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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | TOTAL (19 States)[1] | | Red River (of the North) and tributaries in North Dakota (I) | MISSOURI RIVER (II) Total[2] | | MISSOURI RIVER (II) Direct (II) | |
|---|---|---|---|---|---|---|---|---|
| | **IRRIGATED UNITS AND AREAS** | | | | | | | |
| 1 | Irrigated units[a]....1939...number..... | 430,022 | | 61 | 47,386 | | 835 | |
| 2 | Area irrigated....1939...acres..... | 21,003,739 | | 4,493 | 4,410,385 | | 76,298 | |
| 3 | (a) Cropland harvested....1939...acres..... | 18,300,138 | | 4.458 | 3,922,984 | | 71,226 | |
| 4 | (b) Crop failure....1939...acres..... | 259,188 | | ..... | 67,790 | | 550 | |
| 5 | (c) Pasture....1939...acres..... | 2,444,413 | | 35 | 419,611 | | 4,522 | |
| 6 | Area irrigated....1929...acres..... | 19,547,544 | | 2,099 | 4,185,180 | | 24,367 | |
| 7 | 1919...acres..... | 19,191,716 | | ..... | 4,147,278 | | 27,707 | |
| 8 | Increase or decrease (-), 1929-1939....percent.... | 7.4 | | 114.1 | 5.4 | | 213.1 | |
| 9 | Irrigable area in enterprises....1940...acres..... | 31,305,949 | | 8,100 | 6,542,576 | | 166,802 | |
| 10 | 1930...acres..... | 30,599,470 | | 2,409 | 6,231,873 | | 42,388 | |
| 11 | 1920[5]..acres..... | 35,890,821 | | ..... | 8,483,171 | | 92,270 | |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 10,302,210 | | 3,607 | 2,132,191 | | 90,504 | |
| 13 | 1930...acres..... | 11,051,926 | | 310 | 2,046,693 | | 18,021 | |
| 14 | 1920[5]..acres..... | 16,699,105 | | ..... | 4,335,893 | | 64,563 | |
| 15 | Area works were capable of supplying with water...1940...acres..... | 28,055,248 | | 7,980 | 5,942,958 | | 120,485 | |
| 16 | 1930...acres..... | 26,101,890 | | 2,099 | 5,472,012 | | 40,149 | |
| 17 | 1920...acres..... | 26,020,477 | | ..... | 5,805,630 | | 62,559 | |
| 18 | Increase or decrease (-), 1930-1940....percent.... | 7.5 | | 280.2 | 8.6 | | 200.1 | |
| 19 | Excess of area works were capable of supplying with water over area irrigated....1940...acres..... | 7,051,508 | | 3,487 | 1,532,573 | | 44,187 | |
| 20 | 1930...acres..... | 6,554,346 | | ..... | 1,286,832 | | 15,782 | |
| 21 | 1920...acres..... | 6,828,761 | | ..... | 1,658,352 | | 34,852 | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water....1939...percent.... | 74.9 | | 56.3 | 74.2 | | 63.3 | |
| 23 | 1929...percent.... | 74.9 | | 100.0 | 76.5 | | 60.7 | |
| 24 | 1919...percent.... | 73.8 | | ..... | 71.4 | | 44.3 | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | |
| 25 | Total investment in irrigation enterprises....1940...dollars.... | 1,052,049,201 | | 130,566 | 179,750,238 | | 3,069,111 | |
| 26 | (a) Cost of irrigation works and equipment....1940...dollars.... | 1,025,672,714 | | 130,225 | 176,408,046 | | 3,053,632 | |
| 27 | (b) Investment in water rights (reported)....1940...dollars.... | 26,376,487 | | 341 | 3,342,192 | | 15,479 | |
| 28 | Total investment in irrigation enterprises....1930...dollars.... | [7]892,755,790 | | 20,925 | 136,506,721 | | 1,535,899 | |
| 29 | 1920...dollars.... | 697,657,328 | | ..... | 131,553,106 | | 2,300,975 | |
| 30 | Increase or decrease (-), 1930-1940....percent.... | 17.8 | | 524.0 | 31.7 | | 99.8 | |
| 31 | Average investment based on area works were capable of supplying with water, per acre....1940...dollars.... | 37.50 | | 16.36 | 30.25 | | 25.47 | |
| 32 | 1930...dollars.... | 34.20 | | 9.97 | 24.95 | | 38.25 | |
| 33 | 1920...dollars.... | 26.81 | | ..... | 22.66 | | 36.78 | |
| 34 | Average investment per acre irrigated....1939...dollars.... | 50.09 | | 29.06 | 40.76 | | 40.23 | |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 1,126,545,687 | | 142,566 | 196,094,323 | | 3,927,530 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre....1940...dollars.... | 35.99 | | 17.60 | 29.97 | | 23.55 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary Enterprises | Supplemental Enterprises | | Primary Enterprises | Supplemental Enterprises | Primary Enterprises | Supplemental Enterprises |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 72,172 | 10,102 | 13 | 9,590 | 1,369 | 518 | 2 |
| 38 | Area irrigated in these enterprises....1939...acres..... | 20,193,761 | 2,983,963 | 4,493 | 4,293,280 | 775,956 | 73,188 | (8) |
| 39 | Cost of maintenance and operation....1939...dollars.... | 43,172,526 | 2,828,094 | 5,912 | 3,466,125 | 510,603 | 97,593 | (8) |
| 40 | Average cost, per acre irrigated....1939...dollars.... | 2.14 | 0.95 | 1.32 | 0.81 | 0.66 | 1.33 | (8) |
| 41 | Total annual charges (reported)[9] [10]....1939...dollars.... | 32,876,404 | 1,408,263 | 3,235 | 3,186,350 | 331,420 | 19,009 | ..... |
| 42 | Average annual charge per acre irrigated....1939...dollars.... | 2.40 | 0.59 | 0.83 | 1.10 | 0.52 | 0.76 | ..... |
| 43 | Area against which charges were assessed....1939...acres..... | 16,570,704 | 2,592,476 | 7,249 | 3,224,334 | 658,931 | 28,419 | ..... |
| 44 | Average annual charge per acre assessed....1939...dollars.... | 1.98 | 0.54 | 0.45 | 0.99 | 0.50 | 0.67 | ..... |
| 45 | Total charges collected[9]....1939...dollars.... | 27,552,300 | 1,148,062 | 3,479 | 2,594,720 | 202,335 | 7,355 | ..... |
| 46 | Indebtedness to December 31 (reported)[10]....1939...dollars.... | 360,304,925 | 26,335,349 | 29,500 | 76,335,251 | 4,725,444 | 1,590,773 | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | |
| 47 | Enterprises reporting water delivered....1939...number..... | 72,638 | 10,092 | 12 | 9,371 | 1,329 | 545 | 2 |
| 48 | Area irrigated by these enterprises....1939...acres..... | 19,377,064 | 2,986,061 | 4,480 | 4,031,049 | 726,980 | 72,834 | (8) |
| 49 | Water delivered....1939...acre-feet.. | 52,982,775 | 4,208,532 | 6,528 | 7,547,370 | 599,845 | 160,165 | (8) |
| 50 | Average water delivered per acre irrigated....1939...acre-feet.. | 2.7 | 1.4 | 1.5 | 1.9 | 0.8 | 2.2 | (8) |
| 51 | Average cost of water per acre irrigated....1939...dollars.... | 2.60 | 1.10 | 1.23 | 1.03 | 0.84 | 0.75 | (8) |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 0.95 | 0.78 | 0.85 | 0.55 | 1.02 | 0.34 | (8) |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage....1939...number..... | 3,535 | ..... | ..... | 466 | ..... | 23 | ..... |
| 54 | Irrigable area in these enterprises....1939...acres..... | 9,553,069 | ..... | ..... | 1,989,332 | ..... | 15,865 | ..... |
| 55 | Irrigated area in these enterprises....1939...acres..... | 6,224,568 | ..... | ..... | 1,266,478 | ..... | 6,449 | ..... |
| 56 | Area for which drains have been installed....1939...acres..... | 3,861,305 | ..... | ..... | 431,045 | ..... | 7,331 | ..... |
| 57 | Additional area needing drainage....1939...acres..... | 897,912 | ..... | ..... | 108,165 | ..... | 1,449 | ..... |

[a] Schedules called for "Number of farms," see explanation in text.
[1] For the 17 western States and Arkansas and Louisiana.
[2] Data for 2 enterprises in Osage River Drainage Basin, Kans., are included with Missouri River total.
[3] Data for the intrastate tributaries of the Clarks Fork are not shown separately but are included in the Clarks Fork total.
[4] Data for the intrastate tributaries of the Big Horn River are not shown separately but are included in the Big Horn River total.
[5] 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

and Arkansas and Louisiana]

| MISSOURI RIVER (II)—Continued | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yellowstone River (II-A) | | | | | | | | | | | | | | | |
| Total | | Direct (II-A) | | Clarks Fork | | | | Big Horn River | | | | | | | |
| | | | | Total[3] | | Direct (6) | | Total[4] | | Direct (8) | | Shoshone River (17) | | Little Horn River (18) | |
| 11,794 | | 3,198 | | 933 | | 458 | | 5,785 | | 1,243 | | 1,714 | | 160 | 1 |
| 984,530 | | 240,996 | | 88,469 | | 43,589 | | 448,898 | | 104,560 | | 113,849 | | 16,016 | 2 |
| 864,184 | | 225,079 | | 80,206 | | 39,878 | | 383,161 | | 95,409 | | 96,116 | | 14,475 | 3 |
| 7,447 | | 1,657 | | 502 | | 88 | | 3,822 | | 366 | | 80 | | 20 | 4 |
| 112,899 | | 14,260 | | 7,761 | | 3,623 | | 61,915 | | 8,785 | | 17,653 | | 1,521 | 5 |
| 861,145 | | 162,312 | | 92,968 | | 90,650 | | 361,926 | | 88,698 | | 95,636 | | 1,637 | 6 |
| 889,025 | | 189,453 | | 77,736 | | 72,525 | | 358,949 | | 93,902 | | 95,091 | | 1,408 | 7 |
| 14.3 | | 48.5 | | -4.8 | | -51.9 | | 24.0 | | 17.9 | | 19.0 | | 878.4 | 8 |
| 1,515,241 | | 347,513 | | 113,256 | | 52,940 | | 777,811 | | 194,951 | | 161,701 | | 36,765 | 9 |
| 1,401,212 | | 242,693 | | 113,320 | | 110,625 | | 710,522 | | 143,464 | | 163,768 | | 2,705 | 10 |
| 1,826,870 | | 279,211 | | 141,007 | | 130,736 | | 842,297 | | 162,331 | | 217,998 | | 11,353 | 11 |
| 530,711 | | 106,517 | | 24,787 | | 9,351 | | 328,913 | | 90,391 | | 47,852 | | 20,749 | 12 |
| 540,067 | | 80,381 | | 20,352 | | 19,975 | | 348,596 | | 54,766 | | 68,132 | | 1,068 | 13 |
| 937,845 | | 89,758 | | 63,271 | | 58,211 | | 483,348 | | 68,429 | | 122,907 | | 9,945 | 14 |
| 1,360,217 | | 330,391 | | 110,785 | | 50,793 | | 661,210 | | 183,835 | | 142,671 | | 32,793 | 15 |
| 1,210,690 | | 236,401 | | 111,583 | | 108,888 | | 552,748 | | 129,765 | | 142,902 | | 2,705 | 16 |
| 1,322,304 | | 262,801 | | 130,627 | | 121,818 | | 534,404 | | 123,151 | | 134,431 | | 4,340 | 17 |
| 12.4 | | 39.8 | | -0.7 | | -53.4 | | 19.6 | | 41.7 | | -0.2 | | (5) | 18 |
| 375,687 | | 89,395 | | 22,316 | | 7,204 | | 212,312 | | 79,275 | | 28,822 | | 16,777 | 19 |
| 349,545 | | 74,089 | | 18,615 | | 18,238 | | 190,822 | | 41,067 | | 47,266 | | 1,068 | 20 |
| 433,279 | | 73,348 | | 52,891 | | 49,293 | | 175,455 | | 29,249 | | 39,340 | | 2,932 | 21 |
| 72.4 | | 72.9 | | 79.9 | | 85.8 | | 67.9 | | 56.9 | | 79.8 | | 48.8 | 22 |
| 71.1 | | 68.7 | | 83.3 | | 83.3 | | 65.5 | | 68.4 | | 66.9 | | 60.5 | 23 |
| 67.2 | | 72.1 | | 59.5 | | 59.5 | | 67.2 | | 76.2 | | 70.7 | | 32.4 | 24 |
| 40,767,196 | | 11,765,745 | | 1,927,897 | | 705,142 | | 22,303,032 | | 3,524,149 | | 6,745,092 | | 934,665 | 25 |
| 40,495,096 | | 11,677,433 | | 1,910,346 | | 699,011 | | 22,226,639 | | 3,519,632 | | 6,738,082 | | 928,896 | 26 |
| 272,100 | | 88,312 | | 17,551 | | 6,131 | | 76,393 | | 4,517 | | 7,010 | | 5,769 | 27 |
| 31,917,310 | | 7,070,112 | | 928,437 | | 920,562 | | 19,775,462 | | 3,042,063 | | 9,285,642 | | 39,590 | 28 |
| 30,181,550 | | 7,508,390 | | 1,225,483 | | 1,163,593 | | 16,670,257 | | 3,635,033 | | 8,702,480 | | 35,000 | 29 |
| 27.7 | | 66.4 | | 107.6 | | -23.4 | | 12.8 | | 15.8 | | -27.4 | | (5) | 30 |
| 29.97 | | 35.61 | | 17.40 | | 13.88 | | 33.73 | | 19.17 | | 47.28 | | 28.50 | 31 |
| 26.36 | | 29.91 | | 8.32 | | 8.45 | | 35.78 | | 23.44 | | 64.98 | | 14.64 | 32 |
| 22.82 | | 28.57 | | 9.38 | | 9.55 | | 31.19 | | 29.52 | | 64.74 | | 8.06 | 33 |
| 41.41 | | 48.82 | | 21.79 | | 16.18 | | 49.68 | | 33.70 | | 59.25 | | 58.36 | 34 |
| 47,583,418 | | 12,080,931 | | 1,935,907 | | 713,152 | | 28,729,135 | | 4,286,040 | | 7,236,892 | | 1,252,617 | 35 |
| 31.40 | | 34.76 | | 17.09 | | 13.47 | | 36.94 | | 21.99 | | 44.75 | | 34.07 | 36 |
| Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | | | Primary | Sup. | | |
| Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | | | Enterprises | | | |
| 1,957 | 40 | 395 | 5 | 250 | 6 | 100 | 2 | 674 | 12 | 107 | | 72 | 2 | 32 | 37 |
| 960,050 | 71,719 | 235,388 | 2,919 | 86,694 | 15,377 | 43,437 | (8) | 443,950 | 10,530 | 104,520 | | 113,205 | (8) | 16,016 | 38 |
| 813,436 | 24,314 | 222,643 | 1,571 | 45,016 | 2,339 | 27,486 | (8) | 466,923 | 14,368 | 137,686 | | 114,713 | (8) | 24,222 | 39 |
| 0.85 | 0.34 | 0.95 | 0.54 | 0.52 | 0.15 | 0.63 | (8) | 1.05 | 1.36 | 1.32 | | 1.01 | (8) | 1.51 | 40 |
| 803,767 | 56,569 | 264,198 | 2,860 | 36,070 | 31,000 | 26,241 | ..... | 456,839 | 15,693 | 136,728 | | 149,531 | ..... | 16,874 | 41 |
| 1.12 | 0.83 | 1.41 | 1.10 | 0.57 | 2.07 | 0.74 | ..... | 1.27 | 1.54 | 1.43 | | 1.40 | ..... | 1.85 | 42 |
| 818,552 | 84,233 | 205,023 | 2,600 | 64,892 | 31,000 | 35,948 | ..... | 434,944 | 10,235 | 112,527 | | 118,399 | ..... | 15,694 | 43 |
| 0.98 | 0.67 | 1.29 | 1.10 | 0.56 | 1.00 | 0.73 | ..... | 1.05 | 1.53 | 1.22 | | 1.26 | ..... | 1.08 | 44 |
| 596,360 | 40,993 | 275,453 | 2,860 | 35,004 | 14,973 | 20,002 | ..... | 247,761 | 16,476 | 97,721 | | 43,632 | ..... | 3,146 | 45 |
| 19,396,986 | 2,291,998 | 5,703,572 | 41,584 | 26,347 | 700,000 | 17,510 | ..... | 13,085,367 | 890,414 | 1,824,816 | | 3,392,784 | ..... | 698,230 | 46 |
| 1,920 | 36 | 366 | 4 | 234 | 6 | 89 | 2 | 662 | 11 | 97 | | 72 | 2 | 29 | 47 |
| 859,275 | 54,349 | 224,060 | 319 | 69,367 | 15,377 | 32,725 | (8) | 387,928 | 10,530 | 66,123 | | 112,333 | (8) | 6,772 | 48 |
| 1,954,675 | 51,167 | 503,340 | 244 | 147,217 | 16,310 | 85,294 | (8) | 1,019,069 | 6,860 | 148,564 | | 368,643 | (8) | 8,861 | 49 |
| 2.3 | 0.9 | 2.2 | 0.8 | 2.1 | 1.1 | 2.6 | (8) | 2.6 | 0.7 | 2.2 | | 3.3 | (8) | 1.3 | 50 |
| 1.00 | 0.95 | 1.25 | 0.85 | 0.63 | 2.03 | 0.80 | (8) | 1.15 | 1.53 | 1.44 | | 1.39 | (8) | 0.40 | 51 |
| 0.44 | 1.01 | 0.56 | 1.11 | 0.30 | 1.91 | 0.31 | (8) | 0.44 | 2.35 | 0.64 | | 0.42 | (8) | 0.30 | 52 |
| 144 | ..... | 35 | ..... | 9 | ..... | 4 | ..... | 62 | ..... | 9 | | 13 | ..... | [11]1 | 53 |
| 820,839 | ..... | 190,592 | ..... | 16,971 | ..... | 11,771 | ..... | 568,259 | ..... | 178,337 | | 130,861 | ..... | 18,774 | 54 |
| 496,781 | ..... | 148,157 | ..... | 12,841 | ..... | 8,441 | ..... | 301,928 | ..... | 91,527 | | 89,953 | ..... | 8,222 | 55 |
| 230,894 | ..... | 69,821 | ..... | 240 | ..... | 80 | ..... | 159,288 | ..... | 49,074 | | 71,235 | ..... | 384 | 56 |
| 53,452 | ..... | 15,681 | ..... | 1,040 | ..... | 550 | ..... | 33,008 | ..... | 8,074 | | 14,403 | ..... | 1,481 | 57 |

[6] Percent not shown when more than 1,000.
[7] Revised.
[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 reasons.
[10] 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.
[11] Data for less than 3 enterprises shown with permission of the enterprise involved.

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | MISSOURI RIVER (II)—Continued | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Yellowstone River (II-A)—Continued | | | | | | | |
| | | Tongue River | | | | Powder River | | | |
| | | Total[4] | | Direct (20) | | Total[5] | | Direct (22) | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | | |
| 1 | Irrigated units[a]....1939...number.... | 922 | | 533 | | 372 | | 66 | |
| 2 | Area irrigated....1939...acres.... | 82,491 | | 45,036 | | 56,711 | | 7,280 | |
| 3 | (a) Cropland harvested....1939...acres.... | 73,536 | | 39,800 | | 46,376 | | 6,791 | |
| 4 | (b) Crop failure....1939...acres.... | 67 | | 67 | | 1,361 | | 50 | |
| 5 | (c) Pasture....1939...acres.... | 8,888 | | 5,169 | | 9,074 | | 439 | |
| 6 | Area irrigated....1929...acres.... | 65,498 | | 22,217 | | 50,279 | | 5,847 | |
| 7 | 1919...acres.... | 54,195 | | 20,975 | | 89,631 | | 3,193 | |
| 8 | Increase or decrease (-), 1929-1939....percent.... | 25.9 | | 102.7 | | 12.8 | | 24.5 | |
| 9 | Irrigable area in enterprises....1940...acres.... | 97,291 | | 59,023 | | 84,071 | | 9,699 | |
| 10 | 1930...acres.... | 76,521 | | 29,138 | | 59,516 | | 6,375 | |
| 11 | 1920[7]..acres.... | 100,563 | | 43,075 | | 138,856 | | 10,846 | |
| 12 | Excess of irrigable area over the area irrigated..1940...acres.... | 14,800 | | 13,987 | | 27,360 | | 2,419 | |
| 13 | 1930...acres.... | 11,023 | | 6,921 | | 9,237 | | 528 | |
| 14 | 1920[7]..acres.... | 46,368 | | 22,100 | | 49,225 | | 7,653 | |
| 15 | Area works were capable of supplying with water...1940...acres.... | 92,849 | | 54,632 | | 79,168 | | 9,349 | |
| 16 | 1930...acres.... | 73,950 | | 29,031 | | 56,411 | | 5,920 | |
| 17 | 1920...acres.... | 80,693 | | 32,174 | | 117,181 | | 9,803 | |
| 18 | Increase or decrease (-), 1930-1940....percent.... | 25.6 | | 88.2 | | 40.3 | | 57.9 | |
| 19 | Excess of area works were capable of supplying with water over area irrigated....1940...acres.... | 10,358 | | 9,596 | | 22,457 | | 2,069 | |
| 20 | 1930...acres.... | 8,452 | | 6,814 | | 6,132 | | 73 | |
| 21 | 1920...acres.... | 26,498 | | 11,199 | | 27,550 | | 6,610 | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water....1939...percent.... | 88.8 | | 82.4 | | 71.6 | | 77.9 | |
| 23 | 1929...percent.... | 88.6 | | 76.5 | | 89.1 | | 98.8 | |
| 24 | 1919...percent.... | 67.2 | | 65.2 | | 76.5 | | 32.6 | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | | |
| 25 | Total investment in irrigation enterprises....1940...dollars.... | 2,883,111 | | 2,231,511 | | 963,947 | | 89,557 | |
| 26 | (a) Cost of irrigation works and equipment....1940...dollars.... | 2,818,053 | | 2,171,757 | | 950,055 | | 88,220 | |
| 27 | (b) Investment in water rights (reported)....1940...dollars.... | 65,058 | | 59,754 | | 13,892 | | 1,337 | |
| 28 | Total investment in irrigation enterprises....1930...dollars.... | 1,207,250 | | 569,793 | | 823,698 | | 167,200 | |
| 29 | 1920...dollars.... | 1,419,629 | | 734,059 | | 1,195,398 | | 187,502 | |
| 30 | Increase or decrease (-), 1930-1940....percent.... | 138.8 | | 291.6 | | 17.0 | | -46.4 | |
| 31 | Average investment based on area works were capable of supplying with water, per acre....1940...dollars.... | 31.05 | | 40.85 | | 12.18 | | 9.58 | |
| 32 | 1930...dollars.... | 16.33 | | 19.63 | | 14.60 | | 28.24 | |
| 33 | 1920...dollars.... | 17.59 | | 22.82 | | 10.20 | | 19.13 | |
| 34 | Average investment per acre irrigated....1939...dollars.... | 34.95 | | 49.55 | | 17.00 | | 12.30 | |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 2,919,756 | | 2,268,141 | | 970,082 | | 93,142 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre....1940...dollars.... | 30.01 | | 38.43 | | 11.54 | | 9.60 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. |
| 37 | Enterprises reporting maintenance and operation...1939...number.... | 198 | 9 | 137 | 2 | 176 | 7 | 22 | ..... |
| 38 | Area irrigated in these enterprises....1939...acres.... | 79,649 | 27,562 | 42,907 | (8) | 53,466 | 15,122 | 6,329 | ..... |
| 39 | Cost of maintenance and operation....1939...dollars.... | 33,963 | 4,107 | 15,617 | (8) | 24,909 | 1,829 | 5,986 | ..... |
| 40 | Average cost, per acre irrigated....1939...dollars.... | 0.43 | 0.15 | 0.36 | (8) | 0.47 | 0.12 | 0.95 | ..... |
| 41 | Total annual charges (reported)[9] [10]....1939...dollars.... | 31,050 | 5,160 | 15,192 | 3,890 | 9,916 | 1,856 | 4,283 | ..... |
| 42 | Average annual charge per acre irrigated....1939...dollars.... | 0.49 | 0.20 | 0.52 | 0.23 | 0.47 | 0.13 | 0.90 | ..... |
| 43 | Area against which charges were assessed....1939...acres.... | 67,230 | 25,898 | 33,264 | 17,000 | 22,599 | 14,500 | 4,759 | ..... |
| 44 | Average annual charge per acre assessed....1939...dollars.... | 0.46 | 0.20 | 0.46 | 0.23 | 0.44 | 0.13 | 0.90 | ..... |
| 45 | Total charges collected[9]....1939...dollars.... | 29,420 | 4,674 | 14,865 | 2,444 | 6,548 | 2,010 | 4,283 | ..... |
| 46 | Indebtedness to December 31 (reported)[10]....1939...dollars.... | 119,412 | 660,000 | 119,112 | 660,000 | ..... | ..... | ..... | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | | |
| 47 | Enterprises reporting water delivered....1939...number.... | 219 | 7 | 158 | 1 | 199 | 8 | 31 | 1 |
| 48 | Area irrigated by these enterprises....1939...acres.... | 73,881 | 12,962 | 42,051 | (8) | 56,487 | 15,161 | 7,095 | (8) |
| 49 | Water delivered....1939...acre-feet.. | 116,737 | 15,796 | 71,177 | (8) | 77,989 | 11,957 | 12,071 | (8) |
| 50 | Average water delivered per acre irrigated....1939...acre-feet.. | 1.6 | 1.2 | 1.7 | (8) | 1.4 | 0.8 | 1.7 | (8) |
| 51 | Average cost of water per acre irrigated....1939...dollars.... | 0.55 | 0.15 | 0.56 | (8) | 0.47 | 0.13 | 0.93 | ..... |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 0.35 | 0.12 | 0.33 | (8) | 0.34 | 0.17 | 0.55 | ..... |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage....1939...number.... | 10 | ..... | 4 | ..... | 9 | ..... | 2 | ..... |
| 54 | Irrigable area in these enterprises....1939...acres.... | 19,915 | ..... | 13,343 | ..... | 13,859 | ..... | (8) | ..... |
| 55 | Irrigated area in these enterprises....1939...acres.... | 18,638 | ..... | 12,093 | ..... | 5,985 | ..... | (8) | ..... |
| 56 | Area for which drains have been installed....1939...acres.... | 442 | ..... | 45 | ..... | 580 | ..... | (8) | ..... |
| 57 | Additional area needing drainage....1939...acres.... | 412 | ..... | 312 | ..... | 598 | ..... | (8) | ..... |

[a] Schedules called for "Number of farms," see explanation in text.
[1] Data for the intrastate tributaries of the Little Missouri River are not shown separately but are included in the Little Missouri River total.
[2] Data for Belle Fourche (North Fork) in South Dakota for 1920 are included with Cheyenne River direct.
[3] Data for the intrastate tributaries of the White River are not shown separately but are included in the White River total.
[4] Data for the intrastate tributaries of the Tongue River are not shown separately but are included in the Tongue River total.
[5] 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,[7] MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

and Arkansas and Louisiana]

| MISSOURI RIVER (II)—Continued | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yellowstone River (II-A)—Continued | Little Missouri River | | Cheyenne River | | | | | | | | White River | | |
| | | | | | Belle Fourche River | | | S. Fork Cheyenne River | | | | | |
| Intrastate tributaries in Montana | Total[1] | Direct (31) | Total | Direct[2] (40) | Total[2] | Direct (41) | Redwater Creek (42) | Total[6] | Direct (43) | Intrastate tributary in South Dakota (Cherry Creek) (47) | Total[3] | Direct (49) | |
| 584 | 24 | 18 | 1,162 | 5 | 883 | 761 | 122 | 269 | 96 | 5 | 117 | 94 | 1 |
| 66,965 | 789 | 721 | 62,842 | 350 | 43,953 | 39,762 | 4,191 | 18,514 | 8,930 | 25 | 13,480 | 12,551 | 2 |
| 55,926 | 749 | 681 | 51,999 | 127 | 38,487 | 34,756 | 3,731 | 13,360 | 6,959 | 25 | 12,451 | 11,526 | 3 |
| 38 | ..... | ..... | 2,524 | 205 | 401 | 193 | 208 | 1,918 | 443 | ..... | 795 | 791 | 4 |
| 11,001 | 40 | 40 | 8,319 | 18 | 5,065 | 4,813 | 252 | 3,236 | 1,528 | ..... | 234 | 234 | 5 |
| 128,162 | 1,462 | ..... | 71,550 | ..... | 51,739 | ..... | ..... | 19,740 | 17,724 | ..... | 8,682 | ..... | 6 |
| 119,061 | 1,080 | ..... | 110,143 | 99,333 | 1,966 | ..... | ..... | 8,844 | 5,906 | ..... | 8,008 | ..... | 7 |
| -47.7 | -46.0 | ..... | -12.2 | ..... | -15.1 | ..... | ..... | -6.2 | -49.6 | ..... | 55.3 | ..... | 8 |
| 95,299 | 3,251 | 2,327 | 130,837 | 1,072 | 87,511 | 81,116 | 6,395 | 42,107 | 19,003 | 147 | 21,586 | 20,410 | 9 |
| 198,640 | 2,127 | ..... | 132,003 | ..... | 97,816 | ..... | ..... | 33,986 | 30,645 | ..... | 13,795 | ..... | 10 |
| 324,936 | 7,398 | ..... | 197,288 | 176,715 | 5,054 | ..... | ..... | 15,519 | 11,764 | ..... | 21,922 | ..... | 11 |
| 28,334 | 2,462 | 1,606 | 67,995 | 722 | 43,558 | 41,354 | 2,204 | 23,593 | 10,073 | 122 | 8,106 | 7,859 | 12 |
| 70,478 | 665 | ..... | 60,453 | ..... | 46,017 | ..... | ..... | 14,246 | 12,921 | ..... | 5,113 | ..... | 13 |
| 205,875 | 6,318 | ..... | 87,145 | 77,382 | 3,088 | ..... | ..... | 6,675 | 5,858 | ..... | 13,914 | ..... | 14 |
| 85,814 | 2,711 | 1,842 | 128,036 | 806 | 86,525 | 80,378 | 6,147 | 40,564 | 17,557 | 141 | 16,973 | 15,880 | 15 |
| 179,597 | 1,962 | ..... | 115,980 | ..... | 90,991 | ..... | ..... | 24,888 | 21,707 | ..... | 13,110 | ..... | 16 |
| 196,598 | 4,863 | ..... | 159,083 | 143,847 | 3,621 | ..... | ..... | 11,615 | 7,910 | ..... | 16,939 | ..... | 17 |
| -52.2 | 38.2 | ..... | 10.4 | ..... | -4.9 | ..... | ..... | 63.0 | -19.1 | ..... | 29.5 | ..... | 18 |
| 18,849 | 1,922 | 1,121 | 65,194 | 456 | 42,572 | 40,616 | 1,956 | 22,050 | 8,627 | 116 | 3,493 | 3,329 | 19 |
| 51,435 | 500 | ..... | 44,430 | ..... | 39,192 | ..... | ..... | 5,148 | 3,983 | ..... | 4,428 | ..... | 20 |
| 77,537 | 3,783 | ..... | 48,940 | 44,514 | 1,655 | ..... | ..... | 2,771 | 2,004 | ..... | 8,931 | ..... | 21 |
| 78.0 | 29.1 | 39.1 | 49.1 | 43.4 | 50.8 | 49.5 | 68.2 | 45.6 | 50.9 | 17.7 | 79.4 | 79.0 | 22 |
| 71.4 | 74.5 | ..... | 61.7 | ..... | 56.9 | ..... | ..... | 79.3 | 81.7 | ..... | 66.2 | ..... | 23 |
| 60.6 | 22.2 | ..... | 69.2 | 69.1 | 54.3 | ..... | ..... | 76.1 | 74.7 | ..... | 47.3 | ..... | 24 |
| 923,464 | 36,806 | 18,708 | 5,227,045 | 1,550 | 4,858,998 | 4,757,813 | 101,185 | 364,382 | 179,899 | 2,115 | 555,414 | 527,901 | 25 |
| 912,570 | 36,677 | 18,579 | 5,211,534 | 1,550 | 4,852,744 | 4,757,094 | 95,650 | 355,125 | 174,882 | 2,115 | 545,939 | 518,426 | 26 |
| 10,894 | 129 | 129 | 15,511 | ..... | 6,254 | 712 | 5,535 | 9,257 | 5,017 | ..... | 9,475 | 9,475 | 27 |
| 2,112,351 | 28,656 | ..... | 4,539,915 | ..... | 4,276,534 | ..... | ..... | 257,131 | 230,356 | ..... | 478,392 | ..... | 28 |
| 2,162,393 | 71,608 | ..... | 5,605,911 | 5,277,782 | 76,066 | ..... | ..... | 252,063 | 166,820 | ..... | 183,349 | ..... | 29 |
| -56.3 | 28.4 | ..... | 15.1 | ..... | 13.6 | ..... | ..... | 41.7 | -21.9 | ..... | 16.1 | ..... | 30 |
| 10.76 | 13.58 | 10.16 | 40.82 | 1.92 | 56.16 | 59.19 | 16.46 | 8.98 | 10.25 | 15.00 | 32.72 | 33.24 | 31 |
| 11.76 | 14.61 | ..... | 39.14 | ..... | 47.00 | ..... | ..... | 10.33 | 10.61 | ..... | 36.49 | ..... | 32 |
| 11.00 | 14.73 | ..... | 35.24 | 36.69 | 21.01 | ..... | ..... | 21.70 | 21.09 | ..... | 10.82 | ..... | 33 |
| 13.79 | 46.65 | 25.95 | 83.18 | 4.43 | 110.55 | 119.66 | 24.14 | 19.68 | 20.15 | 84.60 | 41.20 | 42.06 | 34 |
| 947,607 | 45,806 | 24,683 | 5,261,910 | 3,200 | 4,867,163 | 4,765,428 | 101,735 | 389,017 | 203,164 | 2,530 | 664,614 | 636,551 | 35 |
| 9.94 | 14.05 | 10.61 | 40.22 | 2.99 | 55.62 | 58.75 | 15.91 | 9.24 | 10.69 | 17.21 | 30.79 | 31.19 | 36 |
| Primary Enterprises | Sup. Enterprises | | | | | | | | | | | | |
| 264 | 1 | 17 | 14 | 190 | 5 | 62 | 31 | 31 | 113 | 66 | 10 | 45 | 41 | 37 |
| 60,903 | (8) | 546 | 529 | 59,174 | 350 | 43,266 | 39,548 | 3,718 | 15,533 | 6,752 | 25 | 12,887 | 12,471 | 38 |
| 19,982 | (8) | 638 | 513 | 68,364 | 755 | 54,977 | 53,200 | 1,777 | 12,473 | 8,384 | 159 | 20,477 | 19,982 | 39 |
| 0.33 | (8) | 1.17 | 0.97 | 1.16 | 2.16 | 1.27 | 1.35 | 0.48 | 0.80 | 1.24 | 6.36 | 1.59 | 1.60 | 40 |
| 5,694 | ..... | ..... | ..... | 131,242 | ..... | 124,125 | 122,908 | 1,217 | 7,117 | 550 | ..... | 16,824 | 16,784 | 41 |
| 0.25 | ..... | ..... | ..... | 2.69 | ..... | 3.05 | 3.16 | 0.71 | 0.88 | 1.49 | ..... | 1.58 | 1.59 | 42 |
| 23,864 | ..... | ..... | ..... | 72,756 | ..... | 59,643 | 57,924 | 1,719 | 13,113 | 370 | ..... | 10,660 | 10,575 | 43 |
| 0.24 | ..... | ..... | ..... | 1.80 | ..... | 2.08 | 2.12 | 0.71 | 0.54 | 1.49 | ..... | 1.58 | 1.59 | 44 |
| 2,174 | ..... | ..... | ..... | 83,883 | ..... | 77,002 | 76,285 | 717 | 6,881 | 450 | ..... | 15,613 | 15,613 | 45 |
| 462,288 | ..... | ..... | ..... | 4,577,395 | ..... | 4,577,395 | 4,577,395 | ..... | ..... | ..... | ..... | 173,628 | 151,000 | 46 |
| 240 | ..... | 17 | 13 | 186 | 5 | 51 | 31 | 20 | 125 | 57 | 5 | 42 | 37 | 47 |
| 47,552 | ..... | 689 | 651 | 55,955 | 350 | 42,105 | 39,388 | 2,717 | 13,475 | 6,132 | 25 | 12,679 | 12,439 | 48 |
| 90,323 | ..... | 649 | 590 | 61,447 | 384 | 41,643 | 36,442 | 5,201 | 19,384 | 8,054 | 36 | 8,117 | 7,891 | 49 |
| 1.9 | ..... | 0.9 | 0.9 | 1.1 | 1.1 | 1.0 | 0.9 | 1.9 | 1.4 | 1.3 | 1.4 | 0.6 | 0.6 | 50 |
| 0.38 | ..... | 1.07 | 0.96 | 2.52 | 2.16 | 2.99 | 3.16 | 0.58 | 0.89 | 1.08 | 5.20 | 1.65 | 1.64 | 51 |
| 0.20 | ..... | 1.14 | 1.06 | 2.29 | 1.97 | 3.02 | 3.41 | 0.30 | 0.62 | 0.83 | 3.61 | 2.58 | 2.59 | 52 |
| 19 | ..... | 4 | 2 | 6 | ..... | 2 | 2 | ..... | 3 | 1 | 1 | 3 | 1 | 53 |
| 11,243 | ..... | 215 | (8) | 74,747 | ..... | (8) | (8) | ..... | 2,190 | (8) | (8) | 12,020 | (8) | 54 |
| 9,232 | ..... | 66 | (8) | 36,247 | ..... | (8) | (8) | ..... | 1,990 | (8) | ..... | 9,586 | (8) | 55 |
| 523 | ..... | 59 | (8) | 25,850 | ..... | (8) | (8) | ..... | 300 | (8) | ..... | 43 | (8) | 56 |
| 2,713 | ..... | 36 | ..... | 5,983 | ..... | (8) | (8) | ..... | 730 | (8) | (8) | 5 | ..... | 57 |

[6] 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 reasons.
[10] 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.

