SUMMARY FOR 17 WESTERN STATES AND ARKANSAS AND LOUISIANA (Section C)

TABLE 1.—IRRIGATION SUMMARY: 1890 TO 1940 [For the 17 western States and Arkansas and Louisiana]

Live one	: 17 western stat	es and alkadisas	and Louisiana_				
ITEM			1	census of-			
(For definitions and explanations, see text)	1940	1935	1930	1920	1910	1900	1890
Approximate land areaacres	*1,225,056,640	1,223,989,120	1,223,989,120	1,223,989,120	1,224,063,360	1,224,364,160	1,224,241,280
CENSUS OF AGRICULTURE							
All farms (irrigated and nonirrigated)number Land in all farmsacres	1,897,845 629,050,311	2,184,644 608,320,098	2,062,813 568,693,705	1,916,391 505,440,954	1,776,046 416,462,547	1,390,338 376,476,067	934,878 195,595,861
Farms irrigated: Farms	291,655 3 10.0 15.4	289,779 13.3	265,147 19.0 12.9	222,789 36.9 11.6	162,723 43.0 9.2	² 113,849 110.3 8.2	54,136 5.8
Land in farmsacres Proportion of all farm landpercent	112,601,431 17.9	(*)	78,339,222 13.8	(2)	(4) (4)	<u>(</u> *)	(4) (4)
Area irrigatedacres Increase or decrease (-) over preceding censuspercent Proportion of total land area of Statepercent. Proportion of all fara landpercent	⁵ 17,816,777 ³ 21.8 1.5 2.8	6 12,938,381 1.1 2.1	⁷ 14,633,252 1.2 2.6	(⁶)	(⁸)	² 7,744,492 108.4 0.6 2.1	2 3,715,945 0.3 1.9
Value of irrigated farms (land and buildings)dollars Average per farmdollars Average per acredollars	3,467,116,512 11,887.73 30.79	(5)	4,629,781,819 17,461.19 59.10	(4)	(1)	(4) (4) (4)	(\$)
Value of farm implements and machinery dollars	283,024,144 970.41 2.51	(5)	.257,110,965 969.69 3.28	(4)	(4) (4) (4)	(t) (t)	(4) (5) (4)
CENSUS OF IRRIGATION							
Irrigation enterprises: Enterprises. Units irrigated 10number. Area irrigatedacresacres	91,637 430,022 21,003,739	(*)	75,517 (⁴) 19,547,544	(4)	(4)	(4) (4) (4)	(4) (4) (4)
Area existing works were capable of supplying with water			26,101,890 30,599,470		20,285,403 11 32,245,464	(2)	(4) (4)
Additional area existing works were capable of supplying with wateracres	7,051,509	(4)	6,554,346	6,828,761	5,852,118	· · (4)	(4)
Additional irrigable area in enterprises not supplied with wateracres	10,302,210	(4)	11,051,926	11 16,699,105	11 17,812,179	(4)	(4)
Investment in irrigation enterprises		(1)	² 892,755,790				
Average per acre based on area works were capable of supplying with water	37.50 3 9.6		34.20 27.6				(4)
Estimated completed cost of existing enterprisesdollars	1,126,545,687	(4)	1,015,108,210	819,778,005	437,948,825	(4)	(4)
Average per acre based on irrigable area in enterprisesdollars	35.99	(4)	33.17	11 22.84	11 13.56	(4)	(*)

(4)

12 1.07

2.43

2.77

(4)

2.28

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

[For the 17 western States and Arkansas and Louisiana] VALUE OF FARMS (land and buildings) VALUE OF VALUE OF IMPLEMENTS CROPLAND HARVESTED AND MACHINERY 1939 ITEM
(For definitions and explanations, see text) Irrigated Land in pasture 1939 Farms fares Average per acre² age per acre age per acre² Total Irrigated1 Total Total Total Dollars Acres 2,749,303 2,317,655 Dollars Dollars Dollars Dollars Dollars Acres Number Acres ,555,505,540 ,850,915,794 704,589,746 4.06 4.03 4.15 ,095,720,348 737,899,289 357,821,059 1.74 1.61 2.11 12,803,166,043 8,783,602,098 629,050,311 459,428,855 143,843,948 15,067,474 43,843,846 84,359,515 59,484,433 11,005,815 4,061,659 19.12 23.70 431,648 4.019.563.945 821,388 169,621,456 Tenants..... 283,024,144 217,717,548 65,306,590 629,915,422 529,180,148 5.59 2.51 15,067,474 2,749,303 3,467,116,512 112,601,481 97,502,649 19,711,450 Irrigated farms, total...........
Owners and managers...... 14,493,368 5,218,082 11,005,815 4,061,659 2,784,524,630 682,591,882 2,317,655 4.33 6.67 431,648 45.21 100,735,274 Tenants..... 70,016 15,098,782 448,859,681 377,501,371 71,358,310 191,640,325 2.90 2,366,971,049 65,984,746 57,315,843 8,668,903 2,071,385 Wholly irrigated farms..... 219,614 11,995,168 11,995,168 6.59 8.23 146,131,755 45,508,570 2.55 1,897,179,811 469,791,238 8,744,365 3,250,803 1,745,651 Owners and managers..... 168,131 51,483 54.19 3,250,803 325,734 3,072,306 2,261,450 810,856 1,100,145,463 23.68 181,055,741 3.88 91.383.819 1.96 7,716,282 5,749,003 1,967,279 677,918 Partly irrigated farms......
Owners and managers..... 72,041 53,508 46,616,685 40,186,806 1.78 887,344,819 212,800,644 22.08 33.10 151,678,777 29,376,964 572,004 3.08 105,914 6,429,879 Tenants..... 18,533 1.57 18.08 1,925,590,118 3.73 812,696,204 9,336,049,531 516,448,880 124,132,498 Nonirrigated farms, total..... 1,606,190

Average annual cost per acre irrigated for maintenance and operation of irrigation works......dollars...

¹ Does not include irrigated fallow land or land in young irrigated crops not harvested or in irrigated crops that failed. 2 Based on all land in farms for each tenure group.

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

[For the 17 western States and Arkansas and Louisiana]

SOURCE OF WATER SUPPLY		1940			IRRIGAT	ED AREA		DE	LIVERY OF	WATER TO	IRRIGATOR	S, 193)
(For definitions and explanations, see text)	Enter-	Irrigable	Area Works Were				Increase	Irrigate	ed area repo	orting-	Quantity	Cos	it ¹
	prises	area	capable of supplying with water	1939	1929	1919	decrease (-) 1929-39	Quantity	Cost	Quantity and cost	delivered per acre ¹	Per acre	Per acre- foot
Total	Number 91,637	Acres 31,305,949	Acres 28,055,248	Acres 21,003,739	Acres 19,547,544	Acres 19,191,716	Percent 7.4	Acres 19,377,064	Acres 20,210,007	Acres 18,802,811	Acre-feet 3.0		Dollars 1.11
Primary sources: Stréams, gravity Streams, pumped Streams, proped Wells, pumped Wells, pumped and flowing. Lakes, pumped and flowing. Lakes, gravity Springs and streams. Stored storm water City water	25,726 5,915 344 38,715 1,398 163 149 354 3,432 995 434 184 53		16,811,045 2,761,219 1,796,106 3,621,991 50,222 24,850 44,805 70,318 253,493 287,297 33,217 14,372 6,447	1,724,800 1,266,148 2,508,076 41,481 20,835 25,659 45,831 210,373 230,004 21,399 10,837	1,713,380 258,094 2,051,735 48,479 16,798 58,103 77,818 217,246 	199,595 1,283,098 65,856 35,685 100,846 35,730 198,008	0.7 390.6 22.2 -14.4 24.0 -55.8 -41.1 -3.2	1,501,396 1,224,860 2,463,353 36,567 20,651 23,786 44,869 179,209 189,938 17,539 10,451	1,259,596 2,396,465 19,614 19,508 24,872 42,300 170,424 215,216 19,010 9,527	1,578,627 1,219,178 2,371,469 17,231 19,324 23,223 41,455 145,060 183,091 15,546 9,378	2.6 2.6 2.6 2.1 1.8 2.3 2.3 1.4 3.5	7.28 1.06 8.93 1.31 3.32 0.93 0.64 1.20 5.71	0.45 1.39 0.68 2.84 0.40 3.47 0.43 1.86 0.41 0.29 0.87 1.64
Streams, gravity; wells, pumped Streams, gravity; wells, flowing Streams, pumped; wells, pumped Waste water, seepage or drainage Other mixed Other and not reported Supplemental sources: Streams, gravity and/or storage Streams, pumped Wells, pumped	580 111 437 770 741 1 718 231 10,086 120	1,705,708 82,725 369,853 116,346 379,125 3,712,709 36,712 718,088 8,126	1,533,861 81,553 225,108 113,393 325,952 3,531,553 35,357 693,540 7,944	5,260 1,252,329 71,571 172,636 65,613 266,932 2,736,606 25,644 518,429 6,441	3,529 1,164,349 21,292	2,578 344,713 82,865 	ľ	4,384 1,234,969 49,754 169,822 61,605 245,867 2,448,977 21,049 511,291 4,744	3,715 1,241,531 50,907 168,533 58,065 258,129 2,396,400 25,500 49,973 4,732	3,141 1,226,447 49,694 166,119 55,599 { 239,007 2,180,285 20,653 496,145 3,148	2.7 2.5 1.4 2.4 2.1 2.8 2.7 1.9 1.3	2.39 4.30 0.87 6.46 1.46 2.83 0.46 3.55 3.83 0.27	0.90 1.73 0.65 2.70 0.70 1.01 0.35 1.33 2.06 0.22

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

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

Because of the cost of water is cost of maintenance and operation, and for enterprises serving 1 to 4 units the cost of water is cost of maintenance and operation, and for enterprises serving 5 or more units it is total annual charges, and (b) that enterprises reporting cost and quantity of water had used the same quantity of water h

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

[For the 17 western States and Arkansas and Louisiana]

			11	NVESTMENT					COST	OF MAINTE	NANCE	AND OPER	ATION 1	
SOURCE OF WATER SUPPLY	194	10		18	30		Average per acrè	1939		1929)	Average per acre	1919	
(For definitions and explanations, see text)	Amount	Pro- por- tion of total	Aver- age per acre ²	Amount	Pro- por- tion of total	Aver- age per acre ²	increase or decrease (-) 1930-40	Irrigated area reporting	Aver- age per acre	Irrigated area reporting	Aver- age per acre	increase or decrease (-) 1930-40	Irrigated area reporting	Aver- age per acre
Total	Dollars 1,052,049,201	Fercent 100.0	Dollars 37.50	Dollars 8892,755,790	Percent 100.0	Dollars 34.20	Dollars -2.07	Acres 20,193,761	Dollars 2.28	Acres 18,690,184	Dollars 2.77	Dollars -0.63	Acres ³ 16,253,192	Dollara 2.43
Primary sources: Streams, gravity. Streams, pumped. Streams, gravity and pumped. Wells, pumped. Wells, flowing. Wells, pumped and flowing. Lakes, gravity. Lakes, pumped. Springs. Springs and streams. Stored storm water.	441,278,658 81,236,358 138,641,602 139,675,087 1,706,386, 1,855,318 1,248,164 1,865,165 3,356,541 4,053,412 637,667 540,022 209,541	41.9 7.7 13.2 13.3 0.2 0.2 0.2 0.3 0.4 0.1 0.1	28.25 29.42 77.13 38.56 33.98 74.66 27.86 28.52 13.24 14.11 19.20 37.57 32.50	452,381,582 102,027,681 20,823,588 3131,426,464 2,366,242 1,548,810 4,693,943 3,591,977 3,408,382 1,822,458 32,306 261,986	50.6 11.4 2.3 14.7 0.3 0.5 0.4 0.4 0.4	42.27 74.58 35.61 26.43	-1.9 -8.25 29.50 -71.51 -8.29 0.08 -7.75 0.09 -0.03 	12,580,607 1,898,767 1,259,596 2,994,081 19,614 19,508 24,872 42,300 170,424 215,236 19,010 8,105 3,715	0.84 3.81 2.23 6.92 1.01 7.96 1.06 3.40 0.83 0.51 1.12 4.66 2.41	12, 392, 865 1, 678, 550 252, 784 1,921, 060 22, 403 16, 542 55, 527 76, 518 195, 502 36, 023 978 2, 902	1.21 4.30 4.41 9.17 2.34 9.27 2.70 3.93 1.02	-0.37 -0.49 -2.18 -2.25 -1.33 -1.31 -1.04 -0.53 -0.19 -0.19 -2.65 0.25	\$12,183,139 1,151,313 198,656 1,064,338 27,543 29,600 78,586 45,558 139,244	1.25 6.50 2.33 10.07 2.77 8.04 1.30 5.20 1.63
Streams, gravity; wells, pumped. Streams, gravity; wells, flowing. Streams, pumped; wells, pumped Waste water, seepage or drainage Other and not reported	111,874,661 1,714,990 19,194,344 699,435 14,200,912	10.6 0.2 1.8 0.1	72.94 21.03 85.27 6.17 43.57	99,936,110 578,037 	11.2 0.1 6.4 0.1	66.29 16.89 49.82 20.18		1,201,354 50,807 168,533 58,103 258,129	3.56 0.70 6.19 1.45 2.44	1,159,631 20,268 	4.46 2.52 3.52 2.04	-0.90 -1.82 } -1.05	315,640 79,354 	5.97 1.36 2.71 10.75
Supplemental sources: 5 Streams, gravity and/or storage. Streams, pumped	69,896,269 1,622,648 16,524,863 117,158	6.6 0.2 1.6 (4)	19.79 45.89 23.83 14.75	927,158 9,627,568 6,200	0.1 1.1 (4)	28.28 29.92 24.31	17.61 -6.09 -9.56	2,452,362 25,200 501,669 4,732	0.31 4.64 3.86 0.24	23,896 276,347 57	6.27 5.91 0.61	-1.63 -2.05 -0.37		

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

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

[For the 17 western States and Arkansas and Louisiana]

		CENSU	s of—		Increase			CENSUS	0F		Increase
ITEH AND	194	.0	1930	1920	or decrease	ITEM AND	194	10	1930	1920	or decrease (-)
TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	Primary enter- prises	Supple- mental enter- prises ¹	Primary enter- prises	Primary enter- prises	(~) 1930-40 primary enter- prises	TYPE OF ENTERPRISE (For definitions and ex- planations, see text)	Primary enter- prises	Supple- mental enter- prises ¹	Primary enter- prises	Primary enter- prises	1930-40 primary enter- prises
AREA IRRIGATED	Acres 21,003,739	Acres 3,287,210	Acres 19,547,544	Acres 19,191,716	Percent 7.4	AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER-Continued				-	
Individual and partnership Cooperative, incorporated. Cooperative, unincorporated. Irrigation district. Reclamation district. Commercial. Bureau of Reclamation ² Office of Indian Affairs ² . State. City and/or sewage. Other.	7,314,152 5,743,545 908,943 3,514,702 59,052 1,017,781 1,824,004 515,765 17,022 83,457 5,316	596,171 760,981 97,407 211,470 22,743 128,238 1,460,470 2,000 7,730	6,410,581 6,271,334 3,452,276 1,230,763 1,485,028 331,840 11,489 121,218 233,016	6,848,807 6,581,400 1,822,887 1,822,001 1,254,569 284,551 5,620 40,145 531,735	14.1 6.1 1.8 -17.3 22.8 55.4 48.2 -31.2 -97.7	Reclamation district. Commercial. Bureau of Reclamation ³ *. Office of Indian Affairs ² . State: City and/or sewage. Uther. IRRIGABLE AREA ³	Acres 136,276 1,961,202 2,349,967 802,996 37,948 154,219 13,811	Acres 22,743 232,804 1,762,721 2,000 7,730 	2,160,950 1,944,825 739,446 13,600 146,132 407,819	Acres 2,799,563 1,680,643 484,486 7,379 44,458 813,469 35,890,821	-9.2 20.8 8.8 179.0 5.5 -96.6
AREA WORKS WERE CAPABLE OF SUP- PLYING WITH WATER Total		4,268,394	26,101,890 7,982,142	26,020,477 9,255,756		Individual and partnership Cooperative, incorporated Cooperative, unincorporated. Irrigation district Reclamation district Commercial Bureau of Reclamation ² * Office of Indian Affairs ²	10,137,716 7,464,492 1,118,653 5,687,191 137,526 2,551,707 2,794,102 1,195,449		6,013,347 2,619,597 2,569,649 1,122,134	10,628,543 3,432,109 3,999,581 2,627,176 932,985	-1.3 -5.7 -2.6 8.7 6.5
Cooperative, incorporated Cooperative, unincorporated Irrigation district	6,918,052 1,078,184 4,969,395	879,033 111,378 451,677	7,861,081	8,403,298	1.7	State	44,591 158,271	10,000 7,730	14,231 140,534 452,127	9,581 49,650 1,202,781	12.6

¹Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text).

*U.S. Dept. of the Interior.

"For explanation of areas, see text."

Table 6.-ENTERPRISES, AREAS, AVERAGE COSTS, 1940; AND AREA IRRIGATED. 1939; BY TYPE OF ENTERPRISE

[For the 17 western States and Arkansas and Louisiana]

	ENTER	ÝRISES	AR	EAS		AVERAGI	COST			AREA IF	RIGATED, 1	9391	
TYPE OF ENTERPRISE		Serving		Works were		mary prises		emental prises	·		Croplar	id	
(For definitions and explanations, see text)	Total	5 or more units ²	Irrigable	capable of supplying with water	Works and equipment per acres	Maintenance and operation per acres	Works and equipment per acre	Maintenance and operation per acre*	Units served ²	Total area	From which crops were harvested	On which crops failed	Irrigated pasture
Total	Number 91,637	Number 5,732	Acres 31,305,949	Acres 28,055,248	Dollars 33.53	Dollars 2.14	Dollars 19.94	Dollars 0.95	Number 430,022	Acres 21,003,739	Acres 18,300,138	Acres 259,188	Acres 2,444,413
Individual and partnership Cooperative, incorporated Cooperative, unincorporated Irrigation district Reclemation district. Commercial. U. S. Bureau of Reclemation*. U. S. Office of Indian Affairs. State City and/or sewage.	86,050 2,676 1,678 1,678 14 275 97 188 143 62 25	1,093 2,418 1,283 422 11 239 98 117 6 43 4	10,137,716 7,464,492 1,118,653 5,687,191 137,526 2,551,707 2,794,102 1,195,449 44,591 158,271 16,251	6,918,052 1,078,184 4,969,395 136,276 1,961,202	17,40 25,82 14,03 51,30 17,52 28,56 89,76 60,23 28,73 34,12 12,70	2.65 1.28 0.75 2.46 2.62 3.67 2.12 1.93 3.82 3.02 1.66	21.22 17.19 12.74 11.13 0.81 30.00 22.00 257.51 41.91	3.33 0.39 0.18 0.34 0.23 0.84 0.35	90,037 126,490 21,804 108,027 311 19,210 43,517 15,254 5,155 63	7,314,152 5,743,545 908,943 3,514,702 59,052 1,017,781 1,824,004 515,765 17,022 83,457 5,318		14,700 39,843 250 5,536 25,485 2,339 679 3,061	

¹Reported by enterprises in the Census of Irrigation, 1940, not by the Census of Agriculture. ²Schedules called for "Number of farms," see explanation in text.

⁵Based on area works were capable of supplying with water and cost of works and equipment exclusive of water right investment.

⁴Based on irrigated area in enterprises reporting maintenance and operation in 1939. *For explanation of areas and investment, see text.

Table 7.—INVESTMENT IN IRRIGATION ENTERPRISES, BY TYPE OF ENTERPRISE: 1940, 1930, AND 1920 [For the 17 western States and Arkansas and Louisiana]

								 				
		ı		investment,	TO JANUAR	¥ 1			AVERAGE IN PER ACRE WERE CAP SUPPLYIN	WORKS ABLE OF	Capital	Estimated invest-
TYPE OF ENTERPRISE			1940			. 1		Increase	SUPPLIIN	G WAIEK	expend- 1tures	ment re-
(For definitions and explanations, see text)	Total	Primary enter- prises	Supple- mental enter- prises	Total cost of works and equipment	Invest- ment in water rights	1930	1920	or decrease (-) 1930-40	Primary enter- prises	Supple- mental enter- prises	during 1939 ¹	quired to complete works
Total	Dollars 1,052,049,201	Dollars 963,888,263	Dollars 88,160,938	Dollars 1,025,672,714	Dollars 25,376,487	Dollars 2892,755,790	Dollars 697,657,328	Percent 17.8	Dollars 34.36	Dollars 20.65	Dollars 24,897,210	Dollars 74,496,486
Cooperative, incorporated	17,171,378 265,737,810 2,413,740 66,243,823 250,245,359 48,420,058 1,650,272	260,701,900 2,393,108 59,250,003 211,046,133 48,420,058 1,135,247 5,307,467	17,535,014 1,523,312 5,035,910 20,632 6,993,820 39,199,226 515,025 324,000	193,742,284 16,550,568 259,961,654 2,408,740 62,991,424 249,714,567 48,365,592 1,603,893 5,585,336	13,227,214 620,712 5,776,156 5,000 3,252,399 530,772 54,366 46,379 46,131	210,733,476 62,351,714 193,989,576 31,576,920 1,046,554 15,511,463	183,041,500 88,573,514 85,735,470 129,509,819 14,851,236 344,174 2,936,678	25.0 26.1 6.2 29.0 53.3 57.7 -63.7	27.38 14.51 52.46 17.56 30.21 89.81 60.30 29.92 34.42	19. 95 13. 68 11. 15 0. 91 30. 04 22. 24 257. 51 41. 91	1,233,608 102,577 9,786,698 5,475 655,883 8,127,211 4,821,135 67,283	3,600,687 438,335 12,446,829 24,500 1,811,209 12,955,672 38,871,503 28,425 5,000

¹ Only for enterprises serving 5 or more units.

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

[For the 17 western States and Arkansas and Louisiana]

		INDEBTE	DNESS OF E	NTERPRISES	REPORTIN	G	AF		F ENTERPRI	SES	CHARGES OF ENTERPRISES REPORTING			
TYPE OF ENTERPRISE		Ar	ea					Total ar	rearages				,	
(Nor definitions and explanations, see text)	Enter- prises 1940	Irri- gable 1940	Works were capable of supplying with water 1940	Total indebted- ness 1940	Average per acre assessed 1939 ³	Average per acre works were capable of supplying with water ⁴	Enter- prises 1940	Dec. 31 1939	Dec. 31 1938	Average per acre assessed 1939 ⁵	Area assessed 1939	Charges made 1939	Charges collected 1939	
Total	Number 1,419	Acres 16,883,066	Acres 14,665,187	Dollars 386,640,274	Dollars 32.90	Dollars 29.94	Number 202	Dollars 31,080,285	Dollars 29,352,985	Dollars 11.29	Acres 19,163,180	Dollars 34,284,667	Dollars 28,700,362	
Partnership. Incorporated. Cooperative, unicorporated. Irrigation district. Reclamation district. Reclamation district. Onmercial. Rureau of Reclamation ⁶ Office of Indian Affairs ⁶ State. City and/or sewage.	41 750 42 302 5 93 76 72 1	35,311 4,210,672 7172,997 5,276,890 82,910 1,882,409 4,121,792 1,090,283 (7) 9,802	33,901 3,947,336 7172,797 4,656,794 82,910 1,331,255 3,674,717 755,675 (7) 9,802	232,914 23,008,847 74,201,664 152,659,874 1,412,344 19,962,688 148,142,068 1036,888,107 (7) 151,768	7.74 6.32 728.53 33.80 42.12 28.65 64.63 61.37 (7) 16.35	6.85 5.79 724.32 35.41 17.03 14.45 58.54 48.81 (7) 15.48	2 58 7 80 1 23 30	(°) 1,409,193 1,146,574 24,313,110 (°) 1,850,462 1,276,528	(6) 1,277,294 975,617 24,060,076 (1) 1,682,906 1,087,633 1042,320	(6) 10.47 12.50 14.87 (6) 12.21 1.76 33.81	509,737 6,897,301 858,103 5,439,028 64,648 1,296,666 3,373,760 615,481 5,344 99,314 1,797	867,823 9,775,088 561,157 12,234,193 139,061 4,687,562 4,461,271 1,099,592 7,250 447,138 4,512	197,001 8,487,624 353,319 12,385,105 197,702 3,176,396 3,559,276 288,072 115,548	

10nly for enterprises serving 5 or more units. Enterprises and areas shown are totals for primary and supplemental enterprises reporting. 8 In payment of principal, interest, and/or other funded obligations. 5 Based on primary enterprises only; average for supplemental enterprises is \$11.63. 4 Based on primary enterprises only; average for supplemental enterprises is \$1.63. 5 Data are included only in totals because less than 3 enterprises reported in the 1940 Census. 7 Data for 1 State* enterprises are included with "Cooperative, unincorporated" enterprises in the 1940 Census. 7 Data for 1 State* enterprises are included with "Cooperative, unincorporated" enterprises in the 1940 Census. 1940 Censu

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

[For the 17 western States and Arkansas and Louisiana]

		COST	OF MAINTENAN	CE AND OPERA	TION		PAY ROLL	AND EMPLOYEE	s, 1939¹
TYPE OF ENTERPRISE (For definitions and	Prim enterp			mental prises		e cost ated acre	Enterprises	Wages	Employees
explanations, see text)	Irrigated area reporting 1839	Reported cost 1939	Irrigated area reporting 1939	Reported cost 1939	Primary enterprises 1939	Supplemental enterprises 1939	reporting pay roll	and salaries paid and payable	during week ending April 29
Total	Acres 20,193,761	Dollars 43,172,526	Acres 2,963,963	Dollars 2,828,094	Dollars 2.14	Dollars 0.95	Number 3,999	Dollars 16,071,522	Number 24,0
ndividual and partnership	6,761,064 5,705,659 785,725 3,506,863 35,766 1,016,082 1,822,039 487,689 6,059 41,853 4,952	17, 912, 563 7, 321, 830 596, 649 8, 841, 111 100, 785 3, 626, 450 3, 855, 722 959, 648 23, 069 126, 385 8, 314	572,367 730,043 96,841 195,890 22,743 128,238 1,230,111	1,909,696 282,560 17,799 66,328 5,323 107,261 435,148	2.65 1.28 0.75 2.46 2.62 3.57 2.12 1.93 3.82 3.02	3.33 0.39 0.18 0.34 0.23 0.94 0.35	412 2,124 659 393 9 202 81 89 ³ 1 288	159,329 3,283,180 222,518 5,216,167 28,302 1,716,515 3,694,039 1,481,825 760 258,887 (2)	8, 81, 1, 5, 1, 3, 2,

Only for enterprises serving 5 or more units.

Data for 1 "Other" enterprise are included with "Cooperative, unincorporated" enterprises in the 1940 Census.

The enterprise are included with "Cooperative, unincorporated" enterprises in the 1940 Census.

The enterprise are included with "Cooperative, unincorporated" enterprises in the 1940 Census.

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

(For the 17 western States and Arkansas and Louisiana)

[For the 17 western States and Arkansas and Moulestana]																
	DA	ws		CANALS		RESERVOIRS		PIPE FLOWING LINES WELLS		PUMPED WELLS			PUMPING	PLANTS		
TYPE OF ENTERPRISE (For definitions and			Capac-	Leng	th ¹							•	Princ	novers	P	umps
explanations, see text)	Diver- sion	Stor- age	ity at main head- ing	Earth	Lined ²	Num- ber	Capacity	Length	Num- ber	Yield	Number	Yield	Number	Rated capac- ity	Number	Rated capac- ity
Total	Humber 34.544	Number 4,607	Secft. 612,021	%1 les 122,857	#iles 4,676.7	7,709	Acft. 33,787,382	Miles 28,584.9	4,641	G.р.т. 555,073	68,279	G.p.m. 43,355,271	78,293	#p. 1,762,687	78,528	G.p.m. 75,802,998
Individual and partnership. Cooperative, incorporated Cooperative, unincorporated. Irrigation district Commercial. Bureau of Reclamation ⁵ Office of Indian Affairs ⁵ State City and/or sewage	29,728 2,272 1,392 464 3 176 81 339 42	3,242 709 83 169 1 109 89 102 84 16	189,852 194,390 26,171 92,300 1,880 41,482 49,932 13,486 777	43,659 25,597 5,739 21,243 205	830.4 617.5 82.2 2,205.9 9.2 138.7 714.2 70.9 4.0 3.6	5,971 918 130 213 2	6,326,864 3 2,931,186 17,292,933 1,696,896	5,089.1 532.6 3,727.6 14.6 1,044.3 699.9 292.2 42.6 118.2	165 31 13 12	8,691	1,377 354 769	291,902 1,120,816 237,847 348,000 197,748 28,089 3,635	1,908 452 1,461 59 488 300 900 80	1,321,262 144,627 14,830 118,745 6,233 78,577 52,351 22,976 2,070 453 563	1,915 449 1,444 60 489 300	51,215,121 5,318,596 433,126 8,547,271 977,000 6,012,675 2,502,252 674,656 94,510 12,635 15,156

¹ Includes main and lateral canals but not farm ditches.

² Includes flumes.

³U. S. Dept. of the Interior.

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

[For the 17 western States and Arkansas and Louisiana]

				
	194	10	19	30
MATERIAL	Diversion	Storage	Diversion	Storage
Total	Number 34,544	Number 4,607	Number 21,947	Number 2,010
Concrete or masonry	3,666 4,595 18,032 ² 7,766 485	409 72 3,795 225 106	2,380 3,077 112 1 2 15,675 803	365 1,715 716 156

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

[For the 17 western States and Arkansas and Lousiana]

PUMPS BY KIND OF POWER EMPLOYED	Pumps	Proportion of total number	Rated capacity of pumps	Propor- tion of total capacity	Average lift of pumps	MOTIVE POWER BY TYPE OF PUMP EMPLOYED	Prime movers	Proportion of total number	Rated capacity of movers	Proportion of total capacity
Total, 1940	Number 78,528	Percent 100.0	0.p.m. 75,802,998	Percent 100.0	Feet 51	Total, 1940	Number 78,298	Percent 100.0	Ир. 1,762,687	Percent 100.0
Electric motor Centrifugal Turbine Plunger Other. Internal-combustion engine Centrifugal Turbine Plunger Other. Other kinds of motive power Centrifugal Turbine Plunger Other. Mixed kinds of motive power Centrifugal Turbine Plunger Other. Mixed kinds of motive power Centrifugal Turbine Other. Other	50,597 19,208 28,508 2,537 346 21,533 12,750 7,288 1,043 455 1,213 178 5,185 2,311 2,360 2,360 2,360	24.5 36.3 3.2 0.4		57.4 28.1 27.5 0.2 1.5 27.1 16.6 9.2 0.1 1.2 2.4 2.2 0.2 (1) (1)	55 31 70 94 95 55 42 26 69 63 32 88 50 72 39 60 32 61 32 61	Centrifugal pump. Electric. Internal-combustion. Other. Turbline pump. Electric. Internal-combustion. Other. Plunger pump. Electric. Internal-combustion. Other. Other and mixed types of pumps. Electric. Internal-combustion. Other. Total, 1930.	30,792 17,869 12,683 240 34,584 26,911 7,607 66 4,212 2,094 1,074 1,074 8,705 6,559 1,851 280 259,344	39.3 22.8 18.2 0.3 44.2 34.4 9.7 0.1 5.4 2.7 1.4 1.3 il.1 8.4 2.4 0.4	597,067 319,348 241,186 30,533 901,137 609,379 287,433 4,325 17,553 9,964 5,924 1,655 246,930 179,333 83,570 14,027	33.9 33.1 19.1 19.1 19.7 2.1 51.1 34.5 16.3 0.2 1.0 0.8 0.3 0.1 10.2 3.0 0.3 0.3 0.3
Total, 1930	61,445		57,244,859		51	Increase or decrease (-) 1930-1940	18,919	••••••	479,268	•••••
Increase or decrease (-) 1930-1940	17,083	ĺ	18,558,139	••••••						

¹ Less than one-tenth of 1 percent.

Table 13.—PIPE LINES, BY MATERIAL, SIZE, AND LENGTH: 1940 AND 1930 [For the 17 western States and Arkansas and Louisiana]

MATERIAL AND SIZE (DIAMETER)	LEN	G TH	Increase or		LEN	GTII	Increase or	
WAIDRIAN AND GIZE (DIAMETER)	1940¹	1930²	decrease (~) 1930-1940	MATERIAL AND SIZE (DIAMETER)	1940 ¹	1930 ^g	decrease (~) 1930-1910	
Total	#11es 28,584.9	Niles 317,363-1	Percent 64.6	Wood-stave:	Hiles	Wiles	Percent	
Concrete: 1 to 12 inches 13 to 24 inches 0ver 24 inches Metal:	14,126.6 3,968.6 597.0	7,519.1 2,681.9	87.9 70.2	Clay and other: 1 to 12 inches	908.5 230.1 197.9 456.3	593.4 406.4 235.4	90-4 5-8 90-6	
1 to 12 inches 13 to 24 inches Over 24 inches	7,083.1 712.5 231.9	4,019.7 } 835.5	76.2 13.0		120.5 51.9	60.4	185, 4	
i Includes siphons and farm pipe lines reporte Pipe sizes were separated at 30 inches in di Includes 917.8 miles of pipe lines not segre	d.)						

²Principally temporary dams, replaced annually.

²Number of pumping plants.

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

[For the 17 western States and Arkansas and Louisiana]

ITEM	1940	1930	1920	ITEM	1940	1930	1920
Enterprises reporting land drained or needing drainagenumber	3,532	3,853	3,068	Ratio of area drained to area irrigated in— (a) Enterprises reporting lands	ı		
Area irrigable in these enterprises acres	9,550,069	10,611,415	¹ 8,860,760	drained and/or needing drainagepercent	62.0	334.9	117, 2
Area irrigated in these enterprisesacres	6,224,568	(²)	(²)	(b) All irrigation enterprisespercent Ratio of area drained plus area	18.4	19.0	7.9
Area for which drains have been installedacres	3,861,305	3,707,354	1,519,853	needing drainage to-	40.0		,,,,
Additional area needing drainageacres	897,912	1,078,566	1,476,771	(a) Irrigable area reportingpercent (b) Irrigated area reportingpercent	49.8 76.5	(²)	¹ 33.8 (²)

¹For 1920 relates to total area in enterprises. Irrigable area was not reported and irrigated area in enterprises reporting drainage was not reported separately.

²Not available.

³Based on irrigable area for 1930, area irrigated in enterprises reporting land drained or needing drainage not available.

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

[For the 17 western States and Arkansas and Louisiana]

1 TEM		TOTAL			MEASURED		N	OT MEASURE	D,
(For definitions and explanations, see text)	1939	1929¹	1919 ¹	1939	1929¹	1919 ¹	1939	1929 ¹	1919 ¹
PRIMARY ENTERPRISES									
From surface sources reported: Total water entering canals	51,518,947 11,529,614 4.5 45,289,815 16,349,287 2.8	44,335,802 10,723,726 4.1 17,968,596 6,474,338 2.8	60,005,556 10,879,174 5.5 15,339,104 6,059,953 2.5	39,425,558 8,769,099 4.5 21,706,882 7,722,104 2.8	31,606,035 7,815,218 4.0 14,311,037 5,054,632 2.8	36,626,781 7,771,979 4.7 8,673,341 3,980,026 2.2	12,093,389 2,760,515 4.4 23,582,933 8,627,183 2.7	12,729,767 2,908,508 4.4 3,657,559 1,419,706 2.6	29, 378,775 3, 107, 195 7.5 6, 665, 763 2, 079, 927 3.2
From underground sources reported: Total water delivered to irrigatorsacre-feet Area irrigated by these enterprisesacres Average water per acre irrigatedacre-feet	3,027,777			1,142,357 484,821 2.4					
SUPPLEMENTAL ENTERPRISES									
From aurface sources reported: Total water entering canals	2,021,061 1,172,497 1.7 3,251,732 2,470,026	**************************************		1,416,366 864,978 1.6 1,740,754 855,455 2.0			604,695 307,519 2.0 1,510,978 1,614,571 0.9	**********	**********
From underground sources reported: Total water delivered to irrigatorsacre-feet. Area irrigated by these enterprisesacres Average water per acre irrigatedacre-feet.	954,800 516,035 1.9			6,793 5,426 1.3			948,007 510,609 1.9		**********

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

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

	For the 17 west	ern States_					
		1939		19:	29	191	19
TYPE OF WATER RIGHTS		Area irrigate	ч .				
(For definitions and explanations, see text)	Primary enterprises	Proportion of total	Supplemental enterprises ¹	Area irrigated	Proportion of total	Area irrigated	Proportion of total
Total ²	Acres 20,395,043	Percent 100.0	Acres 3,284,290	Acres 3 18,944,856	Fercent 100.0	Acres 3 18,592,888	Percent 100.0
Appropriation ⁴ Riparlan. Appropriation and riparian. Underground. Appropriation and underground. Riparlan and underground. Adjudicated by court Other mixed and not reported.	937,431 2,163,315 922,074 122,037 5,138,337	50.1 3.0 4.6 10.6 4.5 0.6 25.2	1,143,582 26,374 97,071 503,264 61,700 2,136 1,432,322 17,841	7,883,584 530,912 1,755,227 7,871,804 5,903,349	41.6 2.8 9.3 41.6 4.8	⁸ 8,541,671 ³ 346,607 1,067,606 7,169,954 ³ 1,477,050	45.9 1.9 5.7 38.5 7.9

¹ Irrigated areas shown under "Supplemental enterprises" are parts of irrigated areas in "Primary enterprises" (see text).

2 Data for Arkansas and Louisiana not included as water rights have no legal status in these States.

3 Revised.

4 "Appropriation" includes water rights published in the 1930 and 1920 Irrigation Census Reports as "Appropriation and use," "Notice filed and posted," "Permit from State," and "Certificate or license from State."

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

[For the 17 western States

T	DDIMADY DAMEDDDIKES				IRI	RIGATED UNI	TS ¹		
	PRIMARY ENTERPHISES (For definitions and explanations, see text)	TOTAL	No units ²	1 unit	2 to 4 units	5 to 24 units	25 to 99 units	100 to 999 I	and more
1 2 3 4 5	Enterprises, 1940	80,502 430,022 21,003,739 18,300,138 259,188 2,444,413	2,227	66, 269 66, 269 5, 832, 007 4,718, 854 62, 352 1,050, 801	6,567 16,297 1,244,689 1,028,846 12,127 203,716	3,572 36,782 2,371,642 1,987,380 40,978 343,264	1,253 59,464 2,769,280 2,476,494 58,729 234,057	564 141,640 5,448,420 5,015,186 69,570 363,664	50 109,570 3,337,701 3,073,378 15,432 248,891
	CAPITAL INVESTMENT, 1940								
8 9 10 11	Total capital investment in all enterprises	963,868,263 940,555,592 23,332,671 28,055,246 45.89	12,153,234 10,776,306 1,376,928 409,125	140,428,110 138,646,774 1,781,336 7,611,711 24.08	27,297,580 26,099,164 1,198,416 1,615,820 21.93	65,530,535 63,086,538 2,443,997 3,046,312 27.63	96,274,601 92,951,928 3,322,679 3,788,805 34.77 25.41		237, 127,857 235, 665, 786 1,462,071 4,145,857 71.05
	MAINTENANCE AND OPERATION, AND CHARGES, 1939								
14 15 16 17 18 19 20	Enterprises reporting maintenance and operation. number. (a) Area irrigated in these enterprises. acres. (b) Cost of maintenance and operation. dollars. (c) Average cost per irrigated acre reporting. dollars. Total annual charges dollars. Average charge per irrigated acre reporting. dollars. Average charge per irrigated acre reporting. dollars. Area against which charges were assessed. acres. Average annual charge per acre assessed. dollars. Total charges collected ³ . dollars.	72,015 20,193,761 43,172,526 2.14 32,876,404 2.39 16,570,704 1.98 27,552,300	1,018 91,948 21,597 66,500 0.32 13,127	59,859 5,365,456 15,638,217 2.91	6,069 1,161,602 2,024,941 1.74	3,271 2,234,360 2,767,493 1.24 3,457,516 1.55 2,473,709 1.40 1,906,734	1,195 2,701,049 4,033,704 1.49 5,353,930 1.97 3,304,829 1.62 4,320,177	554 5,433,544 11,123,017 2.05 14,298,661 2.63 6,533,300 2.19 12,302,456	49 3,297,750 7,493,206 2,27 9,714,700 2,92 4,192,366 2,32 9,009,606
	INDEBTEDNESS AND ARREARAGE, 1939								
22 23 24 25 26 27 28 29 30 31 32 33 34 35	Interprises reporting indebtedness*	1,329 8,518,597 360,304,925 41.61 625,781,421 14,752,904 640,534,325 19,596,943 25,711,540 22,722,525 10,810,295 32,90 2.98 2.98 2.99	17 1,874,967 5,356,241 1,294,798 6,651,039 29,626 10,209 74,928 18,760 0.61			376 436,002 10,593,203 24,30 25,301,698 1,184,475 27,486,173 802,790 1,193,575 881,533 524,406 18,92 2,28 2,277 51	525 1,448,334 29,668,739 20.62 55,022,794 2,215,890 67,238,684 2,924,315 3,974,369 3,306,932 1,835,744 16.25 2.16 2.75 65	370 4,274,013 173,497,174 40.59 320,807,061 9,600,122 330,207,183 9,142,287 12,206,033 10,600,840 5,313,007 32.59 2.30	411; 2,460,248; 144,470,842; 58.72; 208,493,627; 407,519; 208,951,246; 6,697,925; 7,858,292; 3,120,378; 45,58; 2,67; 3,38; 7,387; 3,387; 45,58; 3,387; 3,387; 3,387; 45,58; 3,387
37 38 39 40	(n) Area assessed in these enterprises	2,671,635 30,859,349 11,29 143,287,600	9,440 446,327 6.23 1,491,804		**********	64,609 2,811,582 38.73 5,710,031	441,594 6,396,312 14.50	1,102,196 9,545,299 8.66 69,954,407	1,053,796 11,659,829 11.06 52,128,449
	TYPE, 1940								
41 42 43 44 45 46 47	Individual and partnership	75, 179 4, 155 410 258 72 188 240	2,099 48 11 7 1 11 50	323 2 28 1 32	6,250 262 3 8	69 111 4 39	16	135 43 38 30	9 23 2 12 3 1
	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939								
48 49 50	Enterprises reporting pay roll	3,833 15,737,214 23,597	23 605,858 527			2,108 973,553 4,605	2,336,236	6,390,466	5,431,101 4,831
51 52 53 54 55 56 57 58	Streams, gravity	25,726 5,915 38,715 1,561 503 4,427 1,472 2,183	277 1,219 23 13 81	5,092 33,998 1,453 426 3,943 1,078	313 2,723 70 6 42 1 213	109 1 630 1 12 1 10 1 134 5 81	65 115 2 3 4 4 4 4 62	46 32 3 4 8 8 95	-23 5 16
	SUPPLEMENTAL ENTERPRISES				. 1	RRIGATED U	NITS1		
	(For definitions and explanations, see text)	TOTAL	No units2	1 unit	2 to 4 units	5 to 24 units	25 to 99 units	100 to 999 units	1,000 unit
1 2 3	Irrigated units, 1939 ¹	11,135 61,794 3,287,210		9,56	3 1,28	3 1,011	1 3,514	13,297	33,12
4 5 6 7 8 9	(a) Cost of irrigation works and equipment	26.92	4,523,204 8,655 205,89	1 14,374,176 5 60,06 1 636,88 28.1	9 1,256,36 0 12,74 7 82,06 2 18.8	8 1,735,937 4 153,17 3 146,375 3 15.05	7 6,696,668 7 566,010 9 393,556 9 21.30	2 24,627,728 2,243,064 1,110,826 30.45	31,903,04 10 1,692,78 23.4

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

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

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

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

and Arkansas and Louisiana]

IO AFRAISAS	and Louisi	anaj	ACOUNT TO	D. T. O. 4 (M277)							OT TRREGUE	ON WORKS AN	IN EQUIDITION		==
	1 to 99	100 to 299	ACRES II	1,800 t	7,500 t	0 2	75,000 acr	es	Less than	\$5,000 to	\$15,000 to		\$1,500,000 to	\$10,000,000	
No acres ²	acres 57,207 68,421	12,906 31,288	1,799 ac	es 7,499 ac	es 74,999 ac	res 340	and more	18	\$5,000 69,570 103,514	\$14,999 7,536	\$99,999 2,574	\$1,499,999 708 108,468	\$9,999,999 108 118,139	and more	1 2
	1,627,740 1,444,549 24,426 158,765	2,125,032 1,846,442 29,950 248,640	4,265, 3,512, 60,	80 4,059, 21 3,417, 22 56,	03 6,522, 65 5,812, 68 77,	638 677 009	2,403,0 2,266,4 11,1 125,4	146 184 113	5,635,965 4,580,167 79,381 976,397	2,413,431 2,041,138 27,663	3,187,634 2,752,562 60,798	4,546,857 4,099,457 54,646 392,754	4,880,522 4,520,613 35,935 323,974	339,330 306,181 765 32,384	3 1 5 6
1,376,306 1,376,928 409,125	80,654,407 79,886,852 767,555 2,535,976	53,708,037 52,783,037 925,000 2,783,224 25,27	100,787, 96,768,6 4,018,6 5,219,6	47 144,507, 24 7,405, 48 5,408,	56 426,989, 15 8,708, 33 8,772,	916 328 439	128,973,4 128,842,8 130,6 2,926,5	78 121 103	78,081,210 76,530,890 1,550,320 7,260,316	56,748,203 942,955 2,978,921	81,675,147 2,665,505 4,161,871	267,736,289 253,610,183 14,126,106 6,606,523 58,88	423,641,958 419,636,219 4,005,739 6,648,930 86.80	52,396,996 52,354,950 42,046 398,687 154,41	7 8 9 10
29.71	49.55	19.30	19		l l	0.67	53. 44.		10.75			40.53	63.72	181.42	12
1,018	51,414 1,500,227 8,132,906	11,920 1,964,676 5,792,820	3,987, 6,357,	122 3,921, 165 6,366,	28 6,417, 02 11,801,	497	2,403,0 4,628,8	886	61,684 5,131,367 9,671,050	7 2,286,100	3,088,612 6,087,590	890 4,507,774 10,716,633	106 4,840,575 9,765,666 2.02	339,330 1,545,313 4.55	13 14 15 16
21,657 67,170 0.32 13,127	5.42 334,593 8.99 47,939 6.98 248,739	2.95 854,196 4.57 216,363 3.96 576,000	3,408, 1 1,987,	772 7,506, .93 2 .73 3,827, .71 1	343 15,183, 36 7,529, 96 7,529	593 3.02	5,567,0 2, 2,894,7	32 794 92	1.86 541,02 0.6 914,96 0.5 273,55	1,096,943 2 1.00 3 1,130,369 0.9	3,923,337 1.69 2,625,912 1.49	2.38 13,051,345 3.05 5,179,900 2.52 10,510,567	12,696,364 2.60 6,321,977 2.01 12,172,858	1,567,395 4.62 396,583 3.95 817,735	17 18 19 20 21
17 1,874,967 5,356,241 1,294,798 6,651,039 29,626 10,209 74,928 16,760 7.91 0.61	39 2,535 174, 196 68.72 514, 184 48,634 562,818 33,522 60,458 38,893 6,942 22.28 8.71 24.62	28,45; 849,20; 29,8; 3,466,16; 229,12; 3,695,28; 242,21; 322,31; 277,19; 37,88; 21,4 8.7 11.9	398, 15,012, 5 40,012, 5 40,012, 5 40,012, 6 151, 6 1,906, 37,958, 7 1,884, 7 1,733, 6 1,733,	907 1,660, 49,329, 115 22, 971 100,452, 846 5,222, 917 105,676, 210 3,763, 833 5,473, 904 4,389, 147 2,154, 118 22, 173 555	776 214,072 375,560 6,109 381,570 10, 189 188 13,478 561 12,351 184 6,318 179 54 62	,737 2.50 ,188 ,963 ,151 ,796 ,364 ,981 ,020 3.58 2.13 2.68	1,491,4 77,990,4 52 104,279,4 40,4 104,320,4 3,860,4,482,6 3,676,4 1,789,4 2	884 .28 893 621 514 684 296 961 053 .59 .51	5,75	0 192,83 554,72 1 2.8 0 1,767,76 146,18 1 1,933,95 8 205,57 7 306,69 9 243,95 9 243,95 9 220,36 0 2.2 8 1.3 1.6 7 1 24,78	2 1,047,433 6,328,523 6,328,523 8 6,24,205,009 7 1,438,480 9 1,567,467 4 2,169,229 1,794,761 1,167,763 7 1.67 9 1.67 2.09 5 1.67	456 3,256,033 83,828,732 25.75 184,810,634 10,583,081 195,373,735 7,814,119 10,721,830 9,110,099 4,039,199 19.77 2.65 3.30 919,735	3,722,759 230,160,741 61,83 365,382,2534,279 367,915,631 8,422,637 10,875,555 10,722,633 4,925,055 45,73 2,23 1,673,980	339,330 39,347,559 115.96 52,354,950 42,046 52,396,996 1,545,313 1,567,395 817,735 396,583 99,522 3.95 4.62 6 1	34 34 31
446,327 6.23 1,491,804 2,099	8,804 27.60 17,928 56,302	64,04 24.9 120,14	2 3,090, 9 36 7 8,092,	855 7,162, .66 16	056 9,741 .03	7.31	10,346, 12 32,357,	.87	16,47 2.8 22,13	6 1.0 7 46,18	1 3.47 9 1,103,223 9 1,296		1	2.07 10,434,297	31 39 40 4.0
48 11 7 1 11 50	673 8 35 2	88 2 3	9 1, 3 8	767 128 71 6 49	691 140 72 20 17	142 93 34 40 7 5		5 7 1 3 2	1,79	3 1,05 77 2 66 4	9 994 3 119 3 89 1 1 0 42 1 33	81 34 32	38 6 34	2	4:
23 605,858 527	309 81,342 543	63 240,44 1,23	1 1,533	695 552 3,135 899 4	842 845 6,801 932 7	310 ,424 ',781	3,338, 2,	18 752 681	1,08 220,37 2,44	1 351,54	2 1,533,160	5,613,757		3 841,678 764	4:
515 277 1,219 23 13 81 32 67	4,571 31,102 1,390 405 3,612	11 46 28	9 1 2 5 5 4	485 309 147 35 33 235 218 157	896 80 54 1 5 30 86 33	229 37 4 2 4 58 6		10 2	22,43 5,36 32,7 1,44 4,2 4,2 1,9	31 29 13 4,85 12 6 36 11 78 20	77 137 29 1,091 96 19 19 16 27 57	88 81 4 10 7 104	12	3	51 52 53 54 55 56 56 57 58
		1	ACI	ES IRRIGAT								T	AND EQUIPME		-
No acres	05 acre	s 8	1,246	300 to ,799 acres	1,800 to 7,499 acres		99 acres		l more	Less than \$5,000	\$5,000 to \$14,999	\$15,000 to \$99,999		\$1,500,000 to \$9,969,999 11 28,624	
4 501 0	271		1,764 196,058	2,506 160,426	5,384 255,111 6,339,086		19,366 100,378		23,613 303,575 412,944	11,413 525,459 11,522,414	2,190 161,264 3,308,622	271,390 5,175,441	1,051,041 34,092,181	1,278,056 34,062,280	1.
4,531,8 4,523,2 8,6 205,8	04 9,215 355 29 391 354		972,620 35,994 234,390 20.45	4,415,179 4,229,748 185,431 215,323 27.52	6,134,922 204,144 283,285 24,65	33, 2,	895, 891 312,554 475,601 32.91	23,	144,944 268,000 499,134 17.96	11,349,245 173,169 686,218 21.93	3,286,548 22,074 201,845 20.52	5,040,706 134,735 344,986 19.07	31,378,343 2,713,838 1,525,111 32.44	34,062,280 1,510,234 26.65	
22.	.01	6.06	17.10	20.50	22.38		24.54		15,62	16.79	16.39	15.00	22.35	22.55	1

 $^{^4}$ Indehtedness and arrearage were reported only by enterprises serving 5 or more units. $^5\,\mathrm{Data}$ for less than 3 enterprises shown with permission of the enterprise involved.

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

For the 17 western States

					IRF	IGATED UNI	TS 1		
	SUPPLEMENTAL ENTERPRISES (For definitions and explanations, see text)	TOTAL	No units ²	1 unit	2 to 4 units	5 to 24 units	25 to 99 units	100 to 999 units	1,000 units and more
	MAINTENANCE AND OPERATION, AND CHARGES, 1939								
11 12 13 14 15	Enterprises reporting maintenance and operation number (a) Area irrigated in these enterprises acros (b) Cost of maintenance and operation dollars (c) Average cost per irrigated acre reporting dollars Total annual charges dollars Average charge per irrigated acre reporting dollars Average charge per irrigated acre reporting dollars Average annual charges were assessed acres Average annual charge per acre assessed dollars Total charges collected dollars dolla	10,089 2,883,963 2,828,094 0,95 1,408,263 0,60 2,592,476 0,54 1,148,062	20,245 	9,181 491,729 1,754,675 3.57	525 64,812 146,409 2.26	80 122,707 32,625 0.27 52,048 0.43 126,982 0.41 48,451	63 314,907 147,767 0.47 206,940 0.73 299,625 0.69 177,673	50 851,721 375,009 0.44 808,165 0.99 1,008,162 0.80 513,987	10 1,136,067 351,363 0.31 335,690 0.30 1,137,242 0.30 384,367
19 20 21 22 23 24 25 25 27 28 29 30 31 32 33 34 35 36 37	INDEBTEDNESS AND ARREARAGE, 1939 Enterprises reporting indebtedness	1,992,609 26,335,349 18,22 52,765,167 2,672,198 55,427,985 617,924 1,000,936 1,975,939 11.63 0.61 15 222,483 220,936 0.93	2,139,073 			17 39,172 254,414 6.49 620,477 127,133 747,610 7,572 26,490 31,148 39,172 6.30 0.68 0.70 3,100 1.35 12,900	31 222,570 2,796,396 12.56 5,023,076 551,435 5,574,511 81,795 129,507 119,381 206,375 1.80 0.63 0.67 4 14,200 4.22 282,840	30 558,134 9,044,012 16,20 18,406,991,267 18,396,293 223,522 650,819 448,558 64,855 62,85 0.94 1.26 1.26 1.86,312 1.89,167 0,743	1,172,733 12,101,454 10.32 28,255,693 28,255,079 285,031 282,200 379,367 1,017,742 0.25 0.25
38 39 40 41 42 43 44	TYPE, 1940 Individual and partnership	10,871 201 17 17 25	786 13 2 2 1	9,530 32 1	540	14 60 4 5	49 6 5 6	1 34 4 4 9	1 1 1 8
45 46 47	PAY ROLL AND NUMBER OF EMPLOYEES, ENTERPRISES REPORTING, 1939 Enterprises reporting pay roll	166 334,308 409	10 58,683 34			52 11,887 60	54 57,306 110	46 173,999 196	4 32,433 19
48 49 50	SUPPLY, 1939 Streams, pumped	231 10,186 718	26 736 43	197 9,000 366	5 430 117	1 15 68	1 3 62	1 2 50	12

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

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

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

11

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

	***	A	CRES IRRIGAT	ED			CC	ST OF IRRIG	ATION WORKS	AND EQUIPME	NT	=
No acres ²	1 to 99 acres	100 to 299 acres	300 to 1,799 acres	1,800 to 7,499 acres	7,500 to 74,999 acres	75,000 acres and more	Less than \$5,000	\$5,000 to \$14,999	\$15,000 to \$99,999	\$100,000 to \$1,499,999	\$1,500,000 to \$9,999,999	
20,246 5,420 20,465 0.25 23,584	8,319 261,430 1,068,609 4.09 1,445 5.25 275 5.25 1,545	1,208 189,692 548,143 2.89 8,246 2.93 3,961 2.07	260 150, 921 380, 163 2.52 122, 207 2.58 71, 162 1.72 106, 184	67 242,672 149,083 0.61 207,405 0.95 229,800 0.90 163,653	49 997,549 369,763 0.37 794,543 0.84 1,125,094 0.71 677,428	6 1,141,699 281,887 0.28 288,997 0.24 1,141,699 0.24 165,635	9,491 506,098 1,461,291 2,89 12,493 0,39 33,823 0,37 4,879	405 157,558 308,406 1.96 23,742 0.38 70,849 0.34 19,496	126 250,743 267,061 1.07 183,373 0.92 246,589 0.74 129,911	58 1,011,397 512,033 0.51 877,905 0.88 1,160,694 0.76 544,173	9 1,058,136 279,303 0.26 310,750 0.29 1,080,521 0.29 449,603	10 11 13 14 14 11 11 11
2,139,073 2,446,925 2,257 2,451,182 5,240 22,482 17,465 3.54 0.30 2 (°) (°) (°)		5 743 7,310 9,84 54,226 2,741 2,411 2,645 643 8,26 3,75 4,44 61 143 2,400	18 15,949 289,009 18.24 943,863 126,225 1,069,788 66,082 22,907 7,84 22,907 4,77 51 1,508 700 0,466 7,500	25 104,816 1,937,977 18.49 4,023,421 178,059 4,201,480 87,792 122,930 97,554 17,94 1.32 2,988 33,219 3,777 1,206,640	32 679,626 15,670,935 23.06 23,967,139 2,997,644,796 247,810 673,252 620,374 807,371 19,22 0.83 1.08 5 114,917 0.64 2,476,439	6 1,101,575 6,299,595 5,28 21,917,993 288,000 22,185,893 213,515 168,697 164,802 0,185 0,1	4 2,022 2,652 1.31 12,201 122,550 134,751 1,280 1,068 1,161 0.31 0.32 0.21	9 14,315 7,622 0.53 89,276 10,00 89,376 3,582 3,704 5,507 13,315 3,47 0.28 0.72 61 143 2,400 16,78 2,400	26 93,989 479,683 15,10 1,263,957 1,317,264 99,995 71,135 66,874 97,034 3.89 0.73 1.06 5 22,828 14,400 0.31 14,400	42 672,110 19,245,862 19,71 21,365,210 2,496,241 23,851,451 305,571 689,495 478,201 791,206 13.65 0.87 1.11 9 196,512 204,136 0,457 4,517,529	9 1,210,173 12,589,530 10.41 30,034,523 207,496 208,944 449,603 1,070,652 10.99 0.28 0.29	21 22 23 24 25 26 27 26 27 28 28 28 27 28 28 28 28 28 28 28 28 28 28 28 28 28
786 13 2 2 1	8,656	1,214 31 1	209 61 2 2 1	5 48 5 6 5	1 25 8 6 11	6	10,418 66 1	380 53 2 2	68 54 7 5 1	5 27 8 8 9 14	1 1 9	4
10 58,683 34		12 1, 194 8	48 30,676 106	51 62,196 76	42 168,887 173	12,672	21 3,429 18	92 7,720 54	58 56,880 90	49 208, 862 219	57,417	4
, 26 736 43	172 8,190 317	23 1,078 145	6 179 90	3 3 64	1 52		217 9,745 524	9 369 59	3 67 67		i	4 4 5

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

Table 18.—DRAINAGE BASIN—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

		7				RIGATORS	[For the 17	Western States
		•		Red		MISSOURI I	RIVER (II)	
	(For definitions and explanations, see text. Major- hasin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for each drainage basin)		OTAL States) ¹	River (of the North) and tributaries in North Dakota (I)	Tot	al ²		rect
	TARTALMER UNITED AND AREA						\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
1 2 3 4 5 6 7 8	IRRIGATED UNITS AND AREAS Irrigated units	18 2 19	430,022 ,003,739 ,300,138 ,259,188 ,444,413 ,547,544 ,191,716 ,7.4	61 4,493 4.458 35 2,099	4,4 3,9 4 4,1	47,386 10,385 22,984 87,790 19,611 35,180 47,278 5.4	2 2	835 6,298 1,226 550 4,522 4,367 7,707 213.1
9 10 11 12 13 14	Irrigable area in enterprises	30 35 10 11	305,949 ,599,470 890,821 302,210 ,051,926 ,699,105	8,100 2,409 3,607 310	6,2; 8,4; 2,1; 2,0	12,576 31,873 33,171 32,191 46,693 35,893	9 9 9 1	6,802 2,388 2,270 0,504 8,021 4,563
15 16 17 18 19	Area works were capable of supplying with water1940acres	26, 26,	055,248 101,890 020,477 7.5	7,980 2,099 280.2	5,9 5,4 5,8	12,958 72,012 05,630 8.6	12 4 6	0,485 0,149 2,559 200.1
20 21	1830 - acres	6,	051,509 554,346 828,761	3,487	1,28	32,573 36,832 58,352	1	4,187 5,782 4,852
23 24	Proportion which area irrigated is of area works were capable of supplying with water		74.9 74.9 73.8	56.3 100.0		74.2 76.5 71.4		63.3 60.7 44.3
	CAPITAL INVESTED TO JANUARY 1							
25 26 27 28 29 30	Total investment in irrigation enterprises	1,025, 26, 7892,	049,201 672,714 376,487 765,790 657,328 17.8	130,566 130,225 341 20,925	176,40		3,05 1 1,53	9,111 3,632 5,479 5,899 0,975
31 32 33	Average investment based on area works were capable of supplying with water, per acre1940dollars 1930dollars 1820dollars		37.50 34.20 26.81	16.36 9.97		30.25 24.95 22.66		99.8 25.47 38.25 36.78
34 35 36	Average investment per acre irrigated	1,126,	50.09 545,687 35.99	29.06 142,566	196,0	40.76 34,323	3,92	40.23 7,530
	MAINTENANCE AND OPERATION, CHARGES	Primary	Supplemental	17.60	Primary	29.97 Supplemental	Primary	23.55 Supplemental
0~	AND INDEBTEDNESS	Enter	prises		Enter	prises	Enter	prises
37 38 39 40	Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises1939acres Cost of maintenance and operation1939dollars Average cost, per acre irrigated1939dollars	72,172 20,193,761 43,172,526 2.14	10,102 2,983,963 2,828,094 0.95	13 4,493 5,912 1.32	9,590 4,293,280 3,466,125 0.81	1,369 775,956 510,603 0.66	518 73,188 97,593 1.33	(⁸) (⁰) (⁸)
41 42 43 44 45 46	Total annual charges (reported) 10	32,876,404 2.40 16,570,704 1.98 27,552,300 360,304,925	1,406,263 0.59 2,592,476 0.54 1,148,062 26,335,349	3,235 0.83 7,249 0.45 3,479 29,500	3,186,350 1.10 3,224,334 0.99 2,594,720 76,335,251	331,420 0.52 658,931 0.50 202,335 4,725,444	19,009 0.76 28,419 0.67 7,355 1,590,773	
	WATER DELIVERED TO IRRIGATORS, 1939							100
47 48 49 50 51 52	Diterprises reporting water delivered. 1939 number. Area irrigated by these enterprises. 1939 .acres. Water delivered. 1939 .acre-feet. Average water delivered per acre irrigated. 1939 .acre-feet. Average cost of water per acre irrigated. 1939 .dollars. Average cost of water per acre-foot delivered. 1839 .dollars.	72,638 19,377,064 52,982,775 2.7 2.80 0.95	10,092 2,986,061 4,206,532 1.4 1.10 0.78	12 4,480 6,528 1.5 1,23 0.85	9,371 4,031,049 7,547,370 1.9 1.03 0.55	1,329 726,980 599,845 0.8 0.84 1.02	545 72,834 160,165 2.2 0.75 0.34	(8) (8) (9) (6) (8)
	DRAINAGE OF IRRIGATED LAND							
53 54 55 56 57	Enterprises reporting land drained or needing drainage	3,535 9,553,069 6,224,568 3,861,305 897,912			466 1,989,332 1,266,478 431,045 106,165		23 15,865 6,449 7,331 1,449	
	Schedulae gallad 6 av	,	l	H			*,***	· · · · · · · · · · · · · · · · · · ·

^{*}Schedules called for *Number of farms," see explanation in text.

