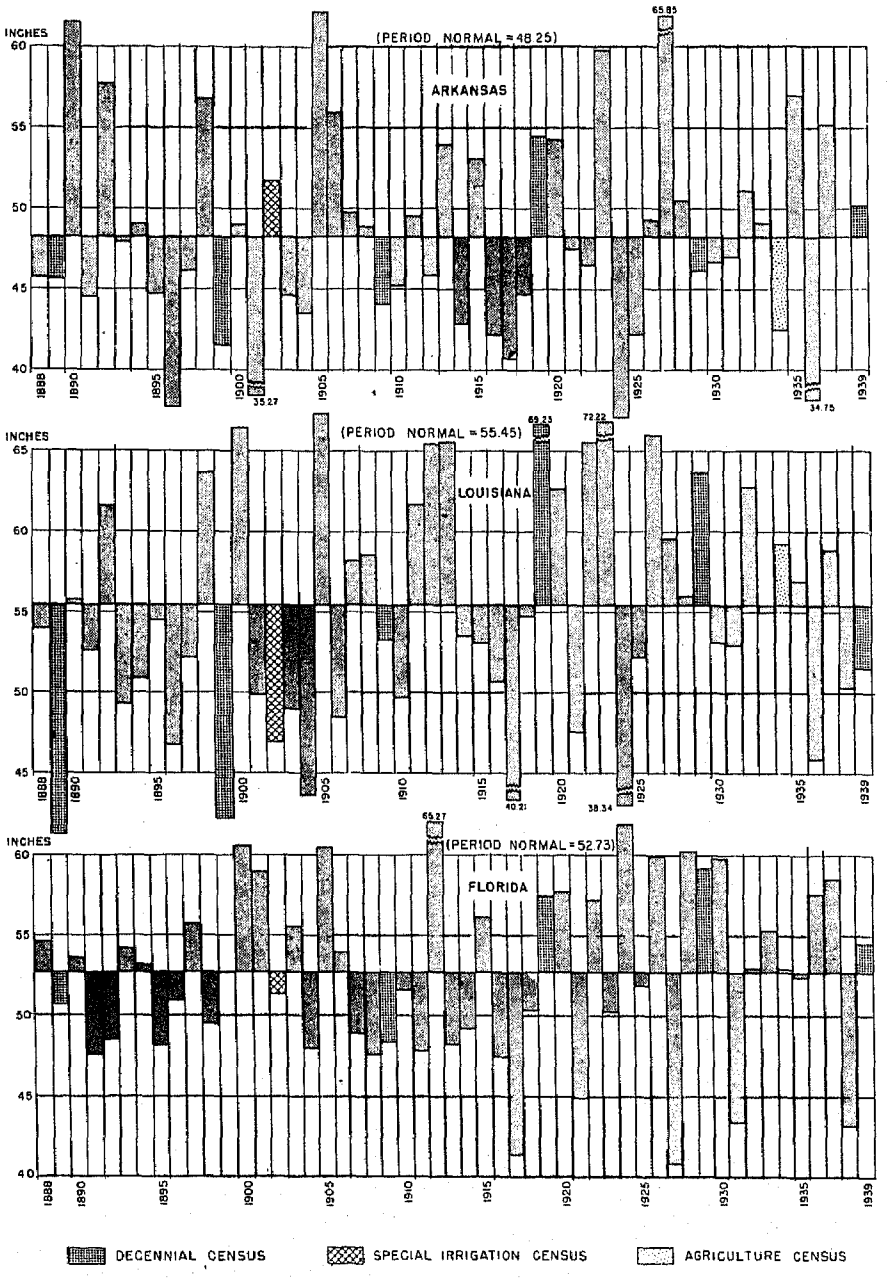
CHART I - ARKANSAS, LOUISIANA, AND FLORIDA

AVERAGE ANNUAL PRECIPITATION AND DEPARTURE FROM NORMAL 1888-1939



AVERAGE MONTHLY PRECIPITATION 1938 AND 1939

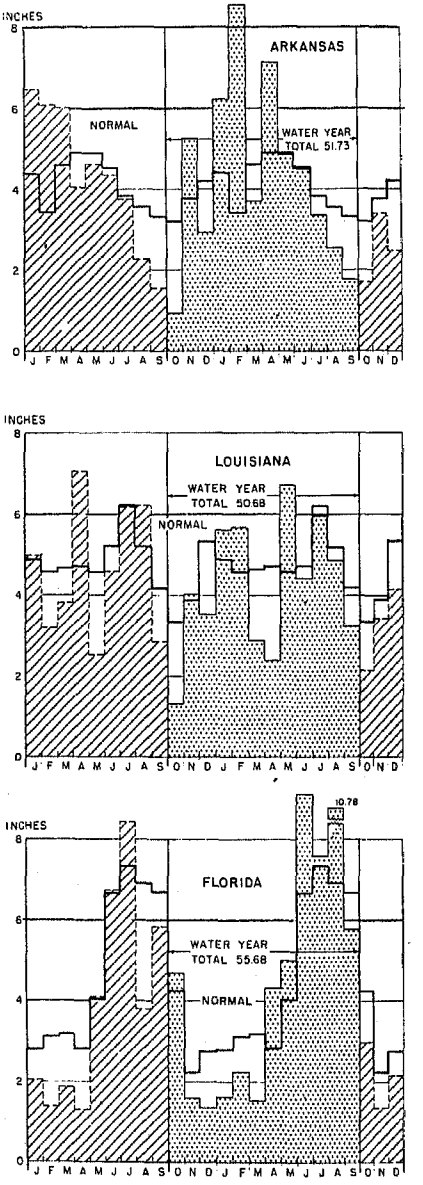
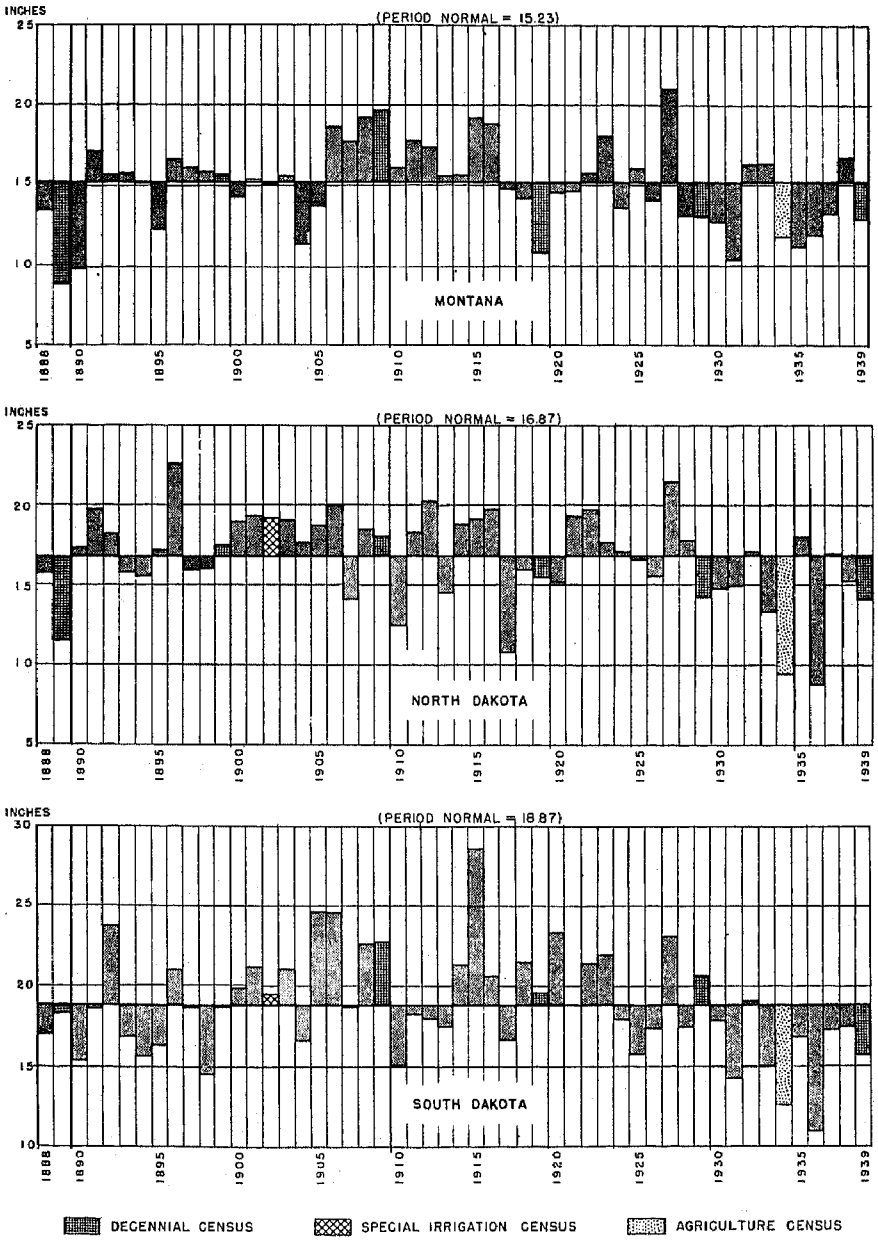


CHART II - MONTANA, NORTH DAKOTA, AND SOUTH DAKOTA

AVERAGE ANNUAL PRECIPITATION AND DEPARTURE FROM NORMAL 1888-1939



AVERAGE MONTHLY PRECIPITATION 1938 AND 1939

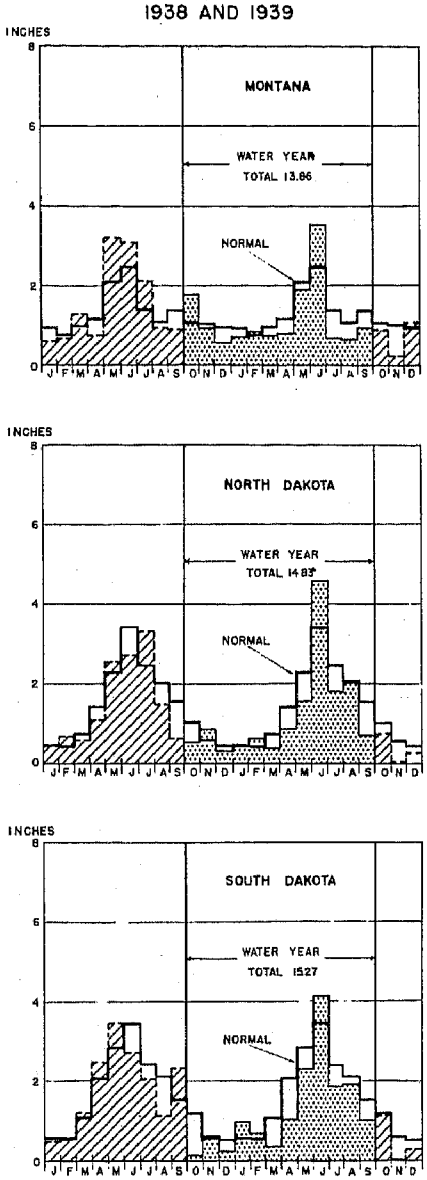
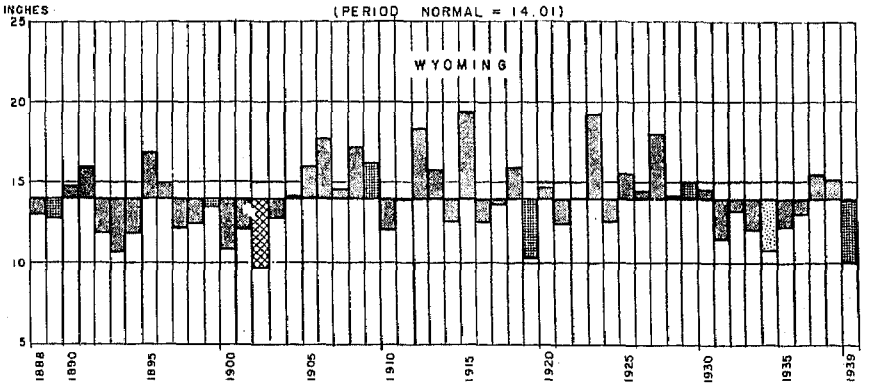
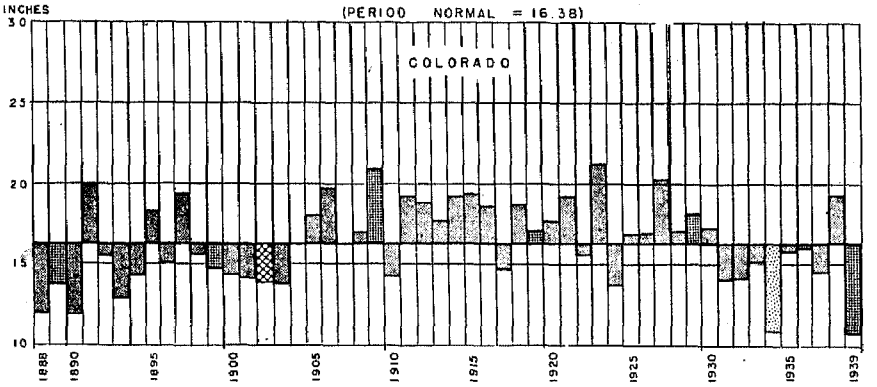
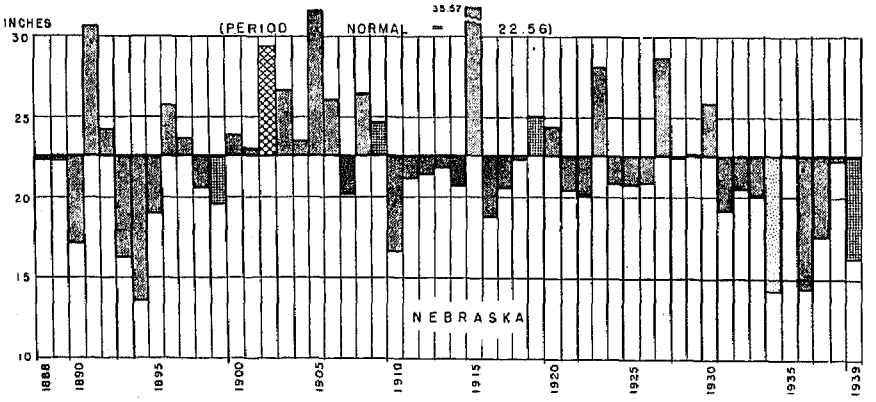


CHART III - WYOMING, COLORADO, AND NEBRASKA

AVERAGE ANNUAL PRECIPITATION AND DEPARTURE FROM NORMAL 1888-1939

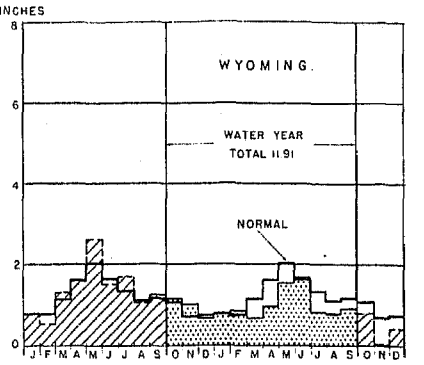


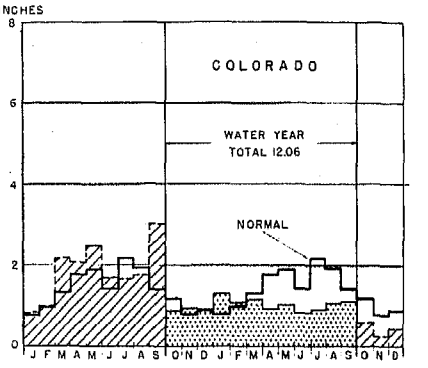




DEGENNIAL CENSUS SPECIAL IRRIGATION CENSUS AGRICULTURE CENSUS

AVERAGE MONTHLY PRECIPITATION
1938 AND 1939





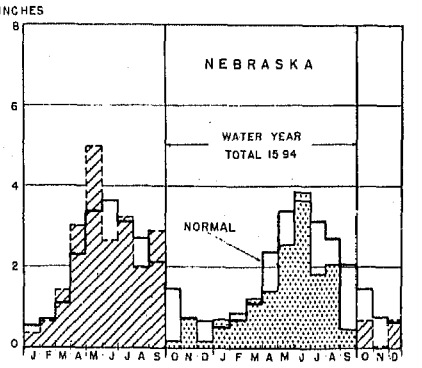
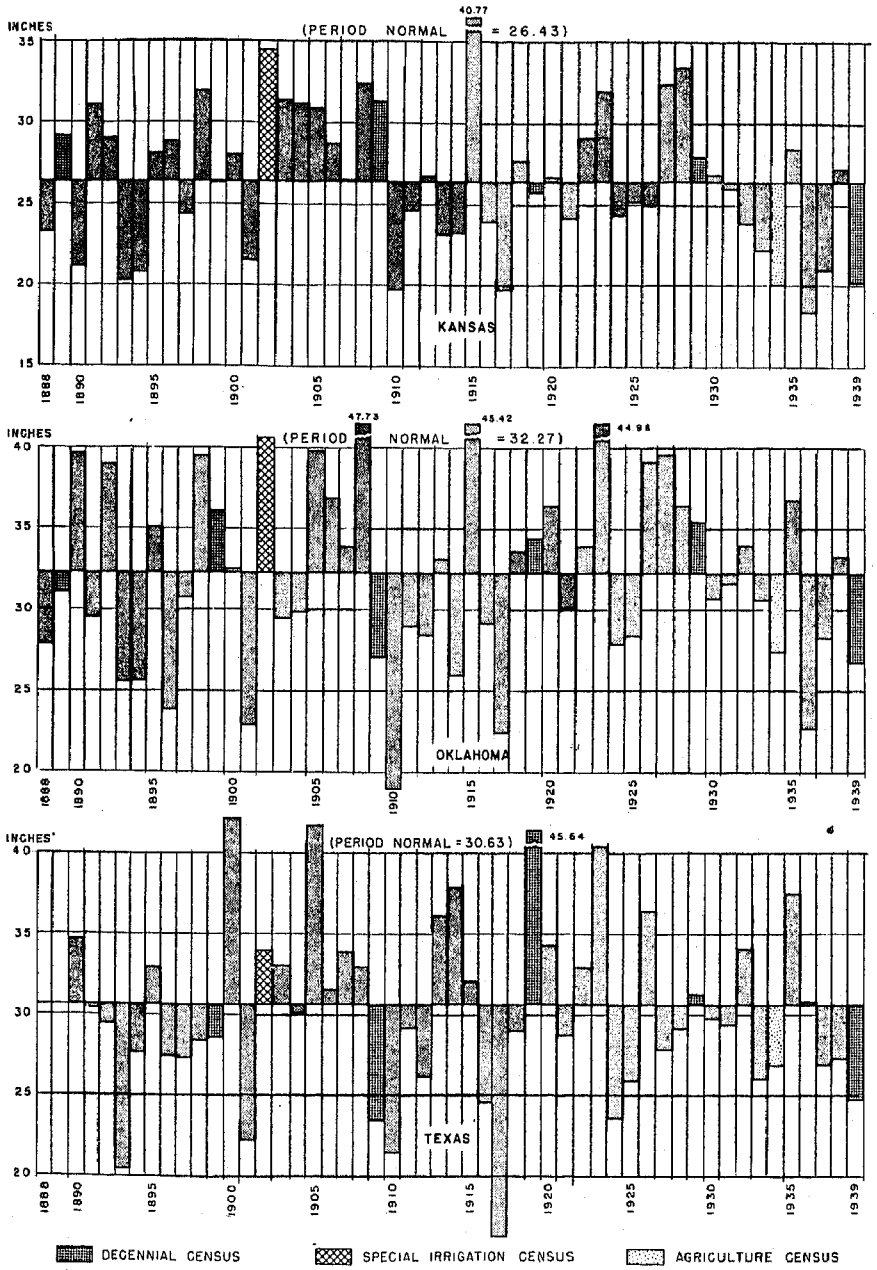


CHART IV - KANSAS, OKLAHOMA, AND TEXAS

AVERAGE ANNUAL PRECIPITATION AND DEPARTURE FROM NORMAL 1888-1939



AVERAGE MONTHLY PRECIPITATION 1938 AND 1939

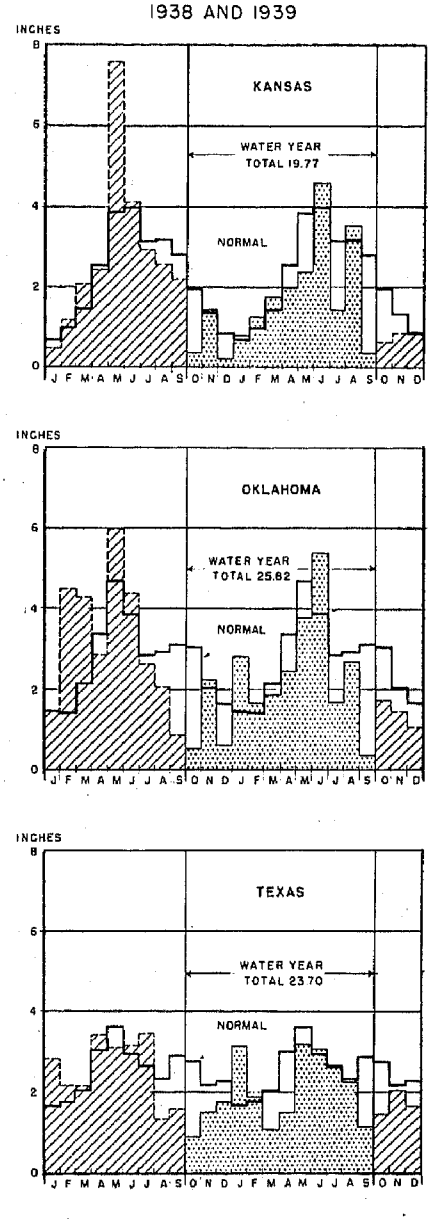
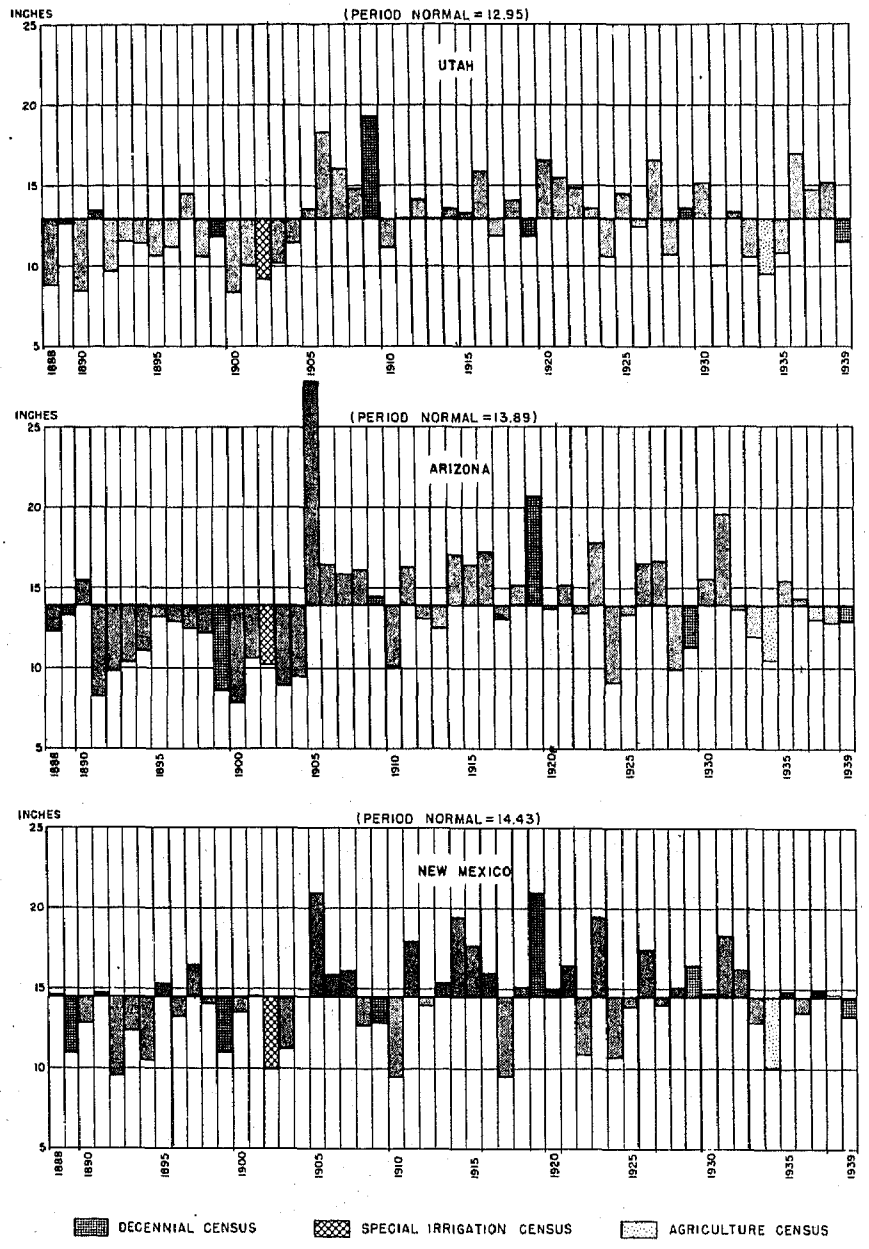


CHART V- UTAH, ARIZONA, AND NEW MEXICO

AVERAGE ANNUAL PRECIPITATION AND DEPARTURE FROM NORMAL 1888-1939



AVERAGE MONTHLY PRECIPITATION 1938 AND 1939

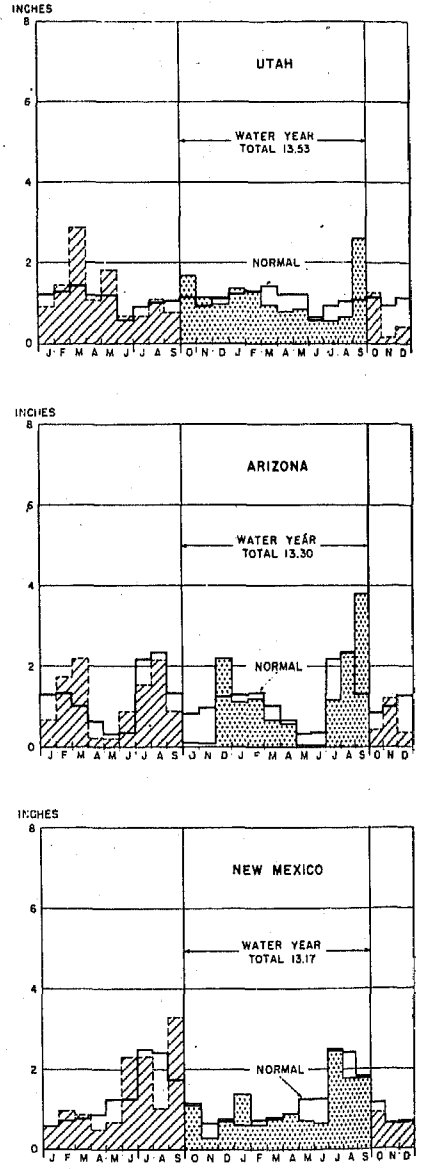
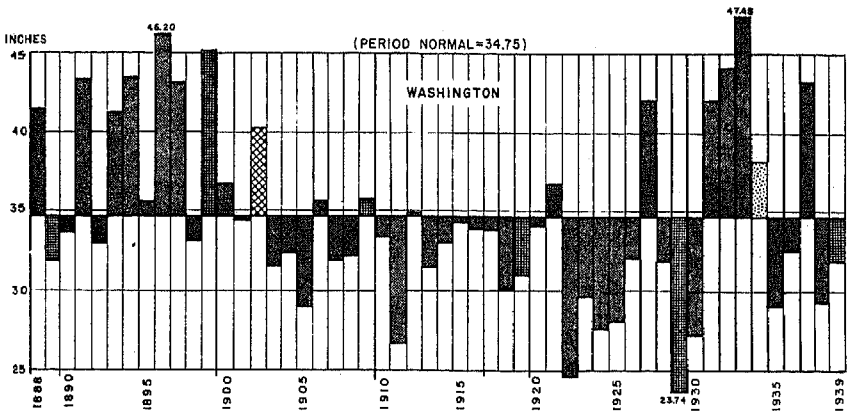
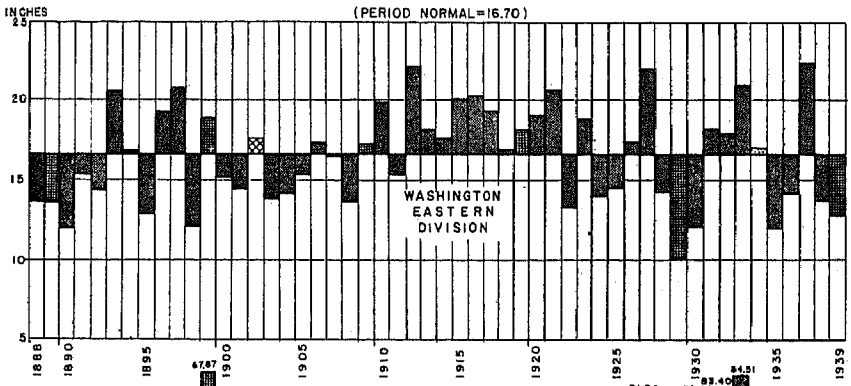
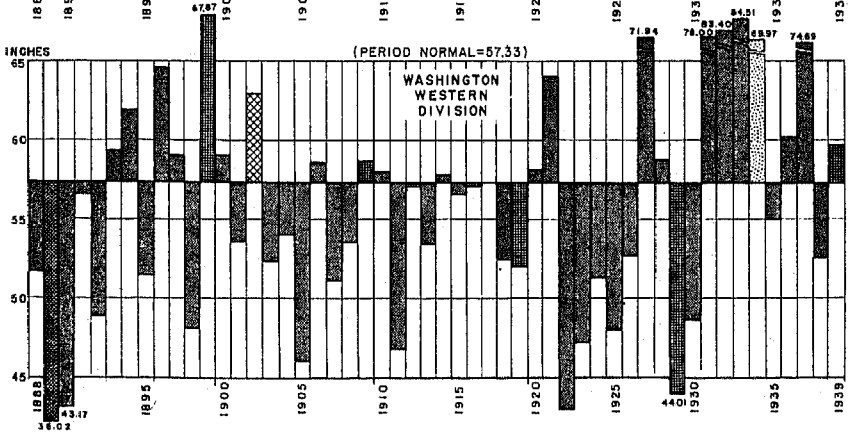


