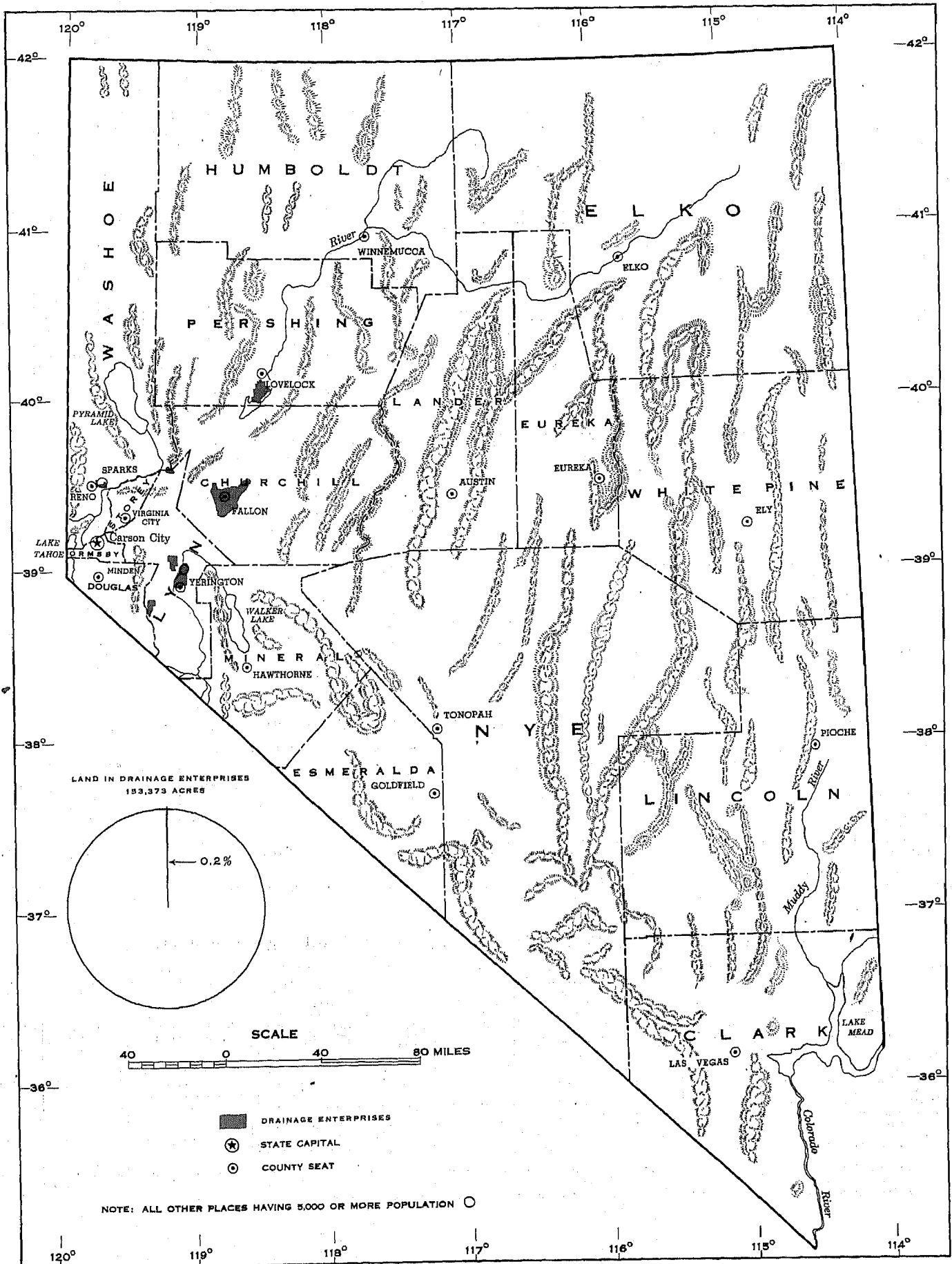


# NEVADA

## Location of Land in Drainage Enterprises.



<sup>1</sup> Each item includes those enterprises that have provided levees in addition to the kind of drains specified.

# CENSUS OF DRAINAGE—NEVADA

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STATE TABLE 5.—PUMPING PLANTS AND LAND SERVED, BY KIND OF POWER: JAN. 1, 1940 AND 1930

KIND OF POWER	Enter- prises	CAPACITY				Land served
		Engine or motor		Pump		
		Number	Hp.	Percent	G. p. m.	
All pumping enterprises.....	1940..	1	22	100.0	2,700	200
	1930..	1	18	100.0	900	50
Electric.....	1940..	1	22	100.0	2,700	200
	1930..	1	18	100.0	900	50
Other.....	1940..	.....	.....	.....	.....	.....
	1930..	.....	.....	.....	.....	.....

STATE TABLE 6.—PUMPING PLANTS AND LAND SERVED, BY KIND OF PUMP: JAN. 1, 1940 AND 1930

KIND OF PUMP	PUMPS			Engine or motor capac- ity	Land served
	Number	Capacity			
			G. p. m.	Percent	Hp.
All pumping enterprises.....1940..	3	2,700	100.0	22	200
.....1930..	2	900	100.0	18	50
Centrifugal and screw.....1940..	3	2,700	100.0	22	200
.....1930..	2	900	100.0	18	50
Other.....1940..	.....	.....	.....	.....	.....
.....1930..	.....	.....	.....	.....	.....

STATE TABLE 7.—LAND, CAPITAL INVESTED, AND AREA DELINQUENT IN DRAINAGE TAXES, BY ARREARAGE IN PAYMENT OF OBLIGATIONS: JAN. 1, 1940 AND 1930

FINANCIAL STATUS	LAND IN ENTERPRISES				CAPITAL INVESTED				AREA DELINQUENT	
	1940		1930		1940		1930		1940	1930
	Acres	Percent	Acres	Percent	Dollars	Percent	Dollars	Percent	Acres	Acres
All enterprises.....	153,373	100.0	162,980	100.0	1,337,647	100.0	1,349,774	100.0	16,983	7,400
Enterprises in arrears.....										
Enterprises not in arrears.....	153,373	100.0	162,980	100.0	1,337,647	100.0	1,349,774	100.0	16,983	7,400
With some delinquent land.....	125,975	82.1	30,000	18.4	1,214,107	90.8	95,000	7.0	16,983	7,400
With no delinquent land.....	27,398	17.9	132,980	81.6	123,540	9.2	1,254,774	93.0		

STATE TABLE 8.—LAND, CAPITAL INVESTED, INDEBTEDNESS, ARREARAGE IN PAYMENT OF BONDS, REDUCTION OF DEBT BY REFINANCING, AND ACREAGE DELINQUENT, 1940; DRAINAGE TAXES COLLECTED IN 1939; BY INDEBTEDNESS AND ARREARAGE, JAN. 1, 1940

FINANCIAL STATUS	Land in enterprises	Capital invested	Indebtedness	Arrearage in payment of bonds	Reduction of debt by refinancing	Delinquent in drainage taxes	Drainage taxes collected in 1939
	Acres	Dollars	Dollars	Dollars	Dollars	Acres	Dollars
All enterprises.....	153,373	1,337,647	648,856			16,983	36,533
Enterprises in debt.....	125,975	1,214,107	648,856			16,983	36,533
In arrears.....	125,975	1,214,107	648,856			16,983	36,533
Not in arrears.....	125,975	1,214,107	648,856			16,983	36,533
Collecting drainage taxes in 1939.....	125,975	1,214,107	648,856			16,983	36,533
Enterprises not in debt.....	27,398	123,540					
No collections reported.....	27,398	123,540					

STATE TABLE 9.—LAND AND CAPITAL INVESTED, BY PRINCIPAL PURPOSE OF DRAINAGE, JAN. 1, 1940

PURPOSE OF DRAINAGE	Land		Capital invested			Land		Capital invested	
	Acres	Percent	Dollars	Percent		Acres	Percent	Dollars	Percent
All enterprises.....	153,373	100.0	1,337,647	100.0	Protection against overflow.....	2,000	1.3	16,000	1.2
Improvement of land already in farms....	69,149	45.1	186,318	13.9	Removal of alkali or seepage from irrigation.....	82,224	53.6	1,135,329	84.9

STATE TABLE 10.—LAND AND CAPITAL INVESTED, BY DATE OF ORGANIZATION, JAN. 1, 1940

DATE OF ORGANIZATION	Land in enterprises		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	153,373	100.0	1,337,647	100.0
1870-1879.....	2,600	1.7	28,000	2.1
1915-1919.....	106,622	69.5	1,230,329	92.0
1920-1924.....	7,551	4.9	10,676	0.8
1925-1929.....	24,922	16.2	64,421	4.8
1930-1934.....	400	0.3	540	( <sup>1</sup> )
1935-1939.....	11,278	7.4	3,681	0.3

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

## CENSUS OF DRAINAGE—NEVADA

STATE TABLE 11.—DRAINAGE CONDITION, DEVELOPMENT, AND USE OF LAND IN ENTERPRISES, BY DATE OF ORGANIZATION, 1939

DATE OF ORGANIZATION	Land in all enterprises	DRAINAGE CONDITION					DEVELOPMENT				USE OF LAND				
		Drained		Partly drained	Undrained		Improved land		Timber and cut-over land	Other unimproved land	In occupied farms		In planted crops	Idle	Land available for settlement
		Acres	Per-cent	Acres	Acres		Acres	Per-cent	Acres	Acres	Acres	Per-cent	Acres	Acres	Acres
All enterprises.....	153,373	133,677	87.2	19,696	.....		83,721	58.5	18,200	45,452	148,617	96.9	78,221	38,798	4,756
1870-1879.....	2,600	2,600	100.0	.....	.....		2,600	100.0	.....	.....	2,600	100.0	2,100	.....	.....
1915-1919.....	106,622	95,198	89.3	11,424	.....		69,670	65.3	.....	36,952	101,866	95.5	58,670	38,798	4,756
1920-1924.....	7,551	6,801	90.1	750	.....		2,951	39.1	3,200	1,400	7,551	100.0	2,951	.....	.....
1925-1929.....	24,922	21,000	84.3	3,922	.....		10,600	42.5	10,000	4,322	24,922	100.0	10,600	.....	.....
1930-1934.....	400	400	100.0	.....	.....		400	100.0	.....	.....	400	100.0	400	.....	.....
1935-1939.....	11,278	7,678	68.1	3,600	.....		3,500	31.0	5,000	2,778	11,278	100.0	3,500	.....	.....

STATE TABLE 12.—COST OF OPERATION AND MAINTENANCE, BY TYPE OF DRAINAGE, 1939

TYPE OF DRAINAGE	Land in all enterprises	LAND REPORTING ON COST OF MAINTENANCE AND OPERATION			COST REPORTED		
		Total	Some cost	No cost	Total amount	Per acre on—	
						Total reporting	Area incurring
All enterprises.....	Acres 153,373	Acres 153,373	Acres 124,035	Acres 29,338	Dollars 24,277	Dollars 0.16	Dollars 0.23
Gravity drainage only:							
Open ditches only.....	78,089	76,089	46,751	29,338	4,743	0.06	0.19
Open ditches and levees.....	.....	.....	.....	.....	.....	.....	.....
Pumping for all or part of drainage:							
Part pumping and part gravity.....	77,284	77,284	77,284	.....	19,534	0.25	0.25

STATE TABLE 13.—LAND AND CAPITAL INVESTED, BY METHOD OF MAINTENANCE AND BY WHETHER MAINTENANCE IS SYSTEMATIC, JAN. 1, 1940

MAINTENANCE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
	Acres	Percent	Dollars	Percent
All enterprises.....	153,373	100.0	1,337,647	100.0
Method:				
By district forces.....	150,373	98.0	1,309,107	97.9
By contract.....	2,000	1.3	16,000	1.2
Work apportioned to landowners.....	1,000	0.7	12,540	0.9
Whether systematic:				
Reporting "yes".....	153,373	100.0	1,337,647	100.0

STATE TABLE 14.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY OWNERSHIP OF POWER EQUIPMENT FOR MAINTENANCE, 1940

ITEM	All enterprises	ENTERPRISES OWNING POWER EQUIPMENT		ITEM	All enterprises	ENTERPRISES OWNING POWER EQUIPMENT	
		Amount	Percent			Amount	Percent
Land in enterprises.....acres....	153,373	89,775	58.5	Drainage works:			
Capital invested.....dollars..	1,337,647	1,146,005	85.7	Open ditches.....miles..	426.4	342.4	80.3
				Title drains.....miles..	.....	.....	.....
				Levees.....miles..	23.0	23.0	100.0

STATE TABLE 15.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FEDERAL AGENCY GIVING AID IN MAINTENANCE, 1940

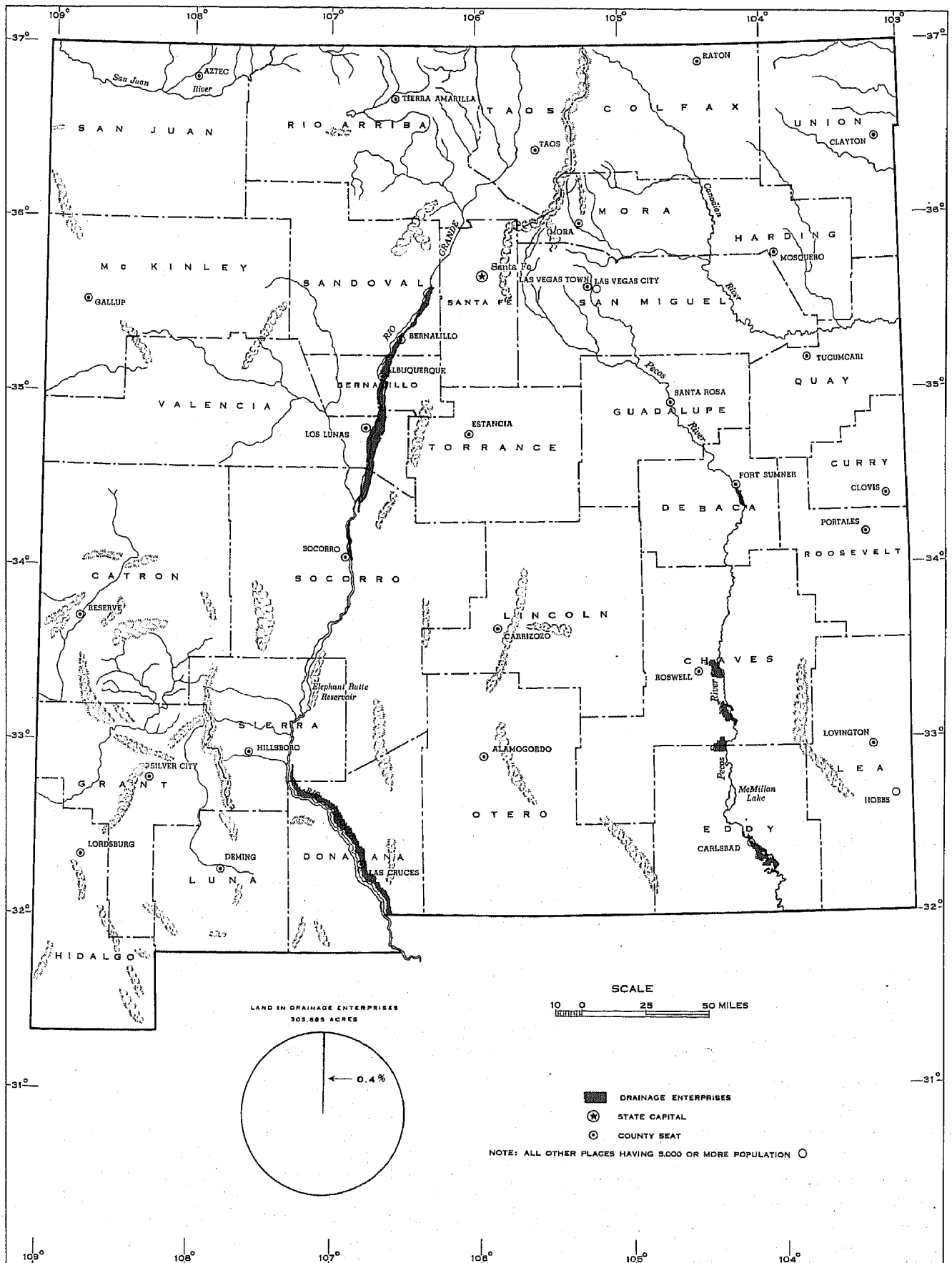
AGENCY	Land in enterprises	Capital invested	DRAINAGE WORKS		
			Ditches	Title	Levees
			Miles	Miles	Miles
All enterprises reporting Federal aid received.....	Acres 150,373	Dollars 1,309,107	414.4	.....	23.0
Civilian Conservation Corps.....	150,373	1,309,107	414.4	.....	23.0
Other.....	.....	.....	.....	.....	.....





# NEW MEXICO

## LOCATION OF LAND IN DRAINAGE ENTERPRISES





# CENSUS OF DRAINAGE—NEW MEXICO

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STATE TABLE 6.—LAND, CAPITAL INVESTED, INDEBTEDNESS, ARREARAGE IN PAYMENT OF BONDS, REDUCTION OF DEBT BY REFINANCING, AND ACREAGE DELINQUENT, 1940; DRAINAGE TAXES COLLECTED IN 1939; BY INDEBTEDNESS AND ARREARAGE, JAN. 1, 1940

FINANCIAL STATUS	Land in enterprises	Capital invested	Indebtedness	Arrearage in payment of bonds	Reduction of debt by refinancing	Delinquent in drainage taxes	Drainage taxes collected in 1939
	<i>Acres</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Acres</i>	<i>Dollars</i>
All enterprises.....	305,885	5,722,121	3,900,967	.....	357,324	4,279	191,390
Enterprises in debt.....	298,247	5,622,121	3,900,967	.....	357,324	4,279	191,264
In arrears.....	175,259	3,476,766	1,891,967	.....	357,324	4,279	99,764
Not in arrears.....	160,789	3,203,579	1,777,967	.....	218,324	367	99,764
Collecting drainage taxes in 1939.....	14,470	273,213	114,000	.....	138,000	3,612	.....
No collections reported.....	122,888	2,145,335	2,009,000	.....	.....	.....	91,500
Not reporting as to arrears.....	122,988	2,145,335	2,009,000	.....	.....	.....	91,500
Collecting drainage taxes in 1939.....	7,638	100,000	.....	.....	.....	.....	126
Enterprises not in debt.....	7,638	100,000	.....	.....	.....	.....	126
Collecting drainage taxes in 1939.....	.....	.....	.....	.....	.....	.....	.....

STATE TABLE 7.—LAND AND CAPITAL INVESTED, BY PRINCIPAL PURPOSE OF DRAINAGE, JAN. 1, 1940

PURPOSE OF DRAINAGE	Land		Capital invested	
	<i>Acres</i>	<i>Percent</i>	<i>Dollars</i>	<i>Percent</i>
All enterprises.....	305,885	100.0	5,722,121	100.0
Removal of alkali or seepage from irrigation.....	305,885	100.0	5,722,121	100.0

STATE TABLE 8.—LAND AND CAPITAL INVESTED, BY DATE OF ORGANIZATION, JAN. 1, 1940

DATE OF ORGANIZATION	Land in enterprises		Capital invested	
	<i>Acres</i>	<i>Percent</i>	<i>Dollars</i>	<i>Percent</i>
All enterprises.....	305,885	100.0	5,722,121	100.0
1905-1909.....	25,055	8.2	129,706	2.3
1910-1914.....	27,056	8.8	738,097	12.9
1915-1919.....	123,586	40.4	2,696,463	47.1
1925-1929.....	122,988	40.2	2,145,335	37.5
1930-1934.....	7,200	2.4	12,500	0.2

STATE TABLE 9.—DRAINAGE CONDITION, DEVELOPMENT, AND USE OF LAND IN ENTERPRISES, BY DATE OF ORGANIZATION, 1939

DATE OF ORGANIZATION	Land in all enterprises		DRAINAGE CONDITION			DEVELOPMENT			USE OF LAND				
	<i>Acres</i>	<i>Acres</i>	<i>Percent</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Percent</i>	<i>Acres</i>	<i>Acres</i>	<i>Percent</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
All enterprises..	305,885	284,474	93.0	9,601	11,810	240,810	78.7	2,874	296,890	93.8	187,727	179,063	26,242
1905-1909.....	25,055	22,055	88.0	2,800	200	25,055	100.0	.....	25,055	100.0	19,531	5,524	.....
1910-1914.....	27,056	27,056	100.0	.....	.....	26,558	98.2	.....	26,558	98.2	24,200	2,856	.....
1915-1919.....	123,586	105,175	85.1	6,801	11,610	104,536	84.6	.....	112,489	91.0	89,016	28,560	8,442
1925-1929.....	122,988	122,988	100.0	.....	.....	79,761	64.8	2,874	117,888	95.9	51,080	41,853	15,500
1930-1934.....	7,200	7,200	100.0	.....	.....	4,900	68.1	.....	4,900	68.1	4,900	2,300	2,300

STATE TABLE 10.—COST OF OPERATION AND MAINTENANCE, BY TYPE OF DRAINAGE, 1939

TYPE OF DRAINAGE	Land in all enterprises	LAND REPORTING ON COST OF MAINTENANCE AND OPERATION			COST REPORTED		
		Total	Some cost	No cost	Total amount	Per acre on—	
						Total reporting	Area incurring
All enterprises.....	Acres 305,885	Acres 305,885	Acres 291,415	Acres 14,470	Dollars 71,675	Dollars 0.23	Dollars 0.25
Gravity drainage only.....	305,885	305,885	291,415	14,470	71,675	0.23	0.25
Open ditches only.....	100,834	100,834	100,834	.....	21,337	0.21	0.21
Open ditches and levees.....	92,250	92,250	92,250	.....	27,460	0.30	0.30
Tile drains only.....	4,443	4,443	4,443	.....	1,257	0.28	0.28
Open ditches and tile drains.....	77,620	77,620	63,150	14,470	9,051	0.12	0.14
Open ditches, tile drains, and levees.....	30,738	30,738	30,738	.....	12,670	0.41	0.41

## CENSUS OF DRAINAGE—NEW MEXICO

STATE TABLE 11.—LAND AND CAPITAL INVESTED, BY METHOD OF MAINTENANCE AND BY WHETHER MAINTENANCE IS SYSTEMATIC, JAN. 1, 1940

MAINTENANCE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	305,885	100.0	5,722,121	100.0
Method, by district forces.....	305,885	100.0	5,722,121	100.0
Whether systematic, reporting "yes".....	305,885	100.0	5,722,121	100.0

STATE TABLE 12.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY OWNERSHIP OF POWER EQUIPMENT FOR MAINTENANCE, 1940

ITEM	All enterprises	ENTERPRISES OWNING <sup>1</sup> POWER EQUIPMENT	
		Amount	Percent
Land in enterprises.....acres....	305,885	256,077	83.7
Capital invested.....dollars..	5,722,121	4,493,049	78.5
Drainage works:			
Open ditches.....miles....	625.2	609.6	97.5
Tile drains.....miles....	308.9	6.9	2.2
Levees.....miles....	181.3	181.3	100.0

STATE TABLE 13.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FEDERAL AGENCY GIVING AID IN MAINTENANCE, 1940

AGENCY	Land in enterprises	Capital invested	DRAINAGE WORKS		
			Ditches	Tile	Levees
	Acres	Dollars	Miles	Miles	Miles
All enterprises reporting Federal aid received.....	122,988	2,145,335	341.4	2.5	181.3
Work Projects Administration.....	122,988	2,145,335	341.4	2.5	181.3

STATE TABLE 14.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FLOOD PROTECTION FROM LEVEES OF AN OUTSIDE AGENCY, 1940

ITEM	All enterprises	ENTERPRISES PROTECTED BY OUTSIDE AGENCY	
		Amount	Percent
Land in enterprise.....acres....	305,885	<sup>1</sup> 104,210	34.1
Capital invested.....dollars..	5,722,121	2,204,199	38.5
Drainage works:			
Open ditches.....miles....	625.2	252.3	40.4
Tile drains.....miles....	308.9	1.0	0.3
Levees.....miles....	181.3	.....	.....

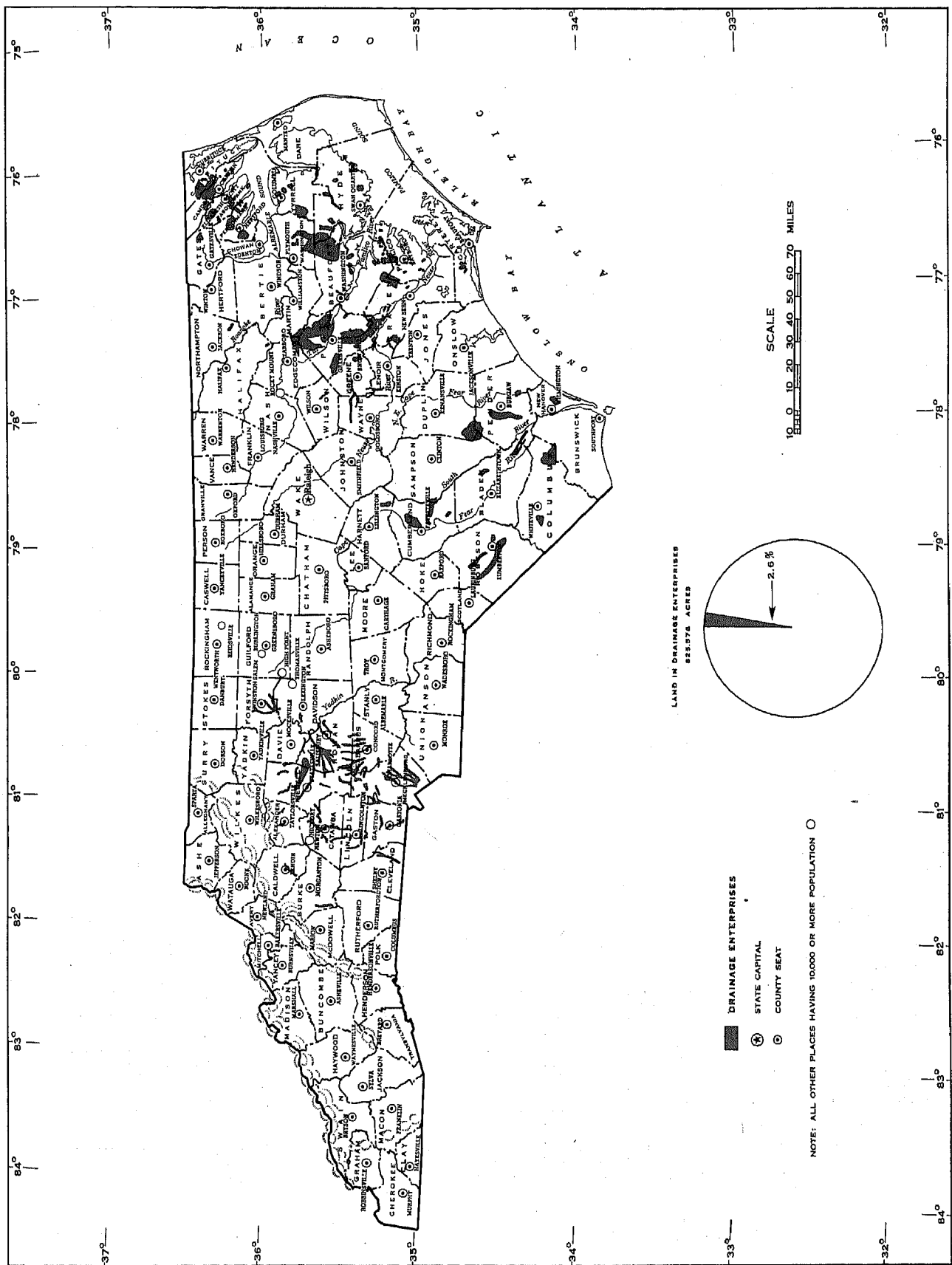
<sup>1</sup>Of this area, 51,000 acres or 48.9 percent is dependent for protection upon levees of outside agencies.