For the 17 western States and Arkansas and Louisiana.

Data for 2 enterprises in Joage River Drainage Basin, Kans., are included with Missouri River total.

Data for the intrastate tributaries of the Clarks Fork are not shown separately but are included in the Clarks Fork total.

Data for the intrastate tributaries of the Big Horn River are not shown separately but are included in the Big Horn River total.

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

13

1940, 1930, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939 and Arkansas and Louisiana]

-M-					MISS	OURI RIVER	(II)—Cont	inued						
						Yellowstone	River (II-A)						
			·		Clarks	Fork			· 	Big Hor	River			
То	tal		rect I-A)	Tot	al ^z	ĺ	rect	Tot	tal ⁴	Direct·		ne Hiver	Little Horn River (18)	
98- 86- 11! 86:	1,794 4,530 4,184 7,447 2,899 1,145 9,025	2	3,198 40,996 25,079 1,657 14,260 62,312 89,453 48.5	81 9	933 3,469 0,206 502 7,761 2,968 7,736 -4.8		458 3,589 19,878 88 3,623 0,650 2,525 -51.9	44 38 6 36	5,785 8,898 3,161 3,822 1,915 1,926 8,949 24.0	1,243 104,550 95,409 366 8,785 88,698 93,902 17.9	1.3 8 1	1,714 3,849 6,116 80 7,653 5,636 65,091 19.0	160 16,016 14,475 20 1,521 1,637 1,408 878.4	1 2 3 4 5 6 7 8
1,40 1,82 53 54	5,241 1,212 6,870 0,711 0,067 7,845	2 2 1	47,513 42,693 79,211 06,517 80,381 89,758	11: 14: 2: 2:	3,256 3,320 1,007 4,787 0,352 3,271	11 13	32,940 0,625 10,736 9,351 9,975 8,211	71 84 32 34	7,811 0,522 2,297 8,913 8,596 3,348	194,951 143,464 162,331 90,391 54,766 68,429	10 21 6	51,701 53,768 .7,998 17,852 58,132 12,907	36,765 2,705 11,353 20,749 1,068 9,945	9 10 11 12 13 14
1,21	0,217 0,690 2,304 12,4	[2	30,391 36,401 62,801 39.8	11	0,785 1,583 0,627 -0.7	10	60,793 68,888 61,818 ~53.4	55	1,210 2,748 4,404 19.8	183,835 129,765 123,151 41.7	14	12,671 12,902 14,431 -0.2	32,793 2,705 4,340 (⁶)	16 16 17 18
34	5,687 9,545 3,279		89,395 74,089 73,348	18	2,316 3,615 2,891	1	7,204 8,238 19,293	19	2,312 0,822 5,455	79,275 41,067 29,249	. 4	28,822 17,266 19,340	16,777 1,068 2,932	18 20 21
	72.4 71.1 67.2		72.9 68.7 72.1		79.9 83.3 59.5		85.8 - 83.3 59.5		67.9 65.5 67.2	56.9 68.4 76.2		79.8 66.9 70.7	48.8 60.5 32.4	23
40,76 40,49 27 31,91 30,18	5,096 2,100 7,310	7,0	85,745 77,433 88,312 70,112 08,390 66.4	1' 92: 1,22:	0,346 7,551 8,437	69	05,142 19,011 6,131 10,562 13,593 -23.4	22,22		3,524,149 3,519,632 4,517 3,042,063 3,635,033 15.8	6,70 9,26	15,092 18,082 -7,010 85,642 12,480 -27,4	934,665 928,896 5,769 39,590 35,000	26 27 25
:	29, 97 26, 36 22, 82		35.61 29.91 28.57	:	17.40 8.32 9.38		13.88 8.45 9.55		33.73 35.78 31.19	19.17 23.44 29.52		47.28 64.98 64.74	28.50 14.64 8.06	31 32 33
47,58	41.41 3,418 31.40	12,0	48.82 80,931	1,93	21.79 5,907	71	16.18 3,152 13,47	28,72	49.68 9,135 36.94	33.70 4,286,040 21.99	7,2:	59.25 36,892 44.75	58.36 1,252,617 34.07	34 35
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.		Primary	Sup.		
1,957 960,050 813,436 0.85	71,719 24,314 0.34	395 235,388 222,643 0.95	5 2,919 1,571 0.54	250 86,694 45,016 0.52	6 15,377 2,339 0.15	100 43,437 27,486 0.63	(8) (8) (8) (8)	674 443,950 466,923 1.05	12 10,530 14,368 1.36	107 104,520 137,686 1.32	72 113,205 114,713 1.01	(8) (8) (8) (8)	32 16,016 24,222 1.51	37 38 39 40
803,767 1.12 818,552 0.98 596,360 19,396,986	56,569 0.83 84,233 0.67 40,993 2,291,998	264,198 1.41 205,023 1.29 275,453 5,703,572	2,860 1.10 2,600 1.10 2,860 41,584	36,070 0.57 64,892 0.56 35,004 26,347	31,000 2.07 31,000 1.00 14,973 700,000	26,241 0,74 35,948 0,73 20,002 17,510		456,839 1.27 434,944 1.05 247,761 13,085,367	15,693 1.54 10,235 1.53 16,476 890,414	136,728 1.43 112,527 1.22 97,721 1,824,816	149,531 1.40 118,399 1.26 43,632 3,392,784		16,874 1.85 15,694 1.08 3,146 698,230	41 42 43 44 45 46
1,920 859,275 1,954,675 2.3 1.00 0.44	36 54,349 51,167 0.9 0.95	366 224,060 503,340 2.2 1.25 0.56	4 319 244 0.8 0.85 1.11	234 69,367 147,217 2.1 0.63 0.30	6 15,377 16,310 1.1 2.03 1.91	89 32,725 85,294 2.6 0.80 0.31	(B) (B) (B) (B) (B) (B)	662 387,928 1,019,069 2.6 1.15	11 10,530 6,860 0.7 1.53 2.35	97 66,123 148,564 2.2 1,44 0.64	72 112,333 368,643 3.3 1.39 0.42	(5) (8) (8) (8) (8) (8)	29 6,772 8,861 1.3 0.40 0.30	47 48 49 50 51 52
144 820,839 496,781 230,894 53,452	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	35 190,592 148,157 69,821 15,681		9 16,971 12,841 240 1,040		4 11,771 8,441 80 550		62 568,259 301,928 159,288 33,008		9 178, 337 91, 527 49, 074 8, 074	130,861 89,953 71,235 14,403		11 ₁ 18,774 8,222 384 1,481	53 54 55 56 57

Percent not shown when more than 1,000.
Revised.

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

Can be a second of the se

TABLE 18.—DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

===				INDLIA DV				or the 17 wes	
	,		· · · · · · · · · · · · · · · · · · ·	MISSO	URI RIVER	(II)Conti	nued		
	1TEM (For definitions and explanations, see text. Major-		· · · · · · · · · · · · · · · · · · ·		stone River	(II-A)-Cont			
	basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins, A com- posite map index-number is shown in parentheses for		Tongue	River			Powder	River	
	each drainage basin)	Tota	114	Dire	ent.	Tota	1 ⁵	Dire	ect
				(20	i			(22	1
	IRRIGATED UNITS AND AREAS								
1	Irrigated units*		922		533		372		66
2	Area irrigated		,491 ,536		036 800	46	,711 ,276	7,2 6,7	791
4 5 6	(b) Crop failure		,888 ,400		67 169	9	,361 ,074	4	50 139
7	Area irrigated	54	,498 ,195 25.9	20,	217 975)2.7	89	, 279 , 631 12.8	5,8 3,1	
9	Irrigable area in enterprises1940acres		,291		023		,071	9,6	
10 11	1930acres 1920 ⁷ acres	76	,521 ,563	29,	138 075	59	,516 ,856	6, 2 10, 8	375
12 13	Excess of irrigable area over the area irrigated1940acres 1930acres	11	,800 ,023	13, 6,	987 921	27	,360 ,237	2,4	119 528
14	1920' acres		, 368	22,	100	49	, 225	7,6	653
15 16	Area works were capable of supplying with water1940acres	73	,849 ,950	29,	632 031	56	,168 ,411	9,5 5,9	920
17 18 19	Increase or decrease (-), 1930-1940,percent Excess of area works were capable of supplying		,693 25.6		174 38.2		,181 40.3		303 7.9
20	with water over area irrigated		, 358 3,452		596 814		,457 ,132	2,6	069 73
21	1920acres		5,498		199	27	,550	6,6	61.0
22	Proportion which area irrigated is of area works were capable of supplying with water1939percent		88.8		32.4		71.6	7'	7.9
23 24	/ 1929percent 1919percent		88.6 67.2		76.5 35.2		89.1 76.5		3.8 2.6
	CAPITAL INVESTED TO JANUARY 1			*					***
25 26	Total investment in irrigation enterprises1940dollars (a) Cost of irrigation works and equipment1940dollars	2,880 2,816	3, 111 3, 053	2,231, 2,171,	,511 ,757	963	,947 ,055	89, 88,	
27 28	(b) Investment in water rights (reported)1940dollars Total investment in irrigation enterprises1930dollars		5,058	59	754 793	13	,892 ,698	1, 167,	337
29 30	Increase or decrease (-), 1930-1940percent		0,629 138.8	734	,059 91.6	1,195	17.0	187,	502 6.4
31 32	Average investment based on area works were capable of supplying with water, per acre1940dollars		31.05		0.85		2.18		.58
33	1930dollars 1920dollars		16.33 17.59		9.63 2.82		.4.60 .0.20		.24
34 35	Average investment per acre irrigated1839dollars Estimated final investment in existing enterprises1940dollars		34.95 \ 9,756	2,268	9.55 .141		7.00	12 93,	-30 142
36	Average investment based on estimated final investment and irrigable area, per acre1940dollars		30.01		8.43		11.54		.60
	MAINTENANCE AND OPERATION, CHARGES	Primary	Sup. orises	Primary	Sup.	Primary	Sup.	Primary	Sup.
37	AND INDEBTEDNESS Enterprises reporting maintenance and operation1939number	198	9	Enterp	2	Enterp		Enter	rises
38 39	Area irrigated in these enterprises 1938acres Cost of maintenance and operation	79,649 33,963	27,562 4,107	137 42,907 15,617	(8) (8) (8)	176 53,466 24,909	7 15,122 1,829	6,329 5,986	
40	Average cost, per acre irrigated1939dollars	0.43	0.15	0.36	(8)	0.47	0.12	0.95	
41 42	Total annual charges (reported) 9 10	31,050 0.49	5,160 0.20	15,192 0.52	3,890 0.23	9,916 0.47	1,856 0.13	4,283 0.90	
43 44 45	Area against which charges were assessed1939acres Average annual charge per acre assessed	67,230 0.46	25,898 0.20	33,264 0.46	17,000 0.23	22,599 0.44	14,500 0.13	4,759 0.90	
46	Total charges collected ²	29,420 119,412	4,674 660,000	14,865 119,112	2,444 660,000	6,548	2,010	4,283	
	WATER DELIVERED TO IRRIGATORS, 1939		·			-			
47 48	Enterprises reporting water delivered	219 73,881	7 12,962	158 42,051	(⁸)	199 56,487	8 15, 161	31 7,095	(a) 1
49 50 51	Average water delivered per acre irrigated1939acre-feet	116,737	15,796 1.2	71,177	(8) (6) (8) (8) (8)	77,989 1.4	11,957 0.8	12,071 1.7	(8) (8) (8)
52	Average cost of water per acre irrigated1939dollars Average cost of water per acre-foot delivered1939dollars	0.55 0.35	0.15 0.12	0.56 0.33	(°) (8)	0.47 0.34	0.13 0.17	0.93 0.55	
	DRAINAGE OF LRRIGATED LAND								
53	Enterprises reporting land drained or needing								
54 55	drainage	10 19,915 18,638		13,343 12,093		13,859		(^B)	
56 57	Area for which drains have been installed1939acres Additional area needing drainage	18,638 442 412		12,093 45 312	**********	5,985 580 598		(8) (8) (8)	
	distribution of the state of th	412	l	312		2008		H (*)	

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

Data for the intrastate tributaries of the Little Missouri River are not shown separately but are included in the Little Missouri River total.

Data for Belle Fourche (North Fork) in South Dakota for 1920 are included with Cheyenne River direct.

Data for the intrastate tributaries of the White River are not shown separately but are included in the White River total.

Data for the intrastate tributaries of the Tongue River are not shown separately but are included in the Tongue River total.

Data for the intrastate tributaries of the Powder River are not shown separately but are included in the Powder River total.

1940, 1930, 1920; AND IRRIGATED UNITS," MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

and Arkansas and Louisia	na.]
--------------------------	------

				<u> </u>	MISS	OURI RIVER	(11)Cont	inued					
Yellows ton	e River	Tittle Misso	ouri River				Cheyen	ne River				White I	River
Intras tribute in Monte	tate aries	To tal ⁱ	Direct	Total	Direct ² (40)	Belle Total ²	Direct	· Redwater Creek (42)	S. Fork Che	Direct	Intrastate tributary in South Dakota (Cherry Creek) (47)	Total ³	D1 rect (49)
66, 55, 11, 128, 119,		24 789 749 40 1,462 1,080 -46.0	18 721 681 40	1,162 62,842 51,999 2,524 8,319 71,550 110,143 -12.2	5 350 127 205 18 99,333	883 43,953 38,487 401 5,065 51,799 1,966 -15.1	761 39,762 34,756 193 4,813	122 4, 191 3, 791 208 252	269 18,514 13,360 1,918 3,296 19,740 8,844 -6.2	96 8,930 6,959 443 1,528 17,724 5,906 -49.6	5 25 25 25	117 13,480 12,451 795 234 8,682 8,008 55.3	94 12,551 11,526 791 234
198, 324, 28, 70,	, 299 , 640 , 936 , 334 , 478 , 875	3,251 2,127 7,398 2,462 665 6,318	2,327 1,606	130,837 132,003 197,288 67,995 60,453 87,145	1,072 176,715 722 77,382	87, 511 97,816 5,054 43,558 46,017 3,088	81,116 41,354	6,395 2,204	42,107 33,986 15,519 23,593 14,246 6,675	19,003 30,645 11,764 10,073 12,921 5,858	122	21,586 13,795 21,922 8,106 5,113 13,914	20,410 7,859
179, 196,	,814 ,597 ,598 52.2	2,711 1,962 4,863 38.2	1,842	128,036 115,980 159,083 10.4	806 143,847	86,525 90,991 3,621 -4.9	80, 378	6, 147	40,564 24,888 11,615 63.0	17,557 21,707 7,910 -19.1	141	16,973 13,110 16,939 29.5	15,880
51	,849 ,435 ,637	1,922 500 3,783	1,121	65, 194 44, 430 48, 940	456 44,514	42,572 39,192 1,655	40,616	1,956	22,050 5,148 2,771	8, 627 3, 983 2, 004	116	3,493 4,428 8,931	3,329
•	78.0 71.4 60.6	29.1 74.5 22.2	39.1	49.1 61.7 69.2	43.4	50.8 56.9 54.3	49.5	68.2	45.6 79.3 76.1	50.9 81.7 74.7	17.7	79.4 66.2 47.3	79.0
912 10 2,112 2,162		36,806 36,677 129 28,656 71,606 28,4	18,708 18,579 129	5,227,045 5,211,534 15,511 4,539,915 5,605,911 15.1	1,550 1,550 5,277,782	-4,858,998 4,852,744 6,254 4,276,534 76,066 13.6	4,757,813 4,757,094 719	101,185 95,650 5,535	364, 382 355, 125 9, 257 257, 131 252, 063 41.7	170,890 174,882 5,017 230,356 166,820 -21.9	2,115 2,115	555,414 545,939 9,475 478,392 183,349 16.1	518,426 9,475
1	0.76 1.76 1.00	13.58 14.61 14.73	10.16	40.82 39.14 35.24	1.92 36.69	56.16 47.00 21.01	59.19	16.46	8.98 10.33 21.70	10.25 10.61 21.09	15.00	32.72 36.49 10.82	H
947	13.79 7,607 9.94	46.65 45,806 14.05	25.95 24,683 10.61	83.18 5,261,910 40.22	4.43 3,200 2.09	110.55 4,867,163 55.62	119.66 4,765,428 58.75	24.14 101,735 15.91		20.15 203,164 10.69		664, 614	42.06 636,551 31.19
Enter 264 60,903 19,982 0.33	Sup. prises (6) (8) (8)	. 17 546 638 1.17	14 529 513 0.97	190 59,174 68,364 1.16	5 350 755 2.16	62 49,266 54,977 1.27	31 39,548 53,200 1.35	31 3,718 1,777 0.48	15,533 12,473	8,384	25 159	12,887 20,477	12,471
5,694 0.25 23,864 0.24 2,174 462,288				131,242 2.69 72,756 1.80 83,883 4,577,395		124,125 3.05 59,643 2.08 77,002 4,577,395	122,908 3.16 57,924 2.12 76,285 4,577,395	717	0.88 13,113 0.54 7 6,881	1.49 370 1.49		16,824 1.58 10,660 1.58 15,613 173,628	1.59 10,575 1.59
240 47,552 90,323 1.9 0.38 0.20		0.9	13 651 590 0.9 0.96	186 55,955 61,447 1.1 2.52	5 350 384 1.1 2.16 1.97	1.0	31 39,388 36,442 0.8 3.16 3.41	5,20 1.1 0.5	7 13,475 1 19,384 9 1.4 8 0.88	6,133 8,054 1.3 1.08	25 4 36 3 1.4 5.20	12,679 8,117 0.6	12,439 7,891 0.6
19 11,243 9,232 523 2,713		. 59	(8) (8)	6 74, 747 36, 247 25, 850 5, 983		2 (8) (8) (8) (8)	(B) (B) (B) (B)	3	. 2,190 . 1,990 . 300	(8) (8) (6)	(⁸)	12,020 9,586 40	(⁶) (⁸) (⁸)

Data for the intrastate tributaries of the South Fork Cheyenne River are not shown separately but are included in the South Fork Cheyenne River total.

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

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

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

Table 18.—DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

\neg			MI.	SSOURI RIVER	(II) — Continued	For the 17	western States
	ITEM				Platte Rive	he (II_B)	
	(For definitions and explanations, see text. Majorbasin totals from 1930 and 1930 Censuses include figures for unidentified tributary basins. A composite map index number is shown in parentheses for each drainage basin)	Niobrara River ¹ (51)	James River (54)	Tot		Dir	
ŀ		(91)	(94)	· · · · · · · · · · · · · · · · · · ·		(11)	-B)
1 2 3 4 5 6 7 8	IRRIGATED UNITS AND AREAS Irrigated units 1939number 1939acres	89 10,359 9,318 310 731 3,831 6,138 170.4	10 336 338	2,36 2,11 5	1,895 9,322 5,297	12 12 7	2,784 8,586 5,403 2,217 966 1,290 7,532 80.4
9 10 11 12 13 14	1940 1940	14,551 4,766 26,956 4,192 935 22,818	370 34	3,08 3,43 97 76	9,995 1,680 1,037 9,380 6,383 4,635	17 15 32 10	8,091 9,011 1,377 9,505 7,721 3,845
15 16 17 18 19	Area works were capable of supplying with water1940acres	13,222 4,563 10,265 189.8 2,863	352	2,81 2,57 70	1,356 3,195 8,720 6.8	14 6	6,465 0,456 8,732 168.0
21 22	1630acres 1820acres Proportion which area irrigated is of area works were capable of supplying with water1939percent	732 4,127 78.3	95,5		7,898 3,318 77,1		9,166 1,200 34.2
23 24	1829percent 1919percent	84.0 59.8			82.3 82.8		50.8 54.6
	CAPITAL INVESTED TO JANUARY 1						
25 26 27 28 29 30	Total investment in irrigation enterprises	139,055 137,735 1,320 26,879 360,439 417.3	10,190	69,49 62,89	5,664 5,205 3,120 3,983 37.0	13,78 20 98 48 (01,510 05,794 05,716 05,716 89,656 88,642
32 33	capable of supplying with water, per acre1940dollars 1930dollars 1920dollars	10.52 5.89 35.11	28.95	}	31.10 24.70 24.38	'	37.19 7.05 7.11
34 35 36	Average investment per acre irrigated	13.42 144,330 9.92	30.33 10,770 29.11	99,28	40.33 5,391 29.73		108.89 32,253 36.37
	MAINTENANCE AND OPERATION, CHARGES			Primary	Supplemental	Primary	Supplemental
37 38 39 40	AND INDEBTEDNESS Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises1939acres	77 10,218 8,540 0.84	8 274 1,162 4.24	4,381 2,304,103 1,863,717 0.81	1,302 586,429 475,109 0.81	1,328 125,598 270,102 2.15	52 57,938 27,094 0.47
41 42 43 44 45 46	Total annual charges (reported) ⁸ ⁷			1,769,060 1.05 1,798,015 0.98 1,649,339 28,505,928	245,105 0.51 480,844 0.51 128,489 1,760,178	70,538 1.04 69,452 1.02 74,153 7,771,892	26,335 0.48 55,434 0.48
	WATER DELIVERED TO IRRIGATORS, 1939			-			
47 48 49 50 51	Enterprises reporting water delivered	79 8,799 16,607 1.9 0.92 0.48	9 286 352 1.2 4.27 3.47	4,179 2,208,815 3,823,863 1.7 1.08 0.63	1,270 582,240 428,522 0.7 0.91	1,252 126,528 231,637 1.8 2.18 1.19	41 58,083 28,415 0.5 0.53 1.00
	DRAINAGE OF IRRIGATED LAND			. "			
53 54 55 56 57	Enterprises reporting land drained or needing drainage	4 806 704 181 83	3 108 74 90 18	175 746,729 550,335 110,018 25,050		19 7,742 3,043 3,192 49	

^{*}Schedules called for "Number of farms," see explanation in text.

*Data for 1 enterprise in Keya Paha River Basin are included with Niobrara River.

*Data for the intrastate tributaries of the Larante River are not shown separately but are included in the Larante River total.

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

1940, 1930, 1920; AND IRRIGATED UNITS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1989—Continued

and Arkansas	and Louisie	LAND,				ISSOURI R	IVER (II)	Continued			- Charles - And and Ton				
<u>, · </u>						Platte Riv	er (II-B)-	Continued	 						
				North Pla	tte River	(II-Ba)					Sout	h Platte Ri	ver (II-Bb)		
Tota	al	Dire (II-I		Tota	Iaramie 1 ²	River Dire		Intras tribute in Wyomi	ries	Intrastate tributary in Nebraska (Blue Creek) (22)	Tota	1	Dire (11-5	- 1	
1,041 872 13 155 951	7,693 ,146 ,920 ,037 5,189 ,359 2,140 9,4	6 678 584 7 86 441 351	i, 044 , 431 , 228 , 931 i, 272 , 263 , 050 53.7	168, 138, 27, 190, 156,	691 674 009 094	95 84 1 8 109 78	615 ,493 ,584 ,962 ,947 ,585 ,580	41, 192, 196,	191 ,252 ,658 ,420	111 8,240 7,810 180 250	1,162 1,093 36 32 1,267 1,224	,547 ,381 ,757 ,604	557 524 18 14 470	5,108 5,441 1,363 1,485 1,593 1,892 2,191 18.4	1 2 3 4 5 6 7 8
361	7,453 2,827	806 549 579 130	3,946 3,764 3,728 3,515 3,501 3,678	330, 328, 373, 161, 137, 217,	105 ,057 ,353 ,731	231 226 177 135 116	,362 1,757 ,979 5,869 1,172	295 251 401 109 59	,281 ,557 ,296	13,121	287	,134	54 51 10 6	9,542 0,615 9,535 2,101 9,723 7,344	9 10 11 12 13 14
1,190	0,503 8,645 2,858 8.5	529	5,749 9,278 9,252 48.5	288 268 298	,426	179	3,648 9,372 9,116 8.0	238 259	,854 ,487 ,274 -9.9	11,747	1,314 1,441 1,335	.,367	50	9,009 4,642 6,310 28.6	15 16 17 18
247	9,357 7,286),718	88	7,318 3,015 3,202	119, 78, 141,	779 332	69	3,155 3,787 3,556	46	,753 ,067 ,074	3,507	173	,587 ,763 ,135	3	1,568 3,750 6,119	19 20 21
	80.1 79.4 74.4		86.3 83.4 81.8	•	58.4 70.8 52.4		49.3 61.1 60.8	i	86.6 80.7 75.7	70.1		88.5 87.9 91.8		85.9 93.3 90.9	22 23 24
36,06 35,72 33 31,01 25,70	7,769 6,036 0,953 2,212	.4 83.4 .4 81.5 .05 26,903,346 .69 26,769,827 .36 133,519 .53 23,310,257 .12 17,624,060		4,515,097 4,188,283 26,814 4,288,150 4,386,696 5.8		3,13	6,107 7,095 9,012 4,911 4,841 -8.9	2,567 2,676	,077 ,153 ,690	106,132 105,582 550	42,244 40,020 2,220 36,890 36,670	3,052 1,496 3,152	22,66 1,81 17,68	01,175 84,285 6,890 95,220 99,612 38.4	25 26 27 28 29 30
:	16.3 27.73 25.87 21.91		15.4 34.24 44.04 41.06	1	5.67 5.90 4.71		16.25 19.26 7.55	2	1.13 0.77 0.32	9.03		32.14 25.60 27.47		37.72 35.05 23.10	31 32 33
37,19	34.64 8,273 25.70	27,02	39.66 1,799 33.40	5,296	6.82 ,822 6.05	3,89	32.95 6,682 16.84	4,765	4.39 ,385 3.14	12.88 114,267 8.71	42,46	36.33 0,189 31.34		43.92 5,796 37.19	34 35 36
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.		Primary Enter	Sup.	Primary Enter	Sup.	
1,261 1,002,601 649,303 0.65	180 132,790 99,934 0.75	626 659,017 509,511 0.77	174 127,787 98,958 0.77	267 162,509 69,962 0.43	(5) (5) (6) (6)	105 94,055 52,594 0.56	prises 2 (5) (5) (5)	342 173,405 63,872 0.37	4 1,263 652 0.52	26 7,670 5,958 0.78	1,567 1,147,827 871,762 0.76	1,068 395,617 347,796 0.88	622 555,763 453,662 0.82	628 182,101 164,963 0.91	37 38 39 40
669,296 1.16 647,129 1.03 552,041 14,804,347	81,188 0.70 116,123 0.70 1,235 1,270,559	582,586 1.31 487,871 1.19 477,746 14,588,980	80,836 0.70 115,023 0.70 883 1,270,559	45,333 0.59 82,812 0.49 40,057 99,490		43,655 0.64 84,432 0.52 38,435 99,490		36,996 0.73 58,591 0.63 22,979 112,877	352 0.36 1,100 0.32 352	4,381 0.70 7,855 0.56 11,259 3,000	962,453 0.97 1,061,335 0.93 976,054 3,803,648	137,582 0.44 309,287 0.44 127,254 489,619	512,934 1.05 523,764 0.98 544,392 1,908,098	24,627 0.20 126,084 0.20 23,011 1,250	45
1,179 942,654 1,841,335 2.0 0.87	166 129,016 68,888 0.5 0.78	601 625,487 1,400,396 2.2 1.07 0.48	161 127,713 68,327 0.5 0.79 1.47	271 167,094 223,319 1.3 0.42 0.32	(5) (6) (6) (6) (6) (5)	113 95,449 140,223 1.5 0.55	(⁵) (⁵) (⁵) (⁵) (⁵)	291 145,685 207,862 1.4 0.49 0.35	4 1,263 543 0.4 0.52 1,20	4,388 9,758 2.2 1.33	1,550 1,112,195 1,695,551 1.5 1.10 0.72	1,061 395,057 331,167 0.8 1.01 1,20	602 523,061 948,468 1.8 1.12 0.62	621 182,240 168,793 0.9 0.91 0.98	46 49 50 51
64 573,585 416,524 80,441 19,853		27 362,722 323,928 60,000 12,559		29 170,077 71,347 18,341		6 153,959 56,225 2,455 7,240		7 38,700 19,495 2,100 40		(5) (5)	66 138,058 118,747 25,986 5,060		20 94,816 80,931 9,396 3,391		54 55 56

⁴Percent not shown when more than 1,000.
⁵Data are included only in totals because less than 3 enterprises reported in the 1940 Census.
⁵Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
⁶Annual charges and indebtedness were reported only by enterprises serving 5 or more units, and items 41 to 46, inclusive, relate to those enterprises only.

TABLE 18.—DRAINAGE BASIN—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

T			TUELTY A	ISSOURI RIVER	(II)—Continued	[For the 17	7 western States
	· ·			Platte River (II-			
	ITEM (For definitions and explanations, see text. Majorbash totals from 1930 and 1920 Censuses include	· · · · · · · · · · · · · · · · · · ·		th Platte River (d	
	figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for each drainage basin)	Cache la Po	udre River	Crow (Greek.	Lodgepol	e Creek
		(8)	(8))	(1:	3)
1 2	IRRIGATED UNITS AND AREAS Irrigated units 1939number		2,371	~	42	19,	216
3 4 5	(g) Cropland harvested. 1899, acres. (b) Crop failure 1899, acres. (c) Pasture. 1993, acres. Area irrigated 1920, acres. 1920, acres. Increase or decrease (-), 1929-1939. percent.	21 29 27	5,521 4,943 8,617 1,961 7,401 2,125 -24.2	6, 5, 4,	571 743 593 235 947 525 7.3	17, 1, 13, 20,	062 306 649
10 11	Irrigable area in enterprises	38 41	5,647 9,975 6,208 0,126	8, 13,	437 366 040 865	18, 33,	953 018 823 936
13 14	1930	9	2,574 4,083	2,	419 515		593
15 16 17 18 19	Area works were capable of supplying with water1940acres 1830acres Increase or decrease (-), 1830-1940percent Excess of area works were capable of supplying	33 28	9,910 6,971 9,634 -28.8	7,	073 903 117 2.2	25,	023 211 646 51.2
20 21	with water over area irrigated	3	4,389 19,570 7,509	1,	502 956 592	, 3,	006 786 642
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water		94.0 88.3 94.0	7	3.8 5.2 3.6	7	73.1 78.0 78.0
	CAPITAL INVESTED TO JANUARY 1						
25 26 27 28 29 30	Total investment in irrigation enterprises	10,12 2 9,64	11,853 23,026 28,827 -2,017 -3,682 5.3	262, 248, 13, 166, 100,	827 347 821	337, 445,	622 860 680
31 32 33	Average investment based on area works were capable of supplying with water, per acre1940dollars 1930dollars		42.32 28.61 36.99	21	.48 .11 ·	19	3.04 3.62 7.38
34 35 36	Average investment per acre irrigated	10,20	45.02 3,283 39.91	254,	.63 474 .35	497,	452 4546
	MAINTENANCE AND OPERATION, CHARGES	Primary	Supplemental	Primary	Supplemental	Primary	Supplementa
	AND INDEBTEDNESS	Entery	prises	Enterp	rises	Enter	prises
37 38 39 40	Enterprises reporting maintenance and operation. 1839number	287 222,719 144,015 0.65	258 159,096 126,719 0.80	22 2,678 5,271 1.97	12 1,255 5,326 4,21	151 18,445 32,814 1.78	. 25 25 0.9
41 42 43 44 45 46	Total annual charges (reported) ⁵ d	250,802 1,22 206,674 1,21 185,695 1,048,227	90,649 0.68 134,180 0.68 80,129 408,369			8,998 2.00 4,499 2.00 9,000 82,000	
	WATER DELIVERED TO IRRIGATORS, 1939						
47 48 49 50 51 52	Enterprises reporting water delivered. 1939. number. Area irrigated by these enterprises. 1939. acres. Water delivered. 1939. acre-feet. Average water delivered per acre irrigated. 1939. acre-feet. Average cost of water per acre irrigated. 1939. dollars. Average cost of water per acre-foot delivered. 1939. dollars.	292 221,138 279,916 1.3 1.35 1.07	251 159,294 112,327 0.7 1.03 1.47	38 7,471 10,214 1.4 1.97	12 1,265 3,239 2.6 4.21 1.64	149 18,442 22,270 1.2 2.08 1.72	25 24 0. 0.9 1.0
	DRAINAGE OF IRRIGATED LAND						
53 54 55 56 57	Enterprises reporting land drained or needing drainage. 1939. number. Irrigable area in these enterprises. 1939. acres. Irrigated area in these enterprises. 1939. acres. Area for which drains have been installed. 1839. acres. Additional area needing drainage. 1939. acres.	41 17,009 15,889 14,557 174		(4) (4) (4) (4)			***************************************

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

Data for the intrastate tributaries of the Smoky Hill River are not shown separately but are included in the Smoky Hill River total.

Percent not shown when more than 1,000.

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

19

1940, 1930, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued and Arkansas and Louisiana]

	131214		MIS	SOURT RIVER (TT	- Continue								=
Platte River (I	I-B) Continued	MISSOURI RIVER (II) — Continued Kansas River (II-C) Republican River Smoky Hill River											
South Platte					Republica	n River			Smo	ky Hill Ri	ver	·	
River (II-Bb)Con. Intrastate tributaries in Colorado	Intrastate tributaries in Nebraska	Total	Direct	Total	Direc	ct	Arikaree River	Frenchman Greek	Total ¹	Direct	White Woman Creek	Big Blue River	
			(II-C)		(1)		(2)	(3)		(4)	(7)	(8)	
6,572 363,135 330,436 7,380 15,319 478,903 585,129 -26.3	793 28,198 27,528 260 410 25,044 1,756 12.6	792 46,204 43,092 1,005 1,507 26,139 34,872 76.8	43 703 603 14 86	517 31, 592 30,007 576 1,049 23, 387 34,360 35.5	9,9 9,4 2	197 175 134	92 6,891 5,787 259 845	192 14,895 14,763 42 70	108 9,423 8,727 407 289 141 278 (²)	40 1,211 1,056 150 5	44 7,273 6,968 237 68	124 4,386 4,295 8 83	1 2 3 4 5 6 7 8
404,332 556,488 688,593 51,197 117,585 122,464	79,540 34,708 5,159 51,342 9,64 3,400	65,137 36,913 63,644 18,933 10,774 18,972	1,372	42,183 32,872 52,080 10,491 9,485 17,720	15,6	786	10,235 3,344	16,258	14,542 391 1,450 5,119 250 1,172	2,458 1,247	10,581 3,308	7,040 44 2,654 25	9 10 11 12 13 14
391,257 573,058 614,402 -31.7 38,122	70,116 02,727 3,021 114.2 41,918	61,942 32,823 44,402 88.7	1,262	40,315 29,086 40,022 38.7 8,553	14,5		9,765 	16,048	13,902 326 1,266 (²) 4,479	2,123	10,421	6,433 44 2,047	15 16 17 18
91,155 48,273	7,683 1,255	6,684 9,730		5, 699 8, 662					185 988			25	20
90.3 83.6 92.1	40.2 76.5 58.1	74.6 79.6 78.1	55.7	78.6 80.4 79.9	68		70.6	92.8	67.8 43.3 22.0	57.0	69.8	68.2 43.2	22 23 24
6,879,864 6,520,292 359,572 9,035,919 16,217,178 -23.9	2,901,006 2,899,049 1,957 593,359 26,300 388,9	1,083,626 1,061,585 22,041 593,747 537,606 81.6	93,656 32,746 910	715,564 696,439 20,125 490,429 500,285 46.1	308,6 301,0 4,6	032 900	103,925 90,020 13,905	303,707 302,387 1,320	161,088 161,003 85 12,460 34,953 (²)	39,268 39,224 44	100,893 100,885 8	172,318 171,397 921 1,625	25 26 27 28 29 30
17.58 15.77 26.40	41.37 18.13 8.71	17.49 18.18 12.11	26.67	17.76 16.86 11.63	, 21.		10.61	18.92	11.59 38.22 27.61	18.50	9.68	25.79 36.93	31 32 33
19.48 6,969,184	102.88 2,964,676	23.45 1,122,220	47.87 41,906	22.61 733,864	31. 323,	. 19 127	15.08 106,230	20.39 304,207	17.10 171,173	32.43 43,458	13.87 104,803	39.29 175,277	34 35
17.24	37.27	17.23	30.54	17.40	20	.61	10.38	18.71	11.77	17.58	9.90	24.90	36
Primary Sup.	Primary Sup.	Primary Sup.		Primary Sup.	Primary	Sup.				·			
### Reference	225 2 28,077 (4) 72,550 (4) 2.58 (4)	500 3 44,888 12 101,079 71 2.25 5.92	39 637 2,934 4.61	257 30,963 12 50,712 71 1.64 5.92	9,411 26,662	71 5.93	30 6,661 4,451 0.67	33 14,891 19,599 1.32	95 9,059 24,924 2.75	35 1,027 3,224 3.14	37 7,123 18,600 2.61	109 4,209 22,509 5.35	37 38 39 40
209,719 22,306 0.65 0.45 326,398 49,023 0.54 0.46 235,967 24,114 765,323 80,000	46,773 2.33 20,098 2.33 47,091 2,126,041			18,275 1.01 18,060 1.01 20,023 13,700	1.53 3,067 1.53 5,100		1,989 0.50 3,969 0.50 9,570 13,700	11,586 1.05 11,024 1.05 11,353					41 42 43 44 45 46
475 174 342,083 52,000 434,683 46,567 1.3 0.9 0.83 1.18 0.66 1.32	198 2 27,438 (4) 55,340 (4) 2.0 (4) 2.65 (4) 1.31 (4)	489 1 43,772 (4) 86,473 (4) 2.0 (4) 2.31 (4) 1.17 (4)	40 624 672 1.1 4.70 4.36	29,601 (4) 66,317 (4) 2.2 (4)	188 9,848 19,615 2.0 2.80 1.41	(4) (4) (4) (4) (4)	31 5,906 10,613 1.8 0.74 0.41	30 13,848 36,089 2.6 1.33 0.51	96 9,293 14,183 1.5 2.75 1.80	37 1,111 1,555 1.4 3.18 2.28	36 7,273 11,202 1.5 2.61 1.70	104 4,254 5,301 1.2 5.36 4.30	50 51
24 25,633 21,533 2,033 1,455	6 27,944 12,021 399 88	32 1,242 860 588 270	4 140 70 62 78	648 404 235	328 164 192		(5) (6) (9) (9) (9)	(5) (5) (6) (7)	4 220 188 65 10	(4) (4) (4) (4) (4)		10 234 199 226	54 55 56

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

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

Annual charges and indebtedness were reported only by enterprises serving 5 or more units, and items 41 to 48, inclusive, relate to those enterprises only.

TABLE 18.—DRAINAGE BASIN-AREA IRRIGATED, 1989, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE For the 17 western States

							[For the 17 we	S CEITH SCALES
		MISSO	URI RIVER	(II)—Continue	1		IPPI RIVER (of the Missour	
	(For definitions and explanations, see text. Majorbasin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A composite man index-number is shown in parentheses for each drainage basin)	Intrast tributa in Monte	ries	Intrastate tributaries in North Dakota	Intrastate tributaries in South Dakota	Toţe	ıı.	Direct
2 3 4	IRRIGATED UNITS AND AREAS Irrigated units 1939 number 1939 acres (2) Cropland harvested 1939 acres (b) Crop failure 1939 acres (c) Pasture 1939 acres 1939	853 748 3 101 871 933	,796 ,261 ,059 ,221 ,981 ,405 ,394	38 344 276 12 56	148 1,290 1,259 31 	927 848 31 48 902	.206 .594 .045 .022 .527 .560 .493 2.8	156 9,548 9,227 254 67 8,972 17,416 6.4
9 10 11 12 13	Irrigable area in enterprises		,131 3,852 7,795 3,726	1,206	2,442 1,509 6,934 1,152 442 6,225	378	,730	15,528 17,342 24,070 5,980 8,370 6,654
15 16 17 18	Area works were capable of supplying with water1940acres 1930acres 1920acres Increase or decrease (-), 1830-1940percent	1,174 1,238 1,601	3,055	810	1,837 1,214 3,594 51.3	1,350 1,170 1,152	,583	14,202 11,668 23,755 21.7
20 21	Excess of area works were capable of supplying with water over area irrigated	366	1,704 5,650 8,507	466	547 147 2,885	268	,317 ,023 ,768	4,654 2,696 6,339
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water1939percent 1929percent 1919percent		72.6 70.4 58.3	42.5	70.2 87.9 19.7		68.7 77.1 83.2	67.2 76.9 73.3
25 26 27 28 29 30	CAPITAL INVESTED TO JANUARY 1 Total investment in irrigation enterprises	33,41; 33,17; 24; 27,85; 29,28	8,141 0,777 8,818	18,551 18,445 106	212,707 212,658 49 25,135 128,136 746.3	31,831 35,183	9,140 2,792 1,673	156,931 156,931 284,998 302,385 -44.9
31 32 33	Average investment based on area works were capable of supplying with water, per acre1940dollars 1930dollars 1920dollars		28.44 22.50 18.28	22.90	115.79 20.70 35.65		27.46 27.19 30.54	11.05 24.43 12.73
34 35 36	Average investment per acre irrigated	37,80	39.17 7,167 29.51	53,93 22,336 18.52	218,081	37,49	40.00 8,140 25.71	16.44 156,981 10.11
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enter	Supplementa prises	1		Primary Enter	Supplemental prises	·
37 38 39 40	Enterprises reporting maintenance and operation1839number	1,839 826,518 485,637 0.59	117,724 11,079 0.09	5 324 9 1,641	1,093 3,701	4,227 897,343 1,763,296 1.97	215 33,415 52,748 1.58	85 8,868 24,387 2.75
41 42 43 44 45 46	Average annual charge per acre assessed1939dollars Total charges collected ³ 1939dollars	427,889 1.10 477,513 0.90 222,147 22,075,841	29,74 0.3 93,85 0.3 32,85 673,26	2 2		738,670 1.48 568,001 1.30 898,535 7,687,224	10,980 1.79 6,142 1.79 1,275	875 1.42
47	WATER DELIVERED TO IRRIGATORS, 1939 Enterprises reporting water delivered	1,849	2			4,206	204	777
48 49 50 51 52	Area irrigated by these enterprises	766,634 1,432,711 1.9	90,30 119,94 1. 0.3 0.2	7 93(3 2.7 2 5.00	1,323 1.4 3 3.40	886,841 1,716,209 1.9 2.31 1.19	35,062 46,572 1.3 2.08 1.57	41,832 4.5 2.78
	DRAINAGE OF IRRIGATED LAND							
53 54 55 56 57	drainage	65 316,598 165,291 55,950 21,764			103 69 6 25	221 164,985 116,659 50,820 6,772		13 2,733 2,230 2,194 505

^{*}Schedules called for "Number of farms," see explanation in text.

*Data for the intrastate tributaries of the Canadian River are not shown separately but are included in the Canadian River total.

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

21

1940, 1980, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

					MISSISS (Exclu	SIPPI RIVER	(III)—Con Missouri Rive	inued er)		•				
						Arkansas Riv	er (III-A)							
Tota	al	Dire		Two Butte and Bear Creeks	Salt Fork Arkansas River	Cimarron River	Verdigris River	Total ¹	Direct	North Canadian River (27)	Intrast tributa in Golora	ries	Intrastate tributaries in Kansas	
		(111-	-A)	(12)	(14)	(15)	(16)		(18)	(37)				
679 608 29 41 753 851	,569 ,919 ,792 ,544 ,581 ,533 ,150	486 444 18 23 461	,484 ,304 ,111 ,432 ,781 ,620 ,103 5.3	64 3,603 3,583 20	9 512 513	99 9,155 7,441 582 1,132 4,200 8,345 118.0	6 24 24 24	1,846 61,210 58,358 1,319 1,503 69,450 90,876 -11.9	113 3,621 3,511 46 64 3,145 2,371 58.8	50 1,065 1,020 32 13	106, 83, 7 14, 201, 210	,867 ,291 ,455 ,893 ,943 ,747 ,024	194 12,820 11,308 1,290 222 15,793 16,409 -18.8	
298	,963	545 641 209 83	,621 ,162 ,783 ,317 ,542 ,680	4,513	1,022 510	17,231 10,980 25,312 8,076 6,780 16,967	27	95,382 116,344 180,804 35,172 46,894 89,928	5,561 2,762 3,022 1,940 617 651	1,018	354 435 89 152	,893 ,258 ,579 ,602 ,511 ,555	19,908 24,495 60,239 7,088 8,702 43,830	
933 960 1, 009	3,312 3,622 9,921 -2.8	51.0 561	,488 ,615 ,120 25.4	4,513	942	11,971 10,795 21,472 10.9	27	77,819 109,619 137,882 -29.0	5,461 2,762 2,615 97.7	1,779	305 260	, 174 6, 887 9, 260 -41 - 4	18,378 22,953 25,714 -19.9	
207	3,393 7,089 3,771	49	,184 ,025 ,017	910	430	2,816 6,595 13,127	3	15,609 40,169 47,006	1,810 517 214	714	104	, 883 , 140 , 236	5,558 7,160 9,305	
	72.9 78.4 84.3		75.9 90.4 93.1	79.8	54.4	76.5 38.9 38.9	88.9	78.7 63.4 65.9	66.8 77.7 90.7	59.9		59.3 66.0 80.7	69.8 68.8 63.8	: -
21,722 30,241	3,471 7,856 2,223	11,710 15,161	,001),545),356	616,895 616,895	14,775 14,475 300	261,899 258,607 3,292 203,310 416,304 28,8	2,815 2,740 75	1,973,811 1,879,695 94,116 1,917,560 5,155,485 2.9	425,590 424,894 696 51,395 148,331 728.1	101,262 101,114 148	7,019 8,652	3,985),446),119	268,155 268,073 82 835,028 848,865 -67.9	3
9	28.60 22.61 29.94	5	31.42 32.93 36.88	136.69	15.68	21.88 18.83 19.39	104.25	25.36 17.49 37.39	77.93 18.61 56.72	56.92) 2	19.14 22.95 33.24	14.59 36.38 33.01	3
27,038		20,291		171.22 619,295 137.22	28.86 15,775 15.44	28.61 292,066 16.95	117.29 2,815 - 104.26	32.25 2,017,906 20.94	117.53 432,340 77.75	95.08 104,262 50.10	3,506	32.26 5,536 17.90	20.92 292,375 14.69	١.
Primary	26. 24 Sup.	Primary	29.17 Sup.	1011,22	10111		1		-		Primary	Sup.	-	1
2,626 666,154 882,253 1.32	214 33,223 51,847 1.56	1,486 480,588 707,172 1.47	199 32,013 50,817 1.59	10 3,569 3,827 1.07	9 512 1,285 2.51	8,972 11,908	6 24 372 15.50	177 58,029 36,099 0.62	55 3,027 4,248 1.40	40 801 4,877 6.09	675 101,805 68,095 0.67	15 1,210 1,030 0.85	12,655 53,495	
661,006 1.42 535,710 1.24 645,870 4,139,507	10,980 1.79 6,142 1.79 1,275	548,562 · 1.51 416,857 1.32 554,137 3,322,400	10,980 1.79 6,142 1.79 1,275	3,973 1.25 3,178 1.25 4,426 1,350				41,871 0.83 59,771 0.70 35,078 218,187	470 0.65 719 0.65	,,,,,,,,,,	89,100 1.42 55,204 1.25 52,229 597,570			
2,547 642,255 1,231,893 1.9 1.76 0.92	203 34,870 46,044 1.3 2.06	1,443 466,417 1,013,491 2.2 1.96	187 31,660 44,196 1.4 2.13	2.7	512 590 1.2 2.51	5,957 6,571 1.1 1.45	24 29 1.2 15.50	177 57,229 63,935 1.1 0.90 0.61	61 3,358 4,019 1.2 1.34 1.12	1,061 2,157 2.0 6.10	618 96,558 116,989 1.2 0,96 0.79	16 3,210 1,846 0.6 0.85 1.46	11,967 20,689 1.7 4.32	7
139 147,681 105,345 39,124 4,733		88 124,619 92,007 37,202 3,317			(5) (5) (6) (5) (5)	L 416 396 338		7 15,076 9,053 15 1,166	(⁵)	4 257 138 15 10	24 5,551 3,880 109 230		1,837 1,004 1,437	7

³ Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
⁴ Annual charges and indebtedness were reported only by enterprises serving 5 or more units, and items 41 to 48, inclusive, relate to those enterprises only.
⁵ Data are included only in totals because less than 3 enterprises reported in the 1940 Gensus.

TABLE 18.—DRAINAGE BASIN—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA,
DELIVERED TO IRRIGATORS, AND DRAINAGE
[For the 17 western States]

				SISSIPPI RIVER			7 western States
	ITEM		Red River	(III-B)		· · · · · · · · · · · · · · · · · · ·	
	(For definitions and explanations, see text. Major- basin totals from 1980 and 1920 Censuses include figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for each drainage basin)	Total	Direct	Washita River (1)	Black River (Ouachtta River and Bartholomew Bayou) (5)+(10)	Intras tribut 1 Arkar	aries n
	IRRIGATED UNITS AND AREAS		3-17	\\ <u>\</u>			
1 2 3 4 5 6 7	Irrigated units	1,504 129,714 124,028 1,099 4,587 39,998 7,191 229.2	1,484 129,132 123,499 1,098 4,534	17 268 215 53	3 314 314	105	
9 10 11 12 13 14	Irrigable area in enterprises	216,190 55,734 23,446 86,476 16,336 16,255	215,107 85,975	766 498	317	***************************************	,774
15 16 17 18 19	Area works were capable of supplying with water1940acres	213,683 55,586 13,483 281.4 83,969 16,188	212,862	504 236	317		,301
21 22 23 24	Proportion which area irrigated is of area works were capable of supplying with water	6,292 60.7 70.9 53.3	60.7	53.2	99.1		57.1
25 26 27 28 29 30	CAPITAL INVESTED TO JANUARY 1 Total investment in irrigation enterprises	6,646,969 6,842,033 4,936 5,208,834 399,634 27,6	6,612,924 6,606,888 4,036	30,032	3,113 3,113	3,606 3,606	
31 32 33	Average investment based on area works were capable of supplying with water, per acre1940dollars 1930dollars 1920dollars	31.11 93.71 29.64	31.07	61.37	9.82		9.01
34 35 36	Average investment per acre irrigated	51.24 6,671,191 30.86	51.21 6,635,571 30.85	32,507	9.91 3,113 9.82	3,624	33.27 9,690 L8.50
	MAINTENANCE AND OPERATION, CHARGES					Primary	Supplemental
37 38 39 40	AND INDEBTEDNESS Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises1939acres Cost of maintenance and operatiom1639dollars Average cost, per acre irrigated1339dollars	682 119,672 307,429 2.57	665 119,091 305,335 2.56	267 1,344	3 314 750 2.39	Entery 834 102,649 549,227 5.35	(5) (6) (6)
41 42 43 44 45 46	Total annual charges (reported) d 7	59,882 2.08 28,833 2.08 250,490 3,547,717	59,882 2.08 28,833 2.08 250,490 3,547,717			13,535 5.24 2,582 5.24 2,175	
	WATER DELIVERED TO IRRIGATORS, 1939				5000 1000 1000 1000 1000 1000 1000 1000		
47 48 49 50 51 52	Enterprises reporting water delivered	797 127,464 145,707 1.1 2.57 2.25	720 127,092 145,161 1.1 2.56 2.24	268 419 1.6 5.03	(5) (5) (6) (6) (5) (5)	845 107,790 296,777 2.8 5.38 1.95	(⁵) (⁵) (⁵) (⁵) (⁵)
	DRAINAGE OF IRRIGATED LAND						
53 54 55 56 57	Enterprises reporting land drained or needing drainage	15 1,587 587 1,274 270	9 1,172 338 972 200	205 39 92	(⁵) (⁵) (⁵) (⁵)	54 13,004 7,497 8,228 1,264	

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

Data for the intrastate tributaries of the Colorado River are not shown separately but are included in the Colorado River total.

Data for the intrastate tributaries of the Brazos River are not shown separately but are included in the Brazos River total.

Data for the intrastate tributaries of the Sabine River are not shown separately but are included in the Sabine River total.

1940, 1980, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

and Arkansas	and Louisiar	na]				GULF OF ME		sippi River)						=
		Colorado	River		Brazos I	liver	· · · · · · · · · · · · · · · · · · ·	Sabine I	liver					
Tota	11	Total ¹	Direct	Total ²		Dire	ect	Total ³	Direct	Intrast tributa in Texa	ries	Intrast tributa in Louisi	ries	
(IV))		(5)			(7)			(11)					
902 860 32 662 698	,588 ,392 ,990 ,436 ,026 ,958 ,077	927 85,446 83,084 44 2,318 61,888 71,278 38.1	846 84,921 82,612 43 2,266	1,54 174,15 168,69 1,21 4,24 21,56 7,53 707.	55 96 11 18 30	174 168 1	,543 ,084 ,627 ,210 ,247	463 74,435 74,425 10 46,722 90,757 59.3	214 28,247 28,237 10	149, 126, 1, 21, 110, 106,	296 367 827 685	418 414 3 422 421	,997 ,866 ,429 ,623 ,103 ,578 -0.8	1 2 3 4 5 6 7 8
873	,404	272,828 224,368 277,268 187,382 162,480 205,890	272,004 187,083	302,83 47,41 22,89 128,68 25,85 15,36	17 96 80 57	128	,659	188,912 157,235 195,118 114,477 110,513 104,361	41,537 13,290	356, 299 305, 207 189	759 954 352 074	807 800 334 385	,237 ,625 ,933 ,371 ,522	9 10 11 12 13 14
1,520 1,221 1,167	,997	176,991 140,626 125,666 25.9	176,172	286,82 30,06 19,56 854	61 60	286		111,432 92,035 123,358 21.1	41,537	200 208	,740 ,932 ,281 11.8	75),804 3,343),664 -5.0	15 16 17 18
559	1,404 1,039 1,452	91,545 78,738 54,388	91,251	112,65 8,50 12,00	01	112		36,997 45,313 32,601	13,290	90	,250 ,247 ,352	33	1,938 3,240 9,086	19 20 21
	59.3 54.3 60.3	48.3 44.0 56.7	48.2	60 71 38	.7			66.8 50.8 73.6	68.0		66.5 55.1 51.3		58.1 55.7 61.9	22 23 24
30,498 30,342 155 28,578 29,439	2,685 5,676 3,193	2,783,786 2,718,920 64,866 1,914,643 3,560,916 45.4	2,729,498 2,664,637 64,861	3,801,1 3,777,1 23,9 657,5 569,5 478	.80 68 55 43	3,770	4,713),745 3,968	4,099,609 4,057,287 42,322 3,395,771 2,270,705 20.7	1,160,042 1,117,756 42,286	7,755 9,634	,324 ,520 ,262	10,86 10,86 14,85 13,40	8,974 4,962	25 26 27 28 29 30
2	20.05 33.39 25.43	15.73 13.62 28.34	15.49	19.: 21.: 29.:	87	********	13.23	36.79 36.90 18.41	27.93	3	9.80 8.60 6.26		15.08 19.59 19.69	31 32 33
30,696		32.58 2,796,666	32.14 2,739,828	21. 3,860,8	85	3,85	21.80 1,450 12.73	55.08 4,100,109 21.70	41.07 1,160,042 27.93	8,975	9.84 5,934 25.15	. 10,96	25.95 3,136 14.55	34 35 36
Primary	16.37 Sup.	10.25	10.07	Primary Enterpri	Sup.	Primary	Sup. orises	22770		Primary Entern	Sup.	Primary Enter	Sup.	1
4,407 863,270 3,568,374 4.13	16 11,582 7,653 0.66	411 82,783 488,622 5.90	347 82,300 486,123 5.91	1,080 157,278 588,998 3.74	(5) (5) (5)	1,075 157,211 588,701 3.74	(⁵) (⁵) (⁵)	45 74,995 309,139 4.16	13 28,207 103,899 3.68	798 139,388 693,205 4.97	(⁵) (⁵) (⁵)	2,073 409,426 1,488,410 3.64	12 2,434 3,683 1.51	37 38 39 40
3,157,777 6.60 498,277 6.34 2,104,511 7,222,993	12,905 1.61 14,500 0.89 13,285 210,500	572,689 8.27 69,253 8.27 394,202 688,162	572,680 8.27 69,253 8.27 394,202 688,162	9.47 43,957	300 70,000	416,370 9.47 43,957 9.47 362,440 586,947	300 70,000	433,276 6.78 63,861 6.78 465,378 2,241,361	144,931 5.38 26,921 5.38 157,973 575,080	548,409 6.89 92,528 5.93 426,473 1,049,085	12,905 1.61 14,500 0.89 12,985 140,500	1,187,033 5.35 228,678 5.19 456,018 2,657,438		41 42 43 44 45 46
4,982 816,018 2,185,426 2.7 5.14 1.92	19 11,727 21,687 1.8 1.68	438 81,874 365,501 4.5 7.67	359 81,349 364,664 4.5 7.68 1.71	1,255 172,594 375,598 2.2 4.76 2.19	(5) (5) (6) (5) (5) (6)	1,252 172,575 375,558 2,2 4.76 2.19	(5) (5) (5) (5) (5) (5)	42 57,968 224,629 3.9 6.54 1.69	12 11,786 31,533 2.7 6.46 2.41	926 147,839 380,743 2.6 5.61 2.18	(5) (5) (5) (5) (6)	2,321 355,743 838,955 2.4 4.32 1.83	15 2,579 2,116 0.8 1.51 1.84	48 49 50 51
676 413,034 160,158 286,975 52,261		7 491 439 165	7 491 439 165	22,038 22,102		19 42,389 22,030 22,090 300		3 1,410 1,032 1,206		27 157,291 37,808 91,098 40,087		618 211,425 98,841 172,404 11,874		54 55 56

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

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

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

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

Table 18.—DRAINAGE BASIN—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

===			DELLAF		KKIGATOK		Western States
Ì		•	- √.	RIO GRAN	IDE (V)		
	ITEM (For definitions and explanations, see text. Major-					Upper Rio G	rande (V-A)
	basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for each drainage basin)	Tota	al .	Dire	ct	Tota	ı
		·(v	,	(V-A) +	(v n)		
ł	IRRIGATED UNITS AND AREAS		<u> </u>	(Y-A) †	(4-1)		
1 2 3 4 5 6 7 8	Irrigated units	1,521 1,322 38	, 174 , 950 , 454 , 725	930 827 12 89 951 684	,669 ,310 ,945 ,473 ,892 ,740 ,718	903 759 27 116 898	570 631 121 586 924 277 122
9 10 11 12 13	Irrigable area in enterprises	2,626 850	7,664 3,153 3,485 2,939	246	,512	318	,526
15 16 17 18	Area works were capable of supplying with water1940acres 1830acres 1920acres Increase or decrease (-), 1830-1840percent	2, 177 1, 914	7,705 4,781 4,285 13.7	1,390 1,110 1,090	3,095 3,177	1,180 1,080 1,072	,567 ,646
19 20 21	Excess of area works were capable of supplying with water over area irrigated	350	6,127 0,056 1,430	16	1,385 1,437 1,647	182	,936 ,369 ,003
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water		60.9 81.7 68.6		66.8 85.5 62.3		76.5 89.1 81.9
	CAPITAL INVESTED TO JANUARY 1						_ [
25 26 27 28 29	Total investment in irrigation enterprises	80,56; 78,900 1,66; 53,74; 34,82;	0,146 3,852 8,608 4,111	59,477 58,54 936 37,323 21,340	1,031 3,496 5,421),536	30,120 28,912 1,210 18,081 10,634	,436 ,926 ,167 ,888
30 31 32 33	Increase or decrease (-), 1830-1940percent Average investment based on area works were capable of supplying with water, per acre1940dollars 1930dollars 1820dollars		49.9 36.99 28.07 18.19		59.3 42.68 33.53 19.41	1	66.6 5.52 6.73 9.92
.34 35 36	Average investment per acre irrigated	. 83,96	52.95 6,088 35.31	61,34	63.93 3,041 41.15	32,44	93.34 9,137 25.22
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterp	Supplemental rises	Primary Entern	Supplemental rises	Primary Enterp	Supplemental rises
37 38 39 40	Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises1939acres Cost of maintenance and operation1939dollars	2,508 1,441,916 2,676,138 1.86	247 199,096 115,190 0.68	895 915,829 2,063,240 2,25	192 132,290 92,679 0.70	1,231 841,998 748,544 0.89	204 152,688 78,645 0.52
41 42 43 44 45	Average annual charge per acre irrigated	2,971,774 2.50 1,780,422 1.67 2,968,852 45,245,240	238, 315 1, 53 266, 865 0, 89 62, 440 1, 449, 874	2,542,033 3.01 1,243,994 2.04 2,753,493 39,378,779	29,087 0.25 117,781 0.25 32,621 268,150	965,372 1.36 908,666 1.06 1,066,628 15,031,611	20, 305 0.18 115,715 0.18 17,225 318,250
	WATER DELIVERED TO IRRIGATORS, 1939						
47 46 49 50 51	Area irrigated by these enterprises	2,524 1,412,046 3,034,957 2.1 2.48 1.16	272 150,958 79,624 0.5 0.65	914 895,810 1,929,971 2.2 3.00 1.39	215 131,584 64,580 0.5 0.65 1.32	1,273 820,555 1,670,533 2.0 1.33 0.68	228 132,910 59,935 0.5 0.56 1.25
	DRAINAGE OF IRRIGATED LAND						
53 54 55 56 57	drainage	183 1,121,694 639,928 721,017 86,260	***************************************	41 871,515 529,668 682,118 48,702		45 398,819 248,931 248,218 18,444	

^{*}Schedules called for "Number of farms," see explanation in text.

