

DRAINAGE OF AGRICULTURAL LANDS

Summary Table 10.—TYPES OF DRAINAGE WORKS,

State	Open ditches						
	Constructed, 1950-1959 (1960 Census)		Constructed, 1940-1949 ² (1950 Census)		Completed prior to Census date (miles)		
	Projects reporting	Miles	Projects reporting	Miles	1940 Census	1930 Census	1920 Census
All drainage States.....	3,333	33,543.5	1,200	9,301	146,152.3	138,673.0	107,468.2
10 "county-drain" States.....	640	4,746.7	³ 135	1,484	86,224.8	85,480.9	78,762.7
30 "drainage-district" States.....	2,693	28,796.8	1,065	7,817	59,927.5	53,192.1	28,705.5
17 irrigation States.....	1,759	25,363.2	487	6,009	37,033.9	32,367.3	14,517.8
13 other States.....	934	3,433.6	578	1,808	22,893.6	20,824.8	14,187.7
Alabama.....	4	15.3	7	66	42.3	...	...
Arizona.....	...	...	...	...	100.8	349.4	32.6
Arkansas.....	347	1,796.0	29	123	6,030.3	4,974.3	3,154.1
California.....	167	812.9	15	34	6,091.1	4,605.9	3,009.8
Colorado.....	1	0.3	4	11	972.9	814.9	132.5
Delaware.....	33	215.7	³ 1	2	1,482.3	...	...
Florida.....	327	10,554.6	145	2,263	5,022.1	5,112.6	1,990.8
Georgia.....	21	52.4	22	115	550.3	496.9	276.8
Idaho.....	11	38.6	19	59	968.1	651.2	274.5
Illinois.....	143	374.5	96	273	6,862.2	5,996.4	4,754.5
Indiana.....	135	487.0	³ 19	198	22,008.1	20,786.8	17,470.7
Iowa.....	78	271.1	³ 33	203	5,189.7	4,800.0	3,998.0
Kansas.....	44	168.0	9	48	381.4	324.7	138.4
Kentucky.....	10	28.4	³ 4	22	1,231.8	1,204.8	664.5
Louisiana.....	562	8,202.7	141	2,116	7,105.5	7,701.2	1,771.6
Maryland.....	23	137.2	26	138	461.3	...	...
Michigan.....	64	974.6	³ 34	554	19,608.6	17,188.5	16,023.8
Minnesota.....	205	2,333.2	³ 29	357	15,856.7	14,477.6	14,657.0
Mississippi.....	222	566.6	156	372	4,344.1	4,022.1	1,815.1
Missouri.....	113	296.7	8	30	5,191.5	4,960.5	3,438.7
Montana.....	10	43.0	8	40	420.9	284.2	102.1
Nebraska.....	10	60.6	28	167	1,406.7	1,202.3	734.5
Nevada.....	1	36.5	2	21	426.4	334.8	16.6
New Jersey.....	7	13.6	5	12	...	...	...
New Mexico.....	2	6.3	...	...	625.2	282.9	124.0
New York.....	7	25.5	7	31	...	...	...
North Carolina.....	217	959.0	158	403	1,846.6	1,483.5	1,171.3
North Dakota.....	35	168.5	³ 6	94	940.4	817.6	708.3
Ohio.....	47	57.3	³ 8	38	18,732.2	25,048.2	24,984.0
Oklahoma.....	22	172.5	³ 1	16	334.3	303.0	18.6
Oregon.....	66	260.3	17	90	780.1	495.1	...
South Carolina.....	93	551.2	28	128	459.9	423.0	262.7
South Dakota.....	11	38.4	...	...	840.7	854.4	237.8
Tennessee.....	22	134.6	23	105	1,508.0	1,413.0	777.3
Texas.....	171	3,224.7	33	948	4,906.3	3,661.8	2,728.5
Utah.....	2	60.9	12	29	267.8	304.3	120.3
Virginia.....	22	45.2	27	59	46.7	40.0	...
Washington.....	38	97.8	23	55	885.0	746.7	162.4
Wisconsin.....	40	261.8	15	76	1,580.7	1,989.4	1,691.3
Wyoming.....	...	...	2	5	643.3	521.0	25.1

See footnotes at end of table.