# NORTH CAROLINA

## Location of Land in Drainage Enterprises.



## CENSUS OF DRAINAGE—NORTH CAROLINA

STATE TABLE 1.—SUMMARY OF DRAINAGE FOR THE STATE: JAN. 1, 1940, 1930, AND 1920

ITEM (See definitions in Introduction)	CENSUS OF—			INCREASE OR DECREASE (—)			
	1940	1930	1920	1930-1940		1920-1930	
				Amount	Percent	Amount	Percent
Approximate land area of State.....acres.....	31,450,880	31,193,600	31,193,600	.....	.....	.....	.....
Land in drainage enterprises.....acres.....	825,576	679,236	542,828	146,340	21.5	136,408	25.1
Improved.....acres.....	534,717	305,597	304,928	229,120	75.0	100,669	49.1
Unimproved:							
Timber and cut-over.....acres.....	236,506	200,961	244,576	26,545	12.6	-34,615	-14.2
Other.....acres.....	54,353	163,078	93,324	-109,325	-66.8	70,354	75.4
Drainage sufficient for normal crop.....acres.....	717,089	438,992	(1)	278,107	63.4	.....	.....
Partly drained, for partial crop.....acres.....	50,535	160,877	(1)	-110,442	-68.6	.....	.....
Unfit to raise any crop for lack of drainage.....acres.....	57,942	79,267	2 77,494	-21,325	-26.9	1,773	2.3
In occupied farms.....acres.....	673,034	331,121	(1)	341,913	103.2	.....	.....
In planted crops.....acres.....	425,589	267,525	(1)	158,064	59.1	.....	.....
Idle.....acres.....	378,478	363,415	(1)	15,063	4.1	.....	.....
Available for settlement.....acres.....	113,994	248,147	(1)	-134,153	-54.1	.....	.....
Open ditches, completed.....miles.....	1,846.6	1,483.5	1,171.3	363.1	24.5	312.2	26.7
Drainage pumping plants, capacity.....horsepower.....	.....	3,000	1,000	-3,000	-100.0	2,000	200.0
.....gal. per min.....	.....	1,000,000	1,000,000	-1,000,000	-100.0	.....	.....
Capital invested in enterprises.....dollars.....	5,467,906	4,719,079	3,623,518	748,827	15.9	1,095,561	30.2
Average per acre.....dollars.....	6.62	6.95	6.68	-0.33	-4.7	0.27	4.0

<sup>1</sup> Not available.<sup>2</sup> Reported as "Swampy, subject to overflow, seeped, or alkali."

STATE TABLE 2.—AREA OF ENTERPRISES, BY SIZE: JAN. 1, 1940, 1930, AND 1920

[For intercounty enterprises the portion in each county is tabulated as a separate enterprise]

SIZE	AREA OF ENTERPRISES <sup>1</sup>			Land in enterprises <sup>2</sup> 1940	SIZE	AREA OF ENTERPRISES <sup>1</sup>			Land in enterprises <sup>2</sup> 1940
	1940	1930	1920			1940	1930	1920	
All enterprises.....	Acres 825,576	Acres 679,236	Acres 542,828	Acres 825,576	5,000 to 9,999 acres.....	Acres 132,000	Acres 81,272	Acres 71,717	Acres 117,083
Less than 100 acres.....	302	98	120	302	10,000 to 19,999 acres.....	165,585	.....	.....	165,585
100 to 199 acres.....	2,533	418	1,526	1,526	20,000 to 49,999 acres.....	222,140	365,742	265,640	218,990
200 to 499 acres.....	23,806	5,075	2,997	17,471	50,000 to 99,999 acres.....	56,500	.....	.....	56,500
500 to 999 acres.....	72,318	17,924	15,928	50,421	100,000 acres and over.....	.....	100,000	100,000	.....
1,000 to 1,999 acres.....	109,235	.....	96,026	91,945					
2,000 to 4,999 acres.....	115,430	117,907	.....	105,753					

<sup>1</sup> The sum of the areas in the individual enterprises, without deduction for overlapping.<sup>2</sup> Overlapping eliminated by tabulating each enterprise according to its acreage not included in later enterprises.

STATE TABLE 3.—LAND AND CAPITAL INVESTED, BY CHARACTER OF ENTERPRISE, JAN. 1, 1940

CHARACTER OF ENTERPRISE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	825,576	100.0	5,467,906	100.0
Drainage districts.....	728,296	88.2	4,994,302	91.3
County drains.....	38,580	4.7	166,279	3.1
Individually owned projects.....	58,700	7.1	307,325	5.6

STATE TABLE 4.—LAND AND CAPITAL INVESTED, BY TYPE OF DRAINAGE: JAN. 1, 1940, 1930, AND 1920

TYPE OF DRAINAGE <sup>1</sup>	LAND IN ENTERPRISES						CAPITAL INVESTED IN ENTERPRISES					
	1940		1930		1920		1940		1930		1920	
All enterprises.....	Acres 825,576	Percent 100.0	Acres 679,236	Percent 100.0	Acres 542,828	Percent 100.0	Dollars 5,467,906	Percent 100.0	Dollars 4,719,079	Percent 100.0	Dollars 3,623,518	Percent 100.0
Gravity drainage only by—												
Open ditches.....	825,576	100.0	577,796	85.1	442,828	81.6	5,467,906	100.0	3,961,079	83.9	2,868,144	79.7
Tile drains.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Open ditches and tile drains.....	.....	.....	1,440	0.2	.....	.....	.....	.....	8,000	0.2	.....	.....
All drained by pumping by—												
Open ditches.....	.....	.....	.....	.....	100,000	18.4	.....	.....	750,000	15.9	735,374	20.3
Tile drains.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Open ditches and tile drains.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total area served by pumps.....	.....	.....	100,000	14.7	100,000	18.4	.....	.....	.....	.....	.....	.....

<sup>1</sup> Each item includes those enterprises that have provided levees in addition to the kind of drains specified.















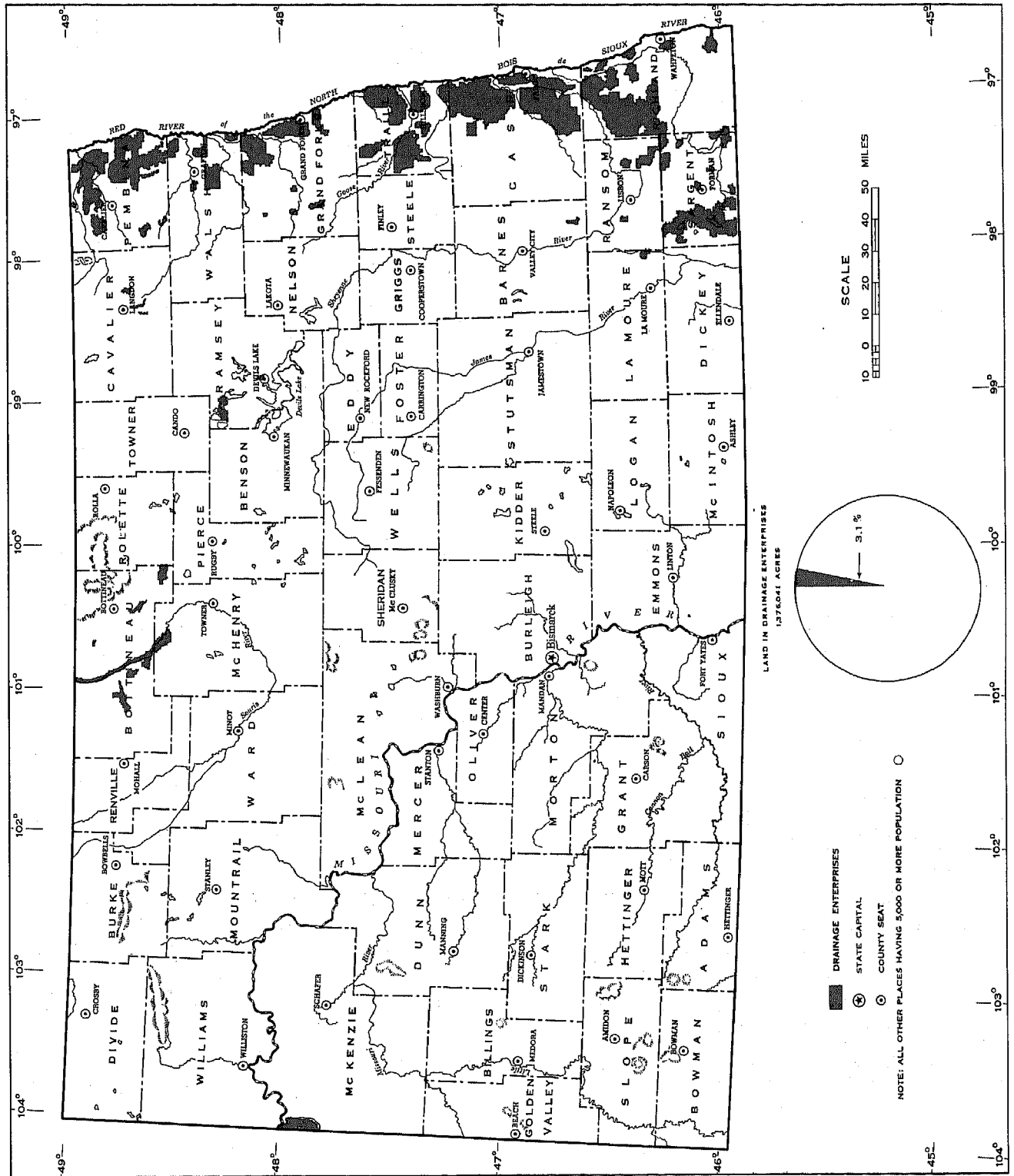






# NORTH DAKOTA

## LOCATION OF LAND IN DRAINAGE ENTERPRISES







## CENSUS OF DRAINAGE—NORTH DAKOTA

STATE TABLE 9.—DRAINAGE CONDITION, DEVELOPMENT, AND USE OF LAND IN ENTERPRISES, BY DATE OF ORGANIZATION, 1939

DATE OF ORGANIZATION	Land in all enterprises <sup>1</sup>	DRAINAGE CONDITION				DEVELOPMENT				USE OF LAND				
		Drained		Partly drained	Undrained	Improved land		Timber and cut-over land	Other unimproved land	In occupied farms		In planted crops	Idle	Land available for settlement
	Acres	Acres	Per-cent	Acres	Acres	Acres	Per-cent	Acres	Acres	Acres	Per-cent	Acres	Acres	Acres
All enterprises..	1,376,041	1,360,259	98.8	11,482	4,300	1,371,741	99.7	.....	4,300	1,322,573	96.1	1,116,385	242,493	.....
1890-1899.....	72,020	72,020	100.0	.....	.....	72,020	100.0	.....	.....	70,043	97.3	57,831	14,009	.....
1900-1904.....	147,238	147,238	100.0	.....	.....	147,238	100.0	.....	.....	147,078	99.9	124,842	22,236	.....
1905-1909.....	464,240	464,240	100.0	.....	.....	464,240	100.0	.....	.....	448,720	96.9	382,350	70,330	.....
1910-1914.....	140,800	140,800	100.0	.....	.....	140,800	100.0	.....	.....	135,320	96.1	114,487	26,313	.....
1915-1919.....	303,295	293,313	96.7	9,982	.....	303,295	100.0	.....	.....	285,904	94.3	239,191	61,641	.....
1920-1924.....	168,960	168,960	100.0	.....	.....	168,960	100.0	.....	.....	159,320	94.3	133,015	32,944	.....
1925-1929.....	79,488	73,688	92.7	1,500	4,300	75,188	94.6	.....	4,300	75,188	94.6	64,668	14,820	.....

<sup>1</sup>Land included in more than 1 enterprise is tabulated only in the last organized.

STATE TABLE 10.—COST OF OPERATION AND MAINTENANCE, BY TYPE OF DRAINAGE, 1939

TYPE OF DRAINAGE	Land in all enterprises	LAND REPORTING ON COST OF MAINTENANCE AND OPERATION			COST REPORTED		
		Total	Some cost	No cost	Total amount	Per acre on—	
						Total reporting	Area incurring
All enterprises.....	Acres 1,376,041	Acres 1,376,041	Acres 58,648	Acres 1,317,393	Dollars 4,420	Dollars ( <sup>1</sup> )	Dollars 0.08
Gravity drainage only.....	1,376,041	1,376,041	58,648	1,317,393	4,420	( <sup>1</sup> )	0.08
Open ditches only.....	1,365,721	1,365,721	58,648	1,307,073	4,420	( <sup>1</sup> )	0.08
Tile drains only.....	9,040	9,040	.....	9,040	.....	.....	.....
Open ditches and tile drains.....	1,280	1,280	.....	1,280	.....	.....	.....

<sup>1</sup>Less than 1/2 cent per acre.

STATE TABLE 11.—LAND AND CAPITAL INVESTED, BY METHOD OF MAINTENANCE AND BY WHETHER MAINTENANCE IS SYSTEMATIC, JAN. 1, 1940

MAINTENANCE		Land		Capital invested	
		Acres	Percent	Dollars	Percent
All enterprises.....		1,376,041	100.0	3,673,336	100.0
Method:					
By district forces.....		1,131,623	82.2	2,972,617	80.9
"None," or not reporting.....		244,218	17.8	700,719	19.1
Whether systematic:					
Reporting "yes".....		1,132,663	82.3	2,948,148	80.2
Reporting "no".....		243,378	17.7	725,188	19.8

STATE TABLE 12.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY OWNERSHIP OF POWER EQUIPMENT FOR MAINTENANCE, 1940

ITEM	All enterprises	ENTERPRISES OWNING POWER EQUIPMENT	
		Amount	Percent
Land in enterprises.....acres....	1,376,041	19,928	1.4
Capital invested.....dollars..	3,673,336	176,431	4.8
Drainage works:			
Open ditches.....miles....	940.4	35.0	3.7
Tile drains.....miles....	10.4	.....	.....





## CENSUS OF DRAINAGE—NORTH DAKOTA

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COUNTY TABLE II.—DRAINAGE ENTERPRISES—WORKS AND CAPITAL INVESTED, 1940, 1930, AND 1920; AND MAINTENANCE AND OPERATION, AND FINANCIAL CONDITION, 1939

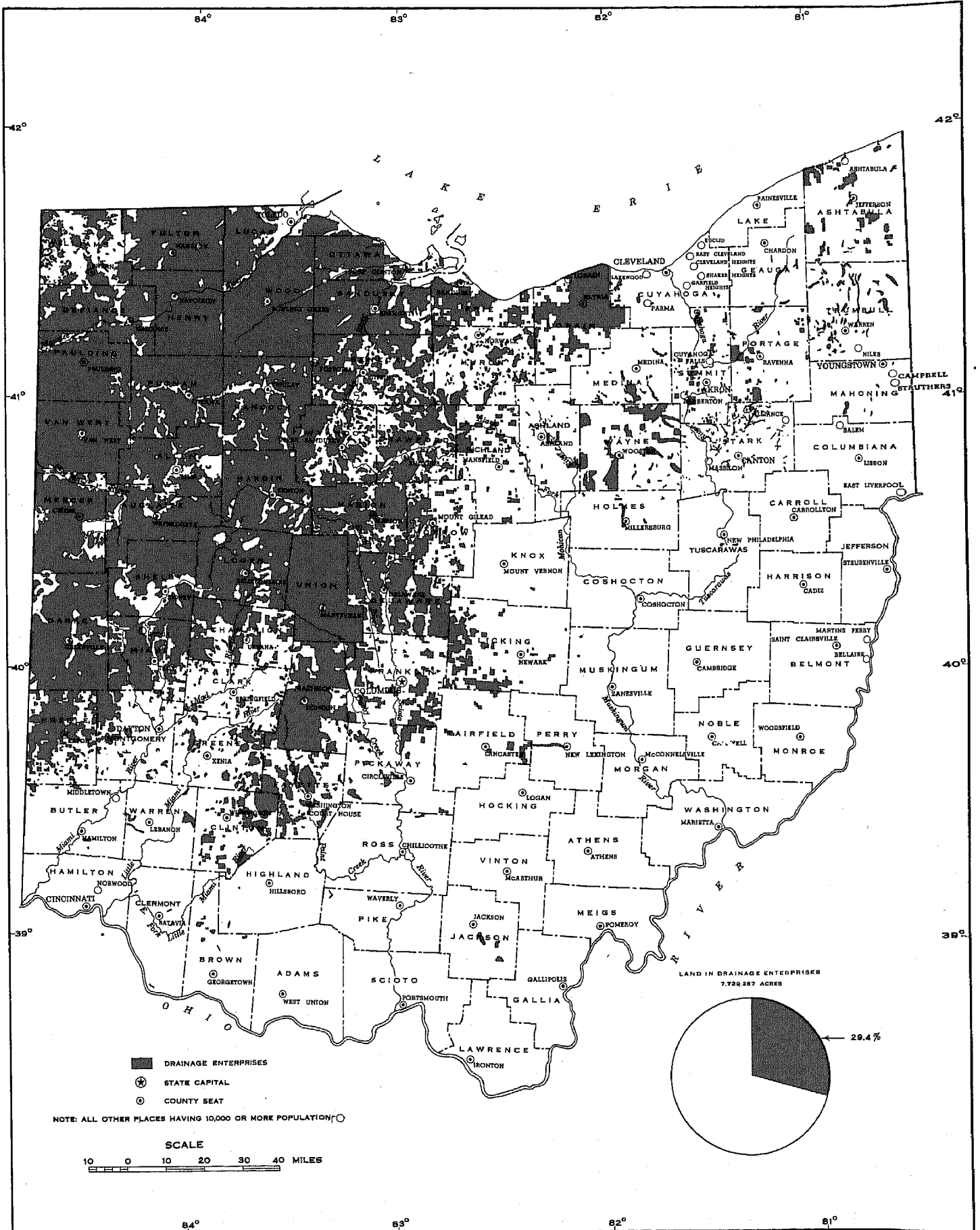
ITEM (See definitions in Introduction)		THE STATE	Bottineau	Cass	Cavalier	Grand Forks	McKenzie <sup>1</sup>	Pembina
<b>DRAINAGE WORKS</b>								
1	Drainage enterprises.....number.....1940..	2 145	7	27	3	12	1	30
2	Open ditches:							
3	Completed.....miles.....1940..	940.4	60.6	228.7	13.7	72.6	35.0	154.6
4	1930..	817.6	28.6	204.5	15.5	26.8	33.2	157.1
5	1920..	708.3	44.0	177.3	12.0	25.8		145.8
6	Additional length authorized.....miles.....1940..							
7	Tile drains:							
8	Completed.....miles.....1940..	10.4						
9	1930..	9.6						0.1
10	1920..	9.3						
11	Additional length authorized.....miles.....1940..							
12	Levees and dikes:							
13	Completed.....miles.....1940..							
14	1930..							
15	1920..	2.1						2.1
16	Additional length authorized.....miles.....1940..							
17	Pumping plants:							
18	Engine capacity.....horsepower.....1940..							
19	1930..							
20	1920..							
21	Pump capacity.....gal. per min.....1940..							
22	1930..							
23	1920..							
24	Land served by pumps.....acres.....1940..							
25	1930..							
26	1920..							
27	Wells pumped for drainage.....number.....1940..							
28	1930..							
<b>CAPITAL INVESTED</b>								
29	Capital invested to January 1.....dollars.....1940..	3,673,336	199,661	1,626,333	19,200	157,047	176,431	318,158
30	1930..	3,148,919	38,999	1,574,786	19,900	62,230	151,553	239,003
31	1920..	2,208,049	171,096	806,090	15,785	49,894		297,282
32	Estimated cost when completed.....dollars.....1940..	3,673,336	199,661	1,626,333	19,200	157,047	176,431	318,158
33	1930..	3,148,919	38,999	1,574,786	19,900	62,230	151,553	239,003
34	1920..	2,261,449	171,096	837,090	15,785	49,894		297,282
35	Average cost per acre when completed.....dollars.....1940..	2.67	3.76	5.15	3.66	1.43	8.85	1.61
36	1930..	2.88	1.28	5.87	3.66	1.05	24.89	1.07
37	1920..	1.82	3.44	4.16	1.24	1.06		1.06
38	Invested in and required for completion, 1940:							
39	Enterprises having open ditches only.....dollars..	3,023,013	199,661	1,626,333	19,200	157,047	176,431	318,158
40	Average amount per acre.....dollars..	2.65	3.76	5.15	3.66	1.43	8.85	1.61
41	Enterprises having open ditches and levees.....dollars..							
42	Average amount per acre.....dollars..							
43	Enterprises having tile only.....dollars..	48,250						
44	Average amount per acre.....dollars..	5.34						
45	Enterprises having tile and levees.....dollars..							
46	Average amount per acre.....dollars..							
47	Enterprises having open ditches and tile.....dollars..	2,073						
48	Average amount per acre.....dollars..	1.62						
49	Enterprises having ditches, tile, and levees.....dollars..							
50	Average amount per acre.....dollars..							
51	Enterprises operating pumping plants.....dollars..							
52	Average amount per acre.....dollars..							
<b>MAINTENANCE AND OPERATION</b>								
53	Cost of maintenance and operation in 1939:							
54	By enterprises operating pumping plants.....dollars..							
55	Enterprises reporting.....number..							
56	Land in these enterprises.....acres..							
57	Average cost per acre.....dollars..							
58	By enterprises not operating pumping plants.....dollars..	4,420				(3)	3,701	(3)
59	Enterprises reporting.....number..	7				1	1	1
60	Land in these enterprises.....acres..	58,648				(3)	19,928	(3)
61	Average cost per acre.....dollars..	0.08				(3)	0.18	(3)
62	Federal aid in maintenance:							
63	Enterprises reporting.....number..							
64	Land in these enterprises.....acres..							
<b>FINANCIAL CONDITION</b>								
65	Drainage taxes collected in 1939.....dollars..	4 179						
66	Enterprises reporting.....number..	1						
67	Land in these enterprises.....acres..	42,960						
68	Average amount collected per acre.....dollars..	0.06						
69	Area delinquent in drainage taxes, Dec. 31, 1939.....acres..	42,086						
70	Enterprises reporting.....number..	2						
71	Land in these enterprises.....acres..	6,320						
72	Portion delinquent in these enterprises.....percent..	33.0						
73	Total indebtedness, Dec. 31, 1939.....dollars..	184,096				(3)	176,431	
74	Enterprises reporting.....number..	5				2	1	
75	Land in these enterprises.....acres..	31,048				(3)	19,928	
76	Average indebtedness per acre.....dollars..	5.93				(3)	8.85	
77	Indebtedness in arrears, Dec. 31, 1939.....dollars..	4 5,765						
78	Enterprises reporting.....number..	2						
79	Land in these enterprises.....acres..	6,320						
80	Average arrearage per acre.....dollars..	0.91						
81	Reduction of debt by refinancing, prior to 1940.....dollars..							
82	Enterprises reporting.....number..							
83	Land in these enterprises.....acres..							
84	Average reduction per acre.....dollars..							

<sup>1</sup>For counties having less than 3 enterprises, statistics are shown only by written permission of each enterprise affected.<sup>2</sup>An intercounty enterprise is counted in each county in which a part is located. The number of separate enterprises in the State is 141.<sup>3</sup>Where there are less than 3 enterprises reporting, data are included only in State totals.<sup>4</sup>Not distributed by counties.



# OHIO

## LOCATION OF LAND IN DRAINAGE ENTERPRISES



























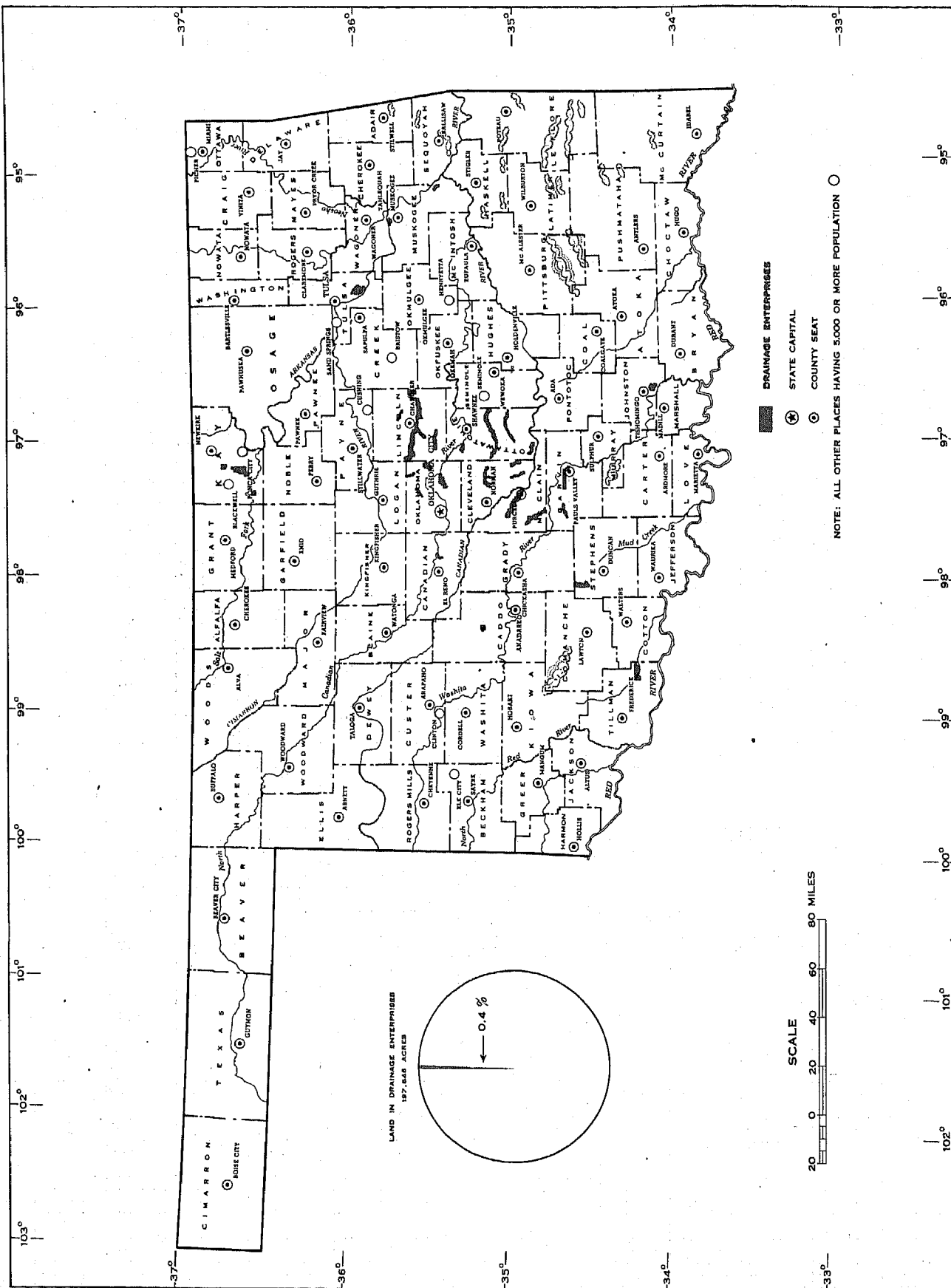






# OKLAHOMA

## Location of Land in Drainage Enterprises



# CENSUS OF DRAINAGE — OKLAHOMA

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STATE TABLE 1.—SUMMARY OF DRAINAGE FOR THE STATE: JAN. 1, 1940, 1930, AND 1920

ITEM (See definitions in Introduction)	CENSUS OF—			INCREASE OR DECREASE (—)			
	1940	1930	1920	1930-1940		1920-1930	
				Amount	Percent	Amount	Percent
Approximate land area of State.....acres.....	44,341,120	44,424,960	44,424,960	.....	.....	.....	.....
Land in drainage enterprises.....acres.....	197,646	170,158	12,150	27,488	16.2	156,008	(1)
Improved.....acres.....	163,787	142,766	8,646	21,021	14.7	133,921	(1)
Unimproved:							
Timber and cut-over.....acres.....	20,215	11,823	3,305	8,292	69.5	8,618	260.8
Other.....acres.....	13,644	15,469	.....	-1,825	-11.8	15,469	.....
Drainage sufficient for normal crop.....acres.....	181,353	143,221	(2)	38,132	25.6	.....	.....
Partly drained, for partial crop.....acres.....	8,637	21,263	(2)	-12,626	-59.6	.....	.....
Unfit to raise any crop for lack of drainage.....acres.....	7,726	5,734	3 2,250	1,992	34.7	3,494	154.8
In occupied farms.....acres.....	182,960	163,936	(2)	19,044	11.6	.....	.....
In planted crops.....acres.....	86,884	135,856	(2)	-49,072	-36.1	.....	.....
Idle.....acres.....	18,693	26,082	(2)	-8,399	-24.5	.....	.....
Available for settlement.....acres.....	4,393	1,063	(2)	3,330	313.3	.....	.....
Open ditches, completed.....miles.....	334.3	303.0	16.6	31.3	10.3	284.4	(1)
Capital invested in enterprises.....dollars.....	1,971,350	2,283,598	76,415	-312,248	-13.7	2,207,183	(1)
Average per acre.....dollars.....	9.97	13.42	6.29	-3.45	-25.7	7.13	113.4

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

<sup>2</sup> Not available.

<sup>3</sup> Reported as "Swampy, subject to overflow, seeped, or alkali."

STATE TABLE 2.—AREA OF ENTERPRISES, BY SIZE: JAN. 1, 1940, 1930, AND 1920

SIZE	LAND IN ENTERPRISES <sup>1</sup>		
	1940	1930	1920
All enterprises.....	Acres 197,646	Acres 170,158	Acres 12,150
200 to 499 acres.....	.....	670	400
500 to 999 acres.....	.....	.....	750
1,000 to 1,999 acres.....	1,593	45,616	5,000
2,000 to 4,999 acres.....	40,788		
5,000 to 9,999 acres.....	70,393	60,381	6,000
10,000 to 19,999 acres.....	49,880	63,491	.....
20,000 to 49,999 acres.....	34,992		

<sup>1</sup> No overlapping of enterprises indicated in Oklahoma in 1940 or 1930.

