

**STATE OF NEBRASKA
DEPARTMENT
OF
PUBLIC WORKS
REPORT OF SECRETARY**

1929-1930

Eighteenth Biennial Report

of the

Department of Public Works

To

HONORABLE ARTHUR J. WEAVER

Governor of the State of Nebraska

Lincoln, Nebraska

1929-1930

November 1, 1930.

TO HIS EXCELLENCY, ARTHUR J. WEAVER,
GOVERNOR OF THE STATE OF NEBRASKA.

MY DEAR GOVERNOR:

As provided in Section 8421 of the Compiled Statutes for 1922, I have the honor to submit the following report of the work of the Department of Public Works during the past two years.

BUREAU OF ROADS AND BRIDGES

The accomplishments of this department during the past two years includes the building of 196 miles of hard-surfaced pavement, 22 miles of oil-sand construction, 980 miles of gravel surfacing, and 1122 miles of grading, together with incidental small drainage structures and the building of 160 bridges.

All of the pavement constructed has been of twenty foot width and is described more explicitly in the report of M. B. Jones, Assistant Construction Engineer.

We have continued the experiments started two years ago with oil-sand and oil-gravel mixtures, and believe from the information that we have thus far obtained that this type of construction has great possibilities, particularly in the northwestern section of the state.

The total number of bridges constructed during the two-year period include such major structures as bridges across the Platte river west of Kearney, across the Platte river near Alda, across the South Platte river at Paxton, across the South Platte river at Hershey, across the South Platte river at Ogallala, across the Niobrara river near Naper, also across the Nemaha river at Falls City.

The above construction both as to highways and bridges has all been accomplished with current revenue.

Attention is called to the fact that our prices for highway work during this biennium have been lower than those of any previous biennium in the history of road-building activities. The prices as an average for this biennium have been approximately thirty percent below those of the biennium for 1923-1924; about fifteen percent below those of 1925-1926, and about ten percent below those of the biennium of 1927-1928. Taking one item, for example, such as pavement, it is found that the costs at the present time are approximately ten thousand dollars per mile less than they were during the earliest biennium above listed.

I have always stated that I thought the policy for this state should be one of gravel surfacing at low cost the State and Federal highway system on the pay-as-you go plan (which has been adopted as a state

policy by the legislature) and then determine by actual experience those roads on which gravel surfacing is inadequate, using this very practical method as I consider it as a means of gaging the necessary progress in the way of hard-surfaced construction.

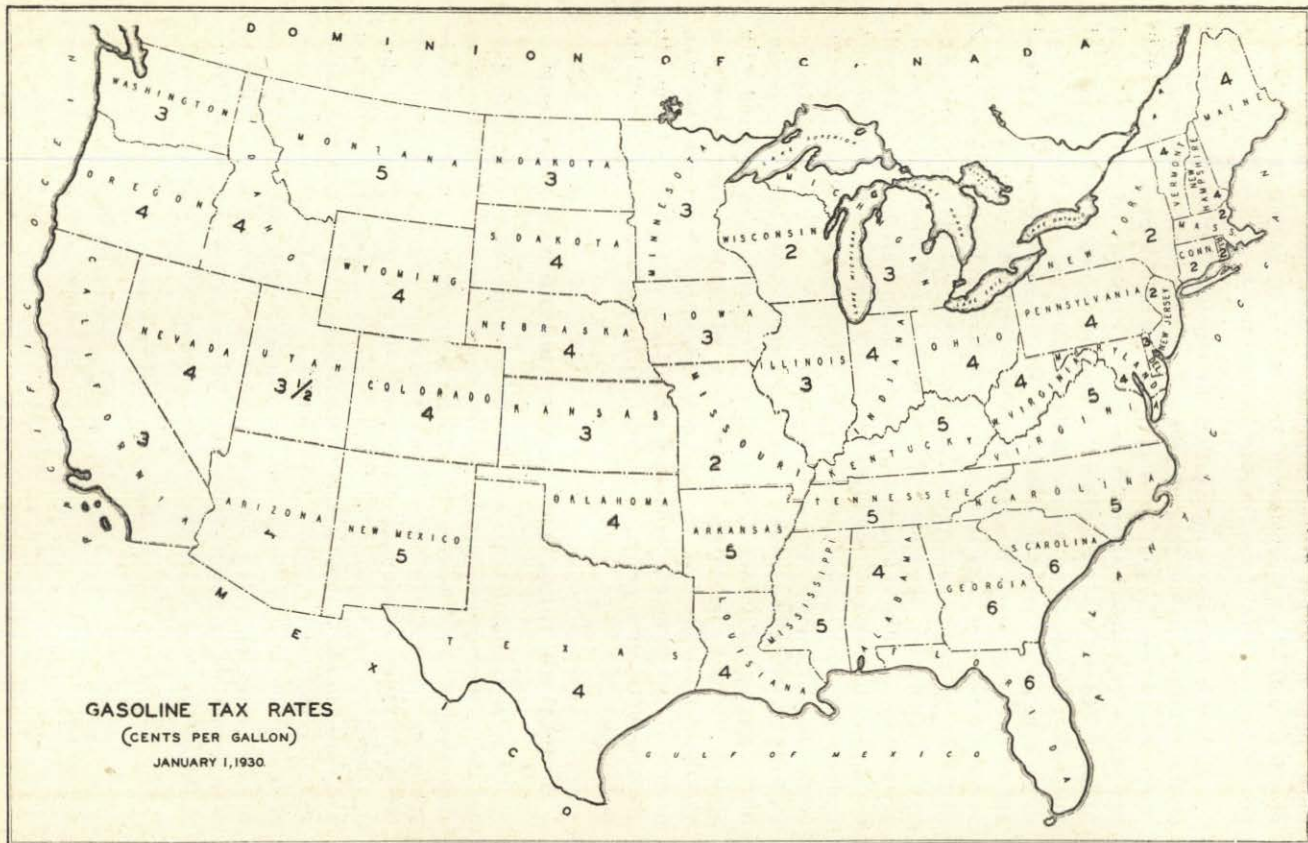
With this thought in mind, it is my opinion that we have arrived at the point where the rate of progress in hard-surfaced construction should be increased. Our present revenue will not make this possible unless a very considerable portion of our construction funds is used to meet Federal aid for paving. Attention is called to that part of this report having to do with available Federal aid. As this is written there appears to be some possibility of Congress advancing Federal aid to the state as a measure to relieve unemployment, where the states are not now able to meet such Federal aid. It is to be noted that there is approximately \$4,500,000 of Federal aid unencumbered, now available for contracts. This does not take account of Federal-aid projects already contracted and those under agreement, which will require future revenue to finance the state's part. To be able to meet Federal aid with present revenue can be accomplished only in the event that practically all work is concentrated on constructing the Federal system and that work on the strictly state highways be deferred largely for future action. In case the state is to proceed with present revenue and without an increase of funds it then becomes a question of deciding on the division of construction funds between paving and the further expansion of the gravel highway system. In deciding on such a program, account will need be taken of available Federal Aid.

BUREAU OF IRRIGATION, WATER POWER AND DRAINAGE

Particular attention is called to the great growth in irrigation during the past ten years. Our records show that in 1889 there were approximately 9000 acres of land under irrigation; in 1919 there were approximately 400,000 acres under irrigation and that in 1930 this acreage had increased to 680,000 acres, or an increase of 70% during the past eleven years. Of the increase in acreage during the past ten years we find that a very considerable part of this has taken place in the lower Platte. The increase in irrigated acreage east of the city of North Platte has been from 10,000 acres in 1912 to 155,000 acres in 1929. This increase makes necessary, in order to have a dependable water supply, the construction of storage reservoirs in the lower areas of the Platte river between Sutherland and Cozad.

Respectfully submitted,

R. L. COCHRAN,
Secretary and State Engineer.



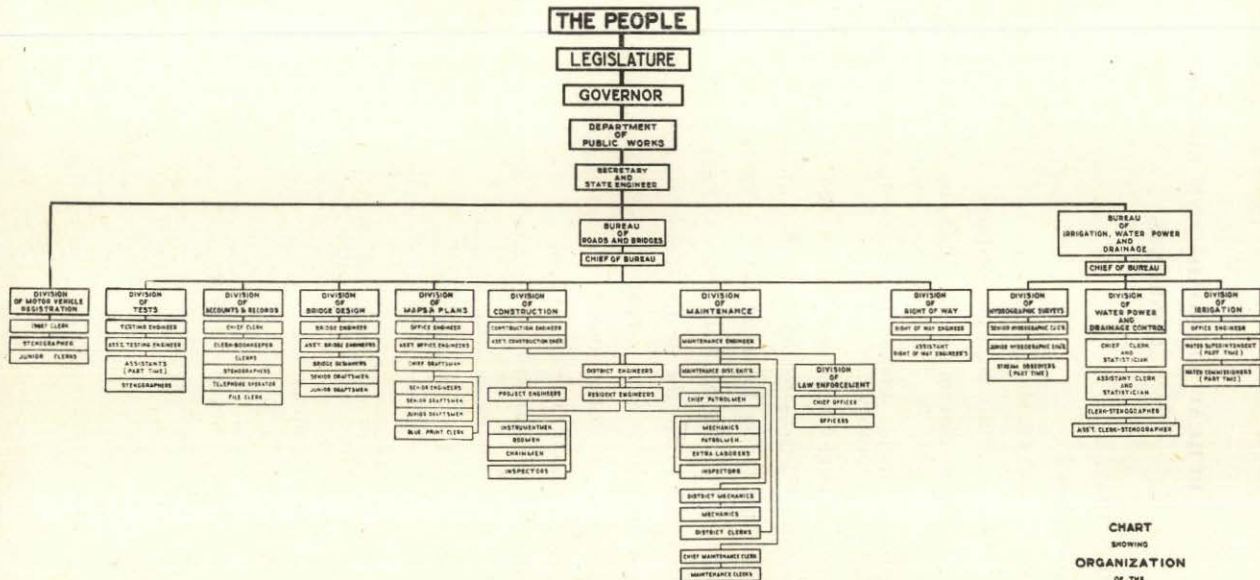


CHART
SHOWING
ORGANIZATION
OF THE
DEPARTMENT OF PUBLIC WORKS
STATE OF NEBRASKA
NOVEMBER 15TH 1930

PART I
BUREAU OF ROADS AND BRIDGES
CONTENTS

Organization Chart.....	5
List of Executives.....	8
Regular Employees (Table).....	9
Report of Nebraska State Highway Mileage.....	14
Contracts Awarded November 15, 1928 to November 1, 1930. (Table)	16
Improvement of Roads Connecting State Institutions and State Parks with Highways.....	34
Contractors to whom Contracts were Awarded.....	37
Average Contract Prices for 1929-1930. (Table).....	40
Average Contract Prices for 1927-1928. (Table).....	42
Average Contract Prices for 1917-1926. (Table).....	44
Average Contract Prices for Bridge Items. (Table).....	46
Federal Aid Appropriations. (Table).....	47
Total Obligations by Bienniums. (Table).....	48
County Apportionment Ratios. (Table).....	49
Reports of the Eight Districts.....	52
Division of Construction.....	63
Paving	65
Graveled Roads in Nebraska.....	69
Nebraska Oiled Roads.....	71
Division of Maintenance.	
Functions	81
Organization	82
Inventory of Equipment.....	86
Snow Removal.....	87
Signs	88
Oil Dust Palliatives and Oil Mats.....	89
Road Magnet.....	91
Traffic Census.....	92
Budgets and Costs.....	96
Maintenance Costs.....	98
Highway Law Enforcement.....	103

CONTENTS (Continued)

Division of Maps and Plans.....	107
Bridge Design and Construction.....	111
Descriptions of Bridges Built in 1929-1930.....	136
Division of Accounts and Records.....	142
Division of Right of Way	144
Right of Way Purchased. (Table).....	146
Division of Tests.	
Function, Organization & Needs.....	148
Importance of Proper Sampling and Testing.....	150
Materials	151
Research Work	152
Summary of Laboratory Tests (Table).....	155
Division of Motor Vehicle Registration.....	157
Annual Report of Motor Vehicle Department, 1928. (Table).....	160
Annual Report of Motor Vehicle Department, 1929. (Table).....	164

**LIST OF EXECUTIVES AND LENGTH OF SERVICE
WITH
DEPARTMENT OF PUBLIC WORKS**

R. L. Cochran, Secretary13 yrs. 5 mo.

Bureau of Roads & Bridges

A. T. Lobdell, Chief Bureau.....11 yrs. 4 mo.
 A. M. Gaddis, Construction Engineer.....11 yrs. 9 mo.
 M. B. Jones, Ass't Const. Engr..... 8 yrs. 7 mo.
 A. C. Tilley, Maintenance Engineer.....11 yrs. 7 mo.
 F. H. Klietsch, District Engineer No. 1.....10 yrs. 1 mo.
 Edwin Olmstead, District Engineer No. 2..... 9 yrs. 8 mo.
 J. B. Martin, District Engineer No. 3..... 4 yrs 8 mo.
 F. C. Rolls, District Engineer, No. 4.....11 yrs. 7 mo.
 T. C. Middleswart, District Engineer No. 5.....11 yrs. 8 mo.
 F. C. Smith, District Engineer No. 6..... 8 yrs. 8 mo.
 C. W. Eubank, District Engineer No. 7.....10 yrs. 0 mo.
 W. H. Bauman, District Engineer No. 8.....10 yrs. 0 mo.
 A. G. Williams, R. O. W. Engineer..... 3 yrs. 9 mo.
 R. J. Boyd, Office Engineer.....11 yrs. 1 mo.
 R. N. Riddle, Ass't Office Engineer..... 7 yrs. 9 mo.
 E. J. Babcock, Jr., Ass't Office Engineer..... 9 yrs. 3 mo.
 J. G. Mason, Bridge Engineer..... 4 yrs. 3 mo.
 A. L. Ogle, Ass't Bridge Engineer.....11 yrs. 6 mo.
 C. M. Duff, Testing Engineer..... 8 yrs. 3 mo.
 B. L. Schultz, Chief Clerk..... 9 yrs. 7 mo.

BUREAU OF IRRIGATION, WATER POWER AND DRAINAGE

Robert H. Willis, Chief.....35 yrs. 6 mo.
 John J. Rasmussen, Superintendent Division 2-D..... 4 yrs. 0 mo.
 F. B. Shaffer, Office Engineer..... 2 yrs. 9 mo.
 K. I. Ward, Statistician.....12 yrs. 2 mo.
 A. W. Hall, Hydrographer-Draftsman.....11 yrs. 6 mo.
 A. E. Johnston, Hydrographer.....10 yrs. 8 mo.
 C. E. Franklin, Hydrographer..... 5 yrs. 7 mo.
 Esther Clay, Clerk.....11 yrs. 6 mo.

DIVISION OF MOTOR VEHICLE REGISTRATION

Mabel G. Tracy, Chief.....11 yrs. 10 mo.

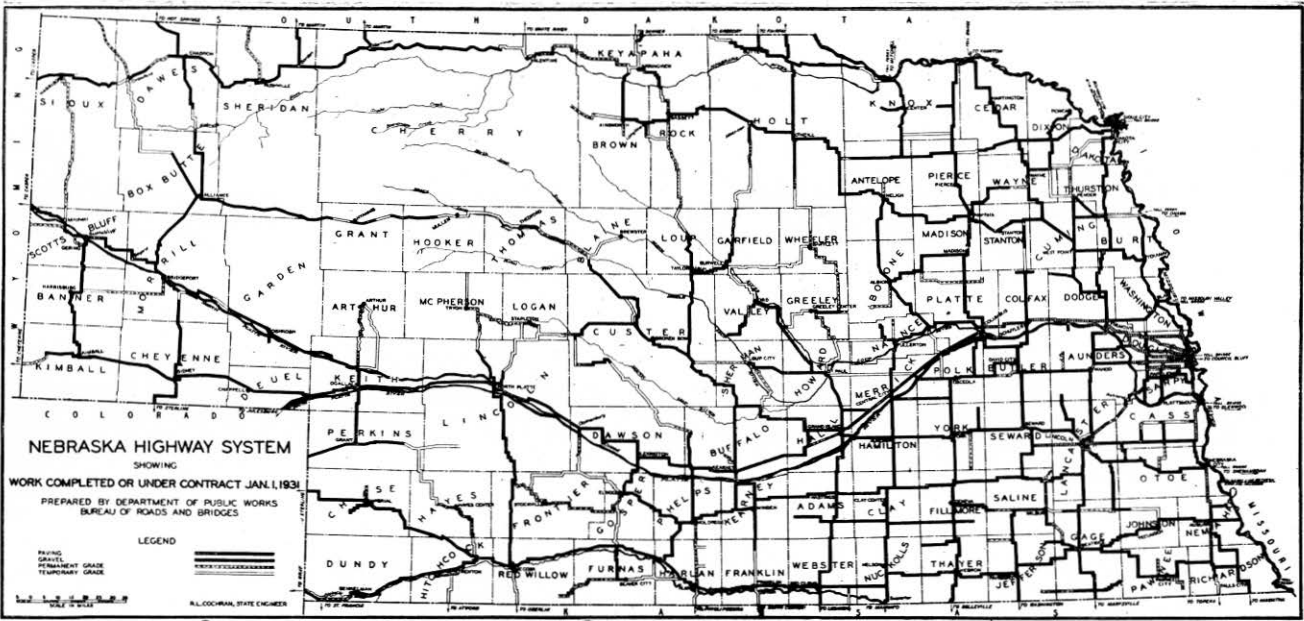
REGULAR EMPLOYEES OF THE DEPARTMENT OF PUBLIC WORKS, 1929

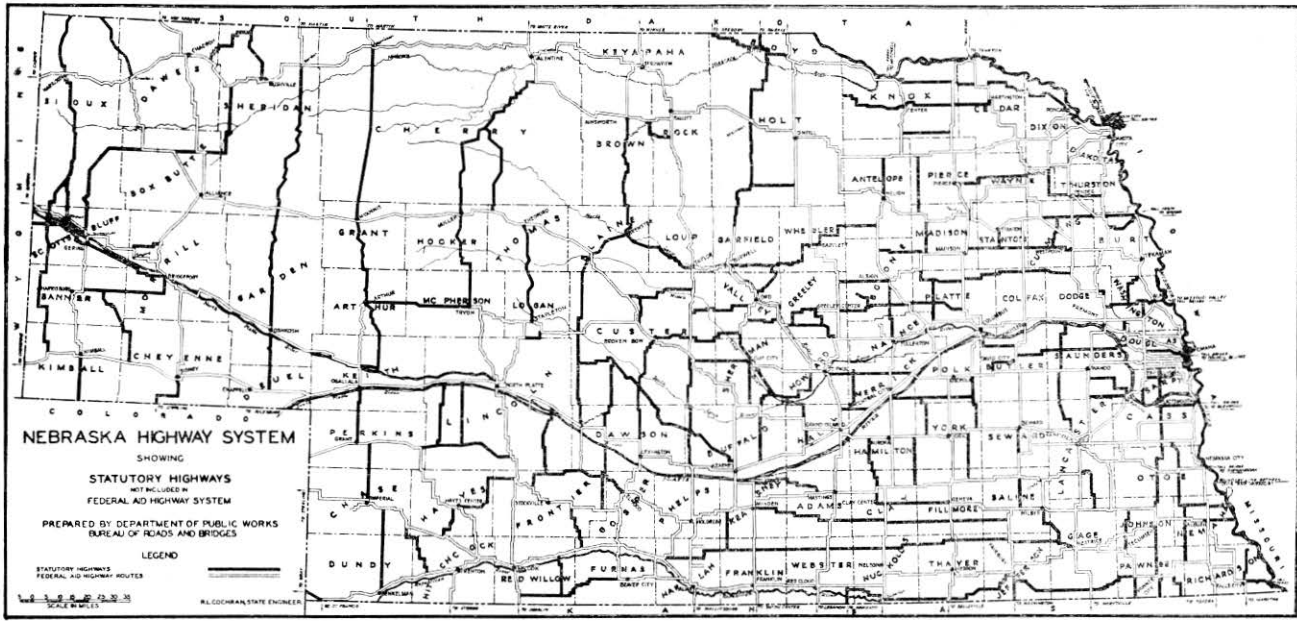
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Secretary	1	1	1	1	1	1	1	1	1	1	1	1
Chief Bureau Roads	1	1	1	1	1	1	1	1	1	1	1	1
Maint. & Const. Engr.	1	1	1	1	1	1	1	1	1	1	1	1
Ass't Const. Engr.	1	1	1	1	1	1	1	1	1	1	1	1
District Engineers	8	8	8	8	8	8	8	8	8	8	8	8
R. O. W. Engr.	1	1	1	1	1	1	1	1	1	1	1	1
Clerical & Records	9	9	9	9	9	10	14	12	11	11	10	11
Motor Vehicle	16	17	21	22	22	25	23	22	22	12	12	12
Drivers - License										9	8	8
Irrigation Office	6	7	7	6	7	7	6	7	8	6	6	7
Water Observers	8	6	8	8		10	10	10	9	9	9	8
Water Commissioners	9	9	9	9	9		3	4	2	2	2	1
Equipment Division	4	5	5	5	5	5						
Office Engineer	1	1	1	1	1	1	1	1	1	1	1	1
Ass't Office Engrs.	2	2	2	2	2	2	2	2	2	2	2	2
Bridge Engineers	13	13	10	12	12	16	18	18	18	17	17	16
Sr. Engrs. & Draftsmen	28	21	21	21	21	25	27	26	26	26	26	25
Draftsmen—Part Time	1			5	5	1	2	1	8	8	9	9
Blue Printer	1	1	1	1	1	1	1	1	1	1	1	1
Res. & Proj. Engrs.	42	48	46	46	47	58	60	59	59	59	59	60
Instrument Men	21	22	20	20	21	30	29	29	29	28	29	28
Rodmen & Inspectors	21	22	27	38	44	55	81	90	80	83	82	78
Chainmen	5	3	5	5	14	41	47	50	52	48	46	39
Maint. Clerks—Lincoln	12	11	12	9	10	9	9	9	9	9	9	9
Reg. Patrolmen, Power	400	395	407	400	439	403	418	399	407	392	393	400
Reg. Patrolmen, Team	32	33	35	34	32	36	39	38	35	35	37	36
Mechanics	22	22	22	22	22	20	21	21	21	21	21	21
Chief Patrolmen	40	39	39	38	39	38	42	38	36	37	37	38
District Clerks	8	8	8	8	8	8	8	8	8	8	8	8
Total	714	707	728	734	783	814	874	858	857	837	837	831

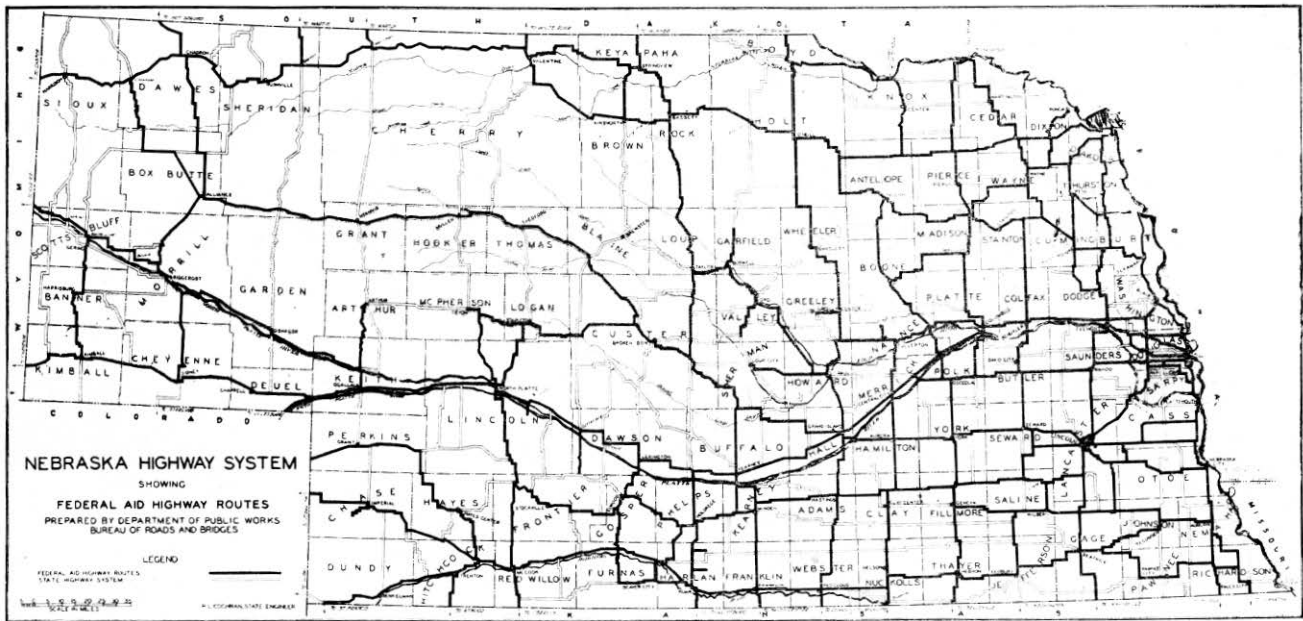
DEPARTMENT OF PUBLIC WORKS

REGULAR EMPLOYEES OF THE DEPARTMENT OF PUBLIC WORKS, 1930

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Secretary	1	1	1	1	1	1	1	1	1	1
Chief Bureau Roads	1	1	1	1	1	1	1	1	1	1
Construction Engr.	1	1	1	1	1	1	1	1	1	1
Ass't Const. Engr.	1	1	1	1	1	1	1	1	1	1
Maintenance Engr.	1	1	1	1	1	1	1	1	1	1
District Engineers	8	8	8	8	8	8	8	8	8	8
R. O. W. Engr.	1	1	1	1	1	1	1	1	1	1
Clerical & Records	10	10	10	11	11	11	12	12	12	12
Motor Vehicle	12	18	18	12	12	12	13	13	13	13
Special Survey	1	1	1	2	8	7	8	13	8	3
Irrigation Office	7	7	8	8	6	7	9	10	6	7
Water Observers	7	7	9	9	11	9	9	9	10	11
Water Commissioners	1	1	1	1	1	1	2	1	1	1
Office Engineer	1	1	1	1	1	1	1	1	1	1
Ass't Office Engrs.	2	2	2	2	2	2	2	2	2	2
Bridge Engineers	16	16	16	16	16	16	16	16	16	16
Sr. Engrs. & Draftsmen	25	25	25	24	21	23	23	24	21	23
Draftsmen—Part Time	9	9	10	10	12	1	1	.....	2	4
Supply Clerk	1	1	1	1	1	1	1	1	1	1
Res. & Proj. Engrs.	59	58	56	70	77	80	78	82	79	82
Instrument Men	25	27	20	20	21	30	30	28	27	29
Rodmen & Inspectors	49	63	65	94	103	123	124	117	104	98
Chainmen	27	31	36	49	57	74	83	79	59	53
Maint. Clerks—Lincoln	8	8	8	8	8	8	8	8	8	8
Maint. Employees in Field										
Regular Patrolmen, Power	386	382	390	385	390	377	353	338	340	344
Regular Patrolmen, Team	28	28	30	31	30	30	28	27	27	25
Mechanics	18	16	16	16	16	16	16	16	16	16
Chief Patrolmen	43	42	42	42	43	46	44	36	36	35
Sign Dept.	3	3	3	3	3	3	3	3	3	3
District Clerks	8	8	8	8	8	8	8	8	8	8
Total	760	778	790	836	872	899	886	858	814	808







REPORT OF NEBRASKA STATE HIGHWAY MILEAGE

The following description gives the status of the mileage of the Nebraska State Highway System estimated as of December 31st, 1930.

The total mileage of State and Federal highways when completed equals approximately 9752 miles, which is 1740 miles more than the total mileage as of two years ago.

The origin of the 9752 miles on the Nebraska State Highway System is as follows:

From the State system established by the 1919 Legislature, of which 5619 miles is now on the Federal Aid System; and also 582 miles on the old State system which became state highways as provided by law between 1919 and 1923 by having been built with State and Federal funds prior to establishment of the 7% system in 1923.....	6201 miles
Highways number 10 to 161 inclusive and not included in the above 6201 miles	2383 miles
Highways number 162 to 204, inclusive	1168 miles
Total	9752 miles

The State has marked and will maintain, as of December 31st, 1930, approximately 6882 miles, which is 584 miles more than were marked and maintained two years ago. The State has not marked and is not maintaining 2872 miles which have been added by the last two Legislatures but which can be maintained by the State only after construction, as required by law.

Of the 6882 miles on the Nebraska State Highway System which are marked and maintained, the status as of December 31st, 1930, is estimated as follows:

Gravel roads	4760 miles
Paved roads	368 miles
Oiled roads	29 miles
Permanent grade without surfacing	510 miles
Temporary grade without surfacing	1048 miles
Unimproved but marked and maintained	167 miles
Total maintained	6882 miles
Mileage on State system not maintained.....	2870 miles
Total State Highway mileage	9752 miles

The following chart gives the mileage constructed by the Department of Public Works by bienniums. The totals on the following chart are not the same as the totals given in the preceding paragraph inasmuch as considerable mileage was improved by counties, cities and with other funds and also, in the case of gravel surfacing the natural condition of the soil produced a natural gravel road, which did not require construction. For complete totals of mileage by types see the previous paragraph.

**MILEAGE CONSTRUCTED BY THE DEPARTMENT OF
PUBLIC WORKS**

Types	1917	1919	1921	1923	1925	1927	1929
	1918	1920	1922	1924	1926	1928	1930
Earth Road	169.5	1055.3	750.7	378.0	1065.9	773.6	1122.3
¾" Gravel Surfacing						1.5	1.1
1" Gravel Surfacing						115.5	51.8
1½" Gravel Surfacing					20.6	159.8	274.5
2" Gravel Surfacing		10.5		147.4	528.6	288.0	353.8
3" Gravel Surfacing			12.5	187.3	965.4	777.7	289.6
4" Gravel Surfacing	12.4	22.5	74.9	124.5	25.5	2.7	
6" Gravel Surfacing				3.3	0.3		9.3
Crushed Rock Surfacing					1.5		
Oiled Sand or Gravel						5.8	22.2
Concrete Pavement		10.0	1.7	30.5	27.1	9.8	194.9
Sheet Asphalt Pavement				2.5		0.2	
Bituminous Conc. Pavement			6.0	2.2	1.9	1.5	1.1
Brick Pavement	5.4	1.2	0.9	11.5	0.6		
Number of Bridges		5	46	75	157	106	160

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930**

The following tabulation with the projects listed in numerical order includes the estimated cost of work for which contracts were awarded by the Department of Public Works from November 15, 1928 to November 1, 1930.

For the work prior to November 15, 1928 please refer to the preceding biennial reports.

Proj. No.	Name	County	Length Miles	Funds		
				Federal	State	Other
1	Lincoln-Emerald	Lancaster	.....	\$.....	\$ 8,745.96	\$.....
2I	Neb. City-Falls City.....	Otoe	.....	88,944.14	133,726.01	.....
2II	Neb. City-Falls City.....	Otoe-Nemaha	.....	92,085.98	138,444.74	.....
2A	Nebr. City-Falls City.....	Richardson	.....	.....	2,716.18	.....
2B	Neb. City-Falls City.....	Nemaha	.....	3,399.84	5,147.79	.....
2C	Nebr. City-Falls City.....	Otoe	.....	.....	9,107.51	.....
3I	Grand Island West.....	Hall	.....	66,709.13	66,769.15	.....
3II	Grand Island West.....	Hall	.....	15,339.04	16,994.48	.....
5	Norfolk-Columbus	Madison	21.413	83,027.18	95,736.93	.....
7C	Hastings East	Adams	21.406	56,643.05	61,178.03	.....
10	No. Platte-Sutherland	Lincoln	18.684	.....	8,181.20	.....
10	No. Platte-Sutherland	Lincoln	.....	38,574.14	43,833.59	.....
12	Stapleton-Ringgold	Logan	11.540	.....	10,059.66	.....
14K	O'Neill-Butte	Boyd	9.975	.....	7,638.81	.....
17	Havelock East	Lancaster	10.115	105,743.58	111,058.78	.....
19	Emerald West	Lancaster	3.975	45,880.64	70,555.30	.....
26	Hamlet-Imperial	Chase-Hayes	.....	4,677.48	39,499.38	.....
27	Lincoln-Fremont	Saunders	28.236	20,916.91	21,941.66	4,170.60
27	Wahoo North	Saunders	.....	16,786.63	16,786.65	.....
28	Nebr. City-Plattsmouth.....	Cass	.....	.....	1,577.98	.....
28	Nebr. City-Plattsmouth.....	Cass	15.900	171,141.16	205,855.33	.....
28	Nebr. City-Plattsmouth.....	Cass	.....	.....	1,175.00	.....
29	David City-Rising City.....	Butler	.....	21,188.32	27,762.38	.....
29	David City-Schuyler	Butler	.....	.....	6,351.41	.....
29	David City-Schuyler	Butler	.....	.....	2,890.34	.....
30	Beaver City-Arapahoe	Furnas	14.654	.....	25,362.48	.....
31	Allen-Ponca	Dixon	16.857	.....	7,167.48	.....
33A	Center-Creighton	Knox	11.322	.....	8,070.95	.....
37	Rockville-Loup City	Sherman	.....	.....	21,087.08	.....
39B	Lexington Paving	Dawson	0.984	14,700.00	8,730.04	8,730.05
46	Bartley-McCook	Red Willow	16.750	18,945.30	27,202.72	.....
46	Bartley-McCook	Red Willow	.....	8,609.73	8,099.74	.....
49E	So. Sioux City-Dak. City.....	Dakota	1.854	23,331.99	24,687.44	.....
49H	So. Sioux City-Dak. City.....	Dakota	0.715	8,725.53	8,773.36	.....
50B	Ext. No. of Fullerton.....	Nance	0.307	.....	908.41	.....
50K	Central City-Belgrade.....	Merrick	5.100	.....	3,456.99	.....
54	Chappell-Big Springs	Deuel	10.947	4,217.82	6,124.36	.....
58A	Schuyler South	Colfax	.....	.....	4,876.99	.....
58B	Schuyler West	Colfax	10.602	119,599.66	125,261.87	.....
58C	Schuyler-Pilger	Colfax	6.511	4,946.34	4,946.34	.....
58C	Schuyler-Pilger	Colfax	.....	112.20	112.20	.....
60AC	St. Paul South	Howard	.....	36,884.22	104,361.44	.....
60K	St. Paul Relocation	Howard	0.704	.....	3,865.18	.....
65A	Greeley East	Greeley	7.895	1,500.86	1,512.61	.....
65A	Greeley East	Greeley	.....	10,974.03	10,985.47	.....

DEPARTMENT OF PUBLIC WORKS

17

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930

Total Cost	Earth		Paving		Gravel		No. Bridges	Date Awarded
					2"	3"		
\$ 8,745.96	0.137	Conc.	0.137					3-27-30
222,670.15	7.129†	Conc.	7.129					3-27-30
230,530.72	7.439†	Conc.	7.439					3-27-30
2,716.18								1929
8,547.63							1	7-11-29
9,107.51								5-23-29
153,478.28	6.309	Conc.	6.309					10- 9-30
32,333.52	7.165						1	10- 9-30
178,764.11	6.886†	Conc.	6.886					7-25-29— 9-26-29
117,821.08	4.513†	Conc.	4.513					8-15-29
8,181.20	3.000†			1.5"— 3.000*				8-27-29— 9-10-29
82,407.73	2.857†	Conc.	2.857					3-27-30
10,059.66	3.314†							6-20-30
7,638.81				1.5"— 9.975				5-23-29
216,802.36	8.773†	Conc.	9.775					5-23-29— 6- 1-29
	1.028							
116,435.94	3.787†	Conc.	3.787					3-27-30— 8-18-30
		Mac.	0.185					8-30-29— 9-12-29
44,176.86	5.518†			1.5"— 8.373	7.014			7-11-29
47,029.17	3.475					2.036	1	8-11-30
33,573.28		Conc.	1.439					11-30-28
1,577.98								
376,996.49	13.637†	Conc.	13.637	1 "— 11.500§				7-29-29— 6-27-29
1,175.00								8-26-30
48,950.70	9.311						1	1930
6,351.41	0.062†	Conc.	0.062					4- 3-30
2,890.34					0.123			8-11-30
25,362.48				1.5"— 14.654				7-11-29
7,167.48				1 "— 6.126*				7-11-29
8,070.95					11.124			5-23-29
21,087.08	2.136					2.136		7-11-29
32,220.09	0.984	Conc.	0.984					10-14-30
46,148.02	5.869						6	7-11-29
17,219.47						5.869		3-27-30
48,019.43	1.854†	Conc.	1.854					6-17-29
17,498.89	0.715	Conc.	0.715					5-23-29
908.41						0.307		5-15-29
3,456.99				1 "— 5.100*				8-15-29
10,342.18					10.947			1- 4-30
4,876.99	0.099	Conc.	0.099					4- 3-30
244,861.53	10.602†	Conc.	10.602	¾"— 5.500§				7-11-29
9,892.68						6.511		5-23-29
224.40								3-27-30
141,245.66	3.137	Conc.	3.450					6-20-30
	0.313†						1	
3,865.18	0.704			1.5"— 0.704				7-23-29—11-27-29
3,013.47								11-27-29
21,959.50						7.895		3-27-30

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Proj. No.	Name	County	Length Miles	Funds		
				Federal	State	Other
66	Valentine-Sparks	Cherry			834.40	
68A	McCook-Trenton	Hitchcock	4.245		5,993.97	
68E	McCook-Trenton	Hitchcock			618.38	
68F	McCook-Trenton	Hitchcock	3.961		6,270.92	
71	Franklin-Orleans	Franklin			2,746.26	
71	Franklin-Orleans	Harlan			7,465.95	
71	Franklin-Orleans	Harlan		19,136.16	24,236.17	
71	Franklin-Orleans	Franklin		6,656.58	6,656.58	
71	Franklin-Orleans	Franklin			5,700.00	
71B	Franklin-Orleans	Harlan	0.132		288.02	
71D	Orleans Paving	Harlan	2.846	3,027.25	403.77	9,319.40
S. A. 72B	Hartington-Yankton	Cedar			3,045.80	
74B	Parks-Haigler	Dundy	9.524	29,295.49	30,726.53	
76G	Alliance-Chadron	Box Butte	8.861	19,160.24	22,160.24	
79A	Bridgeport-Broadwater	Morrill	12.510		7,817.62	
79K	Bridgeport-Broadwater	Morrill	4.090		5,447.24	
80C	Seneca-Hyannis	Grant	5.207	17,979.00	22,696.31	
80C	Seneca-Hyannis	Grant	5.207	4,711.65	4,711.66	
80D	Seneca-Hyannis	Hooker	6.954	9,825.27	11,164.44	
80D	Seneca-Hyannis	Hooker		19,143.98	21,143.98	
82K	Broadwater-Oshkosh	Morrill	0.750		1,650.00	
83C	Neligh-Albion	Antelope	10.229	18,147.76	18,157.90	
84A	Greeley Center-Wolbach	Greeley			988.04	
84K	Spaulding South	Greeley	10.000		5,000.00	
87B	Norfolk-Stanton	Stanton	7.461	5,046.91	5,046.92	
87B	Norfolk-Stanton	Stanton			3,996.02	
89A	Long Pine-Harrop	Brown	4.776		6,127.38	
89K	Long Pine-Harrop	Rock	34.000		10,000.00	
94B	Lemoyne-Arthur	Keith	7.169	19,247.25	19,247.25	
96C	Arnold-Stapleton	Custer	7.871	5,208.11	5,208.12	
97A	Table Rock-Lewiston	Pawnee			1,147.55	
97C	Table Rock-Lewiston	Pawnee	13.983	25,305.36	25,844.20	
105A	Gothenburg Paving	Dawson	1.344	25,216.33	17,087.72	25,700.81
105B	Cozad-Gothenburg	Dawson	3.012	39,600.55	39,600.56	
S. A. 105	Cozad-Gothenburg	Dawson	13.406		4,143.80	
107A	Greenwood-Ashland	Cass		18,085.67	27,358.78	
107A	Greenwood-Ashland	Cass		23,099.89	63,773.49	
107A	Greenwood-Ashland	Cass		11,892.94	11,892.94	
107E	Greenwood-Ashland	Cass	0.541	8,390.16	10,640.16	
108A	Hay Springs-Merriman	Sheridan			200.00	
108K	Gordon Relocation	Sheridan	1.280		2,882.92	
108L	Rushville-Clinton	Sheridan	0.631		1,667.95	
113C	Center-Niobrara	Knox			202.47	202.48
114B	Trenton-Max	Hitchcock	11.590	800.02	1,077.03	277.00
114K	Trenton-Max	Hitchcock	5.600		13,075.60	
117A	Lutherville-Oshkosh	Garden	2.077		2,650.00	
122K	Rockford Spur	Gage	0.167		226.51	
123	Falls City South	Richardson	1.473	43,006.16	55,752.34	
124A	Hay Springs-Chadron	Sheridan	5.992	6,445.44	6,456.01	
124B	Hay Springs-Chadron	Dawes	3.926	3,787.27	3,815.65	

DEPARTMENT OF PUBLIC WORKS

19

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued

Total		Gravel			No.	Date
Cost	Earth	Paving	2"	3"	Bridges	Awarded
834.40		1 "— 0.510				5-23-29
5,993.97	2.225†		4.245			7-11-29
618.38						1929
6,270.92	3.961†		3.961			7-11-29
2,746.26	3.376†					8-26-29
7,465.95	8.000†					1929
43,372.33	2.770			2.770		3-27-30
13,313.16			7.339			8-29-30
5,700.00	10.000†					10-21-30
288.02				0.132		7-20-29
12,750.42		Conc. 0.231				7-19-29
3,045.80					1	1- 2-30
60,022.02	9.524				2	1930
41,320.48	8.861		8.861			6-20-30— 8-29-30
7,817.62	1.800†				1	7-11-29
5,447.24	4.090			4.090		8-28-29—12- 2-29
40,675.31	5.207			5.207		7-11-29
9,423.31						8-29-30
20,989.71	6.954					7-11-29
40,287.96				Oiled 6.954		6-20-30
1,650.00	0.750					5-31-30
36,305.66						5-23-29
988.04				0.644		3-27-30
5,000.00	10.000					1930
10,093.83	0.436			0.436	1	7-11-29
3,996.02						3-27-30
6,127.38		1 "— 4.776				8-15-29
10,000.00	7.500					8- 5-30
38,494.50	7.169					10-30-30
10,416.23				7.871		6-20-30
1,147.55				0.581		7-12-29
51,149.56						5-23-29
68,004.86	1.344	Conc. 1.344		13.983		4-19-30
79,201.11	3.012	Conc. 3.012			1	8-12-30
4,143.80	3.000†					8-29-30
45,444.45	4.672	Conc. 5.724				9-12-29
86,873.38						6-20-30
23,785.88					2	1- 2-30
19,030.32	0.541	Conc. 0.541				8-13-30
200.00						1929
2,882.92	1.280			1.280		9-12-29
1,667.95				0.631		6-20-30
404.95						5-23-29
2,154.05						2-28-29
13,075.60	5.600			5.600		7-11-29
2,650.00	1.750†					1929
226.51		1.5"— 0.167				6-20-30
98,758.50	1.473†			1.473	1	8-28-29
12,901.45						7-11-29
7,602.92						2-15-29

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Proj.	Name	County	Length Miles	Funds		
				Federal	State	Other
124C	Hay Springs-Chadron	Dawes	7.961	7,805.44	7,817.14	.....
124K	Hay Springs-Chadron	Dawes	2.141	.....	4,026.01	.....
125A	Long Pine-Ainsworth	Brown	7.760	.....	8,137.99	.....
128AB	Seward-Lincoln	Seward	9.717	18,351.82	25,160.42	.....
130B	Sidney South	Cheyenne	.....	.....	2,123.61	2,123.61
132A	Atkinson South	Holt	6.423	.....	8,729.38	.....
133E	Lincoln-Eagle	Lancaster	9.048	3,673.30	15,113.14	.....
133G	Lincoln-Eagle	Lancaster	0.738	31,599.32	30,033.67	19,675.06
134A	Emerald-Milford	Seward	9.740	78,348.78	135,811.05	.....
135A	Central City-Chapman	Merrick	9.939	112,253.20	123,753.22	.....
135A	Central City-Chapman	Merrick	.....	7,168.74	7,168.74	.....
137A	Springview-Bassett	Rock	0.994	.....	1,378.03	.....
137B	Springview-Bassett	Keya Paha	3.042	.....	4,201.31	.....
137K	Springview-Bassett	Keya Paha	12.700	.....	17,623.19	.....
137L	Springview-Bassett	Rock	4.700	.....	5,951.00	.....
138A	Fort Crook-Omaha	Sarpy	4.862	45,005.90	54,302.51	.....
138C	Fort Crook-LaPlatte	Sarpy	2.319	19,580.15	36,011.91	.....
138D	Plattsmouth-LaPlatte	Cass	2.363	10,904.54	33,443.57	.....
139B	Norfolk-Ewing	Madison	.....	.....	966.60	.....
140A	Broken Bow-Merna	Custer	9.473	27,954.01	34,677.83	.....
140A	Broken Bow-Merna	Custer	.....	10,084.58	10,084.58	.....
141K	Bassett-Long Pine	Rock	10.297	.....	3,334.93	.....
145K	Oxford-Mascot	Harlan	.....	.....	3,116.82	.....
149E	Potter-Brownson	Cheyenne	11.352	25,026.23	27,576.66	.....
149E	Potter-Brownson	Cheyenne	.....	7,392.36	7,392.36	.....
158A	O'Neill-Stuart	Holt	17.598	.....	2,245.00	.....
161B	Wilber-Western	Saline	11.002	15,670.60	15,670.61	.....
161C	Wilber-Western	Saline	6.499	6,417.44	6,800.30	.....
161C	Wilber-Western	Saline	.....	18,542.95	20,842.96	.....
168A	Stuart-Bassett	Holt	5.550	.....	3,212.43	.....
170A	No. Platte-Vroman	Lincoln	.....	.....	9,823.35	.....
170A	No. Platte-Vroman	Lincoln	.....	34,155.36	36,024.25	.....
170A	No. Platte-Vroman	Lincoln	.....	109,777.43	109,777.45	.....
170C	Brady-Vroman	Lincoln	9.189	22,522.16	22,522.16	.....
170C	Brady-Vroman	Lincoln	.....	100,017.57	100,017.58	.....
177	Kearney-Simmonds	Buffalo	16.900	53,816.17	57,350.64	.....
180	Columbus East	Platte	6.291	70,522.63	80,720.31	.....
188A	Arnold-Merna	Custer	10.187	6,714.55	6,714.56	.....
188B	Arnold-Merna	Custer	5.324	3,518.20	3,518.21	.....
188C	Arnold-Merna	Custer	2.282	1,505.91	1,505.91	.....
193C	Ord-Arcadia	Valley	7.326	10,090.51	12,245.87	.....
194A	Oxford South	Furnas	2.503	2,223.39	2,223.40	.....
197A	Springview-Ainsworth	Keya Paha	5.103	.....	7,278.15	.....
198K	Alliance-Crawford	Box Butte	0.750	.....	1,825.00	.....
202A	Valentine-Gordon	Cherry	21.224	14,927.41	16,213.78	.....

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Total				Gravel		No.	Date
Cost	Earth	Paving		2"	3"	Bridges	Awarded
15,622.58					7.961		2-15-29
4,026.01	2.141			2.141			6-29-29
8,137.99			1.5"— 7.760				7- 9-29
43,512.24	1.193				7.425		12-29-28
4,247.22	6.232†					1	8-28-29
8,729.38				6.423			7-20-29
18,786.44	0.375†	Bit.	0.375				5- 3-29
81,308.05	0.738	Bit.	0.738			1 un.-pass	8-15-29— 8-25-29
214,159.83	6.823†	Conc.	6.823				11-27-29
236,006.42	9.429†	Conc.	9.429				3-27-30
							8-15-29
14,337.48	0.510†	Conc.	0.510				8-29-30
1,378.03				0.994			7-11-29
4,201.31				3.042			7-11-29
17,623.19	12.700		1.5"— 12.700				9-20-30—10- 9-30
5,951.00	4.700						9- 8-30
99,308.41	3.774†	Conc.	3.774	1 "— 1.000\$			6-27-29— 8- 1-29
55,592.06	2.319†	Conc.	2.319	¾"— 2.200\$			
				½"— 3.500\$			6- 7-29— 7-11-29
44,348.11	1.719†	Conc.	1.719	¾"— 2.500\$			6-27-29— 7-22-29
966.60							3-27-30
62,631.84	9.473					3	6- 5-29
20,169.16				9.473			3-27-30
3,334.93				1 "— 0.170			
				1 "— 3.200*			7-11-29— 9-14-29
3,116.82							3-27-29
52,602.89	11.352					6	5-23-29
14,784.72					11.352		3-27-30
2,245.00	3.500†						1929
31,341.21					10.713		8-11-30
13,217.74						1	11-30-29
39,385.91	6.499				6.499		1- 2-30—10-16-30
3,212.43				1.5"— 2.898			5-23-29
9,823.35							12-17-28
70,179.61	9.206†				8.653*		5-23-29
219,554.88	8.953†	Conc.	8.953				3-27-30— 7- 1-30
45,044.32	9.189				1.474		8-14-30
200,035.15	7.712†	Conc.	7.712				5-23-29
							3-27-30
111,166.81	4.014†	Conc.	4.014				6-20-30
151,242.94	0.278	Conc.	6.291				
	6.013†						5-23-29
13,429.11					10.187		6-20-30
7,036.41					5.324		6-20-30
3,011.82					2.282		6-20-30
22,336.38	7.326					1	11- 7-30
4,446.79					2.503		7-11-29
7,278.15					5.103		7- 9-29
1,825.00	0.750				0.750		8-23-29
31,141.19					10.731		5-23-29

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Proj. No.	Name	County	Length Miles	Funds		
				Federal	State	Other
202B	Valentine-Gordon	Sheridan	5.771	6,898.61	7,448.07	
202C	Valentine-Gordon	Cherry	2.838	4,067.36	4,138.79	
202D	Valentine-Gordon	Cherry			8,823.74	
202H	Valentine-Gordon	Cherry	11.077	32,827.09	32,827.10	
202H	Valentine-Gordon	Cherry	11.077	12,953.69	15,653.70	
202K	Valentine-Gordon	Cherry	1.023		1,617.26	
203B	Plainview-Orchard	Antelope	7.088	28,646.32	37,847.63	
203K	Plainview-Orchard	Antelope	0.679		960.33	
205D	Superior-Franklin	Nuckolls	10.900	8,549.19	8,559.99	
205E	Guide Rock East	Webster	3.001	8,752.42	8,752.42	
205E	Guide Rock East	Webster	3.001	2,060.98	2,060.98	
205E	Guide Rock East	Webster		211.40	211.40	
208A	Dawson North	Richardson	0.132		1,451.64	
208B	Dawson North	Richardson	0.672		333.52	
208B	Dawson North	Richardson	0.672		3,842.84	
208E	Dawson North	Richardson	4.001	90.41	90.42	
208F	Dawson Paving	Richardson	1.169	13,002.37	4,446.57	30,321.06
208G	Dawson North	Richardson	5.118	4,181.23	4,371.45	
208G	Dawson North	Richardson	5.118	22,420.96	22,847.99	
210	Superior Southwest	Nuckolls	2.609	991.62	1,012.42	
213A	Schuyler-Rodgers	Colfax	8.071	99,805.40	162,024.72	
215A	Grand Island-Hansen	Hall	2.388	4,823.00	11,649.61	
215A	Grand Island South	Hall		23,070.26	36,936.66	
215B	Grand Island South	Hall	2.699	29,251.13	31,736.42	
220	Orleans Paving	Harlan	0.133	1,354.18	179.31	1,997.84
221D	No. Platte-Maywood	Frontier	3.038	3,729.89	3,741.07	
222C	Cotesfield-North Loup	Howard-Greeley	7.653	28,255.28	40,105.29	
222D	Elba-Cotesfield	Howard	6.502	21,154.22	29,269.88	
222K	Scotia Jct.-North Loup	Valley-Greeley	4.318		5,184.68	
222L	St. Paul Relocation	Howard	1.026		4,417.92	
222L	St. Paul Relocation	Howard			1,519.64	
225	Lincoln-Woodlawn	Lancaster	4.478	12,909.49	15,409.49	
228A	Aurora-Grand Island	Hall	3.507	51,092.32	51,092.34	
233K	North Platte-Tryon	Lincoln	6.00		1,101.08	
233L	North Platte-Tryon	McPherson	5.000		354.84	
234A	Gretna-Millard	Sarpy	2.519	22,945.98	28,330.63	
235A	Millard-Wahoo	Douglas-Saunders			12,105.12	
236B	Bayard-Scottsbluff	Scotts Bluff	5.318	68,591.96	71,160.05	
236B	Bayard-Scottsbluff	Scotts Bluff			2,000.00	
237C	Avery-Ralston	Sarpy	0.417	12,542.92	9,642.69	8,340.00
237L	Avery-Ralston	Sarpy			1,576.85	
238A	Ainsworth-Norden	Brown			1,030.00	
239A	Wilber-Geneva	Saline			2,833.46	
240A	Oxford-Orleans	Harlan	12.068	3,201.56		5,203.10
242L	Alliance-Bridgeport	Morrill	8.700		10,900.00	
242L	Alliance-Bridgeport	Morrill			10,773.27	
243B	Culbertson-Imperial	Hitchcock	8.598		13,236.29	
243B	Culbertson-Imperial	Hitchcock			5,249.54	
243C	Culbertson-Imperial	Hayes	7.294	2,729.67	6,023.22	
243C	Culbertson-Imperial	Hayes			3,145.14	

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Total		Gravel			No.	Date
Cost	Earth	Paving	2"	3"	Bridges	Awarded
14,346.68			5.771			7-11-29
8,206.13			2.838			5-23-29
8,823.74	0.626†		0.626*			1929
65,654.19	11.077				1	7-11-29— 9-12-29
28,607.39			11.077			3-27-30
1,617.26		1.5"— 1.023				5-23-29
66,493.95	7.088			7.088		5-23-29— 7-11-29
960.33			0.679			7-11-29
17,109.18			10.900			11-27-29
17,504.84	3.001					12-28-28
4,121.96			3.001			11-27-29
422.80						6-20-30
1,451.64	0.132†			0.132		1-30-30— 7-16-30
333.52						11-27-29
3,842.84	0.672†			0.672		1-30-30— 7-16-30
180.83						9-12-29
47,770.00	1.169	Conc.	0.687			6-13-29
8,552.68				0.482		11-27-29
45,268.95	5.118			5.118		1-30-30— 7-16-30
2,004.04						2-23-29
261,830.12	8.071†	Conc.	8.071		1	3-27-30
16,472.61	2.127		1 "— 2.127			7-11-29
60,006.92	0.261	Conc.	2.388			8- 2-30
60,987.55	2.699†	Conc.	2.699			7-11-29
3,531.33		Conc.	0.096			7-19-29
7,470.96				3.038		7-11-29
68,360.57	7.653				1	6-20-30
50,424.10	6.502				7	8-26-30
5,184.68			1.5"— 4.318			3-27-30
4,417.92	1.026					11-27-29
1,519.64			1.5"— 1.026			7-23-30
28,318.98	0.585			0.585	1	1- 2-30
102,184.66	3.507†	Conc.	3.507			11-27-29
1,101.08	6.000					1929
354.84	5.000					1929
51,276.61	1.994†	Conc.	1.994			6-28-29
12,105.12		‡	0.611			7- 7-30
139,752.01	5.318	Conc.	5.318			5-23-29
2,000.00						5- 8-30
30,525.61	0.417			0.417	1 un.-pass	8-31-29
1,576.85						10-30-30
1,030.00						10-28-30
2,833.46			1.5"— 1.988			10-16-30
8,404.66		Conc.	0.248			7-19-29
10,900.00	8.700					9-23-29
10,773.27			1.5"— 8.700			6-20-30
13,236.29	4.223†		1 "— 8.598			7-11-29— 9-12-29
5,249.54			1 "— 8.598*			3-27-30
8,752.89			1 "— 3.404	3.890		9-12-29
3,145.14			1 "— 3.404*			3-27-30

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Proj.		Length		Funds		
No.	Name	County	Miles	Federal	State	Other
245C	McCook-Maywood	Frontier	16.986	24,265.48	24,265.48	.....
246A	Verdon-Pawnee City	Pawnee	2.791	4,133.52	4,199.93	.....
246C	Verdon-Pawnee City	Richardson	8.883	18,381.88	18,381.88	.....
246K	Verdon-Pawnee City	Pawnee	2.034	.....	4,016.95	.....
247C	Fairbury-Western	Saline	3.021	3,890.05	4,218.13	.....
247C	Fairbury-Western	Saline	.....	7,848.95	8,148.96	.....
248	Axtell-Kearney	Kearney	10.022	4,154.59	4,165.78	.....
251C	Holdrege-Elwood	Gosper	5.814	10,690.82	17,690.82	.....
254C	Cambridge-Bartley	Furnas- Red Willow	7.731	37,503.81	54,111.63	.....
254C	Cambridge-Bartley	Furnas- Red Willow	.....	11,156.85	11,156.85	.....
255C	Sterling-Adams	Johnson	13.683	43,849.08	43,849.08	.....
258A	Blair-Kennard	Washington	5.368	5,876.18	5,904.52	.....
258B	Kennard-Arlington	Washington	8.682	71,444.53	81,692.83	.....
258B	Kennard-Arlington	Washington	.....	1,163.73	1,163.73	.....
261A	Schuyler-Pilger	Stanton	8.472	13,938.37	13,938.38	.....
261B	Schuyler-Pilger	Colfax	11.849	15,959.96	15,959.96	.....
261B	Schuyler-Pilger	Colfax	.....	479.60	479.60	.....
264K	Grant-Venango	Perkins	8.500	.....	8,582.29	.....
265A	Chadron-Crawford	Dawes	5.689	4,673.83	4,673.84	.....
265B	Chadron-Crawford	Dawes	9.175	.....	5,150.00	2,850.00
265B	Chadron-Crawford	Dawes	.....	9,558.80	9,558.81	.....
265C	Chadron-Crawford	Dawes	7.258	33,321.15	38,298.17	.....
269B	Laurel-Randolph	Cedar	9.214	12,554.25	12,554.26	.....
269C	Laurel-Randolph	Cedar	8.325	40,382.94	55,973.97	.....
269C	Laurel-Randolph	Cedar	.....	10,956.48	10,956.48	.....
270A	Jackson-Allen	Dixon	6.938	9,495.48	9,495.48	.....
270B	Jackson-Allen	Dixon	8.530	46,288.72	46,988.73	.....
270B	Jackson-Allen	Dixon	.....	14,932.70	14,932.70	.....
271B	Jackson-Waterbury	Dixon-Dakota	10.411	66,551.87	90,916.58	.....
271B	Jackson-Waterbury	Dixon-Dakota	.....	19,830.61	19,830.63	.....
273A	Oxford-Arapahoe	Furnas	15.195	24,618.69	31,553.73	.....
273A	Oxford-Arapahoe	Furnas	.....	.....	851.34	.....
274A	Wayne-Norfolk	Wayne	12.289	16,046.14	16,046.15	.....
274B	Wayne-Norfolk	Wayne	.....	2,830.74	2,830.75	.....
274C	Wayne-Norfolk	Wayne	7.963	26,391.91	28,622.46	.....
274D	Wayne-Norfolk	Madison-Pierce	5.926	36,528.18	37,078.18	.....
275A	Madison-Newman	Grove, Madison	8.596	15,162.90	15,174.86	.....
275B	Madison-Newman	Grove, Madison	11.944	23,823.82	24,047.53	.....
277C	Hyannis-Antioch	Sheridan	7.889	1,209.69	1,218.32	.....
277C	Hyannis-Antioch	Sheridan	.....	2,613.60	2,613.60	.....
277D	Hyannis-Antioch	Sheridan	14.772	15,208.15	15,208.16	.....
277D	Hyannis-Antioch	Sheridan	.....	1,093.76	10,260.26	.....
277E	Hyannis-Antioch	Grant	4.216	3,998.63	4,009.29	.....
280K	Niobrara-Monowi	Knox	5.509	.....	40,434.32	.....
280K	Niobrara-Monowi	Knox	.....	.....	7,451.32	.....
281C	Dunning-Seneca	Thomas	5.052	10,327.37	10,327.38	.....
281D	Dunning-Seneca	Blaine	9.556	29,749.99	32,350.00	.....
282A	Harrison West	Sioux	9.274	41,457.16	45,044.28	.....
283	Minden-Kearney	Kearney	6.370	11,354.59	14,097.91	.....
286K	Lynch-Spencer	Boyd	.....	.....	1,663.20	.....

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Total Cost	Earth	Paving		Gravel		No. Bridges	Date Awarded
				2"	3"		
48,530.96				16.986			7-11-29
8,333.45					2,791		7-11-29
36,763.76					8,883		7-11-29
4,016.95				2,034			7-12-29
8,108.18						1	11-30-29
15,997.91	3.021				3,021		1- 2-30—10-16-30
8,320.37				6,504			5-23-29
28,381.64	5.814			5,814			8-29-30— 6-20-30
91,615.44	7.731					8	7-11-29
22,313.70					7,731		3-27-30
87,698.16	13.683					1	
11,780.70					5,348		7-11-29
153,137.36	8.682				8,682	6	1-11-29— 7-11-29
2,327.46							3-27-30
27,876.75					8,472		6-20-30
31,919.92					11,886		5-23-29
959.20							3-27-30
8,582.29	8.500		1.5"—	8,500			6-20-30
9,347.67				5,315			10-16-30
8,000.00						1	1929
19,117.61				9,224			6-20-30
71,619.32	7.258					2	6-20-30
25,108.51					9,214		6-20-30— 8-29-30
96,356.91	8.325					6	7-11-29
21,912.96					8,325		6-20-30
18,990.96					6,938		6-20-30
93,277.45	8.530					3	7-11-29
29,865.40					8,530		6-20-30— 8-29-30
157,468.45	10.411					5	7-11-29
39,661.24					10,411		6-20-30
56,172.42					15,195		7-11-29—11-30-29
851.34							3-27-30
32,092.29					12,289		6-20-30
5,661.49					1,824		6-20-30
55,014.37	7.963					1	1930
73,006.36	5.926				5,926	1	7-11-29— 8-15-29
30,337.76					8,596		5-23-29
47,871.35					11,944		5-23-29
2,428.01							2-18-29
5,227.20	1.202†						6-20-30
30,416.31			Oiled 5.750	1,769			6-13-29— 7-11-29
11,354.02			1 "— 7.053				1-22-30— 3-27-29
8,007.92				4,216			7-11-29
40,434.32	5.509					1	8-15-29
7,451.32				5,509			8-29-30
20,654.75	5.052						8-11-30
62,099.99	9.556						6-20-30
86,501.44	9.274		6 "— 9.274				10-30-30
25,452.50	6.370			6,370			5-23-29
1,663.20						1	9-23-29

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Proj. No.	Name	County	Length Miles	Funds		
				Federal	State	Other
286L	Lynch-Spencer	Boyd	5.000	.....	6,148.60	.....
287A	Big Springs Southwest.....	Deuel	4.594	.....	3,595.40	.....
287B	Big Springs Southwest.....	Deuel	4.853	18,675.47	18,745.48	.....
287C	Big Springs Southwest.....	Deuel	.....	2,401.88	2,401.88	.....
292A	Loup City-St. Paul	Sherman	7.365	10,223.48	10,762.03	.....
292B	Loup City-St. Paul	Howard	5.038	7,404.11	10,517.66	.....
292K	Loup City-St. Paul	Howard	5.300	.....	25,284.43	.....
292L	Loup City-St. Paul	Sherman	4.000	.....	10,874.36	.....
297B	Gothenburg-Farnam	Dawson	8.551	31,569.16	31,569.16	.....
297B	Gothenburg-Farnam	Dawson	.....	432.11	432.11	.....
300M	Scottsbluff-Henry	Scotts Bluff	2.218	.....	7,324.76	.....
301B	Gurley-North	Morrill	8.029	19,393.23	19,525.24	.....
301B	Gurley-North	Morrill	.....	3,578.58	3,578.59	.....
302C	Pender-Rosalie	Thurston	0.183	.....	346.44	.....
302K	Pender-Rosalie	Thurston	2.074	.....	6,346.43	.....
302K	Pender-Rosalie	Cuming	4.185	.....	12,805.37	.....
304M	Winslow-Oakland	Burt	7.000	.....	7,862.27	.....
307	Merriman North	Cherry	5.595	7,267.14	8,853.05	.....
308A	Alma-Holdrege	Phelps	6.173	1,303.73	2,803.74	.....
308B	Alma-Holdrege	Harlan	8.105	25,882.78	27,527.84	.....
308K	Alma-Holdrege	Harlan	8.000	.....	13,350.70	.....
309A	Ames-North Bend	Dodge	4.355	47,270.35	47,270.35	.....
309B	North Bend-Rodgers	Dodge	10.893	17,602.06	27,787.63	.....
309B	North Bend-Rodgers	Dodge	.....	127,228.39	134,808.29	1,987.06
310A	Scotia West	Greeley	1.010	.....	1,259.83	.....
311A	Red Cloud South	Webster	5.875	28,591.28	33,052.11	.....
312	Lincoln-Havelock	Lancaster	.....	.....	601.08	.....
313A	O'Neill-Bartlett	Holt	9.486	18,597.66	19,287.17	.....
313A	O'Neill-Bartlett	Holt	.....	25,774.22	25,774.23	.....
313B	O'Neill-Bartlett	Holt	4.039	10,798.81	10,798.81	.....
313C	O'Neill-Bartlett	Wheeler	5.490	14,845.83	14,845.83	.....
313L	O'Neill-Bartlett	Holt	10.000	.....	3,500.00	.....
314L	Adams-Wilber	Gage	5.591	.....	14,137.48	.....
314M	Adams-Wilber	Gage	13.000	.....	9,245.90	.....
315A	Osceola-Clarks	Merrick	3.540	43,097.69	11,504.99	34,505.22
315A	Osceola-Clarks	Merrick	.....	499.71	249.86	249.86
315A	Osceola-Clarks	Polk	0.483	18,252.91	1,000.31	17,252.60
315A	Osceola-Clarks	Polk	.....	499.72	249.86	249.86
316A	Bushnell West	Kimball	7.955	18,993.95	19,189.32	.....
317A	Johnstown-Wood Lake	Brown	6.332	15,154.74	16,154.74	.....
317A	Johnstown-Wood Lake	Cherry	3.122	5,443.18	5,443.19	.....
319	U. S. Gov. Mon. Sta. Road.....	Hall	0.661	1,763.05	2,764.99	.....
320	Ogallala Paving	Keith	0.557	8,355.00	.....	16,366.14
321A	Pender-Emerson	Thurston	10.618	32,333.26	32,333.27	.....
600A	David City-Columbus	Butler	15.470	.....	11,489.37	.....
602A	Osceola-Clarks	Polk	11.584	.....	3,609.79	.....
606A	Stromsburg-Central City.....	Polk	11.996	.....	4,200.00	.....
607C	Burchard-Fairbury	Gage	7.994	.....	22,916.04	.....
607D	Burchard-Fairbury	Gage	.....	.....	904.28	.....
607E	Burchard-Fairbury	Jefferson	5.669	.....	18,836.58	.....

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Proj. No.	Name	County	Length Miles	Funds		
				Federal	State	Other
611A	Minden-Western	Adams	7.533		5,461.07	
611B	Minden-Western	Clay	11.997		27,060.58	
611B	Minden-Western	Clay			967.78	
611C	Minden-Western	Adams	8.251		20,375.03	
611D	Minden-Western	Clay	12.040		57,235.30	
611D	Minden-Western	Clay			447.26	
611E	Minden-Western	Fillmore	20.452		36,284.02	
611F	Minden-Western	Adams	5.765		15,361.72	
613A	Ogallala-Grant	Keith	7.700		26,521.88	
613B	Ogallala-Grant	Perkins	11.051		34,134.54	
614B	Valley-Colon	Douglas	2.979		65,559.56	
614C	Valley-Colon	Saunders	9.966		55,276.97	
615A	Hubbard-Emerson	Dakota			1,400.00	
617A	Fairbury South	Jefferson	9.163		59,083.94	
617A	Fairbury South	Jefferson			6,997.20	
618A	Gresham-Waco	York	8.621		26,850.69	
619A	Fullerton-Albion	Boone	8.049		48,970.22	
619C	Fullerton-Albion	Nance	6.000		6,000.00	
620A	St. Edward-Greeley Ctr.	Boone	7.880		42,118.34	
620B	St. Edward-Greeley Ctr.	Greeley	4.048		31,418.19	
621A	Lincoln-Valparaiso	Lancaster	15.780		42,394.60	
621A	Lincoln-Valparaiso	Lancaster			15,541.93	
621B	Lincoln-Valparaiso	Saunders	2.099		6,625.40	
621B	Lincoln-Valparaiso	Saunders			2,059.35	
621C	North Bend-Morsebluff	Saunders	1.142		5,753.59	
621C	North Bend-Morsebluff	Dodge	0.607		6,439.67	
621D	Prague South	Saunders	7.111		36,890.52	
621F	Morsebluff South	Saunders	2.700		4,610.10	
622BCDE	Elwood-Eustis-Curtis	Frontier			6,692.53	
622C	Elwood-Eustis-Curtis	Dawson			965.78	
622D	Elwood-Eustis-Curtis	Lincoln			257.27	
623A	Ainsworth-Brewster	Brown	6.400		3,437.00	
624B	Bridgeport-Harrisburg	Morrill	20.000		5,750.00	
624C	Bridgeport-Harrisburg	Banner	7.969		26,282.74	
625B	Oshkosh-Chappell	Garden	3.278		15,107.01	
625B	Oshkosh-Chappell	Garden			1,982.02	
627A	Arnold-Kearney	Buffalo	1.553		5,177.08	
627B	Arnold-Kearney	Dawson	4.167		14,188.44	
627C	Arnold-Kearney	Custer	2.000		2,134.44	
627D	Arnold-Kearney	Buffalo	5.605		12,315.58	
628A	Blair East	Washington	1.031		14,350.82	
629A	Auburn-Brownville	Nemaha	9.211		38,235.19	
629A	Auburn-Brownville	Nemaha			17,104.39	
631A	Creighton South	Knox	2.048		3,995.82	
631B	Creighton South	Antelope	6.083		12,800.24	
631C	Neligh North	Antelope	4.025		22,335.73	
632A	Bruning-Davenport	Thayer	14.876		65,009.53	
632B	Hoag-Plymouth	Gage	2.979		2,674.51	
632B	Hoag-Plymouth	Gage			3,541.06	
632C	Hoag-Plymouth	Jefferson	3.987		5,616.08	

DEPARTMENT OF PUBLIC WORKS

29

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued

Total				Gravel		No.	Date
Cost	Earth	Paving		2"	3"	Bridges	Awarded
5,461.07				1½" — 7.533			7-11-29
27,060.58	9.203			1½" — 11.997		1	5-23-29 — 7-11-29
967.78							11-27-29
20,375.03	8.251			1½" — 8.251			10-20-30
57,235.30	12.040			1½" — 12.040		3	7-11-29 — 8-28-29
							11-27-29
447.26							10-20-30
36,284.02	20.452			1 " — 19.800			6-20-30 — 10-16-30
15,361.72	5.765			1½" — 5.765		1	6-20-30
26,521.88	7.700				7.700		7-11-29
34,134.54	11.051				11.051		7-11-29
65,559.56	2.979	Conc.	2.979				8-15-29
55,276.97	9.966				9.966	2	11-27-29
1,400.00						1	11-23-29
59,083.94	7.165	Conc.	0.161			1	8-15-29
6,997.20				1½" — 9.163			6-20-30
26,850.69	4.621			1 " — 4.000	4.621	1	5-23-29
48,970.22	8.049					1	11-27-29
6,000.00	6.000						19-30
42,118.34	7.880					2	3- 6-30 — 5- 1-30
31,418.19	4.048					1	8-27-29
42,394.60	15.780					1	9-26-29
15,541.93				1½" — 15.780			8-29-30
6,625.40	2.099						9-26-29
2,059.35				1½" — 2.099			8-29-30
5,753.59	1.142						7-11-29
							1.142
6,439.67	0.607				0.607	1	7-11-29
36,890.52	7.111					2	6-20-30
4,610.00	2.700			1 " — 0.400	2.300		8-29-30
6,692.53							6-20-30
965.78							6-20-30
257.27							6-20-30
3,437.00	4.500						9- 8-30
5,750.00	20.000						4-28-30
26,282.74	7.969					4	10-30-30
15,107.01	3.278					1	5-23-29
1,982.02				1½" — 3.278			8-29-30
5,177.08	1.553					2	6-20-30
14,188.44	4.167						6-20-30
2,134.44				1½" — 2.000			10-16-30
12,315.58	5.605					1	6-20-30 — 7-23-30
14,350.82	0.555			1 " — 0.476	0.555	1	4-26-29
38,235.19	9.211					1	7-11-29
17,104.39					9.211		8-29-30
3,995.82	2.048				2.048		5-23-29 — 7-11-29
12,800.24	6.083				6.083		5-23-29 — 7-11-29
22,335.73	4.025						11-27-29
65,009.53	14.876			1½" — 14.876		2	7-11-29 — 11- 8-29
2,674.54	2.979						11-30-29
3,541.06				1½" — 2.979			10-30-30
5,616.08	3.987						11-30-29

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Proj. No.	Name	County	Length Miles	Funds		
				Federal	State	Other
632C	Hoag-Plymouth	Jefferson			4,751.27	
632D	Daykin East	Jefferson	9.500		9,487.94	
633A	Wisner-Bancroft	Cuming	7.967		43,505.00	
634A	Rosalie East	Thurston	0.844		2,100.03	
635B	Victoria Springs State Park Anselmo	Custer	5.800		10,090.08	
636A	Beatrice-DeWitt	Gage	13.032		20,816.86	
636A	Beatrice-DeWitt	Gage			11,752.38	
636B	Beatrice-DeWitt	Saline	0.307		642.18	
636C	DeWitt-Wilber	Saline	7.688		20,998.06	
637A	Chadron North	Dawes	13.120		12,495.41	
637A	Chadron North	Dawes			9,154.64	
637B	Chadron North	Dawes	3.800		8,028.54	
638A	Wakefield-Wayne	Dixon	4.000		12,120.61	
638A	Wakefield-Wayne	Wayne	4.000		12,120.62	
639A	Deverre-Atkinson	Holt	8.522		52,863.40	
639B	Deverre-Atkinson	Garfield	6.299		44,541.15	
639C	Deverre-Atkinson	Holt	23.000		5,750.00	
641A	Mitchell-Harrison	Scotts Bluff	4.000		1,550.00	
641B	Mitchell-Harrison	Sioux	31.000		9,550.00	
642A	Crawford Northwest	Dawes	12.000		5,312.68	
642A	Rushville North	Sheridan	10.000		6,200.00	
642B	Crawford Northwest	Sioux	3.000		1,103.71	
642B	Rushville North	Sheridan	14.000		8,836.35	
644A	Syracuse-Weeping Water	Cass	2.031		5,407.21	
644B	Syracuse-Weeping Water	Otoe	10.842		41,348.16	
644C	Chalco-Pawnee City	Pawnee	7.000		6,261.13	
644D	Chalco-Pawnee City	Pawnee	7.000		9,245.06	
645A	Beaver City-Hendley	Furnas	4.109		15,594.45	
645B	Hendley-Lebanon	Red Willow	7.026		14,516.84	
645C	Hendley-Lebanon	Furnas	13.481		47,582.61	
646A	Waco-Exeter	York	8.144		19,284.31	
647A	Bloomfield East	Knox	5.835		14,243.33	
647A	Bloomfield East	Knox			20,183.23	
647B	Verdigre-Center	Knox	10.340		15,437.04	
648A	Clarkson-Howell	Colfax	5.779		25,967.32	
648B	Lindsay-Humphrey	Platte	11.000		7,321.09	
648C	Newman Grove-Scribner	Colfax	4.000		3,800.00	
648D	Newman Grove-Scribner	Platte	6.500		6,050.00	
649A	Plattsmouth East	Cass	0.731		8,765.12	1,254.18
651A	Spencer North	Boyd	9.300		14,651.35	
653A	Butte North	Boyd	5.000		8,891.31	
654A	Beemer South	Cuming	0.344		654.19	
660A	Gering-Lyman	Scotts Bluff	17.000		4,500.00	
661B	Dickens-Elsie	Lincoln	14.000		2,100.00	
661C	Dickens-Elsie	Perkins	3.000		450.00	
662A	Burwell-Taylor	Loup	11.000		6,004.15	
662B	Burwell-Taylor	Garfield	5.000		3,685.52	
664A	Omaha-Elkhorn	Douglas	2.043		48,969.38	
664B	Omaha-Elkhorn	Douglas	4.830		105,878.78	
665A	Blair-Nickerson	Washington	1.100		557.55	

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Continued**

Total				Gravel		No.	Date
Cost	Earth	Paving		2"	3"	Bridges	Awarded
4,751.27			1½"— 3.987				10-30-30
9,487.94	9.500						7-21-30— 8-29-30
43,505.00	7.967			7.967			11-30-29— 8-29-30
2,100.03	0.844			0.844			7-11-29
10,090.08			1½"— 5.800				6-20-30
20,816.86	13.032						11-30-29
11,752.38			1½"— 13.032			1	10-30-30— 8-29-30
642.18	0.307						11-30-29
20,998.06	7.688		1½"— 7.688				8-12-30— 8-29-30
12,495.41	13.120		1½"— 13.120				8-17-29—12- 2-29
9,154.64			½"— 9.209*				
			1½"— 3.911*				10-16-30
8,028.54	3.800		1½"— 3.800				10-14-30—10-16-30
12,120.61	4.000			4.000			9-26-29
12,120.62	4.000			4.000			9-26-29
52,863.40	8.522					1	2-30-30— 6-20-30
							7-23-30
44,541.15	6.299					1	1- 2-30— 2-19-30
5,750.00							10-23-29
1,550.00	4.000						8-25-29
9,550.00	31.000						8-17-29
5,312.68	12.000					2	8-17-29
6,200.00	10.000						1929
1,103.71	3.000						8-17-29
8,836.35	14.000					1	5- 8-30— 6-20-30
5,407.21	2.031						11-27-29
41,348.16	10.842					1	11-27-29
6,261.13	7.000						7-21-30— 8-11-30
9,245.06	7.000						9-18-30
15,594.45	4.109						11-27-29
14,516.84	7.026					3½	6-20-30
47,582.61	13.481					17½	6-20-30
19,284.31	8.144					1	6-20-30
14,243.33	5.835						1929
20,183.23				5.854		2	3-27-30— 6-20-30
15,437.04	10.340		1½"— 10.340				6-20-30— 8-29-30
25,967.32	5.779			5.779			11-27-29
7,321.09	11.000						7-16-30— 9-25-30
3,800.00	4.000						10-28-30
6,050.00	6.500						10-21-30
10,019.30	0.731			0.731			9-25-29
14,651.35	9.300		1½"— 9.300				10-16-30
8,891.31	5.000		1½"— 5.000				6-20-30—10-16-30
654.19				0.344			10- 3-29
4,500.00	17.000						1930
2,100.00	14.000						8- 5-30
450.00	3.000						8- 5-30
6,004.15	11.000						7-21-30— 8-29-30
3,685.52	5.000						7-21-30— 8-29-30
48,969.38	2.043	Conc.	2.043				8-20-30
105,878.78	4.830	Conc.	4.830				10-14-30
557.55			¾"— 1.100				8-16-30

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Concluded**

Proj. No.	Name	County	Length Miles	Funds		
				Federal	State	Other
668A	Loup City-Ansley	Sherman	11.703		41,755.31	
671A	Genoa-Stromsburg	Nance	1.000		1,750.00	
TOTALS				\$4,241,494.93	\$7,424,893.90	\$190,775.93

From November 15, 1928 to
November 1, 1930.

- † Reshaping
- * Second Course
- ‡ Rock Asphalt
- § Gravel placed on Detours

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 15, 1928 TO NOVEMBER 1, 1930—Concluded**

Total		Paving			Gravel		No.	Date
Cost	Earth				2"	3"	Bridges	Awarded
41,755.31	11,703							10- 9-30
1,750.00	1,000							10-14-30
\$11,857,164.76	1,128,505	Conc.	194.896	1 " — 51.814	353.814	301.040	161	
	229.490†	Bit.	1.113	1½"—274.509	5.200*	8.653*	2 un.-pass	
		Mac.	0.185	6 "— 9.274	4.000‡			
		‡	0.611	¾"— 1.100				
				½"— 9.209*				
				1 "— 30.428*				
				1½"— 26.411*				
				½"— 3.500‡				
				¾"— 10.200‡				
				1 "— 12.500‡				
				1½"— 7.500‡				
				Oiled 22.190				

Conc.—Concrete
 Bit. —Bituminous Concrete
 Mac. —Macadam
 Oiled—Oiled Sand or Gravel

**IMPROVEMENT OF ROADS CONNECTING STATE INSTITUTIONS
AND STATE PARKS WITH HIGHWAYS**

Funds in the amount of \$100,000.00 were appropriated by the 1919 Legislature for use in paying the State's share of the cost of paving highways adjacent to or connecting State Institutions with permanent highways. From the funds thus appropriated, the following expenditures were made:

Town	Institution	Expenditures
Peru	Peru Normal	\$ 23,753.86
Beatrice	State Institution for Feeble Minded	26,000.55
Lincoln	State Hospital for Insane	32,000.04
Grand Island	Old Soldiers' Home	18,000.00
Total.....		\$ 99,754.45

The 1921 Legislature also appropriated \$100,000.00 for State Aid Paving which was expended as follows:

Town	Institution	Expenditures
Wayne	Wayne Normal	\$ 23,000.00
Chadron	Chadron Normal	20,000.00
Lincoln	State Hospital for Insane	57,000.00
Total.....		\$100,000.00

The Legislature of 1923 appropriated \$48,000.00 for State Aid Paving to State Institutions from which funds the following expenditures were made:

Town	Institution	Expenditures
Nebraska City	Nebr. City School for Blind....	\$ 7,800.00
North Platte	No. Platte Experimental Farm	36,639.53
Total.....		\$ 44,439.53
Unexpended Balance		\$ 3,560.47

Of this balance \$3,488.00 was re-appropriated by the 1925 Legislature and again re-appropriated by the Legislature of 1927 for use in defraying the excess cost of improving highways adjacent to State Institutions. This amount was used in paying a portion of the cost of the construction of a bridge on the road leading from the Milford Soldiers' and Sailors' Home to Milford.

