939...number	249	1,508	61	33	10	18	1,447	3
2	Area irrigated....1939...acres	46,188	129,398	1,859	1,211	467	181	127,539	24
3	(a) Cropland harvested....1939...acres	46,188	123,620	1,704	1,178	348	178	121,916	24
4	(b) Crop failure....1939...acres	.....	1,234	145	26	119	.....	1,089	.....
5	(c) Pasture....1939...acres	.....	4,544	10	7	.....	3	4,534	.....
6	Area irrigated....1929...acres	28,225	39,070	466	.....	.....	.....	38,604	.....
7	1919...acres	64,900	6,963	440	.....	.....	.....	6,523	.....
8	Increase or decrease (-), 1929-1939....percent	63.6	231.2	298.9	.....	.....	.....	230.4	.....
9	Irrigable area in enterprises....1940...acres	147,375	214,923	3,900	1,872	1,539	489	211,023	28
10	1930...acres	125,263	54,968	766	.....	.....	.....	54,202	.....
11	1920[1]...acres	149,800	23,353	840	.....	.....	.....	22,513	.....
12	Excess of irrigable area over the area irrigated..1940...acres	101,187	85,525	2,041	661	1,072	308	83,484	4
13	1930...acres	97,038	15,898	300	.....	.....	.....	15,598	.....
14	1920[1]...acres	84,900	16,390	400	.....	.....	.....	15,990	.....
15	Area works were capable of supplying with water...1940...acres	69,895	212,674	3,851	1,862	1,539	450	208,823	28
16	1930...acres	60,263	54,820	766	.....	.....	.....	54,054	.....
17	1920...acres	82,000	13,025	440	.....	.....	.....	12,585	.....
18	Increase or decrease (-), 1930-1940....percent	16.0	287.9	402.7	.....	.....	.....	286.3	.....
19	Excess of area works were capable of supplying with water over area irrigated....1940...acres	23,707	83,276	1,992	651	1,072	269	81,284	4
20	1930...acres	32,038	15,750	300	.....	.....	.....	15,450	.....
21	1920...acres	17,100	6,062	.....	.....	.....	.....	6,062	.....
22	Proportion which area irrigated is of area works were capable of supplying with water....1939...percent	66.1	60.8	48.3	65.0	30.3	40.2	61.1	85.7
23	1929...percent	46.8	71.3	60.8	.....	.....	.....	71.4	.....
24	1919...percent	79.1	53.5	100.0	.....	.....	.....	51.8	.....
	CAPITAL INVESTED TO JANUARY 1								
25	Total investment in irrigation enterprises....1940...dollars	2,939,567	6,663,422	84,192	44,492	20,745	18,955	6,579,230	600
26	(a) Cost of irrigation works and equipment....1940...dollars	2,939,531	6,660,346	84,132	44,492	20,745	18,895	6,576,214	600
27	(b) Investment in water rights (reported)....1940...dollars	36	3,076	60	.....	.....	60	3,016	.....
28	Total investment in irrigation enterprises....1930...dollars	2,695,128	5,196,305	17,800	.....	.....	.....	5,178,505	.....
29	1920...dollars	1,396,770	439,272	69,472	.....	.....	.....	369,800	.....
30	Increase or decrease (-), 1930-1940....percent	9.1	28.2	373.0	.....	.....	.....	27.0	.....
31	Average investment based on area works were capable of supplying with water, per acre....1940...dollars	42.06	31.33	21.86	23.89	13.48	42.12	31.51	21.43
32	1930...dollars	44.72	94.79	23.24	.....	.....	.....	95.80	.....
33	1920...dollars	19.47	33.73	157.89	.....	.....	.....	29.38	.....
34	Average investment per acre irrigated....1939...dollars	63.64	51.50	45.29	36.74	44.42	104.72	51.59	25.00
35	Estimated final investment in existing enterprises..1940...dollars	2,940,067	6,689,079	88,677	46,992	22,730	18,955	6,600,402	600
36	Average investment based on estimated final investment and irrigable area, per acre....1940...dollars	19.95	31.12	22.74	25.10	14.77	38.76	31.28	21.43
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS								
37	Enterprises reporting maintenance and operation...1939...number	32	694	49	27	9	13	645	.....
38	Area irrigated in these enterprises....1939...acres	46,188	119,292	1,529	892	466	171	117,763	.....
39	Cost of maintenance and operation....1939...dollars	205,240	305,842	5,082	2,692	1,455	935	300,760	.....
40	Average cost, per acre irrigated....1939...dollars	4.44	2.56	3.32	3.02	3.12	5.47	2.55	.....
41	Total annual charges (reported)[2 3]....1939...dollars	288,345	59,852	.....	.....	.....	.....	59,852	.....
42	Average annual charge per acre irrigated....1939...dollars	7.81	2.08	.....	.....	.....	.....	2.08	.....
43	Area against which charges were assessed....1939...acres	36,940	28,814	.....	.....	.....	.....	28,814	.....
44	Average annual charge per acre assessed....1939...dollars	7.81	2.08	.....	.....	.....	.....	2.08	.....
45	Total charges collected[2]....1939...dollars	307,405	250,490	.....	.....	.....	.....	250,490	.....
46	Indebtedness to December 31 (reported)[3]....1939...dollars	1,666,281	3,545,688	.....	.....	.....	.....	3,545,688	.....
	WATER DELIVERED TO IRRIGATORS, 1939								
47	Enterprises reporting water delivered....1939...number	30	755	58	30	10	18	697	1
48	Area irrigated by these enterprises....1939...acres	46,182	127,351	1,653	1,005	467	181	125,698	(4)
49	Water delivered....1939...acre-feet	193,096	144,054	2,123	1,399	433	291	141,931	(4)
50	Average water delivered per acre irrigated....1939...acre-feet	4.2	1.1	1.3	1.4	0.9	1.6	1.1	(4)
51	Average cost of water per acre irrigated....1939...dollars	6.65	2.56	3.35	3.06	3.12	5.38	2.55	.....
52	Average cost of water per acre-foot delivered..1939...dollars	1.57	2.26	2.60	2.20	3.37	3.35	2.26	.....
	DRAINAGE OF IRRIGATED LAND								
53	Enterprises reporting land drained or needing drainage....1939...number	3	8	2	.....	.....	2	6	.....
54	Irrigable area in these enterprises....1939...acres	1,410	797	(5)	.....	.....	(5)	(5)	.....
55	Irrigated area in these enterprises....1939...acres	1,032	154	(5)	.....	.....	(5)	(5)	.....
56	Area for which drains have been installed....1939...acres	1,206	615	(5)	.....	.....	(5)	(5)	.....
57	Additional area needing drainage....1939...acres	.....	180	.....	.....	.....	.....	(5)	.....

[1] For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.
[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.
[4] Data are included only in State totals because less than 3 enterprises reported in the 1940 Census.
[5] Data are shown in Mississippi River Total only.