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | MISSOURI RIVER (II) — Continued | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | Platte River (II-B) | | | |
| | | Niobrara River[1] (51) | James River (54) | Total | | Direct (II-B) | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | |
| 1 | Irrigated units* ... 1939 ... number | 89 | 10 | 26,579 | | 2,784 | |
| 2 | Area irrigated ... 1939 ... acres | 10,359 | 336 | 2,360,615 | | 128,586 | |
| 3 | (a) Cropland harvested ... 1939 ... acres | 9,318 | 336 | 2,119,398 | | 125,403 | |
| 4 | (b) Crop failure ... 1939 ... acres | 310 | ..... | 51,895 | | 2,217 | |
| 5 | (c) Pasture ... 1939 ... acres | 731 | ..... | 189,322 | | 966 | |
| 6 | Area irrigated ... 1929 ... acres | 3,831 | ..... | 2,315,297 | | 71,290 | |
| 7 | 1919 ... acres | 6,138 | ..... | 2,136,402 | | 37,532 | |
| 8 | Increase or decrease (-), 1929-1939 ... percent | 170.4 | ..... | 2.0 | | 80.4 | |
| 9 | Irrigable area in enterprises ... 1940 ... acres | 14,551 | 370 | 3,339,995 | | 458,091 | |
| 10 | 1930 ... acres | 4,766 | ..... | 3,081,680 | | 179,011 | |
| 11 | 1920[3] ... acres | 28,956 | ..... | 3,431,037 | | 151,377 | |
| 12 | Excess of irrigable area over the area irrigated ... 1940 ... acres | 4,192 | 34 | 979,380 | | 329,505 | |
| 13 | 1930 ... acres | 935 | ..... | 766,383 | | 107,721 | |
| 14 | 1920[3] ... acres | 22,818 | ..... | 1,294,635 | | 113,845 | |
| 15 | Area works were capable of supplying with water ... 1940 ... acres | 13,222 | 352 | 3,061,356 | | 376,465 | |
| 16 | 1930 ... acres | 4,563 | ..... | 2,813,195 | | 140,456 | |
| 17 | 1920 ... acres | 10,265 | ..... | 2,579,720 | | 68,732 | |
| 18 | Increase or decrease (-), 1930-1940 ... percent | 189.8 | ..... | 8.8 | | 168.0 | |
| 19 | Excess of area works were capable of supplying with water over area irrigated ... 1940 ... acres | 2,863 | 16 | 700,741 | | 247,879 | |
| 20 | 1930 ... acres | 732 | ..... | 497,898 | | 69,166 | |
| 21 | 1920 ... acres | 4,127 | ..... | 443,318 | | 31,200 | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water ... 1939 ... percent | 78.3 | 95.5 | 77.1 | | 34.2 | |
| 23 | 1929 ... percent | 84.0 | ..... | 82.3 | | 50.8 | |
| 24 | 1919 ... percent | 59.8 | ..... | 82.8 | | 54.6 | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | |
| 25 | Total investment in irrigation enterprises ... 1940 ... dollars | 139,055 | 10,190 | 95,210,869 | | 14,001,510 | |
| 26 | (a) Cost of irrigation works and equipment ... 1940 ... dollars | 137,735 | 10,190 | 92,445,664 | | 13,795,794 | |
| 27 | (b) Investment in water rights (reported) ... 1940 ... dollars | 1,320 | ..... | 2,765,205 | | 205,716 | |
| 28 | Total investment in irrigation enterprises ... 1930 ... dollars | 26,879 | ..... | 69,493,120 | | 989,656 | |
| 29 | 1920 ... dollars | 360,439 | ..... | 62,893,983 | | 488,642 | |
| 30 | Increase or decrease (-), 1930-1940 ... percent | 417.3 | ..... | 37.0 | | (4) | |
| 31 | Average investment based on area works were capable of supplying with water, per acre ... 1940 ... dollars | 10.52 | 28.95 | 31.10 | | 37.19 | |
| 32 | 1930 ... dollars | 5.89 | ..... | 24.70 | | 7.05 | |
| 33 | 1920 ... dollars | 35.11 | ..... | 24.38 | | 7.11 | |
| 34 | Average investment per acre irrigated ... 1939 ... dollars | 13.42 | 30.33 | 40.33 | | 108.89 | |
| 35 | Estimated final investment in existing enterprises ... 1940 ... dollars | 144,330 | 10,770 | 99,285,391 | | 16,662,253 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre ... 1940 ... dollars | 9.92 | 29.11 | 29.73 | | 36.37 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | | | Primary | Supplemental | Primary | Supplemental |
| | | | | Enterprises | | Enterprises | |
| 37 | Enterprises reporting maintenance and operation ... 1939 ... number | 77 | 8 | 4,381 | 1,302 | 1,328 | 52 |
| 38 | Area irrigated in these enterprises ... 1939 ... acres | 10,218 | 274 | 2,304,103 | 586,429 | 125,598 | 57,938 |
| 39 | Cost of maintenance and operation ... 1939 ... dollars | 8,540 | 1,162 | 1,863,717 | 475,109 | 270,102 | 27,094 |
| 40 | Average cost, per acre irrigated ... 1939 ... dollars | 0.84 | 4.24 | 0.81 | 0.81 | 2.15 | 0.47 |
| 41 | Total annual charges (reported)[6] [7] ... 1939 ... dollars | ..... | ..... | 1,769,060 | 245,105 | 70,538 | 26,335 |
| 42 | Average annual charge per acre irrigated ... 1939 ... dollars | ..... | ..... | 1.05 | 0.51 | 1.04 | 0.48 |
| 43 | Area against which charges were assessed ... 1939 ... acres | ..... | ..... | 1,798,015 | 480,844 | 69,452 | 55,434 |
| 44 | Average annual charge per acre assessed ... 1939 ... dollars | ..... | ..... | 0.98 | 0.51 | 1.02 | 0.48 |
| 45 | Total charges collected[6] ... 1939 ... dollars | ..... | ..... | 1,649,339 | 128,489 | 74,153 | ..... |
| 46 | Indebtedness to December 31 (reported)[7] ... 1939 ... dollars | ..... | ..... | 28,505,928 | 1,760,178 | 7,771,892 | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | |
| 47 | Enterprises reporting water delivered ... 1939 ... number | 79 | 9 | 4,179 | 1,270 | 1,252 | 41 |
| 48 | Area irrigated by these enterprises ... 1939 ... acres | 8,799 | 286 | 2,208,815 | 582,240 | 126,528 | 58,083 |
| 49 | Water delivered ... 1939 ... acre-feet | 16,607 | 352 | 3,823,863 | 428,522 | 231,637 | 28,415 |
| 50 | Average water delivered per acre irrigated ... 1939 ... acre-feet | 1.9 | 1.2 | 1.7 | 0.7 | 1.8 | 0.5 |
| 51 | Average cost of water per acre irrigated ... 1939 ... dollars | 0.92 | 4.27 | 1.08 | 0.91 | 2.18 | 0.53 |
| 52 | Average cost of water per acre-foot delivered ... 1939 ... dollars | 0.49 | 3.47 | 0.63 | 1.23 | 1.19 | 1.09 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage ... 1939 ... number | 4 | 3 | 175 | ..... | 19 | ..... |
| 54 | Irrigable area in these enterprises ... 1939 ... acres | 806 | 108 | 746,729 | ..... | 7,742 | ..... |
| 55 | Irrigated area in these enterprises ... 1939 ... acres | 704 | 74 | 550,335 | ..... | 3,043 | ..... |
| 56 | Area for which drains have been installed ... 1939 ... acres | 181 | 90 | 110,018 | ..... | 3,192 | ..... |
| 57 | Additional area needing drainage ... 1939 ... acres | 83 | 18 | 25,050 | ..... | 49 | ..... |

*Schedules called for "Number of farms," see explanation in text.
[1] Data for 1 enterprise in Keya Paha River Basin are included with Niobrara River.
[2] Data for the intrastate tributaries of the Laramie River are not shown separately but are included in the Laramie River total.
[3] 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]

| MISSOURI RIVER (II)—Continued | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Platte River (II-B)—Continued | | | | | | | | | | | | | | | | | |
| North Platte River (II-Ba) | | | | | | | | | | | | South Platte River (II-Bb) | | | | | |
| Total | | Direct (II-Ba) | | Laramie River | | | | Intrastate tributaries in Wyoming | | Intrastate tributary in Nebraska (Blue Creek) (22) | | Total | | Direct (II-Bb) | | | |
| | | | | Total[2] | | Direct (15) | | | | | | | | | | | |
| 7,693 | | 6,044 | | 854 | | 615 | | 684 | | 111 | | 15,309 | | 6,108 | | 1 | |
| 1,041,146 | | 678,431 | | 168,374 | | 95,493 | | 186,101 | | 8,240 | | 1,162,685 | | 557,441 | | 2 | |
| 872,920 | | 584,228 | | 138,691 | | 84,584 | | 142,191 | | 7,810 | | 1,093,547 | | 524,363 | | 3 | |
| 13,037 | | 7,931 | | 2,674 | | 1,962 | | 2,252 | | 180 | | 36,381 | | 18,485 | | 4 | |
| 155,189 | | 86,272 | | 27,009 | | 8,947 | | 41,658 | | 250 | | 32,757 | | 14,593 | | 5 | |
| 951,359 | | 441,263 | | 190,094 | | 109,585 | | 192,420 | | ..... | | 1,267,604 | | 470,892 | | 6 | |
| 872,140 | | 351,050 | | 156,159 | | 78,560 | | 196,200 | | ..... | | 1,224,974 | | 362,191 | | 7 | |
| 9.4 | | 53.7 | | -11.4 | | -12.9 | | -3.3 | | ..... | | -8.3 | | 18.4 | | 8 | |
| 1,447,453 | | 808,946 | | 330,105 | | 231,362 | | 295,281 | | 13,121 | | 1,354,911 | | 659,542 | | 9 | |
| 1,312,827 | | 549,764 | | 328,057 | | 228,757 | | 251,557 | | ..... | | 1,555,134 | | 540,615 | | 10 | |
| 1,603,305 | | 579,728 | | 373,353 | | 177,979 | | 401,296 | | ..... | | 1,671,198 | | 519,535 | | 11 | |
| 406,307 | | 130,515 | | 161,731 | | 135,869 | | 109,180 | | 4,881 | | 192,226 | | 102,101 | | 12 | |
| 361,468 | | 108,501 | | 137,963 | | 119,172 | | 59,137 | | ..... | | 287,530 | | 69,723 | | 13 | |
| 731,165 | | 228,678 | | 217,194 | | 99,419 | | 205,096 | | ..... | | 446,225 | | 157,344 | | 14 | |
| 1,300,503 | | 785,749 | | 288,153 | | 193,648 | | 214,854 | | 11,747 | | 1,314,272 | | 649,009 | | 15 | |
| 1,198,645 | | 529,278 | | 268,426 | | 179,372 | | 238,487 | | ..... | | 1,441,367 | | 504,642 | | 16 | |
| 1,172,858 | | 429,252 | | 298,153 | | 129,116 | | 259,274 | | ..... | | 1,335,109 | | 398,310 | | 17 | |
| 8.5 | | 48.5 | | 7.3 | | 8.0 | | -9.9 | | ..... | | -8.8 | | 28.6 | | 18 | |
| 259,357 | | 107,318 | | 119,779 | | 98,155 | | 28,753 | | 3,507 | | 151,587 | | 91,568 | | 19 | |
| 247,286 | | 88,015 | | 78,332 | | 69,787 | | 46,067 | | ..... | | 173,763 | | 33,750 | | 20 | |
| 300,718 | | 78,202 | | 141,994 | | 50,556 | | 63,074 | | ..... | | 110,135 | | 36,119 | | 21 | |
| 80.1 | | 86.3 | | 58.4 | | 49.3 | | 86.6 | | 70.1 | | 88.5 | | 85.9 | | 22 | |
| 79.4 | | 83.4 | | 70.8 | | 61.1 | | 80.7 | | ..... | | 87.9 | | 93.3 | | 23 | |
| 74.4 | | 81.8 | | 52.4 | | 60.8 | | 75.7 | | ..... | | 91.8 | | 90.9 | | 24 | |
| 36,063,805 | | 26,903,346 | | 4,515,097 | | 3,146,107 | | 4,539,230 | | 106,132 | | 42,244,548 | | 24,481,175 | | 25 | |
| 35,727,769 | | 26,769,827 | | 4,488,283 | | 3,137,095 | | 4,364,077 | | 105,582 | | 40,023,052 | | 22,664,285 | | 26 | |
| 336,036 | | 133,519 | | 26,814 | | 9,012 | | 175,153 | | 550 | | 2,221,496 | | 1,816,890 | | 27 | |
| 31,010,953 | | 23,310,257 | | 4,268,150 | | 3,454,911 | | 2,567,690 | | ..... | | 36,899,152 | | 17,685,220 | | 28 | |
| 25,702,212 | | 17,624,060 | | 4,386,696 | | 974,841 | | 2,676,082 | | ..... | | 36,676,829 | | 9,199,612 | | 29 | |
| 16.3 | | 15.4 | | 5.8 | | -8.9 | | 76.8 | | ..... | | 14.5 | | 38.4 | | 30 | |
| 27.73 | | 34.24 | | 15.67 | | 16.25 | | 21.13 | | 9.03 | | 32.14 | | 37.72 | | 31 | |
| 25.87 | | 44.04 | | 15.90 | | 19.26 | | 10.77 | | ..... | | 25.60 | | 35.05 | | 32 | |
| 21.91 | | 41.06 | | 14.71 | | 7.55 | | 10.32 | | ..... | | 27.47 | | 23.10 | | 33 | |
| 34.64 | | 39.66 | | 26.82 | | 32.95 | | 24.39 | | 12.88 | | 36.33 | | 43.92 | | 34 | |
| 37,198,273 | | 27,021,799 | | 5,296,822 | | 3,896,682 | | 4,765,385 | | 114,267 | | 42,460,189 | | 24,525,796 | | 35 | |
| 25.70 | | 33.40 | | 16.05 | | 16.84 | | 16.14 | | 8.71 | | 31.34 | | 37.19 | | 36 | |
| Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | | |
| 1,261 | 180 | 626 | 174 | 267 | 2 | 105 | 2 | 342 | 4 | 26 | | 1,567 | 1,068 | 622 | 628 | 37 | |
| 1,002,601 | 132,790 | 659,017 | 127,787 | 162,509 | (5) | 94,055 | (5) | 173,405 | 1,263 | 7,670 | | 1,147,827 | 395,617 | 555,763 | 182,101 | 38 | |
| 649,303 | 99,934 | 509,511 | 98,958 | 69,962 | (5) | 52,594 | (5) | 63,872 | 652 | 5,958 | | 871,762 | 347,796 | 453,662 | 164,963 | 39 | |
| 0.65 | 0.75 | 0.77 | 0.77 | 0.43 | (5) | 0.56 | (5) | 0.37 | 0.52 | 0.78 | | 0.76 | 0.88 | 0.82 | 0.91 | 40 | |
| 669,296 | 81,188 | 582,586 | 80,836 | 45,333 | ..... | 43,655 | ..... | 36,996 | 352 | 4,381 | | 982,453 | 137,582 | 512,934 | 24,627 | 41 | |
| 1.16 | 0.70 | 1.31 | 0.70 | 0.59 | ..... | 0.64 | ..... | 0.73 | 0.36 | 0.70 | | 0.97 | 0.44 | 1.05 | 0.20 | 42 | |
| 647,129 | 116,123 | 487,871 | 115,023 | 92,812 | ..... | 84,432 | ..... | 58,591 | 1,100 | 7,855 | | 1,061,335 | 309,287 | 523,764 | 126,084 | 43 | |
| 1.03 | 0.70 | 1.19 | 0.70 | 0.49 | ..... | 0.52 | ..... | 0.63 | 0.32 | 0.56 | | 0.93 | 0.44 | 0.98 | 0.20 | 44 | |
| 552,041 | 1,235 | 477,746 | 883 | 40,057 | ..... | 38,435 | ..... | 22,979 | 352 | 11,259 | | 976,054 | 127,254 | 544,392 | 23,011 | 45 | |
| 14,804,347 | 1,270,559 | 14,588,980 | 1,270,559 | 99,490 | ..... | 99,490 | ..... | 112,877 | ..... | 3,000 | | 3,803,648 | 489,619 | 1,908,098 | 1,250 | 46 | |
| 1,179 | 166 | 601 | 161 | 271 | 1 | 113 | 1 | 291 | 4 | 16 | | 1,550 | 1,061 | 602 | 621 | 47 | |
| 942,654 | 129,016 | 625,487 | 127,713 | 167,094 | (5) | 95,449 | (5) | 145,685 | 1,263 | 4,368 | | 1,112,195 | 395,057 | 523,061 | 182,240 | 48 | |
| 1,841,335 | 68,888 | 1,400,396 | 68,327 | 223,319 | (5) | 140,223 | (5) | 207,862 | 543 | 9,758 | | 1,695,551 | 331,167 | 948,468 | 168,793 | 49 | |
| 2.0 | 0.5 | 2.2 | 0.5 | 1.3 | (5) | 1.5 | (5) | 1.4 | 0.4 | 2.2 | | 1.5 | 0.8 | 1.8 | 0.9 | 50 | |
| 0.87 | 0.78 | 1.07 | 0.79 | 0.42 | (5) | 0.55 | (5) | 0.49 | 0.52 | 1.33 | | 1.10 | 1.01 | 1.12 | 0.91 | 51 | |
| 0.44 | 1.47 | 0.48 | 1.47 | 0.32 | (5) | 0.38 | (5) | 0.35 | 1.20 | 0.60 | | 0.72 | 1.20 | 0.62 | 0.98 | 52 | |
| 64 | ..... | 27 | ..... | 29 | ..... | 6 | ..... | 7 | ..... | 1 | | 86 | ..... | 20 | ..... | 53 | |
| 573,585 | ..... | 362,722 | ..... | 170,077 | ..... | 153,959 | ..... | 38,700 | ..... | (5) | | 138,058 | ..... | 94,816 | ..... | 54 | |
| 416,524 | ..... | 323,928 | ..... | 71,347 | ..... | 56,225 | ..... | 19,495 | ..... | (5) | | 118,747 | ..... | 80,931 | ..... | 55 | |
| 80,441 | ..... | 60,000 | ..... | 18,341 | ..... | 2,455 | ..... | 2,100 | ..... | ..... | | 25,986 | ..... | 9,396 | ..... | 56 | |
| 19,853 | ..... | 12,559 | ..... | 7,242 | ..... | 7,240 | ..... | 40 | ..... | (5) | | 5,060 | ..... | 3,391 | ..... | 57 | |

[4] Percent not shown when more than 1,000.
[5] 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.

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | MISSOURI RIVER (II)—Continued | | | | | |
|---|---|---|---|---|---|---|---|
| | | Platte River (II-B)—Continued | | | | | |
| | | South Platte River (II-Bb)—Continued | | | | | |
| | | Cache la Poudre River (8) | | Crow Creek (9) | | Lodgepole Creek (13) | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | |
| 1 | Irrigated units[a]....1939...number.... | 2,371 | | 42 | | 216 | |
| 2 | Area irrigated....1939...acres.... | 225,521 | | 7,571 | | 19,017 | |
| 3 | (a) Cropland harvested....1939...acres.... | 214,943 | | 6,743 | | 17,062 | |
| 4 | (b) Crop failure....1939...acres.... | 8,617 | | 593 | | 1,306 | |
| 5 | (c) Pasture....1939...acres.... | 1,961 | | 235 | | 649 | |
| 6 | Area irrigated....1929...acres.... | 297,401 | | 5,947 | | 13,425 | |
| 7 | 1919...acres.... | 272,125 | | 4,525 | | 20,004 | |
| 8 | Increase or decrease (-), 1929-1939....percent.... | -24.2 | | 27.3 | | 41.7 | |
| 9 | Irrigable area in enterprises....1940...acres.... | 255,647 | | 8,437 | | 26,953 | |
| 10 | 1930...acres.... | 389,975 | | 8,366 | | 18,018 | |
| 11 | 1920[3]..acres.... | 416,208 | | 13,040 | | 33,823 | |
| 12 | Excess of irrigable area over the area irrigated..1940...acres.... | 30,126 | | 866 | | 7,936 | |
| 13 | 1930...acres.... | 92,574 | | 2,419 | | 4,593 | |
| 14 | 1920[3]..acres.... | 144,083 | | 8,515 | | 13,819 | |
| 15 | Area works were capable of supplying with water...1940...acres.... | 239,910 | | 8,073 | | 26,023 | |
| 16 | 1930...acres.... | 336,971 | | 7,903 | | 17,211 | |
| 17 | 1920...acres.... | 289,634 | | 7,117 | | 25,646 | |
| 18 | Increase or decrease (-), 1930-1940....percent.... | -28.8 | | 2.2 | | 51.2 | |
| 19 | Excess of area works were capable of supplying with water over area irrigated....1940...acres.... | 14,369 | | 502 | | 7,006 | |
| 20 | 1930...acres.... | 39,570 | | 1,956 | | 3,786 | |
| 21 | 1920...acres.... | 17,509 | | 2,592 | | 5,642 | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water....1939...percent.... | 94.0 | | 93.8 | | 73.1 | |
| 23 | 1929...percent.... | 88.3 | | 75.2 | | 78.0 | |
| 24 | 1919...percent.... | 94.0 | | 63.6 | | 78.0 | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | |
| 25 | Total investment in irrigation enterprises....1940...dollars.... | 10,151,853 | | 262,174 | | 469,482 | |
| 26 | (a) Cost of irrigation works and equipment....1940...dollars.... | 10,123,026 | | 248,827 | | 466,622 | |
| 27 | (b) Investment in water rights (reported)....1940...dollars.... | 28,827 | | 13,347 | | 2,860 | |
| 28 | Total investment in irrigation enterprises....1930...dollars.... | 9,642,017 | | 166,821 | | 337,680 | |
| 29 | 1920...dollars.... | 10,713,682 | | 100,319 | | 445,738 | |
| 30 | Increase or decrease (-), 1930-1940....percent.... | 5.3 | | 57.2 | | 39.0 | |
| 31 | Average investment based on area works were capable of supplying with water, per acre....1940...dollars.... | 42.32 | | 32.48 | | 18.04 | |
| 32 | 1930...dollars.... | 28.61 | | 21.11 | | 19.62 | |
| 33 | 1920...dollars.... | 36.99 | | 14.14 | | 17.38 | |
| 34 | Average investment per acre irrigated....1939...dollars.... | 45.02 | | 34.53 | | 24.69 | |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 10,203,283 | | 264,474 | | 497,452 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre....1940...dollars.... | 39.91 | | 31.35 | | 18.46 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary Enterprises | Supplemental Enterprises | Primary Enterprises | Supplemental Enterprises | Primary Enterprises | Supplemental Enterprises |
| 37 | Enterprises reporting maintenance and operation...1939...number.... | 287 | 258 | 22 | 12 | 151 | 3 |
| 38 | Area irrigated in these enterprises....1939...acres.... | 222,719 | 159,095 | 2,678 | 1,265 | 18,445 | 258 |
| 39 | Cost of maintenance and operation....1939...dollars.... | 144,015 | 126,719 | 5,271 | 5,326 | 32,814 | 250 |
| 40 | Average cost, per acre irrigated....1939...dollars.... | 0.65 | 0.80 | 1.97 | 4.21 | 1.78 | 0.97 |
| 41 | Total annual charges (reported)[5] [6]....1939...dollars.... | 250,802 | 90,649 | ..... | ..... | 8,998 | ..... |
| 42 | Average annual charge per acre irrigated....1939...dollars.... | 1.22 | 0.68 | ..... | ..... | 2.00 | ..... |
| 43 | Area against which charges were assessed....1939...acres.... | 206,674 | 134,180 | ..... | ..... | 4,499 | ..... |
| 44 | Average annual charge per acre assessed....1939...dollars.... | 1.21 | 0.68 | ..... | ..... | 2.00 | ..... |
| 45 | Total charges collected[6]....1939...dollars.... | 185,695 | 80,129 | ..... | ..... | 9,000 | ..... |
| 46 | Indebtedness to December 31 (reported)[6]....1939...dollars.... | 1,048,227 | 408,369 | ..... | ..... | 82,000 | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | |
| 47 | Enterprises reporting water delivered....1939...number.... | 292 | 251 | 38 | 12 | 143 | 3 |
| 48 | Area irrigated by these enterprises....1939...acres.... | 221,138 | 159,294 | 7,471 | 1,265 | 18,442 | 258 |
| 49 | Water delivered....1939...acre-feet.. | 279,916 | 112,327 | 10,214 | 3,239 | 22,270 | 241 |
| 50 | Average water delivered per acre irrigated....1939...acre-feet.. | 1.3 | 0.7 | 1.4 | 2.6 | 1.2 | 0.9 |
| 51 | Average cost of water per acre irrigated....1939...dollars.... | 1.35 | 1.03 | 1.97 | 4.21 | 2.08 | 0.97 |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 1.07 | 1.47 | 1.44 | 1.64 | 1.72 | 1.04 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage....1939...number.... | 41 | ..... | 1 | ..... | ..... | ..... |
| 54 | Irrigable area in these enterprises....1939...acres.... | 17,009 | ..... | (4) | ..... | ..... | ..... |
| 55 | Irrigated area in these enterprises....1939...acres.... | 15,883 | ..... | (4) | ..... | ..... | ..... |
| 56 | Area for which drains have been installed....1939...acres.... | 14,557 | ..... | ..... | ..... | ..... | ..... |
| 57 | Additional area needing drainage....1939...acres.... | 174 | ..... | (4) | ..... | ..... | ..... |

[a] Schedules called for "Number of farms," see explanation in text.
[1] Data for the intrastate tributaries of the Smoky Hill River are not shown separately but are included in the Smoky Hill River total.
[2] Percent not shown when more than 1,000.
[3] For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.

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

and Arkansas and Louisiana]

| MISSOURI RIVER (II) — Continued | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Platte River (II-B)—Continued | | | | | | Kansas River (II-C) | | | | | | | | | | | | | |
| South Platte River (II-Bb)—Con. | | | | | | | | Republican River | | | | | | Smoky Hill River | | | | | |
| Intrastate tributaries in Colorado | Intrastate tributaries in Nebraska | | | Total | | Direct (II-C) | Total | | Direct (1) | | Arikaree River (2) | Frenchman Creek (3) | Total[1] | | Direct (4) | | White Woman Creek (7) | Big Blue River (8) | |
| 6,572 | 793 | | | 792 | | 43 | 517 | | 233 | | 92 | 192 | 108 | | 40 | | 44 | 124 | 1 |
| 353,135 | 28,198 | | | 46,204 | | 703 | 31,692 | | 9,906 | | 6,891 | 14,895 | 9,423 | | 1,211 | | 7,273 | 4,386 | 2 |
| 330,436 | 27,528 | | | 43,692 | | 603 | 30,067 | | 9,497 | | 5,787 | 14,783 | 8,727 | | 1,056 | | 6,968 | 4,295 | 3 |
| 7,380 | 260 | | | 1,005 | | 14 | 576 | | 275 | | 259 | 42 | 407 | | 150 | | 237 | 8 | 4 |
| 15,319 | 410 | | | 1,507 | | 86 | 1,049 | | 134 | | 845 | 70 | 289 | | 5 | | 68 | 83 | 5 |
| 478,903 | 25,044 | | | 26,139 | | ..... | 23,387 | | ..... | | ..... | ..... | 141 | | ..... | | ..... | ..... | 6 |
| 566,129 | 1,756 | | | 34,672 | | ..... | 34,360 | | ..... | | ..... | ..... | 278 | | ..... | | ..... | 19 | 7 |
| -26.3 | 12.6 | | | 76.8 | | ..... | 35.5 | | ..... | | ..... | ..... | (2) | | ..... | | ..... | ..... | 8 |
| 404,332 | 79,540 | | | 85,137 | | 1,372 | 42,183 | | 15,692 | | 10,235 | 16,256 | 14,542 | | 2,458 | | 10,581 | 7,040 | 9 |
| 596,488 | 34,708 | | | 36,913 | | ..... | 32,872 | | ..... | | ..... | ..... | 391 | | ..... | | ..... | ..... | 10 |
| 688,593 | 5,156 | | | 53,644 | | ..... | 52,080 | | ..... | | ..... | ..... | 1,450 | | ..... | | ..... | 44 | 11 |
| 51,197 | 51,342 | | | 18,933 | | 669 | 10,491 | | 5,786 | | 3,344 | 1,361 | 5,119 | | 1,247 | | 3,308 | 2,554 | 12 |
| 117,585 | 9,664 | | | 10,774 | | ..... | 9,485 | | ..... | | ..... | ..... | 250 | | ..... | | ..... | ..... | 13 |
| 122,464 | 3,400 | | | 18,972 | | ..... | 17,720 | | ..... | | ..... | ..... | 1,172 | | ..... | | ..... | 25 | 14 |
| 391,257 | 70,116 | | | 61,942 | | 1,252 | 40,345 | | 14,532 | | 9,765 | 16,048 | 13,902 | | 2,123 | | 10,421 | 6,433 | 15 |
| 573,058 | 32,727 | | | 32,823 | | ..... | 29,086 | | ..... | | ..... | ..... | 325 | | ..... | | ..... | ..... | 16 |
| 614,402 | 3,021 | | | 44,402 | | ..... | 43,022 | | ..... | | ..... | ..... | 1,266 | | ..... | | ..... | 44 | 17 |
| -31.7 | 114.2 | | | 88.7 | | ..... | 38.7 | | ..... | | ..... | ..... | (2) | | ..... | | ..... | ..... | 18 |
| 38,122 | 41,918 | | | 15,738 | | 559 | 8,553 | | 4,626 | | 2,874 | 1,153 | 4,479 | | 912 | | 3,148 | 2,047 | 19 |
| 94,155 | 7,683 | | | 6,684 | | ..... | 5,699 | | ..... | | ..... | ..... | 185 | | ..... | | ..... | ..... | 20 |
| 48,273 | 1,265 | | | 9,730 | | ..... | 8,662 | | ..... | | ..... | ..... | 988 | | ..... | | ..... | 25 | 21 |
| 90.3 | 40.2 | | | 74.6 | | 55.7 | 78.6 | | 68.2 | | 70.6 | 92.8 | 57.8 | | 57.0 | | 69.8 | 68.2 | 22 |
| 83.6 | 76.5 | | | 79.6 | | ..... | 80.4 | | ..... | | ..... | ..... | 43.3 | | ..... | | ..... | ..... | 23 |
| 92.1 | 58.1 | | | 78.1 | | ..... | 79.9 | | ..... | | ..... | ..... | 22.0 | | ..... | | ..... | 43.2 | 24 |
| 6,879,864 | 2,901,006 | | | 1,083,626 | | 33,656 | 716,564 | | 308,932 | | 103,925 | 303,707 | 161,088 | | 39,268 | | 100,893 | 172,318 | 25 |
| 6,520,292 | 2,899,049 | | | 1,061,585 | | 32,746 | 696,439 | | 304,032 | | 90,020 | 302,387 | 151,003 | | 39,224 | | 100,885 | 171,397 | 26 |
| 359,572 | 1,957 | | | 22,041 | | 910 | 20,125 | | 4,900 | | 13,905 | 1,320 | 85 | | 44 | | 8 | 921 | 27 |
| 9,035,919 | 593,359 | | | 596,747 | | ..... | 490,429 | | ..... | | ..... | ..... | 12,460 | | ..... | | ..... | ..... | 28 |
| 16,217,178 | 26,300 | | | 537,605 | | ..... | 500,285 | | ..... | | ..... | ..... | 34,953 | | ..... | | ..... | 1,525 | 29 |
| -23.9 | 388.9 | | | 81.6 | | ..... | 46.1 | | ..... | | ..... | ..... | (2) | | ..... | | ..... | ..... | 30 |
| 17.58 | 41.37 | | | 17.49 | | 26.67 | 17.76 | | 21.26 | | 10.64 | 18.92 | 11.59 | | 18.50 | | 9.68 | 26.79 | 31 |
| 15.77 | 18.13 | | | 18.18 | | ..... | 16.86 | | ..... | | ..... | ..... | 38.22 | | ..... | | ..... | ..... | 32 |
| 26.40 | 8.71 | | | 12.11 | | ..... | 11.63 | | ..... | | ..... | ..... | 27.51 | | ..... | | ..... | 36.93 | 33 |
| 19.48 | 102.88 | | | 23.45 | | 47.87 | 22.61 | | 31.19 | | 15.08 | 20.39 | 17.10 | | 32.43 | | 13.87 | 39.29 | 34 |
| 6,969,184 | 2,964,676 | | | 1,122,220 | | 41,906 | 733,864 | | 323,427 | | 106,230 | 304,207 | 171,173 | | 43,468 | | 104,803 | 175,277 | 35 |
| 17.24 | 37.27 | | | 17.23 | | 30.54 | 17.40 | | 20.51 | | 10.38 | 18.71 | 11.77 | | 17.68 | | 9.90 | 24.90 | 36 |
| Primary | Sup. | Primary | Sup. | Primary | Sup. | | Primary | Sup. | Primary | Sup. | | | | | | | | | |
| Enterprises | | Enterprises | | Enterprises | | | Enterprises | | Enterprises | | | | | | | | | | |
| 485 | 167 | 225 | 2 | 500 | 3 | 39 | 257 | 3 | 194 | 3 | 30 | 33 | 95 | | 35 | | 37 | 109 | 37 |
| 348,222 | 52,898 | 28,077 | (4) | 44,868 | 12 | 637 | 30,963 | 12 | 9,411 | 12 | 6,561 | 14,891 | 9,059 | | 1,027 | | 7,123 | 4,209 | 38 |
| 236,000 | 50,538 | 72,550 | (4) | 101,079 | 71 | 2,934 | 50,712 | 71 | 26,662 | 71 | 4,451 | 19,599 | 24,924 | | 3,224 | | 18,600 | 22,509 | 39 |
| 0.68 | 0.96 | 2.58 | (4) | 2.25 | 5.92 | 4.61 | 1.64 | 5.92 | 2.83 | 5.92 | 0.67 | 1.32 | 2.75 | | 3.14 | | 2.51 | 5.35 | 40 |
| 209,719 | 22,306 | 46,773 | ..... | 18,275 | ..... | ..... | 18,275 | ..... | 4,700 | ..... | 1,989 | 11,586 | ..... | | ..... | | ..... | ..... | 41 |
| 0.66 | 0.45 | 2.33 | ..... | 1.01 | ..... | ..... | 1.01 | ..... | 1.53 | ..... | 0.50 | 1.05 | ..... | | ..... | | ..... | ..... | 42 |
| 326,398 | 49,023 | 20,099 | ..... | 18,060 | ..... | ..... | 18,060 | ..... | 3,067 | ..... | 3,969 | 11,024 | ..... | | ..... | | ..... | ..... | 43 |
| 0.64 | 0.46 | 2.33 | ..... | 1.01 | ..... | ..... | 1.01 | ..... | 1.53 | ..... | 0.50 | 1.05 | ..... | | ..... | | ..... | ..... | 44 |
| 235,967 | 24,114 | 47,091 | ..... | 20,023 | ..... | ..... | 20,023 | ..... | 5,100 | ..... | 3,570 | 11,353 | ..... | | ..... | | ..... | ..... | 45 |
| 765,323 | 80,000 | 2,126,041 | ..... | 13,700 | ..... | ..... | 13,700 | ..... | ..... | ..... | 13,700 | ..... | ..... | | ..... | | ..... | ..... | 46 |
| 475 | 174 | 198 | 2 | 489 | 1 | 40 | 249 | 1 | 188 | 1 | 31 | 30 | 96 | | 37 | | 36 | 104 | 47 |
| 342,083 | 52,000 | 27,438 | (4) | 43,772 | (4) | 624 | 29,601 | (4) | 9,848 | (4) | 5,905 | 13,848 | 9,293 | | 1,111 | | 7,273 | 4,254 | 48 |
| 434,683 | 46,567 | 55,340 | (4) | 86,473 | (4) | 672 | 66,317 | (4) | 19,615 | (4) | 10,613 | 36,089 | 14,183 | | 1,555 | | 11,202 | 5,301 | 49 |
| 1.3 | 0.9 | 2.0 | (4) | 2.0 | (4) | 1.1 | 2.2 | (4) | 2.0 | (4) | 1.8 | 2.6 | 1.5 | | 1.4 | | 1.5 | 1.2 | 50 |
| 0.83 | 1.18 | 2.65 | (4) | 2.31 | (4) | 4.70 | 1.69 | (4) | 2.80 | (4) | 0.74 | 1.33 | 2.75 | | 3.18 | | 2.61 | 5.36 | 51 |
| 0.66 | 1.32 | 1.31 | (4) | 1.17 | (4) | 4.36 | 0.75 | (4) | 1.41 | (4) | 0.41 | 0.51 | 1.80 | | 2.28 | | 1.70 | 4.30 | 52 |
| 24 | ..... | 6 | ..... | 32 | ..... | 4 | 14 | ..... | 12 | ..... | 1 | 1 | 4 | | 2 | | ..... | 10 | 53 |
| 25,633 | ..... | 27,344 | ..... | 1,242 | ..... | 140 | 648 | ..... | 328 | ..... | (4) | (4) | 220 | | (4) | | ..... | 234 | 54 |
| 21,533 | ..... | 12,021 | ..... | 860 | ..... | 70 | 404 | ..... | 164 | ..... | (4) | (4) | 188 | | (4) | | ..... | 198 | 55 |
| 2,033 | ..... | 399 | ..... | 588 | ..... | 62 | 235 | ..... | 192 | ..... | (4) | (4) | 65 | | (4) | | ..... | 226 | 56 |
| 1,455 | ..... | 88 | ..... | 270 | ..... | 78 | 182 | ..... | 102 | ..... | (4) | ..... | 10 | | (4) | | ..... | ..... | 57 |

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

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

[6] Annual charges and indebtedness were reported only by enterprises serving 5 or more 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

| | ITEM (For definitions and explanations, see text. Major-basin 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) | MISSOURI RIVER (II)—Continued | | | MISSISSIPPI RIVER (III) (Exclusive of the Missouri River) | | |
|---|---|---|---|---|---|---|---|
| | | Intrastate tributaries in Montana | Intrastate tributaries in North Dakota | Intrastate tributaries in South Dakota | Total | | Direct (III) |
| | **IRRIGATED UNITS AND AREAS** | | | | | | |
| 1 | Irrigated units[a] ... 1939 ... number | 5,796 | 38 | 148 | 14,206 | | 156 |
| 2 | Area irrigated ... 1939 ... acres | 853,261 | 344 | 1,290 | 927,594 | | 9,548 |
| 3 | (a) Cropland harvested ... 1939 ... acres | 748,059 | 276 | 1,259 | 848,045 | | 9,227 |
| 4 | (b) Crop failure ... 1939 ... acres | 3,221 | 12 | 31 | 31,022 | | 254 |
| 5 | (c) Pasture ... 1939 ... acres | 101,981 | 56 | ..... | 48,527 | | 67 |
| 6 | Area irrigated ... 1929 ... acres | 871,405 | ..... | 1,067 | 902,560 | | 8,972 |
| 7 | 1919 ... acres | 933,394 | ..... | 709 | 958,493 | | 17,416 |
| 8 | Increase or decrease (-), 1929-1939 ... percent | -2.1 | ..... | 20.9 | 2.8 | | 6.4 |
| 9 | Irrigable area in enterprises ... 1940 ... acres | 1,281,056 | 1,206 | 2,442 | 1,458,502 | | 15,528 |
| 10 | 1930 ... acres | 1,515,131 | ..... | 1,509 | 1,280,730 | | 17,342 |
| 11 | 1920[2] ... acres | 2,816,852 | ..... | 6,934 | 1,543,064 | | 24,070 |
| 12 | Excess of irrigable area over the area irrigated ... 1940 ... acres | 427,795 | 862 | 1,152 | 530,908 | | 5,980 |
| 13 | 1930 ... acres | 613,726 | ..... | 442 | 378,170 | | 8,370 |
| 14 | 1920[2] ... acres | 1,883,458 | ..... | 6,225 | 584,571 | | 6,654 |
| 15 | Area works were capable of supplying with water ... 1940 ... acres | 1,174,965 | 810 | 1,837 | 1,350,911 | | 14,202 |
| 16 | 1930 ... acres | 1,238,055 | ..... | 1,214 | 1,170,583 | | 11,668 |
| 17 | 1920 ... acres | 1,601,901 | ..... | 3,594 | 1,152,261 | | 23,755 |
| 18 | Increase or decrease (-), 1930-1940 ... percent | -5.1 | ..... | 51.3 | 15.4 | | 21.7 |
| 19 | Excess of area works were capable of supplying with water over area irrigated ... 1940 ... acres | 321,704 | 466 | 547 | 423,317 | | 4,654 |
| 20 | 1930 ... acres | 366,650 | ..... | 147 | 268,023 | | 2,696 |
| 21 | 1920 ... acres | 668,507 | ..... | 2,885 | 193,768 | | 6,339 |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water ... 1939 ... percent | 72.6 | 42.5 | 70.2 | 68.7 | | 67.2 |
| 23 | 1929 ... percent | 70.4 | ..... | 87.9 | 77.1 | | 76.9 |
| 24 | 1919 ... percent | 58.3 | ..... | 19.7 | 83.2 | | 73.3 |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | |
| 25 | Total investment in irrigation enterprises ... 1940 ... dollars | 33,418,918 | 18,551 | 212,707 | 37,101,932 | | 156,931 |
| 26 | (a) Cost of irrigation works and equipment ... 1940 ... dollars | 33,178,141 | 18,445 | 212,658 | 36,159,140 | | 156,931 |
| 27 | (b) Investment in water rights (reported) ... 1940 ... dollars | 240,777 | 106 | 49 | 942,792 | | ..... |
| 28 | Total investment in irrigation enterprises ... 1930 ... dollars | 27,858,818 | ..... | 25,135 | 31,831,673 | | 284,998 |
| 29 | 1920 ... dollars | 29,289,550 | ..... | 128,136 | 35,183,789 | | 302,385 |
| 30 | Increase or decrease (-), 1930-1940 ... percent | 20.0 | ..... | 746.3 | 16.6 | | -44.9 |
| 31 | Average investment based on area works were capable of supplying with water, per acre ... 1940 ... dollars | 28.44 | 22.90 | 115.79 | 27.46 | | 11.05 |
| 32 | 1930 ... dollars | 22.50 | ..... | 20.70 | 27.19 | | 24.43 |
| 33 | 1920 ... dollars | 18.28 | ..... | 35.65 | 30.54 | | 12.73 |
| 34 | Average investment per acre irrigated ... 1939 ... dollars | 39.17 | 53.93 | 164.89 | 40.00 | | 16.44 |
| 35 | Estimated final investment in existing enterprises ... 1940 ... dollars | 37,807,167 | 22,336 | 218,081 | 37,496,140 | | 156,981 |
| 36 | Average investment based on estimated final investment and irrigable area, per acre ... 1940 ... dollars | 29.51 | 18.52 | 89.30 | 25.71 | | 10.11 |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary | Supplemental | | Primary | Supplemental | |
| | | Enterprises | | | Enterprises | | |
| 37 | Enterprises reporting maintenance and operation ... 1939 ... number | 1,839 | 22 | 33 | 23 | 4,227 | 216 | 85 |
| 38 | Area irrigated in these enterprises ... 1939 ... acres | 826,518 | 117,725 | 324 | 1,093 | 897,343 | 33,415 | 8,868 |
| 39 | Cost of maintenance and operation ... 1939 ... dollars | 485,637 | 11,079 | 1,641 | 3,701 | 1,763,296 | 52,748 | 24,387 |
| 40 | Average cost, per acre irrigated ... 1939 ... dollars | 0.59 | 0.09 | 5.06 | 3.39 | 1.97 | 1.58 | 2.75 |
| 41 | Total annual charges (reported)[3 4] ... 1939 ... dollars | 427,889 | 29,746 | ..... | 284 | 738,670 | 10,980 | 1,247 |
| 42 | Average annual charge per acre irrigated ... 1939 ... dollars | 1.10 | 0.32 | ..... | 0.79 | 1.48 | 1.79 | 1.42 |
| 43 | Area against which charges were assessed ... 1939 ... acres | 477,513 | 93,854 | ..... | 359 | 568,001 | 6,142 | 876 |
| 44 | Average annual charge per acre assessed ... 1939 ... dollars | 0.90 | 0.32 | ..... | 0.79 | 1.30 | 1.79 | 1.42 |
| 45 | Total charges collected[3] ... 1939 ... dollars | 222,147 | 32,853 | ..... | ..... | 898,535 | 1,275 | ..... |
| 46 | Indebtedness to December 31 (reported)[4] ... 1939 ... dollars | 22,075,841 | 673,268 | ..... | ..... | 7,687,224 | ..... | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | |
| 47 | Enterprises reporting water delivered ... 1939 ... number | 1,849 | 20 | 34 | 20 | 4,206 | 204 | 77 |
| 48 | Area irrigated by these enterprises ... 1939 ... acres | 766,534 | 90,308 | 344 | 930 | 886,841 | 35,062 | 9,332 |
| 49 | Water delivered ... 1939 ... acre-feet | 1,432,711 | 119,947 | 930 | 1,323 | 1,716,209 | 46,572 | 41,832 |
| 50 | Average water delivered per acre irrigated ... 1939 ... acre-feet | 1.9 | 1.3 | 2.7 | 1.4 | 1.9 | 1.3 | 4.5 |
| 51 | Average cost of water per acre irrigated ... 1939 ... dollars | 0.74 | 0.32 | 5.06 | 3.40 | 2.31 | 2.08 | 2.78 |
| 52 | Average cost of water per acre-foot delivered ... 1939 ... dollars | 0.39 | 0.24 | 1.87 | 2.39 | 1.19 | 1.57 | 0.62 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage ... 1939 ... number | 65 | ..... | 4 | 3 | 221 | ..... | 13 |
| 54 | Irrigable area in these enterprises ... 1939 ... acres | 316,598 | ..... | 60 | 103 | 164,985 | ..... | 2,733 |
| 55 | Irrigated area in these enterprises ... 1939 ... acres | 165,291 | ..... | 16 | 69 | 116,659 | ..... | 2,230 |
| 56 | Area for which drains have been installed ... 1939 ... acres | 55,950 | ..... | 16 | 25 | 50,820 | ..... | 2,194 |
| 57 | Additional area needing drainage ... 1939 ... acres | 21,764 | ..... | 44 | 11 | 6,772 | ..... | 505 |