The 1925 Legislature recognized two deficiencies and made the following appropriations accordingly which were paid through this department:

Town	Institution	Expenditures
Lincoln	State Hospital for Insane.....	\$ 4,732.55
Omaha	State School for Deaf	10,750.61
Total.....*		\$ 15,483.16

The Legislature of 1925 also appropriated, from the Gasoline Tax, funds not to exceed \$25,000, for any one year for the purpose of graveling highways connecting State Institutions with State Highways when such State Institutions are not on State Highways and where the distance does not exceed eight miles. The 1927 Legislature authorized this department to construct highways connecting State Institutions and State Parks with State Highways when such State Institutions and State Parks are not on State Highways established prior to the 1927 Legislature, such expenditures not to exceed \$40,000 for any one year. The 1929 Legislature authorized this department to construct highways connecting State and Federal Institutions and Parks with State Highways when such institutions and parks are not on State Highways, such expenditures not to exceed \$40,000 for any one year. From the appropriations thus made, the following expenditures or obligations have been incurred to November 1, 1930:

Proj. No.	Institution	Length Miles	Type of Improvement	Amount
S. A. 6	Geneva Girls' Train- ing School	0.97	3" Gravel Surfacing ..	\$ 3,295.22
S. A. 7	Geneva Girls' Train- ing School	0.76	3" Gravel Surfacing 3" Resurfacing	2,890.05
S. A. 8	Kearney Boys' In- dustrial Home	0.32	2" Gravel Surfacing	581.08
S. A. 9	Milford Industrial Home	1.00	3" Gravel Surfacing	3,472.86
S. A. 10	State Reformatory to State Hospital..	1.89	3" Gravel Surfacing	4,860.62
S. A. 11	University Place East State Farm..	1.78	3" Gravel Surfacing 1½" Resurfacing ..	6,086.33
S. A. 12	Peru State Normal School	6.12	3" Gravel Surfacing	22,917.98
S. A. 13	Beatrice—State In- stitution for Feeble Minded	0.65	3" Gravel Surfacing	1,869.27
S. A. 14	Norfolk State Hos- pital	2.07	3" Gravel Surfacing	6,097.65
603-A	Stolley Park Road..	0.91	Concrete Pavement ..	21,031.79

REPORT OF SECRETARY

Proj. No.	Institution	Length Miles	Type of Improvement	Amount
605-A	Milford Soldiers' and Sailors' Home	0.25	3" Gravel Surfacing and Bridge	919.38
608-A	Gretna State Fish Hatchery	0.17	1½" Gravel Surfacing and Bridge	4,791.99
608-B	Gretna State Fish Hatchery	5.391	Grading, draining and 1½" Gravel Surfacing	32,175.38
616	Havelock-State Farm	0.37	Bituminous Concrete Pavement	9,441.87
635-A	Victoria Springs State Park— Merna	10.035	Grading, 2" Gravel Surfacing	22,604.04
659	Nebr. City School for the Blind.....		Bridge	8,353.85
669-A	Hastings—Ingleside	0.899	Grading, Paving	23,847.36
Total from 1925 to November 1, 1930.....				\$175,236.72

**CONTRACTORS TO WHOM CONTRACTS WERE AWARDED
DURING THE PERIOD FROM NOVEMBER 30th, 1928
TO NOVEMBER 1st, 1930.**

Abel Construction Company, Terminal Bldg.....	Lincoln, Nebr.
Allen-Davison Coal Company.....	Beatrice, Nebr.
Allied Contractors, Inc., 1803 Douglas St.....	Omaha, Nebr.
American Paving Corporation, 1325 Grace St.....	Omaha, Nebr.
Anderson, Lloyd.....	Henry, Nebr.
Artificial Stone Company.....	Bruning, Nebr.
Beatrice Steel Tank Mfg. Company.....	Beatrice, Nebr.
Beaty Contracting Company.....	Blair, Nebr.
Bell, Geo. W., Company, 1124 Cass St.....	Omaha, Nebr.
Bertrand, J. B., 301 Union Station.....	Denver, Colo.
Blue Valley Gravel and Sand Company.....	Fairbury, Nebr.
Bowen, Jas. F.....	Beverly, Nebr.
Bowker, E., Gravel Company.....	Kearney, Nebr.
Bump, Geo. F.....	Norcatour, Kans.
Busche, F. L., 4118 North 30th St.....	Omaha, Nebr.
Camp and Bayley.....	Gibbon, Nebr.
Capital Bridge Company, Box 1210.....	Lincoln, Nebr.
Carstenson Sand Company.....	Columbus, Nebr.
Carter, Alfred.....	McCook, Nebr.
Carter-Waters Corporation, 2049 Main Street.....	Kansas City, Mo.
Central Bridge & Construction Company.....	Wahoo, Nebr.
Cochrane Construction Co., 822—1st Nat'l Bk. Bldg.....	Lincoln, Nebr.
Concrete Construction Company.....	Norfolk, Nebr.
Condon, Geo. W., 222-224 Grain Exchg. Bldg.....	Omaha, Nebr.
Cronkhite, Geo.....	Perry, Iowa
Crownover, L. G., 1144 South 11th.....	Lincoln, Nebr.
Cuming, Roy T.....	Kearney, Nebr.
David City Construction Company.....	David City, Nebr.
Deffenbaugh, J. L., 1630-G-St., Apt. B-3.....	Lincoln, Nebr.
Diamond Engineering Company.....	Grand Island, Nebr.
Dobson and Robinson, 1st Nat'l. Bank Bldg.....	Lincoln, Nebr.
Dugan, W. H. and Sons, 4202 Calif. St.....	Omaha, Nebr.
Eaton, A. N., Metal Products, 13th and Willis Ave.....	Omaha, Nebr.
Einung, Arthur.....	Nebraska City, Nebr.
Fairbury Construction Company.....	Fairbury, Nebr.
Fremont Construction Company.....	Fremont, Nebr.
Gavenman-Friedel Construction Co., 1517 Howard St.....	Omaha, Nebr.
General Construction Company, 722 Peters Trust Bldg.....	Omaha, Nebr.
Haddon, V. M., Dredging Company.....	Valley, Nebr.
Honska, W. B., Construction Company.....	Concordia, Kans.
Hornby, Chas. T.....	Bassett, Nebr.
Hubert, Julius.....	Upland, Nebr.

Interstate Concrete Company.....	Fairbury, Nebr.
Kavanaugh Brothers.....	Waterbury, Nebr.
Keim Construction Company.....	Tecumseh, Nebr.
Knight, R. R., 1626 D St.....	Lincoln, Nebr.
Koehler Construction Company.....	Sterling, Nebr.
Krotter, F. C. and Sons.....	Palisade, Nebr.
Krotter, Wm.....	Stuart, Nebr.
Landreth, Lyall.....	Scottsbluff, Nebr.
Larson, H. P.....	Kearney, Nebr.
Lund, A. C.....	Kearney, Nebr.
Lunger, Weaver.....	Gibbon, Nebr.
McCallan and Dorn.....	So. Sioux City, Nebr.
McClanahan, M. G. and Son.....	Mitchell, Nebr.
McClanahan, R. D.....	Scottsbluff, Nebr.
McDougall Construction Company.....	Sioux City, Ia.
McGerr, J. W., 2535 Washington St.....	Lincoln, Nebr.
McNeel, Wm. A.....	North Platte, Nebr.
Mack, Earl.....	Kenesaw, Nebr.
Marrs, E. L., 3236 North 40th St.....	Omaha, Nebr.
Martin-Day Company, 310 Little Bldg.....	Lincoln, Nebr.
Merritt, D. H. and Sons, 26th and Randolph.....	Lincoln, Nebr.
Metropolitan Construction Company, 215 South 13th St.....	Omaha, Nebr.
Mid-State Construction Company.....	Hastings, Nebr.
Monarch Engineering Company.....	Falls City, Nebr.
Moran Construction Company, 2123 South 56th St.....	Omaha, Nebr.
Morrissey, M. F., Construction Company.....	Chadron, Nebr.
Murphy Gravel Company.....	Fremont, Nebr.
National Construction Company, 305 Arthur Bldg.....	Omaha, Nebr.
Nebraska Construction Company, 513 South 13th St.....	Lincoln, Nebr.
Nebraska Culvert and Mfg. Company.....	Wahoo, Nebr.
Nelsen, N. Chris.....	Fremont, Nebr.
Nichols, E. W.....	Fairmont, Nebr.
Norfolk Bridge & Construction Company.....	Norfolk, Nebr.
Nutsch and Loch.....	Fairbury, Nebr.
Olund, Axel.....	Detroit Lakes, Minn.
Peterson, H. J. Company, 303 Baum Bldg.....	Omaha, Nebr.
Petersen and Nielsen.....	Boelus, Nebr.
Plainview Gravel Company.....	Plainview, Nebr.
Quinton, Dan.....	Kearney, Nebr.
Read, A. H. Company.....	Cheyenne, Wyo.
Reel Contractors Inc.....	Sidney, Nebr.
Reel and Kennedy.....	Dalton, Nebr.
Rhinehart, J. S.....	Hastings, Nebr.
Risk, H. A., Pipe and Construction Company.....	Nebraska City, Nebr.
Roberts Construction Co., 404 1st Nat'l. Bk. Bldg.....	Lincoln, Nebr.

Ross, A. C.....	Bayard, Nebr.
Sawyer, Paul.....	Holdrege, Nebr.
S and K Gravel Company.....	Sidney, Nebr.
Scott Brothers.....	North Platte, Nebr.
Shearer, J. E. and Son.....	Hebron, Nebr.
Sherman County.....	Loup City, Nebr.
Smith, C. W.....	Plainview, Nebr.
Smith, Glenn E., 525 South 13th St.....	Lincoln, Nebr.
Smith, A. C.....	Scottsbluff, Nebr.
Smith, S. L., 1340 6th St.....	Gering, Nebr.
Sokol Brothers.....	Duncan, Nebr.
Steele and Olinger.....	Sidney, Nebr.
Theisen Brothers.....	Osmond, Nebr.
Thomas County.....	Thedford, Nebr.
Tift, James E., Box 734.....	Grand Island, Nebr.
Tri State Cement & Products Company, 731 Stuart Bldg.....	Lincoln, Neb.
Wachtler, J. W., 310 Arthur Bldg.....	Omaha, Nebr.
Walker, Ed.....	North Platte, Nebr.
Weidner and King.....	Fremont, Nebr.
Western Asphalt Paving Corporation.....	Sioux City, Ia.
Western Bridge & Const. Co., 3867 Leavenworth St.....	Omaha, Nebr.
Wickham Bridge & Pipe Company.....	Council Bluffs, Ia.
Woods Brothers, 132 South 13th St.....	Lincoln, Nebr.
Yant Construction Company, 905 Omaha Nat'l. Bk. Bldg.....	Omaha, Neb.
Young and Hall.....	Maywood, Nebr.

Total number of contractors—112.

Sixty-six of the contractors or 59% of those awarded work in 1927 and 1928 were awarded contracts in 1929 and 1930.

Forty-six contractors who had not been awarded contracts during the 1927 and 1928 biennium were awarded work during 1929 and 1930.

AVERAGE CONTRACT PRICES FOR 1929-1930

Item	Unit	Quantity	Unit Prices		Amount
			Min.	Aver.	
Grading Items					
Hauling & installing reinforced concrete & vitrified clay driveway culverts.....	Lin. Ft.	2,710	.07	.795	2,153.96
Hauling & installing corrugated metal driveway culverts	Lin. Ft.	11,734	.07	.537	6,305.02
Unclassified Excavation (Includes Rock which had a separate classification prior to this biennium)	Cu. Yd.	7,859,907	.13	.188	1,479,037.46
Station Excavation.....	Station	7,455.24	8.00	10.616	79,147.67
Overhaul.....	Cu. Yd. St.	6,531,609	.02	.02	130,632.18
Top soil or sand clay excavation	Cu. Yd.	459,535	.10	.258	118,422.03
Hauling top soil or sand clay.....	Cu. Yd. Mi.	459,443	.20	.400	183,647.70
Sand Gravel Surfacing Items					
Class "A", 3" Deep.....	Sq. Yd.	4,290,381	.0789	.182	781,830.32
Class "A", 2" Deep.....	Sq. Yd.	4,417,785	.0518	.121	532,893.00
Class "A", 1½" Deep.....	Sq. Yd.	3,835,360	.0446	.0826	316,927.71
Class "A", 1" Deep.....	Sq. Yd.	5,014,892	.0275	.063	316,552.36
Class "A", ¾" Deep.....	Sq. Yd.	6,107,686	.0323	.046	281,244.37
Class "A", ½" Deep.....	Sq. Yd.	10,542,333	.015	.033	346,181.27
Class "C", 6" Deep.....	Sq. Yd.	125,600	.1398	.1398	17,558.88
Class "C", 3" Deep.....	Sq. Yd.	62,900	.1653	.1653	10,397.37
Class "C", 2" Deep.....	Sq. Yd.	137,800	.05755	.05755	7,930.39
Class "C", 1½" Deep.....	Sq. Yd.	95,700	.08043	.08043	7,697.15
Class "C", 1" Deep.....	Sq. Yd.	115,900	.0445	.04808	5,572.30
Class "D", 3" Deep.....	Sq. Yd.	356,855	.134	.149	53,101.57
Class "D", 1½" Deep.....	Sq. Yd.	95,500	.0447	.0447	4,268.85
Class "E", ½" Deep.....	Sq. Yd.	129,400	.0274	.0274	3,558.50
Class "G", 1½" Deep.....	Sq. Yd.	23,400	.0945	.0945	2,211.30
Class "G", 1" Deep.....	Sq. Yd.	87,400	.0277	.0389	3,400.42
Fuel Oil applied to sand gravel	Gals	937,316	.084	.093	86,961.16
Discing & manipulating sand for oil surfacing.....	Sq. Yd.	234,329	.078	.085	19,846.49
Pavement Items					
Unclassified Excavation.....	Cu. Yd.	1,752,549	.17	.273	479,020.58
Shoulder Finishing.....	Station	5,844.05	5.00	9.651	56,400.26
Jetting fills.....	Cu. Yd.	87,922	.05	.079	6,945.80
Concrete pavement.....	Sq. Yd.	2,340,209.93	1.44	1.704	3,988,015.65
Bituminous concrete surface course (Mod. Topeka).....	Sq. Yd.	16,568	1.02	1.02	16,899.36
Concrete base course.....	Sq. Yd.	10,890	1.02	1.411	15,367.80
Concrete base course & curb.....	Sq. Yd.	2,967	1.29	1.29	3,827.43
Reinforcing steel.....	Lbs.*	159,250	.03	.041	6,483.20
Reinforcing fabric.....	Lbs.	275,552	.05	.058	16,895.12
Culvert Items					
Unclassified Excavation.....	Cu. Yd.	70,363	.30	.795	55,922.50
Wet Excavation.....	Cu. Yd.	1,342	1.00	2.194	2,945.00
Class A Concrete.....	Cu. Yd.	22,522.48	13.50	16.742	377,061.86
Class AA Concrete.....	Cu. Yd.	84.4	18.00	22.802	1,924.50
Reinforcing steel for Culv.....	Lbs.	1,837,934	.03	.048	89,019.17
18" Reinforced concrete pipe.....	Lin. Ft.	5,206	1.40	1.768	9,202.44
24" Reinforced concrete pipe.....	Lin. Ft.	11,066	1.70	2.442	27,019.72
30" Reinforced concrete pipe.....	Lin. Ft.	2,270	2.75	3.217	7,302.56
36" Reinforced concrete pipe.....	Lin. Ft.	4,128	3.00	4.654	19,212.62
42" Reinforced concrete pipe.....	Lin. Ft.	162	5.00	6.379	1,033.40
48" Reinforced concrete pipe.....	Lin. Ft.	1,232	6.00	8.387	10,333.88
60" Reinforced concrete pipe.....	Lin. Ft.	20	12.00	12.48	249.60
15" Corrugated Metal Pipe.....	Lin. Ft.	20	1.40	2.04	40.80
18" Corrugated Metal Pipe					
L or M.....	Lin. Ft.	11,148	1.25	1.841	20,519.18
24" Corrugated Metal Pipe					
L or M.....	Lin. Ft.	28,632	1.90	2.412	69,058.41

AVERAGE CONTRACT PRICES FOR 1929-1930

Item	Unit	Quantity	Unit Prices		Amount
			Min.	Aver.	
30" Corrugated Metal Pipe					
L or M.....	Lin. Ft.	7,514	2.10	3.188	23,957.76
36" Corrugated Metal Pipe					
L or M.....	Lin. Ft.	10,296	1.75	4.702	48,422.00
42" Corrugated Metal Pipe					
L or M.....	Lin. Ft.	556	5.25	6.309	3,507.80
48" Corrugated Metal Pipe					
L or M.....	Lin. Ft.	1,660	7.00	7.956	13,207.72
60" Corrugated Metal Pipe					
L or M.....	Lin. Ft.	758	8.30	10.44	7,913.76
84" Corrugated Metal Pipe					
L or M.....	Lin. Ft.	140	15.30	15.574	2,180.40
10" Vitrified clay	Lin. Ft.	120	1.20	1.20	144.00
12" Vitrified clay	Lin. Ft.	545	1.25	1.342	731.25
Driveway Culvert Pipe					
delivered freight paid					
18" Reinforced concrete.....	Lin. Ft.	4,514	1.05	1.347	6,080.06
24" Reinforced concrete.....	Lin. Ft.	2,090	1.67	1.96	4,096.72
30" Reinforced concrete.....	Lin. Ft.	336	2.25	2.685	902.24
36" Reinforced concrete.....	Lin. Ft.	440	3.00	4.139	1,821.36
48" Reinforced concrete.....	Lin. Ft.	40	7.40	7.40	296.00
15" Corrugated Metal, L or M.....	Lin. Ft.	24	1.31	1.31	31.44
18" Corrugated Metal, L or M.....	Lin. Ft.	1,689	.50	1.519	2,565.06
24" Corrugated Metal, L or M.....	Lin. Ft.	1,274	.65	1.776	2,263.16
30" Corrugated Metal, L or M.....	Lin. Ft.	238	2.45	2.818	670.62
18" Corrugated Metal, N or O.....	Lin. Ft.	7,701	1.23	1.408	10,839.25
24" Corrugated Metal, N or O.....	Lin. Ft.	2,914	1.60	1.884	5,488.64
30" Corrugated Metal, N or O.....	Lin. Ft.	270	2.10	2.299	620.74
36" Corrugated Metal, N or O.....	Lin. Ft.	88	3.35	4.404	387.56
42" Corrugated Metal, N or O.....	Lin. Ft.	20	4.16	4.16	83.20
12" Vitrified clay.....	Lin. Ft.	24	1.25	1.25	30.00
18" Vitrified clay.....	Lin. Ft.	612	1.30	1.609	984.60
24" Vitrified clay.....	Lin. Ft.	32	1.75	2.20	70.40
30" Vitrified clay.....	Lin. Ft.	136	3.60	3.803	517.20
Miscellaneous Items					
Wire cable guard rail.....	Lin. Ft.	89,776	.23	.283	25,375.96
Anchors for wire cable guard					
rail	Lin. Ft.	1,144	5.00	5.969	6,828.00
Woven Wire guard rail.....	Lin. Ft.	4,768	.442	.466	2,221.54
Braces for woven wire guard					
rail	Lin. Ft.	120	.98	1.388	166.56
Extra posts	Each	301	.70	1.03	300.10

AVERAGE CONTRACT PRICES FOR 1927-1928

Item	Unit	Quantity	Unit Prices		Amount
			Min.	Aver.	
Clearing R. O. W.....	Acre	51	\$35.00	\$193.90	\$ 9,966.20
Grubbing R. O. W.....	Acre	50	40.00	256.32	12,943.33
Solid Rock Excavation.....	Cu. Yd.	29,215	.60	1.04	30,364.00
Common Excavation.....	Cu. Yd.	7,880,057	.139	.19	1,475,810.24
Station Excavation.....	Station	2,837	5.00	7.96	22,574.61
Overhaul	Cu. Yd. St.	6,225,530	.02	.02	124,510.60
Top Soil or Sand Clay Excavation	Cu. Yd.	423,732	.18	.23	98,977.87
Hauling Top Soil or Sand Clay	Cu. Yd. Mile	362,210	.25	.44	160,205.30
Concrete Pavement.....	Sq. Yd.	87,661	1.89	2.09	177,899.34
Reinforced Concrete Pavement	Sq. Yd.	13,054	2.35	2.35	30,676.90
Concrete Base Course and Curb	Sq. Yd.	17,962	1.22	1.22	21,913.64
Bituminous Concrete.....	Sq. Yd.	17,580	1.32	1.32	23,205.60
Concrete Overflow Pavement	Sq. Yd.	3,201	2.75	2.75	8,803.58
Wire Cable Guard Rail.....	Lin. Ft.	31,490	.26	.30	9,540.18
Anchors for Wire Cable Guard Rail.....	Each	416	2.50	5.32	2,212.00
Woven Wire Guard Rail.....	Lin. Ft.	82,056	.40	.42	34,646.36
Braces for Woven Wire Guard Rail.....	Each	946	1.00	1.56	1,473.80
Extra Posts.....	Each	355	.50	.98	347.50
Sand Gravel Surfacing					
Class A, 4" Deep.....	Sq. Yd.	41,021	.19	.19	7,711.95
Class A, 3" Deep.....	Sq. Yd.	9,086,213	.08	.20	1,803,000.39
Class A, 2" Deep.....	Sq. Yd.	4,423,627	.05	.14	613,297.88
Class A, 1½" Deep.....	Sq. Yd.	1,774,135	.04	.09	161,450.13
Class A, 1" Deep.....	Sq. Yd.	2,557,770	.04	.07	186,926.98
Class C, 3" Deep.....	Sq. Yd.	1,012,930	.09	.15	156,967.72
Class C, 1" Deep.....	Sq. Yd.	392,000	.04	.05	20,214.90
Class D, 3" Deep.....	Sq. Yd.	174,600	.15	.15	26,888.40
Class D, 1" Deep.....	Sq. Yd.	270,780	.06	.06	16,214.85
Common Excavation for Culverts	Cu. Yd.	45,571	.45	.79	36,025.80
Wet Excavation for Culverts....	Cu. Yd.	105	2.00	2.81	295.00
Reinforced Concrete for Box Culverts and Retaining Walls	Cu. Yd.	23,610	16.00	19.78	466,887.36
18" Reinforced Concrete Pipe....	Lin. Ft.	3,278	1.40	1.82	5,975.90
24" Reinforced Concrete Pipe....	Lin. Ft.	9,534	2.20	2.54	24,192.24
30" Reinforced Concrete Pipe....	Lin. Ft.	2,014	2.90	3.39	6,836.50
36" Reinforced Concrete Pipe....	Lin. Ft.	2,436	3.75	4.74	11,557.90
48" Reinforced Concrete Pipe....	Lin. Ft.	168	7.00	7.50	1,300.00
60" Reinforced Concrete Pipe....	Lin. Ft.	60	11.00	11.53	692.00
18" Corrugated Metal Pipe.....	Lin. Ft.	6,885	1.50	1.70	11,734.89
24" Corrugated Metal Pipe.....	Lin. Ft.	18,835	2.00	2.66	50,182.71
30" Corrugated Metal Pipe.....	Lin. Ft.	5,279	3.00	3.36	17,744.88
36" Corrugated Metal Pipe.....	Lin. Ft.	3,896	4.75	5.15	20,081.72
42" Corrugated Metal Pipe.....	Lin. Ft.	34	5.30	5.30	180.20
48" Corrugated Metal Pipe.....	Lin. Ft.	188	7.00	8.30	1,564.80
60" Corrugated Metal Pipe.....	Lin. Ft.	216	10.20	10.48	2,251.60
84" Corrugated Metal Pipe.....	Lin. Ft.	340	11.50	14.91	5,069.44
18" Reinforced Concrete Pipe for Driveways.....	Lin. Ft.	734	1.30	1.46	1,070.10
24" Reinforced Concrete Pipe for Driveways.....	Lin. Ft.	408	2.00	2.22	906.80
30" Reinforced Concrete Pipe for Driveways.....	Lin. Ft.	146	2.75	2.79	407.90
18" Corrugated Metal Pipe, Class A, for Driveways.....	Lin. Ft.	112	1.65	1.81	202.40

AVERAGE CONTRACT PRICES FOR 1927-1928

Item	Unit	Quantity	Unit Prices		Amount
			Min.	Aver.	
18" Corrugated Metal Pipe, Class B, for Driveways.....	Lin. Ft.	2,622	1.20	1.46	3,836.90
24" Corrugated Metal Pipe, Class B, for Driveways.....	Lin. Ft.	954	2.10	2.36	2,249.40
30" Corrugated Metal Pipe, Class B, for Driveways.....	Lin. Ft.	208	2.64	2.80	583.20
18" Vitrified Clay Pipe for Driveways	Lin. Ft.	48	1.50	1.50	72.00

AVERAGE CONTRACT PRICES FOR 1917-1926

ITEM	Unit	1917-1918		1919-1920		1921-1922		1923-1924		1925-1926	
		Quantity	Price	Quantity	Price	Quantity	Price	Quantity	Price	Quantity	Price
Earth Excavation.....	Cu. Yd.	483,000	\$0.310	7,028,587	\$0.454	5,211,999	\$0.305	2,931,674	\$0.232	10,352,364	\$0.20067
Station Excavation.....	100 Ft. Sta.					3,251	6.150	2,872	3.707	4,507.61	4.2753
Sand Clay Excavation.....	Cu. Yd.									976,121	0.2312
Hauling Sand Clay Surfacing											
Material.....	Cu. Yd. Mile			115,003	1.130	149,752	0.657	256,887	0.571	923,080.1	0.4775
Loose Rock Excavation.....	Cu. Yd.				2.250	23,902	0.860	9,300	0.617	44,052	0.4645
Solid Rock Excavation.....	Cu. Yd.				3.000	15,098	1.770	4,136	1.706	18,648	1.2482
Class "B" Excavation.....	Cu. Yd.									47,779	0.2790
Channel Excavation.....	Cu. Yd.									33,320	0.2375
2-In. Gravel Surfacing.....	Sq. Yd.			144,432	0.247			1,872,355	0.160	7,300,985	0.1405
3-In. Gravel Surfacing.....	Sq. Yd.					132,231	0.200	2,429,873	0.205	11,505	0.2010
4-In. Gravel Surfacing.....	Sq. Yd.			368,498	0.325	815,863	0.388	1,529,694	0.243	271,963	0.2505
6-In. Gravel Surfacing.....	Sq. Yd.							40,483	0.289	4,200	0.6600
Concrete Pavement.....	Sq. Yd.			104,731	3.140			327,174	2.596	264,337.47	2.1188
Brick Pavement.....	Sq. Yd.	57,524	2.890	10,986	3.950	6,994	4.330	124,564	3.566	7,476.10	2.9700
Bituminous Concrete Pave-											
ment.....	Sq. Yd.					54,775	3.050	54,206	2.581	38,191.33	2.5073
Sheet Asphalt Pavement.....	Sq. Yd.									2,426.67	2.5700
Reinforced Concrete Pavement	Sq. Yd.									7,093	2.1200
Reinforced Concrete Pave-											
ment with Hard Rock											
Wearing Surface.....	Sq. Yd.									14,444	2.4100
Headwall Concrete.....	Cu. Yd.	731	28.090	4,130	38.320	4,410	32.400	2,143	26.220	22,277.558	21.2474
Box Culvert Concrete.....	Cu. Yd.	included above		5,997	36.420	6,101	29.980	2,858	23,070	1,258.886	22.3118
Concrete Overflow Pavement.....	Sq. Yd.			23,247	4.430	11,478	3.290	14,038	2.710	4,264.9	2.6029
Class "A" Excavation for											
Culverts.....	Cu. Yd.									58,688	.74013
Class "B" Excavation for											
Culverts.....	Cu. Yd.									1,841	.56936
18-In. Reinf. Concrete Pipe.....	Lin. Ft.									9,120	1.87759
24-In. Reinf. Concrete Pipe.....	Lin. Ft.									17,122	2.69674
30-In. Reinf. Concrete Pipe.....	Lin. Ft.									3,756	3.69545
36-In. Reinf. Concrete Pipe.....	Lin. Ft.									3,752	4.93059
42-In. Reinf. Concrete Pipe.....	Lin. Ft.										

AVERAGE CONTRACT PRICES FOR 1917-1926

ITEM	Unit	1917-1918		1919-1920		1921-1922		1923-1924		1925-1926	
		Quantity	Price	Quantity	Price	Quantity	Price	Quantity	Price	Quantity	Price
48-In. Reinf. Concrete Pipe.....	Lin. Ft.	.....	.....	.....	.....	.....	.....	.....	.....	642	7.75386
60-In. Reinf. Concrete Pipe.....	Lin. Ft.	.....	.....	.....	.....	.....	.....	.....	.....	24	13.8167
18-In. Corru. Metal Pipe.....	Lin. Ft.	.....	.....	.....	.....	.....	.....	.....	.....	9,706	1.64020
24-In. Corru. Metal Pipe.....	Lin. Ft.	.....	.....	.....	.....	.....	.....	.....	.....	16,290	2.79577
30-In. Corru. Metal Pipe.....	Lin. Ft.	.....	.....	.....	.....	.....	.....	.....	.....	3,756	3.60221
36-In. Corru. Metal Pipe.....	Lin. Ft.	.....	.....	.....	.....	.....	.....	.....	.....	3,918	4.44630
42-In. Corru. Metal Pipe.....	Lin. Ft.	.....	.....	.....	.....	.....	.....	.....	.....	78	7.16667
48-In. Corru. Metal Pipe.....	Lin. Ft.	.....	.....	.....	.....	.....	.....	.....	.....	1,046	7.28618
60-In. Corru. Metal Pipe.....	Lin. Ft.	.....	.....	.....	.....	.....	.....	.....	.....	972	10.45680
Cable Guard Rail.....	Lin. Ft.	.....	.....	.....	.....	52,806	0.457	85,032	0.402	106,194	0.3801
Anchors for Cable Guard Rail....	Each	.....	.....	.....	.....	included	above	782	5.334	1,126	6.1576
Wood Guard Rail.....	Lin. Ft.	.....	.....	43,469	0.740	107,034	0.464	.....	.....	.....	.....
Woven Wire Guard Rail.....	Lin. Ft.	.....	.....	.....	.....	.....	.....	90,354	0.506	.....	0.4681

DEPARTMENT OF PUBLIC WORKS

AVERAGE CONTRACT PRICES FOR BRIDGES

ITEM	Unit	1925-1926			1927-1928			1929-1930		
		Quantity	Unit Price	Amount	Quantity	Unit Price	Amount	Quantity	Unit Price	Amount
Common Excavation	Cu. Yd.	20,545	\$.66	\$ 13,483.05	9,329	\$.97	\$ 9,022.65	6,858	\$ 1.55	\$ 10,650.20
Wet Excavation	Cu. Yd.	8,882	3.24	28,816.25	5,545	3.62	20,093.95	4,349	4.19	18,220.35
Untreated Lumber	M. B. F.				27	68.44	1,863.55	204	72.04	14,706.10
Treated Lumber	M. B. F.	586	118.13	69,247.76	731	103.98	75,968.02	1,076	114.64	123,410.32
Concrete Class "AA"	Cu. Yd.	1,101	24.66	27,152.03	2,616	21.62	56,567.64	3,992	20.57	82,110.66
Concrete Class "A"	Cu. Yd.	9,533	19.98	190,479.10	5,272	20.11	106,029.90	3,954	19.25	76,115.00
Concrete Class B	Cu. Yd.	1,341	16.09	21,579.12						
Reinforcing Steel	Lbs.	945,263	.05	45,209.04	662,105	.05	32,004.40	797,619	.05	40,661.71
Superstructure Steel	Lbs.	4,000,564	.06	238,748.29	4,092,932	.05	200,877.27	1,629,461	.06	103,457.90
Extra Structural Steel	Lbs.	183,380	.06	11,024.85	143,010	.06	9,216.83	129,165	.07	8,650.32
Wood Piling Untreated	Lin. Ft.	15,342	.83	12,669.77	8,140	.86	6,988.00	13,576	.97	13,225.60
Wood Piling Treated	Lin. Ft.	22,258	1.18	26,183.20	32,299	1.07	34,535.70	65,706	1.22	80,336.37
Steel Piling 8"x32 lb. H	Lin. Ft.	47,934	2.15	103,106.40	51,806	2.19	113,508.50	22,890	2.31	52,807.00
Steel Piling 8"x31 lb. I	Lin. Ft.	5,050	1.47	7,431.00						
Cast Iron Scuppers	Each	416	3.03	1,262.00	720	2.60	1,872.00	87	2.83	246.00
Metal Traffic Tread	Lin. Ft.	7,584	1.65	12,492.29	4,824	1.56	7,507.51			
Willow Mattress	Sq. Yd.				4,247	2.30	9,781.25			
Gravel Surfacing	Sq. Yd.	12,561	.30	3,719.28						
Driving only Treated Timber										
Piling	Lin. Ft.							280	.60	168.00
Steel Piling 10"x49.5 lb. H										
Piling	Lin. Ft.							1,885	2.82	5,314.50
Driving Only 8"x32.0 lb. H										
Piling	Lin. Ft.							570	1.45	826.50
Driving Only 10"x49.5 lb. H										
Piling	Lin. Ft.							2,580	1.50	3,870.00
Cast Iron Pile Points	Each							238	2.26	537.00
Copper Drains	Each							407	2.00	815.75
Galvanized Iron Strip	Lin. Ft.							653	.42	272.04
Gas Pipe Handrail	Lin. Ft.							2,438	2.77	6,764.86

FEDERAL AID APPROPRIATIONS

Date of Federal Appropriation	Available Fiscal Year Ending	Lapses July 1	Amount	Nebraska Share	Max. Fed. Aid per Mile
July 11, 1916.....	June 30, 1917	1921	\$ 75,000,000	\$1,599,850.01	\$10,000
Febr. 28, 1919.....	June 30, 1919	1921	200,000,000	4,266,911.65	20,000
Nov. 9, 1921.....	June 30, 1922	1924	75,000,000	1,581,189.50	20,000
June 19, 1922.....	June 30, 1923	1925	50,000,000	1,054,126.33	16,250
Febr. 26, 1923.....	June 30, 1924	1926	65,000,000	1,371,713.17	15,000
June 5, 1924.....	June 30, 1925	1927	75,000,000	1,577,155.34	15,000
Febr. 12, 1925.....	June 30, 1926	1928	75,000,000	1,581,969.00	15,000
Montana's 1923 funds reappropriated			655,546	14,182.00	15,000
Febr. 12, 1925.....	June 30, 1927	1929	75,000,000	1,588,138.00	15,000
June 22, 1926.....	June 30, 1928	1930	75,000,000	1,585,138.00	15,000
June 22, 1926.....	June 30, 1929	1931	75,000,000	1,584,981.00	15,000
May 26, 1928.....	June 30, 1930	1932	75,000,000	1,586,299.00	15,000
May 26, 1928.....	June 30, 1931	1933	75,000,000	1,586,526.00	15,000
April 4, 1930.....	June 30, 1931	1933	50,000,000	1,057,684.00	15,000
Hawaii's 1928 funds reappropriated			326,864.96	7,093.00	15,000
April 4, 1930.....	June 30, 1932	1934	125,000,000	2,644,726.00	15,000
Nebraska's total apportionment of Federal Aid Funds to June 30, 1932				\$24,687,682.00	

Projects completed and paid for, as of September 30, 1930	\$15,072,586.15
Projects under agreement but not completed, as of September 30, 1930	4,457,078.34
Projects approved, agreements not executed, as of September 30, 1930	565,494.44
Total Obligated as of September 30, 1930.....	\$20,095,158.93

Nebraska's total apportionment of Federal Aid Funds to June 30, 1932.....	\$24,687,682.00
Deduction Nebraska's total Obligations as of September 30, 1930.....	20,095,158.93

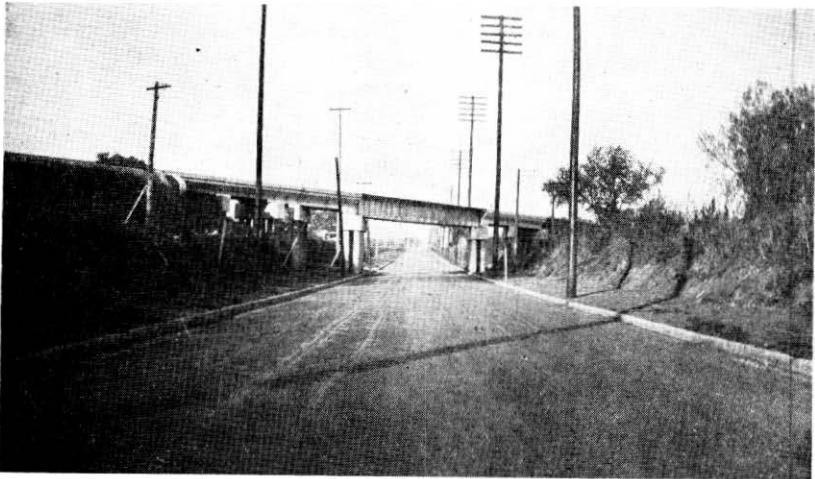
Balance of Federal Aid available for new projects as of October 1, 1930.....	\$ 4,592,523.07
Estimated Additional Federal Aid available for obligation prior to July 1, 1933	\$ 2,644,726.00

Total Federal Aid available for Projects which may be constructed from October 1, 1930 to July 1, 1933.....	\$ 7,237,249.07
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TOTAL OBLIGATIONS BY BIENNIUMS

The following table shows the construction obligations by bienniums from "Federal", "State", and "Other Funds" from 1917 to November 1, 1930. These figures are obtained from final estimates where the actual amounts are known and from contracts where the actual final quantities are not known but where the division into funds is estimated.

Biennium	Federal	State	Other Funds.	Total
1917-1918	\$ 248,443.98	\$ 249,210.17	\$ 147,793.45	\$ 645,447.60
1919-1920	2,861,821.82	3,199,183.49	156,470.29	6,217,475.60
1921-1922	2,224,143.92	2,560,544.84	232,211.70	5,016,900.46
1923-1924	2,430,433.38	1,398,105.07	1,297,290.24	5,125,828.69
1925-1926	4,632,917.58	5,109,880.03	541,609.77	10,284,407.38
1927-1928	3,311,488.80	4,758,924.22	327,753.14	8,398,166.16
1929-1930	4,153,040.09	7,369,986.93	139,018.11	11,662,045.13
Totals	\$19,862,289.57	\$24,645,834.75	\$2,842,146.70	\$47,350,271.02



Underpass on Highway No. 7 East of Lincoln.

**CHART SHOWING FACTORS MAKING UP COUNTY
APPORTIONMENT RATIOS**

County	Area	Population	Post Route	County to State
	Area	Population	Miles of Post Route	Ratio of County to State
Adams.....	565	4,999	530.5	.013532718
Antelope.....	872	3,538	514.2	.013030930
Arthur.....	800	444	108.0	.005070928
Banner.....	742	322	145.6	.005059311
Blaine.....	711	458	89.5	.004513862
Boone.....	692	3,400	430.5	.011243391
Box Butte.....	1,076	1,576	115.5	.007640354
Boyd.....	535	1,745	316.3	.007513526
Brown.....	1,235	1,483	228.0	.009360157
Buffalo.....	945	5,282	621.8	.016427436
Burt.....	475	3,051	415.0	.009745575
Butler.....	583	3,609	505.25	.011764575
Cass.....	538	4,874	489.5	.012858351
Cedar.....	735	3,551	551.75	.012827476
Chase.....	899	1,006	172.0	.006790326
Cherry.....	5,979	3,054	538.5	.034882745
Cheyenne.....	1,194	1,503	122.0	.008134534
Clay.....	579	3,877	554.0	.012546384
Colfax.....	405	2,607	373.0	.008509313
Cuming.....	577	3,113	526.0	.011380300
Custer.....	2,588	6,322	943.0	.027992922
Dakota.....	253	1,721	188.5	.004971961
Dawes.....	1,402	1,923	205.0	.010336314
Dawson.....	985	3,666	502.5	.013546663
Deuel.....	439	563	110.0	.003660678
Dixon.....	472	2,654	365.5	.008778137
Dodge.....	531	5,337	397.0	.012423765
Douglas.....	331	41,642	310.0	.052238170
Dundy.....	927	1,042	236.0	.007599445
Fillmore.....	576	3,600	562.0	.012297063
Franklin.....	578	2,530	359.0	.009030556
Frontier.....	975	1,992	367.0	.010218377
Furnas.....	721	2,920	430.0	.010814705
Gage.....	862	7,047	855.0	.020443556
Garden.....	1,652	963	123.5	.009519145
Garfield.....	575	809	170.0	.005138502
Gosper.....	464	1,101	294.0	.006243441
Grant.....	726	414	78.0	.004412441
Greeley.....	571	2,000	218.0	.006069365
Hall.....	528	5,321	404.0	.012463127
Hamilton.....	538	3,369	516.0	.011403110
Harlan.....	574	2,278	348.0	.008613616
Hayes.....	722	665	143.0	.005338912
Hitchcock.....	724	1,204	212.0	.006661517
Holt.....	2,393	3,990	674.0	.021760174
Hooker.....	722	353	90.0	.004446449
Howard.....	561	2,254	310.0	.008145927
Jefferson.....	578	3,890	548.5	.012501378
Johnson.....	374	2,547	390.5	.008482840
Kearney.....	516	2,771	310.5	.008547534
Keith.....	1,068	1,022	100.0	.006814882
Keya Paha.....	775	790	106.0	.005338324
Kimball.....	958	649	141.5	.006329645
Knox.....	1,114	4,361	671.0	.016603948
Lancaster.....	853	16,925	876.0	.031924683
Lincoln.....	2,536	3,895	513.0	.020645934
Logan.....	573	495	73.0	.003790675
Loup.....	576	442	140.0	.004419713
Madison.....	576	4,887	407.5	.012209955
McPherson.....	874	332	110.0	.005284059
Merrick.....	463	2,665	381.0	.008908219
Morrill.....	1,417	1,472	130.0	.009147626
Nance.....	446	2,186	270.0	.007165007
Nemaha.....	389	3,145	398.1	.009309270

**CHART SHOWING FACTORS MAKING UP COUNTY
APPORTIONMENT RATIOS—Concluded**

County	Area	Population	Miles of Post Route Miles of	Ratio of County to State Ratio of
Nuckolls.....	579	3,354	410.5	.010498335
Otoe.....	606	4,683	567.5	.013722597
Pawnee.....	431	2,541	415.0	.008970787
Perkins.....	886	667	27.0	.004881347
Phelps.....	518	2,543	393.5	.009229291
Pierce.....	577	2,321	354.0	.008736460
Platte.....	673	4,436	528.0	.013331662
Polk.....	430	2,777	420.0	.009287115
Red Willow.....	720	2,510	464.0	.010684404
Richardson.....	545	4,928	530.0	.013359593
Rock.....	1,004	898	218.0	.007586966
Saline.....	573	4,268	562.0	.013048752
Sarpy.....	240	2,360	210.0	.005864201
Saunders.....	756	4,886	700.0	.015944194
Scotts Bluff.....	723	2,938	235.0	.008874514
Seward.....	574	3,775	552.0	.012387718
Sheridan.....	2,469	1,884	404.0	.016952135
Sherman.....	573	2,010	309.5	.007913630
Sioux.....	2,055	1,126	190.0	.012126336
Stanton.....	431	1,705	232.0	.006165479
Thayer.....	578	3,486	532.5	.011877290
Thomas.....	716	440	34.0	.003954412
Thurston.....	387	2,153	219.0	.006356086
Valley.....	570	2,340	342.0	.008606633
Washington.....	580	3,009	348.0	.008608519
Wayne.....	450	2,312	344.5	.008079050
Webster.....	578	2,266	406.0	.009203029
Wheeler.....	578	514	130.0	.004409817
York.....	575	4,402	601.0	.013604726
Total.....	76,808	291,178	33003.5	1.000000000

This apportionment is made, as required by State law, as follows:

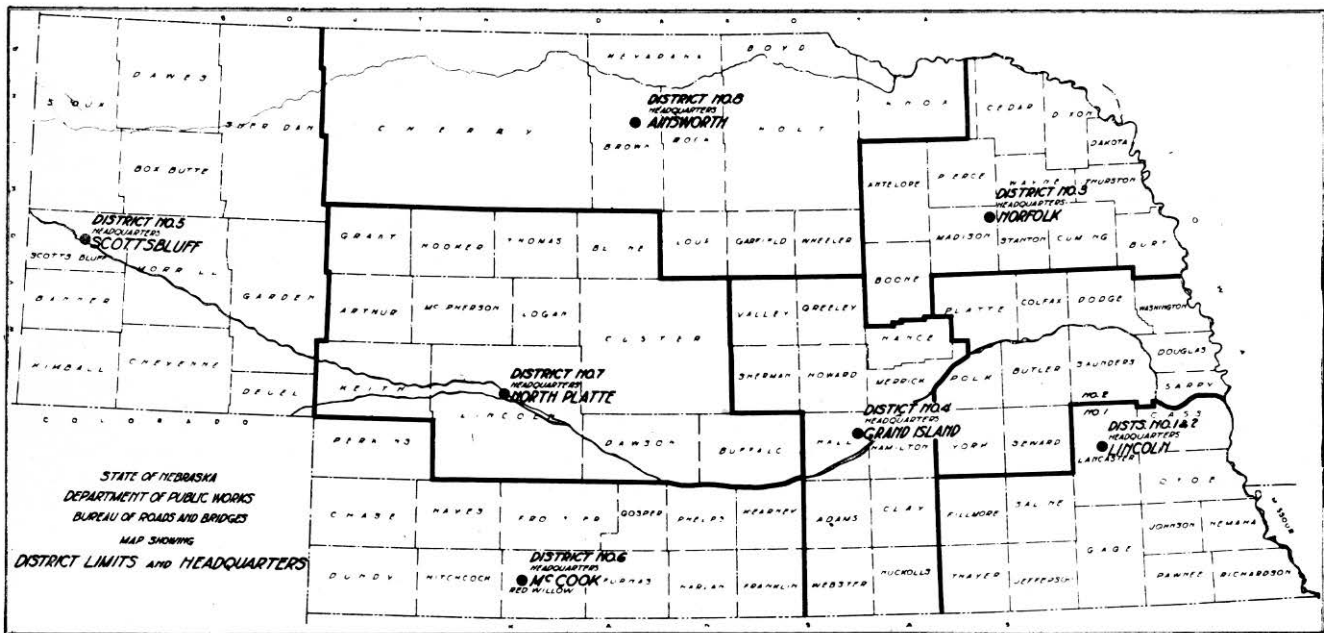
“One-third in the ratio which the area of each county bears to the total area of the state;

One-third in the ratio which the mileage of rural delivery and star routes in each county bears to the total mileage of rural delivery and star routes in the state;

One-third in the ratio which the population of each county bears to the total population of the state.

The ratio of population between the counties shall be determined by the number of votes cast in the respective counties for Governor at the General Election of 1916.”

By multiplying the ratio as shown in the last column of this chart by the total amount of an appropriation, the share due any county can be determined.



REPORT OF THE EIGHT DISTRICTS

There are eight District Engineers, with permanent headquarters as shown by the district map. Contact is maintained between the State Engineer, Chief of Bureau, Construction Engineer, Maintenance Engineer and others in the Lincoln office and the District Engineers by conferences at Lincoln about once every month and by inspection trips in the districts. Below is a brief description of each district for the past two years.

District No. 1

F. H. Klietsch, Lincoln, has been District Engineer for nearly three years. This district is composed of counties in the southeast corner of the state, where soil conditions are favorable for good roads, providing weather conditions are also favorable. However, during the early spring of 1929 very difficult road conditions were had on account of an exceptionally cold winter which resulted in having the ground frozen to a depth of approximately thirty-six inches. In the spring when freezing and thawing weather set in and with frequent rains, many practically impassable mud holes or frost-boils developed, which condition existed until the middle of May. Every effort possible was made to keep these holes passable and in many cases the expense was considerable.

In one particular hole on U. S. 75 between Union and Plattsmouth, after planking failed to stand up, five hundred tons of crushed rock were used, which cost of placing the rock was approximately \$2.50 per ton. This condition was particularly bad on the heavy traveled roads out of Lincoln and in the Missouri Valley from Falls City north to Omaha. A recurrence of this condition will not be so disastrous due to the paving of two of the worst stretches; Nebraska City—south fifteen miles and between Plattsmouth and Union.

About the time the roads were back in good condition following the effect of a bad winter, disastrous floods in Richardson and Nemaha counties were highly destructive to roads. The worst damage resulted on U. S. Highway No. 73 south of Falls City where both the bridge over the Nemaha river and Pony creek were washed out. Approximately \$100,000 was spent in replacing these two bridges with approach fills. The Nemaha river bridge consisted of one 160 foot central span with two seventy foot approach spans.

It was not until late in the summer that normal conditions again existed and considerable extra gravel surfacing was then placed to take care of the gravel that had been lost during the abnormal weather conditions. During the remainder of the biennium, weather conditions were normal and usual maintenance conditions prevailed.

Featuring the construction work in this district, was the paving of approximately thirty miles on U. S. Highway No. 75 and U. S. Highway No. 73, and fourteen miles from Lincoln toward Omaha on U. S. Highway No. 38. Also, the construction and taking over for maintenance of approximately one hundred and fifty miles of new state highways which were formerly cared for by the counties. This construction with the graveling of the original system where no gravel had previously been placed gave more than twenty towns gravel outlets.

Some very important connecting links have been graveled so as to complete gravel surface between important points; some of which are Highway No. 4—Beatrice to Falls City, Highway No. 15, from state-line south of Fairbury to Wilber, and U. S. Highway No. 75 from Auburn to Dawson.

District No. 2

Edwin Olmstead, Lincoln, has been District Engineer for about two and one-half years. This district is comprised of the eleven counties in the east central part of the state.

The outstanding improvements completed during the past biennium are: the completion of a paved surface between Ames and Columbus, providing continuous paving between Columbus and Omaha; the paving of the King of Trails Highway between Omaha and Plattsmouth; the paving of the D. L. D. Highway west of Lincoln and the relocation, construction and gravel surfacing of the Fremont-Blair road.

There have been laid in this district, nearly sixty miles of paved surfacing, during the past two years.

During the spring of 1929, the Platte river was unusually high with a very heavy ice flow. At one period all river crossings between Schuyler and Plattsmouth were closed due to high water. Considerable trouble was also experienced that spring by "frost boils" which broke up the graveled roads in numerous places.

Maintenance during the past two years has been almost exclusively a matter of routine. It has been necessary to resurface a large portion of the graveled roads due to increased traffic.

There have been seventy-two miles of new roads built and maintained as provided by the last legislature.

District No. 3

V. W. Marquis, Norfolk, was the District Engineer up to August 15, 1930, when J. B. Martin was appointed District Engineer with headquarters at Norfolk. There are twelve counties in this district,

which is located in the northeast corner of the state. The outstanding improvement within this district has been the construction of U. S. Highway No. 20, from Randolph east to Jackson, thereby providing a highway to the east that is utilized by all northeast Nebraska. Further in important improvements was the construction of the Elkhorn Bridge and the paving across an extremely sandy and inadequate section of road south of Norfolk on the Meridian Highway, also the completion of Highway No. 32 from Albion to Madison.

The maintenance in this district during this biennium has been rather difficult due to extreme weather conditions prevailing. The drought during this past summer tested our maintenance forces beyond any previous trials and generally the surfaces were kept in a satisfactory condition.

District No. 4

F. C. Rolls, Grand Island, has been the District Engineer for nine years. This district consists of twelve counties and parts of two others. It is situated near the middle of the state, east and west, with an average annual rainfall of approximately twenty-five inches. Most of this occurs in the spring of the year just after the frost has left the ground which causes a serious maintenance problem especially on the Platte River bottoms. During the spring of 1929 it was necessary to keep a 60 horse power caterpillar tractor on the roads out of Grand Island for two months night and day pulling cars and trucks. During 1929 and 1930, highways crossing the Platte River bottoms have been improved, grades were raised as much as three feet in places, and the road-bed paved. This district has about two months of drought each summer and during this time it is not possible to keep a smooth surface on the heavily traveled roads such as U. S. Highway No. 30 and U. S. Highway No. 38.

Relocation of the highways during the last two years resulted in shortening U. S. Highway No. 30, five miles. From Grand Island to Ord, the road was straightened and shortened eight miles. Twenty-seven miles of paving were built and six more placed under contract. This paving was built on stretches where it was not possible to maintain a satisfactory surface, due to heavy traffic and poor soil conditions. Two bridges across the Platte river were built, one at Clarks, 1000 feet long and State Aid bridge at Alda, 550 feet long.

The northern part of the district is very hilly with the result that grading and drainage structures are costly. Consequently road improvement does not progress as rapidly as in the southern part.

District No. 5

T. C. Middleswart, Scottsbluff, has been the District Engineer for three and one-half years. This district is located in the extreme western part of the state. Conditions affecting road construction and maintenance in District Five during the years 1929 and 1930 have been very unusual. The spring of 1929 brought with it the worst frost troubles we have ever experienced. Many places were impassable and traffic moved only when pulled by tractors or teams. In some localities, detours could not be maintained and traffic was handled over a six week's period of time with teams and tractors. One of the worst places during the spring of 1929 was the six mile section immediately east of Scottsbluff. This section was paved during the summer of 1929 and has given no trouble since. The summer of 1929 was favorable for road construction but all work came to a standstill the third week in October and very little construction was done after that date on account of snow, rain, and early winter weather. Maintenance conditions were good during the winter and the District had very few roads blocked with snow, and all snow moving equipment worked to open any drifted roads in record time.

The summer of 1930 was the hottest the district has ever experienced, temperatures reaching well above 100° for a number of days. Eight weeks passed without rain, other than a few scattered showers. Rains that fell in late September and October did considerable damage.

Important projects that have been constructed during the past two years are: Potter—east and west, Dalton—north, Big Springs—southwest, Chadron—Whitney, Angora—south, Chadron—north. A considerable mileage of statutory roads not on the Federal system has been under construction and placed under maintenance, such as Mitchell—Agate; Crawford—northwest; Rushville—White Clay; Bridgeport—Redington; Oshkosh—south.

The 1930 census shows that District Five has a population of 103,000 in round numbers and is steadily increasing. Road building is keeping progress with the growing population and the demands for the building of farm to market roads increase daily. The 1930 beet crop in the North Platte Valley promises to be the largest ever raised and the bulk of this crop is hauled over State and Federal roads.

District No. 6

F. C. Smith, McCook, has been District Engineer in this district for four years. This district is composed of the thirteen counties which lie south of the Platte river in the southwest corner of the state. With the exception of parts of the extreme western counties where some clay surfacing has been necessary they have good hard soil, making conditions favorable for road building as well as for agri-

culture. There is a variety of topographical conditions in these counties ranging from deep canyons to extremely level prairie land. The majority of the land, however, is rolling. The Republican River flows through the south tier of counties and the cross drainage into this river makes highway construction expensive in these counties on account of the large number of culverts and bridges necessary. In some of the flat level counties away from the river, conditions are almost ideal for highway building.

During the past two years, real progress has been made in this district, in closing up uncompleted gaps in the graveled highways. On the D. L. D. Highway, or U. S. Highway No. 38, construction projects between Imperial and Beverly, Indianola and Cambridge, and between Arapahoe and Oxford, have made this highway which passes through eight counties of this district continuously graveled or paved across the state. On the Golden Rod Highway, or State Highway No. 3, projects between Franklin and Oxford, and between Trenton and Max have completed the gravel on this highway with the exception of one ten mile gap. The completing of the gravel between McCook and North Platte has also made an important connection and nearly every county in the district has seen the completion of some important gravel project during the past two years.

Maintenance in this district is carried on entirely with motor maintainers and trucks. Although no serious snow storms nor floods have occurred during the past biennium, maintenance has been much more difficult during the past year due to a season of exceptionally heavy rainfall and greatly increased traffic on the main highways No. 3 and No. 38.

District No. 7

C. W. Eubank, North Platte, has been District Engineer for three years. This district has twelve counties and is located in the west central part of the state.

The demand for more and better highways has greatly increased during the past two years. This demand is occasioned by the vast increase of travel by road and hauling by truck. The increased heavy type of travel was thrown upon the highways which were at one time adequate. All of the weaker places began to show up in the form of bad mud holes along the Platte Valley and impassable sandy stretches in the sand hill sections of the district.

To cope with this extra demand, pavement was resorted to along the Platte Valley, where the graveled roads would not hold up. Seven short paving projects were constructed this biennium, covering some of the worst places.

Experiments with oiled sand roads promise to solve the problem of an adequate surface in the sand hill section, where clay and gravel are not obtainable at a reasonable cost. A seven mile oiled sand project was built between Mullen and Whitman on the Potash Highway. Other oiled projects are being planned for future work. In addition to this, several projects having clay and gravel surface have been built along this route.

The Platte River passes through the south part of District Seven, necessitating the use of many bridges. In a number of cases these bridges have been built jointly by the counties and by the state. During this biennium four such bridges have been built; one across the South Platte River at Ogallala, one at Paxton, one at Hershey, and one across the Platte River at Odessa. In each case permanent structures of concrete and steel were built.

The maintenance in this district has demanded a great deal of attention, due to the increased tonnage being hauled over the highways as well as many local conditions which make maintenance difficult. It is felt that great strides have been made the past two years in developing our maintenance organization. While the cost of maintenance has increased somewhat in this district, it is due largely to the increased mileage caused by taking over new routes and to the necessity of resurfacing old graveled roads.

District No. 8

W. H. Bauman, Ainsworth, has been District Engineer, three and one-half years. This district is made up of ten counties and is in the north central part of the state. Approximately 95% of this district lies in the sand-hill area of Nebraska and indicates an average of population of five persons to the square mile. The area contributes to the wealth of the State through the production of the finest beef cattle in the world.

The construction of roads in this district is often very expensive. The problem consists of locating suitable clay to build a topping or mat over the sand subgrade to support a wearing coat of gravel surfacing. Suitable gravel for surfacing must often be shipped a considerable distance.

The action of the elements is as much of a factor as traffic in the high maintenance costs. Dry windy weather, which prevails most of the year, when coupled with the destructive action of increasing traffic wears out the light clay mat, requiring expensive and extensive replacements.

In an effort to keep road building and maintenance costs within an economical and justifiable limit, an experimental oiled sand project has been completed south of O'Neill. This will be carefully observed

to determine its suitability and economy for future sand hill construction.

With the constantly increasing traffic demands, it is becoming more evident that the type of light soil construction used at present will require revision to a more stable type.

The improvements have made this region easily accessible and generally the residents are well satisfied although constantly requesting further and better roads.

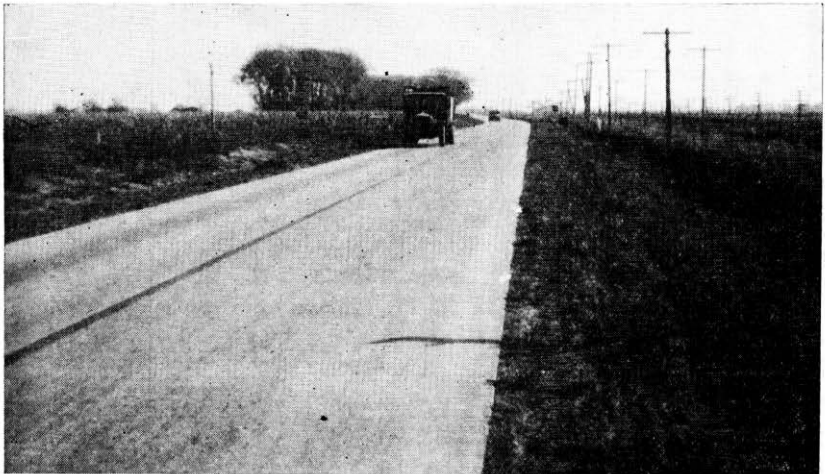
CONCLUSION

The outstanding item of the work in all districts has been the continuance of loyalty shown by all employees, both on construction and maintenance.

The following views are typical of construction and maintenance in the eight districts during 1929-1930.



A Graveled surface was not adequate during extreme weather conditions, on this section of Highway No. 30, one mile east of North Bend, Dodge county. The gravel was replaced by concrete pavement as shown in the view below.



**THREE VIEWS OF TYPICAL CONCRETE PAVEMENT
IN NEBRASKA.**



West of Gothenburg.



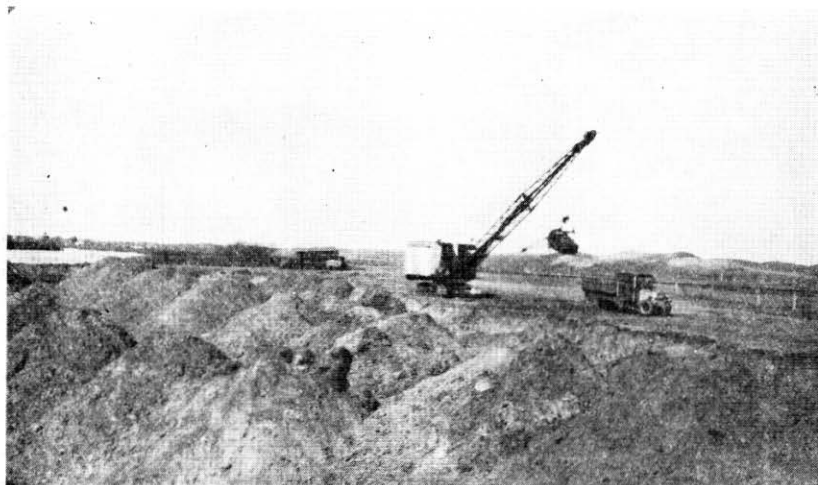
South of Nebraska City.



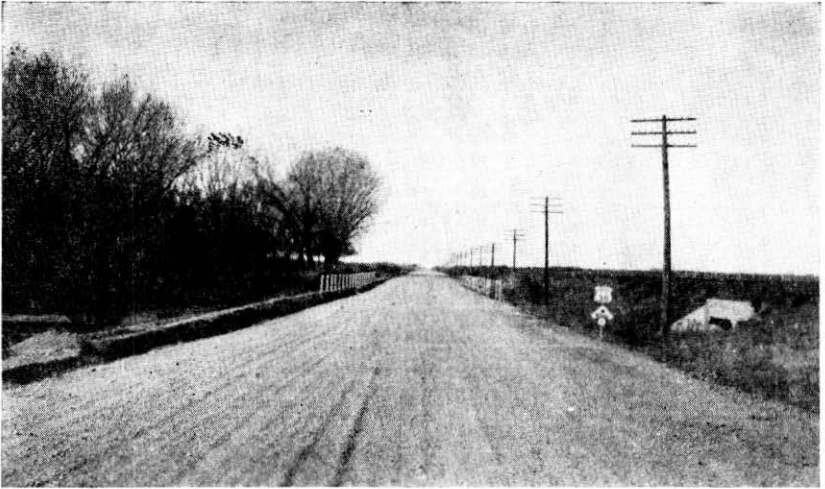
West of Lincoln.



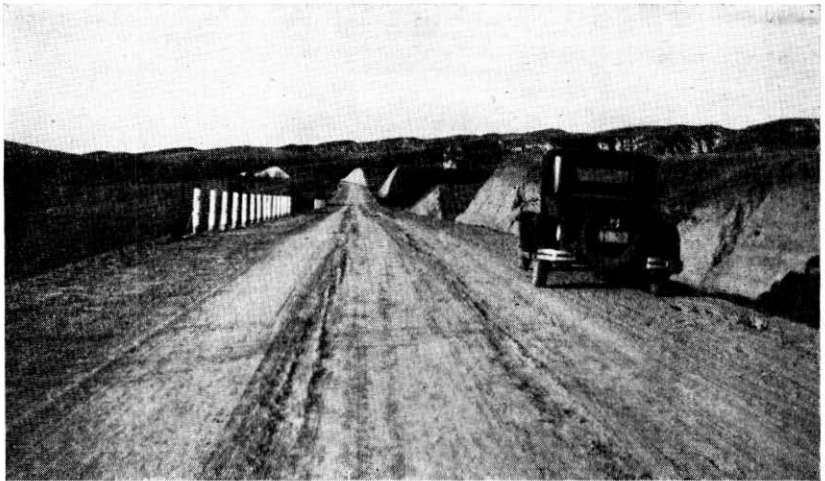
Oiled gravel road near Whitman, Grant County, on the Potash Highway.



Excavating clay surfacing material from a pit near Halsey, Thomas County, on the Potash Highway.



Nebraska has 4760 miles of graveled roads similar to this one.



A typical "dirt" road which has been brought to permanent grade.

DIVISION OF CONSTRUCTION

The Construction Division under the direction of the Construction Engineer, handles the details of location, preliminary surveys, road design and field construction. These matters are handled in conjunction with the U. S. Bureau of Public Roads on Federal Aid projects only. Much consideration has been given to proper location and alignment on primary roads, particularly where pavement is needed to take care of traffic needs. Savings in construction costs effected by shortening of paved highways plays a very important part in decisions relative to location; in many cases it being possible to save more than the right of way costs for new right of way involved. Roads of primary importance on which pavement will ultimately be required are designed in such a way as to permit the widening as required. The rerouting of one of our primary highways will effect a saving in distance of 6.2 miles and eliminate 29 sharp curves, all of which reducing the cost of transportation to the traveling public.

In the design of all our highways, the ideas of serviceability and permanence are uppermost. We attempt to build safety into a road which will be servicable for 365 days of the year.

Some state work has been done with state outfits, it being done with the idea of utilizing equipment which is necessary during winter months for snow removal purposes, in the end affecting considerable savings in construction costs of lesser important highways.

A few important changes were made in the Highway Specifications; principally pertaining to annulment of contracts in cases of non-performance and the method of measuring gravel surfacing. In the first case, the Specifications were changed to permit the department to annul a contract on short notice, where previously twenty days were required. Gravel specifications were altered to provide for a strike-off of gravel boxes at the point of loading, rather than the point of unloading, the former being a much more practical method and has operated very satisfactorily during the season of 1930. It has assured contract quantities on all projects.

Uniformity of construction requirements has been stressed and has resulted in a splendid spirit of cooperation between the department and contractors. The work of field engineers has been watched closely with an aim toward improving the quality and quantity of work accomplished.

The following are a few of the outstanding pieces of construction accomplished during the biennium.

Fifteen miles of pavement were laid south of Nebraska City, thus eliminating a condition on highway No. 75 which was extremely difficult to handle in the spring of the year.

The new routing of the highway through Greenwood on U. S. 38 eliminated approximately 3.5 miles of road and numerous sharp and hazardous curves.

The construction of pavement between Ames and Columbus on U. S. No. 30 eliminated a condition which has probably caused more difficulties to traffic than any other in the state. Due to its proximity to the Platte river and the peculiar soil conditions it was not possible to handle traffic with anything other than pavement.

The reconstruction of the Emerald-west road has converted what was previously a hazardous road into a very safe and modern highway. Hills have been cut down, decreasing grades and increasing sight distance at all points.

Grading work was completed on highway No. 20, between Randolph and Jackson and all under contract for gravel, thus opening up a splendid connection in this part of the state.

The construction of the road from Elba to Scotia accomplished a saving of approximately eight miles in distance and the elimination of numerous sharp and hazardous turns. This was accomplished by the construction of approximately fifteen miles of new highway.

The new pavement between Grand Island and the Platte river bridge on highway No. 11 eliminated a condition which was impossible to cope with during every spring season.

The paving between North Platte and Gothenburg provides a 365 day road, where in the past there have been times during each year when the road was entirely closed to traffic.

Contracts have been awarded for the construction of a new location between Grand Island and Wood River on the Lincoln Highway. This location parallels the Union Pacific railroad and shortens the distance about 5.0 miles. About seven miles of this new location will be paved in 1931.

The new location between Chadron and Whitney will save about $1\frac{1}{2}$ miles and eliminate two railroad crossings and two bridges across the White river.

When construction, now in progress between Kilgore and Crookston, is completed it will eliminate all sand on Highway No. 20.

PAVING

The total mileage of paved roads on the Nebraska State Highway system is estimated at 368 as of December 31st, 1930.

One of the major activities of the Construction Division this biennium has been that of building 195 miles of paving. The paving work done this biennium has been supervised by the Assistant Construction Engineer. Prior to this biennium, paving took up a very small part of the highway program and engineering organization. Outside of Douglas County there was very little paving on the State highways. On account of this low mileage no special study had been made of the construction of pavements or preparations made for carrying out a paving program.

The funds made available by the 1929 Legislature made it possible to build approximately 100 miles of paving per year. This required the organization of an engineering force to handle the inspection and testing of the pavement and also required a revision of the specifications to include the latest methods of construction.

In the location and preparation of plans for paved highways, special attention has been given to directness of route, long sight distances and curves of long radii. In making a route as short and direct as possible, great savings are gained in construction as well as in cost and time to the traffic which travels the highways. All curves are constructed with long radii and super-elevated so that the maximum speed permitted by law can easily be maintained on curves as well as on the straight-away. Five hundred feet is the minimum sight distance permitted. On all grades of $1\frac{1}{2}\%$ or greater, a lip curb 3" high is placed at the edge of the slab and the earth shoulders are sloped towards the pavement. This causes all the water that falls on the shoulders and pavement to flow to the bottom of the grade where it is taken off in flumes. This will eliminate to a great extent the erosion of shoulder slopes and ditches and also prevent any erosion at the edge of the pavement which is dangerous to traffic.

A slab 20' wide, 9" thick at the edges and 6" at the center was the standard section adopted by this department. The 9" tapers to 6" at 3' from the edge. The standard width of 18' has been adopted by other states where an earlier paving program had started but due to the present day traffic 20' makes it much more comfortable and safer to the traffic. It will also tend to lengthen the time in which it will be necessary to widen the slab on main highways on account of the increased traffic.

During 1929 a few longitudinal cracks developed about half way between the center and the edge of the slab, the cause of which could

be laid to several theories. To guard against this, a different design was used on several projects in 1930, where it was considered that the subgrade was not as substantial as desired. The new design being 9" thick at the edge and 6½" at the center, using a parabolic curve on the bottom. This resulted in 7½" of concrete at the quarter point where some of the longitudinal cracks occurred.

Bituminous expansion joints were used on two or three projects in 1930 spaced at various intervals to try to anticipate the transverse cracks and eliminate them as much as possible. The results of this will be observed later.

Due to the paving program, it became necessary to expand the engineering organization to provide for the proper supervision of construction and to see that all requirements of the specifications were complied with. Special instructions were written for field engineers and inspectors covering in detail the method of construction and the inspection of materials. Representatives from the Lincoln office made frequent trips over the work under construction to see that the instructions were being carried out and that the inspection and construction were uniform on all projects.

The activities of the engineering forces engaged in supervising pavement construction are divided into three classes. 1. General engineering duties, and instrument work. 2. Road inspection. 3. Plant inspection. All three of these classes come under an engineer who has complete charge of all operations on the project.

Before work is started, the contractor's equipment is inspected to see that it is not inferior or inadequate. The Plant Inspector is responsible for all materials received on the job to see that they meet the specifications, and that they have not been damaged in shipping or storage. He is also responsible for the weighing of all materials and the proportions entering into the concrete. The Road Inspector is responsible for the preparation of the subgrade, setting of forms and for the mixing, placing, finishing and curing the concrete.

The biggest improvements in the construction of concrete pavements is the weighing of materials and the accurate water measuring devices attached to the mixers. Using this method, the exact amount of aggregate and water that enters into each batch of concrete can be determined. The results are better control and greater uniformity in concrete.

Special attention is given to the smoothness of the concrete or the riding surface. The morning following the pouring of the concrete, the surface is tested with a 10' straight-edge. If there are any variations greater than ¼", the contractor is required to eliminate

such variations with a carborundum brick. The pavements constructed during 1929 and 1930 have had smooth riding surfaces. This is no doubt due to the modern equipment for finishing concrete and the rigid inspection.

Concrete test specimens are made during the progress of the work, two cylinders and two beams are made from each day's run. The cylinders are sent to the testing laboratory in Lincoln and tested at seven and twenty-eight days for compression. The strength requirement in the specifications for compression is 2,000 pounds at seven days and 3,000 pounds at twenty-eight days. The average strength of cylinders tested at twenty-eight days made during 1929 was 5,003 pounds per square inch. The beams are made to determine when the pavement has acquired sufficient strength for opening to traffic. They are tested in the field at four and ten days. The strength requirement for opening the slab to traffic is about 500 pounds. The average for beams tested during 1929 at ten days was 715 pounds.



Long, superelevated curves are built on paved roads for the convenience and safety of traffic. This view is south of Saint Paul.

The average thickness of the concrete is determined by the measurement of cores cut from the pavement which shall be at least equal to the specified thickness within one quarter of an inch. The borings are made at 500' to 1000' intervals as the conditions warrant. During 1929 and 1930, there has been no pavement where the cores showed a thickness less than that required in the plans and specifications. The average depth of pavement for 1929 was 6.2". This is .2" greater than the depth required.

The rate of progress in the construction of concrete pavement has been exceptionally good. The maximum lineal feet of pavement laid in one day was 1,714 feet. The unit prices have been the lowest in the history of this department. This, we believe, is due to the improved methods and increased efficiency of contractors' forces, improved machinery and the well organized supervision of the State Department of Public Works.

GRAVELED ROADS IN NEBRASKA

The total mileage of gravel roads on the Nebraska State Highway System is estimated at 4,760 miles as of December 31st, 1930.

The construction of 980 miles of gravel surfacing in the past two years, together with the construction of 2,886 miles of graveled roads in the preceding four years, emphasizes the importance of the fact that the construction of graveled roads in Nebraska is a major activity in furnishing "all-weather" and "year-around" surfaced roads. The following summaries show the miles of graveled roads built in each biennium by this Department and the total miles of the different depths:

Biennium	Miles	Depth	Miles
1917-1918	12.4	$\frac{3}{4}$ "	2.6
1919-1920	33.0	1 "	167.3
1921-1922	87.4	$1\frac{1}{2}$ "	454.9
1923-1924	462.5	2 "	1328.3
1925-1926	1540.4	3 "	2232.5
1927-1928	1345.2	4 "	262.5
1929-1930	980.1	6 "	12.9
	<hr/>		
	4461.0		
Natural Gravel or			
Built with			
other funds	299		
	<hr/>		
	4760.0		

The kind of gravel generally specified for gravel surfacing in Nebraska is as follows: 100% passing one inch sieve; From 0 to 50% retained on a No. 4 sieve; And from 70 to 90% retained on a No. 10 sieve. No change has been made in the gravel specifications in the past six years, and on account of continued good results with the above specifications no change is contemplated. The material resulting from the above specifications is fine enough so that the surface does not ravel and with proper maintenance, can generally be kept in excellent condition. Such a gravel road is free from slipperiness and can be safely traveled at a high rate of speed.

During the last year, a change has been made in the method of measuring the loads, so that now the vehicle is carefully and accurately measured and struck off at the point of loading the gravel, rather than at the point of delivery of the gravel.

One of the objections to the gravel surface is the dust. Experiments have been made this year on 68 miles of gravel to find the proper kind and proper mixture of road oil to eliminate the dust.

Nebraska, by adopting the use of gravel surfacing generally, but with paving where the gravel surfacing is not adequate has been able to extend its mileage of surfaced roads very fast. In other states it is generally considered that graveled roads are not economical where the traffic exceeds 500 vehicles per day, but in Nebraska, graveled roads have proven successful where traffic has been as high as 2,500 vehicles daily.

The greater part of the graveled roads of Nebraska have been constructed on the natural clay soil, which had previously been shaped to the proper cross section and grade. However, in the north-central part of the state, there is a large mileage of gravel roads built on a sand sub-base which had to be covered with a clay blanket before the gravel was placed.



Wood guard rail. This type is being replaced by woven wire, and cable guard rail.

NEBRASKA OILED ROADS

Six sections of Oiled Gravel and Oiled Sand roads, having a total length of 5.8 miles, were built in Nebraska in 1928. Before they were built a careful study was made of the methods and oils used in other states, especially where materials at hand were similar to those in this state. Considerable experimental work was done in the department's testing laboratory under the direction of Mr. C. M. Duff, Testing Engineer. These sections have been studied closely since their completion and further laboratory experimentation has been done by Mr. Duff, resulting in the construction of three more projects of greater length, during this biennium.

This type of road offers some very desirable features that are unobtainable in other secondary or low cost types of construction such as are demanded by the great mileage to be covered in those sections of the state which are sparsely populated, resulting in a low daily traffic count, and in which the soil is very sandy. Among these desirable features is the waterproof and dustless surface obtainable.

The following tabulation shows the amount of road oil used in construction work in Nebraska:

	Gallons of Road Oil
1928.....	113,221
1929.....	341,422
1930.....	667,543

The construction of the nine projects hereinafter described, furnished the department with a large amount of data. It is expected that a number of conclusive features relative to the value of the different grades and types of road oils when used in the construction of roads by the "mixed-in-place" or "road-mix" method will develop as the length of time that they have been in service increases.

Project No. 303-A

This project, located in Merrick County, eight miles east of Grand Island, on the Lincoln Highway, is 3.135 miles long. Construction was started on this project August 28, 1928 and completed October 2, 1928. The actual time used was six days.

Three types or mixtures of aggregate were used. One type containing $1\frac{3}{4}$ " of Class "A" gravel, $\frac{7}{8}$ " of crushed stone and $1\frac{1}{2}$ " of the natural sand-clay soil. The second contained 2" of Class "A" gravel and $1\frac{1}{2}$ " of the sand-clay soil. The third contained 1" of Class "A" gravel and $1\frac{1}{2}$ " of sand-clay soil.

The oil used was obtained from two different refiners and varied in asphaltic content from 62% to 72%. It was placed on the pre-

pared subgrade in three applications of $\frac{1}{2}$ gallon each from a pressure distributor, making a total application of $1\frac{1}{2}$ gallons per square yard.

After the oil had been placed it was mixed with the aggregate by using a blade grader pulled by a caterpillar tractor. The oiled aggregate was placed in a windrow and then rolled from side to side until it was of uniform color and then spread over the surface. The oiled mat obtained was 3" deep where the first of the previously described aggregate was used, $2\frac{1}{4}$ " on the second and $1\frac{3}{4}$ " on the third.

The total cost of the section containing crushed rock was 39.2¢ per square yard, and of the gravel section 31.7¢ per square yard.

The surface obtained by using the materials and methods as described, was considered to be very good at the time of completion, but it failed to support the heavy traffic that passes over this section of the Lincoln Highway—the traffic count at that time being 2,152 vehicles per day. The experimental section has definitely shown that an oiled aggregate mat of such thickness and on a naturally unstable soil cannot withstand so large a volume of traffic.

Project No. 135-A

This project is located in Merrick County on the Chapman-Central City section of the Lincoln Highway and is .265 miles in length.

One-half of the project was built September 1, 1928 and the other half October 2, 1928.

This project was constructed exactly the same as Project No. 303-A, with the exception that neither gravel nor crushed stone was added to the natural soil.

One and one-half gallons of oil per square yard containing 65% asphalt was mixed with 2" of the natural sand-clay soil, resulting in a mat of $1\frac{1}{2}$ " thickness.

The cost was 17.6¢ per square yard.

This project was replaced by concrete pavement in 1930.

Project No. 236-B

This project, located on U. S. Highway No. 26, approximately three miles east of Scottsbluff in Scotts Bluff County, is .645 miles in length. It was constructed September 7, 1928.

The aggregate in this case was sand-gravel, as this road had been gravel surfaced for a number of years. The old sand-gravel mat was scarified to a depth of $2\frac{1}{2}$ " and the oil, containing 63% asphalt, was

applied thereon from a pressure distributor. The total amount of oil per square yard placed, varied from $\frac{3}{4}$ of a gallon to $1\frac{1}{2}$ gallons. The oiled sand-gravel was then mixed with a blade grader and spread uniformly. The resulting mat was 2" in thickness.

The total cost was 25.1¢ per square yard.

The traffic count on this section of U. S. Highway No. 26 was 2,004, a large percentage of which was heavily loaded trucks engaged in hauling sugar beets to the sugar factory located in Scottsbluff, but up until the time the oiled section was replaced by pavement, July 1929, it had not required any maintenance and was in good condition with the exception of a short piece located on a coarse gravel hill.

Project No. 277-C

This project is located in Sheridan County, and is in what is known as the "Sand Hill" region of the state. It is on State Highway No. 2 about 30 miles east of Alliance and is .258 miles in length, and is the original construction in the "Sand Hill" region.

This project was constructed in September 1928.

The aggregate used was the natural blow-sand of which the sub-grade was composed. Only 26% of this sand is retained on a 50 mesh sieve and 3.5% of it passes a 200 mesh sieve.

The oil used contained 78% of asphalt.

The pressure distributor used to spread it had to be pulled with a caterpillar tractor due to the very unstable condition of the sand. A total of $3\frac{1}{2}$ gallons per square yard was applied in a series of applications of $\frac{1}{2}$ gallon each.

The oil was partially mixed with the sand at the time it was spread, by using a tandem disk-harrow. After all the oil had been applied and disked in, the partially mixed oil and sand was manipulated with a blade grader until a uniform color was obtained. The completed oiled sand mat had a depth of 4 inches.

The total cost was 60.2¢ per square yard.

The purpose of this first experiment with oil in the sand hills was to determine if it was possible to use oil to stabilize the sand and furnish a smooth and durable surface instead of the usual clay and gravel surfacing which is rather expensive in some portions of the sand hills.

The results obtained were good and further construction along the same lines and on a larger scale, has been done since the completion of this project.

Project No. 155-A

This project is on the Cornhusker Highway eight miles north of Lincoln and is .852 miles in length.

The aggregate used was a mixture of Class "A" gravel and blow-sand. About 4% of the blow-sand could be retained on a 50 mesh sieve and about 75% on a 100 mesh sieve. These two aggregates were mixed in the proportion of approximately two parts of gravel and one part of blow sand.