CHART VI - WASHINGTON

AVERAGE ANNUAL PRECIPITATION AND DEPARTURE FROM NORMAL 1888-1939

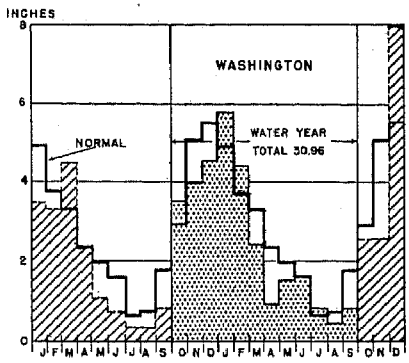


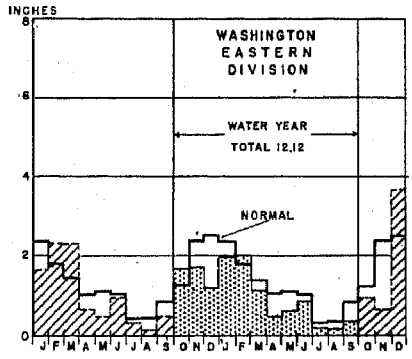




DECENNIAL CENSUS SPECIAL IRRIGATION CENSUS AGRICULTURE CENSUS

AVERAGE MONTHLY PRECIPITATION
1938 AND 1939





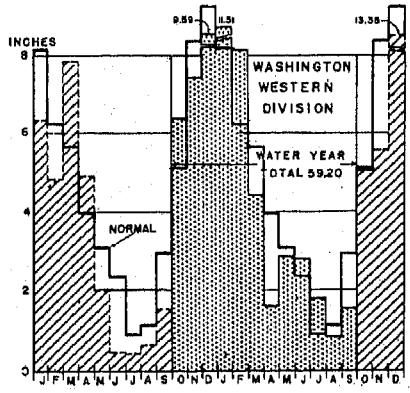
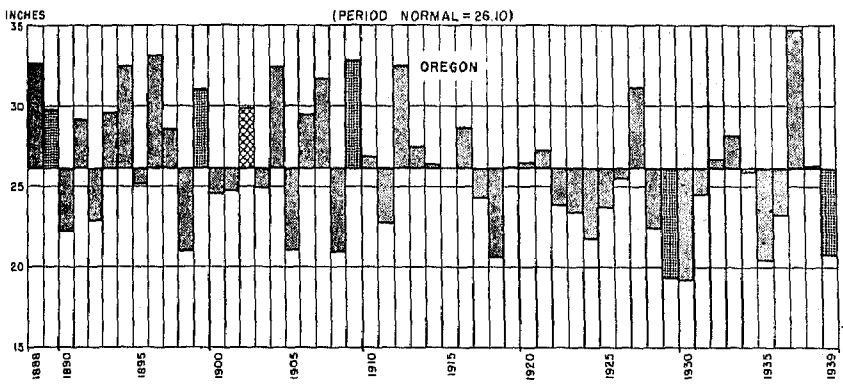
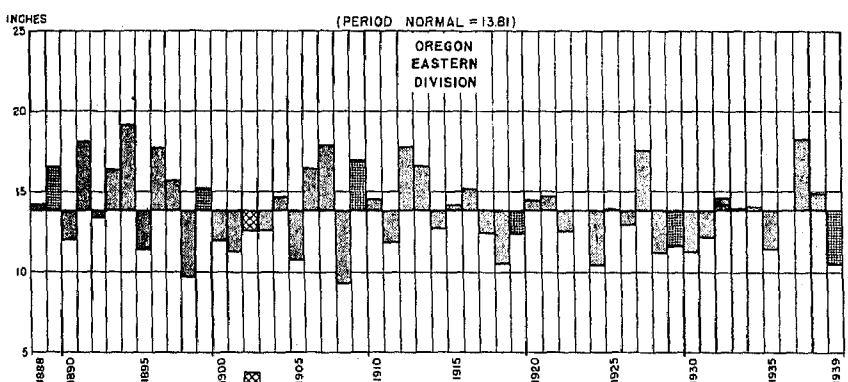
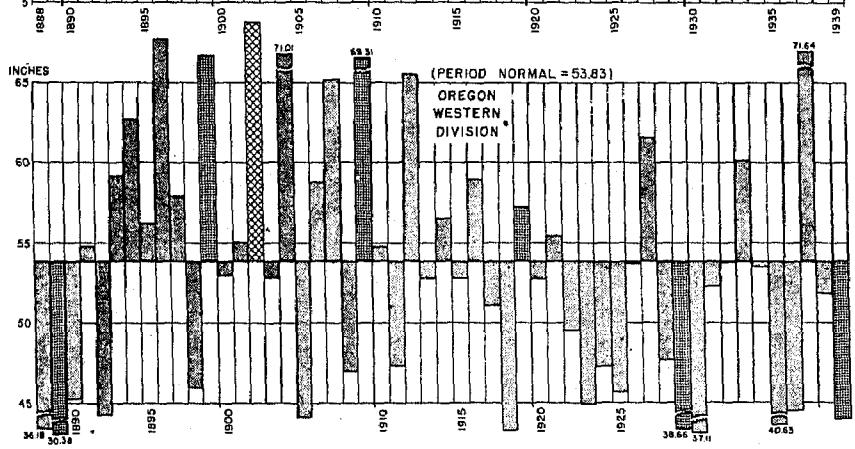


CHART VII - OREGON

AVERAGE ANNUAL PRECIPITATION AND DEPARTURE FROM NORMAL 1888-1939

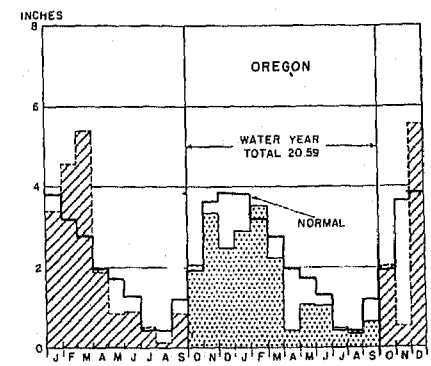


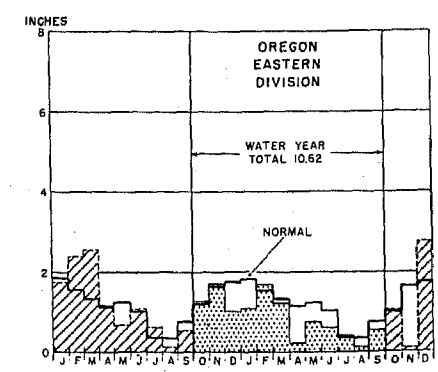




DECENNIAL CENSUS SPECIAL IRRIGATION CENSUS AGRICULTURE CENSUS

AVERAGE MONTHLY PRECIPITATION
1938 AND 1939





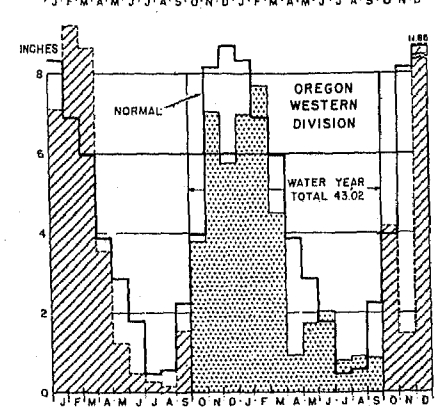
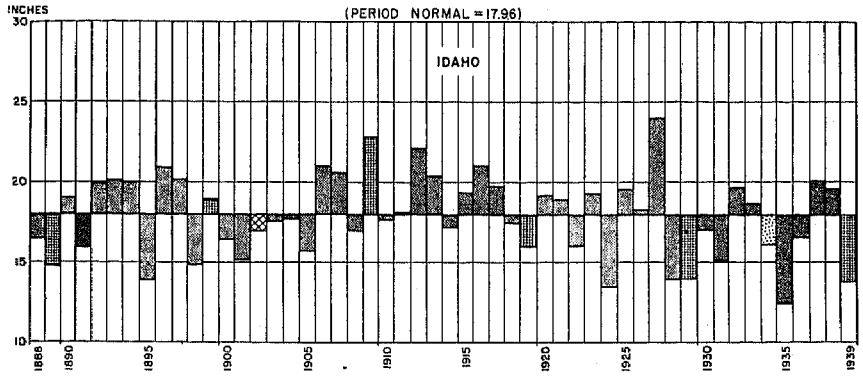
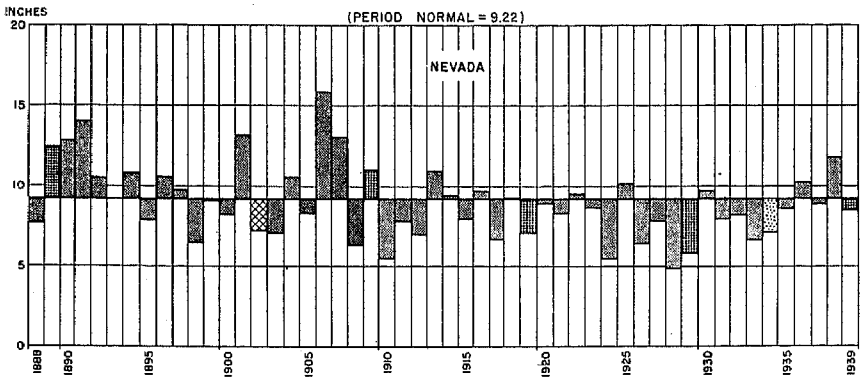
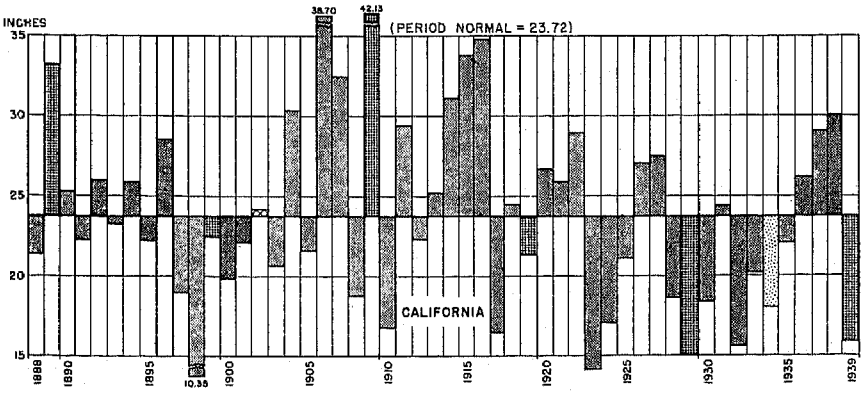


CHART VIII – IDAHO, NEVADA, AND CALIFORNIA

AVERAGE ANNUAL PRECIPITATION AND DEPARTURE FROM NORMAL 1888–1939

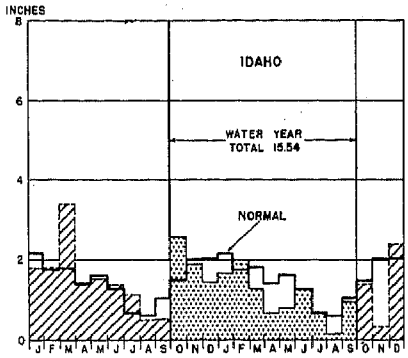


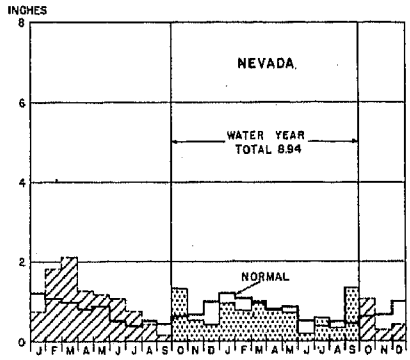




DECENNIAL CENSUS SPECIAL IRRIGATION CENSUS AGRICULTURE CENSUS

AVERAGE MONTHLY PRECIPITATION 1938 AND 1939





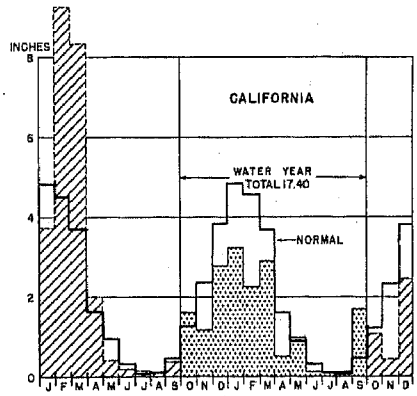
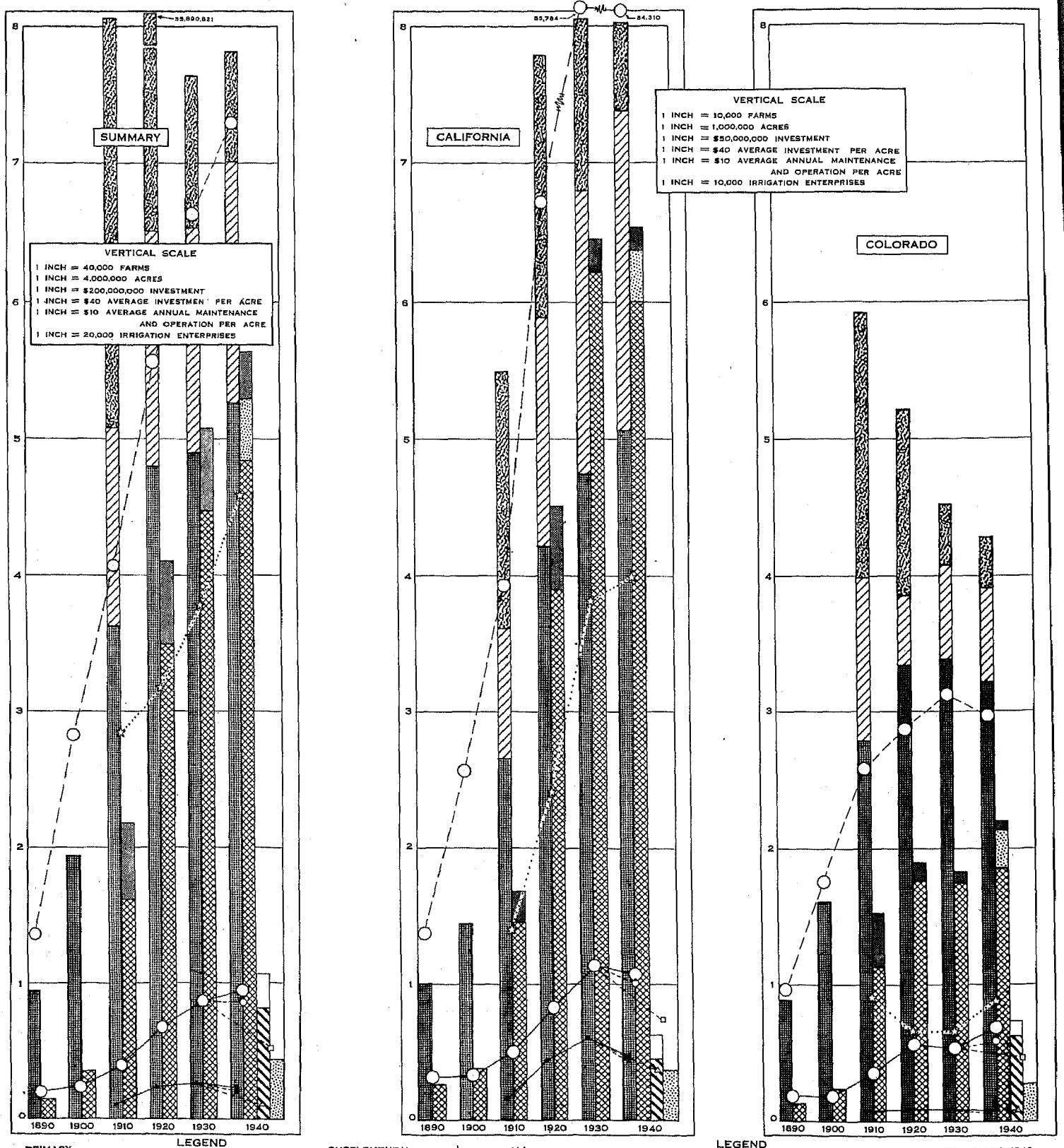


CHART IX.— FARMS IRRIGATED, AREAS, INVESTMENT AND AVERAGE ANNUAL COST OF MAINTENANCE AND OPERATION OF IRRIGATION ENTERPRISES, CENSUSES OF 1890 TO 1940: BY STATES ARRANGED IN ORDER OF AREA IRRIGATION WORKS WERE CAPABLE OF SUPPLYING WITH WATER IN 1940



LEGEND

PRIMARY ENTERPRISES

FARMS IRRIGATED IN THE CROP YEAR ENUMERATED

AREA IRRIGATED IN THE CROP YEAR ENUMERATED

AREA WORKS WERE CAPABLE OF SUPPLYING WATER

AREA IRRIGABLE IN EXISTING ENTERPRISES

SUPPLEMENTAL ENTERPRISES, 1940

IRRIGATION ENTERPRISES

LEGEND

ALL ENTERPRISES

INVESTMENT TO JANUARY 1 OF THE CENSUS YEAR

ESTIMATED COMPLETED COST OF EXISTING ENTERPRISES

AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER

AVERAGE ANNUAL COST PER ACRE OF MAINTENANCE AND OPERATION

ENTERPRISES, 1940 PRIMARY - SUPPLEMENTAL

CHART IX. — FARMS IRRIGATED, AREAS, INVESTMENT, AND AVERAGE ANNUAL COST OF MAINTENANCE AND OPERATION OF IRRIGATION ENTERPRISES, CENSUSES OF 1890 TO 1940: BY STATES ARRANGED IN ORDER OF AREA IRRIGATION WORKS WERE CAPABLE OF SUPPLYING WITH WATER IN 1940 — Continued

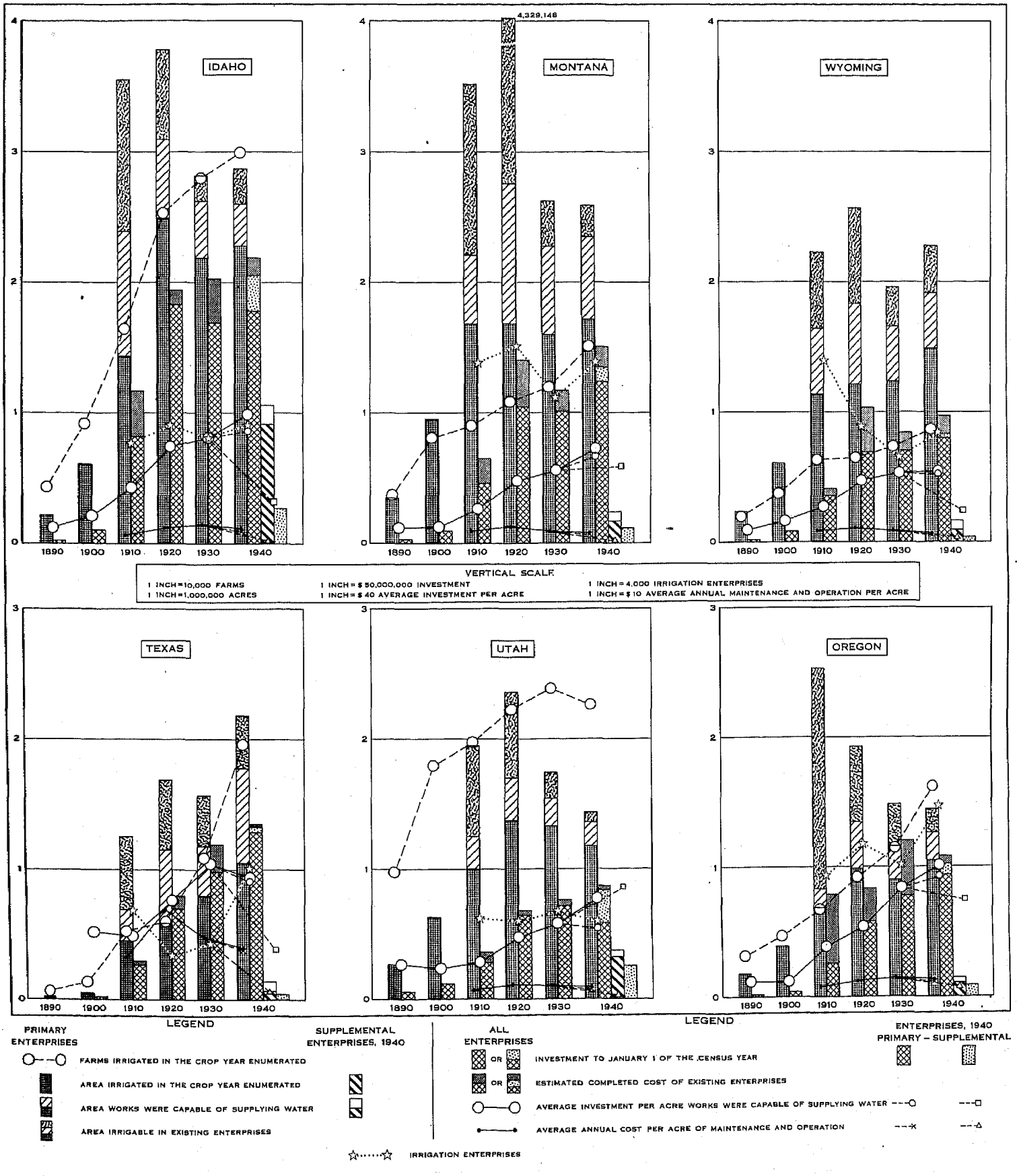
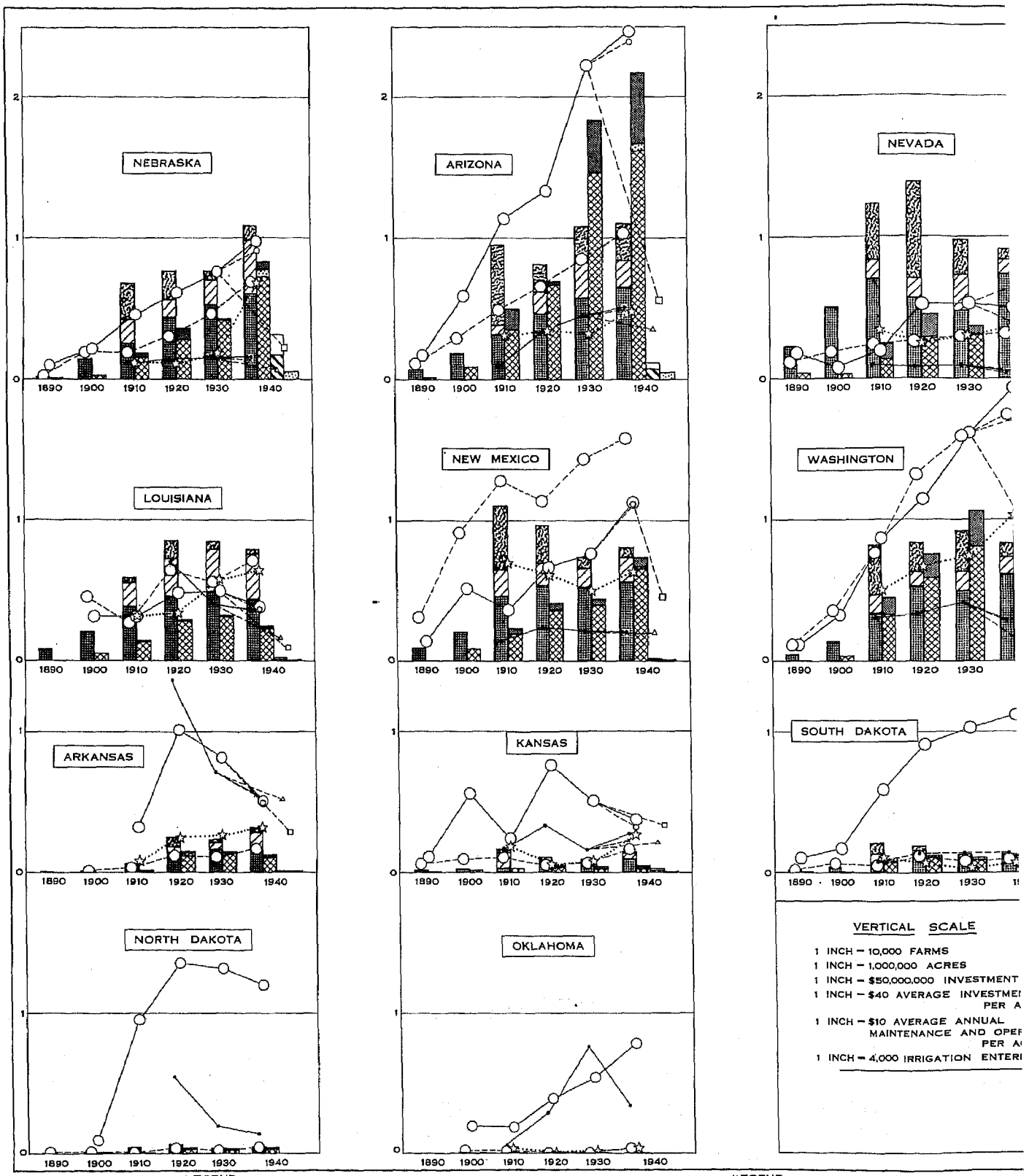


CHART IX.— FARMS IRRIGATED, AREAS, INVESTMENT, AND AVERAGE ANNUAL COST OF MAINTENANCE AND OPERATION OF IRRIGATION ENTERPRISES, CENSUSES OF 1890 TO 1940: BY STATES ARRANGED IN ORDER OF AREA IRRIGATION WORKS WERE CAPABLE OF SUPPLYING WITH WATER IN 1940 — Continued



LEGEND

PRIMARY ENTERPRISES

FARMS IRRIGATED IN THE CROP YEAR ENUMERATED

AREA IRRIGATED IN THE CROP YEAR ENUMERATED

AREA WORKS WERE CAPABLE OF SUPPLYING WATER

AREA IRRIGABLE IN EXISTING ENTERPRISES

SUPPLEMENTAL ENTERPRISES, 1940

IRRIGATION ENTERPRISES

LEGEND

ALL ENTERPRISES

INVESTMENT TO JANUARY 1 OF THE CENSUS YEAR

ESTIMATED COMPLETED COST OF EXISTING ENTERPRISES

AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER

AVERAGE ANNUAL COST PER ACRE OF MAINTENANCE AND OPERATION

ENTERPRI
PRIMARY - SU

CHART X. — AREAS, INVESTMENT, AND AVERAGE INVESTMENT PER ACRE OF IRRIGATION ENTERPRISES, CENSUSES OF 1902 TO 1940: BY SPECIFIED DRAINAGE BASINS