SUMMARY

BY STATES: CENSUSES OF 1920 TO 1960

State	Tile or covered drains						
	Constructed, 1950-1959 (1960 Census)		Constructed, 1940-1949 ² (1950 Census)		Completed prior to Census date (miles)		
	Projects reporting	Miles	Projects reporting	Miles	1940 Census	1930 Census	1920 Census
All drainage States.....	427	2,192.1	146	581	55,734.0	55,031.9	42,311.7
10 "county-drain" States.....	212	1,675.6	81	446	47,262.9	46,530.1	36,191.1
30 "drainage-district" States.....	215	516.5	65	135	8,471.1	8,501.8	6,120.6
17 irrigation States.....	67	224.4	22	48	3,735.6	4,015.9	2,022.8
13 other States.....	148	292.1	43	87	4,735.5	4,485.9	4,097.8
Alabama.....	...	...	...	...	...	...	...
Arizona.....	...	...	...	...	8.8	14.3	1.0
Arkansas.....	...	...	...	...	10.8	0.1	20.4
California.....	21	46.0	2	11	326.2	486.2	85.6
Colorado.....	1	0.4	1	1	365.3	369.5	195.2
Delaware.....	...	...	...	...	...	...	...
Florida.....	9	23.2	4	16	...	...	...
Georgia.....	1	7.8	1	2	2.0	40.0	...
Idaho.....	1	2.5	2	2	174.6	19.9	1.8
Illinois.....	83	124.9	34	67	4,246.6	3,825.6	3,507.1
Indiana.....	57	160.0	13	48	10,754.7	10,438.7	8,227.6
Iowa.....	60	282.8	23	165	12,873.2	13,382.4	10,384.9
Kansas.....	1	0.1	...	...	210.5	212.1	213.0
Kentucky.....	1	20.0	1	1	2.0	71.0	86.2
Louisiana.....	1	0.1	...	...	6.0	2.0	0.2
Maryland.....	...	...	...	...	...	...	...
Michigan.....	29	208.5	28	145	3,229.5	3,490.2	2,173.9
Minnesota.....	47	935.6	11	80	9,893.4	9,451.3	5,924.6
Mississippi.....	...	...	...	...	34.1	43.5	238.8
Missouri.....	36	8.5	...	...	170.3	123.4	38.8
Montana.....	1	2.2	2	2	73.8	76.7	50.7
Nebraska.....	...	...	1	1	26.3	93.4	359.4
Nevada.....	...	...	...	...	...	4.0	4.0
New Jersey.....	3	5.0	2	2	...	...	...
New Mexico.....	...	...	...	...	308.9	305.4	282.2
New York.....	2	19.8	...	...	...	...	...
North Carolina.....	1	4.1	...	...	...	...	...
North Dakota.....	...	...	...	...	10.4	9.6	9.3
Ohio.....	18	68.7	5	7	10,163.9	9,371.6	9,205.3
Oklahoma.....	...	...	...	...	...	...	...
Oregon.....	6	20.4	2	2	150.6	42.5	13.0
South Carolina.....	10	43.5	3	6	...	150.0	101.5
South Dakota.....	...	...	...	...	335.8	315.3	179.3
Tennessee.....	...	...	...	...	...	...	0.3
Texas.....	17	117.0	1	4	14.1	8.5	...
Utah.....	2	3.6	3	5	1,618.6	1,944.5	599.1
Virginia.....	...	...	...	...	...	...	...
Washington.....	6	8.5	4	4	179.0	199.2	83.0
Wisconsin.....	12	78.5	3	10	282.5	303.4	211.3
Wyoming.....	1	0.4	...	...	262.1	237.6	114.2