Includes San Antonio River Drainage Basin in New Mexico.

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

1940, 1930, 1920; AND IRRIGATED UNITS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued and Arkansas and Louisiana]

	as and Louis						RIO GRAN	DE (V)	Continued							I	==
						Грре	er Rio Gra	nde (V-A)	—Continued			·····					
			Conejos	River							Indepe	ndent basins	in the U	pper Rio	Grande		
	ect -A)	Tot	al ¹		ect	Costilla Creek	Intras tribut in Colo	aries	Intrastate tributaries in New Mexico	Tot	al	Sacramento River and Salt Lakes (25)	Intra bas i Colo	ins n	Intra bas i New M	ins n	
								· · · · · · · · · · · · · · · · · · ·									
52 46 5 49	5,357 9,905 2,215 8,140 9,550 2,183 0,532	90 69 4 16 60	,040 ,145 ,185 ,030 ,930 ,918 ,676	68 4 16	988 ,382 ,483 ,007 ,892	920 35,967 32,407 241 3,319 4,003 4,417 798.5	53 4 13 114 104	506 ,167 ,443 ,281 ,443 ,155 ,199	8,918 86,740 72,420 9,409 4,911 111,206 141,945 -22.0	69 1 18 95 108	829 ,707 ,451 ,485 ,771 ,812 ,353 -6.4	4 31 31 	71, 53, 17, 76, 89,	184 571 474 257 840 249 361 6-1	18, 15, 1, 13,	641 105 946 228 931 377 902	1 2 3 4 5 6 7 8
57 68 21 8	9,196 7,847 0,874 9,291 5,664 0,342	112 118 26 31	,279 2,313 3,887 3,134 ,,095 7,211	26	,486 ,104	51,421 10,112 7,385 15,454 6,109 2,968	210 222 60 96	,717 ,709 ,324 ,550 ,554	122,891 196,320 241,231 36,151 85,114 99,286	109 251 25 13	,171 ,225 ,344 ,464 ,413	38	87 217 14	,608 ,006	14, 33, 10,	954 841 936 ,849 ,464	9 10 11 12 13 14
71 53	0,991 8,360 3,604	112	,626 ,806 ,680	111	,833	50,771 7,606 4,803	83 194 123	,631 ,514 ,118	113,766 132,772 170,396	106 107	,782 ,586 ,524	38	83, 86, 107	,089 ,006 ,672	25 14 26	655 610 762	15 16 17
18	32.1 1,086 6,177 3,072	22 18	12.8 2,481 3,890 7,004		,451	567.5 14,804 3,603 386	12 80	57.0 9,464 9,359 8,919	-14.3 27,026 21,586 28,451	19 11	1.1 ,075 ,774 3,171	7	11. 9	.3.4 ,518 ,757 ,311	7 1	75.6 ,550 ,233 ,860	18 19 20 21
	74.5 91.4 79.2		80.0 81.1 92.7		79.9	70.8 52.6 92.0		85.1 58.7 84.6	76.2 83.8 83.3		82.5 89.1 80.5	81.6		86.1 98.7 93.0		70.6 91.6 70.6	22 23 24
	78.2		92.1			52.10		0110	55.0		00.0						
21,34 54 10,25 5,13	12,541 18,037 14,504 57,372 12,478	838			,053 3,898 1,155	1,886,586 1,823,385 63,201 910,360 11,471 107.2	3,575 2,446	5,095 5,520 3,739	2,220,425 2,160,424 60,001 1,730,626 1,540,861 28.3	268 769 938	1,492 3,317 3,175 3,394 3,531 31.9	850 850	118 59 132 287	,709 ,802 ,907 ,090 ,360	626 208 337 649	,933 ,665 ,268 ,441 ,686	25 26 27 28 29 30
	30.79 19.05 9.44		11.97 8.41 5.90	'1	11.96	37.16 119.69 2.39	2	21.06 18.37 19.87	19.52 13.03 9.04		9.33 7.15 6.98	22.37	:	2.15 1.54 2.67	2	2.54 3.10 4.28	31 32 33
23,04	41.31 13,479 30.76	1,35	14.95 1,053	1,341	14.97 1,403	52.45 1,887,836 36.71	1,768	24.75 3,890	25.60 3,304,805 26.89	1,096	11.31 3,074 9.53	27.42 950 25.00	180	2.50 ,054 2.09	917	5.12 ,070 1.67	34 35 36
Primary	Sup.	Primary	Sup.	Primary	Sup.	307.7	Primary	Sup.	20103	Primary	Sup.		Primary	Sup.	Primary	Strp.	
478 520,951 553,311	118,763	79 88,136 17,059 0.19	7 22,477 233 0.01	60 87,373 16,633 0.19	7 22,477 233 0.01	40 34,604 26,059 0.75	74	(⁵)	268 73,662 49,378 0.67	292 56,369 82,873	12 3,833 526 0.14	(³) (³) (³)	94 39,518 6,549 0.17	3,735 265 0.07	197 16,844 76,224 4.53	8 98 261 2.66	37 38 39 40
750,220 1.58 597,132 1.26 946,751	15,160 0.14 105,100 0.14 11,875	22,492 0.30 76,100 0.30 16,136	175 0.07 2,500 0.07 552	22,357 0.30 75,528 0.30 16,048	175 0.07 2,500 0.07 552	42,835 1.33 43,560 0.98 28,908	70,368 1.42 101,850 0.69 17,869	4,970 0.65 8,115 0.61 4,798 50,000	72,372 0.99 84,077 0.86 38,824 777,648	7,085 1.19 5,947 1.19 18,140 1,633			600 1.00 600 1.00 600		6,485 1,21 5,947 1,21 17,540 1,633		41 42 43 44 45 46
13,331,326	268,150	16,700	100	16,700	100	175,186	169,110	00,000	111,046	1,000							"
513,944 1,215,947 2,4 1,51 0,61	117,925 7 51,909 1 0.4 5 0.59	68 83,510 144,236 1.7 0.29 0.17	4 3,477 3,678 1.1 0.07 0.06	64 62,937 142,424 1.7 0.29 0.17	4 3,477 3,678 1.1 0.07 0.08	44 35,061 64,565 1.8 1.25 0.68	92,305	(3) (3) (3) (3) (3) (3)	206 52,365 68,628 1.3 1.11 0.85	359 67,926 84,852 1.2 1.47 1.18	17 3,893 1,448 0.4 0.13	(³)	153 50,807 46,142 0.9 0.16 0.18	8 3,809 1,270 0.3 0.07 0.21	205 17,099 38,610 2.3 4.58 2.03	9 84 178 2.1 3.38 1.59	47 48 49 50 51 52
18 323,40° 222,52; 243,54; 17,34;	B 7 3	8 6,338 4,745 696 2		(3) (3) (5)			4 60,250 13,632 3,800 70		10 8,100 7,400 158 897	5 724 631 23 130					5 724 631 23 130		53 54 55 56 57

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

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

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

TABLE 18.—DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919: CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE [For the 17 western States]

						[For the 17	western States	
\Box				RIO GRANDE (V)—Continued			
ŀ	ITEM			Lower Rio Gra	nde (V-B)		·	
	(For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for					Pecos I	diver	
	posite map index-manuer is shown in particulated for each drainage basin)	Tota	n	Dire	et	Tota	u	
1				(V-I	3)			
	IRRIGATED UNITS AND AREAS]					
2 3 4 5	Irrigated units* 1939. number Area irrigated 1939. acres	617 563 11 43 666 434	, 317 , 947 , 053 , 364 , 530 , 448 , 733	400 365 4 30 459 254	,312 ,405 ,730 ,933 ,342 ,557 ,186	217 197 7 13 175 176	,005 ,542 ,323 ,031 ,188 ,798 ,488	
9	Irrigable area in enterprises	1,091		741	,491 ,665	349	,897 ,164	
11	1920 ² .acres Excess of irrigable area over the area irrigated1940acres 1930acres 1920 ² .acres	1,109 473 294		705 341 161	,270 ,086 ,106 ,084	397 132 111	,443 ,355 ,366 ,965	
15 16 17	Area works were capable of supplying with water1940acres 1630acres 1920acres	834 842	,138 ,135 ,160	574	2,704 ,817 5,761	223 281	,434 ,642 ,150	
18 19 20 21	Increase or decrease (-), 1830-1840percent Excess of area works were capable of supplying with water over area irrigated	379 167	19.5 9,191 7,687 7,427	110	18.8 2,299 5,260 L,575	9 6	40.6 3,892 7,844 4,692	
		101	, , ,	003	,,,,,,	10.	,,2	
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water		62.0 79.9 51.6		58.6 79.9 45.7		69.2 78.6 62.8	
	CAPITAL INVESTED TO JANUARY 1							
25 26 27 28 29	Total investment in irrigation enterprises	50,440 49,98 45 35,66 24,188	7,710 2,926 7,441 9,223	37,58 37,19 39 27,06 16,20	2,994 1,992 3,049 8,058	12,850 12,79- 60 7,220 7,480	1,716 0,934 0,317 3,049	
30 31 32 33	Increase or decrease (-), 1830-1940percent Average investment based on area works were capable of supplying with water, per acre1940dollars 1930dollars 1820dollars	j	41.4 50.50 12.76 28.72		38.9 55.05 47.09 29.16	;	78.0 40.89 32.29 26.62	
34 35 36	Average investment per acre irrigated	j	81.63	J	93.87		59,10	
. 00	investment and irrigable area, per acre1940dollars		17.20		51.65		37.78	
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterp	Supplemental prises	Primary Enterp	Supplemental rises	Primary Enterp	Supplemental prises	
37 38 39 40	Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises	1,277 599,918 1,927,594 3.21	43 46,410 36,545 0.79	417 394,878 1,509,929 3.82	9 13,527 15,737 1.16	860 205,040 417,665 2.04	34 32,683 20,808 0.63	
41 42 43 44 45 46	Total annual charges (reported) ⁴ 5. 1939. dollars Average annual charge per acre irrigated 1839. dollars Area against which charges were assessed 1839. acres Average annual charge per acre assessed 1939. dollars Total charges collected ⁴ 1839. dollars Indebtedness to December 31 (reported) ⁵	2,006,402 4,22 871,756 2,30 1,902,224 30,213,629	218,010 5.29 151,150 1.44 45,215 1,131,624	1,791,813 4.85 646,862 2.77 1,806,742 26,047,451	13,927 1.10 12,681 1.10 20,748	214,589 2.02 224,894 0.95 95,482 4,166,178	204,083 7.16 138,460 1.47 24,460 1,131,624	
	WATER DELIVERED TO IRRIGATORS, 1939							
47 48 49 50 51 52	Enterprises reporting water delivered	1,251 591,491 1,364,424 2.3 4.05	46 18,048 19,689 1.1 1.32	401 383,866 714,024 1.9 4.90 2.63	12 13,659 12,641 0.9 1.16 1.26	850 207,625 650,400 3.1 2.41 0.77	34 4,389 7,048 1.0 1.80	
	DRAINAGE OF IRRIGATED LAND					. `		
53 54 55 56 57	Enterprises reporting land drained or needing drainage	138 722,875 390,997 472,799 67,816		23 548,108 307,145 438,577 31,357		115 174,767 83,852 34,222 36,459		

^{*}Schedules called for "Number of farms," see explanation in text.

Data for the intrastate tributaries of the Dolores River are not shown separately but are included in the Dolores River total.

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

1940, 1930, 1920; AND IRRIGATED UNITS," MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

	sas and Loui:		ıed	COLORADO RIVER (VI) Upper Colorado River (VI-A) Dolores River												
	r Rio Grande	•		Upper Colorac							olorado Ri	ver (VI-A)	·		
, 2511	Pecos River			Total Direct					Cpps. c		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		s River			
D	irect	Intra tribut	aries	Tot	al	Dir	ect .	Tot	al .	Dir	ect	Tot	al 1	Dir	ect	
	(1)	New M		(v.	1)	(VI-A)	- (VI-B)			(VI-	-Δ>			(2)	0)	
	ı									Ì						
	2,984 174,104 156,440 6,024 11,640 92,185 119,848 88.9	45 40 1 1 83 56	,021 ,438 ,883 ,007 ,548 ,613 3,610 48.0	2,63 2,24 3 36 2,53	8,433 8,120 0,581 6,790 0,749 17,124 16,690 4.0	23: 21: 1: 58: 57'	5,417 1,984 5,456 1,706 3,822 5,766 7,408	1,464 1,148 25 286	3,637 3,097 3,537	197 123 1 13 66	,174 ,982 ,080 ,662 ,240 ,141	44 80 74	749 1,698 2,211 362 3,125 3,436 1,916 -35.7	14, 10,	268 130 976 267 887	1 2 3 4 5 6 7
	292,895 190,055 274,243 118,791 97,870 154,395	97 123 13 13	7,002 7,109 1,200 1,564 1,496 3,590	4,43 4,10 1,37 1,89	7,757 5,529 9,096 9,637 8,405 5,406	1,449 876 259 869	5,674 3,790		3,481	126	,401 ,437 ,419 ,296	159 180 80 79	8,414 9,796 0,611 6,716 9,360 5,695	23	,596	9 10 11 12 13 14
	262,154 128,325 198,286 104.3	95 82	2,280 5,317 2,864 45.2	3,33	97,744 15,914 19,219	878,363 255,674 863,700 300,965 340,962 770,032 671,284 -55.7 108,998 184,286 93,876		1,808		97	,420 ,915 85.3	100 84	8,993 8,457 1,973 -35.2		,527	15 16 17 18
	88,050 36,140 78,438	1.1	3,842 ,,704 3,254	79	9,624 18,790 12,529	18	1,266		3,784		,438 ,774	20	7,235 6,021 0,057		,397	19 20 21
	66.4 71.8 60.4		83.1 87.7 68.3		78.3 76.1 77.3		68.0 76.1 86.0		81.0	i	76.1 67.5		75.0 75.6 88.2		72.4	22 23 24
10,6	347,248 310,585 36,663 245,980 314,099 150.8	2,974 1,968	,131 ,271 ,337	155,80 153,17 2,62 132,35 88,93	5,496 5,386 0,247	22,844 21,766 1,076 35,711 28,387	,599 5,145 728		3,752 5,216 3,536	6,606 6,120 486 5,717	,657 ,648 ,009 ,345	6,482 4,847	9,777 3,599 2,945		096 492 604	25 26 27 28 29 30
	40.61 33.09 27.81	3	2.24 1.20 3.76		46.26 39.67 29.56	4	6.38 2.24		25.69		6.42 8.39	6	24.46 30.90 57.05	45	5.84	31 32 33
10,	61.15 958,467 37.41	2,258	0.84 ,922 9.63	186,85	59.06 9,806 46.51	33,61	18.48 1,141 18.72	52,851	31.72 1,640 24.49	6,926	7.86 ,597 4.05	1,844	32.62 1,166 13.32	910,	326 326	34 35 36
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary		Primary		
470 164,589 316,22	32,679	390 40,451 101,439	(³)	6,180 2,570,797 5,829,568	298 131,316 116,130	465 227,124 503,978	13 10,071 40,067	4,090 1,422,549 1,019,212	163 116,218 63,383	414 133,134 181,998	13 10,071 40,067	167 51,030 27,384	5 526 241	110 13,582 12,452	4 449 191	37 38 39
1.9 197,52 2.1 209,97	0.63 1 204,083 7.16	2.51 17,068 1.35 14,922	(³)	2.27 5,549,728 2.94 2,293,912	0.88 75,123 0.77 132,100	2.22 439,066 2.38 202,104	29,950 3,22 10,500	0.72 824,146 0.94 992,573	0.55 74,673 0.77 131,850	1.22 130,026 1.43 99,772	29,950 3,22 10,500	0.54 36,005 0.91 42,919	0.46	17,034 2,67	0.43	40 41 42 43
0.9 91,21 4,141,62	1 1.47	1.14 4,264 24,550		2.42 4,472,657 71,170,793	0.57 91,099 2,806,548	2.17 399,222 6,966,825	2,85 43,349 818,515	0.83 676,368 12,296,638	0.57 90,699 2,804,048	1.30 99,700 2,789,107	2.85 43,349 818,515	0.84 32,575 106,434		1,09		44 45 46
52 167,36 560,48 3, 2.3 0.7	4,185 7 6,609 3 1.6 7 1.80	322 40,259 89,913 2.2 2.60	(3) (3) (3) (3) (3) (3)	5,975 2,496,460 8,595,576 3.4 2,72 0.79	275 166,796 237,167 1.4 1.08 0.76	469 221,167 1,190,294 5.4 2.11 0.39	12 10,179 37,616 3.7 3.03 0.82	3,922 1,361,289 4,795,436 3.5 0.77 0.22	149 94,260 156,487 1.7 0.81 0.49	424 127,402 604,681 4.7 1.20 0.25	12 10,179 37,616 3.7 3.03 0.82	147 47,646 131,862 2.8 0.88 0.32	4 532 1,145 2.2 0.42 0.20	97 12,766 48,824 3.8 1.73 0.45	532 1,145 2.2 0.42 0.20	47 48 49 50 51 52
6 165,87 76,25 27,19 36,15	6 8 3	53 8,891 7,594 7,029 304		147 1,422,474 939,690 341,508 458,141		12 224,264 78,097 68,660 106,373		117 441,074 237,909 36,191 23,940		6 42,006 20,632 12,850 333		9 8,957 7,622 80 511		(3) (3) (3) (3)		53 54 55 56 56 57

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

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

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

TABLE 18-DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

-	Ţ	·				<u> </u>	[For the 17 we	stern States
	1				RIVER (VI)—C			
	(For definitions and explanations, see text. Major-	···			River (VI-A)-			
	basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A com-			Gree	n River (VI-Aa)	Yampa River		
	posite map index-number is shown in parentheses for each drainage basin)	Tota	.	Direct	Henrys 1	Fort	1ampa n	Iver -
	·	100		(VI-Aa)	(12)	ork	Total	L ²
	IRRIGATED UNITS AND AREAS							
2 4	rrigated units 1938 number	636 463 14 159 610	,348 ,977 ,490 ,302 ,185 ,659 ,387 4.3	335 59,737 43,675 1,303 14,759 27,699 22,828 115.7	20,8 13,3	43 29 05 84 98	77, 67, 9, 86, 81,	743 733 432 472
10 11	Irrigable area in enterprises	926 1,148 293 315	,100 ,619 ,821 ,123 ,960	102,850 43,288 36,121 43,113 15,589 13,295	31,7 26,5 25,9 10,8 10,7 17,6	98 40 777 '14	111, 130, 142, 33, 43, 60,	000 636 664
15 16 17 18	Area works were capable of supplying with water1940acres 1830acres 1820acres Increase or decrease (-), 1830-1940percent	792 855	,571 ,677 ,264 -1.3	73,311 31,943 31,072 129.5	27,8 18,6 23,6	377	115, 102,	
	Excess of area works were capable of supplying with water over area irrigated	145 182	,594 ,018 ,877	13,574 4,214 8,246		925 793	18, 29,	436
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water		81.4 77.0 68.6	81.5 86.7 73.5	88	5.1 5.0 5.0	7	90.9 74.8 79.4
ŀ	CAPITAL INVESTED TO JANUARY 1				•			
25 26 27 28 29 30	Total investment in irrigation enterprises	8,820 8,592	5,889 5,102 0,435	1,294,994 1,247,200 47,794 630,488 547,166 105,4	111, 77,	730 956 750	973 1,197	730 607
31 32 33	Average investment based on area works were capable of supplying with water, per acre1940dollars 1930dollars	1	15.54 11.13 10.05	17.68 19.74 17.61	5	.47 .98 .26		9.84 3.39 1.65
34 35 36	Average investment per acre irrigated	13,51	19.09 1,087 14.53	21.68 1,369,854 13.32	217,	.95 809 .86	1,212	2.17 ,458 0.87
İ	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enter	Supplemental rises		Primary Enterp	Supplemental rises	Primary Enterp	Supplemental rises
37 38 39 40	Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises1839acres Cost of maintenance and operation1839dollars Average cost, per acre irrigated1839dollars	1,407 615,600 324,586 0,53	35 75,265 8,977 0-12	173 54,162 27,724 0.51	63 19,982 5,518 0.28	(*) (*) (*) (*)	387 69,449 42,493 0.61	2,371 236 0.10
41 42 43 44 45 46	Total annual charges (reported) ⁶ d. 1939. dollars. Average annual charge per acre irrigated. 1839. dollars. Area against which charges were assessed. 1839. acres. Average annual charge per acre assessed. 1939. dollars. Total charges collected	209,180 0.64 389,618 0.54 212,823 936,003	30,628 0.43 103,885 0.29 30,233 1,652,321	6,917 0.65 12,550 0.55 5,044	2,747 0.58 8,793 0.31 25,603 20,000		13,205 0.57 25,099 0.53 6,737 88,400	150 0.08 2,000 0.08 150
	WATER DELIVERED TO IRRIGATORS, 1939							
47 48 49 50 51 52	Enterprises reporting water delivered	1,480 608,656 1,544,353 2.5 0.55 0.22	35 55,298 68,067 1.2 0.47 0.38	178 56,429 143,002 _2.5 0.49 0.19	64 17,777 43,427 2.4 0.19 0.08	() () () () () () () () () () () () () (442 71,188 210,980 3.0 0.65 0.22	8 2,481 2,486 1.0 0.10 0.10
	DRAINAGE OF IRRIGATED LAND		,		1.	,		
53 54 55 56 57	Enterprises reporting land drained or needing drainage	28 158,409 65,229 3,090 9,443		(4) (4) (4) (4) (4)			4,375 3,520 745	

^{*}Schedules called for "Number of farms," see explanation in text.

Data for other intrastate tributaries of the San Juan River are not shown separately but are included in the San Juan River total.

Data for the intrastate tributaries of the Yampa River are not shown separately but are included in the Yampa River total.

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

29

1940, 1930, 1920; AND IRRIGATED UNITS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued and Arkonsess and Louistana]

and Arkenise	as and Loui	sanaj				LORADO RI	VER (VI)~	-Continued							=
								-Continue							
		···	Green River	(VI-Aa)—Co							San Juan Ri	ver (VI-Ab)			
Dir	a RiverCo	Little Snake River (16)	White	River	Intra tribut i Wyon	aries n	Intra tribut i: Ut:	aries n	Tot	al ¹		ect -Ab)	Los Pino	os River	
37, 4, 22, 18,	487 ,926 ,513 518 ,895 ,138 ,029	169 21,697 18,818 111 2,708 19,603 23,060	31 3 27 25	255 ,046 ,803 382 ,861 ,773 ,625	13 5 17	785 7,187 7,475 2,051 7,661 5,905 9,461 12.5	24 16 6 27 27	6,062 5,222 9,451 9,404 6,367 6,164 8,336 -11.2	18 15 2 17	4,631 0,850 4,332 5,642 0,876 9,932 0,607 0.5	3 2	1,333 2,709 9,424 633 2,652 1,922 3,031 49.2	3	589 0,971 3,033 93 7,845 3,041 0,022 -4.8	1 2 3 4 5 6 7 8
34, 28, 22 12,	,902 ,996 ,221 ,976 ,858 ,192	27,600 23,472 34,280 5,963 3,869 11,200	36 40 7 8	,497 ,263 ,441 ,451 ,490 ,816	28 39 12 10	4,484 3,447 6,646 7,297 8,142 7,185	40 50 7 12	5,943 5,293 6,797 0,721 9,129 8,461	24 25 9 6	0,692 7,845 1,188 19,842 7,913 0,581	3 5 1	2,189 3,478 1,021 9,480 1,556 7,990	6 5 1	6,234 3,337 5,586 5,263 0,296 5,561	9 10 11 12 13 14
28 18,	,848 ,187 ,832 91.0	26,033 23,052 28,807 12.9	31 29	,267 ,648 ,238 30.4	24	2,812 4,346 5,645 -0.6	34 38	1,035 8,542 2,574 -13,6	22	1,566 5,370 7,468 -1.7	3	0,677 2,431 8,443 25.4	5	5,663 7,992 2,033 -21.3	15 16 17 18
	,922 ,019 803	4,396 3,449 5,727	3	,221 ,875 ,613	- 6	5,625 9,041 6,184	7	5,813 2,378 4,238	4	0,716 5,438 6,881	1	7,968 0,509 5,412	1	4,692 4,951 2,011	19 20 21
•	79.7 78.5 95.7	83.1 85.0 50.1		87.3 87.8 87.6		81.2 71.7 59.3		81.5 79.2 72.8		81.6 79.8 84.0		80.4 67.6 81.0		89.7 74.2 71.4	22 23 24
633 22 298 162	,773 ,913 ,860 ,435 ,768	179,540 173,100 6,440 219,827 511,556 -18.3	505 17 460 447	,625 ,820 ,805 ,500 ,141	2,32 40 1,70	3,391 5,674 0,717 8,767 2,334 38.5	6,71 10 4,92	0,442 7,342 3,100 0,773 8,335 38.6	18 2,58 3,08	2,286 0,927 1,359 7,588 8,495 290-8	2,45 1 71 1,03	9,494 4,488 5,006 7,995 9,358 243.9	1,08 4 56	32,704 96,659 14,045 31,050 24,590 103.7	25 26 27 28 29 30
10	2.20 0.59 8.64	6.90 9.54 17.76	1	2.69 4.55 5.29	73	9.75 6.99 8.90		22.66 14.12 9.88		45.64 11.48 18.44		60.71 22.14 36.54		25.02 9.67 12.48	31 32 33
903	5.30 ,093 3.70	8.30 185,250 6.71	530	4.53 ,170 2.19		12.00 8,831 8.68	7,36	27.81 3,965 23.31	13,85	55.92 8,427 49.37	3,67	75.50 3,978 70.40		27.89 4,811 33.16	34 35 36
Primary	Sup.		Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	1
207 35,018 27,321 0.78	2,371 236 0.10	92 21,423 10,490 0.49	134 35,084 19,365 0.55	73 576 110 0.19	424 193,842 64,817 0.33	14 21,999 1,254 0.06	226 244,081 164,669 0.67	13 50,157 7,372 0.15	507 177,764 198,237 1.12	19 2,083 1,455 0.70	155 32,555 79,636 2.45	(4) (4) (4) (4)	64 40,940 29,758 0.73	5 61 24 0.39	37 38 39 40
7,981 0.57 14,379 0.56 1,674 87,950	150 0.08 2,000 0.08 150	5,049 0.70 8,987 0.56 5,063 450	4,500 0.32 16,389 0.27 778 750		17,081 0.37 71,982 0.24 13,404 394,666	411 0.02 19,120 0.02 2,750 39,000	164,730 0.71 254,805 0.65 161,257 434,187	30,067 0.60 82,765 0.36 27,333 1,613,321	180,771 1.17 173,326 1.04 110,769 726,495	1,203 1.07 1,470 0.82 10,484 166,000	61,465 2.69 23,588 2.61 26,109 495,359		15,451 0.42 41,718 0.39 15,917 6,598		41 42 43 44 45 46
260 38,564 137,008 3.6 0.78 0.22	8 2,481 2,486 1.0 0.10	93 20,484 38,678 1.9 0.64 0.34	137 35,887 136,732 3.8 0.54	3 576 992 1.7 0.19 0.11	429 185,328 442,025 2.4 0.34 0.14	12 1,942 4,557 2.3 0.16 0.07	230 242,017 568,127 2.3 0.73 0.31	11 50,137 59,886 1.2 0.50 0.42	319 150,235 402,553 2.7 1.11 0.42	10 1,071 2,066 1.9 0.85 0.44	58 22,452 66,203 2.9 2.43 0.62	(1) (2) (3) (4) (4)	42 35,027 99,344 2.8 0.44 0.15	3 45 35 0.8 0.31 0.40	49 50
3 3,635 2,840 			4 2,475 1,960 2 465		12 97,846 21,988 26 2,450		7 51,313 36,761 3,062 5,738		21 88,486 51,187 606 5,333		12 16,051 9,638 265 2,523		(4) (4) (4) (4)		53 54 55 56 57

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

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

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

Table 18.—DRAINAGE BASIN—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

								the 17 we	stern States
				COLOR	ADO RIVER	(VI) —Continue	d		
.	ITEM			Upper Co	lorado Rive	r (VI-A) Contin	ued		
	(For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include			San Ju	an River (/I-Ab) — Continue	i		
	figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for each drainage basin)	Animas	River	Ia Plata	River	Chinle Creek	Intres tribute	ries	Intrastate tributaries in
	·	(3)	. 1	(4)	. 1	(10)	in Colorado		Utah
ŀ		(0)	·	(32)		(10)			
ŀ	IRRIGATED UNITS AND AREAS		ļ						
1 2 3 4 5 6 7	Irrigated units*	38 34 3 51 41	1,021 280 38,440 13,915 34,536 10,013 220 2,482 3,684 1,420 51,708 28,530 41,174 23,004 -25.7 -51.2		15 13 82 20 30	419 3,171 2,911 260	40, 4, 23, 18,	752 ,402 ,467 947 ,988 ,035 ,594	117 4,542 3,248 1,007 287
9	Irrigable area in enterprises		,118 ,639	31,5 38,8		10,308	70,	,711 ,625	7,784
11 12 13 14	1920 ³ .acres Excess of irrigable area over the area irrigated1940acres 1930acres 1920 ⁵ acres	73 11 10	,413 ,678 ,931 ,239	29,9 17,6 10,3 6,9	18 683 153	7,137	44,795 24,309 9,590		3,242
15 16 17 18	Area works were capable of supplying with water1940acres	56 47	,478 ,699 ,974 21.6	23,0 35,3 23,7 -34	188 165	5,336	75.6		7,654
19 20 21	Excess of area works were capable of supplying with water over area irrigated	4	3,038 ,991 ,800	9,105 2,165 6,858				7,645	
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water		86.4 91.2 85.8	80	0.4 0.6 6.8	59.4	86.1 75.1 78.6		59.3
	CAPITAL INVESTED TO JANUARY 1	_							,
25 26 27 28 29 30	Total investment in irrigation enterprises	893 85		211,7 202,4 9,6 172,7 142,6	102 359 714 588	579,495 579,495	4,490,927 4,461,732 29,195 367,987 241,935		157,867 157,170 697
31 32 33	Increase or decrease (-), 1330-1940percent Average investment based on area works were capable of supplying with water, per acre1940dollars 1930dollars	21.97 9.20		108.60	1	3.34 2.65 0.23	20.63		
34 35 36	Average investment per acre irrigated	980	25.42),244 19.56	315,	.22 571 .99	182.75 1,938,695 188.08	4,707	6.78 ,377 6.57	34.76 158,147 20.32
•	MAINTENANCE AND OPERATION, CHARGES	Primary	Sup.	Primary	Sup.	200100	Primary	Sup.	
	AND INDEBTEDNESS .		prises	Enterp			Enter	rises	
37 38 39 40	Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises1939aores Cost of maintenance and operation1939dollars Average cost, per acre irrigated1939dollars	89 35,945 25,788 0.72	5 312 112 0.36	57 13,875 7,155 0.52	1,002 559 0.56	3,171 6,625 2.09	125 46,036 45,687 0.99	3 457 730 1.60	13 4,542 3,560 0.79
41 42 43 44 45 46	Total annual charges (reported) ⁵	29,545 0.86 36,523 0.81 24,156 38,600		7,963 0.66 18,806 0.42 5,133	503 0.69 1,070 0.47	6,625 2.09 3,171 2.09	49,003 1.28 42,180 1.16 39,004 9,575	700 1.75 400 1.75 10,484 166,000	9,698 2.66 6,640 1.46 450 2,700
	WATER DELIVERED TO IRRIGATORS, 1939								
47 48 49 50 51 52	Enterprises reporting water delivered	63 29,958 102,540 3.4 0.77 0.23	3 312 1,300 4.2 0.35 0.08	16,437	(7) (7) (7) (7) (7)	3 3,171 4,470 1.4 2.09 1.48	96 42,977 108,520 2.5 1.19 0.47	(%) (%) (%) (%) (%)	1: 4,54: 5,03: 1. 2.2- 2.0:
	DRAINAGE OF IRRIGATED LAND								
53 54 55 56 57	Enterprises reporting land drained or needing drainage	3,017 3,017 3,017 251 700		3 472 257 90 10			(7) (7) (7)		

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

Data for the intrestate tributaries of the Little Colorado River and Independent basin (6), Salt Lake and Rito Creek (N. Mex.), are not shown separately but are included in the Little Colorado River total.

Data for the intrestate tributaries of the Virgin River are not shown separately but are included in the Virgin River total.

Total area in enterprises. Irrigable area for that year was not reported.

1940, 1930, 1920; AND IRRIGATED UNITS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued and Arkansas and Louisiana]

and Arkan	sas and Loui	Siana				COLORA	DO RIVER	(VI) Conti	nued							=
Upper Co.	Lorado River	(VI-A)C	ontinued							ver (VI-B) rial Valley)					
	murast		Intra- state				Little C River (Virgin	River	. Gi	lla River	(VI-Bb)		
Paria River	tributa in Colors	1	tribu- taries in Utah	Total		Direct	Total ¹	Direct	Kanab Creek	Total ²	Direct	Total		Direct		
(25)						(VI-B)		(VI-Ba)	(1)		(2)	(VI-Bb)		(1)+(14	' —	
44 891 767 57 67	426, 342, 4 79, 477, 438,	,336 ,387 ,210 ,915 ,262 ,423 ,427	610 29,486 22,547 2,157 4,782	18, 756, 687, 3, 66,	910 021 690	2,243 94,002 93,376 44 582 519,625 495,710 -81.9	1,751 18,460 15,579 156 2,725 19,336 17,036	767 8,736 6,908 141 1,687 7,249 10,260 20.5	135 2,298 2,170 128 322 450 613.7	1,871 29,353 25,006 671 3,676 22,367 35,350 31.1	1,088 14,604 12,239 523 1,842	11,8 577,4 523,3 2,2 51,8 509,5 401,4	68 68 58 42 42	3,5 211,1 189,1 112,1 112,1 83,1	014 074 017 023	1 2 3 4 5 6 7 8
1,738	640 735 141 163	,202 ,783 ,604 ,815 ,360	35,205 5,719	1,333, 576,	278	284,257 1,323,119 728,326 190,255 803,494 232,616	42,410 38,966 35,358 23,950 19,630 18,322	20,905 14,683 20,821 12,169 7,434 10,561	2,710 822 710 412 500 260	51,894 36,192 100,242 22,541 13,805 64,892	29,686 15,082	888,0 848,2 658,4 310,5 338,7	90 116 199 748	355, 280, 210, 143, 167,	014 531 773 881	9 10 11 12 13 14
1,706	582 547	,243 ,056 ,583	30,616	1,033,	057	159,562 672,117 551,506 -76.3	33,055 31,146 21,880 6.1	17,011 11,937 14,131 42.5	2,710 667 610 306.3	47,148 32,059 45,558 47.1	27,925	744,4 734,1 544,1	725	267, 226, 174,	814	15 16 17 18
815	94 105	,856 ,533 ,156	1,130	276,	147	65,560 152,492 55,796	14,595 11,810 4,844	8,275 4,688 3,871	412 345 160	17,795 9,672 10,208	13,321	166, 225, 142,	183	114	926 681 ,823	19 20 21
52.2		81.8 81.9 80.1	96.3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		58.9 77.3 89.9	55.8 62.1 77.9	51.4 60.7 72-6	84.8 48.3 73.8	62.3 69.8 77.6	52.3	6	7.6 9.4 3.8		79.1 19.4 17.9	22 23 24
9,208 8,985 223	15,471 15,200 270 13,177 13,510),625),704 7,669	401,905 988,365 13,540	92,610 91,279 1,330	,870 ,150	16,239,067 15,648,951 590,136 29,994,383 22,214,932 -45.9	2,385,201 2,378,926 6,275 1,452,187 460,206 64.2	1,135,412 1,130,237 5,175 465,060 146,913 144.1	71,161 70,381 800 13,540 20,500 425.7		66,467	69,360, 68,821, 536, 62,542, 25,236,	655 548 801	14,262 2,888	,808 ,263 ,958	25 26 27 28 29 30
5.40	:	29.68 22.60 24.67	13.13	8	9.65	101.77 44.63 40.28	72.16 46.63 21.03	66.75 38.96 10.40	26.27 20.30 33.61	28.85 22.11 35.62		85	3.18 5.12 5.39	6	1.39 2.88 6.58	31 32 33
10.33 9,368		36.28 0,490	13.63 411,505	12 117,230	2.35 ,591	172.75 26,586,544	1	129.97 1,528,525	30.98 71,181		792,447	120.11 82,321,121 92.70		33,741	2.87 ,026 4.86	34 35 36
5.39	Primary	28.67 Sup.	11.69	Primary	7.93 Sup.	93.53	76.85	73.12	26.27	28.69	26.69	Primary	Sup.	Primary Enterpr	Sup.	
11 767 1,105	413,783 293,986	91 28,273 12,643 0.45	37 29,471 11,916 0.40	2,068 731,795 3,530,651 4.82	135 15,098 52,747 3.49		77 17,242 24,341 1.41		20 2,105 2,390 1.13		14,449 28,363	1,182 558,158 2,888,257 5.17	134 15,068 52,737 3.50	377 206,874 848,301 4.10	118 13,928 47,325 3.40	37 38 39 40
420 0.96 577 0.73 475	261,860 1.05 262,677 0.96	12,892 0.83 15,995 0.81 6,633 167,212	15,884 0.67 23,684 0.67 14,662 36,900	3,039,582 5.12 739,339 4.11 2,106,289	450 3.00 250 1.80 400 2,500	309,040 3.32 102,332 3.02 299,522		17,750 2.65 12,617 1.41 12,940 103,904	3,701 2.34 1,680 2.20 3,626	24,609 1.99	2.24 14,009 2.05	2,606,648 5.76 577,680 4.51 1,712,427 36,854,270	450 3.00 250 1.80 400 2,500	768,463 4.57 220,643 3.48 659,598 14,538,403		41 42 43 44 45 46
555 2,24 4.1 1.5	1,516 3 401,338 2,049,883 5.1 4 0.84	88 27,180 47,593 1.8	25,454 59,863 2.4 0.35	2,008 718,234 2,630,180 3.7 5.61 1.53	126 72,536 80,680 1.1 2.90 2.61	93,765 585,613 6.2 3.29	14,705 32,640 2.2	8,536 18,578 2.2 2.27	6,184 3.3 2.17	24,301 97,335 4.0 2.15	10,907 40,519 3.7 2.33	1,145 552,873 1,778,084 3.2 6.12 1.90	125 72,506 80,530 1.1. 2.90 2.62	371 206,300 744,027 3.6 4.87 1.35	109 13,923 20,474 1.5 2.79 1.81	50 51
	138,494 88,517 19,565		(⁷) (⁷) (⁷)	29 456,400 285,781 105,317 119,201		57,465 56,010	6,253 1,012	6,253 1,012 62		4,900 3,852 2,520	5 (7)	7 245,003 219,972 45,706 1,320		(7) (7) (7) (7)	******	53 54 55 56 56

A Percent not shown when more than 1,000.

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

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

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

TABLE 18.—DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

=			.	COL	DRADO RIV	ER (VI)	Continued	[For th	e 17 western States	
	ITEM					iver (VI-B)	-Continued			
	(For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include		 			VI-Bb) Cor				
	figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for	Sen Fran-	Introc			Indeper	dent basins	s in Gila Ri	ver	
	each drainage basin)	cisco and Blue Rivers (2)+(3)	Intras tributa in Arizo	ries	Tot	al	Intrasta in New (Animas (1)	Mexico Valley)	Intrastate basin in Arizona (Sulphur Springs) (19)	
1	IRRIGATED UNITS AND AREAS Irrigated units*	149		,026		101		11	90	
2 3 4 5 6 7 8	Area irrigated	2,437 2,195 34 208 2,223 3,591 9.6	328 1 28 395 314	,159 ,977 ,129 ,053 ,079 ,006	2,:	958 322 78 258		343 295 2 46	4,615 2,327 76 2,212	
9 10 11 12 13 14	Irrigable area in enterprises	9,729 2,907 11,134 7,292 684 7,543	564 435 119 169	,843 ,777 ,828 ,684 ,698 ,822	44,i			647 304	44,161 39,546	
15 16 17 18	Area works were capable of supplying with water1940acres 1930acres 1920acres Increase or decrease (-), 1830-1840percent	9,687 2,462 3,859 293.5	460 505 365	,205 ,157 ,403 -8.9	6,	572		642	6,030	
19 20 21	Excess of area works were capable of supplying with water over area irrigated	7,250 239 268	102 110	,046 ,078 ,397		714		299	1,415	
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water1339percent 1929percent 1919percent	25.2 90.3 93.1		77.8 78.2 85.9	7	4.3		3.4	76.5	
	CAPITAL INVESTED TO JANUARY 1						****			
25 26 27 28 29 30	Total investment in irrigation enterprises	46,433 43,620 2,813 41,964 25,224 10.6	47,376 46,915 460 48,237 22,306	6,662 633 7,304	138, 136, 1,		22,282 21,130 1,152		116,122 115,435 687	
31 32 33	Average investment based on area works were capable of supplying with water, per acre1940dollars 1930dollars 1920dollars	4.79 17.04 6.54	. 9	02.95 95.49 31.05	20	.74	34	.71	19.26	
34 35 36	Average investment per acre irrigated	19.05 47,183 4.85	48,387	32.28 7,933 01.26	144,	979 1.24	24,	1.96 ,582 7.99	25.16 120,397 2.73	
	MAINTENANCE AND OPERATION, CHARGES		Primary -	Sup.	Primary	Sup.	Primary	Sup.		
	AND INDEBTEDNESS		Enterp	rises	Enter	prises	Enter	prises		
37 38 39 40	Enterprises reporting maintenance and operation .1939number	72 2,328 3,641 1.56	644 344,380 2,018,206 5.86	9 535 3,390 6.34	89 4,576 18,109 3.96	7 605 2,022 3,34	9 340 2,852 8.39	7 605 2,022 3.34	80 4,236 15,257 3.60	
41 42 43 44 45 46	Total annual charges (reported) 4 5	1	1,837,204 6.47 358,106 5.16 1,052,829 24,315,867	450 3.00 250 1.80 400 2,500						
	WATER DELIVERED TO IRRIGATORS, 1939		1							
47 48 49 50 51 52	Enterprises reporting water delivered	78 2,294 6,364 2.8 1.51 0.55	604 341,222 1,022,581 3.0 6.91 2.31	9 58,578 59,570 1.0 5.04 4.96	92 3,057 5,112 1.7 6.39 3.82	7 605 486 0.8 3.34 4.16	9 312 831 2.7 9.20 3.45	7 605 486 0.8 3.34 4.16	83 2,745 4,281 1.0 6.01 3.87	
	DRAINAGE OF IRRIGATED LAND									
53 54 55 56 57	Enterprises reporting land drained or needing drainage		6 244,988 219,957 45,691 1,320							

[&]quot;Schedules called for "Number of farms;" see explanation in text.

1930 and 1920 data are designated as "Whitewater Draw and tributaries" and do not include Vamori Wash.

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

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

1940, 1930, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDESTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued and Arteness and Louisiana

and	Arkansas	and Louisia		OLOBADO F	RIVER (VI)-	Continued					•	REAT BASI	N (VIII)		=
			Lower Col	orado Rive	r (VI-B)—Cor	ntinued				Gulf of California			Bonneville La	ce (VIII-A)	
t i	trastate ributary n Nevada as Vegas Valley)	Intrastate tributary in Arizona (Williams River)	(Excl		Independen Intrastate basin in Arizona (Red Lake)		ns	Intrastate basin in California (Whitewater River)	Intrastate tributary in California (Imperial Valley)	(VII) (exclusive of Colorado River) Whitewater Draw and Vamori Wash, Arizona	Tota		Tota		
_	(7)	(8)			(11)		ua.	(12)	(VI-C)	(1)+(2)	(VII	I)	(VIII	-A)	
	111 2,585 1,170 18 1,379	82 1,714 1,213 66 435	31, 25,		4 40 27 13	12,0 7,4	29 37	799 18,981 17,683 445 853	4,550 416,939 404,923 4,000 8,016	405 8,498 4,573 528 3,397 3,301 5,871 157.4	2,073 1,548 29	,788 ,375 ,564 ,033	1,080 944 24), 423 , 238 , 399 , 175 , 664	1 2 3 4 5 6 7
	3,492 927	2,425	57, 26,		42			43,472 24,491	526,817 109,878	14,261 5,570 16,623 5,763 2,269 10,752		,651 ,450 ,884 ,618	18	8,818	9 10 11 12 13 14
	3,169	2,346	40,		42	13,4		27,127	526,632	13,462 4,753 9,950 183.2		,492		2,473	15 16 17 18
:	604	632	9,	613	2	1,	465 	8,146	109,693	4,964 1,452 4,079	500),459 /,662			20 21
	80.9	73.1	7	6.4	95.2	8	9.1	70.0	79.2	63.1 69.5 59.0		87.1 80.3 80.5		89.8	22 23 24
	120,699 119,555 1,144	52,948 52,900 48	3,020, 3,004, 16,	112	2,300 2,300	137, 121, 16,	935 460 475	2,880,352 2,880,352	16,742,110 16,740,410 1,700	226,627 226,622 5 230,606 299,368 -1.7	59,69 56,19 3,51 67,57 62,20	6,777 2,088 9,074	35,09	01,770 09,945 01,825	25 26 27 28 29 30
	38.09	22.57	74	1.28	54.76	10		106.18	31.79	18.83 48.52 30.09		25.07 26.64 22.63		31.02	31 32 33
ľ	47.06 129,789	30.89 59,608	97 3,914	7.28 ,637	57.50 3,650	11 138,	.47 085	151.75 3,172,902	40.15 16,777,575	26.67 257,503	61,70	28.79 9,956	38,21	34.53 57,756	34 35
	37.16	24.58	. 5	7.22	86.90		.58	72.99	81.85	18.06		24.84	Thelesany	30.08 Sup.	36
ſ			Primary Enterp	Sup. rises		Primary Enter	Sup. orises			,	Primary Enter	Sup. prises	Primary Enter	prises	1
	99 2,246 3,391 1.51	68 1,504 5,046 3.36	215,299	(⁵) (³) (³)	40 500 12.50	25 11,537 4,340 0.38	(³) (³) (⁵)	343 16,562 210,459 12.71	22 416,453 1,279,705 3.07		3,941 1,957,973 1,600,266 0.82	142 360,457 118,396 0.33	1,708 1,043,166 769,649 0.74	127 275,210 78,703 0.29	39
			38,430 3.91 10,870 3.54 28,204 68,755			2,712 0.46 6,018 0.45 2,709	**************************************	35,718 9.04 4,852 7.36 25,495 68,755	4.05 562,000 3.00	0.22 2,719 0.22	1,306,994 1.13 1,228,342 1.07 1,154,491 5,934,982	201,239 0.57 382,071 0.53 260,086 10,564,468	973,059 1.04 985,092 0.99 999,743 4,012,844	112,855 0.42 279,700 0.40 181,017 7,823,862	42 43 44 45
	56 1,226 7,604 6.2 2,63	1,434 3,975 2.6	28,037 118,745 4.2 8.77	(5) (5) (7) (7) (7) (3) (3)	3 25 51 2.0 8.00 3.92	23,863 2.5 0.41	(5) (5) (5) (5) (5) (5) (5)	400 18,422 94,831 5.1 13.44 2.61	416,937 1,169,960 2.6 4.06	2,555 5,686 2.2 7.50	3,933 1,821,964 4,644,167 2.5 1.13 0.44	155 296,139 513,971 1.7 0.66 0.38	1.02	141 211,214 221,774 1.0 0.50 0.47	48 49 50 51
	*********	(3)	17,958 3,460 994			(³) (³) (⁵) (³)		416 350	525,000 416,000 200,000	0	251 562,861 471,434 188,450 53,514		209 300,720 275,135 85,420 32,706		54 55 56

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

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

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

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

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

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

TABLE 18-DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

=			DELLAC	EAT BASIN (VIII	Continued	For the 17 w	estem States
		-					
	ITEM		Bout	eville Lake (VIII			
	(For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include	· · · · · · · · · · · · · · · · · · ·		Great Salt	Lake	·	
1	figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for		i\	•		Bear Riv	/er
Ì	each drainage basin)	Total	1	Direc	t l		
1			i l			Total	.
ļ				. (1)			
ŀ	IRRIGATED UNITS AND AREAS						
1 1	rrigated units*1939number	91.	023	1,:	140	9.8	526
2 4	rea irrigated1939acres	773,	745	25,	382	403,6 347,6	305
3	(a) Cropland harvested	677, 11,	338	21,9 1,9		3,4	147
5 6	(c) Pasture	84, 801,	531	2,0	064	52,4 419,4	409
7	1919acres	848,	639			480,	152 3.8
8	Increase or decrease (-), 1929-1939percent	•	-3.5				4
	Irrigable area in enterprises1940acres	892,		28,	227	470, 490,	
10 11	1930acres 1920 ³ acres	953, 1,249,				685,	746
	Excess of irrigable area over the area irrigated1940acres	118, 151,	544	2,	945	66, 71,	
14	1920 ² . acres	401,		,		205,	
18	Area works were capable of supplying with water1940acres	844,	.413	27,	153	444,	479
15 16	1930acres	879	,599			459, 547,	724
17 18	Increase or decrease (-), 1930-1940percent		,919 -4.0			5±7 ,	
19	Excess of area works were capable of supplying with water over area irrigated	ንስ	,668	1.	871	40.	874
20	1930acres	77	,887				315 221
21	1920acres	141	,280			51,	
22	Proportion which area irrigated is of area works			,	13.1		8,00
23	were capable of supplying with water1939percent		91.6 91.1				91.2
24	1919percent		85.7				37.7
	CAPITAL INVESTED TO JANUARY 1		1		ľ		
25	Total investment in irrigation enterprises1940dollars	28,927		2,409		10,068	
26 27	(a) Cost of irrigation works and equipment1940dollars (b) Investment in water rights (reported)1940,dollars	27,363 1,563		2,405	,343 ,330	8,924 1,143	986
28	Total investment in irrigation enterprises1930dollars	21,884	,330			7,493 7,438	,444 ,075
29 30	Increase or decrease (-), 1930-1940percent	18,109	32.2				34.4
31	Average investment based on area works were capable of supplying with water, per acre1910dollars	а	4.26	8	8.74		2.65
32	1930dollars 1920dollars		4.88 18.29				6.30 3.58
33	1820	-		1		•	4.05
34 35	Average investment per acre irrigated1939dollars Estimated final investment in existing enterprises1940dollars	29,670	37.39 3.639	2,572	5.31 ,882	10,356	4.95 ,410
36	Average investment based on estimated final	•		,	1.15	. 2	2.02
	investment and irrigable area, per acre1940dollars	Primary	33.25 Supplemental	Primary	Supplemental	Primary	Supplemental
	MAINTENANCE AND OPERATION, CHARGES	Enterp		Enter		Enterp	
	AND INDEBTEDNESS	4 455	5.6	110	13	483	34
37 38	Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises1939acres	1,155 746,661	86 156,953	23,036	6,235	389,144	11,406
39 40	Cost of maintenance and operation	564,317 0.76	59,735 0.38	17,087	8,420 1.35	235,441 0.61	6,492 0.57
410			·	1	0.100	008 807	5,537
41 42	Total annual charges (reported) 4 5	734,692 1.10	95,404 0.62	22,480 1.17	2,190 0.37	285,537 0.86	0.56
43	Area against which charges were assessed1939acres	696,567 1.05	161,932 0.59	19,816 1.13	9,349 0.23	347,108 0.82	9 ,86 4 0 .5 6
44 45	Total charges collected	777,827	165,995		7,296 1,802,475	263,628 217,415	6,387 923,000
46	Indebtedness to December 31 (reported) 5 1939dollars	3,600,626	7,437,410	21,000	2,500,410	22,122	
	WATER DELIVERED TO			[]			
	IRRIGATORS, 1939			99	16	494	36
47 48	Enterprises reporting water delivered1939number Area irrigated by these enterprises1939acres	1,215 684,526	103 157,328	17,557	6,345	357,183	11,479
49	Water delivered1939acre-feet	1,689,115	195,031 1.2		11,835 1.9	814,950 2.3	17,951 1.6
50 51	Average cost of water per acre irrigated1939dollars	1.04	0.62 0.50	1.20	0.41 0.22	0.81 0.35	0.57 0.37
52	Average cost of water per acre-foot delivered1939dollars	0.42	0.00				
	DRAINAGE OF IRRIGATED LAND			11			
20	The transportance appropriate land due took on washing			1			
53	drainage1939number	152		10 352		39 136,206	
54 55	Irrigated area in these enterprises1939acres	223,924		324		126,584 18,048	
56 57	Area for which drains have been installed1839acres	47,334		99 67		26,185	
91	management of the property of the party of t	1		.11	L	<u> </u>	<u></u>

^{*}Schedules called for *Number of farms," see explanation in text.

1Data for the intrastate tributaries of the Great Salt Lake Basin are not shown separately but are included in the Great Salt Lake Basin total.

2Data for the intrastate tributaries of the Bear River are not shown separately but are included in the Bear River total.

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

1940, 1930, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

and Arkensas and Louisiana] GREAT BASIN (VIII) - Continued Bonneville Lake (VIII-A)-Continued Independent basins Great Salt Lake-Continued Intrastate Bear River-Continued tributary Deep Creek (Tooele County, Utah) (22) Intrastate Deep Creek (Box Elder basin in Nevada (Thousand Snake basins Utah (Sevier River) Total Valley County, Utah) Malad River litah Direct Spring Creek)
(21) (ż) (5) (14) + (18)(19) 1,985 82 2,700 1,713 7,415 6,099 336,336 512 1,718 48,313 42,410 1,800 4,103 13,999 6,222 2,010 2.775 71,924 57,948 3,854 10,122 15,504 14,551 237,569 4.137 208,575 8,983 20,011 2,715 4,133 2,468 44 291,807 3,346 41,183 206,221 60 188 946 258,929 325,718 2,147 1,983 252,073 17,868 62.9 25.8 63.1 -8.2 2,824 2,362 4,326 124 66,467 17,340 277,779 101,988 6,098 20,377 395,049 336,671 630,484 40,210 11,215 45,339 4,873 1,695 250,808 370,284 58,713 44,587 118,211 30,064 1,961 2,343 15 62,624 4.893 2.824 91,232 4,696 17,155 270,066 374.231 2,172 3,446 30.0 11,170 18,317 53.6 303,757 402,387 -11.1 226,457 295,815 65.3 124 1,651 1,650 449 37,895 20,236 43,742 32,497 19,308 44,828 76,669 ************ 95.6 88.1 88.0 90.4 23 85.2 80.9 25 26 27 1,905,959 25,322 22,322 3,000 6,092,351 5,603,973 488,378 2,382,385 223,037 1,679,525 228,434 7,936,443 111,197 17,785 2,131,981 250,404 22,757 3,150 6,848,909 1,087,534 4,267,038 193,559 29,478 113,336 12,277 6,793,638 9,509,836 -10.3 29 30 8,844 106.3 4,533.194 350,272 96.8 31 8.97 5.65 2.57 7.97 5.51 26.11 13.00 10.15 22.5A 21.21 23.63 34 35 39.45 1,947,109 106.74 6.26 26,157 9.38 14.39 226,812 25.64 296,215 140,778 38,322 2,448,581 6,198,536 8,209,353 31.99 29,29 4.29 24.01 Sup. Primary Primary Sup. Primary Sup. Primary Sup. Primary Sup. Enterprises Enterprises Enterprises Enterprises Enterprises 37 38 39 12 212 2,775 2,887 24 111,432 47,031 48,652 1.03 12,128 6,845 6.825 6,825 3,083 4.102 1,720 171 36 0.21 12,838 10,296 0.80 67,756 63,288 3,083 5,371 1,804 228,749 3,221 1,683 142,044 15,885 0.14 1.04 40 197,038 0.56 0.45 0.93 0.34 1,439 1,262 0.30 4,240 27,897 0.76 46,048 0.61 32,504 0.72 56,162 0.58 29,075 16,021 1,439 0.24 5,909 0.24 3.095 16,012 9,071 0.83 10,975 205,863 238,571 ก์. ลา 0.53 474 0.94 232,363 0.89 5,909 0.24 2,476 0.14 5,400 0.87 289,048 111,859 0.14 12,546 4,021 0.30 0.21 855 24,995 13,755 0.83 0.83 2,476 2,065 3,100 2,266 218,666 214,713 11,363 1,636 192,841 2,065 396,197 47 48 49 50 35 9,419 204 2,460 13,266 94 14,485 32,755 2.3 0.89 0.39 6,778 3,141 0.5 267 43,917 96,600 4,137 12,648 3.1 2,390 7,661 3.2 47,108 23,602 0.5 62,323 150,125 2.4 6,778 3,141 209,463 490,334 5,409 7,622 1.4 0.33 0.23 206 226 19,950 305.828 5.4 675,663 0.5 $\frac{1.15}{0.21}$ 1.1 0.21 0.19 2.3 1.27 0.61 0.86 0.96 0.91 0.07 2 57 113,501 104,040 60,062 51,211 38,096 (6) (6) (6)

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

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

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

TABLE 18.-DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

				na v macr			[Fo	r the 17 wes	
			***	GREA'	r basın (VI		req		
	ITEM		·		Lahontan Lak		-1- (1:22 p.)		
	(For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include					Independent	sin (VIII-Ba) basins)		
	figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for	Tots	.		Cowhead	Quinn	River		
	each drainage basin)	1008	"	Total	and Warner	- 40	_	Surprise	Snoke
		(VIII	. p/	(VIII-Ba)	Lakes (9)	Total ²	Direct (13)	Valley (16)	Creek (18)
- 1		(4111	===-	(111-104)	(8)		(13)	(10)	(10)
	IRRIGATED UNITS AND AREAS					ii			
1 2	Irrigated units*		, 182 , 489	772 235,918	62 34,668	115 25,896	97 18,777	186 34,454	1,099
3	(a) Cropland harvested1939acres (b) Crop failure1939acres	604	,389 ,200	158, 128 897	20,272	16,870 228	12,896	27,482 50	819 20
5	(c) Pasture	380	,900	76,893	14,386	8,798 8,518	5,788	6,922	260
7 8	1019acres Increase or decrease (-), 1929-1939percent					9,935 204.0			
						l!			1
9 10	Irrigable area in enterprises	1,232	,555	308,106	40,775	28,841 11,060	21,638	47,723	1,232
11 12	19204acres Excess of irrigable area over the area irrigated1940acres	242	,066	72,188	6,107	19,635 2,945	2,861	13,269	133
13 14	1930acres 1920 ⁴ acres	,		*********		2,542 9,700			*********
15	Area works were capable of supplying with water1940acres	1,175	,460	304,075	40, 115	28,013	20,814	47,311	1,232
16 17	1930acres 1920acres					10,927 13,452			
18 19	Increase or decrease (-), 1930-1940percent Excess of area works were capable of supplying	••••				156.4			
20	with water over area irrigated	184	,971	68,157	5,447	2,117 2,409	2,037	12,857	193
21	1920acres	•••••				3,517			
2:2	Proportion which area irrigated is of area works							70.5	89.2
23	were capable of supplying with water1939percent 1929percent		84.3	77.6	86.4	92.4 78.0	90.2	72.8	
24	1919percent.,	***********		********		73.9		*********	
	CAPITAL INVESTED TO JANUARY 1				440.000	22 424	44.450	*** 000	00.074
25 26	Total investment in irrigation enterprises1940dollars (a) Cost of irrigation works and equipment1940dollars	22,297 21,086	3,832	1,733,612 1,590,738	119,928 114,525	63,421 62,056	41,150 39,800	155,008 92,711	20,974 19,872
27 28	(b) Investment in water rights (reported)1940dollars Total investment in irrigation enterprises1930dollars	1,210),263	142,874	5,403	1,365 68,858	1,350	62,297	1,102
29 30	1920dollars Increase or decrease (-), 1930-1940percent					50,548 -7.9			*********
31	Average investment based on area works were capable of supplying with water, per acre1940dollars	,	18.97	5.70	2.99	2.26	1.98	3.28	17.02
32 33	1930dollars 1920dollars					6.30 3.76			
34	Average investment per acre irrigated1809dollars		22.51	7.35	3,46	2.45	2.19	4.50	19.08
35 36	Estimated finel investment in existing enterprises1940dollars Average investment based on estimated final	23,452		1,762,077	126,468	82, 121	59,850	155,028	20,974
	investment and irrigable area, per acre1940dollars		19.03	5.78	3.10	2.85	2.77	3.25	17.02
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterp	Sup. orises					-	
37		2,233	15	530	45	47	29	174	9
38	Area irrigated in these enterprises1939acres	914,807 830,617	85,247 39,693	217,269	32,033 6,310	23,041 4,968	15,922	32,183 10,030	
40		0.91	0.47	0.27	0.20	0.22		0.31	
41		335,935	88,384					1,348 0.51	252 0.51
42 43	Area against which charges were assessed1939acres	243,250	1.05 102,371	8,989				2,620	490
44 45	Total charges collected ⁵ 1939dollars	1.38 154,748	0.86 79,069	1,662				0.51	*****
46	Indebtedness to December 31 (reported)	1,922,138	2,740,608	359,500			 		***********
	WATER DELIVERED TO IRRIGATORS, 1939								
47	Enterprises reporting water delivered	2,172	14		40	48			
48 48	Water delivered	865,652 2,314,593	84,925 292,197	421,395		45,667	32,282	40,679	2,353
50 50	Average cost of water per acre irrigated1939dollars	2.7 1.26	3.4 1.05	0.29	0.47	0.21	0.22	0.31	0.58
52	Average cost of water per acre-foot delivered1939,dollars	0.47	0.30	0.13	0.24	0.18	0.13	0.25	0.27
	DRAINAGE OF IRRIGATED LAND	1				1	1		
5					` .				
54	drainage	262,141		(7)	(7)				
58 58	Irrigated area in these enterprises	196,299 103,030			(7)				
57	Additional area needing drainage		<u> </u>	1	1	1	1	1	

^{*}Schedules called for "Number of farms," see explanation in text.

1Data for 1930 and 1920 include a portion of the Newland Project, U. S. Bureau of Reclamation, therefore, percent of increase or decrease is not shown.

2Data for the intrastate tributaries of the Quinn River are not shown separately but are included in the Quinn River total.

3Data for the intrastate tributaries of the Truckee River (upper) are not shown separately but are included in the Truckee River (upper) total.