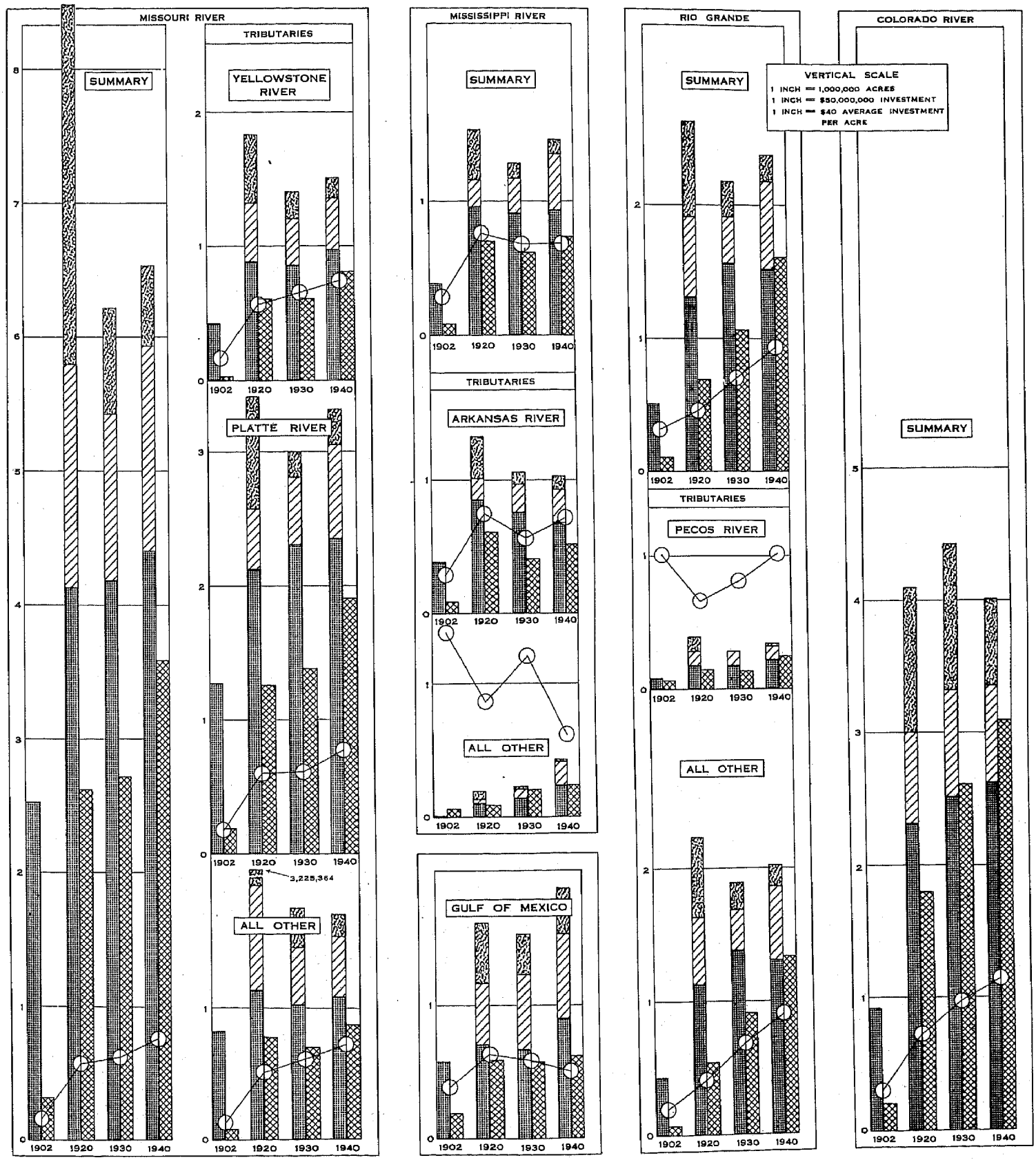


CHART X. — AREAS, INVESTMENT, AND AVERAGE INVESTMENT PER ACRE OF IRRIGATION ENTERPRISES, CENSUSES OF 1902 TO 1940: BY SPECIFIED DRAINAGE BASINS — Continued

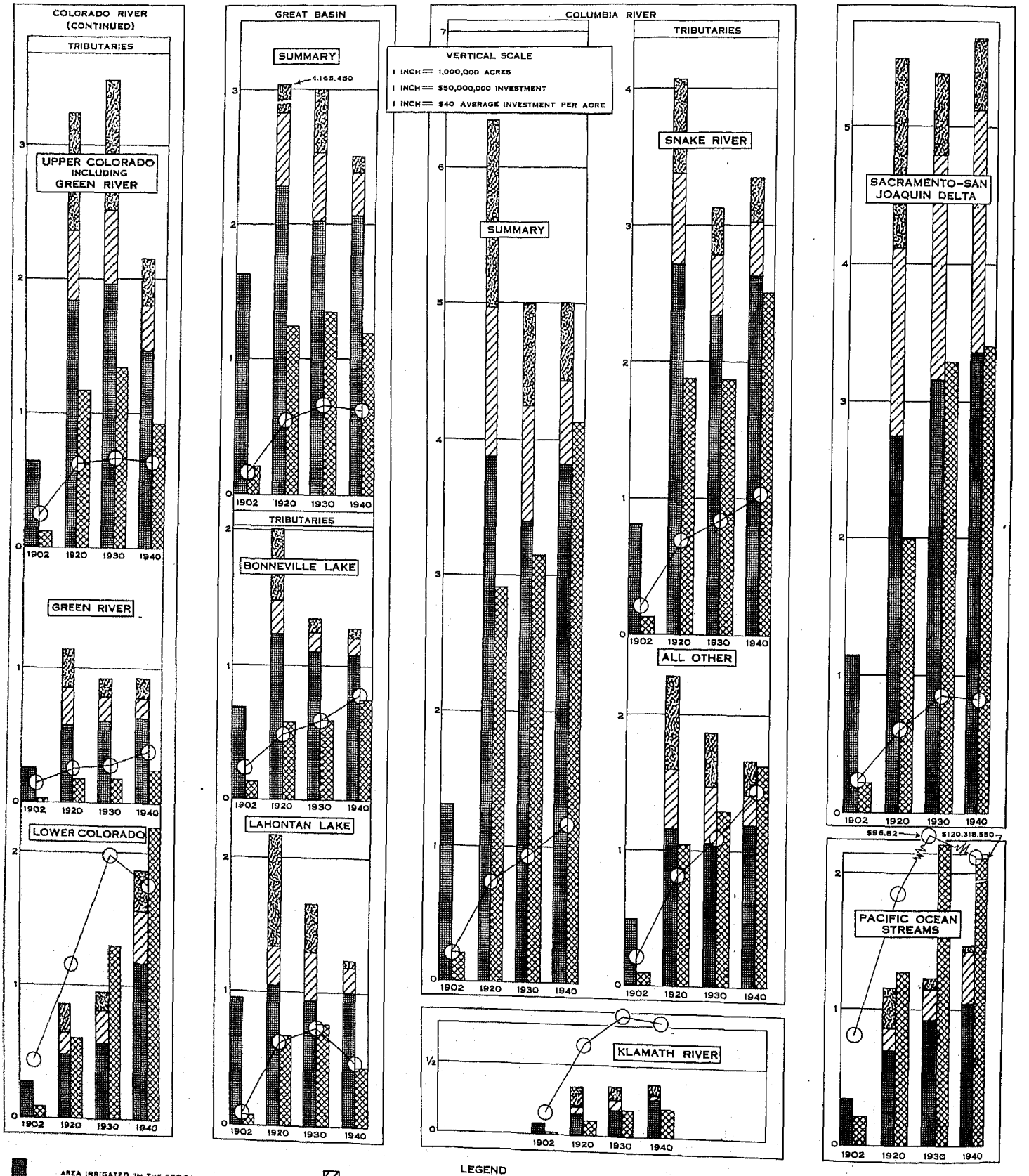


CHART XI.— AREA IRRIGATED, 1909 TO 1939; AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, AREA IRRIGABLE, CAPITAL INVESTED, AND AVERAGE INVESTMENT, 1920 TO 1940; AND AVERAGE ANNUAL COST PER ACRE OF MAINTENANCE AND OPERATION OF IRRIGATION ENTERPRISES, 1919 TO 1939; BY SOURCE OF WATER SUPPLY

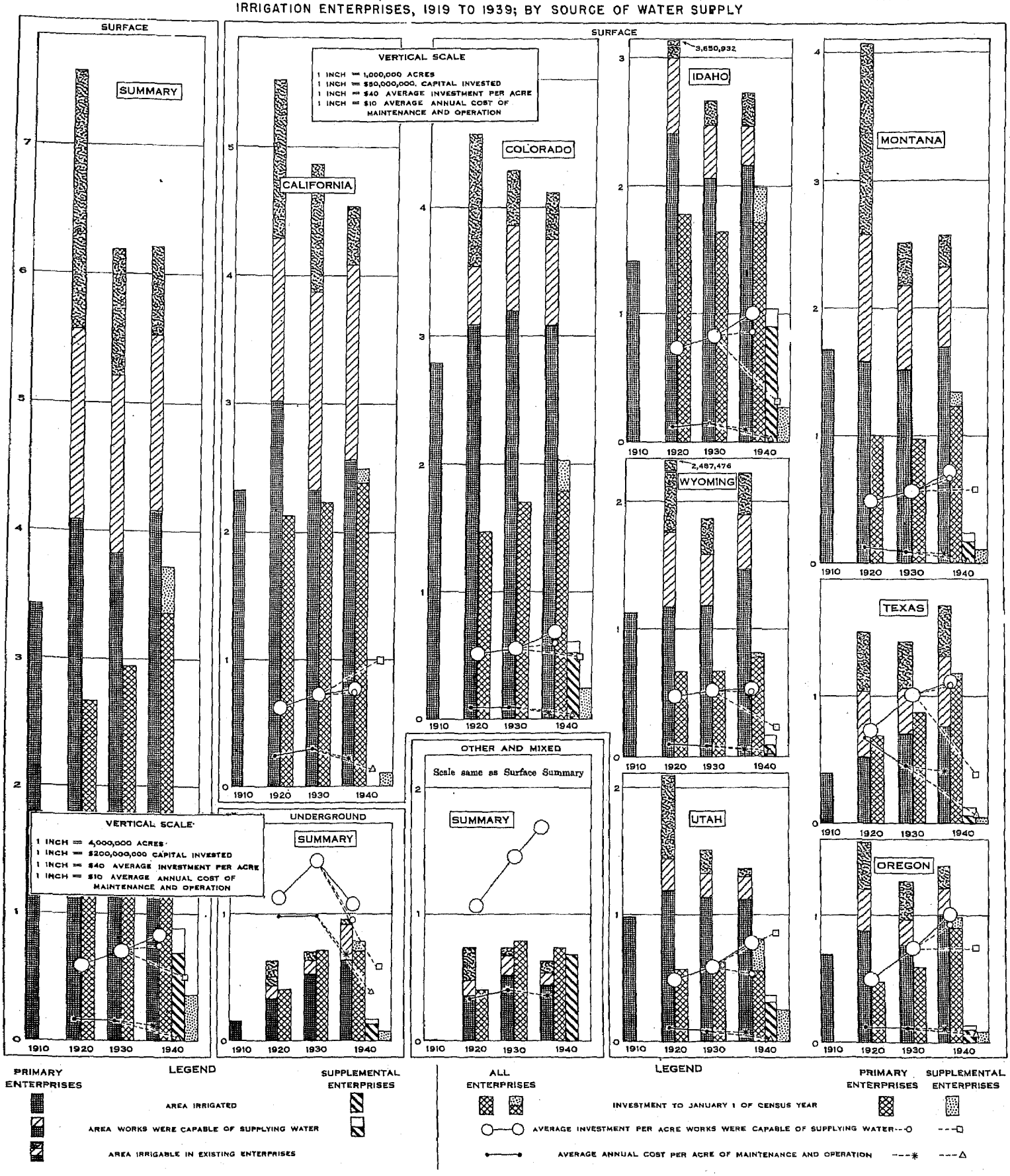


CHART XI.—AREA IRRIGATED, 1909 TO 1939; AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, AREA IRRIGABLE, CAPITAL INVESTED, AND AVERAGE INVESTMENT, 1920 TO 1940; AND AVERAGE ANNUAL COST PER ACRE OF MAINTENANCE AND OPERATION OF IRRIGATION ENTERPRISES, 1919 TO 1939; BY SOURCE OF WATER SUPPLY—Continued

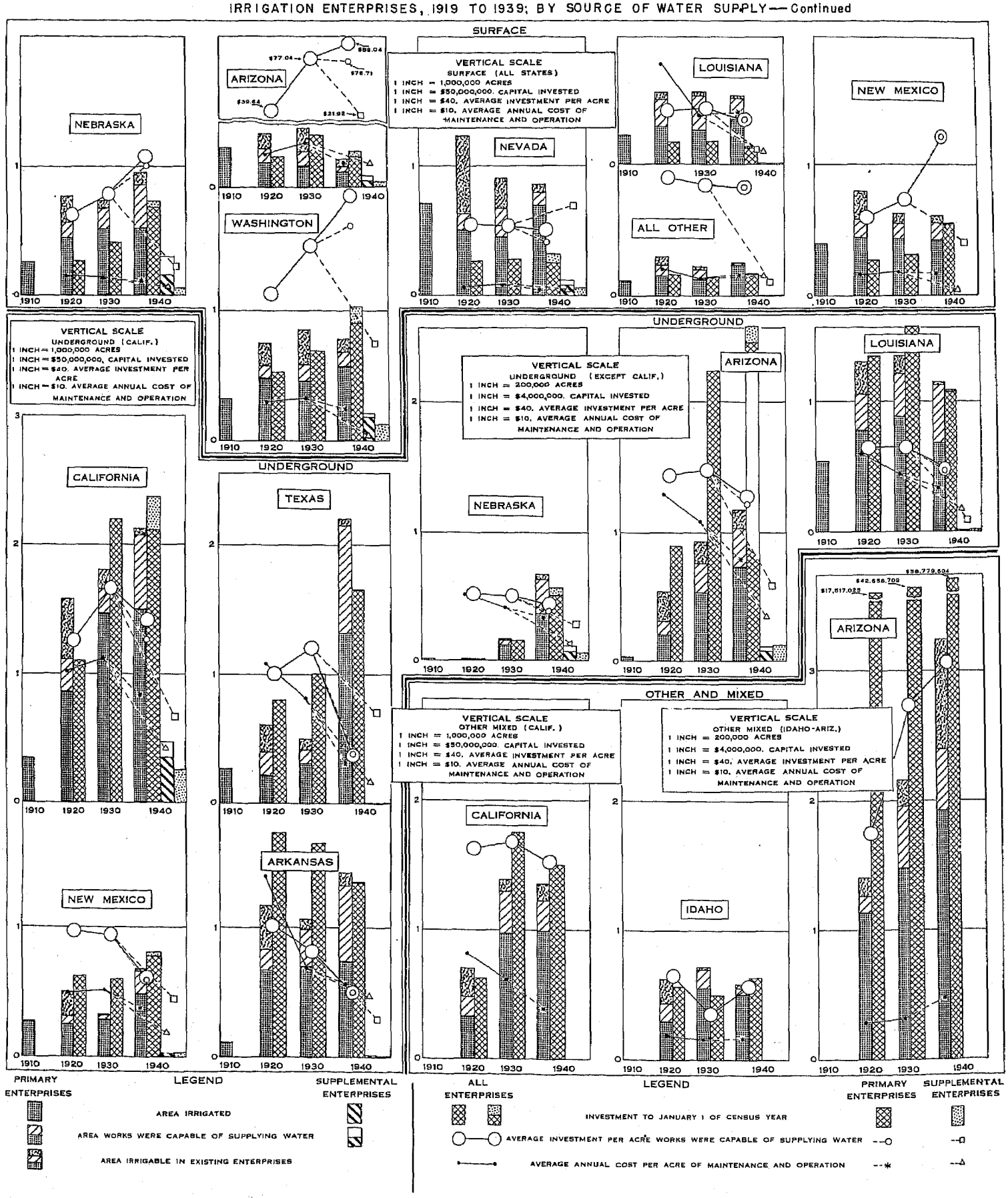
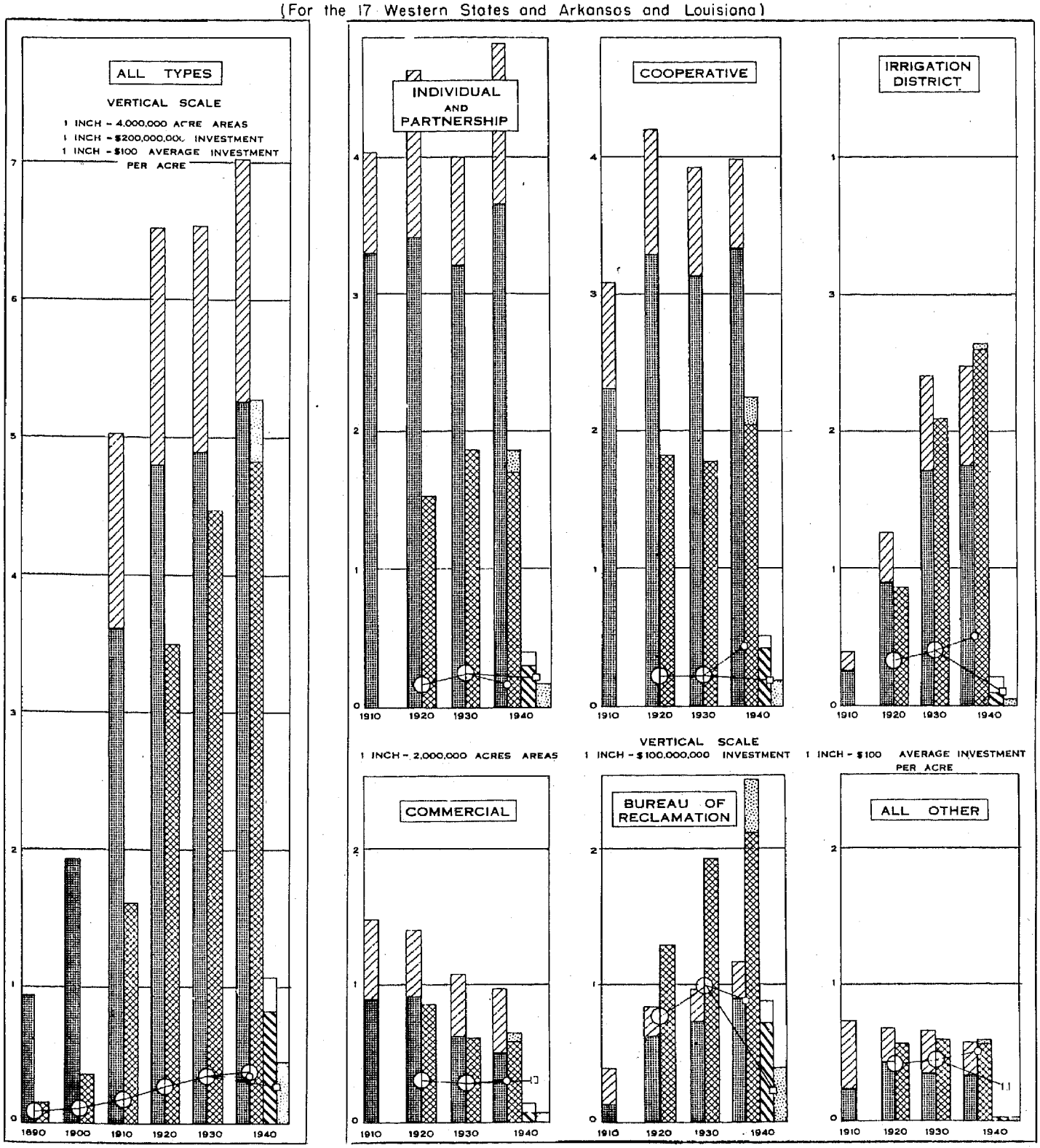


CHART XII — AREAS, CAPITAL INVESTED, AND AVERAGE INVESTMENT PER ACRE, 1890-1940; AND BY TYPE OF IRRIGATION ENTERPRISE, 1910-1940

(For the 17 Western States and Arkansas and Louisiana)



PRIMARY ENTERPRISES

AREA IRRIGATED — CAPABILITY OF WORKS — CAPITAL INVESTED

SUPPLEMENTAL ENTERPRISES

AREA IRRIGATED — CAPABILITY OF WORKS — CAPITAL INVESTED

AVERAGE INVESTMENT PER ACRE, BASED ON:—

TOTAL INVESTMENT AND PRIMARY AREA WORKS WERE CAPABLE OF IRRIGATING

PRIMARY INVESTMENT AND PRIMARY AREA WORKS WERE CAPABLE OF IRRIGATING

SUPPLEMENTAL INVESTMENT AND SUPPLEMENTAL AREA WORKS WERE CAPABLE OF IRRIGATING

CHART XIIa—PROPORTION OF TOTAL.—AREA IRRIGATED AND AREA WORKS WERE CAPABLE OF SUPPLYING WATER, 1910–1940; AND CAPITAL INVESTED, 1920–1940; BY TYPE OF IRRIGATION ENTERPRISE
(For the 17 Western States and Arkansas and Louisiana)

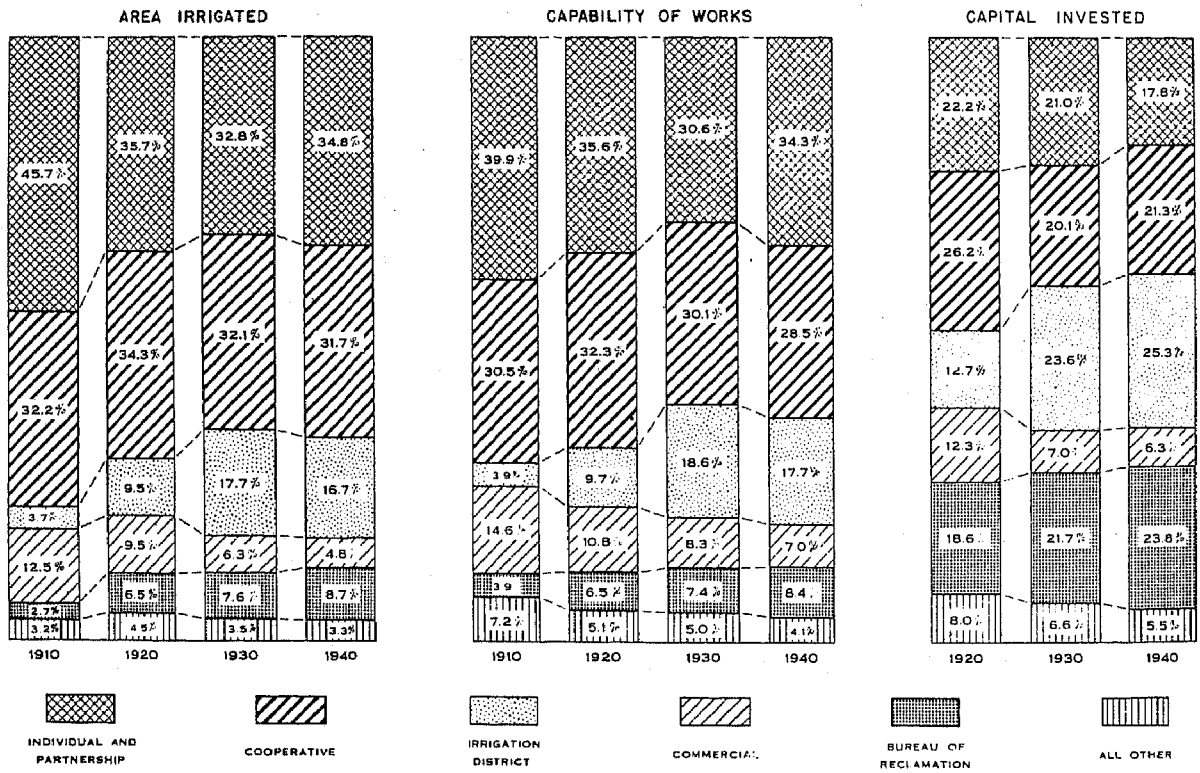


CHART XIII.—NUMBER AND YIELD OF PUMPED AND FLOWING WELLS, AVERAGE YIELD OF PUMPED WELLS, 1910 TO 1940; AND AVERAGE LIFT OF PUMPED WELLS, 1940: BY STATES

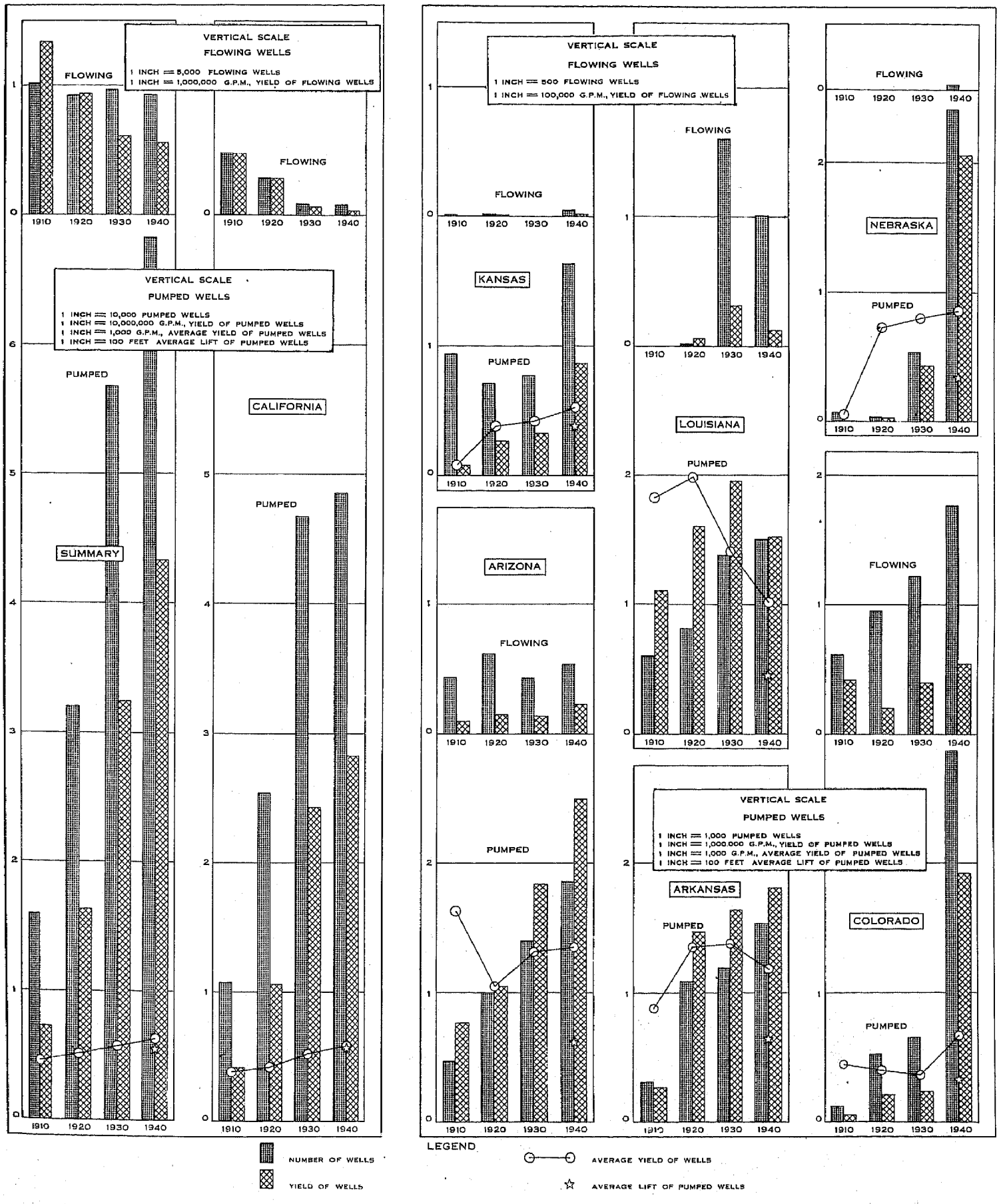


CHART XIII.—NUMBER AND YIELD OF PUMPED AND FLOWING WELLS, AVERAGE YIELD OF PUMPED WELLS, 1910 TO 1940; AND AVERAGE LIFT OF PUMPED WELLS, 1940: BY STATES—Continued