[a] Schedules called for "Number of farms," see explanation in text.
[1] Data for the intrastate tributaries of the Canadian River are not shown separately but are included in the Canadian 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 Arkansas and Louisiana]

| MISSISSIPPI RIVER (III)—Continued (Exclusive of the Missouri River) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arkansas River (III-A) | | | | | | | | | | | | | |
| Total | Direct (III-A) | | Two Butte and Bear Creeks (12) | Salt Fork Arkansas River (14) | Cimarron River (15) | Verdigris River (16) | Canadian River Total[1] | Canadian River Direct (18) | Canadian River North Canadian River (27) | Intrastate tributaries in Colorado | Intrastate tributaries in Kansas | |
| 11,569 | 7,484 | | 64 | 9 | 99 | 6 | 1,846 | 113 | 50 | 1,867 | 194 | 1 |
| 679,919 | 486,304 | | 3,603 | 512 | 9,155 | 24 | 61,210 | 3,621 | 1,065 | 106,291 | 12,820 | 2 |
| 608,792 | 444,111 | | 3,583 | 512 | 7,441 | 24 | 58,358 | 3,511 | 1,020 | 83,455 | 11,308 | 3 |
| 29,546 | 18,432 | | ..... | ..... | 582 | ..... | 1,349 | 46 | 32 | 7,893 | 1,290 | 4 |
| 41,581 | 23,751 | | 20 | ..... | 1,132 | ..... | 1,503 | 64 | 13 | 14,943 | 222 | 5 |
| 753,533 | 461,620 | | ..... | ..... | 4,200 | ..... | 69,450 | 2,145 | ..... | 201,747 | 15,793 | 6 |
| 851,150 | 525,103 | | ..... | ..... | 8,345 | ..... | 90,876 | 2,371 | ..... | 210,024 | 16,409 | 7 |
| -9.8 | 5.3 | | ..... | ..... | 118.0 | ..... | -11.9 | 68.8 | ..... | -47.3 | -18.8 | 8 |
| 1,030,597 | 695,621 | | 4,513 | 1,022 | 17,231 | 27 | 96,382 | 5,561 | 2,081 | 195,893 | 19,908 | 9 |
| 1,051,963 | 545,162 | | ..... | ..... | 10,980 | ..... | 116,344 | 2,762 | ..... | 354,258 | 24,495 | 10 |
| 1,344,646 | 641,783 | | ..... | ..... | 25,312 | ..... | 180,604 | 3,022 | ..... | 435,579 | 60,239 | 11 |
| 350,678 | 209,317 | | 910 | 510 | 8,076 | 3 | 35,172 | 1,940 | 1,016 | 89,902 | 7,088 | 12 |
| 298,430 | 83,542 | | ..... | ..... | 6,780 | ..... | 49,894 | 617 | ..... | 152,511 | 8,702 | 13 |
| 493,496 | 116,680 | | ..... | ..... | 16,967 | ..... | 89,928 | 651 | ..... | 225,555 | 43,830 | 14 |
| 933,312 | 640,488 | | 4,513 | 942 | 11,971 | 27 | 77,819 | 5,461 | 1,779 | 179,174 | 18,378 | 15 |
| 960,622 | 510,645 | | ..... | ..... | 10,795 | ..... | 109,619 | 2,762 | ..... | 305,887 | 22,953 | 16 |
| 1,009,921 | 564,120 | | ..... | ..... | 21,472 | ..... | 137,882 | 2,615 | ..... | 260,260 | 25,714 | 17 |
| -2.8 | 25.4 | | ..... | ..... | 10.9 | ..... | -29.0 | 97.7 | ..... | -41.4 | -19.9 | 18 |
| 253,393 | 154,184 | | 910 | 430 | 2,816 | 3 | 15,509 | 1,840 | 714 | 72,883 | 5,558 | 19 |
| 207,089 | 49,025 | | ..... | ..... | 6,595 | ..... | 40,169 | 517 | ..... | 104,140 | 7,160 | 20 |
| 158,771 | 39,017 | | ..... | ..... | 13,127 | ..... | 47,006 | 244 | ..... | 50,236 | 9,305 | 21 |
| 72.9 | 75.9 | | 79.8 | 54.4 | 76.5 | 88.9 | 78.7 | 66.3 | 59.9 | 59.3 | 69.8 | 22 |
| 78.4 | 90.4 | | ..... | ..... | 38.9 | ..... | 63.4 | 77.7 | ..... | 66.0 | 68.8 | 23 |
| 84.3 | 93.1 | | ..... | ..... | 38.9 | ..... | 65.9 | 90.7 | ..... | 80.7 | 63.8 | 24 |
| 26,691,327 | 20,123,546 | | 616,895 | 14,775 | 261,899 | 2,815 | 1,973,811 | 425,590 | 101,262 | 3,429,431 | 268,155 | 25 |
| 25,753,471 | 19,534,001 | | 616,895 | 14,475 | 258,607 | 2,740 | 1,879,695 | 424,894 | 101,114 | 3,178,985 | 268,073 | 26 |
| 937,856 | 589,545 | | ..... | 300 | 3,292 | 75 | 94,116 | 596 | 148 | 250,446 | 82 | 27 |
| 21,722,223 | 11,710,356 | | ..... | ..... | 203,310 | ..... | 1,917,560 | 51,395 | ..... | 7,019,119 | 835,028 | 28 |
| 30,241,390 | 15,161,972 | | ..... | ..... | 416,304 | ..... | 5,155,485 | 148,331 | ..... | 8,552,044 | 848,855 | 29 |
| 22.9 | 71.8 | | ..... | ..... | 28.8 | ..... | 2.9 | 728.1 | ..... | -51.1 | -67.9 | 30 |
| 28.60 | 31.42 | | 136.69 | 15.68 | 21.88 | 104.26 | 25.36 | 77.93 | 55.92 | 19.14 | 14.59 | 31 |
| 22.61 | 22.93 | | ..... | ..... | 18.83 | ..... | 17.49 | 18.61 | ..... | 22.95 | 36.38 | 32 |
| 29.94 | 26.88 | | ..... | ..... | 19.39 | ..... | 37.39 | 56.72 | ..... | 33.24 | 33.01 | 33 |
| 39.26 | 41.38 | | 171.22 | 28.86 | 28.51 | 117.29 | 32.25 | 117.53 | 95.08 | 32.26 | 20.92 | 34 |
| 27,038,278 | 20,291,510 | | 619,295 | 15,775 | 292,066 | 2,815 | 2,017,906 | 432,340 | 104,262 | 3,506,536 | 292,375 | 35 |
| 26.24 | 29.17 | | 137.22 | 15.44 | 16.95 | 104.26 | 20.94 | 77.75 | 50.10 | 17.90 | 14.69 | 36 |
| Primary Enterprises | Sup. Enterprises | Primary Enterprises | Sup. Enterprises | | | | | | | Primary Enterprises | Sup. Enterprises | | |
| 2,626 | 214 | 1,486 | 199 | 10 | 9 | 80 | 6 | 177 | 55 | 40 | 675 | 15 | 183 | 37 |
| 666,154 | 33,223 | 480,588 | 32,013 | 3,569 | 512 | 8,972 | 24 | 58,029 | 3,027 | 801 | 101,805 | 1,210 | 12,655 | 38 |
| 882,253 | 51,847 | 707,172 | 50,817 | 3,827 | 1,285 | 11,908 | 372 | 36,099 | 4,248 | 4,877 | 68,095 | 1,030 | 53,495 | 39 |
| 1.32 | 1.56 | 1.47 | 1.59 | 1.07 | 2.51 | 1.33 | 15.50 | 0.62 | 1.40 | 6.09 | 0.67 | 0.85 | 4.23 | 40 |
| 664,006 | 10,980 | 548,562 | 10,980 | 3,973 | ..... | 500 | ..... | 41,871 | 470 | ..... | 69,100 | ..... | ..... | 41 |
| 1.42 | 1.79 | 1.51 | 1.79 | 1.25 | ..... | 0.71 | ..... | 0.83 | 0.65 | ..... | 1.42 | ..... | ..... | 42 |
| 535,710 | 6,142 | 416,857 | 6,142 | 3,178 | ..... | 700 | ..... | 59,771 | 719 | ..... | 55,204 | ..... | ..... | 43 |
| 1.24 | 1.79 | 1.32 | 1.79 | 1.25 | ..... | 0.71 | ..... | 0.70 | 0.65 | ..... | 1.25 | ..... | ..... | 44 |
| 645,870 | 1,275 | 554,137 | 1,275 | 4,426 | ..... | ..... | ..... | 35,078 | ..... | ..... | 52,229 | ..... | ..... | 45 |
| 4,139,507 | ..... | 3,322,400 | ..... | 1,350 | ..... | ..... | ..... | 218,187 | ..... | ..... | 597,570 | ..... | ..... | 46 |
| 2,547 | 203 | 1,443 | 187 | 13 | 9 | 69 | 6 | 177 | 61 | 45 | 648 | 16 | 182 | 47 |
| 642,255 | 34,870 | 466,417 | 31,660 | 3,591 | 512 | 5,957 | 24 | 57,229 | 3,358 | 1,061 | 96,558 | 3,210 | 11,967 | 48 |
| 1,231,893 | 46,044 | 1,013,491 | 44,196 | 9,599 | 590 | 6,571 | 29 | 63,935 | 4,019 | 2,157 | 116,989 | 1,848 | 20,689 | 49 |
| 1.9 | 1.3 | 2.2 | 1.4 | 2.7 | 1.2 | 1.1 | 1.2 | 1.1 | 1.2 | 2.0 | 1.2 | 0.6 | 1.7 | 50 |
| 1.76 | 2.06 | 1.96 | 2.13 | 1.30 | 2.51 | 1.45 | 15.50 | 0.90 | 1.34 | 6.10 | 0.96 | 0.85 | 4.32 | 51 |
| 0.92 | 1.56 | 0.90 | 1.52 | 0.49 | 2.18 | 1.32 | 12.88 | 0.81 | 1.12 | 3.00 | 0.79 | 1.48 | 2.50 | 52 |
| 139 | ..... | 88 | ..... | ..... | 1 | 4 | ..... | 7 | 1 | 4 | 24 | ..... | 15 | 53 |
| 147,661 | ..... | 124,619 | ..... | ..... | (5) | 418 | ..... | 15,076 | (5) | 257 | 5,551 | ..... | 1,837 | 54 |
| 108,345 | ..... | 92,007 | ..... | ..... | (5) | 398 | ..... | 9,053 | (5) | 138 | 3,860 | ..... | 1,004 | 55 |
| 39,124 | ..... | 37,202 | ..... | ..... | (5) | 338 | ..... | 15 | ..... | 15 | 109 | ..... | 1,437 | 56 |
| 4,733 | ..... | 3,317 | ..... | ..... | (5) | ..... | ..... | 1,156 | (5) | 10 | 230 | ..... | 5 | 57 |

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

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | MISSISSIPPI RIVER (III)—Continued (Exclusive of the Missouri River) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Red River (III-B) | | | | Intrastate tributaries in Arkansas | |
| | | Total | Direct (III-B) | Washita River (1) | Black River (Ouachita River and Bartholomew Bayou) (5)+(10) | | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | |
| 1 | Irrigated units* ....1939...number.... | 1,504 | 1,484 | 17 | 3 | 977 | |
| 2 | Area irrigated ....1939...acres.... | 129,714 | 129,132 | 268 | 314 | 108,413 | |
| 3 | (a) Cropland harvested ....1939...acres.... | 124,028 | 123,499 | 215 | 314 | 105,998 | |
| 4 | (b) Crop failure ....1939...acres.... | 1,099 | 1,099 | ..... | ..... | 123 | |
| 5 | (c) Pasture ....1939...acres.... | 4,587 | 4,534 | 53 | ..... | 2,292 | |
| 6 | Area irrigated ....1929...acres.... | 39,398 | ..... | ..... | ..... | ..... | |
| 7 | 1919...acres.... | 7,191 | ..... | ..... | ..... | ..... | |
| 8 | Increase or decrease (-), 1929-1939 ....percent.... | 229.2 | ..... | ..... | ..... | ..... | |
| 9 | Irrigable area in enterprises ....1940...acres.... | 216,190 | 215,107 | 766 | 317 | 196,187 | |
| 10 | 1930...acres.... | 55,734 | ..... | ..... | ..... | ..... | |
| 11 | 1920[4]..acres.... | 23,446 | ..... | ..... | ..... | ..... | |
| 12 | Excess of irrigable area over the area irrigated ..1940...acres.... | 86,476 | 85,975 | 498 | 3 | 87,774 | |
| 13 | 1930...acres.... | 16,336 | ..... | ..... | ..... | ..... | |
| 14 | 1920[4]..acres.... | 16,255 | ..... | ..... | ..... | ..... | |
| 15 | Area works were capable of supplying with water ...1940...acres.... | 213,683 | 212,862 | 504 | 317 | 189,714 | |
| 16 | 1930...acres.... | 55,586 | ..... | ..... | ..... | ..... | |
| 17 | 1920...acres.... | 13,483 | ..... | ..... | ..... | ..... | |
| 18 | Increase or decrease (-), 1930-1940 ....percent.... | 284.4 | ..... | ..... | ..... | ..... | |
| 19 | Excess of area works were capable of supplying with water over area irrigated ....1940...acres.... | 83,969 | 83,730 | 236 | 3 | 81,301 | |
| 20 | 1930...acres.... | 16,188 | ..... | ..... | ..... | ..... | |
| 21 | 1920...acres.... | 6,292 | ..... | ..... | ..... | ..... | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water ....1939...percent.... | 60.7 | 60.7 | 53.2 | 99.1 | 57.1 | |
| 23 | 1929...percent.... | 70.9 | ..... | ..... | ..... | ..... | |
| 24 | 1919...percent.... | 53.3 | ..... | ..... | ..... | ..... | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | |
| 25 | Total investment in irrigation enterprises ....1940...dollars.... | 6,646,969 | 6,612,924 | 30,932 | 3,113 | 3,606,705 | |
| 26 | (a) Cost of irrigation works and equipment ....1940...dollars.... | 6,642,033 | 6,608,888 | 30,032 | 3,113 | 3,606,705 | |
| 27 | (b) Investment in water rights (reported) ....1940...dollars.... | 4,936 | 4,036 | 900 | ..... | ..... | |
| 28 | Total investment in irrigation enterprises ....1930...dollars.... | 5,208,934 | ..... | ..... | ..... | ..... | |
| 29 | 1920...dollars.... | 399,634 | ..... | ..... | ..... | ..... | |
| 30 | Increase or decrease (-), 1930-1940 ....percent.... | 27.6 | ..... | ..... | ..... | ..... | |
| 31 | Average investment based on area works were capable of supplying with water, per acre ....1940...dollars.... | 31.11 | 31.07 | 61.37 | 9.82 | 19.01 | |
| 32 | 1930...dollars.... | 93.71 | ..... | ..... | ..... | ..... | |
| 33 | 1920...dollars.... | 29.64 | ..... | ..... | ..... | ..... | |
| 34 | Average investment per acre irrigated ....1939...dollars.... | 51.24 | 51.21 | 115.42 | 9.91 | 33.27 | |
| 35 | Estimated final investment in existing enterprises ..1940...dollars.... | 6,671,191 | 6,635,571 | 32,507 | 3,113 | 3,629,690 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre ....1940...dollars.... | 30.86 | 30.85 | 42.44 | 9.82 | 18.50 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | | | | | Primary Enterprises | Supplemental Enterprises |
| 37 | Enterprises reporting maintenance and operation ...1939...number.... | 682 | 665 | 14 | 3 | 834 | 2 |
| 38 | Area irrigated in these enterprises ....1939...acres.... | 119,672 | 119,091 | 267 | 314 | 102,649 | (5) |
| 39 | Cost of maintenance and operation ....1939...dollars.... | 307,429 | 305,335 | 1,344 | 750 | 549,227 | (5) |
| 40 | Average cost, per acre irrigated ....1939...dollars.... | 2.57 | 2.56 | 5.03 | 2.39 | 5.35 | (5) |
| 41 | Total annual charges (reported)[6] [7] ....1939...dollars.... | 59,882 | 59,882 | ..... | ..... | 13,535 | ..... |
| 42 | Average annual charge per acre irrigated ....1939...dollars.... | 2.08 | 2.08 | ..... | ..... | 5.24 | ..... |
| 43 | Area against which charges were assessed ....1939...acres.... | 28,833 | 28,833 | ..... | ..... | 2,582 | ..... |
| 44 | Average annual charge per acre assessed ....1939...dollars.... | 2.08 | 2.08 | ..... | ..... | 5.24 | ..... |
| 45 | Total charges collected[6] ....1939...dollars.... | 250,490 | 250,490 | ..... | ..... | 2,175 | ..... |
| 46 | Indebtedness to December 31 (reported)[7] ....1939...dollars.... | 3,547,717 | 3,547,717 | ..... | ..... | ..... | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | |
| 47 | Enterprises reporting water delivered ....1939...number.... | 737 | 720 | 15 | 2 | 845 | 1 |
| 48 | Area irrigated by these enterprises ....1939...acres.... | 127,464 | 127,092 | 268 | (5) | 107,790 | (5) |
| 49 | Water delivered ....1939...acre-feet.. | 145,707 | 145,161 | 419 | (5) | 296,777 | (5) |
| 50 | Average water delivered per acre irrigated ....1939...acre-feet.. | 1.1 | 1.1 | 1.6 | (5) | 2.8 | (5) |
| 51 | Average cost of water per acre irrigated ....1939...dollars.... | 2.57 | 2.56 | 5.03 | (5) | 5.38 | (5) |
| 52 | Average cost of water per acre-foot delivered ..1939...dollars.... | 2.25 | 2.24 | 3.22 | (5) | 1.95 | (5) |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage ....1939...number.... | 15 | 9 | 5 | 1 | 54 | ..... |
| 54 | Irrigable area in these enterprises ....1939...acres.... | 1,587 | 1,172 | 205 | (5) | 13,004 | ..... |
| 55 | Irrigated area in these enterprises ....1939...acres.... | 587 | 338 | 39 | (5) | 7,497 | ..... |
| 56 | Area for which drains have been installed ....1939...acres.... | 1,274 | 972 | 92 | (5) | 8,228 | ..... |
| 57 | Additional area needing drainage ....1939...acres.... | 270 | 200 | 70 | ..... | 1,264 | ..... |

* Schedules called for "Number of farms," see explanation in text.
[1] Data for the intrastate tributaries of the Colorado River are not shown separately but are included in the Colorado River total.
[2] Data for the intrastate tributaries of the Brazos River are not shown separately but are included in the Brazos River total.
[3] Data for the intrastate tributaries of the Sabine River are not shown separately but are included in the Sabine River total.

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

and Arkansas and Louisiana]

| GULF OF MEXICO (IV) (Exclusive of the Rio Grande and Mississippi River) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Colorado River | | Brazos River | | | | Sabine River | | | | | | |
| Total (IV) | | Total[1] | Direct (5) | Total[2] | | Direct (7) | | Total[3] | Direct (11) | Intrastate tributaries in Texas | | Intrastate tributaries in Louisiana | | |
| 12,588 | | 927 | 846 | 1,549 | | 1,543 | | 463 | 214 | 2,652 | | 6,997 | | 1 |
| 902,392 | | 85,446 | 84,921 | 174,155 | | 174,084 | | 74,435 | 28,247 | 149,490 | | 418,866 | | 2 |
| 866,930 | | 83,084 | 82,612 | 168,696 | | 168,627 | | 74,425 | 28,237 | 126,296 | | 414,429 | | 3 |
| 3,436 | | 44 | 43 | 1,211 | | 1,210 | | ..... | ..... | 1,367 | | 814 | | 4 |
| 32,026 | | 2,318 | 2,266 | 4,248 | | 4,247 | | 10 | 10 | 21,827 | | 3,623 | | 5 |
| 662,958 | | 61,888 | ..... | 21,560 | | ..... | | 46,722 | ..... | 110,685 | | 422,103 | | 6 |
| 698,077 | | 71,278 | ..... | 7,535 | | ..... | | 90,757 | ..... | 106,929 | | 421,578 | | 7 |
| 36.1 | | 38.1 | ..... | 707.8 | | ..... | | 59.3 | ..... | 35.1 | | -0.8 | | 8 |
| 1,874,654 | | 272,828 | 272,004 | 302,835 | | 302,743 | | 188,912 | 41,537 | 356,842 | | 753,237 | | 9 |
| 1,536,404 | | 224,368 | ..... | 47,417 | | ..... | | 157,235 | ..... | 299,759 | | 807,625 | | 10 |
| 1,602,169 | | 277,268 | ..... | 22,896 | | ..... | | 195,118 | ..... | 305,954 | | 800,933 | | 11 |
| 972,262 | | 187,382 | 187,083 | 128,680 | | 128,659 | | 114,477 | 13,290 | 207,352 | | 334,371 | | 12 |
| 873,446 | | 162,480 | ..... | 25,857 | | ..... | | 110,513 | ..... | 189,074 | | 385,522 | | 13 |
| 904,092 | | 205,990 | ..... | 15,361 | | ..... | | 104,361 | ..... | 199,025 | | 379,355 | | 14 |
| 1,520,796 | | 176,991 | 176,172 | 286,829 | | 286,737 | | 111,432 | 41,537 | 224,740 | | 720,804 | | 15 |
| 1,221,997 | | 140,626 | ..... | 30,061 | | ..... | | 92,035 | ..... | 200,932 | | 758,343 | | 16 |
| 1,157,529 | | 125,666 | ..... | 19,560 | | ..... | | 123,358 | ..... | 208,281 | | 680,664 | | 17 |
| 24.5 | | 25.9 | ..... | 854.2 | | ..... | | 21.1 | ..... | 11.8 | | -5.0 | | 18 |
| 618,404 | | 91,545 | 91,251 | 112,674 | | 112,653 | | 36,997 | 13,290 | 75,250 | | 301,938 | | 19 |
| 559,039 | | 78,738 | ..... | 8,501 | | ..... | | 45,313 | ..... | 90,247 | | 336,240 | | 20 |
| 459,452 | | 54,388 | ..... | 12,025 | | ..... | | 32,601 | ..... | 101,352 | | 259,086 | | 21 |
| 59.3 | | 48.3 | 48.2 | 60.7 | | 60.7 | | 66.8 | 68.0 | 66.5 | | 58.1 | | 22 |
| 54.3 | | 44.0 | ..... | 71.7 | | ..... | | 50.8 | ..... | 55.1 | | 55.7 | | 23 |
| 60.3 | | 56.7 | ..... | 38.5 | | ..... | | 73.6 | ..... | 51.3 | | 61.9 | | 24 |
| 30,498,361 | | 2,783,786 | 2,729,498 | 3,801,148 | | 3,794,713 | | 4,099,609 | 1,160,042 | 8,944,844 | | 10,868,974 | | 25 |
| 30,342,685 | | 2,718,920 | 2,664,637 | 3,777,180 | | 3,770,745 | | 4,057,287 | 1,117,756 | 8,920,324 | | 10,868,974 | | 26 |
| 155,676 | | 64,866 | 64,861 | 23,968 | | 23,968 | | 42,322 | 42,286 | 24,520 | | ..... | | 27 |
| 28,578,193 | | 1,914,643 | ..... | 657,555 | | ..... | | 3,395,771 | ..... | 7,755,262 | | 14,854,962 | | 28 |
| 29,439,808 | | 3,560,916 | ..... | 569,543 | | ..... | | 2,270,705 | ..... | 9,634,534 | | 13,404,110 | | 29 |
| 6.7 | | 45.4 | ..... | 478.1 | | ..... | | 20.7 | ..... | 15.3 | | -26.8 | | 30 |
| 20.05 | | 15.73 | 15.49 | 13.25 | | 13.23 | | 36.79 | 27.93 | 39.80 | | 15.08 | | 31 |
| 23.39 | | 13.62 | ..... | 21.87 | | ..... | | 36.90 | ..... | 38.60 | | 19.59 | | 32 |
| 25.43 | | 28.34 | ..... | 29.12 | | ..... | | 18.41 | ..... | 46.26 | | 19.69 | | 33 |
| 33.80 | | 32.58 | 32.14 | 21.83 | | 21.80 | | 55.08 | 41.07 | 59.84 | | 25.95 | | 34 |
| 30,696,730 | | 2,796,666 | 2,739,828 | 3,860,885 | | 3,854,450 | | 4,100,109 | 1,160,042 | 8,975,934 | | 10,963,136 | | 35 |
| 16.37 | | 10.25 | 10.07 | 12.75 | | 12.73 | | 21.70 | 27.93 | 25.15 | | 14.55 | | 36 |
| Primary Enterprises | Sup. | | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | |
| 4,407 | 16 | 411 | 347 | 1,080 | 2 | 1,075 | 2 | 45 | 13 | 798 | 2 | 2,073 | 12 | 37 |
| 863,270 | 11,582 | 82,783 | 82,300 | 157,278 | (5) | 157,211 | (5) | 74,395 | 28,207 | 139,388 | (5) | 409,426 | 2,434 | 38 |
| 3,568,374 | 7,653 | 488,622 | 486,123 | 588,998 | (5) | 588,701 | (5) | 309,139 | 103,899 | 693,205 | (5) | 1,488,410 | 3,683 | 39 |
| 4.13 | 0.66 | 5.90 | 5.91 | 3.74 | (5) | 3.74 | (5) | 4.16 | 3.68 | 4.97 | (5) | 3.64 | 1.51 | 40 |
| 3,157,777 | 12,905 | 572,689 | 572,689 | 416,370 | ..... | 416,370 | ..... | 433,276 | 144,931 | 548,409 | 12,905 | 1,187,033 | ..... | 41 |
| 6.60 | 1.61 | 8.27 | 8.27 | 9.47 | ..... | 9.47 | ..... | 6.78 | 5.38 | 6.89 | 1.61 | 5.35 | ..... | 42 |
| 498,277 | 14,500 | 69,253 | 69,253 | 43,957 | ..... | 43,957 | ..... | 63,861 | 26,921 | 92,528 | 14,500 | 228,678 | ..... | 43 |
| 6.34 | 0.89 | 8.27 | 8.27 | 9.47 | ..... | 9.47 | ..... | 6.78 | 5.38 | 5.93 | 0.89 | 5.19 | ..... | 44 |
| 2,104,511 | 13,285 | 394,202 | 394,202 | 362,440 | 300 | 362,440 | 300 | 465,378 | 157,973 | 426,473 | 12,985 | 456,018 | ..... | 45 |
| 7,222,993 | 210,500 | 688,162 | 688,162 | 586,947 | 70,000 | 586,947 | 70,000 | 2,241,361 | 575,080 | 1,049,085 | 140,500 | 2,657,438 | ..... | 46 |
| 4,982 | 19 | 438 | 359 | 1,255 | 2 | 1,252 | 2 | 42 | 12 | 926 | 2 | 2,321 | 15 | 47 |
| 816,018 | 11,727 | 81,874 | 81,349 | 172,594 | (5) | 172,575 | (5) | 57,968 | 11,786 | 147,839 | (5) | 355,743 | 2,579 | 48 |
| 2,185,426 | 21,687 | 365,501 | 364,664 | 375,598 | (5) | 375,558 | (5) | 224,629 | 31,533 | 380,743 | (5) | 838,955 | 2,116 | 49 |
| 2.7 | 1.8 | 4.5 | 4.5 | 2.2 | (5) | 2.2 | (5) | 3.9 | 2.7 | 2.6 | (5) | 2.4 | 0.8 | 50 |
| 5.14 | 1.68 | 7.67 | 7.68 | 4.76 | (5) | 4.76 | (5) | 6.54 | 6.46 | 5.61 | (5) | 4.32 | 1.51 | 51 |
| 1.92 | 0.91 | 1.72 | 1.71 | 2.19 | (5) | 2.19 | (5) | 1.69 | 2.41 | 2.18 | (5) | 1.83 | 1.84 | 52 |
| 676 | ..... | 7 | 7 | 21 | ..... | 19 | ..... | 3 | ..... | 27 | ..... | 618 | ..... | 53 |
| 413,034 | ..... | 491 | 491 | 42,417 | ..... | 42,389 | ..... | 1,410 | ..... | 157,291 | ..... | 211,425 | ..... | 54 |
| 160,158 | ..... | 439 | 439 | 22,038 | ..... | 22,030 | ..... | 1,032 | ..... | 37,808 | ..... | 98,841 | ..... | 55 |
| 286,975 | ..... | 165 | 165 | 22,102 | ..... | 22,090 | ..... | 1,206 | ..... | 91,098 | ..... | 172,404 | ..... | 56 |
| 52,261 | ..... | ..... | ..... | 300 | ..... | 300 | ..... | ..... | ..... | 40,087 | ..... | 11,874 | ..... | 57 |

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

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | RIO GRANDE (V) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Total | | Direct | | Upper Rio Grande (V-A) Total | |
| | | (V) | | (V-A) + (V-B) | | | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | |
| 1 | Irrigated units* ... 1939 ... number | 54,887 | | 38,669 | | 27,570 | |
| 2 | Area irrigated ... 1939 ... acres | 1,521,578 | | 930,310 | | 903,631 | |
| 3 | (a) Cropland harvested ... 1939 ... acres | 1,322,174 | | 827,945 | | 759,121 | |
| 4 | (b) Crop failure ... 1939 ... acres | 38,950 | | 12,473 | | 27,586 | |
| 5 | (c) Pasture ... 1939 ... acres | 160,454 | | 89,892 | | 116,924 | |
| 6 | Area irrigated ... 1929 ... acres | 1,564,725 | | 951,740 | | 898,277 | |
| 7 | 1919 ... acres | 1,312,855 | | 684,718 | | 878,122 | |
| 8 | Increase or decrease (-), 1929-1939 ... percent | -2.8 | | -2.3 | | 0.6 | |
| 9 | Irrigable area in enterprises ... 1940 ... acres | 2,378,063 | | 1,490,687 | | 1,286,675 | |
| 10 | 1930 ... acres | 2,177,664 | | 1,198,512 | | 1,216,526 | |
| 11 | 1920[2] ... acres | 2,628,153 | | 1,386,144 | | 1,519,045 | |
| 12 | Excess of irrigable area over the area irrigated ... 1940 ... acres | 856,485 | | 560,377 | | 383,044 | |
| 13 | 1930 ... acres | 612,939 | | 246,772 | | 318,249 | |
| 14 | 1920[2] ... acres | 1,315,298 | | 701,426 | | 640,923 | |
| 15 | Area works were capable of supplying with water ... 1940 ... acres | 2,177,705 | | 1,393,695 | | 1,180,567 | |
| 16 | 1930 ... acres | 1,914,781 | | 1,113,177 | | 1,080,646 | |
| 17 | 1920 ... acres | 1,914,285 | | 1,099,365 | | 1,072,125 | |
| 18 | Increase or decrease (-), 1930-1940 ... percent | 13.7 | | 25.2 | | 9.2 | |
| 19 | Excess of area works were capable of supplying with water over area irrigated ... 1940 ... acres | 656,127 | | 463,385 | | 276,936 | |
| 20 | 1930 ... acres | 350,056 | | 161,437 | | 182,369 | |
| 21 | 1920 ... acres | 601,430 | | 414,647 | | 194,003 | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water ... 1939 ... percent | 69.9 | | 66.8 | | 76.5 | |
| 23 | 1929 ... percent | 81.7 | | 85.5 | | 83.1 | |
| 24 | 1919 ... percent | 68.6 | | 62.3 | | 81.9 | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | |
| 25 | Total investment in irrigation enterprises ... 1940 ... dollars | 80,563,998 | | 59,477,527 | | 30,123,362 | |
| 26 | (a) Cost of irrigation works and equipment ... 1940 ... dollars | 78,900,146 | | 58,541,031 | | 28,912,436 | |
| 27 | (b) Investment in water rights (reported) ... 1940 ... dollars | 1,663,852 | | 936,496 | | 1,210,926 | |
| 28 | Total investment in irrigation enterprises ... 1930 ... dollars | 53,748,608 | | 37,325,421 | | 18,081,167 | |
| 29 | 1920 ... dollars | 34,824,111 | | 21,340,536 | | 10,634,888 | |
| 30 | Increase or decrease (-), 1930-1940 ... percent | 49.9 | | 59.3 | | 66.6 | |
| 31 | Average investment based on area works were capable of supplying with water, per acre ... 1940 ... dollars | 36.99 | | 42.68 | | 25.52 | |
| 32 | 1930 ... dollars | 28.07 | | 33.53 | | 16.73 | |
| 33 | 1920 ... dollars | 18.19 | | 19.41 | | 9.92 | |
| 34 | Average investment per acre irrigated ... 1939 ... dollars | 52.95 | | 63.93 | | 33.34 | |
| 35 | Estimated final investment in existing enterprises ... 1940 ... dollars | 83,966,088 | | 61,343,041 | | 32,449,137 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre ... 1940 ... dollars | 35.31 | | 41.15 | | 25.22 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary | Supplemental | Primary | Supplemental | Primary | Supplemental |
| | | Enterprises | | Enterprises | | Enterprises | |
| 37 | Enterprises reporting maintenance and operation ... 1939 ... number | 2,508 | 247 | 895 | 192 | 1,231 | 204 |
| 38 | Area irrigated in these enterprises ... 1939 ... acres | 1,441,916 | 199,098 | 915,829 | 132,290 | 841,998 | 152,688 |
| 39 | Cost of maintenance and operation ... 1939 ... dollars | 2,676,138 | 115,190 | 2,063,240 | 92,679 | 748,544 | 78,645 |
| 40 | Average cost, per acre irrigated ... 1939 ... dollars | 1.86 | 0.58 | 2.25 | 0.70 | 0.89 | 0.52 |
| 41 | Total annual charges (reported)[4 5] ... 1939 ... dollars | 2,971,774 | 238,315 | 2,542,033 | 29,087 | 965,372 | 20,305 |
| 42 | Average annual charge per acre irrigated ... 1939 ... dollars | 2.50 | 1.53 | 3.01 | 0.25 | 1.36 | 0.18 |
| 43 | Area against which charges were assessed ... 1939 ... acres | 1,780,422 | 266,865 | 1,243,994 | 117,781 | 908,666 | 115,715 |
| 44 | Average annual charge per acre assessed ... 1939 ... dollars | 1.67 | 0.89 | 2.04 | 0.25 | 1.06 | 0.18 |
| 45 | Total charges collected[4] ... 1939 ... dollars | 2,968,852 | 62,440 | 2,753,493 | 32,621 | 1,066,628 | 17,225 |
| 46 | Indebtedness to December 31 (reported)[6] ... 1939 ... dollars | 45,245,240 | 1,449,874 | 39,378,779 | 268,150 | 15,031,611 | 318,250 |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | |
| 47 | Enterprises reporting water delivered ... 1939 ... number | 2,524 | 272 | 914 | 215 | 1,273 | 226 |
| 48 | Area irrigated by these enterprises ... 1939 ... acres | 1,412,046 | 150,958 | 895,810 | 131,584 | 820,555 | 132,910 |
| 49 | Water delivered ... 1939 ... acre-feet | 3,034,957 | 79,624 | 1,929,971 | 64,550 | 1,670,533 | 59,935 |
| 50 | Average water delivered per acre irrigated ... 1939 ... acre-feet | 2.1 | 0.5 | 2.2 | 0.5 | 2.0 | 0.5 |
| 51 | Average cost of water per acre irrigated ... 1939 ... dollars | 2.48 | 0.65 | 3.00 | 0.65 | 1.33 | 0.56 |
| 52 | Average cost of water per acre-foot delivered ... 1939 ... dollars | 1.16 | 1.24 | 1.39 | 1.32 | 0.66 | 1.25 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage ... 1939 ... number | 183 | ..... | 41 | ..... | 45 | ..... |
| 54 | Irrigable area in these enterprises ... 1939 ... acres | 1,121,694 | ..... | 871,515 | ..... | 398,819 | ..... |
| 55 | Irrigated area in these enterprises ... 1939 ... acres | 639,928 | ..... | 529,668 | ..... | 248,931 | ..... |
| 56 | Area for which drains have been installed ... 1939 ... acres | 721,017 | ..... | 682,118 | ..... | 248,218 | ..... |
| 57 | Additional area needing drainage ... 1939 ... acres | 86,260 | ..... | 48,702 | ..... | 18,444 | ..... |

*Schedules called for "Number of farms," see explanation in text.
[1] Includes San Antonio River Drainage Basin in New Mexico.
[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 Arkansas and Louisiana]

| RIO GRANDE (V)—Continued | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Upper Rio Grande (V-A)—Continued | | | | | | | | | | | | | | | | | |
| Direct (V-A) | Conejos River | | | | | Costilla Creek (4) | Intrastate tributaries in Colorado | | Intrastate tributaries in New Mexico | Independent basins in the Upper Rio Grande | | | | | | | |
| | Total[1] | | Direct (3) | | | | | | | Total | | Sacramento River and Salt Lakes (25) | Intrastate basins in Colorado | | Intrastate basins in New Mexico | | |
| 15,357 | 1,040 | | 988 | | | 920 | 506 | | 8,918 | 829 | | 4 | 184 | | 641 | | 1 |
| 529,905 | 90,145 | | 89,382 | | | 35,967 | 71,167 | | 86,740 | 89,707 | | 31 | 71,571 | | 18,105 | | 2 |
| 462,215 | 69,185 | | 68,483 | | | 32,407 | 53,443 | | 72,420 | 69,451 | | 31 | 53,474 | | 15,946 | | 3 |
| 8,140 | 4,030 | | 4,007 | | | 241 | 4,281 | | 9,409 | 1,485 | | ..... | 257 | | 1,228 | | 4 |
| 59,550 | 16,930 | | 16,892 | | | 3,319 | 13,443 | | 4,911 | 18,771 | | ..... | 17,840 | | 931 | | 5 |
| 492,183 | 80,918 | | ..... | | | 4,003 | 114,155 | | 111,206 | 95,812 | | ..... | 76,249 | | 13,377 | | 6 |
| 430,532 | 88,676 | | ..... | | | 4,417 | 104,199 | | 141,945 | 108,353 | | ..... | 89,361 | | 18,902 | | 7 |
| 7.7 | 11.4 | | ..... | | | 798.5 | -37.7 | | -22.0 | -6.4 | | ..... | -6.1 | | 35.3 | | 8 |
| 749,196 | 116,279 | | 115,486 | | | 51,421 | 131,717 | | 122,891 | 115,171 | | 38 | 86,179 | | 28,954 | | 9 |
| 577,847 | 112,313 | | ..... | | | 10,112 | 210,709 | | 196,320 | 109,225 | | ..... | 87,255 | | 14,841 | | 10 |
| 680,874 | 115,887 | | ..... | | | 7,385 | 222,324 | | 241,231 | 251,344 | | ..... | 217,318 | | 33,936 | | 11 |
| 219,291 | 26,134 | | 26,104 | | | 15,454 | 60,550 | | 36,151 | 25,464 | | 7 | 14,608 | | 10,849 | | 12 |
| 85,664 | 31,395 | | ..... | | | 6,109 | 96,554 | | 85,114 | 13,413 | | ..... | 11,006 | | 1,464 | | 13 |
| 250,342 | 27,211 | | ..... | | | 2,968 | 118,125 | | 99,286 | 142,991 | | ..... | 127,957 | | 15,034 | | 14 |
| 710,991 | 112,626 | | 111,833 | | | 50,771 | 83,631 | | 113,766 | 108,782 | | 38 | 83,089 | | 25,655 | | 15 |
| 538,360 | 99,808 | | ..... | | | 7,606 | 194,514 | | 132,772 | 107,586 | | ..... | 86,006 | | 14,610 | | 16 |
| 543,604 | 95,680 | | ..... | | | 4,803 | 123,118 | | 170,396 | 134,524 | | ..... | 107,672 | | 26,762 | | 17 |
| 32.1 | 12.8 | | ..... | | | 567.5 | -57.0 | | -14.3 | 1.1 | | ..... | -3.4 | | 75.6 | | 18 |
| 181,086 | 22,481 | | 22,451 | | | 14,804 | 12,464 | | 27,026 | 19,075 | | 7 | 11,518 | | 7,550 | | 19 |
| 46,177 | 18,890 | | ..... | | | 3,603 | 80,359 | | 21,566 | 11,774 | | ..... | 9,757 | | 1,233 | | 20 |
| 113,072 | 7,004 | | ..... | | | 386 | 18,919 | | 28,451 | 26,171 | | ..... | 18,311 | | 7,860 | | 21 |
| 74.5 | 80.0 | | 79.9 | | | 70.8 | 85.1 | | 76.2 | 82.5 | | 81.6 | 86.1 | | 70.6 | | 22 |
| 91.4 | 81.1 | | ..... | | | 52.6 | 58.7 | | 83.8 | 89.1 | | ..... | 88.7 | | 91.6 | | 23 |
| 79.2 | 92.7 | | ..... | | | 92.0 | 84.6 | | 83.3 | 80.5 | | ..... | 83.0 | | 70.6 | | 24 |
| 21,892,541 | 1,347,703 | | 1,338,053 | | | 1,886,586 | 1,761,615 | | 2,220,425 | 1,014,492 | | 850 | 178,709 | | 834,933 | | 25 |
| 21,348,037 | 1,138,178 | | 1,128,898 | | | 1,823,385 | 1,696,095 | | 2,160,424 | 746,317 | | 850 | 118,802 | | 626,665 | | 26 |
| 544,504 | 209,525 | | 209,155 | | | 63,201 | 65,520 | | 60,001 | 268,175 | | ..... | 59,907 | | 208,268 | | 27 |
| 10,257,372 | 839,676 | | ..... | | | 910,360 | 3,573,739 | | 1,730,626 | 769,394 | | ..... | 132,090 | | 337,441 | | 28 |
| 5,132,478 | 564,739 | | ..... | | | 11,471 | 2,446,808 | | 1,540,861 | 938,531 | | ..... | 287,360 | | 649,686 | | 29 |
| 113.4 | 60.5 | | ..... | | | 107.2 | -50.7 | | 28.3 | 31.9 | | ..... | 35.3 | | 147.4 | | 30 |
| 30.79 | 11.97 | | 11.96 | | | 37.16 | 21.06 | | 19.52 | 9.33 | | 22.37 | 2.15 | | 32.54 | | 31 |
| 19.05 | 8.41 | | ..... | | | 119.69 | 18.37 | | 13.03 | 7.15 | | ..... | 1.54 | | 23.10 | | 32 |
| 9.44 | 5.90 | | ..... | | | 2.39 | 19.87 | | 9.04 | 6.98 | | ..... | 2.67 | | 24.28 | | 33 |
| 41.31 | 14.95 | | 14.97 | | | 52.45 | 24.75 | | 25.60 | 11.31 | | 27.42 | 2.50 | | 46.12 | | 34 |
| 23,043,479 | 1,351,053 | | 1,341,403 | | | 1,887,836 | 1,763,890 | | 3,304,805 | 1,098,074 | | 950 | 180,054 | | 917,070 | | 35 |
| 30.76 | 11.62 | | 11.62 | | | 36.71 | 13.39 | | 26.89 | 9.53 | | 25.00 | 2.09 | | 31.67 | | 36 |
| Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | | Primary Enterprises | Sup. | | Primary Enterprises | Sup. | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | |
| 478 | 183 | 79 | 7 | 69 | 7 | 40 | 74 | 2 | 268 | 292 | 12 | 1 | 94 | 4 | 197 | 8 | 37 |
| 520,951 | 118,763 | 88,136 | 22,477 | 87,373 | 22,477 | 34,604 | 68,276 | (3) | 73,662 | 56,369 | 3,833 | (3) | 39,518 | 3,735 | 16,844 | 98 | 38 |
| 553,311 | 76,942 | 17,059 | 233 | 16,633 | 233 | 26,059 | 19,864 | (3) | 49,378 | 82,673 | 526 | (3) | 6,549 | 265 | 76,224 | 261 | 39 |
| 1.06 | 0.65 | 0.19 | 0.01 | 0.19 | 0.01 | 0.75 | 0.29 | (3) | 0.67 | 1.47 | 0.14 | (3) | 0.17 | 0.07 | 4.53 | 2.66 | 40 |
| 750,220 | 15,160 | 22,492 | 175 | 22,357 | 175 | 42,835 | 70,368 | 4,970 | 72,372 | 7,085 | ..... | ..... | 600 | ..... | 6,485 | ..... | 41 |
| 1.58 | 0.14 | 0.30 | 0.07 | 0.30 | 0.07 | 1.33 | 1.42 | 0.65 | 0.99 | 1.19 | ..... | ..... | 1.00 | ..... | 1.21 | ..... | 42 |
| 597,132 | 105,100 | 76,100 | 2,500 | 75,528 | 2,500 | 43,560 | 101,850 | 8,115 | 84,077 | 5,947 | ..... | ..... | 600 | ..... | 5,347 | ..... | 43 |
| 1.26 | 0.14 | 0.30 | 0.07 | 0.30 | 0.07 | 0.98 | 0.69 | 0.61 | 0.86 | 1.19 | ..... | ..... | 1.00 | ..... | 1.21 | ..... | 44 |
| 946,751 | 11,875 | 16,136 | 552 | 16,048 | 552 | 28,908 | 17,869 | 4,798 | 38,824 | 18,140 | ..... | ..... | 600 | ..... | 17,540 | ..... | 45 |
| 13,331,328 | 268,150 | 16,700 | 100 | 16,700 | 100 | 175,186 | 729,116 | 50,000 | 777,648 | 1,633 | ..... | ..... | ..... | ..... | 1,633 | ..... | 46 |
| 513 | 203 | 68 | 4 | 64 | 4 | 44 | 83 | 2 | 206 | 359 | 17 | 1 | 153 | 8 | 205 | 9 | 47 |
| 511,944 | 117,925 | 83,510 | 3,477 | 82,937 | 3,477 | 35,061 | 69,749 | (3) | 52,365 | 67,926 | 3,893 | (3) | 50,807 | 3,809 | 17,099 | 84 | 48 |
| 1,215,947 | 51,909 | 144,236 | 3,678 | 142,424 | 3,678 | 64,565 | 92,305 | (3) | 68,628 | 84,852 | 1,448 | (3) | 46,142 | 1,270 | 38,610 | 178 | 49 |
| 2.4 | 0.4 | 1.7 | 1.1 | 1.7 | 1.1 | 1.8 | 1.3 | (3) | 1.3 | 1.2 | 0.4 | (3) | 0.9 | 0.3 | 2.3 | 2.1 | 50 |
| 1.55 | 0.59 | 0.29 | 0.07 | 0.29 | 0.07 | 1.25 | 1.11 | (3) | 1.11 | 1.47 | 0.13 | ..... | 0.16 | 0.07 | 4.58 | 3.38 | 51 |
| 0.65 | 1.33 | 0.17 | 0.06 | 0.17 | 0.06 | 0.68 | 0.84 | (3) | 0.85 | 1.18 | 0.36 | ..... | 0.18 | 0.21 | 2.03 | 1.59 | 52 |
| 18 | ..... | 8 | ..... | 2 | ..... | ..... | 4 | ..... | 10 | 5 | ..... | ..... | ..... | ..... | 5 | ..... | 53 |
| 323,407 | ..... | 6,338 | ..... | (3) | ..... | ..... | 60,250 | ..... | 8,100 | 724 | ..... | ..... | ..... | ..... | 724 | ..... | 54 |
| 222,523 | ..... | 4,745 | ..... | (3) | ..... | ..... | 13,632 | ..... | 7,400 | 631 | ..... | ..... | ..... | ..... | 631 | ..... | 55 |
| 243,541 | ..... | 696 | ..... | (3) | ..... | ..... | 3,800 | ..... | 158 | 23 | ..... | ..... | ..... | ..... | 23 | ..... | 56 |
| 17,345 | ..... | 2 | ..... | ..... | ..... | ..... | 70 | ..... | 897 | 130 | ..... | ..... | ..... | ..... | 130 | ..... | 57 |