CENSUS OF IRRIGATION—UNITED STATES SUMMARY

37

1940, 1930, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

4. 20.	nd Arkansas	and Louisians		, : : : : :		GREAT R	ASIN (VI)T	-Continued							==
Strictor State State CTL Calc Company CTL Calc CTL Calc CTL													·		
Tablewister Part	Northern G	reat Basin (VI	II-Ba) Con.				·····	·		I-Bb)					
Total		Intrastate	Intrastate					Ps	ramid Lake						
	basins	Nevada	California	Tot:	al I			İ	T	ruckee Rive	r (upper)				
190, 255 0, 190		Desert)	Plains)			Tot	tal		Total	3	Dire	ct	• • •	, l	
199, 950		(12)	(17)	(VIII-	-Bb)		· · · · · · · · · · · · · · · · · · ·	* (1)			(2,		(0)		
199, 950															
4. 20. 20. 20. 20. 20. 20. 20. 20. 20. 20	129,234			314	1.994		,426	2,924	46,	502		,242	43,	099	1 2 3
44.775 1.127 1.360 117,344 9.3,500 1.77,405 1.3,500 1.3,500 1.3,400 1.3,500 1.	294			174	1,994 2,757		473		·	473		131		168	4
	314,686	1,187	1,285	137	7,243	18	,352	1,736	39,	028	30	,417	74,	797	5 6 7
1888, 985	302,864 -58.9								20,	002 9.2	14	6,0 6,0			8
\$48,805	175, 187	10,318	4.030	40:	1.136	57,406		5.488	51.	918	32	2,903			g
114,702	483,802								47	770	36	3,971	233	668	10 11
114,702	45,953			80	3,142	7,980			5,	416		661			12 13
\$70,038							***************************************		14,	657	1:	3,434	158	, 229	14
104,977	174,702										3:	2,903 1,625	44 124	, 153 , 239	15 16
## ## ## ## ## ## ## ## ## ## ## ## ##	446,777			************					20	920	11	5,436			17 18
1,283,417		, , , , , , , , , , , , , , , , , , , ,	050	4	0 967								1	.054	19
74.0 79.5 94.1 88.7 91.4 66.6 93.8 93.0 97.6 97.2 2 95.5 94.6 97.2 2 95.5 94.6 97.2 2 95.5 94.6 97.2 2 95.5 94.6 95.6 94.6 97.2 2 95.5 94.6 95.6 94.6 97.2 2 95.6 95.6 95.6 95.6 95.6 95.6 95.6 95.6	55,522		1						4	396					20 21
85.0	140,013	************			,					- /					
1,282,417 55,064 32,500 11,521,575 2,817,689 65,086 2,722,092 2,018,239 440,572 1,212,105 55,669 32,500 11,743,244 3,791,035 65,086 2,953 1,989,393 440,572 3,807 70,312 2,905 2,905 3,905 1,989,393 440,572 3,807 70,312 2,905 3,905 3,905 3,905 3,905 3,905 3,905 3,905 3,905 3,905 3,905 3,905 3,905 3,907 48,907 48,907		79.5			86.7		91.4								22
1.212.1.00		***********													24
1.212.1.00														1	
T0, 131			32,800	11,82	1,575			95,926			2,01	3,239 3,362	440 436	,872 -885	25 26
1,00,0074 1,000,0074 1,000,0074 1,000,0074 1,000,0075 1,00	70,312		32,800						26	,933	1	3,877	3	,987	27
7.34 6.81 8.14 32.54 52.09 22.57 54.61 61.28 5.99 55.09 55.00 32.40 31.43 77.20 32.61 54.61 1.60 5.83 10.23 55.04 32.60 55.00	5,799,574							4,414444	594	187		5,900	8,064	685	29
15.88						i .	,							9.99	31
8.62 8.67 8.93 7.53 7.53 7.701 32.81 55.54 8.2 10.23 10.23 1.001,577 63,109 32,600 12,391,641 3.175,029 321,176 2,855,853 2,150,660 510,302 1.001,	16.83	6.81	8.14		32.04				4	1.79		45,42	5	8.04	32
1,901,577 53,109 32,900 12,931,841 30.89 55.36 55.00 55.06 510,302															34
Primary Sup. Prim															35
Enterprises	7.43	6,12	8.14	,	30.89		35.36	58.52							36
217															
217 344 499 9 45,294 1,583 43,701 30,325 39,326 2,1533 15,466 3,362 295,903 67,507 44,482 3,128 41,385 34,396 10,719 1,457 0.28 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.9							T				41		111	n n	37
\$\begin{array}{c c c c c c c c c c c c c c c c c c c	120,331	5,446	3,362	295,903	67,507	45,264		1,563	43,701		30,336		39,796	2,913	38
212 31 9 493 9 80 13,606 23,406,179 1.226,520 1,588,679 1.226,520 1.236,307 2.31,508 1.23,240 1,066,179 1.23,240 1.23,240 1.23,240 1.23,240 1.23,240 1.23,240 1.23,24											1.13	*******			
0.35	2,055			293,927	59,085										
0.55	0.35			1.56	0.88	35,275		655	34,620		25,666		17,814	2,000	43
359,500	0.35			1.44	0.72	31,508			31,508		23,906		1,494	1,940	45 46
212 31 9 493 9 80 13 67 44 99 3 112,337 6,265 3,672 301,689 67,507 48,484 2,924 45,650 31,630 38,509 2,313 293,432 19,414 3,475 899,567 213,175 202,573 8,715 193,688 162,710 168,602 2,378 2.6 2.9 0.9 3.0 3.2 4.2 3.0 4.3 5.1 4.4 1.0 0.26 1.06 0.09 1.15 0.88 1.38 2.00 1.35 1.17 0.27 1.13 0.10 0.36 0.09 0.33 0.28 0.33 0.67 0.32 0.23 0.06 1.10 204,982 33,666 33,666 24,904 (7) 160,624 30,562 30,562 24,806 (7) 82,958 12,512 12,512 8,113 (7)	359,500			1,226,620	1,536,679	129,240	1,066,179		129,240	1,000,179	14,795	1,000,178			1
212 31 9 493 9 80 13 67 44 99 3 112,337 6,265 3,672 301,888 67,507 43,484 2,924 45,560 31,630 38,503 2,313 293,432 18,414 3,475 899,567 202,573 8,715 193,588 192,710 163,602 2,378 2.6 2.9 0.9 3.0 3.2 4.2 3.0 4.3 5.1 4.4 1.0 0.26 1.05 0.09 1.15 0.88 1.38 2.00 1.35 1.17 0.27 1.13 0.10 0.36 0.09 0.39 0.28 0.33 0.67 0.32 0.23 0.08 1.10 0.86 0.09 0.39 0.28 0.33 0.67 0.32 0.23 0.08 1.10 0.10 0.36 0.09 0.39 0.28 0.33 0.67 0.32 0.23 0.08 1.10 0.22 0.00 0.33 0.60 33,666 24,904 (7) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00												100			
112,337			9	. 493	9									3	
2.6 2.9 0.9 3.0 3.2 4.2 3.0 4.3 0.1 0.2 1.15 0.27 1.13 0.20 1.06 0.09 1.35 0.38 0.67 0.32 0.23 0.27 1.13 0.10 0.36 0.09 0.33 0.28 0.33 0.67 0.32 0.23 0.06 1.10 0.10 0.20 0.23 0.00 1.10 0.27 1.13 0.00 1.10 0.10 0.26 0.32 0.32 0.23 0.06 1.10 0.10 0.27 0.32 0.30 0.23 0.00 1.10 0.10 0.20 0.32 0.30 0.23 0.00 1.10 0.10 0.20 0.32 0.30 0.23 0.00 1.10 0.10 0.32 0.30 0.30 0.30 0.30 0.30 0.23 0.00 1.10 0.10 0.32 0.33 0.30 0.30 0.30 0.30 0.23 0.00 1.10 0.10 0.32 0.33 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 <td< td=""><td>112,337 293,432</td><td></td><td>3,672 3,475</td><td>301,688 899,567</td><td></td><td></td><td></td><td>8,715</td><td>193,658</td><td></td><td>162,710</td><td></td><td>168,602</td><td>2,378</td><td>4.8</td></td<>	112,337 293,432		3,672 3,475	301,688 899,567				8,715	193,658		162,710		168,602	2,378	4.8
		2.9	0.9	3.0 1.15	0.89	1.38		2.00	1.35		1.17		0.27	1.13	51
25 8 8 6 224,904 7 204,982 33,666 33,666 24,904 7 160,624 30,562 30,562 24,806 7 82,958 12,512 12,512 8,113 7	0.10	0.36	0.09	0.39	0,28	0.33		0.67	0.32		0.23	*********	0.00	1.10	1 ~
25 8 8 6 224,904 7 204,982 33,666 33,666 24,904 7 160,624 30,562 30,562 24,806 7 82,958 12,512 12,512 8,113 7								H							1.
204,982 33,000 30,562 24,806 (7)	-		*. · · ·			_					R		2	,	59
14.000 170 12.000 1.000 170	*********			204,982		33,666			33,666		24,904		(7)		53 54 55
				82,958		12,512			12,512		8,113		(7)		56 57

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

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

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

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

TABLE 18.-DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

=		i =====		GREAT BA	SIN (VIII)-	Continued	Fron mo 1.	restern States
					ake (VIII-B)			
	ITEM				Slope (VIII-B			
	(For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include	<u> </u>			Walker Lake			
1	figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for			Τ	102200	Walker	River	
1	each drainage basin)						T	
		10	tal	Direct	Tot	al	Dire	ct.
L		,		(7)			(8)	
ſ	TRANSPORTER AND ARREST							
- 1	IRRIGATED UNITS AND AREAS	1						
1 2	Irrigated units	11	482 2,052	77 3,646	100	405 406		222 ,133
3	(a) Cropland harvested	4	2,188	814		,374		160
4 5	(b) Crop failure	1 .	66 9,798	2,832	66	66 • 966	l an	913
6	Area irrigated				91	,881 ,625		
8	Increase or decrease (-), 1929-1939percent					18.0		
	*							
10	Irrigable area in enterprises		5,085	7,371		,714 ,800	48	,881
11 12	19201acres Excess of irrigable area over the area irrigated1940acres		3,033	3,725	400	,232 ,306		,748
13	1930acres		J		99	,919		,,,40
14	1920 ¹ acres				247	,607		
15	Area works were capable of supplying with water1940aores	12	2,583	5,154		,429	4.9	,596
16 17	1930acres 1920acres				94	,317 ,562		
18	Increase or decrease (-), 1930-1940percent					24.5		
19	Excess of area works were capable of supplying with water over area irrigated	1.	0,531	1,508	٥	,023		,463
20	1930acres	(2	,436		
21	1920acres	• • • • • • • • • • • • • • • • • • •		********	28	, 937		
22	Proportion which area irrigated is of area works	ĺ					[.	
23	were capable of supplying with water1939percent		91.4	70.7		92.3 97.4		89.0
24	1919percent					85.0		
	CAPITAL INVESTED TO JANUARY 1							
25	Total investment in irrigation enterprises1940dollars	1.78	0,062	218,179	1,56	883	971	9,400
26	(a) Cost of irrigation works and equipment1940dollars	1,75	7,490	215,679	1,54	1,811	869	5,051
27 28	(b) Investment in water rights (reported)1940dollars Total investment in irrigation enterprises1930dollars	2	2,572	2,500) 2.21:	0,072 3,164	14	1,349
29 30	1920dollars, Increase or decrease (-), 1930-1940percent				1,69	9,059 -29.4		
31	Average investment based on area works were	{	,,		1		***************************************	•••••
32	capable of supplying with water, per acre1940dollars		14.52	42.33		13.30 23.47	:	17.73
33	1920dollars					9.46		
34	Average investment per acre irrigated		15.89	59.84	!	14.41	1	19.93
35 36	Estimated final investment in existing enterprises1940dollars Average investment based on estimated final		3,062	272,179		,883		8,000
90	investment and irrigable area, per acre1940dollars		14.73	36.93		13.34		17.80
	MAINTENANCE AND OPERATION, CHARGES	Primary	Supplemental		Primary	Supplemental	Primary	Supplemental
	AND INDEBTEDNESS	Enter	prises		Enter	rises	Enterp	rises
37	Enterprises reporting maintenance and operation1939number	85	3	2	83	3	30	1
38 39	Area irrigated in these enterprises	109,392	65,000	(⁸)	105,880	65,000	43,787	(<u>s)</u>
40	Cost of maintenance and operation	28,950 0.26	19,972	(R) (R)	24,949	19,972 0.31	7,367 0.17	(2) (2)
41	Total annual charges (reported) 3 41939dollars		1	1	ł			
42	AVERAGE annual charge mer acre irrimited 1000 deller	17,217 0.25	57,085 0.88	0.03	17,128 0.26	57,085 0.88	5,338 0.15	38,545 0,88
43 44	Area against which charges were assessed	75,542	. 80,175	3,498	72,044	80,175	39,764	54,137
45	Total charges collected	0.23 15,721	0.71 54,552	0.03 85	0.24 15,636	0.71 54,552	0.13 5,251	0.71 36,836
46	reported)	23,753	470,500	<u> </u>	15,636 23,753	54,552 470,500		36,836 317,806
	WATER DELIVERED TO				,			
	IRRIGATORS, 1939		l		1			
47 48	Enterprises reporting water delivered	91	3	3	88	. 3	33	. 1
49		107,776 221,951	65,000 210,450	3,646 6,754	104,130 215,197	65,000 210,450	44,133 97,994	(²)
50 51	Average cost of water per acre irrigated 1939 acre-feet.	2.1	3.2	1.9	2.1	3.2	2.2	(2) (2)
52	Average cost of water per acre-foot delivered. 1939 dollars	0.25 0.12	0.88	0.03 0.01		0.88 0.27	0.18	(2) (2)
	· ·							
	DRAINAGE OF IRRIGATED LAND	· ·						
53	Enterprises reporting land drained or needing						1	!
54	Irrigable area in these optomates	76,156			76 186	•••••	6 006	
55 56		66,563	1		76,166 66,563		68,226 60,363	
57	Area for which drains have been installed. 1839. acres. Additional area needing drainage. 1839. acres.	27,860 8,975			27,860 8,975	************	25,620 7,775	
		,	1	11	1 0,040	,	ر ۱۹۰۵ و ۲	,

^{*}Schedules called for "Number of faras," see explanation in text.

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

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

1940, 1930, 1920; AND IRRIGATED UNITS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

and Arkansas and Louisiana] GREAT BASIN (VIII) -- Continued Lahontan Lake (VIII-B) -- Continued Sierra Nevada Slope (VIII-Bb) - Continued Gentral Great Basin and Eastern Nevada (VIII-Bc) Walker Lake-Continued Intrastate streams : Nevada Walker River-Continued Intrastate stream and Intrastate (Truckee and tributaries in Nevada (Humboldt River) Total basins Carson Rivers, lower) (6) Total Honey Lake West Walker River East Walker River California (9) (10) (12) (VIII-Be) (1)+(7)+(10)1.695 406 245 36.816 54,254 44,797 1,545 56,163 34,228 505 439,577 271,267 1,546 15,686 7,615 286,099 178,231 16,086 505 20,730 505 13,359 24,664 44,327 64.1 25.323 21.430 107.025 7,912 8,071 166,761 27,942 86,066 64,348 23,572 523,313 335.015 49,319 55,065 23,871 24,655 10 485 48,916 3,075 13 10,738 14 56,608 49,069 49,264 15.4 27,942 66,768 19,045 15 18 16,131 24,405 4,937 19 20 21 3,359 92.3 98.3 81.3 82.4 22 552, 297 546, 979 6,168,815 6,168,815 2,974,199 2,232,727 741,472 320,296 295,677 293,572 293,362 210 613,868 589,039 8.741,908 129.781 26 27 24,619 1,511,574 414,068 5,318 405 28 29 30 13,85 4.86 99.99 17.20 31 32 33 *. . .* ********* 8.41 15.00 10.40 3,077,817 34 4.74 113.70 10 99 7 91 18 79 10 80 552,697 130,186 6,207,165 650,283 325,811 327,472 9,278,282 35 72.12 13.89 Primary Sup. Primary Sup. Primary Sup. Primary Sup. Primary Sup. Primary Sup. Enterprises Enterprises Enterprises Enterprises Enterprises Enterprises 23 25, 287 37 38 39 3 194 1,244 401,635 36,806 12,878 (2) (2) (2) 36,011 194 253,977 54,251 47,200 11,189 17,740 17,079 4,704 0.19 55,956 1.03 23,456 0.50 133 12,035 133 11,421 608,040 1.51 18,131 57,041 16,966 0.35 0.69 0.33 0.69 40 13,872 1.81 4,400 38,353 1.50 41 42 43 44 45 46 4,187 0.79 5,880 0.71 11,790 0.40 18,272 1.35 14,352 199,540 1.68 0.40 8,443 1.64 8,845 47,000 20,196 1.45 22,577 ,203,927 16,834 19,874 32,280 0.37 20,158 14,346 1.27 5,903 29,597 3.23 22,577 1,203,570 66,703 1,026,627 13,715 118,293 8,845 47,000 10,385 4,001 34,511 47 48 49 50 51 52 34,375 82,809 2.4 0.40 0.16 39,644 69,923 1.8 0.62 0.35 244,895 601,313 53,274 181,455 53,645 124,986 2.3 0.71 194 347 1.8 0.69 194 17,418 79,022 4.5 1.67 17,079 78,502 25.622 14,001 373,885 347 1.8 0.69 34,394 1.3 0.18 0.13 55,063 3.9 1.02 0.26 993,631 2.7 1.88 0.71 3.75 0.31 5 2 16 53 (2) (2) (2) (2) 695 465 660 1,112 38,228 16,744 32,603 13,336 15,000 330 54 55 56 57 83,615 1,807 865 ******** 53,013 400 41,301 1.060 15,222 1,172

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

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

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

CENSUS OF IRRIGATION-UNITED STATES SUMMARY 40

TABLE 18.-DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA DELIVERED TO IRRIGATORS, AND DRAINAGE

=				GREAT BAS	SIN (VIII)—C	ontinued	[For the 17 we	stern States
- 1	İ			Lahontan L	ake (VIII-B)C	ontinued		
ļ	ITEM		Central	Great Basin and			Continued	
	(For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include				lependent basin			-
	figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for each drainage basin)	Tota	al	Amargosa River and Dry Iakes (22)	Intras basi in Neva	tate ns	Intras basii in Califo	15
	IRRIGATED UNITS AND AREAS							7
1 2 3 4 5 6 7 8	Irrigated units 1939 number Area irrigated 1939 acres (a) Cropland harvested 1339 acres (b) Crop failure 1898 acres (c) Pasture 1939 acres Area irrigated 1929 acres Increase or decrease (-), 1929-1939 percent	153 93 59	,198 ,478 ,036 703 ,739	34 2,156 672 145 1,339	113,6 57,0 3 56,6	931 817 936	37, 35,	809 438 333 241 864
9	Irrigable area in enterprises	188	,298	3,151	127,3	386	57.	761
10 11 12 13 14	1930acres 1920*acres Excess of irrigable area over the area irrigated1940acres 1930acres 1920 ⁵ acres		,820	995	19,8			323
15	Area works were capable of supplying with water1940acres	170	,762	3,065	124,	269	K1	434
16 17 18	1830acres 1920acres Increase or decrease (-), 1930-1940percent		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		124,			, ,
19 20 21	Excess of area works were capable of supplying with water over area irrigated		,284	909	10,		13	996
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water		85.9	70.3	9	1.6	,	72.8
	CAPITAL INVESTED TO JANUARY 1							
25 26 27 28	Total investment in irrigation enterprises 1940dollars (a) Cost of irrigation works and equipment 1940dollars (b) Investment in water rights (reported) 1940dollars Total investment in irrigation enterprises 1980dollars	5,520	7,709 0,113 7,596	80,720 76,950 3,770	606, 502, 103,	139	5,080 4,941 139	
29 30 31	Increase or decrease (-), 1990-1940percent Average investment based on area works were capable of supplying with water, per acre	*************	32.26	26.34	4	.88	9	8.79
32 33	1930dollars 1920dollars							
34 35 36	Average investment per acre irrigated1839dollars Estimated final investment in existing enterprises1940dollars Average investment based on estimated final investment and irrigable area, per acre1940dollars	6,200	37,58 0,465 32.93	37.44 81,720 25.93	675,	.32 935 .31	5,442	5.72 ,810 4.23
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enter	Supplemental prises		Primary Enterp	Supplemental rises	Primary Enterp	Supplemental rises
37 38 39 40	Enterprises reporting maintenance and operation	898 147,658 550,999 3.73	3 661 1,165 1.76	30 1,782 4,493 2.52	283 110,053 35,472 0.32	(4) (4) (4) (4)	585 35,823 511,034 14.27	(4) (4) (4)
41 42 43 44 45 46	Average annual charge per acre irrigated	31,856 3.38 12,763 2.50 24,313 336,018	765 2.38 322 2.38		1,500 0.21 6,980 0.21		30,356 12.47 5,783 5.25 24,313 336,018	765 2.38 322 2.38
	WATER DELIVERED TO IRRIGATORS, 1939						•	
47 48 48 50 51	Area irrigated by these enterprises	864 128,990 392,318 3.0 4.51 1.48	(4) (4) (4) (4) (4) (4)	29 1,777 13,402 7.5 2.98 0.40	229 90,498 180,510 2.0 0.35 0.17	(4) (4) (4) (4) (4) (4)	606 36,715 198,406 5.4 14.80 2.74	(4) (4) (4) (4) (4) (4) (4)
	DRAINAGE OF IRRIGATED LAND				:			
53 54 55 56 51	drainage	11 5,625 3,408 222 842			7 5,125 3,353 14 732		500 55 208 110	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

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

Data for the intrastate tributaries of the Clark Fork are not shown separately but are included in the Clark Fork total.

Data for the intrastate tributaries of the Spokane River are not shown separately but are included in the Spokane River total.

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

1940, 1930, 1920; AND IRRIGATED UNITS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

nd Arkansas	s and Louisi	Lanaj				COLUMBIA	RIVER (IX	()							
		· · · · · · · · · · · · · · · · · · ·						Columbia Ri	ver (IX-A)						
						[Clark F	ork		Spokare	River			
Tot	tal	Direct	Tot	al	Direct	Kootenai River	Tota	11 ¹	Dii	ect	Total ²	Direct	Intrasi tributa in Washing	ries	
(1	x)	(IX-A) +(IX-C)		•	(IX-A)	(1)			(2)		(12)			
3,8 3,3 4 4 3,3	80,728 19,738 08,507 32,819 78,412 93,640 73,245 12.6	1,743 27,967 25,463 251 2,253 10,035 24,563 178.7	89- 75	3,856 4,680 3,192 7,056 1,432	1,373 20,933 20,193 195 545	210 7,391 6,680 8 703 7,590 5,982 -2.6	337 278 58 263 286	5,042 7,102 5,855 ,803 3,444 8,732 3,290 27.8	22 2 13 3	650 ,184 ,464 61 ,659 ,667 ,188	2,468 23,104 22,143 305 746 18,422 20,614 25.9	2,442 22,669 21,800 305 564 16,453	506 431 4	,321 ,745 ,994	
4,99 6,39 1,19 1,59	01,483 92,131 36,801 81,745 98,491 63,556	38,921 22,546 49,432 10,954 12,511 24,889	1,19	3,969	26,988 6,055	10,796 10,330 14,423 3,405 2,740 8,441	450,910 427,180 603,088 113,808 163,448 316,796		20 15 18 6	,382 ,253 ,834 ,198 ,586 ,646	27,613 38,220 50,860 4,419 19,798 30,246	27,065 40,391 4,396 23,938		,282	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
4,2	26,367 41,244 68,518 4.4	33,337 13,678 32,615 143.7	1,05		24,336	9,561 9,432 9,724 1.4	399,561 397,315 444,928 0.6		18 5	,810 ,122 ,786 97.6	27,321 30,482 27,356 -10.4	26,773 21,675	589		1 1 1
8-	06,629 47,604 95,273	5,370 3,643 8,052		5,514	3,403	2,170 1,842 3,742	62,459 133,583 158,638		4	,626 ,455 ,598	4,127 12,060 6,742	4,104 5,222			1 2 2
	86.3 80.0 78.0	83.9 73.4 75.3			86.0	77.3 80.5 61.5	66.4		70.3 75.4 55.1	84.9 60.4 75.4	84.7 75.9		85.9	1 1	
203,9 2,5 157,3	23,302 47,836 75,466 55,114 72,382 31.2	3,662,839 3,590,679 72,160 1,377,002 2,240,216		9,788 9,479	3,262,987 3,192,548 70,439	227,899 225,794 2,105 230,535 221,976 -1.1	13,20 9 9,04	13,301,442 791,478 13,201,522 779,298 99,920 12,180 9,047,331 504,725 8,421,394 209,549 47.0 56.8		3,069,262 14,028 1,352,395	3,070,500 3,056,522 13,978 1,637,743	47,603 47,020 588	0,662 2,987	2 2 2 2 2 2 3	
	46.66 37.10 29.32	109.87 100.67 68.69			134.08	23.84 24.44 22.83		39.29 22.77 18.93	2	2.10 7.85 6.22	112.85 44.37 80.95	114.69 75.56		0.76	3 3
217,5	54.07 590,075	130.97 3,749,780	70,15	75.42 1,756	155.88 3,335,7 5 5	30 .83 239,994	14,478	39.46 3,799		1.43 5,543	132.93 3,194,461	135.45 3,181,171	48,905	4.07 ,747	3
	49.51	96.34		58.53	123.60	22.23		32.11	2	2.26	115.69	117.54	7	1.67	3
Primary	Sup. prises	: : : : : : : : : : : : : : : : : : :	Primary Enterp	Sup.			Primary Enterp	Sup.	Primary	Sup. prises			Prisary Enterpr	Sup.	-
11,449 3,693,481 4,762,706 1.29	358 992,044 245,951 0.25	865 26,075 250,654	3,921 866,972 1,743,150 2.01	129 34,921 13,942	546 19,626 211,109 10.76	138 6,895 6,395 0.93	1,515 320,817 243,620 0.76	12 19,461 3,699 0.19	314 23,989 16,853 0.70	3 381 75 0.20	114 22,478 145,108 6.46	93 22,029 143,725 6.52	1,608 497,156 1,136,918 2,29	117 15,460	
4,599,324 1.58 3,224,168 1.43 4,172,856 65,947,558	244,825 0.25 993,977 0.25	9.61 104,494 12.36 11,157 9.37 92,193 320,953	1,666,228 2.62 726,201 2.29 1,131,182 32,798,680	0.40 29,523 1.40 45,442 0.65 36,044 1,344,886	99,735 12.46 10,538 9.46 88,025 320,953	4,283 2.15 2,419 1.77 3,668 13,000	236,146 1.43 200,088 1.18 157,769 10,984,172	26,394 1.36 36,502 0.72 13,022 498,508	14,695 1,29 15,251 0,96 9,276 497,525	370 1.00 370 1.00 352	174,845 8.27 22,958 7.62 170,558 1,028,544	174,845 8.27 22,958 7.62 170,558	1,151,219 2.61 490,198 2.05 711,162 20,452,011	3,129 1.81 8,940 0.35 23,022 846,378	4 4 4
11,676 3,458,855 13,867,957 4.0 1.51 0.38	332	907 27,302 112,647 4.1 10.18 2.47	4,164 862,668 3,238,330 3.8 2.40 0.64	131 194,887 717,326 3.7 1.20 0.38	579 20,386 89,886 4.4 11.46 2.60	166 7,391 25,113 3.4 1.17 0.34	1,626 325,025 847,481 2.6 0.91 0.35	12 17,394 18,841 1.1 1.51	362 24,869 66,302 2.7 0.96 0.37	4 386 513 1.3 1.12 0.84	128 22,974 93,232 4,1 8,16 2,01	102 22,449 91,634 4.1 8.26 2.02	1,665 486,892 2,182,618 4.5 2.76 0.62	119 177,493 698,485 3.9 0.74 0.19	4' 41 41 56 5
496 1,705,259 1,240,294 467,652 54,628		22 850 587 486 214	97 589,817 382,265 179,397 21,073	0.38	2.60 4 173 110 128 6	5 561 457 100 70	49 147,906 86,873 2,569 2,730	A-138	6 76 28 35	0.84	(4) (4) (4) (4) (4)	(4) (4) (4) (4) (4)	38 441, 142 294, 800 176, 596 18, 261	0.19	5: 5: 5: 5: 5:

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

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

8 Annual charges and indebtedness were reported only by enterprises serving 5 or more units, and items 41 to 45, inclusive, relate to those enterprises only.

CENSUS OF IRRIGATION—UNITED STATES SUMMARY 42

TABLE 18.-DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

1				COLUM	BIA RIVER	(IX)—Contin	ued		
	ITEM ·				Snake River		•		
	(For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include			<u> </u>	Shake hive	(12-0)	Upper Snal	ce River	
	figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for each drainage basin)	Tot	al	Dire	ct	Tota		Dire	et.
	new .			(177	n)	100	- 	(1)	ļ
ŀ				(IX-	в)			(1)	
j	IRRIGATED UNITS AND AREAS]
2	Irrigated units	2,62	5,392 5,355	861	,507 ,060	717	,192 ,006	187	,458 ,444
3 4	(a) Cropland harvested	2,29	6,208 0,056	817	,723 ,866	654 1	,845 ,508	174	,870 10
5	(c) Pasture	30	9,091	41	,471		,653	12	,564
8	Area irrigated		9,264 2,618		,770 ,154	************			
8	Increase or decrease (-), 1929-1939percent		12.2		19.5	•••••		•••••	••••••
9	Irrigable area in enterprises,1940acres		3,028	1,061	,020	854	,956	209	,903
10 11	1930acres 1920 ² acres		0,120 57,747		3,077 3,050				
12	Excess of irrigable area over the area irrigated1940acres		7,673	199	9,980		,950	22	,459
13 14	1930acres 1920 ⁸ acres	790,858 1,345,129			5,307 2,896				
]									
15 16	Area works were capable of supplying with water1940acres		8,889 3,621		, 255 , 587	821	,914	209	,032
17	1920acres	3,37	6,146	898	,209				
18 19	Increase or decrease (-), 1930-1940percent Excess of area works were capable of supplying		8.8		13.3	••••••	•••••	*********	
- 20	with water over area irrigated1940acres		3,534		195	104	1,908	21	.,588
21	1930acres 1920acres	66	14,357 33,528		0,817 2,055			**********	
00	Description which are instanted to of our wants			ł	i		l		1
22	Proportion which area irrigated is of area works were capable of supplying with water1939percent		87.0		90.3		87.2		80.7
23 24	1929percent 1919percent		84.3		85.6 83.0	************		********	
	•		80.3		00.0	**********		••••••	
	CAPITAL INVESTED TO JANUARY 1				,				
25 26	Total investment in irrigation enterprises1940dollars (a) Cost of irrigation works and equipment1940dollars	125,32		48,64		20,496	3,750		7,840
27	(b) Investment in water rights (reported)1940dollars	123,72 1,59	27,685 92,747	48,520	0,126 2,271	20,269	9,283 9,467	6,216	3,557 3,283
28 29	Total investment in irrigation enterprises1930dollars	93,26	55,245	33,98	3,494				
30	Increase or decrease (-), 1900-1940percent	93,04	25,117 34.4	37,22	43.1	***********			, , , , , , , , , , , , , ,
31	Average investment based on area works were capable of supplying with water, per acre1940dollars		41.51] ,	51.03		24.94		30.13
.32	1930dollars		33.63	. 4	10.38		24.54		
33	1920dollars		27.73	· '	11.59		••••••	**********	
34 35	Average investment per acre irrigated1939dollars Estimated final investment in existing enterprises1940dollars	100.00	47.73		56.49		28.59		33.60
36	Average investment based on estimated final	133,23	12 0 0 7	49,710	1,402	20,98	1,506	}	2,840
	investment and irrigable area, per acre1940dollars		39.85		16.85		24.54		30.08
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterp	Sup.	Primary Enterp	Sup.	Primary Enterp	Sup.	Primary	Sup. prises
			T		11013	B. Ger	11303		
37 38	Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises1839acres	4,552 2,538,451	166 939,686	746 853,210	20 479,085	773 694,605	30 400,628	61 184,704	132,768
39 40	Cost of maintenance and operation	2,570,462	214,344	1,234,793	17,576	424,407	19,553	197,162	5,188
40	Average cost, per acre irrigated1939dollars	1,01	0.23	1.45	0.04	0.61	0.05	1.07	0.04
41 42		2,558,179	203,496	1,320,276	14,644	507,276	17,897	232,475	4,614
43	Area against which charges were assessed1939acres	1.22 2,304,964	938,696	1.63 881,278	0.03 477,778	0.82 658,691	0.04 399,242	1.27 201,759	0.03 132,369
44 45	Average annual charge per acre assessed1939dollars Total charges collected	1,11	0.22	1.50	0.03	0.77	0.04	1.15	0.03
46	Indebtedness to December 31 (reported) 51239dollars	2,700,414 28,943,619	75,145 3,699,525	1,257,375 6,921,574	14,547	459,295 2,868,559	18,072 2,760,661	204,648 393,118	4,490
	WATER DELIVERED TO								
	IRRIGATORS, 1939		i i	[ĺ			
47	Enterprises reporting water delivered1939number	4 410	140	725	10	900	90	E.C	
48 49	Area irrigated by these enterprises	4,419 2,309,204	931,780	736	18 475,598	667,167	30 415,622	184,202	129,408
50	Average water delivered per acre irrigated1030acre_feet	9,576,457 4.1	1,092,843	3,333,084 4.2	572,110 1.2	3,285,386 4.9	459,592 1.1	893,681 4.9	155,787 1.2
51 52	Average cost of water per acre irrigated1939dollars	1.10	0.22	1.58	0.03	0.80	0.05	1.29	0.03
	1	0.26	0.19	0.38	0.03	0.16	0.04	0.27	0.03
	DRAINAGE OF IRRIGATED LAND					[
53	Enterprises reporting land drained or needing					{			
54		231		63		36		8	
55	Irrigated area in these enterprises1939acres	1,066,085		520,556 396,542		84,215		63,772	
56	Area for which drains have been installed 1839 acres Additional area needing drainage 1939 acres	820,570 282,130		72,505		64,127 9,673	*********	46,540 8,573	
57		29,351		5,255	*******	5,927		1,395	

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

Data for the intrastate tributaries of the South Fork Snake River are not shown separately but are included in the South Fork Snake River total.

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

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

CENSUS OF IRRIGATION-UNITED STATES SUMMARY

43

1940, 1930, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued and Arkensas and Louisiana]

and Arkensa	as and Louisi	anaj			703	HUBIA DIVE	D (TV) Cont	t man d			<u> </u>			$\overline{\Box}$
		***					R (IX)—Cont							-
					·		liver—Continu							1
		South Fork	Snake River	T				Henry	s Fork	,			state]_
То	tal ¹	11	rect		River 5)	То	tal	1	rect (6)	Teton (7	River	(i	taries n aho	
28	4,463 1,467 19,044 187		3,681 20,823 06,140 61		729 ,170 ,706 126	17	2,531 2,862 6,564	1:	2,039 25,342 14,641	47	492 7,520 1,923	7	1,740 5,233 4,367	1 2 3
22	2,236 1,542 4,562 27.0	1	14,622 63,236 52,509 35.3	36	,338 ,863 ,338 41.5	17	254 .6,044 '4,960 98,534 -1.2	********	40 10,661		214		1,057 9,809	4 5 6 7 8
27 31 4 5	9,049 3,358 1,654 7,582 1,816 7,092	2	56, 161 87, 831 09, 494 35, 338 24, 593 56, 985	49 57 9 12	,678 ,016 ,288 ,508 ,153 ,950	21 32 2 3	8,955 1,117 25,114 26,093 16,157 .6,580		41,046 15,704	10	7,909 ,389	4	7,049 1,816	11
25	5,126 9,020 8,873 21.7	1	45,729 83,511 94,352 33.9	46 46	,352 ,233 ,234 28.4	19	5,449 6,373 6,514 -5.6	13	32,411	53	,038	11	2,307	15 16 17 18
3	3,659 7,478 4,311	24,806 7,182 20,273 9,370 41,843 11,896		,370	2	.2,587 21,413 77,980	********	7,069	£	5,518		7,074	19 20 21	
·	89.3 85.5 89.0 76.9 78.5		ĺ	87.9 79.7 74.3		93.2 89.1 72.8		94.7	{ • • • • • • • • • • • • • • • • • • •	89.6		67.0	25 25 24	
6,68 6 3,58	6,746,266 6,392,913 6,681,542 6,342,852 64,724 50,061 3,584,906 3,342,586 6,967,591 6,693,903 88.2 91.3		42,852 50,061 42,586	293 13 111 149	,763 ,735 ,028 ,368 ,207	4,57 3 1,92 2,00	2,718 4,150 8,568 5,652 1,841 139.5	4,34	77,433 46,534 30,899	227 7	5,285 7,616 7,669	2,79	1,926 15,034 (6,892	25 26 27 28 29
:	21.41 13.84 24.95		26.02 18.21 34.44	1	5.17 2.41 3.23		24.87 9.81 6.99	•••••	33.06	•••••	4.44		25,30	31 32 33
6,75	23.97 8,712 20.64	6,3	28.95 99,619 24.98	310	5.88 ,168 5.03	4,63	26.68 6,553 23.30	4,3	34.92 99,553 31.19	237	4.95 7,000 4.09	3,27	37.77 3,401 27.97	34 35
Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	Primary	Sup.	1 "
379 271,894 95,126 0.35	prises 8 167,798 4,763 0.03	213 214,030 85,182 0.40	7 3 160,165 4,378 0.03	144 49,562 8,439 0.17	4,267 60 0.01	167 165,157 57,534 0,35	99,867 9,424 0.09	77 124,035 50,758 0.41	99,473 9,014 0.09	90 41,122 6,776 0.16	(⁸)		971ses 4 195 178 0.91	39
152,195 0.67 237,240 0.64 157,128 344,554	4,776 0.03 167,556 0.03 4,278 661	140,262 0.76 193,257 0.73 148,383 304,992	4,419 0.03 160,080 0.03 4,278 661	11,383 0.31 39,731 0.29 8,745 39,582	(°) (4,110 (°)	79,412 0.52 158,123 0.50 75,840 163,156	8,507 0.09 99,317 0.09 9,304 2,760,000	70,104 0.59 121,828 0.58 67,525 134,261	8,507 0.09 99,317 0.09	9,308 0.26 36,295 0.26 8,315 28,895	**********	43,194 0.72 61,569 0.70 21,679 1,967,731		41 42 43 44 45 46
400 252,284 1,382,331 5.5 0.65 0.12	10 167,869 200,578 1.2 0.03 0.02	215 201,362 1,238,721 6.2 0.75 0.12	4 160,226 193,698 1.2 0.03 0.02	159 42,448 113,932 2,7 0.27 0.10	5 4,277 880 0.2 0.01 0.07	171 160,382 782,585 4.9 0.51	12 118,150 102,880 0.9 0.09	77 116,121 690,856 5.9 0.59	9 117,708 102,260 0.9 0.09 0.10	94 44,261 91,729 2.1 0.26 0.12	3 444 600 1.4 1.04 0.77	175 70,299 226,789 3.2 0.67 0.21	4 195 367 1,3 0,91 0,49	47 48 49 50 51
8,210 7,000		3 8,050 6,943		(³)		17 6,831 5,325		7 4,652 4,172		10 2,179 1,153		. 7 5,402 5,262	0.46	53 54 55
1,085	*********	1,065	*********	(3)		1,080 1,213		100 913	************	980 300		20 2,234		56

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

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

6 Less than one cent.

CENSUS OF IRRIGATION—UNITED STATES SUMMARY 44

TABLE 18.—DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

							[For the 17 we	stern States
	· · · · · · · · · · · · · · · · · · ·			COLUMBIA RI				
.	ITEM				r (IX-B) Con	tinued		
	(For definitions and explanations, see text. Major-		TI.	Lowe	r Snake River			
	basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for each drainage basin)	Total		Direc	et	Raft River	Goose Creek	Salmon Falls Creek
- 1				(12)		(13)	(14)	(15)
	IRRIGATED UNITS AND AREAS							
3 4	Irrigated units*	1,833, 1,577, 15, 240,	,435 ,145 ,830	673 642 1	,049 3,616 ,853 ,858 ,907	196 14,007 12,626 60 1,321 13,406 23,620 4.5	313 19,144 18,126 86 932 19,359 25,000	294 30,940 29,152 160 1,628 38,566 41,330 -19.8
10 11	Irrigable area in enterprises	547	, 444		,501	21,360 37,941 42,906 7,353 24,535 19,286	21,603 25,424 50,000 2,459 6,065 25,000	50,056 49,434 87,260 19,116 10,868 45,930
16 17 18	Area works were capable of supplying with water1940acres 1930acres 1920acres Increase or decrease (-), 1930-1940percent Excess of area works were capable of supplying			74-		16,405 23,366 -26,436 -29.8	20,221 25,424 50,000 -20,5	48,104 49,284 49,920 -2.4
19 20 21	with water over area irrigated	******),208	79		2,398 9,960 2,816	1,077 6,085 25,000	17,164 10,718 8,590
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water		87.6		90.5	85.4 57.4 89.3	94.7 76.1 50.0	
	CAPITAL INVESTED TO JANUARY 1		*					
25 26 27 28 29	Total investment in irrigation enterprises	102,245	2,682 5,951	42,34 42,30 4	1,569 2,988	159,027 154,339 4,688 50,786 100,928 213.1	1,600,477 250,326 1,508,520 393,755	2,657,901 237,196 2,598,895 4,152,745
31 32 33	Average investment based on area works were capable of supplying with water, per acre1910dollars 1920dollars		49.47		56.90	9.69 2.17 3.82	59.33	52.7
34 35 36	Average investment per acre irrigated	110,97	56.50 0,021 46.61		62.86 97,592 50.99	11.35 306,212 14.34	1,851,303	2,898,39
		Primary	Supplemental	Primary	Supplemental			
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS		rises	Enter	rises	-		
37 38 39 40			136 539,058 194,791 0.36	1,037,631	346,317 12,388 0.04	11,365	18,40	29,550 23,48 7 0.7
41 42 43 44 45	Average annual charge per acre irrigated	1,979,501 1.39 1,575,656 1.26 2,182,650 25,787,060	185,599 0.35 539,454 0.34 57,073 938,664	1.73 679,519 1.60 1,052,727	10,030 0.00 345,400 0.00 10,05	0.42 9,89 0.3 7 3,28	0.7 1 16,31 4 0.7 4 10,00	2 1.3 3 35,00 0 0,6
	WATER DELIVERED TO IRRIGATORS, 1939							9 1
47 48 49 50 51 52	Area irrigated by these enterprises	6,021,530	112 516,158 633,251 1.2 0.36 0.30	615,177 2,439,403 4.0 1.67	346,19 416,32 1. 0.0 0.0	0 8,01 3 17,27 2 2. 3 0.6	9 17,88 6 39,66 2 2. 4 0.6	2 30,72 9 73,78 2 2,
	DRAINAGE OF IRRIGATED LAND							
53 54 55 56 57	drainage	754,686 272,457			,		(3) (3)	1

^{*} Schedules called for "Number of farms," see explanation in text.

1 Data for intrastate tributaries of the Grande Ronde River are not shown separately but are included in the Grande Ronde River totals 2 For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

1940, 1930, 1920; AND IRRIGATED UNITS, MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

	and Louisi					COLUMBI	A RIVER	(IX)—Con	inued							
								-B)— Conti								
	г							ver—Conti	nued				Grande Rone	in River		
						Uwynee	South	Fork Owyhe	na River				orande nom	's utaet.		
Bruneau	River	Tota	ı.	Dire	ct	Tota		Dire		East Fork Owyhee River	Jordan Creek	Tota	ııi	Dire	ct	
(18	3)			(23	<u>) </u>			(24)	(25)	(26)			(46)	
20,9 14,9 5,8 21,1 22,8	984 140 828 161	126 101 4 20 60	,345 ,991 ,348 ,803 ,840 ,054 ,830	.50 1 6	978 ,004 ,215 ,542 ,247	39 1	232 1,688 1,502 1,398 1,788	2,	40 972 263 971 738	192 26,716 16,239 427 10,050	137 15,299 11,631 1,863 1,805	64, 49, 15, 57, 79,	591 7 224 655	17, 15,	543 7 054	1 2 3 4 5 6 7
27, 37, 1,0 6,0	27,702 160,067		3,895 3,891	31	,669 ,981	32, 5,	705 733	52,964 26,248	18,093 2,794	76, 65, 98, 11, 7,	227 912 879 572	25, 7,	695	10 11 12 13 14		
24, 25,	930	71 116	, 127 , 016 , 238 15.6		3,725			31,	185	27,537	17,680			23,	720	10 10 1' 1:
3,	786 769 038	10	3,136 0,962 1,408		3,721				213	821	2,381	5,	115 519 060	6	116	20
8	6.4 4.9 8.1		82.9 84.6 90.2	75.6			91.4	8	6.5	97.0	86.5	ε	96.5 91.3 90.8			2 2
186, 2, 571, 574,	188, 119 11,774,350 186,048 11,770,090 2,071 4,280 571,321 3,260,445 574,935 1,411,424		0,090 1,260 0,445	10,400		860	2,538 0,217 2,321	94,	939 739 200	767,599 765,478 2,121	511,530 510,510 1,020	386 476	682 544 759	150	627 ,381 ,246	2 2 2 3
22	3.65 2.92 2.43	4	76.89 15.91 12.14	1:	35.55		14.69		3.04	27.88	28.03		3.34 3.12 3.46		s.39	3 3
5 191,	3, 98 , 149	12,42	92.72 1,405	10,64	79.30 3,837		16.07 6,038		3.52 ,439	28.73 1,168,599	33.44 511,530	626	9.65 ,390	152	9.61 ,174	31
6	3,68	(38.76	1	38.42		14.78		2.98	22.06	28.27		8.17		6.02	36
Primary Enterp	Sup.	Primary Enterp	Sup. rises	Primary Enterp	Sup. rises	Primary Enterp	Sup. orises	Primary	Sup. orises			Primary Enterp	Sup. rises	Primary Enterp	sup. rises	
86 19,948 13,607 0.68	(³) (⁵) (³)	176 122,532 177,616 1.45	6 11,869 8,175 0.69	51 57,262 139,361	5 11,769 8,125 0.69	71 52,528 19,332 0.37	(3) (3) (3) (5)	34 25,972 6,072 0.23	(³) (³) (³)	37 26,556 13,260 0.50	54 12,742 18,923 1.49	412 58,724 25,769 0.44	7 14,276 1,003 0.07	203 13,445 7,379 0.55	(3) (3) (3)	3: 3: 4:
6,093 1.35 4,900 1.24 3,534		51,800 0.81 78,954 0.66 44,933 739,000	7,715 0.66 11,690 0.66	0.63 65,659	7,715 0.66 11,690 0.66	5,116 0.78 6,518 0.78		50 0.25 200 0.25		5,066 0.80 6,318 0.80	14,617 2,27 6,777 2,16 12,967 430,000	21,432 0.49 48,530 0.44 16,193 55,922	980 0.07 17,155 0.06	3,384 0.38 10,700 0.32 990		4: 4: 4: 4: 4: 4:
63 14,675 30,961 2.1 0.49 0.23	5 148 198 1.3 1.52 1.13	151 91,576 487,252 5.3 0.62 0.12	3 11,743 21,210 1.8 0.68 0.38	58 58,004 287,581 5.0 0.64 0.13	3 11,743 21,210 1.8 0.68 0.38	24,497 182,118 7.4 0.52		9 1,425 3,502 2.5 0.42 0.17	********	28 23,072 179,616 7.7 0.53 0.07		428 57,224 185,951 3,2 0,52 0,16	5 124 293 2.4 0.17 0.07	217 16,262 33,296 2.0 0.53 0.26	3 92 167 1.8 0.09 0.05	4 5 5
4 1,197 1,118 635		3 68,073 50,632 14,787 2,470		3 68,073 50,632 14,787 2,470								9 2,195 2,084 57 233		3 511 501 47 80		5 5 5 5 5

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

TABLE 18.-DRAINAGE BASIN-AREA IRRIGATED, 1989, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE For the 17 western States.

\neg				COLUMBIA RIVER	(IX) —Continue		7 western States
-				<u> </u>			
	ITEM (For definitions and explanations, see text. Major-			Snake River (IX		·	
	basin totals from 1930 and 1930 Censuses include figures for unidentified tributary basins. A composite map index-number is shown in parentheses for each drainage basin)	Intras tributa in Idah	tate ries	Snake River—Cont Intras tributa in Oreg	tate ries	Intrastate tributaries in Washington	Independent intrastate basins in I daho
ı	IRRIGATED UNITS AND AREAS	······································		· · · · · · · · · · · · · · · · · · ·			
1 2 3 4 5 6 7 8	Irrigated units 1939 . number Area irrigated 1939 . acres (2) Cropland harvested 1939 . acres (2) Crop failure 1939 . acres (2) Pasture 1939 . acres (3) Pasture 1939 . acres 1939 . acres (2) Pasture 1939 . acres 1	686 547 5 132		192 156 2		338 4,570 4,303 22 245	758 74,930 63,928 3,403 7,608 69,920 108,351 7,2
9 10 11 12 13 14	Irrigable area in enterprises	••••••	,829		,061	5,068 498	107,218 155,190 345,591 92,276 86,070 238,190
15 16 17 18	Area works were capable of supplying with water1940acres	782		227		5,068	103,357 150,578 181,000 -31.4
20 21	with water over area irrigated	96	,596	34		498	28,418 80,658 72,658
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water		87.7		84.7	90.2	72.5 46.4 59.0
	CAPITAL INVESTED TO JANUARY 1						
25 26 27 28 29 30 31	Total investment in irrigation enterprises	***************************************), 144 1,039		,521 5,289	767,461 758,911 8,550	1,242,019 1,215,720 26,329 2,419,285 3,801,739 -48.5
32 33	capable of supplying with water, per acre1940dollars 1930dollars 1920dollars		10.64		49.15 	151.43	12.02 16.03 21.00
34 35 36	Average investment per acre irrigated	36,995		11,51	-	167.93 767,871 151.51	16.57 1,281,160 11.95
	investment and irrigable area, per acre1940dollars MAINTENANCE AND OPERATION, CHARGES	Primary	11.16 Supplemental	Primary	Supplemental	181.81	11.00
37 38 39 40	AND INDESTEDNESS Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises	1,472 664,368 639,514 0.96	97 148,737 170,219 1,14	Enters 672 171,955 110,479 0.64	9 17,813 2,936 0.16	46,974	151 73,910 55,050 0.74
41 42 43 44 45 46	Total annual charges (reported) ⁴ 5. 1939. dollars Average annual charge per acre irrigated. 1939. dollars Area against which charges were assessed. 1939. acres. Average annual charge per acre assessed. 1939. dollars Total charges collected ⁴	660,487 1.24 583,062 1.13 939,674 13,465,956	156,643 1.08 147,720 1.06 38,506 169,198	0.67 115,740 0.60 51,387	10,231 0.59 17,480 0.59 8,510 769,666	13.36 3,647 12.19 39,900	71,402 1.43 70,717 1.01 58,469 288,000
	WATER DELIVERED TO IRRIGATORS, 1939					-	
47 48 49 50 51 52	Enterprises reporting water delivered	1,338 563,885 2,289,515 4.1 1.06 0.26	77 140,572 172,296 1.2 1.12 0.91	164,389 445,209 2.7 0.55	8 17,381 22,931 1.3 0.59 0.45	4,570· 12,508 2.7 10.56	151 73,919 209,541 3.6 1.15
	DRAINAGE OF IRRIGATED LAND						
53 54 55 56 57	Enterprises reporting land drained or needing drainage	394,413 306,577		8 56,658 44,093 20,607 2,085		(3) (3) (3) (3)	5 2,370 1,757 455

^{*}Schedules called for "Number of farms," see explanation in text.

1 Data for the intrastate tributaries of the Klamath River are not shown separately but are included in the Klamath River total.

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

1940, 1930, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued and Arkenses and Iouisianal

and Arkansa			LUMBIA RI	VER (IX)-	-Continued			.			KLAMATH R	IVER (X)			
			Lower Col	umbia River	(IX-C)									·	
Tot	al	Direct (IX-C)		Walla ver 1)	Intras tribut ir Oreg	aries	Intra tribut ix Washi	aries	Tota	11 ¹	Dir-		ī.ast (3		i i
								ì							
296 256 37	3,480 0,703 3,107 5,707 7,889	370 7,034 5,270 56 1,708	37 30 6 29 38	1,673 7,596 7,693 5,693 5,333 7,631 9,784 26.9	242 210 27 204	3, 184 2, 617 0, 497 4, 831 7, 289 4, 905 3, 412 18.4	12, 9,	253 456 647 250 559	271 167 1 101 187 153	,790 ,038 ,622 ,624 ,792 ,991 ,105 44.2	55 40 65	763 5,090 3,308 947 0,835 3,727 5,720 49.2	8: 6: 1/ 6:	1,125 1,206 5,766 675 1,855 0,450 3,568 34.5	1 2 3 4 5 6 7
160	9,806 0,103	4,899	36 54 8	3,443 3,088 4,614 3,847 3,457 4,830	350 490 14- 146	3,969 0,736 3,183 4,352 5,831 1,771		,005	316 362 112 128	,003 ,239 ,793 ,965 ,248 ,688	12: 12: 2: 5:	0,374 2,584 8,763 5,284 8,857 3,043	79 19 2 1	9,517 7,170 4,748 8,221 6,720 6,180	9 10 11 12 13 14
357	7,284	9,001	31 47	5,001 1,526 7,745 42.7	276	289,439 276,897 339,296 4.5		843	205	,560 ,949 ,374 17.2	96	8,598 8,922 8,075 7.8	.71	3,847 5,857 5,304 30.3	15 16 17 18
57	7,581	1,967	1	,405 ,895 ,961	7:	71,992 112,884		387	76	,522 ,958 ,269	36	1,508 5,195 0,355	14	7,561 5,407 6,736	19 20 21
	83.9 78.1			83.5 94.0 83.3		83.8 74.0 66.7		90-0		87.3 71.0 74.5		89.2 64.4 86.4		82.2 79.7 61.5	22 23 24
13,510	13,723,603 13,510,369 213,240		892 67 747	0,133 2,701 7,432 7,053 1,914 28.5	12, 12; 11, 98; 13; 11, 74; 11, 09;	5,386 9,692 7,283	4,	,540 ,145 ,395	10,430 10,206 224 9,430 5,502	, 193 -, 748), 566	2,09 2 4,25 1,73	8,699 8,726 9,973 3,840 4,099 -50.0	5,36 14 4,29	6,452 1,854 4,598 5,740 1,383 28.2	25 26 27 28 29 30
	38.41	44.42		21.34 23.70 24.55		41.89 42.42 32.70	1'	7.23	:	33.59 35.59 26.79		19.97 43.00 22.79		55.71 56.63 36.21	31 32 33
14,202	15.79 2,632 30.89	56.85 414,025 34.70	967	25.54 7,295 20.83	12,56	19.98 3,805 32.47	257,	9. 15 ,507 7.81	12,446	18,49 5,774 12,41	2,24	22.39 9,554 18.69	5,79	57.79 1,980 52.91	34 35 36
Primary Enterp	Sup.		Primary Entern	Sup.	Primary Enter:	Sup.	Primary Enter	Sup.	Primary Enter	Sup. Orises	Primary Enter	Sup. prises	Primary Enter	Sup. orises	1
2,976 288,058 449,094 1.56	63 17,437 17,665 1.01	319 6,449 39,545 6,13	530 35,270 47,083 1,33	57 801 4,913 6.13	2,052 234,026 357,516 1.53	9,936 11,942 1.20	75 12,313 4,950 0.40	(3) (3) (3) (3)	763 250,878 273,943 1.09	13 49,692 43,759 1.00	303 84,859 76,910 0.91	4 6, 184 4,679 0.76	71 75,336 120,528 1.60	5 37,199 38,621 1.04	
374,917 2.23 193,003 1.94 341,260 4,205,259	11,806 1.20 9,839 1.20 2,648 10,550	4,759 10.48 619 7.69 4,168	31,084 1,52 21,085 1,47 31,251 83,306		333,556 2,45 159,474 2,09 303,148 4,114,953	11,806 1,20 9,839 1,20	5,518 0.49 11,825 0.47 2,693 7,000	2,648 10,550	275,586 2.02 150,831 1.83 222,792 7,415,421	42,662 0.99 42,942 0.99 457 37,425	64,430 1.55 42,909 1.50 56,384 1,550,013	4,554 0.77 5,931 0.77 457	139, 134 2.08 71,889 1.94 112,948 3,174,098	38,108 1.03 37,005 1.03	43
3,093 284,963 1,053,170 3.7 2,11 0.57	59 17,593 57,128 3.2 1.52 0.47	328 6,916 22,761 3.3 6.30 1.91	549 32, 184 158, 115 4.9 1.51	52 777 3,985 5.1 5.85 1.14	2,138 233,962 850,977 3.6 2.16 0.59	4 9,936 47,783 4.8 1.20 0.25	78 11,921 21,317 1.8 0.60 0.34	3 6,880 5,360 0.8 0.10	537 234,352 648,131 2.8 1.45 0.53	9 41,417 82,739 2.0 1.03 0.52	. 195 80,559 259,570 3.2 1.11	(²) (³) (³) (⁴) (³)	75 80,781 211,478 2.6 1.94 0.74	4 37, 190 68, 165 1.8 1.04 0.57	48 49 50
167 49,357 37,459 6,125 4,404		18 677 477 358 208	3 457 299 3 145		145 47,743 36,203 5,759 4,046		(3) (5) (3) (3) (3)		59 159, 493 119, 455 111, 485 8, 292		21 58,592 45,893 42,155 2,014		20 91, 235 66, 865 67, 230 5, 298		53 54 55 56 56

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

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

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

TABLE 18.—DRAINAGE BASIN-AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, DELIVERED TO IRRIGATORS, AND DRAINAGE

					10 1101		[For the 17 we	
		(E	exclusive of (OCEAN STRE		Klamath Rivers)	
	ITEM (For definitions and explanations, see text. Majorbasin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A composite map index-number is shown in parentheses for each drainage basin)	Streams no the Columbi	a River	Streams bet Columbia Klamath R	ween the and ivers ¹	Streams between the Klamath River and San Francisco Bay	San Francis and tributaries Sacramento Joaquin I	other than and San belta
}		(XI-	A)	(XI-	B)	(XI-C)	i–IX)	1)
1 2 3 4 5 6 7 8	IRRIGATED UNITS AND AREAS Irrigated units*	22, 13, 9, 8, 6,	782 486 335 4 147 960 160 ii.0	71, 52, 19, 60, 40,	638 97 160 693	267 8,229 7,462 57 710 6,384 3,466 28.9	5, 99, 76,	502 599 856 953 979
9 10 11 12 13 14	Irrigable area in enterprises	20, 12, 22, 11,	930 142 680 444 182 500	139, 16,	324 826 382 631	11,184 12,001 23,217 2,955 5,617 19,751	165, 111, 100, 49, 12, 23,	954 730 233 275
15 16 17 18 19	Area works were capable of supplying with water1940acres 1930acres 1920acres Increase or decrease (-), 1830-1940percent Excess of area works were capable of supplying	17, 9, 13	,932 ,607 ,860 32.5	77, 56,	754 877 469 8.8	10,950 9,515 14,823 15.1 2,721		432
20 21	with water over area irrigated	8	,647 ,700	17	184 766	3,131 11,357		353 832
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water1839percent 1929percent		54.9 50.9 52.5	. 7	34.8 77.9 72.1	75,2 67,1 23,4	9	1.4 2.2 8.7
25 26 27 28 28 30 31 31 31	(a) Cost of irrigation works and equipment 1940 dollars (b) Investment in water rights (reported) 1940 dollars Total investment in irrigation enterprises 1930 dollars 1930 dollars Increase or decrease (-), 1930-1940 percent Average investment based on area works were capable of supplying with water, per acre 1940 dollars 1830 dollars	296 94 2 2 2 1		5,230 1,975 6	,988 ,682 ,947	418,622 417,931 690,089 687,555 -30.2 38.23 63.07 46.38	9,405 4,940 5'	250 148 139
3: 3:	Estimated final investment in existing enterprises1940dollars	1,249	6.41 ,477 7.81	5,424	3.80 ,354 3.45	50.87 446,961 39.96	9,412	6.79
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary Enterp	Sup. rises	Primary Enter	Sup. rises		Primary Enterp	Sup. rises
3 3 3 4	7 Phterprises reporting maintenance and operation1939number 8 Area irrigated in these enterprises1939acres	727 22,331 76,373 3.42	(5) (5) (5) (5)	877 69,730 210,832 3.02		234 7,715 46,585 6.04	114,041 887,812	3 569 3,791 6.67
4	1 Total annual charges (reported) 6 7	67,775 4.63 25,028 2.71 51,757 235,340		213,245 4.44 52,436 4.07 271,460 1,236,206	2		9.45 18,074 9.27 4,752	
	WATER DELIVERED TO IRRIGATORS, 1939	696	1	908		24		2
4 4 1	7 Enterprises reporting water delivered	19,366 47,962 2.5 5.38	(5) (5) (5) (5) (6) (5)	66,826 211,659 3.2 370 1.17	(5) (5) (5)	7,78 13,66 1. 6.0	7 192,419 8 1.7 2 8.22	(5) (5) (5) (6) (5) (5)
	DRAINAGE OF IRRIGATED LAND							
	Biterprises reporting land drained or needing drainage	6,008 4,341 1,018	**********	26 13,325 12,379 651 333		. 52 31 5	0 11,096	***********

^{*} Schedules called for "Number of farms," see explanation in text.

1 Data for 1 enterprise on the Illinois River in California are included.

8 Data for the intrastate tributaries of the Sacramento River are not shown separately but are included in the Sacramento River total.