The oil used contained 67% of asphalt. One gallon per square yard was placed on the aggregate and then mixed with a blade grader and spread over the old gravel road which was in good condition. The oiled mat was 2 inches in thickness when compacted.

The cost varied from 31.4¢ to 36.5¢ per square yard.

This project has had very little maintenance and is in fairly good condition at this time.

Project No. 298-A

This project, located on State Highway No. 16, beginning at the junction with the pavement about 1½ miles north of North Platte, in Lincoln County, is .626 miles in length and was built in October, 1928.

The aggregate was a mixture of Class "A" gravel and blow-sand in the approximate proportion of two parts coarse and one part fine. The coarse material being that part which was retained on a No. 10 sieve and the fine, that part which passed a No. 10 sieve.

The oil used contained 73% of asphalt.

The aggregate and oil was mixed in an asphalt plant at North Platte and hauled to the road in trucks, where it was spread over the existing graveled road with a blade grader.

The cost of this project varied from 43.1¢ to 47.9¢ per square yard, depending upon the exact proportion of gravel used.

This section has given fairly satisfactory service with very little maintenance and is in fair condition at the present time.

Project No. 277-D

This project is located in Sheridan County about 15 miles east of Project No. 277-C, and in what is known as the "Sand Hill" region of the state. It is on State Highway No. 2 about 45 miles east of Alliance. The town of Bingham is at the approximate center of the project, which is 5.742 miles long.

Construction began on this project July 27, 1929, and it was completed October 30, 1929.

The newly constructed subgrade on which the oil was spread is made up of very fine sand and approximately 50% passes a 100 mesh sieve.

The oil used was a residual road oil containing from 75% to 85% of asphalt having a penetration of 100. This oil was spread on the sand in $\frac{1}{2}$ gallon per square yard applications, from a pressure distributor pulled by a caterpillar tractor, and then partially mixed by the use of a tandem disk-harrow. Eight applications were made in this manner, totaling 4 gallons per square yard.

After the first two gallons per square yard had been applied and disked into the sand it was bladed into a windrow by using blade graders pulled with caterpillar tractors. This windrow was then rolled from side to side until the uniform mix required was obtained, and then spread evenly over the subgrade. More sand was then brought in and spread on top of the mix and the remaining two gallons applied in the same manner as the first two. The process of mixing with the blade graders was then repeated until a mat of uniform color was obtained to the minimum depth of 4 inches. The surface was then dragged smooth and allowed to compact under traffic.

Two producers furnished the oil for this project, about $\frac{1}{2}$ of the amount used being purchased from each and placed separately on the road with the exception of an overlap of about $\frac{1}{4}$ of a mile. Although the two different products contained approximately the same amount of asphalt, considerable difference is apparent in the results obtained. The oiled sand mat built with one of the oils has developed a surface which is fairly hard and is more difficult to keep smooth than the mat built with the other oil, which is easily maintained with the same equipment that is being used on the adjoining graveled project and yet has a high degree of stability even in the hottest part of the year.

This last mentioned portion is considered to be the best section of oiled road built in the state to date. A careful study is being made of the oil used on it and all other conditions relative to its construction as an aid to subsequent oiled sand construction.

Project No. 313-A

This project, located in Holt County on State Highway No. 13, beginning at a point 4 miles south of O'Neill and continuing in that direction to the south branch of the Elkhorn river, is $9\frac{1}{2}$ miles in length.

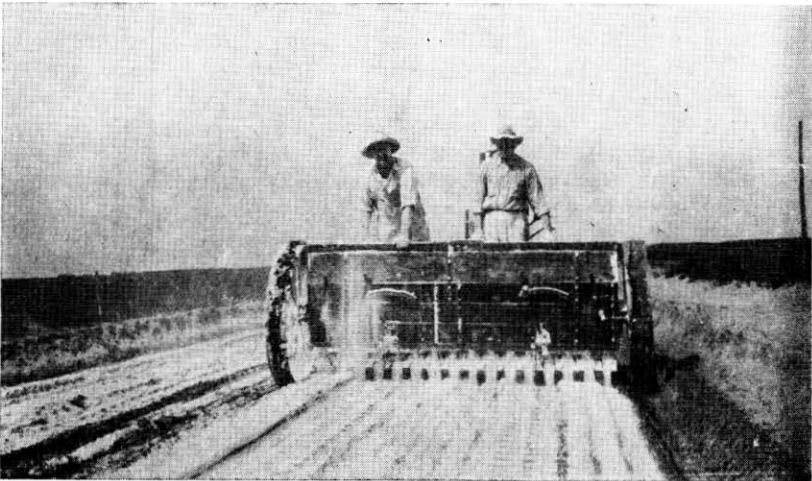
Construction was started September 11, 1929, but was suspended November 16, 1929, on account of winter weather. Work was resumed June 21, 1930, and the project completed October 27, 1930.

This project is a unit in a series of experimental projects being built under the close observation of the Federal Bureau of Public Roads in various sections of the United States. An engineer experienced in the construction of bituminous roads was assigned to this project by the Federal Bureau to assist in its construction and to observe the methods used and the results obtained.

The natural subgrade material consisted of fine sand on the greater portion of the project, from 25% to 50% of it passing a 100 mesh sieve. On the remaining portion some silt and clay was mixed with the sand during the construction of the subgrade.

After a study of the results of a series of experiments conducted in the Federal Research Laboratory by the U. S. Bureau of Public Roads with oiled sand mixtures, it was decided that 3% of Limestone dust, of which 85% would pass a 200 mesh sieve, should be added to every alternate half mile of the project. The laboratory tests indicated that a greater degree of stability would be obtained if the Limestone dust was added.

The Limestone dust was applied by using a common limestone sower, as shown in the accompanying picture.



The total amount used was 10 pounds per square yard. It was spread in two courses, one half being placed directly on the subgrade, and the other half on the sand that had been brought in on top of the completed bottom course of oil mix for the construction of the top course of oil mix.

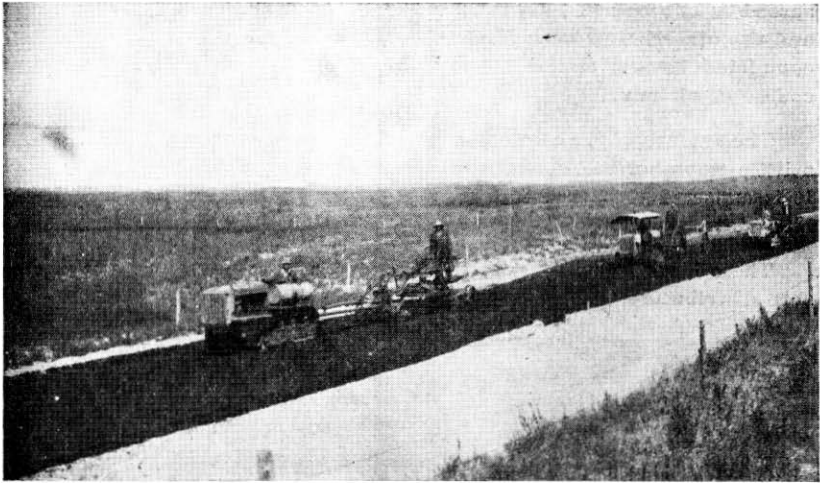
The surface of the sections containing Limestone dust appears to be a little smoother and finer in texture than those not containing it. It is expected that the value of the dust will be more apparent at a later date.

The oil was hauled out to the project and distributed by two pressure distributors.



A pressure distributor used for application of oil.

Two gallons per square yard were applied on the sand in a series of four applications of $\frac{1}{2}$ gallon each, and then partially mixed with the sand by using a tandem disk-harrow. The partially mixed oiled sand was then bladed into a windrow which was rolled from side to side until the uniform color specified was obtained and then spread out evenly over the subgrade. Enough sand to make the top course was then brought in on top of the completed bottom course and another two gallons per square yard were applied and disked in. The windrowing and mixing operation was then repeated until the top course was as well mixed and of as uniform color as the bottom course and the two well bonded together. The surface was then bladed and dragged until it was smooth and allowed to compact under traffic. The oiled sand mat resulting from this method of construction had a minimum depth of 4 inches.



The project was divided into ten experimental sections and numbered from one to ten. The first nine being approximately one mile in length and the tenth, $\frac{1}{2}$ mile long.

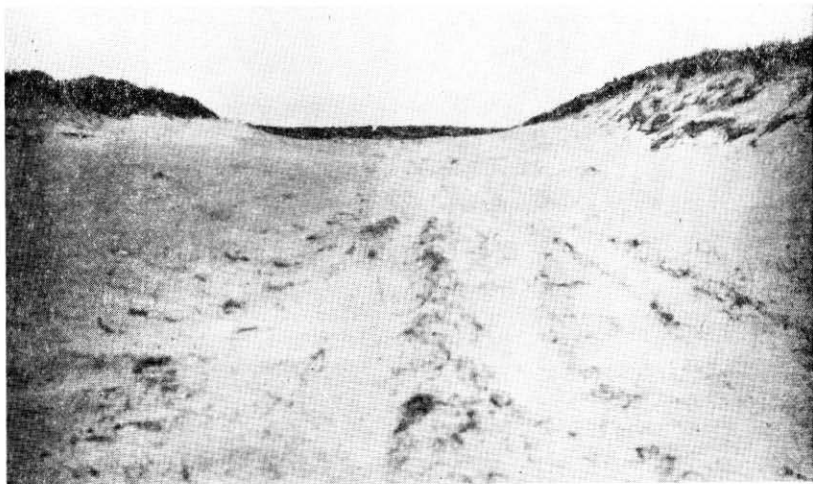
The oil used on sections 7, 8 and 9 was a cutback product. The base material used in the manufacture of this product was an oil containing not less than 95% of asphalt having a penetration of 100, to which enough kerosene was added to cut it down to a workable consistency. The resulting product contained between 70% and 80% of asphalt having a penetration of 100. The use of oils of this type makes it possible to obtain a greater percentage of asphalt per square yard in relation to the total amount applied, than can be obtained when the straight-run or residual type is used.

The oil used on sections 4, 5, 6, 10, 1 and one-half of 2 was of the same type as that used on sections 7, 8 and 9 but was made up from slightly different materials. The base material was an asphaltic cement having a penetration of from 100 to 120. This cement was cut back to a workable consistency with kerosene, the resulting product containing between 75% and 80% of asphalt having a penetration of 80.

The oil used on sections 3 and one-half of 2 was a straight run or residual road oil containing between 60% and 70% of asphalt of 100 penetration. The surface resulting from the use of this type of oil is not as hard as that obtained when a cutback product is used.

This feature is advantageous from the viewpoint of maintenance as it can be smoothed with the same kinds of equipment that the State now has in service.

This project will also have further surface treatments on some of the experimental sections next year. The two pictures are "before" and "after" views on this project.



Project No. 80-D

This project, located in Hooker County on State Highway No. 2, is 25 miles west of Mullen and is 6.954 miles long.

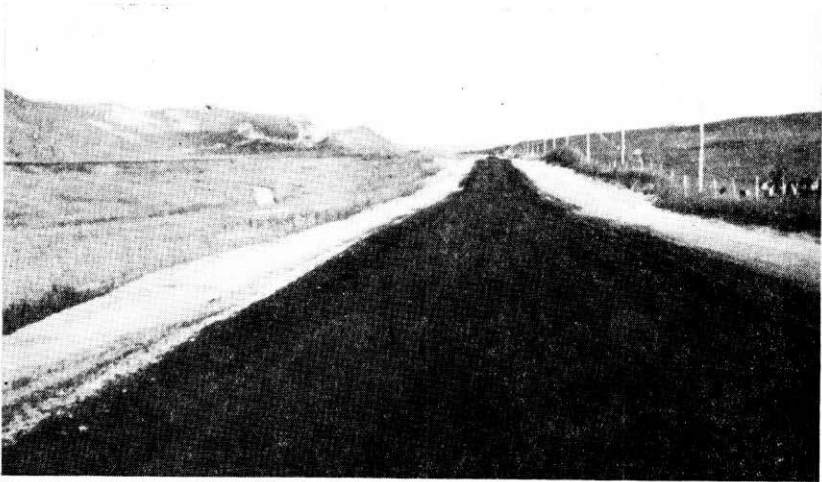
Construction was started in the early part of August 1930, but is not complete at this time.

The subgrade on this project is the same as that previously described for Projects Nos. 277-C and 277-D.

The methods of construction are also the same.

The oil specified is an oil containing from 65% to 75% of asphalt, having a penetration of 100.

The accompanying picture shows a portion of the completed surface on this project.

**Project No. 225**

This project, on the S. Y. A. just west of the paving out of Lincoln, is 700' long. It is of the penetration macadam type of construction and was built in October 1930.

One and one-half inches of crushed stone, having a maximum size of 1" was spread on the existing graveled surface and treated with a cutback asphalt. A light wearing surface of crushed stone having a maximum size of $\frac{1}{2}$ " treated with the same oil, was then built on top of this and covered with fine road gravel. The total thickness of the mat after rolling was about 2" and cost about 50¢ per square yard.

This experiment was made with the idea of making a hard surface over a gravel base carrying more than average traffic.

DIVISION OF MAINTENANCE**Purpose of Maintenance**

The maintenance of highways is an endless operation. No matter how well or how thoroughly the highway is constructed, consistent and continuous maintenance must follow to keep even the best constructed highway in good condition for those who use it, and to properly protect the original investment so that the maximum value is received from it.

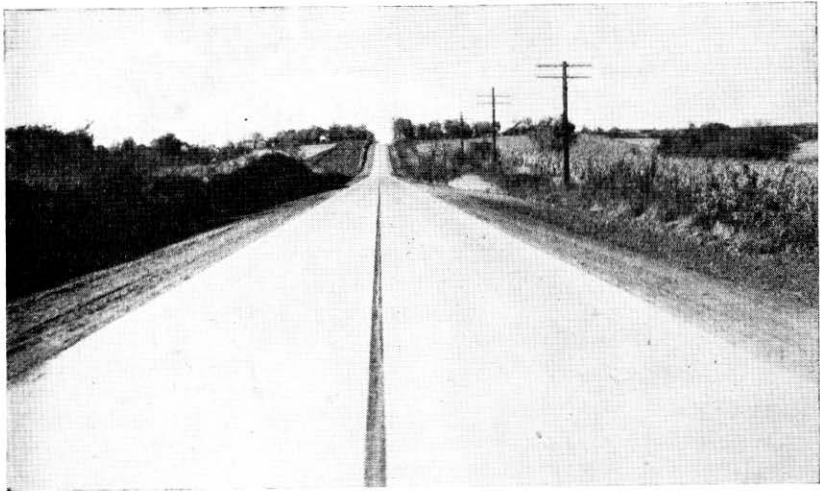
No type of highway is actually permanent; however, it naturally follows that the more permanently the highway is constructed, or the higher the type of construction, the less it depreciates from the same action of the elements and from the same usage.

The action of the elements depend largely on the topography, and the soil, since it is apparent that a highway located on a natural divide, providing excellent drainage and constructed on a firm soil foundation, would suffer much less from the action of the elements than would a highway constructed on light unstable soil, and through a wet valley or across a series of steep hills and ravines subject to erosion, consequently, the cost of maintenance may be generally said to be in direct proportion to the type of highway, the traffic using it, the soil, the topography, and the elements, particularly the amount of rainfall, snow, wind, and frost.

The cost of Maintenance then depends largely on five distinct features and it is apparent that the first, "the type of highway", should depend to a considerable extent on the cost of maintenance due to the other four and to the suitability of the highway under maintenance to serve the class and amount of traffic that uses it.

The function of the Maintenance Department, regardless of the "Type of Highway", is to keep in the best repair possible, the surface, ditches, shoulders, and structures on all highways; to erect fences to prevent the drifting of snow and to remove snow where it does drift; to erect and keep in repair proper caution and direction signs; to mow the weeds, and keep up the general appearance of the highway; and in cases of emergency to exert every reasonable effort to keep the highways open for the traffic that must use them.

All of the above must be done for the purpose of protecting the original investment, and to provide the users of the highways with the greatest ease and comfort, greatest safety, and the most economical operation of vehicles as is possible under the existing conditions. The last function of the maintenance organization is to keep traffic records and records of the cost of the above activities to provide, if needed, a basis for helping to determine the need of further improvement.



Modern Concrete Highway.

Organization

The organization to accomplish these duties is through the Maintenance Engineer. The State is divided into eight districts, comprised of about eleven to twelve counties each. Each district is in charge of a district engineer who is responsible to the Maintenance Engineer for the Maintenance activities in his respective district.

That portion of the State Highway System which is eligible for maintenance, is divided into patrol sections of varied lengths depending upon the type of equipment, traffic, topography, and soil. Very few team patrols are used but those few range in length from six to twelve miles. Tractor patrol sections average approximately fourteen miles in length while truck patrol sections vary from twenty to fifty miles in length.

A patrolman with proper equipment is assigned to each patrol and he is responsible to his Chief Patrolman. Each Chief Patrolman has charge of about ten patrols and he in turn is responsible to the District Engineer.

One standard of maintenance prevails, namely; to keep the section being maintained in the best possible condition in all details. This does not mean that each section of the highway should be in equally good condition and comparable at all times. Varying conditions of soil, topography, traffic, rainfall, and type of construction preclude this. So that uniformity will prevail, however, each patrol-

man has been instructed in and has posted in the cab of his patrol machine six Daily Duties which all patrolman are expected to perform:

1. Have a windrow of gravel on one side only. Keep drain holes in windrow to let surface water out. Keep windrow on same side of road for as long distances as possible. When you desire to blade off gravel, blade it across the road into main windrow. At no time except when shifting, should there be two windrows. Keep windrow well out to shoulder and in a straight line.

2. Keep shoulder opposite windrow clean and free from weeds by blading right out to shoulder line.

3. Take off and put on gravel as conditions demand. This requires good judgment on the part of the patrolman since conditions vary frequently, depending on the weather. Gravel should never be so loose as to make driving hard or dangerous or to induce corrugations. Keep a very light coat of gravel on in dry weather—just enough to protect the surface. Generally speaking, most roads have too much loose gravel on in dry weather.

4. Keep weeds down with scythe at sign posts, culverts, bridges, and guard rails. A little to be done each day.

5. Keep sign posts straight and sign securely bolted on and in general good condition. After our signs are once put in good shape, just a few minutes each day spent on a few signs that need attention will keep them so. Any soft spots, bad chuck holes, or any other temporary hazard in the roadway should be suitably marked at once with red flags and slow signs.

6. Particular attention should be given to setting of blades and drags so that maximum results on surface are obtainable. Maintain a uniform crown. When blading use light drag also. A crown is essential to a good surface.

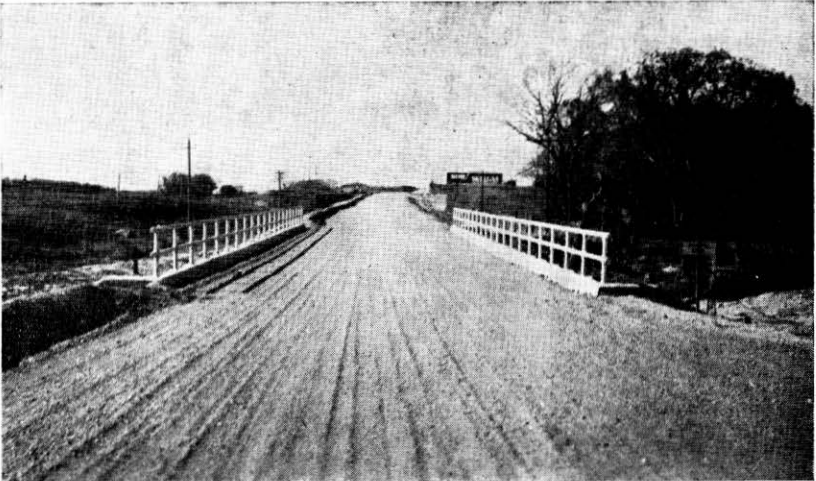
Patrolmen have many additional routine duties to perform which do not require daily attention. These duties include:

1. Keeping drainage structures and ditches free from debris.
2. Filling small depressions in the road surface and at bridge ends.
3. Making minor repairs on bridges and culverts.
4. Repairing guard rail and erecting and removing snow fence and keeping it in a proper state of repair when erected.
5. Removal of snow in so far as this can be accomplished with the equipment at their disposal.

6. Making minor repair and adjustments on equipment and equipment sheds.
7. Giving aid to travelling public in cases of emergency.
8. Making proper reports as required.

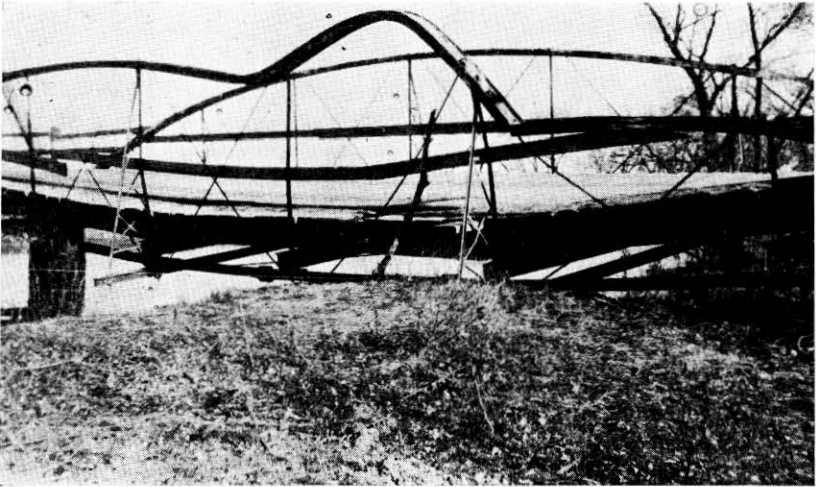
Depending on the nature of the patrol and the amount of this additional work necessary, one patrolman will take care of a larger percentage than another. The Chief Patrolmen on their regular inspections see that the Daily Duties are carried out by all patrolmen, and as many of the additional duties also as is possible. Where the occasion demands it, extra help is provided.

The accompanying cut shows the standard of maintenance resulting from this organization.



Major repairs and reconstruction work, including the filling of washouts or large depressions, cleaning ditches, rebuilding shoulders, large bridge or culvert repairs, filling cracks on concrete pavement, painting the center strip on pavement, tearing out and rebuilding sections of pavement, repainting bridges, and other similar items are cared for through extra crews properly supervised and equipped for the work.

Often times major repairs necessitating unexpected expenditures are made necessary by floods or bridge failures. The accompanying cuts show instances of this nature.



Failure of old Elkhorn river bridge span, south of Pilger.



High water on Highway No. 75, near Union.

A District Mechanic, working under the supervision of the District Engineer, has charge of equipment repair in each district. Each District Mechanic has such assistants as may be necessary to keep all equipment in proper repair. The functioning of the repair forces is an important and difficult feature of the maintenance organization whose first duty is to keep the roadway in good condition for travel. With very little spare equipment, it is necessary that needed repairs be accomplished quickly and at such times when the machines can be spared from their work. Major overhauls are generally done during the winter.

EQUIPMENT

The following is a report of the active major equipment owned and operated by the Department:

Type of Equipment	On Hand	Purchased		On hand 1931
	Jan. 1 1929	during 1929	during 1930	
Tractors	158	20	12	190
Trucks	195	12	57	183
Maintainers & Graders	314	20	18	343
One-man Units	258	22	.....	273
Cars	111	33	16	120
Mowers	103	14	29	140
Snow Plows	25	7	40	69
Air Compressors	1	1	2	4
Scarifiers, Block	2	2	1	5
Concrete Mixers	1	.....	.....	1
Elevator Graders	4	4	7	14
Velie Holst .....	.....	1	.....	1
Pressure Sand Blast & Paint Spray Outfits	2	1	1	4
Drag-lines .....	.....	1	.....	1
Fuel Tank Wagons .....	.....	1	.....	1
Nail Pickers .....	.....	1	.....	1
Pavement Breaker .....	.....	1	.....	1
Paving Striper .....	.....	1	.....	1
Concrete Core Drill Ma- chine of Velie Truck	.....	1	.....	1
Trailers .....	.....	.....	3	3
Willett Scrapers .....	.....	.....	36	36
Gravel Loaders .....	.....	.....	1	1
Snow Fence	1,493,350 Ft.	465,000 Ft.	43,500 Ft.	2,001,850 Ft.
Snow fence posts.....	89,601	30,075	4,490	124,166

SNOW REMOVAL

We attempt to keep the snow removed from our entire maintained system. It is our policy to keep the road surface scraped entirely free from snow, if possible, to keep it from melting on the surface. This prevents subsequent freezing and icy covering on paved sections. On gravel sections, it eliminates rutting of the surface which is certain to occur if the gravel mat is permitted to become saturated. On earth roads prompt removal eliminates a rutted, muddy surface in case the snow is followed by a thaw. Also, once removed, our regular maintenance units are able to resume their daily smoothing operations which are carried on in the same manner in winter as in summer.

During 1930, thirty-eight new trucks were purchased and equipped with blade snow plows. These plows can be operated at from ten to twenty miles per hour and will fill a weak spot in our snow removal program. We seldom have roads drifted for long distances, due to the approximately four hundred miles of snow fence which is erected each year at the worst places. Our drifts occur at short unprotected spots and generally occur with long intervals between where no drifts exist. This rapid method of removal will make possible the early opening for traffic of all roads blocked by such drifts which otherwise would have to be shovelled out by hand. Also, all large caterpillar tractors used in the summer for grading are stationed at strategic points in winter for use with plows or graders.

A snow plow, in this case a V plow, is shown at work in the accompanying cut.

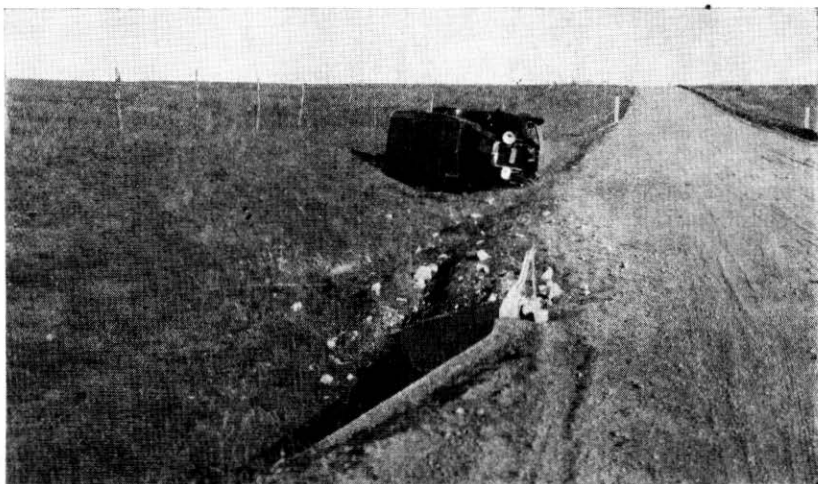


Incidentally these trucks, like the caterpillar tractors, have a summer use. They furnish needed hauling units and each has been equipped with a spring blade for surface maintenance in summer. Capable of working at higher speeds than tractors, these trucks so equipped are able to do the surface work on relatively long patrols on light traffic roads and thereby furnish a means of equalizing the cost of smoothing the surface on light traffic highways in proportion to the cost of the same operation on heavy traffic highways.

SIGNS

During 1930 a thorough recheck and replacement of signs was effected. All signs were carefully set according to a standard plan to insure uniformity in all cases so that the motorist might feel quite safe in depending on the signs at all times. All posts were driven in a true vertical position and painted white. Rusty and otherwise defaced signs were replaced. Special studies were made of unusual cases and deviations from standards were made in such cases to obtain the desired results.

Because of the large saving that is possible, a sign refinishing department is maintained at Lincoln. Rusty, bent, and defaced signs are returned from the field to this department where they are straightened, repainted and stocked ready for further service.



Statistics show that a large percentage of accidents occur on straightaways where road is good and vision is unobstructed.

OIL DUST PALLIATIVES AND OIL MATS

In 1930 two oil distributors were purchased and used to lay oil dust palliatives and to experiment with oil mats of the "blotter treatment" type. Approximately 68 miles of oil were laid with quite satisfactory results.

For dust palliatives light 30-50% asphalt oils were applied at the rate of about four-tenths to five-tenths of a gallon per square yard of road surface. The oil was applied to one side of the roadway at a time leaving the other side for travel. The fresh oil was immediately covered with a light coat of gravel to prevent picking up by traffic and then this side was opened up while the other side was oiled.

About two miles of blotter treatment oil mat was laid from College View east on Highway No. 24. Differing from surface mix methods, the blotter treatment eliminates expensive mixing operations and speeds up progress. In the blotter treatment, oil is applied in several successive applications and covered with gravel aggregate which absorbs the oil and hence the name "blotter treatment".

In this particular experiment, 67% asphalt road oil, cut back with gas oil (a low grade distillate), was used and about two inches of standard road gravel was added.

On the first mile, oil was applied in four applications using a total of 1.4 gallons per square yard. On the second mile the oil was applied in three applications totaling 1.25 gallons per square yard.

This work has just been completed and shows decided possibilities. More experimentation to determine just the right grade of oil, and to try asphalt emulsions, would be desirable and doubtless will improve results.

It appears that the greatest benefit can be derived from this type of surface in the western and northwestern parts of the State where the soils are light and have been clay-surfaced at great cost. Strong winds prevail which blow away this costly clay-surfacing material in dry weather. Oil mats on this type of road should prove economical as well as providing an excellent driving surface for the lighter traffic that uses these highways.



Soaking up oil with light application of gravel.

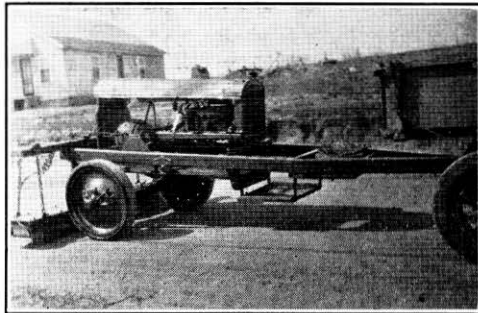


1000 gallon capacity oil distributor.

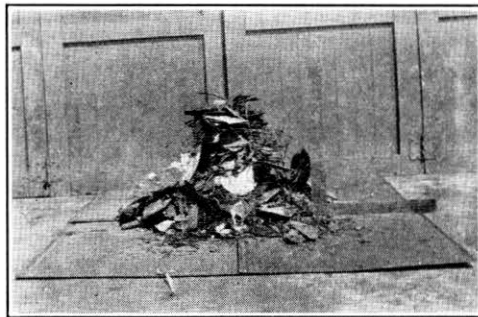
ROAD MAGNET

A new activity during this biennium has been the operation of a road magnet used to pick up nails, screws, and miscellaneous metal from the road surface. Built as an experiment from scrapped material picked up here and there, this magnet has proven of great service to the travelling public and has caused unusual interest and favorable comment.

Mounted on a trailer and pulled behind a truck equipped with sleeping quarters for the operators, it has cleaned 2105 miles during 1930. In this distance it picked up approximately 6062 pounds of nails and other metal, the greater portion of which would puncture a tire. The average "pickup" is about 2.88 pounds per mile, but of course some roads have yielded more than others. For instance, on U. S. Highway No. 38 between Lincoln and Omaha, 180 pounds were picked up in 18 miles, or an average of 10 pounds per mile.



Road Magnet.



Contents of an average "pickup".

TRAFFIC CENSUS

A comprehensive study of traffic on all main State and Federal highways in Nebraska was begun on September 3rd, 1929 and was continued for one year. It was conducted and paid for jointly by the Nebraska Department of Public Works and the United States Bureau of Public Roads.

This traffic survey was conducted simultaneously in the following states:—Nebraska, Wyoming, Colorado, New Mexico, Arizona, Utah, Idaho, Nevada, California, Oregon, and Washington.

The cooperative traffic survey will result in information secured under uniform conditions in eleven States and will make possible comparisons of conditions on interstate routes in adjoining States, and should facilitate agreements between States for the improvement of interstate connections. The important routes throughout a territory comprising over forty percent of the area of the United States, may be selected upon the basis of traffic facts. Not only interstate, but international, cooperative highway improvement will be made easier as a result of the securing of such primary information with regard to highway transport.

The count was taken at 72 regular stations in Nebraska, arranged in three loops. In case the station was located at a junction outside of a city or town, counts were taken in all directions from the junction so that the greatest possible information could be obtained with the minimum of expense. If the junction came in a city or a town, counts were taken on all State highways far enough outside the city or town so that city traffic would not interfere with traffic using the highway in question.

To obtain the count at the 72 regular stations three day-men and one night-man were used, a day-man for each loop and the night-man to rotate from one loop to the other. These recorders were given a day off every thirteenth day thus taking the count at a station every 26 days. Where more than one man was needed at a station, the regular census checker was supplemented by men from our maintenance forces as required. The work and checkers were directed by a supervisor in charge. This made a total of five men employed for a period of one year for this work.

Each recorder worked a shift of 10 hours taking the count, after which he made out his report for the day and then drove to his next station which averaged about 40 miles distant. The hours of the count at the different stations were so arranged that the number of 6 a. m. to 4 p. m. counts were the same as the number of 10 a. m. to

8 p. m. counts. When the day and night count was taken at a station the hours were always 10 a. m. of one day to 6 a. m. of the following day.

Each recorder kept a count of the number of passenger cars, trucks, foreign vehicles, busses, and trailers passing the station. If the station was located at a junction, not in a city, the recorder would check every vehicle twice, that is, once on the road approaching the station and once on the road leaving the station.

To get further information, the recorder gave each driver a card to be mailed back with the following questions: From what state did you come? To what state are you going? How many passengers (including driver)? Do you live in a city or in the country—if city, more or less than 2,500 inhabitants? If vehicle is a truck, what capacity? What is your mileage today? These cards were government franked, required no signature, and were sent to Washington, D. C. for tabulation without expense to Nebraska. The information requested, when tabulated, will be valuable in indicating the direction of the traffic flow, the number of people using this mode of transportation, the weight of loads reported on the cards, and will indicate the ratio between users who live on farms, towns and cities. Although a small percent of the cards given out will be returned, it is estimated that a certain percent of each class of people will return them, thus giving a good average of the total.

A traffic count was also taken at 18 extra stations at four periods of the year. These stations were located on highways where the traffic is rather light and at important points which we were unable to place in our regular loops. These stations were called Blanket Stations and were taken on the following dates:

October 27th & 28th, 1929	April 27th & 28th, 1930
January 26th & 27th, 1930	July 27th & 28th, 1930

The hours for all Blanket Stations were from 10 a. m. to 8 p. m. The recorders for the Blanket Stations were from our regular maintenance men.

Heretofore, a one week census has been taken each year at a few selected points. The results necessarily were not average since such a survey did not permit variances due to weather, seasons, and other influences.

The traffic count was taken at the following places:

(See Table on Next Page)

Sta. No.	Location	Sta. No.	Location
1	Jct. US 73 & Neb 4, 9 Mi. NW of Falls City	19-A	Jct. Neb 36 & Neb 8, 1 ¼ Mi. E of Elk City
2	Auburn Jct. US 75 & Neb 3	19-B	Jct. Neb 31 & Neb 8, 1 Mi. E of Elk City
3	Nebraska City Jct. US 75 & Neb 24	20	Norfolk, Jct. (US 81 & Neb 8) (Neb 8 & 35)
4	On US 75, approx. 3.75 Mi. N of Plattsmouth	21	Wisner Jct. Neb 8 & 15
5-A	On US 38, approx. 2 Mi. NE of Ashland	22	On Neb. 8, 1 Mi. NW of Scribner
5-B	On US 38, 1.5 Mi. S of Ashland	23-A	Jct. (US 77, US 30 & Neb 8) & (US 30, Neb 8 & Neb 130) —Fremont
6	Lincoln, intersection 13th & O Streets	23-B	Jct. US 77 & Town Road to Cedar Bluffs So. of Fremont
7	Jct. US 77 & Neb 33, 11 Mi. S of Lincoln	24	Jct. US 30 & Neb 31, ¾ Mi. SE of Elkhorn
8	Jct. US 38 & Neb 15, 1 Mi. W of Dorchester	25	Jct. US 77 & Neb 16, 1 Mi. NE of Wahoo
9	Fairmont, Jct. US 81 & US 38	26	Jct. Neb 16 & Neb 15, 3 Mi. S & 1 ½ Mi. E of David City
10	On US 81, one Mi. W of Belvidere	27	Schuyler Jct. US 30 & Neb 15
11	Jct. Neb 3 & Neb 15, 3 Mi. north of Fairbury	28-A	Jct. US 30, US 81 & Neb 13, N of Columbus
12	Jct. Neb 3 & Neb 4, one mile N of Rockford	28-B	Jct. US 30 & US 81, S of Columbus
13	Blair, Jct. Neb 5 & Neb 18	28-C	Jct. US 81 & Neb 64, S of Columbus
14-A	Jct. US 77 & Neb 5 in Oakland	29	Clarks Jct. US 30 & Neb 16
14-B	Jct. US 77 & Neb 9, west of Oakland	30	Chapman Jct. US 30 & Neb 69
15	On US 77 South of Winnebago	31	Jct. Neb 11 & Neb 2, 1 Mi. S of Grand Island
16-A	Jct. US No. 77 & Neb 35, 5 Mi. SW of Dakota City	32	Hastings Jct. US 38 and Neb 2
16-B	Jct. US 20 & County Road, 6 Mi. SW of So. Sioux City	33-A	Jct. US 38 & Neb 14, 4 Mi. S of Eldorado
17-A	Jct. US 20 & Neb 9, 1 Mi. W of Allen	33-B	Jct. US 38 & Neb 14, 7 Mi. SW of Eldorado
17-B	Jct. US 20 & Neb 9, East of Allen	34	Aurora Jct. Neb 14 & Neb 11
18	Jct. Neb 35 & Neb 15, 2 Mi. N of Wayne	35-A	Jct. US 81 & Neb 11, N of York

Sta. No.	Location	Sta. No.	Location
35-B	Jct. Neb 11 & Township Rd. 4 Mi. W of York	51	At Hyannis, on Neb 2
35-C	On US 81, 4 Mi. S of York	52	4 Mi. W of Ellsworth on Neb 2
36-A	Jct. Neb 15 & Co. Road 4 Mi. N of Seward	53-A	Jct. Neb 2 & Neb 19, W of Alliance
36-B	Jct. Neb 11 & Neb 15, 3 Mi. E of Seward	53-B	Jct. Neb 2 & Neb 19 in Alliance
36-C	On Neb 11, 4 Mi. W of Seward	54	Jct. US 26 & Neb 19, 8 Mi. NW of Bridgeport
37	Jct. US 38 & Neb 10, 5 Mi. N of Minden	55	6 Mi. S of Gering, on Neb 29
38	Franklin Jct. Neb 10 & Neb 3	56	Kimball Jct. 30 & Neb 29
39	Jct. US 38 & Neb 3, ¼ Mi. E of Oxford	57	Sidney Jct. US 30 & Neb 19
40	Arapahoe Jct. Neb 21 & US 38	58	Jct. US 26 & Neb 19, 6 Mi. SE of Bridgeport
41	Jct. US 38 & Neb 3, NW of Culbertson	59	5 Mi. SE of Oshkosh, on US 26
42	Jct. Neb 23 & Neb 6, ¼ Mi. S of Maywood	60	Big Springs Jct. US 30 & US 138
43-A	Jct. Neb 23 & Neb 16, N of North Platte	61	St. Paul Jct. Neb 11, Neb 16 & Neb 34
43-B	Jct. US 30 & Neb 23 in North Platte	62	Jct. Neb 58, & Neb 16, 2 Mi. SE of Loup City
44	Lexington Jct. US 30 & Nebr. 21	63	Jct. Neb 2 & Neb 10 & Neb 16, 1 Mi. N of Ansley
45-A	Jct. US 38 & Neb 6, W of Holdrege	64	Burwell Jct. Neb 11, Neb 53 & Neb 54.
45-B	Jct. US 38 & Neb 22 in Holdrege	65	Bartlett Jct. Neb 13 & Neb 53
46-A	Jct. Neb 10 & Neb 44, S of Kearney	66-A	Jct. US 20 & Neb 8, N of O'Neill
46-B	Jct. US 30 & Neb 10 in Kearney	66-B	Jct. US 20 & Neb 8 in O'Neill
47	Jct. Neb. 10 & Neb 2, 2 Mi. S. of Hazard	67	Jct. US 20 & Neb 8, 6 Mi. SE of Page
48	Jct. US 30 & Neb 2, 13 Mi. W of Grand Island	68	Neligh Jct. Neb 14 & Neb 8
49	Ogallala Jct. US 30, US 26 & Neb 61	69-A	Jct. Neb 32 & Co. Road 3 Mi. E of Albion
50	Jct. Neb 59 & Neb 2, N of Dunning	69-B	Jct. Neb 32 & Neb 14 in Al- bion
		70	Genoa Jct. Neb 13, Neb 14 & Neb 39
		71	Wolbach Jct. Neb 13 & Neb 34

Sta. No.	Location	Sta. No.	Location
72	Jct. Neb 11 & Neb 56, 1½ Mi. W of Scotia	82	Imperial, Jct. US 38 & Neb 48
73	Jct. US 81 & Neb 15, S of Yankton, So. Dakota	83	Haigler, Jct. Neb 3 & Neb 71
74	Jct. Neb 12 & Neb 8, 3 Mi. SE of Spencer	84-A	3 Mi. E of Osmond Jct. US 20 & US 81
75-A	Jct. US 20 & Neb 10-A, 3 Mi. W of Springview	84-B	5 Mi. E of Osmond Jct. US 20 & US 81
75-B	Jct. Neb 10 & Neb 10-A in Springview	85	On US 81 S of Chester Kans.-Neb. State Line
76	Valentine, Jct. US 20 & Neb 60	86	Jct. US 77 & Neb 68, 6 Mi. S of Wymore
77	Gordon Jct. US 20 & Neb 62	87	On US 75, 10 Mi. S of Dawson
78	Chadron Jct. US 20 & Nebr 19	88	Jct. US 20 & Neb 63 Harrison
79	Crawford Jct. US 20 & Neb 2	89	Wyoming-Neb. State Line on US 26, W of Henry
80	Arthur Jct. Neb 61 & Neb 49	90	On US 30, 7 Mi. West of Bushnell
81	Jct. Neb 40 & Neb 16-A, 4 Mi. W of Stapleton		

Completed tabulations have not been received from Washington, but are expected to be available soon.

BUDGETS AND COSTS

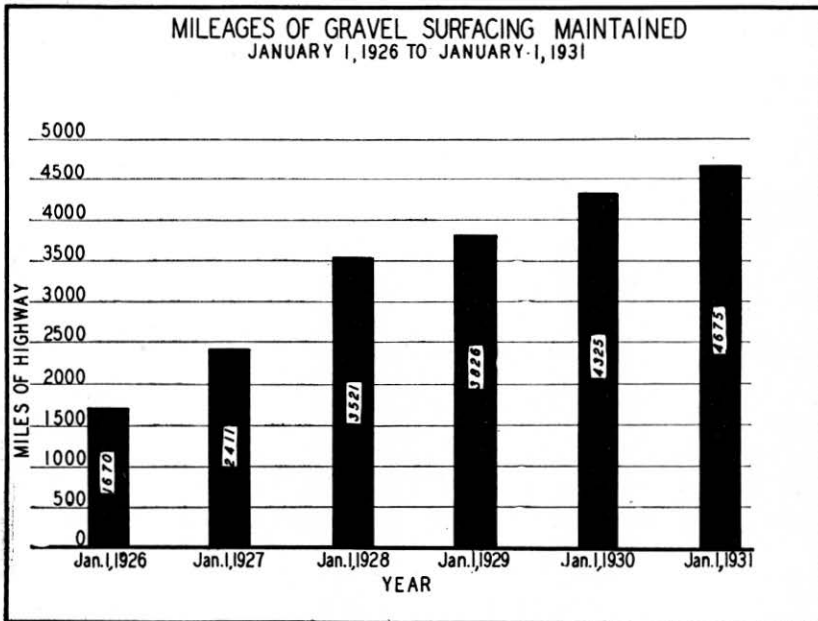
On January 1st of each year, after a careful study of his respective district, budgets are submitted by each District Engineer, covering the estimated expenditures that will be necessary for the maintenance of the highways in that district. Because of uncertainties involved, the budget necessarily cannot be accurate but serves as a guide for the year and actually, taking the State as a whole, forecasts the expenditures quite closely.

All payrolls for field work are prepared in the district offices and forwarded to the Lincoln office where they are checked and forwarded for payment. Material and Supply vouchers are initiated by the dealer on forms furnished for that purpose. These are forwarded by the dealer to the District office where they are checked against the duplicate purchase order copies, approved, and forwarded to Lincoln for rechecking before being sent to the Finance office for payment.

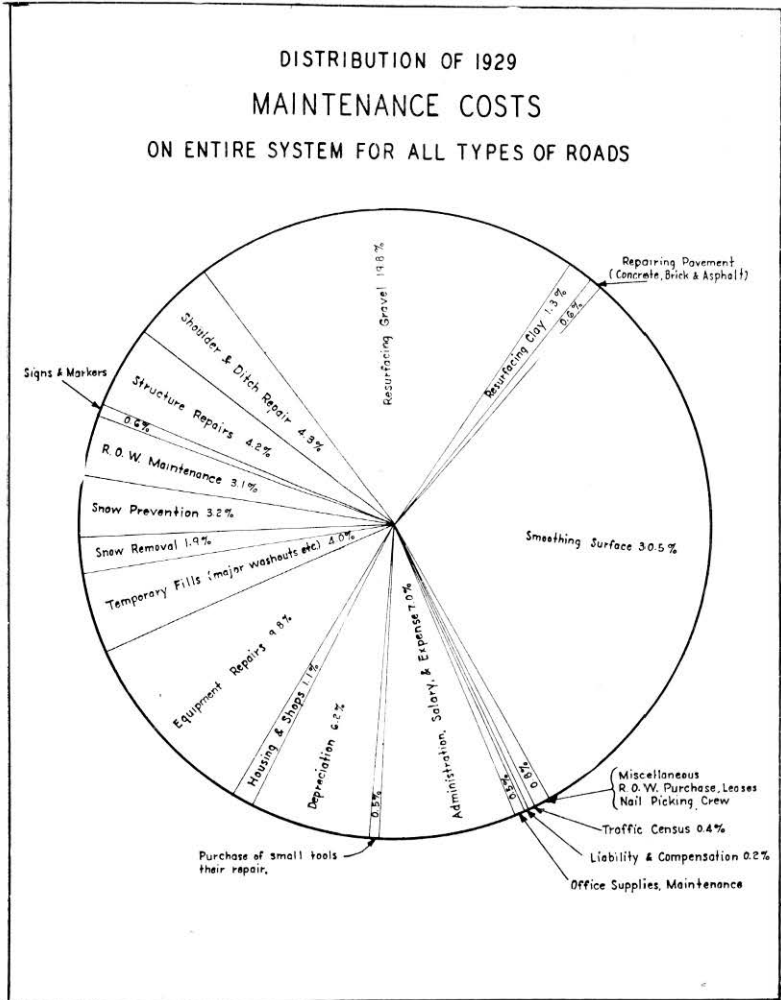
The Lincoln office keeps cost records subdivided to the various items of maintenance on each patrol and cost records on each piece of machinery.

It is found that the actual cost of routine maintenance per mile of any one type of highway does not vary greatly from year to year. The total expenditure for maintenance increases each year due to the increased mileage maintained and due more particularly to the increased mileage of gravel roads to be maintained, making necessary the replacement of gravel as the original application wears out or is otherwise dissipated by the elements.

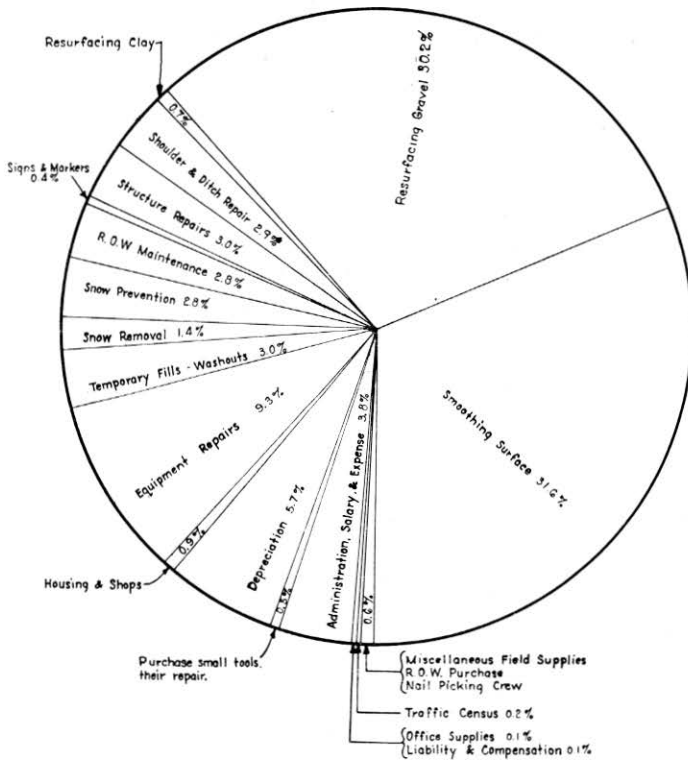
The accompanying chart showing the increase in mileage of gravel highways and the two charts showing the distribution of the 1929 maintenance costs, one taking into account the entire maintained system including all types and the other showing the distribution on gravel roads only, explain graphically how the increase in mileage of gravel roads maintained, automatically increases the total expenditure. Note that "resurfacing gravel" represents only 19.76% of the total cost of the maintenance of the entire system including all types, whereas it represents 30.21% of the entire cost of maintenance on gravel roads.



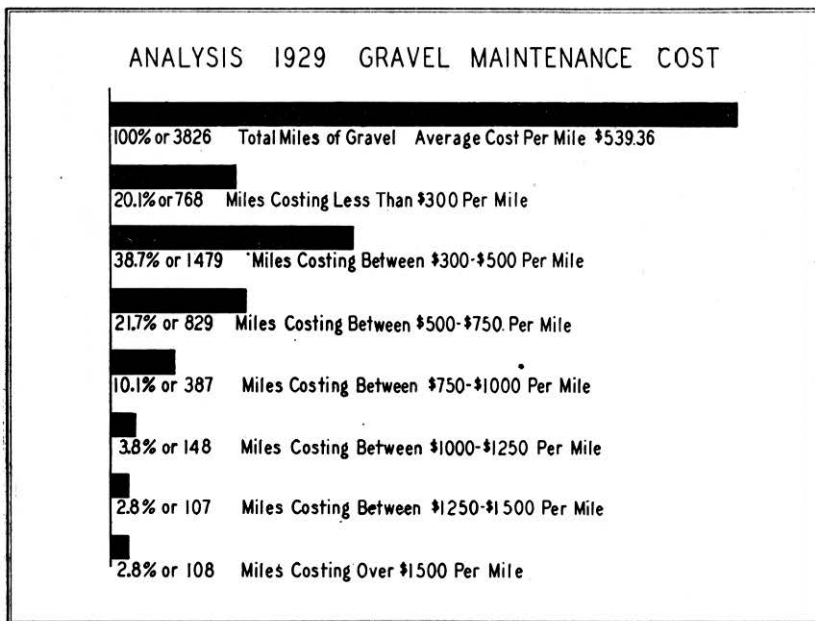
DISTRIBUTION OF 1929
 MAINTENANCE COSTS
 ON ENTIRE SYSTEM FOR ALL TYPES OF ROADS



DISTRIBUTION OF 1929
GRAVEL ROAD MAINTENANCE COSTS



Another interesting study is depicted in the accompanying chart showing the analysis of the 1929 gravel maintenance costs.



MAINTENANCE COSTS

During the year 1929, the average cost of maintenance on gravel was \$539.36 per mile per year. The average cost of maintenance of earth roads was \$305.71 per mile per year.

Because our paving program started in 1929, sufficient time has not yet passed to give any definite idea of the cost of maintenance on modern pavements. It is estimated, however, that the cost of maintenance on modern concrete pavements will approximate \$225.00 per mile per year.

Maintenance Expenditures by Districts

1928

Dist. 1.....	861.1	miles	.....\$	350,907.58
Dist. 2.....	763.35	miles	.....	289,661.46
Dist. 3.....	742.65	miles	.....	286,069.29
Dist. 4.....	707.00	miles	.....	269,115.25
Dist. 5.....	734.95	miles	.....	219,684.76
Dist. 6.....	806.00	miles	.....	256,468.09
Dist. 7.....	890.60	miles	.....	234,099.91
Dist. 8.....	768.20	miles	.....	209,384.58

Additional expenditures not prorated to Districts, including office supplies, equipment, clerical work, signs, and Misc. Expenses	42,596.62
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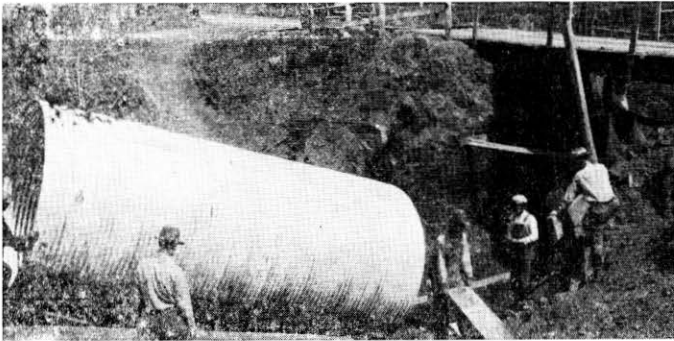
\$ 2,157,987.54

1929

Dist. 1.....	828.34	miles\$	500,010.46
Dist. 2.....	729.27	miles	429,025.20
Dist. 3.....	776.95	miles	430,425.88
Dist. 4.....	796.75	miles	.....	335,368.09
Dist. 5.....	717.32	miles	.....	284,293.01
Dist. 6.....	807.30	miles	.....	289,169.48
Dist. 7.....	873.60	miles	.....	270,597.62
Dist. 8.....	752.10	miles	.....	239,997.06

Additional expenditures not prorated to districts, including office supplies, equipment, clerical work, signs, and Misc. Expenses	54,640.20
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\$ 2,833,527.00



Three views, showing culvert failure, erection of temporary crossing, and replacement with corrugated pipe culvert, all accomplished with a minimum of inconvenience to traffic.

HIGHWAY LAW ENFORCEMENT

The 1929 legislature made an appropriation of \$30,000.00 for the biennium beginning July 1, 1929 and ending June 30, 1931 for enforcement of Motor Vehicle Laws.

To accomplish this enforcement, a chief patrol officer and two patrol officers were employed. Each officer has been equipped with a car and a set of scales for weighing trucks. While this force is expected to detect and warn motorists for all infractions of Motor Vehicle Laws and for all violations of the Rules of the Road, yet a small force of three men is insufficient to cope fully with the problem over the entire state. For that reason particular attention has been given to violations of the license laws and the truck weight laws.

Each patrolman carries cards in duplicate showing the various violations and drivers who violate the road laws are given one of these cards showing the offense. Duplicate cards are furnished the Lincoln office and in the case of lack of license plates, the Lincoln office by contact with the County Treasurers is able to determine whether or not proper plates have been purchased after the notice is given. Failure to comply with the notice makes the offender subject to arrest.

In the case of infractions of the rules of the road, courtesy cards are given on the first offense, calling the attention of the offender to the violation and explaining the law or rule covering the case.

To discourage the practice of overweighting trucks, complaints are filed against the owners. Several fines have been imposed but good cooperation has existed with truck owners and only in isolated cases has it been necessary to file complaints.

In order that the public might be fully advised regarding the Motor Vehicle Laws, we had printed 420,000 copies which were sent to the County Treasurers for distribution to all persons to whom driver's licenses were issued.

Though small, this force of enforcement officers by contacting each part of the State for short periods have accomplished much good.

The total cost of operations from July 1, 1929 to November 1, 1930 has been \$17,897.92.

The following tables give a good idea of the activities of this unit and gives approximately the funds brought in through their efforts. It is to be noted that the funds brought in equal approximately three times the cost of maintaining an enforcement patrol.

(For table see following sheet)

**SUMMARY OF EXTENT AND VARIETY OF WORK DONE BY
THE HIGHWAY PATROL FROM AUGUST 1, 1929
TO OCTOBER 15, 1930.**

Improper use of dealer's plates	574
Improper passing cars on hill	19
Parked on highway	31
Trucks too wide	28
Trucks too high	72
Not observing state stop signs	527
Speeders	157
Trailers without license plates	51
Touring cars using farm truck plates	14
Drivers without driver's license	141
Using one set of plates for two cars	129
Cars with only one number	2,004
Cars and trucks without plates or with numbers expired....	4,445
Out of state trucks without Nebraska license	662
Cars and trucks turned over to sheriffs and police	831
Busses—no license	44
Trucks—no lights or vision mirrors	1,451
Stolen cars recovered	8
Trucks too heavy	30
Arrests	29
Aid to motorists	200
Fines	\$ 1,232.95
Estimated cash for licenses	49,810.00
	<hr/>
	\$ 51,042.95



Highway law enforcement officers' cars.



Left: Checking weight of truck.
Right: Truck driver receiving tag for operating without a license.



Faulty license. Dealer's paper plate is not properly punched.



Modern Transportation.

DIVISION OF MAPS AND PLANS

The principal activities of the Division of Maps and Plans consist of the preparation of plans and estimates of cost of all State and Federal Aid highway construction work which is performed under the supervision of the Department of Public Works, as well as estimates and plans for the work performed by the Maintenance Division which is of a nature that requires the use of plans. Minor duties which are also performed by this Division include the keeping of cost records for all state highway construction work which has been completed or is under construction, preparing the maps, charts and blue prints of the plans, all of which are required in connection with the activities of this department, providing supplies for all field survey parties and performing other office work of a general routine nature.

During the present biennium the volume of work performed in this Division has been increased quite appreciably over that performed in the past, through the appropriation of a larger amount of funds for the operation of the Department of Public Works.

In general the employees in this Division work in groups of three or four men each. An engineer who has had considerable experience in the kind of work being performed is in charge of each group. The men who are engaged in preparing plans and estimates of costs of proposed construction work are under the direct supervision of one of the Assistant Office Engineers. Those who are engaged in the preparation or in the checking of estimates or plans for completed projects work under the supervision of the Chief Draftsman.

Parts of three rooms in the State House are in use by this Division as drafting rooms. The largest of these is a room which is approximately one hundred feet in length and about thirty feet in width. It is quite well lighted by large windows throughout the entire length of its north side, and it is especially well suited for the purpose for which it is being used. Three other smaller rooms are used by this Division as an office, blue-print room, and supply and cloak room. Two fire-proof vaults are provided for the storage of the more valuable supplies and records of the Division.

The principal function of this Division is the preparation of plans and estimates for State and Federal Aid construction work. After a road has been added to the State Highway System and the route between the specified terminal points selected, a preliminary survey is made by a survey party usually consisting of an engineer, a rodman and a chainman. In exceptional cases a preliminary survey party may be increased in size. These survey parties work under direct supervision of the District Engineer in whose territory the road is located. All survey notes are submitted to the office of the Division of Maps

and Plans where they are plotted and proposed grade changes shown. Blue prints are then made and given to the Construction Engineer, who makes a plan-in-hand inspection of the road, usually in company with the District Engineer and, whenever feasible, the chief of the group who it is expected will prepare the completed plans. Studies are made to determine the sizes and types of drainage structures necessary to be built, proposed changes in channels of streams, suggested changes in the grades indicated and other features affecting the work are determined. The blue prints used in making the plan-in-hand inspection are then returned to the office of the Division of Maps and Plans, with all recommendations shown on the prints. The plans are then prepared and an estimate of the quantities for all of the items involved in the proposed construction work is made. Blue prints of the plans so prepared are then given to the Construction Engineer who then checks the plans in the field. In making this inspection the Construction Engineer is generally accompanied by the District Engineer affected, the Bridge Engineer or one of his assistants if the construction of any large or unusual types of bridges will be required, and, if the road in question is a Federal Aid project, a representative of the U. S. Bureau of Public Roads. Any necessary changes, as well as the locations of all additional right-of-way necessary to be acquired and any unusual features which will affect the work and are not indicated, are shown on the blue prints used. These blue prints are then returned to the office of the Division where all suggested changes are made and the plans completed.

If the project in question is a part of the Federal Aid Highway System and it is desired to receive Federal Aid funds for use in payment for a part of the cost of the proposed construction work, a request is then made of the U. S. Bureau of Public Roads that such funds as are available to be so used, be set aside for that purpose. This request is accompanied by an estimate of the cost and plans for the proposed improvement. If this request is granted and the plans and estimates are approved, a contract, which is termed a "Project Agreement", is then entered into by the U. S. Bureau of Public Roads and the Department of Public Works.

The next step after the approval of the plans and estimate by the U. S. Bureau of Public Roads or the completion of the plans if the work is not a part of a Federal Aid project, is the advertising for bids and the awarding of contracts. In most instances the bids are received at the main office of the Department in the State House and generally unit price bids are requested. The bids are computed in this Division and comparisons made to determine the low bidders.

In addition to furnishing supplies and blue prints of plans, this Division keeps a record of progress made in all construction work

and checks all requests for approval of changes in the plans as found necessary in the course of this work.

The Engineer in charge of the field supervision of all construction work usually prepares computations of the quantities for the several items involved in the work performed. These are submitted with all survey notes and other supporting data to the office of this Division where all notes, computations and other features, including the Contractor's final estimate, are checked. Plans showing the project as built are then prepared.

All vouchers for work performed on completed Federal Aid projects are checked in the Division of Maps and Plans. All computations of quantities shown in these vouchers, together with explanation of any unusual features, and blue prints of all necessary plans are submitted to the U. S. Bureau of Public Roads.

At times, particularly during the winter months when construction activities are reduced greatly, many members of engineering parties who have been engaged in the supervision of construction work during the other seasons are transferred to work in this Division. As far as it is considered possible to do so, the duties of completing all records, computations and other features of the engineering work connected with the construction activities in which they were in charge, are assigned to these men in order that all final estimates and plans of the completed work may be prepared before they are asked to assist in the preparation of plans for proposed work or in any of the other work of this Division.

As members of field survey parties are transferred to this Division when weather or other conditions stop construction activities, so is this Division called upon to supply engineering parties when these activities are again resumed. This gives rise to one of the most difficult conditions which we are forced to meet; that is the need of so regulating and conducting the work that the duties are discharged in the most efficient manner possible, because, as it might naturally be supposed, when field construction work is at a maximum and the office force greatly reduced, particularly as far as the number of the more experienced men is concerned, so are greater demands frequently made of this Division.

No report of the activities of the Division of Maps and Plans would be complete without mentioning the magnificent spirit of loyalty and interest shown by its members through their meeting all demands made for overtime work during particularly busy seasons in this biennium. A great number of these men have returned to work night after night for several successive weeks, and in one particular instance almost every man worked overtime eleven hours

each week for a period of three weeks. This work has been performed by these men with definite assurance that direct payment could not be made for the extra time worked and with the knowledge that possibly full allowance as increased vacation privileges could not be given them.

THE TREND OF BRIDGE DESIGN AND CONSTRUCTION

The design and construction of highways is an enterprize which is subject to the law of evolution. Structures incident to and forming a very important link in the continuity of these highways are subject to the same law. Thus it is interesting to trace the improvements in roads and bridges made in past years and to look forward to future developments which such retrospection portends.

A brief review shows that fords and ferries over streams were the determining factors in locating our early roads. Since ford or ferry locations are not necessarily good bridge sites, the relocating of roads came hand in hand with the introduction of bridge crossings. The consideration of the kind and amount of traffic expected on these roads, together with characteristics of the stream, determined the type of bridges selected. And so as we look backward we see the development of bridges from the simple type of untreated timber resting on mud sills, to those supported by timber piles; the introduction of treated timber; the utilizing of steel for bridges as that material developed; then to the use of plain and reinforced concrete; and so on up to the present time when a diversified assembly of all these various types go to make up our modern highways.

It would be obviously impracticable to expect one particular type of bridge to emerge from this development as a superior type. The field, however, narrows down to a few dependable types, any one of which may be found superior for a certain kind of location. There are five of these outstanding types in common use in Nebraska at the present time.

- (1) Timber Structures, 17' to 25' spans.
- (2) Steel I Beam Structures, 21' to 32' spans.
- (3) Transverse Joist Girders, 35' to 60' spans.
- (4) Steel Deck Girder, 32' to 60' spans.
- (5) Steel Truss, 70' to 110' spans.

The object of this article is to show the trend of development of these various types during the past biennium and to point out, where possible, the probable further development to be expected during the coming biennium.

TIMBER TRESTLES

First: Past experience has demonstrated that untreated timber bridges are not economical in well established locations. They are tolerable only in cases of uncertain stream behavior, or in undeveloped territory where it is obvious that the traffic requirements do not justify the expense of a high first cost structure.

Second: Experience has also demonstrated the economy of treated timber in bridges. The increased life of treated structure results in a lower annual cost during its life than obtains for untreated timber structures.

Third: A study of bids on designs for a treated timber floor with metal traffic treads supported by timber piles, caps and stringers compared to a reinforced concrete floor on a similar substructure shows an economy in favor of the concrete floor. Thus it is to be noted that almost all treated timber bridges are now being constructed with concrete floors. The result is a less mental hazard and a much more comfortable riding surface.

Fourth: The most recent development in timber substructure bridges with concrete floors is the introduction of structural steel handrails. This practice completes the illusion of making the structure look like an I Beam bridge or a concrete structure. While the structural rail is stronger than a rail of wood, it has the added advantage of imparting a certain sense of security to the motorist which reduces the mental hazard when he is compelled to pass any other vehicle on the bridge.

Fifth: One new development in both timber and I Beam bridges is the advent of premoulded asphaltic plank as a wearing surface. This plank has been used on some approach spans and is being presented for bids on one new structure. The latter structure will be observed carefully and its behavior under traffic will determine to a large extent the future popularity of such a type of floor.

Sixth: Experience has demonstrated the necessity of a wide roadway for comparatively short bridges. Most of our timber and I Beam bridges are now being built with 24 foot clear roadways. It is planned to replace all narrow bridges now in use with wider roadway structures when replacement becomes necessary.

I BEAM STRUCTURES

First: This type of structure is considered more permanent than timber structures, and is generally installed on principal highways where traffic is dense and stream characteristics are well known. Its place is fairly well defined, being used to best advantage for spans of 25 to 32 feet.

Second: The past two years experience has shown that I Beams are superior both economically and from a load carrying standpoint to wood stringers, for spans over 25 feet and up to 32 feet.

Third: Experience also shows that even for the shorter spans, I Beam stringer bridges are but little more expensive than wood stringers with concrete floors. It is probable that in the future more

I beams will be used in composition with timber piles, caps, backing, and with concrete floors.

Fourth: A twenty-four foot clear roadway is established as the proper width for short I beam structures.

TRANSVERSE JOIST GIRDERS

This type of structure is a type originated in Nebraska.

Examples of its use are numerous throughout the State both in County and State work.

First: This is a through girder type which takes advantage of the top flanges of girders as a protection from running off the bridge. The low curb and hand rail relieves the sensation of feeling imprisoned while crossing, or when passing other vehicles.

Second: The fabrication of this type can be standardized and the erection is a simple operation requiring a minimum of false work.

Third: This type allows a wide flexibility in the selection of the kind of floor and wearing surface desired.

Fourth: The limitations of this type are that the maximum economical roadway width is about 20 feet, and it is difficult and expensive to widen in the future.

DECK STEEL GIRDERS

This type of structure is growing in popularity and seems to be more suited for Nebraska streams in general than any other type. The features of this type are as follows:

First: The appearance of obstructiveness is reduced to a minimum in approaching one of these bridges. Motorists will drive much closer to the curb than in passing between the chords of a pony truss or a high truss. Thus, due to optical effects, this type of bridge is more suitable for dense fast traffic than either the pony or the high truss.

Second: The fabrication and erection of this superstructure is very simple and economical. In fact there is one instance where the Contractor ordered his girders shipped from the mill direct to his job and fabricated them at the bridge site.

Third: The pipe and cast iron posts give the structure a neat appearance and can be fabricated and erected at the site with field forces.

Fourth: The substructure is massive and rigid, thus insuring the greatest possible resistance to flood, debris, and ice, and at the same time being safe from undermining scouring action of the stream.

Fifth: The tendency developed during the past two years is to lengthen the maximum allowable spans from 50 feet to 60 feet and to widen the clear roadway from 20 feet to 22 and 24 feet.

Sixth: An advantage this type has over the truss type is in that it can be widened in the future without disturbing the original construction and without stopping traffic over it.

STEEL TRUSS BRIDGES

The principal feature in the use of trusses developed during this biennium is in the matter of span lengths. Fifty and sixty foot spans are practically eliminated from consideration, owing to the preference for girders. On the other hand there are several sites where spans longer than 100 feet have been used. During the past two years one 160 foot truss was used and two 110 foot spans. The tendency is to use 22 foot roadways.

Features of new designs for trusses are as follows:

First: Higher curbs and stronger hand rails.

Second: More efficient floor drainage.

Third: Raised floor beams with bottoms flush with bottom chord of bridge, giving more waterway.

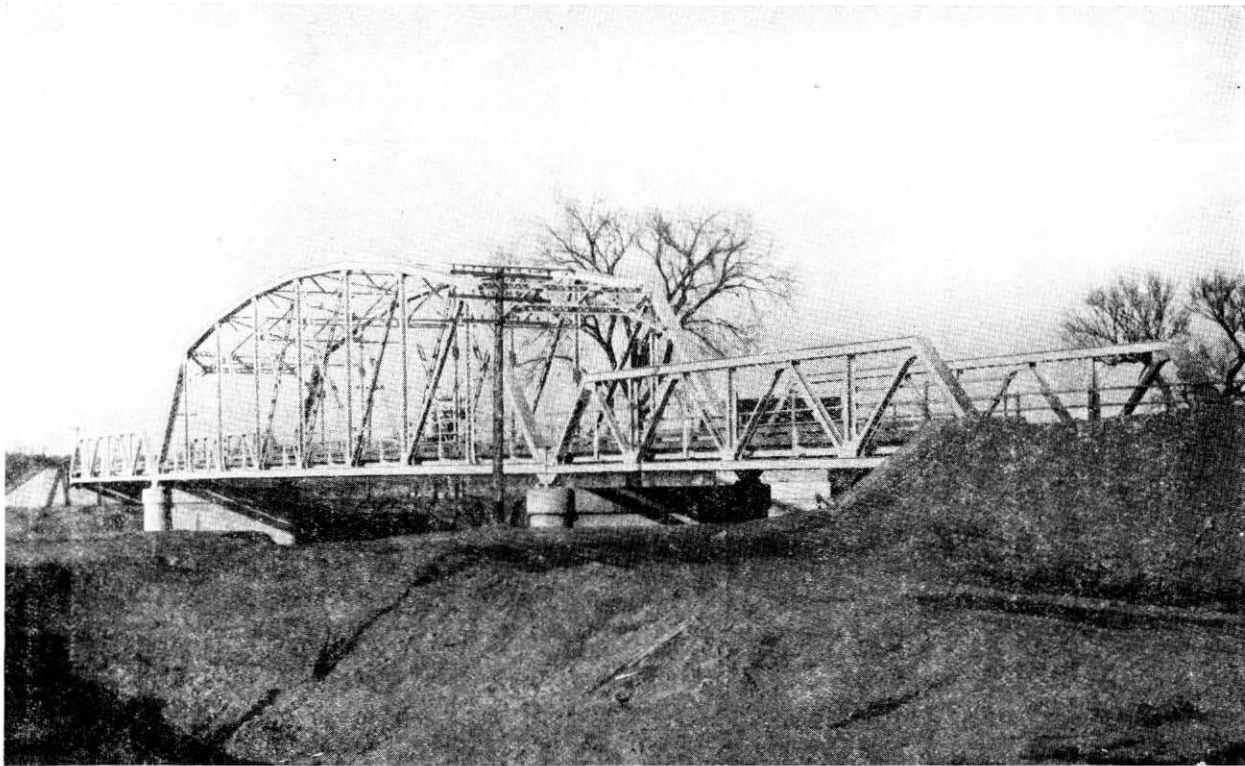
Fourth: Wider roadways, the tendency being towards 22 foot widths in the clear.

Fifth: Designed for modern H 15 truck loading which provides for trains of trucks in both directions over two lanes of traffic.

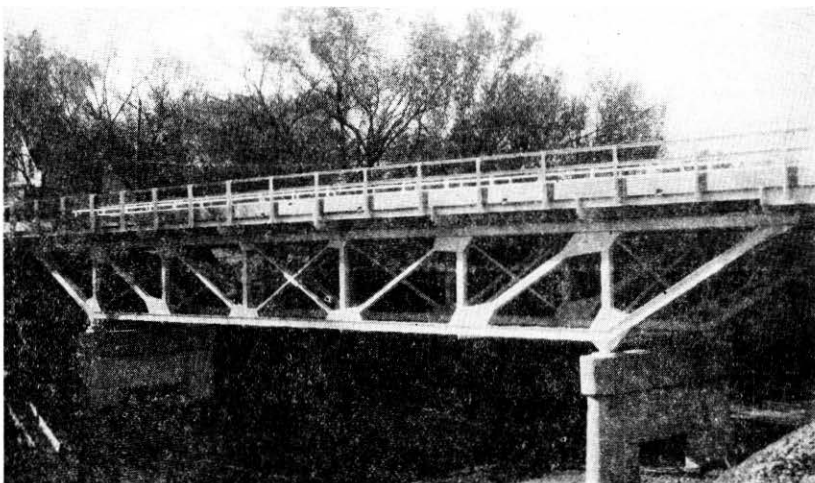
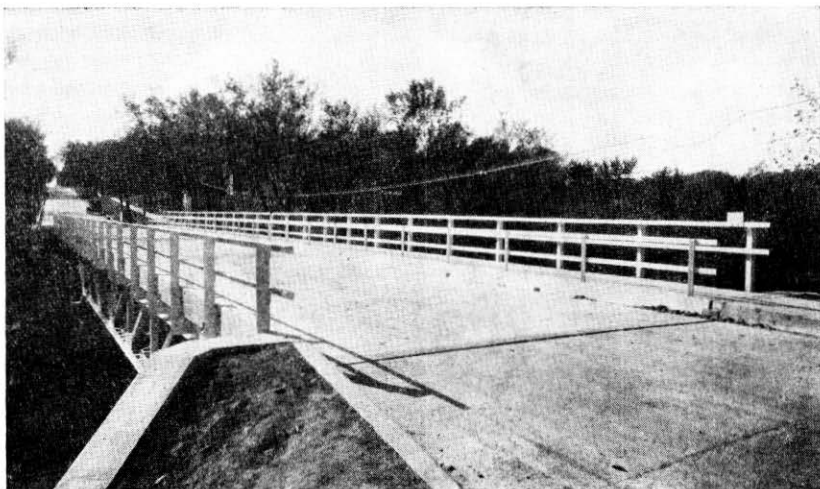
Sixth: Painting steel superstructure with aluminum paint which enhances the appearance and is a safety measure more favorable to night driving.

ILLUSTRATIONS

The following pages illustrate by photo, drawings and descriptions some of these types:



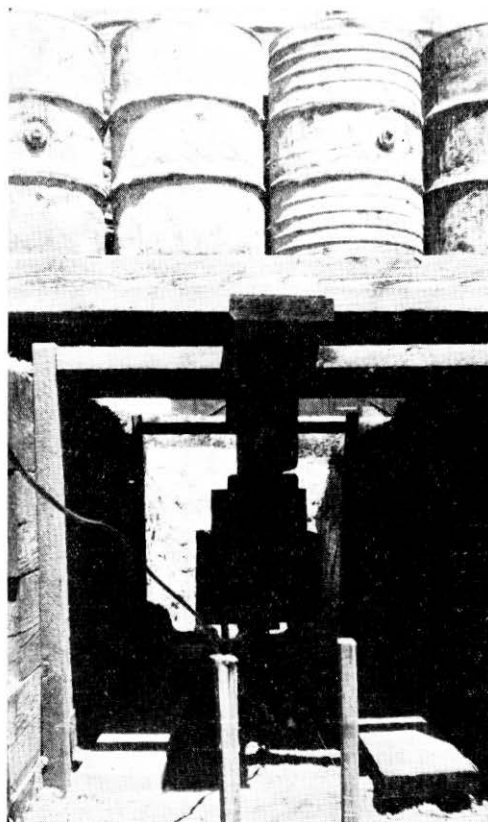
Bridge over the Nemaha river near Falls City, on Highway No. 73. Project 123.



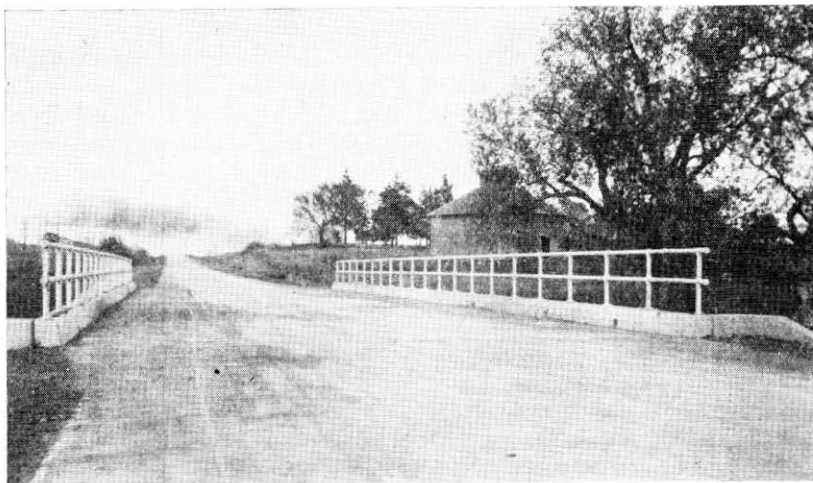
Two views of the Nebraska City, North Tenth Street Bridge. Project 659-A.



Views of the Woodlawn Bridge on a relocation of the S. Y. A. F. A. Project 225.



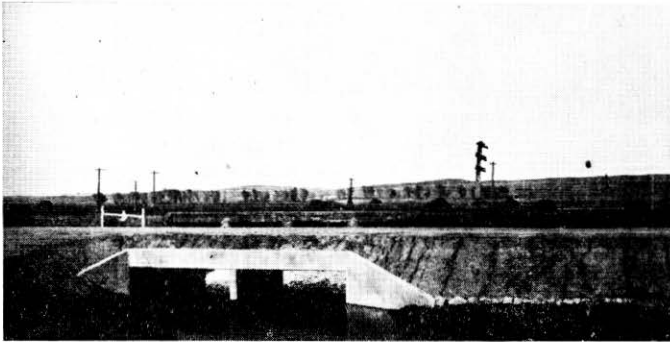
Soil test for the Columbus viaduct. Project 278-D.



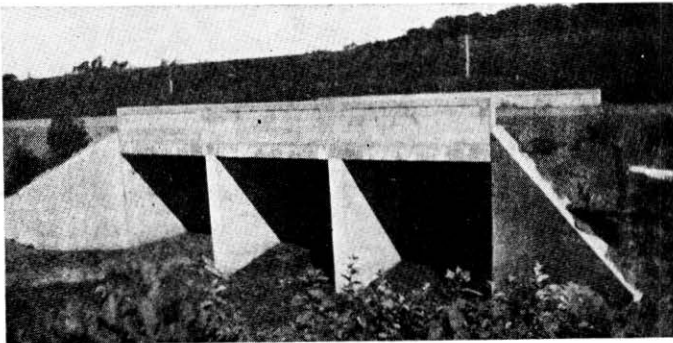
Bridge of deck steel girder type, near Greenwood on the D. L. D. Project 107-A 1.



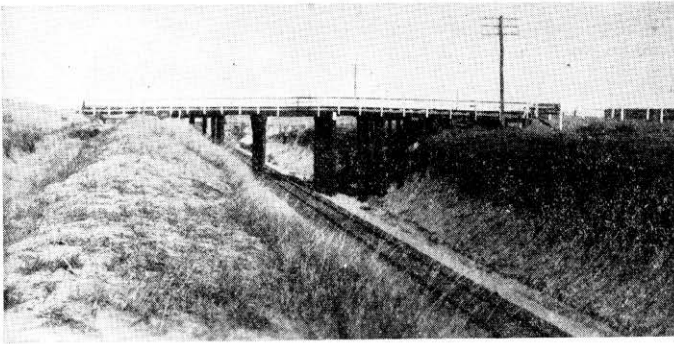
Single Box culvert Harlan County.



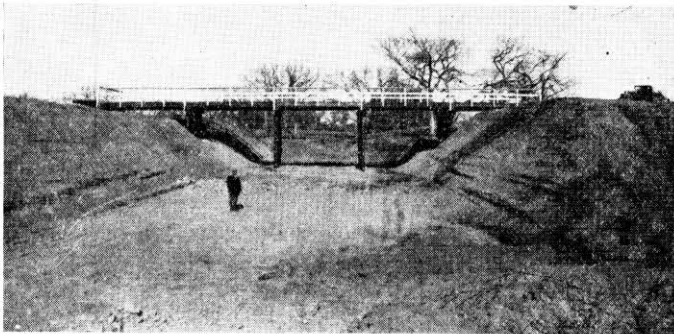
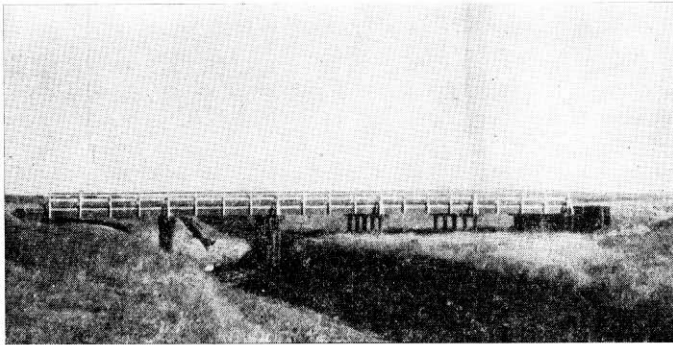
Twin box east of North Platte.



