

## DRAINAGE OF AGRICULTURAL LANDS

Summary Table 5.—DRAINAGE PROJECTS, AREA, SIZE,

Item and Census year	Total (39 States)	Alabama	Arkansas	California	Colorado	Delaware	Florida	Georgia
AREA								
1 Approximate land area.....acres...	1,744,413,440	32,678,400	33,599,360	100,206,720	66,485,760	1,265,920	34,721,280	37,295,360
2 Land in farms.....acres...	1,052,713,726	16,542,730	16,458,515	36,887,948	38,787,312	762,526	15,236,521	19,657,615
3 Drainage projects.....number...	8,461	11	598	356	16	60	516	52
4 Total area in drainage projects <sup>1</sup> .....acres served...	101,870,257	69,901	4,870,106	1,934,825	55,496	356,702	9,222,517	94,728
5 Area not used for agriculture or not drained.....acres served...	9,573,393	4,000	189,140	23,574	...	15,780	4,367,190	1,500
6 Net area drained and used for agriculture.....acres served...	92,296,864	65,901	4,680,966	1,911,251	55,496	340,922	4,855,327	93,228
7 Drainage established before 1950.....acres served...	86,960,271	64,851	4,447,703	1,666,899	55,496	340,066	4,306,371	67,982
8 Area added, 1950-1959.....acres served...	5,336,593	1,050	233,263	244,352	...	856	548,956	25,246
9 Area served by two or more projects.....acres served...	6,276,437	...	917,881	106,696	...	600	1,353,192	7,621
10 Total of areas of individual projects.....acres served <sup>2</sup> ...	99,098,430	65,901	5,765,338	2,019,547	55,496	341,522	6,348,491	101,854
PROJECTS, 1960, BY SIZE								
11 500 to 999 acres.....number of projects...	2,847	6	230	104	4	18	148	21
12 acres served...	1,950,621	3,749	150,233	71,294	2,892	11,961	101,911	14,172
13 1,000 to 1,999 acres.....number of projects...	2,081	...	109	76	4	24	109	18
14 acres served...	2,881,301	...	144,769	101,939	5,930	31,948	147,268	26,533
15 2,000 to 4,999 acres.....number of projects...	1,588	3	76	75	4	14	107	10
16 acres served...	4,883,398	11,271	238,843	230,410	11,464	51,448	340,809	28,613
17 5,000 to 9,999 acres.....number of projects...	728	...	60	56	4	1	66	1
18 acres served...	5,081,845	...	439,295	381,682	35,210	6,346	473,168	9,846
19 10,000 to 19,999 acres.....number of projects...	499	...	54	27	...	1	38	2
20 acres served...	6,963,107	...	776,548	385,170	...	11,700	531,642	22,690
21 20,000 to 49,999 acres.....number of projects...	320	2	45	9	...	...	31	...
22 acres served...	9,795,271	50,881	1,388,425	234,240	...	...	851,598	...
23 50,000 to 99,999 acres.....number of projects...	152	...	12	8	...	...	13	...