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

CENSUS OF IRRIGATION-UNITED STATES SUMMARY

49

1940, 1930, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

and Arkansas	and Louisia	ina]	1000 00											==
(Exclusive o		OCEAN STR lifornia str		Continued	math Rivers)		SACRAMEN	TO-SAN JOA	QUIN DELTA	AND TRIBU	TARY STREAT	MS (XII)		
Paci	fic Ocean s	treams south	of San Fran	cisco Bay (X	[-E)						Sacramen	to River		
То	tal	Francis and S	eams en San sco Bay Santa River	Santa Mar and s so	treams	Tot	al		lta rect	Tot	nlº	Dir	ect	
			-Ea)	-1X)	-Eb)	(X)	I)	(:	1)			(2)+(1	5) + (24)	
81 80 77	5,135 3,182 1,179 3,319 8,684 3,623 4,254 5-1	17	3,453 76,954 74,182 927 1,845	63 62	1,682 6,228 6,997 2,392 6,839	3,30 3,08 1 30 3,18	66,539 83,882 12,169 1,521 0,192 7,132 4,644 7.5	246 23	1,904 5,691 8,636 1,012 6,043	77 67 9 69	5,758 9,368 6,523 5,468 7,377 6,924 0,950	26 28 1	3,294 8,679 17,516 837 10,496 77,407 14,397	1 2 3 4 5 6 7 8
1,03 86 33 26	1,476 13,942 16,464 8,294 0,319 2,210	4	26,582		8,666	5,39 5,49 2,26 2,28	0,337 3,666 19,735 6,455 6,534 5,091	9:	7,304 1,613	1,55 1,20 92 85	8,003 4,698 4,769 8,635 7,774 3,819	51 43 91 30	52,877 78,410 39,169 53,998 01,003 14,772	9 10 11 12 13 14
96	1,123,176 218,409 904,767 962,076			4,79	2,597 5,836 3,524 7.0		3,376	1,17	2,185 6,770 4,605 18.3	5	32,646 30,983 96,748 19.1	15 16 17 18		
18	120,856		26	8,539	1,63	8,715 8,704 8,880		7,685	47	2,817 9,846 3,655	21	99,767 59,576 02,351	19 20 21	
	72.4 81 80.4						66.1 65.8 66.7		73.7		56.0 59.2 74.1		47.2 52.2 65.5	22 23 24
7,68 498,09	6,782 7,615	10,74	55,279 13,132 12.147	93,44 85,77 7,67	3,650 5,468	171,00 167,40 3,58 164,63 100,52	9,547 5,392 8,093	5,80	9,300 7,746 1,554	1,42 48,75	8,587 3,577 5,010 0,541 3,106 -5.5	16,3 17,5	95,878 11,224 84,654 02,425 30,374 -6.3	25 26 27 28 29 30
1	92.78 01.96 81.15		49.24		03.29		33.32 34.33 24.44		17.43		33.08 41.43 33.35		25.92 32.96 39.87	31 32 33
105,37	· · · · · · · · · · · · · · · · · · ·	11,10	60.78 67,183	94,21		177,3		5,87	23.64	49,01	59.10 0,703 28.69	16,5	54.86 56,184 25.36	34 35 36
Primary	91.52 Sup.	Primary	49.29 Sup.	Primary	01.86 Sup.	Primary	31.34 Sup.	Primary	17.41 Sup.	Primary	Sup.	Primary	Sup.	30
8,407 753,397 6,342,202 8.42	178 51,302 256,025 4.99	2,562 173,537 1,158,765 6.68	28 2,320 16,445 7.09	5,845 579,860 5,183,437 8.94	150 48,982 239,580 4.89	16,122 3,246,911 11,642,315 3.59	7,261 384,497 1,357,820 3,53	Enter; 684 170,538 504,342 2.96	11 22,950 6,701 0,29	4,704 743,682 2,624,323 3.53	59 16,164 12,144 0.75	781 291,775 1,010,414 3.46	7 1,075 2,559 2.38	37 38 39 40
4,644,323 11.85 462,339 10.05 3,467,817 15,534,986	215,902 5.48 39,718 5.44 381,108 1,347,129	56,102 5.12 28,980 1.94 40,354 10,334		4,588,221 12.05 433,359 10.59 3,427,463 15,524,652	215,902 5.48 39,718 5.44 381,108 1,347,129	5,990,229 2.89 3,034,228 1.97 5,163,621 56,289,636	34,892 0.59 55,230 0.63 22,140 139,000	315,488 5.07 87,196 3.62 282,500 2,191,863	5,329 0,23 22,743 0,23 5,323	1,361,910 3,14 843,583 1,61 1,211,911 13,277,819	15,360 1.24 12,387 1.24 15,400 139,000	502,157 2.43 276,215 1.82 476,378 5,537,244		41 42 43 44 45 46
d,628 802,032 1,508,811 1.9	180 34,607 63,751 1.8	2,614 176,210 370,444 2.1	30 2,327 5,454	6,014 625,822 1,138,367	150 32,280 58,297	16,169 3,202,911 8,756,250 2.7	7,313 377,491 693,453 1.8	772 210,047 493,991 2.4	8 22,943 21,184 0.0	4,751 713,535 2,522,009 3.5	65 16,264 20,679 1.3	795 287,962 1,194,556 4,1	7 1,075 3,087 2.9	47 48 49 50
9.60 5.10	7.12 3.86	6.66 3.17	2.3 7.09 3.02	1.8 10.43 5.73	1.8 7.12 3.94	4.02 1.47	3.73 2.03	3.28 1.40	0.28 0.31	3.61 1.02	1.63 1.28	2.97 0.71	2.38 0.83	51 52
365 80,789 60,687 39,322 3,595		148 13,318 11,786 8,125 1,350	••••••	217 67,471 48,901 31,197 2,245		452 1,897,316 1,181,659 1,213,586 60,237		196 218,350 158,807 171,953 9,522		155 675,459 273,956 536,104 22,804		51 491,148 213,341 420,856 1,887		53 54 55 56 57

A Revised.

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

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

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

CENSUS OF IRRIGATION-UNITED STATES SUMMARY

TABLE 18.—DRAINAGE BASIN—AREA IRRIGATED, 1939, 1929, 1919; CAPITAL INVESTED AND IRRIGABLE AREA, 1940, 1930, 1920; AND IRRIGATED UNITS,* MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER DELIVERED TO IRRIGATORS, AND DRAINAGE OF IRRIGATED LAND, 1939—Continued

		SACE	RAMENTO-SAN J	OAQUIN DELT	A AND TRIBUT	ARY STREAMS	(XII)—Contin	nued
į	ITEM (For definitions and explanations, see text. Major-		Sacramer	nto River—Cont	inued			
ſ	basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A com-			Pit River			Intra	state
	posite map index-number is shown in parentheses for each drainage basin)	Tot	al	Dire	ect.	Goose Iake	tribut in Califo	aries n
- 1				(3)	, 1	(4)		
ļ		- -						
ļ	IRRIGATED UNITS AND AREAS		.]		,)		
1 2 3 4 5/	Irrigated units 1839 mumber	. 78	746 ,381 ,537 2 ,842	54	487 ,226 ,252 1	259 28,155 24,285 1 3,869	2,36 2,16	8,877 8,823 7,010 5,041 6,772
6	Area irrigated1929acres	69	,768				2,46	0,208
7 8	1919acres Increase or decrease (-), 1929-1939percent		,984 49.6				2,10	3,694 ~3.7
9 10	Irrigable area in enterprises		3,114 1,151		,305	47,809		5,030 6,968
11 12	1920 ¹ acres Excess of irrigable area over the area irrigated1940acres		,984 ,733		,079	19,654		1,966 6,207
13	1930acres	124	,383				1,37	8,760
14	1920 ¹ ,.acres	. 40	,000				2,19	1,272
15	Area works were capable of supplying with water1940acres		,970	. 91	,070	46,900		7,036
16 17	1930acres 1920acres		3,058 7,478					.9,066 .8,919
18	Increase or decrease (-), 1930-1940percent		66.1				-1	-5.9
19	Excess of area works were capable of supplying with water over area irrigated1940acres	33	3,589	14	,844	18,745	1,03	88,213
20 21	1930acres 1920acres		3,290 7,494					8,858 5,225
	15001110011001	1.	,,,,,,			1	-,	,
22 23 24	Proportion which area irrigated is of area works were capable of supplying with water		75.7 84.0 83.7		83.7	60.0		69.5 68.0 64.8
~.					7			
	CAPITAL INVESTED TO JANUARY 1						440.46	
25 26	Total investment in irrigation enterprises1940dollars (a) Cost of irrigation works and equipment1940dollars		3,799 8,688	1,313 1,253	,865	1,620,194 1,610,823	119,13 116,96	38,224
27 28	(b) Investment in water rights (reported)1940dollars Total investment in irrigation enterprises1930dollars		5,111 2,284	55	,740	9,371	2,16 $115,85$	38,828 77.559
29	1920dollars	79	9,913					1,653
30 31	Increase or decrease (-), 1930-1940percent Average investment based on area works were	-	198.7					2.8
32	capable of supplying with water, per acre1940dollars		21.26 11.83	1	4.42	34.55		34.97 32.02
33	1920dollars	,	7.44		,,,,,,,,,,,,,	• • • • • • • • • • • • • • • • • • • •		22.07
34	Average investment per acre irrigated1939dollars	-	28.11		17.23	57.55		50.29
35	Estimated final investment in existing enterprises. 1940dollars		7,469	1,37	030,1	1,623,439	122,48	88,157
36	Average investment based on estimated final investment and irrigable area, per acre1940dollars		20.51		13198	33.96		33.88
	MAINTENANCE AND OPERATION, CHARGES	Primary	Supplemental	Primary	Supplemental		Primary	Supplemental
	AND INDEBTEDNESS	Enter	prises	Enter	prises		Enter	rises
37	Enterprises reporting maintenance and operation1939number	406	2	277	. 2	129	10,734	7,191
38 39	Area irrigated in these enterprises1939acres Cost of maintenance and operation1939dollars	93,201 52,970	(2) (2)	67,743 36,100	(2) (2)	25,458 16,870	2,332,691 8,513,650	345,383 1,338,975
40	Average cost, per acre irrigated1939dollars	0.57		0-53	(²)	0.60	3.65	3.68
41	Total annual charges (reported) 3 4	24,577	15,360	12,535	15,360	12,042	4,312,831	14,263
42	Average annual charge per acre irrigated1939dollars	0.98	1.24	[[0.73	1.24	1.51 8,375	2,73 2,103,449	0.59 20,100
43 44		31,598 0.78	12,387		12,387 1.24	1.44	2.05	0.71
45	Total charges collected	21,001 61,360		6,970 45,000	15,400 139,000	14,031 16,360	3,669,210 40,819,934	1,417
46		52,000					<u> </u>	
	WATER DELIVERED TO IRRIGATORS, 1939						70.040	7,250
47 48	Enterprises reporting water delivered1939number Area irrigated by these enterprises1939acres	343 88,774	2	222 65,299	(²)	121 23,475	10,646 2,279,329	338,284 651,590
49	Water delivered1939acre-feet	210,804	(2) (2)	146,868	(²)	63,936	5,740,250 2.5	651,590
50 51		2.4 0.61	(²)	0.57	(2) (2) (2) (2)	0.71	4.21	4.08 2.12
52	Average cost of water per acre-foot delivered. 1939dollars	0.26	(*)	0.25	(*)	0.26	1.67	
	DRAINAGE OF IRRIGATED LAND			1				
Ec	Enterprises reporting land drained or needing	1				1	,	1
53	drainage1939number	38		35		230	101 1,003,507	
54 55	Irrigable area in these enterprises1939acres Irrigated area in these enterprises1939acres	13,474 10,550		13,244 10,411		139	748,896	
-56	Area for which drains have been installed1939acres	8,400 398		8,400 340	,	58	505,529 27,911	
57	Additional area needing drainage1939acres	1		11	L	<u> </u>	L	L

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

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

Data are included only in totals because less than 3 enterprises reported in the 1840 Census.

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

CENSUS OF IRRIGATION—UNITED STATES SUMMARY

Table 19.—DRAINAGE BASIN-ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920

		Red		М	ISSOURI RIV	ER (II)		
ITEM (For definitions and explanations, see taxt. Major- basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A tom- posite map index-number is shown in parentheses for each drainage basin)	TOTAL (19 States) 1	River (of the North) and tributaries in	Total ^g	Direct	Total	ellowstone R	Clarks	
· · · · · · · · · · · · · · · · · · ·		North Dakota (I)		(11)		(II-A)	Total ³	Direct (6)
ENTERPRISES AND IRRIGATION WORKS . JANUARY 1								
nterprises	91,815	13	12,126	593	2,255	468	271	
with water	306 34,544	814	8,897	203 473	603 1,943	706 ! 379	409 280	1
1930total number	21,947 23,894		5,006 5,973	15 45	1,000 1,014	23 14	49 105	
(a) Concrete and masonry1940.number(b) Timber	3,666 4,595		673 1,046	26 55	153 240	21 54	27 72	
(c) Earth and rock	18,032 8,251	5	5,351 1,827	233 159	955 595	158 146	86 95	i
tain canals and laterals1940total length, miles	127,533.7 126,802	23.9	31,131.1 30,612	1,189.2 217	8,162.6 8,015	1,812.7 1,096	823.3 792	23
1930total length, miles 1920total length, miles	159,864 122,857	23	39,599 30,875	665 1,182	8,833 8,107	1,167 1,797	1,021 822	
(a) Earth	4,676.7 612,021	0.9 365	256.1 148,255	7.2 4,673	55.6 32,035	15.7 7,785	1.3 3,045	1
1930 capacity, c.f.s. 4 1920 capacity, c.f.s. 4	547,314 631,079	2	130, 173 167, 891	1,613 1,617	29,539 32,064	5,349 5,508	4,152 3,353	4 3
Pipe lines 5	29,584.9	1.9	400.6	17.3	70.3 4.9	15.3 1.0	1.4 0.7	
1930total length, miles 1920total length, miles	17,363.1 8,878.3		101.1 89.5 71.8	0.7 4.3 0.5	13.1 11.9	2.0 2.7	0.4	 .
(a) Concrete	18,692.2 8,027.5		227.6	15.1	39.9 13.8	8.4	0.8 0.2	
(c) Wood-stave	1,236.5 628.7		63.4		4.7	1.8		
Storage dams	4,607 2,949	2	1,237 734	53 10	195 86	60 2	6 1	
(a) Concrete and masonry1940number	3,931		1,246 33	22	160 3	11	5	
(c) Other, mixed, and not reported. 1940. number	3,795	2	1,119 85	49 3	185 7	57 3	4 2	
Reservoirs	47,709	72	1,332	59	205	61	6	
(a) 1-99 acre-feet capacity1940number	1,107	2	747 336 249	44 13	117 49 39	37 18 6	3.	
capacity1940number	33,787,382	720	6,715,271 743	13,595	945,935 90	42,364 2	32,568 1	11
1930. total capacity, ac. aft.	24,508,590		4,043,135	1,466	575,611	1,700	4,000	•••••
Wells, flowing1940mumber	4,811		79 21	13	20 6 21	3	1	
1920nmber 1940. yield, g.p.m	555,073		9,915	3,585	2,494 2,265		100	
1930yield, g.p.m 1920yield, g.p.m			7,218 4,271		194	69		
Wells, pumped	56,729		4,760 1,071	39	28 4	6		:::::
1920nmber	32,094 43,355,271		385 3,633,499	10,565	6,613	2,238		
1930yield, g.p.m 1920yield, g.p.m	32,467,120		613,350 171,464		555 1,005			
Pumping plants1940total number		16	5,738	190	229	114	4 2	
Prime movers	1,762,687		1,198 117,173	7,980	9,497 3,284	27 7,397 2,952	86 12	
1930. capacity, hp		i	25,788 18,329 1,338	716 6,602 42	3,284 3,965 32	2,501 11	10	
(a) 1940. capacity, hp	1,118,024	(^y)	26,658 4,285	5,071	4,313 181	4,125 94	4	
(c) Other	588,123	266	88,287 115	2,792	4,224	2,323 9	86	
1940. capacity, hp	56,540	16	2,228 5,994	117 206	960 244	949 122	4	•••••
1,930. number 1,920. number	61,445	8	1,279 689	16 45	68 120	36 45	2 2	
1940capacity, g.p. m 1930capacity, g.p. m	75,802,998	26,045	5,733,010 1,343,545	411,389 46,920	532,157 273,074	415,724 245,249	3,995 1,410	3
1920capacity, g.p.m	36,275,005		800,218	168,725	182,508	127,662	470	
(a) Centrifugal1940.number	42,036,392	19,975	3,562 3,537,513 993	360,698 2,026	462,759	353,531 3,214	3,995 990	3
1940. average capacity, g.p.m. (b) Turbine	. 38,204	71	2,202 2,096,177	17 47,612	11 43,600	38,290		:::::
1940capacity, g.p.m	805	3,000		2,801	3,964	6,382		:::::
(c) Plunger	. 299,420	(9)	7,701		548 37	(°)		:::::
1940average capacity, g.p.m. (d) Other1940.number	. 990	2	102 91,619	(9) 2	8 25,250	23,900		:::::
Pumping lift, from all sources1940average, feet	. 51	21	32	23	22	19	22	
1930average, feet 1920average, feet	41		26 22	31 32	25	22 24	8.	
from pumped wells1940average, feet	. 55	21	35 20	27	19	16 19	22	11 *****

For the 17 western States and Arkansas and Louisiana. Data for 2 enterprises in Osage River Drainage Basin, Kans., are included with Missouri River total. Obata for the intrastate tributaries of the Clarks Fork are not shown separately but are included in the Clarks Fork total. Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources. Includes siphons and farm pipe lines reported. There reservoirs reported with no capacity. Data for less than 3 enterprises shown with permission of the enterprises involved. Total capacity of all reservoirs regardless of size.

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

TABLE 19.—DRAINAGE BASIN—ENTERPRISES AND IRRIGATION [For the 17 western States

T				.=	IISSOURI R	IVER (II)-	Continue			estern States
	I'TEM			Ye	llowstone R	iver (II-A)-	-Continue	d		
	(For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include		Big Hor	n River	 -1	Tongue I		Powder	River	
	figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for each drainage basin)	Total ⁵	Direct	Shoshone River	Little Horn River (18)	Total	Direct	Total 7	Direct	Intrastate tributaries in Montana
	ENTERPRISES AND IRRIGATION WORKS									
2 4	JANUARY 1 hterprises	737	108	80	32	245	174	234	44	300
	area works were capable of supplying with water1940acres	897	1,702	1,783	1,025	379	314	338	212	286
4	liversion dams1940total number	491 308	75 23	28 24	25 8	217 84	175 34	259 62	35 9	317 474
3	(a) Concrete and masonry1940number	311 49	55 6	38 8	.,2	183 29	43 20	152 6	18	249 21
	(b) Timber	34 243	6 30	5	1 17	15 129	10 107	11 223	35	54 116
	(d) Other, mixed, and not reported. 1940. number	165	33	9	7	44	38	19		126
1	fain canals and laterals1940total length, miles 1930total length, miles	3,485.5 3,605	582.7 544	829.1 877	201.0 44	690.1 500	466.6 163	575.4 385	53.3 26	775.0 1,637
	1920total length, miles (a) Earth1940length, miles	3,141 3,463	606 579	775 820	43 201	708 687	266 464	804 572	46 53	1,999
ı]	(b) Lined1940. length, miles	22.5 13,298	3.7 2,381	9.1 2,611	404	3.1	2.6	3.4	0.3	9.0
5	1930. capacity, c.f.s 1930. papacity, c.f.s	12,194	1,703 2,387	3,529	30 46	2,943 1,482 2,508	1,856 629 1,333	2,255 1,025 2,620	211 118 183	2,701 5,33' 8,19
8	Pipe lines 10 1940total length, miles	45.1	10.1	15.3	3.1	1.7	0.7	5.8	2.5	1.0
9	1930total length, miles 1920total length, miles	2.2 10.0	4.5	1.0	0.5	1.0 0.3	1.0	0.3		0.1
2	(a) Concrete	8.6 23.5	8.4	7.3 3.6	3,1	0.2 1.5	0.1	5.6	2.5	0.
3	(c) Wood-stave1940.length, miles(d) Other1940.length, miles	10.2 2.8	1.5	2.4				0.1		0.1
1	Storage dams	51	12				*******	0.1		
i i	1930total number	29	*******	7 4	9 2	35 11	20 5	37 12	18	3
7 8	(a) Concrete and masonry1940number	31	2	9		37	12	32 1	13	4
9	(b) Earth and rock	49	12	6	9	34	19	35 1	18	
1 2 3 4	Reservoirs	60 25 14	19 13 6	8 2 1	11 5 1	32 23 3	19 17 1	39 25 11	19 14 5	
5	capacity1940. number	762,306 41 502,077	1,729 2 42	5 463,515 5 459,570	30,606 3 206	73,989 13 47,554	60,595 3	33,554 13 4,984	1,554 4 60	1, 15 2 15,29
3	Wells, flowing	14	10			1	1	5	5	
9	1930. number 1920. number	1	2					1 17	1 15	
2	1940.yield, g.p.m	2,296 1,965	1,096 950			(¹²)	(12)	178 200	178 200	
3	1920yield, g.p.m							125	119	
5 (Wells, pumped	8	6			4	3	9	5	}
6	1920. number 1940. yield, g.p.m	2,565	1 1,565			300	285	1,210	1 85	(12)
8	1930yield, g.p.m 1920yield, g.p.m	950	950					15	10) 5t
- [Pumping plants1940total number	F	-	 		 		 		
1 2	Prime movers	42	20 5	3	2	42	33 6	22	10	1
3	1930, capacity, hp	952 93	93	8	(¹²)	581 118	454 96	393	200	8 7
5	(a) Electric	406 14	357 11	2		361	286 2	570	245	11
7	(b) Internal-combustion1940number	131 27	105	(12)	2	57 34	(¹²) 30	17	5	
3	(c) Other	819	141		(12)	523 1	414	385	192	
1	Pumps	(12) 42	20	(¹²)	2	(¹²)	(12) 33	. 5 8	8	
2	1930 . number 1920 . number	5 25	5 20			7	- 6	29 4	11	
4	1940capacity, g.p.m	52,023	15,615	520	(12)	37,140	34,470	19,735	12,930	3,54
16	1930. capacity, g.p.m	4,240 11,800	4,240 8,840			6,335 19,275	5,900 14,575	6,505	14,265	9,33 8,63
17	(a) Centrifugal1940.number1940.capacity, g.p.m	36	15	(12)	(12) 2	36	28	19	6	
9	(b) Turbine	50,538 1,404	14,150	(12)	(12) (12)	33,140 921	30,485 1,089	18,015 948	12,845 2,141	3,54
1 2	1940capacity, g.p.m	(12) 2	(12) 2			(12) 1	(1E) 1	(12) 2		
3	(c) Plunger1940average capacity, g.p.m	(12)	(12)	1		(12)	(12) 3	(12)		
5	1940capacity, g.p.m	(12) (12)	(12) (12)	(12) (12)		300 75	285 95	190	85	
76	(d) Other	(12)	(12) 2			(12)	1	24	17	
78	Pumping lift, from all sources1940average, feet	28	31	30	(12)	17	(¹²) 17	00		
79 30	1930. average, feet	9 38	9		ļ	12	12	36 54	· · · · · er	
31	from pumped wells1940average feet	41	40 54			18 26	15 33	30 75	16 110	(12)
	from surface sources1940average, feet	25	23	30	(12)	16	15	ttle Misso	12	

Data for 1 enterprise in Keya Paha River Basin are included with Nichrara River.

Data for the intrastate tributaries of the Little Missouri River are not shown but are included in the Tongue River total.

Data for the intrastate tributaries of the Little Missouri River are not shown to the thirt River total.

Data for the intrastate tributaries of the Control of

WORKS, 1940, 1930, AND 1920-Continued

Section Sect						MISS	SOURI RIVE	ER (II)—Cont	anued					
Direct D	Attle Miss	ouri River				Cheye	nne River				White	River		
					Belle	Fourche Ri	ver	South Fork C	neyenne River	tributary			Niobrara	
State	Total ²		Total		Total ³		Creek	Total ⁶		South Dakota (Cherry Creek)	Total ⁴			River
ST		(31)		(40)		(41)	(42)		(43)	(47)		(49)	(51)	(54)
ST														
The color of the	31	.21	288	5	83	49	34	185	85	15	52	43	89	10
1	87	. 88	' 445	161	1,042	1,640	. 181	219	207	9	, 326	369	149	35
Section Sect		15				42				18		34		
10	21		264		[24 [58	47		63		30	
10	•••••		20		8		8	12] 3	9] 3	
The color of the				1						1				
Transfer		l k		5.0			55.1	268.5		6.0				
11	77							185 215						
88		1.5								ì	72			
100		11	1,962	13	1,019	862		915	307	. 15		11	246	17
2-0.0		11	6,438		397			831		1		11		
0.1	0.3	0.2		1			0.5			0.6		18.7	3.0	1.4
0.1 0.2 0.2 0.7 0.0 0.1 1.1 0.2 0.6 13.2 11.2 11.0 0.2 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	0.1		7.0		[
1. 1. 1. 1. 1. 1. 1. 1.			2.7					1.1	0.2	0.6			0.2	1.4
1			0.7	16	0.2	0.2		0.5	0.5			7.0	1.2	
18	16	8								 				
110	12		25		6	1		16	10		3	11	11	
1			1		1 1									
16 6 78 3 15 2 22 12 13 6 6 6 76 3 15 5 2 2 2 2 13 1 1 1 5 8 3 3 C 1 1 1 1 5 8 1 3 C 1 1 1 1 1 5 8 1 3 C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							_		36	1			5	1
1,87							6	1	37	3	l	10	5	1
1,857 1,556 204,212 1197,747 197,667 50 6,18 5,37 5 15,37 14,991 122 (15) 120 205,433 203,040 2,383 2,067 12,000 6773 12,000 6773 12,000 6773 12,000 6773 12,000 6773 12,000 6773 12,000 6773 12,000 6773 12,000 6773 12,000 6773 12,000 6773 12,000 6773 12,000 6773 12,000 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td>5</td> <td>1</td>							6			3			5	1
1,567 1,594 204,611 197,747 197,697 50 6,587 5 115,711 14,681 122 (15) 120 205,433 203,000 20 4 2,389 2,007 12,000 36 675 33 3 30	••••				.	1			ļ]]		
120			204,511		197,747			6,759	5,337	5	15,571			(1E)
						2	4		1 7					
	• • • • • • • • • • • • • • • • • • • •		[4]		8			1	1					
1	• • • • • • • • • • • • • • • • • • • •				1,810 2,975	(12)	1,750							********
1	•••••	•••••						, ,						
144	• • • • • • • • • •		4		1	1		3	2		5	4	13	7
				1	/18\	/18\			(18)					
7 7 47 66 12 12 12 88 8 25 1 33 18 28 14	•••••				•••••			140			1,290		13,840	509
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	********	********	2,800	800	2,000						2,200			7
68 88 964 1.28 225 285 539 491 (12) 494 353 616 213 175 222 173 103 1 15 16 14 16 16 16 14 16 16 14 16 16 14 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>28</td><td></td><td>1</td><td>33</td><td>18</td><td>28</td><td>14</td></t<>								28		1	33	18	28	14
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		88	964	138	285	285		539	491	(¹²)	494			213
7	, 175	•••••	292	173	103			16	16				8	
68 88 890 138 151 151 539 491 (12) 462 321 618 147 7 7 48 5 13 13 13 29 26 1 33 18 29 15 4 19 14 4 19 14 4 11 1			(12)		(12)			**********						68
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	88	88	830	138	151	151		539	491	(1E) 1	462	321	616	147
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			(1 2)		(18) 2						(12) I	(18)		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		11								1			. 29	15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			19	14	4			1	1	/12\				9 000
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			3,580		1,360	113,104		2,220	2,220	()				0,829
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		il .	1 1		; ;			, ,	1,100		1	*******	1	**********
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7,600	7,600	52,220	7,200	14,500	14,500		30,500	28,830	(12)	26,970	16, 145	19,025	6,723
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1,086	1,160	1,440	1,450				1,109	(12)		897	793	672 4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	• • • • • • • • • • • • • • • • • • • •				[• • • • • • • • • [[4,630	200
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			/12\		1 1	1	•••••				1		1,108	1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	•••••		(12°)		(12) (12)						(1g) (1g)			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	• • • • • • • • • •		1 2 1		1 21	: 2								
$\begin{array}{cccccccccccccccccccccccccccccccccccc$. 15	15		16	í · í	1		16	18	(12)	31	'i	1	17
		•••••	32		35			31	31					
15 16 16 17 17 17 15 16 (1z) 27 29 18 15		15		[f -	(¹⁸)	(¹²)			*********	(iz)	46		50	25 15

separately but are included in the Little Missouri River total. *Data for Belle Fourche (North Fork) in South Dakota for 1920 are included with Cheyenne River Direct. Big Horn River are not shown separately but are included in the Big Horn River total. *Data for the intrestate tributaries of the Tongue River are not shown separately but are included in the South Fork Cheyenne River are not shown separately but are included in the South Fork Cheyenne River are not shown separately but are included in the South Fork Cheyenne River total. *Total capacity pipe lines reported.**

11 Total capacity of all reservoirs regardless of size. *12 Data are included only in totals because less than 3 enterprises reported in the 1940

CENSUS OF IRRIGATION—UNITED STATES SUMMARY

Table 19.—DRAINAGE BASIN—ENTERPRISES AND IRRIGATION For the 17 western States

				MISS	OURI RIVER	(II) — Con	tinued		
1	ITEM				Platte R	lver (II-B)			
hasin totals from 1930	planations, see text. Major- 0 and 1920 Censuses include		7.		1	North Platte	River (II-Ba	1)	
Ciminos Con unidentifi	ed tributary basins. A com- r is shown in parentheses for	Total	Direct	Total	Direct	Laranie	River	Intrastate tributaries	Intrastat tributary in
			(II-B)	10001	(II-Ba)	Total ²	Direct (15)	in Wyoming	Nebraska (Blue Creek (22)
ENTERPRISES AN	D IRRIGATION WORKS								
Onterprises	1940number	6,075	1,434	1,569	855	299	123	387	
	1940acres	504	263	829	919	964	1,574	555	4
Diversion dams	1940total number	3,371 2,028	13	2,157 1,124	777 41	562 426	223 120	812 471	
(a) Concrete and masonry	1920total number	2,137 327	4 4	1,199 165	52 48	390 12	72 3	483 101	
(b) Timber	1940 .number	312 2,227	2 5	258 · 1,452	48 584	20 461	2 188	190 405	
(d) Other, mixed, and not rep	orted1940mimber	505	2	282	97	69	30	116	
Main canals and laterals	1940total length, miles 1930total length, miles	13,422.2 12,616	682.7	7,477.9 6,541	4,417.3 3,025	1,266.5	619.0 603	1,752.0 1,636	4
(a) Fanth	1920total length, miles	14,961 13,292	344 681	7,023	2,342 4,376	1,317 1,262	589 618	2,280 1,743	
(b) Lined	1940length, miles	130.2 72,454	1.7	54.9 28,684	41.3 18,714	4.5 5,474	1.0 3,929	9.0 4,347	
	1930capacity, c.f.s.3	66,838	4,347 3,375	24,490	10,520	6,277	5,040	3,709	
Dina linesi	1920capacity, c.f.s. ³	67,344 188.9	1,776	27,254	10,496 28.5	6,411	2,196 1.0	4,811 3.5	
triba trues	1930total length, miles	52.9 50.8	1.0	27.2 3.6	24.7	0.4	0.3	2.5 2.5	
	1940length, miles	45.2	1.2	14.8	13.8	0.8	0.5 0.5	0.2	
(c) Wood-stave	1940length, miles	109.7 6.5	37.8 0.6	8.7 3.4	6.9 2.4	1.0		1.0	
- /	1940length, miles	27.5	********	7.0	5.4			1.6	********
Storage dams	1940total number	607 371	48	146 119	58 7	50 20	20 5	36 76	
(a) Concrete and masonry	1920total number	469 17	1	141 9	11 1	41 5	8 2	69 2	
(b) Earth and rock	1910number	555 35	48	118 19		38 7	17	30 4	
	1940total number	636	47	166	79	44	21	40	
(a) 1-99 acre-feet capacit(b) 100-999 acre-feet capa	y1940number city1940number	309 166	45	103 28	58 10	25 8	9 7	19 10	
(c) 1,000 and over acre-fe capacity	1940number	161		35	11	11	5	11	_
	1940total capacity, acft. ⁵ 1930total number	419	526 4	3,839,231 121	3,430,095	326,235 23	312,189 5	73,681 72	9
	1930total capacity, acft		189	1,772,184	1,338,520	249,223	236,500	66,022	•••••
wells, flowing	1940. number			8	1	7	7		
	1920number			2 751	(6)	750	750	2	
	1930yield, g.p.m 1920yield, g.p.m	270		40				40	
Wells, pumped	1940.,rnumber	4,277	1,655	266	237	6	4	1	
•	1930. number	956 313	4 14	11 9	1 2	2		5	
	1940yield, g.p.m		1,411,279 990	241,662 1,320	221,266 365	1,998	1,593	(6) 5	18
i	1920. yield, g.p.m	143,904	10,551	4,330	3,180	1,150			
Pumping plants	1940total number	4,348	1,591	350	317	9	6	2	
Prime movers	1930. total number	904 80,575	30,596	41 7,107	6,071	54	43	(6) 15	
(a) Electric	1930capacity, hp 1920capacity, hp 1940.number	14,787 3,869	37 180	635 410	477 311	6		137 83	
	1940capacity, hp	1,129	113 1,425	34 587	31 546	(d) 1	(e) 1	(6)	(ª)
	1940capacity, hp	3,163 65,679	1,463 29,002	301 6,354		5 40	32		
	1940number	56 608	15 169	15 166	10	3 13	(0)	(⁶)	(⁶)
Pumps	1940total number	4,533 944	1,734 6	365 44		9	6	17	
	1920 number	307	1,506,089	34 359,336	16	3	2,468	(⁰)	11
	1930. capacity, g.p.m		3,290	63,991 24,039	51,752		500	11,239	
(a) Centrifugal	1920apacity, g.p.m	2,418	14,580	24,039		1	500	2	
	1940. capacity, g.p.m	1,942,891	760,430 835	252,669 1,019	248,276	2,318	1,918	(6)	
(b) Turbine	1940number	1,987	759	91	71	1	(8)		1
(a) Blumon	1940capacity, g.p.m 1940average capacity, g.p.m	914	703,025 926	95,125 1,045	1,073	(°)	(6)		"
(c) Plunger	1940number	3,308	14 934	1,564	1,536	(0)			
(d) Other	1940. average capacity, g.p.m 1940. number	64 76	67 26		16	1			
	1940capacity, g.p.m	50,488	21,700	9,978	- 11				•••••
rumping lift, from all source	es1940average, feet	33	31 9	27 20	21				
from pumped we	1920average, feetl940average, feet	. 22	31	21	. 22	13		(6)	•••••
	Durces1940average, feet	. 20							

¹Data for the intrastate tributaries of the Smoky Hill River are not shown separately but are included in the Smoky Hill River total.

²Data for the intrastate tributaries of the Laramie River are not shown separately but are included in the Laramie River total.

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

WORKS, 1940, 1930, AND 1920-Continued

	· · · · · · · · · · · · · · · · · · ·					MISSOURI R	IVER (11)	- Contin	ıed						I
		Platte I	River (II-I	3) —Continue	ed.					Kansa	s River (I	I-C)			
-	S	outh Platte			1					Republic	an River		Smol	y Hill Bi	ver
Total	Direct	Cache la Poudre River (8)	Crow Creek (9)	Lodgepole Creek (13)	Intrastate tributaries in Colorado	Intrastate tributaries in Nebraska	Total	Direct	Total	Direct	Arikaree Biver (2)	Frenchman Creek (3)	Total ¹	Direct (4)	White Woman Creek (7)
2,840	1,307	579	52	158	744	232	547	44	278	210	34	34	104	41	38
463 1,184 897 930 155 52 765 212	497 384 100 106 32 16 224 112	414 334 208 123 30 4 260	155 47 75 14 1	165 99 62 63 8 1 70 20	526 320 452 624 84 31 166	302 17 4 4 3 5 9	113 76 28 58 11 5	29	145 62 21 53 8 4 36	20 20 20 1 15 2	287 27 4 2 10 11	472 15 2 1 11	134 4 1 5	52 4	274
4,971.2 5,581 7,569 4,901 70.2 38,094 38,965 38,215	2,459.7 2,116 1,782 2,454 5.7 18,951 16,741 13,272	779.7 1,309 1,684 735 44.7 5,961 5,918 8,444	44.7 70 64 44 0.7 108 191 220	103.7 142 278 103 0.7 307 236 607	39 1,588.4 1,943 3,761 1,565 18.4 12,767 15,879 15,672	290.4 3 25 287 3.4 1,329 8	16 213.7 131 294 213 0.7 1,095 445 1,333	9	198.5 114 285 198 0.5 831 401 1,307	36.2 36 0.2 324	70.3 70 0.3 257	92.0 92 92 250	6.1 2 8 6 0.1 80 8	3.0	
89.4 23.5 46.9 21.4 16.2 2.3 19.5	20.5 3.4 9.8 10.1 6.4 0.4 3.6	36.0 0.6 18.0 8.0 18.7 0.8 8.5	0.2 1.7	4.4 0.2 2.9 0.8 0.5	26.6 19.0 19.1 2.9 16.5 0.3 6.9	26.0 1.2 0.3 7.8 17.0 0.2 1.0	24.9 4.3 2.5 0.6 20.8 0.8 2.7	4.8	9.7 0.6 2.0 0.6 7.4 0.1 1.6	6.9 0.6 5.6 0.1 0.6	0.5	1.3	9.3 0.4 0.1 2.5	0.5	
381 246 321 8 357 16	91 20 14 2 79 10	103 95 97 1 100 2	9 7 13 8 1	6 10 16 1 4 1	172 113 180 4 166 2	32 4 6 32	28 4 18 1 22 5		17 2 16 17	8 	8	1	5 1 2 1 4	1	2
130 135 126 768,188	35 16 50 401,569	29 25 50 175,009	3,425	6,305	60 85 25 181,880	31 1	29 4		12 4	8 1 	4 2 560	1 (6)	185	(⁶)	(6)
285 798,317 6	23 386,654 4	96 186,868 1	8 2,947 1	6,716	148 215,129	249	9 53 19		5 46				5		
230 2,270	165 170 1,181	(⁶) 60 536	(⁶)	128	363	86	370	42	180	157	7	16	86	31	42
503 290 ,638,599 196,262 129,023	94 942,739 6,165	137 143 291,637 37,660 60,611		10 3 111,554 12,800 2,835	306 43 268,754 108,887 6,025	438 61,810 361,878	78 45 234,423 36,375 10,600	19,040	46 14 123,070 26,035 8,500	97,320	6,550	19,200	18 31 68,348 2,800 2,100	18,675	
2,186 382 38,608 5,215 3,229 972 12,099 1,196 26,354	14 19,732 270 1,132 443 6,655 689	502 63 5,428 895 1,558 3,62 3,601 110 1,827	46 55 516 104 35 292 10 221	134 15 3,338 239 90 10 173 115 3,064	366 255 9,594 3,222 449 92 1,378 272	221 475 4,264 8,900 70 10 177 203 3,969	539 111 11,904 1,805 844 67 1,830 449 9,925	444 	248 67 5,571 1,120 491 14 278 224 5,250	4,421 10 128 195 4,265	9 255 9 256	895 4 150 20	3,160 110 303 18 586 95	47 964 2 (⁶) 43 886	1,637 15 566 26 1,070
18 155 2,197 398 248 1,733,759 243,265 176,690	6 59 1,151 15 80 981,741 12,114	500 63 127 312,432 49,240	26,648 5,900	9 81 132 15 5 117,704 22,100 8,567	2 (6) 367 268 368 295,234 128,111 30,348	8 118 237 496 11 213,948 412,483	17 149 558 116 37 464,668 97,850 39,903	23,710	10 43 267 68 13 229,290 62,370 32,703	9 28 232 185,570	8,920	(⁵) 26	93 119 3 21	(⁸) 47 40,380	(⁶) 42
1,044 732,079 701 1,101 986,895	660 501,536 760 470 471,452 1,003	217 133,206 614 272 176,835 650	15 9,700 647 29 16,308 562	20 17,657 863 105 99,230 945	132 69,960 530 225 223,070 991	191 177,713 930 36 31,400 872	355 284,925 803 174 174,110 1,001	37 17,195 465 7 5,850 836	166 139,335 839 85 86,380 1,040	151 121,265 803 65 62,730 965	4 2,620 655 5 6,300 1,260	11 15,450 1,405 15 19,350	56 47,055 840 62 63,655 1,027	33 26,430 801 14 13,950 996	41 44,905 1,095
25 540 22 27 14,245	323 29 10 8,430	(6) (6) 9 2,335	(6) (6) (6)	17 3 1	2,060	270 68 6 4,565	1	665	575 38 1 (⁶)	575 38 1 (⁵)			(6) (8) 		(°)
37 24 21 37 22	21 L 22 7 34	21 21 33	25	31 11 57		30 21 40		27		34 	75	70	20 29 61	34 46 21	76

Includes siphons and farm pipe lines reported.

Total capacity of all reservoirs regardless of size.

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

CENSUS OF IRRIGATION—UNITED STATES SUMMARY

TABLE 19.-DRAINAGE BASIN-ENTERPRISES AND IRRIGATION

	,	MIS	SOURI RIVER	(II) Contin	meq	M (Excl	ISSISSIP usive of t	PI RIVER (I he Missouri	II) River)
	ITEM	Kansas River (II-C) — Con.						Arkansas Ri	
basin totals from 1930 figures for unidentifie	lanations, see text. Major- and 1920 Censuses include d tributary basins. A com- is shown in parentheses for	Big Dlue	Intrastate tributaries in Montana	Intrastate tributaries in North	Intrastate tributaries in South	Total	Direct	m-1 -2	, ne
		River		Dakota	Dakota	}		Total	Dire
7		(8)		ļ			(111)	ļ	(111-
	IRRIGATION WORKS UARY 1			}					
Average size of enterprise based area works were capable of supp	lying	121	2,120	38	26	4,876	91	3,110	1,
	1940acres	J	554	1	71	277	156	300	ł
	1930total number	1	2,583 1,759		24 5	959 814	16	936 808	ľ
(a) Concrete and masonry (b) Timber	1940number	1 9	2, 325 124		16 2	1,704 88	340	1,249	
(c) Earth and rock	1940number	4	407 1,555	1 5	22	58 472	8 8	50 458	
	ted1940number		477			341		340	ļ
wath canals and laterals	1940total length, miles 1930total length, miles	9.1	6,840.6 8,337		36.3	4,838.6 5,518	66.1	4,423.7 5,275	2,58
(a) Earth	1920total length, miles	1 9	12,927 6,790	*********	60 36	8,266 4,784	356 66	7,691	3,
(b) Lined	1940. length, miles	0.1	50.6 35,247		0.3	54.6	0.1	4,374 49.7	2,
	1940. capacity, c.f.s. ² 1930. capacity, c.f.s. ² 1920. capacity, c.f.s. ²		29,423		106 54	49,858 49,701	455 719	48,217 46,577	27, 24,
Pipe lines ³	1940total length, miles		58,362	l .	124	41,974	869	39,166	11,
	1930total length, miles	1	80.2 21.6	1.1	3.5 0.5	174.5 114.9	11.7 13.2	142.1 100.0	1
(a) Concrete	1920total length, miles 1940length, miles	1	10.9	0.1	. 0.3	148.3 61.9	6.2	140.9 60.3	:
(C) Wood-steve	1940length, miles	6.1	20.9	0.9	3.5	78.8	10.8	58.7)
(d) Other	1940length, miles		26.8	0.1	**********	14.5 19.3		13.5 9.6	
Storage dams	1940total number	6	211	10	16	360	20	312	
(a) Consents and measure	1920total number		211 310		1 71	180 259	6	164 242	
(b) Earth and rock	1940number	1 4	9 173	10	1 15	17 300	15	16 259	ŀ
	ted1940number	. 1	29			43	5	37	
	1940. total number		239 126 73	10 9	16 9 6	425 291 68	24 16 2	357 243 61	
capacity	1940number 1940total capacity, acft.4	205	40 916,709	2,822	1	66	6	53	
	1930total number 1930total capacity, acft		194		3,645	1,608,164 209	18,968	890,544 187	692
Wells, flowing	1940mumber		676,835		3	1,523,856	104	922,611	561,
	1930number	1	i		5	47		46 6	
	1940Vield. g.n.m	970	10 104		(⁵)	27 4,263		3,729	2,
	1930yield, g.p.m 1920yield, g.p.m	***********	1,057		1,940	993 6,240		945	
Wells, pumped		37	29	10	3	4,428		3,640 2,529	2,
	1930number	*********	28 17		1	2,216 2,085	6	1,343	~,
	1940. yield, g.p.m	23,965	12,502 12,195	78	185	3,493,820	******	1,354 1,497,906	1,281,
	1920yieid, g.p.m		10,955	**********	375	2,104,316 1,876,840	1,362	999,536 934,452	626 641
	1940total number	119	242	38	27	4,156	51	2, 101	1
	1940. capacity, hp	2,729	99 4,174	239	2 401	1,742 145,750	64 1,570	811 55,196	45
(a) Electric	1930. capacity, hp	30	4,973 2,391		21 110	78,378 73,739	1,038 2,845	29,527	22,
	1940. capacity, hp	862	56 935	5 22	3	1,389 41,202	341	34,404 772 18,035	27, 17,
	1040 canadty be	96 1,864	177 2,919	24 184	24 393	2,516 103,070	39	1,174	
	1040 consents by	3 13	320	9	*********	251	1	36,554 155	27,
rumps	1930. rumber	122	254	38 38	27	1,478 4,190	(⁵) 54	607 2,125	1,
	1920. number 1940. capacity, g.p.m	2	121 147	**********	2 6	1,804 1,715	64 74	852 872]
	1930. capacity, g.p.m	100,940	358,937 193,885	10,713	21,030 1,437	4,275,330 2,418,238	169,608 82,630	2,004,166 1,144,006	1,585,
(a) Centrifugal	1920. capacity, g.p.m	1,000	158,251	• • • • • • • • • • • • • • • • • • • •	4,270	2,237,441	102,500	1,119,743	697 798,
	1940. capacity, g.p.m	96 81,340	231 340,722	26 10,135	24 20,845	2,677 2,984,989	54 169,608	1,615	1,000
(b) Turbine	1940average capacity, g.p.m	847 20	1,475	390	869	1,115	3,141	1,652,662 1,023	1,363,
	1940capacity, g.p.m	16,225	9,580	•••••		1,214 1,237,531		325 328,706	204
(C) Plunger	1940. capacity, g.p.m	811	1,916 10	11	3	1,019 249		1,011 159	.1,
(d) Other	1940. average capacity, g.p.m	1,085 362	394 39	478 43	185 62	9,382 38		3,815	2,
	1940. capacity, g.p.m.	2,290	8 8,241	(⁵)		50		24 26	
Pumping lift, from all sources	1940average, feet	37	16	17	27	43,428	19	18,983	14
	1930. average, feet		20	7.1			13	43	I.
•	1920average, feet	18	16	• • • • • • • • • • • •	27 24	54 45	15 12	49	

Data for the intrastate tributaries of the Canadian River are not shown separately but are included in the Canadian River total.

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

Includes siphons and farm pipe lines reported.

WORKS, 1940, 1930, AND 1920-Continued

	as and Loui				MIS	SISSIPPI	RIVER (III)	Continued			, , , , , , , , , , , , , , , , , , , ,			$\overline{}$
			Arkansas	River (III-			T die Missour	1 IIIvery		Red Riv	ver (III-B)	W	· .	
Two Butte and Bear Creeks	Salt Fork Arkansas River	Cimarron River	Verdigris River	Ca Total ¹	Direct	North Canadian River	Intrastate tributaries in Colorado	Intrastate tributaries in Kansas	Total	Direct	Washita River	Black River Ouachita River and Bartholomew Bayou	Intrastate tributaries in Arkansas	
(12)	(14)	(15)	(16)		(18)	(27)				(III-B)	(1)	(5)+(10)		
. 18	9	86	6	218	71	. 49	763	192	799	780	16	3	876	1
251	105	139	4	357	77	36	295	. 86	267	273	32	106	217	2
4	3	49 B	••••••	106 86	32 3	1	429 621	-48 19	4	4			3	3
	1	52 12	*********	264 13	1 2		831 30	2	14			1		5
4	2	16	*********	5 72	26	1	14 192	2 33		4			2	1 '
		21	********	18	4		193	7					ĩ	١ '
29.0	5.2	119.1 58		412.6 561	65.3 13	6.0	1,255.3 2,035	14.0 85	308.0 202	303.0	5.0		40.8	1
29	5	220 108	*********	982 389	15 65	6	3,101 1,253	191 14	128 307	302	5		37	11
133	0.2 87	11.1 439	3	23.6 3,167	0.3 181	37	2.3 16,171	400	1.0 1,156	1.0 1,134	21	1	3.8	
		157 642	*********	5,518 8,123	40 59		18,461 17,881	138 835	1,009 163				• • • • • • • • • • • • • • • • • • • •	1
0.5	0.3	0.2 0.2	0.5	16.1	2.8	11.9	19.5	6.2	9.9	7.2	2.7		10.8	1
********		0.2	0.3	3.2 19.0	0.2 4.2		77.0 104.8	12.9 2.8	0.9 0.4			0.4		2
	0.3	0.1 0.1	9 0.5	14.9	2.8	10.8	0.7 11.0	0.3 5.7	0.7 8.1	0.4 5.8	0.3 2.3		1.2	
0.5				0.2 1.0		0.1 1.0	3.6 4.2	0.2	1.0 0.1	1.0	0.1		9.6	2 2
6	2	14	1	43	13	11	84	23	16	11	5		12	
••••••		5 9	********	24 63	2 2		111 125	7 11	3				************	2 2
6	2	11	1	1 31	13	3	2 78	6 16	1 15	11	1 4		11	2
	2	1 10		11	40	8	4	1				*****	1	
5	2	13 11 2	1 1	45 25 13	13 12	13 10 3	85 53 20	28 19 8	33 30 1	30 27 1	3	***********	11 2 4	: 3:
30,061	(⁵)	891	(⁵)	7 105,751	2,092	1,146	12 54,093	7,101	681,831	2 681,826	5		5 16,821	
******	********	3,536	1 9	25 147,045	2 2		116 174,662	16 36,292	600,013					3
3		20					1	4	1	1	*********			3
*********	********	8		•••••	********		5 16	1	3				*************	40
93	********	423	,				(⁵) 870	1,030 75	(⁶)	(⁵)				4
10	3	500	*********	101			2,825	450	2,600					4
		18 5	9	101 12	34 12	51	70 127	159 732	652 63	848	3		1,047	44
4,134	2,710	12 20, 158	2	32,992	15 8,123	11,569	76 30,469	672 126,173	49 715,848	715,047	601	(⁵)	1,280,066	
*******		1,330 5,321	1,450 52	1,705 6,417	1,705 3,108	********	55,872 19,521	313,085 261,397	58,830 48,950					48
10	7	30 5	3 5	109 15	37	55	79 96	225 241	907	890	14	а	1,097	50
256	99	813	10	1,384 170	15 391	402	1,221 1,221	6,359	72 39,565	39,369	162	34	49,419	52
		46 221	9 2	259 25	170 193 12	13	372 14	5,607 6,397 21	2,397 3,444 181	175			425	5% 54 56
6	(°)	27	(⁵) 1	288 48	146 14	142	110	430 204	6,950 647	6,885 637	65	3	15,876 656	50
243 4		796	(⁶)	1,034 36	225 11	240 23	973 17	5,929	32,491 79	32,361 78	96 1	34	32,79F	58
13 10	(⁵)	17 30	3	42 110	20 39	20 53	138	237	124 911	123 894	(⁶)	3	745 1, 100	60
		8 11	9 2	14 26	14 19		98 46	269 261	75 67	0094	7.3			6:
6,634	9, 160	41,658	150	37,853	9,322	15,126	40,890 75,507	282,620	763,940	751,563	10,777	1,600	1,337,616	6
******		1,480 4,817	1,450 42	2,355 6,663	2,355 5,141	********	21,451	365,655 288,475	55,760					66
(⁵)	6,450 1,612	26,600 1,900	(⁵) (⁶)	32 14,375 449	11 2,445 222	18 10,230 568	38 26,734 704	176 211,330 1,201	66,895 778	73 55,170 756	10 10,125 1,012	3 1,600 533	922 1,095,824 1,189	67 68 68
3,100	(5)	14 15,050	********	22,425	11 6,475	4,400	21 13,312	67,670	732 691,435	731 691,135	300		157 217, 390	70
775 4	1 '' ,	1,075 2	1	680 45	589 17	440 25	634 15	1,187	945 89	945 86	300		1,385 1	77
34 8	(⁶)	(5) (5)	(⁵) (⁵)	1,053 23	402 24	496 20	134 9	(⁵)	5,565 63	5,213 61	352 117		(⁶) (⁵)	74
*******			,,,,,,,,,,,	********			700	3,600	45	45	.,,,,,,,,,,		20 24,400	70
88	27	40 35	11 32	79 71	83 71	90	32 21	38 24	91 44	92	40	25	59	78
93	1 20	26 55	19	79 88	88 98	100	27 36	30 47	76 95	95	93.	(⁵)	60	8
68	15	20	11	27	20	34	20	27	. 26	26	24	30	23	1 8

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

TABLE 19.-DRAINAGE BASIN-ENTERPRISES AND IRRIGATION

				(Exclusive		MEXICO Grande and	(IV) Mississippi	River)	-	
ITE			Colorad	lo River	Brazos	River	Sabine F	liver		
(For definitions and explanate basin totals from 1930 am figures for unidentified to posite may index-number is each drainage basin)	i 1920 Censuses include ributary basins. A com-	Total	Total ¹	Direct	Total ²	Direct	Total ³	Direct	Intra- state tribu- taries in Texas	Intra- state tribu- taries in Louisian
ENERDDICES AND I	D D TOLETON WODEN			(0)		\(\(\)		(11)		
ENTERPRISES AND JANUA Enterprises	RY 1 1940number	5,398	514	433	1,358	1,352	46	14	1,011	2,46
area works were capable of supplyi with water	ng 1940acres	282	344	407	211	212	2,422	2,967	222	. 29
(a) Concrete and masonry	1930total number	196 99 148 42	41 15 46 27	39	15 2 2	15 2	2 4		49 43 62	
(b) Timber(c) Earth and rock	. 1940. number	11 85 58	4 7 3	4 5 3	13	13	2		10 26 13	
Main canals and laterals	1940total length, miles 1930total length, miles	4,569.8 3,792	664.5 731	662.3	152.0 42	152.0	543.0 318	194.4	934.8 574	2,275 2,1
(a) Earth. (b) Lined	1920total length, miles	4,886 4,512 57.8 18,860	963 644 20.5 3,100	643 19.3 3,054	266 151 1.0 1,100	151 1.0 1,097	257 542 1.0 2,751	194 0,4 613	609 923 11.8 2,393	2,7 2,2 23 9,5
Pipe lines ⁶	1940capacity, c.f.s. ⁵	18,608 20,931 221.0	1,791 3,925	28.7	393 287	13.1	2,700 1,972		4,579 4,545	9,1 10,2
	1930total length, miles 1920total length, miles	46.5 158.9	7.9 8.5		6.1		0.4	0,1	116.5 30.4 105.1	45
(b) Metal	1940length, miles	30.5 173.9	2.9	2.9 19.8	0.9 12.7	0.7 11.9	* 0.1	0.1	12.3 101.9	14 28
(d) Other	1940length, miles	7,5 9,1	0.1 6.0	6.0	0.5	0.5	0.2		1.5 0.8	
Storage dams	1940total number	204 195	53 53	50	25 20	24	. 1	1	32 50	
	1920total number	162 43	53 27	27	2 6	6	2		44	
(c) Carth and rock	1940number	140 21	25 1	22 1	18 1	17	1	1	21 2	
Reservoirs(a) 1-99 acre-feet capacity(b) 100-999 acre-feet capacity(c) 1,000 and over acre-feet		436 388 31	68 58 8	61 52 8	44 41 2	43 40 2	1 1	1 1	273 254 8	
	1940total capacity, acFt. ⁷ 1930total number	17 334,176 321	8,301 33	1 4,298	3,041 20	3,037	(⁸)	(⁸)	11 307,721 194	15,
Wells, flowing	1930total capacity, acft	296,264 576	8,828	2	3,534	1	20		270,149 64	13,
•	1930. number	856 127	13 3		1 3				36 112	
	1940yield, g.p.m	43,504 52,933	742 1,255	(⁸)	(⁸) 72	(⁸)			30,063 19,693	12,
Wells, pumped	1920yield, g.p.m	57,009 4,158	5,400 317	275	3,500 1,467	1,464	4	2	41,854 868	6,
	1930number	2,363 1,615	117 57		171 150		7 2		694 596	1,
	1930yield, g.p.m	3,210,783 2,493,111	77,160 26,143	75,938	1,213,809	1,213,669	3,530 16,800	(⁸)	395,171 390,315	1,521,
	1920yield, g.p.m.,		30,667		136,332		27,500		297,944	1,580
Prime movers	1930. total number	5,572 3,197	554 374	482	1,529 212	1,523	71 20	18	1,162 884	2, 1,
	1930 canacity by	208,930 140,298 136,953	20,052 17,507 13,500	19,742	63,983 8,829	63,946	11,625 4,739	2,959	30,787 25,886	82
	1920capacity, hp	787 43,062	12,858	90 12,858	6,276 130 8,065	126 8,048	8,755 3 1,200	1 200	26,975 277 10,389	10
	1940number	4,425 142,717	352 5,894	321 5,627	1,294 55,526	1,292 55,506	3,872	1,200 15 1,759	811 16,127	1,
	1940. ramber	360 23,151	1,300	71 1,257	105 392	105 392	21 6,553		74 4,271	10,
rumps	1930. number	5,697 3,525	592 414	529	1,533 219	1,527	72	18	1,170 945	2,
		3,208 11,646,141 8,929,951 9,202,748	359 1,455,328 1,308,649 912,048	1,439,297	175 1,733,799 268,075 153,585	1,732,639	45 1,213,799 596,687 2,171,000	211,619	773 1,131,256 1,111,111	6,111, 5,645,
(a) Centrifugel	1940number	2,767	285	265	305	301	52	12	1,176,729 503	4,789,
(b) Turbine	1940average capacity, g.p.m	7,884,996 2,850 2,107	1,227,560 4,307 59	1,211,750 4,573 59	676,673 2,219 1,083	675,623 2,245 1,082	763,269 14,678 18	201,119 16,760 6	833,103 1,656	4,384, 2,
j	1940. capacity, g.p.m	3,063,294 1,454	207,995 3,525	207,995 3,525		1,040,100 961	450,500 25,029	10,500 1,750	408 275,253 675	1,089,
	1940capacity, g.p.m	643 37,142	241 18,159	199 17,954	125 3,434	124 3,414	(8) 2		211 14,439	1,
(d) Other	1940average capacity, g.p.m	58 180	75	90	27 20	28 20	(8)		68 48	. *
Pumping lift, from all sources	1940capacity, g.p.m	660,709 50	1,614 44	1,598 43	13,502	13,502 76	19	•••••	8,461	637,
	1930. average, feet	46 37	38 30	43	54 63	76	13 40 21	13	54 66 45	1
from pumped wells from surface sources.	1910average, feet	62 20	61 26	61 26	78 23	78	21	(⁸)	60	1

Data for the intrastate tributaries of the Colorado River are not shown separately but are included in the Colorado River total.

Bata for the intrastate tributaries of the Brazos River are not shown separately but are included in the Brazos River total.

Bata for the intrastate tributaries of the Sabine River are not shown separately but are included in the Brazos River total.

Includes San Antonio River Drainage Basin in New Mexico.