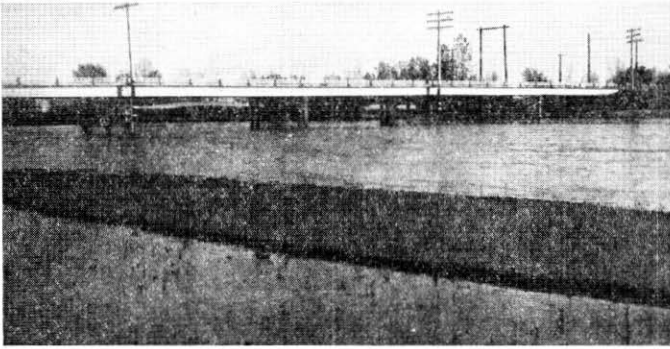
Triple 12' x 12' box on the D. L. D. near Greenwood.



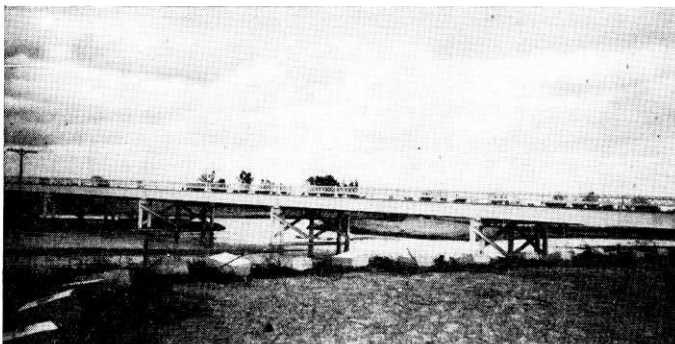
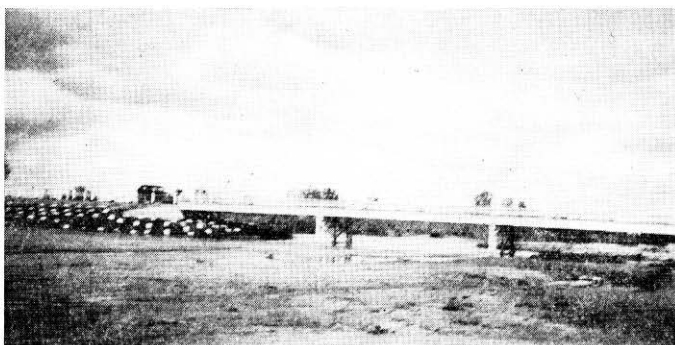
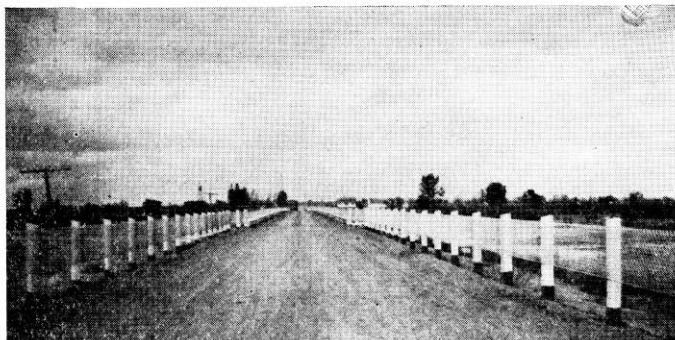
Grade separation of Highway No. 38 and the C. B. & Q. Railroad, south of Atlanta.



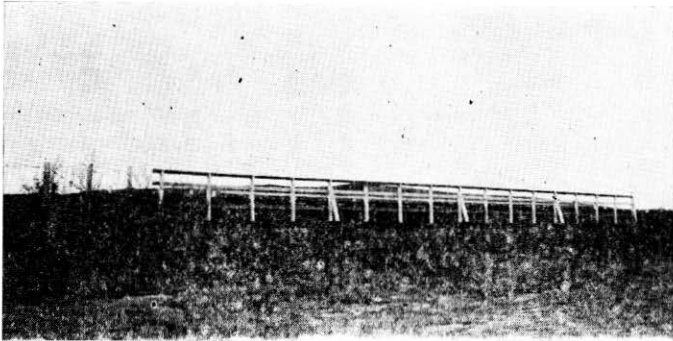
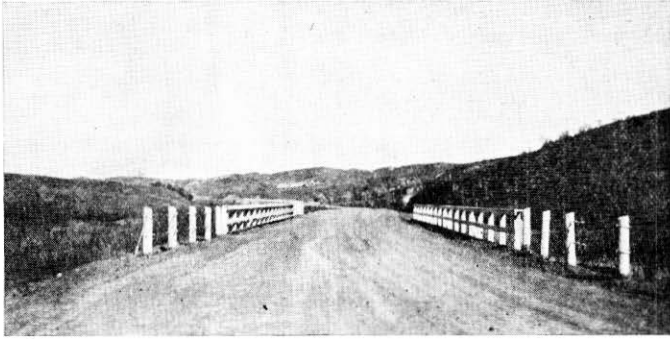
Two creosoted timber trestle bridges with concrete floors and wood handrails, on Highway No. 38, Red Willow County.



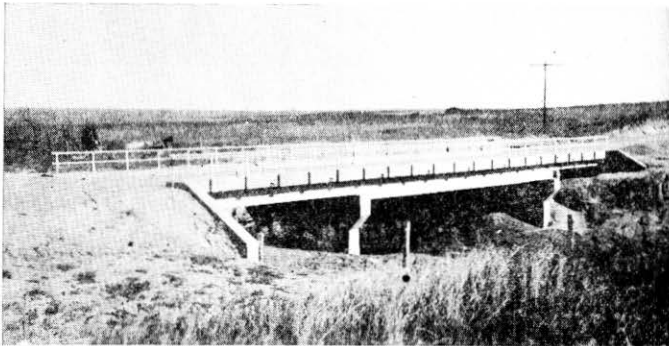
Views of a typical transverse joist girder bridge, over the South Platte river, near Ogallala.



South Hershey State Aid Bridge over South Platte River.



Two views of creosoted timber trestle bridge with concrete floor, on the Gothenburg-Farnam road.



A steel deck girder bridge with 22 foot roadway, concrete floor, concrete piers founded on rock, and steel pile abutments encased in concrete. Harlan County.



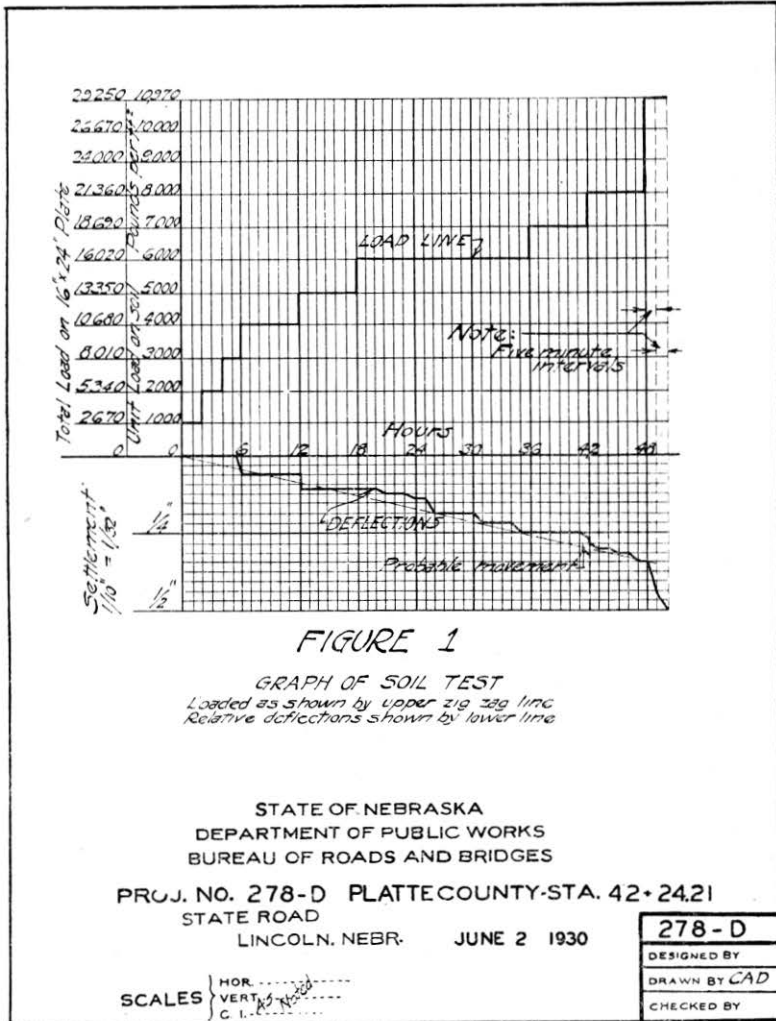
Testing strength of old concrete slab bridge, south of Nebraska City. Project 2-C.

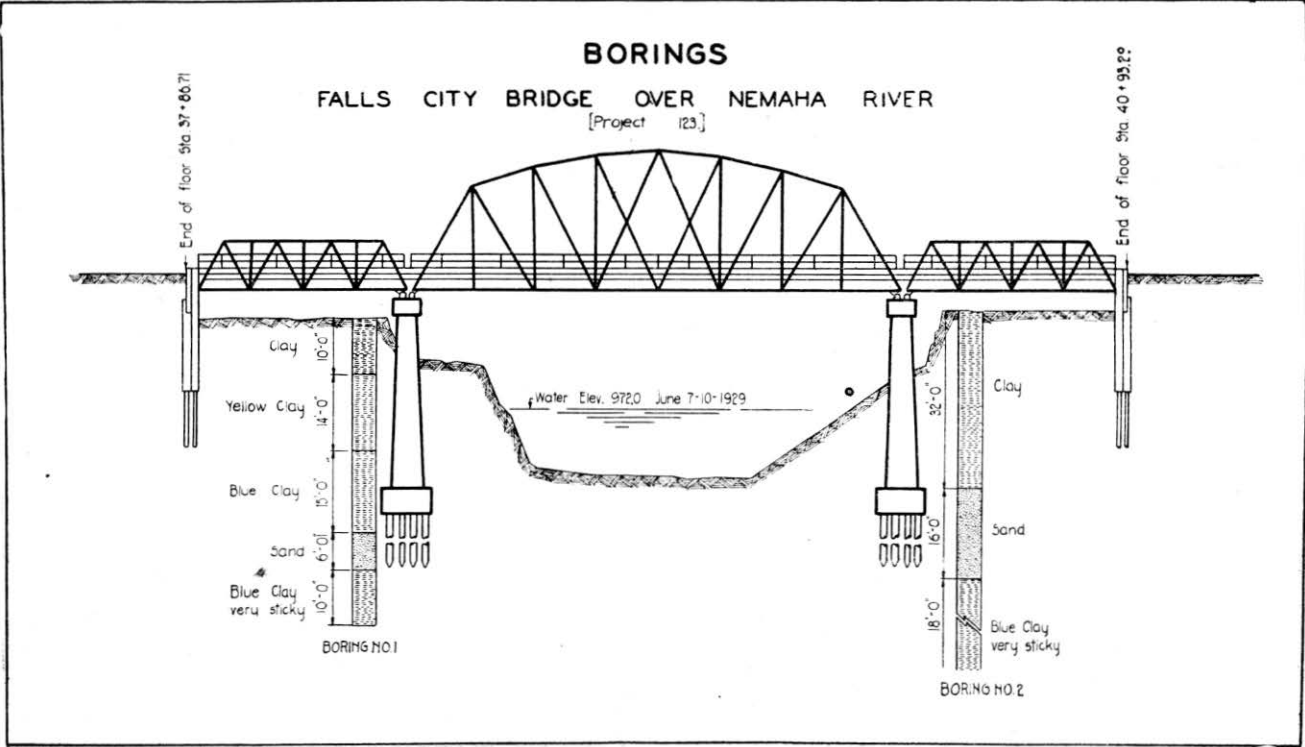


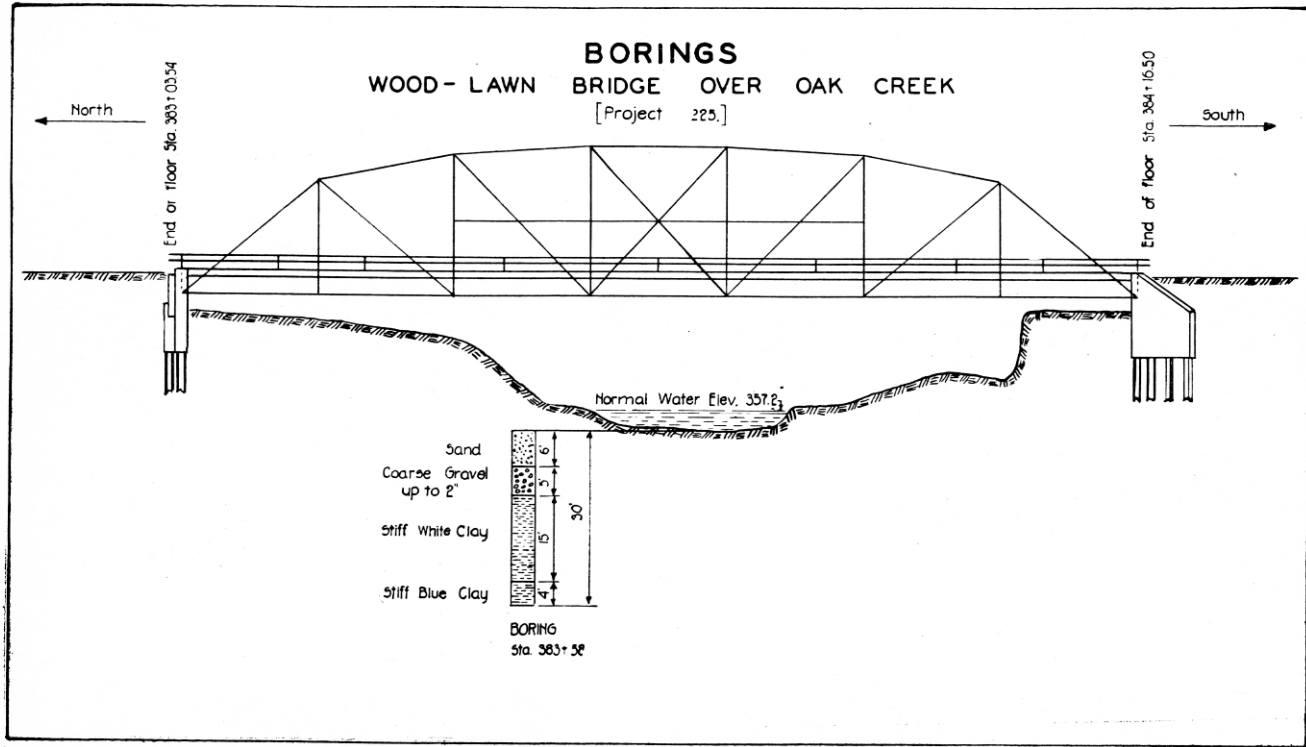
Alda state aid bridge over south channel of the Platte river. Project 860.

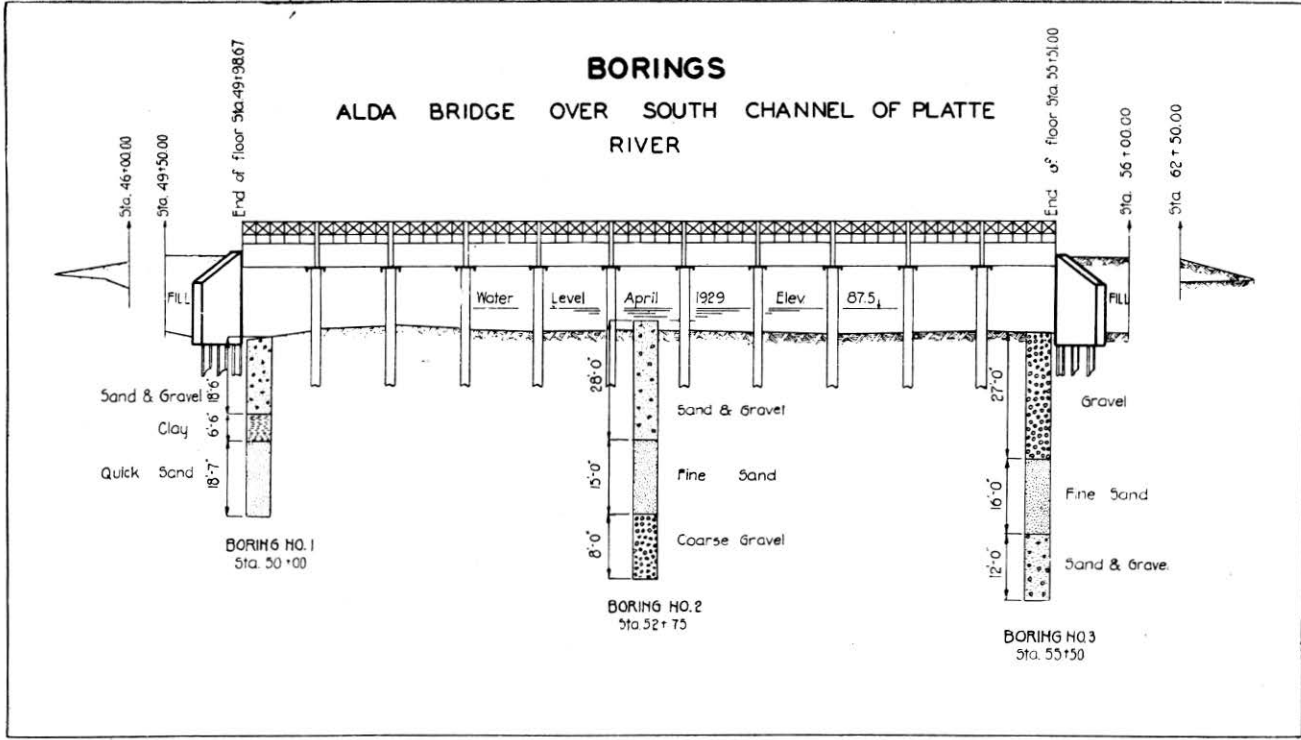


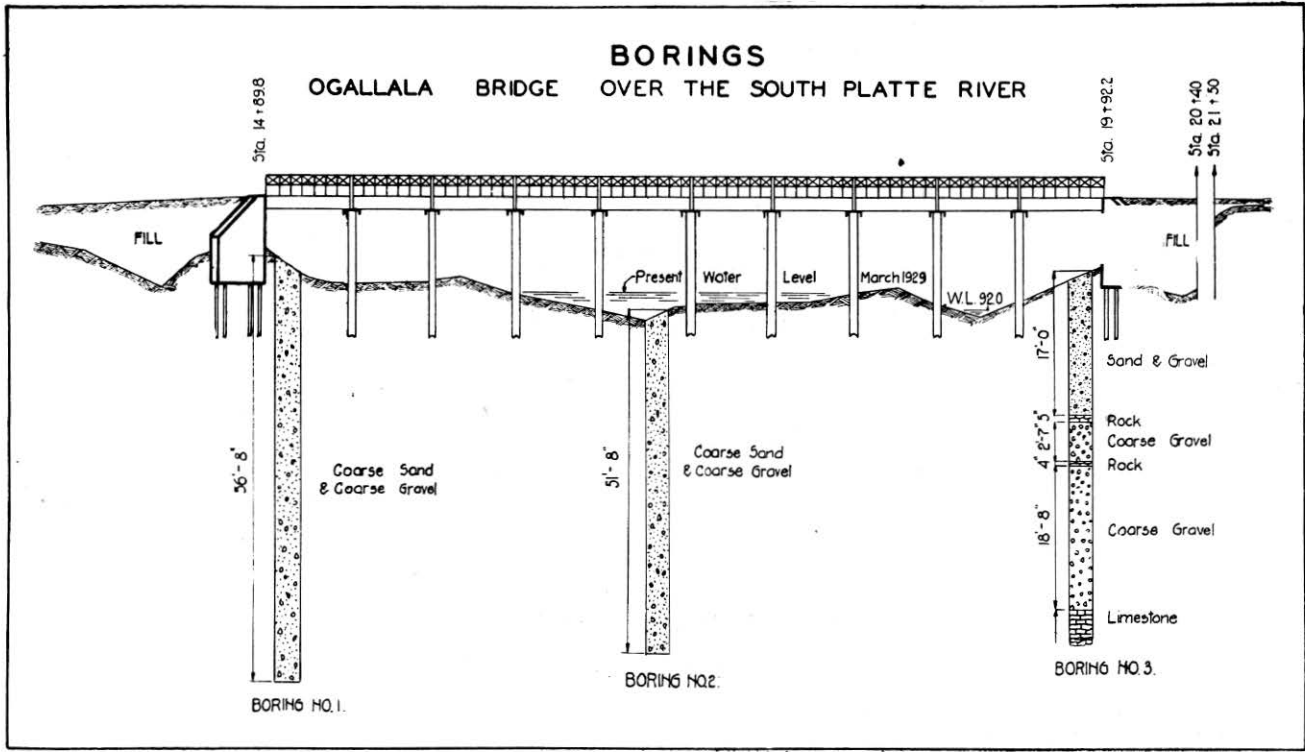
Ice fields on the Platte river are broken up by dynamite for the protection of the bridge piers.

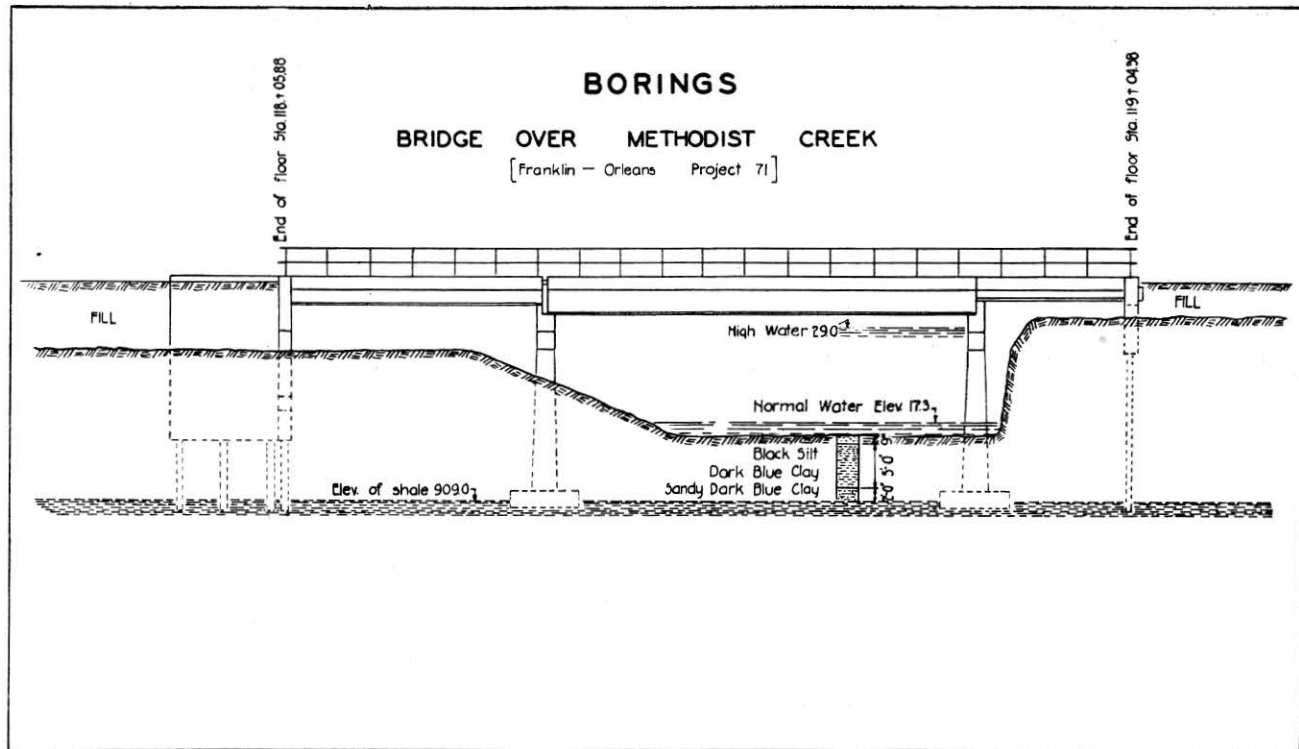






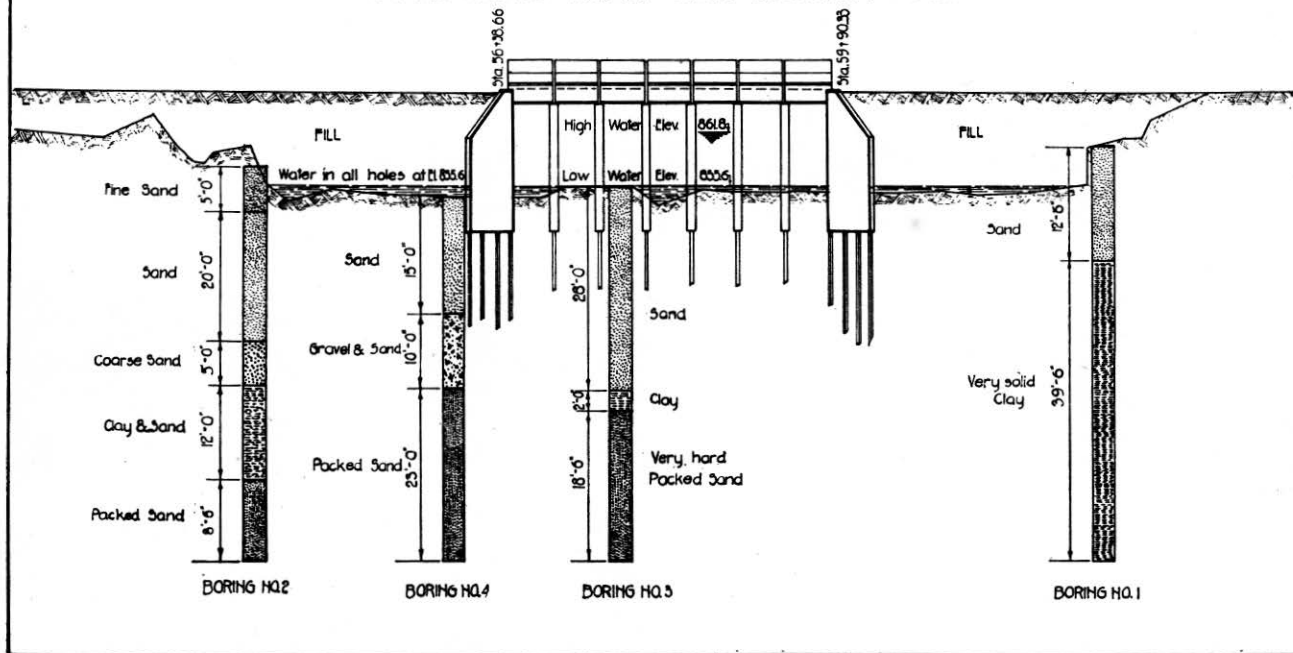


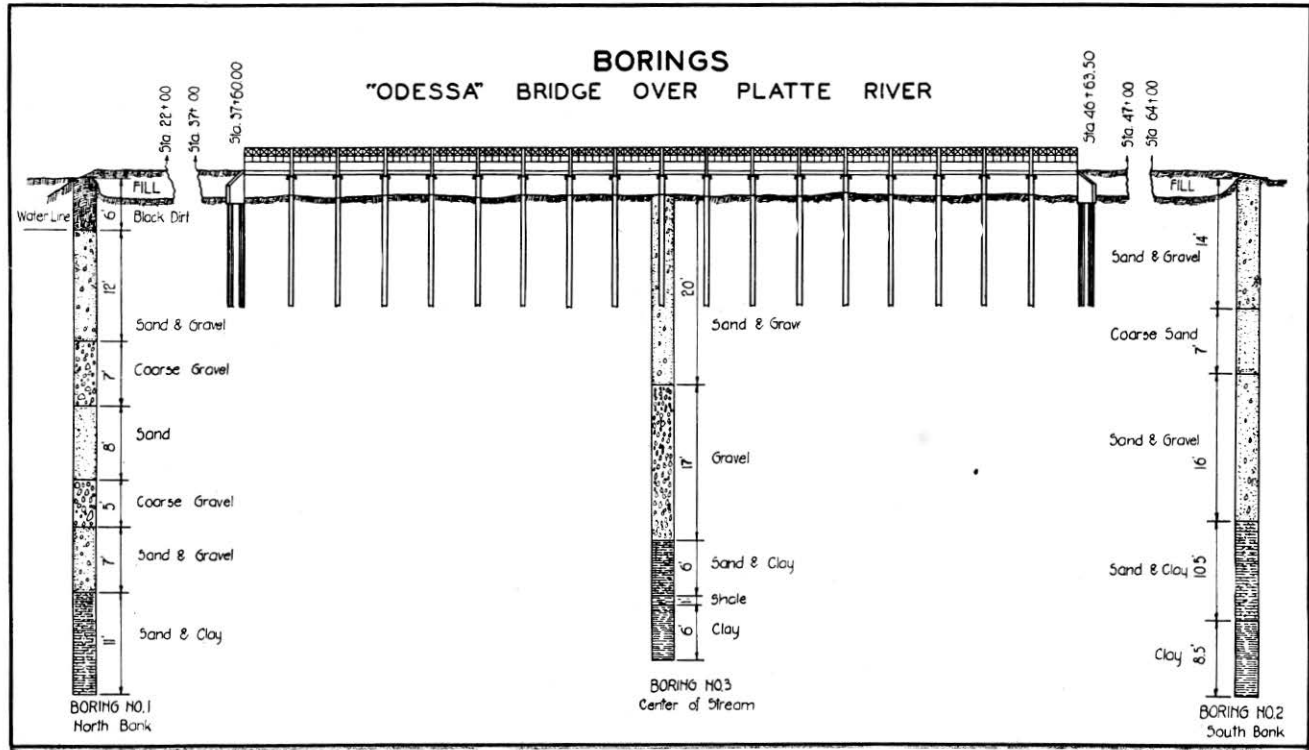


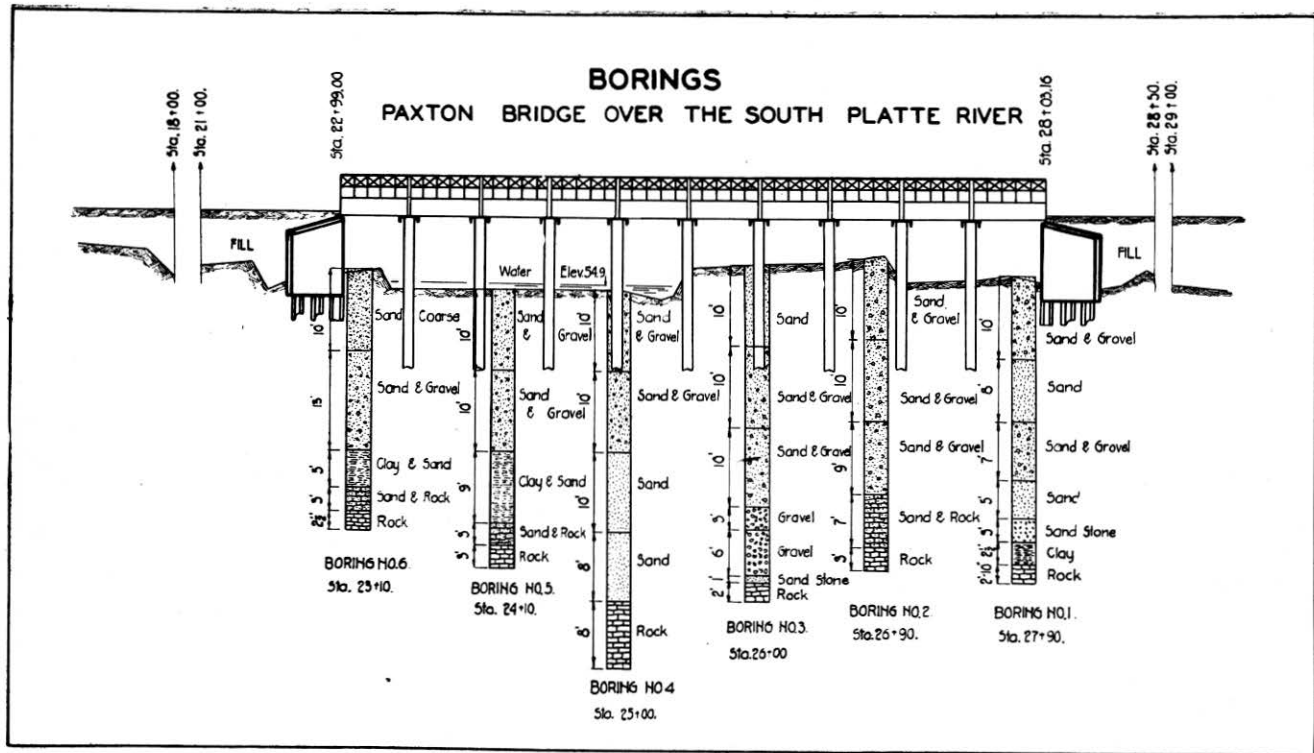


BORINGS

"GRAND RAPIDS BRIDGE" OVER NIOBRARA RIVER







FALLS CITY NEMAHA RIVER BRIDGE**Project 123**

This structure replaces a steel bridge that was washed out in the June flood of 1929. It consists of one 160' by 20' high truss central span and one 70' x 20' pony truss approach span at each end. The abutments are of the concrete encased steel pile type and the piers are the concrete dumb bell type supported by wood piles. This structure has a 20 foot clear roadway, concrete floor and is designed for T20 loading. Owing to the heavy traffic on highway No. 73 between Kansas City, St. Joseph and Omaha, and to the continued wet weather following the June flood, it was impossible to maintain a suitable detour and crossing for such traffic. This project was considered to be in the emergency class of priority. Plans and specifications for a new structure were assembled whereupon the State Purchasing Agent ordered the steel piling delivered to Falls City prior to opening of bids. The contract contained a penalty time clause requiring a completion date by January 1st 1930. Bids for this work together with the 100' truss bridge over Pony Creek were opened on August 28th, 1929. The contract for the Nemaha River bridge and the Pony Creek bridge was awarded to the Monarch Engineering Company for \$55,-246.65 and \$18,257.48 respectively. This contract was prosecuted diligently and was completed December 31, 1929.

NEBRASKA CITY NORTH TENTH STREET BRIDGE**Project 659-A**

This bridge is located on North Tenth Street which leads from the business district of Nebraska City out through a residential section and to the State School for the blind. North Table Creek, the small stream crossed is in the bottom of a deep wide chasm, far below the established grade of Tenth Street. Advantage was taken of this situation to employ the use of a deck cantilever truss which achieved the economy of a short span truss applied to a long span condition.

The structure consists of a 110 foot deck cantilever truss supported by concrete pedestal piers 78 feet 6 inches on centers, and with 20 foot and 30 foot I Beam approaches at each end respectively. The structure has a concrete floor 20 feet between curbs and a five foot sidewalk on one side.

The State paid the sum of \$7,529.25 towards the total cost of this construction and Otoe County paid the remainder. State funds were taken from State Paving Institution Funds.

The contract for this construction was awarded to the Monarch Engineering Company of Falls City Nebraska on July 3, 1930 and the bridge was completed early in October. The lump sum contract price was \$16,492.00.

WOODLAWN FEDERAL AID BRIDGE**F. A. Project 225**

This structure spans Oak Creek near Woodlawn on a relocated portion of the S. Y. A. highway, about 8 miles north of Lincoln. The necessary relocation demanded the crossing to occur at the bend of the creek which necessitated setting the north abutment well back on the north bank. Owing to the violent nature of the stream and to the prevalence of debris this site obviously required one long central span. Also on account of its proximity to a curve and to the heavy traffic expected, a wide roadway was deemed necessary.

The structure consists of one 110 foot, high steel truss with 22 foot clear roadway, supported on concrete encased double rowed steel piling abutments.

The contract for this construction was awarded to Wickham Brothers Bridge and Pipe Company of Council Bluffs, Iowa on January 2nd, 1930, for the sum of \$23,471.00.

ALDA STATE AID BRIDGE

Over the south channel of the Platte River

Project 860

Several spans of the old wood bridge at this location were washed out early in 1929. In considering plans for a new structure the location was shifted down stream and advantage taken of wood piles at both ends of the old structure as anchors for protection work of the new structure.

The new structure consists of 11-50' Transverse Joist Girders with concrete floor and 18' roadway.

The contract for this construction was awarded to the Allied Contractors of Omaha for the lump sum of \$45,780.00. The same firm was awarded the contract for the approach fills and protection work for the lump sum of \$13,900.00. Thus the total cost amounted to \$59,680.00.

Work on this bridge was started in July and the project was completed in November, 1929.

OGALLALA STATE AID BRIDGE

This structure replaced an old timber bridge over the South Platte river near Ogallala, Nebraska.

It consists of 10-50' Transverse Joist Girder Spans with concrete floor and with a 20' roadway.

The contract for the bridge proper was awarded to the Western Bridge and Construction Company of Omaha for the lump sum of \$51,740.00.

A contract for approach fills and protection work was awarded to Edw. Walker of North Platte, Nebraska for the lump sum of \$9,000.00 which made the total cost of this work amount to \$60,740.00.

SOUTH HERSHEY STATE AID BRIDGE

This structure spans the South Platte river south of Hershey, Nebraska and consists of 10-50' Transverse Joist Girders with a black gum wood floor and an 18' roadway.

The contract for the bridge proper was awarded to the General Construction Company of Omaha for the lump sum of \$43,271.00. The approach fills and protection work was awarded to Scott Brothers of North Platte, Nebraska for the lump sum of \$13,999.00 making the total cost \$57,270.00.

FRANKLIN-ORLEANS

Federal Aid Project 71

This structure is a unique example of the Deck Steel Girder type. It consists of 1-50' central span and 1-30' and 1-18' approach span. The structure has a 22' roadway. The hand rail is made up of pipes and posts of 2½" diameter extra strong black pipe.

The abutments are concrete encased steel pile abutments with piles driven to shale rock. The piers are of reinforced concrete of the pedestal type founded on a shale bed and without the use of any piling.

This contract was awarded to Dan Quinton of Kearney, Nebraska on March 27, 1930 for the sum of \$8,407.70.

GREENWOOD—CHALCO, CASS COUNTY

Project 107-A1

This structure is the east one of two similar bridges built on the D. L. D. between Greenwood and Ashland. It is adjacent to a Burlington Railroad bridge, crossing a small tributary which empties into Salt Creek within a short distance from it. Thus the highway bridge had to be elevated on high piers to clear the structure from back waters of Salt Creek during frequent high floods.

The highway structure consists of 1-40' central span with a 26' I Beam approach span at each end. It is of the Deck Steel Girder type with concrete deck and curbs with a 24 foot clear roadway.

The abutments are of the steel pile concrete encased type. The piers are of the concrete dumb bell type supported by untreated wood piling. The handrail and posts are made up of 2½ inch extra strong pipe.

This construction was awarded on January 2, 1930 to the Martin-Day Company of Lincoln, Nebraska for the sum of \$12,623.10.

ATLANTA—OXFORD**Project 145-K**

This is a grade separation of Highway No. 38 and the C. B. & Q. R. R. main line south of Atlanta, Nebraska. The structure consists of 161 feet of creosoted timber trestle, caps and stringers with a 24' roadway concrete floor. The railroad company furnished and constructed the entire substructure and timber stringers, and the State furnished the concrete floor, wood curb and wood handrails.

GOTHENBURG—FARNAM**Project 297-B2**

This structure consists of 5-25 foot creosoted timber trestle spans with concrete floor and a 24' roadway. It is a typical example of this type of bridge.

The contract for this structure was awarded to the Central Bridge and Construction Company of Wahoo, Nebraska for the sum of \$5,701.52.

THE COLUMBUS VIADUCT**Project 278-D**

Plans are complete for a grade separation of Highway No. 81 and the Union Pacific R. R. in the city of Columbus, Nebraska. The state expects to ask for bids on this work before January 1, 1931.

Two views of a soil test for these proposed foundations are shown elsewhere in this Report, together with the diagramatic chart of loading, penetrations or settlements, all synchronized with time intervals of application.

The feature of this test is the manner of obtaining a high degree of accuracy in loading the soil. A trench was excavated to the required depth and then roofed over with heavy timbers. This timber platform was made to support two tiers of metal drums of asphaltic compound weighing over 400 lbs. each. Then steel plates of proper surface area were embedded in the soil squarely under the above described load and an hydraulic jack with calibrated pressure gauge was set up between. Thus loads were transmitted by predetermined increments to the steel plates—the jack being backed up by the loaded platform above.

PLATTE RIVER ICE

Three views are shown elsewhere of ice conditions in the Platte river. The danger to bridges from floating ice is greatly reduced by dynamiting flowing ice fields. This breaks up the mass into smaller cakes which are capable of but little damage to bridge piers.

TESTING THE STRENGTH OF OLD BRIDGES**Project 2-C**

A view is shown of two ten-ton caterpillar tractors balanced on a plank which was laid cross wise to the roadway, parallel to the stream and over the center of span. This test was applied to an old concrete 17' span slab bridge south of Nebraska City on Highway No. 75 prior to paving over the top of the bridge slab. A maximum deflection of about one-tenth of an inch resulted.

**APPLICATIONS FOR STATE AID BRIDGES REMAINING ON FILE
NOV. 1, 1930**

No.	County	Bridge	Stream	Date of Application
1.	Merrick.....	Prairie Island.....	Platte	3- 7-1913
2.	Dawson.....	Willow Island.....	Platte	2-11-1914
3.	Hitchcock.....	Trenton.....	Republican	12-21-1915
4.	Keya Paha.....	Meadville.....	Niobrara	1-11-1918
5.	Platte.....	Columbus.....	Loup	9-26-1918
6.	Nance-Merrick.....	Palmer.....	Loup	11-20-1918
7.	Red Willow.....	McCook.....	Republican	2- 4-1920
8.	Antelope-			
	Madison.....	Tilden.....	Elkhorn	5-28-1920
9.	Sherman.....	Austin.....	Middle Loup	1-23-1920
10.	Custer.....	Sargent.....	Middle Loup	12-20-1923
11.	Keith.....	Brule.....	South Platte	3- 5-1925
12.	Boyd-Holt.....	Grand Rapids.....	Niobrara	12-18-1925
13.	Lincoln.....	Maxwell.....	Platte	10-21-1926
14.	Hall.....	Alda.....	Platte	10-25-1927
15.	Valley.....	Ord.....	North Loup	7-10-1928
16.	Keith.....	Roscoe.....	North Platte	7-31-1928
17.	Morrill.....	Bayard.....	North Platte	9- 3-1929
18.	Hamilton-			
	Merrick.....	Chapman.....	Platte	3- 4-1930

DIVISION OF ACCOUNTS AND RECORDS
APPROPRIATION FOR THE BIENNIUM OF JULY 1, 1929,
TO JUNE 30, 1931
DEPARTMENT OF PUBLIC WORKS

Code No.

180	Salary of Secretary	\$ 15,000.00
S. A. Road, Administration and Engineering		
181	Salaries and Wages (To be paid out of receipts from 3¢ Tax on Gasoline)	283,000.00
182	Maintenance (To be paid out of receipts from 3¢ Tax on Gasoline)	70,000.00
183	Salaries and Wages (Bureau of Irrigation).....	37,380.00
184	Maintenance (Bureau of Irrigation)	25,200.00
185	Special Survey (Bureau of Irrigation)	25,000.00
State Highway Administration and Purchase Auto License Plates		
186	2½ % of Motor Vehicle Registration Fees, Balance and Estimated Fees	190,000.00
186B	Motor Vehicle Operators License	137,280.00
187A	Enforcement Motor Vehicle Laws (From Gas Tax)	30,000.00
Public Improvements		
187	Road Maintenance, 30 % of Motor Vehicle Registration, including Unexpended Balance	2,200,000.00
188	Road Maintenance from Gasoline Tax.....	3,550,000.00
189	All Funds Derived from a 3¢ per gallon Gasoline Tax, not otherwise appropriated for Road Purposes to be Distributed as Provided by Law, Estimated	8,400,000.00
190	Paving—State Institution (From Gas Tax).....	80,000.00
193	State Aid Bridges	200,000.00
194	Federal Aid Road Fund. All Federal Aid Road Moneys Received During the Biennium Ending June 30, 1931, Together with any Unexpended Balance on Hand June 30, 1929, Estimated.....	5,000,000.00
196	Irrigation Building, Bridgeport	10,000.00
715	Cash Aid Road Fund	250,000.00

This division is required to make up quarterly estimates, estimating the amounts necessary during the quarter for salaries and wages, supplies, expenses, parts and repairs, equipment, public improvements, etc., the amount of the quarterly estimate for each appropriation being limited to one-eighth of the appropriation for the biennium.

In the preliminary work for awarding contracts on projects and patrols, this division sends out about five hundred copies of Notices to Contractors, and handles the publication of notices in the proper newspapers; handles all certified checks filed with bids; writes up the minutes of meeting at which contracts are awarded; makes up the proper number of contracts, from five to seven copies being necessary on each one, and mails them to the proper parties.

Progress estimates on construction work made up by the men in the field and approved by the proper District Engineer, also final estimates made up and checked by the engineers in the office and approved by the proper District Engineer, are again checked by this division and vouchers issued on the proper funds, and sent to contractor for certification before a Notary Public. On the return of these vouchers they are passed on to the Tax Commission office for payment. Payments have been made promptly to contractors in all cases.

Requisitions for supplies and equipment for the office and field, for maintenance equipment and gravel for maintenance, are handled through this division, as are also all payrolls and expense vouchers for construction work, the Bureau of Irrigation, and the Motor Vehicle Division. All stenographic work and the filing of all records with reference to construction work on roads and bridges are handled by this division.

DIVISION OF RIGHT OF WAY

The State Legislature in 1927 enacted legislation which authorizes and empowers the Department of Public Works to purchase right of way direct from the land owner, or, if unable to agree with him on the matter of price, to have the same appraised in the same manner as counties are authorized to condemn property for county purposes. Water courses may be changed, and borrow dirt, clay surfacing and gravel may also be obtained in this manner, although up to the present time the law has not been invoked to secure gravel. It is the policy of the Department of Public Works however, to avail itself of the condemnation feature of the law only as a last resort and but comparatively few cases have been instituted. Occasionally, the Department of Public Works is requested by administrators of estates, guardians of minors, etc., to use this method of purchase in order to protect themselves from criticism and this also gives the Department of Public Works title to the property where otherwise the title might be difficult to secure.

The Federal Government does not participate in the purchase of the right of way for highways but does pay one-half of the cost of borrow dirt, clay surfacing and channel changes on Federal Aid projects.

In negotiating for right of way or road materials it is usual for a representative of the Department of Public Works and the land owner to enter into a contract for the sale and purchase of the land or material required. Where possible the requirements are specifically stated in the contract and the full purchase price agreed upon, but in cases of borrow dirt or clay surfacing it is not unusual to contract by the acre, and payment is made on the actual acreage used. After the amount has been arrived at, a voucher is prepared by the Department of Public Works and presented or mailed to the claimant for his signature and acknowledgment. After this has been done and the voucher returned, it is approved by the proper District Engineer, the Right of Way Engineer and by the Secretary of the Department of Public Works, following which it is passed to the Department of Finance. In appraisal or condemnation cases, the County Judge signs the voucher instead of the land owner and includes all costs of the appraisal, which are always borne by the Department of Public Works, and disbursements are made through the County Judge's office.

The expenditures for Right of Way from April 23, 1927, the date on which legislation enacted by the 1927 Legislature authorized the Department of Public Works to acquire right of way, to November 17, 1928, as given in the 1927-1928 report totaled **\$204,203.23**.

During the 1929-1930 biennium, on account of necessary relocations and the increase in paved roads which generally require extra widths of right of way, and on account of the increased funds for construction from the extra cent of gas tax, a resulting increase in activities of the Division of Right of Way has steadily taken place. In addition to the Right of Way Engineer, two assistants have been used on field work and also a stenographer in the Lincoln office was necessary.

The following table shows the total amount spent for right of way in each county, and includes all road materials and channel changes, beginning November 18, 1928, and ending October 24, 1930, both dates inclusive, and includes all purchases for which a voucher has been approved with a total number of transactions of 1,384.

STATEMENT OF ITEMIZED EXPENDITURES FOR RIGHT OF WAY FROM
NOVEMBER 20, 1928 TO OCTOBER 24, 1930

County	RIGHT OF WAY	Borrow Dirt		Clay Surfacing		Channel Change		TOTAL
		State Only	Federal Aid	State Only	Federal Aid	State Only	Federal Aid	
Adams.....	\$ 600.00	\$ 642.27	\$ 642.27	\$.....	\$.....	\$ 67.50	\$ 67.50	\$ 2,019.54
Antelope.....	682.72	1,631.21	1,497.20	567.97	567.97			4,947.07
Arthur.....								
Banner.....								
Blaine.....	2,526.95	50.00	50.00					2,626.95
Boone.....	54.00	20.00	20.00					94.00
Box Butte.....	477.20	243.50	243.50					964.20
Boyd.....	276.10	5.00						281.10
Brown.....								
Buffalo.....	1,849.98	555.10	555.10					2,960.18
Burt.....	1,294.54							1,294.54
Butler.....	7.50	36.54						44.04
Cass.....	28,713.34	333.70	333.70			158.32	158.32	29,697.39
Cedar.....	15,482.65	1,699.42	1,674.42			193.60	193.60	19,243.69
Chase.....	1,417.33							1,417.33
Cherry.....	801.72	86.05	86.05	657.42	557.16			2,188.40
Cheyenne.....	2,551.52	405.05	405.04			22.67	22.67	3,406.95
Clay.....	425.00					470.00		895.00
Colfax.....	19,702.97	1,640.07	1,343.12					22,686.16
Cuming.....	422.32					18.48		440.80
Custer.....	6,210.60	145.38	145.38	422.54	272.52	85.71	85.72	7,367.85
Dakota.....	15,372.25	2,151.79	2,151.80			50.00	50.00	19,775.82
Dawes.....	5,656.79	740.00				124.10	124.10	6,644.99
Dawson.....	1,553.57	164.63	12.50			36.00	36.00	1,802.70
Deuel.....	1,001.00							1,001.00
Dixon.....	7,485.53	540.99	540.98					8,567.50
Dodge.....	13,895.85	1,613.27	1,313.28					16,822.40
Douglas.....	30.00	46.13	46.12					122.25
Dundy.....	662.00							662.00
Fillmore.....	153.20							153.20
Franklin.....	342.00							342.00
Frontier.....	187.10							187.10
Furnas.....	12,098.62	987.50	987.50					14,123.62
Gage.....	1,156.22					25.00	25.00	1,275.93
Garden.....	250.00					119.71		300.00
Garfield.....								
Gosper.....	8,245.27							8,245.27
Grant.....	5,217.30	500.00		1,243.60	243.60			7,204.50
Greeley.....	4,822.83	386.25	302.25					5,511.33
Hall.....	16,224.81	797.70	797.70	227.50	227.50			18,275.21
Hamilton.....	948.50	417.00		1,220.50				2,586.00
Harlan.....	6,609.60	100.00	100.00					6,809.60
Hayes.....								
Hitchcock.....	248.50							248.50
Holt.....	477.50	411.50	331.50	50.00	50.00			1,320.50
Hooker.....	423.62							423.62
Howard.....	18,727.58	691.35	276.78			498.75	498.75	20,693.25
Jefferson.....	931.41	1,896.64		100.00				2,928.05
Johnson.....						25.00	25.00	50.00
Kearney.....		1,471.18	1,471.17					2,942.35
Keith.....	1,525.90	275.00		200.00				2,000.90
Keya Paha.....								
Kimball.....	16.00							16.00
Knox.....	4,869.79	274.90				71.35		5,216.04
Lancaster.....	26,136.42	360.00	360.00			91.50	91.50	27,039.42
Lincoln.....	6,955.81	1,790.75	803.75	1,586.18	1,401.63	675.00	500.00	13,713.12
Logan.....								
Loup.....								
Madison.....	409.15	1,635.96	1,587.97	277.50	277.50	1,500.00	1,500.00	7,188.10
McPherson.....				100.00	100.00			200.00
Merrick.....	15,129.58	3,414.16	3,414.15					21,957.89

DEPARTMENT OF PUBLIC WORKS

147

STATEMENT OF ITEMIZED EXPENDITURES FOR RIGHT OF WAY FROM
NOVEMBER 20, 1928 TO OCTOBER 24, 1930—Concluded

County	RIGHT OF WAY	Borrow Dirt		Clay Surfacing		Channel Change		TOTAL
		State Only	Federal Aid	State Only	Federal Aid	State Only	Federal Aid	
Morrill.....	5,792.13	37.50	37.50	60.00	60.00			5,987.13
Nance.....	3,812.00	949.00				898.00		5,659.00
Nemaha.....	5,692.55	65.00						5,757.55
Nuckolls.....						75.00	75.00	150.00
Otoe.....	1,667.12					100.00	100.00	1,867.12
Pawnee.....	151.00	90.87	90.86					332.73
Perkins.....				345.00				345.00
Phelps.....	1,500.00							1,500.00
Pierce.....		238.75	238.75	100.00	100.00			677.50
Platte.....	6,097.64	1,059.16	1,059.16			30.87	30.88	8,277.71
Polk.....	240.26	714.63	365.42			200.00		1,520.31
Red Willow.....	26,363.45	819.52	819.51	58.06	58.06	502.09	502.09	29,122.78
Richardson.....	2,227.50	574.98	574.98			90.00	90.00	3,557.46
Rock.....		67.50		60.00				127.50
Saline.....	4,416.60							4,416.60
Sarpy.....	9,502.85	560.53	560.53					10,623.91
Saunders.....	11,582.14	522.08	522.06	114.10		240.00		12,980.38
Scotts Bluff.....	3,056.23	75.00	75.00					3,206.23
Seward.....	4,936.01	213.37	213.38			125.00	125.00	5,612.76
Sheridan.....	4,575.12	100.00	100.00	624.84	624.83			6,024.79
Sherman.....	1,902.25					100.00		2,002.25
Sioux.....	3,560.05							3,560.05
Stanton.....	60.00	162.50	162.50			57.50	57.50	500.00
Thayer.....	1,512.66							1,512.66
Thomas.....								
Thurston.....	2,302.15							2,302.15
Valley.....	2,370.01							2,370.01
Washington.....	10,087.57	1,813.50	1,813.49			40.80	40.80	13,796.16
Wayne.....								
Webster.....	4,207.30							4,207.30
Wheeler.....								
York.....								
Total.....	\$378,874.71	\$36,223.94	\$28,126.37	\$ 8,065.21	\$4,540.77	\$6,691.95	\$4,399.44	\$466,922.39

DIVISION OF TESTS

Function, Organization, and Needs

The functions of this division are to test or otherwise analyze all materials used or offered for use in the construction and maintenance of State and Federal Aid Roads and Bridges and to report on the acceptability or advisability of using such materials.

This work is done under an agreement between the Department of Public Works and the State University, by the terms of which the University furnishes the necessary office and laboratory facilities, the testing equipment, and the personnel for making and reporting all tests and for making field inspections and investigations of various materials. Payments are made for this service by the Department directly to the University, such payments being based upon a nominal monthly allowance in addition to an agreed price for each test. The test price, however, varies with the amount of testing done each month.

Professor C. M. Duff of the Department of Applied Mechanics, College of Engineering, University of Nebraska, is in charge of this work and is designated as the Materials and Testing Engineer by the Department of Public Works. To assist Professor Duff, who devotes part time to teaching during the school year, the University employs from twelve to twenty-five office and laboratory assistants. The number required is seasonal and varies with the amount of material received for test. During the school year most of the laboratory men work only part time, which is a very desirable arrangement at present due to the crowded conditions of the laboratory and necessity of using much of the present equipment for regular University classes during part of the day. This makes it necessary to do a considerable part of the testing before and after regular class periods, which can be done more economically with part time assistants. This arrangement also gives a number of students an opportunity to make part of their school expenses while attending the University and at the same time it is usually possible to select men who are more capable to do the work accurately and efficiently than would be possible with the employment of all full time men. This also prevents the necessity of laying off the regular help during the period when construction work is at a stand still.

Most of the testing is done in the Department of Applied Mechanics Laboratories at the University of Nebraska, except where certain materials are tested at the manufacturer's plant or where temporary laboratories are established on certain projects where field control is necessary or desirable. Temporary laboratories are established for most of the paving projects during their construction period where

such tests as grading of aggregate, moisture determination, and transverse tests of concrete beams are made. Inspectors are placed at most of the gravel pits from which road gravel or concrete aggregate is obtained for the purpose of testing the grading prior to shipment. Where gravel is shipped from the pit without inspection, an inspector is usually placed on the project to test the material as it is received. Most of this field work is done under the supervision of the Assistant Construction Engineer or District Engineer and the inspector makes his own reports, which are not reported through the testing laboratory at the University. However, frequent samples are submitted to the Testing Engineer as checks and for more complete tests.

The amount of testing done at the University laboratory is growing very rapidly. The total number of tests made during each of the past four biennial periods was as follows: 1923-24, 2755; 1925-26, 5902; 1927-28, 7166; and 1929-30, 15,661. This rapid increase in testing is taxing the facilities of the University to the limit and unless some steps are taken soon to provide for future expansion it will be impossible to adequately take care of this work. If the Testing Division is to continue under the supervision of the University the time is opportune for making permanent arrangements for the future. If the Legislature will make the necessary appropriation a joint building with the University could no doubt be arranged for on the city campus and located west of the new power plant, which was jointly constructed by the Capitol Commission and the University. The construction of such a building could be planned to take care of all the testing for the Department as well as to provide necessary class rooms and laboratories for all courses offered by the University in Mechanics and Strength of Materials. Such an arrangement would mean a large saving to the State due to unnecessary duplication of testing equipment that would result if the Department found it necessary to construct an independent laboratory. The location mentioned would be convenient for University class work in connection with the rest of the Engineering College buildings, and would offer excellent railroad and trucking facilities which are very necessary for the adequate handling of materials to be tested and their disposal after completion of tests.

During the past year the University has provided two additional rooms on the first floor of the Mechanic Arts building for office and laboratory use to alleviate the existing congested and inadequate facilities for efficient testing. While this expansion temporarily relieved to a certain extent the overcrowded working conditions for carrying on the required testing of this Department, it also deprived the University of class room space that it could ill afford to spare and additional laboratory space is still badly needed.

Considerable new equipment and testing apparatus has been added during the past year. Recently a Southwark-Emery Universal Testing Machine having a capacity of 300,000 pounds in compression was installed. This machine is of the hydraulic type, but the weighing system is entirely independent of the cylinder pressure and has a sensitiveness and accuracy unobtainable in the ordinary hydraulic machine. The machine has many advantages over the screw and lever type machine and with a fifty per cent higher loading capacity makes a very valuable addition to the testing laboratory. All concrete compression tests are now made on this machine.

Importance of Proper Sampling and Testing

In order for testing to occupy the important place that it should, it is necessary to have the complete cooperation of the entire field organization as the sampling of materials is usually done by men from this group. If the samples submitted for test are not representative and are not taken by men having judgment, skill and honesty no amount of care and accuracy in the testing laboratory can produce a correct report. The importance of careful, accurate, and intelligent sampling cannot be over emphasized, for if sampling is done by careless, incompetent and dishonest persons the testing is of little value, and may result in the approving of materials that should be rejected or of rejection of materials that should be accepted and in this way work an unjust hardship on some innocent party.

In submitting samples to the laboratory for test special care should be taken to have them delivered without damage or loss of material. Correct test results cannot be obtained where such materials as sand-gravel or other aggregates are submitted in burlap bags which permit the loss of fine materials. Samples should always be accompanied by a complete and accurate statement covering all the available information obtainable, which should include the source of material, the date and by whom sampled, quantity represented, kind of structure in which the material is to be used, etc.

As far as possible the testing and analyzing of all materials is done according to standard methods. This is necessary in order that the results obtained in one locality will be comparable with those obtained in any other. Where applicable either the methods outlined in the United States Department of Agriculture Department Bulletin No. 1216, "Tentative Standard Methods of Sampling and Testing," or the Standard and Tentative Standards of the American Society for Testing Materials, are used. Occasionally it becomes necessary to improvise special tests which are not standard in order to determine the suitability and acceptability of certain materials. Since various tests are materially affected by temperature conditions, shape of specimen, speed at which testing machines are operated, duration of tests and

many other conditions, it is very important that these different conditions be given proper consideration. Where the recognized standards for testing are followed most of these conditions are taken into consideration.

Materials

Portland cement is probably the most outstanding material used in highway construction from the standpoints of cost and quantity used. This product has been changed somewhat during the past few years and two of the more noticeable resulting characteristics are finer grinding and high early strength obtainable in from twenty-four hours to three days. The specifications have repeatedly been made more rigid, and during the past year the seven and twenty-eight day strength requirements for mortar briquettes have again been increased. However, no trouble has been experienced in obtaining cement that meets all the requirements of the specifications.

Concrete aggregate no doubt is the next most important highway material. While some crushed stone and fine aggregate has been used, the most common aggregate is sand-gravel, most of which is obtained by pumping. A notable fact concerning the production of sand-gravel is the numerous locations from which it is obtained and the proximity of these points of production to the place where it is to be used. At some locations trouble has been experienced in obtaining material free from clay balls, but by proper stripping and careful inspection most of this trouble has been overcome. Some crushed stone has been used, but the production of this material is limited largely to the southeastern part of the State. Many of the rock formations are not suitable for concrete aggregate due to their being too soft.

Concrete, which is a product resulting from a mixture of cement, aggregate, and water, is to most people a very familiar product, yet there is probably no material entering a structure that is more susceptible to variations in strength and quality. No recent changes have been made in the requirements for the various classes specified. Different classes of concrete are produced by varying the proportions of the ingredients, but due to the many variables such as kind of cement and aggregate used, grading of aggregate, length of mixing time, method of curing, etc., it is not possible to produce concrete without some variations in strength and quality. With the use of more improved methods of proportioning and mixing, these variations have been materially reduced and under the present specifications a uniformly high strength concrete is being produced. Occasionally where due care in proportioning has not been exercised, where excess water has been used, or where the aggregate contains objectionable foreign material or has been either too fine or too coarse, the resultant concrete has been found to be unsatisfactory.

Steel products are susceptible to very accurate uniformity of production and should give no cause for failure to comply with specifications. However, some trouble has been experienced in obtaining satisfactory materials in this group, and a number of rejections have been made. Most of the trouble has been due to the tendency of manufacturers to furnish under-size or under-weight material although a few samples have been found to be under-strength. These deficiencies appear to be caused by the manufacturer's trying to produce material that just satisfies the minimum tolerance of the specifications rather than the average values intended.

Culvert pipes are divided into two distinct groups: Those manufactured from corrugated galvanized iron and those manufactured from reinforced concrete. The corrugated iron pipes are of the flexible type and the tests made on them are for the purpose of determining the gage or thickness of metal used and the amount of spelter coating on the iron. The reinforced concrete pipes are of the rigid type and the quality of the product is determined by its load-carrying capacity. Both classes of pipe, with but few exceptions, have shown very satisfactory test results.

Clay for surfacing sandy or light soil roads prior to graveling also occupies a rather prominent place in road construction in this State. The locating of acceptable supplies is often a rather difficult task and requires considerable judgment on the part of the engineer submitting samples. In this type of construction not only the quality of the material must be considered but also the economic location of such supplies. Many samples of clay surfacing material are submitted for tests which are found to be unsatisfactory.

In addition to the many other materials tested for use in construction work and which are incorporated in the structure, such supplies as lubricating oils and other materials necessary to the proper operation of construction and maintenance equipment are tested and analyzed. Since lubricating oils have been supplied on the basis of specifications and testing has been introduced to assure strict compliance with the specifications, a much more satisfactory product has been obtained.

Research Work

Research work has not been given the attention that its importance demands, which is due largely to the lack of a special research appropriation. If funds could be made available for research fellowships at the University various types of investigations could be undertaken that would be of great value to the State.

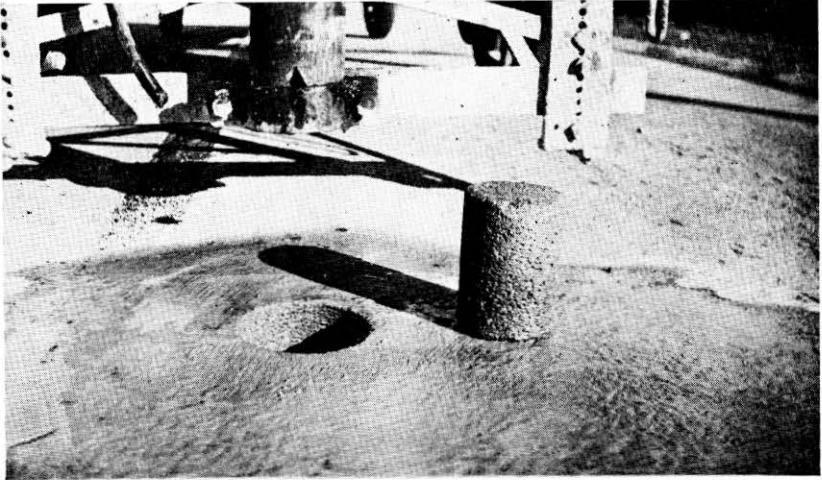
A number of materials involved in Nebraska highway construction are not common to other states and in order to use these materials to

the best advantage special studies should be made to determine their suitability.

Most of the research work performed during the past biennium has been done in connection with routine testing. A correlation and study is being made of the results obtained from various methods of testing concrete. This includes a comparison of compression tests for concrete cylinders made at the time of construction and tested at seven and twenty-eight days; of transverse tests made on concrete beams at various ages and with varying span lengths; of compression tests on concrete prisms obtained from the transverse testing of beams; and of compression tests made on concrete cores obtained from the pavement.

With the advent of road oil for use in highway construction many new problems present themselves both from the standpoint of specifications covering the types of oil and other materials to be used and the methods of construction. Nebraska has many miles of sand-hill roads which do not have sufficient traffic to warrant the construction of pavements of the higher types. Very satisfactory roads can be constructed in these sections by surfacing the sand with about eight inches of clay and then surfacing the clay with about two inches of gravel. One of the principal disadvantages of this type of construction is the inability to obtain economically, suitable material for clay surfacing, and attention is now being directed to the use of oil as a stabilizing agent. Several experimental sections of sand-hill roads have been constructed by using only the original material found in the roadway to which various types of asphaltic oils have been added. The oils used have varied from fuel oils with a 60% to 70% asphalt content to 120 penetration cut-back asphalt, and a very marked difference has been observed in the type of surfaces produced. Where fuel oil is used the material tends to compact, but does not mat or form a hard surface. A very thin crust forms over the surface which disintegrates easily with the use of most any type of maintenance equipment. With the cut-back asphalts the tendency is for the surface to become hard and rigid on top and more or less brittle, while the bottom remains rather soft and spongy and lacks stability. The yielding of the soft material under the top crust causes the surface to crack and check, which tends to produce disintegration of the top surface. This condition is very similar to that found in a dirt road when it starts to surface dry after being muddy. At the present time the road surfaces constructed with fuel oils having a 75% to 85% asphalt content with a low volatilization loss appear most promising. The oils used are being thoroughly analyzed to determine their properties. It has been found that two oils producing entirely different types of road surfaces may satisfy the same specifications where the requirements include only viscosity, asphalt content, loss of heating,

solubility, flash point, gravity, and water content. Just what requirements and tests should be made on road oils is a subject that should receive very careful consideration. There is much need of research in this field not only to determine the kind of oil best suited for a given type of aggregate but also to develop efficient and economical methods of construction.



Cores are cut from new pavement to make tests for thickness and for compressive strength.

**SUMMARY OF LABORATORY
TESTS MADE DURING PAST FOUR BIENNIAL PERIODS**

Material	Biennium			
	1923-24	1925-26	1927-28	1929-30
Abrasions (Stone and Gravel)				41
Asphalt (Paving)	33	21	11	7
Asphalt (Emulsified Products)				11
Bituminous Concrete (Analysis).....		31	106	28
Bituminous Concrete Aggregate.....		30	6	10
Brick Paving	2	34		
Cement	725	1044	951	4281
Clay	42	319	1082	692
Clay Pipe				7
Clay Tile				
Compression	6			12
Absorption				4
Concrete				
Beams				494
Cores		137	13	959
Cylinders	938	1658	2109	4311
Prisms				846
Creosote Oil		37	52	43
Creosoted Timber and Piling		42	45	20
Culvert Pipe				
Concrete	1	69	154	110
Corrugated Metal	23	613	803	792
Flumes (Galvanized Iron)				18
Gravel	933	1211	813	990
Guard Rail				
Cable		21	30	45
Woven Wire		56	136	23
Joint Filler				16
Lubricating Oil				246
Oiled Aggregate (Analysis)			85	59
Paint	13	67	14	7
Pile Capping				10
Reinforcing				
Bars	38	491	554	1004
Mesh		9	10	61
Reventment Cable				49
Road Oil				
Highway Construction			29	160
Dust Palliative				23

REPORT OF SECRETARY

Material	Biennium			
	1923-24	1925-26	1927-28	1929-30
Road Signs			13	.....
Sewer Pipe			4	3
Snow Fence			2	16
Steel Piling			62	56
Steel Posts		7	8	69
Stone	1		28	.....
Sub-Soil (Analysis)			42	81
Unclassified (Miscellaneous)			2	7
Water		5	2	50
TOTAL	2755	5902	7166	15,661

DIVISION OF MOTOR VEHICLE REGISTRATION

The Automobile Department was organized in 1913 with a registration of 25, 617 cars, increasing as follows to 1928 with percentage of increase based upon 1913 registrations.

Year	Number	Total % Increase	% Increase Annually
1913	25,617	.0	.0
1914	40,929	59.8	59.8
1915	59,140	130.9	44.5
1916	100,534	292.4	70.0
1917	148,101	478.1	47.3
1918	175,409	584.7	18.4
1919	210,000	719.8	19.7
1920	221,000	762.7	05.2
1921	238,704	831.8	08.0
1922	256,654	901.9	07.5
1923	286,053	1016.7	11.5
1924	310,000	1110.1	08.4
1925	338,719	1222.2	09.3
1926	366,773	1331.7	08.2
1927	373,912	1359.6	01.9
1928	393,077	1434.4	05.1
1929	418,226	1532.3	06.4
1930 Approx.	450,000	1656.6	07.6

The division of Motor Vehicle Registration under the office of Secretary of State was transferred in 1919 by the Legislature to the Department of Public Works under the office of State Engineer.

At this time the Treasurers of the various counties were appointed by the Department of Public Works to act as agents of the Department for the purpose of registering Motor Vehicles and in the collection of all automobile registration fees in their counties.

The Legislature provided that while acting as agents for the Department of Public Works, the County Treasurers should retain from the funds collected for automobile registration five cents (5¢) for each original Motor Vehicle registration, said five cents (5¢) to be accounted for as other fees passing through their hands. After five cents (5¢) was deducted the County Treasurers transmitted to the State Treasurer two and one-half percent ($2\frac{1}{2}\%$) of all such funds collected by them; said two and one-half percent ($2\frac{1}{2}\%$) to be credited to the State General Fund, and when appropriated to be used by the Department of Public Works to pay the cost of administration of the Motor Vehicle law together with the cost of all automobile

license plates, and the supervision of the maintenance of the state highways. It was further provided that after January 1, 1926, thirty percent (30%) of the balance remaining (after deduction of the five cents (5¢) by the County Treasurer for each registration and the two and one-half percent (2½%) for the State General Fund) should be transmitted by the County Treasurers of the various counties to the State Treasurer and credited to the State Highway Fund out of which Fund is allowed claims for the maintenance of the State Highway System.

In 1922 the state went from central distribution of automobile license plates to distribution directly by the County Treasurers.

All applications for Motor Vehicle registration are forwarded to the Department of Public Works where they are filed numerically in counties by registration number and alphabetically by name of applicant, also, a record of each make or kind of car is filed according to motor number with cross references in each instance to the registration number assigned to such Motor Vehicle. The records are kept by card index and are open to the public during reasonable business hours. The new system of using two forms of receipts for Motor Vehicle registration which required but one writing of the receipt for renewals was brought about by agitation on the part of quite a few County Treasurers six years ago in which some of them claimed that the law did not require the County Treasurers to furnish but one copy. As a result of this agitation, the Department worked out a system that would meet with our demands and make possible a reduction of the work for which they were asking. The result of this was the two forms of receipt which for the greater majority of certificates written requires but one operation. There has been a growing enthusiasm on the part of the County Treasurers ever since this was instituted in favor of this new system. Incidentally, it has greatly reduced the work in this office and makes possible our keeping up the records in a much more up-to-date condition, also eliminates employing extra help for six or seven months each year.

The Motor Vehicle Operators License Law was enacted by the 1929 Legislature effective September 1, 1929. All applications for license to operate a motor vehicle made by persons resident in a county are transmitted to the County Treasurer of said county and a distinguishing number assigned to each license issued; the application is accompanied by a fee of 75 cents of which 25 cents is retained by the County Treasurer as his official fee and is included in his report of fees as provided by law.

The County Treasurer or persons appointed by the County Treasurer to receive and approve applications for driver's licenses shall be entitled to a fee of 25 cents for the service rendered; the remain-

ing 25 cents is remitted to the State Treasurer and credited to the Motor Vehicle Operator's License Fund.

The operator's license is for the period of the licensee's continuous legal residence in the State of Nebraska.