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

| | ITEM (For definitions and explanations, see text. Major-basin 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) | RIO GRANDE (V)—Continued | | | | | |
|---|---|---|---|---|---|---|---|
| | | Lower Rio Grande (V-B) | | | | Pecos River | |
| | | Total | | Direct (V-B) | | Total | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | |
| 1 | Irrigated units*.....1939...number..... | 27,317 | | 23,312 | | 4,005 | |
| 2 | Area irrigated.....1939...acres..... | 617,947 | | 400,405 | | 217,542 | |
| 3 | (a) Cropland harvested.....1939...acres..... | 563,053 | | 365,730 | | 197,323 | |
| 4 | (b) Crop failure.....1939...acres..... | 11,364 | | 4,333 | | 7,031 | |
| 5 | (c) Pasture.....1939...acres..... | 43,530 | | 30,342 | | 13,188 | |
| 6 | Area irrigated.....1929...acres..... | 666,448 | | 459,557 | | 175,798 | |
| 7 | 1919...acres..... | 434,733 | | 254,186 | | 176,458 | |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | -7.3 | | -12.9 | | 23.7 | |
| 9 | Irrigable area in enterprises.....1940...acres..... | 1,091,388 | | 741,491 | | 349,897 | |
| 10 | 1930...acres..... | 961,138 | | 620,665 | | 287,164 | |
| 11 | 1920[2]..acres..... | 1,109,108 | | 705,270 | | 397,443 | |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 473,441 | | 341,086 | | 132,355 | |
| 13 | 1930...acres..... | 294,690 | | 161,108 | | 111,366 | |
| 14 | 1920[2]..acres..... | 674,375 | | 451,084 | | 220,985 | |
| 15 | Area works were capable of supplying with water...1940...acres..... | 997,138 | | 682,704 | | 314,434 | |
| 16 | 1930...acres..... | 834,135 | | 574,817 | | 223,642 | |
| 17 | 1920...acres..... | 842,160 | | 555,761 | | 281,150 | |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | 19.5 | | 18.8 | | 40.6 | |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 379,191 | | 282,299 | | 96,892 | |
| 20 | 1930...acres..... | 167,687 | | 115,260 | | 47,844 | |
| 21 | 1920...acres..... | 407,427 | | 301,575 | | 104,692 | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 62.0 | | 58.6 | | 69.2 | |
| 23 | 1929...percent.... | 79.9 | | 79.9 | | 78.6 | |
| 24 | 1919...percent.... | 51.6 | | 45.7 | | 62.8 | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 50,440,636 | | 37,584,986 | | 12,855,650 | |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 49,987,710 | | 37,192,994 | | 12,794,716 | |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 452,926 | | 391,992 | | 60,934 | |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | 35,667,441 | | 27,068,049 | | 7,220,317 | |
| 29 | 1920...dollars.... | 24,189,223 | | 16,208,058 | | 7,483,049 | |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | 41.4 | | 38.9 | | 78.0 | |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 50.59 | | 55.05 | | 40.89 | |
| 32 | 1930...dollars.... | 42.76 | | 47.09 | | 32.29 | |
| 33 | 1920...dollars.... | 28.72 | | 29.16 | | 26.62 | |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 81.63 | | 93.87 | | 59.10 | |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 51,516,951 | | 38,299,562 | | 13,217,389 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 47.20 | | 51.65 | | 37.78 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary | Supplemental | Primary | Supplemental | Primary | Supplemental |
| | | Enterprises | | Enterprises | | Enterprises | |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 1,277 | 43 | 417 | 9 | 860 | 34 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 599,918 | 46,410 | 394,878 | 13,527 | 205,040 | 32,883 |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 1,927,594 | 36,545 | 1,509,929 | 15,737 | 417,665 | 20,808 |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 3.21 | 0.79 | 3.82 | 1.16 | 2.04 | 0.63 |
| 41 | Total annual charges (reported)[4 5].....1939...dollars.... | 2,006,402 | 218,010 | 1,791,813 | 13,927 | 214,589 | 204,083 |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 4.22 | 5.29 | 4.85 | 1.10 | 2.02 | 7.16 |
| 43 | Area against which charges were assessed.....1939...acres..... | 871,756 | 151,150 | 646,862 | 12,681 | 224,894 | 138,469 |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 2.30 | 1.44 | 2.77 | 1.10 | 0.95 | 1.47 |
| 45 | Total charges collected[4].....1939...dollars.... | 1,902,224 | 45,215 | 1,806,742 | 20,746 | 95,482 | 24,469 |
| 46 | Indebtedness to December 31 (reported)[5].....1939...dollars.... | 30,213,629 | 1,131,624 | 26,047,451 | ..... | 4,166,178 | 1,131,624 |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 1,251 | 46 | 401 | 12 | 850 | 34 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 591,491 | 18,048 | 383,866 | 13,659 | 207,625 | 4,389 |
| 49 | Water delivered.....1939...acre-feet.. | 1,364,424 | 19,689 | 714,024 | 12,641 | 650,400 | 7,048 |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 2.3 | 1.1 | 1.9 | 0.9 | 3.1 | 1.6 |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 4.05 | 1.32 | 4.90 | 1.16 | 2.41 | 1.80 |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 1.75 | 1.21 | 2.63 | 1.26 | 0.77 | 1.12 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 138 | ..... | 23 | ..... | 115 | ..... |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 722,875 | ..... | 548,108 | ..... | 174,767 | ..... |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 390,997 | ..... | 307,145 | ..... | 83,852 | ..... |
| 56 | Area for which drains have been installed.....1939...acres..... | 472,799 | ..... | 438,577 | ..... | 34,222 | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 67,816 | ..... | 31,357 | ..... | 36,459 | ..... |

* Schedules called for "Number of farms," see explanation in text.
[1] Data for the intrastate tributaries of the Dolores River are not shown separately but are included in the Dolores 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 Arkansas and Louisiana]

| RIO GRANDE (V)—Continued | | | | COLORADO RIVER (VI) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lower Rio Grande (V-B)—Continued | | | | | | | | Upper Colorado River (VI-A) | | | | | | | | |
| Pecos River—Continued | | | | | | | | | | | | Dolores River | | | | |
| Direct (1) | Intrastate tributaries in New Mexico | | | Total (VI) | | Direct (VI-A) + (VI-B) | | Total | | Direct (VI-A) | | Total[1] | | Direct (20) | | |
| 2,984 | 1,021 | | | 48,433 | | 5,417 | | 24,892 | | 3,174 | | 749 | | 268 | | 1 |
| 174,104 | 43,438 | | | 2,638,120 | | 231,984 | | 1,464,271 | | 137,982 | | 51,698 | | 14,130 | | 2 |
| 156,440 | 40,883 | | | 2,240,581 | | 216,456 | | 1,148,637 | | 123,080 | | 42,211 | | 10,976 | | 3 |
| 6,024 | 1,007 | | | 36,790 | | 1,706 | | 29,097 | | 1,662 | | 362 | | 267 | | 4 |
| 11,640 | 1,548 | | | 360,749 | | 13,822 | | 286,537 | | 13,240 | | 9,125 | | 2,887 | | 5 |
| 92,185 | 83,613 | | | 2,537,124 | | 585,766 | | ..... | | 66,141 | | 80,436 | | ..... | | 6 |
| 119,848 | 56,610 | | | 2,326,690 | | 577,408 | | ..... | | ..... | | 74,916 | | ..... | | 7 |
| 88.9 | -48.0 | | | 4.0 | | -60.4 | | ..... | | 108.6 | | -35.7 | | ..... | | 8 |
| 292,895 | 57,002 | | | 4,017,757 | | 487,658 | | 2,157,752 | | 203,401 | | 138,414 | | 37,726 | | 9 |
| 190,055 | 97,109 | | | 4,435,529 | | 1,449,556 | | ..... | | 126,437 | | 159,796 | | ..... | | 10 |
| 274,243 | 123,200 | | | 4,102,096 | | 878,363 | | ..... | | ..... | | 180,611 | | ..... | | 11 |
| 118,791 | 13,564 | | | 1,379,637 | | 255,674 | | 693,481 | | 65,419 | | 86,716 | | 23,596 | | 12 |
| 97,870 | 13,496 | | | 1,898,405 | | 863,790 | | ..... | | 60,296 | | 79,360 | | ..... | | 13 |
| 154,395 | 66,590 | | | 1,775,406 | | 300,955 | | ..... | | ..... | | 105,695 | | ..... | | 14 |
| 262,154 | 52,280 | | | 3,367,744 | | 340,982 | | 1,808,055 | | 181,420 | | 68,933 | | 19,527 | | 15 |
| 128,325 | 95,317 | | | 3,335,914 | | 770,032 | | ..... | | 97,915 | | 106,457 | | ..... | | 16 |
| 198,286 | 82,864 | | | 3,009,219 | | 671,284 | | ..... | | ..... | | 84,973 | | ..... | | 17 |
| 104.3 | -45.2 | | | 1.0 | | -55.7 | | ..... | | 85.3 | | -35.2 | | ..... | | 18 |
| 88,050 | 8,842 | | | 729,624 | | 108,998 | | 343,784 | | 43,438 | | 17,235 | | 5,397 | | 19 |
| 36,140 | 11,704 | | | 798,790 | | 184,266 | | ..... | | 31,774 | | 26,021 | | ..... | | 20 |
| 78,438 | 26,254 | | | 682,529 | | 93,876 | | ..... | | ..... | | 10,057 | | ..... | | 21 |
| 66.4 | 83.1 | | | 78.3 | | 68.0 | | 81.0 | | 76.1 | | 75.0 | | 72.4 | | 22 |
| 71.8 | 87.7 | | | 76.1 | | 76.1 | | ..... | | 67.5 | | 75.6 | | ..... | | 23 |
| 60.4 | 68.3 | | | 77.3 | | 86.0 | | ..... | | ..... | | 88.2 | | ..... | | 24 |
| 10,647,248 | 2,208,402 | | | 155,800,882 | | 22,845,744 | | 46,448,752 | | 6,606,657 | | 1,686,376 | | 895,096 | | 25 |
| 10,610,585 | 2,184,131 | | | 153,175,496 | | 21,769,599 | | 45,155,216 | | 6,120,648 | | 1,599,777 | | 814,492 | | 26 |
| 36,663 | 24,271 | | | 2,625,386 | | 1,076,145 | | 1,293,536 | | 486,009 | | 86,599 | | 80,604 | | 27 |
| 4,245,980 | 2,974,337 | | | 132,350,247 | | 35,711,728 | | ..... | | 5,717,345 | | 6,482,945 | | ..... | | 28 |
| 5,514,099 | 1,968,950 | | | 88,939,884 | | 28,357,883 | | ..... | | ..... | | 4,847,569 | | ..... | | 29 |
| 150.8 | -25.8 | | | 17.7 | | -36.0 | | ..... | | 15.6 | | -74.0 | | ..... | | 30 |
| 40.61 | 42.24 | | | 46.26 | | 67.00 | | 25.69 | | 36.42 | | 24.46 | | 45.84 | | 31 |
| 33.09 | 31.20 | | | 39.67 | | 46.38 | | ..... | | 58.39 | | 60.90 | | ..... | | 32 |
| 27.81 | 23.76 | | | 29.56 | | 42.24 | | ..... | | ..... | | 57.05 | | ..... | | 33 |
| 61.15 | 50.84 | | | 59.06 | | 98.48 | | 31.72 | | 47.88 | | 32.62 | | 63.35 | | 34 |
| 10,958,467 | 2,258,922 | | | 186,859,806 | | 33,513,141 | | 52,851,640 | | 6,926,597 | | 1,844,166 | | 910,326 | | 35 |
| 37.41 | 39.63 | | | 46.51 | | 68.72 | | 24.49 | | 34.05 | | 13.32 | | 24.13 | | 36 |
| Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | |
| Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | |
| 470 | 32 | 390 | 2 | 6,180 | 298 | 465 | 13 | 4,090 | 163 | 414 | 13 | 167 | 5 | 110 | 4 | 37 |
| 164,589 | 32,679 | 40,451 | (3) | 2,570,797 | 131,316 | 227,124 | 10,071 | 1,422,549 | 116,218 | 133,134 | 10,071 | 51,030 | 526 | 13,562 | 449 | 38 |
| 316,226 | 20,438 | 101,439 | (3) | 5,829,568 | 116,130 | 503,978 | 40,067 | 1,019,212 | 63,383 | 161,998 | 40,067 | 27,384 | 241 | 12,452 | 191 | 39 |
| 1.92 | 0.63 | 2.51 | (3) | 2.27 | 0.88 | 2.22 | 3.98 | 0.72 | 0.55 | 1.22 | 3.98 | 0.54 | 0.46 | 0.92 | 0.43 | 40 |
| 197,521 | 204,083 | 17,068 | ..... | 5,549,728 | 75,123 | 439,066 | 29,950 | 824,146 | 74,673 | 130,026 | 29,950 | 36,005 | ..... | 17,034 | ..... | 41 |
| 2.10 | 7.16 | 1.35 | ..... | 2.94 | 0.77 | 2.38 | 3.22 | 0.94 | 0.77 | 1.43 | 3.22 | 0.91 | ..... | 2.67 | ..... | 42 |
| 209,972 | 138,469 | 14,922 | ..... | 2,293,912 | 132,100 | 202,104 | 10,500 | 992,573 | 131,850 | 99,772 | 10,500 | 42,919 | ..... | 8,550 | ..... | 43 |
| 0.94 | 1.47 | 1.14 | ..... | 2.42 | 0.57 | 2.17 | 2.85 | 0.83 | 0.57 | 1.30 | 2.85 | 0.84 | ..... | 1.99 | ..... | 44 |
| 91,218 | 24,469 | 4,264 | ..... | 4,472,657 | 91,099 | 399,222 | 43,349 | 676,368 | 90,699 | 99,700 | 43,349 | 32,575 | ..... | 14,328 | ..... | 45 |
| 4,141,628 | 1,131,624 | 24,550 | ..... | 71,170,793 | 2,806,548 | 6,966,825 | 818,515 | 12,296,638 | 2,804,048 | 2,789,107 | 818,515 | 106,434 | ..... | 75,500 | ..... | 46 |
| 528 | 32 | 322 | 2 | 5,975 | 275 | 469 | 12 | 3,922 | 149 | 424 | 12 | 147 | 4 | 97 | 4 | 47 |
| 167,366 | 4,185 | 40,259 | (3) | 2,496,460 | 166,796 | 221,167 | 10,179 | 1,361,289 | 94,260 | 127,402 | 10,179 | 47,646 | 532 | 12,766 | 532 | 48 |
| 560,487 | 6,609 | 89,913 | (3) | 8,595,576 | 237,167 | 1,190,294 | 37,616 | 4,795,436 | 156,487 | 604,681 | 37,616 | 131,862 | 1,145 | 48,824 | 1,145 | 49 |
| 3.3 | 1.6 | 2.2 | (3) | 3.4 | 1.4 | 5.4 | 3.7 | 3.5 | 1.7 | 4.7 | 3.7 | 2.8 | 2.2 | 3.8 | 2.2 | 50 |
| 2.37 | 1.80 | 2.60 | (3) | 2.72 | 1.08 | 2.11 | 3.03 | 0.77 | 0.81 | 1.20 | 3.03 | 0.88 | 0.42 | 1.73 | 0.42 | 51 |
| 0.71 | 1.14 | 1.17 | (3) | 0.79 | 0.76 | 0.39 | 0.82 | 0.22 | 0.49 | 0.25 | 0.82 | 0.32 | 0.20 | 0.45 | 0.20 | 52 |
| 62 | ..... | 53 | ..... | 147 | ..... | 12 | ..... | 117 | ..... | 6 | ..... | 9 | ..... | 1 | ..... | 53 |
| 165,876 | ..... | 8,891 | ..... | 1,422,474 | ..... | 224,264 | ..... | 441,074 | ..... | 42,006 | ..... | 8,957 | ..... | (3) | ..... | 54 |
| 76,258 | ..... | 7,594 | ..... | 939,690 | ..... | 78,097 | ..... | 237,909 | ..... | 20,632 | ..... | 7,622 | ..... | (3) | ..... | 55 |
| 27,193 | ..... | 7,029 | ..... | 341,508 | ..... | 68,860 | ..... | 36,191 | ..... | 12,850 | ..... | 80 | ..... | ..... | ..... | 56 |
| 36,155 | ..... | 304 | ..... | 458,141 | ..... | 106,373 | ..... | 23,940 | ..... | 333 | ..... | 511 | ..... | (3) | ..... | 57 |

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

| | ITEM (For definitions and explanations, see text. Major-basin 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) | COLORADO RIVER (VI)—Continued | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Upper Colorado River (VI-A)—Continued | | | | | | |
| | | Green River (VI-Aa) | | | | | | |
| | | Total | | Direct (VI-Aa) | Henrys Fork (12) | | Yampa River Total[2] | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | |
| 1 | Irrigated units*.....1939...number..... | 8,348 | | 335 | 119 | | 792 | |
| 2 | Area irrigated.....1939...acres..... | 636,977 | | 59,737 | 20,877 | | 77,908 | |
| 3 | (a) Cropland harvested.....1939...acres..... | 463,490 | | 43,675 | 13,343 | | 67,743 | |
| 4 | (b) Crop failure.....1939...acres..... | 14,302 | | 1,303 | 429 | | 733 | |
| 5 | (c) Pasture.....1939...acres..... | 159,185 | | 14,759 | 7,105 | | 9,432 | |
| 6 | Area irrigated.....1929...acres..... | 610,659 | | 27,699 | 15,884 | | 86,472 | |
| 7 | 1919...acres..... | 586,387 | | 22,826 | 8,298 | | 81,661 | |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | 4.3 | | 115.7 | 31.4 | | -9.9 | |
| 9 | Irrigable area in enterprises.....1940...acres..... | 930,100 | | 102,850 | 31,754 | | 111,572 | |
| 10 | 1930...acres..... | 926,619 | | 43,288 | 26,598 | | 130,000 | |
| 11 | 1920[3]..acres..... | 1,148,821 | | 36,121 | 25,940 | | 142,636 | |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 293,123 | | 43,113 | 10,877 | | 33,664 | |
| 13 | 1930...acres..... | 315,960 | | 15,589 | 10,714 | | 43,528 | |
| 14 | 1920[3]..acres..... | 562,434 | | 13,295 | 17,642 | | 60,975 | |
| 15 | Area works were capable of supplying with water...1940...acres..... | 782,571 | | 73,311 | 27,802 | | 96,344 | |
| 16 | 1930...acres..... | 792,677 | | 31,943 | 18,677 | | 115,989 | |
| 17 | 1920...acres..... | 855,264 | | 31,072 | 23,694 | | 102,861 | |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | -1.3 | | 129.5 | 48.9 | | -16.9 | |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 145,594 | | 13,574 | 6,925 | | 18,436 | |
| 20 | 1930...acres..... | 182,018 | | 4,244 | 2,793 | | 29,517 | |
| 21 | 1920...acres..... | 268,877 | | 8,246 | 15,396 | | 21,200 | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 81.4 | | 81.5 | 75.1 | | 80.9 | |
| 23 | 1929...percent.... | 77.0 | | 86.7 | 85.0 | | 74.6 | |
| 24 | 1919...percent.... | 68.6 | | 73.5 | 35.0 | | 79.4 | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 12,160,991 | | 1,294,994 | 207,686 | | 947,853 | |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 11,905,889 | | 1,247,200 | 203,730 | | 906,123 | |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 255,102 | | 47,794 | 3,956 | | 41,730 | |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | 8,820,435 | | 630,488 | 111,750 | | 973,607 | |
| 29 | 1920...dollars.... | 8,592,346 | | 547,166 | 77,320 | | 1,197,975 | |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | 37.9 | | 105.4 | 85.8 | | -2.6 | |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 15.54 | | 17.66 | 7.47 | | 9.84 | |
| 32 | 1930...dollars.... | 11.13 | | 19.74 | 5.98 | | 8.39 | |
| 33 | 1920...dollars.... | 10.05 | | 17.61 | 3.26 | | 11.65 | |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 19.09 | | 21.68 | 9.95 | | 12.17 | |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 13,511,087 | | 1,369,854 | 217,809 | | 1,212,458 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 14.53 | | 13.32 | 6.86 | | 10.87 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary Enterprises | Supplemental Enterprises | | Primary Enterprises | Supplemental Enterprises | Primary Enterprises | Supplemental Enterprises |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 1,407 | 35 | 173 | 63 | 1 | 387 | 4 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 616,600 | 75,265 | 54,162 | 19,982 | (4) | 69,449 | 2,371 |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 324,586 | 8,977 | 27,724 | 5,518 | (4) | 42,493 | 236 |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 0.53 | 0.12 | 0.51 | 0.28 | (4) | 0.61 | 0.10 |
| 41 | Total annual charges (reported)[5] [6].....1939...dollars.... | 209,180 | 30,628 | 6,917 | 2,747 | ..... | 13,205 | 150 |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 0.64 | 0.43 | 0.65 | 0.58 | ..... | 0.57 | 0.08 |
| 43 | Area against which charges were assessed.....1939...acres..... | 389,618 | 103,885 | 12,550 | 8,793 | ..... | 25,099 | 2,000 |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 0.54 | 0.29 | 0.55 | 0.31 | ..... | 0.53 | 0.08 |
| 45 | Total charges collected[5].....1939...dollars.... | 212,823 | 30,233 | 5,044 | 25,603 | ..... | 6,737 | 150 |
| 46 | Indebtedness to December 31 (reported)[6].....1939...dollars.... | 938,003 | 1,652,321 | ..... | 20,000 | ..... | 88,400 | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 1,480 | 35 | 178 | 64 | 1 | 442 | 8 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 608,656 | 55,298 | 56,429 | 17,777 | (4) | 71,188 | 2,481 |
| 49 | Water delivered.....1939...acre-feet.. | 1,544,353 | 68,067 | 143,002 | 43,427 | (4) | 210,980 | 2,486 |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 2.5 | 1.2 | 2.5 | 2.4 | (4) | 3.0 | 1.0 |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 0.55 | 0.47 | 0.49 | 0.19 | (4) | 0.65 | 0.10 |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 0.22 | 0.38 | 0.19 | 0.08 | (4) | 0.22 | 0.10 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 28 | ..... | 1 | ..... | ..... | 4 | ..... |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 158,409 | ..... | (4) | ..... | ..... | 4,375 | ..... |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 65,229 | ..... | (4) | ..... | ..... | 3,520 | ..... |
| 56 | Area for which drains have been installed.....1939...acres..... | 3,090 | ..... | ..... | ..... | ..... | ..... | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 9,443 | ..... | (4) | ..... | ..... | 745 | ..... |

*Schedules called for "Number of farms," see explanation in text.
[1] Data for other intrastate tributaries of the San Juan River are not shown separately but are included in the San Juan River total.
[2] Data for the intrastate tributaries of the Yampa River are not shown separately but are included in the Yampa River total.
[3] 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]

| COLORADO RIVER (VI)—Continued | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Upper Colorado River (VI-A)—Continued | | | | | | | | | | | | | | | | | | |
| Green River (VI-Aa)—Continued | | | | | | | | | | | | | San Juan River (VI-Ab) | | | | | |
| Yampa River—Continued | | | White River | | Intrastate tributaries in Wyoming | | Intrastate tributaries in Utah | | Total[1] | | | | Direct | | Los Pinos River | | | |
| Direct (13) | | Little Snake River (16) | (20) | | | | | | | | | | (VI-Ab) | | (2) | | | |
| 487 | | 169 | 255 | | 785 | | 6,062 | | 4,631 | | | | 1,333 | | 589 | | | 1 |
| 42,926 | | 21,637 | 36,046 | | 197,187 | | 245,222 | | 180,850 | | | | 32,709 | | 40,971 | | | 2 |
| 37,513 | | 18,818 | 31,803 | | 137,475 | | 169,451 | | 154,332 | | | | 29,424 | | 33,033 | | | 3 |
| 518 | | 111 | 382 | | 2,051 | | 9,404 | | 5,642 | | | | 633 | | 93 | | | 4 |
| 4,895 | | 2,708 | 3,861 | | 57,661 | | 66,367 | | 20,876 | | | | 2,652 | | 7,845 | | | 5 |
| 22,138 | | 19,603 | 27,773 | | 175,305 | | 276,164 | | 179,932 | | | | 21,922 | | 43,041 | | | 6 |
| 18,029 | | 23,080 | 25,625 | | 169,461 | | 278,336 | | 140,607 | | | | 23,031 | | 30,022 | | | 7 |
| 93.9 | | 10.4 | 29.8 | | 12.5 | | -11.2 | | 0.5 | | | | 49.2 | | -4.8 | | | 8 |
| 65,902 | | 27,600 | 43,497 | | 324,484 | | 315,943 | | 280,692 | | | | 52,189 | | 56,234 | | | 9 |
| 34,996 | | 23,472 | 36,263 | | 283,447 | | 405,293 | | 247,845 | | | | 33,478 | | 63,337 | | | 10 |
| 28,221 | | 34,280 | 40,441 | | 396,646 | | 506,797 | | 251,188 | | | | 51,021 | | 55,586 | | | 11 |
| 22,976 | | 5,963 | 7,451 | | 127,297 | | 70,721 | | 99,842 | | | | 19,480 | | 15,263 | | | 12 |
| 12,858 | | 3,869 | 8,490 | | 108,142 | | 129,129 | | 67,913 | | | | 11,556 | | 20,296 | | | 13 |
| 10,192 | | 11,200 | 14,816 | | 227,185 | | 228,461 | | 110,581 | | | | 27,990 | | 25,564 | | | 14 |
| 53,848 | | 26,033 | 41,267 | | 242,812 | | 301,035 | | 221,566 | | | | 40,677 | | 45,663 | | | 15 |
| 28,187 | | 23,052 | 31,648 | | 244,346 | | 348,542 | | 225,370 | | | | 32,431 | | 57,992 | | | 16 |
| 18,832 | | 28,807 | 29,238 | | 285,645 | | 382,574 | | 167,488 | | | | 28,443 | | 42,033 | | | 17 |
| 91.0 | | 12.9 | 30.4 | | -0.6 | | -13.6 | | -1.7 | | | | 25.4 | | -21.3 | | | 18 |
| 10,922 | | 4,396 | 5,221 | | 45,625 | | 55,813 | | 40,716 | | | | 7,968 | | 4,692 | | | 19 |
| 6,049 | | 3,449 | 3,875 | | 69,041 | | 72,378 | | 45,438 | | | | 10,509 | | 14,951 | | | 20 |
| 803 | | 5,727 | 3,613 | | 116,184 | | 104,238 | | 26,881 | | | | 5,412 | | 12,011 | | | 21 |
| 79.7 | | 83.1 | 87.3 | | 81.2 | | 81.5 | | 81.6 | | | | 80.4 | | 89.7 | | | 22 |
| 78.5 | | 85.0 | 87.8 | | 71.7 | | 79.2 | | 79.8 | | | | 67.6 | | 74.2 | | | 23 |
| 95.7 | | 80.1 | 87.6 | | 59.3 | | 72.8 | | 84.0 | | | | 81.0 | | 71.4 | | | 24 |
| 656,773 | | 179,540 | 523,625 | | 2,366,391 | | 6,820,442 | | 10,112,286 | | | | 2,469,494 | | 1,142,704 | | | 25 |
| 633,913 | | 173,100 | 505,820 | | 2,325,674 | | 6,717,342 | | 9,930,927 | | | | 2,454,488 | | 1,098,659 | | | 26 |
| 22,860 | | 6,440 | 17,805 | | 40,717 | | 103,100 | | 181,359 | | | | 15,006 | | 44,045 | | | 27 |
| 298,435 | | 219,827 | 460,500 | | 1,708,767 | | 4,920,773 | | 2,587,598 | | | | 717,995 | | 561,050 | | | 28 |
| 162,768 | | 511,556 | 447,141 | | 2,542,334 | | 3,778,335 | | 3,088,495 | | | | 1,039,358 | | 524,590 | | | 29 |
| 120.1 | | -18.3 | 13.7 | | 38.5 | | 38.6 | | 290.8 | | | | 243.9 | | 103.7 | | | 30 |
| 12.20 | | 6.90 | 12.69 | | 9.75 | | 22.66 | | 45.64 | | | | 60.71 | | 25.02 | | | 31 |
| 10.59 | | 9.54 | 14.55 | | 6.99 | | 14.12 | | 11.48 | | | | 22.14 | | 9.67 | | | 32 |
| 8.64 | | 17.76 | 15.29 | | 8.90 | | 9.88 | | 18.44 | | | | 36.54 | | 12.48 | | | 33 |
| 15.30 | | 8.30 | 14.53 | | 12.00 | | 27.81 | | 55.92 | | | | 75.50 | | 27.89 | | | 34 |
| 903,093 | | 185,250 | 530,170 | | 2,816,831 | | 7,363,965 | | 13,858,427 | | | | 3,673,978 | | 1,864,811 | | | 35 |
| 13.70 | | 6.71 | 12.19 | | 8.68 | | 23.31 | | 49.37 | | | | 70.40 | | 33.16 | | | 36 |
| Primary | Sup. | | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | | | Primary | Sup. | Primary | Sup. | | |
| Enterprises | | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | | | Enterprises | | Enterprises | | | |
| 207 | 4 | 92 | 134 | 3 | 424 | 14 | 226 | 13 | 507 | 19 | | | 155 | 2 | 64 | 5 | | 37 |
| 35,016 | 2,371 | 21,423 | 35,084 | 576 | 193,842 | 21,999 | 244,081 | 50,157 | 177,764 | 2,083 | | | 32,555 | (4) | 40,940 | 61 | | 38 |
| 27,321 | 236 | 10,490 | 19,365 | 110 | 64,817 | 1,254 | 164,669 | 7,372 | 198,237 | 1,455 | | | 79,636 | (4) | 29,758 | 24 | | 39 |
| 0.78 | 0.10 | 0.49 | 0.55 | 0.19 | 0.33 | 0.06 | 0.67 | 0.15 | 1.12 | 0.70 | | | 2.45 | (4) | 0.73 | 0.39 | | 40 |
| 7,981 | 150 | 5,049 | 4,500 | ..... | 17,081 | 411 | 164,730 | 30,067 | 180,771 | 1,203 | | | 61,465 | ..... | 16,451 | ..... | | 41 |
| 0.57 | 0.08 | 0.70 | 0.32 | ..... | 0.37 | 0.02 | 0.71 | 0.60 | 1.17 | 1.07 | | | 2.69 | ..... | 0.42 | ..... | | 42 |
| 14,379 | 2,000 | 8,987 | 16,389 | ..... | 71,982 | 19,120 | 254,805 | 82,765 | 173,326 | 1,470 | | | 23,588 | ..... | 41,718 | ..... | | 43 |
| 0.56 | 0.08 | 0.56 | 0.27 | ..... | 0.24 | 0.02 | 0.65 | 0.36 | 1.04 | 0.82 | | | 2.61 | ..... | 0.39 | ..... | | 44 |
| 1,674 | 150 | 5,063 | 778 | ..... | 13,404 | 2,750 | 161,257 | 27,333 | 110,769 | 10,484 | | | 26,109 | ..... | 15,917 | ..... | | 45 |
| 87,950 | ..... | 450 | 750 | ..... | 394,666 | 39,000 | 434,187 | 1,613,321 | 726,495 | 166,000 | | | 495,359 | ..... | 6,598 | ..... | | 46 |
| 260 | 8 | 93 | 137 | 3 | 429 | 12 | 230 | 11 | 319 | 10 | | | 58 | 1 | 42 | 3 | | 47 |
| 38,564 | 2,481 | 20,484 | 35,887 | 576 | 185,328 | 1,942 | 242,047 | 50,137 | 150,235 | 1,071 | | | 22,452 | (4) | 35,027 | 45 | | 48 |
| 137,008 | 2,486 | 38,678 | 136,792 | 992 | 442,025 | 4,557 | 568,127 | 59,886 | 402,553 | 2,066 | | | 66,203 | (4) | 99,344 | 35 | | 49 |
| 3.6 | 1.0 | 1.9 | 3.8 | 1.7 | 2.4 | 2.3 | 2.3 | 1.2 | 2.7 | 1.9 | | | 2.9 | (4) | 2.8 | 0.8 | | 50 |
| 0.78 | 0.10 | 0.64 | 0.54 | 0.19 | 0.34 | 0.16 | 0.73 | 0.50 | 1.11 | 0.85 | | | 2.43 | (4) | 0.44 | 0.31 | | 51 |
| 0.22 | 0.10 | 0.34 | 0.14 | 0.11 | 0.14 | 0.07 | 0.31 | 0.42 | 0.42 | 0.44 | | | 0.82 | (4) | 0.15 | 0.40 | | 52 |
| 3 | ..... | ..... | 4 | ..... | 12 | ..... | 7 | ..... | 21 | ..... | | | 12 | ..... | 1 | ..... | | 53 |
| 3,635 | ..... | ..... | 2,475 | ..... | 97,846 | ..... | 51,313 | ..... | 88,486 | ..... | | | 16,051 | ..... | (4) | ..... | | 54 |
| 2,840 | ..... | ..... | 1,960 | ..... | 21,988 | ..... | 36,761 | ..... | 51,187 | ..... | | | 9,638 | ..... | (4) | ..... | | 55 |
| ..... | ..... | ..... | 2 | ..... | 26 | ..... | 3,062 | ..... | 606 | ..... | | | 265 | ..... | ..... | ..... | | 56 |
| 705 | ..... | ..... | 465 | ..... | 2,450 | ..... | 5,738 | ..... | 5,333 | ..... | | | 2,523 | ..... | (4) | ..... | | 57 |

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

| | ITEM (For definitions and explanations, see text. Major-basin 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) | COLORADO RIVER (VI)—Continued | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Upper Colorado River (VI-A)—Continued | | | | | | | |
| | | San Juan River (VI-Ab)—Continued | | | | | | | |
| | | Animas River (3) | | La Plata River (4) | | Chinle Creek (10) | Intrastate tributaries in Colorado | | Intrastate tributaries in Utah |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | | |
| 1 | Irrigated units*.....1939...number..... | 1,021 | | 280 | | 419 | 752 | | 117 |
| 2 | Area irrigated.....1939...acres..... | 38,440 | | 13,915 | | 3,171 | 46,402 | | 4,542 |
| 3 | (a) Cropland harvested.....1939...acres..... | 34,536 | | 10,013 | | 2,911 | 40,467 | | 3,248 |
| 4 | (b) Crop failure.....1939...acres..... | 220 | | 2,482 | | 260 | 947 | | 1,007 |
| 5 | (c) Pasture.....1939...acres..... | 3,684 | | 1,420 | | ..... | 4,988 | | 287 |
| 6 | Area irrigated.....1929...acres..... | 51,708 | | 28,530 | | ..... | 23,035 | | ..... |
| 7 | 1919...acres..... | 41,174 | | 23,004 | | ..... | 18,594 | | ..... |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | -25.7 | | -51.2 | | ..... | 101.4 | | ..... |
| 9 | Irrigable area in enterprises.....1940...acres..... | 50,118 | | 31,598 | | 10,308 | 70,711 | | 7,784 |
| 10 | 1930...acres..... | 62,639 | | 38,883 | | ..... | 32,625 | | ..... |
| 11 | 1920[3]..acres..... | 73,413 | | 29,918 | | ..... | 44,795 | | ..... |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 11,678 | | 17,683 | | 7,137 | 24,309 | | 3,242 |
| 13 | 1930...acres..... | 10,931 | | 10,353 | | ..... | 9,590 | | ..... |
| 14 | 1920[3]..acres..... | 32,239 | | 6,914 | | ..... | 26,201 | | ..... |
| 15 | Area works were capable of supplying with water...1940...acres..... | 44,478 | | 23,020 | | 5,336 | 53,888 | | 7,654 |
| 16 | 1930...acres..... | 56,699 | | 35,388 | | ..... | 30,680 | | ..... |
| 17 | 1920...acres..... | 47,974 | | 23,765 | | ..... | 23,652 | | ..... |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | -21.6 | | -34.9 | | ..... | 75.6 | | ..... |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 6,038 | | 9,105 | | 2,165 | 7,486 | | 3,112 |
| 20 | 1930...acres..... | 4,991 | | 6,858 | | ..... | 7,645 | | ..... |
| 21 | 1920...acres..... | 6,800 | | 761 | | ..... | 5,058 | | ..... |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 86.4 | | 60.4 | | 59.4 | 86.1 | | 59.3 |
| 23 | 1929...percent.... | 91.2 | | 80.6 | | ..... | 75.1 | | ..... |
| 24 | 1919...percent.... | 85.8 | | 96.8 | | ..... | 78.6 | | ..... |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 976,984 | | 211,761 | | 579,495 | 4,490,927 | | 157,867 |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 893,927 | | 202,402 | | 579,495 | 4,461,732 | | 157,170 |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 83,057 | | 9,359 | | ..... | 29,195 | | 697 |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | 811,597 | | 172,714 | | ..... | 387,987 | | ..... |
| 29 | 1920...dollars.... | 1,148,088 | | 142,588 | | ..... | 241,935 | | ..... |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | 20.4 | | 22.6 | | ..... | (4) | | ..... |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 21.97 | | 9.20 | | 108.60 | 83.34 | | 20.63 |
| 32 | 1930...dollars.... | 14.31 | | 4.88 | | ..... | 12.65 | | ..... |
| 33 | 1920...dollars.... | 23.93 | | 6.00 | | ..... | 10.23 | | ..... |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 25.42 | | 15.22 | | 182.75 | 96.78 | | 34.76 |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 980,244 | | 315,571 | | 1,938,695 | 4,707,377 | | 158,147 |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 19.56 | | 9.99 | | 188.08 | 66.57 | | 20.32 |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary | Sup. | Primary | Sup. | | Primary | Sup. | |
| | | Enterprises | | Enterprises | | | Enterprises | | |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 89 | 5 | 57 | 4 | 3 | 125 | 3 | 13 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 35,945 | 312 | 13,875 | 1,002 | 3,171 | 46,036 | 457 | 4,542 |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 25,788 | 112 | 7,155 | 559 | 6,625 | 45,687 | 730 | 3,569 |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 0.72 | 0.36 | 0.52 | 0.56 | 2.09 | 0.99 | 1.60 | 0.79 |
| 41 | Total annual charges (reported)[5 6].....1939...dollars.... | 29,545 | ..... | 7,963 | 503 | 6,625 | 49,003 | 700 | 9,698 |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 0.86 | ..... | 0.66 | 0.69 | 2.09 | 1.28 | 1.75 | 2.66 |
| 43 | Area against which charges were assessed.....1939...acres..... | 36,523 | ..... | 18,806 | 1,070 | 3,171 | 42,180 | 400 | 6,640 |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 0.81 | ..... | 0.42 | 0.47 | 2.09 | 1.16 | 1.75 | 1.46 |
| 45 | Total charges collected[5].....1939...dollars.... | 24,156 | ..... | 5,133 | ..... | ..... | 39,004 | 10,484 | 450 |
| 46 | Indebtedness to December 31 (reported)[6].....1939...dollars.... | 38,600 | ..... | 57 | ..... | 148,905 | 9,575 | 166,000 | 2,700 |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 63 | 3 | 44 | 2 | 3 | 96 | 1 | 13 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 29,958 | 312 | 12,108 | (7) | 3,171 | 42,977 | (7) | 4,542 |
| 49 | Water delivered.....1939...acre-feet.. | 102,540 | 1,300 | 16,437 | (7) | 4,470 | 108,520 | (7) | 5,039 |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 3.4 | 4.2 | 1.4 | (7) | 1.4 | 2.5 | (7) | 1.1 |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 0.77 | 0.35 | 0.55 | (7) | 2.09 | 1.19 | (7) | 2.24 |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 0.23 | 0.08 | 0.40 | (7) | 1.48 | 0.47 | (7) | 2.02 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 3 | ..... | 3 | ..... | ..... | 2 | ..... | ..... |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 3,017 | ..... | 472 | ..... | ..... | (7) | ..... | ..... |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 3,017 | ..... | 257 | ..... | ..... | (7) | ..... | ..... |
| 56 | Area for which drains have been installed.....1939...acres..... | 251 | ..... | 90 | ..... | ..... | ..... | ..... | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 700 | ..... | 10 | ..... | ..... | (7) | ..... | ..... |

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

[1] 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.