<sup>2</sup> 960 acres overlapping were reported in 1930.

STATE TABLE 3.—LAND AND CAPITAL INVESTED, BY CHARACTER OF ENTERPRISE, JAN. 1, 1940

CHARACTER OF ENTERPRISE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	197,646	100.0	1,971,350	100.0
County drains.....	197,646	100.0	1,971,350	100.0

STATE TABLE 4.—LAND AND CAPITAL INVESTED, BY TYPE OF DRAINAGE: JAN. 1, 1940, 1930, AND 1920

TYPE OF DRAINAGE	LAND IN ENTERPRISES						CAPITAL INVESTED IN ENTERPRISES					
	1940		1930		1920		1940		1930		1920	
All enterprises.....	Acres 197,646	Percent 100.0	Acres 170,158	Percent 100.0	Acres 12,150	Percent 100.0	Dollars 1,971,350	Percent 100.0	Dollars 2,283,598	Percent 100.0	Dollars 76,415	Percent 100.0
Gravity drainage only by open ditches.....	197,646	100.0	170,158	100.0	12,150	100.0	1,971,350	100.0	2,283,598	100.0	76,415	100.0

## CENSUS OF DRAINAGE—OKLAHOMA

STATE TABLE 5.—LAND, CAPITAL INVESTED, AND AREA DELINQUENT IN DRAINAGE TAXES, BY ARREARAGE IN PAYMENT OF OBLIGATIONS: JAN. 1, 1940 AND 1930

FINANCIAL STATUS	LAND IN ENTERPRISES				CAPITAL INVESTED				AREA DELINQUENT	
	1940		1930		1940		1930		1940	1930
	Acres	Percent	Acres	Percent	Dollars	Percent	Dollars	Percent	Acres	Acres
All enterprises.....	197,646	100.0	170,168	100.0	1,971,350	100.0	2,283,598	100.0	20,645	5,846
Enterprises in arrears.....	55,316	28.0	2,960	4.9	597,051	30.3	66,000	2.9	11,945	2,680
With some delinquent land.....	21,610	10.9	2,960	1.7	299,051	15.2	28,000	1.2	11,945	2,680
With no report on delinquency.....	33,706	17.1	5,310	3.1	298,000	15.1	38,000	1.7	.....	.....
Enterprises not in arrears.....	140,735	71.2	161,888	95.1	1,344,299	68.2	2,217,598	97.1	8,700	2,968
With some delinquent land.....	24,420	12.4	12,165	7.2	98,652	5.0	184,000	8.0	8,700	2,968
With no delinquent land.....	94,942	48.0	122,627	72.1	980,673	49.7	1,670,598	68.6	.....	.....
With no report on delinquency.....	21,373	10.8	27,096	15.9	264,974	13.4	462,708	20.3	.....	.....
Enterprises not reporting on arrearage—with no report on delinquency.....	1,593	0.8	.....	.....	30,000	1.5	.....	.....	.....	.....

STATE TABLE 6.—LAND, CAPITAL INVESTED, INDEBTEDNESS, ARREARAGE IN PAYMENT OF BONDS, REDUCTION OF DEBT BY REFINANCING, AND ACREAGE DELINQUENT, 1940; DRAINAGE TAXES COLLECTED IN 1939; BY INDEBTEDNESS AND ARREARAGE, JAN. 1, 1940

FINANCIAL STATUS	Land in enterprises	Capital invested	Indebtedness	Arrearage in payment of bonds	Reduction of debt by refinancing	Delinquent in drainage taxes	Drainage taxes collected in 1939
	Acres	Dollars	Dollars	Dollars	Dollars	Acres	Dollars
All enterprises.....	197,646	1,971,350	262,199	88,941	( <sup>1</sup> )	20,645	8,638
Enterprises in debt.....	<sup>2</sup> 81,331	725,703	262,199	88,941	( <sup>1</sup> )	20,645	8,638
In arrears, amount of arrearage stated.....	31,316	382,051	190,941	88,941	( <sup>1</sup> )	11,945	5,446
Collecting drainage taxes in 1939.....	11,190	114,031	24,251	12,251	.....	1,660	5,446
No collections reported.....	20,128	268,000	135,690	76,690	( <sup>1</sup> )	10,085	.....
In arrears, amount not stated.....	<sup>2</sup> 24,000	215,000	43,000	.....	( <sup>1</sup> )	.....	.....
Collecting drainage taxes in 1939.....	.....	.....	.....	.....	( <sup>1</sup> )	.....	.....
No collections reported.....	<sup>2</sup> 24,000	215,000	43,000	.....	( <sup>1</sup> )	.....	.....
Not in arrears.....	24,420	98,652	57,358	.....	.....	8,700	3,192
Collecting drainage taxes in 1939.....	17,380	80,652	39,943	.....	.....	6,700	3,192
No collections reported.....	7,040	18,000	17,415	.....	.....	2,000	.....
Not reporting as to arrears.....	1,593	30,000	900	.....	.....	.....	.....
Collecting drainage taxes in 1939.....	.....	.....	.....	.....	.....	.....	.....
No collections reported.....	1,593	30,000	900	.....	.....	.....	.....
Enterprises not in debt.....	116,315	1,245,647	.....	.....	.....	.....	.....
Collecting drainage taxes in 1939.....	.....	.....	.....	.....	.....	.....	.....
No collections reported.....	116,315	1,245,647	.....	.....	.....	.....	.....

<sup>1</sup> Amounts not stated by 3 enterprises reporting.<sup>2</sup> Includes 14,000 acres for which amount of indebtedness was not reported.

STATE TABLE 7.—LAND AND CAPITAL INVESTED, BY PRINCIPAL PURPOSE OF DRAINAGE, JAN. 1, 1940

PURPOSE OF DRAINAGE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	197,646	100.0	1,971,350	100.0
Improvement of land already in farms.....	66,832	34.8	856,251	43.4
Protection against overflow.....	124,814	65.2	1,115,099	56.6

STATE TABLE 8.—LAND AND CAPITAL INVESTED, BY DATE OF ORGANIZATION, JAN. 1, 1940

DATE OF ORGANIZATION	Land in enterprises <sup>1</sup>		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	197,646	100.0	1,971,350	100.0
1905-1909.....	72,872	36.9	947,017	48.0
1910-1914.....	14,483	7.3	112,841	5.7
1915-1919.....	2,590	1.3	8,500	0.4
1920-1924.....	48,781	24.7	477,151	24.2
1925-1929.....	33,600	17.0	251,189	12.7
1930-1934.....	18,720	10.0	168,873	8.6
1935-1939.....	5,600	2.8	5,679	0.4

<sup>1</sup> No overlapping of enterprises indicated in Oklahoma in 1940.











## CENSUS OF DRAINAGE—OREGON

STATE TABLE 5.—PUMPING PLANTS AND LAND SERVED, BY KIND OF POWER: JAN. 1, 1940, 1930, AND 1920

KIND OF POWER	Enterprises	CAPACITY			Land served
		Engine or motor		Pump	
	Number	Hp.	Percent	G. p. m.	Acres
All pumping enterprises.....	1940.. 26	4,218	100.0	742,923	51,785
	1930.. 17	2,173	100.0	488,800	59,386
	1920.. ..	.....	.....	.....	.....
Steam.....	1940.. 1	300	13.8	60,000	5,704
	1930.. ..	.....	.....	.....	.....
	1920.. ..	.....	.....	.....	.....
Electric.....	1940.. 21	3,413	80.8	577,423	39,225
	1930.. 12	1,683	77.9	402,100	50,873
	1920.. ..	.....	.....	.....	.....
Internal combustion.....	1940.. 3	165	3.9	50,500	1,905
	1930.. 4	180	8.3	26,700	2,709
	1920.. ..	.....	.....	.....	.....
Steam and electric.....	1940.. 1	575	13.6	100,000	5,664
	1930.. ..	.....	.....	.....	.....
	1920.. ..	.....	.....	.....	.....
Electric and internal combustion.....	1940.. 1	65	1.6	15,000	5,000
	1930.. ..	.....	.....	.....	.....
	1920.. ..	.....	.....	.....	.....

<sup>1</sup>One enterprise reported pumps but not area served by them.

STATE TABLE 6.—PUMPING PLANTS AND LAND SERVED, BY KIND OF PUMP: JAN. 1, 1940 AND 1930

KIND OF PUMP	PUMPS			Engine or motor capac- ity	Land served	
	Number	Capacity				
All pumping enterprises.....	1940..	56	G. p. m. 742,923	Percent 100.0	Hp. 4,218	Acres <sup>1</sup> 51,795
	1930..	31	488,800	100.0	2,173	59,386
Centrifugal.....	1940..	24	316,100	42.5	1,630	16,771
	1930..	24	260,000	53.2	1,455	38,970
Rotary.....	1940..	1	1,800	0.4	16	4,000
	1930..	4	11,050	1.5	60	5,776
Screw.....	1940..	2	1,673	0.2	18	8,016
	1930..	1	500	0.1	15	251
Turbine.....	1940..	13	246,600	33.2	1,410	18,242
	1930..	6	227,000	46.4	702	8,400
Centrifugal and—	1940..	12	167,000	22.5	1,085	9,709
Screw.....	1940..	1	500	0.1	15	251
	1930..	1	500	0.1	15	251
Turbine.....	1940..	1	500	0.1	15	251
	1930..	1	500	0.1	15	251
Water wheel.....	1940..	1	500	0.1	15	251
	1930..	1	500	0.1	15	251

<sup>1</sup>One enterprise reported pumps but not area served by them.<sup>2</sup>Served by pumps located in Siskiyou County, California.

STATE TABLE 7.—LAND, CAPITAL INVESTED, AND AREA DELINQUENT IN DRAINAGE TAXES, BY ARREARAGE IN PAYMENT OF OBLIGATIONS: JAN. 1, 1940 AND 1930

FINANCIAL STATUS	LAND IN ENTERPRISES				CAPITAL INVESTED				AREA DELINQUENT <sup>1</sup>	
	1940		1930		1940		1930		1940	1930
	Acres	Percent	Acres	Percent	Dollars	Percent	Dollars	Percent	Acres	Acres
All enterprises.....	348,825	100.0	211,182	100.0	5,482,012	100.0	4,165,549	100.0	53,329	64,747
Enterprises in arrears.....	81,165	23.3	72,063	34.1	2,039,312	37.2	880,194	21.1	50,019	57,117
With some delinquent land.....	79,417	22.8	60,943	28.8	1,884,312	34.0	738,644	17.7	50,019	57,117
With no delinquent land.....	416	0.1	8,153	3.9	35,000	0.6	83,510	2.0	.....	.....
With no report on delinquency.....	1,332	0.4	2,967	1.4	140,000	2.6	58,040	1.4	.....	.....
Enterprises not in arrears.....	256,289	73.5	139,119	65.9	3,152,665	57.5	3,285,355	78.9	1,310	7,630
With some delinquent land.....	8,708	2.5	54,114	25.6	218,478	4.0	1,268,862	30.5	1,310	7,630
With no delinquent land.....	232,856	66.8	71,573	33.9	2,056,179	37.5	1,252,138	30.1	.....	.....
With no report on delinquency.....	14,725	4.2	13,432	6.4	878,208	16.0	764,225	18.3	.....	.....
Enterprises not reporting on arrearage.....	11,371	3.2	.....	.....	289,835	5.3	.....	.....	2,000	.....
With some delinquent land.....	5,356	1.5	.....	.....	161,973	3.0	.....	.....	2,000	.....
With no delinquent land.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
With no report on delinquency.....	6,015	1.7	.....	.....	127,862	2.3	.....	.....	.....	.....

<sup>1</sup>If any land is delinquent in 2 or more overlapping enterprises, the acreage delinquent is too large by the amount of such duplication.



## CENSUS OF DRAINAGE—OREGON

STATE TABLE 12.—COST OF OPERATION AND MAINTENANCE, BY TYPE OF DRAINAGE, 1939

TYPE OF DRAINAGE	Land in all enterprises	LAND REPORTING ON COST OF MAINTENANCE AND OPERATION			COST REPORTED		
		Total	Some cost	No cost	Total amount	Per acre on—	
						Total reporting	Area incurring
	Acres	Acres	Acres	Acres	Dollars	Dollars	Dollars
All enterprises.....	348,825	348,825	213,833	134,992	98,128	0.28	0.46
Gravity drainage only.....	203,061	203,061	98,453	134,608	16,666	0.08	0.24
Open ditches only.....	95,636	95,636	34,285	61,351	10,359	0.11	0.30
Open ditches and levees.....	1,232	1,232	912	320	562	0.46	0.62
Open ditches and tile drains.....	106,188	106,188	33,256	72,937	5,745	0.05	0.17
Pumping for all or part of drainage.....	145,764	145,764	145,410	354	81,460	0.56	0.66
All drainage by pumping.....	39,468	39,468	39,114	354	42,696	1.08	1.09
Part pumping and part gravity.....	106,296	106,296	106,296	.....	38,764	0.36	0.36

STATE TABLE 13.—LAND AND CAPITAL INVESTED, BY METHOD OF MAINTENANCE AND BY WHETHER MAINTENANCE IS SYSTEMATIC, JAN. 1, 1940

MAINTENANCE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	348,825	100.0	5,482,012	100.0
Method:				
By district forces.....	206,925	59.3	3,537,576	64.5
By contract.....	12,786	3.7	401,774	7.3
Work apportioned to landowners.....	53,802	15.4	436,951	8.0
"None," or not reporting.....	75,312	21.6	1,108,311	20.2
Whether systematic:				
Reporting "yes".....	257,809	73.9	3,210,668	58.6
Reporting "no".....	91,016	26.1	2,271,344	41.4

STATE TABLE 14.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY OWNERSHIP OF POWER EQUIPMENT FOR MAINTENANCE, 1940

ITEM	All enterprises	ENTERPRISES OWNING POWER EQUIPMENT	
		Amount	Percent
Land in enterprises.....acres....	348,825	178,652	51.2
Capital invested.....dollars..	5,482,012	2,448,893	44.7
Drainage works:			
Open ditches.....miles....	780.1	473.4	60.7
Tile drains.....miles....	150.6	14.0	9.3
Levees.....miles....	143.2	66.5	46.4

STATE TABLE 15.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FEDERAL AGENCY GIVING AID IN MAINTENANCE, 1940

AGENCY	Land in enterprises	Capital invested	DRAINAGE WORKS			AGENCY	Land in enterprises	Capital invested	DRAINAGE WORKS		
			Ditches	Tile	Levees				Ditches	Tile	Levees
All enterprises reporting Federal aid received.....	Acres 167,856	Dollars 3,524,224	Miles 444.6	Miles 119.5	Miles 78.2	Civilian Conservation Corps.....	Acres 121,684	Dollars 1,075,048	Miles 243.5	Miles 17.5	.....
Work Projects Administration.....	26,157	701,859	102.3	.....	14.6	Corps of Engineers, U.S.A.....	17,654	1,482,317	86.0	100.0	54.1
						W.P.A. and Corps of Engineers.....	1,332	140,000	7.8	2.0	4.5
						P.W.A. and Corps of Engineers.....	1,029	125,000	5.0	.....	5.0

STATE TABLE 16.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FLOOD PROTECTION FROM LEVEES OF AN OUTSIDE AGENCY, 1940

ITEM	All enterprises	ENTERPRISES PROTECTED BY OUTSIDE AGENCY	
		Amount	Percent
Land in enterprises.....acres....	348,825	12,127	0.6
Capital invested.....dollars..	5,482,012	28,682	0.5
Drainage works:			
Open ditches.....miles....	780.1	18.0	2.3
Tile drains.....miles....	150.6	.....	.....
Levees.....miles....	143.2	.....	.....

<sup>1</sup>All land in these enterprises is dependent for protection upon levees of outside agencies.



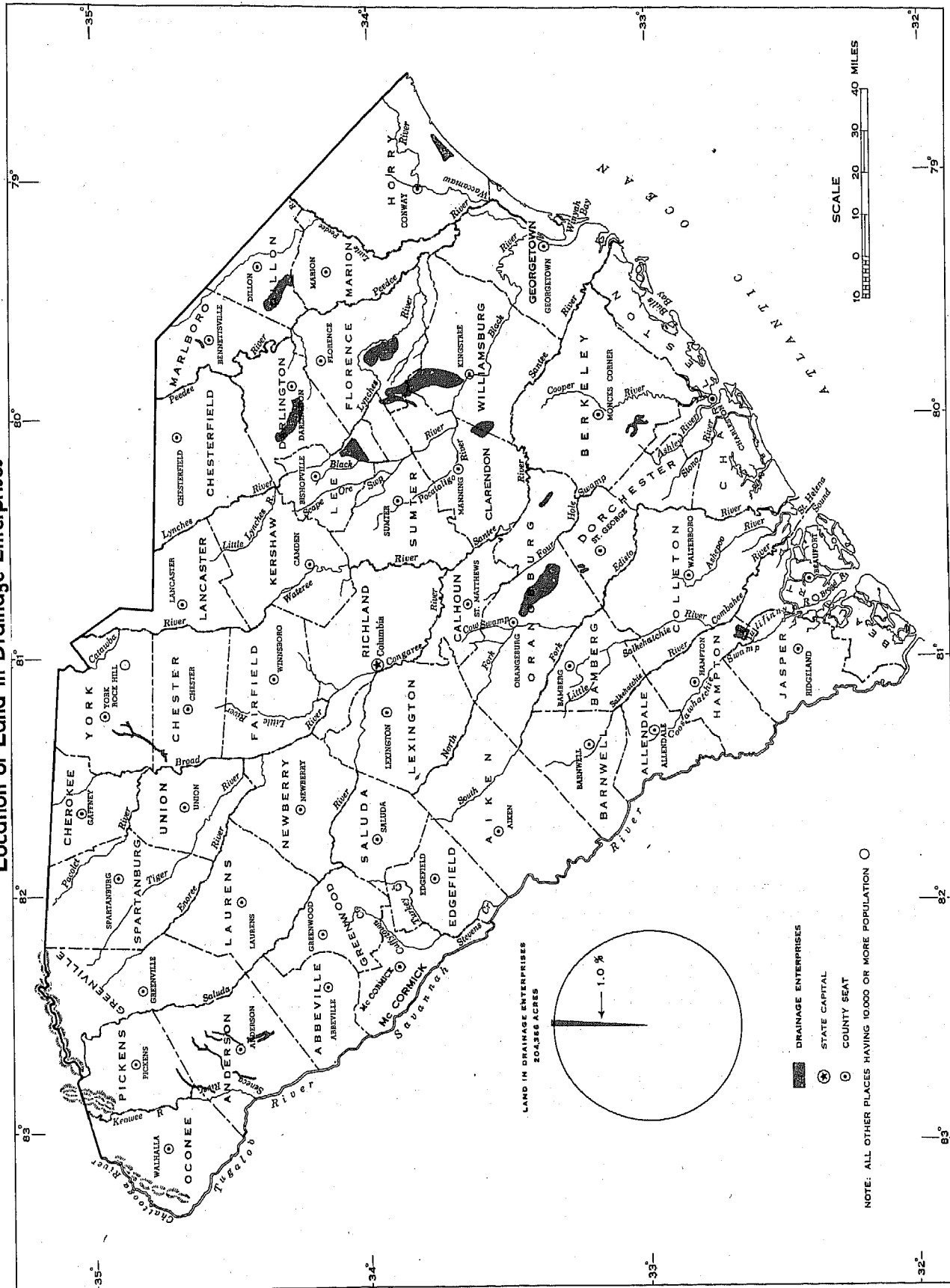






# SOUTH CAROLINA

## Location of Land in Drainage Enterprises







## CENSUS OF DRAINAGE—SOUTH CAROLINA

STATE TABLE 10.—COST OF OPERATION AND MAINTENANCE, BY TYPE OF DRAINAGE, 1939

TYPE OF DRAINAGE	Land in all enterprises	LAND REPORTING ON COST OF MAINTENANCE AND OPERATION			COST REPORTED		
		Total	Some cost	No cost	Total amount	Per acre on—	
						Total reporting	Area incurring
All enterprises.....	Acres 204,366	Acres 204,366	Acres 5,600	Acres 198,766	Dollars 800	Dollars ( <sup>1</sup> )	Dollars 0.14
Gravity drainage only: Open ditches only.....	204,366	204,366	5,600	198,766	800	( <sup>1</sup> )	0.14

<sup>1</sup>Less than 1 cent per acre.

STATE TABLE 11.—LAND AND CAPITAL INVESTED, BY METHOD OF MAINTENANCE AND BY WHETHER MAINTENANCE IS SYSTEMATIC, JAN. 1, 1940

MAINTENANCE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	204,366	100.0	1,241,300	100.0
Method, "none," or not reporting.....	204,366	100.0	1,241,300	100.0
Whether systematic:				
Reporting "yes".....	5,600	2.7	25,000	2.0
Reporting "no".....	198,766	97.3	1,216,300	98.0

STATE TABLE 12.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FEDERAL AGENCY GIVING AID IN MAINTENANCE, 1940

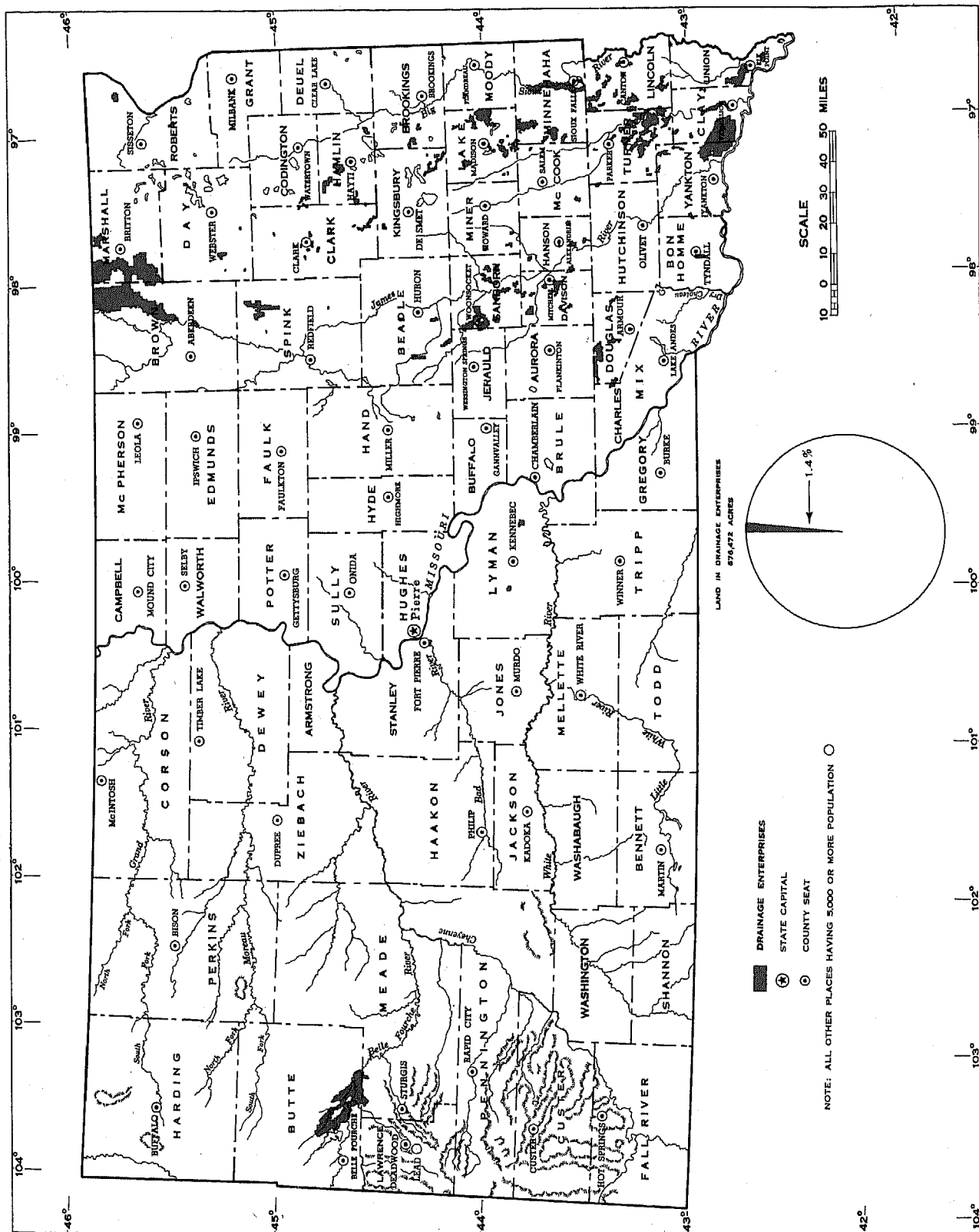
AGENCY	Land in enterprises	Capital invested	DRAINAGE WORKS		
			Ditches	Tile	Levees
All enterprises reporting Federal aid received.....	Acres 67,481	Dollars 334,000	Miles 129.0	Miles .....	Miles .....
Work Projects Administration.....	67,481	334,000	129.0	.....	.....





# SOUTH DAKOTA

## LOCATION OF LAND IN DRAINAGE ENTERPRISES







# CENSUS OF DRAINAGE—SOUTH DAKOTA

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STATE TABLE 10.—COST OF OPERATION AND MAINTENANCE, BY TYPE OF DRAINAGE, 1939

TYPE OF DRAINAGE	Land in all enterprises	LAND REPORTING ON COST OF MAINTENANCE AND OPERATION			COST REPORTED		
		Total	Some cost	No cost	Total amount	Per acre on—	
						Total reporting	Area incurring
All enterprises.....	Acres 676,472	Acres 676,472	Acres 104,146	Acres 572,326	Dollars 2,311	Dollars ( <sup>1</sup> )	Dollars 0.02
Gravity drainage only.....	676,472	676,472	104,146	572,326	2,311	( <sup>1</sup> )	0.02
Open ditches only.....	483,232	483,232	23,176	460,056	115	( <sup>1</sup> )	( <sup>1</sup> )
Open ditches and levees.....	2,160	2,160	.....	2,160	.....	.....	.....
Tile drains only.....	77,465	77,465	4,920	72,545	329	( <sup>1</sup> )	0.07
Open ditches and tile drains.....	113,615	113,615	76,050	37,565	1,867	0.02	0.02
Pumping for all or part of drainage.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> Less than 1/2 cent per acre.

STATE TABLE 11.—LAND AND CAPITAL INVESTED, BY METHOD OF MAINTENANCE AND BY WHETHER MAINTENANCE IS SYSTEMATIC, JAN. 1, 1940

MAINTENANCE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	676,472	100.0	5,078,771	100.0
Method:				
By district forces.....	636,912	94.2	5,008,197	98.6
"None," or not reporting.....	39,560	5.8	70,574	1.4
Whether systematic:				
Reporting "yes".....	636,912	94.2	5,008,197	98.6
Reporting "no".....	39,560	5.8	70,574	1.4

STATE TABLE 12.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY OWNERSHIP OF POWER EQUIPMENT FOR MAINTENANCE, 1940

ITEM	All enterprises	ENTERPRISES OWNING POWER EQUIPMENT	
		Amount	Percent
Land in enterprises.....acres....	676,472	74,186	11.0
Capital invested.....dollars..	5,078,771	821,315	16.2
Drainage works:			
Open ditches.....miles....	840.7	206.8	24.8
Tile drains.....miles....	335.6	18.2	5.4
Levees.....miles....	7.4	.....	.....