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, Jan. 1, to Dec. 31, 1928

County	REGULAR		TRUCKS		FARM TRUCKS		BUSSES		MOTOR CYCLES		TRAILERS	
	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.
Adams.....	\$ 59,630.28	6512	\$ 5,321.66	334	\$ 228.00	29	\$ 2,371.50	16	\$ 70.00	21	\$ 124.64	47
Antelope.....	36,798.78	4297	5,426.77	321	66.00	8	102.00	1	14.00	4	25.25	35
Arthur.....	2,860.05	357	489.88	36	8.00	1	.....	.....	.....	.....	.....	.....
Banner.....	4,342.68	490	3,422.63	171	178.00	33	.....	.....	8.00	2	.....	.....
Blaine.....	3,116.15	371	502.88	34	136.00	17	.....	.....	.....	.....	2.00	2
Boone.....	35,898.27	4265	4,501.06	269	709.00	93	109.00	1	11.00	5	10.25	11
Box Butte.....	25,061.83	2875	6,192.05	397	587.00	80	130.00	1	1.00	2	35.06	24
Boyd.....	15,781.16	1867	2,079.13	105	52.75	6	.....	.....	22.00	6	.....	.....
Brown.....	12,581.87	1490	1,918.42	113	122.00	19	.....	.....	8.00	2	13.25	13
Buffalo.....	62,669.16	7135	9,646.48	617	107.00	14	137.00	1	74.00	19	222.18	163
Burt.....	34,221.96	3950	6,456.63	352	27.00	4	.....	.....	45.00	13	26.25	28
Butler.....	34,681.25	3925	3,854.20	215	.....	.....	.....	.....	48.00	13	19.00	19
Cass.....	41,902.00	4877	8,151.58	465	96.00	15	109.00	1	74.00	23	10.00	10
Cedar.....	37,933.35	4463	5,996.11	297	173.00	24	.....	.....	28.00	8	17.25	19
Chase.....	3,165.11	453	978.90	80	576.00	72	.....	.....	2.00	1	22.50	26
Cherry.....	18,873.62	2203	4,350.17	265	.....	.....	.....	.....	21.00	5	15.50	19
Cheyenne.....	27,603.54	2926	2,919.13	183	.....	.....	0.00	2	16.00	4	19.50	12
Clay.....	33,898.81	3864	2,941.79	174	912.50	121	116.00	1	14.00	5	78.75	97
Colfax.....	30,273.98	3417	7,798.15	386	372.00	51	.....	.....	2.00	1	34.00	21
Cuming.....	37,037.70	4277	4,664.72	250	1,612.00	206	.....	.....	12.00	5	50.75	13
Custer.....	59,232.16	6995	5,345.09	363	2,277.00	294	109.00	1	36.00	12	141.93	155
Dakota.....	18,891.89	2257	2,468.89	135	406.00	50	.....	.....	31.00	11	4.75	8
Dawes.....	24,835.65	2759	3,917.41	275	.....	.....	.....	.....	8.00	3	5.50	6
Dawson.....	45,061.71	5175	8,256.98	507	77.00	18	.....	.....	45.00	11	363.51	291
Deuel.....	10,787.72	1198	2,884.39	182	1,239.00	173	.....	.....	15.00	6	16.00	10
Dixon.....	23,960.62	2851	4,001.53	210	210.00	28	144.00	1	4.00	1	1.50	2
Dodge.....	67,874.99	7536	14,098.94	643	1,089.75	137	3,578.00	23	85.00	27	40.75	35
Douglas.....	425,540.40	45145	97,392.25	4132	8.00	1	3,951.50	26	729.00	218	374.50	51
Dundy.....	9,702.33	1175	2,274.76	139	27.00	8	.....	.....	.....	.....	31.00	32
Fillmore.....	33,676.84	3905	4,148.78	255	75.00	20	.....	.....	35.00	10	62.25	71
Franklin.....	22,993.04	2670	1,641.26	113	50.00	9	.....	.....	6.00	2	51.75	49
Frontier.....	19,333.04	2389	4,514.53	296	75.00	20	.....	.....	1.00	1	34.38	27
Furnas.....	30,325.56	3488	3,938.29	248	24.00	3	.....	.....	8.00	2	212.00	51
Gage.....	71,842.71	8184	10,621.63	646	480.00	58	782.50	5	58.00	17	174.02	153
Garden.....	11,216.21	1314	696.50	46	1,462.00	191	0.00	1	.....	.....	14.00	16
Garfield.....	7,603.71	929	483.00	26	82.00	12	.....	.....	4.00	1	3.50	5
Gosper.....	11,404.92	1380	1,833.50	124	4.00	1	.....	.....	2.00	1	27.00	31
Grant.....	3,761.57	420	380.63	21	8.00	1	.....	.....	.....	.....	.....	.....
Greely.....	20,254.98	2406	1,520.73	92	180.00	23	.....	.....	29.00	7	14.50	17
Hall.....	68,589.40	7583	11,052.45	659	13.00	2	496.00	7	174.00	50	130.25	108
Hamilton.....	40,301.46	4587	4,368.78	276	150.00	25	172.00	6	44.00	13	93.14	90
Harlan.....	20,855.14	2424	1,923.00	129	56.00	7	109.00	1	14.00	3	210.14	89
Hayes.....	8,126.15	986	2,898.15	190	192.00	26	.....	.....	.....	.....	10.50	11
Hitchcock.....	15,395.66	1895	3,450.06	238	74.00	10	.....	.....	21.00	6	39.05	46
Holt.....	29,792.46	3609	4,940.18	282	32.00	4	.....	.....	7.00	2	.....	.....
Hooker.....	3,363.54	411	450.75	24	85.00	11	.....	.....	.....	.....	12.25	12
Howard.....	25,415.41	2952	2,486.26	155	309.00	41	.....	.....	21.00	6	48.25	59
Jefferson.....	41,664.29	4816	5,563.69	323	93.00	25	.....	.....	38.00	11	77.50	78
Johnson.....	23,110.17	2761	4,201.42	224	2.00	1	.....	.....	22.00	6	35.00	40
Kearney.....	21,789.54	2511	2,868.91	178	173.00	24	.....	.....	4.00	1	195.25	160
Keith.....	15,726.44	1796	6,053.90	355	42.00	6	.....	.....	24.00	7	9.00	10
Keya Paha.....	6,350.15	773	1,371.38	86	32.00	4	.....	.....	6.00	2	65.04	37
Kimball.....	11,532.14	1351	6,926.76	388	494.00	89	.....	.....	26.00	10	3.75	6
Knox.....	40,078.52	4811	6,734.66	373	376.00	55	.....	.....	37.00	9	20.25	29
Lancaster.....	242,184.15	26264	38,086.17	2105	74.00	14	1,551.64	32	606.00	180	254.13	168

DEPARTMENT OF PUBLIC WORKS

161

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, Jan. 1, to Dec. 31, 1928

DEALERS		TRANSFERS		LOST PLATES		LOST CERTIF.		REFUND		TOTALS			
Fees	Plt's	Fees	No.	Fees	No.	Fees	No.	Amt.	No.	Plates	Total Reg.	Fees	
\$ 1,051.38	98	57	2,704.12	1516	\$ 64.00	64	\$ 43.00	43	\$ 5.25	1	7016	8639	\$ 71,608.58
585.88	44	44	1,351.14	769	42.00	43	63.00	65	.....	.....	4710	5587	44,474.82
61.50	5	5	167.48	105	.....	.....	20.00	20	15.00	6	399	524	3,606.91
.....	.....	.....	252.67	131	2.00	3	18.00	19	14.50	2	696	849	8,223.98
37.00	4	4	132.36	92	1.00	1	5.00	5	.....	.....	428	526	3,932.39
496.75	45	45	1,624.12	934	55.00	55	12.00	12	.....	.....	4689	5690	43,426.45
582.88	52	52	1,364.59	739	25.00	25	344.00	345	74.56	15	3431	4540	34,323.41
183.26	18	18	741.51	405	8.00	8	20.00	20	.....	.....	2002	2435	18,887.81
262.13	25	20	557.79	289	6.00	6	77.00	77	30.50	6	1657	2029	15,546.46
1,186.38	105	105	3,485.58	1750	70.00	71	244.00	243	.....	.....	8054	10118	77,841.78
575.29	44	44	1,649.56	869	25.00	25	132.00	131	5.00	1	4391	5416	43,158.69
440.60	39	39	1,156.45	734	26.00	26	46.00	45	.....	.....	4211	5016	40,271.50
690.89	59	60	2,102.45	1095	43.00	43	92.00	92	119.19	28	5451	6681	53,270.92
696.13	54	54	1,691.64	946	41.00	41	71.00	71	46.87	12	4865	5923	46,647.48
65.40	8	8	374.22	235	7.00	7	22.00	22	4.00	1	640	904	5,213.13
456.75	29	29	957.75	492	9.00	9	88.00	92	7.25	1	2521	3114	24,772.79
652.63	60	60	1,218.99	625	22.00	24	193.00	193	31.75	6	3187	4029	32,644.79
532.50	47	42	1,433.62	882	21.00	22	49.00	49	10.00	3	4304	5257	39,997.97
545.13	45	45	1,160.27	594	31.00	31	48.00	48	.....	.....	3921	4594	40,264.53
456.38	36	26	1,220.96	649	27.00	33	53.00	57	.....	.....	4777	5516	45,134.51
1,040.88	103	103	3,401.43	1907	93.00	93	289.00	306	18.00	2	7923	10229	71,965.49
26.26	2	2	853.27	432	26.00	25	29.00	30	63.50	15	2463	2950	22,731.06
510.00	47	47	1,366.09	700	23.00	23	106.00	99	9.75	2	3090	3912	30,773.65
640.39	64	50	2,437.44	1291	42.00	43	133.00	133	.....	.....	6052	7519	57,057.03
144.38	11	11	501.34	279	10.00	10	19.00	19	.....	.....	1580	1888	15,616.83
462.75	35	35	721.49	438	28.00	28	24.00	24	.....	.....	3128	3618	29,557.89
1,134.75	94	44	3,503.64	1857	63.00	63	189.00	189	16.25	6	8445	10554	91,657.82
6,252.25	479	199	20,905.81	9806	621.00	628	3,433.00	3535	1,250.11	9	49772	63741	559,207.71
160.06	14	14	316.09	223	3.00	3	6.00	6	.....	.....	1368	1600	12,520.18
470.89	32	29	1,267.07	762	19.00	19	67.00	70	23.25	7	4290	5141	39,821.83
274.13	27	22	1,326.77	773	13.00	13	23.00	23	.....	.....	2865	3674	26,378.95
312.26	30	30	1,043.05	629	22.00	22	112.00	115	.....	.....	2763	3529	25,447.26
975.63	76	55	1,645.52	967	13.00	13	117.00	127	24.75	6	3847	4954	37,259.00
1,088.13	100	100	3,475.43	1898	50.00	50	259.00	259	180.12	40	9163	11370	88,831.42
228.00	20	20	463.12	287	2.00	2	28.00	28	.....	.....	1588	1905	14,109.83
110.50	10	10	385.17	233	7.00	7	14.00	14	.....	.....	983	1237	8,692.88
36.00	4	4	513.73	329	6.00	6	16.00	16	.....	.....	1541	1892	13,863.15
96.50	7	7	179.83	102	2.00	2	11.00	11	9.75	2	449	564	4,439.53
270.25	26	26	497.70	288	13.00	13	19.00	19	15.75	4	2571	2891	22,799.16
1,245.90	104	52	4,017.80	2155	119.00	119	211.00	211	315.65	69	8461	10946	86,048.80
434.88	32	32	1,566.17	938	26.00	26	59.00	60	72.50	13	5029	6053	47,215.43
343.50	38	28	947.20	557	19.00	19	47.00	35	.....	.....	2681	3292	24,523.98
61.50	4	4	379.30	256	7.00	6	9.00	8	.....	.....	1217	1487	11,683.60
245.75	20	20	604.19	410	3.00	3	16.00	16	36.00	8	2215	2644	19,848.71
415.25	31	31	1,197.31	642	29.00	31	21.00	22	56.50	10	3928	4623	36,434.20
209.00	15	15	187.88	88	1.00	1	24.00	24	.....	.....	473	586	4,333.42
330.00	29	29	1,046.32	585	16.00	16	30.00	30	.....	.....	3242	3873	29,702.24
741.88	63	42	2,643.46	1478	48.00	48	233.00	233	51.63	10	5295	7054	51,102.82
501.63	44	44	1,259.32	680	31.00	31	63.00	63	.....	.....	3076	3850	29,225.54
111.00	11	10	1,076.64	601	17.00	17	40.00	40	.....	.....	2884	3542	26,275.34
424.75	28	28	726.68	411	7.00	7	42.00	42	57.00	11	2202	2662	23,055.77
50.88	3	3	248.80	139	6.00	6	11.00	11	.....	.....	905	1061	8,141.25
225.39	17	17	603.82	305	10.00	10	39.00	39	.....	.....	1861	2215	19,860.86
516.50	44	36	1,737.02	1009	31.00	31	120.00	120	16.75	12	5133	6473	49,650.95
3,554.64	293	237	11,932.31	6334	357.00	339	1,989.00	1982	784.60	158	29000	36655	300,569.04

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, Jan. 1, to Dec. 31, 1928

County	REGULAR		TRUCKS		FARM TRUCKS		BUSSES		MOTOR CYCLES		TRAILERS	
	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.
Lincoln.....	51,404.62	5834	9,413.33	628	10.00	2	130.00	2	48.00	14	115.50	77
Logan.....	4,178.38	512	273.00	21	211.00	27	.....	.....	.....	.....	7.50	7
Loup.....	3,998.89	496	626.90	38	118.00	17	.....	.....	3.00	1	17.00	5
Madison.....	60,662.37	6740	11,715.73	587	1,316.00	165	.....	.....	89.00	26	140.52	39
McPherson.....	3,023.02	376	869.02	59	4.00	1	.....	.....	.....	.....	5.00	5
Merrick.....	27,462.72	3176	3,915.90	240	390.00	49	.....	.....	10.00	3	45.00	47
Morrill.....	21,027.13	2511	3,962.03	236	358.00	72	17.50	1	10.00	3	24.00	27
Nance.....	21,836.70	2582	3,786.64	208	89.00	13	.....	.....	12.00	3	21.75	15
Nemaha.....	30,823.30	3505	4,934.20	297	34.00	6	0.00	5	51.00	15	17.00	21
Nuckolls.....	30,118.40	3491	3,104.68	200	139.00	22	.....	.....	7.00	2	28.38	32
Otoe.....	49,418.71	5715	10,569.06	618	71.00	15	0.00	1	42.00	12	44.50	14
Pawnee.....	23,176.58	2736	2,880.02	168	28.00	4	.....	.....	17.00	5	26.00	29
Perkins.....	14,224.01	1656	6,432.39	356	263.00	50	.....	.....	10.00	4	36.00	34
Phelps.....	25,088.98	2882	2,567.40	183	128.00	16	.....	.....	28.00	8	742.25	317
Pierce.....	28,547.13	3325	4,742.29	263	157.00	20	.....	.....	15.00	3	2.75	4
Platte.....	51,462.74	5810	10,954.29	579	149.00	23	158.00	1	28.00	9	28.50	10
Polk.....	27,636.81	3118	5,120.51	317	.....	.....	109.00	1	11.00	3	47.39	50
Red Willow..	30,897.90	3856	5,866.04	356	121.00	26	109.00	3	28.00	9	20.25	20
Richardson..	47,503.85	5274	8,217.53	441	88.00	17	.....	.....	39.00	12	115.75	126
Rock.....	6,003.67	773	1,251.26	82	104.00	12	.....	.....	.....	.....	15.00	19
Saline.....	42,086.78	4809	7,613.93	442	1,021.00	158	.....	.....	19.00	7	32.38	35
Sarpy.....	22,648.20	2677	4,749.28	293	87.00	19	.....	.....	52.00	15	3.50	3
Saunders.....	55,398.98	6348	9,357.80	501	1,066.00	146	137.00	1	60.00	17	11.75	16
Scotts Bluff..	61,928.77	7255	15,876.35	857	797.00	189	204.00	13	39.00	12	25.00	31
Seward.....	41,823.45	5044	6,578.23	388	206.00	40	274.00	4	55.00	15	69.75	77
Sheridan.....	24,149.32	2786	5,220.82	351	113.00	15	.....	.....	20.00	5	21.00	22
Sherman.....	17,923.22	2132	1,747.89	117	58.00	8	.....	.....	13.00	4	30.50	34
Sioux.....	7,251.70	842	1,853.88	123	32.00	4	.....	.....	5.00	1	.....	.....
Stanton.....	20,133.16	2340	2,223.13	109	354.00	47	.....	.....	.....	.....	4.00	3
Thayer.....	34,281.67	3983	4,225.56	262	179.00	21	174.00	2	4.00	1	98.14	100
Thomas.....	3,091.92	398	447.63	31	61.00	8	.....	.....	.....	.....	2.25	2
Thurston.....	18,232.93	2220	2,566.76	139	328.00	41	.....	.....	19.00	5	9.50	4
Valley.....	23,118.39	2635	2,242.76	137	.....	.....	.....	.....	12.00	3	22.00	28
Washington..	32,690.86	3832	4,414.92	232	.....	.....	.....	.....	30.00	9	26.00	10
Wayne.....	29,168.72	3413	2,265.13	124	874.00	114	361.00	3	22.00	6	9.50	10
Webster.....	24,717.05	2858	2,997.76	191	.....	.....	109.00	1	53.00	14	58.50	61
Wheeler.....	4,040.52	506	286.63	18	32.00	4	.....	.....	.....	.....	7.00	10
York.....	45,364.24	5146	5,630.27	347	16.00	2	400.00	2	40.00	11	157.11	151
TOTALS.....	\$3,157,452.01	359312	\$542,928.90	30041	\$ 24,929.00	3557	\$16,150.64	167	\$3,501.00	1032	\$5,590.39	4007

DEPARTMENT OF PUBLIC WORKS

163

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, Jan. 1, to Dec. 31, 1928

DEALERS			TRANSFERS		LOST PLATES		LOST CERTIF.		REFUND		TOTALS		
Fees	Plt's	App.	Fees	No.	Fees	No.	Fees	No.	Amt.	No.	Plates	Total Reg.	Fees
1,023.50	88	55	3,144.48	1708	58.00	58	516.00	523	251.12	54	6612	8901	65,863.43
45.00	4	4	187.92	104	4.00	4	2.00	2	.....	.....	571	681	4,908.80
18.50	2	2	177.25	120	.....	.....	6.00	6	.....	.....	559	685	4,965.54
986.13	77	48	2,920.78	1497	61.00	62	177.00	180	.....	.....	7605	9344	78,068.53
47.50	3	3	202.76	119	.....	.....	8.00	8	.....	.....	444	571	4,159.30
360.13	35	35	1,209.26	720	40.00	40	76.00	77	48.25	10	3550	4387	33,509.01
396.75	34	34	1,218.58	694	35.00	35	161.00	162	.....	.....	2884	3775	27,209.99
315.88	25	26	902.87	509	23.00	23	75.00	76	24.50	4	2847	3455	27,062.84
400.70	35	27	1,563.70	818	22.00	22	91.00	91	4.00	1	3876	4807	37,936.90
432.13	41	30	1,509.18	850	9.00	9	64.00	64	39.50	9	3777	4700	35,411.77
619.50	55	55	2,411.53	1352	29.00	29	125.00	126	196.00	39	6430	7937	63,330.30
208.50	18	12	1,086.15	666	21.00	21	45.00	45	14.00	5	2954	3686	27,488.25
286.63	26	26	570.22	365	9.00	9	37.00	37	.....	.....	2126	2537	21,868.25
261.50	23	21	1,131.63	681	21.00	20	48.00	48	.....	.....	3427	4176	30,016.76
420.00	32	21	1,168.05	620	36.00	36	99.00	99	58.00	10	3636	4391	35,187.22
795.63	64	39	2,072.02	1112	61.00	61	213.00	215	.....	.....	6471	7859	65,922.18
381.76	31	24	1,060.21	582	35.00	35	23.00	23	44.25	8	3513	4153	34,424.68
927.88	81	54	1,597.74	896	48.00	49	176.00	177	151.75	37	4324	5446	39,791.81
549.65	46	34	2,318.72	1286	62.00	62	186.00	186	.....	.....	5904	7438	59,080.50
46.50	4	4	205.84	138	1.00	1	6.00	7	.....	.....	890	1036	7,633.27
742.26	63	63	1,674.77	993	31.00	31	94.00	94	73.12	17	5514	6632	53,315.12
213.50	15	14	1,093.61	562	30.00	30	48.00	48	84.00	19	3021	3661	28,925.09
642.88	58	58	2,043.17	1167	47.00	47	151.00	155	.....	.....	7087	8456	68,915.58
1,156.50	93	93	3,822.52	1846	133.00	133	690.00	693	180.89	35	8450	11122	84,672.14
458.00	48	36	1,959.98	1108	37.00	37	90.00	90	.....	.....	5604	6839	51,551.41
755.89	64	48	1,300.68	649	33.00	32	55.00	55	.....	.....	3227	3963	31,668.71
354.00	28	28	757.27	456	17.00	17	60.00	60	.....	.....	2323	2856	20,960.88
49.00	4	4	249.17	118	6.00	6	2.00	2	.....	.....	974	1100	9,448.75
124.63	10	10	766.07	412	15.00	15	25.00	26	.....	.....	2509	2962	23,644.99
787.39	75	53	1,657.03	963	20.00	20	61.00	60	8.50	3	4422	5465	41,487.79
171.25	16	16	167.04	91	2.00	1	38.00	38	2.50	2	455	585	3,981.09
250.88	21	21	631.40	355	18.00	18	12.00	13	.....	.....	2430	2816	22,068.47
382.38	36	25	1,001.67	549	26.00	26	39.00	40	.....	.....	2828	3443	26,844.20
290.00	30	30	1,801.84	938	34.00	34	83.00	83	.....	.....	4113	5168	39,370.62
160.25	15	14	1,150.22	679	23.00	23	20.00	21	67.31	15	3684	4407	34,053.82
356.50	27	27	1,125.01	686	7.00	7	24.00	25	37.50	9	3152	3870	29,447.82
53.50	6	6	128.81	83	.....	.....	5.00	5	.....	.....	544	632	4,553.46
845.38	73	73	2,520.63	1401	52.00	51	104.00	104	.....	.....	5732	7288	55,129.63
\$49,523.22	4180	3366	\$150,836.26	80533	\$3,394.00	3414	\$13,225.00	13372	\$4,699.92	1001	401482	498801	\$3,967,530.42

REPORT OF SECRETARY

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT

Lincoln, Nebraska, Jan. 1, to Dec. 31, 1929

County	REGULAR		FARM TRUCKS		TRUCKS		BUSSES		MOTOR CYCLES		TRAILERS	
	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.
Adams.....	\$ 60,930.38	6462	\$ 1,097.00	143	\$ 6,617.68	351	\$ 5,741.50	47	\$ 64.00	19	\$ 167.50	72
Antelope.....	38,145.27	4420	1,109.00	138	3,855.56	199	102.00	1	16.00	4	65.73	80
Arthur.....	3,052.91	360	448.00	56	487.38	33	.....	.....	.....	.....	.50	2
Banner.....	4,268.64	471	1,297.00	161	963.40	62	.....	.....	6.00	2	.....	.....
Blaine.....	3,454.11	423	244.00	31	422.50	20	.....	.....	.....	.....	6.25	7
Boone.....	36,043.55	4194	1,585.00	198	3,284.01	179	.....	.....	12.00	4	24.50	29
Box Butte.....	27,714.94	3142	2,174.00	275	4,448.91	333	130.00	1	39.00	14	60.13	42
Boyd.....	13,642.82	1588	362.00	45	1,593.27	82	.....	.....	30.00	8	59.88	32
Brown.....	13,041.10	1535	469.00	59	1,657.27	96	.....	.....	6.00	2	67.75	46
Buffalo.....	6,482.29	7187	1,648.75	203	9,367.14	511	337.00	5	41.00	13	332.63	273
Burt.....	36,380.66	4108	1,279.13	159	5,371.13	222	.....	.....	28.00	8	45.75	42
Butler.....	39,666.73	4385	2,086.00	264	3,415.38	164	.....	.....	23.00	8	42.75	42
Cass.....	45,117.87	5089	2,106.00	269	7,049.18	373	144.00	1	93.00	26	16.00	16
Cedar.....	39,781.58	4607	1,116.00	141	5,503.63	264	.....	.....	13.00	3	36.25	36
Chase.....	13,131.55	1581	1,174.50	147	1,470.15	143	.....	.....	16.00	4	96.00	79
Cherry.....	20,834.39	2383	1,150.00	142	2,485.29	157	.....	.....	8.00	2	31.50	34
Cheyenne.....	27,264.44	2955	4,919.00	641	3,185.52	212	.....	.....	8.00	2	27.75	33
Clay.....	35,867.32	4058	1,539.76	192	2,868.02	197	.....	.....	23.00	7	210.75	215
Colfax.....	31,950.33	3567	2,542.00	314	4,098.27	184	.....	.....	22.00	5	21.25	25
Cuming.....	39,602.49	4458	2,037.50	256	2,963.39	145	.....	.....	16.00	5	52.25	26
Custer.....	65,950.29	7600	3,210.00	405	6,417.19	403	0.00	2	29.00	8	347.37	277
Dakota.....	20,636.97	2397	893.00	115	2,205.64	120	.....	.....	30.00	10	49.75	9
Dawes.....	27,135.93	2915	649.50	80	3,942.95	258	.....	.....	19.00	6	33.00	20
Dawson.....	47,561.95	5364	1,594.03	200	6,482.00	409	.....	.....	57.00	17	421.25	358
Deuel.....	11,251.61	1241	1,886.00	243	1,629.65	143	.....	.....	14.00	5	55.00	35
Dixon.....	26,560.64	3099	639.00	80	3,220.27	156	140.00	1	.....	.....	8.00	8
Dodge.....	72,810.83	7944	2,567.00	320	12,845.69	559	3,975.00	33	70.00	22	130.13	64
Douglas.....	474,778.26	49145	1,533.00	194	114,781.02	4717	4,252.75	13	699.00	211	457.63	101
Dundy.....	11,242.18	1361	1,259.00	157	1,293.51	102	.....	.....	3.15	2	36.50	44
Fillmore.....	35,468.07	4034	1,446.00	187	2,613.15	149	.....	.....	25.00	7	129.00	152
Franklin.....	24,699.51	2836	1,208.00	154	2,423.63	123	.....	.....	13.00	5	63.00	65
Frontier.....	20,950.02	2474	1,939.00	243	1,703.66	111	.....	.....	11.00	3	55.49	50
Furnas.....	31,723.37	3591	959.00	120	3,574.03	201	.....	.....	16.00	5	163.25	89
Gage.....	77,195.71	8607	2,454.51	315	10,610.45	588	1,690.50	15	75.00	25	227.75	199
Garden.....	12,540.39	1454	1,958.50	248	789.38	56	.....	.....	6.00	2	10.00	14
Garfield.....	7,745.18	935	302.00	38	497.00	32	.....	.....	2.00	1	19.75	25
Gosper.....	11,916.91	1391	871.00	109	997.50	60	.....	.....	4.00	1	34.25	33
Grant.....	3,539.01	377	270.00	34	262.13	16	.....	.....	.....	.....	2.25	3
Greeley.....	17,307.46	2016	436.00	55	1,340.80	80	0.00	1	34.00	10	24.50	30
Hall.....	73,099.96	7933	1,273.00	157	11,882.30	673	2,007.00	17	231.00	63	314.80	174
Hamilton.....	34,498.64	3844	1,497.00	189	2,791.04	162	214.00	5	21.00	10	209.88	124
Harlan.....	22,557.31	2577	287.00	36	3,082.26	202	109.00	1	4.00	1	258.88	128
Hayes.....	9,307.05	1118	848.00	109	2,741.85	154	.....	.....	.....	.....	11.50	13
Hitchcock.....	17,323.80	2086	1,782.80	228	1,919.51	159	.....	.....	12.00	5	76.75	85
Holt.....	31,668.09	3766	1,525.00	193	3,230.03	203	.....	.....	2.25	2	60.38	66
Hooker.....	3,747.52	443	206.00	26	395.25	25	.....	.....	.....	.....	14.50	23
Howard.....	25,727.97	2938	977.50	121	2,290.63	119	.....	.....	19.00	6	88.00	87
Jefferson.....	44,729.11	5051	1,388.00	182	5,301.32	284	.....	.....	28.00	8	109.25	109
Johnson.....	25,641.22	3027	560.00	72	3,553.14	191	.....	.....	24.00	7	48.25	59
Kearney.....	22,676.86	2561	834.00	106	2,160.00	128	.....	.....	13.00	4	228.75	181
Keith.....	17,849.91	1898	1,979.00	258	2,895.14	172	.....	.....	10.00	4	12.75	13
Keya Paha.....	6,713.86	816	431.00	56	761.76	53	.....	.....	.....	.....	107.47	44
Kimball.....	12,343.19	1432	1,964.00	251	3,585.15	281	.....	.....	22.00	6	12.13	12
Knox.....	42,531.89	5058	1,712.00	220	4,499.77	243	.....	.....	32.00	7	24.25	29
Lancaster.....	257,737.90	27336	1,822.00	235	43,644.15	2079	3,194.00	39	495.00	149	292.89	227

DEPARTMENT OF PUBLIC WORKS

165

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, Jan. 1, to Dec. 31, 1929

DEALERS			TRANSFERS		LOST PLATES		LOST CERTIF.		REFUND	TOTALS			
Fees	Plt's	App.	Fees	No.	Fees	No.	Fees	No.	Amt.	No.	Plates	Total Reg.	Fees
\$ 1,355.25	119	48	\$ 3,073.70	1771	\$ 51.00	51	60.00	58	.....	.....	7142	9022	\$ 79,158.01
543.50	41	41	1,839.52	1084	35.00	35	105.00	105	.....	.....	4883	6107	45,816.58
87.50	5	5	186.78	102	.....	.....	14.00	14	194.00	30	456	572	4,277.07
.....	.....	.....	298.60	158	4.00	4	6.00	6	1,047.88	96	696	864	6,843.64
78.50	7	7	181.85	127	1.00	1	2.00	2	.....	.....	488	618	4,390.21
629.25	53	53	1,732.36	1093	55.00	55	19.00	19	.....	.....	4657	5824	43,384.67
579.76	52	52	1,573.22	913	16.00	16	218.00	219	68.69	14	3859	5007	36,953.96
252.75	18	18	627.12	388	7.00	7	40.00	39	.....	.....	1773	2207	16,614.84
366.13	29	25	603.44	400	6.00	6	56.00	56	150.38	22	1763	2225	16,272.69
1,485.00	118	118	3,503.43	1815	63.00	64	374.00	352	905.65	118	8310	10541	81,934.24
637.28	43	43	1,942.58	1073	20.00	20	141.00	142	1,038.48	135	4582	5817	45,845.53
485.50	40	40	1,449.71	963	28.00	28	98.00	98	.....	.....	4903	5992	47,295.09
901.75	74	74	2,426.26	1402	47.00	47	136.00	136	1,311.58	181	5848	7433	58,037.06
750.75	56	56	2,168.50	1233	38.00	38	57.00	55	395.70	63	5107	6433	49,464.71
199.90	17	17	695.20	504	5.00	5	42.00	43	146.25	15	1971	2523	16,830.30
460.76	29	29	1,207.36	675	12.00	10	109.00	79	128.38	17	2747	3511	26,298.30
752.38	64	64	1,207.80	728	40.00	40	177.00	177	.....	.....	3907	4852	37,581.89
647.13	46	40	2,003.55	1227	17.00	18	80.00	82	55.75	11	4709	6036	43,256.53
542.63	39	39	1,397.17	808	28.00	28	74.00	73	1,595.88	158	4134	5043	40,675.65
396.50	35	22	1,670.67	978	31.00	31	52.00	59	47.75	4	4912	5980	46,821.80
1,219.50	105	105	4,043.14	2364	65.00	67	363.00	345	197.38	39	8800	11576	81,644.49
133.50	11	11	962.92	562	9.00	9	40.00	42	86.63	8	2662	3275	24,960.78
494.01	40	40	1,103.83	626	25.00	24	85.00	60	63.13	8	3319	4029	33,488.22
1,027.88	78	52	3,055.38	1676	54.00	54	151.00	156	590.88	72	6400	8286	60,404.49
204.13	14	14	658.67	378	15.00	15	21.00	20	454.50	43	1681	2094	15,735.06
553.50	37	37	1,192.66	726	16.00	16	46.75	24	70.00	8	3381	4147	32,376.82
1,379.87	108	52	4,079.38	2310	43.00	44	218.00	221	1,052.25	112	8994	11569	98,118.90
6,458.75	487	196	23,370.76	11893	665.00	633	3,758.00	3634	4,214.24	692	54577	70737	630,754.17
262.13	23	23	933.72	547	6.00	6	4.00	4	.....	.....	1689	2246	15,040.19
666.01	47	46	1,893.42	1133	19.00	20	95.00	97	869.70	113	4575	5825	42,354.65
532.50	41	38	1,316.71	753	15.00	15	22.00	19	.....	.....	3221	4008	30,293.35
252.50	19	19	1,586.87	825	6.00	6	113.00	114	.....	.....	2900	3845	26,627.54
776.00	57	39	1,805.99	1034	20.00	21	142.00	144	32.25	6	4045	5244	39,179.64
1,336.00	111	111	4,214.12	2297	72.00	72	289.00	286	574.92	85	9860	12515	98,165.04
283.50	21	21	757.94	439	6.00	6	44.00	30	16.00	4	1795	2270	16,395.71
161.75	12	12	344.77	243	10.00	10	6.00	6	.....	.....	1041	1300	9,088.45
86.50	10	10	706.96	460	5.00	5	14.00	15	.....	.....	1604	2084	14,636.12
128.00	10	10	173.81	90	.....	.....	15.00	13	91.50	8	440	543	4,390.20
333.60	24	24	626.55	368	20.00	20	30.00	29	202.05	26	2216	2633	20,152.91
1,483.75	128	60	4,448.68	2415	139.00	139	255.00	254	614.80	115	9077	11885	95,134.49
465.00	35	35	1,609.40	1034	30.00	30	68.00	66	66.75	15	4369	5499	41,403.96
457.50	43	29	1,210.25	722	11.00	11	16.00	13	36.25	6	2974	3720	27,993.20
146.50	9	9	732.30	467	5.00	5	23.00	22	97.25	16	1403	1897	13,815.20
407.88	29	29	1,131.01	717	3.00	3	17.00	14	77.89	16	2592	3326	22,673.75
672.75	41	41	1,313.67	792	19.00	20	38.00	35	170.63	24	4271	5118	38,529.17
170.50	11	11	191.27	114	4.00	4	24.00	23	55.00	5	528	669	4,753.04
229.63	27	27	1,117.80	675	25.00	26	30.00	30	.....	.....	3298	4029	30,555.53
928.50	77	41	2,527.77	1532	31.00	31	196.00	171	663.38	82	5675	7409	55,238.95
492.25	40	40	1,524.00	858	23.00	22	78.00	78	.....	.....	3396	4354	31,943.86
255.88	23	23	1,164.56	693	9.00	9	55.00	52	.....	.....	3003	3757	27,397.05
440.51	33	33	1,001.15	592	14.00	14	77.00	74	1,708.62	186	2378	3058	24,279.46
39.50	3	3	703.12	320	2.00	2	5.00	7	.....	.....	972	1301	8,363.71
291.00	20	20	352.31	393	27.00	27	36.00	35	1,703.38	168	2002	2457	19,032.78
445.01	40	32	2,058.43	1260	20.00	20	159.00	155	1,072.38	135	5589	7024	51,482.35
4,206.13	336	212	12,507.56	7458	373.00	377	1,689.00	1665	1,728.46	334	30277	39777	325,961.63

REPORT OF SECRETARY

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, Jan. 1, to Dec. 31, 1929

County	REGULAR		FARM TRUCKS		TRUCKS		BUSSES		MOTOR CYCLES		TRAILERS	
	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.
Lincoln.....	56,659.38	6166	2,470.00	306	7,306.84	471	181.00	3	29.00	8	119.63	118
Logan.....	4,313.27	524	136.00	20	563.25	32	.....	.....	.....	.....	23.63	21
Loup.....	4,153.63	496	290.00	37	225.00	12	.....	.....	.....	.....	31.00	29
Madison.....	65,274.59	7134	2,817.00	346	11,260.82	559	118.50	3	64.00	20	309.91	98
McPherson.....	3,173.80	382	260.00	33	541.00	52	.....	.....	.....	.....	11.00	7
Merrick.....	28,895.25	3317	1,270.00	161	3,405.55	196	.....	.....	14.00	6	98.88	92
Morrill.....	21,422.22	2464	1,711.00	211	1,632.76	131	.....	.....	.....	.....	19.00	22
Nance.....	22,047.29	2570	1,193.00	150	2,177.63	101	.....	.....	32.00	9	48.94	32
Nemaha.....	31,793.35	3255	650.00	81	4,891.60	252	0.00	4	39.00	11	19.00	25
Nuckolls.....	32,461.41	3667	860.00	110	2,753.89	166	.....	.....	14.00	5	89.52	69
Otoe.....	52,879.42	6025	3,429.00	432	6,356.40	364	0.00	1	81.00	23	59.25	37
Pawnee.....	24,378.78	2813	621.00	79	2,907.75	154	.....	.....	12.00	2	43.75	56
Perkins.....	15,361.32	1781	2,697.00	355	2,545.89	195	0.00	5	4.00	1	111.75	75
Phelps.....	27,390.15	3095	1,560.50	199	2,366.13	147	.....	.....	23.00	8	546.50	278
Pierce.....	28,545.54	3266	1,270.00	160	3,794.64	168	.....	.....	15.00	4	12.75	20
Platte.....	54,295.93	6061	2,826.00	352	6,752.16	341	.....	.....	41.00	12	18.75	26
Polk.....	29,276.40	3270	2,144.00	274	3,013.13	157	.....	.....	.....	.....	75.91	76
Red Willow...	34,539.77	3932	1,813.00	231	3,919.41	245	0.00	4	29.00	11	44.00	51
Richardson...	49,731.89	5468	1,360.00	172	6,586.18	340	.....	.....	26.00	7	137.15	151
Rock.....	6,534.25	835	412.00	52	1,221.76	81	.....	.....	3.00	2	28.88	32
Saline.....	45,441.91	5073	3,772.00	494	3,791.03	249	.....	.....	14.00	5	96.00	102
Sarpy.....	26,127.78	3028	1,809.00	225	3,696.87	186	17.50	1	50.00	14	5.50	8
Saunders.....	58,213.78	5725	3,189.00	405	7,212.63	400	246.00	2	33.00	9	20.25	24
Scotts Bluff..	67,731.36	7720	5,537.00	692	9,625.06	786	452.50	4	48.00	14	35.75	47
Seward.....	44,620.14	4947	2,418.00	314	5,099.92	258	214.00	3	41.00	12	210.50	156
Sheridan.....	27,152.13	3025	113.00	16	7,033.43	474	.....	.....	17.00	5	54.00	43
Sherman.....	21,703.72	2486	583.00	74	1,753.77	105	.....	.....	6.00	2	55.00	51
Sioux.....	8,268.55	941	1,145.50	144	685.01	59	.....	.....	5.00	2	3.25	4
Stanton.....	21,612.22	2445	1,585.00	201	746.26	48	.....	.....	.....	.....	21.25	22
Thayer.....	39,385.21	4439	844.00	108	4,088.14	231	218.00	2	.....	.....	182.00	214
Thomas.....	3,429.17	419	80.00	10	430.26	32	.....	.....	7.00	2	4.75	7
Thurston.....	18,794.86	2239	567.00	70	2,172.52	120	.....	.....	10.00	3	7.25	5
Valley.....	24,286.97	2719	1,174.00	147	2,242.54	113	.....	.....	9.00	2	39.75	46
Washington...	33,876.34	3845	1,636.00	207	4,456.76	214	.....	.....	30.00	8	19.50	20
Wayne.....	32,155.85	3671	1,270.00	160	2,792.01	152	532.00	4	4.00	2	47.75	22
Webster.....	26,937.16	3053	570.00	72	3,159.26	177	.....	.....	21.00	5	116.00	106
Wheeler.....	4,428.15	536	576.00	73	391.50	23	.....	.....	.....	.....	5.50	6
York.....	46,227.37	5257	1,052.00	133	5,983.56	275	372.00	3	30.00	10	383.63	236
TOTALS....	\$3,387,372.27	375725	\$133,254.48	16876	\$483,052.35	25404	\$24,388.25	221	\$3,235.40	972	\$8,660.25	6515

DEPARTMENT OF PUBLIC WORKS

167

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, Jan. 1, to Dec. 31, 1929

DEALERS			TRANSFERS		LOST PLATES		LOST CERTIF.		REFUND		TOTALS		Fees
Fees	Plt's	App.	Fees	No.	Fees	No.	Fees	No.	Amt.	No.	Plates	Total Reg.	
1,241.06	103	58	2,865.00	1471	71.00	72	779.00	781	667.75	102	7130	9454	71,721.91
50.00	4	4	374.38	203	3.00	3	6.00	6	.....	.....	601	813	5,469.53
12.00	1	1	218.84	141	.....	.....	.....	.....	.....	.....	575	716	4,930.47
1,228.76	84	48	3,400.81	1903	60.00	60	185.00	190	.....	.....	8208	10361	84,719.39
114.00	7	7	334.45	158	.....	.....	26.00	25	43.75	7	481	664	4,460.25
541.63	39	39	1,713.39	927	49.00	49	93.00	94	735.83	99	3811	4881	36,080.70
454.01	37	37	1,183.79	625	21.00	22	187.00	183	.....	.....	2865	3695	26,630.78
356.25	25	25	1,025.65	655	22.00	22	102.00	113	932.19	108	2887	3677	27,004.76
399.65	34	24	1,594.70	894	35.00	35	98.00	95	.....	.....	3652	4676	39,520.30
313.25	27	19	1,578.39	908	10.00	10	64.00	64	399.95	57	4036	5018	38,144.46
842.88	63	63	2,650.66	1606	47.00	49	186.00	190	.....	.....	6945	8790	66,531.61
290.50	25	16	1,056.44	633	13.00	12	61.00	62	.....	.....	3120	3827	29,384.22
533.00	41	41	967.13	623	17.00	17	26.00	26	.....	.....	2453	3119	22,263.09
303.38	26	26	1,238.61	830	14.00	14	47.00	48	4.75	1	3753	4645	33,489.27
433.26	29	19	1,033.47	665	25.00	25	103.00	104	116.50	18	3637	4431	35,232.66
893.13	76	41	2,412.83	1440	62.00	62	261.00	262	.....	.....	6833	8597	67,562.80
451.63	34	24	1,511.04	867	28.00	28	63.00	63	65.12	14	3801	4759	36,563.11
1,226.63	99	56	1,765.05	1076	47.00	47	399.00	370	710.00	104	4530	6023	43,782.86
533.50	48	33	2,236.98	1399	63.00	63	182.00	166	.....	.....	6171	7799	60,856.70
90.50	6	6	300.91	189	2.00	2	5.00	6	112.00	11	1008	1205	8,598.30
917.75	70	70	1,962.93	1251	29.00	29	147.00	146	86.37	18	5993	7419	56,171.62
288.00	19	19	1,350.93	696	22.00	22	65.00	67	964.26	132	3481	4266	33,432.58
1,016.88	75	75	2,481.77	1550	43.00	43	452.00	190	.....	.....	6640	8423	72,908.31
1,268.39	101	101	4,231.63	2354	112.00	112	716.00	658	2,201.10	224	9364	12488	89,757.69
659.64	66	46	2,264.59	1343	44.00	43	79.00	77	.....	.....	5736	7199	55,650.79
963.88	66	44	1,720.18	856	35.00	35	67.00	67	.....	.....	3607	4565	37,155.62
317.50	28	28	1,009.42	574	7.00	7	31.00	26	155.00	20	2746	3353	25,466.41
105.00	8	8	405.98	221	6.00	6	11.00	11	.....	.....	1158	1396	10,635.29
142.50	10	10	928.75	571	19.00	19	32.00	32	.....	.....	2726	3348	25,086.98
1,031.00	75	51	2,067.86	1158	25.00	25	65.00	58	33.50	5	5045	6286	47,906.21
141.00	13	13	149.05	83	1.00	1	17.00	18	8.12	3	483	585	4,259.23
267.00	19	19	756.78	485	14.00	14	69.00	60	.....	.....	2456	3015	22,658.41
276.00	27	21	1,036.54	647	25.00	25	13.00	15	.....	.....	3048	3735	29,102.80
321.63	30	30	1,585.70	927	23.00	23	109.00	109	.....	.....	4324	5383	42,057.93
383.25	34	34	1,266.66	815	19.00	20	21.00	23	67.25	9	4045	4903	38,491.52
432.00	36	36	1,393.41	824	14.00	14	26.00	20	8.00	2	3449	4307	32,668.83
10.00	1	1	238.42	141	1.00	1	5.00	5	.....	.....	639	786	5,655.57
1,197.25	95	95	2,463.04	1499	38.00	38	91.00	92	529.63	70	6009	7638	57,837.85
\$58,671.83	4616	3584	\$172,985.86	99416	\$3,376.00	3356	\$14,971.75	14289	\$31,437.59	4189	429297	546358	\$4,289,968.44

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**REPORT OF BUREAU OF IRRIGATION,
WATER POWER AND DRAINAGE**

**DIVISION OF IRRIGATION
DIVISION OF STATISTICS**

**Division of Water Power and Drainage
Division of Hydrography and Surveys**

REPORT OF SECRETARY

EXECUTIVES AND EMPLOYEES

BUREAU OF IRRIGATION, WATER POWER AND DRAINAGE

R. H. Willis.....	Chief
K. I. Ward, Lincoln.....	Statistician
E. Clay, Lincoln.....	Assistant Statistician
A. W. Hall, Bridgeport.....	Office Engineer
F. B. Shaffer, Bridgeport.....	Special Survey—Office Engineer
H. H. Mole, Bridgeport.....	Special Survey—Field Engineer
A. E. Johnston, Bridgeport.....	Hydrographer
C. E. Franklin, Bridgeport.....	Hydrographer
John J. Rasmussen, Crawford.....	Superintendent W. D. No. 2
Fern Sharp, Bridgeport.....	Clerk
Edna Jarmon, Bridgeport.....	Stenographer

WATER COMMISSIONERS

W. F. Chaloupka, Bridgeport.....	District 2, Division 1-A
R. F. Noskey, North Platte.....	District 6, Division 1-A
Arthur Davis, Scottsbluff.....	Acting—Division 1-A
Clarence Raish, Cozad.....	Acting—Division 1-A
S. B. Hanna, Kimball.....	District 1—Division 1-E
Chas. Gardner, Sidney.....	District 2—Division 1-E
C. T. Korell, Culbertson.....	District 1—Division 1-B
Fred Hood, Chadron.....	District 1—Division 2-D

OBSERVERS

G. F. Shelton.....	Torrington, Wyoming
A. C. Ray.....	Henry, Nebraska
C. G. Waldo.....	Mitchell, Nebraska
F. W. Smith.....	Minatare, Nebraska
Glen Mong.....	Oshkosh, Nebraska
A. W. Shilling.....	North Platte, Nebraska
Arlan Luxe.....	Julesburg, Colorado
Nils Brunzell.....	Overton, Nebraska
Loretta Stachura.....	Duncan, Nebraska
R. W. Reim.....	Ashland, Nebraska

Bridgeport, Nebraska.
November 30, 1930.

Mr. R. L. Cochran,
Secretary and State Engineer,
Department of Public Works,
Lincoln, Nebraska.

Dear Sir:

I have the privilege of submitting herewith a report of matters transpired and experiences encountered while entrusted with the supervision of the activities properly assigned to the Bureau of Irrigation, Water Power and Drainage during the biennium just ended.

Water Supply

The snow bulletin, supplied by the Forest Rangers and the United States Weather Bureau, reported an amount of snow in the higher elevations of the Platte River basin at the end of April as 128 and 66 per cent of normal for 1929 and 1930 respectively.

Although the inflow above the Pathfinder Reservoir for 1929 was sufficient to fill the Pathfinder Reservoir together with an overflow extending from May 21st to July 23rd—a period of sixty-three days, there was a restricted use of water in the Platte River basin beginning August 1st and ending September 3rd. And in spite of the snow deficit, the Pathfinder Reservoir filled in 1930 and overflowed for three days, May 11th to 13th inclusive.

The expected low flow period began about May 25th and continued until about August 7th, 1930. To give an idea how the low flow of the river was accentuated, a comparison of the ten year mean (1920 to 1929) for each month at the Mitchell gaging station with the 1930 season is shown as follows: May 32%, June 12%, July 30%, August 88% and September 113%. From July 5th to July 14th, 1930, practically no water coming from the upper section of the North Platte River reached the river bridge north of Sutherland. During that period the Birdwood Creek, with a discharge of 160 second feet, and the Lincoln County Drain, with a discharge of 103 second feet, was the only supply available for projects demanding water east of the Sutherland bridge in the Platte basin.

In the northwest part of the state, Hat Creek flows northerly into South Dakota. This stream and its tributaries were nearly dry during midsummer of 1930, not enough water flowing to satisfy the demands for domestic use. The United States Government needed water for

domestic purposes on the Ardmore Experimental Farm. A demand was made on Nebraska, through the United States Attorney of Omaha, to discontinue irrigation use in the Hat Creek basin until domestic demands could be satisfied. This situation lasted about three weeks before rain gave relief. In the meantime Ardmore received water in railroad tanks for domestic use from Belmont, Nebraska.

The flow of White River and tributaries was about normal for both years of this biennium. The Whitney Irrigation District had a very satisfactory supply from its storage reservoir both seasons. The water supply of the White River was ample for all direct flow appropriators.

The flow of the Frenchman and Republican Rivers was normal for both years. Although the demand was greater in 1930 due to scanty rainfall and high temperatures, practically no injury occurred to crops.

The Lodgepole Creek flow was normal both seasons. It is assumed that the Kimball Irrigation District was amply supplied with water from its reservoir. This district does not cooperate with the Department to the extent of furnishing data bearing on quantity of water stored or used. Hence, definite information is not available.

The discharge of the South Platte River at Julesburg ending September 30th, was 321,000 acre feet in 1929 and 306,000 acre feet in 1930. The amount passing Julesburg from May to September inclusive was 68,020 acre feet in 1929 and 62,740 acre feet in 1930.

Notwithstanding the subnormal flow of the Platte River during a part of both seasons, the Pathfinder, Gering-Fort Laramie, and Northport Irrigation Districts received an unrestricted supply of water from the Pathfinder Storage Reservoir.

Distribution

During the season of 1929 the water supply was sufficient to permit project canals diverting from the Platte River basin to take water to capacity until about the 15th of August. From August 15th until about September 1st projects were permitted to take only one second foot for each seventy acres irrigated, excepting those projects east of North Platte having rights later than September 15th, 1894, and they were closed or regulated according to the amount of water available in that section coming from local showers. After September 1st the available water supply exceeded the demand.

For the Platte River basin the 1930 season was very much more deficient in water supply than was 1929. In fact, the amount of water coming from the melting snows of the mountains was the lowest since 1910.

While the flow in the river passing Mitchell in 1930 was about 500 second feet below the amount required at that station to supply all projects in the basin as far east as Kearney with their respective legal amounts, there happened to be ample rainfall in the section east of North Platte until about the 25th of June.

There are four projects diverting water from the South Platte River east of Julesburg in Nebraska, namely: Western Irrigation District, Hollingsworth Ditch, Beal Ditch, and the Paxton Irrigation District. The Western diverted 16,526 acre feet in 1929.

Administration

The velocity of water flowing in the Platte River varies from eighteen to fifty-four miles per twenty-four hours, depending on the quantity flowing. The time required for a normal July flow to move from the Pathfinder reservoir to Kearney is about twelve to fourteen days, or ten to eleven days to North Platte. It is, therefore, necessary to anticipate the needs of the water users of the Platte River basin for one to two weeks in advance.

A good example of no administrative cooperation was exemplified on the North Platte River during the last part of June. For instance, on the 19th day of June, 2980 second feet of natural flow passed through the Pathfinder Reservoir. On the 22nd, at Whalen, Wyoming, 326 second feet of this natural flow was taken by the Pathfinder and the Gering-Fort Laramie Canals, and further diversions from this flow by other canals were made all the way to North Platte. Hence, on the first day of July, 115 second feet was the residue reaching North Platte. On the 25th of June, 2810 second feet of natural flow passed through the Pathfinder Reservoir. When this flow passed Whalen, the canals at this diversion dam diverted from it 1424 second feet. Each project after passing Whalen diverted a portion of the remainder as it moved down stream, and the last drop of the 2810 second feet was gone just before reaching the river bridge north of Sutherland. The officials in charge of distribution could have protected the senior appropriators down stream by cooperating.

In July and the first seven days in August the water from the melting snows of the mountains, together with the runoff from rainfall and return flow, was insufficient to supply all projects having direct flow rights from the Platte River basin. The rainfall in the entire basin from June 25th to August 7th was extremely scanty, and the situation intensified by very high temperatures, the temperature varying from 90 degrees to 110 degrees for twenty-one days during that period.

It was anticipated during the last half of June, 1930, that there would probably be an extreme shortage of water in the lower section of the Platte River basin after the first of July. However, no orders to close or regulate were issued until July 9th. This action was urged by complaints coming from the water users in the lower sections of the river for three or four days prior to the issuance of this order. The order provided that projects dating later than March 23, 1900, be closed and all others be reduced to the legal amount of their appropriations. As the water supply was rapidly growing less and the demands greater, an order from the Lincoln office was issued on the 12th of July, instructing water commissioners to close canals to the natural flow dating later than December 22, 1890, and to reduce the flow of other projects to the legal amount of their respective appropriations as modified by the 1930 acreage reports. This order continued in effect until August 11th, after which date the available water supply exceeded the demand.

Under the doctrine of priority, projects were regulated, closed, or partially closed in times of scarcity as a duty of the department to protect appropriators.

There are projects diverting in Wyoming having priority dates later than 1902 with capacities aggregating approximately 3800 second feet that, without cooperation between Wyoming and Nebraska, can do irreparable damage to projects in Nebraska anti-dating 1902 in times of scarcity.

During the period of scarcity in July, 1930, the department cooperated with the State Engineer of Wyoming in regulating diversions of the Platte River basin in the order of priority. However, this arrangement did not go into effect until July 9th, and the experiment resulted in greater satisfaction over former years.

Hydrography

Stream measurements were made during the past biennium with the same corps of hydrographers as in former years, namely:—Two hydrographers working full time throughout the year in the field, and one hydrographer making stream gagings during the summer months and doing inside work during the remainder of the year in the Bridgeport office. However, the increasing demand for stream measurements made it necessary to keep the third man occupied full time in the field during the entire irrigation season of 1930. In former years the part time hydrographer checked all the current meter notes and made all stream measurements west of Bridgeport. It was, therefore, found necessary to employ an extra office engineer and stenographer during June, July and August of 1930 to perform this work. The United States Reclamation Engineers and the State Engineer of Wyom-

ing were supplied with daily reports as a prerequisite to administrative agreement with Nebraska officials in charge of distribution.

The quantities of water supply, diversions, evaporation, etcetera, were tentatively determined each day covering the entire Platte River basin below the Pathfinder Reservoir during the 1930 season, necessitating a great amount of office work.

Water Commissioners

The necessity of water commissioners is obvious. For a number of years the system of calling for the services of a water commissioner only when there was a scarcity of water proved unsatisfactory. He was usually found engaged in other work at the time his services were required.

A new plan was tried for 1930 on the Platte Rivers by employing two men full time from July 1st to September 15th, including Sundays and holidays. Although this plan was an improvement, the distance traveled each day was too great for two men. The work will require four men on the Platte Rivers and tributaries between the Wyoming-Nebraska line and Kearney. As soon as it was discovered that two men were unable to cover the territory, the situation was corrected immediately by transferring the activities of two hydrographers to the Platte River basin as assistants to the two water commissioners. By doing so, however, other streams of the state were neglected, except the Frenchman and Republican rivers, during the crisis in the Platte River basin.

Observers

Twelve observers were engaged during this biennium to read daily the water surface heights at the following stations: Torrington, Wyoming-Nebraska State Line, Mitchell, Minatare, Oshkosh, North Platte (two stations), Julesburg, Overton, Duncan, Columbus, and Ashland.

Automatic recorders were maintained at the Wyoming-Nebraska Line, Mitchell, Bridgeport, North Platte and Overton. Additional observers will be employed for 1931 to make daily gage height readings at Culbertson on the Republican and Frenchman rivers, as well as other streams in the state.

Irrigation Districts

The Pioneer Irrigation District was declared duly organized June 25, 1930, by the County Board of Dundy County. On September 19th, 1930, the State Engineer signed an order approving a bond issue in the amount of \$26,883.80, the proceeds of which will be used to purchase the old Haigler Ditch which has been in operation and owned

by the Pioneer Irrigation Company since 1890. The headgate is located on the south bank of the Republican River about five miles west of the Colorado-Nebraska State line.

Development

The Paxton Irrigation District completed its project and diverted some water from the South Platte River during the 1930 season.

The Elm Creek Irrigation Company was incorporated about January, 1930, and took over the appropriation (A 2104) of water with a priority date of September 17th, 1929, to reclaim sixteen thousand (16,000) acres. About eight miles of canal were completed in 1930 and a small acreage irrigated.

The Dawson County Irrigation Company (A 2110) completed an extension of the Dawson Canal, a distance of ten miles, to carry an appropriation of water with a priority date of October 25th, 1929, to reclaim nineteen thousand nine hundred fifty (19,950) acres in the vicinity of Overton.

Future Development

There are storage possibilities in the lower Platte River basin that will conserve practically all the flow of the river below the confluence of the North and South Platte rivers.

On the South Platte River on the divide between Big Springs and Grant, there are seventeen reservoir sites with an aggregate capacity of about 80,000 acre feet. Under the terms of the Colorado-Nebraska River Compact, 500 second feet were allocated for these reservoirs. Approximately 250,000 acre feet were available for storage in both the 1929 and 1930 seasons that were not used.

On the Frenchman River about five miles southeast of Imperial is a reservoir known as the Harvey Site that will take care of about half of the winter flow of the Frenchman at that point.

Cooperation

The number of projects cooperating with the department has increased slightly. However, there are projects that still show indifference in this respect. The department cannot supply data which is so necessary in a study of the water resources of the State without cooperation. Neither can the administration of the available water supply be carried on efficiently until all interests cooperate to the utmost. No project should decline to file acreage reports, keep a record of gage heights and report daily to the Department in times of scarcity and maintain automatic recorders where practical.

Evaporation

The most important factor in the problem of water administration is evaporation, especially so in the North Platte River basin where storage water is carried in the river.

In the absence of an agreement between the Wyoming, Colorado, Nebraska, and the U. S. Reclamation officials as to the correct amount to be charged off per mile day, the Department of Public Works has computed a tentative figure to be used until a conference can be arranged to determine a fixed quantity. Two second feet per day per mile has been used the past three years for that part of the river between the Pathfinder Reservoir and the Wyoming-Nebraska line during the months of July and August.

Miscellaneous Summary

Stream and Canal Measurements.....	8296
Applications filed	123
Water Appropriation Permits	89
Applications Canceled	32
Applications Dismissed	26
Applications Pending	50
Hearings Held	4
Relocation Permits	11
Water Power Leases	1
Deeds Recorded	8
Irrigation Districts Organized	1
Drainage Districts Organized	7
Maps Filed	140
Field Inspections	96
Fees Collected:	\$2,177.45

Future Flow of North Platte River at North Platte

Graphs for each of the irrigation months, May to September inclusive, are published in this report to show the change in the flow of the North Platte River, from 1895 to 1930 inclusive, at two gaging stations, namely: Whalen, Wyoming and North Platte, Nebraska. The Orin Junction and Guernsey gaging stations were used in lieu of Whalen station prior to 1909, at which time Whalen station was established and the former stations were discarded.

Beginning with 1909 the Whalen curve divided into two curves. "Above Whalen" included the total flow reaching Whalen and "Below Whalen" curve excludes the water diverted by the two large canals, namely, Pathfinder and the Gering-Fort Laramie Canals. Each year this spread has grown larger in each of the five months, and it

is greater in the last three months than it is during the first two for the reason irrigation demands are greater during the last three months.

The great drop in the curve for May and June just prior to 1914 was due to storing of flood waters in the Pathfinder reservoir, and the gradual building up of the curve thereafter was due to the return flow from the increasing area irrigated.

During the month of July since 1921 the amount of water "Below Whalen" is growing less and the amount "Above Whalen" is growing greater. In August this relation started about 1913 and in September a similar relation began about 1915.

The "North Platte" curve seems to follow or run parallel with the "Above Whalen" curve for all five months.

A study of the curves would indicate at this time that the quantity of water diverted above Whalen does influence the quantity flowing in the river at North Platte. It is quite probable that in the very near future all three curves will run parallel.

Recommendations

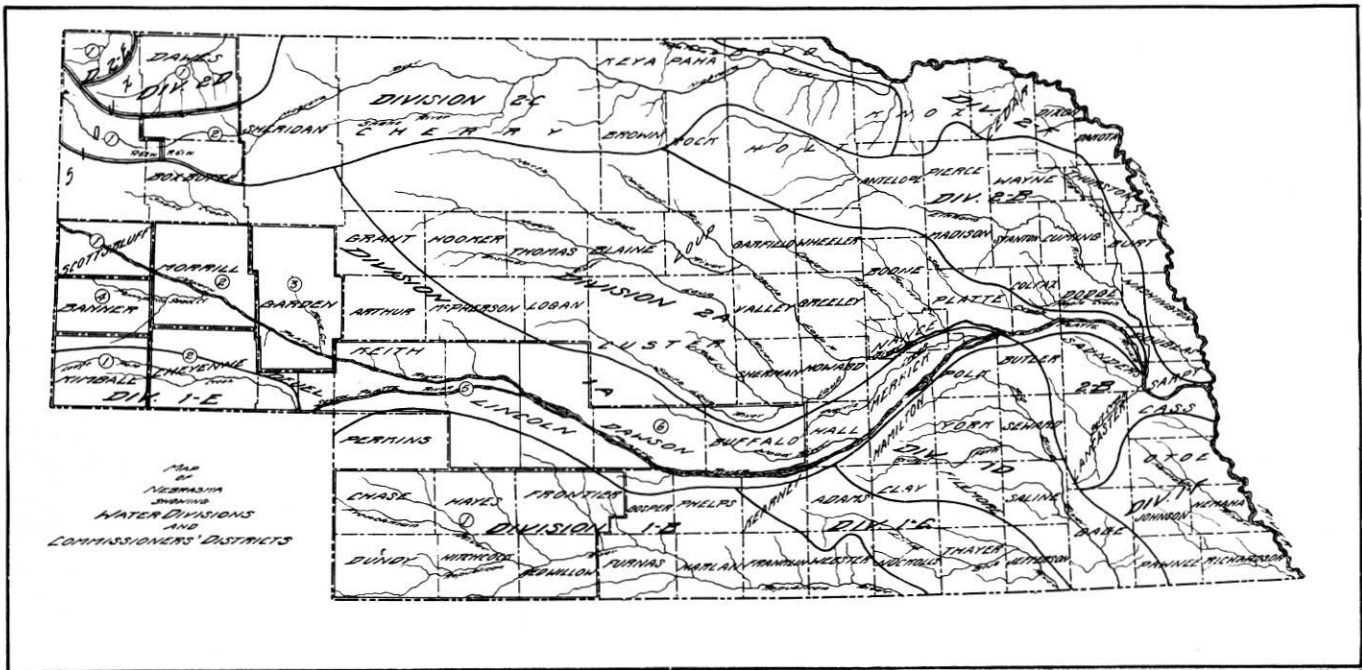
Section 8465, Compiled Statutes of Nebraska, 1922, should be amended so as to require projects to report daily, during times of scarcity, the gage heights to the proper official of the Department of Public Works. This requirement was on the 1913 Statutes and inadvertently was omitted when the laws were reenacted in 1919. This is very important in times of shortage.

A conference with the State Engineers of Colorado and Wyoming, the United States Reclamation Engineer and the Nebraska State Engineer should be had for the purpose of determining the evaporation loss on the North Platte River.

Respectfully submitted,

R. H. WILLIS, Chief,
Bureau of Irrigation, Water
Power and Drainage.

Division of Statistics



WATER DIVISIONS AND WATER DISTRICTS

WATER DIVISIONS—The State of Nebraska is hereby divided into two water divisions denominated Water Division No. 1 and Water Division No. 2, respectively. (C. S. 1922, 8415).

BOUNDARIES OF DIVISION NO. 1—Water Division No. 1 shall consist of all the lands in the state drained by the Platte Rivers and their tributaries lying west of the mouth of the Loup River; and also all other lands lying south of the Platte and South Platte Rivers that may be watered from other superficial or subterranean streams not tributary to the Platte River. (C. S. 1922, 8416).

BOUNDARIES OF DIVISION NO. 2—Water Division No. 2 shall consist of all lands that may be watered from the Loup, White, Niobrara and Elkhorn Rivers and their tributaries, and other lands of the State not included in any other water division. (C. S. 1922, 8417.)

For convenience in the adjudication of claims and in the distribution of water, these divisions have been subdivided into twelve water divisions, denominated 1-A, 1-B, 1-C, 1-D, 1-E, 1-F, 2-A, 2-B, 2-C, 2-D, 2-E, 2-F, as shown on the opposite page.

CLAIMS AND APPLICATIONS

The following tables give a complete list of all claims and applications for water granted by the Department of Public Works and which have not been canceled; also all claims of records, and applications pending.

In these tables the claims and applications have been arranged in each water division by streams in alphabetical order, and appropriations on each stream are arranged in order of priority.

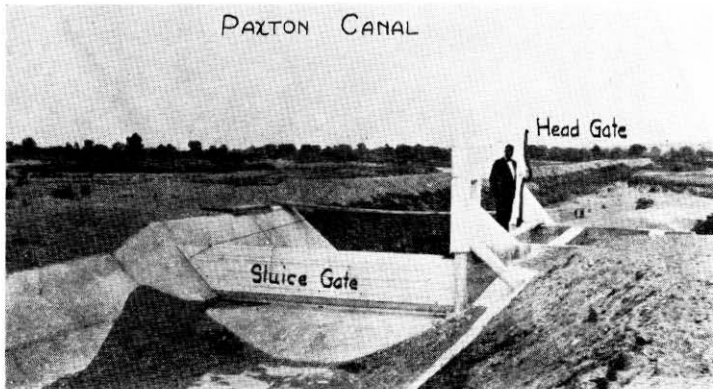
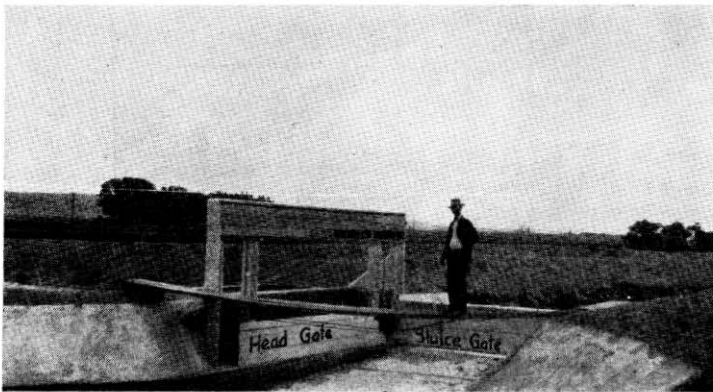
Appropriations having docket numbers are claims made covering rights acquired under the law prior to April 4, 1895, and those having application numbers are applications for permits to appropriate water made under the law of 1895.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D	Yr.
Akers Draw (No. Platte R.)	Enterprise Irr. Dist.	Scottsbluff	Nelson Canal	O. D.		13	23	57	Scotts Bluff	May	21	1913	920	1290
Atkins Drain (No. Platte R.)	Atkins, A. W.	Bridgeport	Atkins Canal	O. D.		15	19	49	Morrill	Mar.	27	1916	828	1450
Ash Creek	Gilliard, George	Lewellen	Gilliard Canal	Irrig.	1.43	3	16	42	Garden	Dec.	31	1899	812	.....
Bayard Sugar Fcty. Drain (No Platte R.)	Alliance Irr. Dist.	Bridgeport	Alliance Canal	O. D.		5	20	52	Morrill	Aug.	13	1925	874	1776
Beaver Creek	C. B. & Q. R. R. Co.	Lincoln	C. B. & Q. Water Supply	Steam	1.00	8	12	14	Buffalo	July	26	1919	.....	1550
Beaver Creek	Yanda, Geo. J.	Ravenna	Yanda Pump	Irrig.	.90	9	12	14	Buffalo	Apr.	4	1927	.....	1920
Birdwood Creek	Birdwood Irr. Dist.	No. Platte	Birdwood Canal	Irrig.	100.00	35	15	33	Lincoln	Oct.	21	1893	646	.....
Birdwood Creek	Northouse, Ed.	Sutherland	West Birdwood Canal	Irrig.	8.57	22	15	33	Lincoln	Jan.	16	1894	652	.....
Birdwood Creek	Saxson, Bert.	Sutherland	Beaucamp Canal	Irrig.	3.00	15	15	33	Lincoln	Sept.	19	1894	677	.....
Blue Creek	Union Irr. & Water Power Company	Lewellen	Union Canal	Irrig.	20.00	18	16	42	Garden	May	16	1890	763	.....
Blue Creek	Hooper Irr. Dist.	Lewellen	Hooper Canal	Irrig.	12.86	6	16	42	Garden	Sept.	7	1893	781	.....
Blue Creek	Blue Creek Irr. Dist.	Lewellen	Blue Creek Canal	Irrig.	39.00	33	17	42	Garden	Dec.	27	1893	785	.....
Blue Creek	Meeker Ditch Co.	Lewellen	Graf Canal	Irrig.	32.73	19	16	42	Garden	Apr.	2	1894	788	.....
Blue Creek	Hooper Irrig. Dist.	Lewellen	Hooper Canal	Irrig.	0.27	19	16	42	Garden	Apr.	2	1894	788	"R"
Blue Creek	Blue Creek Irrig. Dist.	Lewellen	Blue Creek Canal	Irrig.	3.79	33	17	42	Garden	Sept.	27	1894	795	.....

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D|Yr.	
Blue Creek.....	Paisley Irr. Dist.....	Lewellen.....	West Side Canal.....	Irrig.	15.55	28	17	42	Garden.....	Nov.	20	1894	800	.....
Blue Creek.....	Robinson, A. A.....	Gering.....	Paisley Canal.....	O. D.		2	16	44	Garden.....	Nov.	20	1894	800	1742
(No. Platte R.)														
Blue Creek.....	Paisley Irr. Dist.....	Lewellen.....	Paisley Canal.....	Irrig.	1.00	28	17	42	Garden.....	July	14	1899	.....	515
Blue Creek.....	Eggers, J. E.....	Lewellen.....	Blue Creek Canal.....	Irrig.	.42	33	17	42	Garden.....	Jan.	4	1912	.....	1154
Blue Creek.....	Paisley Irr. Dist.....	Lewellen.....	West Side Canal.....	Irrig.	3.30	28	17	42	Garden.....	Feb.	25	1924	.....	1738
Broncho Lake.....	Miller, True.....	Alliance.....	Broncho Lake.....	Irrig.	1.16	6	24	48	Box Butte.....	May	7	1926	.....	1806
Browns Creek.....	Haxby, George H.....	Bridgeport.....	Haxberry Canal.....	Irrig.	.43	19	20	48	Morrill.....	July	17	1903	.....	717
Buckham Springs	Maddox, P. P.....	North Platte.....	Maddox Canal.....	Irrig.	2.28	8	14	36	Keith.....	Oct.	3	1908	.....	918
Buffalo Creek.....	Savins, Richard T.....	Lexington.....	Savins Pump.....	O. D.		22	10	21	Dawson.....	Aug.	18	1917	622	1495
(Platte R.)														
Buffalo Creek.....	Doughty, Wm. T. & R. H.....	Lexington.....	Doughty Pump.....	O. D.		21	10	21	Dawson.....	Mar.	24	1922	622	1648
(Platte R.)														
Buffalo Creek.....	Kopf, Walter W.....	Buffalo.....	Kopf Pump.....	Irrig.	0.57	21	12	22	Dawson.....	Mar.	3	1926	.....	1799
Buffalo Creek.....	Streiff, Mrs. Anna.....	Elm Creek.....	Streiff Pump.....	Irrig.	1.80	35	9	19	Dawson.....	Sept.	15	1926	.....	1859
Buffalo Creek.....	Hodgson, Martha.....	Lexington.....	Hodgson Pump.....	O. D.		33	10	20	Dawson.....	Oct.	28	1926	622	1868
(Platte R.)														
Buffalo Creek.....	Stryker, Abram I.....	Overton.....	Stryker Pump.....	Irrig.	1.62	18	9	19	Dawson.....	July	19	1927	.....	1944
Buffalo Creek.....	Philpot, W. J.....	Overton.....	Philpot Pump.....	Irrig.	3.33	28	9	19	Dawson.....	July	26	1927	.....	1946
Buffalo Creek.....	Bowden, C. A.....	Overton.....	Bowden Pump.....	Irrig.	1.65	12	9	20	Dawson.....	Oct.	10	1927	.....	1939
Buffalo Creek.....	Lloyd, Bell F.....	Elm Creek.....	Lloyd Pump.....	Irrig.	2.16	36	9	19	Dawson.....	Feb.	20	1928	.....	1985
Buffalo Creek.....	Potts, Chas. S.....	Elm Creek.....	Potts Pump.....	Irrig.	4.14	4	8	18	Buffalo.....	Mar.	5	1928	.....	1988
Buffalo Creek.....	Fitzgerald, Elva J.....	Elm Creek.....	Jones Pump.....	Irrig.	.94	5	8	18	Buffalo.....	Apr.	30	1928	.....	2012
Buffalo Creek.....	Wilson, Harry W.....	Overton.....	Wilson Canal.....	Irrig.	2.29	18	9	19	Dawson.....	Nov.	12	1928	.....	2052



Three Views of Paxton Canal

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month			D Yr.
Buffalo Creek and Mud Creek	Ulrich, Maria	Lexington	Ulrich Canal	Irrig.	.52	1	8	19	Dawson	Feb.	4 1929	2068
Buffalo Creek	Gilmore, Eliza A.	Murry	Gilmore Pump	Irrig.	1.03	21	9	15	Dawson	Mar.	5 1929	2074
Buffalo Creek	Armstrong, Lillian G.	Elm Creek	Armstrong Canal	Irrig.	.23	23	9	18	Buffalo	June	19 1929	2087
Buffalo Creek	Phillips, Reber D.	Omaha	Phillips Pump	Irrig.	4.57	12	9	20	Dawson	July	13 1929	2089
Buffalo Creek	Jensen, Peter E.	Cozad	Jensen Pump	Irrig.	1.00	21	11	2	Dawson	July	17 1929	2090
Buffalo Creek	Kopf, Walter P.	Buffalo	Kopfs Pump	Irrig.		21	12	2	Dawson	Dec.	26 1929	2119*
Camp Creek	Wehn, J. W.	Alliance	Camp Creek Canal	Irrig.	1.43	13	18	45	Morrill	Mar.	16 1892	866
Camp Clark Seep (No. Platte R.)	Schermerhorn Irr. Co.	Bridgeport	Schermerhorn Canal	O. D.	A-418	9	20	50	Morrill	June	22 1929	2088
Carter Creek	Gardner, Wm. E.	Gering	Carter Canal Nelson-Radcliffe	Irrig.	3.70	27	21	56	Scotts Bluff	Oct.	13 1922	1691
Cedar Creek	Radcliffe, Mack	Sidney	Canal	Irrig.	2.77	28	18	48	Morrill	June	1 1882	1034a
Cedar Creek	Radcliffe, Mack	Sidney	Radcliffe Canal No. 2	Irrig.	1.23	34	18	48	Morrill	July	1 1885	1034b
Cedar Creek	Rush Creek Land & Live Stock Company	Lisco	Radcliffe Canal No. 3	Irrig.	.76	27	18	48	Morrill	Feb.	14 1890	1034c
Cedar Creek	Bridgeport Irr. Dist.	Bridgeport	Belmont Feeder	Irrig.	5.00	23	18	48	Morrill	Jan.	7 1915	1397
Clear Creek	Hooper, D. C.	Lewellen	Clear Cr. Canal	Irrig.	2.86	32	16	41	Keith	July	1 1888	748
Clear Creek	Clear Creek Irr. Co.	Lewellen	Barber Canal	Irrig.	14.57	29	16	41	Keith	May	30 1893	754
Clear Creek	Clark, Wesley and Bairn, John	Lewellen	Williams Canal	Irrig.	1.00	28	16	41	Keith	May	18 1894	747
Clear Creek	Barber, Frank H.	Lincoln	Finch Canal	Irrig.	1.43	4	15	41	Keith	June	30 1895	964
Clear Creek	Clear Creek Irr. Co.	Lewellen	Barber Canal	Irrig.	1.14	31	16	41	Garden	July	5 1911	1111

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Cold Water Creek	Lisco Irr. Dist.	Lisco	Cold Water Canal	Irrig.	4.29	26	18	46	Deuel	Sept.	28	1894	796	.....
Coon Creek	Winterer, Wm. H.	Keystone	Coon Creek Canal	Irrig.	.71	34	15	37	Keith	July	3	1895	.....	69
Coon Creek	Winterer, Wm. H.	Keystone	Coon Creek Canal	Irrig.	1.42	34	15	37	Keith	Sept.	16	1911	.....	1225
Crescent Lake	Lake Water Carrying Co.	Lewellen	Crescent Lake Project	Supple.	†7000	21	20	44	Garden	Jan.	30	1920	.....	1575
(Blue Creek)	Lake Water Carrying Co.	Lewellen	Union Canal	Irrig.	20.00	18	16	42	Garden	May	16	1890	763	1575
(Blue Creek)	Lake Water Carrying Co.	Lewellen	Hooper Canal	Irrig.	12.86	6	16	42	Garden	Sept.	7	1893	781	1575
(Blue Creek)	Lake Water Carrying Co.	Lewellen	Blue Creek Canal	Irrig.	39.00	33	17	42	Garden	Dec.	27	1893	785	1575
(Blue Creek)	Lake Water Carrying Co.	Lewellen	Graf Canal	Irrig.	32.73	19	16	42	Garden	Apr.	2	1894	788	1575
(Blue Creek)	Lake Water Carrying Co.	Lewellen	Hooper Canal	Irrig.	0.27	19	16	42	Garden	Apr.	2	1894	788	1575
(Blue Creek)	Lake Water Carrying Co.	Lewellen	Blue Creek Canal	Irrig.	3.79	21	17	42	Garden	Sept.	27	1894	795	1575
(Blue Creek)	Lake Water Carrying Co.	Lewellen	West Side Canal	Irrig.	15.55	28	17	42	Garden	Nov.	20	1894	800	1575
(Blue Creek)	Lake Water Carrying Co.	Lewellen	Paisley Canal	Irrig.	1.00	28	17	42	Garden	July	14	1899	.....	515
(Blue Creek)	Eggers, J. E.	Lewellen	Blue Creek Canal	Irrig.	.42	33	17	42	Garden	Jan.	4	1912	.....	(1575) 1154
(Blue Creek)	Paisley Irr. Dist.	Lewellen	West Side Canal	Irrig.	3.30	28	17	42	Garden	Feb.	25	1924	.....	(1575) 1738
Dawson County Drainage Ditch No. 1	Orthman, Vernon C.	Lexington	Orthman Pump	Irrig.		14	9	21	Dawson	Mar.	15	1930	.....	2129*
Deep Cold Cr.	Finn, J. L.	Dalton	Finn Bros. Canal	Irrig.	.50	28	18	49	Morrill	July	1	1890	836	.....
Deep Holes Cr.	Hanway, F. P.	Broadwater	Emma Canal	Irrig.	1.40	3	18	49	Morrill	May	17	1924	.....	1740

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D|Yr.
Dougout Cr. (Lower)	Hagerty, M. H.	Broadwater	Cooper Canal	Irrig.	.86	4	19	48	Morrill	Aug. 15	1892	872	.....
Dougout Cr. (Lower)	Mulloy, Francis C.	Broadwater	Mulloy Canal	Irrig.	1.00	27	27	48	Morrill	July 18	1907	.....	865
Dougout Cr. (Lower)	Hagerty, M. H.	Broadwater	Hagerty Canal	Irrig.	1.00	4	19	48	Morrill	Oct. 20	1912	.....	1238
Dougout Cr. (Lower)	Hagerty, M. H.	Broadwater	Klondyke Reservoir	A-1238	34AF	4	19	48	Morrill	July 11	1919	.....	1547-S
Elm Creek	Scott, Natonia	Elm Creek	Scott Pump	Irrig.	1.14	29	9	16	Buffalo	Jan. 28	1929	.....	2066
Farmers Canal Seep (No. Platte R.)	Warner, Frank	Morrill	Warner Canal	O. D.		12	23	5	Scotts Bluff	Sept. 16	1887	918	1709
Gebauer Seep Lake	Gebauer, Paul G.	Northport	Gebauer Canal	Irrig.		28	20	50	Morrill	Apr. 25	1930	.....	2138
Golden Creek	Theis, M. J.	Ogallala	Theis Canal	Irrig.	2.71	25	15	30	Keith	Sept. 17	1895	.....	160
Gravel Creek (Sand Creek)	Maddox, P. P. and Sillasen, S. J.	North Platte	Sand Creek Canal	Irrig.	1.84	9	14	36	Keith	Jan. 3	1910	.....	974
Greenwood Cr.	Keenan, Mary K.	Bridgeport	Trinnier Canal	Irrig.	6.29	28	18	50	Morrill	Apr. 6	1891	849	.....
Greenwood Cr.	Keenan, Mary K.	Bridgeport	Nelson Canal	Irrig.	3.00	33	18	50	Morrill	Apr. 1	1892	845	.....
Greenwood Cr.	Shannon Bros.	Bridgeport	Capron Canal	Irrig.	2.00	15	18	50	Morrill	Jan. 1	1893	890	.....
Greenwood Cr.	Meglemre, C. E.	Bridgeport	Meglemre Canal	Irrig.	.59	3	18	50	Morrill	May 6	1896	.....	294
Greenwood Cr.	Meglemre, C. E.	Bridgeport	Meglemre Canal	Irrig.	1.14	3	18	50	Morrill	Mar. 11	1907	.....	853

† Acre feet per annum.

† This amount affirmed by Supreme Court.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R.	County	Month			D|Yr.
Greenwood Cr.....	Keenan, Mary K.....	Bridgeport.....	Trinnier Canal.....	Irrig.	1.65	3	18	50	Morrill.....	Aug.	18 1919	.....	1551
Horse Creek.....	Mihan, John, Estate.....	Morrill.....	State Line Canal.....	Irrig.	3.07	33	23	58	Scotts Bluff.....	Sept.	10 1897	.....	407
Horse Creek.....	Braziel-Marsh.....	Morrill.....	Marsh-Braziel Canal.....	Irrig.	7.19	4	22	60	Wyoming.....	Nov.	24 1908	.....	921
Horse Creek.....	Gilmore Ditch Ass'n.....	Morrill.....	Gilmore Canal.....	Irrig.	9.00	33	23	58	Scotts Bluff.....	Feb.	21 1910	.....	983
Horse Creek.....	Mihan, John, Est.....	Morrill.....	State Line Canal.....	Irrig.	2.00	33	23	58	Scotts Bluff.....	Apr.	21 1910	.....	994
Horse Creek.....	Casteel & Husted.....	Henry.....	Jackson Extension.....	Irrig.	1.00	27	23	58	Scotts Bluff.....	May	19 1910	.....	1000
Horse Creek.....	Marsh & Braziel.....	Morrill.....	Marsh-Braziel Extension.....	Irrig.	13.00	4	22	60	Wyoming.....	Sept.	18 1911	.....	1126
Horse Creek.....	Gr. Western Sugar Co.....	Scottsbluff.....	Lyman Factory.....	Mfg.	15.00	34	23	58	Scotts Bluff.....	June	16 1926	.....	1819
Hoth Draw..... (No. Platte R.)	O'Holloran, Jas.....	Bayard.....	O'Holloran Pump.....	O. D.		28	21	52	Morrill.....	Jan.	26 1917	918	1473
Hoth Draw.....	Gr. Western Sugar Co.....	Scottsbluff.....	Pump L. Bayard Fcty.....	Mfg.	15.00	34	21	52	Morrill.....	Oct.	4 1920	.....	1593
Hoth Draw & No. Platte R.	Austin, Wm. F.....	Bayard.....	Morrill County Hydro-Electric Plant.....	Power		18	21	53	Morrill.....	July	14 1930	.....	2146*
Hoth Draw.....	O'Holloran, Jas.....	Bayard.....	O'Holloran Pump.....	Power		28	21	52	Morrill.....	July	16 1930	.....	2147*
Huntington Spring.....	Card, Fred.....	Hull.....	Card Canal.....	Irrig.	1.43	9	20	58	Scotts Bluff.....	Dec.	23 1904	.....	778
Kiowa Creek.....	Currie, Edw. A.....	Mitchell.....	Currie Canal.....	Irrig.	9.14	13	21	57	Scotts Bluff.....	Mar.	23 1892	938	.....
Kiowa Creek.....	Kellums, John H.....	Morrill.....	Kellums Canal.....	Irrig.	2.43	11	22	58	Scotts Bluff.....	Oct.	18 1901	.....	641
Kiowa Creek.....	Kellums, John H.....	Morrill.....	Kellums Canal No. 2.....	Irrig.	.57	1	22	58	Scotts Bluff.....	Nov.	29 1907	.....	880
Lawrence Fork.....	Simms and Postal.....	Bridgeport.....	Laing Canal.....	Irrig.	.50	28	18	52	Morrill.....	Dec.	31 1886	825	.....
Lawrence Fork.....	Gilman, Byron & Crigler, E. S.....	Redington.....	Redington Canal.....	Irrig.	.57	36	19	52	Morrill.....	Oct.	9 1889	820	.....

* Application pending.

DEPARTMENT OF PUBLIC WORKS

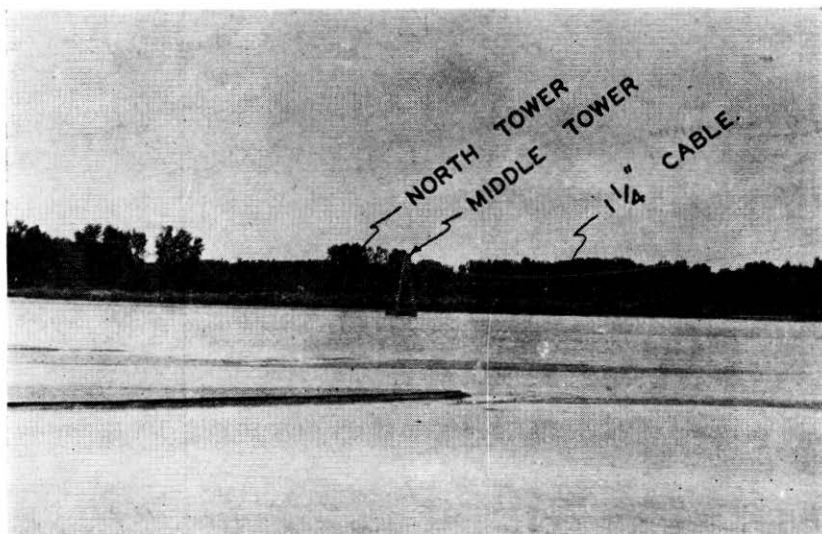
CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

190

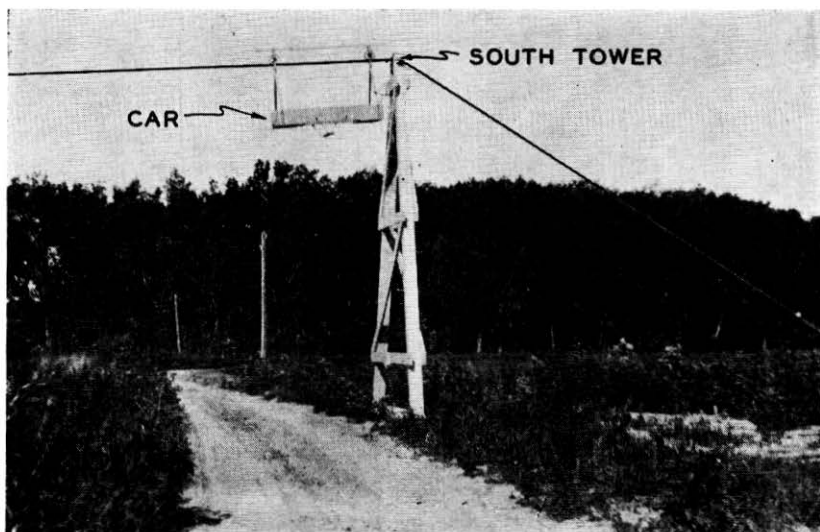
Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D Yr.
Lawrence Fork	Lindburg, Fred R.	Bridgeport	E. S. Crigler Canal	Irrig.	.57	1	18	52	Morrill	Sept. 11	1891	861	
Lawrence Fork	Neihus, Pearl E.	Redington	Spring Ranch	Irrig.	1.00	11	18	52	Morrill	Oct. 23	1891	862	
Lawrence Fork	Neihus, Pearl E.	Redington	Redington Canal	Irrig.	.50	11	18	52	Morrill	May 1	1893	893	
Lawrence Fork	Lindberg, Fred R.	Bridgeport	Crigler Extension	Irrig.	1.43	1	18	52	Morrill	Nov. 25	1898		486
Lawrence Fork	Neihus, Dora, Estate	Redington	Neihus Canal	Irrig.	.86	11	18	52	Morrill	Mar. 23	1900		550
Lawrence Fork	Neihus, Pearl E.	Redington	Harper Canal	Irrig.	1.43	11	18	52	Morrill	May 27	1902		669
Lawrence Fork	Simms & Postal	Henry	Randall Canal	Irrig.	2.57	21	18	52	Morrill	May 15	1911		1100
Lawrence Fork	King, Wm. O.	Kearney	King Canal	Irrig.	4.00	15	18	52	Morrill	Dec. 8	1915		1440
Lawrence Fork	King, Wm. O.	Kearney	King Canal	Irrig.	1.00	15	18	52	Morrill	July 3	1920		1587
Lawrence Fork	Neihus, J. W.	Redington	Hopeful Canal	Irrig.	1.43	1	18	52	Morrill	Apr. 19	1930		2135
Lonergan Creek	Soehl, Herman A.	Lemoyne	Soehl Canal	Irrig.	2.00	17	15	39	Keith	May 10	1889	697a	
Lonergan Creek	Jacobs, Lee	Lemoyne	East Lonergan Canal	Irrig.	9.14	17	15	39	Keith	May 25	1889	699	
Lonergan Creek	Soehl, Herman A.	Lemoyne	Soehl Canal	Irrig.	.86	17	15	39	Keith	Apr. 27	1893	697b	
Lonergan Creek	Harris, F. H.	Lemoyne	Haney Canal	Irrig.	1.14	17	15	39	Keith	July 1	1893	719	
Lost Creek	Campbell, Wm. N.	Oshkosh	Campbell Canal	Irrig.		11	17	44	Garden	Dec. 23	1929		2118*
Mathews Creek	Mathews, Benj. G.	Keystone	Mathews Canal	Irrig.	1.14	28	15	37	Keith	Apr. 1	1893	750	
Mud and Buffalo Creek	Ulrich, Maria	Lexington	Ulrich Canal	Irrig.	4.20	1	8	19	Dawson	Feb. 4	1929		2068
Nine Mile Draw (No. Platte R.)	Nine Mile Irr. District	Bayard	Nine Mile Canal	O. D.		10	21	53	Morrill	Aug. 19	1915	925	1431
No. Platte River.	Platte Valley Irr. Dist.	Hershey	No. Platte Canal	Irrig.	300.00	13	14	34	Lincoln	May 31	1884	635	
No. Platte River.	Farmers Irr. Dist.	Scottsbluff	Farmers Canal	Irrig.	1142.86	3	23	58	Scotts Bluff	Sept. 16	1887	918	
No. Platte River. (Sheep Creek)	Farmers Irr. Dist.	Scottsbluff	Ramshorn Canal	Irrig.	3.07	13	23	58	Scotts Bluff	Sept. 16	1887	918	"R"
	Sheep Creek Lateral Co.	Morrill	Sheep Creek Lateral	O. D.		8	23	57	Scotts Bluff	Sept. 16	1887	918	1176

* Application pending.