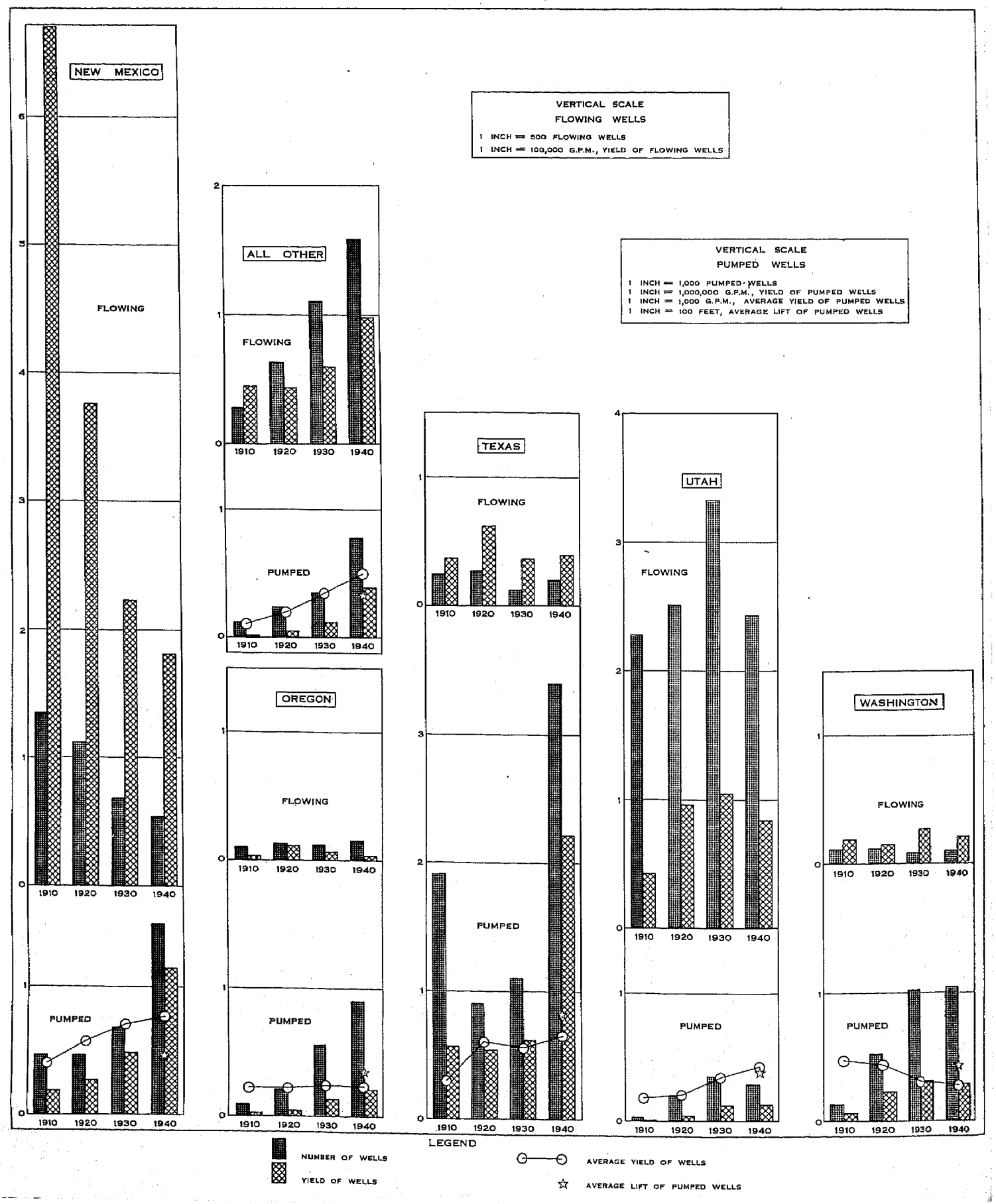
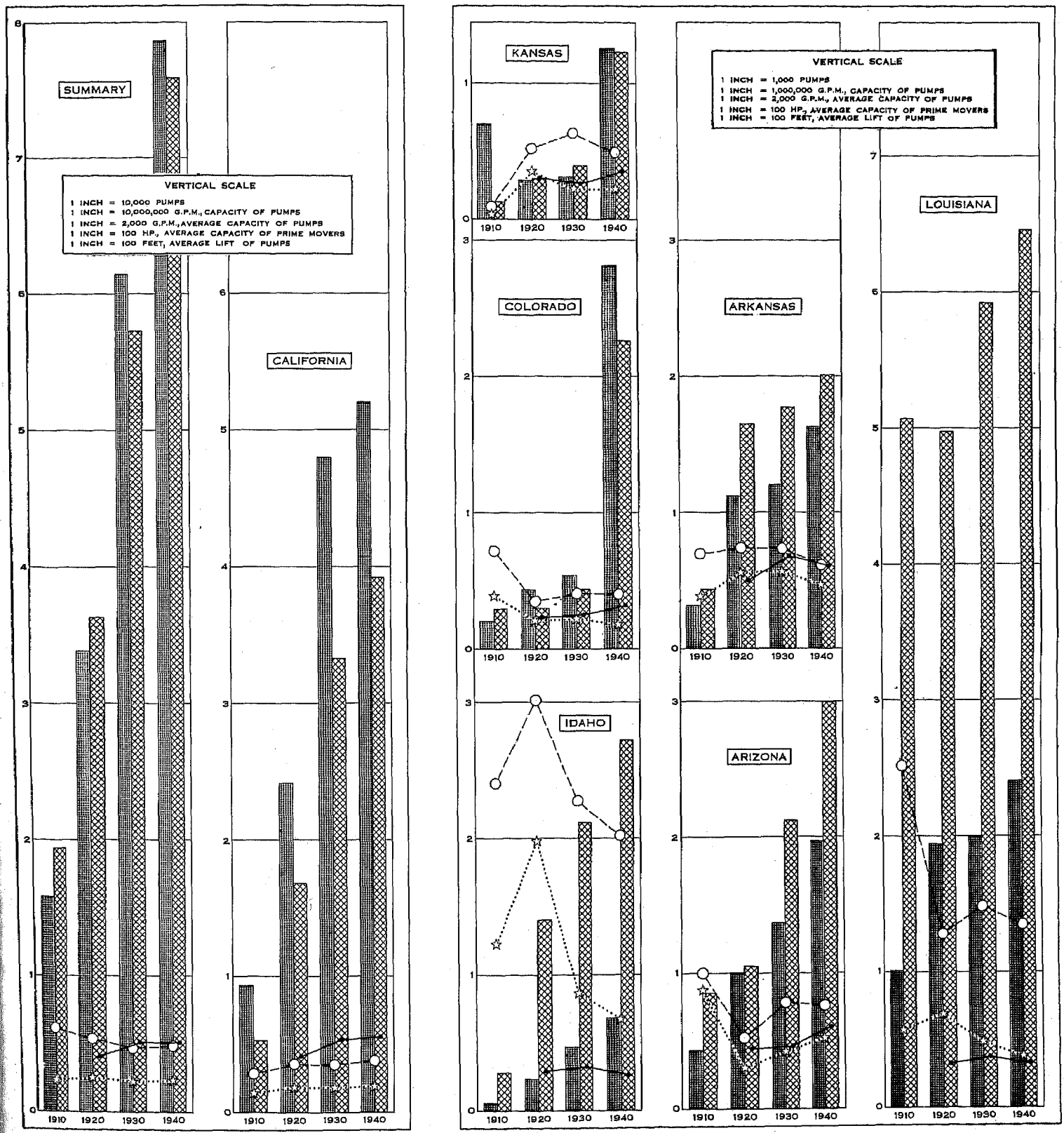


CHART XIV—NUMBER AND TOTAL CAPACITY OF PUMPS, 1910 TO 1940; AVERAGE CAPACITY OF PUMPS AND AVERAGE CAPACITY OF PRIME MOVERS, 1910 TO 1940; AVERAGE LIFT OF PUMPS, 1920 TO 1940: BY STATES



LEGEND

NUMBER OF PUMPS

CAPACITY OF PUMPS

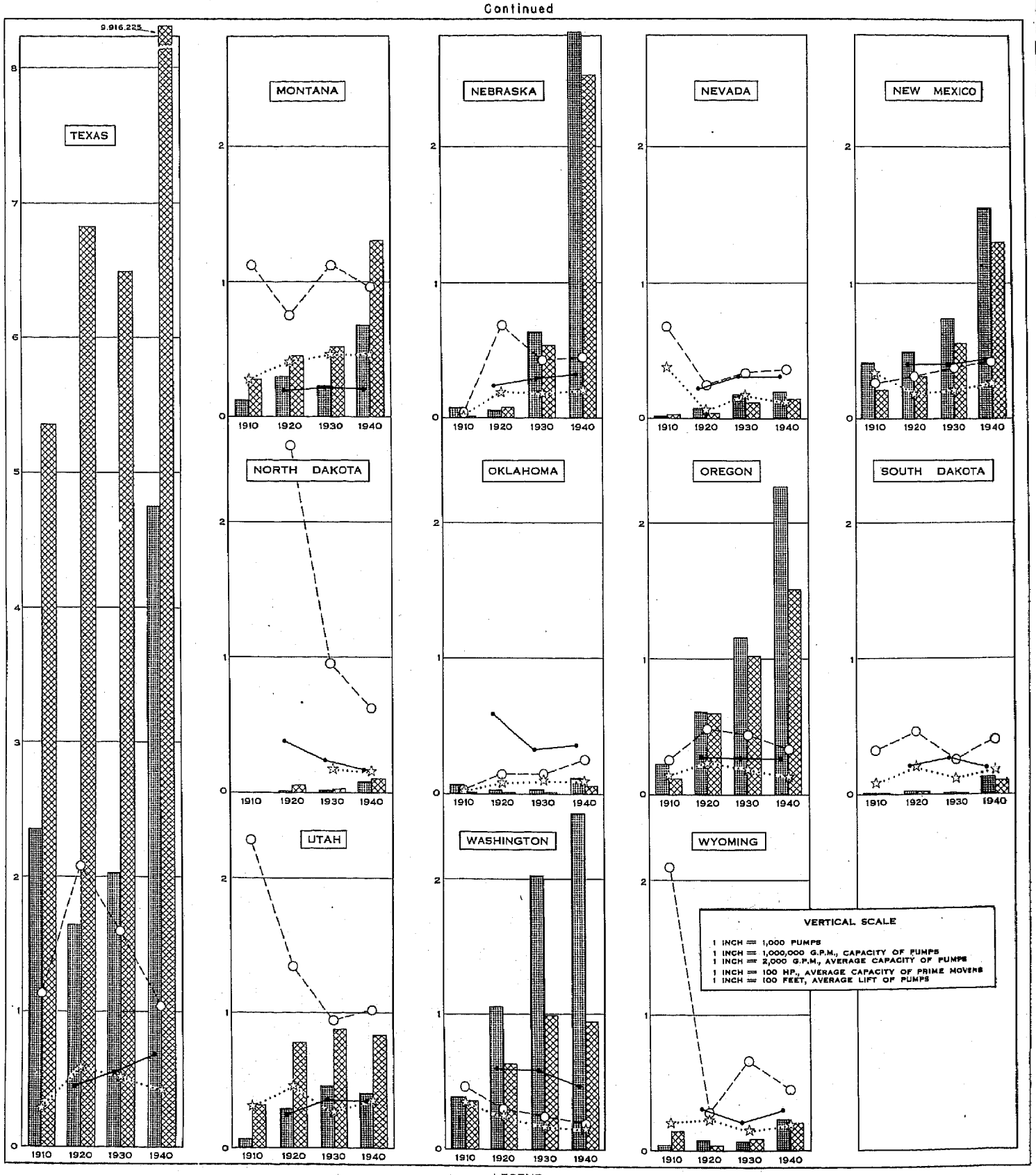
AVERAGE CAPACITY OF PUMPS

AVERAGE CAPACITY OF PRIME MOVERS

AVERAGE LIFT OF PUMPS

CHART XIV.—NUMBER AND TOTAL CAPACITY OF PUMPS, 1910 TO 1940; AVERAGE CAPACITY OF PUMPS AND AVERAGE CAPACITY OF PRIME MOVERS, 1910 TO 1940; AVERAGE LIFT OF PUMPS, 1920 TO 1940: BY STATES

Continued



LEGEND

NUMBER OF PUMPS — CAPACITY OF PUMPS — AVERAGE CAPACITY OF PUMPS — AVERAGE CAPACITY OF PRIME MOVERS — AVERAGE LIFT OF PUMPS

TABLE 1.—PRECIPITATION AND DEPARTURES FROM NORMAL: 1889, 1899, 1902, 1909, 1919, 1929, 1934, AND 1939

(For the 17 western States, Arkansas, Louisiana, and Florida. See charts I to VIII)

STATE	PRECIPITATION																	
	Normal for period	1889		1899		1902		1909		1919		1929		1934		1939		
		Amount	Depart.[1]	Amount	Depart.[1]	Amount	Depart.[1]	Amount	Depart.[1]	Amount	Depart.[1]	Amount	Depart.[1]	Amount	Depart.[1]	Amount	Depart.[1]	Percent of normal
	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	
Arizona	13.89	13.29	-0.60	8.61	-5.28	10.23	-3.66	14.48	+0.59	20.70	+6.81	11.29	-2.60	10.47	-3.42	12.88	-1.01	93
Arkansas	48.25	45.61	-2.64	41.49	-6.76	51.70	+3.45	44.05	-4.20	54.52	+6.27	46.10	-2.15	42.47	-5.78	50.16	+1.91	104
California	23.72	33.25	+9.53	22.47	-1.25	24.22	+0.50	42.13	+18.41	21.29	-2.43	15.00	-8.72	18.01	-5.71	15.80	-7.92	67
Colorado	16.38	13.73	-2.65	14.67	-1.71	13.88	-2.50	20.96	+4.58	17.14	+0.76	18.16	+1.78	10.89	-5.49	10.68	-5.70	65
Idaho	17.96	14.76	-3.20	18.96	+1.00	16.96	-1.00	22.83	+4.87	15.97	-1.99	13.94	-4.02	16.10	-1.86	13.73	-4.23	76
Kansas	26.43	29.44	+3.01	26.26	-0.17	34.42	+7.99	31.15	+4.72	25.65	-0.78	27.96	+1.53	20.02	-6.41	20.08	-6.35	76
Louisiana	55.45	41.21	-14.24	42.19	-13.26	46.89	-8.56	53.25	-2.20	69.23	+13.78	63.65	+8.20	59.23	+3.78	51.51	-3.94	93
Montana	15.23	8.94	-6.29	15.74	+0.51	15.12	-0.11	19.72	+4.49	10.68	-4.55	13.08	-2.15	11.87	-3.36	12.83	-2.40	84
Nebraska	22.56	22.29	-0.27	19.55	-3.01	29.47	+6.91	24.64	+2.08	25.09	+2.53	22.74	+0.18	14.31	-8.25	16.28	-6.28	72
Nevada	9.22	12.41	+3.19	9.12	-0.10	7.25	-1.97	11.03	+1.81	7.08	-2.14	5.83	-3.39	7.12	-2.10	8.48	-0.74	92
New Mexico	14.43	10.97	-3.46	10.98	-3.45	9.97	-4.46	12.83	-1.60	20.95	+6.52	16.48	+2.05	10.08	-4.35	13.22	-1.21	92
North Dakota	16.87	11.54	-5.33	17.62	+0.75	19.35	+2.48	18.10	+1.23	15.59	-1.28	14.31	-2.56	9.51	-7.36	14.15	-2.72	84
Oklahoma	32.27	31.01	-1.26	36.07	+3.80	40.54	+8.27	27.01	-5.26	34.41	+2.14	35.39	+3.12	27.46	-4.81	26.71	-5.56	83
Oregon	26.10	29.79	+3.69	31.06	+4.96	29.88	+3.78	32.85	+6.75	26.21	+0.11	19.33	-6.77	25.87	-0.23	20.77	-5.33	80
Eastern Division	13.81	16.60	+2.79	15.23	+1.42	12.60	-1.21	17.00	+3.19	12.41	-1.40	11.58	-2.23	14.07	+0.26	10.50	-3.31	76
Western Division	53.83	30.38	-23.45	66.70	+12.87	68.76	+14.93	69.31	+15.48	57.28	+3.45	38.66	-15.17	53.53	-0.30	43.90	-9.93	82
South Dakota	18.87	18.34	-0.53	18.84	-0.03	19.54	+0.67	22.74	+3.87	19.64	+0.77	20.63	+1.76	12.58	-6.29	15.71	-3.16	83
Texas	30.63	38.06	+7.43	28.70	-1.93	33.92	+3.29	23.45	-7.18	45.64	+15.01	31.17	+0.54	26.78	-3.85	24.69	-5.94	81
Utah	12.95	12.67	-0.28	11.83	-1.12	9.17	-3.78	19.31	+6.36	11.83	-1.12	13.60	+0.65	9.52	-3.43	11.49	-1.46	89
Washington	34.75	31.83	-2.92	45.07	+10.32	40.24	+5.49	35.87	+1.12	31.00	-3.75	23.74	-11.01	38.27	+3.52	32.00	-2.75	92
Eastern Division	16.70	13.62	-3.08	18.97	+2.27	17.69	+0.99	17.40	+0.70	18.22	+1.52	10.19	-6.51	17.13	+0.43	12.83	-3.87	77
Western Division	57.33	36.02	-21.31	67.87	+10.54	62.98	+5.65	58.75	+1.42	52.08	-5.25	44.01	-13.32	69.97	+12.64	59.74	+2.41	104
Wyoming	14.01	12.93	-1.08	13.58	-0.43	9.81	-4.20	16.33	+2.32	10.46	-3.55	15.06	+1.05	10.88	-3.13	10.27	-3.74	73
Florida	52.73	50.69	-2.04	52.65	-0.08	51.33	-1.40	48.37	-4.36	57.50	+4.77	59.19	+6.46	52.94	+0.21	54.54	+1.81	103

[1] Departure from normal.

TABLE 2.—MONTHLY AND ANNUAL PRECIPITATION WITH ANNUAL DEPARTURE FOR CALENDAR YEARS, 1938 AND 1939; AND MONTHLY AND TOTAL PRECIPITATION WITH DEPARTURE FOR PERIOD FOR WATER YEAR, OCTOBER 1938 THROUGH SEPTEMBER 1939

(For the 17 western States, Arkansas, Louisiana, and Florida. See charts I to VIII)

STATE	PRECIPITATION																						
	Water Year																						
	1938								1939														
							Annual											Water Year			Annual	
	Jan.-Mar.	Apr.-June	July-Sept.	Oct.	Nov.	Dec.	Precipitation	Departure[1]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Precipitation	Departure[1]	Oct.-Dec.	Precipitation	Departure[1]
	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches
Arizona	4.58	1.29	4.56	0.10	0.07	2.20	12.80	-1.09	1.12	1.20	0.66	0.56	0.04	0.04	1.16	2.56	3.79	13.30	-0.59	1.95	12.88	-1.01
Arkansas	18.58	12.99	7.55	0.94	5.26	2.93	48.25	0.00	6.21	8.56	3.71	7.13	4.85	4.50	3.34	2.53	1.77	51.73	+3.48	7.56	50.16	+1.91
California	21.31	2.59	0.60	1.61	1.17	2.78	30.06	+6.34	3.23	2.25	2.90	0.52	0.97	0.12	0.08	0.07	1.70	17.40	-6.32	3.96	15.80	-7.92
Colorado	3.98	6.23	6.45	0.87	0.93	0.89	19.35	+2.97	1.30	1.09	1.14	0.91	1.03	0.82	0.90	1.08	1.10	12.06	-4.32	1.31	10.68	-5.70
Idaho	7.02	4.40	2.19	2.58	1.91	1.46	19.56	+1.60	1.69	2.01	1.29	0.68	0.81	1.29	0.69	0.16	0.97	15.54	-2.42	4.14	13.73	-4.23
Kansas	3.67	14.05	7.82	0.33	1.40	0.20	27.27	+0.84	0.78	1.22	1.72	1.96	2.35	4.59	1.40	3.50	0.32	19.77	-6.66	2.24	20.08	-6.35
Louisiana	11.99	14.16	15.23	1.32	4.03	3.53	50.26	-5.19	5.62	5.69	2.89	2.40	6.72	4.42	5.97	4.86	3.23	50.68	-4.77	9.71	51.51	-3.94
Montana	2.54	6.98	3.88	1.75	0.89	0.56	16.60	+1.37	0.70	0.81	0.72	0.78	1.89	3.52	0.68	0.62	0.94	13.86	-1.37	2.17	12.83	-2.40
Nebraska	2.41	10.65	8.09	0.18	0.72	0.18	22.23	-0.33	0.70	0.87	1.21	1.40	2.53	3.84	1.83	2.04	0.44	15.94	-6.62	1.42	16.28	-6.28
Nevada	4.67	3.52	1.34	1.32	0.52	0.42	11.79	+2.57	0.98	0.78	0.95	0.79	0.73	0.19	0.60	0.34	1.34	8.94	-0.28	1.80	8.48	-0.74
New Mexico	2.38	3.48	6.63	1.10	0.27	0.76	14.62	+0.19	1.39	0.61	0.76	0.88	0.72	0.84	2.45	1.76	1.83	13.17	-1.26	2.18	13.22	-1.21
North Dakota	1.75	6.37	5.47	0.55	0.87	0.32	15.33	-1.54	0.47	0.63	0.39	0.87	1.55	4.59	1.81	2.10	0.68	14.83	-2.04	1.06	14.15	-2.72
Oklahoma	10.15	13.20	6.51	0.52	2.21	0.62	33.21	+0.94	2.79	1.67	1.82	2.44	3.76	5.35	1.65	2.66	0.33	25.82	-6.45	4.24	26.71	-5.56
Oregon	13.33	3.60	1.49	2.06	3.33	2.48	26.31	+0.21	2.90	3.53	2.23	0.44	1.07	1.05	0.49	0.35	0.64	20.59	-5.51	8.07	20.77	-5.33
Eastern Div.	6.70	2.87	1.30	1.29	1.71	1.02	14.89	+1.08	1.09	1.68	1.22	0.22	0.76	0.61	0.35	0.12	0.55	10.62	-3.19	3.90	10.50	-3.31
Western Div.	28.05	5.25	1.93	3.80	7.04	5.76	51.83	-2.00	6.97	7.70	4.51	0.93	1.75	2.03	0.79	0.88	0.86	43.02	-10.81	17.48	43.90	-9.93
South Dakota	2.35	8.67	5.49	0.16	0.57	0.26	17.50	-1.37	0.95	0.69	0.35	1.03	2.32	4.15	1.85	1.92	1.02	15.27	-3.60	1.43	15.71	-3.16
Texas	7.12	9.65	6.32	0.87	1.50	1.72	27.18	-3.45	3.10	1.86	1.04	1.47	3.16	3.05	2.60	2.21	1.12	23.70	-6.93	5.08	24.69	-5.94
Utah	5.24	3.60	2.52	1.70	1.16	0.97	15.19	+2.24	1.37	1.29	0.94	0.78	0.86	0.65	0.54	0.66	2.61	13.53	+0.58	1.79	11.49	-1.46
Washington	11.40	4.23	1.54	3.55	4.01	4.54	29.27	-5.48	5.79	4.44	2.45	0.91	1.52	1.64	0.84	0.43	0.84	30.96	-3.79	13.14	32.00	-2.75
Eastern Div.	6.30	2.07	0.91	1.64	1.70	1.17	13.79	-2.91	1.97	1.99	1.12	0.43	0.60	0.85	0.18	0.13	0.34	12.12	-4.58	5.22	12.83	-3.87
Western Div.	19.05	7.52	2.68	6.40	7.46	9.59	52.70	-4.63	11.51	8.12	4.45	1.64	2.90	2.83	1.84	0.87	1.59	59.20	+1.87	23.99	59.74	+2.41
Wyoming	2.61	5.75	4.04	1.17	1.01	0.68	15.26	+1.25	0.78	0.85	0.68	0.96	1.57	1.70	0.81	0.78	0.92	11.91	-2.10	1.22	10.27	-3.74
Florida	5.28	12.14	18.10	4.70	1.60	1.35	43.17	-9.56	1.62	2.25	1.54	4.32	5.01	9.13	7.59	10.78	5.79	55.68	+2.95	6.51	54.54	+1.81

[1] Departure from normal.

TABLE 3.—IRRIGATION ENTERPRISES, AREA EXISTING IRRIGATION WORKS WERE CAPABLE OF SUPPLYING WITH WATER, AREA IRRIGABLE IN ENTERPRISES, AND ESTIMATED COMPLETED COST OF EXISTING ENTERPRISES, 1910 TO 1940; FARMS IRRIGATED, AREA IRRIGATED, AND CAPITAL INVESTED, 1890 TO 1940: BY STATES

(For the 17 western States and Arkansas and Louisiana. See chart IX)

ITEM	CENSUS OF—							
	1890	1900	1910	1920	1930	1940		
						Total	Primary enterprises	Supplemental enterprises
	SUMMARY (19 STATES)							
Irrigation enterprises—number	----------	----------	56,858	63,298	75,517	91,637	80,502	11,135
Farms irrigated [1]—number	54,138	115,849	162,725	222,789	265,147	291,655	291,655	----------
Area irrigated—acres	3,715,945	7,744,492	14,433,285	19,191,716	19,547,544	21,003,739	21,003,739	3,287,210
Area existing irrigation works were capable of supplying with water—acres	----------	----------	20,285,403	26,020,477	26,101,890	28,055,248	28,055,248	4,268,394
Area irrigable in enterprises—acres	----------	----------	[2] 32,245,464	[2] 35,890,821	30,599,470	31,305,949	----------	----------
Capital invested in irrigation enterprises—dollars	29,533,921	70,010,594	321,454,008	697,657,328	892,755,790	1,052,049,201	963,888,265	88,160,938
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3] 7.95	[3] 9.04	15.85	26.81	34.20	37.50	34.36	20.65
Estimated completed cost of existing enterprises—dollars	----------	----------	434,948,825	819,778,005	1,015,108,210	1,126,545,687	----------	----------
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	----------	----------	1.07	2.43	2.77	2.28	2.14	0.95
	BY STATES							
California:								
Irrigation enterprises—number	----------	----------	13,970	24,115	38,117	39,975	31,733	8,242
Farms irrigated [1]—number	13,732	25,675	39,352	67,391	85,784	84,310	84,310	----------
Area irrigated—acres	1,004,233	1,446,114	2,664,104	4,219,040	4,746,632	5,069,568	5,069,568	455,342
Area existing irrigation works were capable of supplying with water—acres	----------	----------	3,619,378	5,894,466	6,815,250	7,398,576	7,398,576	624,550
Area irrigable in enterprises—acres	----------	----------	[2] 5,490,360	[2] 7,805,207	8,075,895	8,039,175	----------	----------
Capital invested in irrigation enterprises—dollars	13,004,817	19,181,610	72,580,030	194,886,388	310,987,979	318,889,218	300,164,036	18,725,182
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3] 12.95	[3] 13.26	20.05	33.06	45.63	43.10	40.57	29.98
Estimated completed cost of existing enterprises—dollars	----------	----------	84,392,344	225,799,123	325,930,535	327,593,311	----------	----------
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	----------	----------	1.54	4.40	6.10	4.73	4.39	3.69
Colorado:								
Irrigation enterprises—number	----------	----------	9,065	6,634	6,509	8,713	7,084	1,629
Farms irrigated [1]—number	9,659	17,613	25,857	28,756	31,288	29,766	29,766	----------
Area irrigated—acres	890,735	1,611,271	2,792,032	3,348,385	3,393,619	3,220,685	3,220,685	628,015
Area existing irrigation works were capable of supplying with water—acres	----------	----------	3,990,166	3,855,348	4,078,712	3,913,542	3,913,542	738,232
Area irrigable in enterprises—acres	----------	----------	[2] 5,917,457	[2] 5,220,588	4,528,251	4,283,250	----------	----------
Capital invested in irrigation enterprises—dollars	6,368,755	11,758,703	56,636,443	88,302,442	87,603,240	106,849,343	92,871,122	13,978,221
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3] 7.15	[3] 7.30	14.19	22.90	21.48	27.30	23.73	18.93
Estimated completed cost of existing enterprises—dollars	----------	----------	76,443,239	95,198,423	91,845,804	109,808,466	----------	----------
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	----------	----------	0.75	0.87	0.85	0.81	0.65	0.82
Idaho:								
Irrigation enterprises—number	----------	----------	3,092	3,629	3,222	3,625	3,437	188
Farms irrigated [1]—number	4,323	9,188	16,439	25,283	27,953	29,898	29,898	----------
Area irrigated—acres	217,005	608,718	1,430,848	2,488,806	2,181,250	2,277,857	2,277,857	910,002
Area existing irrigation works were capable of supplying with water—acres	----------	----------	2,388,959	3,092,810	2,617,021	2,593,534	2,593,534	1,053,582
Area irrigable in enterprises—acres	----------	----------	[2] 3,549,573	[2] 3,780,048	2,814,048	2,870,023	----------	----------
Capital invested in irrigation enterprises—dollars	1,029,000	5,120,399	40,977,688	91,501,009	84,500,354	102,585,798	89,034,966	13,550,832
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3] 4.74	[3] 8.41	17.15	29.59	32.29	39.55	34.33	12.86
Estimated completed cost of existing enterprises—dollars	----------	----------	58,451,106	97,019,717	101,350,250	109,513,311	----------	----------
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	----------	----------	0.63	1.17	1.44	1.11	1.02	0.23
Montana:								
Irrigation enterprises—number	----------	----------	5,534	6,035	4,461	5,555	5,501	54
Farms irrigated [1]—number	3,708	8,043	8,970	10,807	11,925	15,087	15,087	----------
Area irrigated—acres	350,582	951,154	1,679,084	1,681,729	1,594,912	1,711,409	1,711,409	168,863
Area existing irrigation works were capable of supplying with water—acres	----------	----------	2,205,155	2,753,498	2,276,000	2,344,390	2,344,390	254,269
Area irrigable in enterprises—acres	----------	----------	[2] 3,515,602	[2] 4,329,148	2,622,423	2,588,214	----------	----------
Capital invested in irrigation enterprises—dollars	1,623,195	4,683,073	22,970,958	52,143,363	50,319,204	67,352,505	61,882,978	5,469,527
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3] 4.63	[3] 4.92	10.42	18.94	22.11	28.73	26.40	23.35
Estimated completed cost of existing enterprises—dollars	----------	----------	32,382,077	70,079,028	58,489,575	75,174,645	----------	----------
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	----------	----------	0.89	1.26	0.87	0.73	0.72	0.12
Wyoming:								
Irrigation enterprises—number	----------	----------	5,577	3,564	2,631	3,385	3,319	66
Farms irrigated [1]—number	1,917	3,721	6,297	6,449	7,308	8,637	8,637	----------
Area irrigated—acres	229,676	605,878	1,133,302	1,207,982	1,236,155	1,486,498	1,486,498	93,581
Area existing irrigation works were capable of supplying with water—acres	----------	----------	1,639,510	1,831,039	1,655,008	1,913,527	1,913,527	163,090
Area irrigable in enterprises—acres	----------	----------	[2] 2,224,298	[2] 2,564,668	1,958,147	2,277,046	----------	----------
Capital invested in irrigation enterprises—dollars	831,427	3,973,165	17,700,980	34,326,328	35,153,187	41,522,801	39,955,803	1,566,998
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3] 3.62	[3] 6.56	10.80	18.75	21.24	21.70	20.88	9.61
Estimated completed cost of existing enterprises—dollars	----------	----------	20,425,890	51,500,288	41,970,416	48,539,663	----------	----------
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	----------	----------	0.86	1.04	0.84	0.59	0.57	0.34
Texas:								
Irrigation enterprises—number	----------	----------	2,772	1,371	1,728	4,040	4,021	19
Farms irrigated [1]—number	623	1,325	5,238	5,974	10,861	19,568	19,568	----------
Area irrigated—acres	18,419	49,652	451,130	586,120	798,917	1,045,224	1,045,224	66,909
Area existing irrigation works were capable of supplying with water—acres	----------	----------	690,991	1,150,542	1,177,415	1,773,812	1,773,812	139,231
Area irrigable in enterprises—acres	----------	----------	[2] 1,253,173	[2] 1,687,447	1,566,876	2,180,796	----------	----------
Capital invested in irrigation enterprises—dollars	----------	1,027,608	13,487,347	35,072,759	49,022,164	66,441,376	64,300,488	2,140,888
Average investment per acre based on area existing works were capable of supplying with water—dollars	----------	[3] 20.70	19.52	30.48	41.64	37.46	36.25	15.38
Estimated completed cost of existing enterprises—dollars	----------	----------	14,754,172	39,860,871	59,555,624	67,319,032	----------	----------
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	----------	----------	3.25	6.92	4.74	3.89	3.86	0.64

[1] Number of farms irrigated as reported in the Census of Agriculture, 1940. [2] For 1910 and 1920, relates to total area in enterprises. Areas irrigable for those years were not reported. [3] Not shown graphically.