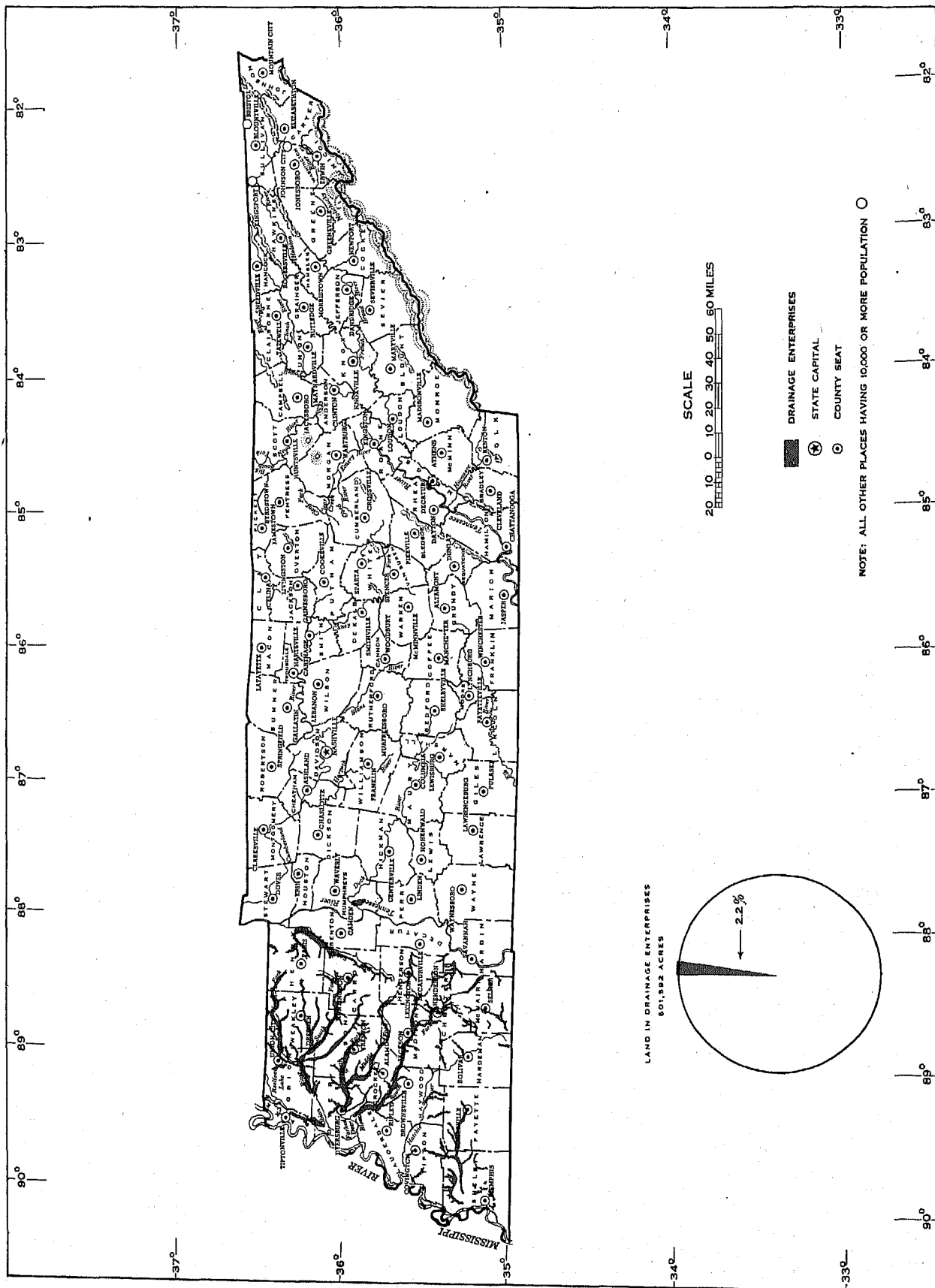






# TENNESSEE

## LOCATION OF LAND IN DRAINAGE ENTERPRISES







# CENSUS OF DRAINAGE — TENNESSEE

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STATE TABLE 11.—LAND AND CAPITAL INVESTED, BY METHOD OF MAINTENANCE AND BY WHETHER MAINTENANCE IS SYSTEMATIC, JAN. 1, 1940

MAINTENANCE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	601,502	100.0	8,501,750	100.0
Method:				
By district forces.....	6,808	1.1	1,700	( <sup>1</sup> )
Work apportioned to landowners.....	28,125	4.7	160,497	2.5
"None," or not reporting.....	566,659	94.2	6,339,653	97.5
Whether systematic:				
Reporting "yes".....	34,933	5.8	162,197	2.5
Reporting "no".....	562,504	93.5	6,308,058	97.0
Not reporting.....	4,155	0.7	31,485	0.5

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

STATE TABLE 12.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FEDERAL AGENCY GIVING AID IN MAINTENANCE, 1940

AGENCY	Land in enterprises	Capital invested	DRAINAGE WORKS		
			Ditches	Title	Levees
All enterprises reporting Federal aid received.....	Acres 21,064	Dollars 29,304	Miles 31.2	Miles .....	Miles .....
Work Projects Administration.....	21,064	29,304	31.2	.....	.....

STATE TABLE 13.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FLOOD PROTECTION FROM LEVEES OF AN OUTSIDE AGENCY, 1940

ITEM	All enterprises	ENTERPRISES PROTECTED BY OUTSIDE AGENCY	
		Amount	Percent
Land in enterprises.....acres....	601,592	13,150	0.5
Capital invested.....dollars..	6,501,750	33,150	0.5
Drainage works:			
Open ditches.....miles....	1,508.0	5.0	0.3
Title drains.....miles....	.....	.....	.....
Levees.....miles....	30.0	.....	.....

<sup>1</sup> The land actually dependent upon outside agencies for protection is 1,250 acres, which is 39.7 percent of all land in these protected enterprises.



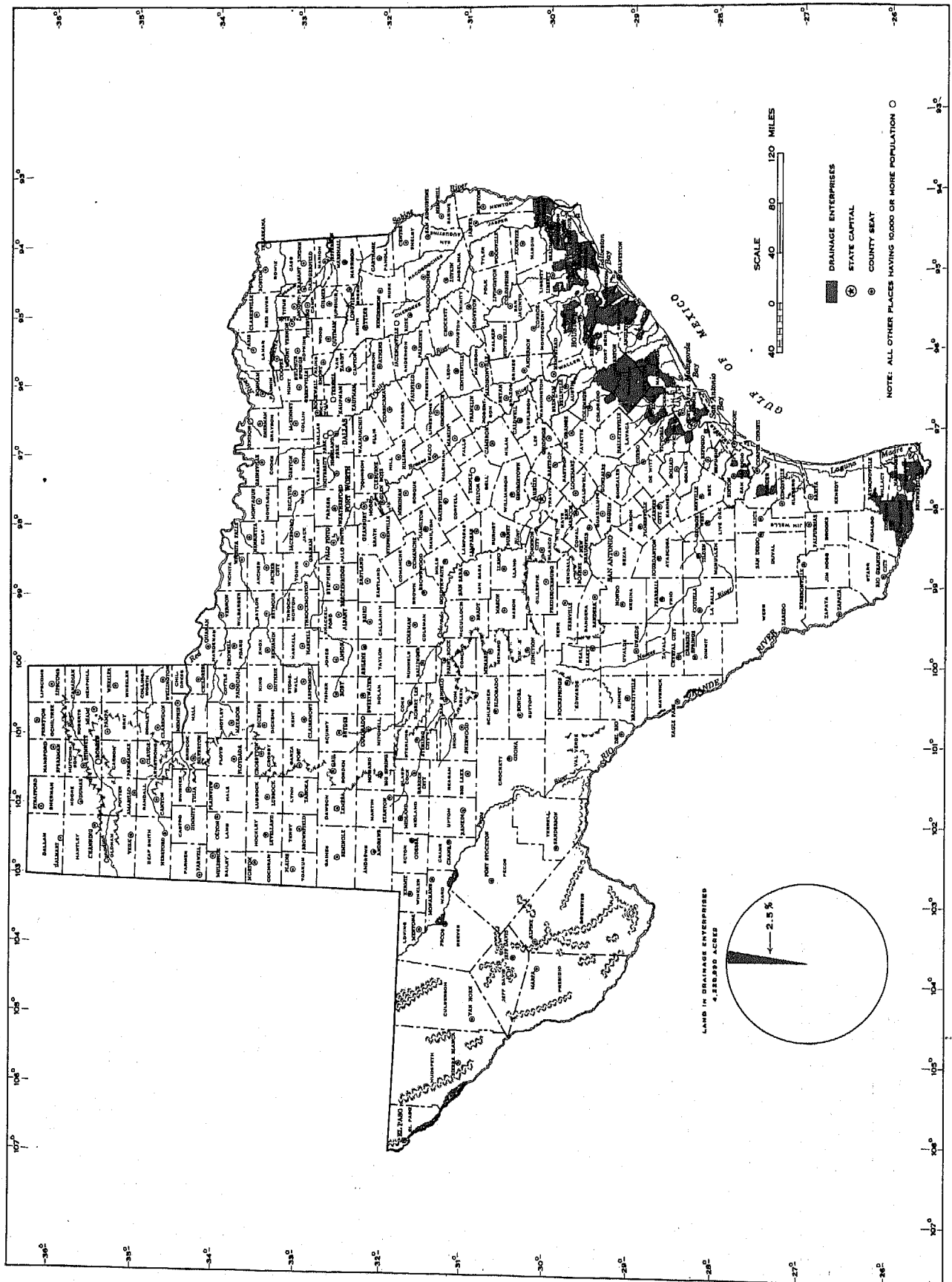






# TEXAS

## LOCATION OF LAND IN DRAINAGE ENTERPRISES









## CENSUS OF DRAINAGE—TEXAS

STATE TABLE 14.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY OWNERSHIP OF POWER EQUIPMENT FOR MAINTENANCE, 1940

ITEM	All enterprises	ENTERPRISES OWNING POWER EQUIPMENT	
		Amount	Percent
Land in enterprises.....acres....	4,218,850	2,582,151	61.2
Capital invested.....dollars..	14,047,181	7,735,373	55.1
Drainage works:			
Open ditches.....miles....	4,906.3	2,672.5	54.5
Tile drains.....miles....	14.1	13.1	93.9
Levees.....miles....	61.7	12.0	19.4

STATE TABLE 15.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FEDERAL AGENCY GIVING AID IN MAINTENANCE, 1940

AGENCY	Land in enterprises	Capital invested	DRAINAGE WORKS		
			Ditches	Tile	Levees
All enterprises reporting Federal aid received.....	Acres 1,156,080	Dollars 1,983,291	Miles 1,055.5	Miles 1.1	Miles .....
Work Projects Administration.....	1,156,080	1,983,291	1,055.5	1.1	.....
Other kind or combination.....	.....	.....	.....	.....	.....

STATE TABLE 16.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FLOOD PROTECTION FROM LEVEES OF AN OUTSIDE AGENCY, 1940

ITEM	All enterprises	ENTERPRISES PROTECTED BY OUTSIDE AGENCY	
		Amount	Percent
Land in enterprises.....acres....	4,218,850	1,461,935	10.9
Capital invested.....dollars..	14,047,181	4,166,111	29.6
Drainage works:			
Open ditches.....miles....	4,906.3	902.2	18.4
Tile drains.....miles....	14.1	8.1	57.4
Levees.....miles....	61.7	1.0	1.6

<sup>1</sup>The land actually dependent upon outside agencies for protection is 339,539 acres, which is 84.3 percent of all land in these protected enterprises.









## CENSUS OF DRAINAGE—TEXAS

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COUNTY TABLE II.—DRAINAGE ENTERPRISES—WORKS AND CAPITAL INVESTED, 1940, 1930, AND 1920; AND MAINTENANCE AND OPERATION, AND FINANCIAL CONDITION, 1939—Continued

ITEM (See definitions in Introduction)		Fannin	Fort Bend	Galveston	Harris	Hidalgo	Jackson	Lamar
DRAINAGE WORKS								
1	Drainage enterprises.....number.....1940..	3	3	3	11	4	6	3
2	Open ditches:							
3	Completed.....miles.....1940..	60.1	130.0	120.0	746.0	542.9	399.0	19.0
4	.....1930..	10.0	65.0	195.0	484.5	(1)	630.0	57.0
5	.....1920..		177.0	80.0	407.0	25.0	537.5	
6	Additional length authorized.....miles.....1940..		4.0			64.0		
7	Tile drains:							
8	Completed.....miles.....1940..		0.1					
9	.....1930..							
10	.....1920..							
11	Additional length authorized.....miles.....1940..							
12	Levees and dikes:							
13	Completed.....miles.....1940..	4.7	8.0			(4)		1.0
14	.....1930..	31.8	8.0				1.0	45.0
15	.....1920..					15.0		
16	Additional length authorized.....miles.....1940..							
17	Pumping plants:							
18	Engine capacity.....horsepower.....1940..							
19	.....1930..							
20	.....1920..							
21	Pump capacity.....gal. per min.....1940..							
22	.....1930..							
23	.....1920..							
24	Land served by pumps.....acres.....1940..							
25	.....1930..							
26	.....1920..							
27	Wells pumped for drainage.....number.....1940..							
28	.....1930..							
29	.....1920..							
30	CAPITAL INVESTED							
31	Capital invested to January 1.....dollars.....1940..	331,900	482,000	146,980	1,278,000	1,786,841	575,950	374,010
32	.....1930..	303,000	565,000	183,000	1,294,000	(1)	522,572	401,041
33	.....1920..		180,000	165,000	615,000	176,000	453,452	
34	Estimated cost when completed.....dollars.....1940..	331,900	483,800	146,980	1,278,000	1,930,391	575,950	374,010
35	.....1930..	303,000	565,000	183,000	1,294,000	(1)	522,572	401,041
36	.....1920..		180,000	165,000	615,000	176,000	453,452	
37	Average cost per acre when completed.....dollars.....1940..	18.70	10.87	1.29	3.70	4.66	3.98	25.56
38	.....1930..	18.25	13.53	1.75	3.94	(1)	3.25	22.51
39	.....1920..		4.88	1.76	2.58	0.49	3.29	
40	Invested in and required for completion, 1940:							
41	Enterprises having open ditches only.....dollars.....		232,000	146,980	1,278,000	1,930,391	575,950	345,960
42	Average amount per acre.....dollars.....		8.11	1.29	3.70	4.66	3.98	26.20
43	Enterprises having open ditches and levees.....dollars.....	331,900	251,800					28,050
44	Average amount per acre.....dollars.....	18.70	15.82					19.64
45	Enterprises having tile only.....dollars.....							
46	Average amount per acre.....dollars.....							
47	Enterprises having tile and levees.....dollars.....							
48	Average amount per acre.....dollars.....							
49	Enterprises having open ditches and tile.....dollars.....							
50	Average amount per acre.....dollars.....							
51	Enterprises having ditches, tile, and levees.....dollars.....							
52	Average amount per acre.....dollars.....							
53	Enterprises operating pumping plants.....dollars.....							
54	Average amount per acre.....dollars.....							
55	MAINTENANCE AND OPERATION							
56	Cost of maintenance and operation in 1939:							
57	By enterprises operating pumping plants.....dollars.....							
58	Enterprises reporting.....number.....							
59	Land in these enterprises.....acres.....							
60	Average cost per acre.....dollars.....		(2)	13,690	77,258	11,070	9,331	
61	By enterprises not operating pumping plants.....dollars.....							
62	Enterprises reporting.....number.....		1	3	10	4	5	
63	Land in these enterprises.....acres.....		(2)	113,500	340,720	376,438	137,500	
64	Average cost per acre.....dollars.....		(2)	0.12	0.23	0.03	0.07	
65	Federal aid in maintenance:							
66	Enterprises reporting.....number.....				11		(3)	1
67	Land in these enterprises.....acres.....				344,920			
68	FINANCIAL CONDITION							
69	Drainage taxes collected in 1939.....dollars.....	5,898	(2)	13,666	149,087	(2)	35,425	8,007
70	Enterprises reporting.....number.....	3	2	3	11	1	6	3
71	Land in these enterprises.....acres.....	17,744	(2)	113,500	344,920	(2)	170,500	14,631
72	Average amount collected per acre.....dollars.....	0.33	(2)	0.12	0.43	(2)	0.21	0.55
73	Area delinquent in drainage taxes, Dec. 31, 1939.....acres.....	4,120		3,900	39,003	(2)	14,000	1,972
74	Enterprises reporting.....number.....	3		3	10	1	6	3
75	Land in these enterprises.....acres.....	17,744		113,500	340,720	(2)	170,500	14,631
76	Portion delinquent in these enterprises.....percent.....	23.2		3.4	11.4	(2)	8.2	13.5
77	Total indebtedness, Dec. 31, 1939.....dollars.....	97,700	222,551		349,500	(2)	135,572	128,040
78	Enterprises reporting.....number.....	3	3		7	1	5	3
79	Land in these enterprises.....acres.....	17,744	44,513		127,420	(2)	137,500	14,631
80	Average indebtedness per acre.....dollars.....	5.51	5.00		2.74	(2)	0.98	8.75
81	Indebtedness in arrears, Dec. 31, 1939.....dollars.....							
82	Enterprises reporting.....number.....							
83	Land in these enterprises.....acres.....							
84	Average arrearage per acre.....dollars.....							
85	Reduction of debt by refinancing, prior to 1940.....dollars.....	208,485				(2)		161,710
86	Enterprises reporting.....number.....	3				1		3
87	Land in these enterprises.....acres.....	17,744				(2)		14,631
88	Average reduction per acre.....dollars.....	11.75				(2)		11.05

1 Included in "Other counties."

2 Included with "Other counties" to avoid disclosure of an individual enterprise.

3 Where there are less than 3 enterprises reporting, data are included only in State totals, except as stated in footnote 2.

## CENSUS OF DRAINAGE—TEXAS

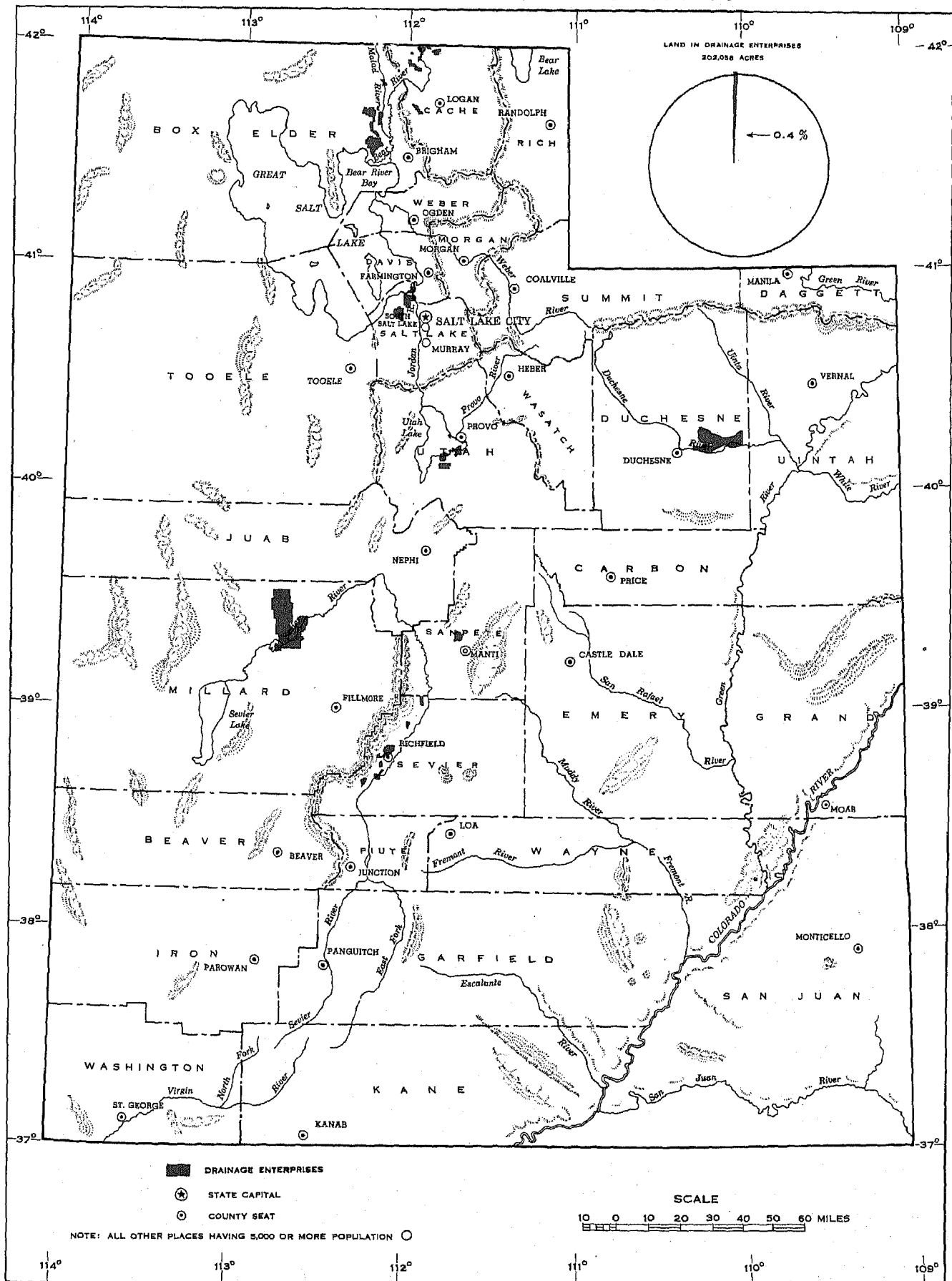
COUNTY TABLE II.—DRAINAGE ENTERPRISES—WORKS AND CAPITAL INVESTED, 1940, 1930, AND 1920; AND MAINTENANCE AND OPERATION, AND FINANCIAL CONDITION, 1939—Continued

ITEM (See definitions in Introduction)		Matagorda	Orange <sup>1</sup>	San Patricio	Victoria	Wichita <sup>1</sup>	Willacy <sup>1</sup>	Other counties <sup>2</sup>
<b>DRAINAGE WORKS</b>								
1	Drainage enterprises.....number.....1940..	4	1	3	4	1	1	15
2	Open ditches:							
3	Completed.....miles.....1940..	249.0	85.0	108.0	213.0	7.0	28.3	843.5
4	.....1930..	241.0		42.5	222.0	5.5		756.5
5	.....1920..	210.4	30.0		195.0			300.4
6	Additional length authorized.....miles.....1940..						60.0	50.0
7	Tile drains:							
8	Completed.....miles.....1940..							8.4
9	.....1930..							
10	.....1920..							
11	Additional length authorized.....miles.....1940..							
12	Levees and dikes:							
13	Completed.....miles.....1940..	26.0			12.0			70.6
14	.....1930..	26.0						1.8
15	.....1920..	26.0	1.0					
16	Additional length authorized.....miles.....1940..							
17	Pumping plants:							
18	Engine capacity.....horsepower.....1940..							30
19	.....1930..							450
20	.....1920..							
21	Pump capacity.....gal. per min.....1940..							6,732
22	.....1930..							13,830
23	.....1920..							
24	Land served by pumps.....acres.....1940..							3,500
25	.....1930..							20,279
26	.....1920..							
27	Wells pumped for drainage.....number.....1940..							2
28	.....1930..							44
<b>CAPITAL INVESTED</b>								
29	Capital invested to January 1.....dollars.....1940..	513,853	611,000	183,000	271,488	27,500	176,150	2,409,893
30	.....1930..	946,600		139,500	263,352	27,500		2,952,116
31	.....1920..	675,824	24,600		215,880			655,929
32	Estimated cost when completed.....dollars.....1940..	513,853	611,000	183,000	271,488	27,500	290,800	2,600,990
33	.....1930..	946,600		139,500	263,352	27,500		2,955,795
34	.....1920..	675,824	24,600		215,880			755,929
35	Average cost per acre when completed.....dollars.....1940..	2.42	2.94	3.13	2.00	8.25	7.92	2.08
36	.....1930..	4.40		4.48	2.08	8.25		2.74
37	.....1920..	3.03	1.12		1.62			2.66
38	Invested in and required for completion, 1940:							
39	Enterprises having open ditches only.....dollars..	366,940	611,000	183,000	255,461	27,500	290,800	2,100,990
40	Average amount per acre.....dollars..	2.68	2.94	3.13	2.46	8.25	7.92	1.71
41	Enterprises having open ditches and levees.....dollars..	146,913			16,027			
42	Average amount per acre.....dollars..	1.95			0.50			
43	Enterprises having tile only.....dollars..							
44	Average amount per acre.....dollars..							
45	Enterprises having tile and levees.....dollars..							
46	Average amount per acre.....dollars..							
47	Enterprises having open ditches and tile.....dollars..							
48	Average amount per acre.....dollars..							
49	Enterprises having ditches, tile, and levees.....dollars..							
50	Average amount per acre.....dollars..							
51	Enterprises operating pumping plants <sup>3</sup> .....dollars..							500,000
52	Average amount per acre.....dollars..							25.00
<b>MAINTENANCE AND OPERATION</b>								
53	Cost of maintenance and operation in 1939:							
54	By enterprises operating pumping plants.....dollars..							
55	Enterprises reporting.....number..							
56	Land in these enterprises.....acres..							
57	Average cost per acre.....dollars..							
58	By enterprises not operating pumping plants.....dollars..	10,938	1,150	8,450	30,625	316		118,344
59	Enterprises reporting.....number..	4	1	3	3	1		13
60	Land in these enterprises.....acres..	212,380	208,000	58,407	130,844	3,332		1,238,777
61	Average cost per acre.....dollars..	0.05	0.01	0.14	0.23	0.09		0.10
62	Federal aid in maintenance:							
63	Enterprises reporting.....number..							2
64	Land in these enterprises.....acres..							(5)
<b>FINANCIAL CONDITION</b>								
65	Drainage taxes collected in 1939.....dollars..	15,483	83,322	26,590	48,033	3,147		309,544
66	Enterprises reporting.....number..	4	1	3	3	1		12
67	Land in these enterprises.....acres..	212,380	208,000	58,407	103,813	3,332		1,188,564
68	Average amount collected per acre.....dollars..	0.07	0.40	0.46	0.46	0.94		0.26
69	Area delinquent in drainage taxes, Dec. 31, 1939.....acres..	31,011	40,000	4,300	7,600	1,717		56,620
70	Enterprises reporting.....number..	4	1	3	3	1		11
71	Land in these enterprises.....acres..	212,380	208,000	58,407	103,813	3,332		1,188,088
72	Portion delinquent in these enterprises.....percent..	14.6	19.2	7.4	7.3	51.5		4.8
73	Total indebtedness, Dec. 31, 1939.....dollars..	(5)	300,225	152,000	104,781	20,560		71,605,277
74	Enterprises reporting.....number..	(5)	1	3	3	1		12
75	Land in these enterprises.....acres..	(5)	208,000	58,407	103,813	3,332		71,605,277
76	Average indebtedness per acre.....dollars..	(5)	1.44	2.60	1.01	6.17		71.00
77	Indebtedness in arrears, Dec. 31, 1939.....dollars..					2,560		(5)
78	Enterprises reporting.....number..					1		1
79	Land in these enterprises.....acres..					3,332		(5)
80	Average arrearage per acre.....dollars..					0.77		(5)
81	Reduction of debt by refinancing, prior to 1940.....dollars..							(5)
82	Enterprises reporting.....number..							1
83	Land in these enterprises.....acres..							(5)
84	Average reduction per acre.....dollars..							(5)

<sup>1</sup> For counties having less than 3 enterprises reporting, statistics are shown only by written permission of each enterprise affected. <sup>2</sup> Includes Austin, Colorado, Hudspeth, Jefferson, Lampasas, Liberty, Maverick, Nueces, Realito, Ward, and Wharton Counties in 1940; Bowie, Chambers, Colorado, De Witt, Henderson, Hidalgo, Hudspeth, Jefferson, Liberty, Nueces, Red River, Realito, Ward, and Wharton Counties in 1930; and Colorado, De Witt, Henderson, Jefferson, Liberty, Nueces, Ward, and Wharton Counties in 1920. <sup>3</sup> Data in lines 46 and 47 are not included in lines 34 to 45. <sup>4</sup> Includes enterprises in Chambers and Fort Bend Counties to avoid disclosures with respect to individual enterprises; also includes 1 enterprise operating pumping plant reporting cost of operation and maintenance. <sup>5</sup> Where there are less than 3 enterprises reporting, data are included only in State totals, except as stated in footnotes 1, 4, and 6. <sup>6</sup> Included with "Other counties." <sup>7</sup> Includes data for enterprises in Hidalgo and Matagorda Counties to avoid disclosures of individual enterprises.

# UTAH

## LOCATION OF LAND IN DRAINAGE ENTERPRISES



## CENSUS OF DRAINAGE—UTAH

STATE TABLE 1.—SUMMARY OF DRAINAGE FOR THE STATE: JAN. 1, 1940, 1930, AND 1920

ITEM (See definitions in Introduction)	CENSUS OF—			INCREASE OR DECREASE (—)			
	1940	1930	1920	1930-1940		1920-1930	
				Amount	Percent	Amount	Percent
Approximate land area of State.....acres....	52,701,440	52,597,760	52,597,760	.....	.....	.....	.....
Land in drainage enterprises.....acres....	202,058	156,052	113,823	46,006	29.5	42,220	37
Improved.....acres....	135,686	137,962	97,314	-2,286	-1.7	40,648	41
Unimproved:							
Timber and cut-over.....acres....	300	4,759	.....	-4,459	-93.7	.....	.....
Other.....acres....	66,092	13,331	16,509	52,761	395.8	-3,178	-10
Drainage sufficient for normal crop.....acres....	123,237	142,941	( <sup>1</sup> )	-19,704	-13.8	.....	.....
Partly drained, for partial crop.....acres....	37,659	7,511	( <sup>1</sup> )	30,148	401.4	.....	.....
Unfit to raise any crop for lack of drainage.....acres....	41,162	5,600	28,181	35,562	635.0	-82,581	-63
In occupied farms.....acres....	140,148	109,518	( <sup>1</sup> )	30,630	28.0	.....	.....
In planted crops.....acres....	95,451	90,368	( <sup>1</sup> )	5,083	5.6	.....	.....
Idle.....acres....	35,768	60,946	( <sup>1</sup> )	-25,178	-41.3	.....	.....
Available for settlement.....acres....	7,259	20,651	( <sup>1</sup> )	-13,392	-64.8	.....	.....
Open ditches, completed.....miles....	267.8	304.3	120.3	-36.5	-12.0	184.0	153
Tile drains, completed.....miles....	1,618.6	1,944.5	599.1	-325.9	-16.8	1,345.4	224
Capital invested in enterprises.....dollars..	4,869,273	4,772,000	1,005,473	97,273	2.0	3,766,527	374
Average per acre.....dollars..	24.10	30.58	8.83	-6.48	-21.2	21.75	246

<sup>1</sup> Not available.<sup>2</sup> Reported as "Swampy, subject to overflow, seeped, or alkali."

