

# CENSUS OF IRRIGATION—UNITED STATES SUMMARY

3

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

[For the 17 western States and Arkansas and Louisiana]

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	1940			IRRIGATED AREA			DELIVERY OF WATER TO IRRIGATORS, 1939							
	Enter- prises	Irrigable area	Area works were capable of supplying with water	1939	1929	1919	Increase or decrease (-) 1929-39	Irrigated area reporting—			Quantity delivered per acre <sup>1</sup>	Cost <sup>1</sup>		
								Quantity	Cost	Quantity and cost		Per acre	Per acre- foot	
	Number	Acres	Acres	Acres	Acres	Acres	Percent	Acres	Acres	Acres	Acres	Acres	Dollars	Dollars
<b>Total.....</b>	<b>91,637</b>	<b>31,305,949</b>	<b>28,055,248</b>	<b>21,003,739</b>	<b>19,547,544</b>	<b>19,191,718</b>	<b>7.4</b>	<b>19,377,064</b>	<b>20,210,007</b>	<b>18,802,811</b>	<b>3.0</b>	<b>3.28</b>	<b>1.11</b>	
<b>Primary sources:</b>														
Streams, gravity.....	25,726	18,642,336	16,811,045	13,063,955	12,980,575	14,527,060	0.6	11,798,244	12,552,792	11,440,122	2.6	1.18	0.45	
Streams, pumped.....	5,915	3,225,700	2,761,219	1,724,800	1,713,380	1,226,510	0.7	1,601,396	1,699,903	1,578,627	3.2	4.39	1.39	
Streams, gravity and pumped.....	344	2,182,762	1,796,105	1,266,148	258,094	199,595	390.6	1,224,860	1,259,596	1,219,178	4.0	2.72	0.68	
Wells, pumped.....	38,715	3,770,232	3,621,991	2,508,076	2,051,735	1,263,098	22.2	2,463,353	2,396,465	2,371,469	2.6	7.28	2.84	
Wells, flowing.....	1,398	52,791	50,222	41,481	48,479	65,856	-14.4	36,567	19,614	17,231	2.6	1.06	0.40	
Wells, pumped and flowing.....	163	25,648	24,850	20,835	16,798	35,685	24.0	20,651	19,508	19,324	2.6	8.93	3.47	
Lakes, gravity.....	149	46,656	44,805	25,659	58,103	100,646	-55.8	23,786	24,872	23,223	3.1	1.31	0.43	
Lakes, pumped.....	354	75,047	70,818	45,831	77,818	35,730	-41.1	44,869	42,300	41,455	1.8	3.32	1.86	
Springs.....	3,432	265,666	253,493	210,373	217,246	198,008	-3.2	179,209	170,424	145,060	2.3	0.93	0.41	
Springs and streams.....	995	306,174	287,297	230,004	.....	.....	.....	189,938	215,216	183,091	2.3	0.64	0.29	
Stored storm water.....	434	37,682	33,217	21,399	39,587	98,873	-45.9	17,539	19,010	15,546	1.4	1.20	0.87	
City water.....	184	14,661	14,372	10,837	1,654	990	555.2	10,451	9,527	9,378	3.5	5.71	1.64	
Sewage.....	53	6,717	6,447	5,260	3,529	2,578	49.1	4,384	3,715	3,141	2.7	2.39	0.90	
Streams, gravity; wells, pumped..	580	1,705,708	1,533,861	1,252,329	1,164,349	344,713	7.6	1,234,969	1,241,531	1,226,447	2.5	4.30	1.73	
Streams, gravity; wells, flowing..	111	82,725	81,553	71,571	21,292	82,655	236.1	49,754	50,807	48,694	1.4	0.87	0.65	
Streams, pumped; wells, pumped...	437	369,853	225,108	172,636	.....	.....	.....	169,822	168,533	165,119	2.4	6.46	2.70	
Waste water, seepage or drainage..	770	116,346	113,393	65,613	.....	.....	.....	61,605	58,065	55,699	2.1	1.46	0.70	
Other mixed.....	741	379,125	325,952	266,932	866,434	996,621	-70.2	245,667	239,007	239,007	2.8	2.83	1.01	
Other and not reported.....	1	.....	.....	.....	28,471	13,148	.....	.....	.....	.....	.....	.....	.....	
<b>Supplemental sources:<sup>2</sup></b>														
Streams, gravity and/or storage...	718	3,719,709	3,531,553	2,736,696	.....	.....	.....	2,448,977	2,396,400	2,180,285	1.3	0.46	0.35	
Streams, pumped.....	231	36,712	35,357	25,644	24,671	.....	.....	21,049	25,500	20,653	2.7	3.55	1.33	
Wells, pumped.....	10,066	718,088	693,540	518,429	293,026	.....	.....	511,291	499,973	496,145	1.9	3.83	2.06	
Wells, flowing.....	120	8,126	7,944	6,441	148	.....	.....	4,744	4,732	3,148	1.3	0.27	0.22	

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

<sup>2</sup>Areas shown under "Supplemental sources" are parts of areas shown under "Primary sources" and therefore are not again added into the totals (see text).

<sup>3</sup>Percent not shown when more than 1,000.