CENSUS OF IRRIGATION—UNITED STATES SUMMARY

WORKS, 1940, 1930, AND 1920-Continued

and Louisiana] RIO GRANDE (V) Lower Rio Grande (V-B) Unner Rio Grande (V-A) Conejos River Independent basins in the Upper Rio Grande Intrastate Intrastate Total Direct Costilla tributaries tributaries Sacramento Intrastate Intrastate Total Total Direct Direct Creek River basins basins in Direct Total in New Mexico (V-A) Colorado New Mexico Salt Lakes (25) Colorado (V) (V-B) (V-A) (3) (4) (V-B) 3,393 1,308 1,774 788 94 84 48 89 328 427 4 175 248 1,619 520 1 475 103 1,313 642 1,066 665 902 1,198 1,331 1,058 940 347 255 10 616 2 1,450 1,047 275 83 195 345 53 261 55 95 54 922 71 723 70 223 238 133 86 47 84 199 16 106 69 16 1,639 1,227 103 48 224 481 192 4121.1 12 19 158 95 16 14 39 670 212 486 159 56 54 21 29 98 71 184 53 54 341 46 14 13 8 18 141 114 91 23 83 9 2,921.7 2,466 1,610 1,120.5 4,783.1 2,425.2 2.0 188.5 155.6 8,702.9 5,346.9 295.0 287.0 280.1 316.2 346.1 39 43 280 4,641 3,483 4,428 2,145 1,843 2,407 1,410 1,604 1,104 5,523 5,908 9.381 414 389 974 541 427 114 280 3,858 11 287 1,085 311 668 12 2,021 900.7 13 14 15 153 2,948 295 4,737 971.8 1,017.9 918.9 46.1 18.2 0.1 5.2 16.5 6.1 3.5 23,017 20,393 17,925 26,035 23,923 25,000 3,242 3,747 3,545 2,016 3,180 3,487 1,732 2,239 6,035 43,851 38,609 12,365 10,175 4,986 4,312 4.960 1,694 270 1,416 310 17,816 10,652 9,319 2,005 234 16 17 40,424 3.188 8,606 139 774.3 287.9 0.2 5.8 750.9 704.6 18 720.3 0.1 275.9 59.3 642.6 19 20 21 $0.4 \\ 0.2$ 265.4 42.8 12.0 31.0 0.5 9.0 90.3 0.1 5.6 14.0 8.8 40.5 648.4 5.8 1.5 0.6 0.1 0.1 638.3 0.1 0.2 3.2 54.3 49.7 22 23 24 21.4 20.1 3.0 0.5 36.0 0.3 0.2 33.0 44 2 13 74 47 49 97 36 32 17 13 25 26 27 28 29 58 34 19 14 10 99 125 52 76 9 72 7 15 11 11 40 4 89 4 2 40 2 4 12 1 2 49 2 14 14 1 137 13 65 4 1.1 20 11 6 85 45 19 91 92 93 567 478 152 150 143 243 4 147 324 146 272 20 206 44 7 35 26 15 28 2,877,121 54 3,864,857 7 2,783,958 32 :11 34 35 (8) 93, 163 64 129,864 45,500 261,418 300 626,811 3,238,046 16,269 1,007 36 37 306 68 110 73 196 107,527 21.280 3,120,623 3,013,096 2,689,979 6,500 15,739 223,944 63,731 1,466 437 1,029 1,1362 320 320 529 860 526 10 300 615 452 73 72 350 105 11,168 40 41 42 43 1,016 106 564 560 ...,... 155 240,308 276,671 560 11,168 51,898 39,720 21,042 1,000 15,000 15,000 3,372 372 27 2.847 401,156 13,595 16,771 13,595 20 207 2,922 75 384.385 1,712 731 503 229 137 995 608 717 10 471 я 2 4 362 209 350 350 369 88 99,158 OF 204 46 47 48 49 (⁸) 3,000 450 2,450 80,561 1,291,071 1,703 448,607 368,046 474,357 2,320 2,025 498,631 2,320 230.077 229,178 229,178 268,554 286, 143 50,542 46,944 46,944 177,301 50 51 52 1,632 722 2,323 1,171 5 2 5 691 449 3 2 617 216 219 367 348 34B 367 11,270 7,119 3,926 192 2,900 459 76,569 52,910 30,941 682 3,686 7,008 2,074 128 3,660 7,008 2,074 128 65,299 7,405 38 (8) 63 26 39,777 45,791 27,015 490 37,142 21,779 164 52 336 61 1,057 59 54 55 56 57 59 61 62 63 64 1,516 i (8) 1,814 82 1,825 8,494 (B) 14,108 17,008 9,551 1,030 40,121 364 2 (8) 26 20,418 (⁸) 48,407 26,704 8,286 6,286 38 1,851 15 21 228 152 11,154 40 84 24 62 15 112 1 10,865 754 282 10,927 (8) 21 11,0702 224 356 2,353 447 3 285 372 356 709 202 221 30 98 93 83 488 1,710 (⁶) 5,486,952 3,881,586 2,716,936 531,799 3,930 800 4,088,747 ,509,639 3.000 102,267 1,500 100,767 4,955,153 3,647,857 2,607,912 9,077,125 2,383,251 230,300 3,079,305 2,180 14,828 47,417 66 46,779 2,398,079 109,024 46,779 1,238 4,163,897 3,363 67 2 3,516,850 6,586 3,870,885 24,415 519 164 (8) (8) (6) (6) 2,200 733 1,500 22,915 293,012 261,767 . . . , 533 4,330 589 4.597 852 909 164 77,568 294 237,980 809 92 70 71 72 73 74 75 76 77 RRS 219 127 638,235 1,084 129,500 1,408 876,215 992 288,112 77,568 473 17 473 1,316 1,249 17 101 150 49 31 284 1.456 1.047 (⁸) (⁸) 2,253 1,550 797 503 . 17 18 76 16 1 444,577 441,350 (8) (8) 444,587 441,360 78 79 80 81 65 50 45 37 32 49 18 42 21 (⁶) 25 48 14 41 51 20 . **. . .** 50 89 22 68 64 36 55 42 ····· 53 57 64(₈) 30 62 83

18

21

11

⁵Total capacity (not necessarily capacities of canals) of heading structures (including pumping plants) for diverting water from natural surface sources.
⁶Includes siphons and farm pipe lines reported.
⁷Total capacity of all reservoirs regardless of size.
⁸Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

TABLE 19.-DRAINAGE BASIN-ENTERPRISES AND IRRIGATION

RIO GRANDE (V) -Continued COLORADO RIVER (VI) Lower Rio Grande (V-B) -Continued Upper Colorado River (VI-A) ITEM

(For definitions and explanations, see text. Majorbasin totals from 1980 and 1920 Censuses include figures for unidentified tributary basins. A com-Dolores River Pecos River Total Direct osite map index-nu each drainage basin) Intrastate index-number is shown in parentheses for Total tributaries Total Direct Tota11 Direct in New Mexico (VI-A) (VI-B) (VI) (VI-A) (20)ENTERPRISES AND IRRIGATION WORKS JANUARY 1 Enterprises 1,099 633 466 7,350 530 4,655 478 188 128 Average size of enterprise based on area works were capable of supplying with water.....1940.acres..... 286 414 112 458 643 388 380 367 153 Diversion dams......1940..total number..... 333 133 200 241 4,391 3,623 238 237 196 3,155 2,468 318 1930..total number..... 178 1920..total number..... 45 12 87 (a) Concrete and masonry......1940..number.... 28 59 215 489 19 479 10 192 15 131 192 2,135 794 68 63 2,614 136 118 Main canals and laterals......1940..total length, miles..... 998.1 476.2 753 1,039 749.7 248.4 1,206.6 20,894,1 1.792.6 13,964,3 240.4 442 988 20,185 22,586 20,581 3,049 3,511 1,757 1930..total length, miles..... 1.175 733 457 750 11 12 13 14 15 16 (c) Earth... 1940. length, miles...
(d) Earth... 1940. length, miles...
(e) Lined... 1940. length, miles...
1940. length, miles...
1940. length, miles...
1940. capacity, c.f.s.4.
1920. capacity, c.f.s.4. 2,082 927 1,094 680 13,896 240 247 1,191 475 71.1 1.4 937 946 1,476 15.6 6,682 2,576 69.7 313.1 35.4 6,227 2,974 4,143 81,033 68,322 66,306 7.164 9,975 57,900 3,920 5,619 15,207 990 10,117 2,827 2,622 1.8 45.6 2.4 18.8 40.8 0.5 6.1 919.0 40.4 71.5 25.1 2.4 0.4 4.0 12.5 1.1 12.3 4.1 1.9 12.7 216.6 16.6 1.3 12.9 11.4 13.2 248.0 4.3 0.4 38.6 1.5 23 16.3 30.0 25 26 18 3 4 14 840 494 565 35 10 1930..total number..... 11 27 1920..total number..... 10 19 25 29 18 16 2 772 43 14 10 34 31 32 331940..total number..... 239 225 14 12 6 1,030 12 227 618 24 15 34 11 10 7,708 35 36 37 1940..total capacity, ac.-ft.8.. 1930..total number.......... 1930..total capacity, ac.-ft.... 7,706 533,648 127 509,627 5,717,080 841,798 41,975 32,561 85,643 81.088 3,748,284 4,555 26,146 273 200 .1910. number. 1930. number. 1940. yield, g.p.m. 1930. yield, g.p.m. 1930. yield, g.p.m. 18 337 6 300 (°) 661 1,094 563 283 612 41 42 43 188,255 48,584 16,803 70,917 130,270 57,985 220,457 176,860 237, 257 207,4651940. number..... 44 45 46 47 48 49 858 523 31 1930. rumber 1930. rumber 1930. rumber 1930. rumber 1930. yield, g.p.m. 1930. yield, g.p.m. 13 317 1,196 138 149 1,128 1,830 453,921 15,175 282,232 247,371 ,758,983 ,772,812 736, 153 8,104 1,700 262,546 174,938 265 92,107 82,831 095,724 1,650 50 Pumping plants..... 2,698 138 364 .28 6,814 25,522 7,774 5,174 326 117,403 6,406 4.129 128 108 53 54 55 56 57 58 59 60 61 62 63 64 65 66 6,636 2,076 171 62,050 27,406 1,635 6,357 3,359i9 (b) Internal-combustion 1940. capacity, hp. 1940. capacity, hp. 1940. capacity, hp. 1940. capacity, hp. 1940. capacity, hp. 1940. number. 3,239 5,614 2.375 2,789 86,505 1.296 1,220 25 509 534 161 914 19,703 14,334 26,365 149 1,615 19 1,559 109 108 50 24 205 911 200 576 (⁹) 2,410 4,533 3,551 2,400 335 343 150 296,352 271,546 1,220 1,128 404 309 159 570,054 3,616,220 488,683 230,121 132,039 5.900 4,550 86,850 32,882 84,788 124,701 367.101 465,200 221,289 96,588 195.680 67 68 (a) Centrifugal......1940..mumber.... 142 169,155 218 70 254,006 35 184,880 848 354,035 906,009 136,080 56.298 4.550 5.900 69 70 71 1,144 1,622 ,600,149 1,603 983 1,191 1,248 1,609 1,138 (b) Turbine..... 497 111 110,385 994 10 75,566 15,113 (c) Plunger. 1940. capacity, g.p.m. 1940. average capacity, g.p.m. 1940. number. 1940. number. 1940. capacity, g.p.m. 1940. capacity, g.p.m. 1940. average capacity, g.p.m. 1940. number. 1940. capacity, g.p.m. 1940. capacity, g.p.m. 508,735 1,024 398,350 1,032 153,066 15,307 86,566 10,821 72 73 74 75 76 77 45

Data for the intrastate tributaries of the Dolores River are not shown separately but are included in the Dolores River total.

Data for other intrastate tributaries of the San Juan River are not shown separately but are included in the San Juan River total.

Data for the intrastate tributaries of the Yampa River are not shown separately but are included in the Yampa River total.

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

Includes siphons and farm pipe lines reported.

409

3,227

47

31

379

2.170

34

30

10

29 27

29

1,057

8,582

101,480

46

54 44

611

27

(⁹)

285

7.190

24

29

27

13

13

17

15

17

81

surface sources...1940..average, feet.....

WORKS, 1940, 1930, AND 1920—Continued and Arkansas and Louisianal

and Ark	ansas and l	Louisiana	1				COLORA	DO RIVER	(VT) —	Continued	·——						_
						······································				-Continue	· ·						-
			Gree	n River (V	I-Aa)				(11 11/	- octomu		San Ju	an River (VI-Ab)			_
Total	Direct	Henrys Fork (12)	Total ³	Direct	Little Snake River (16)	White River (20)	Intra- state tribu- taries in Wyoming	Intra- state tribu- taries in Utah	Total ²	Direct	Los Pinos River	Animas River	La Plata River (4)	Chinle Creek (10)	Intrastate tributaries in Colorado	Intrastate tributaries in (!tah	
1,606	189	70	473	285	. 96	151	466	257	571	167	72	110	64	3	141	. 13	
487	388	397	204	189	271	273	521	1,171	388	244	634	404	360	1,779	382	589	
1,368 1,359 919 83 266 758 261	129 76 25 4 25 89	129 7 45 2 17 61 49	166 295 109 10 6 137	53 25 16 9 3 36 5	61 30 10 57	121 183 43 6 47 28 40	546 629 285 18 124 309 95	277 165 412 43 47 134 53	437 364 133 77 34 190	115 33 27 12 28 26	51 32 9 11	57 139 45 5 2	E2 42 30 9 1 28	20	117 112 18 11 3 76	20 5 7	
5,743.9 5,794 6,703 5,733 10.9 21,496 17,145 16,875	423.1 363 209 420 3.1 1,899 1,563 1,474	201.0 158 185 201 373 345 301	887.9 1,041 1,516 886 1.9 2,765 2,637 2,736	528.4 160 154 527 1.4 1,745 639 498	209.0 202 272 209 593 697 873	412.0 359 451 410 2.0 1,368 930	1,407.8 1,722 1,918 1,407 0.8 5,756 5,438	2,412.1 2,137 2,422 2,409 3.1 9,335 6,193	136 1,905.5 1,627 1,524 1,892 13.5 6,346 4,573	49 619.2 221 265 614 5.2 1,232 603	265.7 278 269 260 2.7 1,251 875	35 319.5 473 436 315 4.5 1,391 1,289	14 169.0 252 233 169 667 691	129.3 129 0.3 132	27 348.7 380 304 348 0.7 1,520	43.0	
9.2 1.6 1.5 0.1 6.6 2.3 0.2	1.4 0.4 0.7 0.7		2.0 0.4 0.3 0.1 1.9	0.1 1.0	0.4	2,883 1.9 0.5 0.2	5,502	3,976 2.5 0.7 0.6 0.7 1.6 0.2	4,510 6.6 2.8 7.2 4.0 2.6	669 3.5 0.1 7.1 2.7 0.8	853 0.7 0.2 0.1	1,694 1.5 0.5 0.3 1.2	0.1 0.1	0.1	0.6 0.6 2.0 0.1 0.5		
162 102 124 1 143 18	`22 1 1 21 1	6 1 226	30 40 57 28 2	23 2 4 22 1	3 1 6 2 1	13 14 16 12	45 16 17 1 33 11	46 28 11 43 3	43 17 21 37 6	20 6 19	1 3 1	3	3 4 3 3	5	5 8 3		
170 63 59 48	19 14 3	5 1 1	48 21 23	34 11 19	4 1 3	13 6 7	40 17 10	45 4 15	45 8 35	20 3 17	71	3 1 2	3 2 1	5	7 2 4		
560,672 104 185,530	3,826	7,043 1 80	15,748 33 10,226	14,441 5 2,180	659 1 400	1,297 9 5,741	13 141,083 20 56,874	26 391,675 39 112,587	28,785 13 4,681	9,442	******	1,170	581 2 180	4,334	11,158 9 2,555		
11 4 2 734 510			(°)	(⁰)		648 360	4 1 2 61 120	30	10 360	2 90		4	*************				
11 3 1 920 410 1,350	1,350		838	818	(⁹)		5 3 82 410		1 1 1 (⁸) 50				(⁸)				
70 21 1,883 1,071 647 4 26 54 732 1,125 67	34 13 1,470 980 559 2 (°) 23 342 9 1,108		20 3 200 42 48 2 (°) 16 192 2 (°) 2	15 1 153 2 48 2 (⁹) 13 147	5 2 47 40 3 45 2 (°) 6	8 1 78 4 10	, 5 30 5 22 22 15 1 (°) 6	3 1 105 40 8 3 105	3 2 38 14 27 3 38	1 (°) 12 22 1 (°)			(°) 2				
22 23 80,650 16,774 44,820	14 14 44,590 13,544 13,085		3 4 21,528 720 3,200	14 1 4 16,648 320 3,200	4,880 400	9 1 7,350 750 900	1,082 410	3 6,100 1,350 27,735	3 2 4 1,312 317 1,200	(°) 300 1,200			(°) 17				
54 65,350 1,210 (°) (°) 8 110 14 4 7,190	27 35,550 1,317 (°) (°) 1 (°)		15 17,150 1,143 3 28 9 2 (9)	12 14,540 1,212 1 (*) (*) (*)	2,610 870 2 (°) (°) (°)	9 7,350 817	(°) (°) (°)	(*) 2 (*) (*)	3 1,312 437	(9)			(0)				
20 20 16 38 16	19 20 29 19		13 23 15 20 11	14 10 15 21 12	(⁹)	15 12 10 15	60 25 24 60	13 6 40 13	18 86 128 (°) 15	(⁹) 132 85 (⁹)	*******	******	(⁹) 40 (⁹) (⁹)				

Three reservoirs reported with no capacity.

Capacity not reported.

Total capacity of all reservoirs regardless of size.

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

TABLE 19.-DRAINAGE BASIN-ENTERPRISES AND IRRIGATION

				COI	LORADO RIV			[For the 17 wes	
TMD/		Upper Co	lorado River	(VI-A) —Con.			er Colorado Rive		
ITEM (For definitions and explanations, see tex basin totals from 1930 and 1920 Censuse figures for unidentified tributary basins posite map index-number is shown in parent each drainage basin)	es include . A com-	Paria River	Intrastate tributaries in	Intrastate tributaries in	Total	(Excl	Little Colorado Total	River (VI-Ba)	Kanab Creek
·		(25)	Colorado	Utah		(VI-B)	100,41	Direct (VI-Ba)	(1)
ENTERPRISES AND IRRIGATIO JANUARY 1									
Enterprises1940number. Average size of enterprise based on area works were capable of supplying with water1940acres		15 114	1,759 296	38 906	2,416	52 3,068	96 344	90 284	. 1:
Diversion dams	umber	16	1,284 766	43 31	763	3	67 36	16 9	
(a) Concrete and masonry1940number. (b) Timber1940number. (c) Earth and rock1940number.		14	725 28 148 878	148 8 2 19	98 10 179	5	32 36	19 17	
(d) Other, mixed, and not reported1940number. Main canals and laterals1940total l 1930total l	ength, miles		230 4,415.6 4,439	14 161.2 127		596.0 2,592	14 355.1 281	13 215.1 116	25
(a) Earth	ength, miles miles miles y, c.f.s. ³ y, c.f.s. ³ y, c.f.s. ³	25 0.3	5,789 4,419 26.6 19,967	189 161 0.2 607	4,780 239.8 15,592	2,761 565 20.0 3,293	199 355 0.4 159	100 215 0.1 333	n
Pipe lines ⁴	ength, miles		15,877 19,765 27.8 11.4	477 518 0.4	789.8	12,631 -7,290 15.3 12.6	399 341 2.4 2.1	129 208 2.2	******
1920.total 1 (a) Concrete.	ength, miles miles miles miles		32.2 4.5 14.0 3.0	1.0 0.2 0.2	642.5 122.7 3.3	0.4 10.3 0.9 0.1	0.5 1.9	0.5 1.7	1
Storage dams	umber umber	3	5.3 288 234 210	19	257	4.0	63 33 14	10 7 9	
(a) Concrete and masonry		3	3 277 8 295	3 15 1 21	18 240 9 428		59 4 64	38 2 42	
(a) 1-99 acre-feet capacity1940number. (b) 100-999 acre-feet capacity1940number. (c) 1,000 and over acre-feet capacity1940number.			136 120 35	8 10	361 34		23 23 18	16 19	
1930total n	apacity, a c f t. 5., umber			11		2	70,051 41 81,292	45,526 10 11,648	
1930number. 1920number. 1940yield,	g.p.h		1		47.490	(⁶)	13 2 4,000	13 2 4,000	
Wells, pumped1940number. 1830number.	g, p. m. , , , , , , , , , , , , , , , , , ,		1		2,348	31		14	
1930yield, 1930yield, 1920yield,	g.p.mg.p.m.		(⁶)	*************	2,742,382	8,104 1,700 1,650	5,117 1,000	4,395	
Prime movers	y, hpy, hpy		17 18 228 1,464 855	***************************************	2,522 110,456	58 19 3,685 2,995	97 348	19 284	(a)
(b) Internal-combustion1940number.	y, hp		6 50 8		1,601 84,921 805 24,562	487 15 1,569 32 1,106	3 13 21 311	3 13 14 269	(°)
1940.capacit Pumps1940.total n 1930.number.	y, hp		6 14 21 21	• • • • • • • • • • • • • • • • • • • •	116 973 2,473	11 10 57 27	3 24 27 2	(⁵) 19	
1940capacit 1930capacit	y, g.p.m y, g.p.m y, g.p.m		10,220 49,267 7,806	*************	3,371,222	356,644 378,350 82,200	9,802	7,100	(⁶)
1940capacity 1940average (b) Turbine	/, g.p.m		12 7,220 602 2		676 763,544 1,130 1,601	35 197,708 5,649 5	18 6,595 366 2	5,735 410 (6)	(⁸)
(c) Plunger	capacity, g.p.m		(°) (°)		2,505,709 1,565 161 7,702 48	77,500 15,500 15 436 29	(⁸) (⁸) 5 252 50	(°) (°) (°) 2 (°) (°)	
1940umber 1940capacity Pumping lift, from all sources1940average.	/, g.p.m		42		35 94,267 56	(⁶) 22	(⁶)	(⁶) 26	(⁶)
1930.average	feet		(⁶)		58 32	23 31 15	30 31 57	31 74	

Data for the intrastate tributaries of the Little Colorado River and independent basin (6), Salt Lake and Rito Creek (N. Mex.), are not shown separately but are included in the Little Colorado River total.

Data for the intrastate tributaries of the Virgin River are not shown separately but are included in the Virgin River total.

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

WORKS, 1940, 1930, AND 1920-Continued

na arkai	nsas and	Louisiana]		J—Conti		COLORADO B	IVER (VI) -Conti	mad						₁
						Lo	wer Colorado Rive	er (VI-B) Continue		-,,					
Virgin	River				Gila R	iver (VI-		mperial Valley)				Independe	ent basin	ns	Intra- state
otal ²	Direct	Total	Direct	San Fran- cisco and Blue	Intra- state tribu- taries	Ind	Intrastate basins in New Mexico	in Gila River Intrastate basin in Arizona	Intrastate tributary in Nevada (Las Vegas	Intrastate tributary in Arizona (Williams	Total	Intrastate basin in Arizona	Intra- state basins	Intrastate basin in California (Whitewater	tributary in Cali- fornia (Imperial
	(2)	(VI-Bb)	(1) + (14)	Rivers (2)+(3)	in Arizona	I G Gaz	(Animas Valley) (18)	(Sulphur Springs) (19)	Valley) (7)	River) (8)		(Red Lake) (11)	in Nevada	River) (12)	Valley) (VI-C)
231	92	1,587	559	84	834	110	18	92	106	79	473	4	31	438	49
204	304	469	479	115	552	51	36	56	30	30	86	10	435	62	10,748
204 122 120	79	437 257 231	105 53 31	72 64 54	242 139 144	18	***************************************	18	3	13 9 5	27		13	14	5
17	8 3	31 7	13	s	15 5	3	*************	3	1	1	21		7	14	5
134 50	45 23	293 106	53 39	58 12	167 55	15	*************	15	2	10 2	6	*********			
364.1 341	150.4	3,550.1 3,463	1,380.5 1,124	103.0 49	2,043.4 2,285	23.2	9.2	14.0	8.1	45.0 28	85.6		43.0	42.6	1,910.0
547 350	148	2,842 3,374	650 1,311	68 103	2,116 1,937	23	9	14	8	35 45	57		43	49 14	1,905
921	12.4 454	176.1	69.5 3,738	244	106.4 6,190	0.2 279	0.2	274	0.1 17	141	28.6 254	2	181	28.6	5.0 7,541
807 773		11,355 10,449	3,959 2,819		7,280 7,490		***********		******	36 40		.,,,,,,,,		57	
12.9 6.1	6.4	322.6 150.0	62.2 2.3	0.3 4.4	254.7 143.3	5.4		5.4	2.4	4.0 3.7	430.2		3.6	426.6	57.7
7.6 2.4	0.1	90.4. 255.0	1.3 60.1	1.4	85.5 194.9				0.2	10.1 0.1	374.0		0.5		39.5
10.0 0.2 0.3	6.1 0.2	55.6 2.2	2.1	0.3	47.8 2.2 9.8	5.4	***********	5.4	2.2	0.8	49.0		3.1	45.9	19.9
39	19	9.8 142	15	3	119	5		5	1	4	7.2		8	1 1	1.3
23 13		43 35	2	2	38 31					2					
1 38	1 18	17 120	15		16 98	1 4		1 4	1		9		8	1	5
42	19	5 277	87	4	5 173	13		13			24		17		7
38	18	258 7	82	3	161	12		13 12 1	. 9	3	21		14	7	. 7
أ		12	2		10			*			з		3		
2,670 24	194	4,794,690 215	1,202,626 1	607 1	3,591,219 213	238		238	18	43 14	7,620		7,595	22	57
1,763		3,316,173 252	1,200,000	601	2,115,572 154				107	34	72			79	*******
1		202 298			202					1				242	
40		18,431 13,314	5,955		12,401 13,314	(⁶)		(8)	15,736	10	9,313			9,313	
106 18	5	14,044 1,679	690		14,044 893		40	73	23	32				36,860	34
5		1,119 774	89 78		1,030 692				2.3	44				325	
4,389 1,429	1,753	2,445,790 1,745,297	1,278,919 147,300	23	1,121,803 1,597,997	45,045	10,372	34,673	3,777		262,270	(6)		261,020	14,771
1,730			78,531	225						2,015				121,469	
23 5		1,757 1,080	708 95	4	981	94	17			41				593	38
155 発	72	98,090 52,391 19,091	41,252 4,653 2,382	92 30 70		1,791	311	1,480	190	419 326 39	8,564	(⁶)		8,523 3,212	541
7 48		1,056 76,626	426		630				5 19	2				512 6,636	15 288
10 94	60	617 21,066	262 11,442	7	270	78	17	1,451	17 170	33	75	1		74 1,403	14
6 13	12	84 398	20 197	4	44 168	16 29		29		37	490	(6) 1		7 484	9
21 5]] [1,055	707 23	5	1,027]]	*********		44				545	
7,254	4,230	767 2,715,566		2,543	1,329,953	46,325	11,222		4,757	13,665	262,824			247 261,574	
	[[1,806,044 890,248	141,010 92,581		1,660,844 791,157			*************					[128,356	
456 1	2,700 900	1,169	123 180,192 1,465 557	2,500 500	275,306 1,182	26,080 492	5,000 558	1	3,879 216	10,895 389	54,671 363 379	(⁶)		379	912
(⁶)		2,216,560 1,835	1,150,203 2,065		1,046,875	19,482	6,022 860	13,460 841	(⁶)	2,400 600	204,899 541			204,899 541	7,874 606
4 111		111 3,251	22 725	· 43	2,120	16 363	(6) 2	14	28	370	3,254			17 3,254	
28 5 1,435	3			11	31 20	23 1		12			191				37
. 21	22	53	5,625 59	22	1 1	4	38		23		52	(8)		52	(⁶) 58
35 39 24 23	19	46 45 65	38 34	25 19 30	50 48 72	44	38	46		24 20 27	52			41 52	54

Includes siphons and farm pipe lines reported.

Total capacity of all reservoirs regardless of size.

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

^{· 493794} O - 42 - 9

TABLE 19-DRAINAGE BASIN-ENTERPRISES AND IRRIGATION

$\overline{}$					GREAT	BASIN (VI		the 17 west	ern States
		Gulf of California				onneville La			
ŀ	ITEM (For definitions and explanations, see text. Major-	(VII) (exclusive of						****	
	basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A com-	Colorado River)			· · · · · · · · · · · · · · · · · · ·	. Gr	eat Salt Lake		
	posite map index-number is shown in parentheses for	Whitewater	Total	Total		-	В	ear River	
	each drainage basin)	Draw and Vamori Wash, 1			Total ²	Direct	Total 3	7/4	Malad
1		Arizona (1)+(2)	(VIII)	(VIII-A)		(1)	Total	Direct (2)	River (5)
Ì	ENTERPRISES AND IRRIGATION WORKS		7,777/	(VIII-A)		11/		(2)	
	JANUARY 1		ľ						
1 2	Enterprises	283	4,831	2,286	1,576	171	619	435	108
~	area works were capable of supplying	40	400			4=0		999	150
а	with water	48 158	4,263	527	536	159	718	860 495	159 51
4	1930total number	7	3,806	1,800	1,254 1,123	84	610 553	121	26
5 6	1920. total number(a) Concrete and masonry1940. number	6	3,234 756	587	1,128 508	53	670 157	82 117	192 14
8	(b) Timber	67	441 1,933	185 736	107 485	3 22	52 322	46 267	2 32
9	(d) Other, mixed, and not reported. 1940. number	90	1,133	292	154	6	79	65	3
10 11	Main canals and laterals1940total length, miles 1930total length, miles	26.0 7	10,757.6 12,753	7,339.2	5,471.7 4,917	215.0	2,668.7	2, 176, 1 808	128.0 112
12 13	1920total length, miles (a) Earth1940length, miles	128 26	17,665 10,444	7,089	6,999 5,243	186	3,597 2,652	1,057 2,166	847 128
14 15	(b) Lined	484	313.6 57,949	250.2 28,428	228.7 19,258	29.0 625	16.7	10.1 7,442	234
16	1930capacity, c.f.s. ⁵	10	50,743		17,692	020	8,902 8,083	4,543	176
17	1920capacity, c.f.s. ⁵ Pipe lines	553	57,409	1770 5	19,501		10,589	5,088	413
18 19	1930total length, miles	4.1	984.7 1,112.3	179.5	152.5 69.3	28.8	18.2 14.1	11.7 3.1	4.7
20 21	(a) Concrete	5.1	723.0 706.1	42.6	108.9 41.9	19.9	23.3 4.9	7.7 1.9	2.5
22 23	(b) Metal	1	186 - 5 35 - 8	62.3 24.2	45.2 17.4	6.0	6.9 6.0	4.8 4.6	1.4 0.8
24	(d) Other1940.,length, miles		56.3	50.4	48.0	2.9	0.4	0.4	
25 26	Storage dams		462	291	180	9	59	45	9
27	1920total number	4 51	409 449		137 158		50 104	5 7	5 59
28 29	(a) Concrete and masonry1940number(b) Earth and rock1940number		53 395	41 245	. 34 142	9	7 50	5 39	2 6
30	(c) Other, mixed, and not reported. 1940. number.	1	14	5	4	*********	2	1	1
31 32	Reservoirs1940total number	18 18	766 543	378 235	210 116	37 36	63 i	46 21	13 7
33 34	(b) 100-999 acre-feet capacity1940.number		138	92	70		. 25	20	4.
35	capacity		85 3,781,538	51 3,038,679	24	1 0004	8	5	3,775
36 37	1930total number	. 90	787	41,444444	2,503,568	3,934	1,468,970	1,449,832	5
38	1930total capacity, acft Wells, flowing	140	1,922,757 1,698	1,313	402,788 893	188	35,988 121	50 12	2,411
39 40	1930number	11	2,175		719		111		21
41	1920number 1910yield, g.p.m	765	1,610 118,499	88,934	452 69,486	7,886	6,705	600	5,035
42 43	1930yield, g.p.m 1920yield, g.p.m		153,800 128,522		35,525 42,248		4,545 12,635		750
44	Wells, pumped1940.number	142	1,306	305	100	48	25	. 15	-8
45 46	1930number	210 209	2,707 870		107 68		88 57	2	,
47 48	1940yield, g.p.m 1930yield, g.p.m	45,537 62,457	653,078 1,321,396	129,711	36,343 31,786	16,226	11,588 20,926	4,770	4,818 600
49	. 1920yield, g.p.m		273,094		16,067		11,597	902	,,,,,,,,,
50 51	Pumping plants1940total number	150 214	1,458 2,686	402	193 182	49	75 140	61	7
52	Prime movers	2,070	39,973	15,142	12,857	450	3,987	28 3,464	171
53 54 55	1930capacity, hp	2,025 2,403 2	62,344 20,603 977	316	10,537 10,490 167	45	4,126 3,016	781 2,208 54	6 5
56 57	1940capacity. hp	(8)	30,316	13,799	12,348	45 406	3,639	3,374	165
58	(b) Internal-combustion1940number	133 2,045	399 9,144	78 1,035	25 259	44	10 98	90	(8)
59 60	(c) Other1940number	15 15	513	308	91 250		9 1 250		
61 62	Pumps1940total number	144 215	1,448 2,788	404	192 219	49	75 151	61 31	7
63 64	1920number	209 63,344	820 1,514,746	877,780	175 767,228	16,217	111	32 151,835	4,878
65 66	1930. capacity, g.p.m	59,507	3,205,814 1,033,964	• • • • • • • • • • • • • • • • • •	863,660 701,160		200,215	47,384	600
67	(a) Centrifugal1940.number	73,967	1,033,964	274	143	34	118,285	80,025 51	
68 69	1940capacity, g.p.m	27,696 426	522,634 1,096	359,384 1,312	295,402 2,066	8,972 264	136,680	121,680	3,700 925
70 71	(b) Turbine1940number	48	826	103	30	14	2,241	2,386	2
72	1940capacity, g.p.m	31,230 651	519,532 629	66,193 643	20,405 680	7,145 510	9,685 968	7,625 1,089	(8)
73 74	(c) Plunger1940.number	28 2,468	119 7,941	13 654	533		(8)	********	(8)
75 76	1940. average capacity, g.p.m	88	67 26	50 14	76 12		(a) 3	3	(%)
77	1940capacity, g.p.m	1,950	464,639	451,549	450,888	(⁸)	22,530	22,530	
78 79	Pumping lift, from all sources1940average, feet	57 48	71 67	38	40 40	45	38 42	35 35	
80 81	1920average, feetfrom pumped wells1940average, feet	44	41 76	39	37 42	46	40 42	37	66
82	from surface sources1940average, feet	56	35	36	37	12		36	

¹⁹³⁰ and 1920 data are designated as "Whitewater Draw and tributaries" and do not include Vamori Wash.

2 Data for the intrastate tributaries of the Great Salt Lake Basin are not shown separately but are included in the Great Salt Lake Basin total.

3 Data for the intrastate tributaries of the Bear River are not shown separately but are included in the Bear River total.

4 Data for the intrastate tributaties of the Quinn River are not shown separately but are included in the Quinn River total.

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

WORKS, 1940, 1930, AND 1920-Continued

						REAT BASIN (V	III) —Con	tinued						
		Bonneville I	ake (VIII-/	i) — Continu	led		·	·	I	ahontan La				
			Indepen	dent basin	s	*		•		Northern (Inde	reat Basi pendent b	n (VIII-Ba) Isins)		
ntrastate tributary in Utah	Total	(Box Elder	Deep Creck (Tooele	Snake	Intrastate basins in	Intrastate basin in Nevada	Total	Total	Cowhead and Warner	Quinn	1	Surprise Valley	Smoke Creek	Intrastate basins in
vier River)		County, Utah)	County, Utah)	Valley	Utah	(Thousand Spring Creek) (21)	A15-28 23		Lakes	Total4	Direct			Oregon
(14)+(18)		(19)	(22)	(23)		(21)	(VIII-B)	(VIII-Ba)	(9)		(13)	(16)	(18)	
351	359	15	19	54	259	· 12	2,545	595	57	5 7	39	178	14	243
769	251	313	149	300	242	408	462	511	704	491	534	266	88	719
310	236	2	33	65	129	7	2,463	775	81	78	35	95	4	493
184 95			1 3							65 5			*******	634 435
37	42	i		13	28		169	46	9	4	2			31
40 132	38 119		11 22	11 i 37	16 53	7	256 1,197	123 344	8 47	2 49	2 15	12 83	4	95 149
101	37	1		4	32		841	262	17	. 23	16	• • • • • • • • • • • • • • • • • • • •		218
1,306.7	560.8	56.0	50.0 37	74.0	329.8	51.0	3,418.4	822.4	73.6	117.0 74	55.0	67.0	9.0	463.8 582
1,487 2,586			- 36		*******	***************************************				. 38				894
1,297 9.7	549 11.8	56	50	64 10.0	328 1.8	51	3,355 63.4	820 2.4	72 1.6	117	55	67	9	463 0.8
6,760	2,410	101	67	281	1,774	187	29,521	6,706	657	964 306	850	697	15	4,040
6,088 7,762			37 50					::::::		98				3,924 4,356
15.4	11.6		0.4	2.3	2.8	6.1	805.2	7.1	2.7		<i></i>	0.4		1.5
5.1 9.0	[· · · · · · ·]	*********				************		:::::::		4.4				0.7
0.2	0.5				0.3	0.2	663.5	1.5	1.2			1.0		0.2
8.7 5.6	8.4 1.2		0.4	2.3	1.3 0.2	4.4 1.0	124.2 11.6	5.1 0.5	1.5			0.3		0.5
0.9	1.5			•••••	1.0	0.5	5.9					********		
76 51	35	5	3	2	23	2	171	42	14	2		1	2	11
51 50			1							1				97
3 73	4 30	5	1 2	2	3 19		12 150	2 38	14				2	1 2
	1				1		9	2					· · · · · · · ·	
83	85	8	8	.6	63	2	388	47	13	· · · · · ·	•••••	5	2	1
51 13	68 9	6	8	5	49 9		308 46	20 12	1 4			4, 1	2	
19				1	5	2	34	15	8		1:			2
465,872	69,239	50	28	4,102	52,359	, (⁸)	742,859	58,671	15,202			222	(⁸)	23,839
47 511,227	::::::		2 1							1,003				104,25
362	58	1	2		55		385	271	2]i		127	62	54
106 258														18 41
17,604	1,844	(⁸)	(⁸)		1,783		29,565	20,783	(⁸)			3,141	3,069	1,893
10,423 38,863			*********			***********				· · · · · · · · ·	******			4,487
14	191	3	1	2	184	1	1,001	37		16	16	1	4	10
3 3	• • • • • • • • • • • • • • • • • • • •									10				10
7,069	86,299	140	(⁸)	(a)	84,974	(⁸)	523,367	11,844	:::::::	3,798	3,798	(⁸)	466	7,375
2,170 178			*********						:::::::	850 50				9,160 1,850
16	193	3	1	2	186	1	1,056	44	4	17	17	2	4	11
, 8				<i></i> .						3				13
267 122	2,018	7	(^B)	(⁸)	1,993	(⁸)	24,831	462	87	117 51	117	(⁸)	19	210 154
117 5	144				144		661	4		4		1		209
95 9	1,356 44	i		2	1,356	1	16,517 321	53 26	4	12	12	(⁸)		. 50 8
146	630	(8)	(a)	(⁸)	607	(8)	8,109	394	87	111	111	(⁵)	(⁵)	160
(^e) 2	32	(8) 2			30		74 205	14		5 6	. 5 6		3	
16 5	196	3	1	3	188	1	1,044	44	4	17	17	2	4	11
10				/B\		/85			10.400	5		/A		15
19,068 5,770	91,484	140	(8)	(⁸)	90,159	(8)	636,966	28,934	12,400	3,898 1,700	3,898	(8)	476	10,600 12,900
18,318	•••••							• • • • • • • • • • • • • • • • • •		********				4,11
7 7,525	124 56,457	(8) 1	(⁸)	(8)	120 55,202	(8)	203 163,250	18,800	12,400	7 1,550	7 1,550	(8)	(8)	2,900
. 1,075	455	(8) (8)	(⁸)	(a)	460		804	1,106	3,100	221	221	(8)	(8)	967
7 11, 160	34,628				66 34,628		723 453,339	9,870		2,170	2,170			7,700
1,594 1	525				525		627	759		434	434		3	962
(⁸)	118	(6) 2		(⁸)	(6)		7,287	264		178	178		26	
(⁸)		(ª)		(⁶)	(8)		69 12	19		36	36		9	
(B)	(B)				(8)		13,090							
31 27		117	(8)	(a)	35	(8)	84	35	9	43	43	(8)	20	42
30								::::::		43 25				26
40	36	117	(8)	(⁸)	35	(8)	88 33	40		43	43	(⁸) (⁶)	16 32	11

Includes siphons and farm pipe lines reported.

Total capacity of all reservoirs regardless of size.

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

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

Table 19.—DRAINAGE BASIN—ENTERPRISES AND IRRIGATION [For the 17 western States]

			Lahont	an Lake (V	111-E) C	ontinued			
	ITEM	Northern Great Bas	in (VIII-Ba)Con. nt basins)		Sierr	a Nevada	Slope (VIII	-Bb)	
	(For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include	(1ndepende	iit basins)			Pyra	mid Lake		
	figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for	Intrastate	Intrastate				Truckec Riv	er (upper)	Carso
	each drainage basin)	basin in Nevada (Black Rock	basin in California	Total	Total				River
		Desert)	(Madeline Plains)		TOTAL	Direct	Total ²	Direct	(upper
		(12)	(17)	(VIII-Bb)		(1)		(2)	(5)
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1						-		
À٧	terprises	37	9	567	89	13	76	52]
W	ith water1940acres		448	641	608	327	656	633	
Di	version dams1940total number	22	2	527	91	4	87 65	52 31	-
	1920total number	1					54	23	
	(a) Concrete and masonry1940. number(b) Timber1940. number	2 6	••••••	78 94	16	1	15	10 5	
	(c) Earth and rock	11	1	246	43	3	40	18	
	(d) Other, mixed, and not reported. 1940. number	1	1.	109	{		25	19	l
Ma	din canals and laterals1940total length, miles	81.0	11.0	1,659.6	321.0	21.1	299.9 350	212.8 306	17
	1920total length, miles		***************	[••••••			172	145	[:
	(b) Lined			1,604 25.6	316 5.0	0.1	295 4.9	209 3.8	
	1940. capacity, c.f.s. ³ 1930. capacity, c.f.s. ³	241	92	10,799	3,250	146	3,104	2,466	1.0
	1920. capacity, c.f.s. ²		***************************************		.,		3,137 2,465	2,939 426	4, 3,
p	ipe lines41940total length, miles	2.2	***************************************	81.6	8.2	1.6	6.6	2.3	1
	ipe lines		•••••				0.7	0.6	2
	(a) Concrete			38.3	0.6	0.6		0.7	l
	(b) Metal	2.2	***************************************	28.8 9.1	4.0 3.1	1.0	3.0	2.2 0.1	l
	(d) Other1940length, miles		************	5.4	0.5		0.5		
S	torage daws	4	8	67	16		16	4	
	torage dams						5		1
	(a) Concrete and masonry1940number	1		3				2	
	(b) Earth and rock	4	8	61			15	4	
D.	eservoirs1940. total number	1	Į.	73	II	2		2	\ ·····
	(a) 1-99 acre-feet 'capacity 1940. number (b) 100-999 acre-feet capacity 1940. number (c) 1,000 and over acre-feet	3	4	34 27		2	13	2	
	capacity1940number	1	3 15 000	12	1		1		_
	1940. total capacity, acft.6	4,341	10,023	429,067		(7)	5,163	(7)	7,
	1930total capacity, acft		•••••	•••••	*****		1,100		296,
W	ells, flowing	26	••••••	21	 				
	1920number			********		::::::			_
	1940. yield, g.p.m 1930. yield, g.p.m	12,430	***************************************		::::::				(7
	1920yield, g.p.m								
W	ells, pumped	6	***************************************		5		5	5	1
	1930umber 1920rumber	***************************************							
	1940. yield, g.p.m 1930. yield, g.p.m	55	•••••	44,807	4,020		4,020	4,020	
	1930yield, g.p.m 1920yield, g.p.m		***************************************		::	∦ ::::::		225	18
,						1==		1	+
-	umping plants1940total number 1930total number		**************	83	'∥	11	6 3	6	
	Prime movers	6	***************************************	1,954	46	i 	46	46	1
	(a) Electric		**************	477			· ^6	32	
	1940capacity, hp		**************	1,336				4	
	(b) Internal-combustion1940number			27 488	' ·····			 	}
	(c) Other	- 6	***************************************	9	9		. 2		
	1940capacity, hp	6		130 82			1 ' '	(7)	, (
ĺ	1930. number				. ∥	····	3	2	
1	1920. humber		***************************************	136,893		. ::::::		4,042	58
	1930 capacity, g.p.m		***************************************			· •••••	1,350	450	73
	(a) Centri forms	1	***************************************		- 11		1	H	1
	(a) Centrifugal1940number 1940capacity, g.p.m			79,313	4,020				23
	(b) Turbine			1,724	804	ե •••••	804	804	i 1
ĺ	1940capacity, g.p.m		***************	46,628	i				
	(c) Plunger	1		1,793	3]		1		.] :
ı	1940capacity, g.p.m	. 60		161	(7)		. (7)	(n)	· ::::
	(d) Other	1 10		27	(7)	.∥::::::	• (7)	(7)	. <u></u>
	LF4U. IRIMDET								
	1940capacity, g.p.m		1		11	71			1
F		. 30		34	1 12				
F	1990. capacity, g.p.m	.			1		. 20	10)

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

Data for the intrestate tributaries of the Truckee River (upper) are not shown separately but are included in the Truckee River (upper) total.

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

Includes siphons and farm pipe lines reported.

WORKS, 1940, 1930, AND 1920-Continued

		······							Continued						
							an Lake	(VIII-B)	Continued						
				erra Nevada S	lope (VIII-Bb)	—Continued					entral Great	Basin and			3c)
		y	alker L			Intrastate	Ind	ependent	basins		Intrastate		Indepen	dent basins	
			*	alker River		streams in Nevada			,		stream and tributaries		1		
otal	Direct	mata1	N	West Walker	East Walker	(Truckee and Carson Bivers,	Total	lloney Lake	Intrastate basins in	Total	in Nevada (Humboldt	Total	Amargosa River and	Intrastate basins in	Intrastate basins in
	(7)	Total	Direct (8)	River (9)	River (10)	lower)			California	(VIII-Bc)	River) (1)+(7)+(10)		Dry Lakes (22)	Nevada	California
	(1)		(6)	(0)	(10)	(6)		(12)	·	(4111-220)	(1)1(1)1(10)		1		
						ì		1 1)		Ĭ		
99	3	96	35	33	28	10	244	179	65	1,383	366	1,017	36	321	660
1,238	1,718	1,223	1,417	1,209	998	6,677	310	316	293	367	900	176 402	85	387	78 16
98	,1	97 58	30	38	29	3	206	1.79 55	27	1,161	759 618	403		304	10
21		77 21	7	14			24	152°	7	45	715	5		1	4
7 46		7 45	1 7	6 16	22	1	57 101	55 87	2 14	-39 607	16 313	23 294	₂	23 288	4
. 24	.,	24	15	2	7	1	24	20	4	470	390	80		72	8
417.7	15.1	402.6 325	170.0	152.6	80.0	414.0	330.9	201.0 84	129.9	936.4	579.0 1,303	357.4	10.0	299.3	48-1
		821	·	,	80		319	435 199	120	901	1,573 578	323	8	289	26
6.7	0.1	396 6.6	164 6.0	152 0.6	[<i></i>	9.14	11.9	2.0	9.9	35.4	1.0 8,540	34.4 3,476	2.0		22.1 905
2,663	148	2,520 1,698	1,043	958	519	2,088	1,221	775	446	12,016	5,253	******			
		2,192	•••••			45.4	44.6	2,446	41.0	716 5	1,204	702.4	3.4	30.9	668-1
3.1	2.7	2.7	0.4			15.4	44.6	3.8	41.8	716.5	14.1 15.3	• • • • • • •			
						0.6	35.6 9.0	4.1	35-6	623.7	15.7 0.7	623.0	2.6	1.2	619-2
2.7	2.7					4.3 6.0	9.0	3.0	6.0	90.3	2.0	79.2	0.8	29.7	48.7
0.4		0.4	0.4			4.5		····		0.5	0.3	0.2		**********	0.2
8	1	7 2	1	3	3	1	27	24 7	3	62	13 13	49	7	35	7
	:	14						9			12				
8	1	7	1	3	3		22	2 19	3	51	9	4 42	6		4
•••••	····:					51	3	3		4	1	3	10	9	100
8	1	7	1	3	3		35 15	30 13	5 2	254	19 14	249 240		70	
3	····	3			3		13	11	2	7		7		7	
2 4,280	(7)	81,280	(7)	280	1,000	273,600	48,789	46,686	2,103	255,121	241,062	14,059	8	2,657	11,394
	:::::	92,002						9 32,476			21 105,611				
14	 	14	1	13		3	3	1	2	93	7	86	20	64	2
• • • • •		16 26									4 12				
785		785 576	(7)	735		17	55	(")	(7)	7,895	203 65	7,692	4,490	2,975	(7)
••••		242									805				
3		3-	3				34	27 2	7	906	30 28	876	11	27	838
900		71					17 484	2	4 500		. 18	******		3,798	459,699
	:::::	900	900				17,434	4,750	4,560	466,716	6,770 13,035	459,946			
		5		**********				555		*******	2,540	•••••			
		3	:3			6	41	2	7	929	31 28	808			858
65		65	65			422	618	468 145	150	22,415	239 62 7	22,176			21,815
2	1	2 2				6	i8	43 14	4	610	71 5	605	2		603
(⁷)	:::::	(7)	(7)			422	359 18	304 15	85		40		(7)	23	15,058 217
(7)		(7)	(7)				215 5	150	65	7,227	189	7,038	155	162	6,721
• • • • •]]				14	14		60]] 10	50	(7)	11	36
3		3	3	**********		6	40	33 2	7		31 29		4	*********	
6,900		6,900	6,900			43,084	23,964	19,304	4,660	471,139	6,950			4,398	456,906
*****								5,500 4,640		*******	11,770 22,495				
3		3	3			3	19	15	4	140	16	124	2	0	113
6,900			6,900 2,300			32,313 10,771	12,105 637	9,845 656	2,260 565	65,137 465	4,712 294	60,425	(⁷)	1,910 212	58,015 513
*****							15 11,700	12	2,400	684	2		7	4	671
· · · · · · ·	:::::						780	775	800	580	(7)	579	318	328	584
• • • • •	:::::	******	:::::				139				488	6,374	160	748	5,460
•••••		******				3	28	1		8		8		3	E
			∦			10,771	(7)	(7)		1	11	2,299	1)	430	1
		10	10			24	43	37 50	85		31			48	98
5		10					43	20 32			30 35		111	52	96
13						24	43			36					

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

Total capacity of all reservoirs regardless of size.

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

TABLE 19.-DRAINAGE BASIN-ENTERPRISES AND IRRIGATION

				***************************************				stern State
	ļ			COLUM	BIA RIVER (/=n .\	
ITE				n	Upper Co	lumbia River		
(For definitions and explana basin totals from 1930 and	l 1920 Censuses include						Clark F	ork
figures for unidentified to	ibutary basins. A com-	Total	Direct	[]		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	li.	
posite map index-number is a each drainage basin)	mown in parentneses for			Total	Direct	Kootenai River	m-4-11	Discot
-			ļ .				Total ¹	Direct
		(XX)	(IX-A)+(IX-C)		(IX-A)	(1)		(2)
DAMED DE LORG AND T	DRICATION WORKS				-			
ENTERPRISES AND I JANUA		-						
Enterprises	ı	13,154	928	4,441	586	170	1,730	386
Average size of enterprise based on			1			,	1	
area works were capable of supplying with water		337	36	236	42	56	231	9-
Diversion dams		11,208	264	3,470	189	168	2,040	39
	1930total number	6,247 6,494	2 9				403 715	. 1
(a) Concrete and masonry	1940number	1,066	8	128	. 4	6	30	1
(c) Earth and rock	1940.,number	1,748 5,698	101 129	743 1,616	56 107	78 56	395 1,002	10 20
	1940number	2,696	26	983	22	28	613	7
Main canals and laterals		27,535.0 26,919	196.7 51	7,712.4	158.0	152.5	3,773.6	383. 13
	1920total length, miles	32,799	199		.,		3,398 4,239	8
(a) Earth(b) Lined	1940length, miles	26,453 1,082.0	141 55.7	7,027 685.4	125 33.0	144 8.5	3,718 55.6	37 11.
/-/ ***********************************	1940. capacity, c.f.s.	121,457	830	24,788	604	485	11,165	1,44
	1930capacity, c.f.s.4	115,083 134,536	205 632				7,112 14,618	50 1,39
Pipe lines ⁵	• • • • • • • • • • • • • • • • • • • •	3, 181.4	584.4	2,193.5	450.9	10.0	59.2	24.
Tipo times	1930total length, miles	1,616.2	148.4			10.0	35.8	2.
	1920total length, miles	1,125.2 794.9	164.7 64.5	594.2	48.3	**********	27.8	2.
(b) Metal (c) Wood-stave	1940length, miles	1,427.7	378.9	901.0	296.2	4.1	40.5	16
(d) Other	1940length, miles	821.7 137.1	127.2 13.8	591.0 107.3	103.0	5.9	12.3	6. 1.
Storage dams	1940total number	590	32	207	20	12	111	
	1930total number	414	1				58	
	1940number	603 85	18	27	1	***********	103	
	1940number	388 117	25	141 39	19	4 8	73 27	;
Reservoirs		614	24	207	10		1 1	
(a) 1-99 acre-feet capacity	1940number	350	20	116	18 14	10 9	120 64	
(b) 100-999 acre-feet capacity (c) 1,000 and over acre-feet	1940number	131	4	43	4	•••••	33	
capacity	1940 number	133		48		1	23	33.5.5
	1940. total capacity, acft.8	7,517,123 353	1,696	1,405,800	1,631	3,107	236,657	8
	1930total capacity, acft	6,316,670	50		• • • • • • • • • • • • • • • • • • • •		159,601	3,5
Wells, flowing		374	16	46	1		39	
	1930number	293 176	1 8				37	
-	1940. yield, g.p.m	65,579 62,451	4,070 300	11,905	(7)		9,600 3,798	(7)
	1920yield, g.p.m	27,135	4,390		.,		3,333	
Wells, pumped	1940number	1,972	353	620	200	3	34	
	1930number	1,663 752	11 175				17 3	
	1940 yield, g.p.m	687,639	74,599	225,886	43,764	740	9,998	3,8
	1930. yield, g.p.m 1920. yield, g.p.m	464,026 277,555	11,325 58,401			***********	5,903 80	1,5
Pumping plants			690	1 644	416	9	121	
	1930. total number	4,447 3,251	219	1,644	,,	,	40	
Frame movers	1940. capacity, hp	105,911 77,271	9,075 6,625	41,973	7,048	44	10,145 329	
(a) Electric	1930capacity, hp	62,451 3,089	6,493	1,388	379		283 62	
	1940capacity. hp	84,555	7,873	33,970	6,686		9,578	
	1940number	1,237 13,042	1,202	210 2,338	36 362	37	52 394	
(c) Other	1940number	121	B1	. 46	1,8	. 2	7]
Pumps	1940capacity, hp	8,314 4,439	687	5,665 1,640	417	(7)	173 118	
	1930 . number	3,434 1,745	228 359		**********	**********	41 27	1
	1940capacity, g.p.m	4,609,862	211,334	936,702	132,272	2,545	155,663	18,
	1930. capacity, g.p.m	3,593,854 2,522,910	215,538 233,881				20,755 12,447	1,
(a) Centrifugal	1940. number	3,632	559	1,390	358	6	86	
	1940capacity, g.p.m	4,002,160	189,697	865,397	121,610	1930	129,379	. 9,
(b) Turbine	1940average capacity, g.p.m	1,102	339 45	623 96	340 27	322	1,504	
	1940. capacity, g.p.m	348,633	15,041	43,913	8,179		13,012	7,
(c) Plunger	1940. average capacity, g.p.m	1,031	334 71	457 124	303 28	2		1,
1.	1940. capacity, g.p.m	22,359 73	5,415 76	10,482 85	2,091 75	(7)	1,112 70	
1 44 60	1940number	161	12	30	4	2	. 9	
(a) Uther							10 100	13
	1940capacity, g.p.m	236,710	1,181		392		12,160	İ
Pumping lift, from all sources	. 1940average, feet	39	62	16,910	74		33	
Pumping lift, from all sources	1940capacity, g.p.m	39 47 50	ii .	1	il	19	33 29 32	******

Luata for the intrastate tributaries of the Clark Fork are not shown separately but are included in the Clark Fork total.

Blata for the intrastate tributaries of the Spokane River are not shown separately but are included in the Spokane River total.

Buts for the intrastate tributaries of the Spokane River are not shown separately but are included in the Spokane River total.

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

WORKS, 1940, 1930, AND 1920-Continued

						COLUMBIA	HIVER (
		(IX-A)Con.		,					River (
Spokan	e River					T		Uppe	r Snake R	iver				Lower Snal	e River
To tal ²	Direct	Intrastate tributaries in Washington	Total	Direct	Total	Direct	South Total 3	Fork Snake	Salt	Total	enrys Fork Direct	Teton	Intrastate tributaries in	Total	Direct
ļ	(12)			(IX→B)		(1)		(2)	River (5)	10001	(6)	River (7)	Idaho		(12)
	1							, , , , , , , , , , , , , , , , , , ,							
136	110	1,819	5,314	882	940	78	455	260	168	209	101	108	198	4,211	784
201	243	324	-568	1,106	874	2,680	693	945	353	887	1,311	491	567	497	949
56	46	1,017	5,527	658	778	29	392	213	160	166	83	83	191	4,578	629
6 34	15		3,871 3,901	23 59			252 217	102 113	62 50	93 226					
15 10	15 10	73 204	465 813	60 63	120 73	11	56 51	41 11	15 38	33 19	24 14	9 5	20	314 519	49 62
20 11	10 11	431 309	3,229 1,220	354 181	404 181	15 2	197 88	105 56	77 30	82 32	37 8	45 24	110 59	2,740 1,005	339 179
153,0	149.8	3,475.3	16,397.2	4,507.1	3,649.3	817.6	1,368.7	992.3	304.3	798.6	518-5	280.1	664.4	12,269.7	3,689.5
25 276	235		16,904 20,071	0,831 3,429			1,326 1,668	833 1,063	215 351	683 1,187				*******	
98 55.0	95	2,942 533.3	16,218 179.2	4,483 24.1	3,639 10.3	817 0.6	1,365	989	304 0.3	795 3.6	515 3.5	280 0.1	662 2.4	12, 101 168.7	3,666
642	54.8 616	11,892	86,012	23,521	29,457	5,309	3.7 11,818	3.3 9,584	1,867	9,632	7,942	1,690	2,696	54, 134	18,212
289 912	802		85,164 95,846	16,679 19,014			8,730 10,840	7,061 8,651	753 1,355	10,709 12,693					
233.7	231.1	1,439.7	367.8	99.6	15.8	4.4	0.9	0.1	0.8	1.2	0.7	0.5	9.3	349.4	95.2
98.5 163.5	132.7		276.1 264.0	36.2 81.4			2.0		2.0	1.0 0.8				********	
155.9 29.6	155.9 27.4	385.3 530.6	101.4 92.2	27.2 31.6	4.9 5.4	2.4 1.0	0.8 0.1	0.1	0.8	0.2 0.5	0.2	0.2	1.5 3.8	96.5 84.2	24.8 30.6
29.9	29.5	439.9	164.9	39.3	5.3	1.0			•••••	0.5	0.5		3.8	159.6	38.3
18.3	18.3	83.9 56	9.3	1.5	0.2		******			******	11	3	23	255	36
8	8		311 208	43 6	53	7	9	7 4	2	14				200	
11 5	8 5	10	321 48	11 7	7	2 	9	1	2	25 I	1		3	40	5
3	3	42	209 54	25 11	40 6	4	5 2	5	1	13	10	3	17	167 48	21 10
16	14	43	343	50	51	6	9	7		14	11	3	22	289	44
14 2	12	15 4	181 84	26 15	28 12	3 2	4 2	3	2 1 1	4 5	1 5	3	17	151 72	23 13
	 	24	78	9	11	1	a	3		5	5		2	66	8
972 3	970	1,163,433	5,854,698	1,770,481	2,995,974	1,700,602	851,924	851,543	(7)	225,951	225,936	15	217,497	2,820,709	69,879
1,607		***********	5,249,573	1,802,180			5 848,587	847,200	800	82,888				********	::::::::
		6	294	83	2	2					.,			263	81
		***********	212 105	10	******			,		20				********	
		955	42,569 32,163	9,579	(7)	(7)				2,828	::::::			31,199	4,809
•••••	 ••••••	••••••	9,867	860					•••••						
51 80	40	332	418 229	69	14	2	2	2	•••••	5 23		5	5	350	67
47 79,684	47 78,414	91,700	130 256,972	40 36,387	15,290	(7)	(7)	(7)		5,835		5,835	5,375	143,502	33,867
74,059			70,236	2,500	10,260	,				3,886					
58,504	58,504	**********	40,957	13,855			 				<u> </u>	******			
98 95	82	1,000	977 714	409 185	81	43	3	3 1		8 44	3	5	27	845	356
5,110 3,822	5,071	19,626	50,462 39,449	37,066 31,197	2,903	2,511	21 5			208 326	71	137	163	45,716	34,555
4,468 78	3,476 63	869	39,653 671	32,689 324	54	38		i		1	i		14	572	286
4,900 17	4,864	12,806	44,876	35,760	2,584	2,459	(7)	(7)	• • • • • • • • • • • • • • • • • • • •	(ツ	(7)		70 11	40,546 235	33,301 71
175	16 172	1,370	265 3,105	76 1,082	24 316	52	(7) 2	(7) 2		167	(7)	137	91	2,692	1,030
3 35		5,450	2,481	224	3			:::::::		(7)	(7)		(7) 2	2,478	224
97 105	82	998	971 804	408 261		40	3	3 1		8 44	3	5	27	842	368
104 124,162	93 122,117	522,060	478 3,017,533	225 2,142,894		166,805	3,210	3,210		12,986	6,661	6,925	12,347	2,551,481	1,976,089
72,534 118,684			2,331,003	1,684,413			600	600	• • • • • • • • • • • • • • • • • • • •	18,695					
76	!!	864	1,758,084	1,340,211	67	38	3	3		4	2	2		639	301
119,025 1,566	116,980	493,453	2,564,935	2,003,944	183,186	164,585	3,210	3,210		8,166	(7)	{ ⁷ }	7,225 328	2,153,095 3,369	1,839,359 6,111
6	6	571 56	3,447 131	5,911 45	2,734 8	4,331				2,042] 3	3	110	49
3,570 595		19,152 342	239,788 1,830	99,659 2,215	/12,020 1,502					4,800 1,600		4,800 1,600	5,000 1,667	185,618 1,687	97,439 2,266
12 1,292	12	5,837	18 703	7 291									**********	18 703	7 291
108		88 12	39 78	42 17				 		1	i		2	39	42 17
275	275	3,618	212,207	39,000						(7)	(7)		· . (7) ~	212,065	39,000
56 77		47	25	27]] 23		8		25		38	15	26	28
77	79	*********	29 29	43 39			6						18	25	24
74	85	50	24	24	20	(7)	(7)	(7)		31	1 3				

5 Includes siphons and farm pipe lines reported.

Total capacity of all reservoirs regardless of size.

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

Mater wheel reporting no horsepower.

TABLE 19.—DRAINAGE BASIN-ENTERPRISES AND IRRIGATION

COLUMBIA RIVER (IX) - Continued Snake River (IX-B) - Continued Lower Snake River-Continued (For definitions and explanations, see text. Major-basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A com-Owyhee River South Fork Owyhee River posite map index-number is shown in parentheses for each drainage basin) Raft Falls Jordar Total Direct East Fork Direct Owyhee River (25) (13) (14) (18)(23) (24)(26)ENTERPRISES AND IRRIGATION WORKS JANUARY 1 57 26 28 109 202 63 79 39 40 ഞ Average size of enterprise based on area works were capable of supplying with water.....1940..acres..... 288 778 1,718 295 199 758 1,218 743 800 688 193 129 61 104 89 122 1930..total number..... 51 41 1920..total number..... 101 35 4 40 141 ****** 21 30 25 60 64 32 155 309 52 147 58 42 13 Main canals and laterals......1940..total length, miles..... 135.3 10 107.0 98.0 137.0 151.2 957.0 415.7 406.0 265.0 141.0 | 1830 total length, miles | 1830 total length, miles | 1830 total length, miles | 1820 total length, miles | 1820 total length, miles | 1840 length, miles | 1840 length, miles | 1840 capacity, c.f.s. | 1830 capacity, c.f.s. | 1830 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f.s. | 1820 capacity, c.f. 141 206 262 151 402 13.7 ***** 137 347 426 11 12 13 14 15 16 17 163 107 352 109 679 943 717 28.0 0.2 545 14.0 0.3 613 415 1.013 3.940 2,143 1,123 406 674 1,409 ****** ***** 0.2 3.0 24.1 22.6 1.1 0.2 0.1 1.6 2.5 0.5 **** ******** 10-0 9.7 0.3 0.3 1.0 23 24 2.0 Storage dams......1940..total number..... 18 27 ***** ***** 2 2 Concrete and masonry......1940..number..... Reservoirs......1940..total number..... 11 5 24 ***** 10 12 34 35 36 37 575 1,883 75,007 211,601 823,905 724,546 64,821 (7) 34,538 เราร์กระ เรารากก 1930. total capacity, ac .- ft. ... 367 74.000 182,650 5,235 396, 951555,555555 likain Wells, flowing......1940..number..... .555555 66 3 1930 number 1920 number 1940 yield, g.p.m. 1930 yield, g.p.m. 38 7,440 7,378 25 41 42 43 290 ***** 10 35 35 35 35 35 35 35 1,900 1,628 787 ****** 3 1930. number 1930. number 1940. yield, g.p.m. 1930. yield, g.p.m. ****** 46 (⁷) (7) (7) (7) 47 48 49 15,920 **** 27 265 29 ********* (7) ************* (7) (⁷) 451 457 3,705 566 1,318 (⁷) (7) 3,697 618 20 570 16 3,386 3 2 (b) Internal-combustion 1940.capacity, hp. 1940.mumber 1940.capacity, hp. (c) Other 1940.number 1940.capacity (7) 3,386 5 (⁷) (7) (7) **(7)** 49 10555555 (⁷) 10 1930 ...mber..... ****** ****** ***** 63 64 65 66 1920. number..... ********** (7) 61 ****** (7) 15,470 (7) 169,339 169,089 (7) (7) 440 32,130 27,465 36,924 80,503 444444 67 68 (a) Centrifugal......1940..number.... 1940. capacity, g.p.m. 1940. average capacity, g.p.m. 1940. musber 1940. capacity, g.p.m. 1940. average capacity, g.p.m. 1940. number (7) (7) 161,507 (7) (7) (7) (7) 161,257 8,500 ***** 69 70 71 72 73 74 75 76 77 472 ****** ****** 8,075 8,959 (b) Turbine..... 7,832 2,611 7,832 2,611 ****** 774 ****** . * * * * * * * (c) Plunger..... *****555555 4333333 ***** *********** ****** .555555 455555 ,555,555 ,555,555 .,,,,,,,,,,,,,,,, (d) Other..... (7) ***** .455555 ****** ****** ***** ********* Pumping lift, from all sources1940..average, feet...... 38 (7) (7) **(7)** 28 (7) (⁷) **** ********* (7) (7) (7) (7)

Data for the intrastate tributaries of the Klamath River are not shown separately but are included in the Klamath River total.