STATE TABLE 2.—AREA OF ENTERPRISES, BY SIZE: JAN. 1, 1940, 1930, AND 1920

[For intercounty enterprises the portion in each county is tabulated as a separate enterprise]

SIZE	AREA OF ENTERPRISES <sup>1</sup>			Land in enterprises <sup>2</sup> 1940	SIZE	AREA OF ENTERPRISES <sup>1</sup>			Land in enterprises <sup>2</sup> 1940
	1940	1930	1920			1940	1930	1920	
All enterprises.....	Acres 204,150	Acres 156,052	Acres 113,823	Acres 202,058		Acres 12,864	Acres 53,081	Acres 29,104	Acres 12,8
100 to 199 acres.....	125	190	.....	125	1,000 to 1,999 acres.....	46,831	.....	.....	12,8
200 to 499 acres.....	378	.....	.....	378	2,000 to 4,999 acres.....	11,292	15,545	5,280	10,6
500 to 999 acres.....	3,020	1,831	1,749	3,020	5,000 to 9,999 acres.....	22,299	85,405	77,690	22,2
					10,000 to 19,999 acres.....	107,361	.....	.....	107,3
					20,000 to 49,999 acres.....	.....	.....	.....	.....

<sup>1</sup> The sum of the areas in the individual enterprises, without deducting for overlapping.<sup>2</sup> Overlapping eliminated by tabulating each enterprise according to its acreage not included in later enterprises.

STATE TABLE 3.—LAND AND CAPITAL INVESTED, BY CHARACTER OF ENTERPRISE, JAN. 1, 1940

CHARACTER OF ENTERPRISE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	202,058	100.0	4,869,273	100
Drainage districts.....	148,677	73.6	4,617,869	94
Irrigation enterprises—Federal.....	41,361	20.5	57,304	1
Individually owned projects.....	12,020	5.9	194,100	4

STATE TABLE 4.—LAND AND CAPITAL INVESTED, BY TYPE OF DRAINAGE: JAN. 1, 1940, 1930, AND 1920

TYPE OF DRAINAGE <sup>1</sup>	LAND IN ENTERPRISES				CAPITAL INVESTED IN ENTERPRISES					
	1940		1930		1920		1940		1930	
All enterprises.....	Acres 202,058	Percent 100.0	Acres 156,052	Percent 100.0	Acres 113,823	Percent 100.0	Dollars 4,869,273	Percent 100.0	Dollars 4,772,000	Percent 100.0
Gravity drainage only by—										
Open ditches.....	62,797	31.1	19,324	12.4	1,050	0.9	350,834	7.2	254,900	5.3
Tile drains.....	25,350	12.5	12,210	7.8	4,321	3.8	670,325	13.8	305,000	6.4
Open ditches and tile drains..	113,911	56.4	124,518	79.8	108,452	95.3	3,848,014	79.0	4,212,100	88.3

<sup>1</sup> Each item includes those enterprises that have provided levees in addition to the kind of drains specified.

STATE TABLE 5.—LAND, CAPITAL INVESTED, AND AREA DELINQUENT IN DRAINAGE TAXES, BY ARREARAGE IN PAYMENT OF OBLIGATIONS: JAN. 1, 1940 AND 1930

FINANCIAL STATUS	LAND IN ENTERPRISES				CAPITAL INVESTED				AREA DELINQUENT <sup>1</sup>	
	1940		1930		1940		1930		1940	1930
All enterprises.....	Acres 202,058	Percent 100.0	Acres 156,052	Percent 100.0	Dollars 4,869,273	Percent 100.0	Dollars 4,772,000	Percent 100.0	Acres 49,787	Acres 95.1
Enterprises in arrears—with some delinquent land.....	74,501	36.9	102,651	65.8	2,777,414	57.0	3,799,100	79.6	46,550	90.1
Enterprises not in arrears.....	127,557	63.1	53,401	34.2	2,091,859	43.0	972,900	20.4	3,217	5.1
With some delinquent land.....	28,856	13.3	30,991	19.8	554,155	11.4	615,000	12.9	3,217	5.1
With no delinquent land.....	98,101	48.5	18,110	11.6	1,472,704	30.3	327,900	6.9	.....	.....
With no report on delinquency.....	2,600	1.3	4,900	2.8	65,000	1.3	30,000	0.6	.....	.....

<sup>1</sup> If any land is delinquent in 2 or more overlapping enterprises, the acreage delinquent is too large by the amount of such duplication.

# CENSUS OF DRAINAGE—UTAH

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STATE TABLE 6.—LAND, CAPITAL INVESTED, INDEBTEDNESS, ARREARAGE IN PAYMENT OF BONDS, REDUCTION OF DEBT BY REFINANCING, AND ACREAGE DELINQUENT, 1940; DRAINAGE TAXES COLLECTED IN 1939; BY INDEBTEDNESS AND ARREARAGE, JAN. 1, 1940

FINANCIAL STATUS	Land in enterprises	Capital invested	Indebtedness	Arrearage in payment of bonds	Reduction of debt by refinancing	Delinquent in drainage taxes <sup>1</sup>	Drainage taxes collected in 1939
	Acres	Dollars	Dollars	Dollars	Dollars	Acres	Dollars
All enterprises.....	202,058	4,869,273	2,769,190	2,317,670	33,500	49,767	34,540
Enterprises in debt.....	107,119	3,516,639	2,709,190	2,317,670	31,500	49,078	32,910
In arrears, amount of arrearage stated.....	74,501	2,777,414	2,547,690	2,317,670	.....	46,550	14,903
Collecting drainage taxes in 1939.....	61,688	2,342,314	2,210,690	2,190,690	.....	33,717	14,903
No collections reported.....	12,833	435,100	337,000	126,980	.....	12,533	.....
Not in arrears.....	32,618	739,125	221,500	.....	31,500	2,528	18,007
Collecting drainage taxes in 1939.....	25,050	503,000	164,500	.....	26,500	1,686	18,007
No collections reported.....	7,568	236,125	57,000	.....	6,000	862	.....
Enterprises not in debt.....	91,152	1,283,734	.....	.....	.....	689	1,280
Collecting drainage taxes in 1939.....	17,066	229,530	.....	.....	.....	689	1,280
No collections reported.....	74,086	1,054,204	.....	.....	.....	.....	.....
Enterprises not reporting as to debt.....	3,787	69,000	.....	.....	2,000	.....	350
Collecting drainage taxes in 1939.....	1,187	4,000	.....	.....	2,000	.....	350
No collections reported.....	2,600	65,000	.....	.....	.....	.....	.....

<sup>1</sup>If any land is delinquent in 2 or more overlapping enterprises, the acreage delinquent is too large by the amount of such duplication.

STATE TABLE 7.—LAND AND CAPITAL INVESTED, BY PRINCIPAL PURPOSE OF DRAINAGE, JAN. 1, 1940

PURPOSE OF DRAINAGE	Land		Capital invested		PURPOSE OF DRAINAGE	Land		Capital invested	
	Acres	Percent	Dollars	Percent		Acres	Percent	Dollars	Percent
All enterprises.....	202,058	100.0	4,869,273	100.0	Protection against overflow.....	6,281	3.1	76,775	1.6
Improvement of land already in farms... Reclamation of swamp land not previously in farms.....	75,517 2,050	37.4 1.0	2,501,394 60,000	51.4 1.2	Removal of alkali or seepage from irrigation.....	118,210	58.5	2,231,104	45.8

STATE TABLE 8.—LAND AND CAPITAL INVESTED, BY DATE OF ORGANIZATION, JAN. 1, 1940

DATE OF ORGANIZATION	Land <sup>1</sup>		Area of enterprises		Capital invested	
	Acres	Percent	Total acres <sup>2</sup>	Overlapped acres	Dollars	Percent
All enterprises.....	202,058	100.0	204,150	2,092	4,869,273	100.0
1900-1904.....	3,500	1.7	3,500	.....	50,000	1.0
1905-1909.....	41,361	20.5	41,361	.....	57,304	1.2
1910-1914.....	9,200	4.6	11,292	2,092	405,000	8.3
1915-1919.....	95,166	47.1	95,166	.....	3,114,639	64.0
1920-1924.....	27,928	13.8	27,928	.....	486,630	10.0
1925-1929.....	22,600	11.2	22,600	.....	728,100	14.9
1930-1934.....	1,925	0.9	1,925	.....	22,600	0.5
1935-1939.....	378	0.2	378	.....	5,000	0.1

<sup>1</sup>Land included in more than 1 enterprise is tabulated only in the last organized.

<sup>2</sup>The sum of the areas of the individual enterprises.

STATE TABLE 9.—DRAINAGE CONDITION, DEVELOPMENT, AND USE OF LAND IN ENTERPRISES, BY DATE OF ORGANIZATION, 1939

DATE OF ORGANIZATION	Land in all enterprises <sup>1</sup>	DRAINAGE CONDITION				DEVELOPMENT				USE OF LAND				
		Drained		Partly drained	Undrained	Improved land		Timber and cut-over land	Other un-improved land	In occupied farms		In planted crops	Idle	Land available for settlement
All enterprises..	Acres	Acres	Per-cent	Acres	Acres	Acres	Per-cent	Acres	Acres	Acres	Per-cent	Acres	Acres	Acres
	202,058	123,237	61.0	37,059	41,162	135,686	67.1	300	66,092	140,148	69.4	95,451	35,768	7,259
1900-1904.....	3,500	3,500	100.0	.....	.....	3,500	100.0	.....	.....	3,500	100.0	3,500	.....	.....
1905-1909.....	41,361	5,246	12.7	10,815	25,301	10,490	25.4	.....	30,371	10,490	25.4	10,490	.....	.....
1910-1914.....	9,200	6,267	68.1	2,231	702	9,200	100.0	.....	.....	9,800	95.6	7,837	884	.....
1915-1919.....	95,166	66,333	69.7	24,413	4,420	63,394	66.6	300	31,482	64,627	67.9	40,804	33,082	7,259
1920-1924.....	27,928	23,989	85.9	200	3,739	24,189	86.6	.....	3,739	27,928	99.6	21,917	1,822	.....
1925-1929.....	22,600	15,600	69.0	.....	7,000	22,600	100.0	.....	.....	22,600	100.0	8,600	.....	.....
1930-1934.....	1,925	1,925	100.0	.....	.....	1,925	100.0	.....	.....	1,925	100.0	1,925	.....	.....
1935-1939.....	378	378	100.0	.....	.....	378	100.0	.....	.....	378	100.0	378	.....	.....

<sup>1</sup>Land included in more than 1 enterprise is tabulated only in the last organized.

## CENSUS OF DRAINAGE—UTAH

STATE TABLE 10.—LAND AND CAPITAL INVESTED, BY METHOD OF MAINTENANCE AND BY WHETHER MAINTENANCE IS SYSTEMATIC, JAN. 1, 1940

MAINTENANCE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	202,058	100.0	4,869,273	100.0
Method:				
By district forces.....	187,002	92.5	4,392,973	90.2
Work apportioned to landowners.....	9,075	4.5	232,525	4.8
"None," or not reporting.....	5,981	3.0	243,775	5.0
Whether systematic:				
Reporting "yes".....	165,475	81.9	3,474,173	71.3
Reporting "no".....	36,583	18.1	1,395,100	28.7

STATE TABLE 11.—COST OF OPERATION AND MAINTENANCE, BY TYPE OF DRAINAGE, 1939

TYPE OF DRAINAGE	Land in all enterprises	LAND REPORTING ON COST OF MAINTENANCE AND OPERATION			COST REPORTED		
		Total	Some cost	No cost	Total amount	Per acre on—	
						Total reporting	Area incurring
All enterprises.....	Acres 202,058	Acres 198,258	Acres 121,372	Acres 76,886	Dollars 22,100	Dollars 0.11	Dollars 0.19
Gravity drainage only.....	202,058	198,258	121,372	76,886	22,100	0.11	0.19
Open ditches only.....	62,797	62,797	17,536	45,261	3,064	0.05	0.17
Tile drains only.....	26,350	21,550	16,650	4,900	1,400	0.06	0.09
Open ditches and tile drains.....	101,911	101,911	75,186	26,725	16,636	0.16	0.22
Open ditches, tile drains, and levees.....	12,000	12,000	12,000	.....	1,000	0.08	0.09

STATE TABLE 12.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY OWNERSHIP OF POWER EQUIPMENT FOR MAINTENANCE, 1940

ITEM	All enterprises	ENTERPRISES PROTECTED BY OUTSIDE AGENCY	
		Amount	Percent
Land in enterprises.....acres....	202,058	110,361	59.1
Capital invested.....dollars..	4,869,273	2,534,618	52.1
Drainage works:			
Open ditches.....miles....	267.8	127.5	47.6
Tile drains.....miles....	1,618.6	1,022.0	63.1
Levees.....miles....	5.0	5.0	100.0

STATE TABLE 13.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FEDERAL AGENCY GIVING AID IN MAINTENANCE, 1940

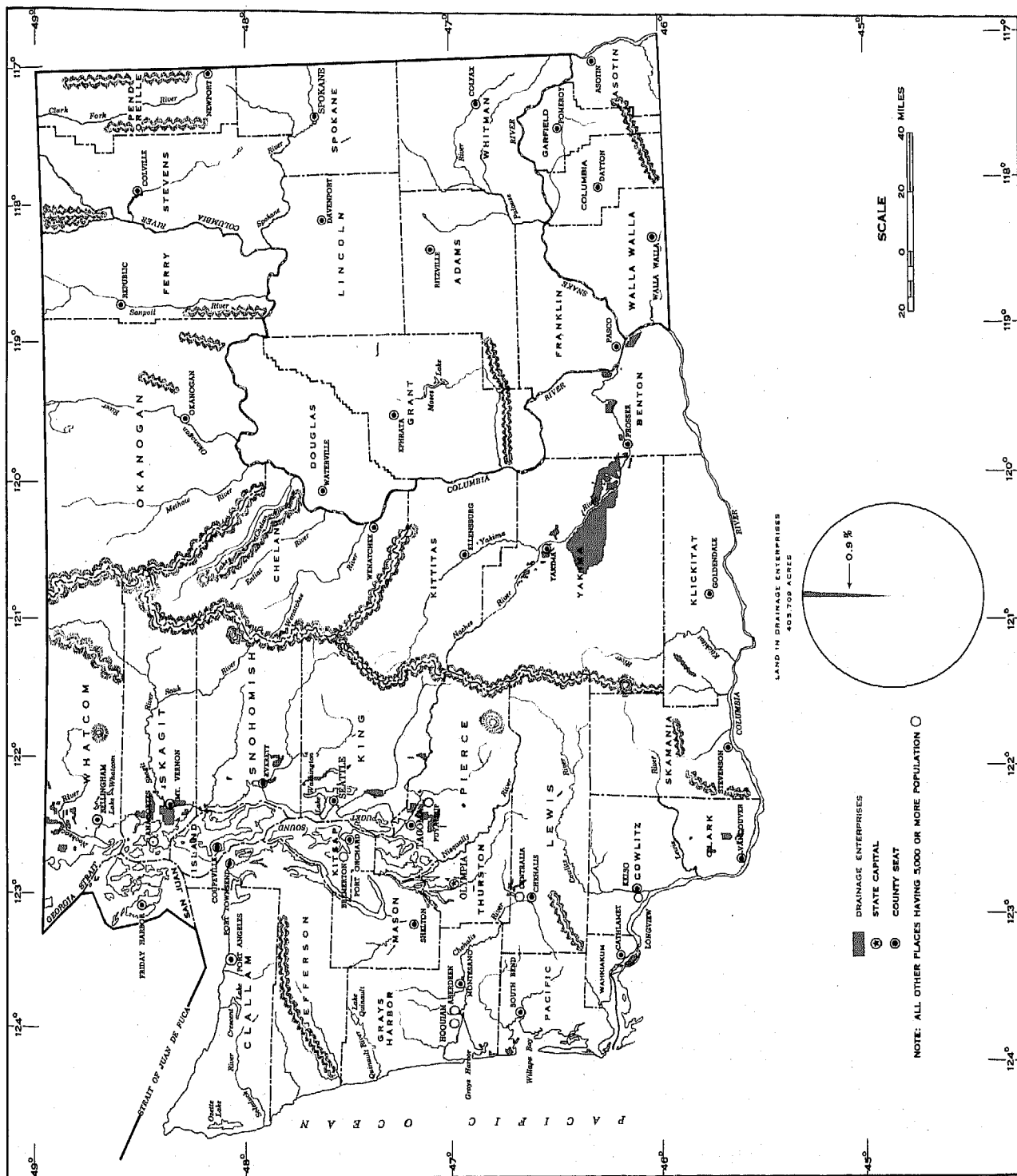
AGENCY	Land in enterprises	Capital invested	DRAINAGE WORKS		
			Ditches	Tile	Levees
All enterprises reporting Federal aid received.....	Acres 21,890	Dollars 474,000	Miles 22.2	Miles 204.9	Miles 5.0
Work Projects Administration.....	21,890	474,000	22.2	204.9	5.0





# WASHINGTON

## LOCATION OF LAND IN DRAINAGE ENTERPRISES



## CENSUS OF DRAINAGE — WASHINGTON

STATE TABLE 1.—SUMMARY OF DRAINAGE FOR THE STATE: JAN. 1, 1940, 1930, AND 1920

ITEM (See definitions in Introduction)	CENSUS OF—			INCREASE OR DECREASE (—)			
	1940	1930	1920	1930-1940		1920-1930	
				Amount	Percent	Amount	Percent
Approximate land area of State.....acres.....	42,865,280	42,775,040	42,775,040	.....	.....	.....	.....
Land in drainage enterprises.....acres.....	405,709	387,242	94,924	38,467	10.5	272,318	288.9
Improved.....acres.....	349,576	332,265	81,886	17,311	5.2	250,379	305.8
Unimproved:							
Timber and cut-over.....acres.....	39,715	18,591	860	21,184	114.3	17,681	( <sup>1</sup> )
Other.....acres.....	16,418	16,446	12,188	-28	-0.2	4,258	34.0
Drainage sufficient for normal.....acres.....	368,293	329,166	( <sup>2</sup> )	39,127	11.9	.....	.....
Partly drained, for partial crop.....acres.....	31,513	28,197	( <sup>2</sup> )	3,316	11.8	.....	.....
Unfit to raise any crop for lack of drainage.....acres.....	5,903	9,879	10,873	-3,976	-40.2	-994	-9.1
In occupied farms.....acres.....	380,964	351,898	( <sup>2</sup> )	29,066	8.2	.....	.....
In planted crops.....acres.....	332,672	309,818	( <sup>2</sup> )	22,854	7.4	.....	.....
Idle.....acres.....	13,197	33,764	( <sup>2</sup> )	-20,567	-60.9	.....	.....
Available for settlement.....acres.....	1,790	4,653	( <sup>2</sup> )	-2,863	-61.5	.....	.....
Open ditches, completed.....miles.....	885.0	746.7	193.4	138.3	18.5	584.3	359.8
Tile drains, completed.....miles.....	179.0	199.2	83.0	-20.2	-10.1	116.2	140.0
Drainage pumping plants, capacity.....horsepower.....	1,305	982	.....	323	32.9	982	.....
.....gal. per min..	240,750	184,500	.....	56,250	30.5	184,500	.....
Capital invested in enterprises.....dollars.....	5,332,842	4,637,576	1,397,419	695,266	15.0	3,240,157	231.9
Average per acre.....dollars.....	13.14	12.63	14.72	0.51	4.0	-2.09	-14.2

<sup>1</sup>Percent not shown when more than 1,000.<sup>2</sup>Not available.<sup>3</sup>Reported as "Swampy, subject to overflow, seeped, or alkali."

STATE TABLE 2.—AREA OF ENTERPRISES, BY SIZE: JAN. 1, 1940, 1930, AND 1920

[For intercounty enterprises the portion in each county is tabulated as a separate enterprise]

SIZE	AREA OF ENTERPRISES <sup>1</sup>			Land in enterprises <sup>2</sup> 1940
	1940	1930	1920	
	Acres	Acres	Acres	Acres
All enterprises.....	433,340	394,851	105,477	405,709
Less than 100 acres.....	285	156	322	285
100 to 199 acres.....	1,765	1,756	.....	1,266
200 to 499 acres.....	11,062	9,314	1,625	10,739
500 to 999 acres.....	36,322	32,331	9,161	34,571
1,000 to 1,999 acres.....	63,978	.....	.....	55,545
2,000 to 4,999 acres.....	68,828	139,169	52,820	62,531
5,000 to 9,999 acres.....	85,877	74,317	19,649	73,549
10,000 to 19,999 acres.....	10,392	.....	.....	10,392
20,000 to 49,999 acres.....	21,831	47,808	21,900	24,831
50,000 to 99,999 acres.....	.....	90,000	.....	.....
100,000 to 199,999 acres.....	132,000	.....	.....	132,000

<sup>1</sup>The sum of the areas in the individual enterprises, without deduction for overlapping.<sup>2</sup>Overlapping eliminated by tabulating each enterprise according to its acreage not included in later enterprises.

STATE TABLE 3.—LAND AND CAPITAL INVESTED, BY CHARACTER OF ENTERPRISE, JAN. 1, 1940

CHARACTER OF ENTERPRISE	Land		Capital invested		CHARACTER OF ENTERPRISE	Land		Capital invested	
	Acres	Percent	Dollars	Percent		Acres	Percent	Dollars	Percent
All enterprises.....	405,709	100.0	5,332,842	100.0	Irrigation enterprises:	.....	.....	.....	.....
Drainage districts.....	256,410	63.2	4,416,541	82.8	Federal.....	132,000	32.5	794,480	14.9
Township drains.....	7,629	1.9	69,221	1.3	Other.....	8,390	2.1	32,600	0.6
					Individually owned projects.....	1,280	0.3	20,000	0.4

STATE TABLE 4.—LAND AND CAPITAL INVESTED, BY TYPE OF DRAINAGE: JAN. 1, 1940, 1930, AND 1920

TYPE OF DRAINAGE <sup>1</sup>	LAND IN ENTERPRISES						CAPITAL INVESTED IN ENTERPRISES					
	1940		1930		1920		1940		1930		1920	
	Acres	Percent	Acres	Percent	Acres	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
All enterprises.....	405,709	100.0	367,242	100.0	94,924	100.0	5,332,842	100.0	4,637,576	100.0	1,397,419	100.0
Gravity drainage only by—												
Open ditches.....	286,406	73.0	252,338	68.7	.....	.....	2,569,717	48.2	2,223,066	47.9	.....	.....
Tile drains.....	14,868	3.7	26,414	7.2	94,924	100.0	433,676	8.1	595,223	12.8	1,397,419	100.0
Open ditches and tile drains.....	59,926	14.8	61,178	16.7	.....	.....	1,227,759	23.0	1,941,953	29.0	.....	.....
All drained by pumping by—												
Open ditches.....	8,945	2.2	.....	.....	.....	.....	364,894	6.8	.....	.....	.....	.....
Tile drains.....	2,020	0.5	9,420	2.5	.....	.....	144,203	2.7	192,479	4.2	.....	.....
Open ditches and tile drains.....	7,955	2.0	.....	.....	.....	.....	127,779	2.4	.....	.....	.....	.....
Part only by pumping by—												
Open ditches.....	6,018	1.5	.....	.....	.....	.....	142,314	2.7	.....	.....	.....	.....
Tile drains.....	.....	.....	17,892	4.9	.....	.....	.....	.....	294,855	6.1	.....	.....
Open ditches and tile drains.....	9,572	2.3	.....	.....	.....	.....	322,500	6.1	.....	.....	.....	.....
Total area served by pumps.....	26,745	6.6	19,557	5.4	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup>Each item includes those enterprises that have provided levees in addition to the kind of drains specified.

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STATE TABLE 5.—PUMPING PLANTS AND LAND SERVED, BY KIND OF POWER: JAN. 1, 1940 AND 1930

KIND OF POWER	Enter- prises	CAPACITY			Land served	KIND OF POWER	Enter- prises	CAPACITY			Land served		
		Engine or motor		Pump				Engine or motor		Pump			
		Number	Hp.	Percent	G.p.m.	Acres		Number	Hp.	Percent	G.p.m.	Acres	
All pumping enterprises.....	1940..	16	1,305	100.0	240,750	26,745	Internal combustion.....	1940..	4	220	16.8	47,500	4,885
	1930..	11	982	100.0	184,500	19,857		1930..	2	57	5.8	10,000	1,021
Electric.....	1940..	11	655	50.2	113,250	19,180	Steam and internal combustion..	1940..	1	430	33.0	80,000	2,600
	1930..	9	925	94.2	174,500	18,236		1930..	.....	.....	.....	.....	.....

STATE TABLE 6.—PUMPING PLANTS AND LAND SERVED, BY KIND OF PUMP: JAN. 1, 1940 AND 1930

KIND OF PUMP	PUMPS			Engine or motor capac- ity	Land served
	Number	Capacity			
		G. p. m.	Percent	Hp.	Acres
All pumping enterprises.....1940..	24	240,750	100.0	1,305	26,745
.....1930..	18	184,500	100.0	982	19,857
Centrifugal.....1940..	12	75,750	31.5	465	15,858
.....1930..	18	184,500	100.0	982	19,857
Rotary.....1940..	3	16,000	6.7	75	2,500
.....1930..	.....	.....	.....	.....	.....
Turbine.....1940..	1	28,000	11.6	100	2,000
.....1930..	.....	.....	.....	.....	.....
Centrifugal and—					
Rotary.....1940..	3	80,000	33.2	430	2,600
.....1930..	.....	.....	.....	.....	.....
Turbine.....1940..	5	41,000	17.0	235	3,697
.....1930..	.....	.....	.....	.....	.....

STATE TABLE 7.—LAND, CAPITAL INVESTED, AND AREA DELINQUENT IN DRAINAGE TAXES, BY ARREARAGE  
IN PAYMENT OF OBLIGATIONS: JAN. 1, 1940 AND 1930

FINANCIAL STATUS	LAND IN ENTERPRISES				CAPITAL INVESTED				AREA DELINQUENT <sup>1</sup>	
	1940		1930		1940		1930		1940	1930
	Acres	Percent	Acres	Percent	Dollars	Percent	Dollars	Percent	Acres	Acres
All enterprises.....	405,709	100.0	367,242	100.0	5,332,842	100.0	4,637,576	100.0	16,763	16,280
Enterprises in arrears.....	32,214	7.9	59,616	16.2	1,173,048	22.0	1,358,221	29.3	3,890	7,673
With some delinquent land.....	16,099	3.9	46,426	12.6	700,949	13.1	1,185,448	25.6	3,890	7,673
With no delinquent land.....	16,115	4.0	9,390	2.6	472,096	8.9	153,617	3.3	.....	.....
With no report on delinquency.....	.....	.....	3,800	1.0	.....	.....	19,156	0.4	.....	.....
Enterprises not in arrears.....	373,025	91.9	307,626	83.8	4,159,294	77.9	3,279,355	70.7	12,873	8,607
With some delinquent land.....	51,039	12.6	55,845	15.2	1,199,254	22.5	1,138,264	24.6	12,873	8,607
With no delinquent land.....	317,933	78.2	222,448	60.6	2,888,040	54.2	1,652,197	35.6	.....	.....
With no report on delinquency.....	4,653	1.1	29,333	8.0	67,000	1.2	488,894	10.5	.....	.....
Enterprises not reporting on arrearage.....	470	0.2	.....	.....	5,500	0.1	.....	.....	.....	.....
With some delinquent land.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
With no delinquent land.....	210	0.1	.....	.....	1,500	( <sup>2</sup> )	.....	.....	.....	.....
With no report on delinquency.....	260	0.1	.....	.....	4,000	0.1	.....	.....	.....	.....

<sup>1</sup> If any land is delinquent in 2 or more overlapping enterprises, the acreage delinquent is too large by the amount of such duplication.  
<sup>2</sup> Less than one-tenth of 1 percent.