24 acres served...	10,630,513	...	778,208	477,966	...	...	909,054	...
25 100,000 or more acres.....number of projects...	246	...	12	1	...	2	4	...
26 acres served...	56,912,374	...	1,849,017	136,846	...	228,119	2,993,041	...
PROJECTS, 1960, BY TYPE OF ORGANIZATION								
27 Drains owned by one landowner.....number of projects...	1,817	1	167	157	3	...	388	11
28 acres served...	4,162,544	500	236,104	311,903	2,638	...	1,836,408	12,847
29 Cooperative or mutual drains.....number of projects...	2,469	6	202	45	3	1	36	17
30 acres served...	3,577,204	33,745	276,463	124,511	5,610	780	274,431	24,325
31 Legally organized public drains.....number of projects...	4,175	4	229	154	10	59	92	24
32 acres served...	91,358,682	31,656	5,252,771	1,583,133	47,248	340,742	4,237,652	64,682
PROJECTS, 1960, BY YEAR STARTED								
33 1950-1959.....number of projects...	2,503	1	338	87	...	10	197	14
34 acres served...	6,258,852	500	773,954	267,081	...	22,822	828,437	34,533
35 Prior to 1950.....number of projects...	5,958	10	260	269	16	50	319	38
36 acres served...	92,839,578	65,401	4,991,384	1,752,466	55,496	318,700	5,520,054	67,321
DRAINAGE OPERATIONS, 1950-1959 <sup>3</sup>								
37 Cost of drainage works and services.....projects reporting...	6,137	6	471	344	15	48	450	23
38 dollars...	416,875,865	31,061	20,488,226	29,065,257	178,196	476,944	91,627,636	118,012
39 New drainage works constructed, enlarged, or installed.....projects reporting...	3,606	4	352	206	3	33	338	21
40 dollars...	185,688,673	25,812	9,044,351	4,525,825	3,750	399,511	68,012,516	109,012
41 Open ditches.....projects reporting...	3,333	4	347	167	1	33	327	21
42 length, miles...	33,543.5	15.3	1,796.0	812.9	0.3	215.7	10,554.6	52.4
43 Tile or covered drains.....projects reporting...	427	...	...	21	1	...	9	1
44 length, miles...	2,192.1	...	...	46.0	0.4	...	23.2	7.8
45 Levees or dikes.....projects reporting...	322	...	9	50	...	...	119	...
46 length, miles...	2,016.9	...	27.8	227.4	...	...	1,198.1	...
47 Pumps.....projects reporting...	357	...	3	74	1	...	139	...
48 number of pumps...	957	...	4	162	1	...	548	...
49 Other (see text).....projects reporting...	264	...	...	42	1	...	28	...
50 Cost of maintenance, operation, repair, and administration.....projects reporting...	4,042	5	169	289	14	25	312	3
51 dollars...	231,187,192	5,249	11,443,875	24,539,432	174,446	77,433	23,615,120	9,000