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

[3] 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]

| COLORADO RIVER (VI)—Continued | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Upper Colorado River (VI-A)—Continued | | | | Lower Colorado River (VI-B) (Exclusive of Imperial Valley) | | | | | | | | | | | | |
| | | | | | | Little Colorado River (VI-Ba) | | | Virgin River | | Gila River (VI-Bb) | | | | | |
| Paria River (25) | Intrastate tributaries in Colorado | Intrastate tributaries in Utah | Total | Direct (VI-B) | | Total[1] | Direct (VI-Ba) | Kanab Creek (1) | Total[2] | Direct (2) | Total (VI-Bb) | | Direct (1)+(14) | | | |
| 44 | 7,336 | 610 | 18,991 | 2,243 | | 1,751 | 767 | 135 | 1,871 | 1,088 | 11,838 | | 3,562 | | | 1 |
| 891 | 426,387 | 29,486 | 756,910 | 94,002 | | 18,460 | 8,736 | 2,298 | 29,353 | 14,604 | 577,468 | | 211,914 | | | 2 |
| 767 | 342,210 | 22,547 | 687,021 | 93,376 | | 15,579 | 6,908 | 2,170 | 25,006 | 12,239 | 523,368 | | 189,574 | | | 3 |
| 57 | 4,915 | 2,157 | 3,693 | 44 | | 156 | 141 | ..... | 671 | 523 | 2,258 | | 1,017 | | | 4 |
| 67 | 79,262 | 4,782 | 66,196 | 582 | | 2,725 | 1,687 | 128 | 3,676 | 1,842 | 51,842 | | 21,323 | | | 5 |
| ..... | 477,423 | ..... | ..... | 519,625 | | 19,336 | 7,249 | 322 | 22,387 | ..... | 509,542 | | 112,133 | | | 6 |
| ..... | 438,427 | ..... | ..... | 495,710 | | 17,036 | 10,260 | 450 | 35,350 | ..... | 401,400 | | 83,406 | | | 7 |
| ..... | 10.7 | ..... | ..... | -81.9 | | -4.5 | 20.5 | 613.7 | 31.1 | ..... | 13.3 | | 89.0 | | | 8 |
| 1,738 | 568,202 | 35,205 | 1,333,188 | 284,257 | | 42,410 | 20,905 | 2,710 | 51,894 | 29,686 | 888,067 | | 355,687 | | | 9 |
| ..... | 640,783 | ..... | ..... | 1,323,119 | | 38,966 | 14,683 | 822 | 36,192 | ..... | 848,290 | | 280,014 | | | 10 |
| ..... | 735,604 | ..... | ..... | 728,326 | | 35,358 | 20,821 | 710 | 100,242 | ..... | 658,416 | | 210,531 | | | 11 |
| 847 | 141,815 | 5,719 | 576,278 | 190,255 | | 23,950 | 12,169 | 412 | 22,541 | 15,082 | 310,599 | | 143,773 | | | 12 |
| ..... | 163,360 | ..... | ..... | 803,494 | | 19,630 | 7,434 | 500 | 13,805 | ..... | 338,748 | | 167,881 | | | 13 |
| ..... | 297,177 | ..... | ..... | 232,616 | | 18,322 | 10,561 | 260 | 64,892 | ..... | 257,016 | | 127,125 | | | 14 |
| 1,706 | 521,243 | 30,616 | 1,033,057 | 159,562 | | 33,055 | 17,011 | 2,710 | 47,148 | 27,925 | 744,404 | | 267,840 | | | 15 |
| ..... | 582,956 | ..... | ..... | 672,117 | | 31,146 | 11,937 | 667 | 32,059 | ..... | 734,725 | | 226,814 | | | 16 |
| ..... | 547,583 | ..... | ..... | 551,506 | | 21,880 | 14,131 | 610 | 45,558 | ..... | 544,014 | | 174,229 | | | 17 |
| ..... | -10.6 | ..... | ..... | -76.3 | | 6.1 | 42.5 | 306.3 | 47.1 | ..... | 1.3 | | 18.1 | | | 18 |
| 815 | 94,856 | 1,130 | 276,147 | 65,560 | | 14,595 | 8,275 | 412 | 17,795 | 13,321 | 166,936 | | 55,926 | | | 19 |
| ..... | 105,533 | ..... | ..... | 152,492 | | 11,810 | 4,688 | 345 | 9,672 | ..... | 225,183 | | 114,681 | | | 20 |
| ..... | 109,156 | ..... | ..... | 55,796 | | 4,844 | 3,871 | 160 | 10,208 | ..... | 142,614 | | 90,823 | | | 21 |
| 52.2 | 81.8 | 96.3 | 73.3 | 58.9 | | 55.8 | 51.4 | 84.8 | 62.3 | 52.3 | 77.6 | | 79.1 | | | 22 |
| ..... | 81.9 | ..... | ..... | 77.3 | | 62.1 | 60.7 | 48.3 | 69.8 | ..... | 69.4 | | 49.4 | | | 23 |
| ..... | 80.1 | ..... | ..... | 89.9 | | 77.9 | 72.6 | 73.8 | 77.6 | ..... | 73.8 | | 47.9 | | | 24 |
| 9,208 | 15,471,329 | 401,905 | 92,610,020 | 16,239,087 | | 2,385,201 | 1,135,412 | 71,181 | 1,360,114 | 747,982 | 69,360,203 | | 21,799,071 | | | 25 |
| 8,985 | 15,200,625 | 388,365 | 91,279,870 | 15,648,951 | | 2,378,926 | 1,130,237 | 70,381 | 1,183,390 | 681,515 | 68,821,655 | | 21,725,808 | | | 26 |
| 223 | 270,704 | 13,540 | 1,330,150 | 590,136 | | 6,275 | 5,175 | 800 | 176,724 | 66,467 | 538,548 | | 73,263 | | | 27 |
| ..... | 13,177,669 | ..... | ..... | 29,994,383 | | 1,452,187 | 465,060 | 13,540 | 708,926 | ..... | 62,542,801 | | 14,262,958 | | | 28 |
| ..... | 13,510,691 | ..... | ..... | 22,214,932 | | 460,206 | 146,913 | 20,500 | 1,622,997 | ..... | 25,236,237 | | 2,888,708 | | | 29 |
| ..... | 17.4 | ..... | ..... | -45.9 | | 64.2 | 144.1 | 425.7 | 91.9 | ..... | 10.9 | | 52.8 | | | 30 |
| 5.40 | 29.68 | 13.13 | 89.65 | 101.77 | | 72.16 | 66.75 | 26.27 | 28.85 | 26.79 | 93.18 | | 81.39 | | | 31 |
| ..... | 22.60 | ..... | ..... | 44.63 | | 46.63 | 38.96 | 20.30 | 22.11 | ..... | 85.12 | | 62.88 | | | 32 |
| ..... | 24.67 | ..... | ..... | 40.28 | | 21.03 | 10.40 | 33.61 | 35.62 | ..... | 46.39 | | 16.58 | | | 33 |
| 10.33 | 36.28 | 13.63 | 122.35 | 172.75 | | 129.21 | 129.97 | 30.98 | 46.34 | 51.22 | 120.11 | | 102.87 | | | 34 |
| 9,368 | 16,290,490 | 411,505 | 117,230,591 | 26,586,544 | | 3,259,002 | 1,528,525 | 71,181 | 1,488,729 | 792,447 | 82,321,121 | | 33,741,026 | | | 35 |
| 5.39 | 28.67 | 11.69 | 87.93 | 93.53 | | 76.85 | 73.12 | 26.27 | 28.69 | 26.69 | 92.70 | | 94.86 | | | 36 |
| | Primary Enterprises | Sup. | | Primary Enterprises | Sup. | | | | | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | | |
| 11 | 1,547 | 91 | 37 | 2,068 | 135 | 51 | 77 | 51 | 20 | 201 | 77 | 1,182 | 134 | 377 | 118 | 37 |
| 767 | 413,783 | 28,273 | 29,471 | 731,795 | 15,098 | 93,990 | 17,242 | 8,395 | 2,105 | 28,411 | 14,449 | 558,158 | 15,068 | 206,874 | 13,928 | 38 |
| 1,105 | 293,986 | 12,643 | 11,916 | 3,530,651 | 52,747 | 341,980 | 24,341 | 15,249 | 2,380 | 49,957 | 28,363 | 2,888,257 | 52,737 | 848,301 | 47,325 | 39 |
| 1.44 | 0.71 | 0.45 | 0.40 | 4.82 | 3.49 | 3.64 | 1.41 | 1.82 | 1.13 | 1.76 | 1.96 | 5.17 | 3.50 | 4.10 | 3.40 | 40 |
| 420 | 251,860 | 12,892 | 15,884 | 3,039,582 | 450 | 309,040 | 32,712 | 17,750 | 3,701 | 49,051 | 28,706 | 2,606,648 | 450 | 768,463 | ..... | 41 |
| 0.96 | 1.05 | 0.83 | 0.67 | 5.12 | 3.00 | 3.32 | 2.18 | 2.65 | 2.34 | 2.26 | 2.24 | 5.76 | 3.00 | 4.57 | ..... | 42 |
| 577 | 262,677 | 15,995 | 23,684 | 739,339 | 250 | 102,332 | 22,168 | 12,617 | 1,680 | 24,609 | 14,009 | 577,680 | 250 | 220,643 | ..... | 43 |
| 0.73 | 0.96 | 0.81 | 0.67 | 4.11 | 1.80 | 3.02 | 1.48 | 1.41 | 2.20 | 1.99 | 2.05 | 4.51 | 1.80 | 3.48 | ..... | 44 |
| 475 | 205,364 | 6,633 | 14,662 | 2,106,289 | 400 | 299,522 | 22,128 | 12,940 | 3,626 | 40,382 | 21,949 | 1,712,427 | 400 | 659,598 | ..... | 45 |
| ..... | 7,699,799 | 167,212 | 36,800 | 43,374,155 | 2,500 | 4,177,718 | 236,527 | 103,004 | ..... | 36,885 | 18,324 | 38,854,270 | 2,500 | 14,538,403 | ..... | 46 |
| 9 | 1,516 | 88 | 27 | 2,008 | 126 | 45 | 80 | 51 | 16 | 182 | 66 | 1,145 | 125 | 371 | 109 | 47 |
| 558 | 401,338 | 27,180 | 25,454 | 718,234 | 72,536 | 93,765 | 14,705 | 8,536 | 1,893 | 24,301 | 10,907 | 552,873 | 72,506 | 206,300 | 13,323 | 48 |
| 2,241 | 2,049,883 | 47,593 | 59,863 | 2,630,180 | 80,680 | 585,613 | 32,640 | 18,578 | 6,184 | 97,335 | 40,519 | 1,778,084 | 80,530 | 744,027 | 20,474 | 49 |
| 4.0 | 5.1 | 1.8 | 2.4 | 3.7 | 1.1 | 6.2 | 2.2 | 2.2 | 3.3 | 4.0 | 3.7 | 3.2 | 1.1 | 3.6 | 1.5 | 50 |
| 1.54 | 0.84 | 0.68 | 0.35 | 5.61 | 2.90 | 3.29 | 2.38 | 2.27 | 2.17 | 2.15 | 2.33 | 6.12 | 2.90 | 4.87 | 2.79 | 51 |
| 0.38 | 0.16 | 0.39 | 0.15 | 1.53 | 2.61 | 0.53 | 1.07 | 1.05 | 0.66 | 0.54 | 0.63 | 1.90 | 2.62 | 1.35 | 1.81 | 52 |
| ..... | 52 | ..... | 1 | 29 | ..... | 6 | 5 | 5 | ..... | 5 | 2 | 7 | ..... | 1 | ..... | 53 |
| ..... | 138,494 | ..... | (7) | 456,400 | ..... | 182,258 | 6,253 | 6,253 | ..... | 4,905 | (7) | 245,003 | ..... | (7) | ..... | 54 |
| ..... | 88,517 | ..... | (7) | 285,781 | ..... | 57,465 | 1,012 | 1,012 | ..... | 3,852 | (7) | 219,972 | ..... | (7) | ..... | 55 |
| ..... | 19,565 | ..... | ..... | 105,317 | ..... | 56,010 | 62 | 62 | ..... | 2,520 | (7) | 45,706 | ..... | (7) | ..... | 56 |
| ..... | 7,915 | ..... | (7) | 119,201 | ..... | 106,040 | 291 | 291 | ..... | 900 | (7) | 1,320 | ..... | ..... | ..... | 57 |

[4] 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.

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | COLORADO RIVER (VI)—Continued | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Lower Colorado River (VI-B)—Continued (Exclusive of Imperial Valley) | | | | | | | |
| | | Gila River (VI-Bb)—Continued | | | | | | | |
| | | San Francisco and Blue Rivers (2)+(3) | Intrastate tributaries in Arizona | Independent basins in Gila River | | | | | |
| | | | | Total | | Intrastate basin in New Mexico (Animas Valley) (18) | | Intrastate basin in Arizona (Sulphur Springs) (19) | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | | |
| 1 | Irrigated units[a] ... 1939 ... number | 149 | 8,026 | 101 | | 11 | | 90 | |
| 2 | Area irrigated ... 1939 ... acres | 2,437 | 358,159 | 4,958 | | 349 | | 4,615 | |
| 3 | (a) Cropland harvested ... 1939 ... acres | 2,195 | 328,977 | 2,622 | | 295 | | 2,327 | |
| 4 | (b) Crop failure ... 1939 ... acres | 34 | 1,129 | 78 | | 2 | | 76 | |
| 5 | (c) Pasture ... 1939 ... acres | 208 | 28,053 | 2,258 | | 46 | | 2,212 | |
| 6 | Area irrigated ... 1929 ... acres | 2,223 | 395,079 | ... | | ... | | ... | |
| 7 | 1919 ... acres | 3,591 | 314,006 | ... | | ... | | ... | |
| 8 | Increase or decrease (-), 1929-1939 ... percent | 9.6 | -9.3 | ... | | ... | | ... | |
| 9 | Irrigable area in enterprises ... 1940 ... acres | 9,729 | 477,843 | 44,808 | | 647 | | 44,161 | |
| 10 | 1930 ... acres | 2,907 | 564,777 | ... | | ... | | ... | |
| 11 | 1920[2] ... acres | 11,134 | 435,828 | ... | | ... | | ... | |
| 12 | Excess of irrigable area over the area irrigated ... 1940 ... acres | 7,292 | 119,684 | 39,850 | | 304 | | 39,546 | |
| 13 | 1930 ... acres | 684 | 169,698 | ... | | ... | | ... | |
| 14 | 1920[2] ... acres | 7,543 | 121,822 | ... | | ... | | ... | |
| 15 | Area works were capable of supplying with water ... 1940 ... acres | 9,687 | 460,205 | 6,672 | | 642 | | 6,030 | |
| 16 | 1930 ... acres | 2,462 | 505,157 | ... | | ... | | ... | |
| 17 | 1920 ... acres | 3,859 | 365,403 | ... | | ... | | ... | |
| 18 | Increase or decrease (-), 1930-1940 ... percent | 293.5 | -8.9 | ... | | ... | | ... | |
| 19 | Excess of area works were capable of supplying with water over area irrigated ... 1940 ... acres | 7,250 | 102,046 | 1,714 | | 299 | | 1,415 | |
| 20 | 1930 ... acres | 239 | 110,078 | ... | | ... | | ... | |
| 21 | 1920 ... acres | 268 | 51,397 | ... | | ... | | ... | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water ... 1939 ... percent | 25.2 | 77.8 | 74.3 | | 53.4 | | 76.5 | |
| 23 | 1929 ... percent | 90.3 | 78.2 | ... | | ... | | ... | |
| 24 | 1919 ... percent | 93.1 | 85.9 | ... | | ... | | ... | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | | |
| 25 | Total investment in irrigation enterprises ... 1940 ... dollars | 46,433 | 47,376,295 | 138,404 | | 22,282 | | 116,122 | |
| 26 | (a) Cost of irrigation works and equipment ... 1940 ... dollars | 43,620 | 46,915,662 | 136,565 | | 21,130 | | 115,435 | |
| 27 | (b) Investment in water rights (reported) ... 1940 ... dollars | 2,813 | 460,633 | 1,839 | | 1,152 | | 687 | |
| 28 | Total investment in irrigation enterprises ... 1930 ... dollars | 41,964 | 48,237,304 | ... | | ... | | ... | |
| 29 | 1920 ... dollars | 25,224 | 22,308,873 | ... | | ... | | ... | |
| 30 | Increase or decrease (-), 1930-1940 ... percent | 10.6 | -1.8 | ... | | ... | | ... | |
| 31 | Average investment based on area works were capable of supplying with water, per acre ... 1940 ... dollars | 4.79 | 102.95 | 20.74 | | 34.71 | | 19.26 | |
| 32 | 1930 ... dollars | 17.04 | 95.49 | ... | | ... | | ... | |
| 33 | 1920 ... dollars | 6.54 | 61.05 | ... | | ... | | ... | |
| 34 | Average investment per acre irrigated ... 1939 ... dollars | 19.05 | 132.28 | 27.92 | | 64.96 | | 25.16 | |
| 35 | Estimated final investment in existing enterprises ... 1940 ... dollars | 47,183 | 48,387,933 | 144,979 | | 24,582 | | 120,397 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre ... 1940 ... dollars | 4.85 | 101.26 | 3.24 | | 37.99 | | 2.73 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | | Primary Enterprises | Sup. Enterprises | Primary Enterprises | Sup. Enterprises | Primary Enterprises | Sup. Enterprises | |
| 37 | Enterprises reporting maintenance and operation ... 1939 ... number | 72 | 644 | 9 | 89 | 7 | 9 | 7 | 80 |
| 38 | Area irrigated in these enterprises ... 1939 ... acres | 2,328 | 344,380 | 535 | 4,576 | 605 | 340 | 605 | 4,236 |
| 39 | Cost of maintenance and operation ... 1939 ... dollars | 3,641 | 2,018,206 | 3,390 | 18,109 | 2,022 | 2,852 | 2,022 | 15,257 |
| 40 | Average cost, per acre irrigated ... 1939 ... dollars | 1.56 | 5.86 | 6.34 | 3.96 | 3.34 | 8.39 | 3.34 | 3.60 |
| 41 | Total annual charges (reported)[4 5] ... 1939 ... dollars | 981 | 1,837,204 | 450 | ... | ... | ... | ... | ... |
| 42 | Average annual charge per acre irrigated ... 1939 ... dollars | 1.07 | 6.47 | 3.00 | ... | ... | ... | ... | ... |
| 43 | Area against which charges were assessed ... 1939 ... acres | 931 | 356,106 | 250 | ... | ... | ... | ... | ... |
| 44 | Average annual charge per acre assessed ... 1939 ... dollars | 1.05 | 5.16 | 1.80 | ... | ... | ... | ... | ... |
| 45 | Total charges collected[4] ... 1939 ... dollars | ... | 1,052,829 | 400 | ... | ... | ... | ... | ... |
| 46 | Indebtedness to December 31 (reported)[5] ... 1939 ... dollars | ... | 24,315,867 | 2,500 | ... | ... | ... | ... | ... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | | |
| 47 | Enterprises reporting water delivered ... 1939 ... number | 78 | 604 | 9 | 92 | 7 | 9 | 7 | 83 |
| 48 | Area irrigated by these enterprises ... 1939 ... acres | 2,294 | 341,222 | 58,578 | 3,057 | 605 | 312 | 605 | 2,745 |
| 49 | Water delivered ... 1939 ... acre-feet | 6,364 | 1,022,581 | 59,570 | 5,112 | 486 | 831 | 486 | 4,281 |
| 50 | Average water delivered per acre irrigated ... 1939 ... acre-feet | 2.8 | 3.0 | 1.0 | 1.7 | 0.8 | 2.7 | 0.8 | 1.6 |
| 51 | Average cost of water per acre irrigated ... 1939 ... dollars | 1.51 | 6.91 | 5.04 | 6.39 | 3.34 | 9.20 | 3.34 | 6.04 |
| 52 | Average cost of water per acre-foot delivered ... 1939 ... dollars | 0.55 | 2.31 | 4.96 | 3.82 | 4.16 | 3.45 | 4.16 | 3.87 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage ... 1939 ... number | ... | 6 | ... | ... | ... | ... | ... | ... |
| 54 | Irrigable area in these enterprises ... 1939 ... acres | ... | 244,968 | ... | ... | ... | ... | ... | ... |
| 55 | Irrigated area in these enterprises ... 1939 ... acres | ... | 219,957 | ... | ... | ... | ... | ... | ... |
| 56 | Area for which drains have been installed ... 1939 ... acres | ... | 45,691 | ... | ... | ... | ... | ... | ... |
| 57 | Additional area needing drainage ... 1939 ... acres | ... | 1,320 | ... | ... | ... | ... | ... | ... |

[a] Schedules called for "Number of farms," see explanation in text.
[1] 1930 and 1920 data are designated as "Whitewater Draw and tributaries" and do not include Vamori Wash.
[2] For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.
[3] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

1940, 1930, 1920; AND IRRIGATED UNITS,[4] MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

and Arkansas and Louisiana]

| COLORADO RIVER (VI)—Continued | | | | | | | Gulf of California (VII) (exclusive of Colorado River) Whitewater Draw and Vamori Wash,[1] Arizona | GREAT BASIN (VIII) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lower Colorado River (VI-B)—Continued (Exclusive of Imperial Valley) | | | | | | Intrastate tributary in California (Imperial Valley) | | Total | | Bonneville Lake (VIII-A) | | |
| | | Independent basins | | | | | | | | | | |
| Intrastate tributary in Nevada (Las Vegas Valley) (7) | Intrastate tributary in Arizona (Williams River) (8) | Total | Intrastate basin in Arizona (Red Lake) (11) | Intrastate basins in Nevada | Intrastate basin in California (Whitewater River) (12) | (VI-C) | (1)+(2) | (VIII) | | Total (VIII-A) | | |
| 111 | 82 | 960 | 4 | 157 | 799 | 4,550 | 405 | 45,605 | | 40,423 | | 1 |
| 2,565 | 1,714 | 31,050 | 40 | 12,029 | 18,981 | 416,939 | 8,498 | 2,073,727 | | 1,083,238 | | 2 |
| 1,170 | 1,213 | 25,139 | 27 | 7,429 | 17,683 | 404,923 | 4,573 | 1,548,788 | | 944,399 | | 3 |
| 16 | 66 | 482 | ..... | 37 | 445 | 4,000 | 528 | 29,375 | | 24,175 | | 4 |
| 1,379 | 435 | 5,429 | 13 | 4,563 | 853 | 8,016 | 3,397 | 495,564 | | 114,664 | | 5 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 3,301 | 2,036,033 | | ..... | | 6 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 5,871 | 2,277,651 | | ..... | | 7 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 157.4 | 1.9 | | ..... | | 8 |
| 3,492 | 2,425 | 57,933 | 42 | 14,419 | 43,472 | 526,817 | 14,261 | 2,504,611 | | 1,272,056 | | 9 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 5,570 | 3,004,651 | | ..... | | 10 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 16,623 | 4,165,450 | | ..... | | 11 |
| 927 | 711 | 26,883 | 2 | 2,390 | 24,491 | 109,878 | 5,763 | 430,884 | | 188,818 | | 12 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2,269 | 968,618 | | ..... | | 13 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 10,752 | 1,887,799 | | ..... | | 14 |
| 3,169 | 2,346 | 40,663 | 42 | 13,494 | 27,127 | 526,632 | 13,462 | 2,381,171 | | 1,205,711 | | 15 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 4,753 | 2,536,492 | | ..... | | 16 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 9,950 | 2,625,313 | | ..... | | 17 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 183.2 | -6.1 | | ..... | | 18 |
| 604 | 632 | 9,613 | 2 | 1,465 | 8,146 | 109,693 | 4,964 | 307,444 | | 122,473 | | 19 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1,452 | 500,459 | | ..... | | 20 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 4,079 | 547,662 | | ..... | | 21 |
| 80.9 | 73.1 | 76.4 | 95.2 | 89.1 | 70.0 | 79.2 | 63.1 | 87.1 | | 89.8 | | 22 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 69.5 | 80.3 | | ..... | | 23 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 59.0 | 80.5 | | ..... | | 24 |
| 120,699 | 52,948 | 3,020,587 | 2,300 | 137,935 | 2,880,352 | 16,742,110 | 226,627 | 59,698,865 | | 37,401,770 | | 25 |
| 119,555 | 52,900 | 3,004,112 | 2,300 | 121,460 | 2,880,352 | 16,740,410 | 226,622 | 56,186,777 | | 35,099,945 | | 26 |
| 1,144 | 48 | 16,475 | ..... | 16,475 | ..... | 1,700 | 5 | 3,512,088 | | 2,301,825 | | 27 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 230,606 | 67,579,074 | | ..... | | 28 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 299,368 | 62,207,175 | | ..... | | 29 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | -1.7 | -11.7 | | ..... | | 30 |
| 38.09 | 22.57 | 74.28 | 54.76 | 10.22 | 106.18 | 31.79 | 16.83 | 25.07 | | 31.02 | | 31 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 48.52 | 26.64 | | ..... | | 32 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 30.09 | 22.63 | | ..... | | 33 |
| 47.06 | 30.89 | 97.28 | 57.50 | 11.47 | 151.75 | 40.15 | 26.67 | 28.79 | | 34.53 | | 34 |
| 129,769 | 59,608 | 3,314,637 | 3,650 | 138,085 | 3,172,902 | 16,777,575 | 257,503 | 61,709,956 | | 38,257,756 | | 35 |
| 37.16 | 24.58 | 57.22 | 86.90 | 9.58 | 72.99 | 31.85 | 18.06 | 24.64 | | 30.08 | | 36 |
| | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | |
| 99 | 66 | 372 | 1 | 4 | 25 | 1 | 343 | 22 | 159 | 3,941 | 142 | 1,708 | 127 | 37 |
| 2,246 | 1,504 | 28,139 | (5) | 40 | 11,537 | (5) | 16,562 | 416,453 | 6,207 | 1,957,973 | 360,457 | 1,043,166 | 275,210 | 38 |
| 3,391 | 5,046 | 215,299 | (5) | 500 | 4,340 | (5) | 210,459 | 1,279,705 | 20,082 | 1,600,266 | 118,396 | 769,649 | 78,703 | 39 |
| 1.51 | 3.36 | 7.65 | (5) | 12.50 | 0.38 | (5) | 12.71 | 3.07 | 3.24 | 0.82 | 0.33 | 0.74 | 0.29 | 40 |
| ..... | ..... | 38,430 | ..... | ..... | 2,712 | ..... | 35,718 | 1,686,000 | 610 | 1,308,994 | 201,239 | 973,059 | 112,855 | 41 |
| ..... | ..... | 3.91 | ..... | ..... | 0.46 | ..... | 9.04 | 4.05 | 0.22 | 1.13 | 0.57 | 1.04 | 0.42 | 42 |
| ..... | ..... | 10,870 | ..... | ..... | 6,018 | ..... | 4,852 | 562,000 | 2,719 | 1,228,342 | 382,071 | 985,092 | 279,700 | 43 |
| ..... | ..... | 3.54 | ..... | ..... | 0.45 | ..... | 7.36 | 3.00 | 0.22 | 1.07 | 0.53 | 0.99 | 0.40 | 44 |
| ..... | ..... | 28,204 | ..... | ..... | 2,709 | ..... | 25,495 | 1,690,000 | ..... | 1,154,491 | 260,086 | 999,743 | 181,017 | 45 |
| ..... | ..... | 68,755 | ..... | ..... | ..... | ..... | 68,755 | 15,500,000 | ..... | 5,934,982 | 10,564,468 | 4,012,844 | 7,823,862 | 46 |
| 56 | 60 | 424 | 1 | 3 | 21 | 1 | 400 | 45 | 133 | 3,933 | 155 | 1,761 | 141 | 47 |
| 1,226 | 1,434 | 28,037 | (5) | 25 | 9,590 | (5) | 18,422 | 416,937 | 2,555 | 1,821,964 | 296,139 | 956,312 | 211,214 | 48 |
| 7,604 | 3,975 | 118,745 | (5) | 51 | 23,863 | (5) | 94,831 | 1,169,960 | 5,686 | 4,644,167 | 513,971 | 2,329,574 | 221,774 | 49 |
| 6.2 | 2.8 | 4.2 | (5) | 2.0 | 2.5 | (5) | 5.1 | 2.8 | 2.2 | 2.5 | 1.7 | 2.4 | 1.0 | 50 |
| 2.63 | 3.49 | 8.77 | (5) | 8.00 | 0.41 | (5) | 13.44 | 4.06 | 7.50 | 1.13 | 0.66 | 1.02 | 0.50 | 51 |
| 0.42 | 1.26 | 2.07 | (5) | 3.92 | 0.16 | (5) | 2.61 | 1.45 | 3.37 | 0.44 | 0.38 | 0.42 | 0.47 | 52 |
| ..... | 1 | 5 | ..... | ..... | 2 | ..... | 3 | [6]1 | ..... | 251 | ..... | 209 | ..... | 53 |
| ..... | (5) | 17,956 | ..... | ..... | (5) | ..... | 14,780 | 525,000 | ..... | 562,861 | ..... | 300,720 | ..... | 54 |
| ..... | (5) | 3,460 | ..... | ..... | (5) | ..... | 416 | 416,000 | ..... | 471,434 | ..... | 275,135 | ..... | 55 |
| ..... | (5) | 994 | ..... | ..... | (5) | ..... | 350 | 200,000 | ..... | 188,450 | ..... | 85,420 | ..... | 56 |
| ..... | ..... | 10,650 | ..... | ..... | (5) | ..... | 10,000 | 315,000 | ..... | 53,514 | ..... | 32,706 | ..... | 57 |

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

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | GREAT BASIN (VIII)—Continued | | | | | |
|---|---|---|---|---|---|---|---|
| | | Bonneville Lake (VIII-A)—Continued | | | | | |
| | | Great Salt Lake | | | | Bear River | |
| | | Total[1] | | Direct (1) | | Total[2] | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | |
| 1 | Irrigated units*.....1939...number..... | 31,023 | | 1,340 | | 9,526 | |
| 2 | Area irrigated.....1939...acres..... | 773,745 | | 25,282 | | 403,605 | |
| 3 | (a) Cropland harvested.....1939...acres..... | 677,876 | | 21,989 | | 347,659 | |
| 4 | (b) Crop failure.....1939...acres..... | 11,338 | | 1,229 | | 3,447 | |
| 5 | (c) Pasture.....1939...acres..... | 84,531 | | 2,064 | | 52,499 | |
| 6 | Area irrigated.....1929...acres..... | 801,712 | | ..... | | 419,409 | |
| 7 | 1919...acres..... | 848,639 | | ..... | | 480,452 | |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | -3.5 | | ..... | | -3.8 | |
| 9 | Irrigable area in enterprises.....1940...acres..... | 892,289 | | 28,227 | | 470,251 | |
| 10 | 1930...acres..... | 953,001 | | ..... | | 490,780 | |
| 11 | 1920[3]..acres..... | 1,249,721 | | ..... | | 685,746 | |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 118,544 | | 2,945 | | 66,646 | |
| 13 | 1930...acres..... | 151,289 | | ..... | | 71,371 | |
| 14 | 1920[3]..acres..... | 401,082 | | ..... | | 205,294 | |
| 15 | Area works were capable of supplying with water...1940...acres..... | 844,413 | | 27,153 | | 444,479 | |
| 16 | 1930...acres..... | 879,599 | | ..... | | 459,724 | |
| 17 | 1920...acres..... | 989,919 | | ..... | | 547,673 | |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | -4.0 | | ..... | | -3.3 | |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 70,668 | | 1,871 | | 40,874 | |
| 20 | 1930...acres..... | 77,887 | | ..... | | 40,315 | |
| 21 | 1920...acres..... | 141,280 | | ..... | | 67,221 | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 91.6 | | 93.1 | | 90.8 | |
| 23 | 1929...percent.... | 91.1 | | ..... | | 91.2 | |
| 24 | 1919...percent.... | 85.7 | | ..... | | 87.7 | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 28,927,034 | | 2,409,673 | | 10,068,475 | |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 27,363,991 | | 2,405,343 | | 8,924,489 | |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 1,563,043 | | 4,330 | | 1,143,986 | |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | 21,884,330 | | ..... | | 7,493,444 | |
| 29 | 1920...dollars.... | 18,109,805 | | ..... | | 7,438,075 | |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | 32.2 | | ..... | | 34.4 | |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 34.26 | | 88.74 | | 22.65 | |
| 32 | 1930...dollars.... | 24.88 | | ..... | | 16.30 | |
| 33 | 1920...dollars.... | 18.29 | | ..... | | 13.58 | |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 37.39 | | 95.31 | | 24.95 | |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 29,670,639 | | 2,572,882 | | 10,356,410 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 33.25 | | 91.15 | | 22.02 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary | Supplemental | Primary | Supplemental | Primary | Supplemental |
| | | Enterprises | | Enterprises | | Enterprises | |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 1,155 | 86 | 110 | 13 | 483 | 34 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 746,661 | 156,953 | 23,036 | 6,235 | 389,144 | 11,406 |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 564,317 | 59,735 | 17,087 | 8,420 | 235,441 | 6,492 |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 0.76 | 0.38 | 0.74 | 1.35 | 0.61 | 0.57 |
| 41 | Total annual charges (reported)[4 5].....1939...dollars.... | 734,692 | 95,404 | 22,480 | 2,190 | 285,537 | 5,537 |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 1.10 | 0.62 | 1.17 | 0.37 | 0.86 | 0.56 |
| 43 | Area against which charges were assessed.....1939...acres..... | 696,567 | 161,932 | 19,816 | 9,349 | 347,108 | 9,864 |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 1.05 | 0.59 | 1.13 | 0.23 | 0.82 | 0.56 |
| 45 | Total charges collected[4].....1939...dollars.... | 777,827 | 165,995 | 21,239 | 7,296 | 263,628 | 6,387 |
| 46 | Indebtedness to December 31 (reported)[5].....1939...dollars.... | 3,600,626 | 7,437,410 | 21,217 | 1,802,475 | 217,415 | 923,000 |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 1,215 | 103 | 99 | 16 | 494 | 36 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 684,526 | 157,328 | 17,557 | 6,345 | 357,183 | 11,479 |
| 49 | Water delivered.....1939...acre-feet.. | 1,689,115 | 195,031 | 48,301 | 11,835 | 814,950 | 17,951 |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 2.5 | 1.2 | 2.8 | 1.9 | 2.3 | 1.6 |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 1.04 | 0.62 | 1.20 | 0.41 | 0.81 | 0.57 |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 0.42 | 0.50 | 0.44 | 0.22 | 0.35 | 0.37 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 152 | ..... | 10 | ..... | 39 | ..... |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 240,658 | ..... | 352 | ..... | 136,206 | ..... |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 223,924 | ..... | 324 | ..... | 126,584 | ..... |
| 56 | Area for which drains have been installed.....1939...acres..... | 47,334 | ..... | 99 | ..... | 18,048 | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 31,758 | ..... | 67 | ..... | 26,186 | ..... |

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

[1] 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.