STATE TABLE 8.—LAND, CAPITAL INVESTED, INDEBTEDNESS, ARREARAGE IN PAYMENT OF BONDS, REDUCTION OF  
DEBT BY REFINANCING, AND ACREAGE DELINQUENT, 1940; DRAINAGE TAXES COLLECTED IN 1939; BY  
INDEBTEDNESS AND ARREARAGE, JAN. 1, 1940

FINANCIAL STATUS	Land in enterprises	Capital invested	Indebtedness	Arrearage in payment of bonds	Reduction of debt by refinancing	Delinquent in drainage taxes <sup>1</sup>	Drainage taxes collected in 1939
	Acres	Dollars	Dollars	Dollars	Dollars	Acres	Dollars
All enterprises.....	405,709	5,332,842	490,034	30,852	261,263	16,763	119,361
Enterprises in debt.....	<sup>2</sup> 89,169	2,480,265	490,034	30,852	248,190	10,322	87,133
In arrears, amount of arrearage stated.....	21,992	823,866	121,109	30,852	20,187	3,750	8,883
Collecting drainage taxes in 1939.....	19,995	748,262	77,336	24,398	20,187	3,250	8,883
No collections reported.....	1,997	75,604	43,773	6,454	.....	500	.....
In arrears, amount not stated.....	<sup>2</sup> 10,222	349,182	52,500	.....	.....	140	7,500
Collecting drainage taxes in 1939.....	9,572	322,500	52,500	.....	.....	.....	.....
No collections reported.....	<sup>2</sup> 850	26,682	.....	.....	.....	140	.....
Not in arrears.....	56,485	1,301,717	312,225	.....	228,003	6,432	68,900
Collecting drainage taxes in 1939.....	56,421	1,299,795	311,112	.....	228,003	6,432	68,900
No collections reported.....	64	1,922	1,113	.....	.....	.....	.....
Not reporting as to arrears.....	470	5,500	4,200	.....	.....	.....	850
Collecting drainage taxes in 1939.....	470	5,500	4,200	.....	.....	.....	850
No collections reported.....	.....	.....	.....	.....	.....	.....	.....
Enterprises not in debt.....	305,468	2,692,693	.....	.....	2,293	3,746	27,485
Collecting drainage taxes in 1939.....	89,940	678,671	.....	.....	2,293	1,558	27,485
No collections reported.....	215,628	2,014,022	.....	.....	.....	2,188	.....
Enterprises not reporting as to debt.....	11,072	159,884	.....	.....	10,780	2,695	4,743
Collecting drainage taxes in 1939.....	9,772	153,884	.....	.....	10,780	2,695	4,743
No collections reported.....	1,300	6,000	.....	.....	.....	.....	.....

<sup>1</sup> If any land is delinquent in 2 or more overlapping enterprises, the acreage delinquent is too large by the amount of such duplication.  
<sup>2</sup> Includes 650 acres for which amount of indebtedness was not reported.

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STATE TABLE 9.—LAND AND CAPITAL INVESTED, BY PRINCIPAL PURPOSE OF DRAINAGE, JAN. 1, 1940

PURPOSE OF DRAINAGE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	405,709	100.0	5,332,842	100.0
Improvement of land already in farms.....	245,405	60.5	3,796,150	71.2
Reclamation of swamp land not previously in farms.....	15,469	3.8	484,674	9.1
Protection against overflow.....	7,995	2.0	248,707	4.6
Removal of alkali or seepage from irrigation.....	136,840	33.7	803,311	15.1

STATE TABLE 10.—LAND AND CAPITAL INVESTED, BY DATE OF ORGANIZATION, JAN. 1, 1940

DATE OF ORGANIZATION	Land <sup>1</sup>		Area of enterprises		Capital invested	
	Acres	Percent	Total acres <sup>2</sup>	Overlapped acres	Dollars	Percent
All enterprises.....	405,709	100.0	433,340	27,631	5,332,842	100.0
1890-1899.....	16,833	4.1	16,833	.....	142,824	2.7
1900-1904.....	30,272	7.5	30,272	.....	82,407	1.5
1905-1909.....	24,781	6.1	33,657	8,876	635,144	11.9
1910-1914.....	207,225	51.1	220,427	13,202	2,120,077	39.8
1915-1919.....	35,414	8.7	37,644	2,230	884,421	16.6
1920-1924.....	59,687	14.7	63,010	3,323	1,239,874	23.2
1925-1929.....	16,671	4.1	16,671	.....	190,279	3.6
1930-1934.....	311	0.1	311	.....	4,556	0.1
1935-1939.....	14,515	3.6	14,515	.....	33,200	0.6

<sup>1</sup>Land included in more than 1 enterprise is tabulated only in the last organized.<sup>2</sup>The sum of the areas of the individual enterprises.

STATE TABLE 11.—DRAINAGE CONDITION, DEVELOPMENT, AND USE OF LAND IN ENTERPRISES, BY DATE OF ORGANIZATION, 1939

DATE OF ORGANIZATION	Land in all enterprises <sup>1</sup>	DRAINAGE CONDITION			DEVELOPMENT				USE OF LAND					
		Drained		Partly drained	Undrained	Improved land		Timber and cut-over land	Other un-improved land	In occupied farms		In planted crops	Idle	Land available for settlement
All enterprises..	Acres 405,709	Acres 368,293	Per- cent 90.8	Acres 31,513	Acres 5,903	Acres 249,576	Per- cent 85.2	Acres 39,715	Acres 16,418	Acres 380,964	Per- cent 93.9	Acres 332,672	Acres 13,197	Acres 1,790
1890-1899.....	16,833	16,533	98.2	200	100	14,311	85.0	2,222	300	14,537	86.4	13,263	1,226	1,100
1900-1904.....	30,272	29,641	97.9	.....	631	28,975	95.7	292	1,005	29,053	96.0	28,451	832	.....
1905-1909.....	24,781	24,541	99.0	50	190	24,188	97.6	289	304	23,898	96.4	23,238	344	.....
1910-1914.....	207,225	178,490	86.1	25,830	2,905	170,069	82.1	30,229	6,927	196,524	94.8	165,148	1,608	600
1915-1919.....	35,414	32,013	90.4	2,263	1,138	30,471	86.0	871	4,072	31,857	90.0	29,377	1,301	.....
1920-1924.....	59,687	57,858	96.9	1,267	562	52,606	88.1	4,172	2,909	55,800	93.5	47,934	6,374	90
1925-1929.....	16,671	14,845	89.0	1,676	150	14,428	86.5	1,362	681	14,689	88.1	13,692	1,299	.....
1930-1934.....	311	261	83.9	30	20	281	90.4	20	10	280	90.0	270	.....	.....
1935-1939.....	14,515	14,111	97.2	197	207	14,247	98.2	258	10	14,326	98.7	11,290	213	.....

<sup>1</sup>Land included in more than 1 enterprise is tabulated only in the last organized.

STATE TABLE 12.—COST OF OPERATION AND MAINTENANCE, BY TYPE OF DRAINAGE, 1939

TYPE OF DRAINAGE	Land in all enterprises	LAND REPORTING ON COST OF MAINTENANCE AND OPERATION			COST REPORTED		
		Total	Some cost	No cost	Total amount	Per acre on—	
						Total reporting	Area incurring
All enterprises.....	Acres 405,709	Acres 405,492	Acres 215,242	Acres 190,250	Dollars 68,904	Dollars 0.17	Dollars 0.32
Gravity drainage only.....	371,199	370,982	181,689	189,093	43,968	0.12	0.24
Open ditches only.....	282,095	282,095	106,202	175,893	18,223	0.06	0.17
Open ditches and levees.....	14,310	14,310	12,550	1,760	7,231	0.50	0.68
Tile drains only.....	14,868	14,651	12,134	2,517	2,321	0.16	0.19
Open ditches and tile drains.....	50,475	50,475	41,552	8,923	11,991	0.24	0.29
Open ditches, tile drains, and levees.....	9,451	9,451	9,451	.....	4,200	0.44	0.44
Pumping for all or part of drainage.....	34,510	34,510	33,353	1,157	24,838	0.72	0.75
All drainage by pumping.....	18,920	18,920	17,763	1,157	14,991	0.79	0.84
Part pumping and part gravity.....	15,590	15,590	15,590	.....	9,947	0.64	0.64

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STATE TABLE 13.—LAND AND CAPITAL INVESTED, BY METHOD OF MAINTENANCE AND BY WHETHER MAINTENANCE IS SYSTEMATIC, JAN. 1, 1940

MAINTENANCE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	405,709	100.0	5,332,842	100.0
Method:				
By district forces.....	336,428	82.9	4,452,359	83.5
By contract.....	10,279	2.5	105,298	2.0
Work apportioned to landowners.....	46,421	11.5	617,337	11.6
"None," or not reporting.....	12,581	3.1	157,938	2.9
Whether systematic:				
Reporting "yes".....	238,774	58.9	4,172,178	78.2
Reporting "no".....	166,935	41.1	1,160,664	21.8

STATE TABLE 14.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY OWNERSHIP OF POWER EQUIPMENT FOR MAINTENANCE, 1940

ITEM	All enterprises	ENTERPRISES OWNING POWER EQUIPMENT	
		Amount	Percent
Land in enterprises.....acres....	405,709	9,244	2.3
Capital invested.....dollars..	5,332,842	163,681	3.1
Drainage works:			
Open ditches.....miles....	885.0	26.1	2.9
Tile drains.....miles....	179.0	2.6	1.4
Levees.....miles....	72.4	11.1	15.3

STATE TABLE 15.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FEDERAL AGENCY GIVING AID IN MAINTENANCE, 1940

AGENCY	Land in enterprises	Capital invested	DRAINAGE WORKS		
			Ditches	Tile	Levees
	Acres	Dollars	Miles	Miles	Miles
All enterprises reporting Federal aid received.....	119,678	1,971,101	912.2	57.7	67.4
Work Projects Administration.....	113,541	1,662,148	277.0	57.7	22.7
Corps of Engineers, U. S. A.....	3,337	283,953	29.7	.....	44.7
Other.....	2,800	25,000	5.5	.....	.....

STATE TABLE 16.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FLOOD PROTECTION FROM LEVEES OF AN OUTSIDE AGENCY, 1940

ITEM	All enterprises	ENTERPRISES PROTECTED BY OUTSIDE AGENCY	
		Amount	Percent
Land in enterprises.....acres....	405,709	138,327	9.4
Capital invested.....dollars..	5,332,842	737,099	13.8
Drainage works:			
Open ditches.....miles....	885.0	159.0	18.0
Tile drains.....miles....	179.0	18.2	10.2
Levees.....miles....	72.4	10.6	14.6

<sup>1</sup> The land actually dependent upon outside agencies for protection is 29,240 acres, which is 76.3 percent of all land in these protected enterprises.

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COUNTY TABLE I—LAND IN DRAINAGE ENTERPRISES CLASSIFIED BY CONDITION AND BY USE, 1940, 1930, AND 1920; AND BY KIND OF WORKS, 1940

ITEM (See definitions in Introduction)		THE STATE	Benton	Clark	Grant <sup>1</sup>	Grays Harbor	Island	Jefferson <sup>1</sup>	King
LAND AREA									
1	Approximate land area.....acres....1940..	42,865,280	1,112,320	405,120	1,777,280	1,219,200	131,840	1,159,680	1,367,040
2	Drainage enterprises.....number....1940..	<sup>2</sup> 169	12	7	<sup>1</sup>	<sup>3</sup>	<sup>4</sup>	<sup>1</sup>	11
3	Land in enterprises.....acres....1940..	405,709	22,849	11,662	1,280	3,123	3,342	2,330	35,249
4	.....1930..	367,242	17,892	10,559	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	34,484
5	.....1920..	94,924	10,340	.....	.....	.....	.....	.....	.....
6	Area of all enterprises, overlapping included.....acres....1940..	433,340	23,256	11,662	1,280	3,123	3,342	2,330	35,543
7	Amount of overlapping.....acres....1940..	27,631	407	.....	.....	.....	.....	.....	294
CONDITION AND USE OF LAND									
8	Land with drainage sufficient for normal crop.....acres....1940..	368,293	15,141	10,767	1,280	3,123	3,202	2,180	34,055
9	.....1930..	329,166	17,736	10,359	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	32,201
10	Increase or decrease (-), 1930-1940.....acres.....	39,127	-2,595	398	.....	.....	.....	.....	1,854
11	.....percent.....	11.9	-14.6	3.8	.....	.....	.....	.....	5.8
12	Land undrained, unfit for any crop.....acres....1940..	5,903	2,643	158	.....	.....	20	150	725
13	.....1930..	9,879	156	200	.....	.....	( <sup>3</sup> )	.....	395
14	Increase or decrease (-), 1930-1940.....acres.....	-3,976	2,487	-42	.....	.....	.....	.....	330
15	.....percent.....	-40.2	( <sup>4</sup> )	-21.0	.....	.....	.....	.....	83.5
16	Land partly drained, for partial crop.....acres....1940..	31,513	5,065	747	.....	.....	30	.....	460
17	.....1930..	28,197	.....	.....	.....	.....	( <sup>3</sup> )	.....	1,898
18	Increase or decrease (-), 1930-1940.....acres.....	3,316	5,065	747	.....	.....	.....	.....	-1,429
19	.....percent.....	11.8	.....	.....	.....	.....	.....	.....	-75.3
20	Improved land.....acres....1940..	349,576	16,825	9,440	1,280	3,170	2,292	2,180	33,027
21	.....1930..	332,265	17,736	8,129	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	31,133
22	.....1920..	81,886	9,715	.....	.....	.....	.....	.....	.....
Unimproved land:									
23	Woodland and cut-over land.....acres....1940..	39,715	5	2,026	.....	.....	1,040	150	282
24	.....1930..	18,531	.....	2,430	.....	.....	( <sup>3</sup> )	( <sup>3</sup> )	1,118
25	.....1920..	850	.....	.....	.....	.....	.....	.....	.....
26	Other unimproved land.....acres....1940..	16,418	6,019	196	.....	953	10	.....	1,340
27	.....1930..	16,446	156	.....	.....	( <sup>3</sup> )	( <sup>3</sup> )	.....	2,243
28	.....1920..	12,188	625	.....	.....	.....	.....	.....	.....
29	Land in occupied farms.....acres....1940..	380,964	19,411	11,465	1,200	2,610	2,272	2,180	34,207
30	.....1930..	351,898	17,777	10,559	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	32,396
31	Increase or decrease (-), 1930-1940.....acres.....	29,066	1,634	906	.....	.....	.....	.....	1,811
32	.....percent.....	8.2	9.2	8.6	.....	.....	.....	.....	5.6
33	Land in planted crops.....acres....1940..	332,672	16,327	8,869	1,160	1,930	2,160	2,070	33,192
34	.....1930..	309,818	17,014	7,774	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	30,215
35	Increase or decrease (-), 1930-1940.....acres.....	22,854	-687	1,095	.....	.....	.....	.....	2,977
36	.....percent.....	7.4	-4.0	14.1	.....	.....	.....	.....	9.8
37	Land idle.....acres....1940..	13,197	300	2,487	.....	1,080	.....	.....	1,771
38	.....1930..	33,764	177	920	.....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	2,647
39	Increase or decrease (-), 1930-1940.....acres.....	-20,567	123	1,577	.....	.....	.....	.....	-876
40	.....percent.....	-60.9	69.5	171.4	.....	.....	.....	.....	-33.1
41	Land available for settlement.....acres....1940..	1,790	.....	.....	.....	( <sup>3</sup> )	90	.....	.....
42	.....1930..	4,653	.....	.....	.....	.....	.....	.....	1,759
43	Increase or decrease (-), 1930-1940.....acres.....	-2,863	.....	.....	.....	.....	.....	.....	-1,759
44	.....percent.....	-61.5	.....	.....	.....	.....	.....	.....	-100.0
LAND CLASSIFIED BY WORKS, 1940									
45	Land drained by open ditches only.....acres.....	282,095	18,836	10,542	1,280	2,483	3,132	2,330	32,645
46	Length of these ditches.....miles.....	501.4	21.9	20.0	10.0	6.5	10.0	16.0	42.5
47	Part protected by levees of an outside agency.....acres.....	1,600	.....	.....	.....	.....	.....	.....	.....
48	Land drained by open ditches and own levees.....acres.....	14,310	.....	1,120	.....	640	.....	.....	.....
49	Length of these ditches.....miles.....	70.9	.....	2.0	.....	19.8	.....	.....	.....
50	Length of these levees.....miles.....	20.5	.....	0.2	.....	2.9	.....	.....	.....
51	Part protected by levees of an outside agency.....acres.....	7,543	.....	.....	.....	.....	.....	.....	.....
52	Land drained by tile only.....acres.....	14,868	1,327	.....	.....	.....	.....	.....	.....
53	Length of these tile.....miles.....	61.1	2.9	.....	.....	.....	.....	.....	.....
54	Part protected by levees of an outside agency.....acres.....	.....	.....	.....	.....	.....	.....	.....	.....
55	Land drained by tile and own levees.....acres.....	.....	.....	.....	.....	.....	.....	.....	.....
56	Length of these tile.....miles.....	.....	.....	.....	.....	.....	.....	.....	.....
57	Length of these levees.....miles.....	.....	.....	.....	.....	.....	.....	.....	.....
58	Part protected by levees of an outside agency.....acres.....	.....	.....	.....	.....	.....	.....	.....	.....
59	Land drained by open ditches and tile.....acres.....	50,475	2,530	.....	.....	.....	.....	.....	1,601
60	Length of these open ditches.....miles.....	126.6	12.8	.....	.....	.....	.....	.....	8.3
61	Length of these tile.....miles.....	94.5	1.9	.....	.....	.....	.....	.....	0.6
62	Part protected by levees of an outside agency.....acres.....	1,800	.....	.....	.....	.....	.....	.....	.....
63	Land drained by open ditches, tile, and levees.....acres.....	9,451	.....	.....	.....	.....	.....	.....	.....
64	Length of these open ditches.....miles.....	46.0	.....	.....	.....	.....	.....	.....	.....
65	Length of these tile.....miles.....	10.0	.....	.....	.....	.....	.....	.....	.....
66	Length of these levees.....miles.....	1.0	.....	.....	.....	.....	.....	.....	.....
67	Part protected by levees of an outside agency.....acres.....	1,560	.....	.....	.....	.....	.....	.....	.....
68	Land in enterprises operating pumping plants <sup>5</sup> .....acres.....	34,510	156	.....	.....	.....	210	.....	1,003
69	Length of open ditches owned by these enterprises.....miles.....	140.1	.....	.....	.....	.....	2.0	.....	4.6
70	Length of tile owned by these enterprises.....miles.....	13.4	0.5	.....	.....	.....	0.2	.....	.....
71	Length of levees owned by these enterprises.....miles.....	50.9	.....	.....	.....	.....	.....	.....	.....
72	Part protected by levees of an outside agency.....acres.....	16,737	.....	.....	.....	.....	210	.....	.....

<sup>1</sup> For counties having less than 3 enterprises, statistics are shown only by written permission of each enterprise affected.

<sup>2</sup> An intercounty enterprise is counted in each county in which a part is located. The number of separate enterprises in the State is 165.

<sup>3</sup> Included in "Other counties."

<sup>4</sup> Percent not shown when more than 1,000.

<sup>5</sup> Data in lines 68 to 72 are not included in lines 45 to 67.

## CENSUS OF DRAINAGE - WASHINGTON

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COUNTY TABLE I.—LAND IN DRAINAGE ENTERPRISES CLASSIFIED BY CONDITION AND BY USE, 1940, 1930, AND 1920; AND BY KIND OF WORKS, 1940—Continued

ITEM (See definitions in Introduction)		Lewis	Pierce	Skagit	Snohomish	Stevens <sup>1</sup>	Thurston	Whatcom	Yakima	Other counties <sup>2</sup>
LAND AREA										
1	Approximate land area.....acres....1940..	1,566,080	1,075,200	1,110,400	1,344,000	1,613,440	460,160	1,376,640	2,734,720	3,226,240
2	Drainage enterprises.....number....1940..	3	9	12	8	1	8	23	59	7
3	Land in enterprises.....acres....1940..	4,692	25,081	39,705	13,032	4,000	3,874	22,486	196,310	16,684
4	.....1930..	4,075	4,282	38,191	37,501	( <sup>3</sup> )	5,925	25,228	155,695	33,400
5	.....1920..	.....	.....	.....	.....	15,000	.....	.....	55,919	13,685
6	Area of all enterprises, overlapping included.....acres....1940..	4,692	25,081	39,705	13,822	4,000	3,874	23,541	221,405	16,684
7	Amount of overlapping.....acres....1940..	.....	.....	.....	790	.....	.....	1,045	25,095	.....
CONDITION AND USE OF LAND										
8	Land with drainage sufficient for normal crop.....acres....1940..	4,692	24,463	39,500	11,985	4,000	3,874	22,428	172,609	14,884
9	.....1930..	4,075	4,006	37,875	34,261	( <sup>3</sup> )	.....	19,345	131,383	32,000
10	Increase or decrease (-), 1930-1940.....acres.....	617	20,487	1,625	-22,276	.....	-2,051	3,083	41,226	-17,116
11	.....percent.....	15.1	511.4	4.3	-65.0	.....	-34.6	15.9	31.4	-53.5
12	Land undrained, unfit for any crop.....acres....1940..	.....	404	40	150	.....	.....	.....	788	825
13	.....1930..	.....	65	6	2,225	.....	.....	.....	6,763	69
14	Increase or decrease (-), 1930-1940.....acres.....	.....	339	34	-2,075	.....	.....	.....	-5,975	756
15	.....percent.....	.....	521.5	566.7	-93.2	.....	.....	.....	-88.3	( <sup>4</sup> )
16	Land partly drained, for partial crop.....acres....1940..	.....	164	165	-897	.....	.....	68	22,913	975
17	.....1930..	.....	211	310	1,015	( <sup>3</sup> )	.....	5,883	17,549	1,331
18	Increase or decrease (-), 1930-1940.....acres.....	.....	-27	-145	-118	.....	.....	-5,815	5,361	-356
19	.....percent.....	.....	-12.8	-46.8	-11.6	.....	.....	-98.8	30.6	-26.7
20	Improved land.....acres....1940..	3,486	24,107	38,874	11,226	4,000	3,640	18,156	165,233	13,040
21	.....1930..	2,875	3,863	37,241	31,470	( <sup>3</sup> )	5,597	17,016	145,895	11,210
22	.....1920..	.....	.....	.....	.....	13,750	.....	.....	47,593	10,828
Unimproved land:										
23	Woodland and cut-over land.....acres....1940..	650	500	641	1,656	.....	117	4,141	26,010	2,497
24	.....1930..	580	9	850	3,370	.....	177	8,010	766	1,231
25	.....1920..	.....	.....	.....	.....	250	.....	.....	.....	600
26	Other unimproved land.....acres....1940..	556	474	190	150	.....	117	193	5,057	1,147
27	.....1930..	520	410	100	2,661	.....	151	202	9,044	959
28	.....1920..	.....	.....	.....	.....	1,000	.....	.....	8,326	2,237
29	Land in occupied farms.....acres....1940..	4,692	24,781	38,700	9,955	3,900	3,770	18,877	190,294	12,950
30	.....1930..	4,075	4,232	37,025	35,766	( <sup>3</sup> )	5,748	25,228	147,642	31,450
31	Increase or decrease (-), 1930-1940.....acres.....	617	20,549	1,675	-25,811	.....	-1,978	-6,651	42,652	-18,500
32	.....percent.....	15.1	485.8	4.5	-72.2	.....	-34.4	-26.4	28.9	-58.8
33	Land in planted crops.....acres....1940..	2,060	21,244	36,700	8,385	3,700	3,580	16,391	163,049	11,855
34	.....1930..	1,640	3,721	31,672	28,040	( <sup>3</sup> )	3,233	16,659	143,308	26,642
35	Increase or decrease (-), 1930-1940.....acres.....	520	17,523	5,028	-19,655	.....	347	-268	19,741	-14,787
36	.....percent.....	33.8	470.9	15.9	-70.1	.....	10.7	-1.6	13.8	-55.5
37	Land idle.....acres....1940..	2,632	540	476	400	.....	234	1,133	1,040	1,094
38	.....1930..	2,535	261	820	5,373	.....	968	8,212	8,930	2,921
39	Increase or decrease (-), 1930-1940.....acres.....	97	279	-344	-4,973	.....	-734	-7,079	-7,890	-1,827
40	.....percent.....	3.8	106.9	-42.0	-92.6	.....	-75.8	-86.2	-88.4	-62.5
41	Land available for settlement.....acres....1940..	.....	.....	.....	.....	.....	.....	.....	.....	1,700
42	.....1930..	.....	.....	.....	682	.....	.....	.....	302	1,910
43	Increase or decrease (-), 1930-1940.....acres.....	.....	.....	.....	-682	.....	.....	.....	-302	-210
44	.....percent.....	.....	.....	.....	-100.0	.....	.....	.....	-100.0	-11.0
LAND CLASSIFIED BY WORKS, 1940										
45	Land drained by open ditches only.....acres.....	4,692	17,843	1,600	1,260	4,000	3,810	15,117	150,386	12,139
46	Length of these ditches.....miles.....	16.7	20.0	8.0	4.5	10.0	13.5	53.3	221.3	27.2
47	Part protected by levees of an outside agency.....acres.....	.....	.....	1,600	.....	.....	.....	.....	.....	.....
48	Land drained by open ditches and own levees.....acres.....	.....	2,500	7,049	3,007	.....	.....	.....	.....	.....
49	Length of these ditches.....miles.....	.....	2.1	31.0	16.0	.....	.....	.....	.....	.....
50	Length of these levees.....miles.....	.....	2.1	3.8	11.5	.....	.....	.....	.....	.....
51	Part protected by levees of an outside agency.....acres.....	.....	.....	7,049	500	.....	.....	.....	.....	.....
52	Land drained by tile only.....acres.....	.....	280	.....	.....	.....	.....	.....	13,261	.....
53	Length of these tile.....miles.....	.....	1.2	.....	.....	.....	.....	.....	67.0	.....
54	Part protected by levees of an outside agency.....acres.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
55	Land drained by tile and own levees.....acres.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
56	Length of these tile.....miles.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
57	Length of these levees.....miles.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
58	Part protected by levees of an outside agency.....acres.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
59	Land drained by open ditches and tile.....acres.....	.....	4,458	3,644	.....	.....	64	7,379	30,799	.....
60	Length of these open ditches.....miles.....	.....	11.8	15.7	.....	.....	0.8	21.7	55.5	.....
61	Length of these tile.....miles.....	.....	1.7	1.6	.....	.....	0.1	3.6	84.8	.....
62	Part protected by levees of an outside agency.....acres.....	.....	.....	1,800	.....	.....	.....	.....	.....	.....
63	Land drained by open ditches, tile, and levees.....acres.....	.....	.....	9,451	.....	.....	.....	.....	.....	.....
64	Length of these open ditches.....miles.....	.....	.....	46.0	.....	.....	.....	.....	.....	.....
65	Length of these tile.....miles.....	.....	.....	10.0	.....	.....	.....	.....	.....	.....
66	Length of these levees.....miles.....	.....	.....	1.0	.....	.....	.....	.....	.....	.....
67	Part protected by levees of an outside agency.....acres.....	.....	.....	1,660	.....	.....	.....	.....	.....	.....
68	Land in enterprises operating pumping plants <sup>5</sup> .....acres.....	.....	.....	17,967	8,765	.....	.....	.....	1,864	4,545
69	Length of open ditches owned by these enterprises.....miles.....	.....	.....	64.0	27.0	.....	.....	.....	.....	42.5
70	Length of tile owned by these enterprises.....miles.....	.....	.....	7.5	0.2	.....	.....	.....	5.0	.....
71	Length of levees owned by these enterprises.....miles.....	.....	.....	6.0	.....	.....	.....	.....	.....	44.9
72	Part protected by levees of an outside agency.....acres.....	.....	.....	16,527	.....	.....	.....	.....	.....	.....

<sup>1</sup>For counties having less than 3 enterprises, statistics are shown only by written permission of each enterprise affected.

<sup>2</sup>Includes Klickitat, Pacific, San Juan, Spokane, and Whatcom Counties in 1940; Cowlitz, Grant, Grays Harbor, Island, Jefferson, Klickitat, Pacific, San Juan, Spokane, and Stevens Counties in 1930; and Adams, Klickitat, Pacific, and Spokane Counties in 1920.

<sup>3</sup>Included in "Other counties."

<sup>4</sup>Percent not shown when more than 1,000.

<sup>5</sup>Data in lines 68 to 72 are not included in lines 45 to 67.