Data for the intrastate tributaries of the Grande Ronde River are not shown separately but are included in the Grande Ronde River total.

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

Includes siphons and farm pipe lines reported.

(7)

WORKS, 1940, 1930, AND 1920—Continued and Arkansas and Louisianal

			/= =t		RIVER (IX)-	Continued					KLAM	ATH RIVER	(x)
			(IX-B) Contir	nued			Lower	· Columbia Riv	er (IX-C)				
Grande Ro Total ²	Direct	Snake River	Intrastate tributaries in Oregon	Intrastate tributaries in Washington	Independent intrastate basins in Idaho	Total	Direct	Walla Walla River	Intrastate tributaries in Oregon	Intrastate tributaries in Washington	Total ¹	Direct (X)	Lost River
453	230	1,778	739	35	163	3,399	342	653	2,317	87	929	341	83
165 362 175 207 33 110 179 40	103 117 18 24 69 6	95 165 950 239	307 1,239 104 155 681 299	145 30 8 8	634 171 31 21 85 34	105 2,211 473 392 853 493	26 75 4 45 22 4	69 387 128 236 188 65 111 23	125 1,695 1,369 1,195 278 225 711 461	159 64 3 47 9 5	334 670 472 505 29 165 292 194	313 180 411 452 7 71 55 47	1,191 11 13 8 6
410.3 323 629 405 5.3 2,181 1,551 1,894 5.9	176.6 175 1.6 661	5,054.4 4,959 65.4 19,922	1,634.8 1,604 30.6 7,218	30.7 28 1.7 75	478.2 478 0.2 2,421	3,425.4 3,208 217.4 10,657	38.7 16 22.7 226	255.0 230 1,364 245 10.0 1,312 652 1,453	3,072.7 2,922 2,739 2,893 179.7 8,705 7,650 7,838 413.6	59.0 54 5.0 414	1,904.3 1,698 1,726 1,865 39.3 9,179 5,900 8,878	593.0 964 1,214 564 9.0 3,767 2,965 5,778	494.7 436 303 488 6.7 2,355 1,008 1,880
1.1 0.2 4.9 0.8	0.2 4.1 0.7	50-6 21.1 71.1 4.9	6.0 2.2 5.6	4.9 17.6 35.2	2.6	99.3 434.5 65.8 20.5	16.2 82.7 24.2 10.4	20.5 80.0 35.0 15.6 7.8 0.8	160.8 76.9 48.1 327.1 29.2 9.2	*********	21.1 22.1 4.6 43.8 3.4 1.0	17.7 20.8	2.2 0.6 0.8 3.3 0.6 0.3
10 19 1 7 7 7	4 2 9 9	16 65 12 108 84	7 35 8 56 27	3	1 2	10 38 24 64 53	2 6 4 6	14	45 58 8 31 20 58		20 41 5 40 7 60 39	10 23 3 5 4 16 10	9 13 1 7 1
2 49,404 5 41,766	50	13 31 1,229,812		(7)	38,015	4 7 256,625	85		4 7 256, 560 22 203, 863		11 10 1,165,143 32 1,110,363	5 552,578 23 549,256	2 4 3 540,071 2 560,000
	**************************************	10,840	250		6, 600	34 11,105	2,720		6 8 6 890 375 80		3 28 4 42 241 35	3 3 3 42 200	
70 58 20 20,849 20,144 4,203	20,713	63,245	********	450		204,781	153 30,835	282 264 124 58,083 56,042 51,835	488 264 42 115,095 47,041 2,786	768	56 14 10 29,509 21,442 5,975	24 14 14 22,000 21,442 4,375	
88 67 356 367 189 43 108 41 204	342 37 98 40 200	263 5,187 	57 800 27 486 26 238	16 465 11 440 4 24	1,843 45 1,746 6 97	1,826 13,476 1,030 5,709 782 7,599	274 2,027 211 1,187 63 840	341 322 1,557 1,613 1,148 300 1,261 36 292	1,171 475 9,536 3,878 1,672 499 3,198 648 6,245	20 63 15 222	223 98 6,854 6,522 3,998 154 5,939 57 740	74 59 1,941 3,342 3,148 49 1,496	93 26 3,062 2,480 786 82 2,858 9 78
44 87 67 35 34,464 23,504 10,743	3444 79 34,033	9 1,815 266 312,935	4 76 53 35,766	(7) 15 6,188	270,704	34 168 1,828 655,627	270 79,062	5 4 345 329 155 74,156 66,550 40,265	24 93 1, 174 495 147 492, 689 261, 573 92, 604	9,720	12 175 224 123 63 508, 460 508, 985 174, 184	645 75 69 62 163,350 203,843 142,484	(7) 93 38 16 244,339 207,742 21,100
33,148 425 3 776 259 3 155 52	32,798 449 1 (7) (7) 3 155 52 2	167 76,846 460 48 64,961 1,412 3 118 39	41 27,510 671 5 7,590 1,518 4 136 34	13 6,170 475 1 (7) (7)	38 228,554 6,015 13 42,150 3,242	1,498 571,928 382 111 64,932 585 166 11,174 67	201 68,087 339 18 6,862 381 43 3,324 77	320 69,763 218 15 4,175 278 5 33 7	951 425,701 448 77 53,595 696 111 7,567 68	26 8,357 321 1 (7) (7) 7 250 36 5	153 366,620 2,396 32 53,595 1,675 24 997 42 15	48 101,800 2,121 13 16,660 1,282 7 380 54	65 178,534 2,716 17 34,935 2,055 5 182 36 6
385 17 18 12 17 20	(7) 16 16 13	171,010 24 27 27 20	530	(7) 55 40 62	17 20 11	7,593 28 36 22	789 46 57 31	165 28 26 24 30	5, 826 25 30 34 31 21	813 15 22 12	85,248 26 30 25 37 23	44,510 91 36 28 57	32,688 22 33 22 65

⁵Corresponding reservoir not reported.
⁶Total capacity of all reservoirs regardless of size.
⁷Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

Table 19.-DRAINAGE BASIN-ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920-Continued

	Ī .	d Arkansas and Exclusive of Gu	PACIFIC	OCEAN STREA		Klamath Rivers	5)
ITEM (For definitions and explanations, see text. Major- basin totals from 1930 and 1920 Censuses include	Streams	Streams	Streams between the	San Francisco Bay and	Pacific	Ocean streams Francisco Bay	s south
figures for unidentified tributary basins. A com- posite map index-number is shown in parentheses for each drainage basin)	north of the Columbia River	between the Columbia and Klamath Rivers ¹ (XI-B)	Klamath River and San Fran- cisco Bay (XI-C)	tributaries other than Sacramento and San Joaquin Delta (XI-D)	Total	Streams between San Francisco Bay and Santa Maria River (XI-Ea)	Santa Maria River and streams south (XI-Eb)
ENTERPRISES AND IRRIGATION WORKS JANUARY 1					-	(//2 -24)	
Enterprises	774	987	262	2,725	9,310	2,734	6,57
with water	1	88 432	42 16	60	121 281	80 140	1:
1930total number	***********	405 335	26. 21	24 26	176 204		
(a) Concrete and masonry1940. number(b) Timber	31	42 123	6 	4	85 18	28 14	
(d) Other, mixed, and not reported. 1940number	18	192 85	7 3	8	145 33	79 19	
Main canals and laterals1940. total length, siles 1930. total length, miles 1920. total length, miles	**********	1,068.5 1,188 1,066	14.4 47 391	80.5 35 85	630.2 1,218	152.0	478
(a) Earth	135	1,030	13 1.4	68	1,411 218 412.2	110 42.0	37
1940capacity, c.f.s. ² 1930capacity, c.f.s. ²	1,032	2,328 1,813	184 59		3,840 3,195	610	3,
1920capacity, c.f.s. ² Pipe lines ³ 1940total length, siles	******	2,216	134 67.0	381	9,669	14444444444	
1930total length, miles 1920total length, miles	***********	16.3 23.7	60.5 33.3		13,046.0 8,699.6 4,186.4	1,408.2	11,63
(a) Concrete	6.1	8.0 92.9	22.7 43.5	574.6 306.3	8,589.9 4,136.1	941.6 428.6	7,64 3,70
(c) Wood-stave1940.length, miles(d) Other1940.length, miles	14.0	17.0 0.7	0.7 0.1	8.4 3.2	107.0 213.0	18.6 19.4	19:
Storage dams	17	45 20	5 16	21	246	70	
(a) Concrete and masonry1940number		26 10	15 2	9	130 93 67	14	*********
(b) Earth and rock1940number	. 6	23 12	2	14	164 15	50	
Reservoirs	20	43 40	10 10	63 60 2	1,012 959 32	208 198 9	3
capacity1940total number	. 264	21,714 16	190	2,448	21 377,187	7,214	369,
1930. total capacity, acft		45,948	6 207	8,217	579 271,997	**********	*********
Wells, flowing		1	1	9	199 148	19	
1930. yield, g.p.m	1,507	53	1 	(5)	722 18,635	2,410	16,
1920yield, g.p.m		10,000	********	1,085 13,075	22,335 164,409	**********	********
Wells, pusped		37 13	196 207	3,100	11,354 10,092	3,219	8,
1940-yield, g.p.m 1830-yield, g.p.m	24,146	4,345 6,292	93 109,026 91,092	1,204,661	7,304 6,166,881	2,135,973	4,030,
1920yield, g.p.m	**********	11,499	30,819		5,526,095 3,131,557		******
Pumping plants	الأفقيديديدي أرا	362 91	312 295	3,114	12,067 9,292	3,429	8,
Prime movers	2,857	5,246 4,817	3,328 2,841	67,134 61,205	311,022 253,519	73,699	237,
(a) Electric	1 704	789 172 1,491	1,163 151 1,699	36,219 2,944	132,877 9,649 244,429	2,845	6,
(b) Internal-combustion1940mmber	105 1,118	181 1,536	156 1,587	340 7,394	2,183 64,826	63,943 545 9,640	180, 1, 55,
(c) Other,	10	2,219	5 42	41 167	235 1,767	39 116	1,
1,930 . number		364 92 121	312 314	3,193	11,994 9,793	3,402	8,
1940. capacity, g.p.m	79,743	194,352 99,809	143 192,322 171,166	1,359,663	6,274 6,804,216 5,867,238	2,267,067	4,537,
1920.capacity, g.p.m(a) Centrifugal1940.number		41,852	56,454	862,987	3,770,476	.,,,,,,,,,,,	
1940. capacity, g.p.m	68,477	306 186,848 611	269 172,394 641	209,141	2,475 1,432,150	506,126	1, 926,
(b) Turbine	18 970	3,160	35 19,725	2,641	579 7,918 5,266,589	626 2,364 1,746,755	5, 3,519,
(c) Plunger	54 137	451 40	564 7	428 194	665 1,485	739 214	1,
1940. average capacity, g.p.m	- ^^	3,176 79	193 28	11,290 58	79,748 54	11,511 54	68,
1940. capacity, g.p.m		1,168	(5)	7,836	116 25,729	2,675	23,0
	1	1	ł.			11	1
Pumping lift, from all sources1940average, feet		22 27 28	30 26 22	102	78 71 58	64	

Data for 1 enterprise on the Illinois River in California are included.

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

Includes siphons and farm pipe lines reported.

Total capacity of all reservoirs regardless of size.

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

Table 19-DRAINAGE BASIN-ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920-Continued

==	[For the 17 wes	stern States a			on] QUIN DELTA AN	D TRIBUTA	RY STREAMS	(XII)	
	ITEM					mento River			
	(For definitions and explanations, see text. Major-				Bacra	mento ktvar			
	basin totals from 1930 and 1920 Censuses include figures for unidentified tributary basins. A com-		Dolta		,		Pit River		Intrastate
	posite map index-number is shown in parentheses for each drainage basin)	Total	Delta direct	Total ¹	Direct				tributaries in
	each wantage pastify			10 tal.	DIT.CCV	Total	Direct	Goose Lake	California
		(XII)	(1)		(2)+(15)+(24)		(3)	(4)	
		(XII)	(1/		(2)+(10)+(22)		(a)	(-2/	***
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1				·				
1	Enterprises	25,406	818	5,343	890	477	336	141	19,245
2	Average size of enterprise based on area works were capable of supplying	-							_
	with water1940.acres	202	408	261	711	289	271	333	177
3	Diversion dams1940total number	1,497	3	1,229	24	631	453	178	265
4 5	1930total number	781 1,128	*********	599 859	4 6	194 322	********		182 269
5 7	(a) Concrete and masonry1940number	335 313	1	200 283	5 5	65 178	59 113	65	134 30
8	(c) Earth and rock1940number	478	2	388	10 4	168 220	126 155	42 65	88
9	(d) Other, mixed, and not reported. 1940. number	371 15,202.8	470.0	358 4,877.8	1,520.2	574.9	430.2	144.7	0,848.2
10 11	Main canals and laterals1940total length, miles 1830total length, miles	13,314	476.8	4,817	1,436	372	*****		8,497
12 13	(a) Earth1940length, miles	19,428 14,145	417	6,529 4,623	1,278 1,502	808 565	423	142	12,899 9,105
14 15	(b) Lined1940. length, miles	1,057.8	59.8 6,246	254.8 24,800	18.2 9,161	9.9 3,477	2,498	2.7 979	743.2 41,689
16	1930. capacity, c.f.s.2	64,374	annina:	19,097	8,033	2,125	****		45,277
17	1920capacity, c.f.s. ²	79,142	100.0	23,514 1,075.1	5,803 156.7	5,160 17.8	15.6	2.2	65,628 6,169.1
18 19	Pipe lines 3	7,437.1 4,819.4	192.9	796.1	75.5	1.6	10.0	* * * * * * * * * * * * * * * * * * * *	4,023.3
20 21	1920total length, miles (a) Concrete1940length, miles	1,757.8 6,487.8	146.6	361.2 635.4	61.2 104.4	2.9 1.2	1,2	******	1,396.6 5,705.8
22 23	(b) Metal1940length, miles	766.6	39.0	320.6	36.8	9.6	7.4	2.2	407.0
24	(c) Wood-stave1940length, miles	131.0 51.7	4.9 2.4	81.6 37.5	3.9 11.6	6.8 0.2	6.8		14.5 11.8
25	Storage dams	358	1	166	6	75	61	14	191
26 27	1930total number	218 285	*********	140 200	3	32 63	*********		78 85
28	(a) Concrete and masonry1940number	47	******	30	1	1	1	*****	17
29 30	(b) Earth and rock	287 24	1	127 9	3 2	73 1	59 1	14	150 15
31	Reservoirs	1,310	2	201	11	80	66	17	1,107
32 33	(a) 1-99 acre-feet capacity1940number	1,188 42	2	105 34	10	32 23	24 23	8	1,081
34	(c) 1,000 and over acre-feet capacity1940. number	80		62		28	19		
35	1940. total capacity, acft.4	2,681,435	(5)	1,624,173	266	243,241	165,185	78,056	18 1,057,260
36 37	1930. total number	949 2,100,255		176 949,274	121	40 132,588	*******		773 1,150,981
38	Wells, flowing	47		33	1	21	15	6	14
39 40	1930number 1920number	72 181		39 36		14 14			33 145
41 42	1940yield, g.p.m	3,403 14,400	,	1,578 3,630	(5)	223	148	75	1,825
43	1930. yield, g.p.m	51,785	*******	2,957	**********	1,185 693			10,770 48,828
44 45	Wells, pumped1940number	32,418	349	5,409	869	29	23	6	26,660
46	1930. number 1920. number	31,744 14,657	*********	5,450 3,508	147 514	4			26,291 11,149
47 48	1940yield, g.p.m	20,042,293 16,730,369	231,857	3,606,277 2,932,411	803,650 142,430	7,315 252	5,605	1,710	16,204,159
49	1920yield, g.p.m			1,473,602	279,456			*******	13,797,958 4,911,280
50	Pumping plants1940total number	34,882	1,154	6,087	1,207	90	83	7	27,641
51 52	Prime movers1940capacity, hp	32,490 552,193	23,056	6,147 106,366	810 42,431	45 887	831	56	26,343 422,771
53 54 55	1930capacity, hp	468,661 201,074	133335333	104,346 64,163	38,297 28,625	449 440			364,315
56	(a) Electric1940number	30,014 473,865	898 19,538	5,053 91,006	38,733	58 553	55 550	3	136,911 24,063 363,321
57 58	(b) Internal-combustion1940number	4,780 77,579	254	1,011	214	. 24	20	4	3,515
59 60	(c) Other1940number	88	3,497	15,155 23	0,680 4	301 8	248 8	53	58,927 63
61	1940. capacity, hpPumps1940. total number	749 34,831	(⁵) 1,161	205 6,101	18 1,213	33 90	33 83	7	523 27,569
62 63	1930number	33,129 14,849	*******	6,289 3,898	872 807	46 36			26,840 10,051
64 65	1940capacity, g.p.m	29,694,592	2,604,039	8,580,254	4,909,095	108,997	107,256	1,741	18,510,299
66	1930capacity, g.p.m 1920capacity, g.p.m	23,856,244 11,584,371	*******	8,309,204 4,184,240	4,996,652 2,616,658	46,760 32,886	*********	******	15,547,040 7,400,131
67 68	(a) Centrifugal1940number	15, 189	900	3,279	710	58	53	5	11,010
60	1940capacity, g.p.m	15,552,893 1,024	2,091,141 2,323	5,724,260 1,746	3,815,666 5,374	74,246 1,280	73,311 1,383	935 187	7,737,492 703
70 71	(b) Turbine	18,312 13,494,822	233 464,710	2,703 2,403,618	473 671,138	19	18	(5)	15,376
72 73	(c) Plunger	737	1,994	889	1,419	34,520 1,817	33,720 1,873	(⁶)	10,626,494 601
74	1940capacity, g.p.m	1,188 97,693	11 327	70 5,025	9 266	11 121	10 115	(⁶)	1,107 92,341
75 76	(d) Other	82 142	30 17	72 49	30 21	11 2	12	(B)	83
77	1940capacity, g.p.m	549,184	47,861.	447,351	422,025	(⁵)	(5)	*******	53,972
78 79	Pumping lift, from all sources1940average, feet	42 42	18	36	31	18	17	24	44
80 81	1920average, feet	. 32	********	30 26	17 24	13 18	*****	******	45 34
82	from pumped wells1940average, feet	43 20	31 11	. 38 23	35 20	29 13	31 13	24 22	44 26
	1 Date Co. 41		<u> </u>		L				

Data for the intrastate tributaries of the Sacramento River are not shown separately but are included in the Sacramento River total.

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

Total capacity of all reservoirs regardless of size.

Total capacity of all reservoirs regardless of size.

Total capacity of all reservoirs regardless of size.

Table 20.— IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS,

	ITEM (For definitions and explanations, see text)	TOTA (19 States, exclusi	AL ive of Florida) 1	Ariz	ona	Arkans	sas
	FARMS, ACREAGE, AND TENURE OF FARM OPERATORS					u	
1 /	1910. mmher		7,845		468		,674
2	1830. number 1rrigated farms		2,813		173		,334
3 1	Irrigated farms1940number		1,655 5,147		,339 ,523		,529 ,096
4 5	Increase or decrease (-), 1930-1940percent	20	10.0		21.3		39.5
ì	Operated by-	an an			707		OEO
6	(a) Owners and managers		1,639 3,825		,787 ,750		958 625
a l	(h) Tenants		0,016		552		571
9	Isad in all farms		31,322	1	,773		471
0	Land in all farms	629,05 112,60		25,651 5,274	470	18,044	,920
1 1	Average per farm	110,00	386	0,214	510	002	388
3	(a) Operated by owners and managers1940 acres	97,50	2,649	5,051		394	,572
14	Average per farm1940acres	15.00	440	000	575	*00	412
15 16	(b) Operated by tenants	10,08	98,782 216	شيد	,653 143	198	347
- 1			11		1		1
17	Approximate land area	1,225,05	66,640	72,691	,200	33,744	,000
. 1	IRRIGATED AND IRRIGABLE AREAS						
18	Area irrigated1939acres	91.A	3,739	653	,263	161	.,601
19	(a) Cropland harves ted	18,30	00,138	592	,305	158	3,833
00	(b) Crop failure	25	59,188	3	,321		133
21 22	(c) Pasture		14,413 17,544		,637 ,590		2,635 L,787
22 23	area irrigated1929acres		91,716		,565		946
24	Increase or decrease (-), 1929-1939percent		7.4		13.5		6.5
	Irrigable area in enterprises		05,949	1,104			1,929
26 27	1920 ² acres		99,470 90,821	1,085 813	,627 ,153		5,992 3,480
28	Excess of irrigable area over the area irrigated1940acres	10,30	02,210	451	,382	153	3,328
29	1930acres		51,926		,037		1,205
30 31	Area works were capable of supplying with water1940acres	28,05	55,248 01,890		,212 ,152		7,765 9,942
32	1920acres		20,477		,303		9,013
39.	Increase or decrease (-), 1930-1910percent		7.5		2.4		37.1
34 35	Excess, capability of works over area irrigated1940acres		51,509 54,346		,949		3,164
	Proportion which area irrigated is of all lands in	0,04	04,340	240	,562		3,155
	irrigated farms1939percent		18.7		12.4		27.3
37	1929percent	ļ	25.0		19.3		41.8
38	Proportion which area irrigated is of area works were capable of supplying with water1939percent		74.9		77.4		56.2
39	1929percent		74.9		69.8		72.3
Ì	-						
	CAPITAL INVESTED TO JANUARY 1			,			
40 41	Total investment in all enterprises1940dollars (a) Cost of irrigation works and equipment1940dollars	1,052,0		83,52		5,76	6,895
42	(b) Investment in water rights (reported)1940dollars	1,025,6	76,487	82,990	0,947 5,661	5,76	6,895
43	Total investment in all enterprises1930dollars		55,790	73,32		6,83	6,648
44 45	1920dollars	697,6	57,328	33,49		7,18	3,322
46	Increase or decrease (-), 1930-1940percent Average investment, based on area works were		17.8		13.9		-15.6
	capable of supplying with water, per acre1940dollars		37.50		98.94	,	20.04
47 48	1930dollars	1	34.20		38.97	;	32.56
49	Average investment per acre irrigated1939dollars	1	26.81 50.09		53.40		40.13
50	Estimated final investment in existing enterprises1940dollars	1,126,5		108,98	27.86 0.519		35.69 8,930
51	1930dollars	1,015,1	108,210	91,91	3,550	6,84	4,092
52 53	Increase or decrease (-), 1930-1940percent	819,7	778,005	34,61			3,522
54	Average investment, based on estimated final	1	11.0		18.6	}	-14.1
_	investment and irrigable area, per acre1940dollars	1	35.99	1	98.66		18.67
55 56	1930dollars 1920 ² dollars		93.17		84.68		30.28
			22.84		42.57		29.55
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary	Supplemental	Primary	Supplemental	Primary	Supplemental
", l		Enterp			prises	Enter	orises
57 58	Enterprises reporting maintenance and operation1939number Area irrigated in these enterprises1939acres	72,457	10,161	1,380	127	1,229	3
59	Cost of maintenance and operation1939dollars	20,193,761 43,172,526	2,983,963 2,828,094	630,942 3,101,467	14,463	153,346	231 1,201
60	Average cost, per acre irrigated1939dollars	2.14	0.95	4.92	50,715 3.51	835,891 5.45	5.20
61 62	Total annual charges (reported) 4 6	2.77		4,57		7.03	
63	Average annual charge per acre irrigated	32,876,404 2.40	1,408,263 0.59	2,826,235	450	34,409	
õ4	Area against which charges were assessed	16,570,704	2,592,476	656,350	3.00 250	7.05 4,879	
65 66	INVERTIGE AUGUST CHAPPE DET SCHE SSESSES 1020 Jolland	1 00	0.54	4.31	1.80	7.05	
	Total charges collected 1939. dollars Indebtedness to December 31 (reported) 1939. dollars	27,552,300 360,304,925	1,148,062 26,335,349	1,943,583	400	23,818	
67		000,004,920	40,000,040	42,589,633	2,500		
	WATER DELIVERED TO IRRIGATORS		ļ	ll .			
67			10,105	1,303	118	1,259	2
67 68	Enterprises reporting water delivered1939number	72,899			71,901	158,767	(⁶)
67	i area irrigated in these enterprises 1000 acros	19,377,064	2,986,061	622,469	11,801	200,101	
68 69 70 71	Water delivered in these enterprises	19,377,064 52,962,775	4,206,532	2,056,290	80,044	441,289	(6)
67 68 69 70	i area irrigated in these enterprises 1000 acros	19,377,064 52,962,775			80,044	441,289 2.8	(6) (6) (6) (6)
68 69 70 71	Water delivered in these enterprises	19,377,064 52,962,775	4,206,532 1.4	2,056,290	80,044	441,289	(6) (6) (6)
68 69 70 71 72	Water delivered in these enterprises	19,377,064 52,962,775	4,206,532 1.4	2,056,290	80,044	441,289 2.8	(6) (6)
68 69 70 71 72	Water delivered in these enterprises	19,377,064 52,982,775 2.7 2.60	4,206,532 1.4 1.10	2,056,290 3.3 5.82	80,044	441,289 2.8 5.42	(6) (6) (7)
68 69 70 71 72 73	Water delivered in these enterprises	19,377,064 52,982,775 2.60 2,60 3,587 9,553,069	4,206,532 1.4	2,056,290	80,044 1.1 2.88	441,289 2.8 5.42	(6) (6) (6)
68 69 70 71 72	Water delivered in these enterprises	19,377,064 52,982,775 2.70 2.60 3,587 9,553,069 6,224,568	4,206,532 1.4 1.10	2,056,290 3.3 5.82	80,044	441,289 2.8 5.42	(8) (8) (6)

^{*}Census of Agriculture.

1 For the 17 western States and Arkansas and Louisiana.

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

3 Revised.

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

	T					====							
California	1	Colo	rado	Florida	Ida	ho	Kans	SAS	Louis	iana	Monte	ına.	
132,65 135,67 84,31 85,78 -1.	76 10 34	2	51,436 3,956 9,766 11,288 -4.9	62,248 3,947	4 2	3,663 1,674 9,898 7,953 7.0	160	5,327 5,042 1,578 683 131.0	16	0,007 1,445 7,037 3,588 25.9	47 15 11	,623 ,495 ,087 ,925 26.5	1 2 3 4 5
69, 30 71, 91 15,00 13,87 30,524,32 14,071,22 16 12,016,42 17 2,054,80	11 73 24 22 22 73 22 73	10,18	.8,865 20,060 .0,991 11,228 27,240 23,458 421 11,139 540 41,319 215	3,490 457 7,46,337,708 598,139 151 575,825 165 20,914 44	10,29 5,68 4,72	1,773 0,486 8,125 7,745 0,584 190 1,461 217 9,123	48,173 87: 650	1,031 391 547 292 3,635 1,189 552 6,836 637 4,353 392	9,99 1,06	3,807 3,049 3,230 3,230 5,108 6,655 152 2,822 169 3,833 131	8 46,451 16,022 1 14,015	,060 ,062 ,361 ,291	6 7 8 9 10 11 12 13 14 15
100,353,92	20	66,53	8,880	34,727,680	52,99	7,120	52,55	2,320	28,91	3,280	93,642	2,240	17
5,069,66 4,621,79 22,08 425,69 4,746,63 4,219,04 6,68,039,17 8,075,89	91. 93. 93. 93. 940 •8 95.	2,79 7 35 3,39 3,34 4,28 4,52 5,22	20,685 16,075 13,844 0,766 13,619 18,365 -5.1 13,250 18,251 20,588	132,362 125,474 4,204 2,684	2,02 1 23 2,18 2,48 2,87 2,81 3,78	7,857 6,435 2,448 8,974 1,250 8,806 4.4 0,023 4,048 0,048	81 1: 7: 4' 14' 9: 10'	9,980 5,139 1,386 8,455 1,290 7,312 40,2 7,226 5,719 2,562	44 45 45 79 85 85	7,095 2,317 1,078 3,700 3,901 4,882 -0.8 3,674 3,401 1,211	201 1,594 1,683 2,588 2,62; 4,324	1,878 7,844 7,687 1,912 1,729 7.3 3,214 2,423	18 19 20 21 22 23 24 25 26 27
2,969,60 3,329,26 7,398,57 6,815,25 5,894,46 8 2,329,00 2,068,61	53 76 50 56 •6	1,13 3,91 4,07 3,85	2,565 14,632 13,542 78,712 55,348 -4.0 12,857 15,093	56,195 175,813 43,451	63 2,59 2,61 3,09	2,166 2,798 3,534 7,021 2,810 -0.9 5,677 5,771	24 14: 8: 6:	7,246 4,429 2,409 3,583 7,853 70.4 2,429 2,293	39 75 79 72 31	6,579 9,500 9,915 5,165 8,742 -4.4 2,820 4,264	1,027 2,34- 2,276 2,755	1,390 3,000	28 29 30 31 32 33 34 35
36. 39.			25.7 32.7	22.2		40.1 45.0		11.5 22.9		41.9 50.5		10.7 13.3	36 37
68. 69.			82.3 83.2	75.3	-14-174 - 1 11-14-1	87.8 83.3		70.2 85.3	,	58.8 56.7		73.0 70.1	38 39
318,889,21 306,729,17 12,160,04 310,967,97 194,886,38	75 43 79 88	87,60		7,055,921 7,055,921	84,50	85,798 89,161 96,637 90,354 91,009	2,06 8 1,68	3,886 7,284 6,602 5,652 7,381 27.8	14,08	5,513 	67, 35, 66, 83 52, 50, 31 52, 14	0,409 2,096 9,204	40 41 42 43 44 45
43.1 45.6 33.0 62.6 327,593,31 5 325,930,55 225,799,12	63 06 90 11 35 23	109,80 91,84	27.30 21.48 22.90 33.18 38,486 45,804 98,423 19.6	40.13 53.31 7,228,453	109,51 101,35	39.55 32.29 29.59 45.04 45.04 3,311 50,250 19,717 8.1	2,25 1,72	15.12 20.17 30.47 21.54 5,579 3,872 5,981 30.8	11,65 15,77 14,26	15.22 19.80 19.30 25.87 9,725 (1,003 4,178 -26.1	1	,575	46 47 48 49 50 51 52 53
40.9	96		25.64 20.28	38.34		38.16 36.02		15.32 18.01	1	14.69 18.55	2	39.04 22.30	54 55
	Sup.	Primary	18.24 Sup.		Primary	25.67 Sup.	Primary	21.41 Sup.	Primary	16.76 Sup.	Primary	Sup.	56
4.39 6.10 12,789,209 4.24 4,212,879 3.04 10,519,461	7,457 439,235 ,620,218 3.69 252,555 2.51 96,930 2.61 403,248 ,523,911	Enterp 6,454 3,128,787 2,035,680 0.65 0.85 2,278,099 0.96 2,637,673 0.86 2,077,508 20,851,011	1,532 608,498 498,440 0.82 213,062 0.46 461,109 0.45 206,370 1,959,596	2,944 112,517 370,340 3,29	8nterr 3,037 2,219,486 2,256,798 1.02 1.44 2,461,470 1.25 2,141,909 1.15 2,635,522 23,488,279	165 889,254 202,690 0.23 	936 99,033 227,076 2.29 1.53 43,166 1.05 56,719 0.76 31,346 49,775	76 13,628 29,689 2.18	Enter 2,181 436,931 1,580,007 3.64 4.09 1,259,711 5.27 245,975 5.12 542,853 2,748,768	12 2,434 3,683 1.51	Enterp 4,837 1,650,373 1,180,189 0.72 0.87 1,057,500 1.18 1,065,494 0.99 729,103 41,968,921	168,762 20,908 0.12 93,290 0.65 176,956 0.53 65,214 2,573,360	57 58 59 60 61 62 63 64 65 66
29,522 4,840,760 12,657,820 2.6 5.06	7,507 414,972 761,982 1.8 4.00	6,915 3,039,354 7,258,191 2.4 0.92	1,522 588,300 500,267 0.9	2,878 111,375 194,519 1.7	2,892 2,034,989 8,356,961 4.1 1.16	147 896,000 1,042,271 1.2 0.21	902 93,008 134,041 1,4 2,40		2,419 367,081 884,020 2.4 4.27	15 2,579 2,116 0.8 1.51	4,945 1,524,390 3,214,146 2.1 0.84	45 123,469 155,543 1.3 0.70	70
1,711,027 1,509,832 394,963		241 687,246 466,804 119,286 35,792		847 73,383 46,323 53,275 5,573	200 943,910 731,717 238,907 29,042	<u> </u>	44 3,507 2,093 2,552 240		634 214,408 101,321 174,848 12,379		205 822,140 473,604 147,151 52,071		73 74 75 76 77

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

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

Bata are included only in total because less than 3 enterprises reported in the 1940 Census.

Table 20.—IRRIGATED FARMS AND TENURE OF FARM OPERATORS, 1940 AND 1930; IRRIGATED AREA, AND OPERATION, CHARGES, AND INDEBTEDNESS, 1939 AND 1929; LAND IN IRRIGATED FARMS,

T	ITEM (For definitions and explanations, see text)	Nebras	ka	Nevad	a.	New Mex	ico
<u> </u> -	FARMS, ACREAGE, AND TENURE OF FARM		•				
1	OPERATORS*	121,	062	a.	573	31.	105
2	1930number Irrigated farms	129		3,	442 264	31,	401 811
4	1930number	4,	602	3,	031 7.7	14,	347 0,2
5	Increase or decrease (-), 1930-1940percent Operated by—		0.2		1	!	396
6	(a) Owners and managers	2,	342 276	2,	811 656	11,	477
8	(b) Tenants	2	.571 .326		453 375	2,	415 870
	Land in all farms	47,343 3,577		3,785, 3,624,	536	38,860, 7,408,	997
12 13	Average per farm		517	1, 3,426,	110 873	6,501,	469 491
14 15	Average per farm	977	778 341	1, 197	219 663	907	
16	Average per farm1940acres		274		436		376
17	Approximate land area	49,057	,920	70,273	280	77,767	,040
	IRRIGATED AND IRRIGABLE AREAS	~~		700	000	==4	000
19	Area irrigated	6 579	,379 ,535	459	,863 ,863	554 512	,441
20 21	(b) Grop failure	20	,717 ,127	274	,298 ,702	20	,069 ,529
22 23	Area irrigated	442	,617 ,690	561	648	527 538	
24 25	Increase or decrease (~), 1929-1939percent Irrigable area in enterprises	1,095		915	52.0 ,689		5.1 ,656
26 27	1930acres 1920 ¹ acres	766	,039 ,768	1,382		961	,245 ,879
28 29	Excess of irrigable area over the area irrigated1940acres	230	,188 ,422	497	,826 ,069	214	,617 ,212
30 31	Area works were capable of supplying with water1940acres		,957 ,641		,30 1 ,249	656	,990 ,669
32 33	1920acres Increase or decrease (-), 1830-1940percent		,468 41.1		,708 14.3		,119 11.5
34 35	Excess, capability of works over area irrigated1940acres		,578 ,024		,441 ,601		,951 ,636
36	Proportion which area irrigated is of all lands in irrigated farms		17.1		20.4		7.5
37 38	1929percent Proportion which area irrigated is of area works		32.3		15.7	1 -	10.5
39	were capable of supplying with water1939percent 1929percent		61.5 75.7		87.9 66.1		75.7 80.3
	CAPITAL INVESTED TO JANUARY 1						
40 41	Total investment in all enterprises	39,056		16,906		32,735 32,290	
42 43	(b) Investment in water rights (reported)1940dollars		,991	15,827	,223	445	,141
44 45	Total investment in all enterprises	21,386 13,906	,185	15,457 14,754	,280	19,834 18,210	0,412 65.0
46	Average investment, based on area works were	,	82.6		9.4		
47 48	capable of supplying with water, per acre1940dollars		39.33 30.33		20.10	(14.72 30.20
49	Average investment per acre irrigated1939dollars	1	4.73 3.99		20.94		26.16 59.09
50 51	Estimated final investment in existing enterprises1940dollars 1830dollars	41,996 21,465	,772	18,129 18,489	603	36,775 21,942	2,450
52 53	Increase or decrease (-), 1930-1940percent	18,030	95.6	22,64	3,747 -1.9	20,440	67.6
54	Average investment, based on estimated final investment and irrigable area, per acre1940dollars		38.33		19.80		15,53
55 56	1930dollars 1920 ¹ dollars		28.13 23.51		18.80 16.39		29.60 21.25
	MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS	Primary	Supplementa.	Primary	Supplemental	Primary	Supplemental
57	Enterprises reporting maintenance and operation1939number	Enterp 2,367	262	Enterp 1,327	10	2,018	prises 49
58 59	Area irrigated in these enterprises1939acres Cost of maintenance and operation	602,582 839,682	171,448 119,770	688,722 293,859	84,722 38,705	516,916 1,082,768	5,083 10,142
60 61	Average cost, per acre irrigated	1.39	0.70	0.43 0.91	0.46	2.09 2.15	2.00
62 63	Total annual charges (reported) ² 3	674,403 1.40	96,342 0.63	304,084	87,619 1.04	966,767 2.47	
64 65	Area against which charges were assessed	521,292 1.29	153,282 0.63	218,138 1.39	102,049 0.86	483,407 2.00	
66 67	Total charges collected ²	575,579 20,456,809	833 1,270,559	128,223 1,194,066	79,069 2,740,249	1,037,433 16,715,813	,
	WATER DELIVERED TO IRRIGATORS	2.557.750					
68 69		2,222	208	1,116	9	1,960	51
70 71	Water delivered in these enterprises1939acre-feet	573,110 1,105,696	171,519 89,845	1,171,256	84,622 291,980	474,184 1,438,686	5,097 7,732
72		1.9 1.73	0.5 0.73	3.0 0.76	3.5 1.05	2.80	1.5 · 2.00
	DRAINAGE OF IRRIGATED LAND	,					
73	drainage1939nimber	69		36		162	
74 75	Irrigable area in these enterprises	338,461 284,658		244,184 180,444		331,233 231,795	
76 77	area for which drains have been installed1939acres	47,960 10,305		97,576 21,153		240,614 8,732	
75 76	Area for which drains have been installed	284,658 47,960		180,044 97,576		231,795 240,614	

^{*}Cersus of Agriculture.

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

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

North Dakota	Oklahoma	Oregon	South Dakota	Texas	Utah	Washington	Wyoming.	T
			DALOGA					1
73,962 77,975 479 113 323.9	179,687 203,866 275 99 177.8	61,829 55,153 16,159 11,987 41.9	72,454 83,157 967 763 26.7	418,002 495,489 19,588 10,861 80.2	25,411 27,159 22,612 23,847 -5,2	81,686 70,904 17,426 15,949 9.3	15,018 16,011 8,637 7,308 18.2	1 2 3 4 5
309 85 170 28 37,936,136 344,988 720 262,554 850 82,434	205 69 70 30 34,803,317 190,552 693 155,752 760 34,840 498	13,345 9,339 2,814 2,048 17,989,307 ,8,730,104 540 7,968,948 597 761,156 270	586 453 381 310 39,473,584 1,021,659 1,057 863,702 1,474 157,957	12,181 6,056 7,387 4,805 137,683,372 11,619,780 594 9,672,335 794 1,947,445 264	19,593 20,886 3,029 2,961 7,302,007 4,955,056 219 4,647,567 237 310,491 103	14,069 13,129 3,357 2,820 15,181,815 2,108,197 121 1,762,907 345,290 103	6,427 5,426 2,210 1,882 28,025,979 12,915,523 1,495 11,959,992 1,861 955,531	6 7 8 9 10 11 12 13 14
44,834,560	44,341,120	61,664,000	48,983,040	168,732,160	52,701,440	42,865,280	62,403,840	16 17
21,615 21,507 12 96 9,392 12,072 130.1 39,558 24,860 57,476 17,943 15,468 36,522 24,006 34,235 52.1 14,907	4,160 3,603 148 409 1,573 2,969 164.5 13,494 7,344 11,742 9,334 5,771 8,624 7,331 9,672 17.6	1,049,176 790,925 13,781 244,470 898,713 986,162 16.7 1,441,417 1,478,128 1,925,987 392,241 579,415 1,261,081 1,165,210 1,344,046 8.9	00,198 50,424 2,286 7,488 67,107 100,682 -10.3 123,961 122,510 188,382 63,763 55,403 121,947 109,550 150,914 11.2	1,045,224 961,765 12,569 70,870 798,917 596,120 30.8 2,180,796 1,588,876 1,887,447 1,135,572 767,959 1,773,612 1,177,415 1,150,542 50.7	1,176,116 980,881 38,487 156,748 1,324,125 1,371,661 -11.2 1,432,533 1,739,869 2,369,244 256,417 415,744 1,357,714 1,542,475 1,700,550 -12.0 181,588	615,013 520,424 6,113 88,476 489,283 529,899 23.2 837,096 915,379 836,795 222,083 416,096 731,527 631,511 637,151 15.8	1,486,498 1,193,997 16,550 275,951 1,226,155 1,207,082 20.3 2,277,046 1,958,147 2,564,668 700,648 721,992 1,013,527 1,655,008 1,831,039 15.6 427,029	18 10 20 20 21 22 25 26 27 28 29 30 31 32 34 35 34 35
6.3	5,758 2.2	259,497 12.0	42,443 5.9	378,498 9.0	218,350 23.7	132,228	418,853	35 36 37
16.6 59.2 39.1	2.7 48.2 21.5	14.2 83.2 77.6	49.4	42.1 58.9	32.0 86.6	26.0 84.1	12.4	37 38 39
1,755,489 1,752,862 2,627 1,267,314 1,857,118 38.5	272,186 269,618 2,568 160,099 151,325 70.0	50,961,251 50,399,668 561,583 38,754,548 28,929,151 31.5	5,395,610 5,383,865 11,745 4,502,117 5,465,248 19.8	67.9 66,441,376 65,884,261 557,115 49,022,164 35,072,739 35.5	85. 8 41,896,532 39,590,175 2,306,367 35,669,819 32,037,361 17. 5	78.1 56,415,196 55,678,678 736,518 40,561,895 29,299,011 39.1	74.7 41,522,801 41,037,813 464,988 35,153,187 34,326,328 18.1	40 41 42 43 44 45
48.07 52.79 54.25 81.22 1,785,539 1,343,911 2,072,766 32.9	31.56 21.84 15.65 65.43 299,486 167,909 162,775	40.41 33.46 21.52 48.57 53,884,430 60,039,939 41,585,742 -10.3	44.28 41.10 36.21 89.63 5,432,934 5,174,417 5,500,748	37.46 41.64 30.48 63.57 67,319,032 59,555,624 39,860,871 13.0	30.86 23.13 18.84 35.62 43,380,986 37,857,011 33,835,641 14.6	77.12 64.23 45.68 91.73 58,141,097 53,232,477 37,684,591 9.2	21.70 21.24 18.75 27.93 48,539,683 41,970,416 51,500,288 15.7	46 47 48 49 50 51 52 53
45.14 54.06 36.06	22.19 22.86 13.86	37.38 40.62 21.59	43.83 42.24 29.20	30.87 38.01 23.62	30.28 21.76 14.34	69.46 58.15 45.03	21.32 21.43	54 55
		Primary Sup.		Primary Sup.	Primary Sup.	Primary Sup.	20.08 Primary Sup.	56
73 21,290 30,072 1.41 1.97 18,909 0.99 23,425 0.81 14,749 1,337,648	107 3,869 12,973 3,35 7,62 530 0,74 719 0,74	5,192 86 982,940 97,643 1,157,018 71,049 1.18 0.73 1.41	184 56,426 71,986 1.28 1.33 131,490 2.68 73,040 1.80 83,883 4,600,023	**Shterprises** 3,299	### Interprises 1,870 124 1,144,100 322,055 881,814 0.77 0.28 1.00 1.00 1,079,113 142,478 1.02 0.45 1,128,306 0.96 0.96 0.40 1,106,871 27,916 4,329,234 9,437,183	### Enterprises 3,746	2,977 1,421,852 93,014 807,345 0.57 0.84 0.84 0.84 0.87 0.84 0.87 0.84 0.74 0.98 0.74 0.74 0.38 447,354 15,770,071 929,414	57 58 59 60 61 62 63 64 65 66
74 21,302 39,309 1.8 1.27	105 3,974 5,671 1.4 3.34	5,354 73 925,920 80,999 3,020,606 176,182 3.3 2,2 1.35 0.94	170 52,345 58,797 1.1 2.72	3,810 17 1,017,411 22,807 2,404,098 32,212 2.4 1.4 4.85 1.39	1,874 135 1,049,365 258,047 2,654,225 278,685 2.5 1.1 1.03 0.50	3,851 131 590,627 194,534 2,548,681 704,152 4.3 3.8 3.35 0.75	3,006 55 1,360,506 67,746 2,633,092 56,521 2.1 0.8 0.66 0.48	68 69 70 71 72
9 26, 826 15, 277 11, 552 242	11 838 342 429 106	275 338,991 285,771 126,698 18,786	16 74,640 96,072 25,906 5,509	99	204 324,771 283,314 90,857 28,418	210	150	73 74 75 76 77

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

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

 $T_{\mathtt{ABLE}}$ 21.—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939

	. ITEM (For definitions and explanations, see text)	TOTAL (19 States, excl. Florida) 1	Arizona	Arkansas	California	Colorado	Florida	Idaho
	FARM VALUES, 1940°							
1 2	Land and buildings, all farmsdollars Land and buildings, irrigated farmsdollars	12,803,166,043 3,467,116,512	153,676,675 115,309,610	456,848,156 17,067,803	2,166,452,648 1,591,824,377	388,343,847 268,377,191	324,377,874 77,835,579	339,194,391 236,628,170
3 4	Operated by— (a) Owners and managersdollars (b) Tenantsdollars (c)	2,784,524,630 682,591,882	99,320,601 15,989,009	11,711,544 5,356,259	1,336,867,338 254,957,039	173,643,424 94,733,767	74,622,653 3,212,926	173,589,977 63,038,193
5 6	Average, land and buildings, per farmdollars per acre in farmsdollars	11,887.73 30.79	11,152.88 21.86	11,162.72 28.79	18,880.61 113.13	9,016.23 21.43	19,720.19	7,914.52 41.66
7 8	Buildings, irrigated farms reporting valuenumber Total reporteddollars	273,133 629,915,422	9,673 16,497,968	1,464 3,211,708	78,626 250,220,347	28,812 59,423,593	3,320 10,883,687	28,943 53,585,575
9 10	Average, per irrigated farm reportingdollars per acre on all irrigated farmsdollars	2,306.26 5.59	1,705.57 3.13	2,193.79 5.42	3,182.41 17.78	2,062.48 4.75	3,278.22 18.26	1,851.42 9.43 13,009
11 12 13	Buildings, nonirrigated farms reporting valuenumber	1,539,992 1,925,590,118 1,250.39	7,587 6,593,469 869.05	208,576 113,101,840 542.26	46,019 129,487,709 2,813.79	20,248 25,423,820 1,255.62	51,591 57,327,320 1,111.19	18,705,158 1,437.86
14	per acre on all nonirrigated farmsdollars	3.73	0.32	6.48	7.87	1.34	7.41	4.05
15 16 17	Implements and machinery, irrigated farms reporting value.number Total reported	247,513 283,024,144 1,143,47	8,031 7,461,726 929,12	1,436 3,417,847 2,380.12	66,427 99,181,718 1,493.09	26,692 25,650,123 960.97	2,850 4,685,526 1,644.04	26,475 28,818,258 1,088.51
18 19	per acre, on all irrigated farmsdollars Implements and machinery, nonirrigated farms reporting	2.51	1.41	5.76	7.05	2.05	7.86	5.07
20 21	valuenumber	1,357,101 812,696,204 1.57	6,357 2,499,372 0,12	166,473 33,998,816 1,95	35,025 33,155,391 2.02	18,137 13,371,491 0,70	41,515 15,696,720 2.03	11,466 13,326,972 2.89
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1			-			· · · · · · · · · · · · · · · · · · ·	
22	Enterprises.,	² 91,697	1,911	1,298	39,975	8,713	3,628	3,625
23 24 25	1830number	² 75,551 63,298	1,270 1,388	1,043 944	38,117 24,115	6,509 6,634		3,222 3,629
26	irrigable area	404	578 854	242 217	201 212	484 688	52	775 864
27 28 29	1920 ³ .acres	567 34,544 127,533.7	586 602 4,178.2	261 6 77.9	324 2,714 19,799.1	787 4,792 19,864.0	3 74.0	1,042 3,209 13,602.1
30 31 32	1930length, miles 1920length, miles 1940capacity, c.f.s.*	126,802 159,864	3,974 3,368	51 86	18,602 27,384	21,381 27,593	1.047	14,344 17,298 71,510
33 34	1930capacity, c.f.s.4	547,314	13,258 13,697 11,707	270 1,845 1,205	115,237	139,780 123,652 119,558	1,947	76,763 86,273
35 36	Pipe lines ⁵	į.	344.3	13.0		245.1	4,259.9 5	299.9 260
37 38	Storage dams	5,122	199 333 378			1,015 1,071 765	7	290 155
39 40 41	1920umber 1940capacity, acre-feet 1930capacity, acre-feet	33,787,382	340 4,860,898 3,410,975	16 31,992 7,342	3,581,621	979 2,071,522 1,924,982	19,419	3,795,272 3,645,373
42 43 44	1820capacity, acre-feet Wells, floring	21,246,436 4,641	1,510,856 268	20	1,091,394 436	2,406,372 886	4,631	3,493,511 375 220
45 46	1920number 1940yield, g.p.m	4,606 555,073	215 310 22,878		1,415 34,767	621 476 54,859	994,828	142 40,165
47 48 49	1830yield, g.p.m	005 057		*********	65,768 287,187 48,568	39,644 20,139 2,878	1,686	30,108 15,133 309
50 51 52	1930number 1920number	56,729 32,094	1,398 999	1,190 1,089	46,737 25,401	654 527		121 53
53 54	1940yield, g.p.m	43,355,271 32,467,120 16,396,549	1,832,352	1,812,647 1,641,448 1,470,147	24,266,167	1,929,798 237,903 210,094	482,144	225,164 34,601 17,749
55 56	Pumping plants	78,293	1,970	1,633	52,217	2,806	2,321	665 393
57 58 59	Prime movers	59,344 29,458 1,762,687	1,378 744 102,733	1,041 76,048	21,561 968,351		29,588	143 44,537
60 61	1930capacity, hp	1,283,419 748,971 75,802,998	57,633 22,014 2,992,986	66,980 58,332 2,013,697	386,200	11,204 8,635 2,263,375	2,104,450	33,754 28,364 2,719,905
62 63 64	1830capecity, g.p.m 1830capecity, g.p.m 1920capacity, g.p.m 1920average, feet	57,244,859 36,275,005	2,125,293 1,048,030	1,775,788 1,654,097	33,240,589 16,773,692	437,250 299,726		2,113,513 1,397,681
65 66 67	1930average, feet	51 51 41	60 46 44	68 50	53 41		50	26 32 29
67	from pumped wells1940average, feet PAY ROLL AND NUMBER OF EMPLOYEES	55	62			33	21	59
68	1939 6							
69 70	Irrigated area in these enterprises	4,349 13,559,338 16,071,522	515,128	4,027	2,949,047	2,695,030	542 5,288	458 1,932,890 1,316,975
71	Persons employed during week ending April 29umber.	24,006	1,546	12,020			5	2,275

*Census of Agriculture. ¹For the 17 western States and Arkansas and Louisiana. ²Includes 60 interstate projects for census of 1940 and 34 interstate projects for census of 1940 and 1940 and 1940 and 1940 and 1940 and 1940 and 1940 and 1940 and 1940

Table 21.—FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939—Continued

=	ITEM (For definitions and explanations, see text)	Kansas	Louisiana	Montana	Nebraska	Nevada	New Mexico	North Dakota
	FARM VALUES, 1940°							***************************************
1 2	Land and buildings, all farmsdollars Land and buildings, irrigated farmsdollars	1,421,387,464 22,721,389	353,873,506 45,182,979	350,178,461 163,836,136	1,137,808,019 92,846,541	47,594,384 48,392,883	187,525,814 82,619,776	490,197,358 4,371,806
3 4 5 6	Operated by— (a) Obmers and managers	16,409,622 6,311,767 14,398.85 26.08	28,353,724 16,829,255 6,420.77 42.36	129,225,314 34,610,822 10,859.42 10.23	54,397,486 38,449,055 13,430.72 25.95	42,128,655 4,264,228 14,213.51 12.80	67,593,251 15,026,525 5,225.46 11.15	3,236,068 1,135,738 9,126.94 12.67
7 8 9 10 11 12 13	Buildings, irrigated farms reporting Valuenumber Total reported	1,497 3,942,540 2,633.63 4.53 144,152 253,889,232 1,761.26 5.37	6,779 8,019,180 1,182.94 7,52 138,349 83,374,445 602.64 9.94	14,813 33,750,271 2,278.42 2.11 25,333 32,860,604 1,297.15 1.08	6,698 17,318,057 2,595.56 4.84 109,386 239,435,747 2,188.91 5.47	3,079 8,971,907 2,913.90 2.48 246 368,450 1,497.76 2.29	14,236 14,976,063 1,051.99 2.02 17,255 13,277,393 766.48 0.42	469 1,200,510 2,559.72 3.48 68,151 139,174,486 2,042.15 3.70
15 16 17 18 19	Implements and machinery, irrigated farms reporting valuenumber Total reported	1,464 1,992,911 1,361.28 2.29	6,220 7,291,697 1,172,90 6,84	13,990 16,967,155 1,212.81 1.06	6,597 9,398,048 1,424.59 2.63	2,961 3,612,624 1,220.07 1.00	13,043 6,937,641 53 1. 91 0.94	459 616,899 1,344.01 1.79
20 21	valueumber	136,732 113,269,775 2.39	115,411 28,513,155 3,19	24,144 26,226,447 0.86	106,087 88,247,037 2.02	177 108,639 0.68	15,179 8,275,033 0.26	66,987 76,259,370 2.03
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
22 23	Enterprises	1,066	2,566 2,352	5,555 4,461	2,717 721 470	1,464 1,245 1,015	2,503 1,965 2,391	23
24 25	Average size of enterprise based on irrigable area	138	307	6,035 464	399 1,041	621 789	320	482
26 27 28 29 30 31 32 33 34 35	1830	317 491 102 292.5 285 418 3,347 2,079 1,667 24.1	361 620 105 2,421.0 2,226 3,243 10,335 11,386 11,889 63.6	586 717 6,130 15,702.5 15,957 22,496 66,745 53,253 94,429 148.1	1,041 1,631 3,51.3 3,31.3 3,465 3,925 14,256 13,108 11,665 126.1	1,362 1,896 2,897.2 4,155 4,368 22,930 16,986 10,554	402 1,072 4,647.9 4,466 5,932 16,821 17,479	1,916 19 159.2 87 151 616 1,072 836
36 / 37 38 39 40 41 42 43 445 46 47 48 49 50 51 52 53	Storage dams.	391 24 1 6 1,453 75 500 1,638 772 710 863,663 323,600	114 75 85 74 34,199 13,999 7,632 502 807 9 12,685 31,661 6,285 1,504 1,389 1,955,611 1,607,637	468 517 282 488 1,301,422 857,067 1,571,720 44 40 4,106 4,608 10,23 4,00 10,23 10,83 11,065	2,412 537 34 2,053,184 428,058	147 129 50,938 54,169	502 244 3,280,502 2,945,222 2,960,718 203 340 5 181,077 223,257 376,222 1,487 6,60 461	14 8 9 3,946 1,466 1,110
55 56 57 58 59 60 61 62 63 64 65 66	1920number 1940. capacity, ip 1930. capacity, ip 1930. capacity, ip 1930. capacity, ip 1920. capacity, ip 1920. capacity, ip 1940. capacity, g.p.m. 1940. capacity, g.p.m. 1930. capacity, g.p.m. 1940. capacity, g.p.m. 19	198 26,796 6,221 6,946 1,231,482 393,526 297,975 35	6,453,487 5,914,799 4,968,686 32 37	198 29,110 9,095 10,341 1,309,014 523,444 453,231 22	610 5 51,572 10,991 9 9,528,669 4 73,686 73,686	167 64 2,262 2,671 405 141,065 115,646 35,266	702 40,114 14,48: 8,48: 1,309,000 555,08: 304,78: 44	13 4 4 1,253 1 216 2,068 104,158 24,900 1 17 244 17 24
68 69 70	PAY ROLL AND NUMBER OF EMPLOYEES 1939 4 Enterprises reporting pay roll	10 41,116 16,235	230,726 502,320	827,76 1,501,14	7 471,792 8 308,746	169,818	930,21 718,21	9 19,090 14,611

^{*}Census of Agriculture.

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

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

2Includes siphons and farm pipe lines reported.

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

TABLE 21:- FARM VALUES, 1940; ENTERPRISES AND IRRIGATION WORKS, 1940, 1930, AND 1920; AND PAY ROLL AND NUMBER OF EMPLOYEES, 1939-Continued

	ITEM (For definitions and explanations, see text)	Oklahowa	0regon	South Dakota	Texas	Uteh	Washington	Wyoming
Ī	FARM VALUES, 1940							
1 I	Land and buildings, all farms	831, 140, 748 3, 251, 114	476,817,354 152,701,476	505,452,178 9,972,519	2,589,978,936 248,746,614	154,358,365 137,529,004	593,366,445 121,212,949	158,971,29 106,524,17
3 4 5 6	Operated by—	2,631,046 620,068 11,822.23 17.06	131,641,303 21,060,173 9,449.93 17.49	7,699,778 2,272,741 10,312.84 9.76	194,702,077 54,044,537 12,711.91 21.41	122, 156, 713 15, 372, 291 6,082, 12 27,74	100,900,376 20,312,573 6,955.87 57.50	88,316,33 18,207,84 12,333.4 8.2
7 8 9 .0 .1	Buildings, irrigated farms reporting valuenumber Total reported	268 878,415 3,277.67 4.61 173,242 140,637,553	14,82 <u>9</u> 33,570,300 2,264.90 3.85 45,667 81,675,283	935 2,173,503 2,324.60 2.13 67,742 131,576,350	15,696 32,848,639 1,967.46 2.83 363,227 385,420,914	19,759 32,426,080 1,641.08 6.54 2,211 3,630,811	17, 135 36, 111, 810 2, 107.49 17.13 63,475 118,408,326	8,420 20,788,950 2,466.30 1.6 6,11 8,546,52
3	Average; per nonirrigated farm reportingdollars per acre on all nonirrigated farmsdollars	811.80 4.06	1,788.50 8.82	1,942.35 3.42	1,005.72	1,642.16 1.65	1,865,43	1,397.1
15 16 17 18	Implements and machinery, irrigated farms reporting valuenumber Total reported	245 324,257 1,323.50 1.70	13, 395 15, 346, 736 1, 145.71 1.76	908 1,164,804 1,282.82 1.14	16,549 20,123,937 1,216.02 1.73	19,084 10,761,346 563.89 2.17	15,795 13,082,573 828.27 6.21	7,74 10,873,84 1,404.5 0.8
20	value	152,490 78,124,476 2.26	38,054 29,261,196 3,16	65,568 58,804,590 1.53	337,963 160,620,275 1,27	1,691 1,179,592 0.50	52,562 43,018,574 3.29	5,57 4,438,00 0,2
	ENTERPRISES AND IRRIGATION WORKS JANUARY 1							
3	Enterprises	120 77 33	5,884 4,066 4,710	274 121 292	4,040 1,728 1,371	2,401 2,714 2,403	4,120 2,986 2,692	3,38 2,68 3,50
6	Average size of enterprise based on irrigable area	112 95 356	244 363 409	448 1,004 645	536 903	590 637 982	203 306 311	6 7 7
6 9 0 1	Diversion dams	8 42.2 24 57 277	5,097 8,518.0 8,177 9,071 37,290	1,082 1,258	5,936.1 4,879 4,473	1,973 9,004.5 9,237 11,677 34,579	1,755 4,248.6 3,635 25,615 15,104	4,2 11,762 10,7 12,0 46,3
3 4 5	1920length, miles 1940capacity, c.f.s. ⁵ 1920capacity, c.f.s. ⁵ 1920capacity, c.f.s. ⁵ 1920capacity, c.f.s. ⁵ 1920capacity, c.f.s. ⁵	77 344 24.4	25,906 28,897 665.2	1,995 5,427	21,626 23,261	30,648 29,447 172.5	14,987 16,242	35,8 39,0 70
6 7 8 9 0	Storage dams	21. 20 7 8 900 293	247 257 120 266 2,212,315	82 5 119 209,785	325 368 1,405,024	362 438 413 476 3,417,704	114 78 205 1,165,527	3,379,9
3	1920capacity, acre-feet Wells, flowing	52	1,698,428 1,905,037 76 59	212,264 19 13	392,969 100 61 135	1,093,252 1,600,505 1,216 1,663 1,256	477,789 50 42 60	3,051,7 2,911,7
6 7 8 9	1940 - yield, g.p.m - 1890 - yield, g.p.m - 1890 - yield, g.p.m - 1820 - yield, g.p.m - 1940 - number - 1940 - number - 1890	100 77 18	3,396 6,535 11,968 901 558	4,825 2,750	36,020 62,364 3,396	83,838 104,670 96,371 286	27,290 14,925 1,041	3,4 2,5
1 2 3 4	1920uimber	, 19 /15,486 2,715 3,643	209,289 136,669	1,039	2,213,230 614,395	192 122,528 120,333	520 287,327 306,800	60,1 8,1 8,0
5	Pumping plants	116 25	1,091	ι	1,828	428	1,951	1
8 9 0	11260number 11260n	1,037 229 184	29,527 21,257 13,769	25 7 2,060 92 94 96	195,061 95,933 80,511	11,381	37,131 33,187 22,929	4, 1,
3 4 5	Pumping lift, from all sources	59,290 8,855 7,668 36	1,022,213 600,045	4,027 3 23,320 7 20	7 5,494,999 6,825,998	877,942 783,588	993,303 636,552 647	209, 86, 39,
36	1920average, feet from pumped wells1940average, feet PAY ROLL AND NUMBER OF EMPLOYEES	59 48	20	3 2:	L 45	. 25	5 60	
38	1939 ⁵ Enterprises reporting pay rollnumber Irrigated area in these enterprisesacres		194 501, 227			689 1,009,119		637,

^{**}Census of Agriculture.