<sup>1</sup>Land served by two or more projects counted only once.

<sup>2</sup>Total of acres of individual projects with no deduction for land included in more than one project; extensive contiguous areas not used for agriculture or not drained (line 5) were excluded.

<sup>3</sup>Includes projects taken over by another project prior to 1960. See text.

# SUMMARY

## AND TYPE OF ORGANIZATION, 1960; AND DRAINAGE OPERATIONS, 1950 TO 1959; BY STATES

Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maryland	Michigan	Minnesota	Mississippi	Missouri	
52,933,120	35,795,200	23,158,400	35,860,480	52,510,720	25,512,320	28,867,840	6,319,360	36,492,160	51,205,760	30,222,720	44,248,320	1
15,232,401	30,327,261	18,613,046	33,830,950	50,152,870	17,030,675	10,347,328	3,456,769	14,782,907	30,796,097	18,630,263	33,155,226	2
33	1,496	292	249	103	28	915	138	86	307	590	425	3
130,982	5,616,121	11,120,936	6,884,409	402,330	945,515	9,089,516	353,837	10,208,735	11,688,201	3,123,227	3,123,416	4
20,000	52,695	67,490	13,070	29,220	56,716	1,978,892	3,390	331,686	1,127,393	82,620	26,100	5
110,982	5,563,426	11,053,446	6,871,339	373,110	888,799	7,110,624	350,447	9,877,049	10,560,808	3,040,607	3,097,316	6
110,118	5,428,733	10,980,064	6,748,104	309,135	882,753	6,144,937	341,631	9,753,462	9,316,571	2,791,239	3,059,174	7
864	134,693	73,382	123,235	63,975	6,046	965,687	8,816	123,587	1,244,237	249,368	38,142	8
...	293,808	210,322	190,819	4,873	2,000	1,255,460	44,541	23,279	475,138	294,417	517,507	9
110,982	5,883,070	11,267,848	7,063,570	377,983	890,799	8,457,799	396,786	9,900,328	11,045,146	3,354,500	3,670,629	10
11	313	120	61	26	7	373	45	28	110	222	99	11
8,075	228,468	80,373	40,868	20,036	4,566	261,601	31,330	18,013	76,273	149,764	65,228	12
9	438	59	51	23	6	271	36	5	76	122	85	13
12,214	633,572	77,882	72,690	34,597	8,683	373,294	52,090	7,085	105,305	161,464	118,155	14
9	435	28	36	24	1	126	41	1	34	114	108	15
30,656	1,380,782	82,548	115,231	70,415	2,000	361,443	127,218	4,200	95,505	346,550	331,669	16
2	182	12	19	22	2	28	13	3	5	53	50	17
11,988	1,240,267	85,208	140,346	155,065	14,400	203,467	89,562	22,096	36,520	361,648	345,052	18