## CENSUS OF DRAINAGE—WASHINGTON

COUNTY TABLE II.—DRAINAGE ENTERPRISES—WORKS AND CAPITAL INVESTED, 1940, 1930, AND 1920; AND MAINTENANCE AND OPERATION, AND FINANCIAL CONDITION, 1939

ITEM (See definitions in introduction)		THE STATE	Benton	Clark	Grant <sup>1</sup>	Grays Harbor	Island	Jefferson <sup>1</sup>	King
<b>DRAINAGE WORKS</b>									
1	Drainage enterprises.....number.....1940..	2169	12	7	1	3	4	1	11
2	Open ditches:								
3	Completed.....1940..miles.....	885.0	34.7	22.0	10.0	26.3	12.0	16.0	55.4
4	.....1930..	746.7	13.7	21.3	( <sup>2</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	58.3
5	.....1920..	162.4	7.9						
6	Additional length authorized.....1940..miles.....	8.6					0.5		
7	Tile drains:								
8	Completed.....1940..miles.....	179.0	5.3				0.2		0.8
9	.....1930..	199.2	7.0						1.7
10	.....1920..	83.0							
11	Additional length authorized.....1940..miles.....								
12	Levees and dikes:								
13	Completed.....1940..miles.....	72.4		0.2		2.9			
14	.....1930..	78.8							42.0
15	.....1920..								
16	Additional length authorized.....1940..miles.....								
17	Pumping plants:								
18	Engine capacity.....1940..horsepower.....	1,305	( <sup>4</sup> )				5		45
19	.....1930..	982	15						97
20	.....1920..								
21	Pump capacity.....1940..gal. per min.....	240,750	( <sup>4</sup> )				1,500		6,750
22	.....1930..	184,500	1,000						25,000
23	.....1920..								
24	Land served by pumps.....1940..acres.....	26,735	158				210		575
25	.....1930..	19,857	198						1,036
26	.....1920..								
27	Wells pumped for drainage.....1940..number.....	3							
28	.....1930..								
29	.....1920..								
<b>CAPITAL INVESTED</b>									
30	Capital invested to January 1.....1940..dollars.....	5,332,842	167,970	63,483	20,000	168,311	53,500	85,000	305,076
31	.....1930..	4,637,576	236,914	42,703	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	287,398
32	.....1920..	1,397,419	50,200						
33	Estimated cost when completed.....1940..dollars.....	5,367,442	167,970	63,483	20,000	168,311	53,500	85,000	305,576
34	.....1930..	4,655,076	236,914	42,703	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	287,398
35	.....1920..	1,436,419	79,200						
36	Average cost per acre when completed.....1940..dollars.....	13.23	7.35	5.44	15.62	53.35	16.04	36.48	8.67
37	.....1930..	12.68	13.24	4.71	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	8.33
38	.....1920..	15.13	7.66						
39	Invested in and required for completion, 1940:								
40	Enterprises having open ditches only.....dollars.....	2,272,258	83,348	58,703	20,000	41,861	52,000	85,000	209,804
41	Average amount per acre.....dollars.....	8.05	1.42	5.57	15.62	16.68	16.60	36.48	6.43
42	Enterprises having open ditches and levees.....dollars.....	313,959		4,790		124,950			
43	Average amount per acre.....dollars.....	21.94		4.28		195.23			
44	Enterprises having tile only.....dollars.....	433,675	31,009						
45	Average amount per acre.....dollars.....	29.17	23.37						
46	Enterprises having tile and levees.....dollars.....								
47	Average amount per acre.....dollars.....								
48	Enterprises having open ditches and tile.....dollars.....	1,127,759	50,729						
49	Average amount per acre.....dollars.....	22.34	20.05						
50	Enterprises having ditches, tile, and levees.....dollars.....	100,000							
51	Average amount per acre.....dollars.....	10.58							
52	Enterprises operating pumping plants.....dollars.....	1,119,790	2,884			1,600			64,272
53	Average amount per acre.....dollars.....	32.45	18.49			7.62			64.08
<b>MAINTENANCE AND OPERATION</b>									
54	Cost of maintenance and operation in 1939:								
55	By enterprises operating pumping plants.....dollars.....	24,938	( <sup>6</sup> )				( <sup>6</sup> )		( <sup>6</sup> )
56	Enterprises reporting.....number.....	14	1				1		2
57	Land in these enterprises.....acres.....	33,353	( <sup>6</sup> )				( <sup>6</sup> )		( <sup>6</sup> )
58	Average cost per acre.....dollars.....	0.75	( <sup>6</sup> )				( <sup>6</sup> )		( <sup>6</sup> )
59	By enterprises not operating pumping plants.....dollars.....	43,966	1,355	627	100	( <sup>6</sup> )	( <sup>6</sup> )	6	6,439
60	Enterprises reporting.....number.....	103	10	4	1	1	2	1	4
61	Land in these enterprises.....acres.....	181,889	18,063	5,998	1,280	( <sup>6</sup> )	( <sup>6</sup> )	2,330	27,749
62	Average cost per acre.....dollars.....	0.24	0.08	0.10	0.08	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>7</sup> )	0.23
63	Federal aid in maintenance:								
64	Enterprises reporting.....number.....	45	5	4		2			3
65	Land in these enterprises.....acres.....	119,678	5,442	8,143		( <sup>6</sup> )			28,430
<b>FINANCIAL CONDITION</b>									
66	Drainage taxes collected in 1939.....dollars.....	119,361	2,095	592		( <sup>6</sup> )	3,094	2,380	9,799
67	Enterprises reporting.....number.....	91	9	4		1	4	1	8
68	Land in these enterprises.....acres.....	166,170	12,938	5,998		( <sup>6</sup> )	3,342	2,330	33,218
69	Average amount collected per acre.....dollars.....	0.64	0.16	0.10		( <sup>6</sup> )	0.92	1.02	0.29
70	Area delinquent in drainage taxes, Dec. 31, 1939.....acres.....	16,763	2,333			( <sup>6</sup> )	( <sup>6</sup> )	1,066	( <sup>6</sup> )
71	Enterprises reporting.....number.....	40	4			2	2	1	2
72	Land in these enterprises.....acres.....	67,138	5,026			( <sup>6</sup> )	( <sup>6</sup> )	2,330	( <sup>6</sup> )
73	Portion delinquent in these enterprises.....percent.....	25.0	46.4			( <sup>6</sup> )	( <sup>6</sup> )	45.8	( <sup>6</sup> )
74	Total indebtedness, Dec. 31, 1939.....dollars.....	490,034	22,101	( <sup>6</sup> )		( <sup>6</sup> )	3,100	7,600	43,726
75	Enterprises reporting.....number.....	54	5	1		1	3	1	3
76	Land in these enterprises.....acres.....	88,519	3,596	( <sup>6</sup> )		( <sup>6</sup> )	2,982	2,330	1,089
77	Average indebtedness per acre.....dollars.....	5.54	6.14	( <sup>6</sup> )		( <sup>6</sup> )	1.04	3.26	40.15
78	Indebtedness in arrears, Dec. 31, 1939.....dollars.....	30,852	( <sup>6</sup> )			( <sup>6</sup> )	( <sup>6</sup> )		( <sup>6</sup> )
79	Enterprises reporting.....number.....	14	2			1	1		1
80	Land in these enterprises.....acres.....	32,214	( <sup>6</sup> )			( <sup>6</sup> )	( <sup>6</sup> )		( <sup>6</sup> )
81	Average arrearage per acre.....dollars.....	0.96	( <sup>6</sup> )			( <sup>6</sup> )	( <sup>6</sup> )		( <sup>6</sup> )
82	Reduction of debt by refinancing, prior to 1940.....dollars.....	261,269	25,580			( <sup>6</sup> )		66,693	
83	Enterprises reporting.....number.....	21	4			1		1	
84	Land in these enterprises.....acres.....	28,927	4,365			( <sup>6</sup> )		2,330	
85	Average reduction per acre.....dollars.....	9.03	5.86			( <sup>6</sup> )		28.62	

<sup>1</sup> For counties having less than 3 enterprises, statistics are shown only by written permission of each enterprise affected. <sup>2</sup> An intercounty enterprise is counted in each county in which a part is located. The number of separate enterprises in the State is 165. <sup>3</sup> Included in "Other counties." <sup>4</sup> Pumps in Yakima County serve land in Benton County. <sup>5</sup> Data in lines 46 and 47 are not included in lines 34 to 45. <sup>6</sup> Where there are less than 3 enterprises reporting, data are included only in State totals, except as stated in footnote 1. <sup>7</sup> Less than one-half of 1 cent per acre.

## CENSUS OF DRAINAGE — WASHINGTON

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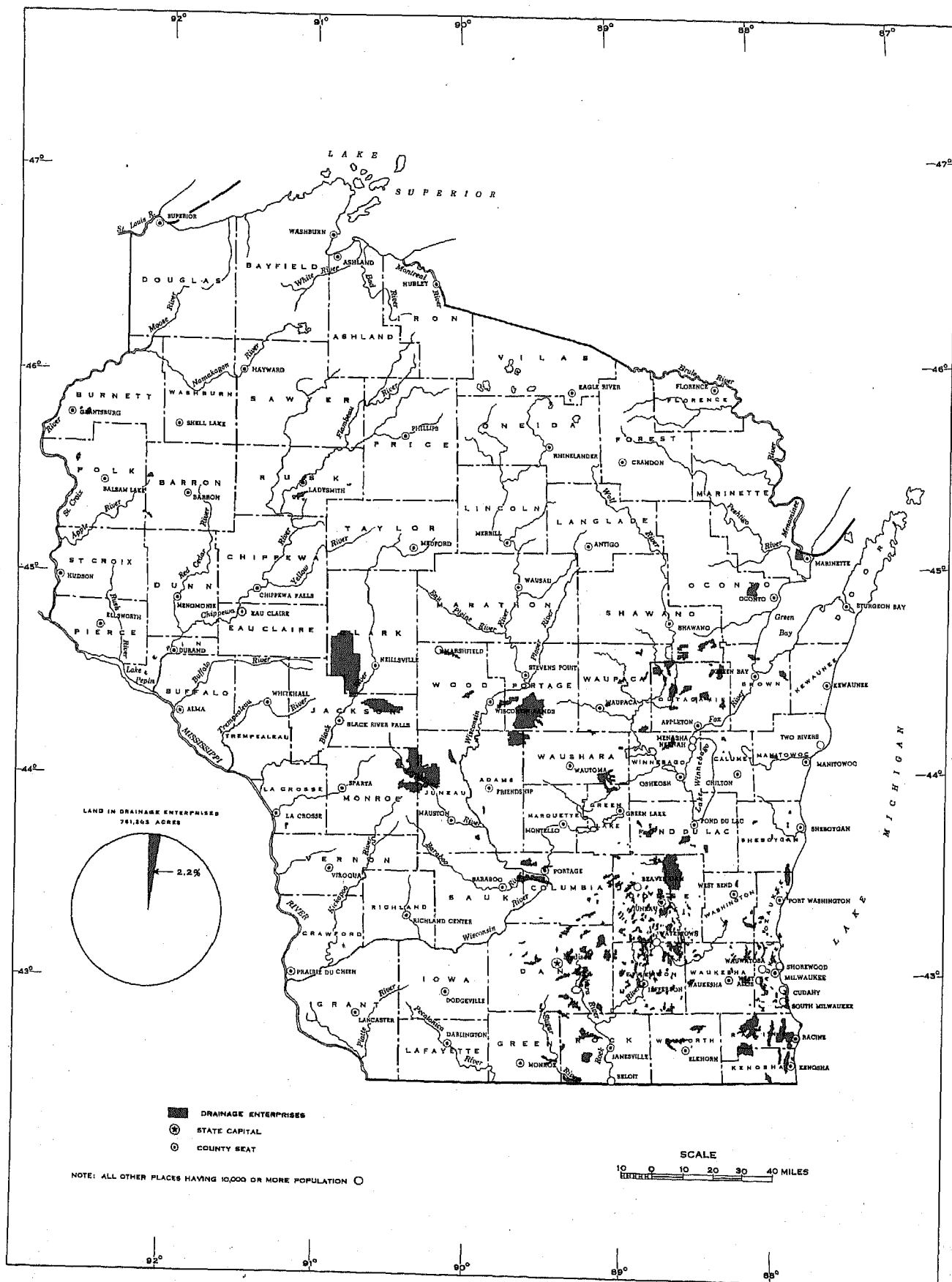
COUNTY TABLE II—DRAINAGE ENTERPRISES—WORKS AND CAPITAL INVESTED, 1940, 1930, AND 1920; AND MAINTENANCE AND OPERATION, AND FINANCIAL CONDITION, 1939—Continued

ITEM (See definitions in Introduction)		Lewis	Pierce	Skagit	Snohomish	Stevens <sup>1</sup>	Thurston	Whatcom	Yakima	Other counties <sup>2</sup>
DRAINAGE WORKS										
1	Drainage enterprises.....number.....1940..	3	9	12	8	1	8	23	59	7
2	Open ditches:									
3	Completed.....miles.....1940..	16.7	33.9	184.7	47.5	10.0	14.3	75.0	276.8	69.7
4	1930..	13.3	16.0	103.0	48.8	( <sup>3</sup> )	27.3	76.5	223.3	145.2
5	1920..					26.0			86.5	42.0
6	Additional length authorized.....miles.....1940..		2.6		0.5				5.0	
7	Tile drains:									
8	Completed.....miles.....1940..		2.9	19.1	0.2		0.1	3.6	146.8	
9	1930..		4.1	37.1	3.2		2.6		143.5	
10	1920..								82.0	1.0
11	Additional length authorized.....miles.....1940..									
12	Levees and dikes:									
13	Completed.....miles.....1940..		2.1	10.8	11.5					44.9
14	1930..			14.8	21.0	( <sup>3</sup> )				1.0
15	1920..									
16	Additional length authorized.....miles.....1940..									
17	Pumping plants:									
18	Engine capacity.....horsepower.....1940..			435	275				415	530
19	1930..			395	400					75
20	1920..									
21	Pump capacity.....gal. per min. 1940..			67,000	69,500				41,500	94,500
22	1930..			92,000	55,000					11,500
23	1920..									
24	Land served by pumps.....acres.....1940..			13,645	5,750				1,864	4,545
25	1930..			13,167	5,187					269
26	1920..									
27	Wells pumped for drainage.....number.....1940..				3					
28	1930..									
29	1920..									
CAPITAL INVESTED										
30	Capital invested to January 1.....dollars.....1940..	88,581	169,833	765,976	168,524	50,000	71,584	164,862	2,484,779	487,253
31	1930..	72,892	149,491	386,932	268,581	( <sup>3</sup> )	158,176	217,810	2,188,268	618,411
32	1920..					118,500			1,013,675	215,044
33	Estimated cost when completed.....dollars.....1940..	88,581	175,933	765,976	206,524	50,000	71,584	164,862	2,494,779	487,253
34	1930..	72,892	149,491	387,432	268,581	( <sup>3</sup> )	158,176	217,810	2,208,268	618,411
35	1920..					118,500			1,013,675	225,044
36	Average cost per acre when completed.....dollars.....1940..	18.85	7.01	19.29	15.85	12.50	18.48	7.33	12.71	29.20
37	1930..	17.89	34.91	10.14	7.16	( <sup>3</sup> )	26.70	8.63	14.18	16.52
38	1920..					7.90			18.13	16.47
39	Invested in and required for completion, 1940:									
40	Enterprises having open ditches only.....dollars..	88,581	70,545	8,043	14,000	50,000	69,682	128,470	1,119,441	178,300
41	Average amount per acre.....dollars.....	18.88	3.95	5.03	11.11	12.50	18.28	8.50	7.44	14.28
42	Enterprises having open ditches and levees.....dollars..		1,460	124,577	58,182					
43	Average amount per acre.....dollars.....		0.58	17.69	19.35				383,895	
44	Enterprises having tile only.....dollars.....		18,772						28.65	
45	Average amount per acre.....dollars.....		67.04							
46	Enterprises having tile and levees.....dollars.....									
47	Average amount per acre.....dollars.....									
48	Enterprises having open ditches and tile.....dollars..		85,156	71,836			1,822	36,392	850,124	
49	Average amount per acre.....dollars.....		19.10	19.74			30.03	4.93	27.60	
50	Enterprises having ditches, tile, and levees.....dollars..			100,000						
51	Average amount per acre.....dollars.....			10.58						
52	Enterprises operating pumping plants.....dollars.....			461,420	134,342				141,319	313,953
53	Average amount per acre.....dollars.....			28.68	15.33				75.81	69.08
MAINTENANCE AND OPERATION										
54	Cost of maintenance and operation in 1939:									
55	By enterprises operating pumping plants.....dollars..			10,940	2,560				( <sup>4</sup> )	( <sup>4</sup> )
56	Enterprises reporting.....number.....			4	3				1	2
57	Land in these enterprises.....acres.....			17,547	8,765				( <sup>4</sup> )	( <sup>4</sup> )
58	Average cost per acre.....dollars.....			0.62	0.29				( <sup>4</sup> )	( <sup>4</sup> )
59	By enterprises not operating pumping plants.....dollars..	( <sup>4</sup> )	2,778	9,088	3,879		381	4,195	13,391	( <sup>4</sup> )
60	Enterprises reporting.....number.....	1	5	7	5		5	12	43	2
61	Land in these enterprises.....acres.....	( <sup>4</sup> )	21,454	21,738	4,267		2,605	14,223	50,493	( <sup>4</sup> )
62	Average cost per acre.....dollars.....	( <sup>4</sup> )	0.13	0.42	0.91		0.15	0.29	0.26	( <sup>4</sup> )
63	Federal aid in maintenance:									
64	Enterprises reporting.....number.....		2	6	6		1		12	4
65	Land in these enterprises.....acres.....		( <sup>4</sup> )	27,737	10,982		( <sup>4</sup> )		18,170	7,345
FINANCIAL CONDITION										
66	Drainage taxes collected in 1939.....dollars.....	( <sup>3</sup> )	8,159	34,873	15,869		630	4,405	31,242	6,223
67	Enterprises reporting.....number.....	1	7	10	7		3	9	24	3
68	Land in these enterprises.....acres.....	( <sup>3</sup> )	24,127	38,984	11,772		2,103	10,888	30,148	10,324
69	Average amount collected per acre.....dollars.....	( <sup>3</sup> )	0.34	0.89	1.35		0.30	0.40	1.04	0.60
70	Area delinquent in drainage taxes, Dec. 31, 1939.....acres..		( <sup>4</sup> )	4,952	580				5,530	( <sup>4</sup> )
71	Enterprises reporting.....number.....		1	3	3				21	1
72	Land in these enterprises.....acres.....	( <sup>4</sup> )	16,882	2,434					28,186	( <sup>4</sup> )
73	Portion delinquent in these enterprises.....percent.....		( <sup>4</sup> )	26.2	23.8				19.6	( <sup>4</sup> )
74	Total indebtedness, Dec. 31, 1939.....dollars.....	( <sup>4</sup> )	( <sup>4</sup> )	120,389	27,621		6,147		194,502	( <sup>4</sup> )
75	Enterprises reporting.....number.....	2	1	3	6		3		23	2
76	Land in these enterprises.....acres.....	( <sup>4</sup> )	( <sup>4</sup> )	17,650	11,325		1,256		29,028	( <sup>4</sup> )
77	Average indebtedness per acre.....dollars.....	( <sup>4</sup> )	( <sup>4</sup> )	6.82	2.44		4.89		6.70	( <sup>4</sup> )
78	Indebtedness in arrears, Dec. 31, 1939.....dollars.....	( <sup>4</sup> )		( <sup>4</sup> )			( <sup>4</sup> )		2,429	( <sup>4</sup> )
79	Enterprises reporting.....number.....	2		1			1		4	1
80	Land in these enterprises.....acres.....	( <sup>4</sup> )		( <sup>4</sup> )			( <sup>4</sup> )		7,979	( <sup>4</sup> )
81	Average arrearage per acre.....dollars.....	( <sup>4</sup> )		( <sup>4</sup> )			( <sup>4</sup> )		0.30	( <sup>4</sup> )
82	Reduction of debt by refinancing, prior to 1940.....dollars..		( <sup>4</sup> )	( <sup>4</sup> )					146,510	
83	Enterprises reporting.....number.....		1						12	
84	Land in these enterprises.....acres.....		( <sup>4</sup> )	( <sup>4</sup> )					16,009	
85	Average reduction per acre.....dollars.....		( <sup>4</sup> )	( <sup>4</sup> )					9.15	

<sup>1</sup>For counties having less than 3 enterprises, statistics are shown only by written permission of each enterprise affected. <sup>2</sup>Includes Klickitat, Pacific, San Juan, Spokane, and Wahkiakum Counties in 1940; Cowlitz, Grant, Grays Harbor, Island, Jefferson, Klickitat, Pacific, San Juan, Spokane, and Stevens Counties in 1930; and Adams, Klickitat, Pacific, and Spokane Counties in 1920. <sup>3</sup>Included in "Other counties." <sup>4</sup>Pumps in Yakima County serve land in Benton County. <sup>5</sup>Data in lines 46 and 47 are not included in lines 34 to 45. <sup>6</sup>Where there are less than 3 enterprises reporting, data are included only in State totals, except as stated in footnote 1.

# WISCONSIN

## LOCATION OF LAND IN DRAINAGE ENTERPRISES









## CENSUS OF DRAINAGE — WISCONSIN

STATE TABLE 13.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FLOOD PROTECTION FROM LEVEES OF AN OUTSIDE AGENCY, 1940

ITEM	All enterprises	ENTERPRISES PROTECTED BY OUTSIDE AGENCY	
		Amount	Percent
Land in enterprises.....acres....	761,203	<sup>1</sup> 4,740	0.6
Capital invested.....dollars..	4,254,586	44,156	1.0
Drainage works:			
Open ditches.....miles....	1,580.7	13.5	0.8
Tile drains.....miles....	282.6	5.0	1.8
Levees.....miles....	8.0	.....	.....

<sup>1</sup>All land in these enterprises, 4,740 acres, is dependent for protection on the levees of the outside agencies.











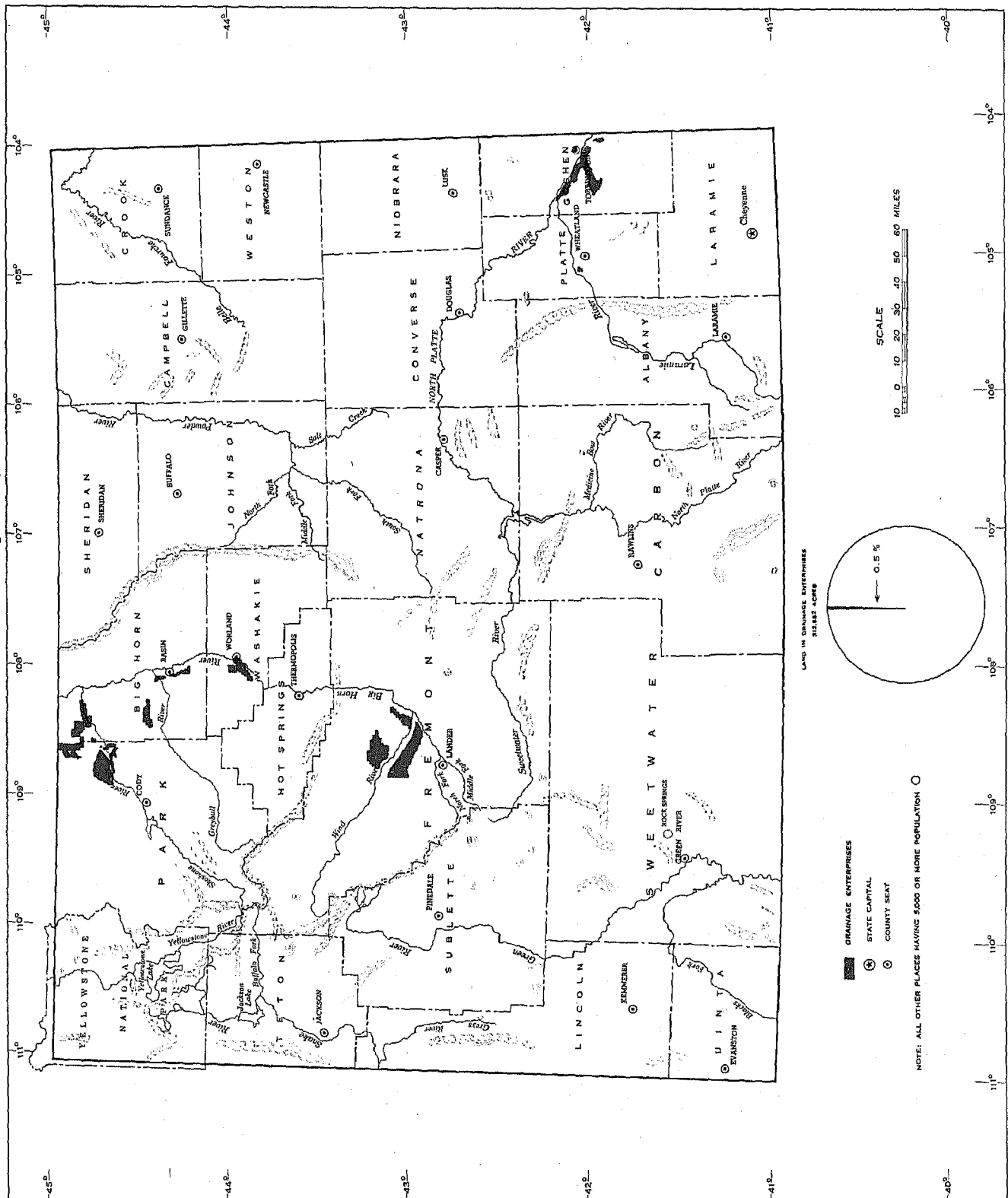






# WYOMING

## Location of Land in Drainage Enterprises



## CENSUS OF DRAINAGE—WYOMING

STATE TABLE 1.—SUMMARY OF DRAINAGE FOR THE STATE: JAN. 1, 1940, 1930, AND 1920

ITEM (See definitions in Introduction)	CENSUS OF—			INCREASE OR DECREASE (—)			
	1940	1930	1920	1930-1940		1920-1930	
				Amount	Percent	Amount	Percent
Approximate land area of State.....acres.....	62,403,840	62,430,720	62,430,720	.....	.....	.....	.....
Land in drainage enterprises.....acres.....	312,662	245,703	95,474	66,950	27.2	150,229	157.4
Improved.....acres.....	277,735	181,828	81,846	95,897	52.7	96,982	114.3
Unimproved:							
Timber and cut-over.....acres.....	1,002	1,100	.....	-98	-8.9	.....	.....
Other.....acres.....	33,935	62,775	10,628	-28,540	-45.9	52,147	490.6
Drainage sufficient for normal crop.....acres.....	287,803	219,762	(1)	68,071	31.0	.....	.....
Partly drained, for partial crop.....acres.....	11,555	16,920	(1)	-5,365	-31.7	.....	.....
Unfit to raise any crop for lack of drainage.....acres.....	13,274	9,021	2 20,785	4,253	47.1	-11,764	-56.6
In occupied farms.....acres.....	287,420	188,327	(1)	90,093	52.6	.....	.....
In planted crops.....acres.....	226,148	163,015	(1)	63,134	38.7	.....	.....
Idle.....acres.....	69,629	94,478	(1)	5,151	8.0	.....	.....
Available for settlement.....acres.....	10,535	39,505	(1)	-28,970	-73.3	.....	.....
Open ditches, completed.....miles.....	643.3	521.0	25.1	122.3	23.5	495.9	(2)
Tile drains, completed.....miles.....	262.1	237.6	114.2	24.5	10.3	123.4	108.0
Drainage pumping plants, capacity.....horsepower.....	(4)	.....	.....	(4)	.....	.....	.....
gal. per min..	(4)	.....	.....	(4)	.....	.....	.....
Capital invested in enterprises.....dollars.....	5,594,856	5,250,573	1,175,962	344,283	6.6	4,074,611	346.5
Average per acre.....dollars.....	17.89	23.79	12.32	-4.90	-21.5	10.47	85.0

<sup>1</sup> Not available.

<sup>2</sup> Reported as "Swampy, subject to overflow, seeped, or alkali."

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

<sup>4</sup> Where there are less than 3 enterprises reporting, data are not shown.

STATE TABLE 2.—AREA OF ENTERPRISES, BY SIZE: JAN. 1, 1940, 1930, AND 1920

SIZE	AREA OF ENTERPRISES <sup>1</sup>			SIZE	AREA OF ENTERPRISES <sup>1</sup>		
	1940	1930	1920		1940	1930	1920
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>		<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
All enterprises.....	312,662	248,316	95,474	1,000 to 1,999 acres.....	6,587		
Less than 100 acres.....				2,000 to 4,999 acres.....	18,705	33,438	21,514
100 to 199 acres.....			140	5,000 to 9,999 acres.....	80,181	63,067	27,400
200 to 499 acres.....	225			10,000 to 19,999 acres.....	37,545	100,375	45,920
500 to 999 acres.....			500	20,000 to 49,999 acres.....	83,902		
				50,000 to 99,999 acres.....	103,427	51,436	

<sup>1</sup> No overlapping of enterprises reported in Wyoming in 1940.

STATE TABLE 3.—LAND AND CAPITAL INVESTED, BY CHARACTER OF ENTERPRISE, JAN. 1, 1940

CHARACTER OF ENTERPRISE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	312,662	100.0	5,594,856	100.0
Drainage districts.....	88,803	28.4	2,315,973	41.4
Irrigation enterprises—Federal <sup>1</sup> .....	223,859	71.6	3,278,883	58.6

<sup>1</sup> Includes projects or divisions of projects of Bureau of Reclamation operated by water users.

STATE TABLE 4.—LAND AND CAPITAL INVESTED, BY TYPE OF DRAINAGE: JAN. 1, 1940, 1930, AND 1920

TYPE OF DRAINAGE <sup>1</sup>	LAND IN ENTERPRISES						CAPITAL INVESTED IN ENTERPRISES					
	1940		1930		1920		1940		1930		1920	
	Acres	Percent	Acres	Percent	Acres	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
All enterprises.....	312,662	100.0	245,703	100.0	96,474	100.0	5,594,856	100.0	5,250,573	100.0	1,175,962	100.0
Gravity drainage only by—												
Open ditches.....	2 178,131	57.3	125,043	50.9	3,404	3.6	2 1,401,517	25.0	1,407,828	26.8	25,127	2.1
Tile drains.....	2,165	0.7	14,740	6.0	54,650	57.2	125,673	2.2	320,000	6.1	590,039	50.2
Open ditches and tile drains..	131,966	42.0	105,920	43.1	37,420	39.2	4,067,666	72.7	3,522,745	67.1	560,796	47.7
Part only by pumping by—												
Open ditches.....	(2)	(2)	.....	.....	.....	.....	(2)	(2)	.....	.....	.....	.....