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

Not revised.

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

Includes siphons and farm pipe lines reported.

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

Table 22.—SPECIFIED CROPS GROWN ON IRRIGATED AND NONIRRIGATED LANDS—FARMS REPORTING AND AVERAGE YIELDS, 1939; AND ACREAGES, 1939 AND 1929; BY STATES

[Yields for irrigated crops based on farms reporting entire crop irrigated; yields for nonirrigated crops based on farms reporting no irrigation for such crops. This table is presented in two sections, the second section beginning on p. 86. For the 17 western States and Arkansas and Louisiana]

	(For definitions: "Farms reporting," etc., see text)	(19 States,	TAL excl. Florida)	AF	I ZONA	ARE	ANSAS	CVII	FORNIA
	Trial Topologia, Citary See Search	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirriga
Com:	orn for all purposesfarms reporting1939	57 214	1 000 000	0.001	0.000	0.5	*** DOM	0.551	
00	acres	57,314 643,984	1,009,908	3,031 16,473	2,230 18,437	31 709	174,375 2,236,199	3,771 63,159	25
	Harvested for grainfarms reporting1939.	476,900	34,478,384	12,335	15,549	519	1,865,244	51,303	29
	acres	42,711 455,838	898,722 19,724,466	2,423 10,197	1,950 14,292	30 694	170,085 2,184,928	1,747 36,302	10
	1929	348,563	29,133,788	6,305	11,201	510	1,756,458	28,197	11
	average yield (bu.)1939 Cut for silagefarms reporting1939	29.7	15.3	14.1	8.6	16.0	15.4 100	36.0	
	acres1939.	7,614 99,845	40,800 934,234	223 3,482	44 862	•••••	2,050	1,263 17,410	
	1929	49,639	468,800	2,873	431	•••••	2,278	13,979	
	average yield (tons)1939	7.71	2,66	8.40	2.18	• • • • • • • • •	4.56	10.40	i
	cut for fodderfarms reporting1939.	10,428	151,728	455	313	1	7,325	887	
	acres1939	88,301	3,312,068	2,794	3,283	15	49,221	9,447	1
orgh	1929	78,698	4,875,796	3,157	3,917	9	106,508	9,127	1.
Šo	rghums for all purposes,	,			}		ŀ		
e	xcept sirupfarms reporting1939	15,239	556,805	1,309	155	3	34, 172	3,130	١
	acres	313,909 110,163	12,994,923 7,491,603	21,890 12,734	1,793 4,147	91 11	98, 131 53, 152	69,104 54,481	1: 2
	Harvested for grainfarms reporting1939	6,518	184,240	818	13		1,948	2,673	
	acres	144,518	4,451,208	13,667	180 1,080	********	5,949	62,759	1
	average yield (bu.)1939	71,371	3,413,532 10.4	7,321 34.0	6.2	•••••	2,929 14.0	50,940 34.9	2.
	Cut for silage (green			, , , ,					1
	wt.) 1	1,488	29,959	160	7	2	157	234	
	average yield (tons)1939	32,638 7.44	722, 104 3,92	4,532 10.16	2.02	81 4.47	3,216 5.76	3,312 10.51	İ
	Cut for hay or fodder			10010		2721		10.01	1
	(dry wt.) 1	8,762	466,103	386	140	1	32,690	271	1
	1929.	136,755 38,792	7,821,611 4,078,071	3,691 5,413	1,504 3,067	10 11	88,966 50,223	3,033 3,541	
	average yield (tons)1939	2.03	1.13	1.94	1.09	1.90	1,32	1.93	
	grains: xed grains (other than a			1					1
	lax and wheat mixture)		· i	i			ŀ	i	İ
t	hreshedfarms reporting1939	4,221	20,069	52	3		182	78	
	acres	51,974 25,427	538,134	810	27		1,484	2,111	
	average yield (bu.)1939	34.2	466,682 14.4	479 28.0	318 11.6	7	1,046	2,225 20.8	ŀ
0a	ts threshed or cut and								
T)	ed unthreshedfarms reporting1939	38,824 494,494	383,194 9,654,551	277	74	5	18,265	1,074	١.,
	1929	421,893	10,991,800	4,470 2,699	2,111 2,071	196 129	214,592 90,888	31,294 14,351	13
	Oats threshed1939	35,676	325,480	196	52	4	6,293	589	
	acres	454,331 382,491	8,862,926 10,079,911	3,549 1,575	1,691 1,692	178 124	142,774	22,908	120
	average yield (bu.)1939	38.3	22.4	34.9	12.4	54.5	32,270 29.4	8,671 41.7	71
	Oats cut and fed un-						1		
	threshedfarms reporting1939acres1939	3,815 40,163	69,537 791,625	90 921	23 430	1 20	12,584 71,818	502 8,386	13
	1929	39,402	911,889	1,124	379	5	58,618	5,680	18
ва	rley threshedfarms reporting1939acres1939	45,750 978,270	206,479 6,891,679	759	28 452	********	1,018	3,059	
	1929.	665,985	8,087,639	25,769 7,501	629	********	9,874 141	347,409 198,993	898 866
Des	average yield (bu.)1939	34.6	16.6	34.5	11.1	******	14.8	34.1	
ny	e threshedfarms reporting1939 acres1939	1,139 17,367	65,331 2,107,178	76	5 319		138 1,317	1 500	7
	1929	12,335	1,642,388	8	171	*******	216	1,503 813	
61 .	average yield (bu.)1939	16.4	8.5	19.6	4.5	•••••	11.8	15.4	
17.20	ax threshedfarms reporting1939 acres1939	1,147 93,170	21,469 656,064	107 4,917	***********		4 254	402 75,612	,
,	1929	7,482	2,422,236			*******			1
Δni	average yield (bu.)1939 y wheat threshedfarms reporting1939	18.1	6.5	23.1		********	9.7	19.0	ĺ.,
ang	acres	57,477 905,531	412,363 36,287,769	1,319 23,748	61 824	********	3,204 33,612	1,088 77,396	. 51.3
	1929	1,017,921	48,043,322	13,843	1,605	********	16,535	115,386	517
	Winter wheat threshedfarms reporting1939acres1939	12,797 353,846	281,060 23,919,166	1,034	19	******	3,204	709	
	1929	266,617	28,681,059	19,158 11,056	272 671	*******	33,612 16,467	63,327 101,449	428 421
	average vield (bu.)1939	. 23.2	13.4	25.5	8.6	•••••	10.5	28.3	4.8
	Spring wheat threshedfarms reporting1939 acres1939	46,273	142,927	293	42		***	383	
	1929	551,685 751,304	12,368,603 19,362,263	4,590 2,787	552 934	********	68	14,069 13,937	85 95
75.4	average yield (bu.)1939	28.3	10.6	25.0	9.4			19.1	810
	ce (rough or paddy)	0 445	68						
-	acres	8,447 848,292	171		***********	1,428 153,095		431 104,931	
	1929	724,997	12,073			145,690	898	80,720	1
iscel	average yield (bu.)1939	51.5	22.5	• • • • • • • • • • • • • • • • • • • •	**********	50.0	*******	75.2	********
Ir	ish potatoesfarms reporting1939	39,498	527,246	172	130	.3	111,652	1,691	. 1
	acres1939	359,737	417,440	898	361	2	39,910	55,612	
	1929	252,805	538,361	784	1,023	, 26	29,189	23,238	
Swe	average yield (bu.)1939 eetpotatoes and yamsfarms reporting1939	221.0 1,844	74.3 202,115	167.2 101	39.9	175.0 4	74.6 59,387	328.5 854	1
	acres1939	10,546	184,509	644	(*)	9	26,125	7,083	
	1929	10,634	153,295	524	25	6	22,220	7,690	
Co	average yield (bu.)1939 ttonfarms reporting1939	113.1 15,538	65.6 619,624	106.0 2,001	1	41.2	68.0 150,633	114.1	
	acres1939	762,217	12,750,177	183,327	5	855	2,055,920	5,315 316,267	
	1929	893,745	26,110,274	210,475 1.09	703	239 0-67	3,446,246	292,747 1.38	7
	average yield (bales) 81939	1.16	0.41		0.20		0.66		

¹1929 data for sorghums cut for silage included with sorghums cut for hay or fodder. ²Less than 1 acre reported. ³Running square bales of lint cotton, counting round as half bales.

TABLE 22.—SPECIFIED CROPS GROWN ON IRRIGATED AND NONIRRIGATED LANDS—FARMS REPORTING AND AVERAGE YIELDS, 1939; AND ACREAGES, 1939 AND 1929; BY STATES—Continued

	ITEM	COL	DRADO	ID	OHA	KA	NSAS	roni	SIANA
	(For definitions: "Farms reporting," etc., see text)	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigate
C	orn: Corn for all purposesfarms reporting	11,271 146,282 132,898 7,120 74,755 88,169 28.4 2,387 40,063	8,856 569,039 1,395,641 5,348 400,761 1,173,957 6.3 979 38,447	5,790 40,752 22,856 4,560 30,840 16,137 43,6 765 5,810	761 4,675 8,988 440 2,438 3,574 20.1 47	138 1,529 6,327 90 1,105 6,017 21.1 16 214 81	83,193 2,737,398 6,636,174 6,520 2,091,267 5,642,917 15.2 8,227 211,098	55 847 527 54 844 480 20.2	129,5 1,629,6 1,188,6 127,6 1,602,4 1,169,2
	average yield (tons)1939 Hogged or grazed off, or cut for fodderfarms reporting1939 acres1939 1929	19,837 6.19 2,681 31,464 24,892	26,593 1.41 3,649 123,831 195,091	3,068 9,91 800 4,102 3,651	964 3.88 316 1,770 4,450	\ 81 5.78 39 210 229	184,183 2.88 20,648 435,035 809,074	1 3 47	1,4 2, 24,
ę	Sorghums: Sorghums for all purposes, 1939 except sirup	2,164 35,171 5,668 788 14,362 1,240	8,085 468,790 274,111 1,949 128,312 34,690	24 98 7 4 12.9	17 180 27 6 69	877 29,148 5,758 512 15,325 4,887 23.1	93,469 2,377,733 1,538,491 38,138 826,126 722,630 9,8	11	5, 12, 3,
	Cut for silage (green #t.) 1	155 2,698 3.69	230 11,942 1.16	2 14 4.29		141 3,350 8.63	11,228 254,515 4.61	***********	2,
	(dry wt.) 1	1,457 18,111 4,428 1.81	7,367 328,536 239,421 0.59	18 72 7 2.82	27	536 10,473 871 2.75	67,248 1,297,092 815,881 1.43		5 8 2
	flax and wheat mixture) threshed	352 5,346 5,393 24.6	6,761 6,863	2,026 20,692 4,636 44.0	3,180 3,715	2 20 72 7.0	23,797		
	fed unthreshedfarms reporting1939 acres1939 1939 0ats threshedfarms reporting1939 acres1939 1929 average yield (bu.)1839	6,817 85,285 96,028 6,103 76,553 87,267 31.3	98,899 1,408 33,020 74,951	72,689 55,928 8,263 69,988 52,841	109,978 78,550 4,018 106,079 71,395	509 695 29 337		3 12 8 1 8	15 1 43 7
	Oats cut and fed un- threshed	904 9,732 8,761 10,325 202,459 31.4 261 3,336	21,893 23,948 4,111 199,690 438,968 7.2 957 34,848	2,701 3,087 9,054 96,746 69,988 2 41.1 7 100	3,899 7,155 4 3,732 3 117,261 6 63,428 1 28.7 0 170 2,202	172 23 150 3,555 3,219 13.3	80,869 88,117 24,393 595,957 575,004 10,9 4,207 62,897		16 7
	average yield (bu.) 1939. Flax threshed farms reporting 1939. acres 1939. average yield (bu.) 1939. Any wheat threshed farms reporting 1939. acres 1939.	17.9 21 19 7.7	6.6 14 462 658 7 3.5 7 7,252	19.2 2.239 2.733 3.50 5.14.6 2.15,147	11.4 189 3 7,649 0 77 0 8.8 7 7,970 6 701,890	5.8	10.5 4,100 95,369 19,756 7.7 100,017		
	1928 Winter wheat threshedfarms reporting 1939 acres	29.2 5,80	1,368,533 5,999 783,555 1,140,193 8.4 2,1,805	284,542 2 666 5 14,930 3 11,800 8 27.1 5 14,67	1,010,033 5,364 548,266 691,43 9 24.3 6 4,048	8,086 313 3 17,523 4 8,026 3 17.6	99,997 9,194,360 3 12,026,265 3 12.2 40		
	acres	107,060 22.:	228,340	272,73	4 318,603 8 18.8	60	46,670	5,778 404,036	3
	1628 Miscellaneous crops: average yield (bu.) 1639 Irish potatoes	5,013 66,32 74,86	3 1,20- 4 4,43- 5 14,82-	4 10,88 8 119,03 6 68,27	0 4,43 3 6,20 6 8,33	396	52,101 23,284 0 41,310	1:	0 4! 1 3! 8 2'
	average yield (bu.)1839. Sweetpotatoes and yams	162. 6 5 4 83.	5 54. 4 1 6 0 1 38.	6 220. 8 1 4 3 1 1 0 108.	1 68. 5	2 126.6 6 168	78.4 6 2,16 5 2,83 3 3,500	44.4 5 2/ 1 2/ 10 61.4	4 70 1 8 7 6
	acres			: :			2,448	18:	3 1,08 0 1,94

¹1829 data for sorghums cut for silege included with sorghums cut for hay or fodder. ²Running square bales of lint cotton, counting round as half bales.

TABLE 22.—SPECIFIED CROPS GROWN ON IRRIGATED AND NONIRRIGATED LANDS—FARMS REPORTING AND AVERAGE YIELDS, 1939; AND ACREAGES, 1939 AND 1929; BY STATES—Continued

T		MON	TANA	NEBI	RASKA	NE'	ADA	NEW)	ÆX1CO
. (ITEM For definitions: "Farms reporting," etc., see text)	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated
2 3 4 5 6	n for all purposes	2,297 25,928 5,091 1,578 16,146 1,320 28,8	5,516 119,456 128,760 2,045 32,496 20,739 12.1 182	4,739 160,250 124,902 4,364 145,085 112,009 31.7 363	98, 664 6,144,718 9,391,292 86,136 4,909,638 8,477,958 13-7	416 3,877 1,579 281 1,965 1,076 31.7	2 1 73 1 (1) 64 (1)	9,755 56,762 41,857 8,982 49,238 35,509 23.1 156 2,607	7,581 119,707 200,500 5,975 92,398 180,992 9.1 74
9 10 11	acres	3,406 452 6-42	4,343 1,092 1.73	7,631 744 6.54 520	344,708 68,730 1.99 27,048	1,141 193 9.08	1	1,212 6.12	1,203 1.67
13 14 Sorghi	cut for fodder	689 6,376 3,319	4,031 81,617 106,929	7,554 12,149	890, 372 844, 605	771 310	1 8	4,857 5,136	25,607 24,305
16 17	ghuss for all purposes, cept sirup	86 838 7 11 62	513 8,323 859 3 47 1	1,156 18,233 264 275 4,033	74,645 1,542,683 137,578 21,162 351,572 3,692 10.0	47 266 115 24 160 81 23.5	1 2 3 1 2 2	1,829 30,684 7,589 456 5,741 1,584 34.6	5,102 392,403 325,294 2,242 170,906 181,759
22 23 24	Cut for silage (green wt.) ²	10 97 4.86	15 271 1.97	235 3,959 9.31	8,776 1121,793 4.94	7 28 12.76		143 3,369 6.91	7,109 1.81
26 27 28 Small	Cut for hay or fodder (dry wt.) 2	69 679 7 2-49	499 8,005 858 1.06	779 10,241 284 2-30	64,146 1,069,318 133,886 1.37	20 80 34 3.30	3	6,005	143,535
ſ	lax and wheat mixture) hreshed	221 4,441 4,171 33.2	261 7,213 30,829 15.1	7 129 582 22.2	2,477 58,939 94,987 10.5	20 243 411 27.0	3		5,983 705
33 Oa	ts threshed or cut and ed unthreshed	5,809 102,200 74,168 5,610	9,607 222,178 227,796 8,411	1,282 17,589 21,204 1,201	56,730 1,313,701 2,368,553 52,909	227 3,875 3,343 206	25	10,150	14,624 20,591 549
37 38 39 40	acres	98, 282 69, 027 41.1 304	182,627 163,431 21.1 2,196	16,337 20,376 29.1	1,218,738 2,296,890 14.6 5,478	3,582 2,962 32.7	25	26.6	19,644
44 45	acres	3,918 5,141 3,533 53,967 57,358	39,551 64,365 5,278 127,167 185,987	1,252 828 1,550 30,667 34,501	94,963 71,663 40,732 999,610 608,655	723 14,707 5,390	10	2,966 755 9,340 0 3,483	6,947 207 3,310 4,305
48 49 50	average yield (bu.)1939 te threshed	35.0 107 1,656 1,108 17.5	65,917 10.3	30.8 130 2,431 746 13.9	15,809 377,661 243,297 9.2	189 347 16.0	14 54	1 53 4 455 4 86	107 4,031 525
52 53 54	ax threshed	336 8,748 6,415 9.6 6,274	62,411 355,686 3.6	32	5.4 57,895	830			1,884
56 57 58 59	acres	162,715 139,951 638 19,926	2,892,161 4,278,637 6,133 753,455	9,194 13,253 317 8,260	3,134,977 3,686,714 55,743 3,037,591	12,400 13,434 272 4,742	95	24,411 1,581 9,976	295,397 1,351 244,058
60 61 62 63 64	1939 1939	13,011 24.3 5,909 142,789 126,940	16.7 16,917 2,138,706 3,667,627	18.3	11.1 3,160 97,380 191,908	29.7 583 7,658 9,617	68	17.6 2 2,899 3 10,522 3 18,156	11.6 55 4,070 10,500
	average yield (bu.)1939 lce (rough or paddy) threshed			14.7			10.0		
Misc	altaneous crops: rish potatoes	4,232 7,497	6,162 11,793	38,180 16,507	33,784 84,401	1,977	17	1,104 1,298	1,179 2,799
74 S 75 76 77	weetpotatoes and yamsfarms reporting1939 acres1939 1929 average yield (bu.)1939		3 1 5 20.0	136 136	5 534 3 354 3 238 5 74.2	10 10 2 45.5	/	1,609 1,510 125.0	9 25 3 99 3 24.8
78 C 79 80 81	otton			*********			**********	83,132 125,323	6,569

 $^{^1\}mathrm{Less}$ than 1 acre reported. 2 1929 data for sorghums cut for silage included with sorghums cut for hay or fodder. 3 Rumning square bales of lint cotton, counting round as half bales.

TABLE 22.—SPECIFIED CROPS GROWN ON IRRIGATED AND NONIRRIGATED LANDS—FARMS REPORTING AND AVERAGE YIELDS, 1939; AND ACREAGES, 1939 AND 1929; BY STATES—Continued

IT		NORTH	DAKOTA	OKLA	нома	ORE	GON	SOUTH	DAKOTA
(For definitions: "Farms r	eporting," etc., see text)	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigate
Com:									
Corn for all purposes	.farms reporting1939	126 1,810	42,473 1,072,095	9 210	108,804 1,787,634	1,593 10,818	10,081 57,061	416 7,265	52,3 2,676,9
	1929	198	1,004,410	168	3,069,477	5,429	57,777	4,688	5,090,1
Harvested for grain	.farms reporting1939	41	15,860	9	104,769	1,252	5,145	162	40,8
. "	acres	481 45	346,119 137,751	210 168	1,718,601 2,912,969	8,506 3,763	25,009 21,097	2,319 1,619	1,962,2 3,491,6
	average yield (bu.)1939	37.3	19.1	22.6	14.7	38.8	29.3	20.1	20
Cut for silage	.faras reporting1939	21	5,804		426	1.50	2,539	81	5,5 103,6
	acres1939	362	146,358 70,276	*********	8,251 11,789	1,111 856	20,908 21,249	1,509 152	56,
	average yield (tons)1939	6.03	2.49		3.89	8.32	6.29	4.08	á
Hogged or grazed off, or	- · · ·	أمسا	20.444			567	0 500	605	20,
cut for fodder	.farms reporting1939	79 967	29,414 579,618		5,780 60,782	267 1,201	3,523 11,144	226 3,437	610,
	1929	153	796,383		144,719	810	15,431	2,917	1,541,
Sorghums:		•			,	İ			İ
Sorghums for all purposes,	.farms reporting1939	25	10,792	13	84,998	15	27	149	38,
except arrapition	acres	227	164,076	200	1,466,674	89	72	2,608	1,060,
	1929		5,214	-58	1,441,230	14	81	6 9.	15, 5,
Harvested for grain	.farms reporting1939		64 848	8 61	37,048 629,961	6 17	4 7	81	150,
	1929		41	47	747,577		4		
F. 10 (1)	average yield (bu.)1939		12.5	25.0	8.6	29.1	12.6	9.0	1
Cut for silage (green wt.) 1,	.farms reporting1939	3	750		1,257	3	5	18	1,
	acres	37	12,249		32,108	40	26	414	31,
	average yield (tons)1939	4.73	2.12	•••••	3.38	9.88	7.58	3.71	۱ ۱
Cut for hay or fodder	farms reporting1939	22	10,115	9	63,003	7	19	130	36,
fred Host severesesses	acres1939.	190	150,979	139	804,605	32	39	2,113	887
	1929		5,173	11	693,653	14	77	6	15,
Small grains:	average yield (tons)1939	1.68	1.33	1.73	0.89	1.84	2.05	1.82	1
Mixed grains (other than a	i .	1							
flax and wheat mixture)					· ·		`	ļ	
threshed	farms reporting1939	6	531 21,372		4,870	184	2,980		26,
	1929	82 69	99,472	20	124, 188 18, 797	3,308 986	73,961 34,696		
	average yield (bu.)1939	42.6	15.2		12.1	27.4	24.2		
Oats threshed or cut and	forms reporting 1000	on.	40.000	_	F77 (787.1	4 700	11 010	100	10
ten mimitesuga	farms reporting1939acres1939	67 1,048	48,292 1,535,766	5 122	57,771 1,317,480	1,739 33,059	11,313 227,106	136 1,671	1,633
	1929	630	1,862,781	15	907,924	18,659	204,059	5,756	2,329
Oats threshed	farms reporting1939	63	46,357	5	45,040	1,638	11,034	124	42
	acres1939 1929.,	1,026 591	1,457,546 1,734,870	122 -5	1,174,293 762,818	31,645 17,539	223,386 195,877	1,360 5,445	1,597 2,266
	average yield (bu.)1939	41.2	22.7	37.4	17.9	40.8	30.8	26.3	
Oats cut and fed un-	farms reporting1939	6	4,450	ł	14 101	136	463	16	1
an concursion	acres1939	. 22	78,220		14,131 143,187	1,414	3,720	311	
	1929	39	127,911	10	145,106	1,120	8,182	311	62
Barley threshed	farms reporting1939 acres1939	75 1,150	41,272 1,624,523	2 28	23,115 494,263	2,156 44,694	5,462 114,646	226 3,983	
	1929	1,633	2,833,316	30	71,044	23,075	55,284	5,680	2,055
non Abourbo	average yield (bu.)1939	36.7	17.2		16.1	36.9	25.8	21.3	:
нуе threshed	farms reporting1939 acres1939		17,570		3,542	185	808	1	
	1929	63	778,734 948,987		113,058 7,573	4,569 6,198	18,013 14,238		
	average yield (bu.)1939		7.8		9.7	15.4	11.9	9.8	1
FIRX Unreshed	ocres	6	8,706		126		253 5,164		146
	1929	81 331	311,991 1,338,630		3,661 98	536	1,050	369	
	average vield (bu.)1939	10.6	5.1		8.7	9.6	10.8	1	· l
any wheat threshed	farms reporting1939	129	65,696		51,248	2,392	12,422	157	
	acres	3,343 2,193	6,895,456 9,967,177	160 255		36,328 49,210	686,132 1,026,031		
Winter wheat threshed	farms reporting1939		285	6	51,248	296	9,996	5 28	1
	acres1939		11,586	160	4,158,070		578,048		
	1929 average yield (bu.)1939		45,836 10.3	255 16.0	4,549,153	5,575 25.9	920,502 21.5		
Spring wheat threshed	farms reporting1939	129	65,594		,	2,135	3,554	131	. 31
	acres1939	3,343	6,883,870			30,381	108,084	1,593	2,007
	1929 average yield (bu.)1939	2,193	9,921,341		26, 150	43,635 28.9	105,529 17.5		
Rice (rough or paddy)	•	~	1		1	1]	1	
threshed	farms reporting1939		••••••						
	acres	*********							
	average yield (bu.)1939								
Miscellaneous crops:	6								. [-
TLISH horatoss	farms reporting1939 acres1939		43,141	33	72,423 26,629	2,578	12,348 11,272	276 518	
	1929	40	140,995 121,012				24,956		
	average vield (bu.) 1939	151.0	84.5	204.1	72.2	230.5	106.9		
Sweetpotatoes and yams	farms reporting1939		•••••	99				3	.
	acres1939 1929	*********		40			1:		
	average yield (bu.)1939			138.0	47.6	91.0			
				10					
Catton									
Corton	acres	********		347 434					.

¹⁹²⁹ data for sorghums cut for silage included with sorghums cut for hay or fodder. Rumming square bales of lint cotton, counting round as half bales.

Table 22.—SPECIFIED CROPS GROWN ON IRRIGATED AND NONIRRIGATED LANDS—FARMS REPORTING AND AVERAGE YIELDS, 1939; AND ACREAGES, 1939 AND 1929; BY STATES—Continued

ITEM		TE.	EXAS	UTAH		WASHINGTON		MAONING	
(For definitions: "Farms repo	rting," etc., see text)	Irrigated	Nonirrigated	Trrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigat
Harvested for grainfa	res1939 1929	4,928 45,573 31,112 4,466 40,132 27,714	274,768 4,654,902 4,219,635 260,621 4,282,232 4,048,492	4,149 10,829 11,729 1,877 8,085 6,023	295 2,368 2,674 153 1,126 1,271	3,118 15,753 11,527 2,427 11,237 7,219	5,657 21,889 21,028 826 3,504 2,702	1,681 26,158 11,855 1,248 17,657 6,283	2, 93, 147, 38,
Cut for silagefa	erage yield (bu.)1939	23.5 148 1,841 783 6.47	16.0 1,048 29,818 7,056 2.72	26.3 1,196 6,921 2,175 9.59	16.5 37 250 74 4.74	36.3 404 3,047 2,369 10.40	21.8 1,715 9,548 7,357 9.03	24.3 172 3,290 ·865 6.74	2, 1
Hogged or grazed off, or cut for fodderfa	rms reporting1939 res1939 1929	445 3,600 2,615	18,271 342,852 164,087	1,319 4,623 3,531	131 992 1,329	461 1,469 1,939	3,326 8,837 10,969	409 5,211 4,707	1, 52, 76,
Sorghums for all purposes, except sirupfa	res1939 1929	4,148 103,032 23,185	198,978 5,360,523 3,666,277	75 249 210 5	31 168 152	33 101 10 6	17 60 39	156 1,678 15	19,
	rms reporting	923 28,204 5,205 25.2	75,217 2,173,903 1,695,508 11.3	25 54 32.2	26	7 1 27.9	19	*********	
wt.) 1fa ac av Cut for hay or fodder	res1939 erage yield (tons)1939	324 10,151 5.47	5,920 244,738 3.55	18 116 9.25		49 9.45	2 22 8.18	29 391 4.22	
ac	rms reporting1939 res1939 1929 rerage yield (tons)1939	3,487 64,677 17,980 1.87	173,741 2,941,882 1,970,769 1.02	.53 108 156 3.92	31 168 126 1.24	24 45 9 2.69	38 26 1.42	1,487 15 2.02	16
Mixed grains (other than a flex and wheat mixture) threshedfa	rms reporting1939 res1939 1928 verage yield (bu.)1939	64 2,158 94 21.5	24,415	828 6,930 2,280 31.8	31 659 604 13+4	67 755 812 37•4	557 9,559 8,805 27.5	175 3,820 2,332 28.6	
Oats threshed or cut and fed unthreshedfe	rms reporting1939 res1939 1929	414 8,997 4,591 265	53,205	5,916 32,100 43,469 5,650	254 1,547 3,998 235	1,763 22,872 13,075 1,658	8,933 157,726 126,124 8,180	3,268 62,655 56,995	10
ac	res	7,099 3,721 26.7	1,263,642 1,144,389 25.4	30,505 41,794 37.8	1,324 3,686 29.0	22,063 11,771 54.8	151,005 109,196 43.7	59,345 50,925 33.4	1:8
Barley threshedfr	rms reporting	155 1,898 870 327 7,962 1,239	170,763 182,160 8,506 194,059	318 1,595 1,675 9,577 75,507 32,452	23 223 312 770 8,480 5,614	139 809 1,304 945 11,240 7,592	6,721 16,928 3,034 80,788	48,554	20
Rye threshedfe	verage yield (bu.) 1939 arms reporting 1938 1939 1928 verage yield (bu.) 1939	22.6 10 209 10 8.5	13.8 363 15,391 2,579 6.8	41.4 81 621 753 18.0	25.4 41 1,005 2,243 5.3	41.0 78 481 197 21.0	473 13,360 11,545 10.8	874 265 17 - 3	21
Flax threshedfe	arms reporting1939 cres1939 1929 verage yield (bu.)1939	14 365 13.7 763	7,001	10,544	2,039	3.1 2,031	10,449 8.0 10,655	223 7.0 2,577	1'
Winter wheat threshedf	cres	66,846 3,065 763 56,846 2,997	2,966,446 25,673 2,677,218	71,532 89,918 1,887 20,334 20,108	175,781 1,525 118,080	52,677 177 1,716	2,242,365 8,010 1,179,142	34,385 205 3,982	301
Spring wheat threshedfi	verage yield (bu.)1939 arms reporting1939 cres1939 1929	15.5	10.1	24.1 8,976 51,198 69,810 30.1	15.7 602 9,145 10,570	30.1 1,868 19,557 48,447	25.2 4,886 763,719 1,095,962	16.5 2,409 28,842 30,488	4
Rice (rough or paddy) threshedfi	verage yield (bu)1939 arms reporting1939 cres	810 186,230 103,973	2 6 1,643		101.0	**********		**********	
Miscellaneous crops: Irish potatoesf a	cres1939 1929	709 7,904 8,300	86,797 36,378 31,486	5,599 12,703 10,371	433	2,754 17,762 19,143	19,324 16,189 24,765	1,740 8,322 7,890	1
Sweetpotatoes and yamsf	verage yield (bu.)1939 arms reporting1939 cres1939 1929 verage yield (bu.)1939	93.4 282 725 529 103.8	57,387 59,068 44,123	10		1 2 2	1 S 2 1	**********	(2)
Cottonf	arms reporting1939 cres1939	5,642 178,106 264,317	267,480 7,927,605	*********			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	***************************************	

¹¹⁹²⁹ data for sorghums cut for silage included with sorghums cut for hay or fodder.
2 Less than 1 acre reported.
3 Rumning square bales of lint cotton, counting round as half bales.

TABLE 22.—SPECIFIED CROPS GROWN ON IRRIGATED AND NONIRRIGATED LANDS-FARMS REPORTING AND AVERAGE YIELDS, 1939; AND ACREAGES, 1939 AND 1929; BY STATES—Continued

[Yields for irrigated crops based on farms reporting entire crop irrigated; yields for nonirrigated crops based on farms reporting no irrigation for such crops. This table is presented in two sections, the first section beginning on p. 81. For the 17 western States and Arkansas and Louisiana]

	ITEM	TOT (19 States, e		AR	IZONA	ARK	ANSAS	CALI	FORNIA
	(For definitions: "Farms reporting," etc., see text)	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated
1 2 3	Miscellaneous crops—Continued: Sugar beets for sugarfarms reporting1939 acres	29, 213 626, 190 501, 951	764 20,200 26,467	3 293				1,643 143,376 35,045	176 8,337 4,790
4 5 6	average yield (tons)1939 Hops	13.07 324 12,896 4,811	9.77 559 16,868 18,474	15.72				16.12 91 5,643 1,648	11,43 27 711 2,496
8 9 10 11	average yield (lb.)1939 Broomcorn	1,422 57 774 186	851 5,521 195,643 288,187	3 75 18			212 210 190	1,434 8 88 8	1,154
12 13 14 15 16	average yield (lb.)1939 Popcorn	420 618 2,479 743 24.3	228 9,300 10,543 14,760 12.1	132 1 1 1 4 20.0	1 2 1 4.5		319 411 282 241 11.0	372 29 108 11 21.9	29 2,008 28 10.9
17	Root and grain crops (other than corn and annual legumes) hogged or grazed offfarms reporting1939	1,503	30,965	185	29		443	325	648
18 19 20 21 22	acres	20, 162 8, 899 219, 149 137, 754 2.2	847,354 23,187 355,985 8,072,931	2,703 485 34,221 14,559 2.8	903 1 10 81,499 0.2		2,154 20 237 49,340 1.3	6,191 523 20,375 8,765 3.1	24,724 179 4,748 786,181 2.2
28	Land in bearing and nonbearing fruit orchards, vineyards, and planted nut trees (nurseries								
24 25	excluded)	86,576 1,374,458 1,494,637	211,532 857,670 1,085,412	2,118 22,607 19,775	619 1,051 2,186	3 10 80	41,214 108,546 140,740	49,608 1,084,830 1,172,171	19,186 330,181 431,276
26 27 28	Annual legumes: Soybeans, total		321,886	8 80 1			36,496 595,217 54,288		24
29 30 31 32	Cowpeas, total	1,802 4,422 345	2,190,282 422,321 139,392	29 21 13	23		87,115 760,929 130,181 32,608	343 48 110	114 47 10
33 34 35	acres1939 1929 Vetches, velvetbeans, mung and horse beans	627 432	369,940	21		2	55,356 28,628 1,396	1,116 96 249	925
36 37	Navy, pea bean, Great Northern, kidney, lima, pinto, and other dry field and seed beans, and lentils			884	,		12,694	5,254	19,006
38 39 40 41 42	acres	449,296 427,996 23.2 975 71,277	495,243 715,723 5.5 578 52,805	3,515 1,307 9.2 34 78	11,984 4,264 3.4 12		1,262 1,595 6.0	189,381 24.0 941 71,199	107,299 137,982 12.7 566 52,643
43 44 45 46	Other dry field and seed beans 1	3,698 111,551	1,767 66,478	857 3,437 9.2	720 11,822			28.1 2,841 108,114 21.5	1,047 54,656
47 48 49	Dry field and seed peasfarms reporting1939 acres1939 sverage yield (bu.) 21939	4,265 76,506	3,623 154,754	63 63 3.3	36		19 61	138 8,571	133 4,864
50 51 52	Annual legimes saved for	6,758,431	19,147,810	103,861	17,581	. 166	637,223	979,321	850,283
53 54 56 56 57	1929 sverage yield (tons)1939 Alfalfa hayfarms reporting1939	10,524 19,833 1.76 136,096	928,119 404,114 0.97 149,219	82 5 1.44 3,504	42 5 11 6 0.31 1 258	152 54 0.95	363,720 112,916	3,402 1,756 2,20 22,983	6,456 3,408 1.63 2,102
58 60 61	1929. average yield (tons) .1939. Sweetclover hayfarms reporting1839. acres	4,096,383 2.64 3,934 57,840 29,270	4,114,304 1.39 28,316 505,718 596,758	91,765 2.47 58 662 137	4,295 0.99 12 2 40 140		49,320 2,25 657 4,933 30,661	719,610 4.27 255 3,788 435	75,336 2.06 97 1,776 5 546
6: 6:	Clover or timothy hay, alone or mixed	13,757	7 29,742 354,071	29	10) 		577	415 9,054
61 62 63 70	average yield (tons)1939 Small grain hay	1.37 17,86; 241,83 219,34;	7 1.60 3 116,832 1 2,024,609	1.07 656 10,957	7 0.71 3 25: 7 3,81:	l l 3	1.07 10,930 77,721	1.65 6,041 97,138	1.78 1 14,187 5 443,534
7: 7: 7: 7:	average yield (tons)1939. All other tame hayfarms reporting1939. acres1939. 1829.	1.4° 7,199 303,289 356,21	7 1.04 9 177,347 3 2,276,147 1 1,131,988	1.50 179 3,069 2,36	0.57 9 117 9 1,593 1 2,433	7 7 1 L 8	0.82 15,411 121,799 132,160	1.66 1,158 40,158 0 46,948	1.31 1,482 39,591 62,404
71 71 71 71	i Wild hay	. 11,554 1,648,144 1,303,244	1.06 5 205,644 7,879,395 8 9,415,743	1.2 5 1,08 1,67	9 9 3,570 6 5,29	1 3 3 45	20,370 161,946 141,370	633 63,233 60,193	5 2,702 75,670 72,277

¹Separate reports only for Arizona and California.
²Average yields were computed by using acreages grown alone in all States except California, Idaho, Oregon, and Washington, where total acreages were used.
³Data for 1939 include lespedeza hay, not shown separately.
¹Data for 1929 are for "Sweet, crimson, and Japan (lespedeza) clover."

TABLE 22.—SPECIFIED CROPS GROWN ON IRRIGATED AND NONIRRIGATED LANDS—FARMS REPORTING AND AVERAGE YIELDS, 1939; AND ACREAGES, 1939 AND 1929; BY STATES—Continued

ITEM	COL	ORADO	DAMO		KAI	NSAS	LOUISIANA	
(For definitions: "Farms reporting," etc., see text)	Irrigated	Non1rr1gated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated
Miscellaneous crops—Continued: Sugar beets for sugarfarms reporting1939 acres1939 1920 average yield (tons)1939	6,872 138,485 206,245 11.04	37 304 3,590 4.81	5,873 70,627 47,163 13.85	25 177 651 12.49	252 6,957 5,000 7.89	1 20 1,149 1.25		
Hops	*********		3 96 1,125	************	*********		*********	
Broomcorn	6 19 130	390 45,313 64,118	2 9 11	1 10	8	257 11,564 49,864 176		28 10 4 33
average yield (1b.)1939. Popcorn	387 173 452 231 25.2	162 56 82 391 7-0	778 133 1,077 233 28.3	60 4 4 3 14.5	10 10 10	2,250 2,981 3,473 11.6		1,11 40 6
Root and grain crops (other than corn and annual legumes) hogged or grazed offfarms reporting1939	156 2,023	151 7,462	136 917	95 1,321	22 657	1,495 57,456		41 1,08
Alfalfa seedfarms reporting1939. acres1939. 1929. average yield (bu.)1939.	889 15,220 13,384 1.4	106 1,891 796,592 1.0	2,068 41,082 32,989 1.6	754 17,830 733,458	117 4,486 3,971 1.6	8,699 106,016 725,651 1.4		76 11,83
Land in bearing and nonbearing fruit orchards, vineyards, and planted nut trees (nurseries								
excluded)	4,858 23,442 29,612	527 933 2,886	3,235 16,167 32,575	1,508 1,791 4,414	78 372 115	8,648 25,874 66,426	8 25 38	12,18 48,73 25,7
Ammual legumes: Soybeans, total	89 487 170	17 111 413	4 24 75	96	30	4,776 39,827 18,650	27 235 90	52,70 516,63 216,54
Cowpeas, total	40 315 1,421	25 202 62		1	12			48,88 372,38
acres1939 1929 Vetches, velvetbeans, mung and	(1)	1	47	63	······i	19 114	3	33,00 13,40
horse beans	. 2	(1)	15 157	3 49	*********	47 371		
lentils	5,367 92,302 40,138 19.4	2,412 148,686 335,446 3.5	3,421 77,456 116,813 30.0	441 21,681 16,806 5.8	10.0	22,595	1	1,0
Lima beans (dry) ² farms reporting					***********			
beans ²					**********	**********		
Dry field and seed peasfarms reporting1939 acres1939 average yield (bu.) 31939	1,077 29,290 15.2	76 532 5.7	1,232 19,262 22.0	29,908	*********			
Hay crops, exclusive of sorghums: All hay	1,077,563 1,262,506	202,127 356,068	817,303 833,394			1,930,555		297,2 160,8
hayfarms reporting1939 acres1939 1929 average yield (tons)1939	174 3,148 15,506 1.35	26 332 1,268 0.66	27 264 290 2-18	389 1.11	37	21,290 9,986 1.19	211 2.36	141,6 66,1
Alfalfa hayfarms reporting1939 acres	19,427 534,255 717,934 1.84	1,934 44,518 92,042 0.97	23,263 613,177 630,634 2.64	160,857 135,811	15,415 21,044	360,336 708,578	11	1,7; 27,9;
Sweetclover hayfarms reporting1939 acres	875 16,179 11,222 1.22	160 2,344 3,098	309 3,589 1,987 1.74	320 5,011 843	39	1,702 20,123 20,873		2,7,7,24,00
sverage yield (tons)1939 Clover or timothy hay, alone or mixedfarms reporting1939 acres1939	1,777 126,308	320 7,176	4,289 90,610	2,265 34,897		1,408 14,413		5 10,1
1929	163,144 1.32 2,028 24,684	0.75 2,364 63,850	113,236 1.33 1,215 11,179	1.24 4,750	22 348	53,092	1 5	Ó. 3
1929 average yield (tons)1939 All other tame hayfarms reporting1939 acres	24,206 1.09 1,033 63,109	99,000 0.46 952	6,735 1.47 407 16,346	73,469 1.26 707	142 0.94 29	20,028 0.65 9,462	1.00	1,0
1928 average yield (tons)1939 Wild hay1839	57,389 1.22 1,859	54,114 0.66 1,513	17,396 1.36 1,169	6,651 1.09 941	155 3.06 4	70,785 1.28 30,657	27	36,8 1. 4,6
acres1939 1929 average yield (tons)1939	309,880 273,105 0.83	88,496	82,138 63,116 1.13	32,327	160	918,454		31,0° 17,5 1

Less than I acre reported.

Separate reports only for Arizona and California.

Separate reports only for Arizona and California.

Average yields were computed by using acreages grown alone in all States except California, Idaho, Oregon, and Washington, where total acreages were used.

Data for 1939 include lespedeza hay, not shown separately.

Buta for 1929 are for "Sweet, crimson, and Japan (lespedeza) clover."

TABLE 22.—SPECIFIED CROPS GROWN ON IRRIGATED AND NONIRRIGATED LANDS—FARMS REPORTING AND AVERAGE YIELDS, 1939; AND ACREAGES, 1939 AND 1929; BY STATES-Continued

	ITEM	ном	TANA	NEBF	ASKA	NE	/ADA	NEW N	(EXI CO
	(For definitions: "Farms reporting," etc., see text)	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigate
M	iscellaneous .cropsContinued:								
	Sugar beets for sugarfarms reporting1939 acres1939	2,738 71,527	6 45	2,486 65,926	2,073	8 1,654		908	
	1929	33,724	1,192	78,767	5,159			388	
	average yield (tons)1939	12.34	1.13	11.87	6.65	9.96		5.99	
	Hops1939acres1939			*********		*********			*********
	1929	*****		• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •		.,	********
	average yield (lb.)1939 Broomcorn1939	1			12			14	
	acres1939	Î			26	*********		321	53,
	1929.			*******	159	•••••		11	38,
	average yield (lb.)1939 Popcorn1939	42 55		69	378 1,444	**********		329 10	
	acres1939	54	64	249	1,315			24	
	1929	81	7	63	8,486	*********		6 25.1	. 2
	average yield (bu.)1939 Root and grain crops (other	23.8	10.3	18,1	11.9	**********	**********	20.1	ļ -
	than corn and armual legumes)	1	ì	1	})		ì
	hogged or grazed offfarms reporting1939 acres1939	42 396		15 125	1,467 33,567	48 293	25	119 1,993	7,
ı	Alfalfa seedfarms reporting1939	1,004		175	6,005	72		249	i ''
	acres1939	21,001	28,247	3,076	69,215	1,461		7,991	
	1929	5,651		1,068	1,138,017	1,159	145,609	3,418	98,
l	average yield (bu.)1939	2.9	1.9	1.8	1.1	2.3		2.0	
ľ	Land in bearing and nonbearing	ļ.							
١	fruit orchards, vineyards, and planted nut trees (nurseries	\	}		1		1.		l .
١	excluded)	1,202	353		5,776	405		4,372	
	acres	4,017 6,084	582 1,701		10,001 28,836	752 1,282		13,027 10,951	1 2
	1925	0,004	1,101	307	.20,030	1,202	80	10,831	
	Annual legumes:	·	1	1	1				
١	Soybeans, totalfarms reporting1939acres1939			17 73	1,346 10,003			26 121	
l	1929	176						171	
l	Cowpeas, totalfarms reporting1939		**********		13		************	12	
١	acres1939 1929		***********	************				1,297	
l	Peanuts, totalfarms reporting,1939				4	,		173	
1	acres1939		*************		1			1,833	
1	Vetches, velvetbeans, mung and	*********	***************************************		25			381	1.
1	horse beansfarms reporting1939					1		36	
	acres1939 Navy, pea bean, Great Northern, kidney, lima, pinto, and other dry field and seed beans, and	51	. 31			50		31	
	lentils1939							2,381	
I	acres							20,000	
1	average yield (bu.)1939	22.6						13.1	
	Lima beans (dry) 1farms reporting1939.	• • • • • • • • • • • • • • • • • • • •							
ı	acres								
	Other dry field and seed	1	\				1	1	1
	beans1farms reporting1939.	• • • • • • • • • • • • • • • • • • • •						**********	
	acres			***********					
.	Dry field and seed peasfarms reporting1939	571						864	1
	acres	13,522			• • • • • • • • • • • • • • • • • • • •		***************************************	2,035	[
	average yield (bi.) 21939.	20.6	18.9		1		1	7.8	'[
,	Hay crops, exclusive of sorghums:	, con							
	All hayacres								
,	Annual legumes saved for		- 1	1	1 ' '	1	0,502		
	hay1939.							84	
	acres					126		423	
	average yield (tons)1939	1.48	1.29	1.03	1-17	• • • • • • • • • • •		0.93	3
	Alfalfa hayfarms reporting1939acres								
3	1920.	413,211							
ļ	average yield (tons)1939.	1.96	1.10	2.35	1.15	2.2	0.59	2.50)
	Sweetclover hayfarms reporting1939.							15:	
Ė	1929.	6,976							
ì	average yield (tons)1939							1.13	
ŀ	alone or mixedfarms reporting1939	2,156	1,32	14	1 254	15	5	1 38:	2
j	aores1939.	108,26	7 41,08					3,70	1
3	1929.	175,167	7 96,53	644	175,11	1 35,19	2 80	5,75	5
3	average yield (tons)1939. Small grain hayfarms reporting1939.						2 9 8	1.2	7
Θ	acres								
3	1929.	9,760	285,77	7 68	37,18	3,53	4 78:	4,79	1 1
1 2	average yield (tons)1939. All other tame hayfarms reporting1939.	. 1.90	0.8	9 0.9		3 1.3	1 0.40	1.1	7
3	acres1939.	38,058							1 2
4	1929.	24,91	36,15	0 1,20	1 97,17	9 30,93	0 174	5 4,49	9
	wild hayfarms reporting1939.	1.2						0 1.1	8
6		. 2.13	5 7,69						
6			8 351.21	9 33.08	2 2.999.PO	3 215.19	8 1 54	6 16.90	9 1
5 6 7 8 9	acres	341,23 301,93	336,05	1 21,05	7 2,768,95	3 141,72	7 4,39	0 6,65	9 1 6 1

Separate reports only for Arizona and California.

Average yields were computed by using acreages grown alone in all States except California, Idaho, Oregon, and Washington, where total acreages were used.

Bata for 1829 are for "Sweet, crimson, and Japan (lespedeza) clover."

89

TABLE 22.—SPECIFIED CROPS GROWN ON IRRIGATED AND NONIRRIGATED LANDS—FARMS REPORTING AND AVERAGE YIELDS, 1939; AND ACREAGES, 1939 AND 1929; BY STATES-Continued

	ITEM (For definitions: "Farms reporting," etc., see text)		DAKOTA	OKLAHOMA		OR	EGON	SOUTH DAKOTA	
(For delimitions: "Fames re	orting," etc., see text)	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirriga
discellaneous cropsContinued:									
Sugar beets for sugar	farms reporting1939	139	227			382		321	
	acres1939	3,839	8,609			6,574		6,903	į.
	1929 average yield (tons)1939	1,403 13.91	6,846			**********	• • • • • • • • • • • • •	10,949	l .
Hops	farms reporting1939	10.81	9.08			14.94 39	-518	8.72	;
	acres1939					2,887	15,762		
	1929	********				1,081	15,246		
_	average yield (lb.) 1939	*********		********	.,	1,205	841	*******	
Broomcorn		1	7	********	2,667	3		********	
	acres	1	111	•••••	60,362	17		*******	i
	1929 average yield (1b.)1939	30	575	*********	124,990		3	*********	
Popcorn	farms reporting1939	30	326	**********	268 225	635 11	23	18	
•	acres1939	13	301		447	23	23	19	
	1929	*********	4		443	3	33		1
Don't and much according	average yield (bu.)1939	11.2	10.3	•••••	14.7	34.8	21.1	28.4	
Root and grain crops (other than corn and annual legumes)		1			1			١ ،	
hopped or grazed off	.farms reporting1939	1 1	112	_ a	0.000	75	856	7	
megan or graned officers	acres	3	2,111	16	8,089 198,150	612	12,182	24	17
Alfalfa seed	.farms reporting 1939	111	1,065	19	3,514	501	163	104	1
	acres1939	203	14,299	563	78,411	8,513	2,818	1,487	
	1929		287,080	316	181,469	2,451	247,084	899	878
	average yield (bu.)1939	1.7	1.3	.2.3	1.8	1.7	1.0	1.7	•
and in bearing and nonbearing	•								
fruit omchards, vineyards, and				l					
planted mut trees (murseries		t						1	
excluded)	farms reporting1939	1.5	, 226	36	18,561	3,308	18,119	81	i
	acres1939	10	1.64	134	44,638	26,306	101,951	157	
	1929	********	1,455	46	74,850	32,319	119,985	171	t
nnual legumes:		I				1	ĺ		1
Soybeans, total	farms reporting1930.	1	186	l 	2,280		4		1
	acres1939	2	2,830		20,749		4	3	
	1929		502	*******	21,371	20	281	2	
Cowpeas, total	·farms reporting1939		1	2	32,659	1	1		1
	acres1939		1	7	222,503	20	3	*******	
Donnets Antel	1929	205	1,236	1	52,529	11	286	******	1
Peanuts, total	.Tarms reporting1939		(1)	(1) 2	14,519	********	**********	ı	********
	acres1939		(1)	(1)	69,098	••••••		1	
Vetches, velvetbeans, mung and	1929		***	1	103,197			l	1
horse beans	.farms reporting1939				689	103	10,817		1
	acres1939				- 6,918	976	179,744	•••••	1
Navy, pea bean, Great Northern								ŀ	
kidney, lima, pinto, and othe								1	
dry field and seed beans, and	farms reporting1939	13	38		580				
	acres1939	151	50	• • • • • • • • • • • • • • • • • • • •	1,456	51 524	100 691	6	
	1929	484	1,480		1,231	95	7,529	5	
	average vield (bu.)1939	16.9	8.4		4.9	9.8	6.2	14.0	
Lima beans (dry) 2	farms reporting1939				***********			14	
1	acres1939	********	**********	********		********	**********		
Other dry field and seed	average yield (bu.)1939	•••••			*********	*********			
beans ⁸	.farms reporting1939					1 .	i		ľ
	acres1939					**********			
• •	average yield (bu.) 1939					*********			l
Dry field and seed peas	farms reporting1939	********	14		77	81	1,034		
	acres1939		227	********	1,125	1,582	30,653	*********	
	average yield (bu.) 51939		16.4	*******	3.2	17.8	16-1		
ay crops, exclusive of sorghums:									1
All hay	.acres41939	7,040	2,808,846	1,364	1,038,984	495,146	562,513	23,070	2,420
	1929	3,336	2,884,204	532	886,183	478,340	627,351	26,734	3,461
Annual legumes saved for		' '	'			-,	,	,	٠, ٠٠٠
nay	.farms reporting1939		-50	*******	10,839	91	5,610	1	
	acres1939.,		415	********	83,336	1,300	67,975	3	
	1929	10	3,352	********	42,972	259	52,368	*******	1
Alfalfa hav	farms reporting1939	87	1.11 6.291	44	0.71	1.99	1.95	1.00	
	acres1939	1,719	6,291 103,702	44 1,359	18,646 232,353	7,987 203,802	7,162	484	12
	1929	1,613	285,467	515	181,270	198,870	79,857 50,665	13,896 22,615	174
	average yield (tons) 1939	2.00	1.02	1,46	1.63	2.83	1.91	1.78	856
Sweetclover hay	.farms reporting1939	52	14,223	*********	564	193	557	100	2
	acres1939	701	294,935		5,322	1,999	4,380	1,208	42
	51929	244	288,641	********	7,181	602	2,640	91	67
Claver or timothy hay,	average yield (tons)1939	1.40	1.07	********	0.97	1.72	1.55	1.22	
	farms reporting 1939	1	353		391	2,040	2 77.2	10	
	acres1939	ĝ	6,061		3,725	43,265	4,744 44,060	13 374	
	1929	19	68,110	5	23,774	57,040	72,274	1,142	70
	average yield (tons) 1939	1.56	0.97		1.04	1.57	1.71	1.27	,,,
Cont.		7	9,501		5,453	2,166	18,849	102	. 5
Small grain hay		76	168,211	•••••	55,995	31,147	274,914	1,245	143
Small grain hay	acres1939		332,780	********	25,248	25,536	312, 372	238	78
	acres1939	291		********	0.75 25,593	1.53 640	1.41	0.88	
	acres1939	1.58	88.0			D40 i	4,943	107	19
	acres	1.58 13	28,828	1 5	909 ARA		an'.we		
	acres	1.58	28,828 536,754	. 5	293,454	33,438	52,070	1,527	270
All other tame hay	acres	1.58 13 528	28,828	5 5	293,454 124,052	33,438 32,990	52,070 66,312	1,527 115	276 49
All other tame hay	acres	1.58 13 528 1.38 18	28,828 536,754 125,986 1.02 40,660	. 5	293,454 124,052 0.98	33,438 32,990 1.38	52,070 66,312 1.70	1,527 115 1,23	270 49
All other tame hay	acres	1.58 13 528 1.38 18 4,007	28,828 536,754 125,986 1.02 40,660 1,698,768	5 5 1.20	293,454 124,052 0,98 14,114 353,775	33,438 32,990	52,070 66,312 1.70 2,516	1,527 115 1,23 99	270 49 02
All other tame hay	acres	1.58 13 528 1.38 18	28,828 536,754 125,986 1.02 40,660	5 5 1.20	293,454 124,052 0.98 14,114	33,438 32,990 1,38 1,094	52,070 66,312 1.70	1,527 115 1,23	270 49

less than 1 acre reported.

Separate reports only for Arizona and California.

Separate reports only for Arizona and California.

Average yields were computed by using acreages grown alone in all States except California, Idaho, Oregon, and Washington, where total acreages were used.

Albata for 1939 include lespedeza hay, not. shown separately.

Blata for 1929 are for "Sweet, crimson, and Japan (lespedeza) clover."

TABLE 22.—SPECIFIED CROPS GROWN ON IRRIGATED AND NONIRRIGATED LANDS-FARMS REPORTING AND AVERAGE YIELDS, 1939; AND ACREAGES, 1939 AND 1929; BY STATES-Continued

ITEM (For definitions: "Farms reporting," etc., see text)		TE	XAS	UTAH		WASHINGTON		WYOMING		
	(For delinitions: "Farms repo	rting," etc., see text)	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigat
١,	Miscellaneous crops-Continued:									
	Sugar beets for sugar	farms reporting1939	14		6,090	29	628	104	1,740	
		acres1939 1929	84		48,279 39,537	119 567	11,883 134	366 1,372	49,475 43,596	
i		average yield (tons) 1939	9.76	4 1 2 4 1 4 1 4 1 1 1 1 1 1	13.67	7.82	17.26	14.74	11.22	3
	Hops	farms reporting1939			* * * * * * * * * * * * * * * * * * * *		191	14		
	*	acres1939					4,270 2,082	395		
		average yield (lb.)1939					1,498	732 786		
	Broomcorn	farms reporting1939	7	953	3	1	8		1	
		acres1939	168	24,572	6	. 3	68		1	
		1929 average yield (1b.)1939	575	10,069 197	167	100	701		200	
	Popcorn	farms reporting1939	36	3,034	107	133	701 40	13	19	
		acres1939	269	2,044	8		132	8	40	
	e e	1929	4	112	19		88	7		
	Root and grain crops (other	average yield (bu.)1939	11.9	12.7	22.2	**********	24.5	22.8	18.4	i
	than corn and annual legumes)	6.4		İ						
	· hogged or grazed off	farms reporting1939	179	15,774	101	15	81	551	9	
		acres1939	3,213	472,986	467	148	364	2,329	165	2
	Alfalfa seed	farms reporting1939	176	250	1,697	411	81	98	728	
		acres1939	5,896 1,284	3,393	36,765	10,609 506,311	1,162 150	1,928	15,647	904
		average yield (bu.)1939	2.7	48,935 2.3	44,395 1.9	1.1	1.9	228,374 1.1	3,295 2.1	394
							,			
	Land in hearing and nonbearing									
	fruit orchards, vineyards, and planted nut trees (nurseries		1	1	1				ļ ·	•
	excluded)	farms reporting1939	5,090	57,292	3,700	. 113	8,015	25,976	234	
		acres1939	72,866	149,255	15,060	273	93,805	31,789	450	
		1929	52,825	134,756	18,421	954	117,278	41,230	587	1
	Annual legumes:									
i	Soybeans, total	farms reporting 1000	21	0.004]			٠	
١	Salas de Caracter de la constante de la consta	acres	261	3,304 18,334	20		50	***********	11 49	
١		1929	27	4,496	143	2	<i></i>		1 90	
l	Cowpeas, total	farms reporting1939	111	104,397	• • • • • • • • • • • • • • • • • • • •					
١		acres1939	768	825,242						
١	Peanuts, total	farms reporting1939	1,257	158,873 66,389	40					
		acres	476	411,951						
١		1929	22	224,285	54					
١	Vetches, velvetheans, mung and						1		l .	
ļ	horse beans	farms reporting1939	21	1,223	2 6		19	1,890		
-	Navy, pea bean, Great Northern kidney, lima, pinto, and othe dry field and seed beans, and	r	21	7,873			114	17,673		
	lentils		146	4,067	309	72	97	75	1,653	1
I		acres1939	1,095	15,495	3,565	2,878	1,363	2,154	43,550	1 4
I		1929	188	5,407	1,373	573	89	4,400	24,002	
١	Lima hoens (down) 1	average yield (bu.)1939 farms reporting1939	6.6	3.9	14.4	4.1	18.1	15.0	22.4	
1	nima nema (ary)	acres					1			
١		average yield (bu.)1939								
	Other dry field and seed	- i		1	1		1		1	1
	beans*	farms reporting1939				••••••				
۱		acres								
ŀ	Dry field and seed peas	farms reporting1939.	1			я	47			
١	•	acres1939	(²)	106	448	8	634	84,531	1,099	· '
۱		average yield (bu.) 31939	(²)	4.6	17.3		24.1			
	Hay crops, exclusive of sorghums:		1	1						
	All hay	.acres41939	62,858	1,053,764	452,517	48,297	182,097	714,923	727,736	19
		1929	30,075	570,714		74,571				
ļ	Annual legumes's aved for	farme poposition 1000		04.00=					1 -	
l	Hay	farms reporting1939	37 332	24,005 229,184	92 468	43				
ļ		1929	159	98,104	111	40	188			
۱		average yield (tons) 1939	1.50	0.55	1.93	0.95	2.20			
ł	Alfalfa hay	.farms reporting 1939	1,853	4,235	18,229	1,548	8,553	10,364	5,726	i.
I		acres1939	51,730	62,017	352,421	35,259	130,346	165,041	253,057	' 3
I		1929 average yield (tons)1939	25,079 2.94	25,140 1.91	501,219 2-03	49,487	133, 174			
ļ	Sweetclover hay	farms reporting1939.	2.94	275	495	36	97			
J		acres1939	173	2,314	3,524	293	735			1
		51929	43	1,828	1,515	101	770	1,944	3,824	Ł į
	Clover or timothy hay,	average yield (tons)1939	3,29	1.23	1.52	1.83	1.97	1.55	1.22	1
		.farms reporting1939	7	205	728	27	911	14,484	675	
١		acres1939	69	1,688	15,469	445			76,286	
		1929	59	3,671	30,785	1,958	18,408	159,007	98,591	
	Cmoll waste have	average yield (tons) 1939	1.04	1.11	1.51	1.28	1.96	2.11	1.16	6
۱	DMRTT RLUTH USA	farms reporting1939	99	3,822	851 5 073	166				j _
١	•	1929.	2,391 807	52,154 58,672	5,073 1,871	2,401 2,585				
۱	•	average yield (tons) 1939	1.16			0.84				
	All other tame hay	.farms reporting1939	488	44,345	592	64	315	8,078	492	2
ŀ		acres1939	8,022	520,222						<u>'</u>
		1929 average yield (tons)1939	3,748				1,508			
1	Wild hay	farms reporting1939	1.56			328				
ı			137	185,113		8,548			331,836	
		acres								
		acres	180		50,360	18,170	2,757			

¹ Separate reports only for Arizona and California.

Less than 1 acre reported.

Average yields were computed by using acreages grown alone in all States except California, Idaho, Oregon, and Washington, where total acreages were used.

Average yields were computed by using acreages grown alone in all States except California, Idaho, Oregon, and Washington, where total acreages were used.

Bata for 1939 include lespedeza hay, not shown separately.

Data for 1929 are for "Sweet, crimson, and Japan (lespedeza) clover."