...	98	8	30	8	2	43	2	2	7	41	43	19
...	1,317,391	101,632	429,493	97,870	29,191	600,013	33,541	31,169	105,929	582,586	603,643	20
2	27	8	16	...	2	36	...	5	18	25	29	21
48,049	822,295	273,059	532,875	...	53,371	1,111,624	...	184,213	608,036	710,266	847,008	22
...	2	6	13	...	5	16	1	5	22	12	8	23
...	151,034	479,819	932,852	...	335,569	1,046,309	63,045	403,485	1,597,870	898,322	527,879	24
...	1	51	23	...	3	22	...	37	35	1	3	25
...	109,261	10,087,327	4,799,215	...	443,019	4,500,048	...	9,230,067	8,419,708	143,900	831,995	26
5	39	18	10	5	1	526	...	11	25	121	55	27
4,074	78,673	22,765	11,428	3,660	2,000	810,903	...	7,454	34,930	155,650	42,154	28
3	154	188	89	14	10	235	9	21	192	230	56	29
4,362	228,762	237,047	125,657	23,427	8,660	309,784	14,183	22,724	248,293	292,531	57,739	30
25	1,303	86	150	84	17	154	129	54	90	239	314	31
102,546	5,575,635	11,008,036	6,926,485	350,896	880,139	7,337,112	382,603	9,870,150	10,761,923	2,906,319	3,570,736	32
1	101	154	64	27	8	307	22	22	160	197	111	33
704	227,957	197,004	75,368	68,772	6,646	1,521,116	36,354	16,365	370,380	435,318	167,964	34
32	1,395	138	185	76	20	608	116	64	147	393	314	35
110,278	5,655,113	11,070,844	6,988,202	309,211	884,153	6,936,683	360,432	9,883,963	10,674,766	2,919,182	3,502,665	36
29	1,027	254	202	96	17	753	29	79	248	374	302	37
2,011,573	28,691,965	13,598,832	21,032,299	1,665,416	897,753	45,796,344	409,398	37,186,074	41,809,993	9,557,061	12,138,381	38
16	228	158	110	45	10	576	23	67	207	223	117	39
200,332	11,114,587	2,528,431	5,726,914	850,795	97,291	24,432,591	393,798	4,783,366	23,831,372	3,855,591	936,412	40
11	143	135	78	44	10	562	23	64	205	222	113	41
38.6	374.5	487.0	271.1	168.0	28.4	8,202.7	137.2	974.6	2,333.2	566.6	296.7	42
1	83	57	60	1	1	1	...	29	47	...	36	43
2.5	124.9	160.0	282.8	0.1	20.0	0.1	...	208.5	935.6	...	8.5	44
5	24	2	6	13	...	34	...	2	2	3	13	45
8.6	115.2	0.3	6.5	33.4	...	215.2	...	4.7	0.4	3.3	42.6	46
11	30	1	2	...	...	45	...	7	2	1	3	47
18	45	1	2	...	...	91	...	15	2	3	5	48
1	50	26	19	2	...	16	...	4	2	4	8	49
29	936	162	138	76	10	490	8	55	97	206	224	50
1,811,241	17,577,378	11,070,401	15,305,385	814,621	800,462	21,363,753	15,600	32,402,708	17,978,621	5,701,470	11,201,969	51