<sup>1</sup> Each item includes those enterprises that have provided levees in addition to the kind of drains specified.

<sup>2</sup> Data for 1 enterprise operating a pumping plant are included in those for enterprises not operating pumping plants, having open ditches only.

# CENSUS OF DRAINAGE - WYOMING

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STATE TABLE 5.—LAND, CAPITAL INVESTED, AND AREA DELINQUENT IN DRAINAGE TAXES, BY ARREARAGE IN PAYMENT OF OBLIGATIONS: JAN. 1, 1940 AND 1930

FINANCIAL STATUS	LAND IN ENTERPRISES				CAPITAL INVESTED				AREA DELINQUENT	
	1940		1930		1940		1930		1940	1930
	Acres	Percent	Acres	Percent	Dollars	Percent	Dollars	Percent	Acres	Acres
All enterprises.....	312,662	100.0	245,703	100.0	5,594,856	100.0	5,250,573	100.0	21,680	18,686
Enterprises in arrears.....	19,225	6.1	32,021	13.0	457,473	8.2	797,824	15.2	10,275	10,250
With some delinquent land.....	13,465	4.3	24,021	9.8	199,800	3.6	617,824	11.8	10,275	10,250
With no report on delinquency.....	5,760	1.8	8,000	3.2	257,673	4.6	180,000	3.4	.....	.....
Enterprises not in arrears.....	288,437	92.3	213,682	87.0	4,987,363	89.1	4,452,749	84.8	11,405	8,436
With some delinquent land.....	26,755	8.6	101,407	41.3	755,000	13.5	3,296,828	62.8	11,405	8,436
With no delinquent land.....	242,824	77.7	92,115	37.5	3,788,863	67.7	831,121	15.8	.....	.....
With no report on delinquency.....	18,858	6.0	20,160	8.2	443,500	7.9	324,800	6.2	.....	.....
Enterprises not reporting on arrearage—with no report on delinquency.....	5,000	1.6	.....	.....	150,000	2.7	.....	.....	.....	.....

STATE TABLE 6.—LAND, CAPITAL INVESTED, INDEBTEDNESS, ARREARAGE IN PAYMENT OF BONDS, REDUCTION OF DEBT BY REFINANCING, AND ACREAGE DELINQUENT, 1940; DRAINAGE TAXES COLLECTED IN 1939; BY INDEBTEDNESS AND ARREARAGE, JAN. 1, 1940

FINANCIAL STATUS	Land in enterprises	Capital invested	Indebtedness	Arrearage in payment of bonds	Reduction of debt by refinancing	Delinquent in drainage taxes	Drainage taxes collected in 1939
	Acres	Dollars	Dollars	Dollars	Dollars	Acres	Dollars
All enterprises.....	312,662	5,594,856	4,455,107	141,631	408,147	21,680	48,981
Enterprises in debt.....	307,856	5,542,963	4,455,107	141,631	408,147	21,680	47,892
In arrears, amount of arrearage stated.....	19,225	457,473	357,325	141,631	42,500	10,275	3,474
Collecting drainage taxes in 1939.....	5,060	151,800	158,325	11,631	12,500	275	3,474
No collections reported.....	14,165	305,673	199,000	130,000	30,000	10,000	.....
Not in arrears.....	283,631	4,035,490	3,978,282	.....	365,647	11,405	44,408
Collecting drainage taxes in 1939.....	271,658	4,761,106	3,803,898	.....	365,647	11,405	44,408
No collections reported.....	11,773	174,384	174,384	.....	.....	.....	.....
Not reporting as to arrears.....	5,000	150,000	119,500	.....	.....	.....	.....
No collections reported.....	5,000	150,000	119,500	.....	.....	.....	.....
Enterprises not in debt.....	4,806	51,893	.....	.....	.....	.....	1,099
Collecting drainage taxes in 1939.....	2,000	35,000	.....	.....	.....	.....	1,099
No collections reported.....	2,806	16,893	.....	.....	.....	.....	.....

STATE TABLE 7.—LAND AND CAPITAL INVESTED, BY PRINCIPAL PURPOSE OF DRAINAGE, JAN. 1, 1940

PURPOSE OF DRAINAGE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	312,662	100.0	5,594,856	100.0
Improvement of land already in farms.....	104,358	33.4	3,322,778	59.4
Removal of alkali or seepage from irrigation.....	208,304	66.6	2,272,078	40.6

STATE TABLE 8.—LAND AND CAPITAL INVESTED, BY DATE OF ORGANIZATION, JAN. 1, 1940

DATE OF ORGANIZATION	Land in enterprises		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	312,662	100.0	5,594,856	100.0
1910-1914.....	15,595	5.0	312,000	5.6
1915-1919.....	97,958	31.3	1,781,200	31.8
1920-1924.....	152,721	48.8	1,604,657	28.7
1925-1929.....	46,368	14.8	1,896,999	33.9

STATE TABLE 9.—DRAINAGE CONDITION, DEVELOPMENT, AND USE OF LAND IN ENTERPRISES, BY DATE OF ORGANIZATION, 1939

DATE OF ORGANIZATION	Land in all enterprises	DRAINAGE CONDITION			DEVELOPMENT				USE OF LAND					
		Drained		Partly drained	Undrained	Improved land		Timber and cut-over land	Other unimproved land	In occupied farms		In planted crops	Idle	Land available for settlement
										Acres	Per-cent			
	Acres	Acres	Per-cent	Acres	Acres	Acres	Per-cent	Acres	Acres	Acres	Per-cent	Acres	Acres	Acres
All enterprises..	312,662	287,833	92.0	11,555	13,274	277,725	88.8	1,002	33,935	287,420	91.9	226,149	69,629	10,535
1910-1914.....	15,595	10,300	66.0	2,295	3,000	12,300	78.9	.....	3,285	15,595	100.0	11,800	295	.....
1915-1919.....	97,958	92,692	94.6	450	4,816	81,547	83.2	602	15,809	86,735	88.5	69,949	15,524	9,800
1920-1924.....	162,721	144,623	94.7	3,110	4,958	145,005	95.5	400	6,416	144,886	94.9	108,941	43,381	545
1925-1929.....	46,368	40,188	86.6	5,700	500	37,973	81.8	.....	8,415	40,204	86.7	35,959	10,429	190

## CENSUS OF DRAINAGE—WYOMING

STATE TABLE 10.—COST OF OPERATION AND MAINTENANCE, BY TYPE OF DRAINAGE, 1939

TYPE OF DRAINAGE	Land in all enterprises	LAND REPORTING ON COST OF MAINTENANCE AND OPERATION			COST REPORTED		
		Total	Some cost	No cost	Total amount	Per acre on—	
						Total reporting	Area incurring
	Acres	Acres	Acres	Acres	Dollars	Dollars	Dollars
All enterprises.....	312,662	312,662	299,604	12,968	36,137	0.12	0.12
Gravity drainage only <sup>1</sup> .....	312,662	312,662	299,604	12,968	36,137	0.12	0.12
Open ditches only.....	173,018	173,018	173,018	.....	10,264	0.06	0.06
Open ditches and levees.....	6,113	6,113	6,113	.....	1,209	0.20	0.20
Tile drains only.....	2,165	2,165	2,165	.....	500	0.23	0.23
Open ditches and tile drains.....	131,366	131,366	118,398	12,968	24,164	0.18	0.20

<sup>1</sup> Data for 1 enterprise operating a pumping plant are included in those for enterprises having gravity drainage only.

STATE TABLE 11.—LAND AND CAPITAL INVESTED, BY METHOD OF MAINTENANCE AND BY WHETHER MAINTENANCE IS SYSTEMATIC, JAN. 1, 1940

MAINTENANCE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	312,662	100.0	5,594,856	100.0
Method:				
By district forces.....	282,938	90.5	5,163,779	92.3
By contract.....	1,465	0.5	19,800	0.4
Work apportioned to landowners.....	1,650	0.5	40,000	0.7
"None," or not reporting.....	26,579	8.5	371,277	6.6
Whether systematic:				
Reporting "yes".....	221,085	70.7	2,700,185	48.3
Reporting "no".....	91,577	29.3	2,894,671	51.7

STATE TABLE 12.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY OWNERSHIP OF POWER EQUIPMENT FOR MAINTENANCE, 1940

ITEM	All enterprises	ENTERPRISES OWNING POWER EQUIPMENT	
		Amount	Percent
Land in enterprises.....acres....	312,662	268,097	85.7
Capital invested.....dollars..	5,594,856	4,674,999	83.6
Drainage works:			
Open ditches.....miles....	643.3	551.2	85.7
Tile drains.....miles....	262.1	196.9	75.1
Levees.....miles....	7.2	7.2	100.0

STATE TABLE 13.—LAND, CAPITAL INVESTED, AND DRAINAGE WORKS, BY FEDERAL AGENCY GIVING AID IN MAINTENANCE, 1940

AGENCY	Land in enterprises	Capital invested	DRAINAGE WORKS		
			Ditches	Tile	Levees
All enterprises reporting Federal aid received.....	Acres 61,853	Dollars 2,463,594	Miles 291.6	Miles 134.2	Miles .....
Civilian Conservation Corps.....	61,853	2,463,594	291.6	134.2	.....

## CENSUS OF DRAINAGE - WYOMING

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COUNTY TABLE I.—LAND IN DRAINAGE ENTERPRISES CLASSIFIED BY CONDITION AND BY USE, 1940, 1930, AND 1920; AND BY KIND OF WORKS, 1940

ITEM (See definitions in Introduction)		THE STATE	Big Horn	Fremont	Goshen	Park	Platte <sup>1</sup>	Washakie
LAND AREA								
1	Approximate land area.....acres....1940..	62,403,840	2,032,640	5,916,160	1,427,200	3,338,880	1,352,980	1,447,680
2	Drainage enterprises.....number....1940..	2 28	12	5	3	4	1	3
3	Land in enterprises.....acres....1940..	312,682	35,358	109,046	57,292	59,001	1,680	20,285
4	.....1930..	245,703	75,034	33,600	55,186	61,061	1,840	20,285
5	.....1920..	95,474	41,750	140	2,764	29,920	500	18,982
6	Area of all enterprises, overlapping included.....acres....1940..	312,682	65,358	109,046	57,292	59,001	1,680	20,285
7	Amount of overlapping.....acres....1940..							
CONDITION AND USE OF LAND								
8	Land with drainage sufficient for normal crop.....acres....1940..	287,833	52,900	107,346	55,252	50,370	1,680	20,285
9	.....1930..	219,762	57,114	32,980	53,337	55,969	1,800	18,532
10	Increase or decrease (-), 1930-1940.....acres.....	68,071	-4,214	74,366	1,915	-5,629	-120	1,753
11	.....percent.....	31.0	-7.4	225.5	3.6	-10.1	-6.7	9.5
12	Land undrained, unfit for any crop.....acres....1940..	13,274	8,663	1,400	2,040	1,148		
13	.....1930..	9,021	4,840	620	1,649	1,687		225
14	Increase or decrease (-), 1930-1940.....acres.....	4,253	3,846	780	391	-539		-225
15	.....percent.....	47.1	79.5	125.8	23.7	-32.0		-100.0
16	Land partly drained, for partial crop.....acres....1940..	11,555	3,772	300		7,483		
17	.....1930..	16,920	13,080		200	3,375	40	225
18	Increase or decrease (-), 1930-1940.....acres.....	-5,365	-9,308	300	-200	4,108	-40	-225
19	.....percent.....	-41.7	-71.2		-100.0	121.7	-100.0	-100.0
20	Improved land.....acres....1940..	277,725	55,935	96,727	53,201	49,897	1,680	20,285
21	.....1930..	181,828	54,555	13,400	51,897	44,636	1,840	15,500
22	.....1920..	84,846	33,922	140	2,764	29,920	500	17,600
Unimproved land:								
23	Woodland and cut-over land.....acres....1940..	1,002	602	400				
24	.....1930..	1,100	1,100					
25	.....1920..							
26	Other unimproved land.....acres....1940..	33,935	8,821	11,919	4,091	9,104		
27	.....1930..	62,775	19,379	20,200	3,289	16,425		3,482
28	.....1920..	10,628	7,828					2,800
29	Land in occupied farms.....acres....1940..	287,420	62,025	99,246	52,520	52,447	1,680	19,502
30	.....1930..	188,327	50,757	11,350	53,446	44,434	1,840	17,500
31	Increase or decrease (-), 1930-1940.....acres.....	99,093	2,268	87,896	-926	8,013	-160	2,002
32	.....percent.....	52.6	3.8	774.4	-1.7	18.0	-8.7	11.4
33	Land in planted crops.....acres....1940..	226,149	44,317	65,781	48,289	47,279	1,680	18,803
34	.....1930..	183,015	51,825	9,673	43,480	40,727	1,800	15,500
35	Increase or decrease (-), 1930-1940.....acres.....	63,134	-7,518	56,108	4,809	6,552	-120	3,303
36	.....percent.....	38.7	-14.5	580.0	11.1	16.1	-6.7	21.3
37	Land idle.....acres....1940..	69,620	16,079	32,565	8,963	11,323		699
38	.....1930..	64,478	19,685	23,927	9,069	8,400		3,400
39	Increase or decrease (-), 1930-1940.....acres.....	5,161	-3,606	8,638	-103	2,923		-2,701
40	.....percent.....	8.0	-18.3	36.1	-1.1	34.8		-79.4
41	Land available for settlement.....acres....1940..	10,535	386	9,800		349		
42	.....1930..	39,505	9,331	22,050		6,724		1,400
43	Increase or decrease (-), 1930-1940.....acres.....	-28,970	-8,945	-12,250		-6,375		-1,400
44	.....percent.....	-73.3	-95.9	-55.6		-84.8		-100.0
LAND CLASSIFIED BY WORKS, 1940								
45	Land drained by open ditches only.....acres.....	<sup>3</sup> 173,018	16,090	94,941	<sup>3</sup> 54,486	7,501		
46	Length of these ditches.....miles.....	<sup>3</sup> 318.2	84.8	47.0	<sup>3</sup> 161.0	35.4		
47	Part protected by levees of an outside agency.....acres.....							
48	Land drained by open ditches and own levees.....acres.....	6,113		6,113				
49	Length of these ditches.....miles.....	7.2		7.2				
50	Length of these levees.....miles.....	7.2		7.2				
51	Part protected by levees of an outside agency.....acres.....							
52	Land drained by tile only.....acres.....	2,165	2,165					
53	Length of these tile.....miles.....	8.0	8.0					
54	Part protected by levees of an outside agency.....acres.....							
55	Land drained by tile and own levees.....acres.....							
56	Length of these tile.....miles.....							
57	Length of these levees.....miles.....							
58	Part protected by levees of an outside agency.....acres.....							
59	Land drained by open ditches and tile.....acres.....	131,366	47,103	7,992	2,806	51,500	1,680	20,285
60	Length of these open ditches.....miles.....	317.9	62.5	11.8	0.1	223.0	3.0	17.5
61	Length of these tile.....miles.....	254.1	72.9	7.7	0.1	142.7	8.0	22.7
62	Part protected by levees of an outside agency.....acres.....							
63	Land drained by open ditches, tile, and levees.....acres.....							
64	Length of these open ditches.....miles.....							
65	Length of these tile.....miles.....							
66	Length of these levees.....miles.....							
67	Part protected by levees of an outside agency.....acres.....							
68	Land in enterprises operating pumping plants.....acres.....	( <sup>3</sup> )			( <sup>3</sup> )			
69	Length of open ditches owned by these enterprises.....miles.....	( <sup>3</sup> )			( <sup>3</sup> )			
70	Length of tile owned by these enterprises.....miles.....							
71	Length of levees owned by these enterprises.....miles.....							
72	Part protected by levees of an outside agency.....acres.....							

<sup>1</sup>For counties having less than 3 enterprises, statistics are shown only by written permission of each enterprise affected.<sup>2</sup>An intercounty enterprise is counted in each county in which a part is located. The number of separate enterprises in the State is 25.<sup>3</sup>Data for 1 enterprise operating pumping plant are included in those for enterprises drained by open ditches only.

## CENSUS OF DRAINAGE—WYOMING

COUNTY TABLE II.—DRAINAGE ENTERPRISES—WORKS AND CAPITAL INVESTED, 1940, 1930, AND 1920; AND MAINTENANCE AND OPERATION, AND FINANCIAL CONDITION, 1939

ITEM (See definitions in Introduction)	THE STATE	Big Horn	Fremont	Goshen	Park	Platte <sup>1</sup>	Washakie
<b>DRAINAGE WORKS</b>							
1 Drainage enterprises.....number.....1940..	<sup>2</sup> 28	12	5	3	4	1	3
Open ditches:							
2 Completed.....miles.....1940..	643.3	147.3	66.0	151.1	258.4	3.0	17.5
3 ....."1930..	521.0	198.3	22.7	108.0	178.0		14.0
4 ....."1920..	25.1	2.5	( <sup>3</sup> )	( <sup>3</sup> )	17.6	( <sup>3</sup> )	
5 Additional length authorized.....miles.....1940..	47.5	19.5	6.0	7.0	15.0		
Tile drains:							
6 Completed.....miles.....1940..	262.1	80.9	7.7	0.1	142.7	8.0	22.7
7 ....."1930..	237.6	68.2	13.0		135.7	3.7	17.0
8 ....."1920..	114.2	43.9	( <sup>3</sup> )	( <sup>3</sup> )	47.1	( <sup>3</sup> )	23.2
9 Additional length authorized.....miles.....1940..	1.0				1.0		
Levees and dikes:							
10 Completed.....miles.....1940..	7.2		7.2				
11 ....."1930..							
12 ....."1920..							
13 Additional length authorized.....miles.....1940..							
Pumping plants:							
14 Engine capacity.....horsepower.....1940..	( <sup>4</sup> )			( <sup>4</sup> )			
15 ....."1930..							
16 ....."1920..							
17 Pump capacity.....gal. per min.....1940..	( <sup>4</sup> )			( <sup>4</sup> )			
18 ....."1930..							
19 ....."1920..							
20 Land served by pumps.....acres.....1940..	( <sup>4</sup> )			( <sup>4</sup> )			
21 ....."1930..							
22 ....."1920..							
23 Wells pumped for drainage.....number.....1940..	( <sup>4</sup> )			( <sup>4</sup> )			
24 ....."1930..							
<b>CAPITAL INVESTED</b>							
25 Capital invested to January 1.....dollars.....1940..	5,594,856	1,819,256	457,027	498,878	2,194,605	40,000	585,000
26 ....."1930..	5,250,573	1,818,624	309,419	473,369	2,075,161	20,000	554,000
27 ....."1920..	1,175,962	530,027	6,231	16,896	442,808	2,000	158,000
28 Estimated cost when completed.....dollars.....1940..	5,728,123	1,875,183	477,027	504,878	2,246,035	40,000	585,000
29 ....."1930..	5,599,032	1,840,624	309,419	498,369	2,349,120	37,000	555,000
30 ....."1920..	1,067,367	737,433	6,231	21,120	632,583	2,000	278,000
31 Average cost per acre when completed.....dollars.....1940..	18.32	28.69	4.37	8.81	38.07	23.81	28.84
32 ....."1930..	22.79	24.65	9.21	9.03	38.47	20.11	29.23
33 ....."1920..	17.46	17.42	44.51	7.64	21.44	4.00	13.63
Invested in and required for completion, 1940:							
34 Enterprises having open ditches only.....dollars..	<sup>5</sup> 1,417,344	510,610	197,027	<sup>6</sup> 487,095	221,722		
35 Average amount per acre.....dollars..	<sup>5</sup> 8.19	31.73	2.08	<sup>6</sup> 8.96	29.66		
36 Enterprises having open ditches and levees.....dollars..	67,000		67,000				
37 Average amount per acre.....dollars..	10.96		10.96				
38 Enterprises having tile only.....dollars..	125,673	125,673					
39 Average amount per acre.....dollars..	58.05	58.05					
40 Enterprises having tile and levees.....dollars..							
41 Average amount per acre.....dollars..							
42 Enterprises having open ditches and tile.....dollars..	4,118,106	1,238,900	213,000	16,893	2,024,313	40,000	585,000
43 Average amount per acre.....dollars..	31.35	26.30	26.65	6.02	39.31	23.81	28.84
44 Enterprises having ditches, tile, and levees.....dollars..							
45 Average amount per acre.....dollars..							
46 Enterprises operating pumping plants.....dollars..	( <sup>5</sup> )			( <sup>5</sup> )			
47 Average amount per acre.....dollars..	( <sup>5</sup> )			( <sup>5</sup> )			
<b>MAINTENANCE AND OPERATION</b>							
Cost of maintenance and operation in 1939:							
48 By enterprises operating pumping plants.....dollars..	( <sup>5</sup> )			( <sup>5</sup> )			
49 Enterprises reporting.....number..	1			1			
50 Land in these enterprises.....acres..	( <sup>5</sup> )			( <sup>5</sup> )			
51 Average cost per acre.....dollars..	( <sup>5</sup> )			( <sup>5</sup> )			
52 By enterprises not operating pumping plants.....dollars..	<sup>5</sup> 36,137	6,336	5,255	( <sup>5</sup> )	8,979		( <sup>5</sup> )
53 Enterprises reporting.....number..	24	12	5	1	4		2
54 Land in these enterprises.....acres..	<sup>5</sup> 299,694	65,358	109,046	( <sup>5</sup> )	59,001		( <sup>5</sup> )
55 Average cost per acre.....dollars..	<sup>5</sup> 0.12	0.10	0.04	( <sup>5</sup> )	0.15		( <sup>5</sup> )
Federal aid in maintenance:							
56 Enterprises reporting.....number..	3	1			2		
57 Land in these enterprises.....acres..	61,853	( <sup>5</sup> )			( <sup>5</sup> )		
<b>FINANCIAL CONDITION</b>							
58 Drainage taxes collected in 1939.....dollars..	48,981	10,225	7,926	( <sup>5</sup> )	8,619	1,400	( <sup>5</sup> )
59 Enterprises reporting.....number..	22	9	5	2	3	1	2
60 Land in these enterprises.....acres..	278,918	49,018	109,046	( <sup>5</sup> )	49,403	1,680	( <sup>5</sup> )
61 Average amount collected per acre.....dollars..	0.18	0.21	0.07	( <sup>5</sup> )	0.17	0.83	( <sup>5</sup> )
62 Area delinquent in drainage taxes, Dec. 31, 1939.....acres..	21,680	<sup>7</sup> 19,680	2,000		( <sup>7</sup> )		
63 Enterprises reporting.....number..	9	5	3		1		
64 Land in these enterprises.....acres..	40,220	<sup>7</sup> 26,115	14,105		( <sup>7</sup> )		
65 Portion delinquent in these enterprises.....percent..	53.9	<sup>7</sup> 75.4	14.2		( <sup>7</sup> )		
66 Total indebtedness, Dec. 31, 1939.....dollars..	4,455,107	1,604,296	406,327	( <sup>5</sup> )	1,674,773	24,850	<sup>8</sup> 744,861
67 Enterprises reporting.....number..	26	12	5	1	4	1	3
68 Land in these enterprises.....acres..	307,856	65,358	109,046	( <sup>5</sup> )	59,001	1,680	<sup>8</sup> 72,771
69 Average indebtedness per acre.....dollars..	14.47	24.55	3.73	( <sup>5</sup> )	28.38	14.79	<sup>8</sup> 10.21
70 Indebtedness in arrears, Dec. 31, 1939.....dollars..	141,631	<sup>7</sup> 141,631			( <sup>7</sup> )		
71 Enterprises reporting.....number..	5	4			( <sup>7</sup> )		
72 Land in these enterprises.....acres..	19,225	<sup>7</sup> 19,225			( <sup>7</sup> )		
73 Average arrearage per acre.....dollars..	7.37	<sup>7</sup> 7.37			( <sup>7</sup> )		
74 Reduction of debt by refinancing, prior to 1940.....dollars..	408,147	408,147					
75 Enterprises reporting.....number..	8	8					
76 Land in these enterprises.....acres..	37,268	37,268					
77 Average reduction per acre.....dollars..	10.95	10.95					

<sup>1</sup>For counties having less than 3 enterprises, statistics are shown only by written permission of each enterprise affected. <sup>2</sup>An intercounty enterprise is counted in each county in which a part is located. The number of separate enterprises in the State is 25. <sup>3</sup>Not available. <sup>4</sup>Where there are less than 3 enterprises reporting in the State, data are not shown. <sup>5</sup>Data for 1 enterprise operating pumping plant are included in those for enterprises not operating pumping plants, having open ditches only. <sup>6</sup>Where there are less than 3 enterprises reporting, data are shown only in the State totals, except as noted in footnotes 1 and 4. <sup>7</sup>Data for 1 enterprise in Park County included in those for Big Horn County. <sup>8</sup>Data for 1 enterprise in Goshen County included in those for Washakie County.

# CENSUS OF DRAINAGE—ALABAMA AND VIRGINIA

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TABLE 1.—SUMMARY OF DRAINAGE FOR THE STATES: JAN. 1, 1940 AND 1930<sup>1</sup>

ITEM (See definitions in Introduction)	CENSUS OF —		INCREASE OR DECREASE (—)	
	1940	1930	Amount	Percent
Approximate land area of State.....acres.....	58,225,280	25,767,680	.....	.....
Land in drainage enterprises.....acres.....	43,759	15,042	28,717	100.0
Improved.....acres.....	21,299	6,042	15,257	252.5
Unimproved:				
Timber and cut-over.....acres.....	11,579	8,500	3,079	(2) 35.2
Other.....acres.....	10,681	500	10,381	.....
Drainage sufficient for normal crop.....acres.....	15,714	13,138	2,576	19.6
Partly drained, for partial crop.....acres.....	17,534	1,904	15,630	820.0
Unfit to raise any crop for lack of drainage.....acres.....	10,511	.....	10,511	.....
In occupied farms.....acres.....	43,759	5,704	38,055	667.2
In planted crops.....acres.....	18,681	4,748	13,933	293.4
Idle.....acres.....	25,078	9,500	15,578	161.0
Available for settlement.....acres.....	.....	9,000	-9,000	-100.0
Open ditches, completed.....miles.....	89.0	40.0	49.0	122.5
Tile drains, completed.....miles.....	.....	.....	.....	.....
Drainage pumping plants, capacity.....horsepower.....	.....	.....	.....	.....
.....gal. per min.....	.....	.....	.....	.....
Capital invested in enterprises.....dollars.....	611,300	241,608	369,692	153.0
Average per acre.....dollars.....	13.97	16.06	-2.09	-13.0

<sup>1</sup>No drainage enterprises reported in Alabama in 1930.

<sup>2</sup>Percent not shown when more than 1,000.

TABLE 2.—AREA OF ENTERPRISES, BY SIZE: JAN. 1, 1940 AND 1930

SIZE	AREA OF ENTERPRISES <sup>1</sup>	
	1940	1930
All enterprises.....	Acres 43,759	Acres 15,042
1,000 to 1,999 acres.....	.....	.....
2,000 to 4,999 acres.....	2,146	5,501
5,000 to 9,999 acres.....	.....	0,539
10,000 to 19,999 acres.....	41,613	.....

<sup>1</sup>No overlapping of enterprises indicated in Alabama and Virginia in 1940.

TABLE 3.—LAND AND CAPITAL INVESTED, BY CHARACTER OF ENTERPRISE, JAN. 1, 1940

CHARACTER OF ENTERPRISE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	43,759	100.0	611,300	100.0
Drainage districts.....	43,759	100.0	611,300	100.0
Other, or not reported.....	.....	.....	.....	.....

TABLE 4.—LAND AND CAPITAL INVESTED, BY TYPE OF DRAINAGE: JAN. 1, 1940 AND 1930

TYPE OF DRAINAGE	LAND IN ENTERPRISES				CAPITAL INVESTED IN ENTERPRISES			
	1940		1930		1940		1930	
	Acres	Percent	Acres	Percent	Dollars	Percent	Dollars	Percent
All enterprises.....	43,759	100.0	15,042	100.0	611,300	100.0	241,608	100.0
Gravity drainage only by—								
Open ditches.....	43,759	100.0	15,042	100.0	611,300	100.0	241,608	100.0
All or part by pumping.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 5.—LAND AND CAPITAL INVESTED, BY PRINCIPAL PURPOSE OF DRAINAGE, JAN. 1, 1940

PURPOSE OF DRAINAGE	Land		Capital invested	
	Acres	Percent	Dollars	Percent
All enterprises.....	43,759	100.0	611,300	100.0
Improvement of land already in farms.....	28,045	64.1	410,000	67.1
Reclamation of swamp land not previously in farms.....	15,714	35.9	201,300	32.9