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

[For the 17 western States and Arkansas and Louisiana]

SOURCE OF WATER SUPPLY (For definitions and explanations, see text)	INVESTMENT							COST OF MAINTENANCE AND OPERATION <sup>1</sup>						
	1940			1930			Average per acre increase or decrease (-) 1930-40	1939		1929		Average per acre increase or decrease (-) 1930-40	1919	
	Amount	Pro- por- tion of total	Aver- age per acre <sup>2</sup>	Amount	Pro- por- tion of total	Aver- age per acre <sup>2</sup>		Irrigated area reporting	Aver- age per acre	Irrigated area reporting	Aver- age per acre		Irrigated area reporting	Aver- age per acre
	Dollars	Percent	Dollars	Dollars	Percent	Dollars	Dollars	Acres	Dollars	Acres	Dollars	Dollars	Acres	Dollars
<b>Total.....</b>	<b>1,052,049,201</b>	<b>100.0</b>	<b>37.50</b>	<b>592,755,790</b>	<b>100.0</b>	<b>34.20</b>	<b>-2.07</b>	<b>20,193,761</b>	<b>2.28</b>	<b>18,690,184</b>	<b>2.77</b>	<b>-0.63</b>	<b>16,253,192</b>	<b>2.43</b>
<b>Primary sources:</b>														
Streams, gravity.....	441,278,658	41.9	26.25	452,381,562	50.6	26.44	-1.9	12,580,607	0.84	12,392,865	1.21	-0.37	12,183,139	1.25
Streams, pumped.....	81,236,358	7.7	29.42	102,027,581	11.4	37.67	-8.25	1,698,767	3.81	1,678,550	4.30	-0.49	1,151,313	6.50
Streams, gravity and pumped.....	136,541,602	13.2	77.13	20,823,588	2.3	47.63	29.50	1,259,596	2.23	252,784	4.41	-2.18	198,656	2.33
Wells, pumped.....	139,675,087	13.3	38.56	131,426,464	14.7	53.30	-71.51	2,394,081	6.92	1,921,060	9.17	-2.25	1,064,338	10.07
Wells, flowing.....	1,706,366	0.2	33.96	2,366,242	0.8	42.27	-8.29	19,614	1.01	22,403	2.34	-1.33	27,543	2.77
Wells, pumped and flowing.....	1,855,318	0.2	74.66	1,548,810	0.2	74.56	0.08	19,508	7.96	15,542	9.27	-1.31	29,600	8.04
Lakes, gravity.....	1,248,164	0.1	27.86	4,693,943	0.5	35.61	-7.75	24,872	1.06	55,527	2.70	-1.04	78,586	1.30
Lakes, pumped.....	1,655,166	0.2	26.52	3,591,977	0.4	26.43	0.09	42,300	3.40	76,518	3.93	-0.53	45,558	5.20
Springs.....	3,356,541	0.3	13.24	3,408,382	0.4	13.27	-0.03	170,424	0.83	195,502	1.02	-0.19	139,244	1.63
Springs and streams.....	4,053,412	0.4	14.11	.....	.....	.....	.....	215,236	0.51	.....	.....	.....	.....	.....
Stored storm water.....	637,637	0.1	19.20	1,822,468	0.2	28.31	-9.11	19,010	1.12	36,023	1.31	-0.19	57,666	2.39
City water.....	540,022	0.1	37.57	32,306	(*)	17.85	19.72	9,105	4.66	978	7.31	-2.65	361	20.73
Sewage.....	209,541	(*)	32.50	261,986	(*)	65.35	-32.85	3,715	2.41	2,902	2.16	0.25	1,631	9.05
Streams, gravity; wells, pumped..	111,874,661	10.6	72.94	99,936,110	11.2	66.29	6.65	1,201,354	3.56	1,159,631	4.46	-0.90	315,640	5.97
Streams, gravity; wells, flowing..	1,714,990	0.2	21.03	576,037	0.1	16.89	4.14	50,807	0.70	20,268	2.52	-1.82	79,354	1.36
Streams, pumped; wells, pumped...	19,194,344	1.8	85.27	.....	.....	.....	.....	169,822	6.19	.....	.....	.....	.....	.....
Waste water, seepage or drainage..	699,435	0.1	6.17	.....	.....	.....	.....	68,103	1.45	.....	.....	.....	.....	.....
Other mixed.....	14,200,912	1.3	43.57	56,702,676	6.4	49.82	-5.50	256,129	2.44	843,862	3.52	-1.05	838,622	2.71
Other and not reported.....	.....	.....	.....	592,642	0.1	20.16	.....	.....	.....	14,769	2.04	.....	11,941	10.75
<b>Supplemental sources:<sup>5</sup></b>														
Streams, gravity and/or storage...	69,896,269	6.6	19.79	.....	.....	.....	.....	2,452,362	0.31	.....	.....	.....	.....	.....
Streams, pumped.....	1,622,648	0.2	45.69	927,158	0.1	28.28	17.61	25,200	4.64	23,696	6.27	-1.63	.....	.....
Wells, pumped.....	16,524,893	1.6	23.63	9,627,568	1.1	29.92	-6.09	501,669	3.86	276,347	5.91	-2.05	.....	.....
Wells, flowing.....	117,168	(*)	14.75	6,200	(*)	24.31	-9.56	4,732	0.24	57	0.61	-0.37	.....	.....

<sup>1</sup>Based on irrigated area in enterprises reporting cost of maintenance and operation. <sup>2</sup>Based on area works were capable of supplying with water. <sup>3</sup>Revised.

<sup>4</sup>Less than one-tenth of 1 percent.

<sup>5</sup>Areas shown under "Supplemental sources" are parts of areas shown under "Primary sources" and therefore are not again added into the totals (see text).