DRAINAGE OF AGRICULTURAL LANDS

Summary Table 10.—TYPES OF DRAINAGE WORKS,

State	Levees or dikes						
	Constructed, 1950-1959 (1960 Census)		Constructed, 1940-1949 ² (1950 Census)		Completed prior to Census date (miles)		
	Projects reporting	Miles	Projects reporting	Miles	1940 Census	1930 Census	1920 Census
All drainage States.....	322	2,016.9	152	1,020	6,792.9	6,539.5	3,509.8
10 "county-drain" States.....	16	17.6	36	55	622.4	429.9	263.5
30 "drainage-district" States.....	306	1,999.3	146	965	6,170.5	6,109.6	3,246.3
17 irrigation States.....	254	1,789.6	134	925	4,088.1	3,770.3	2,049.0
13 other States.....	52	209.7	12	40	2,082.4	2,339.3	1,197.3
Alabama.....	...	...	...	...	...	...	...
Arizona.....	...	...	...	...	24.5	2.5	26.0
Arkansas.....	9	27.8	4	15	332.4	201.9	121.8
California.....	50	227.4	...	...	1,537.6	1,389.5	1,131.1
Colorado.....	...	...	1	1	...	...	...
Delaware.....	...	...	...	...	...	...	...
Florida.....	119	1,198.1	97	661	470.6	718.4	66.2
Georgia.....	...	...	...	...	5.0	...	...
Idaho.....	5	8.6	4	8	95.4	74.8	9.5
Illinois.....	24	115.2	5	19	1,197.8	1,108.4	650.2
Indiana.....	2	0.3	32	20	139.0	131.9	165.8
Iowa.....	6	6.5	34	35	456.8	113.4	45.2
Kansas.....	13	33.4	7	58	278.3	227.0	165.1
Kentucky.....	...	...	...	...	...	...	0.2
Louisiana.....	34	215.2	12	166	624.4	576.3	440.7
Maryland.....	...	...	...	...	...	...	...
Michigan.....	2	4.7	...	...	13.6	34.6	33.1
Minnesota.....	2	0.4	...	...	0.4	149.7	0.1
Mississippi.....	3	3.3	...	...	190.5	227.7	6.7
Missouri.....	13	42.6	4	17	687.1	931.4	456.9
Montana.....	...	...	...	...	0.8	...	...
Nebraska.....	...	...	1	...	230.3	116.8	26.8
Nevada.....	...	...	...	...	23.0	33.0	...
New Jersey.....	...	...	...	...	...	...	...
New Mexico.....	...	...	...	...	181.3	12.0	...
New York.....	1	5.5	1	2	...	...	...
North Carolina.....	3	20.7	1	1	4.0	22.0	33.5
North Dakota.....	1	3.5	...	...	...	...	2.1
Ohio.....	...	...	...	...	5.2	0.3	9.6
Oklahoma.....	3	2.2	...	...	...	...	5.0
Oregon.....	9	43.7	2	4	143.2	121.4	...
South Carolina.....	3	10.4	1	1	...	11.0	...
South Dakota.....	...	...	...	...	7.4	...	2.4
Tennessee.....	...	...	...	...	30.0	29.8	42.3
Texas.....	4	4.7	2	7	61.7	215.9	59.8
Utah.....	...	...	...	...	5.0	2.0	2.0
Virginia.....	...	...	...	...	...	...	...
Washington.....	11	30.7	4	4	72.4	78.8	...
Wisconsin.....	5	12.0	...	...	8.0	9.0	7.7
Wyoming.....	...	...	...	...	7.2	...	...

Italics indicate States identified in 1950 as "county-drain" States. The other States were designated "drainage-district" States. For the "county-drain" States in 1950 all drainage projects in each county were enumerated as a unit. See text.
Boldface indicates States, other than "county-drain," for which the 1950 drainage data included drained lands in "irrigation enterprises" enumerated in the Census of Irrigation. See text.

NA Not available.

¹Floodgates, culverts, bridges, drainage wells or pumps, land leveling, etc.

²For 1950 Census, data for drainage works not available for 9,076 projects and 4,119,059 acres of drained land in "irrigation enterprises" enumerated in Census of Irrigation; data for pumps not available for "county-drain" States. See text.

³For 1950, for "county-drain" States, count of projects reporting represents counties reporting—in that year all drains in each county were enumerated as a unit. See text.

⁴Data for this and other designated States not available individually but included in totals for all drainage States.