## DRAINAGE OF AGRICULTURAL LANDS

Summary Table 5.—DRAINAGE PROJECTS, AREA, SIZE, AND TYPE OF ORGANIZATION,

Item and Census year	Montana	Nebraska	Nevada	New Jersey	New Mexico	New York	North Carolina	North Dakota
AREA								
1 Approximate land area.....acres...	93,271,040	49,031,680	70,264,320	4,813,440	77,766,400	30,680,960	31,402,880	44,452,480
2 Land in farms.....acres...	64,081,391	47,755,708	10,942,936	1,379,002	46,293,207	13,489,516	15,887,724	41,465,717
3 Drainage projects.....number...	20	103	2	9	5	19	564	161
4 Total area in drainage projects <sup>1</sup> .....acres served...	62,222	744,207	41,521	11,756	31,593	49,616	1,418,892	1,642,543
5 Area not used for agriculture or not drained.....acres served...	2,110	4,987	...	800	...	...	98,389	1,360
6 Net area drained and used for agriculture.....acres served...	60,112	739,220	41,521	10,956	31,593	49,616	1,320,503	1,641,183
7 Drainage established before 1950.....acres served...	49,656	697,914	41,521	6,106	30,293	45,165	1,066,021	1,517,023
8 Area added, 1950-1959.....acres served...	10,456	41,306	...	4,850	1,300	4,451	254,482	124,160
9 Area served by two or more projects.....acres served...	...	1,784	...	...	...	...	95,071	87,840
10 Total of areas of individual projects.....acres served <sup>2</sup> ..	60,112	741,004	41,521	10,956	31,593	49,616	1,417,032	1,732,183
PROJECTS, 1960, BY SIZE								
11 500 to 999 acres.....number of projects...	11	14	...	5	1	14	304	78
12 .....acres served...	9,051	9,684	...	3,400	600	8,871	202,778	52,640
13 1,000 to 1,999 acres.....number of projects...	4	18	...	2	1	2	134	45
14 .....acres served...	4,921	27,781	...	2,600	1,000	2,351	179,749	62,610
15 2,000 to 4,999 acres.....number of projects...	3	28	1	2	...	...	72	19
16 .....acres served...	10,670	89,673	2,500	4,956	...	...	188,866	56,660
17 5,000 to 9,999 acres.....number of projects...	...	26	...	...	2	1	28	9
18 .....acres served...	...	187,135	...	...	15,018	8,500	190,996	63,648
19 10,000 to 19,999 acres.....number of projects...	1	12	...	...	1	2	12	1
20 .....acres served...	12,580	163,857	...	...	14,975	29,894	161,601	18,176
21 20,000 to 49,999 acres.....number of projects...	1	3	1	...	...	...	11	2
22 .....acres served...	22,890	95,508	39,021	...	...	...	303,597	87,228
23 50,000 to 99,999 acres.....number of projects...	...	2	...	...	...	...	3	1
24 .....acres served...	...	167,366	...	...	...	...	189,445	59,309
25 100,000 or more acres.....number of projects...	...	...	...	...	...	...	...	6
26 .....acres served...	...	...	...	...	...	...	...	1,331,912
PROJECTS, 1960, BY TYPE OF ORGANIZATION								
27 Drains owned by one landowner.....number of projects...	1	...	...	...	1	2	39	...
28 .....acres served...	640	...	...	...	600	1,300	65,426	...
29 Cooperative or mutual drains.....number of projects...	6	4	...	9	...	13	403	144
30 .....acres served...	4,685	6,940	...	10,956	...	20,071	485,339	200,630
31 Legally organized public drains.....number of projects...	13	99	2	...	4	4	122	17
32 .....acres served...	54,787	734,064	41,521	...	30,993	28,245	866,267	1,531,553
PROJECTS, 1960, BY YEAR STARTED								
33 1950-1959.....number of projects...	9	4	...	5	1	6	186	27
34 .....acres served...	8,847	33,300	...	4,650	600	4,451	322,432	55,550
35 Prior to 1950.....number of projects...	11	99	2	4	4	13	378	134
36 .....acres served...	51,265	707,704	41,521	6,306	30,993	45,165	1,094,600	1,676,633
DRAINAGE OPERATIONS, 1950-1959 <sup>3</sup>								
37 Cost of drainage works and services.....projects reporting...	18	40	3	8	5	13	310	41
38 .....dollars...	721,491	1,388,581	219,902	40,617	127,433	202,013	2,959,290	1,672,790
39 New drainage works constructed, enlarged, or installed.....projects reporting...	11	12	1	7	2	7	219	37
40 .....dollars...	211,129	417,911	84,215	39,967	70,840	86,009	2,187,155	649,652
41 Open ditches.....projects reporting...	10	10	1	7	2	7	217	35
42 .....length, miles...	43.0	60.6	36.5	13.6	6.3	25.5	959.0	168.5
43 Tile or covered drains.....projects reporting...	1	...	...	3	...	2	1	...
44 .....length, miles...	2.2	...	...	5.0	...	19.8	4.1	...
45 Levees or dikes.....projects reporting...	...	...	...	...	...	1	3	1
46 .....length, miles...	...	...	...	...	...	5.5	20.7	3.5
47 Pumps.....projects reporting...	...	...	1	...	...	1	3	...
48 .....number of pumps...	...	...	4	...	...	2	7	...
49 Other (see text).....projects reporting...	1	4	...	...	...	1	5	2
50 Cost of maintenance, operation, repair, and administration.....projects reporting...	10	36	3	1	3	9	130	13
51 .....dollars...	510,362	970,670	135,687	650	56,593	116,004	772,135	1,023,138