TABLE 3.—IRRIGATION ENTERPRISES, AREA EXISTING IRRIGATION WORKS WERE CAPABLE OF SUPPLYING WITH WATER, AREA IRRIGABLE IN ENTERPRISES, AND ESTIMATED COMPLETED COST OF EXISTING ENTERPRISES, 1910 TO 1940; FARMS IRRIGATED, AREA IRRIGATED, AND CAPITAL INVESTED, 1890 TO 1940; BY STATES—Continued

(For the 17 western States and Arkansas and Louisiana. See chart IX)

ITEM	CENSUS OF—							
	1890	1900	1910	1920	1930	1940		
						Total	Primary enterprises	Supplemental enterprises
	BY STATES—Continued							
Utah:								
Irrigation enterprises—number	—	—	2,472	2,405	2,714	2,401	2,254	147
Farms irrigated [1]—number	9,724	17,924	19,709	22,218	23,847	22,612	22,612	—
Area irrigated—acres	263,475	629,295	999,410	1,371,651	1,324,125	1,176,116	1,176,116	322,994
Area existing irrigation works were capable of supplying with water—acres	—	—	1,250,246	1,700,550	1,542,475	1,357,714	1,357,714	370,284
Area irrigable in enterprises—acres	—	—	[2]1,947,625	[2]2,359,244	1,739,869	1,432,533	—	—
Capital invested in irrigation enterprises—dollars	2,780,000	5,865,302	14,028,717	32,037,351	35,669,819	41,898,532	29,219,904	12,676,628
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3]10.55	[3]9.32	11.22	18.84	23.13	30.86	21.52	34.23
Estimated completed cost of existing enterprises—dollars	—	—	17,840,775	33,835,641	37,857,011	43,380,966	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	0.65	1.08	1.00	0.85	0.77	0.26
Oregon:								
Irrigation enterprises—number	—	—	3,745	4,710	4,066	5,884	5,788	96
Farms irrigated [1]—number	3,150	4,536	6,669	9,154	11,387	16,159	16,159	—
Area irrigated—acres	177,944	388,310	686,129	986,162	898,715	1,049,176	1,049,176	104,970
Area existing irrigation works were capable of supplying with water—acres	—	—	830,526	1,344,046	1,158,210	1,261,081	1,261,081	141,558
Area irrigable in enterprises—acres	—	—	[2]2,527,206	[2]1,925,987	1,478,128	1,441,417	—	—
Capital invested in irrigation enterprises—dollars	825,660	1,843,771	12,760,214	26,929,151	38,754,548	50,961,251	46,726,313	4,234,938
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3]4.64	[3]4.75	15.36	21.52	33.46	40.41	37.05	29.92
Estimated completed cost of existing enterprises—dollars	—	—	39,216,619	41,585,742	60,039,939	53,884,450	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	0.75	1.19	1.41	1.25	1.18	0.73
Nebraska:								
Irrigation enterprises—number	—	—	474	470	721	2,717	2,455	262
Farms irrigated [1]—number	214	1,952	1,852	3,021	4,602	6,913	6,913	—
Area irrigated—acres	11,744	148,538	255,950	442,690	532,617	610,379	610,379	171,633
Area existing irrigation works were capable of supplying with water—acres	—	—	429,225	562,468	703,641	992,957	992,957	316,750
Area irrigable in enterprises—acres	—	—	[2]680,133	[2]766,768	763,039	1,095,567	—	—
Capital invested in irrigation enterprises—dollars	47,798	1,310,698	7,798,310	13,909,185	21,386,319	39,056,207	36,191,786	2,864,421
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3]4.07	[3]8.82	18.17	24.73	30.39	39.33	36.45	9.04
Estimated completed cost of existing enterprises—dollars	—	—	9,485,231	18,050,154	21,465,772	41,995,361	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	1.09	1.48	1.54	1.59	1.39	0.70
Arizona:								
Irrigation enterprises—number	—	—	1,269	1,388	1,270	1,911	1,768	143
Farms irrigated [1]—number	1,075	2,981	4,841	6,605	8,523	10,339	10,339	—
Area irrigated—acres	65,821	185,396	320,051	467,565	575,590	653,263	653,263	73,806
Area existing irrigation works were capable of supplying with water—acres	—	—	387,655	627,303	824,152	844,212	844,212	113,331
Area irrigable in enterprises—acres	—	—	[2]944,090	[2]813,153	1,085,627	1,104,645	—	—
Capital invested in irrigation enterprises—dollars	465,000	4,458,352	17,677,966	33,498,094	73,328,197	83,526,608	81,015,378	2,511,230
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3]7.06	[3]23.94	45.80	53.40	88.97	98.94	95.97	22.16
Estimated completed cost of existing enterprises—dollars	—	—	24,828,868	34,615,064	91,913,550	108,980,519	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	0.93	3.27	4.57	5.00	4.92	3.51
Nevada:								
Irrigation enterprises—number	—	—	1,347	1,015	1,245	1,464	1,453	11
Farms irrigated [1]—number	1,187	1,906	2,406	2,718	3,031	3,264	3,264	—
Area irrigated—acres	224,403	504,168	701,833	561,447	486,648	739,863	739,863	84,722
Area existing irrigation works were capable of supplying with water—acres	—	—	840,962	704,708	756,249	841,304	841,304	123,845
Area irrigable in enterprises—acres	—	—	[2]1,232,142	[2]1,382,036	985,717	915,689	—	—
Capital invested in irrigation enterprises—dollars	1,700,975	1,337,559	6,721,924	14,754,280	15,457,931	16,906,790	13,393,439	3,513,351
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3]7.58	[3]3.05	7.99	20.94	21.00	20.10	15.92	28.37
Estimated completed cost of existing enterprises—dollars	—	—	12,188,756	22,648,747	18,489,603	18,128,554	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	0.97	0.79	0.91	0.48	0.43	0.46
Louisiana:								
Irrigation enterprises—number	—	—	1,237	1,373	2,352	2,566	2,550	16
Farms irrigated [1]—number	—	4,331	2,690	6,471	5,588	7,037	7,037	—
Area irrigated—acres	84,377	201,685	380,200	454,882	450,901	447,095	447,095	2,579
Area existing irrigation works were capable of supplying with water—acres	—	—	553,220	728,742	795,165	759,915	759,915	4,342
Area irrigable in enterprises—acres	—	—	[2]581,965	[2]851,211	850,401	793,674	—	—
Capital invested in irrigation enterprises—dollars	—	2,529,319	6,839,166	14,063,161	15,744,743	11,565,513	11,548,812	16,701
Average investment per acre based on area existing works were capable of supplying with water—dollars	—	[3]12.54	12.40	19.30	19.80	15.22	15.20	3.85
Estimated completed cost of existing enterprises—dollars	—	—	6,914,166	14,264,178	15,771,003	11,659,725	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	—	7.01	4.09	3.65	3.64	1.51
New Mexico:								
Irrigation enterprises—number	—	—	2,786	2,391	1,965	2,503	2,451	52
Farms irrigated [1]—number	3,085	9,128	12,795	11,390	14,347	15,811	15,811	—
Area irrigated—acres	91,745	203,693	461,718	538,377	527,033	554,039	554,039	5,123
Area existing irrigation works were capable of supplying with water—acres	—	—	644,970	696,119	656,669	751,990	751,990	5,912
Area irrigable in enterprises—acres	—	—	[2]1,102,297	[2]961,879	741,245	807,656	—	—
Capital invested in irrigation enterprises—dollars	511,957	4,165,312	9,154,897	18,210,412	19,834,380	32,755,997	32,629,293	106,704
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3]5.58	[3]20.43	14.19	26.18	30.20	44.72	44.58	18.05
Estimated completed cost of existing enterprises—dollars	—	—	11,640,091	20,440,646	21,942,450	36,773,159	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	1.36	2.41	2.15	2.11	2.09	2.00

[1] Number of farms irrigated as reported in the Census of Agriculture, 1940. [2] For 1910 and 1920, relates to total area in enterprises. Areas irrigable for those years were not reported. [3] Not shown graphically.

TABLE 3.—IRRIGATION ENTERPRISES, AREA EXISTING IRRIGATION WORKS WERE CAPABLE OF SUPPLYING WITH WATER, AREA IRRIGABLE IN ENTERPRISES, AND ESTIMATED COMPLETED COST OF EXISTING ENTERPRISES, 1910 TO 1940; FARMS IRRIGATED, AREA IRRIGATED, AND CAPITAL INVESTED, 1890 TO 1940; BY STATES—Continued

(For the 17 western States and Arkansas and Louisiana. See chart IX)

ITEM	CENSUS OF—							
	1890	1900	1910	1920	1930	1940		
						Total	Primary enterprises	Supplemental enterprises
	BY STATES—Continued							
Washington:								
Irrigation enterprises—number	—	—	1,934	2,692	2,986	4,120	3,987	133
Farms irrigated [1]—number	1,046	3,513	7,664	13,271	15,949	17,426	17,426	—
Area irrigated—acres	48,799	135,470	334,378	529,899	499,283	615,013	615,013	184,664
Area existing irrigation works were capable of supplying with water—acres	—	—	470,514	637,151	631,511	731,527	731,527	219,009
Area irrigable in enterprises—acres	—	—	[2] 817,032	[2] 836,795	915,379	837,096	—	—
Capital invested in irrigation enterprises—dollars	196,660	1,722,369	16,219,149	29,299,011	40,561,895	56,415,196	49,881,624	6,533,572
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3] 4.05	[3] 12.71	34.47	45.98	64.23	77.12	68.19	29.83
Estimated completed cost of existing enterprises—dollars	—	—	22,322,856	37,684,591	53,232,477	58,141,097	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	3.08	3.45	4.14	2.80	2.78	0.51
Arkansas:								
Irrigation enterprises—number	—	—	310	944	1,043	1,298	1,293	5
Farms irrigated [1]—number	—	20	232	1,166	1,096	1,529	1,529	—
Area irrigated—acres	9	25	27,755	143,946	151,787	161,601	161,601	341
Area existing irrigation works were capable of supplying with water—acres	—	—	47,136	179,013	209,942	287,765	287,765	1,266
Area irrigable in enterprises—acres	—	—	[2] 52,885	[2] 246,480	225,992	314,929	—	—
Capital invested in irrigation enterprises—dollars	—	—	587,854	7,185,322	6,836,648	5,766,895	5,752,045	14,850
Average investment per acre based on area existing works were capable of supplying with water—dollars	—	—	12.47	40.13	32.56	20.04	19.99	11.73
Estimated completed cost of existing enterprises—dollars	—	—	612,854	7,283,522	6,844,092	5,878,930	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	—	13.67	7.03	5.46	5.45	5.20
Kansas:								
Irrigation enterprises—number	—	—	716	209	300	1,066	988	78
Farms irrigated [1]—number	519	929	1,008	504	683	1,578	1,578	—
Area irrigated—acres	20,818	23,620	37,479	47,312	71,290	99,980	99,980	13,866
Area existing irrigation works were capable of supplying with water—acres	—	—	139,995	67,653	83,583	142,409	142,409	19,163
Area irrigable in enterprises—acres	—	—	[2] 161,300	[2] 102,582	95,719	147,226	—	—
Capital invested in irrigation enterprises—dollars	84,729	529,755	1,365,563	2,067,581	1,885,652	2,153,888	1,896,991	256,895
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3] 4.07	[3] 22.43	9.75	30.47	20.17	15.12	13.32	13.41
Estimated completed cost of existing enterprises—dollars	—	—	1,365,563	2,195,981	1,723,872	2,255,579	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	1.59	3.29	1.53	2.59	2.29	2.18
South Dakota:								
Irrigation enterprises—number	—	—	395	292	121	274	274	—
Farms irrigated [1]—number	189	606	500	1,198	763	967	967	—
Area irrigated—acres	15,717	43,676	63,248	100,682	67,107	60,198	60,198	—
Area existing irrigation works were capable of supplying with water—acres	—	—	128,481	150,914	109,550	121,847	121,847	—
Area irrigable in enterprises—acres	—	—	[2] 201,625	[2] 188,382	122,510	123,961	—	—
Capital invested in irrigation enterprises—dollars	63,968	284,747	3,043,140	5,465,248	4,502,117	5,395,610	5,395,610	—
Average investment per acre based on area existing works were capable of supplying with water—dollars	[3] 4.07	[3] 6.52	23.69	36.21	41.10	44.28	44.28	—
Estimated completed cost of existing enterprises—dollars	—	—	3,800,556	5,500,748	5,174,417	5,432,934	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	0.64	1.26	1.33	1.28	1.28	—
North Dakota:								
Irrigation enterprises—number	—	—	49	30	23	80	80	—
Farms irrigated [1]—number	7	54	69	340	113	479	479	—
Area irrigated—acres	445	4,872	10,248	12,072	9,392	21,615	21,615	—
Area existing irrigation works were capable of supplying with water—acres	—	—	21,917	34,235	24,006	36,522	36,522	—
Area irrigable in enterprises—acres	—	—	[2] 36,173	[2] 57,476	24,860	39,558	—	—
Capital invested in irrigation enterprises—dollars	—	16,980	836,482	1,857,118	1,267,314	1,755,489	1,755,489	—
Average investment per acre based on area existing works were capable of supplying with water—dollars	—	3.49	38.17	54.25	52.79	48.07	48.07	—
Estimated completed cost of existing enterprises—dollars	—	—	836,482	2,072,766	1,343,911	1,785,539	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	28.40	5.50	1.97	1.41	1.41	—
Oklahoma:								
Irrigation enterprises—number	—	—	114	33	77	120	120	—
Farms irrigated [1]—number	—	124	137	73	99	275	275	—
Area irrigated—acres	—	2,759	4,388	2,969	1,573	4,160	4,160	—
Area existing irrigation works were capable of supplying with water—acres	—	—	6,397	9,672	7,331	8,624	8,624	—
Area irrigable in enterprises—acres	—	—	[2] 8,528	[2] 11,742	7,344	13,494	—	—
Capital invested in irrigation enterprises—dollars	—	21,872	47,200	151,325	160,099	272,186	272,186	—
Average investment per acre based on area existing works were capable of supplying with water—dollars	—	[3] 7.93	7.38	15.65	21.84	31.56	31.56	—
Estimated completed cost of existing enterprises—dollars	—	—	47,200	162,775	167,909	299,486	—	—
Average annual cost per acre irrigated for maintenance and operation of irrigation works—dollars	—	—	0.51	2.92	7.62	3.35	3.35	—

[1] Number of farms irrigated as reported in the Census of Agriculture, 1940. [2] For 1910 and 1920, relates to total area in enterprises. Areas irrigable for those years were not reported. [3] Not shown graphically.

TABLE 4.—AREA IRRIGATED, 1902, 1919, 1929, AND 1939; AREA EXISTING WORKS WERE CAPABLE OF SUPPLYING WITH WATER AND AREA IRRIGABLE, 1920 TO 1940; CAPITAL INVESTED AND AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1902, 1920, 1930, AND 1940; BY SPECIFIED DRAINAGE BASINS

(For the 17 western States and Arkansas and Louisiana. See chart X)

DRAINAGE BASIN	AREA IRRIGATED (ACRES)				AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER (ACRES)			AREA IRRIGABLE (ACRES)		
	1902	1919	1929	1939	1920	1930	1940	1920[1]	1930	1940
Summary (19 States)	9,431,066	19,191,716	19,547,544	21,003,759	26,020,477	26,101,690	28,055,248	35,890,821	30,599,470	31,305,949
Red River (of the North)	682	----------	2,099	4,495	----------	2,099	7,980	----------	2,409	8,100
Missouri River, summary	2,533,237	4,147,278	4,185,160	4,410,385	5,805,630	5,472,012	5,942,959	8,483,171	6,231,873	6,542,576
Yellowstone River	427,559	889,025	861,145	984,530	1,322,304	1,210,690	1,360,217	1,826,870	1,401,212	1,515,241
Platte River	1,286,343	2,136,402	2,315,297	2,360,615	2,579,720	2,813,195	3,081,356	3,431,037	3,081,680	3,339,995
All other tributaries	819,335	1,121,851	1,008,738	1,065,240	1,903,606	1,448,127	1,521,385	3,225,264	1,748,981	1,687,340
Mississippi River, exclusive of Missouri River, summary	393,687	958,493	902,560	927,594	1,152,261	1,170,583	1,350,911	1,545,064	1,280,730	1,458,502
Arkansas River	393,085	851,150	753,533	679,919	1,009,921	960,622	933,312	1,344,646	1,051,963	1,050,597
All other tributaries	602	107,343	149,027	247,675	142,340	209,961	417,599	198,418	228,767	427,905
Gulf of Mexico streams, other than Mississippi River and Rio Grande	577,809	698,077	662,958	902,392	1,157,529	1,221,997	1,520,796	1,602,169	1,536,404	1,874,654
Rio Grande, summary	504,942	1,312,855	1,564,725	1,521,578	1,914,265	1,914,781	2,177,705	2,628,153	2,177,664	2,378,083
Pecos River	78,855	176,458	175,798	217,542	281,150	223,642	314,434	397,443	287,164	349,897
All other tributaries	426,087	1,136,397	1,388,927	1,304,036	1,633,115	1,691,139	1,863,271	2,230,710	1,890,500	2,028,186
Colorado River, summary	927,183	2,326,690	2,537,124	2,638,120	3,009,219	3,335,914	3,367,744	4,102,096	4,435,529	4,017,757
Upper Colorado River[2]	649,083	1,844,258	1,968,667	1,464,271	2,360,597	2,516,149	1,808,055	3,236,592	3,485,341	2,157,752
Green River	254,951	586,387	610,659	636,977	855,264	792,677	782,571	1,148,821	926,619	930,100
Lower Colorado River[2 3]	278,120	482,432	568,457	1,173,849	648,622	819,765	1,559,689	865,504	950,188	1,860,005
Great Basin, summary	1,634,433	2,277,851	2,036,033	2,073,727	2,825,313	2,536,492	2,581,171	4,165,450	3,004,851	2,504,611
Bonneville Lake	686,858	1,235,747	1,104,975	1,083,238	1,479,753	1,240,346	1,205,711	2,003,750	1,349,150	1,272,056
Lahontan Lake[4]	[5]947,575	1,041,904	[5]931,058	990,489	1,345,560	[5]1,296,146	1,175,460	2,161,700	[5]1,655,521	1,232,555
Columbia River, summary	1,297,457	3,875,245	3,393,640	3,819,938	4,968,518	4,241,244	4,426,367	6,336,801	4,992,151	5,001,485
Snake River	807,044	2,712,618	2,339,264	2,625,355	3,376,146	2,773,621	3,018,889	4,057,747	3,130,120	3,343,028
All other tributaries	490,393	1,160,627	1,054,376	1,194,583	1,592,372	1,467,623	1,407,478	2,279,054	1,862,011	1,658,455
Klamath River	80,433	153,105	187,991	271,038	205,374	264,949	310,560	362,793	316,239	384,003
Sacramento-San Joaquin Delta and tributary streams	1,139,243	2,744,844	3,157,132	3,393,882	4,113,324	4,795,836	5,132,597	5,499,735	5,393,666	5,660,337
Pacific Ocean streams, exclusive of Gulf of California streams, Columbia and Klamath Rivers, and Sacramento-San Joaquin Delta and tributary streams	341,596	693,807	914,801	1,032,294	858,874	1,141,230	1,422,997	1,150,766	1,222,604	1,461,602
Whitewater Draw and Vamori Wash (Gulf of Calif.)	384	5,871	3,301	8,498	9,950	4,753	13,462	16,623	5,570	14,261

DRAINAGE BASIN	CAPITAL INVESTED (DOLLARS)				AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WATER (DOLLARS)			
	1902	1920	1930	1940	1902[6]	1920	1930	1940
Summary (19 States)	91,000,595	697,657,328	[7]892,755,790	1,052,049,201	9.65	26.81	34.20	37.50
Red River (of the North)	3,957	----------	20,925	130,566	5.77	----------	9.97	16.38
Missouri River, summary	16,176,277	151,555,106	136,506,721	179,750,258	6.39	22.66	24.95	30.25
Yellowstone River	2,770,235	30,181,550	31,917,510	40,767,196	6.48	22.82	28.36	29.97
Platte River	9,241,861	62,893,985	69,493,120	95,210,869	7.18	24.38	24.70	31.10
All other tributaries	4,164,181	38,477,573	35,096,291	43,772,173	5.08	20.21	24.24	28.77
Mississippi River, exclusive of Missouri River, summary	4,619,814	35,183,789	31,831,673	37,101,932	11.73	30.53	27.19	27.46
Arkansas River	4,586,655	30,241,390	21,722,223	26,691,327	11.67	29.94	22.61	28.60
All other tributaries	33,159	4,942,399	10,109,450	10,410,605	55.08	34.72	48.15	24.93
Gulf of Mexico streams, other than Mississippi River and Rio Grande	8,966,265	29,439,808	28,578,193	30,498,361	15.52	25.43	23.39	20.05
Rio Grande, summary	6,493,615	34,824,111	33,748,608	80,563,998	12.86	18.19	28.07	36.99
Pecos River	3,185,855	7,483,049	7,220,317	12,855,650	40.40	26.62	32.29	40.89
All other tributaries	3,307,760	27,341,062	46,528,291	67,708,348	7.76	16.74	27.51	36.34
Colorado River, summary	11,298,671	88,939,884	132,330,247	155,800,882	12.19	29.56	39.67	46.26
Upper Colorado River[2]	6,509,557	58,964,034	67,315,624	46,448,752	10.03	24.98	28.75	25.89
Green River	1,470,459	8,592,346	8,820,435	12,160,991	5.77	10.05	11.13	13.54
Lower Colorado River[2 3]	4,789,114	29,975,850	65,034,623	109,352,130	17.22	46.21	79.33	70.11
Great Basin, summary	10,115,199	82,207,175	67,579,074	59,698,865	6.19	22.02	26.64	23.07
Bonneville Lake	6,531,123	28,678,299	29,693,422	37,401,770	9.51	19.38	23.94	31.02
Lahontan Lake[4]	[5]3,584,076	33,528,876	[5]37,885,652	22,297,095	3.78	24.92	29.23	18.97
Columbia River, summary	10,851,415	145,672,382	157,355,114	206,523,302	8.36	29.32	37.10	46.66
Snake River	6,749,247	93,823,117	93,265,245	125,320,432	8.36	27.73	33.63	41.51
All other tributaries	4,102,168	52,047,265	64,089,869	81,202,870	8.37	32.89	45.67	57.69
Klamath River	529,456	5,502,890	9,430,566	10,430,941	6.58	26.79	33.59	33.59
Sacramento-San Joaquin Delta and tributary streams	10,985,469	100,527,759	164,628,093	171,004,939	9.64	24.44	34.33	33.32
Pacific Ocean streams, exclusive of Gulf of California streams, Columbia and Klamath Rivers, and Sacramento-San Joaquin Delta and tributary streams	10,853,742	63,507,056	110,495,970	120,318,550	32.07	73.94	96.82	84.55
Whitewater Draw and Vamori Wash (Gulf of Calif.)	6,735	299,368	230,606	226,627	17.54	30.09	48.32	16.85

[1]Relates to total area. Area irrigable in 1920 not reported.
[2]Data for Irrigation Census of 1930, included in published Agriculture Census Reports, as "Other Tributaries of Colorado River," are allocated 85 percent to the Upper Colorado River Drainage Basin and 15 percent to the Lower Colorado River Drainage Basin.
[3]Includes data for Imperial Valley, Calif., for all Censuses, and data for some small unidentified basins in the Colorado River Drainage Basins in Censuses of 1902 and 1920.
[4]Statistics for Irrigation Censuses of 1902, 1920, and 1930 include data for some small unidentified basins in the Great Basin Drainage Basins.
[5]Includes unidentified data for the Whitewater River Drainage Basin in California. Data for Whitewater River Basin for Censuses of 1920 and 1940 are included in the Lower Colorado River Basin.
[6]Based on area irrigated. Area works were capable of supplying with water in 1902 not reported.
[7]Revised.