SUMMARY

BY STATES: CENSUSES OF 1920 TO 1960—Continued

State	Pumps										Other drainage works* constructed or installed, 1950-1959, projects reporting (1960 Census)
	Installed, 1950-1959 (1960 Census)		Installed prior to Census date								
	Projects reporting	Number	Projects reporting				Number of pumps				
			1950 Census ²	1940 Census	1930 Census	1920 Census	1950 Census ²	1940 Census	1930 Census	1920 Census	
All drainage States.....	357	957	NA	353	292	210	NA	1,284	1,028	453	264
10 "county-drain" States.....	12	20	NA	18	20	17	NA	28	37	NA	69
30 "drainage-district" States.....	245	937	369	335	272	193	1,146	1,256	991	NA	195
17 irrigation States.....	301	866	314	253	195	NA	1,015	NA	841	NA	124
13 other States.....	44	71	55	82	77	NA	131	NA	150	NA	71
Alabama.....	...	...	...	...	...	...	...	...	...	(⁴)	...
Arizona.....	...	...	...	2	2	1	...	33	175	...	...
Arkansas.....	3	4	2	2	2	...	5	5	5	...	...
California.....	74	162	120	135	105	94	382	763	426	(⁴)	42
Colorado.....	1	1	...	1	...	...	...	4	...	...	1
Delaware.....	...	...	NA	...	...	...	NA	...	...	(⁴)	...
Florida.....	139	548	99	14	12	2	354	68	37	(⁴)	28
Georgia.....	...	...	...	1	1	...	...	(⁴)	4	...	...
Idaho.....	11	18	21	26	23	4	54	73	37	6	1
Illinois.....	30	45	47	68	60	48	115	125	120	(⁴)	50
Indiana.....	1	1	NA	4	4	4	NA	5	7	(⁴)	36
Iowa.....	2	2	NA	11	11	6	NA	18	21	(⁴)	19
Kansas.....	...	...	...	2	1	1	...	4	2	(⁴)	2
Kentucky.....	...	...	NA	...	...	...	NA	...	...	...	...
Louisiana.....	45	91	30	22	18	29	102	59	52	71	16
Maryland.....	...	...	...	...	...	...	...	...	...	(⁴)	...
Michigan.....	7	15	NA	2	2	3	NA	2	3	(⁴)	4
Minnesota.....	2	2	NA	1	2	...	NA	3	5	...	2
Mississippi.....	1	3	...	1	3	1	...	(⁴)	5	(⁴)	4
Missouri.....	3	5	8	11	11	8	16	16	16	14	8
Montana.....	...	...	...	...	...	...	...	...	...	...	1
Nebraska.....	...	...	...	1	1	...	...	3	3	...	4
Nevada.....	1	4	...	1	1	...	...	3	2	...	...
New Jersey.....	...	...	...	...	...	...	...	...	...	...	...
New Mexico.....	...	...	...	...	...	...	...	...	...	...	...
New York.....	1	2	...	...	...	...	...	...	...	...	1
North Carolina.....	3	7	...	...	1	1	...	...	4	(⁴)	5
North Dakota.....	...	...	NA	...	...	...	NA	...	...	...	2
Ohio.....	...	...	NA	...	1	4	NA	...	1	(⁴)	6
Oklahoma.....	...	...	NA	...	...	...	NA	...	...	...	...
Oregon.....	9	16	23	26	17	...	70	56	31	...	7
South Carolina.....	1	1	...	...	...	(⁴)	...	...	...	(⁴)	...
South Dakota.....	...	...	NA	...	...	...	NA	...	...	...	...
Tennessee.....	...	...	...	...	...	...	...	...	...	...	...
Texas.....	5	5	4	4	2	...	5	11	53	...	4
Utah.....	...	...	...	...	...	(⁴)	...	...	...	(⁴)	...
Virginia.....	...	...	...	...	...	...	...	...	...	...	2
Washington.....	13	17	15	16	11	...	43	24	18	...	18
Wisconsin.....	5	8	...	1	1	1	...	(⁴)	1	(⁴)	1
Wyoming.....	...	...	...	1	...	...	...	(⁴)	...	...	...