REPORT OF SECRETARY



North Platte River Cable Station, Wyoming-Nebraska State Line



South End North Platte River Cable Station—
Wyoming-Nebraska State Line

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A.—Continued

192

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D Yr.	
No. Platte River (Dry Spotted Tail)	Frasky, Frank	Mitchell	Roberts Canal	O. D.		16	23	56	Scotts Bluff	Sept.	16	1887	918	1241
No. Platte River (Wet Spotted Tail)	Stewart, H. G.	Mitchell	Stewarts Canal	O. D.		10	23	56	Scotts Bluff	Sept.	16	1887	918	449
No. Platte River (Hoth Draw)	O'Holloran, Jas.	Bayard	O'Holloran Canal	O. D.		28	21	52	Morrill	Sept.	16	1887	918	1473
No. Platte River (Seep Farmers Canal)	Warner, Frank	Morrill	Warner Canal	O. D.		12	23	57	Scotts Bluff	Sept.	16	1887	918	1769
No. Platte River	Minatare Mutual Canal and Irrig. Co.	Minatare	Minatare Canal	Irrig.	249.43	32	22	54	Scotts Bluff	Jan.	14	1888	919	.....
No. Platte River (Winter Creek)	Winter Creek Irrig. Co.	Scottsbluff	Winter Creek Canal	Irrig.	124.29	17	22	55	Scotts Bluff	Oct.	18	1888	952	.....
	Winter Creek Irr. Co.	Scottsbluff	Winter Creek Canal	O. D.		19	22	54	Scotts Bluff	Oct.	18	1888	952	1446
No. Platte River (Akers Draw)	Enterprise Irr. Dist.	Scottsbluff	Enterprise Canal	Irrig.	138.90	27	23	57	Scotts Bluff	Mar.	28	1889	920	.....
	Enterprise Irr. Dist.	Scottsbluff	Enterprise Canal	O. D.		13	23	57	Scotts Bluff	Mar.	28	1889	920	1290
No. Platte River	Castle Rock Irr. Dist.	McGrew	Castle Rock Canal	Irrig.	82.57	4	21	54	Scotts Bluff	Apr.	18	1889	921	.....
No. Platte River	Logan Irr. Company	Bridgeport	Logan Canal	Irrig.	5.71	19	20	50	Morrill	Oct.	17	1889	821	.....
No. Platte River (Atkins Drain)	Bridgeport Irr. Dist.	Bridgeport	Belmont Canal	Irrig.	270.00	18	20	51	Morrill	Dec.	19	1889	828	.....
	Atkins, A. W.	Bridgeport	Atkins Canal	O. D.		15	19	49	Morrill	Dec.	19	1889	828	1450
No. Platte River	Central Irr. Dist.	Gering	Central Canal	Irrig.	36.00	27	22	55	Scotts Bluff	June	23	1890	926	.....
No. Platte River	Sheridan, J. Wake Est.	Paxton	Sheridan-Wilson Canal	Irrig.	10.00	20	14	35	Keith	Oct.	9	1890	710	.....

REPORT OF SECRETARY

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D	Yr.
No. Platte River	Chimney Rk. Irr. Dist.	Chimney Rock	Chimney Rock Canal	Irrig.	60.00	1	20	53	Morrill	Dec.	3	1890	844	.....
No. Platte River	Chimney Rk. Irr. Dist.	Chimney Rock	Chimney Rock Canal	Irrig.		1	20	53	Morrill	Dec.	3	1890	1031	.....
No. Platte River	Empire Canal Co.	Bridgeport	Empire Canal	Irrig.	28.57	18	21	51	Morrill	June	25	1891	858	.....
No. Platte River	Jurgens, Otto, (Adm. Est. of D. Kah)	Minatare	Kah Canal	Irrig.	4.57	11	21	54	Scotts Bluff	Nov.	1	1891	944	.....
No. Platte River	Brown Creek Irr. Dist.	Bridgeport	Brown Creek Canal	Irrig.	188.71	20	20	50	Morrill	Jan.	20	1892	857	.....
No. Platte River	Brown Creek Irr. Dist.	Bridgeport	Brown Creek Canal	Irrig.		20	20	50	Morrill	Jan.	20	1892	1033	.....
No. Platte River	Alliance Irr. Dist.	Bridgeport	Alliance Canal	Irrig.	86.00	5	20	52	Morrill	Dec.	26	1892	874	.....
No. Platte River	Alliance Irr. Dist.	Bridgeport	Alliance Canal	Irrig.		5	20	52	Morrill	Dec.	26	1892	1035	.....
(Red Willow)	Alliance Irr. Dist.	Bridgeport	Alliance Canal	O. D.		6	20	51	Morrill	Dec.	26	1892	874	1429
No. Platte River	Alliance Irr. Dist.	Bridgeport	Alliance Canal	O. D.		5	20	52	Morrill	Dec.	26	1892	874	1776
(Bayard Sugar Factory Drain)														
No. Platte River	Ramshorn Irr. Dist.	Morrill	Ramshorn Canal	Irrig.	45.71	13	23	58	Scotts Bluff	Mar.	20	1893	945	.....
(Sheep Cr.)	Ramshorn Irr. Dist.	Morrill	Ramshorn Canal	O. D.		21	23	57	Scotts Bluff	Mar.	20	1893	945	1465
No. Platte River	Short Line Irr. Dist.	Bayard	Short Line Canal	Irrig.	65.57	25	21	53	Scotts Bluff	May	1	1893	946	.....
No. Platte River	Lisco Irr. Dist.	Lisco	Lisco Canal	Irrig.	19.85	14	18	47	Morrill	July	1	1893	856	.....
No. Platte River	Nine Mile Irr. Dist.	Bayard	Nine Mile Canal	Irrig.	100.00	18	21	53	Scotts Bluff	Dec.	6	1893	925	.....
(9 Mile Draw)	Nine Mile Irr. Dist.	Bayard	Nine Mile Canal	O. D.		10	21	53	Morrill	Dec.	6	1893	925	1431
No. Platte River	Cody Land & Cat. Co.	No. Platte	Cody-Dillon Canal	Irrig.	127.00	9	14	31	Lincoln	Dec.	29	1893	649	.....
No. Platte River	Keith-Lincoln Co. Irr. Dist.	Sutherland	Keith-Lincoln Canal	Irrig.	95.00	18	14	36	Keith	Feb.	2	1894	722	.....
No. Platte River	Paxton-Hershey Water Company	Hershey	Paxton-Hershey Canal	Irrig.	130.00	18	14	33	Lincoln	Feb.	12	1894	653	.....
No. Platte River	Lisco Irr. Dist.	Lisco	Lisco Canal	Irrig.	5.37	14	18	47	Morrill	Mar.	27	1894	787	.....
No. Platte River	No. River Irr. Dist.	Oshkosh	No. River Canal	Irrig.	16.00	14	18	47	Morrill	Mar.	27	1894	787	"R"

"R" Denotes relocation.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D	Yr.
No. Platte River	Suburban Irr. Dist.	No. Platte	Suburban Canal	Irrig.	124.00	12	14	33	Lincoln	May	22	1894	662	
No. Platte River	Roberts, C. F.	Oshkosh	Midland Canal	Irrig.	12.00	2	16	44	Garden	June	9	1894	789	
No. Platte River	Countryman, Chas.	Lewellen	Overland Canal	Irrig.	20.00	2	16	44	Garden	Aug.	14	1894	791	"R"
No. Platte River	Hannah Irr. Co.	Lisco	Hannah Canal	Irrig.	5.71	29	18	47	Morrill	Sept.	24	1894	886	
No. Platte River	Oshkosh Irr. Dist.	Oshkosh	Oshkosh Canal	Irrig.	40.00	33	17	44	Garden	Oct.	5	1894	797	
No. Platte River	Beerline Canal Co.	Broadwater	Beerline Canal	Irrig.	30.00	24	19	49	Morrill	Oct.	13	1894	887	
No. Platte River	Spohn, William	Oshkosh	Spohn Canal	Irrig.	13.14	13	17	45	Garden	Dec.	6	1894	801	
No. Platte River	Rush Cr. Irr. Co.	Lisco	Rush Creek Canal	Irrig.	9.64	2	17	46	Garden	Dec.	11	1894	802	
No. Platte River	Lyons Irr. Dist.	Oshkosh	Lyons Canal	Irrig.	42.14	30	17	44	Garden	Dec.	22	1894	803	
No. Platte River	Western Land & Cattle Co., W. R. Taylor	Omaha	Signal Bluff Canal	Irrig.	30.13	16	16	43	Garden	Jan.	16	1895	807	
No. Platte River	Alfalfa Irr. Dist.	Ogallala	Alfalfa Canal	Irrig.	100.00	1	15	42	Keith	Mar.	25	1895	738	
No. Platte River	Steamboat Irr. Dist.	Melbeta	Steamboat Canal	Irrig.	6.20	4	21	54	Scotts Bluff	Oct.	27	1895		186
No. Platte River	No. River Irr. Dist.	Oshkosh	No. River Canal	Irrig.	64.71	14	18	47	Morrill	Feb.	24	1896		243
No. Platte River	Oshkosh Irr. Dist.	Oshkosh	Oshkosh Canal	Irrig.	2.29	33	17	44	Garden	Feb.	24	1896		243R
No. Platte River	Lisco Irr. Dist.	Lisco	Lisco Canal	Irrig.	9.00	14	18	47	Morrill	Feb.	24	1896		243
No. Platte River	Remick Duer Co.	Broadwater	Lamore Canal	Irrig.	20.00	34	19	48	Morrill	July	18	1896		327
No. Platte River	Steamboat Irr. Dist.	Melbeta	Steamboat Canal	Irrig.	.71	4	21	54	Scotts Bluff	July	22	1896		350
No. Platte River	Gering Irr. Dist.	Gering	Gering Canal	Irrig.	208.62	4	23	58	Scotts Bluff	Mar.	15	1897		365
No. Platte River	Schermerhorn, A. D.	Omaha	Schermerhorn Canal	Irrig.	29.71	16	20	51	Morrill	Oct.	25	1897		418
(Camp Clark Seep and Red Willow Creek)	Schermerhorn Irr. Co.	Bridgeport	Schermerhorn Canal	O. D.		6	20	51	Morrill	Oct.	25	1897		2088
						9	20	51	Morrill	Oct.	25	1897		2088
No. Platte River	Farmers Irr. Dist.	Scottsbluff	Columbia Canal	Irrig.	600.00	3	23	58	Scotts Bluff	Apr.	14	1902		660
No. Platte River	Secretary of Interior Bureau of Reclamation	Mitchell	Pathfinder Reservoir	Stor.	1070000	34	29	84	Wyoming	Sept.	19	1904		768
No. Platte River	Gering & Ft. Laramie Irr. Dist.	Gering	Gering and Ft. Larami Canal	Irrig.	A. F. 1530.00	11	26	65	Wyoming	Sept.	19	1904		768

† Acre feet per annum.

"R" Denotes relocation.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

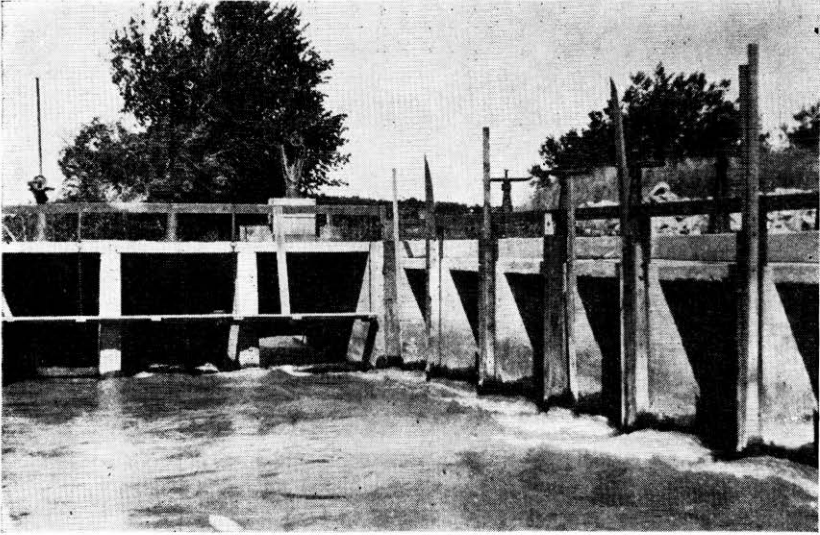
Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D	Yr.
No. Platte River	Northport Irr. Dist.	Bridgeport	Tri-State Canal	Irrig.	1250.00	3	23	58	Scott Bluff	Sept.	19	1904	768
No. Platte River	Pathfinder Irr. Dist.	Scottsbluff	Inter-State Canal	Irrig.	1643.00	11	26	65	Wyoming	Sept.	19	1904	768
No. Platte River	Liebhart Bros.	Denver	Empire Extension	Irrig.	1.00	18	20	51	Morrill	July	20	1907	866
No. Platte River	Lisco Irr. Dist.	Lisco	Lisco Canal	Irrig.	3.00	14	18	47	Garden	Apr.	6	1910	991
No. Platte River	French Ditch Company	Hampton, Mo.	French Canal	Irrig.	11.00	9	23	60	Wyoming	Dec.	21	1911	1149
No. Platte River	Dobson, W. A.	Carrolton, Mo.	Dobson Lateral	Irrig.	3.14	5	20	52	Morrill	Feb.	28	1912	1181
No. Platte River	Stone, Myron K.	Escanto, Cal.	Stone Canal	Irrig.	1.00	28	18	46	Morrill	Jan.	19	1915	1401
No. Platte River	French Ditch Company	Hampton, Mo.	French Canal	Irrig.	3.00	9	23	60	Wyoming	Sept.	11	1915	1433
No. Platte River (Red Willow Cr.)	Dobson, W. A.	Carrolton, Mo.	Dobson Lateral	Irrig.	.25	5	20	52	Morrill	Nov.	3	1915	1436
No. Platte River	Liebhart, L. F.	Denver	Liebhart Lateral	Irrig.	2.90	6	20	52	Morrill	Mar.	1	1916	1448
No. Platte River	Intermountain Ry. Light and Power Co.	Colo. Springs	Gering Hydro Elec. Plant	Power	250.00	10	23	60	Wyoming	Apr.	15	1916	1452
No. Platte River	U. P. Ry. Co.	Omaha	Locomotive Water Sup.	Dom.	1.00	29	14	30	Keith	Jan.	19	1917	1472
No. Platte River	French Ditch Company	Hampton, Mo.	French Canal Extension	Irrig.	.60	9	23	60	Wyoming	Mar.	20	1920	1581
No. Platte River (Blue Creek)	Robinson, A. A.	Gering	Paisley Canal	O. D.		2	16	44	Garden	Mar.	31	1924	800 1742
No. Platte River	No. Platte Water Dept.	No. Platte	Water Supply	Steam	.125	29	14	30	Lincoln	Mar.	16	1927	1912
No. Platte River	Great Western Sugar Co.	Scottsbluff	Gering Factory	Mfg.	15.00	36	22	55	Morrill	Nov.	15	1928	2054
No. Platte River	Maddox, P. P. et al.	No. Platte	Pawnee Canal	Irrig.		35	14	30	Lincoln	Nov.	24	1928	2055*
No. Platte River & Hoth Draw	Austin, Wm. F.	Bayard	Morrill County Hydro- Elec. Power Plant	Power		18	21	53	Morrill	July	14	1930	2146*
No. Platte River	Great Western Sugar Co.	Scottsbluff	Gering Factory	O. D.	A-2054	26	22	55	Scotts Bluff	July	24	1930	2150

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D|Yr.	
No. Platte River (Spring Creek Trib.)	U. P. Ry. Co.	Omaha	Frazier Lake	Ice	4.00	35	14	30	Lincoln	Sept.	6	1907	868	
No. Platte River (Spring Creek Trib.)	Gatch, Chas.	Melbeta	Gatch Canal	Irrig.	.93	25	21	54	Scotts Bluff	Aug.	21	1912	1220	
No. Platte River (Barrow Pit Trib.)	Taylor, A. O.	Minatare	Barrow Pit Canal	Irrig.	.29	19	21	52	Scotts Bluff	Apr.	23	1904	751	
Otter Creek	Deist, R. R.	Lemoine	Cascade Canal	Irrig.	3.30	5	15	40	Keith	Apr.	1	1891	1032	
Otter Creek	Nissen, Pete & Co.	Belmar	Otter Canal	Irrig.	10.29	5	15	40	Keith	May	24	1912	1198	
Otter Creek	Peterson, E. J.	Lemoine	Holcomb Canal	Irrig.	15.49	5	15	40	Keith	Nov.	6	1912	1	
Otter Creek	Peterson, E. J.	Lemoine	Peterson Canal	Irrig.	1.32	5	15	40	Keith	Nov.	6	1912	1240	
Owl Creek	Kellums, John H.	Morrill	Sunflower Canal	Irrig.	.79	12	22	58	Scotts Bluff	Sept.	17	1897	411	
Owl Creek	Kellums, John H.	Morrill	Sunflower Canal	Irrig.	1.14	12	22	58	Scotts Bluff	Oct.	10	1904	770	
Owl Creek	Kellums, John H.	Morrill	Sunflower No. 2	Irrig.	1.14	12	22	58	Scotts Bluff	Nov.	29	1907	879	
Owl Creek	Kellums, John H.	Morrill	Sunflower No. 1	Irrig.	.57	12	22	58	Scotts Bluff	Nov.	29	1907	881	
Pawnee Creek	Kent-Burke Co.	Omaha	Kent-Burke Canal	Irrig.	8.00	13	13	28	Lincoln	Oct.	18	1890	636	
Pawnee Creek	Kent-Burke Co.	Omaha	Kent-Burke Canal	Irrig.	5.85	18	13	27	Lincoln	Nov.	16	1922	1694	
Peden's Lake (Platte R.)	Bean, Smith & Good	Cuzad	Excell Canal	O. D.		12	11	23	Dawson	Sept.	16	1926	645b	
Platte River	Central Power Co.	Grand Island	Kearney Canal	Irrig. Power	22.00	4	8	18	Buffalo	Sept.	10	1882	1023	
Platte River	Gothenburg L. & P. Co.	Gothenburg	Gothenburg Canal	I. & P.	140.00	200.00	29	12	26	Lincoln	July	5	1890	645a



Central Canal Diversion Works.



CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D	Yr.
Platte River	Kjar, Hans C. et al.	Lexington	Dawson County Canal	Irrig.	7.00	18	10	23	Dawson	June	14	1894	621	"R"
Platte River	Dawson Co. Irr. Co.	Lexington	Dawson County Canal	Irrig.	1142.86	18	10	23	Dawson	June	26	1894	622	.....
Platte River (Buffalo Creek)	Savins, Richard T.	Lexington	Savins Pump	O. D.		18	10	23	Dawson	June	26	1894	622	1495
Platte River (Buffalo Creek)	Doughty, Wm. T. & R. H.	Lexington	Doughty Pump	O. D.		18	10	23	Dawson	June	26	1894	622	1648
Platte River	Pederson, Hans, et al.	Lexington	Pumps	Irrig.	3.00	19	9	20	Dawson	Sept.	15	1894	624	.....
						20	9	20	Dawson	Sept.	15	1894	624	.....
Platte River	Beatty, H. T.	Overton	Dawson County Canal	Irrig.	2.19	18	10	23	Dawson	Sept.	15	1894	624	"R"
Platte River	Malm, T. H.	Lexington	Dawson County Canal	Irrig.	9.14	18	10	23	Dawson	Sept.	15	1894	624	"R"
Platte River	Fellers, R. C.	Lexington	Dawson County Canal	Irrig.	.57	18	10	23	Dawson	Sept.	15	1894	624	"R"
Platte River	Boyles, Carl J., et al.	Overton	Dawson County Canal	Irrig.	1.14	18	10	23	Dawson	Sept.	15	1894	624	"R"
Platte River	Peterson, Elizabeth	Lexington	Dawson County Canal	Irrig.	2.30	18	10	23	Dawson	Sept.	15	1894	624	"R"
Platte River	Dawson County Irr. Co.	Lexington	Dawson County Canal	Irrig.	25.06	18	10	23	Dawson	Sept.	15	1894	624	"R"
Platte River (Strever Creek)	Jurgenson, John	Overton	Jurgenson Canal	O. D.		35	9	20	Dawson	Sept.	15	1894	624	2049
Platte River	Gothenburg L. & P. Co.	Gothenburg	Gothenburg Canal	Irrig.	240.00	29	12	26	Lincoln	Sept.	22	1894	645b	.....
Platte River (Peden's Lake)	Bean, Smith & Good	Cozad	Excell Canal	O. D.		12	11	23	Dawson	Sept.	22	1894	645b	1860
Platte River	Six Mile Ditch Co.	Gothenburg	Six Mile Canal	Irrig.	40.00	11	11	26	Lincoln	Oct.	22	1894	680	.....
Platte River	Cozad Irr. Co.	Cozad	Cozad Canal	Irrig.	294.50	15	11	25	Dawson	Dec.	28	1894	626	.....
Platte River	South Side Irr. Co.	Cozad	Orchard-Alfalfa Canal	Irrig.	85.00	9	10	24	Dawson	Jan.	23	1895	627	.....
Platte River	Central Power Company	Grand Island	Central Power Plant	Power	485.00	4	8	18	Buffalo	Feb.	12	1920	.....	1577
Platte River	Central Power Company	Grand Island	Central Power Co.											
			Steam Plant	Steam	925.00	29	11	8	Merrick	Aug.	12	1920	.....	1588
Platte River	Steele, Chas.	Elm Creek	Cottonwood Canal	Irrig.	5.33	7	8	18	Phelps	Dec.	15	1921	.....	1629

"R" Denotes relocation.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.
						S	T	R	County	Month	D			Yr.
Platte River.....	Central Nebraska Supplemental Water Association	Hastings.....	Tri-County Project	Irrig.	17-20	14	12	28	Lincoln.....	Nov.	29	1922	1696*
						2	8	21	Gosper.....				
						36	9	21	Dawson.....				
						8	15	15	Buffalo.....				
Platte River.....	Central Nebraska Supplemental Water Association	Hastings.....	Plum Creek Reservoir.....	Stor.	14	12	28	Lincoln.....	Nov.	15	1923	1727*	
Platte River.....	Central Nebraska Supplemental Water Association	Hastings.....	Tri-County Power Plant	Power	14	12	28	Lincoln.....	Nov.	15	1923	1728*	
Platte River.....	Peaker, Howard.....	Kearney.....	Kearney Tail Race (Pump)	O. D.	11	8	16	Buffalo.....	May	8	1924	1023	1744
Platte River.....	Faught, Carl E.....	Cozad.....	Faught Pump	Irrig.	.74	9	10	24	Dawson.....	Oct.	20	1925	1784
Platte River.....	Thirty Mile Canal Co.....	Gothenburg.....	Thirty Mile Canal	Irrig.	275.06	30	12	26	Dawson.....	Sept.	7	1926	1853
Platte River.....	Robertson, Nina.....	Cozad.....	Robertson Pump	Irrig.	.74	9	10	24	Dawson.....	Nov.	2	1926	1870
Platte River.....	Van Nortwick, Wesley.....	Cozad.....	Van Nortwick Pump	Irrig.	2.36	15	10	24	Dawson.....	July	18	1927	1942
Platte River.....	Frost, Matts.....	Overton.....	Frost Canal	Irrig.	1.43	16	9	20	Dawson.....	Sept.	3	1927	1957
Platte River.....	Priel, W. M.....	Overton.....	Priel Canal	Irrig.	2.27	22	9	20	Dawson.....	Sept.	3	1927	1958
Platte River.....	Thirty Mile Canal Co.....	Gothenburg.....	Thirty Mile Canal	Irrig.	50.79	30	12	26	Lincoln.....	Dec.	13	1927	1976
Platte River.....	Danielson, Fred.....	Brady.....	Danielson Pump	Irrig.	2.10	20	12	27	Lincoln.....	Oct.	1	1928	2038
Platte River.....	Berquist, J. T., et al.....	Lexington.....	Dawson County Canal	Irrig.	91.11	18	10	23	Dawson.....	Oct.	3	1928	2039
Platte River.....	Strever, James B.....	Cozad.....	Cozad Canal	Irrig.	1.00	15	11	25	Dawson.....	Oct.	27	1928	2050
Platte River.....	Carter, Wm.....	Cozad.....	Cozad Canal	Irrig.	2.28	15	11	25	Dawson.....	Dec.	7	1928	2056
Platte River.....	Thirty Mile Canal Co.....	Gothenburg.....	Thirty Mile Canal	Irrig.	4.57	30	12	26	Dawson.....	Apr.	9	1929	2077
Platte River.....	Pettitt, Joe, et al.....	Elm Creek.....	Dawson County Canal	Irrig.	3.00	18	10	23	Buffalo.....	Aug.	3	1929	2093
Platte River.....	Elm Creek Ditch Co.....	Elm Creek.....	Elm Creek Canal	Irrig.	227.00	6	8	19	Dawson.....	Sept.	17	1929	2104

* Application pending.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Platte River.....	Dawson County Irr. Co.	Lexington.....	Dawson County Extension	Irrig.	284.91	18	10	23	Dawson.....	Oct.	25	1929	.....	2110
Platte River.....	Jacobson, John E.....	Lexington.....	Jacobson Pump	Irrig.		18	10	23	Dawson.....	Jan.	14	1930	.....	2122*
Platte River.....	Dawson County Irr. Co.	Lexington.....	Beatty Lateral	Irrig.		18	10	23	Dawson.....	June	14	1930	.....	2145*
Platte River..... (So. Channel)	Johnson, P. L.....	Hastings.....	Johnson Pump	Irrig.	2.56	1	8	13	Adams.....	Feb.	13	1926	.....	1796
Platte River..... (No. Channel)	Hagge, Fred, et al.....	Grand Island.....	Hagge Pump	Irrig.	4.38	28	11	9	Hall.....	Aug.	24	1926	.....	1849
Plum Creek.....	Roblee, L. O.....	Lewellen.....	Plum Creek Reservoir	Irrig.	1.14	14	16	42	Garden.....	Jan.	12	1914	.....	1344
Pumpkinseed Cr.	Kelley, Wm. J.....	Harrisburg.....	Kelley Canal	Irrig.	1.43	5	19	54	Banner.....	May	10	1886	915	.....
Pumpkinseed Cr.	Zingg, Henry N.....	Platte Center.....	Heard Canals No. 1 and 2	Irrig.	1.29	14	19	54	Banner.....	June	1	1887	916	.....
Pumpkinseed Cr.	Olson, Albert H.....	Harrisburg.....	Logan Canal	Irrig.	4.00	7	19	55	Banner.....	July	16	1890	902	.....
Pumpkinseed Cr.	Court House Rock Co.....	Bridgeport.....	Court House Rock Canal	Irrig.	30.50	30	19	50	Morrill.....	Oct.	8	1890	840	}
Pumpkinseed Cr.	Court House Rock Co.....	Bridgeport.....	Court House Rock Canal	Irrig.		30	19	50	Morrill.....	Oct.	8	1890	1028	
Pumpkinseed Cr.	Mutual Ditch Co.....	Redington.....	Mutual Canal	Irrig.	8.57	33	19	52	Morrill.....	Nov.	1	1890	843	.....
Pumpkinseed Cr.	Sweet, S. R.....	Omaha.....	Meredith-Ammer Canal	Irrig.	18.86	23	19	50	Morrill.....	Feb.	20	1893	876	.....
Pumpkinseed Cr.	Finn & Trott.....	Bridgeport.....	Last Chance Canal	Irrig.	6.33	27	19	50	Morrill.....	Apr.	12	1894	883	.....
Pumpkinseed Cr.	Loy, Mrs. E. P.....	Bridgeport.....	Round House Rock Canal	Irrig.	3.00	28	19	51	Morrill.....	May	29	1894	884	.....
Pumpkinseed Cr.	Quinn, T. E.....	Bridgeport.....	Bird Cage Canal	Irrig.	1.00	20	19	51	Morrill.....	June	1	1895	892	.....
Pumpkinseed Cr.	Trinnier, Daisy A.....	Denver.....	Smith-Wheeler North Canal	Irrig.	.71	26	19	51	Morrill.....	June	1	1896	842	.....
Pumpkinseed Cr.	Cluck, Millard.....	Harrisburg.....	Peter Canal	Irrig.	2.57	2	19	56	Banner.....	July	1	1902	913	.....
Pumpkinseed Cr.	Airedale Ranch & Cattle Co.....	Scottsbluff.....	Airedale Canal No. 1	Irrig.	5.52	2	19	55	Banner.....	Jan.	24	1903	.....	698

Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month	D			Yr.
Pumpkinseed Cr.	Airedale Ranch & Cattle Co.	Scottsbluff	Airedale Canal No. 2	Irrig.	3.22	1	19	55	Banner	Jan.	24	1903	699
Pumpkinseed Cr.	Gifford, Owen	Atlanta	Reservoir Nos. 1, 2 & 3	I. & S.	1.31	7	19	55	Banner	June	24	1903	711
Pumpkinseed Cr.	Seybolt, Albert	Bridgeport	Swanger Canal	Irrig.	.43	30	19	50	Morrill	Feb.	28	1909	851
Pumpkinseed Cr.	Airedale Ranch & Cattle Co.	Scottsbluff	Airedale Canal No. 2	Irrig.	1.57	1	19	55	Banner	Oct.	26	1911	1133
Pumpkinseed Cr.	Airedale Ranch & Cattle Co.	Scottsbluff	Airedale Canal No. 1	Irrig.	.51	2	19	55	Banner	Sept.	4	1914	1380
Pumpkinseed Cr.	Airedale Ranch & Cattle Co.	Scottsbluff	Airedale Canal No. 3	Irrig.	4.41	2	19	55	Banner	Mar.	15	1918	1508
Pumpkinseed Cr.	Quinn, T. E.	Bridgeport	Quinn Canal	Irrig.	.25	20	19	51	Morrill	Oct.	15	1919	1561
Pumpkinseed Cr.	Sears, Willis G.	Omaha	Sears Pump	Irrig.	1.68	23	19	53	Banner	Dec.	20	1929	2117
Red Willow Cr.	Alliance Irr. Dist.	Bridgeport	Alliance Canal	O. D.		6	20	51	Morrill	Aug.	5	1915	874
Red Willow Cr.	Dobson, W. A.	Carrolton, Mo	Dobson Lateral	Irrig.	2.00	12	20	51	Morrill	Sept.	10	1915	1432
Red Willow Cr. and Camp Clark Seep	Schermerhorn Irr. Co.	Bridgeport	Schermerhorn Canal	O. D.	A. 418	9	20	50	Morrill	June	22	1929	2088
Sand Creek	Harris, Arch	Lemoyne	Patrick Canal	Irrig.	2.43	10	15	40	Keith	May	31	1891	725
Sand Creek	Nissen, Peter	Lemoyne	Nissen Canal	Irrig.	3.07	10	15	40	Keith	Mar.	18	1901	606
Seep from Lake Scheutz Springs, Trib. to Greenwood Cr.	Huffman, M. J.	Gering	Huffman Canal	Irrig.	6.43	26	21	54	Scotts Bluff	Mar.	19	1909	937
	Scheutz, Louis	Bridgeport	Scheutz Canal	Irrig.	.21	28	18	50	Morrill	May	10	1892	881
Sheep Creek	Nash, Charles A.	Henry	Little Moon Canal	Irrig.	1.00	10	24	58	Sioux	Mar.	23	1904	745

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Sheep Creek.....	Covert, Pitt	Cheyenne, Wyo.	Nebraska Reservoir	Irrig.	3.57	36	27	58	Sioux.....	May	18	1907	.....	859
Sheep Creek.....	West Fork Ditch Co.....	Exeter.....	W. Fork Canal	Irrig.	5.14	1	26	58	Sioux.....	Sept.	21	1907	.....	871
Sheep Creek.....	Cunningham, H. B.....	Exeter.....	Lower Canal	Irrig.	.37	11	25	58	Sioux.....	Nov.	2	1907	.....	875
Sheep Creek.....	Sturdevant, Mrs. Addie	Henry.....	Horse Camp Reservoir	Irrig.	.43	36	27	58	Sioux.....	Jan.	20	1908	.....	885
Sheep Creek..... (No. Platte)	Sheep Creek Lat. Co.....	Morrill.....	Sheep Creek Lateral.....	O. D.		8	23	5	Scotts Bluff	Feb.	26	1912	918	1176
Sheep Creek.....	Sheep Creek Lat. Co.....	Morrill.....	Sheep Creek Lateral.....	Irrig.	.92	8	23	57	Scotts Bluff	Jan.	12	1915	.....	1398
Sheep Creek..... (No. Platte)	Ramshorn Irr. Dist.....	Morrill.....	Ramshorn Canal	O. D.		20	23	57	Scotts Bluff	Sept.	12	1916	945	1465
Sheep Cr. Draw, (Trib. to)	Sheep Cr. Lat. Co.....	Morrill.....	Sheep Creek Lateral.....	Irrig.	.28	8	23	57	Scotts Bluff	Feb.	20	1915	.....	1403
Slough, Warm.....	Johnson, Abram M.....	Gibbon.....	Johnson Pump	Irrig.	.50	30	9	13	Buffalo.....	Feb.	20	1923	.....	1707
Slough, Warm (Spring Branch)	Walter, Jacob J.....	Gibbon.....	Walter Pump	Irrig.	1.14	31	9	13	Buffalo.....	Feb.	17	1927	.....	1900
Skunk Creek.....	Knight, H. H.....	Keystone.....	Miller Canal	Irrig.	2.29	1	14	37	Keith.....	Apr.	1	1895	740	.....
Skunk Creek.....	Maddox, P. P.....	North Platte	Skunk Cr. Canal	Irrig.	3.36	6	14	36	Keith.....	Nov.	5	1909	.....	968
Snake Creek.....	Kilpatrick Bros.....	Beatrice.....	Oasis Canal	Irrig.	54.86	6	24	51	Box Butte.....	June	6	1894	567	.....
Snake Creek.....	Kilpatrick Bros.....	Beatrice.....	Kilpatrick Reservoir No. 1	Stor.	‡100	1	24	52	Box Butte.....	June	7	1911	.....	1104
(Res. A. 1104)	Kilpatrick Bros.....	Beatrice.....	Kilpatrick Res. No. 2	Irrig.	200.00	6	24	51	Box Butte.....	Jan.	25	1912	.....	1159

‡ Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

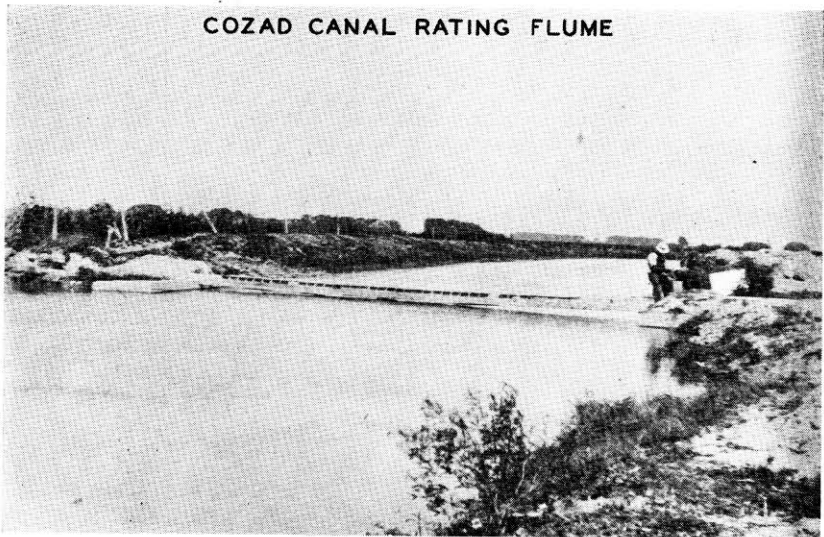
Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D|Yr.
So. Platte River.	Hollingsworth, Clark	Ogalla'a	Hollingsworth Canal	Irrig.	30.00	12	13	39	Keith	June	5|1894	723	.....
So. Platte River.	Reck, Wm. J.	Big Springs	Miller-Warren Canal	Irrig.	.57	7	12	42	Deuel	Jan.	5|1895	805	.....
So. Platte River.	Meyer, Henry	Brule	Meyer Canal	Irrig.	1.46	22	13	40	Keith	Apr.	14|1896	.....	283
So. Platte River.	Western Irr. Dist.	Big Springs	Western Canal	Irrig.	**180.29	14	12	43	Deuel	June	14|1897	.....	393
So. Platte River.	Beal, Orvill	Brule	Beal Power Plant	Power	17.60	20	13	40	Keith	Sept.	20|1921	.....	1619
So. Platte River.	Beal, Orvill	Brule	Beal Canal	Irrig.	5.00	20	13	40	Keith	Sept.	20|1921	.....	1620
So. Platte River.	Goodall, Robt., et al.	Ogallala	.....	Stor.	.....	.....	.....	.....	Deuel	Dec.	17|1921	.....	1630*
So. Platte River.	Western Irr. Dist.	Big Springs	Western Canal	Irrig.	11.43	14	12	43	Keith	Sept.	11|1926	.....	1804
So. Platte River.	Junge, M. F.	Big Springs	Junge Canal	Irrig.	1.07	31	13	41	Keith	Nov.	22|1926	.....	1857
So. Platte River.	Paxton Irr. Dist.	Paxton	Paxton Canal	Irrig.	70.19	1	13	38	Keith	Nov.	22|1926	.....	1874
Spotted Tail, Dry (North Platte R.)	Hrasky, Frank & Chas.	Mitchell	Roberts Canal	O. D.	.....	16	23	56	Scotts Bluff	Nov.	6|1912	918	1241
Spotted Tail, Dry	Great Western Sugar Co.	Scottsbluff	Mitchell Factory	Mfg.	15.00	21	23	56	Scotts Bluff	Mar.	24|1920	.....	1582
Spotted Tail, Wet, (North Platte R.)	Stewart, H. G.	Mitchell	Stewart Canal	O. D.	.....	10	23	56	Scotts Bluff	May	2|1898	918	449
Spotted Tail, Wet,	Wallace, Wm. E.	Mitchell	Stewart Reservoir	Irrig.	1.43	2	23	56	Scotts Bluff	Mar.	2|1904	.....	743
Spotted Tail, Wet	Wallace, Wm. E.	Mitchell	Brown Canal	Irrig.	2.28	2	23	56	Scotts Bluff	Mar.	17|1911	.....	1072
Spotted Tail, Wet	Young, Thos. H.	Mitchell	Spring Creek Reservoir	Ice	†152	27	23	56	Scotts Bluff	Feb.	3|1920	.....	1642
Spring Branch	Brogan Bros.	Keystone	Brogan Bros. Canal	Irrig.	.57	35	15	37	Keith	Sept.	14|1897	.....	410

* Application pending.

** 120.00 Second feet granted under Colorado-Nebraska South Platte River Compact.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			County	Date of Priority			Doc. No.	App. No.
						S	T	R		Month	D	Yr.		
Spring Branch (Warm Slough)	Walter, Jacob J.	Gibbon	Walter Pump	Irrig.	1.14	31	9	13	Buffalo	Feb.	17	1927		1900
Spring Creek	Peterson, E. J.	Lemoyne	Spring Creek Canal	Irrig.	.57	12	15	4	Keith	June	18	1894	724	
Spring Creek	Barden, Wm. E.	Redington	Barden Pump	Irrig.	.89	11	18	52	Morrill	June	17	1929		2086
Spring Creek, Lit.	Keystone Irr. Co.	Keystone	Little Spring Canal	Irrig.	.57	29	15	37	Keith	Apr.	1	1903		659
Spring Creek, Lit.	Beatty, Wallace D.	Scottsbluff	Shramek Canal	Irrig.	1.50	22	22	5	Scotts Bluff	June	9	1913		1295
Spring Creek, Lit.	Gilchrist, M. B.	Scottsbluff	Gilchrist Canal	Irrig.	.14	22	22	5	Scotts Bluff	July	29	1913		1310
Spring Creek, Lit.	Scottsbluff Inv. Co.	Scottsbluff	Shramek Extension	Irrig.	.57	22	22	55	Scotts Bluff	July	30	1917		1492
Spring Creek, Lit.	Nelson, Martin	Scottsbluff	Shramek Extension	Irrig.	.14	22	22	5	Scotts Bluff	June	3	1918		1515
Springs, Trib to Middle Creek	Bartling, Henry	Redington	Bartling Canal	Irrig.	.29	28	18	51	Morrill	July	31	1891	870	
Spring, Trib to Middle Creek	Bartling, Henry	Redington	Bartling Canal	Irrig.	.29	28	18	51	Morrill	June	1	1894	891	
Strever Creek (Buffalo Cr.)	Jensen, Anton	Cozad	Jensen Canal	Irrig.	.56	23	11	2	Dawson	July	27	1925		1772
Strever Creek (Buffalo Cr.)	Anders, Ida M.	Cozad	Anders Canal	Irrig.	1.10	23	11	23	Dawson	July	27	1925		1773
Strever Creek (Buffalo Cr.)	Gardner, H. C.	Cozad	Gardner Pump	Irrig.	1.00	30	12	23	Dawson	Apr.	11	1927		1924



CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

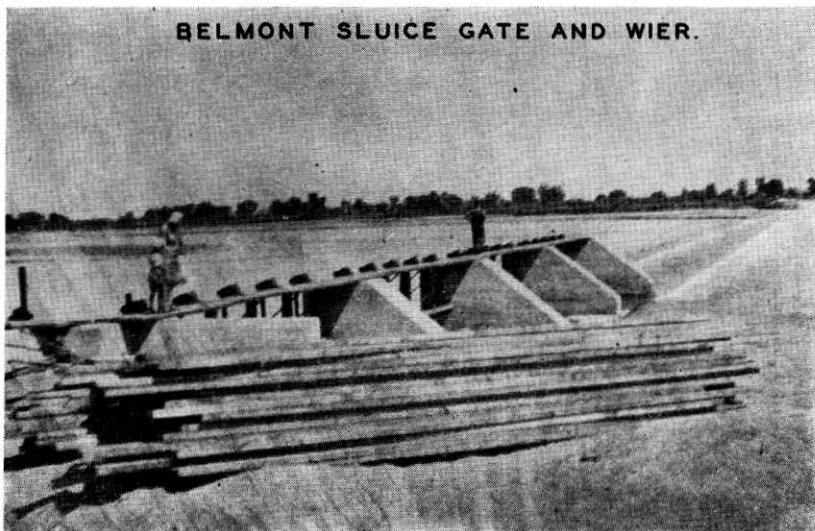
Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Strever Creek (Buffalo Cr.)	Siebenaler, Mat.	Elm Creek	Siebenaler Pump	Irrig.	2.31	6	8	19	Dawson	Nov	22	1927	.....	1969
Strever Creek (Buffalo Cr.)	Jurgenson, John	Overton	Jurgenson Canal	O. D.		35	9	20	Dawson	Oct.	19	1928	624	2049
Strever Creek (Buffalo Cr.)	Beatty, Harry T.	Overton	Beatty Canal	Irrig.	1.13	18	9	20	Dawson	June	3	1929	.....	2083
Strever Creek	Peterson, P. R.	Lexington	Peterson Canal	Irrig.	1.11	18	9	20	Dawson	Aug.	8	1929	.....	2094
Strever Creek	Bend, John T.	Overton	Bend Canal	Irrig.		36	9	20	Dawson	Aug.	26	1929	.....	2099*
White Horse Cr.	Lamlough, Harry	North Platte	Lamlough Lake	Irrig.	2.86	8	14	30	Lincoln	Dec.	31	1883	658	.....
White Horse Cr.	Bratt, John	North Platte	Bratt Canal	Irrig.	6.00	9	14	30	Lincoln	Aug.	25	1913	.....	1316
White Horse Cr.	McCone, Scott	North Platte	McCone Pump	Irrig.		5	14	30	Lincoln	Mar.	10	1930	.....	2127*
White Tail Creek	McCarthy, J. M.	Keystone	McCarthy Canal	Irrig.	1.00	36	15	38	Keith	July	15	1890	749	.....
White Tail Creek	Keystone Irr. Co.	Keystone	Halloway-Phelps Canal	Irrig.	3.86	36	15	38	Keith	June	1	1892	717	.....
White Tail Creek	McGinley, Geo., et al.	Keystone	Foster-Keystone Canal	Irrig.	8.57	26	15	38	Keith	Oct.	30	1894	730	.....
White Tail Creek	Noble, Bert A.	Keystone	Reed Canal	Irrig.	.57	15	15	38	Keith	May	15	1895	751	.....
White Tail Creek	Keystone Irr. Co.	Keystone	Keystone Canal	Irrig.	39.00	26	15	38	Keith	Apr.	26	1902	.....	662b
White Tail Creek	Keystone Irr. Co.	Keystone	Keystone Canal	Irrig.	4.30	26	15	38	Keith	Nov.	30	1906	.....	843
White Tail Creek	Keystone Irr. Co.	Keystone	Keystone Canal	Irrig.	7.41	27	15	38	Keith	May	27	1910	.....	1003
Willow Creek	Banner County Bank	Harrisburg	Willow Springs Canal No. 1	Irrig.	.57	16	19	56	Banner	Jan.	21	1902	.....	650
Willow Creek	Banner County Bank	Harrisburg	Willow Springs Canal No. 2	Irrig.	.86	16	19	56	Banner	Jan.	21	1902	.....	651
Willow Creek	Cross, Inez V.	Harrisburg	Cross Canal	Irrig.	1.40	16	19	56	Banner	May	8	1926	.....	1808
Willow Creek	Stafford, Margaret	Sarben	Stafford Canal	Irrig.	.80	15	14	35	Keith	Nov.	20	1929	.....	2114
Willow Creek	McFadden, M. J.	Sarben	McFadden Canal	Irrig.	.80	14	14	35	Keith	May	26	1930	.....	2142

* Application pending.

BELMONT DAM WIER.



BELMONT SLUICE GATE AND WIER.



CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

208

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Winters Creek.....	Bouton, Chas. A.....	Gering.....	Bouton Canal.....	Irrig.	1.00	3	22	54	Scotts Bluff.....	Aug.	17	1889	923	.....
Winters Creek..... (No. Platte R.)	Winters Creek Irr. Co.	Scottsbluff.....	Winters Cr. Canal.....	O. D.		19	22	54	Scotts Bluff.....	Feb.	2	1916	952	1446
Winters Creek.....	Great West. Sugar Co.	Scottsbluff.....	Scottsbluff Factory.....	Mfg.	15.00	19	22	54	Scotts Bluff.....	Oct.	4	1920	.....	1592
Wood River.....	Ashburn, J. N.....	Gibbon.....	Ashburn Canal.....	Power	40.00	13	9	14	Buffalo.....	Nov.	1	1873	993	.....
Wood River.....	Bearss, Guy S.....	Kearney.....	Bearss Canal.....	Power	25.40	13	9	16	Buffalo.....	May	1	1881	995	.....
Wood River.....	Klein, J. J.....	Kearney.....	White Bridge Park.....	Irrig.	.03	8	9	15	Buffalo.....	Mar.	14	1900	.....	545a
Wood River.....	Klein, J. J.....	Kearney.....	White Bridge Park.....	Power	10.00	8	9	15	Buffalo.....	Mar.	14	1900	.....	545b
Wood River.....	Jacobsen, C. A.....	Riverdale.....	Jacobsen Canal.....	Irrig.	.50	31	10	10	Buffalo.....	Nov.	10	1910	.....	1038
Wood River.....	Kimbrough, Cora.....	Shelton.....	Kimbrough Canal.....	Irrig.	4.00	36	10	13	Buffalo.....	Sept.	21	1912	.....	1227
Wood River.....	Jacobsen, C. A.....	Riverdale.....	Jacobsen Canal.....	Stor.	†9000	31	10	10	Buffalo.....	Feb.	3	1920	.....	1576
					A. F.									
Wood River.....	Haug, James.....	Shelton.....	Haug Pump.....	Irrig.	.64	7	9	13	Buffalo.....	Sept.	7	1920	.....	1590
Wood River.....	Peterson, C.....	Shelton.....	Peterson Pump.....	Irrig.	1.07	10	9	13	Buffalo.....	July	11	1921	.....	1611
Wood River.....	Nutter, M. D.....	Shelton.....	Nutter Pump.....	Irrig.	2.28	8	9	13	Buffalo.....	Aug.	29	1921	.....	1616
Wood River.....	Rodgers, J. H.....	Gibbon.....	Rodgers Pump.....	Irrig.	.30	14	9	14	Buffalo.....	Feb.	4	1922	.....	1641
Wood River.....	Nebr. Conf. Assn. of Seven Day Adventists	Shelton.....	Shelton Academy Pump.....	Irrig.	2.28	31	10	12	Hall.....	Feb.	16	1922	.....	1643
Wood River.....	Haug, James.....	Shelton.....	Haug Pump No. 2.....	Irrig.	.92	9	9	13	Buffalo.....	Feb.	28	1922	.....	1644
Wood River.....	Hallen, Hjalmar.....	Kearney.....	Hallen Reservoir.....	Stor.	†2AF	5	9	16	Buffalo.....	Apr.	4	1922	.....	1654
Wood River.....	Hallen, Hjalmar.....	Kearney.....	Hallen Dam.....	Irrig.		5	9	16	Buffalo.....	Apr.	17	1922	.....	1656
Wood River.....	Hallen, Hjalmar.....	Kearney.....	Hallen Power Plant.....	Power		5	9	16	Buffalo.....	Apr.	17	1922	.....	1657*
Wood River.....	Durtschi, Rudolph.....	Wood River.....	Durtschi Pump.....	Irrig.	1.11	18	10	11	Hall.....	May	22	1922	.....	1668
Wood River.....	Howe, Lloyd M.....	Wood River.....	Howe Pump.....	Irrig.	.54	17	10	11	Hall.....	July	14	1922	.....	1679
Wood River.....	Wilson, C. C.....	Omaha.....	Wilson Pump.....	Irrig.	1.21	14	9	15	Buffalo.....	Nov.	15	1922	.....	1693
Wood River.....	Smith, Evan T.....	Shelton.....	Smith Pump.....	Irrig.	1.09	1	9	13	Buffalo.....	Jan.	12	1923	.....	1702

† Acre feet per annum.

* Application pending.

REPORT OF SECRETARY

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month	D|Yr.			
Wood River.....	Ross, W. M.....	Gibbon.....	Ross Pump	Irrig.	.26	13	9	14	Buffalo.....	Apr.	28	1924	.....	1743
Wood River.....	Foley, Malick T.....	Kearney.....	Foley Pump	Irrig.	1.76	36	10	17	Buffalo.....	Dec.	2	1924	.....	1753
Wood River.....	Richardson, Frank.....	Gibbon.....	Richardson Pump	Irrig.	.49	13	9	14	Buffalo.....	Sept.	8	1925	.....	1780
Wood River.....	Wilcox, Eva C.....	Gibbon.....	Wilcox Pump	Irrig.	.90	8	9	13	Buffalo.....	Jan.	22	1926	.....	1793
Wood River.....	Nutter, John N.....	Gibbon.....	Darby Pump	Irrig.	.70	8	9	13	Buffalo.....	Feb.	10	1926	.....	1794
Wood River.....	Kirk, I. A.....	Gibbon.....	Kirk Pump	Irrig.	2.57	4	9	14	Buffalo.....	Feb.	23	1926	.....	1797
						16	9	14	Buffalo.....					
Wood River.....	Langan, Thos.....	Wood River.....	Langan Pump	Irrig.	1.14	9	10	11	Hall.....	Mar.	19	1926	.....	1800
Wood River.....	McConnell, M. C.....	Gibbon.....	McConnell Pump	Irrig.	3.43	7	9	13	Buffalo.....	Apr.	21	1926	.....	1805
Wood River.....	Mercer, Howard R.....	Gibbon.....	Mercer Pump	Irrig.	.80	9	9	14	Buffalo.....	May	25	1926	.....	1814
Wood River.....	Oliver Bros.....	Shelton.....	Wood River Pump	Irrig.	1.57	2	9	13	Buffalo.....	June	15	1926	.....	1818
Wood River.....	Carlson, Carl E.....	Shelton.....	Carlson Pump	Irrig.	1.10	35	10	13	Buffalo.....	July	19	1926	.....	1830
Wood River.....	Hayman, O. O.....	Shelton.....	Hayman Pump	Irrig.	.57	4	9	13	Buffalo.....	July	20	1926	.....	1831
Wood River.....	Power & Son.....	Gibbon.....	Power Pump	Irrig.	.41	13	9	14	Buffalo.....	July	24	1926	.....	1834
Wood River.....	Schnoor, Jacob.....	Amherst.....	Schnoor Pump	Irrig.	.80	16	10	17	Buffalo.....	Oct.	18	1926	.....	1867
Wood River.....	Oliver, Henry E. Jr.....	Shelton.....	Oliver Pump	Irrig.		9	9	13	Buffalo.....	Feb.	29	1928	.....	1987
Wood River.....	Nickel, Emil.....	Kearney.....	Nickel Pump	Irrig.		12	9	16	Buffalo.....	July	16	1930	.....	2148

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Arickaree River	Jenkins, Chas. T.	Haigler	Haigler Reservoir Canal	Irrig.	171.00	15	1	42	St. of Colo.	Jan.	21	1910	.....	979
Askey Lake, Trib. to Republican River	Pleas, Walter P.	Oxford	Pleas Pump	Irrig.	2.31	5	3	2	Furnas	Jan.	4	1930	.....	2120
Beaver Creek	Newton, Thos. F.	Beaver City	Newton Pump	Irrig.	.97	10	2	21	Furnas	Apr.	11	1927	.....	1923
Beaver Creek	Versaw, Paul E.	Beaver City	Versaw Pump	Irrig.	1.22	22	2	23	Furnas	Feb.	11	1928	.....	1982
Beaver Creek	Weber, John	Lebanon	Weber Pump	Irrig.		17	1	26	Red Willow	Aug.	8	1930	.....	2156*
Beaver Creek	Miller, T. H.	Danbury	Miller Pump	Irrig.		29	1	28	Red Willow	Nov.	24	1930	.....	2177*
Bell Creek, Trib. to Republican	Bell, J. E.	Superior	Valley Reservoir	Stor.	†300	29	1	6	Nuckolls	Apr.	30	1928	.....	2013
Buffalo Creek	Allen, Frank B. Et Al.	Haigler	Allen-Larned Canal	Irrig.	A. F. 6.00	18	1	40	Dundy	Oct.	16	1890	117	.....
Buffalo Creek	Porter, J. R. & Son	Haigler	Porter Canal	Irrig.	2.86	1	1	41	Dundy	Nov.	26	1890	171	.....
Buffalo Creek	Jenkins, Chas. T.	Haigler	Jenkins Canal No. 1	Irrig.	4.29	18	1	40	Dundy	Dec.	12	1908	.....	924
Buffalo Creek	Porter Land & Inv. Co.	Haigler	Porter Canal	Irrig.	3.32	1	1	41	Dundy	June	23	1913	.....	1298
Brush Creek	Lofton, Frank S.	McCook	Brush Creek Reservoir	Stor.	†1250	3	2	29	Red Willow	June	1	1912	.....	1201
Bushy Creek	Young, Lee	Maywood	Young Canal	Irrig.	A. F. .20	33	8	29	Frontier	Apr.	5	1927	.....	1921
Canyon No. 10 (Frenchman R.)	Wacker, Geo.	Culbertson	Wacker Canal	O. D.		17	3	31	Hitchcock	Sept.	4	1918	10	1523
Canyon No. 10 (Frenchman R.)	Crews, C. G.	Culbertson	Farmers Canal	O. D.		17	3	31	Hitchcock	Jan.	21	1920	10	1573

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Center Creek.....	Gregory, A. B. & P. C.	Franklin.....	Gregory Canal.....	Irrig.	2.00	1	1	15	Franklin.....	Aug.	11	1894	182	.....
Center Creek.....	Joy, C. G. Et Al.....	Franklin.....	Blank & Joy Canal.....	Irrig.	2.82	1	1	15	Franklin.....	Aug.	17	1928	.....	2025
Cook Creek.....	Haskell, W. G.....	Alma.....	Cook Cr. Canal.....	Irrig.	1.42	33	2	18	Harlan.....	July	21	1917	.....	1491
Cook Creek.....	Shaffer, Frank.....	Alma.....	Shaffer Canal.....	Irrig.	1.08	33	2	18	Harlan.....	July	10	1918	.....	1517
Cook Creek.....	Shaffer, Frank.....	Alma.....	Shaffer Canal.....	Stor.	†4 AF	23	2	18	Harlan.....	Aug.	24	1918	.....	1522
Cottonwood, Big.	Morlan, Henry.....	Bloomington.....	Bloomington Canal.....	Irrig.	.50	25	2	16	Franklin.....	Dec.	31	1881	185	.....
Cottonwood, Big.	Siegel, Benj. E.....	Bloomington.....	Bloomington Mill.....	Irrig.	6.00	25	2	16	Franklin.....	Nov.	23	1898	.....	483
Cottonwood, Lit.	Gardner, C. D.....	Bloomington.....	Gardner Canal.....	Irrig.	1.14	6	1	15	Franklin.....	Mar.	20	1922	.....	1647
Cottonwood, Lit.	Bradshaw, Geo. F.....	Bloomington.....	Home Irr. Plant.....	Irrig.	.23	6	1	15	Franklin.....	Apr.	27	1922	.....	1661
Craig Creek.....	Hoylman, M. B.....	Naponee.....	Hoylman Canal.....	Irrig.	1.69	14	1	17	Harlan.....	Aug.	1	1927	.....	1948
Crooked Creek.....	Kaley, C. H.....	Red Cloud.....	Fish Pond.....	Fish	1.00	1	1	11	Webster.....	May	7	1902	.....	665
Crooked Creek.....	Slawson, E. R.....	Red Cloud.....	Slawson Ice Pond.....	Stor.	†5 AF	1	1	11	Webster.....	Aug.	8	1912	.....	1213
Crooked Creek.....	Weesner, W. L.....	Red Cloud.....	Weesner Canal.....	Irrig.	.30	2	11	36	Webster.....	June	23	1925	.....	1765
Crosby Cr. Trib. to Republican.....	Worden, Dorsey.....	Superior.....	Worden Reservoir.....	Stor.		34	1	6	Nuckolls.....	Mar.	30	1928	.....	1993*
Crosby Cr. Trib. to Republican.....	Worden, Dorsey.....	Superior.....	Crosby Reservoir.....	Stor.		34	1	6	Nuckolls.....	Nov.	13	1930	.....	2174*
Crystal Springs.....	Newbold, W. G.....	Riverton.....	Crystal Springs Canal.....	Irrig.	.28	10	2	13	Franklin.....	Aug.	17	1921	.....	1615
Curtis Creek.....	Nelson, D. O. & H. L.	Curtis.....	Nelson Pump.....	Irrig.	.27	36	8	28	Frontier.....	Apr.	19	1927	.....	1927

† Acre feet per annum.

* Application pending.

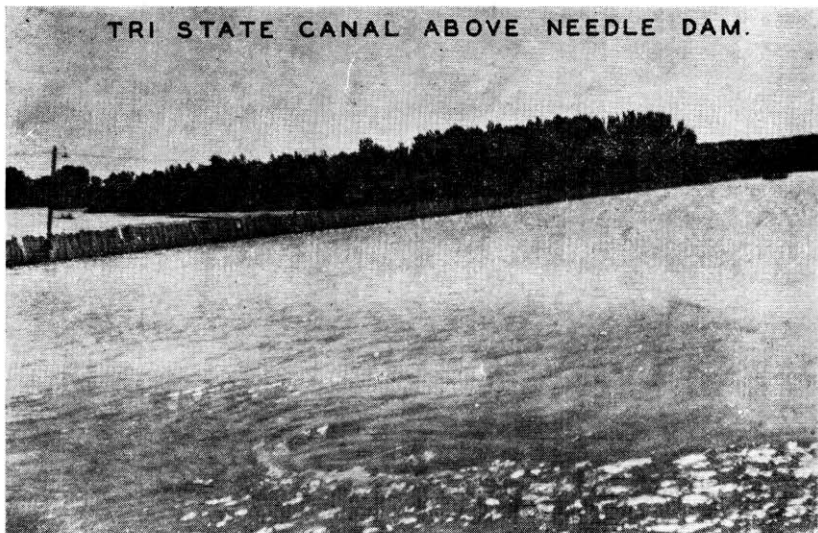
DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority			Doc. No.	App. No.
						S	T	R	County	Month	D	Yr.		
Deep Creek	Runck, John J.	Republican City	Runck Pump No. 2	Irrig.	.65	22	3	20	Harlan	Sept.	18	1928		2030
Driftwood Creek	Schmitz, Mrs. J. A.	McCook	Schmitz Canal	Irrig.	1.50	12	2	30	Red Willow	May	3	1913		1287
Driftwood Creek	Hesterworth, John T.	McCook	Hesterworth Canal	Irrig.	1.00	14	2	30	Red Willow	Nov.	17	1913		1332
Driftwood Creek	Wasson, Monroe A.	McCook	Sylvan Dell Canal	Irrig.	2.80	1	2	30	Red Willow	Dec.	6	1913		1340
Elk Creek	Murray, Esther	Arapahoe	Murray Canal	Irrig.	2.85	11	4	23	Furnas	Aug.	13	1913		1315
Frenchman River	Athey, H. E.	Wauneta	Wauneta Mills	Power	35.00	11	5	30	Chase	July	31	1886	178	
Frenchman River	Daschosifsky, G.	Lamar	Lamar Rolling Mills	Power	30.00	18	6	40	Chase	Dec.	30	1887	1013	
Frenchman River	Est. of M. H. Yaw	Champion	Champion Mills	Power	28.30	21	6	39	Chase	Dec.	31	1887	179	
Frenchman River	Sheridan, R. B.	McCook	Aberdeen Canal	Irrig.	2.00	3	5	38	Chase	July	1	1888	50a	
Frenchman River	McGillen, W. J.	Imperial	Harlan Canal	Irrig.	2.00	1	5	38	Chase	July	1	1888	56	
Frenchman R. & Stinking Water Creek	Frenchman Valley Irr. Dist.	Culbertson	Culbertson Canal	Irrig.	215.00	31	5	3	Hayes	May	16	1890	24-25 29-30	
Frenchman River	Kilpatrick Bros.	Beatrice	Champion Canal	Irrig.	24.00	23	6	40	Chase	Dec.	23	1890	47†	
Frenchman River	Sheridan, R. B.	McCook	Aberdeen Canal	Irrig.	.50	3	5	38	Chase	Feb.	2	1891	50b	
Frenchman River	Farmers Canal Co.	Culbertson	Farmers Canal	Irrig.	10.00	11	3	32	Hitchcock	Dec.	19	1893	10	
Frenchman River (Canyon No. 10)	Wacker, Geo.	Culbertson	Wacker Canal	O. D.		17	3	31	Hitchcock	Dec.	19	1893	10	1523
Frenchman River (Canyon No. 10)	Crews, C. G.	Culbertson	Farmers Canal	O. D.		17	3	31	Hitchcock	Dec.	19	1893	10	1573
Frenchman River	Fuller, C. D.	Imperial	Fuller Canal	Irrig.	25.00	4	5	36	Chase	June	12	1894	62	
Frenchman River	Riverside Irr. Co.	Culbertson	Riverside Canal	Irrig.	12.00	33	4	32	Hitchcock	July	28	1894	18	
Frenchman River	Dissmore, Geo. A.	Des Moines	Frenchman Val. Canal	Irrig.	10.00	32	5	33	Hayes	Aug.	23	1894	38	
Frenchman River	Grossback, Rose	Wauneta	Gould Canal	Irrig.	2.00	1	5	38	Chase	Oct.	9	1894	67	

† This amount affirmed by Supreme Court.

TRI STATE CANAL ABOVE NEEDLE DAM.



HEADGATE HAIGLER DITCH LOOKING SOUTH



CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D Yr.
Frenchman River	Sheridan, R. B.	McCook	Grant-Aberdeen Canal	Irrig.	2.00	3	5	38	Chase	Oct.	16 1894	68	
Frenchman River	Maranville, E. Et AL	Champion	Maranville Canal	Irrig.	6.00	12	6	41	Chase	Dec.	8 1894	70-71	
Frenchman River	Wise, J. S.	Palisade	Wise Canal	Irrig.	2.00	15	5	35	Hayes	Dec.	28 1894	74	
Frenchman River	Woods, John & Francis	Wauneta	N. Gurnsey Canal	Irrig.	5.00	3	5	3	Chase	Jan.	14 1895	72	
Frenchman River	Woods, John & Francis	Wauneta	S. Gurnsey Canal	Irrig.	24.00	10	5	37	Chase	Jan.	14 1895	75	
Frenchman River	Inman, Norton	Champion	Inman Canal	Irrig.	1.50	17	6	40	Chase	Feb.	28 1895	79	
Frenchman River	Kilpatrick Bros.	Beatrice	No. Side Canal	Irrig.	.79	21	6	39	Chase	Feb.	25 1896		246
Frenchman River	Shallenberger, Geo.	Elwood	Shallenberger Canal	Irrig.	1.77	25	6	39	Chase	Dec.	21 1897		423
Frenchman River	Inman Irr. Co.	Imperial	Inman Canal	Irrig.	6.43	17	6	40	Chase	Feb.	10 1898		436
Frenchman River	Hoke, J. A.	Champion	Creamery Canal	Power	34.40	21	6	39	Chase	Dec.	12 1900		591
Frenchman River	Follett-Krotter	Palisade	Follett-Krotter Pump	Irrig.	4.29	35	5	34	Hayes	Apr.	30 1903		705
Frenchman River	Follett-Krotter	Palisade	Follett-Krotter Pump	Irrig.	2.57	35	5	34	Hayes	Aug.	11 1903		720
Frenchman River	Hagerman, Wm.	Hamlet	Hagerman Canal	Irrig.	.86	19	5	34	Hayes	Mar.	11 1909		935
Frenchman River	Krotter, F. C.	Palisade	Follett-Krotter Canal	Irrig.	10.46	35	5	34	Hayes	Jan.	15 1910		975
Frenchman River	Krotter, F. C.	Palisade	Krotter Power Plant	Power	55.00	35	5	34	Hayes	Aug.	17 1910		1021
Frenchman River	Krotter, F. C.	Palisade	Krotter Power Plant										
			No. 3	Irrig.	2.42	35	5	34	Hayes	Dec.	15 1910		1047
Frenchman River	Hoke, J. A.	Champion	Hokes P. & P. Plant	Irrig.	2.28	21	6	39	Chase	May	1 1911		1094
Frenchman River	Kilpatrick Bros.	Beatrice	Kilpatrick Res. No. 1	Stor.	†1000	23	6	40	Chase	June	22 1911		1108
					A. F.								
Frenchman River	Sheridan, R. B.	McCook	Ext. Aberdeen Canal	Irrig.	1.57	2	5	38	Chase	July	29 1911		1117
Frenchman River	Theobald & Athey	Wauneta	Wauneta Power Plant	Power	75.00	11	5	36	Chase	Nov.	16 1911		1136
Frenchman River	Arteburn, E. E.	Lincoln	Arteburn Stor. Res.	S. & I.	†1176	11	6	41	Chase	Nov.	28 1911		1142
					A. F.								
Frenchman River	Bishop, Stephen S.	Lincoln	Inman Stor. Res.	Stor.	†2540	17	6	40	Chase	Dec.	8 1911		1145
					A. F.								
Frenchman River	Kilpatrick Bros.	Beatrice	Kilpatrick Res.	Irrig.	17.00	30	6	39	Chase	Jan.	25 1912		1160

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Frenchman River	Oliver Bros.	Wauneta	Oliver Bros. Power P't	Power	50.00	7	5	35	Hayes	Apr.	28	1913	.....	1284
Frenchman River	Oliver Bros.	Wauneta	Oliver Bros. Canal	Irrig.	3.20	7	5	35	Hayes	Apr.	28	1913	.....	1285
Frenchman River	Krotter, F. C.	Palisade	Krotter Power Plant	Power	65.00	35	5	34	Hayes	Dec.	2	1913	.....	1339
Frenchman River	Village of Imperial	Imperial	Imperial Power Plant	Power	55.00	25	6	39	Chase	Feb.	7	1917	.....	1474
Frenchman River	Shallenberger, O. P.	Imperial	Lake Imperial	Irrig.	4.57	25	6	39	Chase	May	14	1917	.....	1487
Frenchman River	Riverside Ditch Co.	Culbertson	Riverside Canal	Irrig.	2.90	33	4	32	Hitchcock	July	3	1922	.....	1674
Frenchman River	Severns, Fred	Palisade	Severns Pump	Irrig.	2.01	9	4	33	Hitchcock	Sept.	11	1926	.....	1856
Frenchman River	Krotter, F. C.	Palisade	Krotter Imperial Res.	Stor.	†23700	3	5	38	Chase	Feb.	10	1928	.....	1979
					A. F.									
Frenchman River	Krotter, F. C.	Palisade	Krotter-Imperial Power Plant	Power	50.00	3	5	38	Chase	Feb.	10	1928	.....	1980
Frenchman River	Wauneta L. & P. Co.	Wauneta	Wauneta Power Plant	R. Dam	D. 178	11	5	36	Chase	May	7	1928	.....	2015
					A. 1136									
Frenchman River	Oliver Bros.	Wauneta	Oliver Bros. Power P't	Power		7	5	35	Hayes	Jan.	16	1929	.....	2061*
Frenchman River and Stinking Cr.	Krotter, F. C.	Palisade	Krotter Power Plant No. 2	Power		31	5	33	Hayes	Sept.	30	1930	.....	2168*
Horse Creek	Pringle, Geo. N.	Parks	Horse Creek Canal	Irrig.	1.86	23	1	39	Dundy	Aug.	31	1885	159 } 173 }	.....
Horse Creek Springs, Trib. to	Pringle, Geo. N.	Parks	Pringle Canal	Irrig.	1.57	14	1	39	Dundy	May	11	1906	.....	824
Indian Creek	Thompson & Van Sickle	Benkelman	Thompson-Van Sickle Canal	Irrig.	.93	8	2	37	Dundy	June	20	1895	.....	237
Indian Creek	Chamberlain, J. C.	Mt. Sterling, Illinois	Chamberlain Canal	Irrig.	.06	18	2	36	Dundy	Oct.	4	1895	.....	240
Indian Creek	Foster, Chas.	Max	Wilson Canal	Irrig.	1.42	23	2	36	Dundy	June	22	1895	.....	268
Indian Creek	Stonberg, Sanford	Max	Stonberg Canal	Irrig.	1.00	2	2	37	Dundy	Mar.	13	1911	.....	1070

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			County	Date of Priority		Doc. No.	App. No.
						S	T	R		Month	D			Yr.
Indian Creek.....	Phillip, Daniel.....	Red Cloud.....	Phillip Pump.....	Irrig.	2.21	21	2	11	Webster.....	Jan.	9 1926	.....	1791
Indian Creek.....	Ramey, O. E.....	Red Cloud.....	Ramey Pump.....	Irrig.	3.87	20	2	11	Webster.....	Jan.	19 1926	.....	1792
Indian Creek.....	Daniels, E. E.....	Max.....	Daniels Canal.....	Irrig.	.03	23	2	36	Dundy.....	Sept.	9 1926	.....	1854
Macklin Creek.....	Bradley, Francis E.....	Trenton.....	Bradley Pump.....	Irrig.	.36	1	2	34	Hitchcock.....	Mar.	7 1928	.....	1989
Trib. to Republican.....													
Macklin Creek.....	Thuman, A.....	Trenton.....	Cemer Pump.....	Irrig.	.09	36	3	34	Hitchcock.....	Mar.	28 1928	.....	1992
Trib. to Republican.....													
Mauer Springs.....	C. B. & Q. R. R.....	Lincoln.....	Burlington Pipe Line.....	Irrig.	1.48	23	2	11	Webster.....	Nov.	28 1911	.....	1143
Medicine Creek.....	Cambridge Milling Co.....	Cambridge.....	Cambridge Canal.....	Power	68.00	29	4	25	Furnas.....	Dec.	31 1878	92-93	.....
Medicine Creek.....	Sanders, John L.....	Stockville.....	Sanders Canal.....	Irrig.	1.43	27	7	27	Frontier.....	Feb.	18 1895	83	.....
Medicine Creek.....	Crete Mills.....	Curtis.....	Curtis Lake.....	Power		32	8	28	Frontier.....			364*	.....
Medicine Creek.....	Cambridge-Arapahoe Irrig. & Imp. Co.....	Arapahoe.....	Cambridge-Arapahoe Canal.....	Irrig.	170.00	28	4	25	Furnas.....	Dec.	7 1897	89	.....
Medicine Creek.....	Maywood Milling Co.....	Maywood.....	Maywood Mills.....	Power	11.88	16	8	29	Frontier.....	May	4 1907	.....	858
Medicine Creek.....	Nelson, Elmer F.....	Maywood.....	Nelson Pump.....	Irrig.	.61	21	8	29	Frontier.....	Oct.	2 1926	.....	1865
Muddy Creek.....	Larson, Oscar F.....	Arapahoe.....	Larson Pump.....	Irrig.	3.53	17	4	23	Furnas.....	Feb.	9 1927	.....	1898
Muddy Creek.....	Michel, Geo. N.....	Arapahoe.....	Michel Pump.....	Irrig.	.29	15	4	23	Furnas.....	Oct.	13 1928	.....	2042
Red Willow Cr.....	Helm, John F.....	McCook.....	Helm Canal.....	Irrig.	.93	8	3	28	Red Willow.....	Dec.	15 1910	.....	1042
Red Willow Cr.....	Hadley, Flora B.....	McCook.....	Hadley Canal.....	Irrig.	8.43	16	3	28	Red Willow.....	Oct.	22 1927	.....	1964
Red Willow Lake.....	Cooper, Jas.....	Wallace.....	Red Willow Canal.....	Irrig.	2.00	36	9	33	Lincoln.....	Dec.	20 1893	647	.....

* Application not adjudicated.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority			Doc. No.	App. No.
						S	T	R	County	Month	D	Yr.		
Republican River	Western Public Service Co.	Scottsbluff	Arapahoe Star Mills	Power	196.00	27	4	23	Furnas	July	24	1879	1029	.....
Republican River	Carson, A.	McCook	Carson Canal No. 1	Irrig.	1.43	27	3	30	Red Willow	July	1	1888	103	.....
Republican River	Pioneer Irr. Co.	Haigler	Haigler Canal	Irrig.	77.00	2	1	43	Dundy	Apr.	4	1890	1025	.....
Republican River	Brown, W. A.	Haigler	Sand Point Canal	Irrig.	11.00	11	1	42	Dundy	Sept.	25	1890	115	.....
Republican River	Dundy Co. Irr. Co.	Benkelman	Dundy County Canal	Irrig.	45.00	24	1	39	Dundy	Nov.	22	1890	118	.....
Republican River	Trites, W. H. Et Al	Culbertson	Trites-Davenport Canal	Irrig.	7.00	20	3	31	Hitchcock	Dec.	18	1890	3	.....
Republican River	McCook I. & W. P. Co.	McCook	Meeker Canal	Irrig.	143.00	15	3	31	Hitchcock	Dec.	22	1890	4-9	.....
Republican River	Trenton Farmers Irr. Assn.	Trenton	Trenton Farmers Canal	Irrig.	32.00	10	2	34	Hitchcock	Dec.	24	1890	5	.....
Republican River	Carson, A.	McCook	Carson Canal No. 2	Irrig.	18.00	27	3	30	Red Willow	May	5	1891	102	.....
Republican River	Neighbors, E. G.	Benkelman	Neighbors Canal	Irrig.	2.86	24	1	39	Dundy	Mar.	18	1891	133	.....
Republican River	Republican Irr. Co.	Benkelman	Republican River Canal	Irrig.	30.00	29	1	38	Dundy	May	2	1892	147	.....
Republican River	Larned, W. H. et al	Haigler	White-Larned Canal	Irrig.	3.00	22	1	40	Dundy	Apr.	29	1893	150	.....
Republican River	Marr, Lorenzo	Culbertson	Marr Canal	Irrig.	4.29	16	3	31	Hitchcock	Jan.	22	1894	11	.....
Republican River	Anderson, Anders	Max	Anderson Canal	Irrig.	1.90	1	1	37	Dundy	Jan.	26	1894	151	.....
Republican River	Thomas, A. J.	Haigler	Thomas Canal	Irrig.	2.00	24	1	40	Dundy	June	5	1894	154	.....
Republican River	Ballard, Henry L.	Oxford	Ballard Canal	Irrig.	8.00	8	3	21	Furnas	June	9	1894	91	.....
Republican River	Wilcox, F. S.	McCook	Wilcox Canal	Irrig.	4.50	32	3	29	Red Willow	Oct.	4	1894	109	.....
Republican River	Delaware-Hickman Ditch Co.	Benkelman	Delaware-Hickman Can.	Irrig.	20.00	17	1	37	Dundy	Jan.	7	1895	157	.....
Republican River	Allen, E. M. et al	Arapahoe	Allen Canal	Irrig.	14.00	2	3	28	Red Willow	Jan.	26	1895	110	.....
Republican River	Spoooner, J. A.	Parks	Private Canal	Irrig.	1.00	25	1	40	Dundy	Oct.	7	1897	.....	413
Republican River	Hamilton, Henry L.	McCook	Harmon Canal	Ice	10.00	32	3	29	Red Willow	Jan.	22	1900	.....	535
Republican River	Walsh, Patrick	McCook	Walsh Canal	Irrig.	11.00	35	3	30	Red Willow	Jan.	31	1900	.....	537

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D	Yr.			
Republican River	Rogers, W. N.	McCook	Shadeland Park Canal	Irrig.	38.00	26	3	29	Red Willow	Jan.	3	1911	.....	1049
Republican River	McConnell Bros.	Trenton	McConnell Bros. Canal	Irrig.	180.00	10	2	34	Hitchcock	Jan.	23	1911	.....	1055
Republican River	Hurst, J. C. et al.	Trenton	Hurst-Day Canal	Irrig.	7.00	28	2	35	Hitchcock	Mar.	2	1911	.....	1068
Republican River	Cappel, Geo.	McCook	Cappel Canal	Irrig.	1.57	19	3	30	Red Willow	May	1	1911	.....	1093
Republican River	Rogers, W. N.	McCook	Shadeland Park Canal	Irrig.	7.00	25	3	29	Red Willow	Sept.	28	1911	.....	1129
Republican River	Anderson, C. et al.	Benkelman	Cottonwood Canal	Irrig.	3.35	6	1	36	Dundy	Feb.	19	1912	.....	1172
Republican River	Rupert Ditch Co.	Culbertson	Rupert Canal	Irrig.	20.00	32	3	32	Red Willow	Apr.	1	1912	.....	1192
Republican River	Pringle, Geo. N.	Parks	Parks Canal	Irrig.	17.00	20	1	35	Dundy	June	18	1912	.....	1202
Republican River	Kirtland, E. S.	Orleans	Orleans M. & E. Co.	Power	.....	27	2	19	Harlan	.....	.....	.....	1043*	.....
Republican River	Bartlett, Wm. C.	Alma	Lake Disappointment	Stor.	1180	32	2	18	Harlan	Dec.	18	1915	.....	1442
Republican River	Everson, P. M. & Mitchell, J. C.	Alma	Everson Canal	Irrig.	A. F.	1.07	13	2	18	Harlan	Dec.	18	1915	1443
Republican River	Ham, Roy O.	Benkelman	Ham Canal	Irrig.	3.47	9	1	37	Dundy	Sept.	14	1921	.....	1618
Republican River	Campbell, W. E.	Trenton	Campbell Canal	Irrig.	9.27	9	2	34	Dundy	Nov.	26	1921	.....	1627
Republican River	Dunlay, J. E.	Orleans	Dunlay Pump	Irrig.	5.00	26	2	19	Harlan	July	8	1925	.....	1768
Republican River	Fischback, Geo.	Orleans	Fischback Pump	Irrig.	1.58	33	2	19	Harlan	Aug.	27	1925	.....	1778
Republican River	Stevenson, L. E.	Alma	Stevenson Pump	Irrig.	6.34	5	1	18	Harlan	Sept.	30	1925	.....	1781
Republican River	Drummond, Dean	Republican City	Drummond Pump	Irrig.	2.37	11	1	17	Harlan	Oct.	13	1925	.....	1782
Republican River	Scott, C. E.	Alma	Scott Pump	Irrig.	3.37	36	2	19	Harlan	Dec.	22	1925	.....	1789
Republican River	Haeker, K. G.	Orleans	Haeker Pump	Irrig.	4.60	35	2	19	Harlan	Mar.	2	1926	.....	1798
Republican River	Peterson, Elam	Orleans	Republican Valley Pump	Irrig.	2.06	27	3	20	Harlan	June	18	1926	.....	1821
Republican River	Olson, L.	Orleans	Lake View Project	Irrig.	2.50	27	3	20	Harlan	June	29	1926	.....	1824
Republican River	Crews, L. E.	Haigler	Crews No. Side No. 3	Irrig.	4.00	20	1	41	Dundy	June	30	1926	.....	1826
Republican River	Worden, Dorsey	Superior	Worden Bros. Pump	Irrig.	1.04	1	6	32	Nuckolls	Sept.	23	1926	.....	1862
Republican River	Workman, Rich	Republican City	Workman Pump	Irrig.	1.10	16	1	17	Harlan	Jan.	19	1927	.....	1886

† Acre feet per annum.