TABLE 5.—AREA IRRIGATED, 1909 TO 1939; AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, AREA IRRIGABLE, AND AVERAGE ANNUAL COST PER ACRE OF MAINTENANCE AND OPERATION OF

(For the 17 western States and

	STATES	AREA IRRIGATED					AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER				AREA IRRIGABLE		
		1909	1919	1929	1939		1920	1930	1940		1920[2]	1930	1940
					Primary	Supplemental			Primary	Supplemental			
		(Acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)
		SURFACE SOURCES (STREAMS, LAKES, AND SPRINGS, GRAVITY OR											
1	Summary (19 States)	15,755,445	16,386,422	15,344,803	16,653,782	2,762,340	22,510,141	20,844,073	22,170,892	3,586,910	30,332,521	24,796,758	24,898,591
2	Arizona	512,466	199,546	174,608	123,674	58,151	512,644	282,084	161,926	91,137	422,339	468,037	220,652
3	Arkansas	3,355	6,619	1,577	7,254	39	7,810	1,917	11,967	50	8,050	2,672	15,327
4	California	2,313,381	3,020,897	2,310,859	2,558,654	99,895	4,289,833	3,851,490	4,087,433	140,313	5,316,870	4,865,274	4,338,894
5	Colorado	2,785,750	3,082,467	3,196,102	3,085,448	519,025	3,546,394	3,864,285	3,749,967	606,357	4,579,327	4,297,355	4,112,378
6	Idaho	1,428,971	2,427,341	2,065,971	2,168,984	906,945	3,002,625	2,471,610	2,470,701	1,049,887	3,650,932	2,663,572	2,741,987
7	Kansas	35,518	32,137	56,792	49,551	257	44,094	62,269	70,488	257	44,490	73,198	71,904
8	Louisiana	226,574	281,427	263,246	290,154	150	492,528	526,178	505,937	357	551,060	552,497	527,133
9	Montana	1,678,822	1,585,784	1,513,959	1,695,767	168,806	2,579,103	2,174,494	2,327,699	234,211	4,077,327	2,508,432	2,571,400
10	Nebraska	255,811	440,762	505,648	519,043	156,085	559,140	667,953	852,315	292,980	761,502	724,951	948,212
11	Nevada	701,646	509,959	457,243	700,214	84,204	633,077	672,986	797,857	123,240	1,236,183	901,685	869,898
12	New Mexico	406,889	453,552	444,655	426,209	92	591,368	561,637	563,698	132	810,137	643,804	623,822
13	North Dakota	10,247	12,007	8,861	21,568	—	34,145	23,475	36,469	—	57,586	24,079	39,505
14	Oklahoma	4,319	2,716	734	2,934	—	9,333	6,329	5,281	—	11,383	6,329	9,925
15	Oregon	684,669	871,900	764,625	1,011,345	104,267	1,201,343	993,977	1,215,432	140,665	1,576,996	1,264,787	1,393,240
16	South Dakota	61,792	96,168	66,091	58,693	—	141,965	108,529	118,499	—	177,870	121,269	120,289
17	Texas	393,348	518,725	710,633	757,239	66,849	1,037,140	1,063,012	1,310,626	139,171	1,501,064	1,429,078	1,707,437
18	Utah	995,010	1,185,055	1,147,995	1,121,321	520,369	1,478,877	1,328,324	1,296,806	367,297	2,098,681	1,507,074	1,568,800
19	Washington	325,714	487,247	461,227	580,122	183,789	580,626	586,796	687,091	218,130	763,648	864,859	790,162
20	Wyoming	1,133,163	1,174,315	1,194,177	1,475,626	93,437	1,768,094	1,596,750	1,900,720	162,946	2,487,476	1,877,806	2,228,826
		UNDERGROUND SOURCES (WELLS											
1	Summary (19 States)	833,761	1,364,639	2,117,012	2,570,392	524,870	1,797,299	2,542,637	3,697,065	701,484	2,572,264	2,808,727	3,848,569
2	Arizona	7,585	41,810	106,002	146,496	15,655	62,484	151,209	204,532	22,194	108,178	185,583	234,456
3	Arkansas	24,398	135,260	142,978	149,915	302	168,548	199,849	268,145	1,216	235,620	215,144	288,343
4	California	350,725	868,080	1,464,960	1,519,302	355,447	1,117,383	1,661,072	2,080,023	484,237	1,580,740	1,817,884	2,136,037
5	Colorado	8,282	14,390	15,929	65,509	108,990	20,556	20,044	83,995	131,875	27,819	23,352	87,498
6	Idaho	1,877	1,545	5,569	8,395	3,057	1,754	6,660	11,343	3,895	4,395	7,709	12,872
7	Kansas	1,961	13,285	11,651	45,058	13,429	20,579	18,072	64,041	18,926	55,034	18,857	67,327
8	Louisiana	109,547	155,575	175,787	156,778	2,429	211,315	243,720	222,632	3,985	261,147	270,377	230,994
9	Montana	262	351	1,064	1,542	57	556	1,462	1,733	58	917	1,570	1,819
10	Nebraska	139	546	23,452	81,034	15,548	1,148	30,922	126,888	23,750	1,228	33,172	133,431
11	Nevada	187	1,171	3,426	3,409	518	1,804	8,751	4,915	605	7,455	10,292	6,098
12	New Mexico	54,829	52,295	58,118	98,818	5,031	63,987	64,104	130,601	5,780	102,615	65,473	136,954
13	North Dakota	1	—	—	47	—	—	—	53	—	—	—	53
14	Oklahoma	69	125	63	792	—	136	66	1,143	—	156	79	1,346
15	Oregon	1,460	2,405	3,891	8,328	703	2,904	4,300	12,014	893	3,499	4,798	12,566
16	South Dakota	1,456	130	528	701	—	130	533	760	—	250	548	910
17	Texas	57,782	44,486	62,624	268,884	60	80,648	84,680	434,413	60	122,701	100,898	443,811
18	Utah	4,400	12,394	19,655	15,938	2,625	16,908	21,993	19,667	2,987	30,086	25,278	21,492
19	Washington	8,664	20,685	20,995	19,999	875	24,271	24,755	25,799	879	30,211	27,147	27,458
20	Wyoming	139	166	320	3,467	144	188	445	4,566	144	213	586	5,122
		OTHER AND MIXED											
1	Summary (19 States)	44,079	1,440,655	2,085,729	1,779,565	—	1,913,057	2,715,180	2,187,293	—	2,986,036	2,995,985	2,558,789
2	Arizona[6]	—	226,209	294,980	383,093	—	252,175	390,859	477,954	—	282,636	432,007	649,537
3	Arkansas	—	2,067	7,232	4,432	—	2,655	8,176	7,653	—	2,810	8,176	10,259
4	California[6]	—	330,283	971,013	991,612	—	487,248	1,302,688	1,231,120	—	707,597	1,392,757	1,366,444
5	Colorado	—	251,528	181,588	71,728	—	288,398	194,385	79,580	—	613,442	207,544	85,374
6	Idaho	—	59,920	109,710	100,498	—	88,431	138,751	111,490	—	124,721	142,767	115,164
7	Kansas	—	1,890	2,847	5,391	—	3,180	3,242	7,880	—	3,038	3,664	7,995
8	Louisiana	44,079	17,880	11,868	20,163	—	24,899	25,267	31,346	—	39,004	27,527	35,647
9	Montana	—	95,594	79,889	14,080	—	173,859	100,044	14,958	—	250,904	112,421	14,995
10	Nebraska	—	1,382	5,517	10,302	—	2,180	4,766	13,754	—	4,238	4,916	15,924
11	Nevada	—	50,317	25,979	36,240	—	69,827	54,512	38,552	—	138,398	71,740	39,693
12	New Mexico	—	32,530	24,260	29,012	—	40,784	30,928	37,691	—	49,127	31,988	46,880
13	North Dakota	—	65	531	—	—	90	531	—	—	90	781	—
14	Oklahoma	—	128	776	434	—	203	936	2,200	—	203	936	2,223
15	Oregon	—	111,857	130,197	29,503	—	159,799	159,933	35,635	—	345,492	206,543	35,609
16	South Dakota	—	4,384	468	804	—	8,819	488	2,588	—	10,262	693	2,762
17	Texas	—	24,929	25,660	21,121	—	32,754	29,723	28,773	—	63,682	36,900	29,548
18	Utah	—	174,222	156,475	58,857	—	202,765	192,158	41,241	—	230,477	207,517	42,241
19	Washington	—	21,987	17,081	14,892	—	32,254	19,960	18,657	—	42,936	23,373	19,496
20	Wyoming	—	33,505	41,658	7,403	—	62,757	57,833	8,241	—	76,979	79,775	45,098

[1]Based on the area irrigated in enterprises reporting cost of maintenance and operation in the crop year enumerated.
[2]Total area in enterprises. Area irrigable not reported in 1920.
[3]Contains $100,000 for which no acreage was reported and which was not included in computing average investment per acre.
[4]States reporting less than 100,000 acres, area works were capable of supplying with water, in 1940 not shown graphically.
[5]Revised.
[6]Other and mixed sources in Arizona and California are largely for enterprises reporting streams, gravity or pumped, with wells pumped.

CAPITAL INVESTED, AND AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1920 TO 1940; IRRIGATION ENTERPRISES, 1919 TO 1939; BY SOURCE OF WATER SUPPLY, BY STATES

Arkansas and Louisiana. See chart XI)

CAPITAL INVESTED, JANUARY 1					AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WITH WATER					AVERAGE ANNUAL COST PER ACRE OF MAINTENANCE AND OPERATION[1]				
1920	1930	1940			1920	1930	1940			1919	1929	1939		
(Dollars)	(Dollars)	Total (Dollars)	Primary (Dollars)	Supplemental (Dollars)	(Dollars)	(Dollars)	Total (Dollars)	Primary (Dollars)	Supplemental (Dollars)	(Dollars)	(Dollars)	Primary (Dollars)	Supplemental (Dollars)	
PUMPED, STORED STORM WATER, AND WASTE WATER) OF WATER SUPPLY														
533,723,689	589,676,749	744,435,919	672,917,002	71,518,917	23.92	28.29	33.58	30.55	20.05	1.73	1.64	1.27	0.36	1
12,593,094	21,730,456	14,418,570	12,420,810	1,997,560	39.64	77.04	89.04	76.71	21.92	2.59	3.51	1.97	1.89	2
111,324	32,575	180,252	179,902	350	14.25	16.99	15.06	15.03	7.00	7.65	6.14	5.06	7.69	3
106,147,114	111,448,117	124,316,682	118,748,821	5,567,861	24.74	28.94	30.41	29.05	39.68	2.35	2.89	2.15	1.39	4
73,509,625	85,206,834	101,824,106	89,821,241	12,002,865	20.73	22.05	27.15	23.95	19.80	0.87	0.85	0.58	0.36	5
89,148,755	82,264,498	99,740,083	86,305,491	13,434,592	29.69	33.28	40.37	34.93	12.80	1.15	1.43	0.98	0.22	6
1,257,816	947,879	768,696	767,896	800	28.53	15.22	10.91	10.89	3.38	1.74	0.97	1.26	0.38	7
8,501,088	8,925,848	6,707,445	6,706,017	1,428	16.85	16.96	13.26	13.25	4.00	7.55	3.62	3.75	0.95	8
50,354,367	48,409,882	67,006,643	61,537,816	5,468,827	19.52	22.26	28.79	26.44	23.35	1.26	0.87	0.71	0.12	9
[3]13,843,282	20,715,880	36,634,746	34,038,969	2,595,777	24.58	31.01	42.98	39.94	8.86	1.48	1.43	1.07	0.63	10
13,588,332	14,371,337	16,272,427	12,830,961	3,441,466	21.46	21.35	20.40	16.08	27.92	0.69	0.85	0.42	0.45	11
14,523,385	16,811,289	28,009,263	28,007,132	2,131	24.56	29.93	49.69	49.68	16.14	1.65	1.87	1.80	0.59	12
1,856,618	1,254,039	1,752,369	1,752,369	----------	54.37	53.42	48.05	48.05	----------	5.50	1.97	1.40	----------	13
95,250	132,620	129,077	129,077	----------	10.21	20.95	24.44	24.44	----------	1.68	8.18	2.10	----------	14
23,940,423	29,547,086	49,246,537	45,052,846	4,193,691	19.93	29.73	40.52	37.07	29.81	1.18	1.27	1.12	0.68	15
5,391,253	4,486,042	5,347,447	5,347,447	----------	37.98	41.33	45.13	45.13	----------	1.26	1.35	1.25	----------	16
30,401,891	43,300,579	58,830,985	56,691,797	2,139,188	29.31	40.73	44.89	43.26	15.37	6.68	4.49	4.12	0.64	17
28,832,957	31,265,939	40,494,786	27,892,277	12,602,509	19.50	23.54	31.23	21.51	34.31	1.09	0.93	0.73	0.25	18
26,423,472	35,525,751	52,166,332	45,663,158	6,503,174	45.51	60.20	75.92	66.46	29.81	2.98	3.25	2.46	0.35	19
33,603,865	33,500,118	40,589,673	39,022,975	1,566,698	19.01	20.98	21.35	20.53	9.61	1.04	0.84	0.56	0.34	20
FLOWING AND/OR PUMPED) OF WATER SUPPLY[4]														
82,180,866	144,975,284	159,878,812	143,236,791	16,642,021	45.72	57.02	43.24	38.74	25.72	9.84	9.92	6.88	3.85	1
3,587,975	8,959,032	10,328,634	9,814,964	513,670	57.42	59.12	50.55	48.03	23.14	12.82	10.70	7.91	3.51	2
7,028,775	6,540,773	5,429,033	5,414,533	14,500	41.70	33.23	20.25	20.19	11.92	14.06	7.04	5.33	4.69	3
56,640,694	[5]111,174,363	119,346,657	106,189,336	13,157,321	50.69	66.93	57.38	51.05	27.17	10.30	11.25	8.46	4.35	4
435,828	585,303	3,373,470	1,398,114	1,975,356	21.20	29.20	40.16	16.65	14.98	3.38	4.48	3.74	2.96	5
58,587	203,990	342,745	226,505	116,240	33.40	30.63	30.22	19.97	29.84	3.01	2.69	2.59	2.35	6
745,583	648,238	1,275,015	1,018,920	256,095	36.23	35.87	19.91	15.91	13.53	6.96	3.92	3.35	2.21	7
5,394,448	6,282,965	4,324,076	4,308,803	15,273	25.53	25.78	19.42	19.35	3.83	5.93	4.44	3.48	1.55	8
26,292	23,284	48,751	48,051	700	47.29	15.93	28.12	27.72	12.07	6.80	3.06	4.48	15.00	9
23,250	618,939	2,260,097	1,991,453	268,644	20.25	19.95	17.81	15.69	11.31	5.16	4.03	3.48	1.44	10
75,975	301,133	285,229	213,344	71,885	42.11	34.41	58.03	43.41	118.82	17.25	4.65	1.85	1.96	11
2,533,687	2,441,540	3,238,644	3,134,071	104,573	39.60	38.09	24.80	24.00	18.09	5.27	5.39	3.91	2.01	12
----------	----------	3,120	3,120	----------	----------	----------	58.87	58.87	----------	----------	----------	7.26	----------	13
52,075	12,225	87,265	87,265	----------	382.90	185.23	76.35	76.35	----------	46.10	14.30	6.48	----------	14
127,806	256,265	545,944	504,697	41,247	44.01	59.60	45.44	42.01	46.19	8.24	10.54	6.34	6.73	15
5,000	6,000	21,250	21,250	----------	38.46	11.26	27.96	27.96	----------	----------	0.33	2.19	----------	16
3,286,855	4,086,553	6,657,288	6,655,588	1,700	40.76	48.28	15.32	15.32	28.33	10.98	8.37	3.09	1.67	17
338,814	754,403	616,996	542,877	74,119	17.92	34.30	31.37	27.60	24.61	2.08	2.97	2.84	2.00	18
1,803,934	1,993,028	1,579,630	1,549,232	30,398	74.32	80.51	61.23	60.05	34.58	11.23	15.36	9.32	4.50	19
15,090	9,250	114,988	114,688	300	80.27	20.79	25.18	25.12	2.08	7.95	25.56	4.43	0.69	20
SOURCES OF WATER SUPPLY[4]														
81,752,973	158,103,757	147,734,470	147,734,470	----------	42.73	58.23	67.54	67.54	----------	3.39	4.03	3.57	----------	1
17,517,025	42,658,709	58,779,604	58,779,604	----------	69.46	109.14	122.98	122.98	----------	2.77	3.08	4.69	----------	2
43,225	163,300	157,610	157,610	----------	16.28	19.97	20.59	20.59	----------	6.39	6.99	3.54	----------	3
32,098,580	88,345,499	75,225,879	75,225,879	----------	65.88	67.82	61.10	61.10	----------	8.38	6.13	3.87	----------	4
14,358,989	1,811,103	1,651,767	1,651,767	----------	49.78	9.32	20.76	20.76	----------	0.92	0.58	1.09	----------	5
2,293,687	2,031,866	2,502,970	2,502,970	----------	25.94	14.64	22.45	22.45	----------	1.85	1.60	1.66	----------	6
63,982	89,535	110,175	110,175	----------	20.12	27.62	13.98	13.98	----------	1.63	9.50	3.01	----------	7
367,645	535,930	533,992	533,992	----------	14.77	21.21	17.04	17.04	----------	7.79	9.55	3.00	----------	8
1,762,704	1,886,038	297,131	297,131	----------	10.14	18.85	19.86	19.86	----------	1.04	0.81	0.95	----------	9
42,653	53,500	161,364	161,364	----------	19.57	11.23	11.73	11.73	----------	2.65	1.25	1.29	----------	10
1,089,973	785,461	349,134	349,134	----------	15.61	14.41	9.06	9.06	----------	1.54	1.41	0.37	----------	11
1,153,340	581,551	1,488,090	1,488,090	----------	28.29	18.80	39.48	39.48	----------	6.29	-1.93	0.84	----------	12
500	13,275	----------	----------	----------	5.56	25.00	----------	----------	----------	----------	----------	----------	----------	13
4,000	15,254	55,844	55,844	----------	19.70	16.30	25.38	25.38	----------	10.00	4.91	9.90	----------	14
4,860,922	8,951,197	1,168,770	1,168,770	----------	34.77	55.97	34.75	34.75	----------	1.21	1.93	1.54	----------	15
68,995	10,075	26,913	26,913	----------	7.82	20.65	10.40	10.40	----------	1.14	0.09	2.63	----------	16
1,383,993	1,635,032	953,103	953,103	----------	42.25	55.01	33.12	33.12	----------	6.15	4.54	2.78	----------	17
2,865,600	3,649,477	784,750	784,750	----------	14.13	18.99	19.03	19.03	----------	0.94	1.36	1.21	----------	18
1,071,605	3,243,136	2,669,234	2,669,234	----------	33.22	162.48	143.22	143.22	----------	9.19	15.60	6.46	----------	19
707,575	1,643,819	818,140	818,140	----------	11.27	28.42	99.28	99.28	----------	1.25	0.88	0.99	----------	20

TABLE 6.—AREA IRRIGATED, 1909 TO 1939; AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1910 TO 1940; CAPITAL INVESTED AND AVER-

(For the 17 western States and

	ITEM	AREA IRRIGATED (ACRES)					AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER (ACRES)		
		Total			Primary enterprises	Supplemental enterprises	Total		
		1909	1919	1929	1939	1939	1910	1920	1930
		SUMMARY							
1	Summary (19 States)	14,435,285	19,191,716	19,547,544	21,003,739	3,287,210	20,285,403	26,020,477	26,101,890
2	Individual and partnership	6,594,614	8,848,807	6,410,581	7,314,152	596,171	8,086,766	9,255,756	7,982,142
3	Cooperatives	4,643,539	6,581,400	6,271,334	6,652,488	858,388	6,191,577	8,403,298	7,861,081
4	Irrigation district	528,642	1,822,687	3,452,275	3,514,702	211,470	800,451	2,531,425	4,846,095
5	Commercial	1,809,379	1,822,001	1,230,765	1,017,781	128,258	2,954,166	2,799,563	2,160,950
6	Bureau of Reclamation	395,646	1,254,569	1,485,028	1,824,004	1,460,470	786,190	1,680,843	1,944,825
7	All other	461,465	862,052	697,563	680,612	32,473	1,466,253	1,349,792	1,306,797
		STATES							
	California:								
8	Total	2,664,104	4,219,040	4,746,632	5,069,568	455,342	3,619,378	5,894,466	6,815,250
9	Individual and partnership	961,136	1,502,870	1,735,457	2,004,621	348,721	1,131,951	1,919,663	2,037,308
10	Cooperatives	779,020	1,215,696	853,547	851,527	46,647	984,570	1,705,647	1,359,477
11	Irrigation district	173,793	577,168	1,598,830	1,684,602	12,387	294,108	899,785	2,386,919
12	Commercial	746,285	873,499	312,313	368,841	23,135	1,204,059	1,307,968	868,592
13	Bureau of Reclamation	400	36,622	31,998	44,581	1,709	1,200	42,805	44,588
14	All other	3,490	13,185	214,487	115,396	22,743	3,490	18,598	318,366
	Colorado:								
15	Total	2,792,032	3,348,585	3,393,619	3,220,685	628,015	3,990,166	3,855,348	4,078,712
16	Individual and partnership	1,226,025	1,014,412	969,708	907,754	133,143	1,581,941	1,194,422	1,194,132
17	Cooperatives	1,273,141	1,789,385	1,789,909	1,947,770	[2] 433,217	1,870,447	1,993,361	2,065,779
18	Irrigation district	115,504	248,409	230,400	186,925	—	207,570	269,504	344,153
19	Commercial	159,457	212,138	286,846	66,699	48,581	292,103	226,641	311,873
20	Bureau of Reclamation	16,600	71,145	61,883	83,137	13,074	30,000	135,265	116,034
21	All other	1,505	12,896	34,873	28,400	(2)	8,105	36,155	46,741
	Idaho:								
22	Total	1,430,848	2,488,806	2,161,250	2,277,857	910,002	2,388,959	3,092,810	2,617,021
23	Individual and partnership	403,600	513,350	327,488	324,626	8,890	483,946	639,002	388,943
24	Cooperatives	628,102	958,421	1,198,482	1,229,043	44,300	782,603	1,190,422	1,467,327
25	Irrigation district	140,930	355,995	304,010	334,266	14,097	177,900	400,382	335,018
26	Commercial	44,872	6,503	—	8,719	—	67,352	7,747	—
27	Bureau of Reclamation	47,500	253,759	275,954	344,638	842,715	113,000	289,992	290,248
28	All other	165,844	420,778	75,316	36,565	—	764,158	565,265	135,485
	Montana:								
29	Total	1,679,084	1,681,729	1,594,912	1,711,409	168,863	2,205,155	2,753,498	2,276,000
30	Individual and partnership	1,191,060	978,615	885,274	827,564	5,504	1,495,513	1,617,617	1,099,699
31	Cooperatives	333,928	393,257	418,862	443,373	133,287	373,022	553,952	524,077
32	Irrigation district	412	35,153	83,870	71,434	2,072	6,640	70,650	137,458
33	Commercial	62,544	34,115	22,375	40,384	28,000	80,895	38,215	28,780
34	Bureau of Reclamation	14,077	88,291	98,327	186,002	—	85,245	172,206	247,758
35	All other	77,065	154,298	86,204	142,652	—	163,840	300,858	238,230
	Wyoming:								
36	Total	1,133,302	1,207,982	1,236,155	1,486,498	93,581	1,639,510	1,831,039	1,655,008
37	Individual and partnership	813,823	724,620	665,844	816,337	11,376	1,024,137	1,008,379	799,345
38	Cooperatives	116,317	286,702	303,086	396,964	42,500	165,476	432,956	395,079
39	Irrigation district	11,800	22,935	86,174	96,681	24,307	27,050	54,017	115,408
40	Commercial	87,935	57,800	51,460	10,931	—	133,305	121,310	94,760
41	Bureau of Reclamation	12,905	53,555	85,886	138,653	15,398	34,869	93,022	144,548
42	All other	90,522	62,370	43,705	26,932	—	254,673	121,355	105,868
	Texas:								
43	Total	451,130	586,120	798,917	1,045,224	66,909	690,991	1,150,542	1,177,415
44	Individual and partnership	49,657	110,680	132,291	549,774	1,826	65,286	216,351	189,739
45	Cooperatives	130,011	103,378	58,691	59,303	(4)	183,411	256,304	117,815
46	Irrigation district	(5)	88,571	452,461	382,458	(4)	(5)	170,548	604,595
47	Commercial	271,462	262,892	89,996	190,763	(4)	442,294	481,899	199,230
48	Bureau of Reclamation	(5)	20,284	65,442	61,153	12,681	(5)	25,070	66,000
49	All other	(5)	315	38	1,773	—	(5)	370	36
	Utah:								
50	Total	999,410	1,371,551	1,324,125	1,176,116	322,994	1,250,246	1,700,550	1,542,475
51	Individual and partnership	222,448	166,887	172,240	107,537	4,652	257,266	195,858	202,147
52	Cooperatives	687,260	1,014,649	934,680	858,194	141,157	790,855	1,225,084	1,069,593
53	Irrigation district	8,455	21,143	8,125	23,394	8,000	8,455	24,023	8,300
54	Commercial	64,727	[6] 86,911	[6] 99,834	85,600	—	87,070	[6] 126,833	[6] 128,509
55	Bureau of Reclamation	—	29,285	40,000	38,623	161,455	—	50,030	40,000
56	All other	16,520	52,776	69,246	62,768	7,730	106,600	78,722	94,126
	Oregon:								
57	Total	686,129	986,162	898,713	1,049,176	104,970	830,526	1,344,046	1,158,210
58	Individual and partnership	410,078	590,626	450,841	543,612	16,363	454,074	689,723	539,903
59	Cooperatives	149,985	186,037	[6] 184,940	158,174	3,565	169,944	236,171	[6] 222,189
60	Irrigation district	1,500	92,081	160,974	204,271	—	1,500	198,540	240,019
61	Commercial	77,387	27,338	12,619	7,123	—	93,750	67,163	21,517
62	Bureau of Reclamation	22,000	54,981	61,829	130,403	85,042	45,319	76,525	85,612
63	All other	25,179	35,099	27,510	5,593	—	65,939	75,924	48,970
	Nebraska:								
64	Total	255,950	442,690	532,617	610,379	171,633	429,225	562,468	703,641
65	Individual and partnership	45,227	68,140	57,472	123,979	17,986	64,472	96,465	77,296
66	Cooperatives	78,505	55,408	54,811	61,252	365	168,260	102,242	77,324
67	Irrigation district	76,448	206,206	219,590	234,688	56,680	77,228	220,859	254,033
68	Commercial	24,834	25,335	53,574	28,723	—	52,724	27,332	114,361
69	Bureau of Reclamation	30,536	87,558	147,026	160,799	96,602	66,241	115,487	180,458
70	All other	300	45	144	938	—	300	83	169

See footnotes at end of table.

AGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1920 TO 1940; BY TYPE OF IRRIGATION ENTERPRISE, BY STATES

Arkansas and Louisiana. See chart XII)

AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER (ACRES)—Continued		CAPITAL INVESTED, JANUARY 1 (DOLLARS)					AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WITH WATER (DOLLARS)				
Primary enterprises 1940	Supplemental enterprises 1940	Total 1920	Total 1930	Total 1940	Primary enterprises 1940	Supplemental enterprises 1940	Total 1920	Total 1930	Primary enterprises 1940	Supplemental enterprises 1940	
SUMMARY											
28,055,248	4,268,394	697,657,328	[1]892,755,790	1,052,049,201	963,888,263	88,160,938	26.81	34.20	34.36	20.65	1
9,633,198	798,308	154,634,169	[1]187,867,180	187,382,750	170,368,751	17,013,999	16.71	23.54	17.69	21.31	2
7,996,236	990,411	183,041,500	179,329,962	224,140,876	205,082,550	19,058,326	21.78	22.81	25.65	19.24	3
4,969,395	451,677	88,573,514	210,733,476	265,757,810	260,701,900	5,055,910	34.99	43.49	52.46	11.15	4
1,961,202	[2]32,804	85,735,470	62,351,714	66,243,823	59,250,003	6,993,820	30.62	28.85	30.21	30.04	5
2,349,967	1,762,721	129,509,819	193,989,576	250,245,559	211,046,133	39,199,226	77.06	99.75	89.81	22.24	6
1,145,250	32,473	56,162,856	58,483,882	58,298,603	57,438,946	859,657	41.61	44.75	50.15	26.47	7
STATES											
7,398,576	624,550	194,886,388	[1]310,967,979	318,889,218	300,164,036	18,725,182	33.06	45.63	40.57	29.98	8
2,767,274	483,132	57,616,716	[1]108,129,435	109,682,184	97,017,879	12,664,305	30.01	53.07	35.06	26.21	9
1,194,742	68,013	48,899,448	48,682,089	58,187,092	54,451,984	3,735,108	28.67	35.81	45.58	54.92	10
2,384,379	12,387	33,985,301	105,349,178	109,319,715	109,122,822	196,893	37.77	44.14	45.77	15.90	11
740,007	36,566	44,996,723	24,660,758	28,354,269	26,287,295	2,066,974	34.40	36.88	35.52	56.53	12
60,297	1,709	2,398,220	5,520,644	5,915,578	5,874,308	41,270	56.03	125.81	97.42	24.15	13
251,877	22,743	6,989,980	18,625,895	7,450,380	7,409,748	20,632	375.85	38.50	29.42	0.91	14
3,913,542	738,232	88,302,442	87,603,240	106,849,343	92,871,122	13,978,221	22.90	21.48	23.73	18.93	15
1,110,597	166,528	11,599,883	10,815,909	11,348,304	8,829,100	2,519,204	9.71	9.06	7.95	15.13	16
2,307,280	[2]466,787	42,911,035	45,651,717	[2]58,829,793	50,168,249	[2]8,661,544	21.53	22.10	21.74	[2]18.56	17
233,841	35,000	16,269,026	12,657,718	15,621,957	15,332,373	289,584	60.37	36.78	65.57	8.27	18
97,801	53,581	5,711,867	5,624,989	6,228,398	4,933,743	1,294,655	25.20	18.04	50.45	24.16	19
121,746	16,336	10,253,231	11,551,307	12,928,239	11,715,005	1,213,234	75.80	99.55	96.22	74.27	20
42,277	(2)	1,557,380	1,301,600	[2]1,892,652	1,892,652	(2)	43.08	27.85	44.77	(2)	21
2,593,534	1,055,582	91,501,009	84,500,354	102,585,798	89,034,966	13,550,832	29.59	32.29	34.33	12.86	22
388,916	10,522	5,747,004	3,473,615	2,922,197	2,761,026	161,171	8.99	8.93	7.10	15.32	23
1,342,511	55,307	36,576,664	34,785,666	41,534,385	40,502,309	1,032,076	30.73	23.71	30.17	18.66	24
562,665	14,097	11,954,046	10,725,493	13,874,612	13,804,612	70,000	29.86	32.01	38.06	4.97	25
8,719	—	698,179	—	113,660	113,660	—	90.12	—	13.04	—	26
424,840	973,656	17,804,839	29,603,539	41,868,781	29,581,196	12,287,585	81.40	101.99	69.63	12.62	27
65,883	—	18,720,277	5,914,041	2,272,163	2,272,163	—	33.12	43.65	34.49	—	28
2,344,390	234,269	52,143,363	50,319,204	67,352,505	61,882,978	5,469,527	18.94	22.11	26.40	23.35	29
986,782	6,238	15,543,287	7,595,504	6,238,533	6,212,642	25,891	9.61	6.91	6.30	4.15	30
569,880	177,959	6,692,877	8,466,956	11,760,098	8,934,147	2,825,951	12.08	16.16	15.68	15.88	31
82,711	2,072	1,708,851	5,404,781	3,736,632	3,711,632	25,000	24.19	39.32	44.87	12.07	32
112,285	48,000	676,535	632,480	3,945,268	1,832,608	2,112,660	17.70	21.98	16.32	44.01	33
323,197	—	14,381,318	18,325,910	26,607,374	26,607,374	—	83.51	73.97	82.33	—	34
269,537	—	13,140,495	9,895,593	15,064,600	14,584,575	480,025	43.68	41.53	54.11	[3]60.00	35
1,913,527	163,090	34,326,328	35,153,187	41,522,801	39,955,803	1,566,998	18.75	21.24	20.88	9.61	36
995,736	15,492	8,738,886	5,410,053	7,819,522	7,773,873	45,649	8.67	6.77	7.81	2.95	37
509,748	45,586	6,701,990	4,786,271	7,746,056	7,553,366	192,690	15.48	12.11	14.82	4.23	38
117,976	85,691	1,441,312	2,615,006	5,249,158	4,096,984	1,152,174	26.68	22.66	34.73	13.45	39
56,653	—	780,562	2,299,870	2,980,102	2,980,102	—	6.43	24.27	52.60	—	40
170,643	16,321	12,863,870	17,589,985	15,411,395	15,234,910	176,485	138.29	121.69	89.28	10.81	41
62,771	—	3,799,708	2,452,002	2,316,568	2,316,568	—	31.31	23.18	36.91	—	42
1,775,812	139,231	35,072,739	49,022,164	66,441,376	64,300,488	2,140,888	30.48	41.64	36.25	15.38	43
565,686	2,655	8,256,568	9,571,780	9,105,016	9,091,669	13,347	38.16	49.39	16.13	5.03	44
90,241	(4)	3,821,844	3,459,486	1,934,900	1,932,900	(4)	14.91	29.36	21.42	(4)	45
696,415	(4)	5,449,142	26,543,073	42,700,333	42,369,323	(4)	31.95	43.90	60.84	(4)	46
348,392	(4)	13,825,409	3,404,080	9,330,311	7,835,780	(4)	28.69	17.09	22.49	(4)	47
69,010	17,119	3,673,476	6,238,245	3,147,764	2,847,764	300,000	146.53	94.52	41.27	17.52	48
6,068	—	46,300	5,500	223,052	223,052	—	125.14	152.78	36.76	—	49
1,357,714	370,284	32,037,351	35,669,819	41,898,532	29,219,904	12,676,628	18.84	23.13	21.52	34.23	50
142,434	6,600	2,736,804	3,482,497	1,428,479	1,338,791	89,688	13.97	17.23	9.40	13.59	51
968,621	154,933	20,254,212	16,763,420	19,861,261	17,707,384	2,153,877	16.53	15.67	18.28	13.90	52
24,894	8,000	265,484	1,898,590	2,640,455	2,265,455	375,000	11.05	234.15	91.00	46.88	53
98,375	—	[6]3,698,770	[6]7,220,629	3,541,088	3,541,088	—	[6]29.16	[6]58.19	36.00	—	54
40,812	193,021	3,567,057	5,181,980	12,698,755	2,964,692	9,734,063	71.30	129.55	72.64	50.43	55
82,578	7,730	1,515,024	1,124,703	1,726,494	1,402,494	324,000	19.25	11.95	16.98	41.91	56
1,261,081	141,558	28,929,151	38,754,548	50,961,251	46,726,313	4,234,938	21.52	33.46	37.05	29.92	57
650,375	17,206	6,584,382	4,871,862	5,592,899	5,422,518	170,381	9.55	9.02	8.34	9.90	58
174,245	6,619	3,143,698	[6]6,286,247	4,732,990	4,702,990	30,000	13.31	[6]28.29	26.99	4.53	59
233,836	—	6,313,753	13,983,818	12,821,775	12,821,775	—	31.80	58.26	54.83	—	60
16,988	—	3,281,034	1,606,957	441,013	441,013	—	48.85	74.68	25.96	—	61
175,171	117,733	5,956,950	11,408,297	27,002,875	22,968,318	4,034,557	77.84	133.26	131.12	34.27	62
10,466	—	3,649,334	597,867	369,699	369,699	—	48.07	12.21	35.32	—	63
992,957	316,730	13,909,185	21,386,319	39,058,207	36,191,786	2,864,421	24.73	30.39	36.45	9.04	64
197,075	26,893	1,146,227	1,041,547	2,967,486	2,671,642	295,844	11.88	13.47	13.56	11.00	65
88,330	[7]8,365	547,104	751,302	72,175,158	[7]2,144,788	728,370	5.35	9.72	13.24	73.39	66
400,674	175,476	2,811,474	5,082,366	19,205,720	17,716,079	1,489,641	12.73	20.01	44.22	8.49	67
128,673	(7)	726,560	899,054	1,027,010	(7)	(7)	26.58	7.86	(7)	(7)	68
181,155	105,996	8,674,250	13,603,568	14,659,810	13,609,244	1,050,566	75.11	75.38	75.12	9.91	69
1,050	—	3,570	8,482	50,053	50,053	—	43.01	50.19	47.65	—	70

TABLE 6.—AREA IRRIGATED, 1909 TO 1939; AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1910 TO 1940; CAPITAL INVESTED AND AVER-

(For the 17 western States and

	ITEM	AREA IRRIGATED (ACRES)					AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER (ACRES)		
		Total			Primary enterprises	Supplemental enterprises	Total		
		1909	1919	1929	1939	1939	1910	1920	1930
		STATES—Continued							
	Arizona:								
1	Total	320,051	467,565	575,590	653,263	73,806	387,655	627,303	824,152
2	Individual and partnership	61,196	80,511	73,836	131,320	15,547	81,422	195,331	107,220
3	Cooperatives	101,025	114,462	58,753	82,919	215	120,559	150,903	58,427
4	Irrigation district	(5)	300	117,869	77,164	—	(5)	300	191,186
5	Commercial	80	14,500	32,600	12,200	—	200	20,000	76,500
6	Bureau of Reclamation	138,364	248,814	278,584	265,042	58,044	164,500	269,691	298,738
7	All other	19,386	8,958	13,968	84,618	—	20,974	11,078	94,081
	Nevada:								
8	Total	701,833	561,447	486,648	739,863	84,722	840,962	704,708	756,249
9	Individual and partnership	581,406	355,901	316,918	438,996	7,848	849,841	453,900	502,308
10	Cooperatives	78,966	69,877	32,267	[8]222,105		88,255	85,483	56,891
11	Irrigation district	—	80,000	—	2,940	65,000	—	80,000	—
12	Commercial	8,864	5,990	5,855	(8)	—	9,300	7,240	5,855
13	Bureau of Reclamation	30,000	44,324	54,040	57,471	11,874	90,185	69,850	90,000
14	All other	2,597	5,355	77,568	18,351	—	3,381	8,235	81,195
	Louisiana:								
15	Total	380,200	454,882	450,901	447,095	2,579	553,220	728,742	795,165
16	Individual and partnership	222,049	259,673	226,259	248,664	2,579	267,620	375,917	334,045
17	Cooperatives	—	10,635	—	38,640	—	—	20,325	—
18	Commercial	158,151	184,574	224,625	159,764	—	285,600	332,500	461,060
19	All other	—	—	17	27	—	—	—	60
	New Mexico:								
20	Total	461,718	538,377	527,033	554,039	5,123	644,970	696,119	656,669
21	Individual and partnership	144,212	151,351	130,738	151,366	5,123	185,283	215,618	155,802
22	Cooperatives	251,911	264,610	233,286	168,186	—	355,327	305,540	276,581
23	Irrigation district	—	15,008	22,000	86,675	—	—	24,808	37,000
24	Commercial	28,190	19,671	16,192	22,514	—	58,150	33,743	28,212
25	Bureau of Reclamation	13,398	77,678	103,090	98,064	—	21,467	96,751	111,035
26	All other	24,007	9,859	21,727	27,234	—	24,743	19,659	48,039
	Washington:								
27	Total	334,378	529,899	499,283	615,013	184,664	470,514	637,151	651,511
28	Individual and partnership	95,655	142,215	88,015	104,343	10,721	117,145	169,457	108,290
29	Cooperatives	81,122	93,192	92,743	84,256	6,720	90,805	104,699	112,501
30	Irrigation district	—	79,918	97,772	124,599	5,347	—	118,009	122,006
31	Commercial	66,911	21,705	9,474	7,290	—	138,064	31,652	20,201
32	Bureau of Reclamation	55,690	122,869	118,667	167,085	161,876	74,500	135,119	137,268
33	All other	35,000	70,000	92,612	127,440	—	50,000	78,215	135,225
	Arkansas:								
34	Total	(9)	143,946	151,787	161,601	341	(9)	179,013	209,942
35	Individual and partnership	(9)	140,471	145,487	158,750	341	(9)	175,338	203,442
36	Cooperatives	(9)	1,075	—	(4)	—	(9)	1,275	—
37	Commercial	(9)	2,400	6,300	(4)	—	(9)	2,400	6,500
	Kansas:								
38	Total	37,479	47,312	71,290	99,980	13,666	139,995	67,853	83,583
39	Individual and partnership	3,154	14,546	16,689	58,255	12,751	4,795	26,614	25,812
40	Cooperatives	27,372	32,516	37,871	39,328	915	135,200	40,719	41,991
41	Commercial	—	150	16,000	(10)	—	—	520	17,000
42	Bureau of Reclamation	6,953	—	—	—	—	(5)	—	—
43	All other	—	100	730	[2]2,397	—	—	200	780
	South Dakota:								
44	Total	63,248	100,682	67,107	80,198	—	128,481	150,914	109,550
45	Individual and partnership	37,684	31,664	11,268	10,606	—	55,820	56,032	14,174
46	Cooperatives	13,601	10,080	19,646	14,533	—	18,243	10,615	20,876
47	Commercial	6,300	2,280	—	—	—	6,800	1,600	—
48	Bureau of Reclamation	5,613	56,658	36,193	34,222	—	47,568	82,592	74,500
49	All other	50	20	—	837	—	50	75	—
	North Dakota:								
50	Total	10,248	12,072	9,392	21,615	—	21,917	34,235	24,006
51	Individual and partnership	8,638	3,306	3,303	2,232	—	9,821	7,997	4,006
52	Cooperatives	—	—	—	500	—	—	—	—
53	Irrigation district	—	—	—	4,605	—	—	—	—
54	Bureau of Reclamation	1,610	8,766	6,089	14,151	—	12,096	26,238	20,000
55	All other	—	—	—	147	—	—	—	—
	Oklahoma:								
56	Total	4,388	2,969	1,573	4,160	—	6,397	9,672	7,331
57	Individual and partnership	2,388	969	1,453	3,816	—	3,397	2,072	2,331
58	Cooperatives	2,000	2,000	120	—	—	3,000	7,600	4,800
59	All other	—	—	—	344	—	—	—	—

1 Revised.
2 Data for 1 State enterprise included with "Cooperatives."
3 Based on irrigable area.
4 Data are included in State totals because less than 3 enterprises reported.
5 Not included in classification in 1910.
6 Includes 1 Carey Act enterprise.
7 One "Commercial" enterprise included with "Cooperatives."
8 Data for 2 "Commercial" enterprises included with "Cooperatives."
9 Not available.
10 One "Commercial" enterprise included with "All other."

AGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WITH WATER, 1920 TO 1940; BY TYPE OF IRRIGATION ENTERPRISE, BY STATES—Con.

Arkansas and Louisiana. See chart XII)

AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER (ACRES)—Continued		CAPITAL INVESTED, JANUARY 1 (DOLLARS)					AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WITH WATER (DOLLARS)				
Primary enterprises 1940	Supplemental enterprises 1940	Total 1920	Total 1930	Total 1940	Primary enterprises 1940	Supplemental enterprises 1940	Total 1920	Total 1930	Primary enterprises 1940	Supplemental enterprises 1940	
STATES—Continued											
844,212	115,331	53,498,094	73,328,197	83,526,608	81,015,378	2,511,230	53.40	88.97	95.97	22.16	1
184,482	21,751	5,598,625	5,913,408	5,667,378	5,155,438	511,940	28.66	55.15	27.95	23.54	2
92,531	637	3,171,406	1,537,982	3,227,304	3,224,694	2,610	24.23	22.90	34.85	4.10	3
140,687	—	100,000	13,721,792	14,961,006	14,961,006	—	333.33	71.77	106.34	—	4
12,400	—	3,693,400	4,857,759	3,492,683	3,492,683	—	184.67	63.50	281.67	—	5
297,669	90,943	20,277,919	37,691,293	39,708,470	37,711,790	1,996,680	75.19	127.02	126.69	21.96	6
116,443	—	656,744	9,805,963	16,469,767	16,469,767	—	59.28	104.25	141.44	—	7
841,304	123,845	14,754,280	15,457,931	16,906,790	13,393,439	3,513,351	20.94	21.00	15.92	28.37	8
489,808	8,735	4,014,570	4,530,708	2,350,895	2,278,510	440,885	8.84	9.02	4.65	50.47	9
[8] 255,281		1,019,047	936,400	[8] 3,605,009	[8] 3,236,509		11.92	16.46	[8] 12.68		10
3,820	73,900	1,246,611	—	888,934	84,217	804,717	15.58	—	22.05	10.89	11
(8)	—	340,559	227,000	(8)	(8)	—	47.04	38.77	(8)	—	12
66,788	41,210	7,953,537	7,767,759	8,838,237	6,570,488	2,267,749	115.87	86.31	98.38	55.03	13
25,607	—	179,956	1,996,064	1,225,715	1,225,715	—	21.85	24.58	47.79	—	14
759,915	4,342	14,063,181	15,744,743	11,565,513	11,548,812	16,701	19.30	19.80	15.20	3.85	15
419,739	4,342	7,943,252	6,984,092	5,799,128	5,782,427	16,701	21.13	20.91	13.78	3.85	16
47,260	—	161,658	—	766,097	766,097	—	7.95	—	16.21	—	17
292,805	—	5,958,271	8,757,151	4,997,688	4,997,688	—	17.92	18.99	17.07	—	18
111	—	—	3,500	2,600	2,600	—	—	58.33	23.42	—	19
781,990	5,912	18,210,412	19,834,380	32,735,997	32,629,293	106,704	26.16	30.20	44.58	18.05	20
199,699	5,912	5,589,372	3,814,458	4,531,158	4,424,454	106,704	25.92	24.48	22.16	18.05	21
191,544	—	3,558,863	3,016,075	4,973,160	4,973,160	—	11.65	10.90	25.96	—	22
133,512	—	914,479	1,289,180	11,165,731	11,165,731	—	36.86	34.84	83.63	—	23
32,466	—	1,877,842	1,543,000	852,957	852,957	—	55.65	54.69	26.27	—	24
115,695	—	5,020,230	8,684,489	7,760,844	7,760,844	—	51.89	78.21	67.08	—	25
59,074	—	1,249,626	1,487,178	3,452,147	3,452,147	—	63.57	30.96	58.44	—	26
731,527	219,009	29,299,011	40,561,895	56,415,196	49,881,624	6,533,572	45.98	64.23	68.19	29.83	27
151,549	11,058	4,732,706	4,467,599	4,246,697	4,178,853	67,844	27.93	42.03	31.77	6.14	28
91,528	6,720	3,949,896	4,162,417	5,043,916	4,977,116	66,800	37.73	37.00	54.38	9.94	29
142,161	12,554	6,112,628	10,170,631	13,317,182	13,015,291	301,891	51.80	83.36	91.55	24.05	30
7,610	—	2,341,428	682,507	765,810	765,810	—	73.97	33.79	100.63	—	31
210,512	188,677	10,441,145	15,542,597	27,675,132	21,578,095	6,097,037	77.27	113.21	102.50	32.31	32
148,167	—	1,721,208	5,536,144	5,366,459	5,366,459	—	22.01	41.55	36.22	—	33
287,765	1,266	7,183,322	6,836,648	5,766,895	5,752,045	14,850	40.13	32.58	19.99	11.73	34
283,525	1,266	7,073,297	6,711,648	5,711,895	5,697,045	14,850	40.34	32.99	20.09	11.73	35
(4)	—	60.013	—	(4)	(4)	—	47.07	—	(4)	—	36
(4)	—	50,012	125,000	(4)	(4)	—	20.84	19.23	(4)	—	37
142,409	19,163	2,067,381	1,685,652	2,153,886	1,896,991	256,895	30.47	20.17	13.32	13.41	38
83,483	17,978	775,095	875,951	1,494,396	1,256,301	238,095	29.12	36.79	15.05	13.24	39
55,923	1,185	1,289,737	242,001	600,082	581,282	18,800	31.67	5.76	10.39	15.86	40
(10)	—	1,549	520,000	(10)	(10)	—	4.84	30.59	(10)	—	41
—	—	—	—	—	—	—	—	—	—	—	42
10 3,003	—	1,000	47,700	10 59,408	10 59,408	—	5.00	61.15	10 19.78	—	43
121,847	—	5,465,248	4,502,117	5,395,610	5,395,610	—	36.21	41.10	44.28	—	44
26,081	—	743,880	237,424	240,939	240,939	—	13.28	16.75	9.24	—	45
21,471	—	240,030	196,953	256,021	256,021	—	22.61	9.43	11.92	—	46
—	—	15,058	—	—	—	—	9.41	—	—	—	47
72,504	—	4,464,780	4,067,740	4,628,868	4,628,868	—	54.06	54.60	63.84	—	48
1,791	—	1,500	—	269,782	269,782	—	20.00	—	150.63	—	49
36,522	—	1,857,118	1,267,314	1,755,489	1,755,489	—	54.25	52.79	48.07	—	50
3,996	—	81,693	55,091	54,732	54,732	—	10.22	13.75	13.70	—	51
590	—	—	—	57,130	57,130	—	—	—	96.85	—	52
11,824	—	—	—	234,600	234,600	—	—	—	15.84	—	53
19,928	—	1,775,425	1,212,223	1,393,237	1,393,237	—	67.67	60.61	69.91	—	54
184	—	—	—	15,790	15,790	—	—	—	85.82	—	55
8,624	—	151,325	160,099	272,186	272,186	—	15.65	21.84	31.56	—	56
7,961	—	110,658	85,099	180,892	180,892	—	53.41	38.62	22.72	—	57
—	—	40,667	75,000	—	—	—	5.35	15.62	—	—	58
663	—	—	—	91,294	91,294	—	—	—	137.70	—	59

TABLE 7.—LENGTH OF CANALS, 1900 TO 1940; CAPACITY OF CANALS AT MAIN HEADINGS, AND NUMBER AND

(For the 17 western States and Arkansas and

	STATE	CANALS[1]								
		Length (miles)					Capacity at main headings (second-feet)			
		1900	1910	1920	1930	1940	1910	1920	1930	1940
1	Summary (19 States)	44,535	127,930	159,864	126,802	127,533.7	618,097	651,079	547,314	612,021
2	Arizona	1,492	2,597	3,368	3,974	4,178.2	17,200	11,707	13,697	13,258
3	Arkansas	———	131	86	51	77.9	(2)	1,205	1,845	270
4	California	5,106	21,129	27,384	18,602	19,799.1	89,597	115,237	84,944	91,776
5	Colorado	7,374	22,570	27,593	21,581	19,864.0	148,483	119,558	123,652	139,780
6	Idaho	4,977	12,759	17,298	14,344	13,602.1	80,458	86,275	76,763	71,510
7	Kansas	324	316	418	285	292.5	2,600	1,667	2,079	3,347
8	Louisiana	386	1,168	3,243	2,226	2,421.0	(2)	11,889	11,386	10,355
9	Montana	6,812	18,934	22,496	15,957	15,702.5	83,849	94,429	53,253	66,745
10	Nebraska	1,701	2,728	3,325	3,465	3,331.3	9,378	11,665	13,108	14,256
11	Nevada	2,859	3,151	4,368	4,155	2,897.2	17,579	10,554	16,986	22,950
12	New Mexico	2,382	5,854	5,932	4,466	4,647.9	29,646	23,432	17,479	16,821
13	North Dakota	(2)	126	151	87	159.2	2,161	836	1,072	616
14	Oklahoma	68	85	57	24	42.2	155	344	77	277
15	Oregon	2,283	7,591	9,071	8,177	8,518.0	39,686	28,897	25,906	37,290
16	South Dakota	223	1,256	1,258	1,082	1,049.3	3,398	5,427	1,995	1,948
17	Texas	450	2,703	4,473	4,879	5,936.1	12,818	23,261	21,628	24,815
18	Utah	2,838	7,709	11,677	9,237	9,004.5	25,081	29,447	30,648	34,579
19	Washington	806	3,892	5,615	3,635	4,248.6	13,178	16,242	14,987	15,104
20	Wyoming	4,454	13,251	12,051	10,775	11,762.1	42,630	39,009	35,811	46,366

[1]Reported as main canals and ditches, Census of 1900; and as canals (mains and laterals, not including farm ditches), Censuses of 1920, 1930, and 1940.
[2]Not available.

TABLE 8.—AREAS, CAPITAL INVESTED, AVERAGE INVESTMENT PER ACRE, AND PROPORTIONS OF TOTALS, BY TYPE OF ENTERPRISE: 1890 TO 1940

(Statistics for chart III covering the 17 western States and Arkansas and Louisiana)

TYPE OF ENTERPRISE (For definitions and explanations, see text)	CENSUS OF—												
	1890[1]	1900[1]	1910		1920		1930		1940				
	All enterprises	All enterprises	All enterprises	Proportion of total	All enterprises	Proportion of total	All enterprises	Proportion of total	All enterprises	Proportion of total	Increase or decrease (-) 1930-1940	Primary enterprises	Supplemental enterprises[2]
	AREA IRRIGATED												
Total	Acres 3,715,945	Acres 7,744,492	Acres 14,433,285	Percent 100.0	Acres 19,191,716	Percent 100.0	Acres 19,547,544	Percent 100.0	Acres 21,003,739	Percent 100.0	Percent 7.4	Acres 21,003,739	Acres 3,287,210
Individual and partnership	(3)	(3)	6,594,614	45.7	6,848,807	35.7	6,410,581	32.8	7,314,152	34.8	14.1	7,314,152	596,171
Cooperatives	(3)	(3)	4,643,539	32.2	6,581,400	34.3	6,271,534	32.1	6,652,488	31.7	6.1	6,652,488	858,388
Irrigation district	(3)	(3)	528,642	3.7	1,822,887	9.5	3,452,275	17.7	3,514,702	16.7	1.8	3,514,702	211,470
Commercial	(3)	(3)	1,809,379	12.5	1,822,001	9.5	1,250,763	6.3	1,017,781	4.8	-17.3	1,017,781	128,258
U. S. Bureau of Reclamation	(3)	(3)	395,846	2.7	1,254,569	6.5	1,485,028	7.6	1,824,004	8.7	22.8	1,824,004	1,460,470
All other[4]	(3)	(3)	461,465	3.2	862,052	4.5	697,563	3.5	680,612	3.3	-2.4	680,612	32,473
	AREA WORKS WERE CAPABLE OF SUPPLYING WITH WATER												
Total	Acres (3)	Acres (3)	Acres 20,285,403	Percent 100.0	Acres 26,020,477	Percent 100.0	Acres 26,101,890	Percent 100.0	Acres 28,055,248	Percent 100.0	Percent 7.5	Acres 28,055,248	Acres 4,288,594
Individual and partnership	(3)	(3)	8,086,766	39.9	9,255,756	35.6	7,982,142	30.6	9,633,198	34.3	20.7	9,633,198	798,306
Cooperatives	(3)	(3)	6,191,577	30.5	8,405,298	32.3	7,861,081	30.1	7,996,236	28.5	1.7	7,996,236	990,411
Irrigation district	(3)	(3)	800,451	3.9	2,531,425	9.7	4,846,095	18.6	4,969,595	17.7	2.5	4,969,595	451,677
Commercial	(3)	(3)	2,954,166	14.6	2,799,563	10.8	2,160,950	8.3	1,961,202	7.0	-9.2	1,961,202	232,804
U. S. Bureau of Reclamation	(3)	(3)	786,190	3.9	1,680,643	6.5	1,944,825	7.4	2,349,967	8.4	20.8	2,349,967	1,782,721
All other[4]	(3)	(3)	1,466,253	7.2	1,349,792	5.1	1,306,797	5.0	1,145,250	4.1	-12.4	1,145,250	32,473
	CAPITAL INVESTED												
Total	Dollars 29,533,921	Dollars 70,010,594	Dollars 321,454,008	Percent 100.0	Dollars 697,657,328	Percent 100.0	Dollars [5]892,755,790	Percent 100.0	Dollars 1,052,049,201	Percent 100.0	Percent 17.8	Dollars 963,888,253	Dollars 88,160,938
Individual and partnership	(3)	(3)	(3)	(3)	154,654,169	22.2	[5]187,867,180	21.0	187,382,730	17.8	-0.3	170,368,731	17,013,999
Cooperatives	(3)	(3)	(3)	(3)	183,041,500	26.2	179,329,962	20.1	224,140,876	21.3	25.0	205,082,550	19,058,326
Irrigation district	(3)	(3)	(3)	(3)	88,573,514	12.7	210,753,476	23.6	265,757,810	25.3	26.1	260,701,900	5,055,910
Commercial	(3)	(3)	(3)	(3)	85,733,470	12.3	62,351,714	7.0	66,243,825	6.3	6.2	59,250,005	6,993,820
U. S. Bureau of Reclamation	(3)	(3)	(3)	(3)	129,509,819	18.6	193,989,576	21.7	250,245,359	23.8	29.0	211,046,133	39,199,226
All other[4]	(3)	(3)	(3)	(3)	56,182,856	8.0	58,463,882	6.6	58,298,603	5.5	-0.3	57,458,946	839,657
	AVERAGE INVESTMENT PER ACRE WORKS WERE CAPABLE OF SUPPLYING WITH WATER												
Total	Dollars [6]7.95	Dollars [6]9.04	Dollars 15.85	Percent xxx	Dollars 26.81	Percent xxx	Dollars [5]34.20	Percent xxx	Dollars 37.50	Percent xxx	Percent 9.1	Dollars 34.36	Dollars 20.65
Individual and partnership	(3)	(3)	(3)	xxx	16.71	xxx	[5]23.54	xxx	xxx	xxx	xxx	17.69	21.31
Cooperatives	(3)	(3)	(3)	xxx	21.78	xxx	22.81	xxx	xxx	xxx	xxx	25.65	19.24
Irrigation district	(3)	(3)	(3)	xxx	34.99	xxx	43.49	xxx	xxx	xxx	xxx	52.46	11.15
Commercial	(3)	(3)	(3)	xxx	30.62	xxx	28.85	xxx	xxx	xxx	xxx	30.21	30.04
U. S. Bureau of Reclamation	(3)	(3)	(3)	xxx	77.06	xxx	99.75	xxx	xxx	xxx	xxx	89.81	22.24
All other[4]	(3)	(3)	(3)	xxx	41.61	xxx	44.75	xxx	xxx	xxx	xxx	50.15	26.47

[1]Census of Agriculture. [2]Areas shown under "Supplemental sources" are parts of areas shown under "Primary sources" and therefore are not added again into the totals (see text). [3]Data not separated by type of enterprise. [4]Includes Reclamation district office of Indian Affairs, State, City and/or sewage, and other. [5]Revised. [6]Based on area irrigated.