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

[3] 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]

| GREAT BASIN (VIII)—Continued | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bonneville Lake (VIII-A)—Continued | | | | | | | | | | | | | | |
| Great Salt Lake—Continued | | | | | | | | Independent basins | | | | | | |
| Bear River—Continued | | | | | | | | | | | | | | |
| Direct (2) | | Malad River (5) | | Intrastate tributary in Utah (Sevier River) (14)+(18) | | Total | | Deep Creek (Box Elder County, Utah) (19) | Deep Creek (Tooele County, Utah) (22) | Snake Valley (23) | Intrastate basins in Utah | | Intrastate basin in Nevada (Thousand Spring Creek) (21) | |
| 6,099 | | 512 | | 7,415 | | 1,985 | | 90 | 82 | 86 | 1,713 | | 14 | 1 |
| 336,336 | | 15,504 | | 237,569 | | 71,924 | | 4,137 | 2,700 | 13,999 | 48,313 | | 2,775 | 2 |
| 291,807 | | 14,551 | | 208,575 | | 57,948 | | 4,133 | 2,468 | 6,222 | 42,410 | | 2,715 | 3 |
| 3,346 | | 7 | | 8,983 | | 3,854 | | ..... | 44 | 2,010 | 1,800 | | ..... | 4 |
| 41,183 | | 946 | | 20,011 | | 10,122 | | 4 | 188 | 5,767 | 4,103 | | 60 | 5 |
| 206,221 | | 9,520 | | 258,929 | | ..... | | ..... | 2,147 | ..... | ..... | | ..... | 6 |
| 252,073 | | 17,868 | | 325,718 | | ..... | | ..... | 1,983 | ..... | ..... | | ..... | 7 |
| 63.1 | | 62.9 | | -8.2 | | ..... | | ..... | 25.8 | ..... | ..... | | ..... | 8 |
| 395,049 | | 20,377 | | 277,779 | | 101,968 | | 6,098 | 2,824 | 17,340 | 66,467 | | 9,259 | 9 |
| 250,808 | | 11,215 | | 336,671 | | ..... | | ..... | 2,362 | ..... | ..... | | ..... | 10 |
| 370,284 | | 45,339 | | 630,484 | | ..... | | ..... | 4,326 | ..... | ..... | | ..... | 11 |
| 56,713 | | 4,873 | | 40,210 | | 30,064 | | 1,961 | 124 | 3,341 | 18,154 | | 6,484 | 12 |
| 44,587 | | 1,695 | | 77,742 | | ..... | | ..... | 215 | ..... | ..... | | ..... | 13 |
| 118,211 | | 27,471 | | 304,766 | | ..... | | ..... | 2,343 | ..... | ..... | | ..... | 14 |
| 374,231 | | 17,155 | | 270,036 | | 91,232 | | 4,698 | 2,824 | 16,193 | 62,624 | | 4,893 | 15 |
| 228,457 | | 11,170 | | 303,757 | | ..... | | ..... | 2,172 | ..... | ..... | | ..... | 16 |
| 295,815 | | 18,317 | | 402,387 | | ..... | | ..... | 3,446 | ..... | ..... | | ..... | 17 |
| 65.3 | | 53.6 | | -11.1 | | ..... | | ..... | 30.0 | ..... | ..... | | ..... | 18 |
| 37,895 | | 1,651 | | 32,497 | | 19,308 | | 561 | 124 | 2,194 | 14,311 | | 2,118 | 19 |
| 20,236 | | 1,650 | | 44,828 | | ..... | | ..... | 25 | ..... | ..... | | ..... | 20 |
| 43,742 | | 449 | | 76,669 | | ..... | | ..... | 1,463 | ..... | ..... | | ..... | 21 |
| 89.9 | | 90.4 | | 88.0 | | 78.8 | | 88.1 | 95.6 | 86.5 | 77.1 | | 56.7 | 22 |
| 91.1 | | 85.2 | | 85.2 | | ..... | | ..... | 98.8 | ..... | ..... | | ..... | 23 |
| 85.2 | | 97.5 | | 80.9 | | ..... | | ..... | 57.5 | ..... | ..... | | ..... | 24 |
| 7,936,443 | | 223,037 | | 6,092,351 | | 2,382,385 | | 25,907 | 25,322 | 128,982 | 1,905,959 | | 296,215 | 25 |
| 6,848,909 | | 193,559 | | 5,603,973 | | 2,131,981 | | 22,757 | 22,322 | 111,197 | 1,679,525 | | 296,180 | 26 |
| 1,087,534 | | 29,478 | | 488,378 | | 250,404 | | 3,150 | 3,000 | 17,785 | 226,434 | | 35 | 27 |
| 4,267,038 | | 113,336 | | 6,793,638 | | ..... | | ..... | 12,277 | ..... | ..... | | ..... | 28 |
| 4,533,194 | | 350,272 | | 9,509,836 | | ..... | | ..... | 8,844 | ..... | ..... | | ..... | 29 |
| 86.0 | | 96.8 | | -10.3 | | ..... | | ..... | 106.3 | ..... | ..... | | ..... | 30 |
| 21.21 | | 13.00 | | 22.56 | | 26.11 | | 5.51 | 8.97 | 7.97 | 30.43 | | 60.54 | 31 |
| 18.84 | | 10.15 | | 22.37 | | ..... | | ..... | 5.65 | ..... | ..... | | ..... | 32 |
| 15.32 | | 19.12 | | 23.63 | | ..... | | ..... | 2.57 | ..... | ..... | | ..... | 33 |
| 23.60 | | 14.39 | | 25.64 | | 33.12 | | 6.26 | 9.38 | 9.21 | 39.45 | | 106.74 | 34 |
| 8,209,353 | | 226,812 | | 6,138,536 | | 2,448,581 | | 26,157 | 38,322 | 140,778 | 1,947,109 | | 296,215 | 35 |
| 20.78 | | 11.13 | | 22.10 | | 24.01 | | 4.29 | 13.57 | 8.12 | 29.29 | | 31.99 | 36 |
| Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | | | | Primary | Sup. | | |
| Enterprises | | Enterprises | | Enterprises | | Enterprises | | | | | Enterprises | | | |
| 359 | 28 | 61 | 4 | 253 | 24 | 300 | 17 | 13 | 17 | 46 | 212 | 17 | 12 | 37 |
| 328,497 | 5,371 | 12,838 | 171 | 228,749 | 111,432 | 67,756 | 6,825 | 4,102 | 1,720 | 12,128 | 47,031 | 6,825 | 2,775 | 38 |
| 197,038 | 1,804 | 10,296 | 36 | 142,044 | 15,885 | 63,288 | 3,083 | 3,221 | 1,683 | 6,845 | 48,652 | 3,083 | 2,887 | 39 |
| 0.60 | 0.34 | 0.80 | 0.21 | 0.62 | 0.14 | 0.93 | 0.45 | 0.79 | 0.98 | 0.56 | 1.03 | 0.45 | 1.04 | 40 |
| 238,571 | 863 | 9,071 | ..... | 205,863 | 16,012 | 32,504 | 1,439 | 3,095 | 250 | 1,262 | 27,897 | 1,439 | ..... | 41 |
| 0.87 | 0.21 | 0.83 | ..... | 0.94 | 0.14 | 0.72 | 0.24 | 0.81 | 0.53 | 0.30 | 0.76 | 0.24 | ..... | 42 |
| 289,048 | 4,021 | 10,975 | ..... | 232,363 | 111,859 | 56,162 | 5,909 | 5,400 | 474 | 4,240 | 46,048 | 5,909 | ..... | 43 |
| 0.83 | 0.21 | 0.83 | ..... | 0.89 | 0.14 | 0.58 | 0.24 | 0.57 | 0.53 | 0.30 | 0.61 | 0.24 | ..... | 44 |
| 218,666 | 855 | 11,363 | ..... | 192,841 | 12,546 | 29,075 | 2,476 | 3,100 | ..... | 980 | 24,995 | 2,476 | ..... | 45 |
| 214,713 | ..... | 1,636 | ..... | 396,197 | 384,367 | 16,021 | 2,085 | ..... | 2,266 | ..... | 13,755 | 2,085 | ..... | 46 |
| 347 | 29 | 94 | 5 | 267 | 23 | 279 | 15 | 14 | 17 | 35 | 204 | 15 | 9 | 47 |
| 305,828 | 5,409 | 14,485 | 206 | 209,463 | 47,108 | 62,323 | 6,778 | 4,137 | 2,390 | 9,419 | 43,917 | 6,778 | 2,460 | 48 |
| 675,663 | 7,622 | 32,755 | 226 | 490,334 | 23,602 | 150,125 | 3,141 | 12,648 | 7,661 | 19,950 | 96,600 | 3,141 | 13,266 | 49 |
| 2.2 | 1.4 | 2.3 | 1.1 | 2.3 | 0.5 | 2.4 | 0.5 | 3.1 | 3.2 | 2.1 | 2.2 | 0.5 | 5.4 | 50 |
| 0.81 | 0.33 | 0.89 | 0.21 | 0.91 | 0.07 | 1.13 | 0.61 | 0.86 | 0.96 | 0.58 | 1.27 | 0.61 | 1.15 | 51 |
| 0.37 | 0.23 | 0.39 | 0.19 | 0.39 | 0.14 | 0.47 | 1.32 | 0.28 | 0.30 | 0.27 | 0.58 | 1.32 | 0.21 | 52 |
| 24 | ..... | 2 | ..... | 57 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 53 |
| 113,501 | ..... | (6) | ..... | 60,062 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 54 |
| 104,040 | ..... | (6) | ..... | 51,211 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 55 |
| 14,963 | ..... | ..... | ..... | 38,086 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 56 |
| 23,681 | ..... | (6) | ..... | 948 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 57 |

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

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | GREAT BASIN (VIII)—Continued | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Lahontan Lake (VIII-B) | | | | | | | |
| | | Total (VIII-B) | | Northern Great Basin (VIII-Ba) (Independent basins) | | | | | |
| | | | | Total (VIII-Ba) | Cowhead and Warner Lakes (9) | Quinn River | | Surprise Valley (16) | Smoke Creek (18) |
| | | | | | | Total[2] | Direct (13) | | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | | |
| 1 | Irrigated units*.....1939...number..... | 5,182 | | 772 | 62 | 115 | 97 | 186 | 15 |
| 2 | Area irrigated.....1939...acres..... | 990,489 | | 235,918 | 34,668 | 25,896 | 18,777 | 34,454 | 1,099 |
| 3 | (a) Cropland harvested.....1939...acres..... | 604,389 | | 158,128 | 20,272 | 16,870 | 12,896 | 27,482 | 819 |
| 4 | (b) Crop failure.....1939...acres..... | 5,200 | | 897 | 10 | 228 | 93 | 50 | 20 |
| 5 | (c) Pasture.....1939...acres..... | 380,900 | | 76,893 | 14,386 | 8,798 | 5,788 | 6,922 | 260 |
| 6 | Area irrigated.....1929...acres..... | ..... | | ..... | ..... | 8,518 | ..... | ..... | ..... |
| 7 | 1919...acres..... | ..... | | ..... | ..... | 9,935 | ..... | ..... | ..... |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | ..... | | ..... | ..... | 204.0 | ..... | ..... | ..... |
| 9 | Irrigable area in enterprises.....1940...acres..... | 1,232,555 | | 308,106 | 40,775 | 28,841 | 21,638 | 47,723 | 1,232 |
| 10 | 1930...acres..... | ..... | | ..... | ..... | 11,060 | ..... | ..... | ..... |
| 11 | 1920[4]..acres..... | ..... | | ..... | ..... | 19,635 | ..... | ..... | ..... |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 242,066 | | 72,188 | 6,107 | 2,945 | 2,861 | 13,269 | 133 |
| 13 | 1930...acres..... | ..... | | ..... | ..... | 2,542 | ..... | ..... | ..... |
| 14 | 1920[4]..acres..... | ..... | | ..... | ..... | 9,700 | ..... | ..... | ..... |
| 15 | Area works were capable of supplying with water...1940...acres..... | 1,175,460 | | 304,075 | 40,115 | 28,013 | 20,814 | 47,311 | 1,232 |
| 16 | 1930...acres..... | ..... | | ..... | ..... | 10,927 | ..... | ..... | ..... |
| 17 | 1920...acres..... | ..... | | ..... | ..... | 13,452 | ..... | ..... | ..... |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | ..... | | ..... | ..... | 156.4 | ..... | ..... | ..... |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 184,971 | | 68,157 | 5,447 | 2,117 | 2,037 | 12,857 | 133 |
| 20 | 1930...acres..... | ..... | | ..... | ..... | 2,409 | ..... | ..... | ..... |
| 21 | 1920...acres..... | ..... | | ..... | ..... | 3,517 | ..... | ..... | ..... |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 84.3 | | 77.6 | 86.4 | 92.4 | 90.2 | 72.8 | 89.2 |
| 23 | 1929...percent.... | ..... | | ..... | ..... | 78.0 | ..... | ..... | ..... |
| 24 | 1919...percent.... | ..... | | ..... | ..... | 73.9 | ..... | ..... | ..... |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 22,297,095 | | 1,733,612 | 119,928 | 63,421 | 41,150 | 155,008 | 20,974 |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 21,086,832 | | 1,590,738 | 114,525 | 62,056 | 39,800 | 92,711 | 19,872 |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 1,210,263 | | 142,874 | 5,403 | 1,365 | 1,350 | 62,297 | 1,102 |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | ..... | | ..... | ..... | 68,858 | ..... | ..... | ..... |
| 29 | 1920...dollars.... | ..... | | ..... | ..... | 50,548 | ..... | ..... | ..... |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | ..... | | ..... | ..... | -7.9 | ..... | ..... | ..... |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 18.97 | | 5.70 | 2.99 | 2.26 | 1.98 | 3.28 | 17.02 |
| 32 | 1930...dollars.... | ..... | | ..... | ..... | 6.30 | ..... | ..... | ..... |
| 33 | 1920...dollars.... | ..... | | ..... | ..... | 3.76 | ..... | ..... | ..... |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 22.51 | | 7.35 | 3.46 | 2.45 | 2.19 | 4.50 | 19.08 |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 23,452,200 | | 1,782,077 | 126,468 | 82,121 | 59,850 | 155,028 | 20,974 |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 19.03 | | 5.78 | 3.10 | 2.85 | 2.77 | 3.25 | 17.02 |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary Enterprises | Sup. Enterprises | | | | | | |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 2,233 | 15 | 530 | 45 | 47 | 29 | 174 | 9 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 914,807 | 85,247 | 217,269 | 32,033 | 23,041 | 15,922 | 32,183 | 873 |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 830,617 | 39,693 | 59,014 | 6,310 | 4.968 | 3,533 | 10,030 | 505 |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 0.91 | 0.47 | 0.27 | 0.20 | 0.22 | 0.22 | 0.31 | 0.58 |
| 41 | Total annual charges (reported)[5 6].....1939...dollars.... | 335,935 | 88,384 | 3,655 | ..... | ..... | ..... | 1,348 | 252 |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 1.51 | 1.05 | 0.41 | ..... | ..... | ..... | 0.51 | 0.51 |
| 43 | Area against which charges were assessed.....1939...acres..... | 243,250 | 102,371 | 8,989 | ..... | ..... | ..... | 2,620 | 490 |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 1.38 | 0.86 | 0.41 | ..... | ..... | ..... | 0.51 | 0.51 |
| 45 | Total charges collected[6].....1939...dollars.... | 154,748 | 79,069 | 1,662 | ..... | ..... | ..... | ..... | ..... |
| 46 | Indebtedness to December 31 (reported)[6].....1939...dollars.... | 1,922,138 | 2,740,606 | 359,500 | ..... | ..... | ..... | ..... | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 2,172 | 14 | 513 | 40 | 48 | 30 | 159 | 14 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 865,652 | 84,925 | 190,079 | 8,783 | 25,840 | 18,721 | 32,083 | 1,099 |
| 49 | Water delivered.....1939...acre-feet.. | 2,314,593 | 292,197 | 421,395 | 17,375 | 45,667 | 32,282 | 40,679 | 2,353 |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 2.7 | 3.4 | 2.2 | 2.0 | 1.8 | 1.7 | 1.3 | 2.1 |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 1.26 | 1.05 | 0.29 | 0.47 | 0.21 | 0.22 | 0.31 | 0.58 |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 0.47 | 0.30 | 0.13 | 0.24 | 0.12 | 0.13 | 0.25 | 0.27 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 42 | ..... | 1 | 1 | ..... | ..... | ..... | ..... |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 262,141 | ..... | (7) | (7) | ..... | ..... | ..... | ..... |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 196,299 | ..... | (7) | (7) | ..... | ..... | ..... | ..... |
| 56 | Area for which drains have been installed.....1939...acres..... | 103,030 | ..... | (7) | (7) | ..... | ..... | ..... | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 20,808 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

*Schedules called for "Number of farms," see explanation in text.
[1]Data 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.
[2]Data for the intrastate tributaries of the Quinn River are not shown separately but are included in the Quinn River total.
[3]Data for the intrastate tributaries of the Truckee River (upper) are not shown separately but are included in the Truckee River (upper) total.

1940, 1930, 1920; AND IRRIGATED UNITS,[4] MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

and Arkansas and Louisiana]

| GREAT BASIN (VIII)—Continued | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lahontan Lake (VIII-B)—Continued | | | | | | | | | | | | | | |
| Northern Great Basin (VIII-Ba)—Con. (Independent basins) | | | Sierra Nevada Slope (VIII-Bb) | | | | | | | | | | | |
| | | | | | Pyramid Lake | | | | | | | | | |
| | | | | | | | Truckee River (upper) | | | | | | | |
| Intrastate basins in Oregon | Intrastate basin in Nevada (Black Rock Desert) (12) | Intrastate basin in California (Madeline Plains) (17) | Total (VIII-Bb) | | Total | | Direct (1) | Total[3] | | Direct (2) | | Carson River (upper)[1] (5) | | |
| 332 | 53 | 9 | 2,715 | | 717 | | 82 | 635 | | 531 | | 300 | | 1 |
| 129,234 | 6,895 | 3,672 | 314,994 | | 49,426 | | 2,924 | 46,502 | | 32,242 | | 43,099 | | 2 |
| 84,865 | 5,413 | 2,407 | 174,994 | | 30,601 | | 1,188 | 29,413 | | 21,014 | | 23,180 | | 3 |
| 294 | 295 | ..... | 2,757 | | 473 | | ..... | 473 | | 131 | | 168 | | 4 |
| 44,075 | 1,187 | 1,265 | 137,243 | | 18,352 | | 1,736 | 16,616 | | 11,097 | | 19,751 | | 5 |
| 314,686 | ..... | ..... | ..... | | ..... | | ..... | 39,028 | | 30,417 | | 74,797 | | 6 |
| 302,864 | ..... | ..... | ..... | | ..... | | ..... | 20,002 | | 14,606 | | 75,439 | | 7 |
| -58.9 | ..... | ..... | ..... | | ..... | | ..... | 19.2 | | 6.0 | | ..... | | 8 |
| 175,187 | 10,318 | 4,030 | 401,136 | | 57,406 | | 5,488 | 51,918 | | 32,903 | | 44,659 | | 9 |
| 483,802 | ..... | ..... | ..... | | ..... | | ..... | 47,770 | | 38,971 | | 170,446 | | 10 |
| 600,738 | ..... | ..... | ..... | | ..... | | ..... | 34,659 | | 28,040 | | 233,668 | | 11 |
| 45,953 | 3,423 | 358 | 86,142 | | 7,980 | | 2,564 | 5,416 | | 661 | | 1,560 | | 12 |
| 169,116 | ..... | ..... | ..... | | ..... | | ..... | 8,742 | | 8,554 | | 95,649 | | 13 |
| 297,874 | ..... | ..... | ..... | | ..... | | ..... | 14,657 | | 13,434 | | 158,229 | | 14 |
| 174,702 | 8,672 | 4,030 | 363,251 | | 54,094 | | 4,250 | 49,844 | | 32,903 | | 44,153 | | 15 |
| 370,208 | ..... | ..... | ..... | | ..... | | ..... | 43,424 | | 34,625 | | 124,239 | | 16 |
| 446,777 | ..... | ..... | ..... | | ..... | | ..... | 20,920 | | 15,436 | | 104,464 | | 17 |
| -52.8 | ..... | ..... | ..... | | ..... | | ..... | 14.8 | | -5.0 | | ..... | | 18 |
| 45,468 | 1,777 | 358 | 48,257 | | 4,668 | | 1,326 | 3,342 | | 661 | | 1,054 | | 19 |
| 55,522 | ..... | ..... | ..... | | ..... | | ..... | 4,396 | | 4,208 | | 49,442 | | 20 |
| 143,913 | ..... | ..... | ..... | | ..... | | ..... | 918 | | 830 | | 29,025 | | 21 |
| 74.0 | 79.5 | 91.1 | 86.7 | | 91.4 | | 68.8 | 93.3 | | 98.0 | | 97.6 | | 22 |
| 85.0 | ..... | ..... | ..... | | ..... | | ..... | 89.9 | | 87.8 | | 60.2 | | 23 |
| 67.8 | ..... | ..... | ..... | | ..... | | ..... | 95.6 | | 94.6 | | 72.2 | | 24 |
| 1,282,417 | 59,064 | 32,800 | 11,821,575 | | 2,817,958 | | 95,926 | 2,722,032 | | 2,016,239 | | 440,872 | | 25 |
| 1,212,105 | 56,669 | 32,800 | 11,743,254 | | 2,791,025 | | 95,926 | 2,695,099 | | 1,999,362 | | 436,885 | | 26 |
| 70,312 | 2,395 | ..... | 78,321 | | 26,933 | | ..... | 26,933 | | 16,877 | | 3,987 | | 27 |
| 6,231,723 | ..... | ..... | ..... | | ..... | | ..... | 1,814,690 | | 1,572,525 | | 7,210,361 | | 28 |
| 5,799,574 | ..... | ..... | ..... | | ..... | | ..... | 594,187 | | 485,900 | | 8,064,685 | | 29 |
| -79.4 | ..... | ..... | ..... | | ..... | | ..... | 50.0 | | 28.2 | | ..... | | 30 |
| 7.34 | 6.81 | 8.14 | 32.54 | | 52.09 | | 22.57 | 54.61 | | 61.28 | | 9.99 | | 31 |
| 16.83 | ..... | ..... | ..... | | ..... | | ..... | 41.79 | | 45.42 | | 58.04 | | 32 |
| 12.98 | ..... | ..... | ..... | | ..... | | ..... | 28.40 | | 31.48 | | 77.20 | | 33 |
| 9.92 | 8.57 | 8.93 | 37.53 | | 57.01 | | 32.81 | 58.54 | | 62.53 | | 10.23 | | 34 |
| 1,301,577 | 63,109 | 32,800 | 12,391,841 | | 3,178,029 | | 321,176 | 2,856,853 | | 2,150,660 | | 510,302 | | 35 |
| 7.43 | 6.12 | 8.14 | 30.89 | | 55.36 | | 58.52 | 55.03 | | 65.36 | | 11.43 | | 36 |
| | | | Primary | Sup. | Primary | Sup. | | Primary | Sup. | Primary | Sup. | Primary | Sup. | |
| | | | Enterprises | | Enterprises | | | Enterprises | | Enterprises | | Enterprises | | |
| 217 | 34 | 4 | 459 | 9 | 71 | ..... | 10 | 61 | ..... | 41 | ..... | 111 | 3 | 37 |
| 120,331 | 5,446 | 3,362 | 295,903 | 67,507 | 45,264 | ..... | 1,563 | 43,701 | ..... | 30,336 | ..... | 39,796 | 2,313 | 38 |
| 31,576 | 5,325 | 300 | 163,563 | 21,562 | 44,482 | ..... | 3,126 | 41,356 | ..... | 34,396 | ..... | 10,719 | 1,457 | 39 |
| 0.26 | 0.98 | 0.09 | 0.55 | 0.32 | 0.98 | ..... | 2.00 | 0.95 | ..... | 1.13 | ..... | 0.27 | 0.63 | 40 |
| 2,055 | ..... | ..... | 293,927 | 59,085 | 56,546 | ..... | 2,956 | 53,590 | ..... | 31,449 | ..... | 2,352 | 2,000 | 41 |
| 0.35 | ..... | ..... | 1.56 | 0.88 | 1.65 | ..... | 4.51 | 1.60 | ..... | 1.25 | ..... | 0.13 | 1.00 | 42 |
| 5,879 | ..... | ..... | 204,664 | 82,175 | 35,275 | ..... | 655 | 34,620 | ..... | 25,666 | ..... | 17,814 | 2,000 | 43 |
| 0.35 | ..... | ..... | 1.44 | 0.72 | 1.60 | ..... | 4.51 | 1.55 | ..... | 1.23 | ..... | 0.13 | 1.00 | 44 |
| 1,662 | ..... | ..... | 124,271 | 56,492 | 31,508 | ..... | ..... | 31,508 | ..... | 23,906 | ..... | 1,494 | 1,940 | 45 |
| 359,500 | ..... | ..... | 1,226,620 | 1,536,679 | 129,240 | 1,066,179 | ..... | 129,240 | 1,066,179 | 14,798 | 1,066,179 | ..... | ..... | 46 |
| 212 | 31 | 9 | 493 | 9 | 80 | ..... | 13 | 67 | ..... | 44 | ..... | 99 | 3 | 47 |
| 112,337 | 6,265 | 3,672 | 301,688 | 67,507 | 48,484 | ..... | 2,924 | 45,560 | ..... | 31,630 | ..... | 38,509 | 2,313 | 48 |
| 293,432 | 18,414 | 3,475 | 899,567 | 213,175 | 202,573 | ..... | 8,715 | 193,858 | ..... | 162,710 | ..... | 168,602 | 2,378 | 49 |
| 2.6 | 2.9 | 0.9 | 3.0 | 3.2 | 4.2 | ..... | 3.0 | 4.3 | ..... | 5.1 | ..... | 4.4 | 1.0 | 50 |
| 0.26 | 1.06 | 0.09 | 1.15 | 0.89 | 1.38 | ..... | 2.00 | 1.35 | ..... | 1.17 | ..... | 0.27 | 1.13 | 51 |
| 0.10 | 0.36 | 0.09 | 0.39 | 0.28 | 0.33 | ..... | 0.67 | 0.32 | ..... | 0.23 | ..... | 0.06 | 1.10 | 52 |
| ..... | ..... | ..... | 25 | ..... | 8 | ..... | ..... | 8 | ..... | 6 | ..... | 2 | ..... | 53 |
| ..... | ..... | ..... | 204,982 | ..... | 33,666 | ..... | ..... | 33,666 | ..... | 24,904 | ..... | (7) | ..... | 54 |
| ..... | ..... | ..... | 160,624 | ..... | 30,562 | ..... | ..... | 30,562 | ..... | 24,808 | ..... | (7) | ..... | 55 |
| ..... | ..... | ..... | 82,958 | ..... | 12,512 | ..... | ..... | 12,512 | ..... | 8,113 | ..... | (7) | ..... | 56 |
| ..... | ..... | ..... | 19,636 | ..... | 6,206 | ..... | ..... | 6,206 | ..... | 6,006 | ..... | (7) | ..... | 57 |

[4] For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.
[5] Annual charges may include costs of maintenance and operation, and assessments for payments on principal and interest on bonds, notes, warrants, and for special reasons.
[6] Annual charges and indebtedness were reported only by enterprises serving 5 or more 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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | GREAT BASIN (VIII)—Continued | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Lahontan Lake (VIII-B)—Continued | | | | | | |
| | | Sierra Nevada Slope (VIII-Bb)—Continued | | | | | | |
| | | Walker Lake | | | | | | |
| | | | | | Walker River | | | |
| | | Total | | Direct (7) | Total | | Direct (8) | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | |
| 1 | Irrigated units*.....1939...number..... | 482 | | 77 | 405 | | 222 | |
| 2 | Area irrigated.....1939...acres..... | 112,052 | | 3,646 | 108,406 | | 44,133 | |
| 3 | (a) Cropland harvested.....1939...acres..... | 42,188 | | 814 | 41,374 | | 23,160 | |
| 4 | (b) Crop failure.....1939...acres..... | 66 | | ..... | 66 | | 60 | |
| 5 | (c) Pasture.....1939...acres..... | 69,798 | | 2,832 | 66,966 | | 20,913 | |
| 6 | Area irrigated.....1929...acres..... | ..... | | ..... | 91,881 | | ..... | |
| 7 | 1919...acres..... | ..... | | ..... | 152,625 | | ..... | |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | ..... | | ..... | 18.0 | | ..... | |
| 9 | Irrigable area in enterprises.....1940...acres..... | 125,085 | | 7,371 | 117,714 | | 49,881 | |
| 10 | 1930...acres..... | ..... | | ..... | 191,800 | | ..... | |
| 11 | 1920[1]...acres..... | ..... | | ..... | 400,232 | | ..... | |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 13,033 | | 3,725 | 9,308 | | 5,748 | |
| 13 | 1930...acres..... | ..... | | ..... | 99,919 | | ..... | |
| 14 | 1920[1]..acres..... | ..... | | ..... | 247,607 | | ..... | |
| 15 | Area works were capable of supplying with water...1940...acres..... | 122,583 | | 5,154 | 117,429 | | 49,596 | |
| 16 | 1930...acres..... | ..... | | ..... | 94,317 | | ..... | |
| 17 | 1920...acres..... | ..... | | ..... | 179,562 | | ..... | |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | ..... | | ..... | 24.5 | | ..... | |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 10,531 | | 1,508 | 9,023 | | 5,463 | |
| 20 | 1930...acres..... | ..... | | ..... | 2,436 | | ..... | |
| 21 | 1920...acres..... | ..... | | ..... | 26,937 | | ..... | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 91.4 | | 70.7 | 92.3 | | 89.0 | |
| 23 | 1929...percent.... | ..... | | ..... | 97.4 | | ..... | |
| 24 | 1919...percent.... | ..... | | ..... | 85.0 | | ..... | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 1,780,062 | | 218,179 | 1,561,883 | | 879,400 | |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 1,757,490 | | 215,679 | 1,541,811 | | 865,051 | |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 22,572 | | 2,500 | 20,072 | | 14,349 | |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | ..... | | ..... | 2,213,164 | | ..... | |
| 29 | 1920...dollars.... | ..... | | ..... | 1,699,059 | | ..... | |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | ..... | | ..... | -29.4 | | ..... | |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 14.52 | | 42.33 | 13.30 | | 17.73 | |
| 32 | 1930...dollars.... | ..... | | ..... | 23.47 | | ..... | |
| 33 | 1920...dollars.... | ..... | | ..... | 9.46 | | ..... | |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 15.89 | | 59.84 | 14.41 | | 19.93 | |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 1,843,062 | | 272,179 | 1,570,883 | | 888,000 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 14.73 | | 36.93 | 13.34 | | 17.80 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary | Supplemental | | Primary | Supplemental | Primary | Supplemental |
| | | Enterprises | | | Enterprises | | Enterprises | |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 85 | 3 | 2 | 83 | 3 | 30 | 1 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 109,392 | 65,000 | (2) | 105,880 | 65,000 | 43,787 | (2) |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 28,950 | 19,972 | (2) | 24,949 | 19,972 | 7,367 | (2) |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 0.26 | 0.31 | (2) | 0.24 | 0.31 | 0.17 | (2) |
| 41 | Total annual charges (reported)[3] [4].....1939...dollars.... | 17,217 | 57,085 | 89 | 17,128 | 57,085 | 5,338 | 38,546 |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 0.25 | 0.88 | 0.03 | 0.26 | 0.88 | 0.15 | 0.88 |
| 43 | Area against which charges were assessed.....1939...acres..... | 75,542 | 80,175 | 3,498 | 72,044 | 80,175 | 39,764 | 54,137 |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 0.23 | 0.71 | 0.03 | 0.24 | 0.71 | 0.13 | 0.71 |
| 45 | Total charges collected[5].....1939...dollars.... | 15,721 | 54,552 | 85 | 15,636 | 54,552 | 5,251 | 36,836 |
| 46 | Indebtedness to December 31 (reported)[4].....1939...dollars.... | 23,753 | 470,500 | ..... | 23,753 | 470,500 | ..... | 317,696 |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 91 | 3 | 3 | 88 | 3 | 33 | 1 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 107,776 | 65,000 | 3,646 | 104,130 | 65,000 | 44,133 | (2) |
| 49 | Water delivered.....1939...acre-feet.. | 221,951 | 210,450 | 6,754 | 215,197 | 210,450 | 97,994 | (2) |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 2.1 | 3.2 | 1.9 | 2.1 | 3.2 | 2.2 | (2) |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 0.25 | 0.88 | 0.03 | 0.25 | 0.88 | 0.18 | (2) |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 0.12 | 0.27 | 0.01 | 0.12 | 0.27 | 0.08 | (2) |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 8 | ..... | ..... | 8 | ..... | 6 | ..... |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 76,166 | ..... | ..... | 76,166 | ..... | 68,226 | ..... |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 66,563 | ..... | ..... | 66,563 | ..... | 60,363 | ..... |
| 56 | Area for which drains have been installed.....1939...acres..... | 27,860 | ..... | ..... | 27,860 | ..... | 25,620 | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 8,975 | ..... | ..... | 8,975 | ..... | 7,775 | ..... |

*Schedules called for "Number of farms," 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 | | | | | | | | | | | Central Great Basin and Eastern Nevada (VIII-Bc) | | | |
| Walker Lake—Continued | | | | Intrastate streams in Nevada (Truckee and Carson Rivers, lower) (6) | Independent basins | | | | | | Total (VIII-Bc) | | Intrastate stream and tributaries in Nevada (Humboldt River) (1)+(7)+(10) | | |
| Walker River—Continued | | | | | Total | | Honey Lake (12) | | Intrastate basins in California | | | | | | |
| West Walker River (9) | | East Walker River (10) | | | | | | | | | | | | | |
| 150 | | 33 | | 720 | 496 | | 245 | | 251 | | 1,695 | | 507 | | 1 |
| 36,816 | | 27,457 | | 54,254 | 56,163 | | 40,477 | | 15,686 | | 439,577 | | 286,099 | | 2 |
| 16,086 | | 2,128 | | 44,797 | 34,228 | | 26,613 | | 7,615 | | 271,267 | | 178,231 | | 3 |
| ..... | | 6 | | 1,545 | 505 | | 505 | | ..... | | 1,546 | | 843 | | 4 |
| 20,730 | | 25,323 | | 7,912 | 21,430 | | 13,359 | | 8,071 | | 166,764 | | 107,025 | | 5 |
| ..... | | ..... | | ..... | ..... | | 24,664 | | ..... | | ..... | | ..... | | 6 |
| ..... | | ..... | | ..... | ..... | | 44,327 | | ..... | | ..... | | ..... | | 7 |
| ..... | | ..... | | ..... | ..... | | 64.1 | | ..... | | ..... | | ..... | | 8 |
| 39,891 | | 27,942 | | 86,066 | 87,920 | | 64,348 | | 23,572 | | 523,313 | | 335,015 | | 9 |
| ..... | | ..... | | ..... | ..... | | 49,319 | | ..... | | ..... | | ..... | | 10 |
| ..... | | ..... | | ..... | ..... | | 55,065 | | ..... | | ..... | | ..... | | 11 |
| 3,075 | | 485 | | 31,812 | 31,757 | | 23,871 | | 7,886 | | 83,736 | | 48,916 | | 12 |
| ..... | | ..... | | ..... | ..... | | 24,655 | | ..... | | ..... | | ..... | | 13 |
| ..... | | ..... | | ..... | ..... | | 10,738 | | ..... | | ..... | | ..... | | 14 |
| 39,891 | | 27,942 | | 66,768 | 75,653 | | 56,608 | | 19,045 | | 508,134 | | 329,372 | | 15 |
| ..... | | ..... | | ..... | ..... | | 49,069 | | ..... | | ..... | | ..... | | 16 |
| ..... | | ..... | | ..... | ..... | | 49,264 | | ..... | | ..... | | ..... | | 17 |
| ..... | | ..... | | ..... | ..... | | 15.4 | | ..... | | ..... | | ..... | | 18 |
| 3,075 | | 485 | | 12,514 | 19,490 | | 16,131 | | 3,359 | | 68,557 | | 43,273 | | 19 |
| ..... | | ..... | | ..... | ..... | | 24,405 | | ..... | | ..... | | ..... | | 20 |
| ..... | | ..... | | ..... | ..... | | 4,937 | | ..... | | ..... | | ..... | | 21 |
| 92.3 | | 98.3 | | 81.3 | 74.2 | | 71.5 | | 82.4 | | 86.5 | | 86.9 | | 22 |
| ..... | | ..... | | ..... | ..... | | 50.3 | | ..... | | ..... | | ..... | | 23 |
| ..... | | ..... | | ..... | ..... | | 90.0 | | ..... | | ..... | | ..... | | 24 |
| 552,297 | | 130,186 | | 6,168,815 | 613,868 | | 320,296 | | 293,572 | | 8,741,908 | | 2,974,199 | | 25 |
| 546,979 | | 129,781 | | 6,168,815 | 589,039 | | 295,677 | | 293,362 | | 7,752,840 | | 2,232,727 | | 26 |
| 5,318 | | 405 | | ..... | 24,829 | | 24,619 | | 210 | | 989,068 | | 741,472 | | 27 |
| ..... | | ..... | | ..... | ..... | | 1,511,574 | | ..... | | ..... | | ..... | | 28 |
| ..... | | ..... | | ..... | ..... | | 414,068 | | ..... | | ..... | | ..... | | 29 |
| ..... | | ..... | | ..... | ..... | | -78.8 | | ..... | | ..... | | ..... | | 30 |
| 13.85 | | 4.66 | | 92.39 | 8.11 | | 5.66 | | 15.41 | | 17.20 | | 9.03 | | 31 |
| ..... | | ..... | | ..... | ..... | | 30.81 | | ..... | | ..... | | ..... | | 32 |
| ..... | | ..... | | ..... | ..... | | 8.41 | | ..... | | ..... | | ..... | | 33 |
| 15.00 | | 4.74 | | 113.70 | 10.93 | | 7.91 | | 18.72 | | 19.89 | | 10.40 | | 34 |
| 552,697 | | 130,186 | | 6,207,165 | 653,283 | | 325,811 | | 327,472 | | 9,278,282 | | 3,077,817 | | 35 |
| 13.86 | | 4.66 | | 72.12 | 7.43 | | 5.06 | | 13.89 | | 17.73 | | 9.19 | | 36 |
| Primary Enterprises | Sup. | Primary Enterprises | Sup. | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | |
| 30 | 1 | 23 | 1 | 8 | 184 | 3 | 143 | 3 | 41 | 1,244 | 6 | 346 | 3 | 37 |
| 36,806 | (2) | 25,287 | (2) | 54,251 | 47,200 | 194 | 36,011 | 194 | 11,189 | 401,635 | 17,740 | 253,977 | 17,079 | 38 |
| 12,878 | (2) | 4,704 | (2) | 55,956 | 23,456 | 133 | 12,035 | 133 | 11,421 | 608,040 | 18,131 | 57,041 | 16,966 | 39 |
| 0.35 | (2) | 0.19 | (2) | 1.03 | 0.50 | 0.69 | 0.33 | 0.69 | 1.02 | 1.51 | 1.02 | 0.22 | 0.99 | 40 |
| 11,790 | 14,352 | ..... | 4,187 | 199,540 | 18,272 | ..... | 13,872 | ..... | 4,400 | 38,353 | 29,299 | 6,497 | 28,534 | 41 |
| 0.40 | 0.90 | ..... | 0.79 | 3.76 | 1.35 | ..... | 1.81 | ..... | 0.75 | 1.50 | 1.68 | 0.40 | 1.67 | 42 |
| 32,280 | 20,158 | ..... | 5,880 | 61,687 | 14,346 | ..... | 8,443 | ..... | 5,903 | 29,597 | 20,196 | 16,834 | 19,874 | 43 |
| 0.37 | 0.71 | ..... | 0.71 | 3.23 | 1.27 | ..... | 1.64 | ..... | 0.75 | 1.30 | 1.45 | 0.39 | 1.44 | 44 |
| 10,385 | 13,715 | ..... | 4,001 | 66,703 | 8,845 | ..... | 8,845 | ..... | ..... | 28,815 | 22,577 | 4,502 | 22,577 | 45 |
| 23,753 | 118,293 | ..... | 34,511 | 1,026,627 | 47,000 | ..... | 47,000 | ..... | ..... | 336,018 | 1,203,927 | ..... | 1,203,570 | 46 |
| 30 | 1 | 25 | 1 | 4 | 219 | 3 | 157 | 3 | 62 | 1,166 | 5 | 302 | 3 | 47 |
| 34,375 | (2) | 25,622 | (2) | 53,274 | 53,645 | 194 | 39,644 | 194 | 14,001 | 373,885 | 17,418 | 244,895 | 17,079 | 48 |
| 82,809 | (2) | 34,394 | (2) | 181,455 | 124,986 | 347 | 69,923 | 347 | 55,063 | 993,631 | 79,022 | 601,313 | 78,502 | 49 |
| 2.4 | (2) | 1.3 | (2) | 3.4 | 2.3 | 1.8 | 1.8 | 1.8 | 3.9 | 2.7 | 4.5 | 2.5 | 4.6 | 50 |
| 0.40 | (2) | 0.18 | (2) | 3.75 | 0.71 | 0.69 | 0.62 | 0.69 | 1.02 | 1.88 | 1.67 | 0.27 | 1.68 | 51 |
| 0.16 | (2) | 0.13 | (2) | 1.10 | 0.31 | 0.38 | 0.35 | 0.38 | 0.26 | 0.71 | 0.37 | 0.11 | 0.37 | 52 |
| 2 | ..... | ..... | ..... | [5] 2 | 5 | ..... | 3 | ..... | [5] 2 | 16 | ..... | 5 | ..... | 53 |
| (2) | ..... | ..... | ..... | 83,615 | 1,807 | ..... | 695 | ..... | 1,112 | 38,228 | ..... | 32,603 | ..... | 54 |
| (2) | ..... | ..... | ..... | 53,013 | 865 | ..... | 465 | ..... | 400 | 16,744 | ..... | 13,336 | ..... | 55 |
| (2) | ..... | ..... | ..... | 41,301 | 1,060 | ..... | 660 | ..... | 400 | 15,222 | ..... | 15,000 | ..... | 56 |
| (2) | ..... | ..... | ..... | 3,800 | 555 | ..... | ..... | ..... | 555 | 1,172 | ..... | 330 | ..... | 57 |

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

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | GREAT BASIN (VIII)—Continued | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Lahontan Lake (VIII-B)—Continued | | | | | | |
| | | Central Great Basin and Eastern Nevada (VIII-Bc)—Continued | | | | | | |
| | | Independent basins | | | | | | |
| | | Total | | Amargosa River and Dry Lakes (22) | Intrastate basins in Nevada | | Intrastate basins in California | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | |
| 1 | Irrigated units*.....1939...number..... | 1,188 | | 34 | 345 | | 809 | |
| 2 | Area irrigated.....1939...acres..... | 153,478 | | 2,156 | 113,884 | | 37,438 | |
| 3 | (a) Cropland harvested.....1939...acres..... | 93,036 | | 672 | 57,031 | | 35,333 | |
| 4 | (b) Crop failure.....1939...acres..... | 703 | | 145 | 317 | | 241 | |
| 5 | (c) Pasture.....1939...acres..... | 59,739 | | 1,339 | 56,536 | | 1,864 | |
| 6 | Area irrigated.....1929...acres..... | ..... | | ..... | ..... | | ..... | |
| 7 | 1919...acres..... | ..... | | ..... | ..... | | ..... | |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | ..... | | ..... | ..... | | ..... | |
| 9 | Irrigable area in enterprises.....1940...acres..... | 188,298 | | 3,151 | 127,386 | | 57,761 | |
| 10 | 1930...acres..... | ..... | | ..... | ..... | | ..... | |
| 11 | 1920[3]..acres..... | ..... | | ..... | ..... | | ..... | |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 34,820 | | 995 | 13,502 | | 20,323 | |
| 13 | 1930...acres..... | ..... | | ..... | ..... | | ..... | |
| 14 | 1920[3]..acres..... | ..... | | ..... | ..... | | ..... | |
| 15 | Area works were capable of supplying with water...1940...acres..... | 178,762 | | 3,065 | 124,263 | | 51,434 | |
| 16 | 1930...acres..... | ..... | | ..... | ..... | | ..... | |
| 17 | 1920...acres..... | ..... | | ..... | ..... | | ..... | |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | ..... | | ..... | ..... | | ..... | |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 25,284 | | 909 | 10,379 | | 13,996 | |
| 20 | 1930...acres..... | ..... | | ..... | ..... | | ..... | |
| 21 | 1920...acres..... | ..... | | ..... | ..... | | ..... | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 85.9 | | 70.3 | 91.6 | | 72.8 | |
| 23 | 1929...percent.... | ..... | | ..... | ..... | | ..... | |
| 24 | 1919...percent.... | ..... | | ..... | ..... | | ..... | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 5,767,709 | | 80,720 | 606,030 | | 5,080,959 | |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 5,520,113 | | 76,950 | 502,139 | | 4,941,024 | |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 247,596 | | 3,770 | 103,891 | | 139,935 | |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | ..... | | ..... | ..... | | ..... | |
| 29 | 1920...dollars.... | ..... | | ..... | ..... | | ..... | |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | ..... | | ..... | ..... | | ..... | |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 32.26 | | 26.34 | 4.88 | | 98.79 | |
| 32 | 1930...dollars.... | ..... | | ..... | ..... | | ..... | |
| 33 | 1920...dollars.... | ..... | | ..... | ..... | | ..... | |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 37.58 | | 37.44 | 5.32 | | 135.72 | |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 6,200,465 | | 81,720 | 675,935 | | 5,442,810 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 32.93 | | 25.93 | 5.31 | | 94.23 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary | Supplemental | | Primary | Supplemental | Primary | Supplemental |
| | | Enterprises | | | Enterprises | | Enterprises | |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 898 | 3 | 30 | 283 | 1 | 585 | 2 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 147,658 | 661 | 1,782 | 110,053 | (4) | 35,823 | (4) |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 550,999 | 1,165 | 4,493 | 35,472 | (4) | 511,034 | (4) |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 3.73 | 1.76 | 2.52 | 0.32 | (4) | 14.27 | (4) |
| 41 | Total annual charges (reported)[5] [6].....1939...dollars.... | 31,856 | 765 | ..... | 1,500 | ..... | 30,356 | 765 |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 3.38 | 2.38 | ..... | 0.21 | ..... | 12.47 | 2.38 |
| 43 | Area against which charges were assessed.....1939...acres..... | 12,763 | 322 | ..... | 6,980 | ..... | 5,783 | 322 |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 2.50 | 2.38 | ..... | 0.21 | ..... | 5.25 | 2.38 |
| 45 | Total charges collected[5].....1939...dollars.... | 24,313 | ..... | ..... | ..... | ..... | 24,313 | ..... |
| 46 | Indebtedness to December 31 (reported)[6].....1939...dollars.... | 336,018 | 357 | ..... | ..... | ..... | 336,018 | 357 |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 864 | 2 | 29 | 229 | 1 | 606 | 1 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 128,990 | (4) | 1,777 | 90,498 | (4) | 36,715 | (4) |
| 49 | Water delivered.....1939...acre-feet.. | 392,318 | (4) | 13,402 | 180,510 | (4) | 198,406 | (4) |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 3.0 | (4) | 7.5 | 2.0 | (4) | 5.4 | (4) |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 4.51 | (4) | 2.98 | 0.35 | (4) | 14.80 | (4) |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 1.48 | (4) | 0.40 | 0.17 | (4) | 2.74 | (4) |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 11 | ..... | ..... | 7 | ..... | 4 | ..... |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 5,625 | ..... | ..... | 5,125 | ..... | 500 | ..... |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 3,408 | ..... | ..... | 3,353 | ..... | 55 | ..... |
| 56 | Area for which drains have been installed.....1939...acres..... | 222 | ..... | ..... | 14 | ..... | 208 | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 842 | ..... | ..... | 732 | ..... | 110 | ..... |