<sup>1</sup>Land served by two or more projects counted only once.

<sup>2</sup>Total of acres of individual projects with no deduction for land included in more than one project; extensive contiguous areas not used for agriculture or not drained (line 5) were excluded.

<sup>3</sup>Includes projects taken over by another project prior to 1960. See text.

# SUMMARY

## 1960; AND DRAINAGE OPERATIONS, 1950 TO 1959; BY STATES--Continued

Ohio	Oklahoma	Oregon	South Carolina	South Dakota	Tennessee	Texas	Utah	Virginia	Washington	Wisconsin	Wyoming	
26,222,080	44,087,680	61,598,720	19,374,080	48,881,920	26,727,680	168,217,600	52,696,960	25,496,320	42,693,760	35,011,200	62,343,040	1
18,506,796	35,800,688	21,236,298	9,149,492	44,850,666	16,081,285	143,217,559	12,688,518	13,125,802	18,716,972	21,156,223	36,199,666	2
142	31	110	123	41	179	243	9	66	122	235	6	3
8,904,907	133,796	274,754	339,966	658,580	730,855	6,500,043	68,910	98,478	254,482	587,803	23,833	4
95,492	...	4,300	1,900	...	139,976	808,913	2,000	5,700	13,300	3,710	...	5
8,809,415	133,796	270,454	338,066	658,580	590,879	5,691,130	66,910	92,778	241,182	584,093	23,833	6
8,747,745	115,212	190,869	229,279	647,251	492,825	5,372,932	66,390	40,807	227,696	536,444	23,833	7
61,670	18,584	79,585	108,787	11,329	98,054	318,198	520	51,971	13,486	47,649	...	8
64,162	...	41,927	15,850	2,010	6,527	247,844	...	9,198	1,300	4,770	...	9
8,873,857	133,796	314,221	353,916	660,590	597,406	5,938,974	66,910	101,976	242,482	588,863	23,833	10
46	15	46	69	4	55	78	...	43	50	68	...	11
31,479	9,296	32,402	44,128	2,820	38,260	51,490	...	29,435	34,970	48,510	...	12
28	6	28	30	6	60	54	6	11	35	88	2	13
38,053	9,592	37,328	35,548	7,979	83,789	71,193	8,110	14,792	50,138	124,894	3,455	14
13	3	21	10	7	41	32	1	7	25	56	1	15
42,520	10,924	65,573	30,685	21,786	131,220	99,489	2,800	21,948	73,502	165,204	3,347	16
1	2	7	6	9	11	13	...	4	11	16	3	17
5,536	12,176	44,865	47,249	64,609	75,379	96,652	...	25,553	72,372	103,960	17,031	18
8	3	6	4	6	8	20	1	1	1	6	...	19
118,498	42,656	78,213	51,682	101,096	108,569	277,059	12,000	10,248	11,500	90,295	...	20
6	2	2	4	5	3	24	1	...	...	...	...	21
238,003	49,152	55,840	144,624	152,654	69,189	777,625	44,000	...	...	...	...	22
7	...	...	...	3	1	11	...	...	...	1	...	23
532,618	...	...	...	197,579	91,000	735,784	...	...	...	56,000	...	24
33	...	...	...	1	...	11	...	...	...	...	...	25
7,867,150	...	...	...	112,067	...	3,829,682	...	...	...	...	...	26
3	11	6	59	...	8	130	...	5	2	7	...	27
2,424	9,942	25,690	88,203	...	8,433	369,079	...	7,286	1,375	8,055	...	28
76	10	56	52	8	37	43	1	59	20	17	...	29
88,553	9,656	87,807	97,212	11,059	39,293	74,170	1,300	82,289	20,374	23,834	...	30
63	10	48	12	33	134	70	8	2	100	211	6	31
8,782,878	114,198	200,724	168,501	649,531	549,680	5,495,725	65,610	12,401	220,733	556,974	23,833	32
63	20	51	82	8	25	110	1	38	14	32	...	33
68,803	19,098	96,592	119,612	11,059	129,430	194,260	1,040	63,717	18,587	55,549	...	34
79	11	59	41	33	154	133	8	28	108	203	6	35
8,805,054	114,698	217,629	234,304	649,531	467,976	5,744,714	65,870	38,259	223,895	533,314	23,833	36
113	24	98	95	22	36	225	5	54	114	140	6	37
8,268,377	249,053	5,002,268	824,238	298,591	2,136,236	28,895,392	558,392	401,765	4,404,324	1,579,398	145,293	38
53	22	75	95	11	22	175	3	22	49	45	1	39
267,635	241,561	2,308,055	785,638	110,334	1,853,349	13,031,672	350,197	215,992	1,304,272	598,533	2,300	40
47	22	66	93	11	22	171	2	22	38	40	...	41
57.3	172.5	260.3	551.2	38.4	134.6	3,224.7	60.9	45.2	97.8	261.8	...	42
18	...	6	10	...	...	17	2	...	6	12	1	43
68.7	...	20.4	43.5	...	...	117.0	3.6	...	8.5	78.5	0.4	44
...	3	9	3	...	...	4	...	...	11	5	...	45
...	2.2	43.7	10.4	...	...	4.7	...	...	30.7	12.0	...	46
...	...	9	1	...	...	5	...	...	13	5	...	47
...	...	16	1	...	...	5	...	...	17	8	...	48
6	...	7	...	...	...	4	...	2	18	1	...	49
77	7	44	5	15	17	141	5	46	108	118	6	50
8,000,742	7,492	2,694,213	38,600	188,257	282,887	15,863,720	208,195	185,773	3,100,052	980,865	142,993	51