* Appropriation not adjudicated.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D	Yr.
Republican River	Sheffrey, C. E.	Oxford	Sheffrey Pump	Irrig.	1.85	16	3	20	Harlan	Feb.	28	1927	1906
Republican River	Wintersteen, V. L.	Republican City	Wintersteen Pump	Irrig.	.11	12	1	17	Harlan	Mar.	17	1927	1914
Republican River	Best, John H.	Oxford	Best Pump	Irrig.	1.33	27	3	20	Harlan	June	30	1927	1936
Republican River	Wilson, J. F. Jr.	Guide Rock	Wilson Pump	Irrig.	.57	14	1	9	Webster	July	8	1927	1937
Republican River	Romjue, Carl M.	Red Cloud	Romjue Pump	Irrig.	2.03	12	1	10	Webster	Apr.	16	1928	2005
Republican River	Jansen, Wm.	Superior	Jansen Pump	Irrig.	1.60	29	1	7	Nuckolls	May	14	1928	2017
Republican River	Runck, John J.	Republican City	Runck Pump No. 1	Irrig.	3.90	27	3	20	Harlan	Sept.	18	1928	2029
Republican River	Keifer, J. Warren	Bostwick	Keifer Canal No. 1	Irrig.		21	1	18	Nuckolls	Sept.	22	1930	2167
Republican River	Cameron, J. Fury	Franklin	Cameron Pump	Irrig.					Franklin	Nov.	10	1930	2171*
Republican River	Keifer, J. Warren	Bostwick	Keifer Canal No. 2	Irrig.		26	1	8	Nuckolls	Nov.	17	1930	2175*
Republican River	Pringle, Geo. N.	Parks	Parks Canal	Irrig.	2.00	20	1	39	Dundy	Dec.	31	1915	1444
North Fork													
Republican River	Pringle, Geo. N.	Parks	Parks Ext.	Irrig.	1.14	20	1	39	Dundy	Sept.	5	1919	1555
North Fork													
Republican River	Crews, L. E.	Haigler	Crews Canal No. 2	Irrig.	2.59	20	1	41	Dundy	Mar.	29	1923	1709
North Fork													
Republican River	Southern Nebr. Power Co.	Superior	Guthrie Canal	Power	400.00	34	1	7	Nuckolls	Sept.	1	1877	1036
South Fork													
Republican River	Karr, J. W.	Benkelman	Karr Canal	Irrig.	2.00	20	1	37	Dundy	July	28	1894	155
South Fork													
Republican River	Riverside Ditch Co.	Benkelman	Riverside Canal	Irrig.	13.00	29	1	37	Dundy	Aug.	5	1894	156
South Fork													
Republican River	McDonald, J. A.	Benkelman	McDonald Canal	Irrig.	.79	36	1	38	Dundy	Nov.	13	1901	644
South Fork													
Republican River	Bailey, W. J.	Oxford	Bailey Canal	Irrig.	64.00	6	3	21	Furnas	Sept.	8	1913	1321
South Fork													

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D|Yr.	
Republican River Springs Trib. to	Pringle, Esther L.	Parks	Pringle Canal	Irrig.	.57	11	1	39	Dundy	Jan.	12	1897	.....	364
Rock Creek	Kara Cattle Co.	Denver	Parks Canal	Irrig.	4.29	17	1	39	Dundy	Dec.	31	1883	138	.....
Rock Creek	Owens, J. S. et al.	Parks	Phelan Canal	Irrig.	36.00	31	2	39	Dundy	June	20	1895	.....	265
Rock Creek	Campbell, R. R.	Parks	Rock Creek Canal	Irrig.	33.00	13	2	40	Dundy	Dec.	18	1899	.....	526
Rock Creek	Benkelman Light Assn.	Benkelman	Benkelman Light Ass'n.	Power	20.00	8	1	39	Dundy	Nov.	30	1912	.....	1245
Rock Creek	Pringle, Geo. N.	Parks	Parks Extension	Supple		17	1	39	Dundy	June	29	1921	.....	1609
Rock Canon Cr.	Rudisell, L. C.	Benkelman	Rudisell Dam	Stor.	†10 AF	35	3	37	Dundy	Nov.	26	1927	.....	1970
Sappa Creek	Zulauf, Geo. W.	Stamford	Stamford Mills	Power		21	2	20	Harlan				997*	.....
Sappa Creek	Flodine, A. L.	Stamford	Flodine Pump	Irrig.	1.55	19	2	20	Harlan	Sept.	9	1926	.....	1855
Sappa Creek	Fults, J. F.	Beaver City	Fults Pump	Irrig.	1.48	13	1	23	Furnas	Apr.	6	1927	.....	1922
Spring Creek	Carlton, J. C.	Benkelman	Benkelman Canal	Irrig.	1.29	19	1	37	Dundy	Dec.	31	1896	.....	373
Spring Creek	Twin Lakes Company	Benkelman	Twin Lakes Reservoir	Stor.		34	2	38	Dundy	Apr.	16	1930	.....	2133*
Stinking Wat. Cr.	Kilpatrick Bros.	Beatrice	Chase Co. L. & L. S. Canal	Irrig.	2.86	10	7	38	Chase	Mar.	10	1894	57	.....
Stinking Wat. Cr.	Crandall & Taylor	Imperial	McLain Canal	Irrig.	2.50	28	7	37	Chase	Sept.	24	1894	65	.....
Stinking Wat. Cr.	Kilpatrick Bros.	Beatrice	Chase Co. L. & L. S. Canal No. 7	Irrig.	4.57	36	7	37	Chase	Dec.	21	1894	72	.....
Stinking Wat. Cr.	Kilpatrick Bros.	Beatrice	Chase Co. L. & L. S. Canal No. 6	Irrig.	2.00	13	7	38	Chase	Jan.	28	1895	175 } 76 }	.....
Stinking Wat. Cr.	Kilpatrick Bros.	Beatrice	Chase Co. L. & L. S. Canal No. 5	Irrig.	1.50	14	7	38	Chase	Jan.	29	1895	77	.....
Stinking Wat. Cr.	Kilpatrick Bros.	Beatrice	Chase Co. L. & L. S. Canal No. 3	Irrig.	1.71	14	7	38	Chase	Jan.	29	1895	78	.....

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month			D|Yr.
Stinking Wat. Cr.	Kilpatrick Bros.	Beatrice	Chase Co. L. & L. S. Canal No. 4	Irrig.	.91	14	7	38	Chase	June 27	1895	56
Stinking Wat. Cr.	Kilpatrick Bros.	Beatrice	Chase Co. L. & L. S. Canal No. 1	Irrig.	.70	4	7	38	Chase	June 27	1895	57
Stinking Wat. Cr.	Krotter, F. C.	Palisade	Krotter Power Plant	Irrig.	3.00	25	5	34	Hayes	Dec. 15	1910	1046
Turkey Creek	Wilt & Polly	Naponee	Wilt & Polly Canal	Power		4	1	16	Franklin	Dec. 31	1874	183
Turkey Creek	Carpenter, Henry	Edison	Carpenter Canal	Irrig.	.71	30	4	21	Furnas	Sept. 18	1926	1861
Turkey Creek	Watson, John W. E.	Oxford	Watson Pump	Irrig.	2.80	31	4	21	Furnas	Nov. 30	1926	1876
Turkey Creek	Post, Walter A.	Naponee	Post Pump	Irrig.	1.90	8	1	16	Furnas	May 27	1927	1933
Turkey Creek	Johnson, Mathew H.	Oxford	Johnson Pump	Irrig.	1.18	5	3	21	Furnas	May 30	1927	1934
Turkey Creek	Wengert, J. H.	Oxford	Wengert Pump	Irrig.	.94	4	3	21	Harlan	July 9	1927	1938
Turkey Creek	Sindt, Henry	Naponee	Sindt Pump	Irrig.	1.00	17	2	16	Franklin	July 30	1926	1838
Stream, Trib. to						18	2	16				
Valley Home Cr.	Lunt, W. A.	Superior	Lunt Reservoir	Stor.		28	1	6	Nuckolls	Nov. 19	1930	2176*

* Application pending.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BYSTREAMS IN DIVISION NO. 1-C

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Big Sandy Creek	Busing, Fred	Powell	Busing Pump	Irrig.		22	3	1E	Jefferson	Aug.	9	1930		2157
Little Blue River	Southern Nebr. Power Co.	Superior	Oak Mill Race	Power		16	3	5	Nuckolls				991*	
Little Blue River	Larkins, H. M.	Hastings	Crystal Lake	Stor.	†32 AF	27	6	10	Adams	Aug.	17	1912		1219
Little Blue River	Lyon, Geo. Jr.	Nelson	Lyon Little Blue Electric Co.	Power	150.00	29	4	6	Nuckolls	Apr.	26	1915		1410
Little Blue River	Lyon, Geo. Jr.	Nelson	Lyon Canal	Irrig.	4.00	18	4	6	Nuckolls	Apr.	26	1915		1411
Little Blue River	Southern Neb. Pow. Co.	Superior	Meyer Hydro. Elec. Power Plant	Power	150.00	16	3	5	Nuckolls	July	27	1916		1467
Little Blue River	Larkins, H. M.	Hastings	Crystal Lake	Irrig.	.70	27	6	10	Adams	Nov.	9	1918		1526
Little Blue River	Bozarth-Carter	Hebron	Hebron Power Plant	Power	216.00	9	2	2	Thayer	Mar.	31	1919		1538
Little Blue River	Campbell, J. T.	Hebron	Blue Valley Power Co.	Power	200.00	5	2	1	Thayer	May	28	1919		1542
Little Blue River	Larkins, H. M.	Hastings	Larkins & Son Canal	Power	1.50	27	6	10	Adams	Nov.	20	1920		1594
Little Blue River	Hulbert, Chas.	Fairbury	Hulbert Canal	Irrig.	.02	22	2	2	Jefferson	Aug.	7	1922		1685
Little Blue River	Kassebaum, Wm.	Hebron	Kassebaum Power Plant	Power	250.00	29	3	2E	Jefferson	Nov.	13	1923		1726
Little Blue River	Dunn, F. J.	Hastings	Blue Valley Yacht Club	Stor.		10	5	9	Adams	May	23	1924		1745
Little Blue River	Steele, R. B.	Fairbury	Steel, Sand & Mining Project	Mfg.		22	2	2	Jefferson	Aug.	16	1926		1847*
Little Blue River	Kistler, Geo. S.	Roseland	Kistler Pump	Irrig.	.08	9	5	11	Adams	Nov.	1	1926		1869
Little Blue River	Coxbill, James.	Deweese	Vap Pump	Irrig.	.81	31	5	7	Clay	Dec.	8	1926		1878
Little Blue River	Gaudreault, I. S.	Hastings	Gaudreault Pump	Irrig.	.39	26	6	10	Adams	Feb.	22	1927		1903
Little Blue River	Pratt, H. G.	Hastings	Pratt Pump	Irrig.	1.01	28	6	10	Adams	Feb.	23	1927		1904
Little Blue River	Logan, John S.	Fairfield	Logans Canal	Irrig.	1.88	33	5	7	Clay	Mar.	7	1927		1907
Little Blue River	Knopf, Clyde L.	Pauline	Knopf Pump	Irrig.	1.60	25	6	10	Adams	Mar.	8	1927		1908
						31	6	9						

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-C—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Little Blue River	Graham, Harry.....	Ayr.....	Graham Pump.....	Irrig.	.80	13	5	11	Adams.....	Mar.	8	1927	.....	1909
Little Blue River	City of Fairbury.....	Fairbury.....		Mfg.	16.70	15	2	2E	Jefferson.....	Oct.	22	1927	.....	1963
Little Blue River	Hornberger, Thos.....	Ayr.....	Hornberger Pump.....	Irrig.	2.19	14	5	11	Adams.....	Jan.	24	1928	.....	1978
Little Blue River	Grant, Wm.....	Lincoln.....	Little Blue Plant No. 1	Power	240.00	9	2	2E	Jefferson.....	Oct.	16	1928	.....	2043*
Little Blue River	Grant, Wm.....	Lincoln.....	Little Blue Plant No. 2	Power	260.00	26	2	2E	Jefferson.....	Oct.	16	1928	.....	2044*
Little Blue River	Bergt, Theodore.....	Davenport.....	Bergt Pump.....	Irrig.		22	3	4	Thayer.....	Apr.	17	1930	.....	2134
Little Blue River	Dutton, K. M. J.....	Hastings.....	Blue Haven Pump.....	Irrig.		29	3	3	Thayer.....	Aug.	4	1930	.....	2152
						30								
Little Blue River	Mendenhall Thad E.....	Fairbury.....	Mendenhall Pump.....	Irrig.		23	2	2E	Jefferson.....	Aug.	16	1930	.....	2160*
Little Blue River	Jones, E. H.....	Fairbury.....	Midwest Garden Pump...	Irrig.		26	2	2E	Jefferson.....	Sept.	4	1930	.....	2165

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-D.

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority			Doc. No.	App. No.
						S	T	R	County	Month	D	Yr.		
Bear Creek.....	Mangus, Jerry T.....	Beatrice.....	Mangus Pump.....	Irrig.	.50	24	4	6E	Gage.....	Jan.	24	1927	.....	1887
Bear Creek.....	State Board of Control.....	Lincoln.....	Feeble Minded Inst. Pump	Irrig.	.95	6	4	6E	Gage.....	Apr.	22	1928	.....	2010
Beaver Creek.....	Wright, G. D.....	York.....	Wrights Canal.....	Power	40.00	7	10	2	York.....	Nov.	1	1878	963	.....
Big Blue River....	Black Bros. Flour Mills	Beatrice.....	Black Bros. Plant..... (Beatrice)	Power	300.00	33	4	6	Gage.....	Jan.	11	1860	1048	.....
Big Blue River....	Iowa-Nebr. L. & P. Co.	Lincoln.....	Milford Mills.....	Power	300.00	2	9	3	Seward.....	.....	.....	1866	1044	.....
Big Blue River.... (See A. 1692-1698-1732)	Gage Co. Elec. Co., The	Beatrice.....	Black Bros. Plant..... No. 2 (Blue Springs)	Power	450.00	17	2	7	Gage.....	.....	.....	1868	1047	.....
Big Blue River....	Zwonechek & Askamit...	Wilber.....	Mill & Electric Plant.....	Power	200.00	19	5	5	Gage.....	Jan.	1	1875	1046	.....
Big Blue River....	Iowa-Nebr. L. & P. Co.	Lincoln.....	Homesville Power Plant	Power	500.00	29	3	7	Raised Dam.....	Jan.	1	1903	1046	.....
Big Blue River.... (See A. 1095)	Iowa-Nebr. L. & P. Co.	Lincoln.....	Blue River Power Sta. No. 1.....	Power	200.00	19	9	4	Seward.....	July	8	1910	.....	1006
Big Blue River....	Iowa-Nebr. L. & P. Co.	Lincoln.....	Holmesville Power Plant	R. Dam	D. 1021	29	3	7	Gage.....	May	3	1911	.....	1095
Big Blue River....	Jacobs, E.....	Staplehurst.....	Jacobs Power Plant.....	Power	41.00	26	12	2	Seward.....	Nov.	13	1911	.....	1135
Big Blue River.... (See A. 1520)	Iowa-Nebr. L. & P. Co.	Lincoln.....	Big Blue Plant No. 2.....	Power	100.00	32	9	3	Seward.....	Jan.	3	1912	.....	1153
Big Blue River.... (See A. 1585 & A. 1788)	Beatrice Power Co.....	Barneston.....	Barneston Power Plant.	Power	500.00	13	1	7	Gage.....	Feb.	18	1913	.....	1262
Big Blue River.... (See A. 1521-1599-1733-1751)	Iowa-Nebr. L. & P. Co.	Lincoln.....	Blue River Plant No. 3.	Power	100.00	5	8	4	Saline.....	Mar.	13	1913	.....	1265

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-D—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Big Blue River.....	Mares, Frank.....	Wilber.....	Mares Canal.....	Irrig.	2.28	2	6	4	Saline.....	Aug.	12	1913	.....	1314
Big Blue River.....	C. B. & Q. R. R. Co.....	Lincoln.....	C. B. & Q. Pipe line.....	Irrig.	.50	2	9	3	Seward.....	Apr.	30	1914	.....	1366
Big Blue River.....	C. B. & Q. R. R. Co.....	Lincoln.....	Pipe Line at Wymore.....	Irrig.	.50	21	2	7	Gage.....	Dec.	24	1914	.....	1394
Big Blue River.....	C. B. & Q. R. R. Co.....	Lincoln.....	Pipe Line at Seward.....	Irrig.	.50	21	11	3	Seward.....	Dec.	14	1914	.....	1395
Big Blue River..... (See A. 1752)	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Blue River Plant No. 4.....	Power	100.00	32	9	4	Seward.....	Aug.	14	1916	.....	1463
Big Blue River.....	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Power Plant No. 5.....	Power	100.00	11	8	3	Seward.....	Feb.	13	1917	.....	1476
Big Blue River..... (See A. 1761)	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Shestak Power Plant.....	Power	200.00	35	7	4	Saline.....	Feb.	6	1918	.....	1506
Big Blue River..... (See A. 1153)	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Big Blue Plant No. 2.....	R. Dam	A. 1153	32	9	3	Seward.....	Aug.	21	1918	.....	1520
Big Blue River..... (See A. 1265)	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Blue River Plant No. 3.....	R. Dam	A. 1265	5	8	4	Saline.....	Aug.	21	1918	.....	1521
Big Blue River.....	Beatrice Power Co.....	Barneston.....	Beatrice Power Co.....	R. Dam	A. 1262	13	1	7	Gage.....	May	27	1920	.....	1585
Big Blue River.....	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Wilber Power Plant.....	Power	200.00	12	5	4	Saline.....	Dec.	17	1920	.....	1597
Big Blue River.....	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Blue River Plant No. 3.....	R. Dam	A. 1265	5	8	4	Saline.....	Dec.	28	1920	.....	1599
Big Blue River..... (See A. 1731)	Gage Co. Ele. Co., The.....	Beatrice.....	Black Bros. Plant No. 3.....	Power	400.00	2	3	6	Gage.....	Oct.	7	1922	.....	1690
Big Blue River.....	Gage Co. Ele. Co., The.....	Beatrice.....	Black Bros. Plant No. 2.....	Dredge	D. 1047	17	2	7	Gage.....	Nov.	7	1922	.....	1692
Big Blue River.....	Gage Co. Ele. Co., The.....	Beatrice.....	Black Bros. Plant No. 2.....	Dredge	D. 1047	17	2	7	Gage.....	Dec.	15	1922	.....	1698
Big Blue River.....	Seward City Mills.....	Seward.....	Ruby Power Station.....	Power	40.00	15	10	3	Seward.....	Apr.	17	1923	.....	1715
Big Blue River.....	Black Bros. Flour Mills.....	Beatrice.....	Black Bros. Plant No. 3.....	Dredge	A. 1690	2	3	6	Gage.....	Nov.	26	1923	.....	1731*
Big Blue River.....	Black Bros. Flour Mills.....	Beatrice.....	Black Bros. Plant No. 2.....	R. Dam	D. 1047	17	2	7	Gage.....	Dec.	15	1923	.....	1732*
Big Blue River.....	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Blue River Plant No. 3.....	Dredge	A. 1265	5	8	4	Saline.....	Jan.	30	1924	.....	1733
Big Blue River.....	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Blue River Plant No. 3.....	Dredge	A. 1265	5	8	4	Saline.....	Nov.	21	1924	.....	1751
Big Blue River.....	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Blue River Plant No. 4.....	Dredge	A. 1463	32	9	4	Seward.....	Nov.	25	1924	.....	1752
Big Blue River.....	Iowa-Nebr. L. & P. Co.....	Lincoln.....	Shestaks Power Plant.....	Dredge	A. 1506	35	7	4E	Saline.....	Mar.	30	1925	.....	1761

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-D—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D|Yr.
Big Blue River	Beatrice Power Co.	Barneston	Barneston Power	Dredge	A. 12c2	13	1	7	Gage	Dec.	17	1925	1788
Big Blue River	Gage Co. Elec. Co., The	Beatrice	Plant No. 5	Power	300.00	13	4	5	Gage	Oct.	17	1927	1961
Big Blue River	Muirhead, Wm. C.	Bradshaw	Muirhead Canal	Irrig.	.93	30	9	5	Hamilton	Sept.	13	1929	2103
Big Blue River	Johnson, Chas. S. F.	Stromsburg	Johnson Pump	Irrig.	1.29	8	13	2	Polk	Mar.	26	1930	2130
Big Blue River	Sonderegger Nursery and Seed House	Beatrice	Sonderegger Pump	Irrig.		3	3	6E	Gage	Aug.	29	1930	2164
Big Blue River, No. Branch	Nelson, Louie E.	Inland	Nelson Pump	Irrig.	.48	27	8	8	Clay	Feb.	11	1927	1899
Big Blue River, W. Fork	Iowa-Nebr. L. & P. Co.	Lincoln	Bow Span Plant	Power	100.00	26	9	2	Saline	Dec.	17	1920	1595
Big Blue River, W. Fork	Iowa-Nebr. L. & P. Co.	Lincoln	Big Bend Plant	Power	100.00	11	8	3	Saline	Dec.	17	1920	1596
Big Blue River, W. Fork	Warren, Herbert F.	Trumbull	Warren Pump	Irrig.	.16	13	8	9	Adams	Nov.	26	1927	1971
Big Blue River, W. Fork	Show, Frank	McCool Junction	Show Pump	Irrig.		18	9	2	York	Oct.	19	1928	2048
Big Blue River, So. Branch	Swanson, S. A.	Hastings	Swanson's Pump	Irrig.	1.90	4	7	9	Adams	Apr.	4	1929	2076
Big Blue River & School Creek	Garbe, Albert F.	Grafton	Blue Park Dam	Power	66.00	1	8	4	Fillmore	Aug.	7	1917	1494
Turkey Creek	Grothe, Chas.	Pleasant Hill		Power		4	7	3	Saline				990*
Turkey Creek	Lane, J. K.	Pleasant Hill	Lane Model Canal	Irrig.	0.09	4	7	3	Saline	July	16	1895	81
Turkey Creek	Lane, J. K.	Pleasant Hill	Lane Model Canal	Irrig.					Saline	July	18	1895	84

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-E

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Lodge Pole Cr.	Forsling, Alfred	Kimball	Owasco Canal	Irrig.	1.29	29	15	55	Kimball	Dec.	31	1876	347R	
Lodge Pole Cr.	Gieseking, Herman	Altamont, Ill	Bickel Canal	Irrig.	.30	30	15	55	Kimball	Dec.	31	1876	347	
Lodge Pole Cr.	Gunderson, A	Potter	Gunderson Canal	Irrig.	1.43	1	14	52	Cheyenne	June	1	1879	305	
Lodge Pole Cr.	Fuller, Hubert R.	Sidney	Runge Canal No. 1	Irrig.	1.71	20	14	50	Cheyenne	Apr.	15	1880	339	
Lodge Pole Cr.	Fuller, Hubert R.	Sidney	Runge Canal No. 2	Irrig.	.50	28	14	50	Cheyenne	Apr.	15	1882	338	
Lodge Pole Cr.	Connelly, John	Sidney	Anderson Canal No. 1	Irrig.	2.50	8	14	51	Cheyenne	June	30	1882	373	
Lodge Pole Cr.	Peters Trust Co.	Omaha	Circle Arrow Canal	Irrig.	3.71	29	15	55	Kimball	July	1	1882	346	
Lodge Pole Cr.	Fuller, H. R.	Sidney	Urbach Canal	Irrig.	.86	15	14	51	Cheyenne	Sept.	1	1882	308	
Lodge Pole Cr.	Thomas, Elsie O.	Omaha	Hale Canal No. 3	Irrig.	.57	36	14	51	Cheyenne	Apr.	30	1883	320	
Lodge Pole Cr.	Thomas, Elsie O.	Omaha	Hale Canal No. 4	Irrig.	.71	36	14	49	Cheyenne	Apr.	30	1883	321	
Lodge Pole Cr.	Thomas, Elsie O.	Omaha	Hale Canal No. 5	Irrig.	.57	36	14	49	Cheyenne	Apr.	30	1883	322	
Lodge Pole Cr.	Thomas, Elsie O.	Omaha	Lower Whitney Canal	Irrig.	.29	31	14	48	Cheyenne	May	1	1883	317	
Lodge Pole Cr.	Booth, Firth, Est. of	Sunol	Booth Canal	Irrig.	4.29	29	14	47	Cheyenne	May	31	1883	309	
Lodge Pole Cr.	McAuliffe, F.	Chappell	McAuliffe Canal	Irrig.	2.29	21	13	45	Deuel	Dec.	31	1884	814	
Lodge Pole Cr.	Webster, Wm.	Riverside, Cal	Kinney Canal No. 2	Irrig.	2.71	33	15	56	Kimball	Dec.	31	1884	348	
Lodge Pole Cr.	Libby, Mary A.	Santa Monica, Cal.	Libby Canal	Irrig.	2.00	36	14	47	Cheyenne	Dec.	31	1884	312	
Lodge Pole Cr.	Dickinson, Chas. C.	Lodge Pole	Dickinson Canal	Irrig.	1.14	26	14	47	Cheyenne	Jan.	1	1885	969	
Lodge Pole Cr.	Ruttner, Edward A.	Sunol	Howard Canal	Irrig.	.86	31	14	47	Cheyenne	Apr.	10	1885	336	
Lodge Pole Cr.	Kreuger, R. & F. W.	Sidney	Kreuger Canal No. 3	Irrig.	1.14	32	14	48	Cheyenne	May	1	1885	323	
Lodge Pole Cr.	Wolfe, H. D.	Chappell	Wolfe Canal	Irrig.	1.00	18	13	45	Deuel	Dec.	31	1885	813	
Lodge Pole Cr.	Peters Trust Company	Omaha	McIntosh Canal	Irrig.	3.31	29	15	55	Kimball	Apr.	16	1886	351	
Lodge Pole Cr.	Kreuger, R. & F. W.	Sidney	Kreuger Canal No. 2	Irrig.	2.29	32	14	48	Cheyenne	Oct.	10	1886	324	
Lodge Pole Cr.	U. S. Securities Co.	Omaha	Borquist Canal	Irrig.	1.29	34	14	49	Cheyenne	Apr.	30	1887	300	
Lodge Pole Cr.	U. S. Securities Co.	Omaha	Borquist Canal	Irrig.	.71	34	14	49	Cheyenne	Apr.	30	1887	301	
Lodge Pole Cr.	Thomas, Elsie O.	Omaha	Upper Whitney Canal	Irrig.	2.29	36	14	49	Cheyenne	May	1	1887	316	
Lodge Pole Cr.	Dickinson, M. Q.	Sunol	McLaughlin Canal	Irrig.	1.00	25	14	48	Cheyenne	May	1	1887	966	

"R" Denotes relocation.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-E—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Lodge Pole Cr.	Thomas, Elsie O.	Omaha	Hale Canal No. 1	Irrig.	1.14	36	14	49	Cheyenne	July	1	1887	318	
Lodge Pole Cr.	Ramsey, Miss A. A.	Boston, Mass.	Mitchell Canal	Irrig.	.86	8	14	51	Cheyenne	Sept.	1	1887	304	
Lodge Pole Cr.	U. S. Fidelity & Guaranty Co.	Omaha	Tobin Canal	Irrig.	2.29	28	14	47	Cheyenne	July	31	1888	330	
Lodge Pole Cr.	Peeetz, John	Sidney	Bordwell Canal	Irrig.	1.43	35	14	49	Cheyenne	Aug.	1	1888	303	
Lodge Pole Cr.	Wearin, Wm. H.	Carleton	Premier Canal	Irrig.	2.43	3	14	58	Kimball	Apr.	11	1889	340	
Lodge Pole Cr.	Peeetz, John	Sidney	Bordwell Canal	Irrig.	.86	35	14	49	Cheyenne	Apr.	27	1889	302	
Lodge Pole Cr.	Eubank, Mrs. John	Kimball	Polly Canal	Irrig.	.79	30	15	55	Kimball	May	6	1889	342	
Lodge Pole Cr.	Wearin, Wm. H.	Carleton	Independent Canal	Irrig.	3.14	7	14	58	Kimball	May	6	1889	343	
Lodge Pole Cr.	Atkins, D. K.	Kimball	Atkins Canal	Irrig.	.43	30	15	55	Kimball	May	6	1889	344	
Lodge Pole Cr.	Webster, Wm.	Riverside, Cal.	Kinney Canal	Irrig.	2.00	31	15	56	Kimball	May	14	1889	345	
Lodge Pole Cr.	Hoberstroh, W. A.	Omaha	Young Canal	Irrig.	.50	33	15	57	Kimball	May	28	1889	349	
Lodge Pole Cr.	Lehmkuhl, John	Kimball	Ruttner Canal	Irrig.	1.14	36	15	57	Kimball	June	4	1889	350	
Lodge Pole Cr.	Oberfelder, R. S.	Sidney	Oberfelder Canal	Irrig.	.43	31	14	46	Cheyenne	June	10	1889	333	
Lodge Pole Cr.	Thomas, Elsie O.	Omaha	Hale Canal No. 2	Irrig.	.43	36	14	49	Cheyenne	June	26	1889	319	
Lodge Pole Cr.	Carter, J. G.	Lodge Pole	Bullock Canal	Irrig.	1.43	3	13	46	Deuel	June	25	1889	296	
Lodge Pole Cr.	Persinger, A. B., Agt.	Lodge Pole	Persinger Canal	Irrig.	4.57	33	14	46	Deuel	June	25	1889	297	
Lodge Pole Cr.	Kreuger, R. & F. W.	Sidney	Kreuger Canal No. 1	Irrig.	3.00	29	14	48	Cheyenne	June	26	1889	325	
Lodge Pole Cr.	Peters Trust Co.	Omaha	Brady Canal	Irrig.	.71	29	15	55	Kimball	Aug.	16	1889	352	
Lodge Pole Cr.	Wilkinson, Mary E.	Pine Bluff, Wyo.	Hoover Canal	Irrig.	1.43	12	14	59	Kimball	Sept.	4	1889	353	
Lodge Pole Cr.	Lane, Roy and Schweiger, Susan	Sidney	Ickes Canal	Irrig.	2.50	28	14	50	Cheyenne	Mar.	25	1891	329	
Lodge Pole Cr.	Johnson, Chas. W.	Chadron	Adams Canal	Irrig.	1.43	3	14	52	Cheyenne	July	1	1891	371	
Lodge Pole Cr.	Atkins, D. K. and Garrard, Robt. P.	Potter	Hurley-Lily-Polly Canal	Irrig.	2.57	26	15	56	Kimball	Oct.	1	1891	354	
Lodge Pole Cr.	Thortensen, Nels	Kimball	Christensen Canal	Irrig.	.57	7	14	51	Cheyenne	Apr.	15	1893	366	
Lodge Pole Cr.	Thortensen, Nels	Sidney	Christensen Canal	Irrig.	.43	7	14	51	Cheyenne	Apr.	15	1893	367	

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-E—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which app'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D|Yr.
Lodge Pole Cr.	Van Aelstyn, Herman	Sidney	Trognitz Canal	Irrig.	1.00	36	14	50	Cheyenne	June	1 1893	365	.....
Lodge Pole Cr.	Oberfelder, R. S.	Sidney	Oberfelder Canal	Irrig.	2.00	31	14	46	Cheyenne	Dec.	30 1893	306	.....
Lodge Pole Cr.	Kreuger, R. S.	Sidney	Kreuger Canal	Irrig.	1.00	29	14	48	Cheyenne	May	1 1894	968	.....
Lodge Pole Cr.	Lyngholm, Hannah	Sidney	Lyngholm Canal	Irrig.	.36	14	14	51	Cheyenne	Nov.	1 1894	337	.....
Lodge Pole Cr.	Dickinson, Geo. W. et al.	Lodge Pole	Dickinson Canal	Irrig.	2.29	33	14	47	Cheyenne	May	10 1896	967	.....
Lodge Pole Cr.	Persinger, A. B.	Lodge Pole	Bullock Canal	Irrig.	.57	4	13	46	Deuel	Feb.	16 1898	.....	437
Lodge Pole Cr.	Forsling, Alfred	Kimball	Maltese Cross Canal	Irrig.	.21	36	15	57	Kimball	May	16 1898	.....	454
Lodge Pole Cr.	Wearin, Wm. H.	Carleton	Bushnell Canal	Irrig.	3.00	2	14	58	Kimball	Apr.	15 1899	.....	504
Lodge Pole Cr.	Wiegand, Lyle H.	Chappell	Wiegand Canal	Irrig.	2.00	17	13	45	Deuel	May	31 1900	.....	563
Lodge Pole Cr.	Brown, G. B.	Chappell	Neuman Canals Nos. 1-2	Irrig.	1.89	36	13	45	Deuel	June	12 1900	.....	565
Lodge Pole Cr.	McHatton, Jas. W.	Chappell	Wertz Bros. Canal	Irrig.	2.86	12	13	46	Deuel	Feb.	14 1901	.....	600
Lodge Pole Cr.	Neuman, Guy C.	Chappell	Neuman Canal	Irrig.	1.29	26	13	45	Deuel	Apr.	17 1901	.....	611
Lodge Pole Cr.	Johnson, J. C.	Chappell	Johnson Canal	Irrig.	2.14	23	13	45	Deuel	Apr.	17 1901	.....	612
Lodge Pole Cr.	Peters Trust Company	Omaha	Bennett Reservoir	Stor.	†700	22	15	55	Kimball	Mar.	13 1902	.....	657*
					A. F.								
Lodge Pole Cr.	Nasland, John	Chappell	Nasland Canal	Irrig.	.96	1	12	45	Deuel	Apr.	16 1902	.....	661
Lodge Pole Cr.	Peters Trust Company	Omaha	Bennett Res. Canal	Irrig.	1.22	29	15	55	Kimball	Oct.	2 1902	.....	691
Lodge Pole Cr.	Forsling, Alfred	Kimball	Forsling Canal	Irrig.	1.50	34	15	57	Kimball	Apr.	24 1903	.....	703
Lodge Pole Cr.	Omaha Life Ins. Co.	Omaha	Kinney-Forsling	Irrig.	.75	33	15	56	Kimball	July	25 1903	.....	718
Lodge Pole Cr.	Omaha Life Ins. Co.	Omaha	Ruttner-Kinney	Irrig.	.75	31	15	56	Kimball	July	25 1903	.....	718†R
Lodge Pole Cr.	Giesekeing, Herman	Altamont, Ill.	Bickel Canal	Irrig.	.93	30	15	55	Kimball	Aug.	3 1903	.....	719
Lodge Pole Cr.	Fuller, H. R.	Sidney	Pomeroy Canal No. 1	Irrig.	.57	15	14	51	Cheyenne	Aug.	20 1903	.....	723
Lodge Pole Cr.	Atkins, D. K.	Kimball	Faden Canal	Irrig.	.14	30	15	55	Kimball	Sept.	9 1903	.....	724
Lodge Pole Cr.	Peters Trust Co.	Omaha	Owasco Canal	Irrig.	9.84	29	15	55	Kimball	Sept.	12 1903	.....	725
Lodge Pole Cr.	Lehmkuhl, John	Kimball	New Ruttner Canal	Irrig.	.51	36	15	57	Kimball	Sept.	16 1903	.....	727
Lodge Pole Cr.	Peters Trust Co.	Omaha	Owasco Canal	Irrig.	1.75	29	15	55	Kimball	Dec.	15 1903	.....	734
Lodge Pole Cr.	Soderquist, Peter	Chappell	Smith Canal	Irrig.	3.57	12	12	45	Deuel	Aug.	18 1906	.....	850

† Acre feet per annum.

"R" Denotes relocation.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-E—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month			D Yr.
Lodge Pole Cr.	Soderquist, Peter	Chappell	Ralton Irr. System	Irrig.	19.14	12	12	45	Deuel	Jan.	4 1907	847
Lodge Pole Cr.	Omaha Life Ins. Co.	Omaha	Yoder Extension	Irrig.	2.71	36	15	57	Kimball	Apr.	9 1907	857
Lodge Pole Cr.	Walker, I. S.	Kimball	Walker Canal	Irrig.	.63	36	15	57	Kimball	Sept.	16 1907	869 R
Lodge Pole Cr.	Gross, Wm. & Chas.	Pine Bluff, Wyo.	Tracy Canal	Irrig.	.50	12	14	59	Kimball	Sept.	21 1907	870
Lodge Pole Cr.	Soderquist, Peter	Chappell	Ralton Canal	Irrig.	12.40	36	13	45	Deuel	Dec.	4 1907	882
Lodge Pole Cr.	Kimball Irr. Dist.	Kimball	Kimball Storage (Oliver Reservoir)	Stor. & Irrig.	†20,000	36	15	57	Kimball	Apr.	15 1908	897
Lodge Pole Cr.	Kinty, J. F.	Lodge Pole	Wilds Canal	Irrig.	.57	11	13	46	Deuel	June	2 1908	904
Lodge Pole Cr.	Ruttner, Joseph B.	Sunol	Ruttner Canal	Irrig.	.50	30	14	47	Cheyenne	June	25 1908	906
Lodge Pole Cr.	Peters Trust Co.	Omaha	Bennett Canal No. 3	Irrig.	1.00	29	15	54	Kimball	Feb.	17 1909	934
Lodge Pole Cr.	Maginnis, P.	Kimball	McGinnis Ice Pond	Stor.	†1000	26	15	56	Kimball	Sept.	19 1911	1127
Lodge Pole Cr.	Brown, Cyrus D., et al	Chappell	Soderquist Canal	Irrig.	2.00	36	12	45	Deuel	Oct.	22 1912	1237
Lodge Pole Cr.	Heming, Howard C.	Chappell	Wiegend Canal No. 3	Irrig.	1.28	16	13	45	Deuel	Sept.	10 1913	1322
Lodge Pole Cr.	Heming, Howard C.	Chappell	Wiegend Canal No. 2	Irrig.	.42	16	13	45	Deuel	Sept.	10 1913	1323
Lodge Pole Cr.	Brown, Cyrus D., et al	Chappell	Soderquist Canal	Irrig.	2.33	36	13	45	Deuel	June	29 1915	1420
Lodge Pole Cr.	Neuman, A. G.	Chappell	Neuman Canal	Irrig.	1.03	26	13	45	Deuel	Jan.	5 1916	1445
Lodge Pole Cr.	Bentley, Bertha M.	Sidney	Bentley Canal	Stor.	†5 A F	34	14	50	Cheyenne	Feb.	14 1917	1478
Lodge Pole Cr.	Sudman, Mrs. Minnie	Chappell	Sudman Canal	Irrig.	.78	22	13	45	Deuel	Apr.	5 1917	1483
Lodge Pole Cr.	McAuliff, Frank	Chappell	McAuliff Canal	Irrig.	1.77	21	13	45	Deuel	Oct.	6 1919	1559
Lodge Pole Cr.	Ruttner, Joseph B.	Sunol	Ruttner Canal	Irrig.	.20	32	14	47	Cheyenne	Mar.	7 1922	1645
Lodge Pole Cr.	Stuht, Fred W.	Sidney	Stuht Canal	Irrig.	.40	32	14	49	Cheyenne	Nov.	22 1922	1659
Lodge Pole Cr.	McIntosh, J. L. & Martin, Paul L.	Sidney	Martin Pump	Irrig.	1.23	35	14	50	Cheyenne	Nov.	22 1922	1695
Lodge Pole Cr.	Giesecking, C. H.	Altamont, Ill.	Giesecking Canal	Irrig.	.90	20	15	55	Kimball	Mar.	31 1926	1801
Lodge Pole Cr.	Bluhm, Emil H.	Sunol	Bluhm Canal	Irrig.	1.00	36	14	48	Cheyenne	May	24 1926	1811
Lodge Pole Cr.	Stahla, Phillip	Kimball	Kinney Canal	Irrig.	.20	31	15	56	Kimball	July	14 1926	1828

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-E—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.
						S	T	R	County	Month	D			Yr.
Lodge Pole Cr.	Wearm, Wm. H.	Carleton	Wearin Canal	Irrig.	1.50	8	14	58	Kimball	Sept.	28	1926	1864
Lodge Pole Cr.	Peters Trust Co.	Omaha	Bennett Reservoir	Stor.	1524	22	15	57	Kimball	Jan.	13	1928	1974
Lodge Pole Cr.	Peters Trust Co.	Omaha	Bennett Reservoir Canal Ext. No. 2	Irrig.	5.97	22	15	57	Kimball	Jan.	13	1928	1975
Lodge Pole Cr.	Peterson, Geo. H.	Chappell	Peterson Canal	Irrig.	.66	26	13	45	Deuel	Apr.	17	1928	2006
Lodge Pole Cr.	McLernon, Mrs. Emma	Sidney	McLernon Canal	Irrig.	.24	31	14	49	Cheyenne	Aug.	31	1928	2027
Lodge Pole Cr.	Pantenburg, Wm. F.	Sidney	Pantenburg Canal	Irrig.	1.00	34	14	18	Cheyenne	Nov.	15	1929	2113
Lodge Pole Cr.	Oberfelder, R. S.	Sidney	Oberfelder Canal	Irrig.	2.29	31	14	40	Cheyenne	May	29	1889	307
Lodge Pole Cr.	Chambers, Chas. P.	Sidney	Private Canal	Irrig.	.04	14	13	51	Cheyenne	Mar.	19	1895	335
Lodge Pole Cr.	Libby, H. H.	Lodge Pole	Spring Branch Canal	Irrig.	.29	36	14	47	Cheyenne	July	1	1901	623
Flood Water from Hill	Fifield, C. M.	Kimball	Fifield Canal	Irrig.	.57	22	15	56	Kimball	Apr.	27	1911	1091
Wells	S. A. Foster Lbr. Co.	Lincoln	Foster Pump	Irrig.		8	13	46	Cheyenne	Feb.	8	1930	2124*

† Acre feet per annum.

* Application pending.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-F

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Weeping Water...	Gilmore, Chas.....	Weeping Water.....	Gilmore	Ice	8.00	2	10	11	Cass.....	Aug.	5	1909	.....	955
Nemaha River....	C. B. & Q. R. R. Co....	Lincoln.....	C. B. & Q. Water Sup.	Irrig.	1.00	33	3	12	Pawnee.....	Aug.	8	1922	.....	1687
Nemaha River....	Estes, E. B.....	Tecumseh.....	Estes Canal.....	Irrig.		19	5	11	Johnson.....	Aug.	15	1930	.....	2159*
						29		E						

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-A

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Beaver River	Quackenbush, J. W.	Albion	Pioneer Canal	Irrig.	3.57	22	20	6	Boone	Dec.	8	1894	287	
Beaver River	Long, Wm. M.	Genoa	Windmill Project	Irrig.	.14	14	17	4	Nance	Mar.	31	1896		277
Beaver River	Central West Public Service Co. of Nebr.	Omaha	Albion Power Plant	Power	67.00	26	20	6	Boone	Oct.	3	1901		639
Beaver River	Iowa-Nebr. L. & P. Co.	Lincoln	St. Edwards Power Pl't.	Power	134.00	27	19	5	Boone	Feb.	11	1911		1058
Beaver River	The Ravenna Mills	Ravenna	The Ravenna Mills	Power		8	12	14	Buffalo				1037*	
Beaver River	Central West Public Service Co. of Nebr.	Omaha	Albion Power Plant	Power	70.00	26	20	6	Boone	Feb.	20	1917		1480
Beaver Creek	Skochdopole, Ernest	Ravenna	Skochdopole Canal	Irrig.	2.10	1	12	15	Buffalo	Nov.	8	1926		1871
Calamus River	Calamus Irr. Dist.	Harrop	Calamus Canal	Irrig.	121.18	5	24	20	Loup	Oct.	31	1925		1785
Calamus River	Calamus Irr. Dist.	Harrop	Calamus Canal	Irrig.	4.86	5	24	20	Loup	Jan.	12	1927		1883
Calamus River	Calamus Irr. Dist.	Harrop	Calamus Res.	Stor.		5	24	20	Loup	June	8	1926		1816
Cedar River	Van Ackeren Hydro-Power Co., The	Cedar Rapids	Van Ackeren Pow. Pl't.	Power	290.00	5	18	7	Boone	May	1	1881	1049	
Cedar River	Iowa-Nebr. L. & P. Co.	Lincoln	Fullerton Power Plant	Power	200.00	12	16	6	Nance	Sept.	9	1901		636
Cedar River	Western Public Service Co.	Scottsbluff	Ericson Power Plant	Power	175.00	25	21	12	Wheeler	May	24	1915		1415
Cedar River	Iowa-Nebr. L. & P. Co.	Lincoln	Fullerton Power Plant	R. Dam	250.00	12	16	6	Nance	Aug.	8	1922		1686
Cedar River	Iowa-Nebr. L. & P. Co.	Lincoln	Fullerton Power Plant	R. Dam	A. 636	1686	12	16	6	Nance	Jan.	27	1925	1758
Cedar River	Western Public Service Co.	Scottsbluff	Lake Ericson Power Plant	R. Dam	A. 1415									
Cedar River	Western Public Service Co.	Scottsbluff	Lake Ericson Power Plant	R. Dam	A. 1415	25	21	12	Wheeler	May	17	1929		2081
Clear Creek	Sherbeck, Albert I.	Westerville	Sherbeck Pump	Irrig.	4.13	4	15	17	Custer	Feb.	7	1927		1894
Clear Creek	Dean, Paul H.	Ansley	Sutton Pump	Irrig.	2.43	36	16	17	Custer	Oct.	18	1927		1962
Clear Creek	Lowry, Maurice T.	Mason City	Lowry Pump	Irrig.	1.17	1	15	17	Custer	Aug.	22	1928		2026

† Acre feet per annum.

* Application pending.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority			Doc. No.	App. No.
						S	T	R	County	Month	D	Yr.		
Clear Creek	Dean, Paul H.	Ansley	Dean Pump	Irrig.	2.00	22	16	17	Custer	Oct.	9	1928	.....	2040
Cow Creek	Price, Ralph B.	Lewanna	Homestead Canal	Irrig.	2.29	7	26	27	Cherry	July	14	1894	194	.....
Dane Creek	Koupal, Frank	Ord	Koupal Canal	Irrig.	.14	20	19	14	Valley	July	5	1912	.....	1207
Elm Creek	Rogers, Wilber A.	Ord	Roger Pump	Irrig.	1.68	25	19	14	Valley	Sept.	30	1929	.....	2107
Goose Creek	Erickson, P. C. & J. M.	Brewster	Erickson Canal	Irrig.	8.00	18	25	24	Brown	Apr.	3	1895	209	.....
Goose Creek	Giles, R. P., et al.	Elsmere	Giles Canal	Irrig.	10.00	2	25	25	Cherry	June	1	1895	187	.....
Goose Creek	Crook, F.	Giles	Crook Canal	Irrig.	8.00	33	25	24	Brown	June	2	1896	.....	345
Gracie Creek	Shoemaker, A. E.	Burwell	Gracie High Line Canal	Irrig.	.29	29	23	17	Loup	July	9	1897	.....	397
Lillian Creek	Davis, Frank J.	Broken Bow	Davis Pump	Irrig.	4.90	1	19	20	Custer	Feb.	7	1927	.....	1895
Lillian Creek	Meyers, W. F.	Anselmo	Meyers Canal	Irrig.	.11	15	19	20	Custer	Aug.	30	1927	.....	1956
Locking Glass C.	Girard, E. A. & F. H.	Monroe	Monroe Canal	Irrig.	2.86	1	17	3	Platte	June	12	1894	289	.....
Lost Creek (Warm Slough)	Dworak, Helen	Schuyler	Dworak Pump	Irrig.	1.30	28	17	3E	Colfax	Oct.	12	1928	.....	2041
Loup Riv., M. B.	Western Public Service Co.	Scottsbluff	Lundy M. & P. Plant	Power	200.00	4	19	19	Custer	Aug.	1	1886	1024	.....
Loup Riv., M. B.	Conger, Jas. W.	Loup City	Sherman County Canal	Power	125.00	26	17	16	Valley	Fall	of	1888	229a	.....
Loup Riv., M. B.	Middle Loup Valley Irr. Co.	Sargent	Middle Loup Valley Canal	Irrig.	560.29	15	21	22	Blaine	June	6	1894	202	.....

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.			
						S	T	R	County	Month			D	Yr.	
Loup Riv., M. B.	Douglas Grove Irr. Dist.	Comstock	Wescott Canal	Irrig.	88.57	15	19	18	Custer	Aug.	8	1894	214	.....
Loup Riv., M. B.	Sherman Co. Irr. & Water Power Co.	Loup City	Sherman Co. Canal	Irrig.	244.00	26	17	16	Valley	Aug.	13	1894	229b	.....
Loup Riv., M. B.	Thedford Irr. & Pw. Co.	Thedford	Thedford Canal	Irrig.	43.00	4	23	29	Thomas	Aug.	25	1894	198	.....
Loup Riv., M. B.	Purdum, J. W.	Thedford	Norway Canal	Irrig.	2.86	31	24	29	Thomas	Sept.	8	1894	199	.....
Loup Riv., M. B.	Lillian Precinct D. & P. Co.	Gates	Lillian Precinct Canal	Irrig.	140.00	30	21	21	Blaine	Oct.	19	1894	204 216	.....
Loup Riv., M. B.	Rieck, Emil	Dunning	Jewett Canal	Irrig.	4.29	30	22	24	Blaine	Aug.	12	1895	.....	113
Loup Riv., M. B.	Harris, L. H.	Dunning	Harris Canal	Irrig.	5.71	16	22	25	Blaine	Feb.	21	1896	.....	248
Loup Riv., M. B.	Webster Irrigation & Canal Co.	Comstock	Webster Canal	Irrig.	1.71	20	19	17	Custer	Mar.	5	1898	.....	442
Loup Riv., M. B.	Longwood Irr. & Canal Co.	Comstock	Longwood Canal	Irrig.	12.93	20	19	17	Custer	Feb.	21	1912	.....	1175
Loup Riv., M. B.	Muhlback, Fred	Mullen	Mullen Grist & Light Plant	Power	124.00	6	24	32	Hooker	Mar.	12	1912	.....	1185
Loup Riv., M. B.	St. Paul Elec. Lt. Wks.	St. Paul	St. Paul Power Plant	Power	2000.00	3	14	10	Howard	Aug.	12	1912	.....	1216
Loup Riv., M. B.	Western Public Service Co.	Scottsbluff	Lundy M & P. Plant	R. Dam	400.00	4	19	19	Custer	Sept.	16	1912	.....	1224
Loup Riv., M. B.	U. S. of America	Halsey	Nursery Canal	Irrig.	1.00	3	22	26	Thomas	Sept.	16	1912	.....	1226
Loup Riv., M. B.	Holmes, Eddy	Nemo	Loup Valley Canal	Irrig.	.85	36	20	21	Custer	May	31	1913	.....	1294
Loup Riv., M. B.	Lundy, Laura E.	Sargent	Lundy Lake Canal	Irrig.	28.31	5	19	19	Custer	June	27	1913	.....	1300
Loup Riv., M. B.	Lundy, Laura E.	Sargent	Lundy Lake	Stor.	14500	2	19	19	Custer	July	19	1913	.....	1306
(Res. A. 1306)	Lundy, Laura E.	Sargent	Lundy Lake	Irrig.	A. F.	6.34	4	19	19	Custer	July	19	1913	1307
Loup Riv., M. B.	Austin Irr. Co.	Loup City	Austin Canal	Irrig.	50.00	32	13	14	Sherman	Nov.	6	1913	.....	1330

† Acre feet per annum.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month			D|Yr.
Loup Riv., M. B.	Central Power Co.	Grand Island	Central Power Co.	Power	1000.00	10	13	12	Howard	July	14 1914	1373
Loup Riv., M. B.	C. B. & Q. R. R. Co.	Lincoln	Pipe Line at Seneca	Irrig.	.50	18	24	3	Thomas	Dec.	28 1914	1396
Loup Riv., M. B.	Carter, T. H.	Hebron	Loup River Power Co.	Power	600.00	35	18	17	Custer	Sept.	14 1926	1858
Loup Riv., M. B.	Stanciliff, E. L.	St. Louis	Arcadia Power Plant	Power		35	18	17	Custer	Apr.	4 1927	1918*
Loup Riv., M. B.	Kucera-Person	Friend	Comstock Power Plant	Power	290.00	36	18	17	Custer	Apr.	14 1927	1925*
Loup Riv., M. B.	Knapp, Harry R.	Broken Bow	Knapp Pump	Irrig.	5.49	32	15	14	Sherman	July	18 1927	1943
Loup Riv., M. B.	Klausen, Paul	Rockville	Klausen Canal	Irrig.	2.17	36	14	14	Sherman	Aug.	14 1929	2095
Loup Riv., M. B.	John, Vincent L.	Loup City	John Canal	Irrig.	.59	18	15	14	Sherman	Sept.	18 1929	2105
Loup Riv., M. B.	Obermiller, Robert	Boelus	Obermiller Pump	Irrig.		28	13	12	Howard	May	7 1930	2139
Loup Riv., N. B.	North Loup Irr. & Imp. Co.	North Loup	North Loup Canal	Irrig.	143.00	27	19	14	Valley	Sept.	30 1893	227) 228) 232) 188)
Loup Riv., N. B.	Lee, J. R.	Brownlee	Lee Canal	Irrig.	40.00	25	27	29	Cherry	Aug.	7 1894	189) 356)
Loup Riv., N. B.	Burwell Irr. Co.	Burwell	Burwell Canal	Irrig.	110.00	27	21	17	Loup	Sept.	7 1894	224
Loup Riv., N. B.	Newton Irr. Dist.	Moulton	Newton Canal	Irrig.	115.14	35	23	21	Blaine	Feb.	5 1895	205
Loup Riv., N. B.	Erickson, P. C.	Brewster	Homestake Canal	Irrig.	51.43	27	23	22	Blaine	Sept.	10 1895	152
Loup Riv., N. B.	Loup Valley I. & P. Co.	North Loup	No. Loup Power Plant	Power	1000.00	35	19	13	Valley	Nov.	29 1922	1697
Loup Riv., N. B.	Loup Valley I. & P. Co.	North Loup	Scotia Power Plant	Power	1000.00	27	17	12	Greeley	Dec.	22 1922	1700
Loup Riv., N. B.	North Loup Power Co.	North Loup	Scotia Power Plant	Power		27	17	12	Greeley	Mar.	31 1928	1995*
Loup Riv., N. B.	Steinmeyer, Geo. W.	Beatrice	No. Loup Power Plant	Power		35	19	13	Valley	Apr.	26 1928	2011*
Loup Riv., N. B.	Naab, Peter J.	Burwell	Naab Pump	Irrig.	1.40	28	21	17	Garfield	Aug.	3 1929	2091
Loup Riv., N. B.	Anderson Bros. Irrig. Co.	Hastings	Anderson Pump	Irrig.	5.17	7	15	9	Howard	Apr.	5 1930	2131
Loup Riv., N. B.	Smith, Daniel B.	Ord	Smith Pump	Irrig.		9	19	14	Valley	Aug.	6 1930	2154
Loup Riv., N. B.	Mortensen, Crawford J.	Ord	Mortensen Pump	Irrig.		5	19	14	Valley	Aug.	8 1930	2155*

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month			D|Yr.
Loup Riv., N. B.	Stewart, Wm. J.	Ord.	Stewart Pump	Irrig.		9	19	14	Valley	Aug.	11 1930	2158
Loup Riv., N. B.	Bloomquist, O. V.	St. Paul	Bloomquist Pump	Irrig.		16	15	10	Howard	Nov.	26 1930	2178*
Loup Riv., S. B.	Callaway Milling & Elec. Co.	Callaway	Callaway Mill	Power	83.00	2	15	23	Custer	Oct.	1 1889	988
Loup Riv., S. B.	Tillson, W. Z.	Poole	Tillson Canal	Irrig.	15.57	29	12	15	Buffalo	Dec.	28 1894	236
Loup Riv., S. B.	Boblitz, E. J.	Oconto	Boblitz Canal	Irrig.	.50	10	14	21	Custer	Jan.	17 1895	219a
Loup Riv., S. B.	Boblitz, E. J.	Oconto	Boblitz Canal	Power	20.00	10	14	21	Custer	Jan.	17 1895	219b
Loup Riv., S. B.	Brown, A. D.	Milldale	Brown Canal	Irrig.	.86	31	17	24	Custer	Feb.	23 1897	363
Loup Riv., S. B.	Hartzell, B. F.	Logan	Hartzell Canal	Irrig.	.37	27	18	26	Logan	May	18 1897	390
Loup Riv., S. B.	C. B. & Q. R. R. Co.	Lincoln	Pipe Line at Ravenna	Irrig.	.50	9	12	14	Buffalo	Dec.	24 1914	1393
Loup Riv., S. B.	Central Power Co.	Grand Island	Grand Island Elec. Co.	Power	840.00	35	13	12	Howard	Jan.	18 1915	1400
Loup Riv., S. B.	Perkins, Glen O.	Arnold	Perkins Canal	Irrig.	3.77	25	17	25	Custer	Mar.	30 1928	1994
Loup Riv., S. B.	Finch, W. M.	Callaway	Finch Pump	Irrig.	2.37	9	16	24	Custer	Sept.	27 1928	2037
Loup Riv., S. B.	Perkins, Nina	Arnold	Nina Perkins Canal	Irrig.		25	17	25	Custer	Jan.	8 1929	2060
Loup Riv., S. B.	Quest, C. E.	Boelus	Quest Canal	Irrig.	1.55	33	13	12	Howard	June	13 1930	2143
Loup Riv., S. B.	Alter, I. R.	Grand Island	Alter Pump	Irrig.		35	13	12	Howard	Aug.	21 1930	2162
Loup Riv., S. B.	Smith, R. B.	Oconto	Smith Pump	Irrig.		16	15	22	Custer	Nov.	1 1930	2170*
Mira Creek	McClellan, M. E.	North Loup	Mira Reservoir	Stor.	140	26	18	13	Valley	Mar.	8 1912	1182
(Res. A. 1182)	McClellan, M. E.	North Loup	Mira Reservoir Canal	Irrig.	1.32	26	18	13	Valley	Oct.	30 1912	1239
Mira Creek	Hutchins, W. T.	North Loup	Hutchins Dam	Irrig.	.20	26	18	13	Valley	Apr.	18 1916	1453
Mud Creek	Penn, Chas.	Broken Bow	Penn Canal	Irrig.	.50	33	17	20	Custer	Aug.	14 1894	215
Mud Creek	Benson, C. W.	Litchfield	Litchfield Mills	Power		33	14	16	Sherman			999*
Mud Creek	Mason City Roller Mill and Light Plant	Mason City	Mason City Mill and Light Plant	Power		31	15	17	Custer			1042*
Mud Creek	Lang, Geo. W.	Litchfield	Lang Pump	Irrig.	1.21	13	14	17	Custer	Aug.	20 1926	1848

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-A—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D	Yr.
Mud Creek	Wilson, Otis N.	Litchfield	Wilson Pump	Irrig.	.51	14	14	17	Custer	Dec.	10	1926	1879
Mud Creek	Van Sant, J. A.	Broken Bow	Van Sant Pump	Irrig.	.27	33	17	20	Custer	Dec.	13	1926	1880
Mud Creek	Sorensen, U.	Berwyn	Sorensen Pump	Irrig.	1.00	21	16	19	Custer	Jan.	14	1927	1884
Mud Creek	Willoughby, C. D.	Mason City	Willoughby Pump	Irrig.	1.10	34	15	17	Custer	Feb.	8	1927	1896
Mud Creek	Duke, R. H., et al.	Mason City	Dorsett-Duke Amsberry Pump	Irrig.	2.41	35	15	17	Custer	Nov.	10	1928	2051
Mud Creek	Yeoman, Jas. & L. E.	Broken Bow	Yeoman Pump	Irrig.	.47	18	16	19	Custer	Jan.	3	1929	2059
Mud Creek	Tracy, R. N.	Mason City	Tracy Pump	Irrig.	.13	32	15	17	Custer	Apr.	23	1929	2079
Munson Creek	Lassen, Niels P.	Elba	Lassen Pump	Irrig.	.50	1	15	12	Howard	Oct.	10	1929	2108
Oak Creek	Hatt, Hans N.	Dannebrog	Oak Creek Plant No. 1	Irrig.	2.28	2	13	11	Howard	Jan.	18	1919	1530
Oak Creek	Larson, L. E.	Dannebrog	Dannebrog Reservoir	Dom.		2	13	11	Howard	Sept.	16	1919	1556
Oak Creek	Krogh, Arnold	Dannebrog	Krogh Pump	Irrig.	.53	30	14	11	Howard	Mar.	5	1930	2126
Platte River	Fremont Canal & Power Co.	Fremont	Fremont Canal	I. & P.	2500.00	30	17	4	Butler	June	21	1895	40
Platte River	City of Omaha	Omaha	Fremont-Omaha Canal	Power	2000.00	30	17	4	Butler	Mar.	25	1908	894
Sand Creek	Nelson, John	Callaway	Troyer Pump	Irrig.	.24	10	15	23	Custer	Feb.	21	1916	1447
Shell Creek	Schmitt, P.	Columbus	Schmitt Canal	Irrig.	3.00	19	18	1	Platte	Dec.	17	1894	292a
Shell Creek	Schmitt, P.	Columbus	Schmitt Canal	Power	30.50	19	18	1	Platte	Dec.	17	1894	292b
Shell Creek	Gottberg, Max	Columbus	Gottberg Canal	Irrig.	1.00	24	18	1	Platte	June	6	1895	2
Shell Creek	Wolfe, Wm. L.	Schuyler	Wolf Pump	Irrig.		28	18	3E	Colfax	Aug.	4	1930	2153

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-A—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D|Yr.
Spring Branch.....	Milldale Farm & Live Stock Imp. Co.....	Council Bluffs.	Haskill Canal.....	Irrig.	7.00	31	17	24	Custer.....	Feb.	27 1914	.....	1357
Spring Creek.....	Hendryx, H. J.....	Monroe.....	Hendryx Canal.....	Irrig.	1.33	2	17	3	Platte.....	June	25 1894	290	.....
Turtle Creek.....	Beran, John Jr.....	Ord.....	Beran Pump.....	Irrig.		6	19	14	Valley.....	Aug.	21 1930	.....	2161
Turtle Crcek.....	Sorensen, Soren H.....	Ord.....	Soren Pump.....	Irrig.		5	19	14	Valley.....	Nov.	12 1930	.....	2173*
Victoria Creek...	Meyers, Perry A.....	Anselmo.....	Victoria Canal No. 1.....	Irrig.	.71	1	19	21	Custer.....	Mar.	17 1894	210 } 212 }	.....
Victoria Creek.....	Victoria Ditch Ass'n.....	Gates.....	Victoria Canal No. 2.....	Irrig.	8.88	1	19	21	Custer.....	July	17 1894	213	.....
Victoria Creek.....	Laughran, Thomas.....	Anselmo.....	Laughran & Bell Canal.....	Irrig.	.31	3	19	21	Custer.....	Sept.	22 1894	217	.....
Victoria Creek.....	Meyers, Perry A.....	Anselmo.....	Meyers Canal.....	Irrig.	1.51	1	19	21	Custer.....	Aug.	5 1926	.....	1843
Victoria Creek.....	Victoria Ditch Ass'n.....	Broken Bow.....	Victoria Canal No. 2 Ext.	Irrig.	1.01	1	19	21	Custer.....	Aug.	12 1926	.....	1845
Victoria Creek.....	McGraw, Chas.....	Anselmo.....	McGraw Canal.....	Irrig.	2.95	6	19	20	Custer.....	July	23 1927	.....	1945
Victoria Creek.....	McGraw, Chas.....	Anselmo.....	McGraw Canal.....	Irrig.	2.86	6	19	20	Custer.....	Aug.	6 1928	.....	2023
Wiggle Creek.....	Morrison, F. W.....	Callaway.....	Morrison Pump.....	Irrig.		3	15	23	Custer.....	Oct.	17 1928	.....	2045

† Acre feet per annum.

* Application pending.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-B

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month	D|Yr.		
Battle Creek	Scheerger, George	Battle Creek	Battle Creek Mills	Madison	Power	10.67	36	24	3	Nov.	12 1898	.....	484
Battle Creek	Scheerger, George	Battle Creek	Battle Creek Mills	Madison	Power	20.00	36	24	3	Apr.	20 1906	.....	818
Clear Creek	Lyons Drainage Dist.	Lyons	Main Ditch No. 1	Burt	Drain		14	23	8	Mar.	9 1911	.....	1069
Clear Creek	Gilmore, E. L. C.	Ashland	Gilmore Canal	Saunders	Irrig.	.86	35	13	9E	Aug.	10 1927	.....	1950
Elkhorn River	Norfolk Cereal Flour Mills	Norfolk	Norfolk Cereal & Flour Mill	Madison	Power	100.00	23	24	1	Mar.	1 1870	996	.....
Elkhorn River	Skrllda, Jos.	Atkinson	Atkinson Mill	Holt	Power	38.50	30	30	14	Nov.	1 1893	271	.....
Elkhorn River	Elkhorn Irr. Co.	O'Neill	Elkhorn Canal	Holt	Irrig.	131.43	22	29	13	Feb.	3 1894	259 } 263 }	.....
Elkhorn River	Davis, Jos.	O'Neill	Davis Canal	Holt	Irrig.	1.43	31	29	11	Feb.	8 1894	260	.....
Elkhorn River	Carlton, Thos.	O'Neill	Carlton Canal No. 1	Holt	Irrig.	1.00	32	29	11	Feb.	8 1894	261	.....
Elkhorn River	Carlton, Thos.	O'Neill	Carlton Canal No. 2	Holt	Irrig.	5.00	30	29	11	Feb.	8 1894	262	.....
Elkhorn River	Cain, N. E., et al	O'Neill	Cain Canal	Holt	Irrig.	5.00	32	29	11	Feb.	20 1895	283	.....
Elkhorn River	Ross, Chas. P.	Omaha	Platte River Hydro. Elec. Plant	Douglas	Power	500.00	14	15	10	Nov.	24 1909	.....	971
Elkhorn River	Neligh, W. T. S.	West Point	West Point Hydro. Elec. Plant	Cuming	Power	400.00	18	22	6	Dec.	26 1912	.....	1250
Elkhorn River	Sibbersen Bros.	Omaha	Sibbersen Canal	Holt	Irrig.	2.50	10	29	14	Sept.	5 1925	.....	1779
Elkhorn River	Iowa-Nebr. L. & P. Co.	Lincoln	Cooling System	Madison	Mfg.	35.00	22	24	1	Feb.	21 1928	.....	1986
Elkhorn River	Norfolk Packing Co.	Norfolk	Warfield Pump	Madison	Irrig.	1.03	15	24	1	June	15 1929	.....	2085
Elkhorn River	Rothleuter, Albert	Ewing	Flouring Mill	Holt	Power	33.00	3	26	9	Aug.	21 1898	.....	464

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-B—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Middle Creek.....	Malone, Robert.....	Lincoln.....	Malone Ice Plant.....	Ice	10.00	30	10	6	Lancaster.....	Dec.	26	1907	.....	883
Oak Creek.....	Eiche, Herman.....	Lincoln.....	Eiche Plant.....	Irrig.	.71	17	10	6	Lancaster.....	Jan.	4	1899	.....	489
Oak Creek.....	Central Realty & Inv. Co.	Lincoln.....	Capitol Beach Dam.....	Stor.	50 A. F.	16	10	6	Lancaster.....	June	5	1918	.....	1516
Oak Creek.....	Chaney, E. J.....	Lincoln.....	Cheney Pump.....	Irrig.	.45	8	10	6E	Lancaster.....	Feb.	6	1929	.....	2069
Oak Creek.....	Hanich, Edward.....	Lincoln.....	Hanich Pump.....	Irrig.	.15	8	10	6E	Lancaster.....	Nov.	21	1929	.....	2115
Oak Creek.....	Clark, Arthur.....	Lincoln.....	Clark Pump.....	Irrig.	.14	17	10	6E	Lancaster.....	Apr.	11	1930	.....	2132
Platte River.....	Ross, Chas. P.....	Omaha.....	Platte River Hydro Elec. Plant.....	Power	2500.00	6	14	10	Douglas.....	Nov.	24	1909	.....	970
Platte River.....	Parmlee & Rawls.....	Plattsmouth.....	Plattsmouth Power Co.	Power	2000.00	32	13	13	Cass.....	Sept.	4	1914	.....	1379
Ryans Lake.....	Elkhorn River Drainage Dist.	Fremont.....	Cutoff "H".....	Drain		4	17	9	Dodge.....	Oct.	16	1909	.....	966
Salt Creek.....	C. B. & Q. R. R. Co.....	Lincoln.....	C. B. & Q. Water Sup.	Irrig.	2.00	2	9	6E	Lancaster.....	Sept.	20	1923	.....	1722
Salt Creek.....	Rutherford, Frank.....	Hastings.....	Rutherford Pump.....	Irrig.	9.11	24	11	7E	Lancaster.....	July	1	1925	.....	1766
Salt Creek.....	Board of Control.....	Lincoln.....	Penitentiary Canal.....	Irrig.	3.00	11	9	6E	Lancaster.....	June	15	1926	.....	1817
Salt Creek.....	Roper, C. H.....	Lincoln.....	University Shooting Club.....	Resort		32	11	7	Lancaster.....	July	29	1926	.....	1837
Springs.....	Newton Land Co.....	Omaha.....	Spring Branch Canal.....	Irrig.	.07	13	14	13	Sarpy.....	June	18	1895	.....	29
Silver Creek.....	Armour & Co.....	So. Omaha.....	Armour & Co. Reservoir	Ice	10.00	7	13	9	Saunders.....	Oct.	18	1897	.....	415
Silver Creek.....	Swift & Company.....	Chicago.....	Swift & Co.....	Ice	10.00	7	13	9	Saunders.....	Dec.	6	1899	.....	524
Stevens Creek.....	Moore, R. E.....	Lincoln.....	Stevens Creek Canal.....	Irrig.	1.00	2	10	7	Lancaster.....	Nov.	19	1913	.....	1335
Union & Taylor Creeks.....	Bley, Louis G.....	Madison.....	Union Valley Roller Mills.....	Power		32	22	1	Madison.....				.....	998*

DEPARTMENT OF PUBLIC WORKS

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-C

242

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month	D			Yr.
Abitz Creek	Fullerton, J. B.	Atkinson	Fullerton Canal No. 2	Irrig.	.36	18	30	13	Holt	Mar.	23	1896	278
Antelope Creek	Julian, A. R. et al.	Gordon	Antelope Canal	Irrig.	.36	21	32	40	Cherry	June	29	1905	798
Ashburn Creek	Zilmer, W. H.	Valentine	Ashburn Canal	Irrig.	.43	27	34	2	Cherry	June	17	1905	676
Bear Creek	Skinner, Thomas	Springview	Skinner Canal	Irrig.	.22	15	32	21	Keya Paha	June	20	1888	609
Bear Creek	Cedarburg, P.	Springview	Cedarburg Canals Nos. 1 & 2	Irrig.	.02	3	32	21	Keya Paha	Oct.	3	1898	479
Bear Creek	Belsky, Ed	Eli	Belsky Hereford Canal	Irrig.	11.78	25	34	3	Cherry	May	3	1922	1664
Bear Creek	Woods Bros. Realty Co.	Lincoln	Woods Bros. Canal	Irrig.		24	34	36	Cherry	Sept.	21	1928	2035*
Beaver Creek	Tulloss, Frank L.	Hay Springs	Tullos Pond	Stor.		3	32	46	Sheridan	May	22	1930	2141
Beeman Creek	Barnard, C. O.	Springview	Barnard Canal	Irrig.	.43	21	32	20	Keya Paha	June	1	1892	603
Beeman Creek	Spann, M. F.	Bassett	Beeman Canal	Irrig.	1.00	23	32	20	Keya Paha	May	20	1892	620
Big Sandy Creek	Pickler, W. S.	Cody	Badger Canal	Irrig.	1.14	12	33	14	Holt	May	16	1902	667
Big Sandy Creek	Johnson, C. A.	Butte	Badger Mill	Power	35.00	12	33	14	Holt	Aug.	28	1902	685
Blackbird Creek	Mullen, A. F.	O'Neill	Mullen Canal	Irrig.	1.00	29	31	11	Holt	Aug.	18	1894	267
Blue Bird Creek	Murphy, P.	O'Neill	Murphy Canal	Irrig.	1.00	26	30	11	Holt	Sept.	7	1894	273
Boardman Creek	Lee, Jos. S.	Chesterfield	Lee Canal	Irrig.	6.86	6	29	33	Cherry	Apr.	25	1895	973
Boardman Creek	Bachelor, J. H.	Valentine	Boardman Canal	Irrig.	28.57	33	30	32	Cherry	Jan.	17	1912	1155

* Application pending.

REPORT OF SECRETARY

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-C—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority			Doc. No.	App. No.
						S	T	R	County	Month	D	Yr.		
Box Butte Creek	Sandoz, Wm.	Marsland	Billys Canal	Irrig.	.21	29	29	45	Sheridan	Jan.	13	1900	.....	533
Brush Creek	Nebraska Townsite Co.	Perry	Brush C. Power Co.	Power	15.00	23	33	13	Holt	Sept.	28	1898	.....	474
Brush Creek E. Branch	McCarthy, M. H.	O'Neill	McCarthy Canal No. 1	Irrig.	.50	24	32	14	Holt	July	1	1894	264	.....
Brush Creek W. Branch	McCarthy, M. H. et al	O'Neill	McCarthy Canal No. 2	Irrig.	.63	26	32	14	Holt	Aug.	15	1894	266	.....
Burton Creek	Mutz, Otto	Springview	Burton Creek Canal	Irrig.	.57	19	34	19	Keya Paha	June	30	1895	608b	.....
Burton Creek	Mutz, Otto	Springview	One Trip Canal	Irrig.	.35	2	33	20	Keya Paha	Sept.	2	1895	.....	142
Canyon	Gilmore, Emery	So. Omaha	Gilmore Canal	Irrig.	14.29	36	30	54	Sioux	July	5	1907	.....	863
Cedar Creek	McNamee, K. M.	Wood Lake	Cedar Creek Canal	Irrig.	.43	4	30	24	Cherry	Sept.	28	1910	.....	1027
Coffey Lk. Et Al	Coffey Lake Drainage Dist.	Valentine	Coffey Lake Ditch	Drain					Cherry	Nov.	22	1923	.....	1729
Cottonwood Cr.	Morrissey, Tim	Dunlap	Morrissey Canal	Irrig.	.71	17	29	48	Dawes	Feb.	16	1895	481	.....
Cottonwood Cr.	Fendrich & Lichte	Dunlap	Fendrich-Lichte Canal	Irrig.	.64	22	29	48	Dawes	May	9	1896	.....	336
Cottonwood Cr.	Lichte, Hugo	Dunlap	Dunlap Canal	Irrig.	.50	22	29	48	Dawes	July	18	1911	.....	1113
Crooked Creek	Mutz, Otto	Springview	Mutz Canal	Power	3.00	19	34	19	Keya Paha	Dec.	31	1889	608a	.....
Crooked Creek	Mutz, Otto	Springview	Mutz Canal	Irrig.	1.00	19	34	19	Keya Paha	June	30	1895	608b	.....
Cross Creek	Hutchinson, W. H.	Norden	Hutchison Canal	Irrig.	.21	8	33	24	Keya Paha	Sept.	1	1888	615	.....

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-C—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D	Yr.
Cub Creek.....	Tissue & Patterson.....	Springview.....	Tissue-Patterson Canal.....	Irrig.	.03	16	33	22	Keya Paha.....	June	30	1894	618	.....
Cub Creek.....	Josiassin, S.....	Meadville.....	McComber Canal.....	Irrig.	.10	28	33	22	Keya Paha.....	Aug.	15	1894	589	.....
Eagle Creek.....	Bokhof, Wm.....	Atkinson.....	Bokhof Canal.....	Irrig.	2.86	6	30	13	Holt.....	Sept.	18	1894	275	.....
Eagle Creek.....	Robertson, J. A.....	Atkinson.....	Eagle Valley Canal.....	Irrig.	2.29	1	30	14	Holt.....	Mar.	15	1895	280	.....
Eagle Creek.....	Becker, Samuel.....	Atkinson.....	Becker Canal.....	Irrig.	1.14	8	30	13	Holt.....	Nov.	30	1894	274	.....
S. Branch														
Fairfield Creek.....	Kuhre, Wm. M.....	Johnstown.....	Kuhre Pond.....	Irrig.	.14	31	33	23	Brown.....	Sept.	1	1893	612a	.....
Fairfield Creek.....	Kuhre, Wm. M.....	Johnstown.....	Kuhre Canal.....	Power	25.00	31	33	23	Brown.....	Apr.	1	1894	612b	.....
Glencove Springs	Bakewell, Geo. C.....	Johnstown.....	Glencove Canal.....	Irrig.	.86	26	33	24	Brown.....	Mar.	1	1911	.....	1067
Holt Creek.....	Schoettger, F. J.....	Burton.....	Schoettger Canal.....	Irrig.	.14	32	35	20	Keya Paha.....	Feb.	23	1895	595	.....
Holt Creek, E.....	Akers, J. W.....	Springview.....	Akers Canal.....	Irrig.	.14	1	34	21	Keya Paha.....	Aug.	1	1894	611	.....
Horse Head Cr.....	Bruce, A.....	Norden.....	Bruce Canal.....	Irrig.	.17	16	33	24	Keya Paha.....	Sept.	7	1895	.....	149
Horse Shoe Lake	Horseshoe Lake Drain-													
Et Al.....	age Dist.....	Irwin.....	Horseshoe Ditch.....	Drain		13	34	40	Cherry.....	June	27	1916	.....	1461
Huggins Creek.....	Soper, H. K.....	Burton.....	Soper Canal.....	Irrig.	.14	21	35	20	Keya Paha.....	Nov.	6	1894	592	.....
Jewett Creek.....	Jewett, C. P.....	Meadville.....	B. L. Canal.....	Irrig.	.71	5	32	21	Keya Paha.....	Oct.	23	1894	590	.....
Keya Paha River	Yocum, J. C.....	Butte.....	Yocum Canal.....	Irrig.	1.14	23	34	15	Boyd.....	Sept.	7	1894	573	.....
Keya Paha River	Bruce, Andrew & Son.....	Naper.....	Bruce Roller Mills.....	Power	100.00	24	34	16	Boyd.....	Oct.	5	1903	.....	729
Kibby Creek.....	Green, Martha J.....	Hillside.....	Green Canal.....	Irrig.	.01	28	34	16	Boyd.....	Apr.	1	1904	.....	747

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-C—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Lewis Spring.....	Lewis, Ralph.....	Burton.....	Lewis Canal.....	Irrig.	.14	29	35	19	Keya Paha.....	Aug.	30	1895	.....	139
Long Pine Creek.....	Kyner, S. H.....	Long Pine.....	Long Pine L. & P. Pl't	Power	48.00	30	30	20	Brown.....	Apr.	2	1909	.....	941
Louse Creek, Trib. to Niobrara River	Lonsberry, I. F.....	Red Bird.....	Lonsberry Canal.....	Irrig.			32	10	Boyd.....	Sept.	18	1930	.....	2166*
Middle Cr. E. B.	McGuire, M. W.....	Norden.....	McGuire Canal.....	Irrig.	.71	32	33	23	Keya Paha.....	June	1	1884	606	.....
Middle Cr. W. B.	Allen, M. M.....	Norden.....	Allen Canal.....	Irrig.	.50	29	33	23	Keya Paha.....	June	1	1891	616	.....
Middle Cr. W. B.	Allen, M. M.....	Norden.....	Allen Canal.....	Irrig.	1.00	29	33	23	Keya Paha.....	May	2	1904	.....	753
Mile Board Lake	Brd. of County Comm.	Valentine.....	Mile Board Drain Ditch	Drain		5	34	35	Cherry.....	Sept.	17	1924	.....	1750
Minnechaduz Cr.	Interstate Power Co. of Nebraska.....	Dubuque, Ia.....	Pierce Milling Co.....	Power	35.00	30	34	27	Cherry.....	Sept.	12	1896	.....	359
Minnechaduz Cr.	City of Valentine.....	Valentine.....	Valentine Power Plant	Power	40.00	29	34	27	Cherry.....	Apr.	16	1913	.....	1279
Newman Creek.....	Newman, Philo.....	Norden.....	Newman Canal.....	Irrig.	.21	17	33	24	Keya Paha.....	July	1	1888	617	.....
Niobrara River.....	Richardson, Wiley.....	Harrison.....	Lakatoh Canal.....	Irrig.	7.14	1	30	57	Sioux.....	Oct.	1	1883	554	.....
Niobrara River.....	The Coffee Cattle Co.....	Chadron.....	Ernest Canal No. 1.....	Irrig.	2.86	9	29	56	Sioux.....	May	1	1885	514a	.....
Niobrara River.....	Bruce, A.....	Norden.....	Bruce Mill.....	Power	60.00	16	33	24	Keya Paha.....	Apr.	1	1886	610	.....
Niobrara River.....	Cook, J. H.....	Agate.....	McGinley-Stover Lower N Canal.....	Irrig.	8.21	25	29	56	Sioux.....	May	1	1887	513a	.....
Niobrara River.....	Furman, H. G. Jr.....	Marsland.....	Pioneer Canal.....	Irrig.	7.14	36	29	51	Dawes.....	Aug.	1	1887	442a	.....
Niobrara River.....	Hedgcock, Geo. et al.	Marsland.....	McLaughlin Canal.....	Irrig.	7.14	9	28	52	Box Butte.....	May	1	1888	566	.....