* Schedules called for "Number of farms," see explanation in text.
[1] Data for the intrastate tributaries of the Clark Fork are not shown separately but are included in the Clark Fork total.
[2] Data for the intrastate tributaries of the Spokane River are not shown separately but are included in the Spokane River total.
[3] 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]

| COLUMBIA RIVER (IX) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Upper Columbia River (IX-A) | | | | | | | | | | | | | |
| | | | | | | Clark Fork | | | | Spokane River | | | | | |
| Total (IX) | Direct (IX-A)+(IX-C) | Total | | Direct (IX-A) | Kootenai River (1) | Total[1] | | Direct (2) | | Total[2] | | Direct (12) | Intrastate tributaries in Washington | | |
| 80,728 | 1,743 | 26,856 | | 1,373 | 210 | 5,042 | | 650 | | 2,468 | | 2,442 | 17,763 | | 1 |
| 3,819,738 | 27,967 | 894,680 | | 20,933 | 7,391 | 337,102 | | 25,184 | | 23,194 | | 22,669 | 506,060 | | 2 |
| 3,308,507 | 25,463 | 756,192 | | 20,193 | 6,680 | 275,855 | | 22,464 | | 22,143 | | 21,800 | 431,321 | | 3 |
| 32,819 | 251 | 7,056 | | 195 | 8 | 1,803 | | 61 | | 305 | | 305 | 4,745 | | 4 |
| 478,412 | 2,253 | 131,432 | | 545 | 703 | 59,444 | | 2,659 | | 746 | | 564 | 69,994 | | 5 |
| 3,393,640 | 10,035 | ..... | | ..... | 7,590 | 263,732 | | 13,667 | | 18,422 | | ..... | ..... | | 6 |
| 3,873,245 | 24,563 | ..... | | ..... | 5,982 | 286,290 | | 3,188 | | 20,614 | | 16,453 | ..... | | 7 |
| 12.6 | 178.7 | ..... | | ..... | -2.6 | 27.8 | | 84.3 | | 25.9 | | ..... | ..... | | 8 |
| 5,001,483 | 38,921 | 1,198,649 | | 26,988 | 10,796 | 450,910 | | 43,382 | | 27,613 | | 27,065 | 682,342 | | 9 |
| 4,992,131 | 22,546 | ..... | | ..... | 10,330 | 427,180 | | 20,253 | | 38,220 | | ..... | ..... | | 10 |
| 6,336,801 | 49,432 | ..... | | ..... | 14,423 | 603,088 | | 15,834 | | 50,860 | | 40,391 | ..... | | 11 |
| 1,181,745 | 10,954 | 303,969 | | 6,055 | 3,405 | 113,808 | | 18,198 | | 4,419 | | 4,396 | 176,282 | | 12 |
| 1,598,491 | 12,511 | ..... | | ..... | 2,740 | 163,448 | | 6,586 | | 19,798 | | ..... | ..... | | 13 |
| 2,463,556 | 24,869 | ..... | | ..... | 8,441 | 316,798 | | 12,646 | | 30,246 | | 23,938 | ..... | | 14 |
| 4,426,367 | 33,337 | 1,050,194 | | 24,336 | 9,561 | 399,561 | | 35,810 | | 27,321 | | 26,773 | 589,415 | | 15 |
| 4,241,244 | 13,678 | ..... | | ..... | 9,432 | 397,315 | | 18,122 | | 30,482 | | ..... | ..... | | 16 |
| 4,968,518 | 32,615 | ..... | | ..... | 9,724 | 444,928 | | 5,786 | | 27,356 | | 21,675 | ..... | | 17 |
| 4.4 | 143.7 | ..... | | ..... | 1.4 | 0.6 | | 97.6 | | -10.4 | | ..... | ..... | | 18 |
| 606,629 | 5,370 | 155,514 | | 3,403 | 2,170 | 62,459 | | 10,626 | | 4,127 | | 4,104 | 83,355 | | 19 |
| 847,604 | 3,643 | ..... | | ..... | 1,842 | 133,583 | | 4,455 | | 12,060 | | ..... | ..... | | 20 |
| 1,095,273 | 8,052 | ..... | | ..... | 3,742 | 158,638 | | 2,598 | | 6,742 | | 5,222 | ..... | | 21 |
| 86.3 | 83.9 | 85.2 | | 86.0 | 77.3 | 84.4 | | 70.3 | | 84.9 | | 84.7 | 85.9 | | 22 |
| 80.0 | 73.4 | ..... | | ..... | 80.5 | 66.4 | | 75.4 | | 60.4 | | ..... | ..... | | 23 |
| 78.0 | 75.3 | ..... | | ..... | 61.5 | 64.3 | | 55.1 | | 75.4 | | 75.9 | ..... | | 24 |
| 206,523,302 | 3,662,839 | 67,479,267 | | 3,262,987 | 227,899 | 13,301,442 | | 791,478 | | 3,083,290 | | 3,070,500 | 47,603,649 | | 25 |
| 203,947,836 | 3,590,679 | 66,709,788 | | 3,192,548 | 225,794 | 13,201,522 | | 779,298 | | 3,069,262 | | 3,056,522 | 47,020,662 | | 26 |
| 2,575,466 | 72,160 | 769,479 | | 70,439 | 2,105 | 99,920 | | 12,180 | | 14,028 | | 13,978 | 582,987 | | 27 |
| 157,355,114 | 1,377,002 | ..... | | ..... | 230,535 | 9,047,331 | | 504,725 | | 1,352,395 | | ..... | ..... | | 28 |
| 145,672,382 | 2,240,216 | ..... | | ..... | 221,976 | 8,421,384 | | 209,549 | | 2,214,417 | | 1,637,743 | ..... | | 29 |
| 31.2 | 166.0 | ..... | | ..... | -1.1 | 47.0 | | 56.8 | | 128.0 | | ..... | ..... | | 30 |
| 46.66 | 109.67 | 64.25 | | 134.08 | 23.84 | 33.29 | | 22.10 | | 112.85 | | 114.69 | 80.76 | | 31 |
| 37.10 | 100.67 | ..... | | ..... | 24.44 | 22.77 | | 27.85 | | 44.37 | | ..... | ..... | | 32 |
| 29.32 | 68.69 | ..... | | ..... | 22.83 | 18.93 | | 36.22 | | 80.95 | | 75.56 | ..... | | 33 |
| 54.07 | 130.97 | 75.42 | | 155.88 | 30.83 | 39.46 | | 31.43 | | 132.93 | | 135.45 | 94.07 | | 34 |
| 217,590,075 | 3,749,780 | 70,154,756 | | 3,335,755 | 239,994 | 14,478,799 | | 965,543 | | 3,194,461 | | 3,181,171 | 48,905,747 | | 35 |
| 43.51 | 96.34 | 58.53 | | 123.60 | 22.23 | 32.11 | | 22.26 | | 115.69 | | 117.54 | 71.67 | | 36 |
| Primary Enterprises | Sup. | | Primary Enterprises | Sup. | | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | | | Primary Enterprises | Sup. | |
| 11,449 | 358 | 865 | 3,921 | 129 | 546 | 138 | 1,515 | 12 | 314 | 3 | 114 | 93 | 1,608 | 117 | 37 |
| 3,693,481 | 992,044 | 26,075 | 866,972 | 34,921 | 19,626 | 6,895 | 320,817 | 19,461 | 23,989 | 381 | 22,478 | 22,029 | 497,156 | 15,460 | 38 |
| 4,762,706 | 245,951 | 250,654 | 1,743,150 | 13,942 | 211,109 | 6,395 | 243,620 | 3,699 | 16,853 | 75 | 145,108 | 143,725 | 1,136,918 | 10,243 | 39 |
| 1.29 | 0.25 | 9.61 | 2.01 | 0.40 | 10.76 | 0.93 | 0.76 | 0.19 | 0.70 | 0.20 | 6.46 | 6.52 | 2.29 | 0.66 | 40 |
| 4,599,324 | 244,825 | 104,494 | 1,666,228 | 29,523 | 99,735 | 4,283 | 236,146 | 26,394 | 14,695 | 370 | 174,845 | 174,845 | 1,151,219 | 3,129 | 41 |
| 1.58 | 0.25 | 12.36 | 2.62 | 1.40 | 12.46 | 2.15 | 1.43 | 1.36 | 1.29 | 1.00 | 8.27 | 8.27 | 2.61 | 1.81 | 42 |
| 3,224,168 | 993,977 | 11,157 | 726,201 | 45,442 | 10,538 | 2,419 | 200,088 | 36,502 | 15,251 | 370 | 22,958 | 22,958 | 490,198 | 8,940 | 43 |
| 1.43 | 0.25 | 9.37 | 2.29 | 0.65 | 9.46 | 1.77 | 1.18 | 0.72 | 0.96 | 1.00 | 7.62 | 7.62 | 2.35 | 0.35 | 44 |
| 4,172,856 | 113,837 | 92,193 | 1,131,182 | 36,044 | 88,025 | 3,668 | 157,769 | 13,022 | 9,276 | 352 | 170,558 | 170,558 | 711,162 | 23,022 | 45 |
| 65,947,558 | 5,054,961 | 320,953 | 32,798,680 | 1,344,886 | 320,953 | 13,000 | 10,984,172 | 498,508 | 497,525 | ..... | 1,028,544 | 1,028,544 | 20,452,011 | 846,378 | 46 |
| 11,676 | 332 | 907 | 4,164 | 131 | 579 | 166 | 1,626 | 12 | 362 | 4 | 128 | 102 | 1,665 | 119 | 47 |
| 3,456,855 | 1,144,260 | 27,302 | 862,668 | 194,887 | 20,386 | 7,391 | 325,025 | 17,394 | 24,869 | 386 | 22,974 | 22,449 | 486,892 | 177,493 | 48 |
| 13,867,957 | 1,867,297 | 112,647 | 3,238,330 | 717,326 | 89,886 | 25,113 | 847,481 | 18,841 | 66,302 | 513 | 93,232 | 91,634 | 2,182,618 | 698,485 | 49 |
| 4.0 | 1.6 | 4.1 | 3.8 | 3.7 | 4.4 | 3.4 | 2.6 | 1.1 | 2.7 | 1.3 | 4.1 | 4.1 | 4.5 | 3.9 | 50 |
| 1.51 | 0.27 | 10.18 | 2.40 | 1.20 | 11.46 | 1.17 | 0.91 | 1.51 | 0.98 | 1.12 | 8.16 | 8.26 | 2.76 | 0.74 | 51 |
| 0.38 | 0.16 | 2.47 | 0.64 | 0.38 | 2.60 | 0.34 | 0.35 | 1.39 | 0.37 | 0.84 | 2.01 | 2.02 | 0.62 | 0.19 | 52 |
| 495 | ..... | 22 | 97 | ..... | 4 | 5 | 49 | ..... | 6 | ..... | 1 | 1 | 38 | ..... | 53 |
| 1,705,259 | ..... | 850 | 589,817 | ..... | 173 | 561 | 147,906 | ..... | 76 | ..... | (4) | (4) | 441,142 | ..... | 54 |
| 1,240,294 | ..... | 587 | 382,265 | ..... | 110 | 457 | 86,873 | ..... | 28 | ..... | (4) | (4) | 294,800 | ..... | 55 |
| 467,652 | ..... | 486 | 179,397 | ..... | 128 | 100 | 2,569 | ..... | 35 | ..... | (4) | (4) | 176,596 | ..... | 56 |
| 54,828 | ..... | 214 | 21,073 | ..... | 6 | 70 | 2,730 | ..... | 10 | ..... | (4) | (4) | 18,261 | ..... | 57 |

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

| | ITEM (For definitions and explanations, see text. Major-basin 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) | COLUMBIA RIVER (IX)—Continued | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Snake River (IX-B) | | | | | | | |
| | | | | | | Upper Snake River | | | |
| | | Total | | Direct (IX-B) | | Total | | Direct (1) | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | | |
| 1 | Irrigated units[a] ....1939...number.... | 45,392 | | 14,507 | | 11,192 | | 2,458 | |
| 2 | Area irrigated ....1939...acres.... | 2,625,355 | | 861,060 | | 717,006 | | 187,444 | |
| 3 | (a) Cropland harvested ....1939...acres.... | 2,296,208 | | 817,723 | | 654,845 | | 174,870 | |
| 4 | (b) Crop failure ....1939...acres.... | 20,056 | | 1,866 | | 1,508 | | 10 | |
| 5 | (c) Pasture ....1939...acres.... | 309,091 | | 41,471 | | 60,653 | | 12,564 | |
| 6 | Area irrigated ....1929...acres.... | 2,339,264 | | 720,770 | | ..... | | ..... | |
| 7 | 1919...acres.... | 2,712,618 | | 743,154 | | ..... | | ..... | |
| 8 | Increase or decrease (-), 1929-1939 ....percent.... | 12.2 | | 19.5 | | ..... | | ..... | |
| 9 | Irrigable area in enterprises ....1940...acres.... | 3,343,028 | | 1,061,020 | | 854,956 | | 209,903 | |
| 10 | 1930...acres.... | 3,130,120 | | 866,077 | | ..... | | ..... | |
| 11 | 1920[2]...acres.... | 4,057,747 | | 946,050 | | ..... | | ..... | |
| 12 | Excess of irrigable area over the area irrigated ....1940...acres.... | 717,673 | | 199,960 | | 137,950 | | 22,459 | |
| 13 | 1930...acres.... | 790,856 | | 145,307 | | ..... | | ..... | |
| 14 | 1920[2]...acres.... | 1,345,129 | | 202,896 | | ..... | | ..... | |
| 15 | Area works were capable of supplying with water ....1940...acres.... | 3,018,889 | | 953,255 | | 821,914 | | 209,032 | |
| 16 | 1930...acres.... | 2,773,621 | | 841,587 | | ..... | | ..... | |
| 17 | 1920...acres.... | 3,376,146 | | 895,209 | | ..... | | ..... | |
| 18 | Increase or decrease (-), 1930-1940 ....percent.... | 8.8 | | 13.3 | | ..... | | ..... | |
| 19 | Excess of area works were capable of supplying with water over area irrigated ....1940...acres.... | 393,534 | | 92,195 | | 104,908 | | 21,588 | |
| 20 | 1930...acres.... | 434,357 | | 120,817 | | ..... | | ..... | |
| 21 | 1920...acres.... | 663,528 | | 152,055 | | ..... | | ..... | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water[3] ....1939...percent.... | 87.0 | | 90.3 | | 87.2 | | 89.7 | |
| 23 | 1929...percent.... | 84.3 | | 85.6 | | ..... | | ..... | |
| 24 | 1919...percent.... | 80.3 | | 83.0 | | ..... | | ..... | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | | |
| 25 | Total investment in irrigation enterprises ....1940...dollars.... | 125,320,432 | | 48,642,397 | | 20,498,750 | | 6,297,840 | |
| 26 | (a) Cost of irrigation works and equipment ....1940...dollars.... | 123,727,685 | | 48,520,126 | | 20,269,283 | | 6,218,557 | |
| 27 | (b) Investment in water rights (reported) ....1940...dollars.... | 1,592,747 | | 122,271 | | 229,467 | | 79,283 | |
| 28 | Total investment in irrigation enterprises ....1930...dollars.... | 93,265,245 | | 33,983,494 | | ..... | | ..... | |
| 29 | 1920...dollars.... | 93,625,117 | | 37,228,741 | | ..... | | ..... | |
| 30 | Increase or decrease (-), 1930-1940 ....percent.... | 34.4 | | 43.1 | | ..... | | ..... | |
| 31 | Average investment based on area works were capable of supplying with water, per acre ....1940...dollars.... | 41.51 | | 51.03 | | 24.94 | | 30.13 | |
| 32 | 1930...dollars.... | 33.63 | | 40.38 | | ..... | | ..... | |
| 33 | 1920...dollars.... | 27.73 | | 41.59 | | ..... | | ..... | |
| 34 | Average investment per acre irrigated ....1939...dollars.... | 47.73 | | 56.49 | | 28.59 | | 33.60 | |
| 35 | Estimated final investment in existing enterprises ....1940...dollars.... | 133,232,687 | | 49,710,432 | | 20,981,506 | | 6,312,840 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre ....1940...dollars.... | 39.85 | | 46.85 | | 24.54 | | 30.08 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. |
| 37 | Enterprises reporting maintenance and operation ....1939...number.... | 4,552 | 166 | 746 | 20 | 773 | 30 | 61 | 5 |
| 38 | Area irrigated in these enterprises ....1939...acres.... | 2,538,451 | 939,686 | 853,210 | 479,085 | 694,605 | 400,628 | 184,704 | 132,768 |
| 39 | Cost of maintenance and operation ....1939...dollars.... | 2,570,462 | 214,344 | 1,234,793 | 17,576 | 424,407 | 19,553 | 197,162 | 5,188 |
| 40 | Average cost, per acre irrigated ....1939...dollars.... | 1.01 | 0.23 | 1.45 | 0.04 | 0.61 | 0.05 | 1.07 | 0.04 |
| 41 | Total annual charges (reported)[4 5] ....1939...dollars.... | 2,558,179 | 203,496 | 1,320,276 | 14,644 | 507,276 | 17,897 | 232,475 | 4,614 |
| 42 | Average annual charge per acre irrigated ....1939...dollars.... | 1.22 | 0.22 | 1.63 | 0.03 | 0.82 | 0.04 | 1.27 | 0.03 |
| 43 | Area against which charges were assessed ....1939...acres.... | 2,304,964 | 938,696 | 881,278 | 477,778 | 658,691 | 399,242 | 201,759 | 132,369 |
| 44 | Average annual charge per acre assessed ....1939...dollars.... | 1.11 | 0.22 | 1.50 | 0.03 | 0.77 | 0.04 | 1.15 | 0.03 |
| 45 | Total charges collected[4] ....1939...dollars.... | 2,700,414 | 75,145 | 1,257,375 | 14,547 | 459,295 | 18,072 | 204,648 | 4,490 |
| 46 | Indebtedness to December 31 (reported)[5] ....1939...dollars.... | 28,943,619 | 3,699,525 | 6,921,574 | ..... | 2,868,559 | 2,760,661 | 393,118 | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | | |
| 47 | Enterprises reporting water delivered ....1939...number.... | 4,419 | 142 | 736 | 18 | 802 | 30 | 56 | 4 |
| 48 | Area irrigated by these enterprises ....1939...acres.... | 2,309,204 | 931,780 | 799,379 | 475,598 | 667,167 | 415,622 | 184,202 | 129,408 |
| 49 | Water delivered ....1939...acre-feet.. | 9,576,457 | 1,092,843 | 3,333,084 | 572,110 | 3,285,386 | 459,592 | 893,681 | 155,787 |
| 50 | Average water delivered per acre irrigated ....1939...acre-feet.. | 4.1 | 1.2 | 4.2 | 1.2 | 4.9 | 1.1 | 4.9 | 1.2 |
| 51 | Average cost of water per acre irrigated ....1939...dollars.... | 1.10 | 0.22 | 1.58 | 0.03 | 0.80 | 0.05 | 1.29 | 0.03 |
| 52 | Average cost of water per acre-foot delivered ....1939...dollars.... | 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 drainage ....1939...number.... | 231 | ..... | 63 | ..... | 36 | ..... | 8 | ..... |
| 54 | Irrigable area in these enterprises ....1939...acres.... | 1,066,085 | ..... | 520,556 | ..... | 84,215 | ..... | 63,772 | ..... |
| 55 | Irrigated area in these enterprises ....1939...acres.... | 820,570 | ..... | 396,542 | ..... | 64,127 | ..... | 46,540 | ..... |
| 56 | Area for which drains have been installed ....1939...acres.... | 282,130 | ..... | 72,505 | ..... | 9,673 | ..... | 8,573 | ..... |
| 57 | Additional area needing drainage ....1939...acres.... | 29,351 | ..... | 5,255 | ..... | 5,927 | ..... | 1,395 | ..... |

[a] Schedules called for "Number of farms," see explanation in text.
[1] 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.
[2] For 1920 relates to total area in enterprises. Irrigable area for that year was not reported.
[3] Data are included only in totals because less than 3 enterprises reported in the 1940 Census.

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

and Arkansas and Louisiana]

| COLUMBIA RIVER (IX)—Continued | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Snake River (IX-B)—Continued | | | | | | | | | | | | | | |
| Upper Snake River—Continued | | | | | | | | | | | | | | |
| South Fork Snake River | | | | | | Henrys Fork | | | | | | Intrastate tributaries in Idaho | | |
| Total[1] | | Direct (2) | | Salt River (5) | | Total | | Direct (6) | | Teton River (7) | | | | |
| 4,463 | | 3,681 | | 729 | | 2,531 | | 2,039 | | 492 | | 1,740 | | 1 |
| 281,467 | | 220,823 | | 52,170 | | 172,862 | | 125,342 | | 47,520 | | 75,233 | | 2 |
| 259,044 | | 206,140 | | 44,706 | | 156,564 | | 114,641 | | 41,923 | | 64,367 | | 3 |
| 187 | | 61 | | 126 | | 254 | | 40 | | 214 | | 1,057 | | 4 |
| 22,236 | | 14,622 | | 7,338 | | 16,044 | | 10,661 | | 5,383 | | 9,809 | | 5 |
| 221,542 | | 163,238 | | 36,863 | | 174,960 | | ..... | | ..... | | ..... | | 6 |
| 214,562 | | 152,509 | | 34,338 | | 208,534 | | ..... | | ..... | | ..... | | 7 |
| 27.0 | | 35.3 | | 41.5 | | -1.2 | | ..... | | ..... | | ..... | | 8 |
| 329,049 | | 256,161 | | 61,678 | | 198,955 | | 141,046 | | 57,909 | | 117,049 | | 9 |
| 273,358 | | 187,831 | | 49,016 | | 211,117 | | ..... | | ..... | | ..... | | 10 |
| 311,654 | | 209,494 | | 57,288 | | 325,114 | | ..... | | ..... | | ..... | | 11 |
| 47,582 | | 35,338 | | 9,508 | | 26,093 | | 15,704 | | 10,389 | | 41,816 | | 12 |
| 51,816 | | 24,593 | | 12,153 | | 36,157 | | ..... | | ..... | | ..... | | 13 |
| 97,092 | | 56,985 | | 22,950 | | 116,580 | | ..... | | ..... | | ..... | | 14 |
| 315,126 | | 245,729 | | 59,352 | | 185,449 | | 132,411 | | 53,038 | | 112,307 | | 15 |
| 259,020 | | 183,511 | | 46,233 | | 196,373 | | ..... | | ..... | | ..... | | 16 |
| 278,873 | | 194,352 | | 46,234 | | 286,514 | | ..... | | ..... | | ..... | | 17 |
| 21.7 | | 33.9 | | 28.4 | | -5.6 | | ..... | | ..... | | ..... | | 18 |
| 33,659 | | 24,906 | | 7,182 | | 12,587 | | 7,069 | | 5,518 | | 37,074 | | 19 |
| 37,478 | | 20,273 | | 9,370 | | 21,413 | | ..... | | ..... | | ..... | | 20 |
| 64,311 | | 41,843 | | 11,896 | | 77,980 | | ..... | | ..... | | ..... | | 21 |
| 89.3 | | 89.9 | | 87.9 | | 93.2 | | 94.7 | | 89.6 | | 67.0 | | 22 |
| 85.5 | | 89.0 | | 79.7 | | 89.1 | | ..... | | ..... | | ..... | | 23 |
| 76.9 | | 78.5 | | 74.3 | | 72.8 | | ..... | | ..... | | ..... | | 24 |
| 6,746,266 | | 6,392,913 | | 306,763 | | 4,612,718 | | 4,377,433 | | 235,285 | | 2,841,926 | | 25 |
| 6,681,542 | | 6,342,852 | | 293,735 | | 4,574,150 | | 4,346,534 | | 227,616 | | 2,795,034 | | 26 |
| 64,724 | | 50,061 | | 13,028 | | 38,568 | | 30,899 | | 7,669 | | 46,892 | | 27 |
| 3,584,906 | | 3,342,586 | | 111,368 | | 1,925,652 | | ..... | | ..... | | ..... | | 28 |
| 6,957,591 | | 6,693,903 | | 149,207 | | 2,001,841 | | ..... | | ..... | | ..... | | 29 |
| 88.2 | | 91.3 | | 175.4 | | 139.5 | | ..... | | ..... | | ..... | | 30 |
| 21.41 | | 26.02 | | 5.17 | | 24.87 | | 33.06 | | 4.44 | | 25.30 | | 31 |
| 13.84 | | 18.21 | | 2.41 | | 9.81 | | ..... | | ..... | | ..... | | 32 |
| 24.95 | | 34.44 | | 3.23 | | 6.99 | | ..... | | ..... | | ..... | | 33 |
| 23.97 | | 28.95 | | 5.88 | | 26.68 | | 34.92 | | 4.95 | | 37.77 | | 34 |
| 6,758,712 | | 6,399,619 | | 310,168 | | 4,636,553 | | 4,399,553 | | 237,000 | | 3,273,401 | | 35 |
| 20.54 | | 24.98 | | 5.03 | | 23.30 | | 31.19 | | 4.09 | | 27.97 | | 36 |
| Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | |
| Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | |
| 379 | 8 | 213 | 3 | 144 | 4 | 167 | 13 | 77 | 11 | 90 | 2 | 166 | 4 | 37 |
| 271,894 | 167,798 | 214,030 | 160,165 | 49,562 | 4,267 | 165,157 | 99,867 | 124,035 | 99,473 | 41,122 | (3) | 72,850 | 195 | 38 |
| 95,126 | 4,763 | 85,182 | 4,378 | 8,439 | 60 | 57,534 | 9,424 | 50,758 | 9,014 | 6,776 | (3) | 74,585 | 178 | 39 |
| 0.35 | 0.03 | 0.40 | 0.03 | 0.17 | 0.01 | 0.35 | 0.09 | 0.41 | 0.09 | 0.16 | (3) | 1.02 | 0.91 | 40 |
| 152,195 | 4,776 | 140,262 | 4,419 | 11,383 | 20 | 79,412 | 8,507 | 70,104 | 8,507 | 9,308 | ..... | 43,194 | ..... | 41 |
| 0.67 | 0.03 | 0.76 | 0.03 | 0.31 | (3) | 0.52 | 0.09 | 0.59 | 0.09 | 0.26 | ..... | 0.72 | ..... | 42 |
| 237,240 | 167,556 | 193,257 | 160,080 | 39,731 | 4,110 | 158,123 | 99,317 | 121,828 | 99,317 | 36,295 | ..... | 61,569 | ..... | 43 |
| 0.64 | 0.03 | 0.73 | 0.03 | 0.29 | (3) | 0.50 | 0.09 | 0.58 | 0.09 | 0.26 | ..... | 0.70 | ..... | 44 |
| 157,128 | 4,278 | 148,383 | 4,278 | 8,745 | ..... | 75,840 | 9,304 | 67,525 | 9,304 | 8,315 | ..... | 21,679 | ..... | 45 |
| 344,554 | 661 | 304,992 | 661 | 39,562 | ..... | 163,156 | 2,760,000 | 134,261 | 2,760,000 | 28,895 | ..... | 1,967,731 | ..... | 46 |
| 400 | 10 | 215 | 4 | 159 | 5 | 171 | 12 | 77 | 9 | 94 | 3 | 175 | 4 | 47 |
| 252,284 | 167,869 | 201,362 | 160,226 | 42,448 | 4,277 | 160,382 | 118,150 | 116,121 | 117,706 | 44,261 | 444 | 70,299 | 195 | 48 |
| 1,382,331 | 200,578 | 1,238,721 | 193,698 | 113,932 | 880 | 782,585 | 102,860 | 690,856 | 102,260 | 91,729 | 600 | 226,789 | 367 | 49 |
| 5.5 | 1.2 | 6.2 | 1.2 | 2.7 | 0.2 | 4.9 | 0.9 | 5.9 | 0.9 | 2.1 | 1.4 | 3.2 | 1.9 | 50 |
| 0.65 | 0.03 | 0.75 | 0.03 | 0.27 | 0.01 | 0.51 | 0.09 | 0.59 | 0.09 | 0.26 | 1.04 | 0.67 | 0.91 | 51 |
| 0.12 | 0.02 | 0.12 | 0.02 | 0.10 | 0.07 | 0.10 | 0.10 | 0.10 | 0.10 | 0.12 | 0.77 | 0.21 | 0.49 | 52 |
| 4 | ..... | 3 | ..... | 1 | ..... | 17 | ..... | 7 | ..... | 10 | ..... | 7 | ..... | 53 |
| 8,210 | ..... | 8,050 | ..... | (3) | ..... | 6,831 | ..... | 4,652 | ..... | 2,179 | ..... | 5,402 | ..... | 54 |
| 7,000 | ..... | 6,943 | ..... | (3) | ..... | 5,325 | ..... | 4,172 | ..... | 1,153 | ..... | 5,262 | ..... | 55 |
| ..... | ..... | ..... | ..... | ..... | ..... | 1,080 | ..... | 100 | ..... | 980 | ..... | 20 | ..... | 56 |
| 1,085 | ..... | 1,065 | ..... | (3) | ..... | 1,213 | ..... | 913 | ..... | 300 | ..... | 2,234 | ..... | 57 |

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

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | COLUMBIA RIVER (IX)—Continued | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Snake River (IX-B)—Continued | | | | | | |
| | | Lower Snake River | | | | | | |
| | | Total | | Direct (12) | | Raft River (13) | Goose Creek (14) | Salmon Falls Creek (15) |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | |
| 1 | Irrigated units*.....1939...number..... | 33,442 | | 12,049 | | 196 | 313 | 294 |
| 2 | Area irrigated.....1939...acres..... | 1,833,410 | | 673,616 | | 14,007 | 19,144 | 30,940 |
| 3 | (a) Cropland harvested.....1939...acres..... | 1,577,435 | | 642,853 | | 12,626 | 18,126 | 29,152 |
| 4 | (b) Crop failure.....1939...acres..... | 15,145 | | 1,856 | | 60 | 86 | 160 |
| 5 | (c) Pasture.....1939...acres..... | 240,830 | | 28,907 | | 1,321 | 932 | 1,628 |
| 6 | Area irrigated.....1929...acres..... | ..... | | ..... | | 13,406 | 19,359 | 38,566 |
| 7 | 1919...acres..... | ..... | | ..... | | 23,620 | 25,000 | 41,330 |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | ..... | | ..... | | 4.5 | -1.1 | -19.8 |
| 9 | Irrigable area in enterprises.....1940...acres..... | 2,380,854 | | 851,117 | | 21,360 | 21,603 | 50,056 |
| 10 | 1930...acres..... | ..... | | ..... | | 37,941 | 25,424 | 49,434 |
| 11 | 1920[2]..acres..... | ..... | | ..... | | 42,906 | 50,000 | 87,260 |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 547,444 | | 177,501 | | 7,353 | 2,459 | 19,116 |
| 13 | 1930...acres..... | ..... | | ..... | | 24,535 | 6,065 | 10,868 |
| 14 | 1920[2]..acres..... | ..... | | ..... | | 19,286 | 25,000 | 45,930 |
| 15 | Area works were capable of supplying with water...1940...acres..... | 2,093,618 | | 744,223 | | 16,405 | 20,221 | 48,104 |
| 16 | 1930...acres..... | ..... | | ..... | | 23,366 | 25,424 | 49,284 |
| 17 | 1920...acres..... | ..... | | ..... | | 26,436 | 50,000 | 49,920 |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | ..... | | ..... | | -29.8 | -20.5 | -2.4 |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 260,208 | | 70,607 | | 2,398 | 1,077 | 17,164 |
| 20 | 1930...acres..... | ..... | | ..... | | 9,960 | 6,065 | 10,718 |
| 21 | 1920...acres..... | ..... | | ..... | | 2,816 | 25,000 | 8,590 |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 87.6 | | 90.5 | | 85.4 | 94.7 | 64.3 |
| 23 | 1929...percent.... | ..... | | ..... | | 57.4 | 76.1 | 78.3 |
| 24 | 1919...percent.... | ..... | | ..... | | 89.3 | 50.0 | 82.8 |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 103,579,633 | | 42,344,557 | | 159,027 | 1,850,803 | 2,895,097 |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 102,242,682 | | 42,301,569 | | 154,339 | 1,600,477 | 2,657,901 |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 1,336,951 | | 42,988 | | 4,688 | 250,326 | 237,196 |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | ..... | | ..... | | 50,786 | 1,508,520 | 2,598,895 |
| 29 | 1920...dollars.... | ..... | | ..... | | 100,928 | 393,755 | 4,152,745 |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | ..... | | ..... | | 213.1 | 22.7 | 11.4 |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 49.47 | | 56.90 | | 9.69 | 91.53 | 60.18 |
| 32 | 1930...dollars.... | ..... | | ..... | | 2.17 | 59.33 | 52.73 |
| 33 | 1920...dollars.... | ..... | | ..... | | 3.82 | 7.88 | 83.19 |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 56.50 | | 62.86 | | 11.35 | 96.68 | 93.57 |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 110,970,021 | | 43,397,592 | | 306,212 | 1,851,303 | 2,898,397 |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 46.61 | | 50.99 | | 14.34 | 85.70 | 57.90 |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary Enterprises | Supplemental Enterprises | Primary Enterprises | Supplemental Enterprises | | | |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 3,628 | 136 | 685 | 15 | 43 | 23 | 24 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 1,769,930 | 539,058 | 668,506 | 346,317 | 11,365 | 18,407 | 29,555 |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 2,090,999 | 194,791 | 1,037,631 | 12,388 | 5,410 | 10,510 | 23,489 |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 1.18 | 0.36 | 1.55 | 0.04 | 0.48 | 0.57 | 0.79 |
| 41 | Total annual charges (reported)[4] [5].....1939...dollars.... | 1,979,501 | 185,599 | 1,087,801 | 10,030 | 3,389 | 11,368 | 22,750 |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 1.39 | 0.35 | 1.73 | 0.03 | 0.42 | 0.72 | 1.14 |
| 43 | Area against which charges were assessed.....1939...acres..... | 1,575,556 | 539,454 | 679,519 | 346,409 | 9,891 | 16,313 | 35,000 |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 1.26 | 0.34 | 1.60 | 0.03 | 0.34 | 0.70 | 0.65 |
| 45 | Total charges collected[4].....1939...dollars.... | 2,182,650 | 57,073 | 1,052,727 | 10,057 | 3,284 | 10,001 | 21,017 |
| 46 | Indebtedness to December 31 (reported)[5].....1939...dollars.... | 25,787,060 | 938,864 | 6,528,456 | ..... | 25 | ..... | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 3,466 | 112 | 680 | 14 | 39 | 19 | 25 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 1,568,124 | 516,158 | 615,177 | 346,190 | 8,019 | 17,882 | 30,727 |
| 49 | Water delivered.....1939...acre-feet.. | 6,021,530 | 633,251 | 2,439,403 | 416,323 | 17,276 | 39,669 | 73,786 |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 3.8 | 1.2 | 4.0 | 1.2 | 2.2 | 2.2 | 2.4 |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 1.22 | 0.36 | 1.67 | 0.03 | 0.64 | 0.67 | 0.93 |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 0.32 | 0.30 | 0.42 | 0.03 | 0.30 | 0.30 | 0.39 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 190 | ..... | 55 | ..... | ..... | 1 | ..... |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 979,500 | ..... | 456,784 | ..... | ..... | (3) | ..... |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 754,686 | ..... | 350,002 | ..... | ..... | (3) | ..... |
| 56 | Area for which drains have been installed.....1939...acres..... | 272,457 | ..... | 63,932 | ..... | ..... | (3) | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 22,969 | ..... | 3,860 | ..... | ..... | ..... | ..... |

* 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 total.

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

1940, 1930, 1920; AND IRRIGATED UNITS,[2] MAINTENANCE AND OPERATION, CHARGES, INDEBTEDNESS, WATER OF IRRIGATED LAND, 1939—Continued

and Arkansas and Louisiana]

| COLUMBIA RIVER (IX)—Continued | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Snake River (IX-B)—Continued | | | | | | | | | | | | | | | | |
| Lower Snake River—Continued | | | | | | | | | | | | | | | | |
| | Owyhee River | | | | | | | | | | | Grande Ronde River | | | | |
| | | | | | South Fork Owyhee River | | | | | | | | | | | |
| Bruneau River | Total | | Direct | | Total | | Direct | | East Fork Owyhee River | | Jordan Creek | Total[1] | | Direct | | |
| (18) | | | (23) | | | | (24) | | (25) | | (26) | | | (46) | | |
| 162 | 1,345 | | 976 | | 232 | | 40 | | 192 | | 137 | 1,298 | | 569 | | 1 |
| 20,952 | 126,991 | | 58,004 | | 53,688 | | 26,972 | | 26,716 | | 15,299 | 64,822 | | 17,604 | | 2 |
| 14,984 | 101,348 | | 50,215 | | 39,502 | | 23,263 | | 16,239 | | 11,631 | 49,591 | | 15,543 | | 3 |
| 140 | 4,803 | | 1,542 | | 1,398 | | 971 | | 427 | | 1,863 | 7 | | 7 | | 4 |
| 5,828 | 20,840 | | 6,247 | | 12,788 | | 2,738 | | 10,050 | | 1,805 | 15,224 | | 2,054 | | 5 |
| 21,161 | 60,054 | | ..... | | ..... | | ..... | | ..... | | ..... | 57,655 | | ..... | | 6 |
| 22,598 | 104,830 | | ..... | | ..... | | ..... | | ..... | | ..... | 79,257 | | ..... | | 7 |
| -1.0 | 111.5 | | ..... | | ..... | | ..... | | ..... | | ..... | 12.4 | | ..... | | 8 |
| 22,034 | 180,657 | | 76,895 | | 85,669 | | 32,705 | | 52,964 | | 18,093 | 76,701 | | 25,299 | | 9 |
| 27,702 | 180,067 | | ..... | | ..... | | ..... | | ..... | | ..... | 65,227 | | ..... | | 10 |
| 37,751 | 239,242 | | ..... | | ..... | | ..... | | ..... | | ..... | 98,912 | | ..... | | 11 |
| 1,082 | 53,666 | | 18,891 | | 31,981 | | 5,733 | | 26,248 | | 2,794 | 11,879 | | 7,695 | | 12 |
| 6,541 | 120,013 | | ..... | | ..... | | ..... | | ..... | | ..... | 7,572 | | ..... | | 13 |
| 15,153 | 134,412 | | ..... | | ..... | | ..... | | ..... | | ..... | 19,655 | | ..... | | 14 |
| 21,738 | 153,127 | | 76,725 | | 58,722 | | 31,185 | | 27,537 | | 17,680 | 74,937 | | 23,720 | | 15 |
| 24,930 | 71,016 | | ..... | | ..... | | ..... | | ..... | | ..... | 63,174 | | ..... | | 16 |
| 25,636 | 116,238 | | ..... | | ..... | | ..... | | ..... | | ..... | 87,317 | | ..... | | 17 |
| -12.8 | 115.6 | | ..... | | ..... | | ..... | | ..... | | ..... | 18.6 | | ..... | | 18 |
| 786 | 26,136 | | 18,721 | | 5,034 | | 4,213 | | 821 | | 2,381 | 10,115 | | 6,116 | | 19 |
| 3,769 | 10,962 | | ..... | | ..... | | ..... | | ..... | | ..... | 5,519 | | ..... | | 20 |
| 3,038 | 11,408 | | ..... | | ..... | | ..... | | ..... | | ..... | 8,060 | | ..... | | 21 |
| 96.4 | 82.9 | | 75.6 | | 91.4 | | 86.5 | | 97.0 | | 86.5 | 86.5 | | 74.2 | | 22 |
| 84.9 | 84.6 | | ..... | | ..... | | ..... | | ..... | | ..... | 91.3 | | ..... | | 23 |
| 88.1 | 90.2 | | ..... | | ..... | | ..... | | ..... | | ..... | 90.8 | | ..... | | 24 |
| 188,119 | 11,774,350 | | 10,400,282 | | 862,538 | | 94,939 | | 767,599 | | 511,530 | 625,226 | | 151,627 | | 25 |
| 186,048 | 11,770,090 | | 10,399,363 | | 860,217 | | 94,739 | | 765,478 | | 510,510 | 621,682 | | 150,381 | | 26 |
| 2,071 | 4,260 | | 919 | | 2,321 | | 200 | | 2,121 | | 1,020 | 3,544 | | 1,246 | | 27 |
| 571,321 | 3,260,445 | | ..... | | ..... | | ..... | | ..... | | ..... | 386,759 | | ..... | | 28 |
| 574,955 | 1,411,424 | | ..... | | ..... | | ..... | | ..... | | ..... | 476,998 | | ..... | | 29 |
| -67.1 | 261.1 | | ..... | | ..... | | ..... | | ..... | | ..... | 61.7 | | ..... | | 30 |
| 8.65 | 76.89 | | 135.55 | | 14.69 | | 3.04 | | 27.88 | | 28.93 | 8.34 | | 6.39 | | 31 |
| 22.92 | 45.91 | | ..... | | ..... | | ..... | | ..... | | ..... | 6.12 | | ..... | | 32 |
| 22.43 | 12.14 | | ..... | | ..... | | ..... | | ..... | | ..... | 5.46 | | ..... | | 33 |
| 8.98 | 92.72 | | 179.30 | | 16.07 | | 3.52 | | 28.73 | | 33.44 | 9.65 | | 8.61 | | 34 |
| 191,149 | 12,421,405 | | 10,643,837 | | 1,266,038 | | 97,439 | | 1,168,599 | | 511,530 | 626,390 | | 152,174 | | 35 |
| 8.68 | 68.76 | | 138.42 | | 14.78 | | 2.98 | | 22.06 | | 28.27 | 8.17 | | 6.02 | | 36 |
| Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | |
| 86 | 2 | 176 | 6 | 51 | 5 | 71 | 1 | 34 | 1 | 37 | 54 | 412 | 7 | 203 | 2 | 37 |
| 19,948 | (3) | 122,532 | 11,869 | 57,262 | 11,769 | 52,528 | (3) | 25,972 | (3) | 26,556 | 12,742 | 58,724 | 14,276 | 13,445 | (3) | 38 |
| 13,607 | (3) | 177,616 | 8,175 | 139,361 | 8,125 | 19,332 | (3) | 6,072 | (3) | 13,260 | 18,923 | 25,769 | 1,003 | 7,379 | (3) | 39 |
| 0.68 | (3) | 1.45 | 0.69 | 2.43 | 0.69 | 0.37 | (3) | 0.23 | (3) | 0.50 | 1.49 | 0.44 | 0.07 | 0.55 | (3) | 40 |
| 6,093 | ..... | 51,800 | 7,715 | 32,067 | 7,715 | 5,116 | ..... | 50 | ..... | 5,066 | 14,617 | 21,432 | 980 | 3,384 | ..... | 41 |
| 1.35 | ..... | 0.81 | 0.66 | 0.63 | 0.66 | 0.78 | ..... | 0.25 | ..... | 0.80 | 2.27 | 0.49 | 0.07 | 0.38 | ..... | 42 |
| 4,900 | ..... | 78,954 | 11,690 | 65,659 | 11,690 | 6,518 | ..... | 200 | ..... | 6,318 | 6,777 | 48,530 | 17,155 | 10,700 | ..... | 43 |
| 1.24 | ..... | 0.66 | 0.66 | 0.49 | 0.66 | 0.78 | ..... | 0.25 | ..... | 0.80 | 2.16 | 0.44 | 0.06 | 0.32 | ..... | 44 |
| 3,534 | ..... | 44,933 | ..... | 31,966 | ..... | ..... | ..... | ..... | ..... | ..... | 12,967 | 16,193 | ..... | 990 | ..... | 45 |
| ..... | ..... | 739,000 | ..... | 309,000 | ..... | ..... | ..... | ..... | ..... | ..... | 430,000 | 55,922 | ..... | ..... | ..... | 46 |
| 63 | 5 | 151 | 3 | 58 | 3 | 37 | ..... | 9 | ..... | 28 | 56 | 426 | 5 | 217 | 3 | 47 |
| 14,675 | 148 | 91,576 | 11,743 | 58,004 | 11,743 | 24,497 | ..... | 1,425 | ..... | 23,072 | 9,075 | 57,224 | 124 | 16,262 | 92 | 48 |
| 30,961 | 198 | 487,252 | 21,210 | 287,581 | 21,210 | 182,118 | ..... | 3,502 | ..... | 178,616 | 17,553 | 185,951 | 293 | 33,296 | 167 | 49 |
| 2.1 | 1.3 | 5.3 | 1.8 | 5.0 | 1.8 | 7.4 | ..... | 2.5 | ..... | 7.7 | 1.9 | 3.2 | 2.4 | 2.0 | 1.8 | 50 |
| 0.49 | 1.52 | 0.62 | 0.68 | 0.64 | 0.68 | 0.52 | ..... | 0.42 | ..... | 0.53 | 0.77 | 0.52 | 0.17 | 0.53 | 0.09 | 51 |
| 0.23 | 1.13 | 0.12 | 0.38 | 0.13 | 0.38 | 0.07 | ..... | 0.17 | ..... | 0.07 | 0.40 | 0.16 | 0.07 | 0.26 | 0.05 | 52 |
| 4 | ..... | 3 | ..... | 3 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 9 | ..... | 3 | ..... | 53 |
| 1,197 | ..... | 68,073 | ..... | 68,073 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2,195 | ..... | 511 | ..... | 54 |
| 1,118 | ..... | 50,632 | ..... | 50,632 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2,084 | ..... | 501 | ..... | 55 |
| ..... | ..... | 14,787 | ..... | 14,787 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 57 | ..... | 47 | ..... | 56 |
| 635 | ..... | 2,470 | ..... | 2,470 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 233 | ..... | 80 | ..... | 57 |