YIELD OF PUMPED WELLS, 1910 TO 1940; AND AVERAGE PUMPING LIFT FROM PUMPED WELLS, 1940; BY STATES

Louisiana. See chart XIII for pumped wells)

PUMPED WELLS													
Total (number)				Yield (gallons per minute)								Average pumping lift (feet) 1940	
				Total				Average per well					
1910	1920	1930	1940	1910	1920	1930	1940	1910	1920	1930	1940		
15,971	32,094	56,729	68,279	7,248,699	16,596,549	32,467,120	43,555,271	454	511	572	635	55	1
470	999	1,388	1,858	765,921	1,042,590	1,852,352	2,508,337	1,630	1,044	1,311	1,350	62	2
307	1,089	1,190	1,554	268,829	1,470,147	1,641,448	1,812,647	876	1,350	1,379	1,162	64	3
10,724	25,401	46,737	48,568	4,119,575	10,608,476	24,266,167	28,297,969	384	418	519	583	57	4
121	527	654	2,878	53,564	210,094	237,903	1,929,798	445	399	364	671	33	5
24	53	121	309	2,826	17,749	34,601	225,164	118	335	286	729	29	6
939	710	772	1,658	73,368	286,797	323,500	863,663	78	376	419	527	38	7
606	812	1,389	1,504	1,108,256	1,607,657	1,958,811	1,526,613	1,829	1,980	1,410	1,015	45	8
10	22	49	102	5,263	11,085	18,653	33,885	526	504	381	332	24	9
66	34	537	2,412	3,363	24,701	428,058	2,053,184	51	726	797	851	34	10
6	129	147	167	1,349	6,798	54,162	50,958	225	53	368	305	31	11
466	461	680	1,487	190,690	265,618	481,898	1,143,276	409	576	709	769	46	12
1	———	———	11	15	———	———	378	15	———	———	34	25	13
65	19	18	77	1,791	3,643	2,715	15,486	28	192	151	201	48	14
92	208	558	901	20,883	47,026	136,669	209,289	227	226	245	232	33	15
4	1	1	16	24	800	375	1,039	6	800	375	65	56	16
1,912	901	1,102	3,396	587,126	338,565	614,395	2,215,280	297	398	558	652	82	17
27	192	346	286	4,827	39,059	120,333	122,528	179	203	348	428	38	18
128	520	1,019	1,041	60,220	227,744	306,800	287,327	470	438	301	276	43	19
3	16	11	94	835	8,020	8,280	60,522	278	501	753	644	48	20

TABLE 9.—LENGTH OF CANALS, 1902, 1920, 1930, AND 1940; CAPACITY OF CANALS AT MAIN HEADINGS, AND NUMBER AND YIELD OF PUMPED WELLS, 1920 TO 1940; AND AVERAGE PUMPING LIFT FROM WELLS, 1940; BY SPECIFIED DRAINAGE BASINS

(For the 17 western States and Arkansas and Louisiana)

DRAINAGE BASIN	CANALS							PUMPED WELLS										
	Length (miles)				Capacity at main headings (sec.-ft.)			Total (number)			Yield (gallons per minute)						Average pumping lift (feet) 1940
											Total			Average per well			
	1902	1920	1930	1940	1920	1930	1940	1920	1930	1940	1920	1930	1940	1920	1930	1940	
Summary (19 States)	58,880	159,864	126,802	127,533.7	631,079	547,314	612,021	32,094	56,729	68,279	16,596,549	32,467,120	43,555,271	511	572	635	55
Red River (of the North)[1]	6	———	1	23.9	———	2	365	———	———	———	———	———	———	———	———	———	———
Missouri River, summary	17,302	39,599	30,612	31,131.1	167,891	130,175	148,255	385	1,071	4,760	171,464	613,350	3,633,499	445	573	763	35
Yellowstone River	3,980	8,833	8,015	8,162.6	32,064	29,539	32,035	6	4	28	1,005	555	6,613	168	139	236	44
Platte River	6,769	14,961	12,618	13,422.2	67,344	66,838	72,454	313	956	4,277	143,904	580,450	3,353,350	460	586	784	35
All other tributaries	6,553	15,805	9,979	9,546.3	68,483	33,796	43,766	66	111	455	26,555	32,345	273,536	402	472	601	46
Mississippi River, exclusive of Missouri River, summary	3,030	8,266	5,518	4,838.6	41,974	49,701	49,858	2,085	2,216	4,428	1,876,840	2,104,316	3,493,820	900	950	789	52
Arkansas River	3,030	7,691	5,275	4,423.7	39,166	46,577	48,217	1,354	1,343	2,529	934,452	999,536	1,497,906	690	744	592	45
All other tributaries	———	575	243	414.9	2,808	3,124	1,841	731	873	1,899	942,388	1,104,780	1,995,914	1,289	1,265	1,051	77
Gulf of Mexico streams other than Mississippi River and Rio Grande	1,357	4,886	3,792	4,569.8	20,931	18,608	18,860	1,615	2,563	4,158	2,072,580	2,493,111	3,210,783	1,283	1,055	772	62
Rio Grande, summary	3,235	9,732	9,381	8,702.9	40,424	38,609	43,851	503	731	1,712	286,143	498,631	1,291,071	569	682	754	48
Pecos River	853	2,082	1,175	998.1	5,619	3,920	7,164	287	342	858	174,938	282,546	736,153	610	768	858	49
All other tributaries	2,382	7,650	8,206	7,704.8	34,805	34,689	36,687	216	389	854	111,205	216,085	554,918	515	607	650	46
Colorado River, summary	8,376	22,586	20,185	20,894.1	66,306	68,322	81,033	1,128	1,196	2,395	1,095,724	1,772,812	2,758,983	971	1,482	1,152	58
Upper Colorado River[2]	6,191	18,752	15,874	13,964.3	54,437	55,189	57,900	6	22	13	3,000	15,643	1,850	500	711	141	20
Green River	2,127	6,703	5,794	5,743.9	16,875	17,145	21,498	1	3	11	1,350	410	920	1,350	137	84	38
Lower Colorado River[2 3]	2,185	3,834	4,311	6,929.8	11,869	13,133	23,133	1,122	1,174	2,382	1,092,724	1,757,169	2,757,153	974	1,497	1,157	58
Great Basin, summary	8,445	17,665	12,753	10,757.6	57,409	50,743	57,949	870	2,707	1,306	273,094	1,321,396	653,078	314	488	500	76
Bonneville Lake	3,354	10,304	6,806	7,339.2	29,281	25,104	28,428	124	213	305	30,620	73,907	129,711	247	347	425	39
Lahontan Lake[4]	5,091	7,361	5,947	3,418.4	28,128	25,639	29,521	746	2,494	1,001	242,474	1,247,489	523,367	325	500	523	88
Columbia River, summary	10,575	32,799	26,919	27,535.0	134,536	115,083	121,457	752	1,663	1,972	277,555	464,026	687,639	369	279	349	39
Snake River	6,865	20,071	16,904	16,397.2	95,846	85,164	86,012	130	229	418	40,957	70,236	256,972	315	307	615	24
All other tributaries	3,710	12,728	10,015	11,137.8	38,690	29,919	35,445	622	1,434	1,554	236,598	393,790	430,667	380	275	277	45
Klamath River	951	1,726	1,698	1,904.3	8,878	5,900	9,179	16	14	56	5,975	21,442	29,509	373	1,532	527	37
Sacramento-San Joaquin Delta and tributary streams	4,221	19,428	13,314	15,202.8	79,142	64,374	72,735	14,657	31,744	32,418	6,384,882	16,730,369	20,042,293	436	527	618	45
Pacific Ocean streams, exclusive of Gulf of California streams and Columbia and Klamath Rivers and Sacramento-San Joaquin Delta and tributary streams	1,382	3,049	2,622	1,947.6	13,035	5,789	7,995	9,874	12,814	14,932	3,879,505	6,385,210	7,509,059	393	498	503	82
Whitewater Draw and Vamori Wash (Gulf of California)[1]	———	128	7	26.0	553	10	484	209	210	142	72,767	62,457	45,537	348	297	321	37

[1] Not shown graphically.
[2] Data for Census of 1930 shown in published Census reports under "Other tributaries of Colorado River" are allocated, 85 percent to the Upper Colorado River Drainage Basin and 15 percent to the Lower Colorado River Drainage Basin.
[3] Includes Imperial Valley.
[4] Includes unidentified independent streams.

TABLE 10.—NUMBER AND YIELD OF FLOWING WELLS, NUMBER AND CAPACITY OF PUMPS, AND AVERAGE CAPACITY OF PRIME MOVERS, 1910 TO 1940; AVERAGE LIFT OF PUMPS, 1920 TO 1940; BY STATES

(For the 17 western States and Arkansas and Louisiana. See chart XIII for flowing wells and XIV for pumps)

STATE	FLOWING WELLS								PUMPS			
	Total (number)				Yield (gallons per minute)				Total (number)			
	1910	1920	1930	1940	1910	1920	1930	1940	1910[1]	1920	1930	1940
Summary (19 States)	5,071	4,606	4,811	4,641	1,545,676	935,057	609,367	555,075	15,805	33,804	61,445	78,528
Arizona	214	310	215	268	9,953	14,547	13,772	22,878	429	1,001	1,364	1,969
Arkansas	—	—	—	—	—	—	—	—	315	1,121	1,206	1,633
California	2,361	1,415	449	436	477,543	287,187	65,768	34,767	9,297	24,134	47,994	52,016
Colorado	313	476	621	886	41,989	20,159	39,644	54,859	206	435	540	2,818
Idaho	62	142	220	375	7,200	15,133	30,108	40,165	58	232	465	675
Kansas	3	6	1	24	30	500	75	1,453	698	288	312	1,259
Louisiana	—	9	807	502	—	6,255	31,981	12,695	1,007	1,941	2,000	2,403
Montana	15	41	40	44	22,185	4,608	4,106	9,834	125	299	233	860
Nebraska	—	—	—	19	—	—	—	370	75	54	636	2,848
Nevada	19	123	274	322	1,302	21,942	19,131	39,835	18	72	173	196
New Mexico	675	556	340	288	669,268	376,222	223,257	181,076	413	491	738	1,359
North Dakota	—	—	—	—	—	—	—	—	4	10	13	83
Oklahoma	—	1	—	—	—	100	—	—	68	26	30	116
Oregon	51	65	59	76	3,035	11,968	6,535	3,396	229	614	1,157	2,265
South Dakota	42	4	13	19	14,382	2,750	4,825	5,377	8	25	8	127
Texas	123	135	61	100	37,019	62,364	36,020	39,508	2,359	1,641	2,028	4,754
Utah	1,138	1,256	1,663	1,216	42,794	96,371	104,670	83,838	69	291	460	409
Washington	55	60	42	50	18,926	14,925	27,290	21,192	391	1,069	2,023	2,488
Wyoming	2	7	6	36	250	46	2,205	3,830	34	70	65	230

STATE	PUMPS—Continued											PRIME MOVERS			
	Capacity (gallons per minute)								Average lift (feet)			Average capacity (horsepower)			
	Total				Average										
	1910	1920	1930	1940	1910	1920	1930	1940	1920	1930	1940	1910	1920	1930	1940
Summary (19 States)	19,355,864	36,275,005	57,244,859	75,802,998	1,225	1,073	932	965	41	51	51	23	25	22	23
Arizona	851,873	1,048,030	2,125,293	2,992,986	1,986	1,047	1,558	1,520	44	46	60	87	30	42	52
Arkansas	436,402	1,854,097	1,775,788	2,013,697	1,385	1,476	1,472	1,233	50	68	61	39	56	57	47
California	5,276,298	16,773,692	33,240,589	39,147,470	568	695	893	753	41	53	55	14	18	18	19
Colorado	296,937	299,726	437,250	2,283,375	1,441	669	810	803	23	25	32	39	21	22	18
Idaho	278,569	1,397,681	2,113,513	2,719,905	4,803	6,024	4,545	4,029	29	32	26	122	198	86	67
Kansas	128,276	297,975	393,526	1,231,482	184	1,035	1,261	978	30	26	35	2	35	22	22
Louisiana	5,064,173	4,968,686	5,914,799	6,453,487	5,029	2,560	2,957	2,686	32	37	32	57	69	48	37
Montana	281,199	453,231	523,494	1,309,014	2,250	1,516	2,247	1,925	20	22	21	28	41	46	45
Nebraska	5,366	73,686	536,752	2,528,669	72	1,365	844	888	24	29	32	2	19	18	20
Nevada	24,295	35,266	115,648	141,065	1,350	490	668	720	22	31	31	38	6	17	12
New Mexico	216,355	304,789	555,063	1,309,005	524	621	752	840	40	40	44	34	18	21	26
North Dakota	182,115	51,250	24,900	104,158	45,529	5,125	1,915	1,255	38	24	17	510	517	17	15
Oklahoma	4,541	7,668	8,855	59,280	67	295	295	511	59	33	36	2	8	9	9
Oregon	118,514	600,045	1,022,213	1,510,958	518	977	884	667	28	27	27	14	24	19	13
South Dakota	5,289	23,320	4,027	103,050	661	933	503	811	21	27	20	8	20	12	17
Texas	5,362,665	6,825,998	6,494,999	9,916,225	2,273	4,160	3,203	2,086	45	55	69	29	59	52	42
Utah	315,057	783,588	877,942	835,862	4,566	2,695	1,909	2,044	25	36	35	31	46	27	35
Washington	365,411	636,552	993,303	953,751	935	601	491	383	60	59	47	35	24	17	15
Wyoming	142,529	39,725	86,905	209,559	4,192	568	1,337	911	31	21	30	21	23	15	19

[1] Number of pumping plants.

TABLE 11.—NUMBER AND YIELD OF FLOWING WELLS; NUMBER, CAPACITY, AND AVERAGE LIFT OF PUMPS; AND AVERAGE CAPACITY OF PRIME MOVERS; 1920 TO 1940; BY SPECIFIED DRAINAGE BASINS

(For the 17 western States and Arkansas and Louisiana)

DRAINAGE BASIN	FLOWING WELLS						PUMPS		
	Total (number)			Yield (gallons per minute)			Total (number)		
	1920	1930	1940	1920	1930	1940	1920	1930	1940
Summary (19 States)	4,606	4,811	4,641	955,057	609,367	555,073	33,804	61,445	78,528
Red River (of the North)	———	———	———	———	———	———	———	8	16
Missouri River, summary	41	21	79	4,271	7,218	9,915	689	1,279	5,994
Yellowstone River	21	6	20	194	2,265	2,494	120	88	244
Platte River	6	———	14	270	———	1,260	307	944	4,533
All other tributaries	14	15	45	3,807	4,953	6,161	282	267	1,217
Mississippi River, exclusive of Missouri River, summary	27	7	47	6,240	993	4,263	1,715	1,804	4,190
Arkansas River	24	6	46	3,640	945	3,729	872	852	2,125
All other tributaries	3	1	1	2,600	48	534	843	952	2,065
Gulf of Mexico streams, other than Mississippi River and Rio Grande	127	856	576	57,009	52,933	43,504	3,208	3,525	5,697
Rio Grande, summary	1,016	965	1,136	401,156	276,671	240,308	709	1,099	2,353
Pecos River	563	350	273	384,525	237,257	188,255	309	404	911
All other tributaries	453	615	863	16,831	39,414	52,053	400	695	1,442
Colorado River, summary	612	224	463	70,917	18,803	48,584	1,128	1,220	2,640
Upper Colorado River[1]	13	18	18	1,035	3,099	1,094	85	109	130
Green River	2	4	11	———	510	754	23	22	67
Lower Colorado River[1 2]	599	206	445	69,882	15,704	47,490	1,043	1,111	2,510
Great Basin, summary	1,610	2,175	1,698	128,522	153,800	118,499	820	2,788	1,448
Bonneville Lake	846	835	1,313	91,066	46,064	88,934	221	325	404
Lahontan Lake[3]	764	1,340	385	37,456	107,736	29,565	599	2,463	1,044
Columbia River, summary	176	293	374	27,135	62,451	65,579	1,745	3,434	4,439
Snake River	105	212	294	9,867	52,163	42,569	478	804	971
All other tributaries	71	81	80	17,268	30,288	23,010	1,267	2,630	3,468
Klamath River	4	28	3	35	241	42	83	123	224
Sacramento-San Joaquin Delta and tributary streams	181	72	47	51,785	14,400	3,403	14,849	33,129	34,631
Pacific Ocean streams, exclusive of Gulf of California streams and Columbia and Klamath Rivers, Sacramento-San Joaquin Delta, and tributary streams	802	159	212	187,484	23,427	20,211	8,649	12,821	16,552
Whitewater Draw and Vamori Wash (Gulf of California)	10	11	6	503	430	765	209	215	144

DRAINAGE BASIN	PUMPS—Continued									PRIME MOVERS		
	Capacity (gallons per minute)						Average lift (feet)			Average capacity (horsepower)		
	Total			Average								
	1920	1930	1940	1920	1930	1940	1920	1930	1940	1920	1930	1940
Summary (19 States)	36,275,005	57,244,859	75,802,998	1,073	932	965	41	51	51	25	22	23
Red River (of the North)	———	20,400	26,045	———	2,550	1,628	———	13	21	———	19	17
Missouri River, summary	800,218	1,343,545	5,773,010	1,161	1,050	956	22	26	32	31	22	20
Yellowstone River	182,508	273,074	532,157	1,521	4,016	2,181	25	19	22	39	60	41
Platte River	220,040	723,029	3,813,132	717	766	841	22	27	33	14	18	19
All other tributaries	397,670	347,442	1,387,721	1,518	1,301	1,140	(4)	(4)	29	50	32	23
Mississippi River, exclusive of Missouri River, summary	2,237,441	2,418,238	4,275,330	1,305	1,340	1,020	45	54	57	48	45	35
Arkansas River	1,119,743	1,144,006	2,004,166	1,284	1,343	943	42	49	43	45	36	26
All other tributaries	1,117,698	1,274,232	2,271,164	1,326	1,338	1,100	(4)	(4)	72	51	52	44
Gulf of Mexico streams, other than Mississippi River and Rio Grande	9,202,748	8,929,951	11,646,141	2,889	2,533	2,044	37	46	50	59	44	37
Rio Grande, summary	2,718,936	3,881,588	5,486,952	3,852	3,532	2,332	42	41	42	51	54	33
Pecos River	221,289	336,334	866,406	716	833	951	31	28	47	18	21	28
All other tributaries	2,495,647	3,545,252	4,620,546	6,239	5,101	3,204	(4)	(4)	38	78	73	36
Colorado River, summary	1,195,680	2,367,101	3,616,220	1,060	1,940	1,370	42	44	54	32	51	44
Upper Colorado River[1]	169,008	546,746	230,121	1,988	5,016	1,770	(4)	(4)	24	71	98	46
Green River	44,920	16,774	80,650	1,953	762	1,204	18	20	20	36	51	27
Lower Colorado River[1 2]	1,026,672	1,820,355	3,386,099	984	1,638	1,349	(4)	(4)	55	29	47	45
Great Basin, summary	1,033,964	3,205,814	1,514,746	1,261	1,150	1,046	41	67	71	27	23	27
Bonneville Lake	734,153	909,981	877,780	3,322	2,800	2,173	(4)	(4)	38	60	39	38
Lahontan Lake[3]	299,811	2,295,833	636,966	501	932	610	(4)	(4)	84	17	21	24
Columbia River, summary	2,522,910	3,593,854	4,609,862	1,446	1,047	1,038	50	47	39	40	24	24
Snake River	1,758,084	2,331,003	3,017,333	3,678	2,899	3,108	29	29	25	109	55	52
All other tributaries	764,826	1,262,851	1,592,529	604	480	459	(4)	(4)	43	20	15	16
Klamath River	174,184	508,985	506,460	2,099	4,138	2,261	25	33	26	54	67	31
Sacramento-San Joaquin Delta and tributary streams	11,584,371	23,856,244	29,694,592	780	720	833	32	42	42	15	14	16
Pacific Ocean streams, exclusive of Gulf of California streams and Columbia and Klamath Rivers, Sacramento-San Joaquin Delta, and tributary streams	4,732,586	7,059,634	8,830,296	547	551	521	58	79	77	23	25	23
Whitewater Draw and Vamori Wash (Gulf of California)	73,967	59,507	63,344	354	277	440	44	48	57	12	9	14

[1]Data for Irrigation Census of 1930, included in published Agriculture Census Reports, as "Other Tributaries of Colorado River," are allocated 85 percent to the Upper Colorado River Drainage Basin and 15 percent to the Lower Colorado River Drainage Basin.
[2]Includes Imperial Valley.
[3]Includes unidentified independent streams.
[4]Not available.

TABLE 12.—PIPE LINES—TOTAL LENGTHS, 1910 TO 1940; AND LENGTHS BY MATERIALS OF CONSTRUCTION AND SIZE, 1930 AND 1940; BY STATES

(For the 17 western States and Arkansas and Louisiana)

STATE	LENGTH OF PIPE LINES												
	Total (miles)				By materials of construction and size								
					1930								
					Concrete (miles)			Metal (miles)			Wood-stave (miles)		
	1910[1]	1920	1930	1940	Total	1 to 12 inches (diameter)	Over 12 inches (diameter)	Total	1 to 12 inches (diameter)	Over 12 inches (diameter)	Total	1 to 12 inches (diameter)	Over 12 inches (diameter)
Summary (19 States)	3,806.9	8,878.3	[2]17,363.1	28,584.9	[3]10,324.5	7,519.1	2,681.9	[3]4,857.7	4,019.7	835.5	[3]1,003.8	593.4	406.4
Arizona	38.3	104.5	[2]189.3	344.3	71.0	14.0	57.0	58.1	52.5	5.6	41.8	21.5	20.3
Arkansas	———	0.4	1.0	13.0	———	———	———	1.0	0.9	0.1	———	———	———
California	2,619.4	6,885.9	[2]14,685.0	22,890.2	[3]9,585.4	7,199.4	2,269.5	[3]4,094.2	3,335.4	758.3	227.5	158.9	88.6
Colorado	183.6	217.3	131.9	245.1	68.0	55.7	12.3	36.3	21.0	15.3	17.5	5.4	12.1
Idaho	103.9	180.6	[2]263.4	299.9	80.0	36.2	43.8	35.1	29.1	6.0	[3]132.6	55.9	74.7
Kansas	0.3	2.8	16.1	24.1	———	———	———	16.1	16.1	———	———	———	———
Louisiana	4.1	50.1	15.1	63.6	———	———	———	14.6	10.3	4.3	0.5	0.3	0.2
Montana	29.9	48.0	64.9	148.1	12.3	0.2	12.1	27.6	19.6	8.0	15.8	4.7	11.1
Nebraska	1.5	3.8	27.5	126.1	6.6	———	6.6	3.9	2.3	1.6	7.5	1.2	6.3
Nevada	7.2	33.0	[2]90.6	104.7	11.6	9.5	2.1	58.2	54.2	4.0	10.7	10.2	0.5
New Mexico	40.5	60.8	15.2	36.5	0.7	0.7	———	10.0	9.1	0.9	3.5	2.1	1.4
North Dakota	0.3	0.3	1.2	3.8	———	———	———	1.2	1.2	———	———	———	———
Oklahoma	———	4.3	0.7	24.4	———	———	———	0.7	0.7	———	———	———	———
Oregon	107.5	159.6	[2]225.3	665.2	61.5	30.6	30.9	80.7	72.9	7.8	[3]70.4	41.0	27.4
South Dakota	6.7	7.2	8.9	17.3	1.1	———	1.1	3.6	2.9	0.7	1.8	———	1.8
Texas	32.6	157.1	[2]319.0	923.1	[3]149.8	24.0	118.8	58.6	53.9	4.7	56.0	25.2	30.8
Utah	117.8	154.7	159.0	172.5	24.0	9.0	15.0	49.2	42.9	6.3	30.3	26.4	3.9
Washington	500.5	790.0	[2]1,156.9	2,612.7	249.7	139.7	110.0	300.6	290.4	10.2	387.1	260.6	126.5
Wyoming	12.8	17.9	14.1	70.3	2.8	0.1	2.7	8.0	6.3	1.7	0.8	———	0.8

STATE	LENGTH OF PIPE LINES—Continued														
	By materials of construction and size—Continued														
	1930—Continued			1940											
	Clay and other (miles)			Concrete (miles)			Metal (miles)			Wood-stave (miles)			Clay and other (miles)		
	Total	1 to 12 inches (diameter)	Over 12 inches (diameter)	Total	1 to 12 inches (diameter)	Over 12 inches (diameter)	Total	1 to 12 inches (diameter)	Over 12 inches (diameter)	Total	1 to 12 inches (diameter)	Over 12 inches (diameter)	Total	1 to 12 inches (diameter)	Over 12 inches (diameter)
Summary (19 States)	[3]322.8	235.4	60.4	18,692.2	14,126.6	4,565.6	8,027.5	7,083.1	944.4	1,236.5	808.5	428.0	628.7	456.3	172.4
Arizona	0.4	0.4	———	265.8	95.4	170.4	65.7	48.1	17.6	3.0	1.3	1.7	9.8	2.3	7.5
Arkansas	———	———	———	———	———	———	3.4	3.2	0.2	———	———	———	9.6	9.6	———
California	110.7	78.7	32.0	16,745.0	13,183.5	3,561.5	5,414.1	4,787.1	627.0	249.8	160.1	89.7	281.3	215.5	65.8
Colorado	10.1	8.9	1.2	86.7	57.6	29.1	93.5	51.9	41.6	23.7	9.1	14.6	41.2	14.6	26.6
Idaho	11.1	11.0	0.1	96.0	43.8	52.2	58.5	40.2	18.3	121.0	63.6	57.4	24.4	17.3	7.1
Kansas	———	———	———	1.1	0.6	0.5	21.7	20.8	0.9	———	———	———	1.3	0.5	0.8
Louisiana	———	———	———	15.4	6.1	9.3	40.7	20.5	20.2	5.9	5.5	0.4	1.6	1.1	0.5
Montana	9.2	0.7	8.5	14.5	1.8	12.7	78.7	58.8	21.9	26.1	10.8	15.3	28.8	0.9	27.9
Nebraska	9.5	———	9.5	21.2	3.1	18.1	83.2	65.8	17.4	12.5	5.1	7.4	9.2	2.7	6.5
Nevada	8.3	8.3	———	8.7	4.3	4.4	77.7	69.1	8.6	12.1	12.0	0.1	6.2	4.8	1.4
New Mexico	1.0	0.8	0.2	8.7	1.4	7.3	21.4	13.1	8.3	3.4	1.3	2.1	3.0	3.0	———
North Dakota	———	———	———	0.3	———	0.3	3.4	3.3	0.1	———	———	———	0.1	0.1	———
Oklahoma	———	———	———	0.6	0.6	———	23.6	23.6	———	0.1	0.1	———	0.1	0.1	———
Oregon	0.9	0.9	———	97.8	61.8	36.0	489.2	438.5	50.7	67.7	36.3	31.4	10.5	5.8	4.7
South Dakota	2.4	2.3	0.1	5.7	2.0	3.7	11.0	10.0	1.0	0.5	0.5	———	0.1	———	0.1
Texas	1.6	1.6	———	655.4	155.6	499.8	204.0	189.9	14.1	22.2	6.0	16.2	41.5	38.4	3.1
Utah	[3]55.5	54.2	0.3	40.6	17.8	22.8	60.7	43.5	17.2	21.2	13.3	7.9	50.0	44.9	5.1
Washington	[3]99.6	67.6	6.0	614.9	489.5	125.4	1,239.0	1,171.5	67.5	654.3	474.0	180.3	104.5	92.1	12.4
Wyoming	2.5	———	2.5	13.8	1.7	12.1	38.0	26.2	11.8	13.0	9.5	3.5	5.5	2.6	2.9

[1]Data for 1910 represent lengths of pipe reported in 1920 by enterprises which were installed prior to 1909 and may contain some pipe extensions installed by these enterprises between 1909 and 1919.

[2]Data for 1930 contain a total of 854.3 miles of pipe not segregated by material, as follows: Arizona, 18.0; California, 665.2; Idaho, 4.8; Nevada, 1.8; Oregon, 11.8; Texas, 53.0; and Washington, 99.9.

[3]Data for 1930 contain pipe not segregated into size groups, as follows: Concrete—California, 116.5 miles, and Texas, 7.0 miles; metal, California, 2.5 miles; wood-stave—Idaho, 2.0 miles, and Oregon, 2.0 miles; and clay and other—Utah, 1.0 miles, and Washington, 26.0 miles.