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

| | ITEM (For definitions and explanations, see text. Major-basin 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) | COLUMBIA RIVER (IX)—Continued | | | | |
|---|---|---|---|---|---|---|
| | | Snake River (IX-B)—Continued | | | | |
| | | Lower Snake River—Continued | | | | Independent intrastate basins in Idaho |
| | | Intrastate tributaries in Idaho | | Intrastate tributaries in Oregon | Intrastate tributaries in Washington | |
| | **IRRIGATED UNITS AND AREAS** | | | | | |
| 1 | Irrigated units*.....1939...number..... | 15,092 | | 2,355 | 338 | 758 |
| 2 | Area irrigated.....1939...acres..... | 686,001 | | 192,367 | 4,570 | 74,939 |
| 3 | (a) Cropland harvested.....1939...acres..... | 547,952 | | 156,500 | 4,303 | 63,928 |
| 4 | (b) Crop failure.....1939...acres..... | 5,105 | | 2,906 | 22 | 3,403 |
| 5 | (c) Pasture.....1939...acres..... | 132,944 | | 32,961 | 245 | 7,608 |
| 6 | Area irrigated.....1929...acres..... | ..... | | ..... | ..... | 69,920 |
| 7 | 1919...acres..... | ..... | | ..... | ..... | 108,351 |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | ..... | | ..... | ..... | 7.2 |
| 9 | Irrigable area in enterprises.....1940...acres..... | 898,830 | | 253,428 | 5,068 | 107,218 |
| 10 | 1930...acres..... | ..... | | ..... | ..... | 155,990 |
| 11 | 1920[2]..acres..... | ..... | | ..... | ..... | 346,531 |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 212,829 | | 61,061 | 498 | 32,279 |
| 13 | 1930...acres..... | ..... | | ..... | ..... | 86,070 |
| 14 | 1920[2]..acres..... | ..... | | ..... | ..... | 238,180 |
| 15 | Area works were capable of supplying with water...1940...acres..... | 782,597 | | 227,198 | 5,068 | 103,357 |
| 16 | 1930...acres..... | ..... | | ..... | ..... | 150,578 |
| 17 | 1920...acres..... | ..... | | ..... | ..... | 181,009 |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | ..... | | ..... | ..... | -31.4 |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 96,596 | | 34,831 | 498 | 28,418 |
| 20 | 1930...acres..... | ..... | | ..... | ..... | 80,658 |
| 21 | 1920...acres..... | ..... | | ..... | ..... | 72,658 |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 87.7 | | 84.7 | 90.2 | 72.5 |
| 23 | 1929...percent.... | ..... | | ..... | ..... | 46.4 |
| 24 | 1919...percent.... | ..... | | ..... | ..... | 59.9 |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 31,808,183 | | 11,166,810 | 767,461 | 1,242,049 |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 31,130,144 | | 11,061,521 | 758,911 | 1,215,720 |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 678,039 | | 105,289 | 8,550 | 26,329 |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | ..... | | ..... | ..... | 2,413,285 |
| 29 | 1920...dollars.... | ..... | | ..... | ..... | 3,801,739 |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | ..... | | ..... | ..... | -48.5 |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 40.64 | | 49.15 | 151.43 | 12.02 |
| 32 | 1930...dollars.... | ..... | | ..... | ..... | 16.03 |
| 33 | 1920...dollars.... | ..... | | ..... | ..... | 21.00 |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 46.37 | | 58.05 | 167.93 | 16.57 |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 36,995,675 | | 11,514,027 | 767,871 | 1,281,160 |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 41.16 | | 45.43 | 151.51 | 11.95 |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary Enterprises | Supplemental Enterprises | Primary Enterprises | Supplemental Enterprises | |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 1,472 | 97 | 672 | 9 | 35 | 151 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 664,368 | 148,737 | 171,955 | 17,813 | 4,570 | 73,916 |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 639,514 | 170,219 | 110,479 | 2,936 | 46,974 | 55,056 |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 0.96 | 1.14 | 0.64 | 0.16 | 10.28 | 0.74 |
| 41 | Total annual charges (reported)[4] [5].....1939...dollars.... | 660,487 | 156,643 | 69,925 | 10,231 | 44,456 | 71,402 |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 1.24 | 1.08 | 0.67 | 0.59 | 13.36 | 1.43 |
| 43 | Area against which charges were assessed.....1939...acres..... | 583,062 | 147,720 | 115,740 | 17,480 | 3,647 | 70,717 |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 1.13 | 1.06 | 0.60 | 0.59 | 12.19 | 1.01 |
| 45 | Total charges collected[4].....1939...dollars.... | 939,674 | 38,506 | 51,387 | 8,510 | 39,900 | 58,469 |
| 46 | Indebtedness to December 31 (reported)[5].....1939...dollars.... | 13,465,956 | 169,198 | 4,997,701 | 769,666 | ..... | 288,000 |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 1,338 | 77 | 690 | 8 | 35 | 151 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 563,885 | 140,572 | 164,389 | 17,381 | 4,570 | 73,913 |
| 49 | Water delivered.....1939...acre-feet.. | 2,289,515 | 172,296 | 445,209 | 22,931 | 12,508 | 269,541 |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 4.1 | 1.2 | 2.7 | 1.3 | 2.7 | 3.6 |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 1.06 | 1.12 | 0.55 | 0.59 | 10.56 | 1.15 |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 0.26 | 0.91 | 0.20 | 0.45 | 3.86 | 0.31 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 109 | ..... | 8 | ..... | 1 | 5 |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 394,413 | ..... | 56,658 | ..... | (3) | 2,370 |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 306,577 | ..... | 44,093 | ..... | (3) | 1,757 |
| 56 | Area for which drains have been installed.....1939...acres..... | 172,894 | ..... | 20,607 | ..... | (3) | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 13,686 | ..... | 2,085 | ..... | ..... | 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 Arkansas and Louisiana]

| COLUMBIA RIVER (IX)—Continued | | | | | | | | | | | | | | | | KLAMATH RIVER (X) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lower Columbia River (IX-C) | | | | | | | | | | | | | | | | | | | | | | |
| Total | | Direct (IX-C) | Walla Walla River (1) | | Intrastate tributaries in Oregon | | Intrastate tributaries in Washington | | Total[1] | | Direct (X) | | Lost River (3) | | |
| | | | | | | | | | | | | | | | |
| 8,480 | | 370 | 1,673 | | 6,184 | | 253 | | 2,790 | | 763 | | 1,125 | | 1 |
| 299,703 | | 7,034 | 37,596 | | 242,617 | | 12,456 | | 271,038 | | 95,090 | | 81,296 | | 2 |
| 256,107 | | 5,270 | 30,693 | | 210,497 | | 9,647 | | 167,622 | | 53,308 | | 65,766 | | 3 |
| 5,707 | | 56 | 570 | | 4,831 | | 250 | | 1,624 | | 947 | | 675 | | 4 |
| 37,889 | | 1,708 | 6,333 | | 27,289 | | 2,559 | | 101,792 | | 40,835 | | 14,855 | | 5 |
| ..... | | ..... | 29,631 | | 204,905 | | ..... | | 187,991 | | 63,727 | | 60,450 | | 6 |
| ..... | | ..... | 39,784 | | 226,412 | | ..... | | 153,105 | | 65,720 | | 58,568 | | 7 |
| ..... | | ..... | 26.9 | | 18.4 | | ..... | | 44.2 | | 49.2 | | 34.5 | | 8 |
| 459,806 | | 11,933 | 46,443 | | 386,969 | | 14,461 | | 384,003 | | 120,374 | | 109,517 | | 9 |
| ..... | | ..... | 36,088 | | 350,736 | | ..... | | 316,239 | | 122,584 | | 77,170 | | 10 |
| ..... | | ..... | 54,614 | | 498,183 | | ..... | | 362,793 | | 128,763 | | 194,748 | | 11 |
| 160,103 | | 4,899 | 8,847 | | 144,352 | | 2,005 | | 112,965 | | 25,284 | | 28,221 | | 12 |
| ..... | | ..... | 6,457 | | 145,831 | | ..... | | 128,248 | | 58,857 | | 16,720 | | 13 |
| ..... | | ..... | 14,830 | | 271,771 | | ..... | | 209,688 | | 63,043 | | 136,180 | | 14 |
| 357,284 | | 9,001 | 45,001 | | 289,439 | | 13,843 | | 310,560 | | 106,598 | | 98,847 | | 15 |
| ..... | | ..... | 31,526 | | 276,897 | | ..... | | 264,949 | | 98,922 | | 75,857 | | 16 |
| ..... | | ..... | 47,745 | | 339,296 | | ..... | | 205,374 | | 76,075 | | 95,304 | | 17 |
| ..... | | ..... | 42.7 | | 4.5 | | ..... | | 17.2 | | 7.8 | | 30.3 | | 18 |
| 57,581 | | 1,967 | 7,406 | | 46,822 | | 1,387 | | 39,522 | | 11,508 | | 17,551 | | 19 |
| ..... | | ..... | 1,895 | | 71,992 | | ..... | | 76,958 | | 35,195 | | 15,407 | | 20 |
| ..... | | ..... | 7,961 | | 112,884 | | ..... | | 52,269 | | 10,355 | | 36,736 | | 21 |
| 83.9 | | 78.1 | 83.5 | | 83.8 | | 90.0 | | 87.3 | | 89.2 | | 82.2 | | 22 |
| ..... | | ..... | 94.0 | | 74.0 | | ..... | | 71.0 | | 64.4 | | 79.7 | | 23 |
| ..... | | ..... | 83.3 | | 66.7 | | ..... | | 74.5 | | 86.4 | | 61.5 | | 24 |
| 13,723,603 | | 399,852 | 960,133 | | 12,125,078 | | 238,540 | | 10,430,941 | | 2,128,699 | | 5,506,452 | | 25 |
| 13,510,363 | | 398,131 | 892,701 | | 11,985,386 | | 234,145 | | 10,206,193 | | 2,098,726 | | 5,361,854 | | 26 |
| 213,240 | | 1,721 | 67,432 | | 139,692 | | 4,395 | | 224,748 | | 29,973 | | 144,598 | | 27 |
| ..... | | ..... | 747,053 | | 11,747,283 | | ..... | | 9,430,566 | | 4,253,840 | | 4,295,740 | | 28 |
| ..... | | ..... | 1,171,914 | | 11,094,332 | | ..... | | 5,502,890 | | 1,734,099 | | 3,451,383 | | 29 |
| ..... | | ..... | 28.5 | | 3.2 | | ..... | | 10.6 | | -50.0 | | 28.2 | | 30 |
| 38.41 | | 44.42 | 21.34 | | 41.89 | | 17.23 | | 33.59 | | 19.97 | | 55.71 | | 31 |
| ..... | | ..... | 23.70 | | 42.42 | | ..... | | 35.59 | | 43.00 | | 56.63 | | 32 |
| ..... | | ..... | 24.55 | | 32.70 | | ..... | | 26.79 | | 22.79 | | 36.21 | | 33 |
| 45.79 | | 56.85 | 25.54 | | 49.98 | | 19.15 | | 38.49 | | 22.39 | | 67.73 | | 34 |
| 14,202,632 | | 414,025 | 967,295 | | 12,563,805 | | 257,507 | | 12,446,774 | | 2,249,554 | | 5,794,980 | | 35 |
| 30.89 | | 34.70 | 20.83 | | 32.47 | | 17.81 | | 32.41 | | 18.69 | | 52.91 | | 36 |
| Primary Enterprises | Sup. | | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | Primary Enterprises | Sup. | |
| 2,976 | 63 | 319 | 530 | 57 | 2,052 | 4 | 75 | 2 | 763 | 13 | 303 | 4 | 71 | 5 | 37 |
| 288,058 | 17,437 | 6,449 | 35,270 | 801 | 234,026 | 9,936 | 12,313 | (3) | 250,878 | 43,692 | 84,859 | 6,184 | 75,336 | 37,199 | 38 |
| 449,094 | 17,665 | 39,545 | 47,083 | 4,913 | 357,516 | 11,942 | 4,950 | (3) | 273,943 | 43,759 | 76,910 | 4,679 | 120,528 | 38,621 | 39 |
| 1.56 | 1.01 | 6.13 | 1.33 | 6.13 | 1.53 | 1.20 | 0.40 | (3) | 1.09 | 1.00 | 0.91 | 0.76 | 1.60 | 1.04 | 40 |
| 374,917 | 11,806 | 4,759 | 31,084 | ..... | 333,556 | 11,806 | 5,518 | ..... | 275,586 | 42,662 | 64,430 | 4,554 | 139,134 | 38,108 | 41 |
| 2.23 | 1.20 | 10.48 | 1.52 | ..... | 2.45 | 1.20 | 0.49 | ..... | 2.02 | 0.99 | 1.55 | 0.77 | 2.08 | 1.03 | 42 |
| 193,003 | 9,839 | 619 | 21,085 | ..... | 159,474 | 9,839 | 11,825 | ..... | 150,831 | 42,942 | 42,909 | 5,931 | 71,889 | 37,005 | 43 |
| 1.94 | 1.20 | 7.69 | 1.47 | ..... | 2.09 | 1.20 | 0.47 | ..... | 1.83 | 0.99 | 1.50 | 0.77 | 1.94 | 1.03 | 44 |
| 341,260 | 2,648 | 4,168 | 31,251 | ..... | 303,148 | ..... | 2,693 | 2,648 | 222,792 | 457 | 56,384 | 457 | 112,948 | ..... | 45 |
| 4,205,259 | 10,550 | ..... | 83,306 | ..... | 4,114,953 | ..... | 7,000 | 10,550 | 7,415,421 | 37,425 | 1,550,013 | ..... | 3,174,098 | 37,425 | 46 |
| 3,093 | 59 | 328 | 549 | 52 | 2,138 | 4 | 78 | 3 | 537 | 9 | 195 | 2 | 75 | 4 | 47 |
| 284,983 | 17,593 | 6,916 | 32,184 | 777 | 233,962 | 9,936 | 11,921 | 6,880 | 234,352 | 41,417 | 80,559 | (3) | 80,781 | 37,199 | 48 |
| 1,053,170 | 57,128 | 22,761 | 158,115 | 3,985 | 850,977 | 47,783 | 21,317 | 5,360 | 648,131 | 82,739 | 259,570 | (3) | 211,478 | 68,165 | 49 |
| 3.7 | 3.2 | 3.3 | 4.9 | 5.1 | 3.6 | 4.8 | 1.8 | 0.8 | 2.8 | 2.0 | 3.2 | (3) | 2.6 | 1.8 | 50 |
| 2.11 | 1.52 | 6.30 | 1.51 | 5.85 | 2.16 | 1.20 | 0.60 | 0.10 | 1.45 | 1.03 | 1.11 | (3) | 1.94 | 1.04 | 51 |
| 0.57 | 0.47 | 1.91 | 0.31 | 1.14 | 0.59 | 0.25 | 0.34 | 0.13 | 0.53 | 0.52 | 0.35 | (3) | 0.74 | 0.57 | 52 |
| 167 | ..... | 18 | 3 | ..... | 145 | ..... | 1 | ..... | 59 | ..... | 21 | ..... | 20 | ..... | 53 |
| 49,357 | ..... | 677 | 457 | ..... | 47,743 | ..... | (3) | ..... | 159,493 | ..... | 58,592 | ..... | 91,235 | ..... | 54 |
| 37,459 | ..... | 477 | 299 | ..... | 36,203 | ..... | (3) | ..... | 119,455 | ..... | 45,893 | ..... | 66,865 | ..... | 55 |
| 6,125 | ..... | 358 | 3 | ..... | 5,759 | ..... | (3) | ..... | 111,485 | ..... | 42,155 | ..... | 67,230 | ..... | 56 |
| 4,404 | ..... | 208 | 145 | ..... | 4,046 | ..... | (3) | ..... | 8,292 | ..... | 2,014 | ..... | 5,298 | ..... | 57 |

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

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

[For the 17 western States

| | ITEM (For definitions and explanations, see text. Major-basin 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) | PACIFIC OCEAN STREAMS (XI) (Exclusive of Gulf of California streams and Columbia and Klamath Rivers) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Streams north of the Columbia River (XI-A) | | Streams between the Columbia and Klamath Rivers[1] (XI-B) | | Streams between the Klamath River and San Francisco Bay (XI-C) | San Francisco Bay and tributaries other than Sacramento and San Joaquin Delta (XI-D) | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | |
| 1 | Irrigated units*.....1939...number..... | 1,782 | | 4,810 | | 267 | 4,400 | |
| 2 | Area irrigated.....1939...acres..... | 22,486 | | 71,895 | | 8,229 | 116,502 | |
| 3 | (a) Cropland harvested.....1939...acres..... | 13,335 | | 52,638 | | 7,462 | 108,693 | |
| 4 | (b) Crop failure.....1939...acres..... | 4 | | 97 | | 57 | 1,856 | |
| 5 | (c) Pasture.....1939...acres..... | 9,147 | | 19,160 | | 710 | 5,953 | |
| 6 | Area irrigated.....1929...acres..... | 8,960 | | 60,693 | | 6,384 | 99,079 | |
| 7 | 1919...acres..... | 6,160 | | 40,703 | | 3,466 | 76,947 | |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | 151.0 | | 18.5 | | 28.9 | 17.6 | |
| 9 | Irrigable area in enterprises.....1940...acres..... | 44,930 | | 88,277 | | 11,184 | 165,735 | |
| 10 | 1930...acres..... | 20,142 | | 85,324 | | 12,001 | 111,354 | |
| 11 | 1920[3]..acres..... | 12,660 | | 139,826 | | 23,217 | 100,730 | |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 22,444 | | 16,382 | | 2,955 | 49,233 | |
| 13 | 1930...acres..... | 11,182 | | 24,631 | | 5,617 | 12,275 | |
| 14 | 1920[3]..acres..... | 6,500 | | 99,123 | | 19,751 | 23,783 | |
| 15 | Area works were capable of supplying with water...1940...acres..... | 40,932 | | 84,754 | | 10,950 | 163,185 | |
| 16 | 1930...acres..... | 17,607 | | 77,877 | | 9,515 | 107,432 | |
| 17 | 1920...acres..... | 9,860 | | 56,469 | | 14,823 | 86,779 | |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | 132.5 | | 8.8 | | 15.1 | 51.9 | |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 18,446 | | 12,859 | | 2,721 | 46,683 | |
| 20 | 1930...acres..... | 8,647 | | 17,184 | | 3,131 | 8,353 | |
| 21 | 1920...acres..... | 3,700 | | 15,766 | | 11,357 | 9,832 | |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 54.9 | | 84.8 | | 75.2 | 71.4 | |
| 23 | 1929...percent.... | 50.9 | | 77.9 | | 67.1 | 92.2 | |
| 24 | 1919...percent.... | 62.5 | | 72.1 | | 23.4 | 88.7 | |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 1,043,463 | | 5,305,670 | | 418,622 | 9,346,398 | |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 1,038,050 | | 5,275,988 | | 417,931 | 9,331,250 | |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 5,413 | | 29,682 | | 691 | 15,148 | |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | 296,126 | | 5,230,947 | | 600,089 | 9,405,139 | |
| 29 | 1920...dollars.... | 94,010 | | 1,975,189 | | 687,555 | 4,940,061 | |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | 252.4 | | 1.4 | | -30.2 | -0.6 | |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 25.49 | | 62.60 | | 38.23 | 57.27 | |
| 32 | 1930...dollars.... | 16.82 | | 67.17 | | 63.07 | 87.55 | |
| 33 | 1920...dollars.... | 9.53 | | 34.98 | | 46.38 | 56.93 | |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 46.41 | | 73.80 | | 50.87 | 80.23 | |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 1,249,477 | | 5,424,354 | | 446,961 | 9,412,904 | |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 27.81 | | 61.45 | | 39.96 | 56.79 | |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary Enterprises | Sup. | Primary Enterprises | Sup. | | Primary Enterprises | Sup. |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 727 | 1 | 877 | ..... | 234 | 2,568 | 3 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 22,331 | (5) | 69,730 | ..... | 7,713 | 114,041 | 569 |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 76,373 | (5) | 210,832 | ..... | 46,582 | 887,812 | 3,791 |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 3.42 | (5) | 3.02 | ..... | 6.04 | 7.79 | 6.67 |
| 41 | Total annual charges (reported)[6] [7].....1939...dollars.... | 67,775 | ..... | 213,245 | ..... | 1,250 | 167,534 | ..... |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 4.63 | ..... | 4.44 | ..... | 3.63 | 9.45 | ..... |
| 43 | Area against which charges were assessed.....1939...acres..... | 25,028 | ..... | 52,436 | ..... | 344 | 18,074 | ..... |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 2.71 | ..... | 4.07 | ..... | 3.63 | 9.27 | ..... |
| 45 | Total charges collected[6].....1939...dollars.... | 51,757 | ..... | 271,460 | ..... | ..... | 4,752 | ..... |
| 46 | Indebtedness to December 31 (reported)[7].....1939...dollars.... | 235,340 | ..... | 1,236,206 | ..... | ..... | 19,795 | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 696 | 1 | 908 | 1 | 245 | 2,643 | 2 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 19,366 | (5) | 66,826 | (5) | 7,787 | 115,522 | (5) |
| 49 | Water delivered.....1939...acre-feet.. | 47,962 | (5) | 211,659 | (5) | 13,667 | 192,419 | (5) |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 2.5 | (5) | 3.2 | (5) | 1.8 | 1.7 | (5) |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 5.38 | (5) | 370 | ..... | 6.02 | 8.22 | (5) |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 2.17 | (5) | 1.17 | ..... | 3.43 | 4.93 | (5) |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 147 | ..... | 26 | ..... | 9 | 38 | ..... |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 6,008 | ..... | 13,325 | ..... | 526 | 15,973 | ..... |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 4,341 | ..... | 12,379 | ..... | 310 | 11,096 | ..... |
| 56 | Area for which drains have been installed.....1939...acres..... | 1,018 | ..... | 651 | ..... | 52 | 7,724 | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 278 | ..... | 333 | ..... | 24 | 5,212 | ..... |

* Schedules called for "Number of farms," see explanation in text.
[1] Data for 1 enterprise on the Illinois River in California are included.
[2] Data for the intrastate tributaries of the Sacramento River are not shown separately but are included in the Sacramento River total.
[3] 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]

| PACIFIC OCEAN STREAMS (XI)—Continued (Exclusive of Gulf of California streams and Columbia and Klamath Rivers) | | | | | | SACRAMENTO-SAN JOAQUIN DELTA AND TRIBUTARY STREAMS (XII) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pacific Ocean streams south of San Francisco Bay (XI-E) | | | | | | | | | | Sacramento River | | | | |
| Total | | Streams between San Francisco Bay and Santa Maria River (XI-Ea) | | Santa Maria River and streams south (XI-Eb) | | Total (XII) | | Delta direct (1) | | Total[2] | | Direct (2)+(15)+(24) | | |
| 45,135 | | 3,453 | | 41,682 | | 66,539 | | 1,904 | | 15,758 | | 3,294 | | 1 |
| 813,182 | | 176,954 | | 636,228 | | 3,393,882 | | 245,691 | | 779,368 | | 298,879 | | 2 |
| 801,179 | | 174,182 | | 626,997 | | 3,082,169 | | 238,636 | | 676,523 | | 287,546 | | 3 |
| 3,319 | | 927 | | 2,392 | | 11,521 | | 1,012 | | 5,468 | | 837 | | 4 |
| 8,684 | | 1,845 | | 6,839 | | 300,192 | | 6.043 | | 97,377 | | 10,496 | | 5 |
| 773,623 | | ..... | | ..... | | 3,157,132 | | ..... | | 696,924 | | 277,407 | | 6 |
| 564,254 | | ..... | | ..... | | 2,744,644 | | ..... | | 640,950 | | 194,397 | | 7 |
| 5.1 | | ..... | | ..... | | 7.5 | | ..... | | 11.8 | | 7.7 | | 8 |
| 1,151,476 | | 226,582 | | 924,894 | | 5,660,337 | | 337,304 | | 1,708,003 | | 652,877 | | 9 |
| 1,033,942 | | ..... | | ..... | | 5,393,666 | | ..... | | 1,554,698 | | 578,410 | | 10 |
| 866,464 | | ..... | | ..... | | 5,499,735 | | ..... | | 1,204,769 | | 439,169 | | 11 |
| 338,294 | | 49,628 | | 288,666 | | 2,266,455 | | 91,613 | | 928,635 | | 353,998 | | 12 |
| 260,319 | | ..... | | ..... | | 2,236,534 | | ..... | | 857,774 | | 301,003 | | 13 |
| 302,210 | | ..... | | ..... | | 2,755,091 | | ..... | | 563,819 | | 244,772 | | 14 |
| 1,123,176 | | 218,409 | | 904,767 | | 5,132,597 | | 333,376 | | 1,392,185 | | 632,646 | | 15 |
| 962,076 | | ..... | | ..... | | 4,795,836 | | ..... | | 1,176,770 | | 530,983 | | 16 |
| 685,110 | | ..... | | ..... | | 4,113,524 | | ..... | | 864,605 | | 296,748 | | 17 |
| 16.7 | | ..... | | ..... | | 7.0 | | ..... | | 18.3 | | 19.1 | | 18 |
| 309,994 | | 41,455 | | 268.539 | | 1,738,715 | | 87,685 | | 612,817 | | 333,767 | | 19 |
| 188,453 | | ..... | | ..... | | 1,638,704 | | ..... | | 479,846 | | 253,576 | | 20 |
| 120,856 | | ..... | | ..... | | 1,368,880 | | ..... | | 223,655 | | 102,351 | | 21 |
| 72.4 | | 81.0 | | 70.3 | | 66.1 | | 73.7 | | 56.0 | | 47.2 | | 22 |
| 80.4 | | ..... | | ..... | | 65.8 | | ..... | | 59.2 | | 52.2 | | 23 |
| 82.4 | | ..... | | ..... | | 66.7 | | ..... | | 74.1 | | 65.5 | | 24 |
| 104,204,397 | | 10,755,279 | | 93,449,118 | | 171,004,939 | | 5,809,300 | | 46,058,587 | | 16,395,878 | | 25 |
| 96,516,782 | | 10,743,132 | | 85,773,650 | | 167,409,547 | | 5,807,746 | | 44,633,577 | | 16,311,224 | | 26 |
| 7,687,615 | | 12.147 | | 7,675,468 | | 3,595,392 | | 1,554 | | 1,425,010 | | 84,654 | | 27 |
| [4] 98,090,593 | | ..... | | ..... | | 164,628,093 | | ..... | | 48,750,541 | | 17,502,425 | | 28 |
| 55,595,858 | | ..... | | ..... | | 100,527,759 | | ..... | | 28,833,106 | | 11,830,374 | | 29 |
| 6.2 | | ..... | | ..... | | 3.9 | | ..... | | -5.5 | | -6.3 | | 30 |
| 92.78 | | 49.24 | | 103.29 | | 33.32 | | 17.43 | | 33.08 | | 25.92 | | 31 |
| 101.96 | | ..... | | ..... | | 34.33 | | ..... | | 41.43 | | 32.96 | | 32 |
| 81.15 | | ..... | | ..... | | 24.44 | | ..... | | 33.35 | | 39.87 | | 33 |
| 128.14 | | 60.78 | | 146.88 | | 50.39 | | 23.64 | | 59.10 | | 54.86 | | 34 |
| 105,379,863 | | 11,167,183 | | 94,212,680 | | 177,372,167 | | 5,873,307 | | 49,010,703 | | 16,556,184 | | 35 |
| 91.52 | | 49.29 | | 101.86 | | 31.34 | | 17.41 | | 28.69 | | 25.36 | | 36 |
| Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | Primary | Sup. | |
| Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | Enterprises | | |
| 8,407 | 178 | 2,562 | 28 | 5,845 | 150 | 16,122 | 7,261 | 684 | 11 | 4,704 | 59 | 781 | 7 | 37 |
| 753,397 | 51,302 | 173,537 | 2,320 | 579,860 | 48,982 | 3,246,911 | 384,497 | 170,538 | 22,950 | 743,682 | 16,164 | 291,775 | 1,075 | 38 |
| 6,342,202 | 256,025 | 1,158,765 | 16,445 | 5,183,437 | 239,580 | 11,642,315 | 1,357,820 | 504,342 | 6,701 | 2,624,323 | 12,144 | 1,010,414 | 2,559 | 39 |
| 8.42 | 4.99 | 6.68 | 7.09 | 8.94 | 4.89 | 3.59 | 3.53 | 2.96 | 0.29 | 3.53 | 0.75 | 3.46 | 2.38 | 40 |
| 4,644,323 | 215,902 | 56,102 | ..... | 4,588,221 | 215,902 | 5,990,229 | 34,892 | 315,488 | 5,329 | 1,361,910 | 15,360 | 502,157 | ..... | 41 |
| 11.85 | 5.48 | 5.12 | ..... | 12.05 | 5.48 | 2.89 | 0.59 | 5.07 | 0.23 | 3.14 | 1.24 | 2.43 | ..... | 42 |
| 462,339 | 39,718 | 28,980 | ..... | 433,359 | 39,718 | 3,034,228 | 55,230 | 87,196 | 22,743 | 843,583 | 12,387 | 276,215 | ..... | 43 |
| 10.05 | 5.44 | 1.94 | ..... | 10.59 | 5.44 | 1.97 | 0.63 | 3.62 | 0.23 | 1.61 | 1.24 | 1.82 | ..... | 44 |
| 3,467,817 | 381,108 | 40,354 | ..... | 3,427,463 | 381,108 | 5,163,621 | 22,140 | 282,500 | 5,323 | 1,211,911 | 15,400 | 476,378 | ..... | 45 |
| 15,534,986 | 1,347,129 | 10,334 | ..... | 15,524,652 | 1,347,129 | 56,289,636 | 139,000 | 2,191,863 | ..... | 13,277,819 | 139,000 | 5,537,244 | ..... | 46 |
| 6,628 | 180 | 2,614 | 30 | 6,014 | 150 | 16,169 | 7,313 | 772 | 8 | 4,751 | 55 | 795 | 7 | 47 |
| 802,032 | 34,607 | 176,210 | 2,327 | 625,822 | 32,280 | 3,202,911 | 377,491 | 210,047 | 22,943 | 713,535 | 16,264 | 287,962 | 1,075 | 48 |
| 1,508,811 | 63,751 | 370,444 | 5,454 | 1,138,367 | 58,297 | 8,756,250 | 693,453 | 493,991 | 21,184 | 2,522,009 | 20,679 | 1,194,556 | 3,087 | 49 |
| 1.9 | 1.8 | 2.1 | 2.3 | 1.8 | 1.8 | 2.7 | 1.8 | 2.4 | 0.9 | 3.5 | 1.3 | 4.1 | 2.9 | 50 |
| 9.60 | 7.12 | 6.66 | 7.09 | 10.43 | 7.12 | 4.02 | 3.73 | 3.28 | 0.28 | 3.61 | 1.63 | 2.97 | 2.38 | 51 |
| 5.10 | 3.86 | 3.17 | 3.02 | 5.73 | 3.94 | 1.47 | 2.03 | 1.40 | 0.31 | 1.02 | 1.28 | 0.71 | 0.83 | 52 |
| 365 | ..... | 148 | ..... | 217 | ..... | 452 | ..... | 196 | ..... | 155 | ..... | 51 | ..... | 53 |
| 80,789 | ..... | 13,318 | ..... | 67,471 | ..... | 1,897,316 | ..... | 218,350 | ..... | 675,459 | ..... | 491,148 | ..... | 54 |
| 60,687 | ..... | 11,786 | ..... | 48,901 | ..... | 1,181,659 | ..... | 158,807 | ..... | 273,956 | ..... | 213,341 | ..... | 55 |
| 39,322 | ..... | 8,125 | ..... | 31,197 | ..... | 1,213,586 | ..... | 171,953 | ..... | 536,104 | ..... | 420,856 | ..... | 56 |
| 3,595 | ..... | 1,350 | ..... | 2,245 | ..... | 60,237 | ..... | 9,522 | ..... | 22,804 | ..... | 1,887 | ..... | 57 |

[4] Revised.
[5] 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.

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

[For the 17 western States and Arkansas and Louisiana]

| | ITEM (For definitions and explanations, see text. Major-basin 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) | SACRAMENTO-SAN JOAQUIN DELTA AND TRIBUTARY STREAMS (XII)—Continued | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Sacramento River—Continued | | | | | | |
| | | Pit River | | | | | | Intrastate tributaries in California |
| | | Total | | Direct (3) | | Goose Lake (4) | | |
| | **IRRIGATED UNITS AND AREAS** | | | | | | | |
| 1 | Irrigated units*.....1939...number..... | 746 | | 487 | | 259 | | 48,877 |
| 2 | Area irrigated.....1939...acres..... | 104,381 | | 76,226 | | 28,155 | | 2,368,823 |
| 3 | (a) Crops and harvested.....1939...acres..... | 78,537 | | 54,252 | | 24,285 | | 2,167,010 |
| 4 | (b) Crop failure.....1939...acres..... | 2 | | 1 | | 1 | | 5,041 |
| 5 | (c) Pasture.....1939...acres..... | 25,842 | | 21,973 | | 3,869 | | 196,772 |
| 6 | Area irrigated.....1929...acres..... | 69,768 | | ..... | | ..... | | 2,460,208 |
| 7 | 1919...acres..... | 89,984 | | ..... | | ..... | | 2,103,694 |
| 8 | Increase or decrease (-), 1929-1939.....percent.... | 49.6 | | ..... | | ..... | | -3.7 |
| 9 | Irrigable area in enterprises.....1940...acres..... | 146,114 | | 98,305 | | 47,809 | | 3,615,030 |
| 10 | 1930...acres..... | 94,151 | | ..... | | ..... | | 3,838,968 |
| 11 | 1920[1]..acres..... | 129,984 | | ..... | | ..... | | 4,294,966 |
| 12 | Excess of irrigable area over the area irrigated..1940...acres..... | 41,733 | | 22,079 | | 19,654 | | 1,246,207 |
| 13 | 1930...acres..... | 24,383 | | ..... | | ..... | | 1,378,760 |
| 14 | 1920[1]..acres..... | 40,000 | | ..... | | ..... | | 2,191,272 |
| 15 | Area works were capable of supplying with water...1940...acres..... | 137,970 | | 91,070 | | 46,900 | | 3,407,036 |
| 16 | 1930...acres..... | 83,058 | | ..... | | ..... | | 3,619,066 |
| 17 | 1920...acres..... | 107,478 | | ..... | | ..... | | 3,248,919 |
| 18 | Increase or decrease (-), 1930-1940.....percent.... | 66.1 | | ..... | | ..... | | -5.9 |
| 19 | Excess of area works were capable of supplying with water over area irrigated.....1940...acres..... | 33,589 | | 14,844 | | 18,745 | | 1,038,213 |
| 20 | 1930...acres..... | 13,290 | | ..... | | ..... | | 1,158,858 |
| 21 | 1920...acres..... | 17,494 | | ..... | | ..... | | 1,145,225 |
| 22 | Proportion which area irrigated is of area works were capable of supplying with water.....1939...percent.... | 75.7 | | 83.7 | | 60.0 | | 69.5 |
| 23 | 1929...percent.... | 84.0 | | ..... | | ..... | | 68.0 |
| 24 | 1919...percent.... | 83.7 | | ..... | | ..... | | 64.8 |
| | **CAPITAL INVESTED TO JANUARY 1** | | | | | | | |
| 25 | Total investment in irrigation enterprises.....1940...dollars.... | 2,933,799 | | 1,313,605 | | 1,620,194 | | 119,137,052 |
| 26 | (a) Cost of irrigation works and equipment.....1940...dollars.... | 2,868,688 | | 1,257,865 | | 1,610,823 | | 116,968,224 |
| 27 | (b) Investment in water rights (reported).....1940...dollars.... | 65,111 | | 55,740 | | 9,371 | | 2,168,828 |
| 28 | Total investment in irrigation enterprises.....1930...dollars.... | 982,284 | | ..... | | ..... | | 115,877,552 |
| 29 | 1920...dollars.... | 799,913 | | ..... | | ..... | | 71,691,653 |
| 30 | Increase or decrease (-), 1930-1940.....percent.... | 198.7 | | ..... | | ..... | | 2.8 |
| 31 | Average investment based on area works were capable of supplying with water, per acre.....1940...dollars.... | 21.26 | | 14.42 | | 34.55 | | 34.97 |
| 32 | 1930...dollars.... | 11.83 | | ..... | | ..... | | 32.02 |
| 33 | 1920...dollars.... | 7.44 | | ..... | | ..... | | 22.07 |
| 34 | Average investment per acre irrigated.....1939...dollars.... | 28.11 | | 17.23 | | 57.55 | | 50.29 |
| 35 | Estimated final investment in existing enterprises..1940...dollars.... | 2,997,469 | | 1,374,030 | | 1,623,439 | | 122,488,157 |
| 36 | Average investment based on estimated final investment and irrigable area, per acre.....1940...dollars.... | 20.51 | | 13.98 | | 33.96 | | 33.88 |
| | **MAINTENANCE AND OPERATION, CHARGES AND INDEBTEDNESS** | Primary | Supplemental | Primary | Supplemental | | Primary | Supplemental |
| | | Enterprises | | Enterprises | | | Enterprises | |
| 37 | Enterprises reporting maintenance and operation...1939...number..... | 406 | 2 | 277 | 2 | 129 | 10,734 | 7,191 |
| 38 | Area irrigated in these enterprises.....1939...acres..... | 93,201 | (2) | 67,743 | (2) | 25,458 | 2,332,691 | 345,383 |
| 39 | Cost of maintenance and operation.....1939...dollars.... | 52,970 | (2) | 36,100 | (2) | 16,870 | 8,513,650 | 1,338,975 |
| 40 | Average cost, per acre irrigated.....1939...dollars.... | 0.57 | (2) | 0.53 | (2) | 0.66 | 3.65 | 3.88 |
| 41 | Total annual charges (reported)[3] [4].....1939...dollars.... | 24,577 | 15,360 | 12,535 | 15,360 | 12,042 | 4,312,831 | 14,203 |
| 42 | Average annual charge per acre irrigated.....1939...dollars.... | 0.98 | 1.24 | 0.73 | 1.24 | 1.51 | 2.73 | 0.59 |
| 43 | Area against which charges were assessed.....1939...acres..... | 31,598 | 12,387 | 23,223 | 12,387 | 8,375 | 2,103,449 | 20,100 |
| 44 | Average annual charge per acre assessed.....1939...dollars.... | 0.78 | 1.24 | 0.54 | 1.24 | 1.44 | 2.05 | 0.71 |
| 45 | Total charges collected[3].....1939...dollars.... | 21,001 | 15,400 | 6,970 | 15,400 | 14,031 | 3,669,210 | 1,417 |
| 46 | Indebtedness to December 31 (reported)[4].....1939...dollars.... | 61,360 | 139,000 | 45,000 | 139,000 | 16,360 | 40,819,954 | ..... |
| | **WATER DELIVERED TO IRRIGATORS, 1939** | | | | | | | |
| 47 | Enterprises reporting water delivered.....1939...number..... | 343 | 2 | 222 | 2 | 121 | 10,616 | 7,250 |
| 48 | Area irrigated by these enterprises.....1939...acres..... | 88,774 | (2) | 65,299 | (2) | 23,475 | 2,279,329 | 338,284 |
| 49 | Water delivered.....1939...acre-feet.. | 210,804 | (2) | 146,868 | (2) | 63,936 | 5,740,250 | 651,590 |
| 50 | Average water delivered per acre irrigated.....1939...acre-feet.. | 2.4 | (2) | 2.2 | (2) | 2.7 | 2.5 | 1.9 |
| 51 | Average cost of water per acre irrigated.....1939...dollars.... | 0.61 | (2) | 0.57 | (2) | 0.71 | 4.21 | 4.08 |
| 52 | Average cost of water per acre-foot delivered..1939...dollars.... | 0.26 | (2) | 0.25 | (2) | 0.26 | 1.67 | 2.12 |
| | **DRAINAGE OF IRRIGATED LAND** | | | | | | | |
| 53 | Enterprises reporting land drained or needing drainage.....1939...number..... | 38 | ..... | 35 | ..... | 3 | 101 | ..... |
| 54 | Irrigable area in these enterprises.....1939...acres..... | 13,474 | ..... | 13,244 | ..... | 230 | 1,003,507 | ..... |
| 55 | Irrigated area in these enterprises.....1939...acres..... | 10,550 | ..... | 10,411 | ..... | 139 | 748,896 | ..... |
| 56 | Area for which drains have been installed.....1939...acres..... | 8,400 | ..... | 8,400 | ..... | ..... | 505,529 | ..... |
| 57 | Additional area needing drainage.....1939...acres..... | 398 | ..... | 340 | ..... | 58 | 27,911 | ..... |

* Schedules called for "Number of farms," 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.

[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 46, inclusive, relate to those enterprises only.