* Application pending.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-C—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Niobrara River	Cook, J. H.	Agate	McGinley-Stover Lower S. Canal	Irrig.	1.71	25	29	56	Sioux	May	1	1890	513b	
Niobrara River	The Coffee Cattle Co.	Chadron	Ernest Canal No. 1	Irrig.	2.14	9	29	56	Sioux	May	15	1891	514b	
Niobrara River	Cook, J. H.	Agate	Cook Canals Nos. 1 & 2	Irrig.	3.56	1	28	56	Sioux	May	31	1891	980	
Niobrara River	Elliott Bros.	Van Tassel, Wyo.	Bigelow & Seymour Canal	Irrig.	2.40	19	31	57	Sioux	June	8	1891	510	
Niobrara River	Buffington-Coleman	Crawford	Harris-Neece Canal	Irrig.	8.57	3	28	55	Sioux	July	1	1892	517	
Niobrara River	Furman, H. G. Jr.	Marsland	Pioneer Canal	Power	10.00	31	29	50	Dawes	Aug.	1	1893	442b	
Niobrara River	Roll Mill Co.	Marsland	Roll Mill	Power	35.00	5	28	51	Box Butte	Sept.	10	1893	970	
Niobrara River	Green, Frank J.	Hemingford	Meridan Canal	Irrig.	.57	25	29	50	Dawes	Jan.	10	1894	459	
Niobrara River	Taylor, Geo. L.	Nonpariel	Enterprise Canal	Irrig.	5.71	27	29	50	Dawes	Jan.	27	1894	461	
Niobrara River	Furman, H. G.	Marsland	Furman Canal	Irrig.	3.64	29	29	50	Dawes	Feb.	2	1894	462	
Niobrara River	Warneke, Henry	Harrison	Johnson Canal	Irrig.	2.86	36	31	57	Sioux	May	1	1894	511	
Niobrara River	McMannis, J. T., et al	Hemingford	McMannis-Neeland Can.	Irrig.	.86	29	29	49	Dawes	June	15	1894	463	
Niobrara River	McCully, S. J.	Carns	McCully Canal	Irrig.	8.57	25	32	20	Keya Paha	Aug.	7	1894	583	
Niobrara River	Fienken, Chas.	Dustin	Fienken Canal	Irrig.	1.00	12	33	16	Boyd	Oct.	1	1894	575	
Niobrara River	Wilson, J. A.	Springview	Wilson Canal	Irrig.	5.71	18	32	21	Keya Paha	Oct.	18	1894	591	
Niobrara River	Iodence, W. M.	Dunlap	Lichte Canal	Irrig.	1.43	27	29	48	Dawes	Jan.	24	1895	479	
Niobrara River	Warneke, H.	Harrison	Warneke Canal	Irrig.	1.57	27	31	57	Sioux	Feb.	13	1895	505	
Niobrara River	Cook, J. H.	Agate	McGinley-Stover Upper Canal	Irrig.	2.86	23	29	56	Sioux	Feb.	25	1895	521	
Niobrara River	Harris, Octave	Marsland	LaBelle Canal	Irrig.	2.00	6	28	54	Sioux	Mar.	12	1895	518	
Niobrara River	Furman, H. G.	Marsland	Snow Canal	Irrig.	2.86	35	29	51	Dawes	Mar.	26	1895	485	
Niobrara River	Hughes, Mary F.	Marsland	Excelsior Canal	Irrig.	2.86	10	28	52	Box Butte	May	15	1895	568	
Niobrara River	Hughes, Est. of Jno.	Marsland	Hughes Canal	Irrig.		1	28	52	Box Butte				987*	4
Niobrara River	Mann, John E.	Harrison	Bourett Canal	Irrig.	2.00	33	30	56	Sioux	June	8	1895		4
Niobrara River	Bourett, John S.	Harrison	Bourett So. Canal	Irrig.	1.43	29	30	56	Sioux	June	10	1895		5
Niobrara River	Hughes, Est. of Jno.	Marsland	Hughes Canal	Irrig.	1.00	1	28	52	Box Butte	June	26	1895		53

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-C—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month			D|Yr.
Niobrara River	Harris, Octave	Marsland	LaBelle Canal	Irrig.	3.14	6	28	54	Sioux	July	3 1895	60
Niobrara River	Bond-Tissot	Peters	Usher Canal	Irrig.	1.16	19	29	46	Sheridan	July	17 1895	82
Niobrara River	Neece, Robert	Marsland	Moore Canal	Irrig.	5.71	9	28	53	Sioux	July	22 1895	88
Niobrara River	Peters, H. A., et al	Hay Springs	Hay Springs Canal	Irrig.	14.29	29	29	47	Dawes	Sept.	27 1895	173
Niobrara River	Sandoz, George	Marsland	Mettlen Canal	Irrig.	10.00	4	28	54	Sioux	Apr.	27 1896	292
Niobrara River	Neeland, Sarah J.	Hemingford	McManus-Neeland Can.	Irrig.	1.93	29	29	49	Dawes	Apr.	9 1898	448
Niobrara River	Armstrong, T. S.	Butte	Armstrong Canal	Power	150.00	9	33	13	Boyd	May	14 1898	452
Niobrara River	Hunter, Jas. A.	Alliance	Meridian Canal	Irrig.	5.14	25	29	50	Dawes	Aug.	29 1898	469
Niobrara River	Bourett, J. F.	Harrison	Bourett Canal	Irrig.	1.00	29	30	56	Sioux	Mar.	5 1900	542
Niobrara River	Bourett, J. S.	Harrison	J. S. Bourett Canal	Irrig.	1.71	19	30	56	Sioux	Mar.	17 1900	546
Niobrara River	Montague, James	Dunlap	Montague-Lichte Canal	Irrig.	.43	27	29	48	Dawes	Sept.	27 1900	575
Niobrara River	Fendrich, B.	Dunlap	Chladek Canal	Irrig.	.30	26	29	48	Dawes	Mar.	18 1901	607
Niobrara River	Fendrich, G. A.	Dunlap	Fendrich Canal	Irrig.	.29	32	29	48	Dawes	June	1 1901	616
Niobrara River	Fendrich, G. A.	Dunlap	Fendrich Canal	Irrig.	.27	32	29	48	Dawes	June	1 1901	617
Niobrara River	Cornell, C. M.	Valentine	Valentine Power Plant	Power	1600.00	27	34	27	Cherry	Jan.	29 1902	652
Niobrara River	Potmesil Bros.	Dunlap	Potmesil Canal	Irrig.	6.00	26	29	48	Dawes	May	19 1904	757
Niobrara River & Pepper Creek	Taylor, D. T.	Hay Springs	Taylor Canal	Irrig.	4.57	28	29	47	Dawes	Aug.	8 1904	766
Niobrara River	Kay, John L.	Marsland	Kay Canal	Irrig.	2.00	6	28	53	Dawes	May	12 1905	791
Niobrara River	Kirk, E. L.	Sioux City	Nebr. Power Co.	Power	900.00	34	32	7	Knox	Sept.	24 1909	961
Niobrara River	Kirk, E. L.	Sioux City	Nebr. Power Co.	Power	700.00	34	32	7	Knox	Aug.	9 1910	1019
Niobrara River	McCormack, Geo. W.	Harrison	Beiser Canal	Irrig.	.75	4	29	56	Sioux	Jan.	23 1911	1056
Niobrara River	McCormack, Geo. W.	Harrison	Ext. Bourett Canal	Irrig.	1.21	33	30	56	Sioux	Jan.	23 1911	1057
Niobrara River	Iodence, W. M.	Dunlap	Lichte Canal	Irrig.	3.00	27	29	48	Dawes	Apr.	7 1911	1086
Niobrara River	Dierex, Camille	Rushville	Camille Canal	Irrig.	1.53	19	30	43	Sheridan	Apr.	10 1911	1087
Niobrara River	Montague, James	Dunlap	Lichte Canal	Irrig.	.71	27	29	48	Dawes	Apr.	19 1911	1088
Niobrara River	Hopkins, Thomas L.	Hemingford	Potmesil Bros. Canal	Irrig.	.28	25	29	48	Sioux	Jan.	2 1912	1152
Niobrara River	Bourett, John	Harrison	J. Bourett Ext. No. 1	Irrig.	.11	29	30	56	Sioux	Mar.	25 1912	1188

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-C—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate				Date of Priority			Doc. No.	App. No.
						S	T	R	County	Month	D	Yr.		
Niobrara River.....	Wells, Harry E.....	Butte.....	Wells Pumping System.....	Irrig.	1.64	32	32	40	Sheridan.....	May	2	1912	.....	1193
Niobrara River.....	Bourett, John.....	Harrison.....	J. Bourett Ext. No. 2.....	Irrig.	.21	32	30	56	Sioux.....	July	19	1912	.....	1209
Niobrara River.....	Davidson, F. B. & C. T.....	Hemingford.....	Mettlen Canal.....	Irrig.	5.00	4	28	54	Sioux.....	Dec.	18	1912	.....	1248
Niobrara River.....	Davidson, F. B. & C. T.....	Hemingford.....	Bennett Canal.....	Irrig.	4.00	1	28	54	Sioux.....	Dec.	18	1912	.....	1249
Niobrara River.....	Bushnell, Thos. T.....	Marsland.....	Geo. Hitshews Canal.....	Irrig.	6.00	6	28	52	Box Butte.....	Feb.	17	1913	.....	1260
Niobrara River.....	Coffee Cattle Co.....	Chadron.....	Coffee Canal No. 3.....	Irrig.	2.50	15	29	56	Sioux.....	Mar.	24	1914	.....	1362
Niobrara River.....	U. S. Forest Reserve.....	Nenzel.....	Morton Nursery Canal.....	Irrig.	.50	30	33	32	Cherry.....	June	15	1907	.....	1488
Niobrara River.....	Davison, Fred B.....	Marsland.....	Davison Canal.....	Irrig.	.21	12	28	54	Sioux.....	Apr.	27	1922	.....	1662
Niobrara River.....	Northern Nebr. Power Co.....	Spencer.....	Northern Nebr. Power Plant No. 1.....	Power	1450.00	30	33	11	Boyd.....	Oct.	30	1923	.....	1725
Niobrara River.....	Northern Nebr. Power Co.....	Spencer.....	Northern Nebr. Power Plant No. 1.....	R. Dam	A. 1725	30	33	11	Boyd.....	Aug.	20	1925	.....	1777
Niobrara River.....	Northern Nebr. Power Co.....	Spencer.....	Northern Nebr. Power Plant No. 1.....	R. Dam	A. 1725	30	33	11	Boyd.....	Aug.	29	1927	.....	1955
Niobrara River.....	Niobrara River Power Co.....	Spencer.....	Bristow Power Plant.....	Power	880.00	6	32	10	Boyd.....	Nov.	11	1930	.....	2172
Pine Creek.....	Colclesser, Lewis.....	Rushville.....	Pine Creek Mills.....	Power	32.00	33	30	44	Sheridan.....	June	5	1893	415	.....
Plum Creek.....	Plum Creek Irr. Co.....	Johnstown.....	Johnstown Canal.....	Irrig.	26.00	4	29	24	Brown.....	Dec.	18	1894	405	.....
Plum Creek.....	Wilbert, R.....	Ainsworth.....	Wilbert Canal.....	Irrig.	.43	35	32	23	Brown.....	May	5	1896	.....	329
Plum Creek.....	Interstate Power Co. of Nebraska.....	Dubuque, Ia.....	Plum Creek Plant.....	Power	150.00	29	32	22	Brown.....	May	15	1909	.....	947
Pole Creek.....	Julian & Wells.....	Gordon.....	Pole Creek Canal.....	Irrig.	.57	28	32	40	Cherry.....	June	29	1905	.....	799
Rickman Creek.....	Byington, Lola.....	Riverview.....	Byington Canal.....	Irrig.	1.00	22	32	20	Keya Paha.....	May	19	1891	582	.....
Rock Creek.....	Eastlick, B. J.....	Carns.....	Necessity Canal.....	Irrig.	.35	29	32	18	Rock.....	Jan.	17	1895	395	.....
Rock Creek.....	Wile, H.....	Mariaville.....	Wile Canal.....	Irrig.	.86	9	31	18	Rock.....	Apr.	3	1895	397	.....
Rock Creek.....	Duggar Bros.....	Bassett.....	Dugger Canal.....	Irrig.	4.57	33	32	18	Rock.....	Apr.	24	1919	.....	1539

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-C—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Rock Creek.....	Van Koten, J.....	Springview.....	Van Koten Canal.....	Irrig.	.07	25	33	22	Keya Paha.....	Jan.	1	1885	619	.....
Rock Spgs. Cr.....	Moore, W. S.....	Meadville.....	Moore Canal.....	Irrig.	1.43	12	32	22	Keya Paha.....	June	30	1887	593	.....
Sand Creek.....	Peacock, Gardie M.....	Newport.....	Peacock Canal.....	Irrig.	.02	35	32	18	Rock.....	Nov.	14	1929	.....	2112
Shobe Branch.....	Lamb, A. J.....	Spencer.....	Lamb Canal.....	Irrig.	.14	30	33	11	Holt.....	July	6	1896	.....	322
Snake River.....	Jackson, W. S.....	Valentine.....	Snake Hydro Elec. Co.....	Power	180.00	9	31	30	Cherry.....	Feb.	16	1914	.....	1352
Snake River.....	Western Water, Power and Irrig. Co.....	Scottsbluff.....	Snake River Plant No. 1.....	Power		9	31	30	Cherry.....	Jan.	16	1929	.....	2062*
Snider Creek.....	Pickler, W. S.....	Springview.....	Old Canal.....	Irrig.	.01	31	33	19	Keya Paha.....	May	1	1894	607	.....
Spring Creek.....	Kuskie, A. K.....	Sparks.....	Garden Canal.....	Irrig.	.86	27	34	25	Cherry.....	Mar.	30	1900	.....	555
Stream, No Name.....	Grant, C. G.....	Long Pine.....	Grant Canal.....	Irrig.	.14	4	31	20	Rock.....	Jan.	1	1895	400	.....
Stream, No Name.....	Conger, C. K.....	Norden.....	Conger Canal.....	Irrig.	.11	5	33	24	Keya Paha.....	Sept.	16	1895	.....	158
Turkey Creek.....	La Rue, Chas.....	Norden.....	Turkey Creek Canal.....	Irrig.	.43	35	33	23	Keya Paha.....	Feb.	9	1900	.....	539
Turkey Creek.....	La Rue, Chas.....	Norden.....	Turkey Creek Canal No. 2.....	Irrig.	2.00	35	33	23	Keya Paha.....	May	11	1904	.....	754
Verdigris Creek.....	Hanson, J. W.....	Emmettburg, Ia.....	Drayton Canal.....	Irrig.	2.86	8	28	8	Antelope.....	Aug.	11	1894	248	.....
Wyman Creek.....	McCully, R. A.....	Carns.....	McCully Canal.....	Irrig.	.80	19	32	15	Keya Paha.....	June	10	1891	604	.....
Wyman Creek.....	Horton, I.....	Carns.....	Horton Canal.....	Irrig.	.14	17	32	19	Keya Paha.....	June	5	1894	587	.....
Young Creek.....	Lamb, A. J.....	Spencer.....	Harvey-Lamb Canal.....	Irrig.	.21	32	33	1	Holt.....	June	13	1896	.....	311

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-D

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month			D|Yr.
Ash Creek	Connell, W. D.	Whitney	Connell Canal	Irrig.	.63	6	32	50	Dawes	June 17	1888	459
Ash Creek	Cripps, Fred W.	Whitney	Cripps Canal	Irrig.	1.14	13	32	51	Dawes	Dec. 26	1903	735
Ash Creek	Howard, W. C.	Whitney	Cripps Canal	Irrig.	.57	13	32	51	Dawes	Aug. 27	1906	835
Ash Cr., E. Br.	Tomlin, H. B. Est. et al C. A. Minnick, Adm.	Crawford	Ox Yoke Canal	Irrig.	1.47	31	32	50	Dawes	May 31	1880	447
Ash Cr., E. Br.	Tomlin, H. B. Est., et al C. A. Minnick, Adm.	Crawford	Ox Yoke Canal	Irrig.	1.39	29	32	50	Dawes	May 31	1880	447 'R'
Ash Cr., E. Br.	Stumph, John E., Gorr, L. A.	Whitney	Barron Canal	Irrig.	1.14	32	32	50	Dawes	July 1	1888	438 'R'
Ash Cr., E. Br.	Stumph, John E.	Whitney	Stumph Canal	Irrig.	.20	31	32	50	Dawes	Sept. 5	1892	1023½
Ash Cr., E. Br.	Ivins, Orville R.	Crawford	Sheldon Canal	Irrig.	1.43	30	32	50	Dawes	Jan. 26	1899	493
Ash Cr., E. Br.	Vetter, Andrew	Crawford	Todd Canal	Irrig.	.38	5	31	50	Dawes	Sept. 12	1899	520
Ash Cr., E. Br. & Indian Cr.	Norman, Harry	Whitney	Norman Reservoir	Stor.	†1552	7	32	50	Dawes	Aug. 22	1927	1953
Ash Cr., E. Br.	Gorr, L. A.	Whitney	Barron Canal	Irrig.	.89	32	32	50	Dawes	Aug. 15	1928	2024
Ash Cr., E. Br.	Thomas, Olive S.	Whitney	Thomas Canal	Irrig.	1.00	19	32	50	Dawes	Dec. 17	1928	2057
Ash Cr., E. Br.	Seegrst, Cloid	Whitney	Seegrst Power Plant	Power	3.00	8	31	50	Dawes	May 20	1930	2140
Ash Cr., W. Br.	Ivins, Orville R., et al	Crawford	W. Ash Creek Canal	Irrig.	1.62	36	32	51	Dawes	July 4	1893	452
Ash Cr., W. Br.	Vetter, Andrew	Crawford	Mace Canal	Irrig.	1.00	2	31	51	Dawes	July 31	1884	428
Ash Cr., W. Br.	Ivins, Orville R.	Crawford	Woodward Canal	Irrig.	.57	36	32	51	Dawes	Feb. 3	1898	434 "R"
Beaver Creek	Braddock, William Mrs.	Chadron	Braddock Canal	Irrig.	.36	18	34	46	Dawes	Apr. 15	1895	423
Beaver Creek	Braddock, J. F.	Chadron	J. F. Braddock Canal	Irrig.	.04	1	34	47	Dawes	Apr. 15	1895	974
Beaver Creek	Braddock, Wm. Mrs.	Chadron	Wm. Lockler Canal	Irrig.	1.83	34	35	47	Dawes	Sept. 15	1892	1017
Beaver Creek	Braddock, J. F.	Chadron	J. F. Braddock Canal	Irrig.	.63	1	34	47	Dawes	Nov. 24	1897	463

† Acre feet per annum.

"R" Denotes relocation.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-D—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of		Doc. No.	App. No.	
						S	T	R	County	Priority Month			D	Yr.
Beaver Creek	U. R. Land & Cattle Co.	Chadron	Cilek Canal	Irrig.	.36	4	33	46	Sheridan	June	19	1899	513
Beaver Creek	Cavins, J. A.	Chadron	Rickman Canal	Irrig.	1.00	9	33	46	Sheridan	July	2	1902	681
Beaver Creek	Braddock, Julia A. Trustee	Chadron	Braddock Ext.	Irrig.	.39	18	34	46	Sheridan	Sept.	19	1928	2033
Beaver Creek	Braddock, Julia A. Trustee	Chadron	Lockler Canal	Irrig.	.49	34	35	47	Dawes	Sept.	19	1928	2034
Bordeaux, Big	Locket, T. E.	Chadron	Locket Canal	Irrig.	.07	11	32	48	Dawes	June	30	1886	494
Bordeaux, Big	Naylor, Charles	Chadron	Mann Canal	Irrig.	.23	25	33	48	Dawes	Dec.	31	1892	975
Bordeaux, Big	Adams, S. L.	Chadron	Adams Canal	Irrig.	.14	2	32	48	Dawes	Mar.	5	1893	450
Bordeaux, Big	County of Dawes	Chadron	Dawes County Canal	Irrig.	.14	23	33	48	Dawes	July	31	1893	983
Bordeaux, Big	O'Donnell, John	Chadron	O'Donnell Canal	Irrig.	.14	9	34	48	Dawes	Jan.	17	1898	432
Bordeaux, Big	Collins, Jacob	Chadron	Collins Reservoir	Irrig.	.31	14	32	48	Dawes	Feb.	27	1905	780
Bordeaux, Big	Thomas Bros.	Chadron	Thomas Canal	Irrig.	2.13	34	34	48	Dawes	Sept.	12	1924	1748
Bordeaux, Big	O'Donnell, Pat.	Chadron	O'Donnell Ext.	Irrig.	.63	9	34	48	Dawes	Sept.	22	1928	2036
Bordeaux, Big	Kelso, S. M.	Chadron	Belle Isle Reservoir	Stor.	.	23	35	48	Dawes	June	13	1930	2144
Bordeaux, Big	Kelso, S. M.	Chadron	Kelso Pump	Irrig.	.	14	33	48	Dawes	July	24	1930	2151
Bordeaux, Lit.	Schmidt, Elwin	Chadron	Hartzell Canal	Irrig.	.57	13	33	48	Dawes	June	1	1893	448
Bordeaux, Lit.	Butler, J. A.	Chadron	Butler Canal	Irrig.	.11	33	33	47	Dawes	June	1	1894	443
Bordeaux, Lit.	Frady, C. H.	Chadron	Frady Canal	Irrig.	.	30	33	47	Dawes				1009*
Chadron Creek	City of Chadron	Chadron	Chadron Water Wks.	W. S.	1.00	18	32	48	Dawes	Dec.	31	1888	1022
Chadron Creek	Gorr, James	Chadron	Gallup Canal	Irrig.	.08	15	33	49	Dawes	Dec.	20	1890	426
Chadron Creek	Wilson, H. M.	Chadron	Tug Wilson Canal	Irrig.	.20	12	32	49	Dawes	July	13	1893	453
Chadron Creek	City of Chadron	Chadron	Water Wks. Ext.	Stor.	4.50	18	32	48	Dawes	Apr.	8	1920	1583
Chadron Creek	State Park Board	Chadron	Chadron State Park Lake	Dam	†10 AF	31	32	48	Dawes	Apr.	17	1928	2007

† Acre feet per annum.

* Appropriation not adjudicated.

CLAIMS AND APPLICATIONS BY STR EAMS IN DIVISION NO. 2-D—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D|Yr.
Charcoal Cr.....	Weber, M. J.....	Glen.....	Klein Canal.....	Irrig.	.11	33	31	53	Sioux.....	Aug.	1 1882	982	.....
Cottonwood Cr.....	Rasmussen, J. J. & C. M.....	Crawford.....	Rasmussen Canal.....	Irrig.	2.29	10	33	52	Dawes.....	Mar.	8 1898	.....	444
Cottonwood Cr.....	Rasmussen, J. J. & C. M.....	Crawford.....	Rasmussen Canal.....	Irrig.	18.00	10	33	52	Dawes.....	Dec.	26 1899	.....	528
Cottonwood, Little.....	Golden, T. F.....	Crawford.....	Thos. Stuart Canal.....	Irrig.	.36	8	32	52	Dawes.....	Dec.	21 1890	425	.....
Cottonwood, Little.....	Price, J. A. B. & Golden, T. F.....	Crawford.....	Stuart Bros. Canal.....	Irrig.	2.86	18	32	52	Dawes.....	June	10 1895	.....	8
Cottonwood, Little.....	Kusel, William T.....	Chadron.....	Kusel Canal No. 2.....	Irrig.	.43	8	32	51	Dawes.....	May	19 1900	.....	560
Cottonwood, Little.....	Dunn, J. G.....	Crawford.....	Dunn Canal.....	Irrig.	1.43	9	32	52	Dawes.....	Jan.	14 1902	.....	649
Cottonwood, Little.....	Erickson, John R.....	Crawford.....	Stuart-Maple Canal.....	Irrig.	.70	3	32	52	Dawes.....	Mar.	10 1902	.....	656
Cottonwood, Little.....	Kusel, William T.....	Chadron.....	Kusel-Spean Canal.....	Irrig.	.71	8	32	51	Dawes.....	June	30 1902	.....	677
Cottonwood, Little.....	Lawrence, Fay.....	Crawford.....	Broadhurst Canal.....	Irrig.	1.03	7	32	51	Dawes.....	Feb.	25 1913	.....	1264
Cottonwood, Little.....	Dodd & McDowell.....	Crawford.....	Dodd-McDowell Canal.....	Stor.	†480	13	32	53	Sioux.....	Apr.	15 1913	.....	1276
Cottonwood, Little, (Res. A. 1276).....	Dodd, Calvin H.....	Crawford.....	Dodd-McDowell Res.....	Irrig.	2.00	17	32	52	Dawes.....	Jan.	5 1920	.....	1571
Dead Horse Cr.....	Kemery, John.....	Chadron.....	Kemery Canal.....	Irrig.	.01	5	30	49	Dawes.....	Sept.	1 1890	493	.....

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-D—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
Dead Horse Cr.	Woodruff, F. B. & E. F.	Chadron	Flag Butte Canal	Irrig.	.03	32	32	49	Dawes	Apr.	10	1891	427	
Dead Horse Cr.	Geiser, B. A.	Chadron	Geiser Canal	Irrig.	.15	17	32	49	Dawes	Mar.	18	1902		658
Dead Horse Cr.	White, Chas. M. et al.	Chadron	Slattery Canal	Irrig.	1.29	32	33	49	Dawes	Apr.	6	1904		749
Dead Horse Cr.	White, C. M.	Chadron	Slattery Canal Ext.	Irrig.	.55	32	33	49	Dawes	June	15	1928		2021
Dead Horse Cr. Spgs. Trib. to	Goff, T. L.	Chadron	Goff Canal	Irrig.	.14	30	32	49	Dawes	Apr.	2	1891	441	
Deep Creek	Barnum, W. E.	Glen	Deep Creek Canal	Irrig.	.06	9	30	53	Sioux	May	1	1887	525	
Dry Draw	Ernest, Geo. A.	Chadron	Geo. Ernest Canal	Irrig.	3.71	22	35	49	Dawes	Feb.	20	1911		1061
Dry Draw	Glaze, Wm. A. Health, W. E., Agent.	Crawford	Health Reservoir	Stor.	†70 AF	12	32	53	Sioux	Feb.	7	1917		1475
Dry Draw, (Res. A. 1475)	Heath, W. E.	Crawford	Heath Canal	Irrig.	.74	12	32	53	Sioux	July	25	1921		1612
Dry Canyon	Betson, Wm. A.	Crawford	Betson Canal	Irrig.	1.00	33	32	51	Dawes	Mar.	22	1917		1481
Dry Run	Campbell, F. J.	Chadron	Campbell Canal	Irrig.	1.00	35	34	49	Dawes	Nov.	9	1908		919
Dry Run	Guse, Wm.	Crawford	Guse Reservoir	Stor.	†300 AF	35	34	52	Dawes	Jan.	13	1914		1345
Dry Run	Harrison & Weston	Whitney	Harsh-Weston Canal	Irrig.	3.00	31	34	51	Dawes	Mar.	11	1914		1361
English Creek	McDowell, E. C.	Crawford	McDowell Stor. System	Irrig.	.87	12	31	52	Dawes	Oct.	24	1904		772
English Creek	McDowell, Edw. C.	Crawford	McDowell Res. No. 2	Fish	†100	2	31	52	Dawes	Jan.	22	1929		2064
Flood Waters	Lenehan, Delia	Crawford	Lenehan Reservoir	Stor.	A. F.	12								
Flood Waters	Arner, Jessie B.	Crawford	Arner Canal	Irrig.	†22 AF	25	34	52	Dawes	Apr.	16	1913		1278
					.14	27	33	53	Sioux	May	6	1913		1289

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-D—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.			
						S	T	R	County	Month	D			Yr.		
Hooker Creek	Bauersach, C.	Crawford	Bauersach Canal	Irrig.	.87	7	31	51	Dawes	Dec.	31	1889	492	.....	
Hooker Creek	Hansen, Svend A.	Aurora	Alcorn Canal	Irrig.	1.21	31	32	51	Dawes	Nov.	17	1905	.....	803	
Hooker Creek	Souther, Mable G.	Lincoln	Souther Lake	F. & I.	1.42	30	32	51	Dawes	Sept.	24	1908	.....	915	
Indian Creek	Renfro, Oscar S.	Chadron	Seegrist Canal	Irrig.	.03	3	31	50	Dawes	Nov.	1	1893	489	.....	
Indian Creek (Res. A. 1822)	Renfro, Oscar S.	Chadron	Seegrist Extension	Irrig.	.50	3	31	50	Dawes	Nov.	29	1919	.....	1569	
Indian Creek	Norman, Harry	Whitney	Norman Canal	Irrig.	1.92	16	32	50	Dawes	Aug.	3	1921	.....	1614	
Indian Creek	Norman, Harry	Whitney	Elmer Canal	Irrig.	.77	16	32	50	Dawes	Jan.	17	1923	.....	1704	
Indian Creek	Renfro, Oscar S.	Chadron	Renfro Reservoir	Stor.	†550	3	31	50	Dawes	June	21	1926	.....	1822	
Indian Creek (Res. A. 1822)	Renfro, Oscar S.	Chadron	Seegrist Ext. No. 2	Irrig.	4.89	3	31	50	Dawes	June	21	1926	.....	1823	
Indian Creek	Norman, Elmer D.	Whitney	Norman Canal	Irrig.	1.28	16	32	50	Dawes	Aug.	18	1927	.....	1952	
Indian Creek and East Ash Creek	Norman, Harry	Whitney	Norman Res.	Stor.	†776	A	F	7	32	50	Dawes	Aug.	22	1927	1953
Indian Creek, Trib. to	Honnold Bros.	Whitney	Honnold-Wilson Canal	Irrig.	.07	3	31	50	Dawes	May	25	1912	.....	1199	
Madden Creek & North Creek	Flannigan, O. R.	Chadron	Dams	Irrig.	.57	31	35	48	Dawes	Oct.	17	1904	.....	771	
Minneapolis Springs	Smoke, Wm. H.	Chadron	Minneapolis Reservoir	Dom.		19	33	48	Dawes	July	21	1930	.....	2149*	
Rush Creek	Braddock, H. T.	Chadron	Braddock Canal	Irrig.	3.00	10	34	49	Dawes	May	4	1903	.....	706	

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-D—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D|Yr.
Sand Cr. Trib. to Cottonwood	Everson, Jas. T. and Arner, Lloyd C.	Crawford	Bendix Canal	Irrig.	.57	35	33	53	Sioux	Nov. 19	1895	189	
Sand Cr. Trib. to Cottonwood	Arner, J. H.	Crawford	Arner Canal	Irrig.	2.57	26	33	53	Sioux	Jan. 12	1905	779	
Sand Cr. Trib. to Cottonwood	Everson, Jas. T. and Arner, Lloyd C.	Crawford	Bendix Extension	Irrig.	.83	35	33	53	Sioux	May 27	1922	1669	
Saw Log, E.	Stewart, H. E.	Crawford	Little Saw Log Canal	Irrig.	.71	12	30	52	Dawes	Jan. 23	1907	849	
Saw Log, E.	Young, Chas. A.	Crawford	Stephenson Canal	Irrig.	.33	25	31	52	Dawes	Mar. 5	1907	852	
Saw Log, E.	Baker, A. D.	Crawford	Baker Canal	Irrig.	.04	5	30	51	Dawes	Jan. 3	1908	884	
Saw Log, E.	Porter, J. E. & Masters, C. E.	Crawford	Van Treek Canal	Irrig.	.37	4	30	51	Dawes	May 8	1911	1098	
Saxson Draw (Res. A. 1689)	Dodd, Clara A.	Crawford	Harris Reservoir	Stor.	135	AF	32	33	52	Dawes	Sept. 29	1922	1689
	Dodd, Clara A.	Crawford	Harris Res. Canal	Irrig.	.74	32	33	52	Dawes	Mar. 31	1928	1996	
Sheridan Creek	Getchell, G. C.	Pine Ridge	Getchell Canal	Irrig.	.07	27	34	45	Sheridan	Aug. 1	1894	418	
Soldier Creek	Rodgers, J. J.	Crawford	Rodger Canal	Irrig.	.14	5	31	53	Sioux	Apr. 30	1883	546	
Spring Creek Trib. to Chadron Cr.	Benthack, Peter L.	Chadron	Benthack Canal	Irrig.	4.71	11	33	49	Dawes	Sept. 12	1924	1749	
Spring Br., Trib. to White River (Tucker Cr.)	Cutler, Jennie R.	Glen	Tucker Canal	Irrig.	.17	34	31	54	Sioux	June 1	1883	557	
Spring Creek, Trib. to Little Cottonwood	Swinbank, Sam et al.	Crawford	Mozeter Canal	Irrig.	1.14	13	32	52	Dawes	May 3	1888	1014	

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-D—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D|Yr.
Spring Creek, Trib. to Little Cottonwood	Forbes, J. D.	Crawford	Forbes Canal No. 1	Irrig.	.57	20	32	52	Dawes	Apr.	28	1902	663
Spring Creek, Trib. to Little Cottonwood	Pinney, B. G.	Crawford	Squaw Creek Canal	Irrig.	.86	13	32	52	Dawes	May	10	1894	466
Spring Creek Trib. to Little Cottonwood	Lawrence, Fay E.	Crawford	Spring Creek Canal No. 1	Irrig.	1.30	13	32	52	Dawes	Dec.	1	1894	473
Spring Creek Trib. to Little Cottonwood	Lawrence, Fay E.	Crawford	Spring Creek Canal	O. D.		7	32	51	Dawes	Apr.	19	1929	473
Squaw Creek	Hall, LeRoy and Frank	Crawford	Cooper Canal	Irrig.	2.01	36	32	52	Dawes	May	8	1896	333
Squaw Creek	McDowell, E. C.	Crawford	Squaw Cr. Canal	Stor.	†200 AF	12	31	52	Dawes	Oct.	3	1911	1132
(Res. A. 1132)	McDowell, E. C.	Crawford	Squaw Cr. Canal	Irrig.	2.96	12	13	52	Dawes	Jan.	4	1922	1631
Trunk Butte Cr.	Smock, M.	Whitney	Smock Canal	Irrig.	.07	26	32	50	Dawes	June	28	1895	465
Trunk Butte Cr.	Chaulk, John J.	Chadron	Chaulk Canal	Irrig.	3.00	25	33	50	Dawes	Mar.	13	1915	1406
White Clay Cr.	Tandy, A. M.	Crawford	McFarland Canal	Irrig.	1.64	35	32	52	Dawes	May	18	1891	960
White Clay Cr.	White River Irr. Co.	Crawford	White River Canal	O. D.		35	32	52	Dawes	Dec.	31	1894	477
White Clay Cr.	Hall, LeRoy and Frank	Crawford	Cooper Canal	Irrig.	3.71	2	31	52	Dawes	June	22	1895	42
White Clay Cr.	Pine Ridge Agency	Pine Ridge, S. D.	Pine Ridge Canal	Irrig.			35	45	Sheridan				419*
White Clay Cr.	Hunt, Joe E.	Crawford	Rinicker Canal	Irrig.	.33	11	31	52	Dawes	June	8	1901	618

† Acre feet per annum.

* Application pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-D—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D	Yr.
White Clay Cr.	Moss, J. H.	Crawford	Hutzel Canal	Irrig.	.57	13	31	52	Dawes	Apr.	30	1903	704
White Clay Cr.	Townsend, Chas.	White Clay	Townsend Canal	Irrig.	.80	25	25	35	Sheridan	Jan.	21	1911	1054
White Clay Cr.	Hunt, Joe E.	Crawford	Handshugel Lake	Stor.	†22AF	11	31	52	Dawes	Dec.	17	1915	1441
White Clay Cr.	McDowell, Edw. C.	Crawford	McDowell Reservoir										
			No. 1	Fish	†120AF	2	31	52	Dawes	Jan.	22	1929	2063
White Clay Cr. E. Branch	Stewart, H. E.	Crawford	Little Saw Log	Irrig.	.71	12	30	52	Dawes	Jan.	23	1907	849
White Clay & Squaw Creek	White River Irr. Co.	Crawford	White River Canal	Irrig.	8.00	36	32	52	Dawes	Mar.	3	1902	655
White River	Hall, LeRoy	Crawford	Halls Mill	Power	24.83	34	32	52	Dawes	Sept.	10	1885	478a
White River	City of Crawford	Crawford	Crawford Water System	Irrig.	5.00	3	31	52	Dawes	Oct.	1	1890	1026
White River	Pinney, B. G. et al.	Crawford	Harris-Cooper Canal	Irrig.	16.78	26	32	52	Dawes	Mar.	9	1894	464a
White River	Pinney, B. G. et al.	Crawford	Harris-Cooper Canal	Irrig.	1.57	26	32	52	Dawes	June	15	1894	464b
White River	Pinney, B. G. et al.	Crawford	Harris-Cooper Canal	Irrig.	.28	26	32	52	Dawes	Oct.	31	1894	464c
White River	Forbes, Wm. T.	Crawford	Rasher Canal	Irrig.	1.14	19	32	51	Dawes	June	20	1894	467
White River (White Clay Cr.)	White River Irr. Co.	Crawford	White River Canal	Irrig.	8.71	35	32	52	Dawes	Dec.	31	1894	477
White River	Hall Ditch Co.	Crawford	Hall Canal No. 2	Irrig.	12.60	34	32	52	Dawes	Jan.	10	1895	478c
White River	C. B. & Q. R. R. Co.	Lincoln	C. B. & Q. Line at Crawford	Irrig.	.80	3	31	52	Dawes	Sept.	14	1889	1030
White River	Bartlett, A. M.	Chadron	Jones Canal	Irrig.	.71	18	34	48	Dawes	May	21	1897	391
White River	Forbes, Jeanette, et al.	Crawford	Rasher Canal	Irrig.	.50	19	32	51	Dawes	May	23	1898	456
White River	Rasher, Frank	Crawford	Rasher Canal	Irrig.	1.36	19	32	51	Dawes	Jan.	16	1900	534
White River	Village of Crawford	Crawford	Crawford Pump Sta.	Power	18.00	3	31	52	Dawes	Mar.	30	1903	702
White River	Schwabe, August	Chadron	Schwabe Canal	Irrig.	.57	24	34	49	Dawes	June	13	1904	758
White River	Schwabe, August	Chadron	Schwabe Power Plant	Power	5.00	24	34	49	Dawes	June	13	1904	759

† Acre feet per annum.

DEPARTMENT OF PUBLIC WORKS

287

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-D—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			County	Date of Priority			Doc. No.	App. No.		
						S	T	R		Month	D	Yr.				
White River.....	Schwabe, August.....	Chadron.....	Schwabe Canal.....	Irrig.	.29	24	34	49	Dawes.....	Mar.	19	1906	.....	815	
White River.....	White River Irr. Co.....	Crawford.....	White R. Canal So. Br.	Irrig.	1.43	25	32	52	Dawes.....	Mar.	11	1909	.....	936	
White River.....	Schwabe, August.....	Chadron.....	Schwabe Canal.....	Irrig.	3.43	31	34	48	Dawes.....	July	23	1908	.....	908	
White River.....	Pinney & Denslow.....	Crawford.....	Pinney & Denslow Res. No. 2.....	Stor.	†453	A	F	26	32	52	Dawes.....	Aug.	10	1911	1122
White River.....	Forbes, Wm. T.....	Crawford.....	Forbes Extension.....	Irrig.	.50	19	32	51	Dawes.....	Sept.	26	1911	.....	1128	
White River.....	Whitney Irr. District.....	Whitney.....	Whitney Res. & Pipe Line.....	Stor.	†10,000	A	F	26	32	52	Dawes.....	Apr.	28	1921	1603
White River.....	Norman, Wm.....	Whitney.....	Whitney Pipe Line.....	Irrig.	3.60	26	32	52	Dawes.....	May	2	1921	.....	1604	
White River.....	Whitney Irr. District.....	Whitney.....	Whitney Pipe Line.....	Irrig.	25.00	26	32	52	Dawes.....	Nov.	1	1921	.....	1625	
White River.....	Simons, Raynor.....	Whitney.....	Raynor Simons Canal.....	Irrig.	2.07	4	32	51	Dawes.....	Nov.	18	1921	.....	1626	
White River.....	Norman, Wm.....	Whitney.....	Whitney Pipe Line.....	Irrig.	.41	26	32	52	Dawes.....	Apr.	26	1922	.....	1660	
(Res. A. 1603)	Whitney Irr. District.....	Whitney.....	Whitney Pipe Line.....	Irrig.	139.00	4	32	51	} Dawes.....	Dec.	7	1925	.....	1787	
						34	33	51								
						35	33	51								
White River.....	Hageman, Otto.....	Chadron.....	Hageman Canal.....	Irrig.	1.14	26	33	50	Dawes.....	Oct.	18	1928	.....	2046	
White River.....	City of Crawford.....	Crawford.....	Crawford Park Pump.....	Irrig.	.57	3	31	52	Dawes.....	Mar.	12	1929	.....	2075	

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-E

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month			D Yr.
Antelope Cr.	Gayhart, M. J.	Montrose	Gayhart Canal	Irrig.	2.43	16	34	55	Sioux	June 18 1904		760
Antelope Cr. No. Branch	Story, O. W.	Story	Story Canal	Irrig.	2.00	8	34	56	Sioux	Nov. 11 1895		168
Antelope Cr. No. Branch (Dry Creek)	Story, O. W.	Story	Story Canal	Irrig.	5.71	9	34	56	Sioux	Mar. 26 1918		1509
Antelope Cr. No. Branch (Dry Creek)	Schnurr, Albert	Harrison	Grammercy Dam	Floods	10 A. F.	13	34	57	Sioux	Sept. 24 1920		1591
Antelope Cr. So. Branch (Res. A. 1675)	Turner, Geo. H. Est.	Harrison	Turner Canal	Irrig.	.86	26	34	57	Sioux	Oct. 31 1894	537	1676 "S"
Antelope Cr. So. Branch	Turner, Sarah A.	Harrison	Turner Canal	D. 537	.86	26	34	57	Sioux			1676
Antelope Cr. So. Branch	Dryer, F. W.	Harrison	Ellis Canal	Irrig.	.29	9	33	57	Sioux	May 17 1896		338
Antelope Cr. So. Branch (Res. A. 1675)	Turner, Sarah A.	Harrison	Turner Reservoir	Stor.	†166 AF	26	34	57	Sioux	July 3 1922		1675
Antelope Cr. So. Branch	Turner, Sarah A.	Harrison	Turner Canal	Irrig.	1.68	26	34	57	Sioux	July 3 1922		1677
Boggy Creek	Holly, Thos.	Crawford	Holly Canal	Irrig.	.11	30	33	54	Sioux	Dec. 31 1888	956	
Boggy Creek	Smith, J. W.	Harrison	Smith Canal	Irrig.	.28	31	33	54	Sioux	May 1 1892	526	
Boggy Creek	Wickersham Cattle Co.	Omaha	Wickersham Canal	Irrig.	3.00	31	33	54	Sioux	Feb. 28 1903		701
Boggy Creek Mid. Branch	Bannon, J. F.	Harrison	Bannon Canal	Irrig.	.06	7	32	54	Sioux	July 1 1886	560	
Boggy Creek Mid. Branch	Marten, Wm.	Harrison	Marten Canal	Irrig.	.36	18	32	54	Sioux	May 19 1896		342
Boggy Creek Mid. Branch	Hill, Albert E.	Harrison	Hill Canal	Irrig.	.86	11	32	55	Sioux	Jan. 20 1908		886

"S" Denotes Supplemental

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STR EAMS IN DIVISION NO. 2-E—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D|Yr.
Cedar Creek.....	Knori, Samuel.....	Harrison.....	Schelt Creek Canal.....	Irrig.	.57	35	33	56	Sioux.....	May	15 1885	507	.....
Cedar Creek.....	Valdez, M.....	Harrison.....	Valdez Canal.....	Irrig.	.50	10	32	56	Sioux.....	Apr.	5 1886	976	.....
Cedar Creek.....	Plunkett, John.....	Harrison.....	Plunkett Canal.....	Irrig.		4	32	56	Sioux.....			985*	.....
Cherry Creek.....	Ruffing, M.....	Harrison.....	Cherry Creek Canal.....	Irrig.	.03	29	33	54	Sioux.....	May	1 1893	549	.....
Dry Gulch.....	Child, L. M.....	Story.....	Child Canal.....	Irrig.	.57	28	34	56	Sioux.....	Aug.	14 1914		1376
Gieke Creek.....	Geike, August.....	Harrison.....	Geike Canal.....	Irrig.	.43	19	33	56	Harrison.....	Nov.	4 1927		1967
Hat Creek.....	Thayer, John A.....	Harrison.....	W. Hat Cr. Canal.....	Irrig.	.43	16	32	55	Sioux.....	June	1 1880	553a	.....
Hat Creek.....	Coffee, Charles S.....	Harrison.....	Coffee Canal.....	Irrig.	4.29	26	33	55	Sioux.....	Sept.	1 1881	512	.....
Hat Creek.....	Thayer, John A.....	Harrison.....	W. Hat Cr. Canal.....	Irrig.	.57	16	32	55	Sioux.....	May	31 1886	553	.....
Hat Creek.....	Coffee, J. T., et al.....	Harrison.....	Miller Canal.....	Irrig.	.37	23	33	55	Sioux.....	May	19 1896		341
Hat Creek.....	Lyon, E. B.....	Harrison.....	Antrim Canal.....	Irrig.	.57	3	32	55	Sioux.....	Dec.	24 1900		594
Hat Creek.....	Lyon, E. B.....	Harrison.....	Antrim Canal.....	Irrig.	.57	3	32	55	Sioux.....	Aug.	20 1906		834
Hat Creek.....	Coffee, Jno. T.....	Harrison.....	Coffee & Son Flood Canal.....	Irrig.	5.36	14	33	55	Sioux.....	Oct.	22 1912		1236
Hat Creek.....	Zerbe, Harry T.....	Harrison.....	Zerbe Reservoir.....	Stor.	†68A	F 35	33	55	Sioux.....	Mar.	25 1915		1407
Hat Cr. Canyon, trib. to.....	Konrath, Jas.....	Montrose.....	Konrath Canal.....	Irrig.	1.43	17	34	54	Sioux.....	Dec.	28 1905		808
Jim Creek.....	Daut, J.....	Harrison.....	Daut Bros. Canal.....	Irrig.	.86	7	33	56	Sioux.....	May	15 1889	981	.....
Jim Creek.....	Slattery, James.....	Harrison.....	Woodruff S. Canal.....	Irrig.	.34	14	33	57	Sioux.....	May	1 1890	536	.....
Jim Creek.....	Snider, Al.....	Harrison.....	Jim Creek Canal.....	Irrig.	.43	8	33	56	Sioux.....	Dec.	15 1890	502	.....
Jim Creek.....	Slattery, William.....	Harrison.....	Slattery Canal.....	Irrig.	.20	13	33	57	Sioux.....	May	31 1891	543	.....
(Res. A. 1680).....	Slattery, William.....	Harrison.....	Slattery Canal.....	D 543	.20	13	33	57	Sioux.....				1683 S

"S" Denotes Supplemental

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-E—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D	Yr.
Jim Creek.....	Coffee, John T.....	Harrison	Hunter Canal.....	Irrig.	.03	26	33	54	Sioux.....	May	12	1898	451
Jim Creek.....	Slattery, William.....	Harrison	Caladonia Dam.....	Stor.	†42 AF	13	33	57	Sioux.....	July	20	1923	1680
(Res. A. 1680)	Slattery, William.....	Harrison	Caladonia Canal.....	Irrig.	.28	13	33	57	Sioux.....	.....	.....	.....	1681
Jim Creek.....	Slattery, William.....	Harrison	High Line Canal.....	Irrig.	.34	13	33	57	Sioux.....	July	20	1922	1682
(Res. A. 1680)	Slattery, William.....	Harrison	Caladonia Canal.....	Irrig.	.24	13	33	57	Sioux.....	July	20	1922	1683
Jim Cr. & No.													
Jim Creek.....	Dout, Clarence.....	Harrison	Dout Res. No. 1.....	Stor.		7	33	56	Sioux.....	Apr.	2	1928	1999
Jim Creek.....	Dout, Clarence.....	Harrison	Dout Canal No. 1.....	Irrig.		7	33	56	Sioux.....	Apr.	2	1928	2000
(Res. A. 1999)													
Jim Creek.....	Dout, Clarence.....	Harrison	Dout Res. No. 2.....	Stor.		7	33	56	Sioux.....	Apr.	2	1928	2001
Jim Creek.....	Dout, Clarence.....	Harrison	Dout Canal No. 2.....	Irrig.		7	33	56	Sioux.....	Apr.	2	1928	2002*
(Res. A. 2001)													
Jim Creek.....	Wassenberger, J.....	Montrose	Wassenberger Canal.....	Irrig.	2.29	29	34	54	Sioux.....	Oct.	13	1900	581
E. Fork													
Stream, Trib. to													
Jim Creek.....	Coffee, S. D.....	Harrison	Homestead Canal.....	Irrig.	.22	22	23	54	Sioux.....	May	31	1890	984
Jordan Draw.....	Jordan, Dan.....	Harrison	Dan Jordan Reservoir.....	Stor.	†200 AF	32	33	55	Sioux.....	Feb.	20	1929	2071
(Res. A. 2071)	Jordan, Dan.....	Harrison	Dan Jordan Canal.....	Irrig.	1.70	32	33	55	Sioux.....	Feb.	20	1929	2072
Lickett Creek.....	Coffee, S. B.....	Chadron	Lickett Canal.....	Irrig.		27	33	54	Sioux.....	.....	.....	.....	1005*
Lickett Creek.....	Coffee, S. B.....	Chadron	Lickett Canal.....	Irrig.	1.43	27	33	54	Sioux.....	Mar.	21	1900	549
Little Red Cr.....	Plunkett, Thomas.....	Harrison	Zerbst Canal.....	Irrig.	.14	25	33	56	Sioux.....	May	1	1893	551
Little Red Cr.....	Zerbst, Sophia.....	Harrison	Zerbst Canal.....	Irrig.	.90	34	33	56	Sioux.....	Apr.	3	1928	2003
Long Branch.....	Turnbull, S. C.....	Ardmore,											
	S. D.....	O'Connell Canal.....	Irrig.	.20	22	35	54	Sioux.....	Nov.	10	1900	587	

*"S" Denotes Supplemental

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-E—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.			
						S	T	R	County	Month			D|Yr.		
Long Branch	Ebert, L. J.	Ardmore, S. D.	Ebert Canal	Irrig.	.14	19	35	53	Sioux	Aug.	22	1901	.....	635
Monroe Creek	Knori, Samuel	Harrison	Big Monroe Canal	Irrig.	1.43	33	33	56	Sioux	May	1	1888	506	.....
Monroe Creek	Knori, Samuel	Harrison	Schilte-Monroe Canal	Irrig.	.50	27	33	56	Sioux	July	2	1888	509	.....
Monroe Creek	Holz, Ferdinand	Harrison	Noreisch Canal	Irrig.	.04	33	33	56	Sioux	July	19	1895	.....	83
Monroe Creek	Jordan, Cornelius	Montrose	Jordan Reservoir	Stor.	271	AF	13	33	56	Sioux	Nov.	12	1906	841
(Res. A. 841)	Jordan, Cornelius	Montrose	Kite Canal	Irrig.	2.20	13	33	56	Sioux	Nov.	12	1906	.....	841
(Res. A. 1399)	Jordan, Cornelius	Montrose	Kite Canal	A. 841	2.00	13	33	56	Sioux	.....	.....	.....	.....	1469 S
Monroe Creek	Jordan, Cornelius	Montrose	Jordan Reservoir	Stor.	300	AF	13	33	56	Sioux	July	30	1914	1375
(Res. A. 1375)	Jordan, Cornelius	Montrose	Jordan Canal	Irrig.	2.00	13	33	56	Sioux	July	30	1914	.....	1375
(Res. A. 1399)	Jordan, Cornelius	Montrose	Jordan Canal	A. 1375	1.40	13	33	56	Sioux	.....	.....	.....	.....	1470 S
Monroe Creek	Jordan, Richard	Harrison	Wooden Shoe Reservoir	Stor.	72	AF	22	23	56	Sioux	Aug.	14	1914	1377
Monroe Creek	Jordan, Cornelius	Montrose	Jordan Res. Ext.	Stor.	600	AF	13	33	56	Sioux	Jan.	14	1915	1399
Monroe Creek	Jordan, Cornelius	Montrose	Kite Canal	Irrig.	2.20	13	33	56	Sioux	Jan.	14	1915	.....	1469
(Res. A. 1399)	Jordan, Cornelius	Montrose	Supple. to Jordan Canal A. 1375	Irrig.	1.40	13	33	56	Sioux	Jan.	14	1915	.....	1470
Monroe Creek	Jordan, Richard	Harrison	Jordan Canal	Irrig.	.....	22	33	56	Sioux	Sept.	19	1928	.....	2032
Prairie Dog Cr.	Knori, Samuel	Harrison	Schilt Prairie Dog Canal	Irrig.	1.14	35	33	56	Sioux	May	31	1886	508	.....
Prairie Dog Cr.	Plunkett, Thos	Harrison	Plunkett Reservoir	Stor.	66.5	AF	25	33	56	Sioux	Sept.	18	1928	2031
(Res. A. 2031)	Plunkett, Thos	Harrison	Plunkett Canal	Irrig.	.93	25	33	56	Sioux	Feb.	20	1929	.....	2070
Sou Belly Creek	Schaefer, Nick J.	Harrison	Old Sou Belly Canal	Irrig.	3.00	7	32	55	Sioux	June	1	1887	533	.....
Sou Belly Creek	Zerbe, Frank	Harrison	Montgomery Canal	Irrig.	1.00	21	33	55	Sioux	Dec.	1	1890	559	.....
Sou Belly Creek	Jordan, Sarah	Harrison	Jordan Canal	Irrig.	.43	21	33	55	Sioux	June	1	1895	556	.....

"S" Denotes Supplemental

† Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-E—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D	Yr.
Sou Belly Creek.	Nutto, F.	Harrison	Nutto Canal	Irrig.	.43	24	32	56	Sioux	Sept.	4	1897	404	
Sou Belly Creek.	Jordan, Sarah	Harrison	Jordan Canal	Irrig.	.50	21	33	55	Sioux	May	11	1896	424	
Sou Belly Creek.	Carroll, M. J.	Harrison	Carroll Canal	Irrig.	.14	7	32	55	Sioux	July	12	1899	516	
Sou Belly Creek.	Zimmerman, Irvin S.	Harrison	Zimmerman Canal	Irrig.	.71	34	33	55	Sioux	Jan.	11	1900	532	
Sou Belly Creek.	Jordan, S.	Harrison	Jordan Canal	Irrig.	.14	21	33	55	Sioux	May	26	1902	668	
Sou Belly Creek.	Barnes, Paul T.	Harrison	Barnes Reservoir	Stor.	†390	AF	19	32	55	Sioux	Mar.	24	1913	1268
Sou Belly Creek.	O'Connell, M. J.	Montrose	O'Connell Canal	Irrig.	10.00	9	33	55	Sioux	May	5	1913	1288	
Spring Cr., Trib. to Sou Belly.	Hall, W. S. & F. M.	Harrison	Hall Spring Canal	Irrig.	.57	6	32	55	Sioux	Mar.	26	1889	550	
Spring Cr., Trib. to Sou Belly.	Schaefer, N. J.	Harrison	Spring Creek Canal	Irrig.	.29	7	32	55	Sioux	June	1	1893	532	
Spring Creek	Hall, F. M.	Harrison	Crystal Lake	Stor.	†80	AF	6	32	56	Sioux	Aug.	22	1927	1954
Squaw Creek	Dunn, Thos.	Harrison	Dunn Canal	Irrig.	.36	15	33	57	Sioux	June	1	1890	552	
Squaw Creek	Thomas, Sam	Harrison	Hamlin Canal	Irrig.	.01	10	33	57	Sioux	Apr.	1	1891	555	
Squaw Creek	Dunn, Thos.	Harrison	Dunn Res. Canal	Irrig.	.57	10	33	57	Sioux	Aug.	5	1895	100	
Squaw Creek	Dunn, Thos.	Harrison	Dunn Canal	Irrig.	.19	3	33	57	Sioux	Jan.	22	1897	376	
Squaw Creek	Thomas, S. M.	Harrison	Thomas Canal	Irrig.	.50	10	33	57	Sioux	July	23	1901	627	
Squaw Creek	Shepherd Cattle Co.	Harrison	Shepherd Canal	Irrig.	3.01	36	34	57	Sioux	Oct.	24	1927	1965	
Warbonnet Cr.	Anderson, John A.	Harrison	Warbonnet Canal	Irrig.	3.63	21	33	56	Sioux	July	31	1880	548	
Warbonnet Cr.	Priddy, Edouard	Harrison	Nolan Canal No. 1	Irrig.	.01	23	33	57	Sioux	Mar.	15	1887	957	
Warbonnet Cr.	Priddy, Edouard	Harrison	Nolan Canal No. 2	Irrig.	.29	23	33	57	Sioux	May	1	1888	959	
Warbonnet Cr.	Anderson, John A.	Harrison	Daut Canal	Irrig.	.29	30	33	56	Sioux	Dec.	31	1891	539b	
Warbonnet Cr.	Anderson, John A.	Harrison	Warbonnet Canal No. 2	Irrig.	1.43	20	33	56	Sioux	Mar.	11	1908	892	

† Acre feet per annum.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-E—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D|Yr.	
Warbonnet Cr..... Branch of	Zerbst, Carl F.....	Harrison.....	Zerbst Canal No. 2.....	Irrig.	.17	25	33	57	Sioux.....	Mar.	6	1915	.....	1404
Warbonnet Cr., Branch of	Zerbst, Carl F.....	Harrison.....	Zerbst Canal No. 1.....	Irrig.	.03	26	33	57	Sioux.....	Mar.	6	1915	.....	1405
Warbonnet Cr..... No. Branch	Anderson, John A.....	Harrison.....	Daut Canal.....	Irrig.	.71	30	33	56	Sioux.....	May	31	1889	539a	.....
Warbonnet Cr..... No. Branch	Anderson, John A.....	Harrison.....	Kay Canal.....	Irrig.	.14	26	33	57	Sioux.....	May	1	1887	958	.....
Warbonnet Cr..... Spring Br. to	Biehle, Chas.....	Harrison.....	Biehle Canal.....	Irrig.	.23	32	33	56	Sioux.....	Apr.	1	1891	538	.....
Warbonnet Cr..... Spring Br. to	Anderson, John A.....	Harrison.....	Garton Canal.....	Irrig.	1.43	31	33	56	Sioux.....	Oct.	16	1893	503	.....
Whitehead Cr.....	Harrison, R.....	Orella.....	Harrison Canal.....	Irrig.	.06	13	33	54	Sioux.....	May	30	1888	547	.....

CLAIMS AND APPLICATIONS BYSTREAMS IN DIVISION NO. 2-F

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D	Yr.
Bazile Creek.....	Packard, J. L.....	Creighton.....	Creighton Mill Race.....	Power		21	29	5	Knox.....			1002*	.....
Bazile Creek.....	Moss, O. H. and Buckler, Fred.....	Battle Creek.....	Creighton Mills.....	Power	30.00	21	29	5	Knox.....	Sept.	24	1908	.....	914
Jackson Chute.....	Crystal Lake Co.....	So. Sioux City.....	Crystal Lake Dam.....	Ice	15.00	26	29	8	Dakota.....	Apr.	12	1923	.....	1714
Mud Creek.....	Horan, T. W.....	Fort Crook.....	Horan Canal.....	Irrig.	.37	34	14	13	Sarpy.....	Aug.	12	1909	.....	958
Springs and un- derground water.	Village of Crofton.....	Crofton.....	Crofton Municipal Proj.	Dom- estic		26	32	2	Knox.....	Oct.	29	1930	.....	2169*

DEPARTMENT OF PUBLIC WORKS

APPLICATIONS APPROVED FROM NOVEMBER 30, 1928 TO NOVEMBER 30, 1930

266

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			Day	Yr.
Victoria Creek	McGraw, Chas.	Anselmo	McGraw Canal	Irrig.	2.86	6	19	20	Custer	Aug.	6	1928	2023
Lodge Po'e Creek	McLernon, Emma	Sidney	McLernon Canal	Irrig.	.24	31	14	49	Cheyenne	Sept.	1	1928	2027
Monroe Creek	Jordan, Richard	Harrison	Jordan Canal	Irrig.	1.67	22	33	56	Sioux	Sept.	19	1928	2032
Platte River	Berquist, J. T.	Lexington	Dawson Canal	Irrig.	91.11	18	10	23	Dawson	Oct.	3	1928	2039
Buffalo Creek	Dunaway, O. E.	Overton	Dunaway Canal	Irrig.		7	9	19	Dawson	Oct.	18	1928	2047
Spring Creek (Buffalo Creek)	Jurgenson, John	Overton	Jurgenson Canal	O. D.		35	9	20	Dawson	Oct.	19	1928	2049
Platte River	Strevor, James B.	Cozad	Cozad Canal	Irrig.	1.00	15	11	25	Dawson	Oct.	20	1928	2050
Muddy Creek	Duke, R. H., et al.	Mason City	Dorsett-Duke Amsberry Pump	Irrig.	2.41	31	15	17	Custer	Nov.	10	1928	2051
Buffalo Creek	Wilson, Harry W.	Overton	Wilson Canal	Irrig.	2.29	18	9	19	Dawson	Nov.	12	1928	2052
No. Platte River	Great Western Sugar Co.	Denver	Gering Factory	Mfg.	15.00	36	22	55	Morrill	Nov.	15	1928	2054
Platte River	Carter, Wm.	Cozad	Cozad	Irrig.	2.28	15	11	25	Dawson	Dec.	7	1928	2056
East Ash Creek	Thomas, Olive S.	Whitney	Thomas Canal	Irrig.	1.00	19	32	50	Dawes	Dec.	17	1928	2057
Niobrara River	Niobrara River Power Co.	Spencer	Bristow Power Plant	Power	880.00	6	32	30	Boyd	Jan.	2	1929	2058
Muddy Creek	Yeoman, Jas. and L. E.	Broken Bow	Yeoman's Pump	Irrig.	.47	18	16	19	Custer	Jan.	3	1929	2059
Loup Riv., S. B.	Perkins, Nina	Arnold	Nina Perkins Canal	Irrig.		25	17	25	Custer	Jan.	8	1929	2060
White Clay Cr.	McDowell, Edw. C.	Crawford	McDowell Storage No. 1	Fish	60 A. F.	2	31	52	Dawes	Jan.	22	1929	2063
English Creek	McDowell, Edw. C.	Crawford	McDowell Storage No. 2	Fish	100	2-	31	52	Dawes	Jan.	22	1929	2064
Elm Creek	Scott, Nationia	Elm Creek	Scott Pump	Irrig.	1.14	29	9	18	Buffalo	Jan.	28	1929	2066
Mud and Buffalo Creeks	Ulrich, Maria	Lexington	Ulrich Canal	Irrig.	4.72	1	8	19	Dawson	Feb.	4	1929	2068
Oak Creek	Cheney, E. J.	Lincoln	Cheney Pump	Irrig.	.45	8	10	6E	Lancaster	Feb.	6	1929	2069
Res. A. 2031 (Prairie Dog Cr.)	Plunkett, Thos	Harrison	Plunkett Canal	Irrig.	.93	25	33	56	Sioux	Feb.	20	1929	2070

REPORT OF SECRETARY

APPLICATIONS APPROVED FROM NOVEMBER 30, 1928, TO NOVEMBER 30, 1930—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D	Yr.
Jordan Draw	Jordan, Dan	Harrison	Dan Jordan Res.	Stor.	200	32	33	55	Sioux	Feb.	20	1929	2071
Res. A. 2071 (Jordan Draw)	Jordan, Dan	Harrison	Dan Jordan Canal	Irrig.	A. F. 1.70	32	33	55	Sioux	Feb.	20	1929	2072
Buffalo Creek	Gilmore, Eliza A.	Murray	Gilmore Pump	Irrig.	1.03	21	9	19	Dawson	Mar.	5	1929	2074
White River	City of Crawford	Crawford	Crawford Park Pump Station	Irrig.		3	31	52	Dawes	Mar.	12	1929	2075
Trib. So. Branch Big Blue River	Swanson, S. A.	Hastings	Swanson Pump	Irrig.	1.90	4	7	9	Adams	Apr.	4	1929	2076
Platte River	Thirty Mile Canal Co.	Gothenburg	Thirty Mile Canal	Irrig.	4.57	30	12	36	Dawson	Apr.	9	1929	2077
Spring Creek	Lawrence, Fay E.	Crawford	Spring Creek Canal	O. D.		7	32	51	Dawes	Apr.	10	1929	473 2078
Muddy Creek	Tracy, R. N.	Mason City	Tracy Pump	Irrig.	.13	32	15	17	Custer	Apr.	23	1929	2079
Cedar River	Western Public Service Co.	Scottsbluff	Lake Ericson Plant	Power	Rs. Dam A1415	25	21	12	Wheeler	May	17	1929	2081
Oak Creek	Ferguson, W. H.	Lincoln	Ferguson Power Plant	Power		16	10	6E	Lancaster	June	3	1929	2082
Spring Creek	Beatty, Harry T.	Overton	Beatty Canal	Irrig.	1.13	18	9	20	Dawson	June	3	1929	2083
Lost Creek	Campbell, Wm. N.	Oshkosh	Campbell Canal	Irrig.		11	17	44	Garden	July	8	1929	2084
Elkhorn River	Norfolk Packing Co.	Norfolk	Warfield Pump	Irrig.	1.03	15	24	1	Madison	June	15	1929	2085
West Fork	Barden, Wm. E.	Redington	Barden Pump	Irrig.	.89	11	18	52	Morrill	June	17	1929	2086
Buffalo Creek	Armstrong, Lillian G.	Elm Creek	Armstrong Canal	Irrig.	.23	33	9	18	Buffalo	June	19	1929	2087
Red Willow Cr. & Camp Clark Seep	Schermerhorn Irrig. Co.	Bridgeport	Schermerhorn Canal	O. D.	A. 418	6	20	51	Morrill	June	22	1929	2088
Buffalo Creek	Phillips, Reber D.	Omaha	Phillips Pump	Irrig.	4.57	12	9	20	Dawson	July	13	1929	2089

APPLICATIONS APPROVED FROM NOVEMBER 30, 1928, TO NOVEMBER 30, 1930—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.			
						S	T	R	County	Month			D	Yr.	
Buffalo Creek.....	Jensen, Peter E.....	Cozad.....	Jensen Pump.....	Irrig.	1.00	21	11	22	Dawson.....	July	17	1929	.....	2090
Loup River, N. B.....	Naab, J. Peter.....	Burwell.....	Naab Pump.....	Irrig.	1.40	28	21	17	Garfield.....	Aug.	3	1929	.....	2091
Platte River.....	Pettitt, Joe, et al.....	Elm Creek.....	Dawson County Canal.....	Irrig.	3.00	18	10	23	Buffalo.....	Aug.	3	1929	.....	2093
Strevor Creek (Spring Creek)	Peterson, P. R.....	Lexington.....	Peterson Canal.....	Irrig.	1.11	18	9	20	Dawson.....	Aug.	8	1929	.....	2094
Loup River, M. B.....	Klausen, Paul.....	Rockville.....	Klausen Canal.....	Irrig.	2.17	36	14	14	Sherman.....	Aug.	14	1929	.....	2095
Thompson Creek.....	Olson, E. G.....	Riverton.....	Midget No. 1.....	Irrig.		15	2	13	Franklin.....	Aug.	22	1929	.....	2098
Lincoln Creek.....	Herzer, P. C.....	York.....	Herzer Canal.....	Irrig.		3	11	2	York.....	Aug.	26	1929	.....	2100
Loup River, M. B.....	George, Harry C.....	Thedford.....	George Pump.....	Irrig.				23	28	Thomas.....	Sept.	5	1929	2102
Big Blue River.....	Muirhead, Wm. C.....	Bradshaw.....	Muirhead Canal.....	Irrig.		30	9	5	Hamilton.....	Sept.	13	1929	.....	2103
Platte River.....	Elmcreek Ditch Co.....	Elmcreek.....	Elmcreek Canal.....	Irrig.	227.00	6	8	19	Dawson.....	Sept.	17	1929	.....	2104
Loup River, M. B. (Dead Horse Creek).....	John, Vincent L.....	Loup City.....	John Pump.....	Irrig.	.59	18	15	14	Sherman.....	Sept.	18	1929	.....	2105
Chadron Creek.....	Gorr, James O.....	Chadron.....	Gallup Canal.....	Irrig.		15	33	49	Dawes.....	Oct.	11	1929	.....	2106
Elm Creek.....	Rogers, Wilber A.....	Ord.....	Rogers Pump.....	Irrig.	1.68	25	19	14	Valley.....	Sept.	30	1929	.....	2107
Munson Creek.....	Lassen, Niels P.....	Elba.....	Lassen Pump.....	Irrig.	.50	1	15	12	Howard.....	Oct.	10	1929	.....	2108
Loup River, S. B.....	Hunter, Arthur.....	Pleasanton.....	Hunter Pump.....	Irrig.		2	11	16	Buffalo.....	Oct.	23	1929	.....	2109
Platte River.....	Dawson County Irrig. Co.....	Lexington.....	Dawson County Canal Extension.....	Irrig.	284.91	18	10	23	Dawson.....	Oct.	25	1929	.....	2110
Loup River, S. B.....	Riessland Bros.....	Amherst.....	Riessland Pump.....	Irrig.		27	12	17	Buffalo.....	Oct.	28	1929	.....	2111
Sand Creek.....	Peacock, Gardie M.....	Newport.....	Peacock Canal.....	Irrig.	.02	35	32	18	Rock.....	Nov.	14	1929	.....	2112
Lodge Pole Cr.....	Pantenburg, Wm. F.....	Sidney.....	Pantenburg Canal.....	Irrig.	1.00	34	14	49	Cheyenne.....	Nov.	15	1929	.....	2113

APPLICATIONS APPROVED FROM NOVEMBER 30, 1928, TO NOVEMBER 30, 1930—Continued

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D Yr.
Willow Creek.....	Stafford, Margaret.....	Sarben.....	Stafford Canal.....	Irrig.	.80	15	14	35	Keith.....	Nov.	20 1929	.....	2114
Oak Creek.....	Hanich, Edward.....	Lincoln.....	Hanich Pump.....	Irrig.	.15	8	10	6E	Lancaster.....	Nov.	21 1929	.....	2115
Republican R.....	Tower, Floyd.....	Edison.....	Tower Pump.....	Irrig.		6	3	21	Furnas.....	Nov.	21 1929	.....	2116
Pumpkinseed Cr.	Sears, Willis G.....	Omaha.....	Sears Pump.....	Irrig.	1.68	25	19	53	Banner.....	Dec.	20 1929	.....	2117
Askey Lake (Republican R.)	Pleas, Walter P.....	Oxford.....	Pleas Pump.....	Irrig.	2.31	5	3	21	Furnas.....	Jan.	4 1930	.....	2120
Muddy Creek.....	Pearson, Elmer R.....	Ansley.....	Ayrcrest Pump.....	Irrig.		5	15	18	Custer.....	Jan.	10 1930	.....	2121
Loup River, M. B.	Stott, Wm.....	Ravenna.....	Stott Pump.....	Irrig.		25	14	14	Sherman.....	Mar.	4 1930	.....	2125
Oak Creek.....	Krogh, Arnold.....	Dannebrog.....	Krogh Pump.....	Irrig.	.53	30	14	11	Howard.....	Mar.	5 1930	.....	2126
Big Blue River, Loup River, N. B.	Johnson, Chas. S. F.....	Stromsburg.....	Johnson Pump.....	Irrig.	1.29	8	13	2	Polk.....	Mar.	26 1930	.....	2130
Oak Creek.....	Anderson Bros. Irr. Co.	Hastings.....	Anderson Pump.....	Irrig.	5.17	7	15	9	Howard.....	Apr.	5 1930	.....	2131
(New Channel)	Clark, Arthur.....	Lincoln.....	Clark Pump.....	Irrig.	.14	17	10	6E	Lancaster.....	Apr.	11 1930	.....	2132
Little Blue River	Bergt, Theodore.....	Davenport.....	Bergt Pump.....	Irrig.		22	3	4	Thayer.....	Apr.	17 1930	.....	2134
Lawrence Fork.....	Niehus, J. W.....	Bridgeport.....	Hopeful Canal.....	Irrig.	1.43	1	18	52	Morrill.....	Apr.	19 1930	.....	2135
Prairie Creek.....	Ferris Bros.....	Central City.....	Ferris Pump.....	Irrig.		2	14	7	Merrick.....	Apr.	25 1930	.....	2136
Buffalo Creek.....	Jensen, Helene.....	Cozad.....	Helene Pump.....	Irrig.		21	11	22	Dawson.....	Apr.	25 1930	.....	2137
Gebaurer Seep Lake Loup River, M. B.	Gebauer, Paul G.....	Northport.....	Gebauer Canal.....	Irrig.		28	20	50	Morrill.....	Apr.	25 1930	.....	2138
East Ash Creek.....	Obermiller, Robert.....	Boelus.....	Obermiller Pump.....	Irrig.	.97	28	13	12	Howard.....	May	7 1930	.....	2139
Beaver Creek.....	Seegrist, Cloid.....	Whitney.....	Seegrist Power Plant.....	Power Stor.	3.00	8	31	50	Dawes.....	May	20 1930	.....	2140
Willow Creek.....	Tulloss, Frank L.....	Hay Springs.....	Tullos Pond.....			3	32	46	Sheridan.....	May	22 1930	.....	2141
Loup River, S. B.	McFadden, M. J.....	Sarben.....	McFadden Canal.....	Irrig.	.80	14	14	35	Keith.....	May	26 1930	.....	2142
	Quest, C. E.....	Boelus.....	Quest Canal.....	Irrig.		33	13	12	Howard.....	June	13 1930	.....	2143

DEPARTMENT OF PUBLIC WORKS

APPLICATIONS APPROVED FROM NOVEMBER 30, 1928, TO NOVEMBER 30, 1930—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.	
						S	T	R	County	Month			D	Yr.
Big Bordeaux Cr.	Kelso, S. M.	Chadron	Belle Isle Res.	Stor.		23	33	48	Dawes	June	13	1930	2144
Wood River	Nickel, Emil	Kearney	Nickel Pump	Irrig.		12	9	16	Buffalo	July	16	1930	2148
No. Platte River	Great Western Sugar Co.	Scottsbluff	Gering Factory	Mfg.	O. D. A. 2054	26	22	55	Scotts Bluff	July	24	1930	2150
Big Bordeaux Cr.	Kelso, S. M.	Chadron	Kelso Pump	Irrig.		23	33	48	Dawes	July	24	1930	2151
Shell Creek	Wolfe, Wm. L.	Schuyler	Wolfe Pump	Irrig.		28	18	3E	Colfax	Aug.	4	1930	2153
Loup River, N. B.	Smith, Daniel B.	Ord	Smith Pump	Irrig.		9	19	14	Valley	Aug.	6	1930	2154
Big Sandy Creek	Busing, Fred	Powell	Busing Pump	Irrig.		22	3	1E	Jefferson	Aug.	9	1930	2157
Loup River, N. B.	Stewart, Wm. J.	Ord	Stewart Pump	Irrig.		9	19	14	Valley	Aug.	11	1930	2158
Turtle Creek	Beran, John Jr.	Ord	Beran Pump	Irrig.		6	19	14	Valley	Aug.	21	1930	2161
South Loup R.	Alter, I. R.	Grand Island	Alter Pump	Irrig.		35	13	12	Howard	Aug.	21	1930	2162
Little Blue R.	Jones, E. H.	Fairbury	Mid-West Gardens Pump	Irrig.		26	2	2E	Jefferson	Sept.	4	1930	2165
Republican R.	Keifer, J. Warren Jr.	Bostwick	Keifer Canal	Irrig.		21	1	8	Nuckolls	Sept.	22	1930	2167

CLAIMS (DOCKETS) AND APPLICATIONS CANCELED FROM NOV. 30, 1928, TO NOV. 30, 1930

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.
						S	T	R	County	Month	D			Yr.
Ash Creek	Cripps, Fred W.	Whitney	Cripps Canal	Irrig.	1.00	13	32	51	Dawes	Jan.	10	1899	491
Big Bordeaux Creek	Morrissey, M.	Chadron	Morrissey Canal	Irrig.	.08	15	33	48	Dawes	Aug.	25	1894	491
Big Bordeaux Creek	Nelson, P. B.	Chadron	Nelson Canal	Irrig.	.36	14	33	48	Dawes	Oct.	19	1898	478
Big Bordeaux Creek	Nelson, P. B.	Chadron	Nelson Canal	Irrig.	.14	14	33	48	Dawes	Jan.	28	1899	494
Bloody Creek	Calamus Irr. District	Harrop	Bloody Creek Canal	Irrig.		32	25	19	Rock	May	25	1926	1813
Buffalo Creek	Lindholm, Walter	Overton	Lindholm Pump	Irrig.		1	9	20	Dawson	Sept.	8	1928	2028
Buffalo Creek	Dunaway, O. E.	Overton	Dunaway Canal	Irrig.		7	9	19	Dawson	Oct.	18	1928	2047
Buffalo Creek	Jensen, Helene	Cozad	Helene Pump	Irrig.		21	11	22	Dawson	Apr.	25	1930	2137
Bull Creek	Johnson, W. S.	Glen	Johnson Canal No. 1	Irrig.	.29	7	30	53	Sioux	Mar.	13	1895	519
Chadron Creek	Gorr, James O.	Chadron	Gallups Canal	Irrig.		15	33	49	Dawes	Oct.	11	1929	2106
Cedar Canyon	Pelren, J. E.	Crawford	Cedar Canyon Canal	Irrig.	.43	16	33	53	Sioux	Mar.	1	1897	380
Charcoal Creek	Weber, M. J.	Glen	Klein Canal	Irrig.	.11	33	31	51	Sioux	Aug.	1	1882	982
Cottonwood, Little	Simmons, R.	Crawford	Simmons Canal	Irrig.	1.14	9	32	51	Dawes	Sept.	12	1899	521
Dead Horse Cr.	Goff, L. L.	Chadron	Goff Canal	Irrig.	.17	9	31	49	Dawes	Aug.	27	1893	457
Dead Horse Cr.	Harley, Jas.	Chadron	Harley Canal	Irrig.	.01	32	32	49	Dawes	Aug.	1	1894	488
Deadman Creek	Lindeman, C.	Crawford	Lindeman Canal	Irrig.	.14	18	30	52	Dawes	June	11	1900	564
Hat Creek	Haas, Peter	Harrison	Haas Canal	Irrig.	.08	2	32	55	Sioux	May	8	1899	510
Indian Creek	Kaiser, O. A.	Whitney	Kaiser Canal	Irrig.	.57	28	32	50	Dawes	Feb.	15	1900	540
Lincoln Creek	Herzer, P. C.	York	Herzer Canal	Irrig.		3	11	2	York	Aug.	26	1929	2100
Loup River, M. B.	George, Harry C.	Thedford	George Pump	Irrig.			23	28	Thomas	Sept.	5	1929	2102
Loup River, M. B.	Stott, Wm.	Ravenna	Stott Pump	Irrig.		25	14	14	Sherman	Mar.	4	1930	2125
Loup River,													

DEPARTMENT OF PUBLIC WORKS

CLAIMS (DOCKETS) AND APPLICATIONS CANCELED FROM NOV. 30, 1928, TO NOV. 30, 1930—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Month	D			Yr.
S. B. Loup River,	Hunter, Arthur.....	Pleasanton.....	Hunter Pump.....	Irrig.		2	11	16	Buffalo.....	Oct.	23	1929	.....	2109
S. B.	Riessland Bros.....	Amherst.....	Riessland Pump.....	Irrig.		27	12	17	Buffalo.....	Oct.	28	1929	.....	2111
Muddy Creek.....	Pearson, Elmer.....	Ansley.....	Ayrcrest Pump.....	Irrig.		5	15	18	Custer.....	Jan.	10	1930	.....	2121
Niobrara River.....	Northern Nebr. Power Co.	Spencer.....	Eagle Creek Power Pft.	Power	800.00	6	32	10	Boyd.....	July	15	1927	.....	1939
No. Platte River	Carter, E. C.....	Bruning.....	No. Platte Power Canal	Power	300.00	18	20	51	Morrill.....	July	13	1928	.....	2022
Oak Creek	Ferguson, W. H.....	Lincoln.....	Ferguson Power Plant...	Power		16	10	6E	Lancaster.....	June	3	1929	.....	2082
Peterson Draw (Trib. to Indian Creek)	Meyer, Aug.	Ardmore, S. D.....	Meyer Dam.....	Irrig.	2.00	24	35	55	Sioux.....	Nov.	5	1900	.....	585
Prairie Creek.....	Ferris Bros.....	Central City.....	Ferris Pump.....	Irrig.		2	14	7	Merrick.....	Apr.	25	1930	.....	2136
Republican River	Tower, Floyd.....	Edison.....	Tower Pump.....	Irrig.		6	3	21	Furnas.....	Nov.	21	1929	.....	2116
Skull Creek.....	Calamus Irrig. District	Harrop.....	Skull Creek Canal.....	Irrig.		31	25	20	Rock.....	May	25	1926	.....	1812
Thompson Creek.	Olson, E. G.....	Riverton.....	Midget No. 1 and Midget No. 2.....	Irrig.		15	2	13	Franklin.....	Aug.	22	1929	.....	2098
White River.....	Village of Crawford.....	Crawford.....	Crawford Pump Station.	Power	18.00	3	31	52	Dawes.....	Mar.	30	1903	.....	702
Wood River.....	Haug, James.....	Shelton.....	Haug Reservoir.....	Stor.	60 A. F.	9	9	13	Buffalo.....	May	14	1928	.....	2018
Res. A2018 (Wood River)	Haug, James.....	Shelton.....	Haug Canal No. 3.....	Irrig.		9	9	13	Buffalo.....	May	14	1928	.....	2019

APPLICATIONS DISMISSED FROM NOVEMBER 30, 1928, TO NOVEMBER 30, 1930

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.
						S	T	R	County	Month			D|Yr.
Big Bordeaux Creek	Kelso, S. M.	Chadron	Kelso Lake	Stor.		23	33	48	Dawes	Aug.	26 1930	2163
Birdwood Creek	Lower Platte Irr. Ass'n	Lexington	Birdwood Res.	Stor.			15	33	Lincoln	Jan.	12 1922	1634
Buffalo Creek	Galloway, X.	Lexington	Galloway Canal	Irrig.		34	10	20	Dawson	Jan.	28 1929	2067
Buffalo Creek	Hughey, James A.	Overton	Hughey Canal	Irrig.		34	9	19	Dawson	Aug.	20 1929	2096
Buffalo Creek	Daul, Mary	Elm Creek	Daul Canal	Irrig.		6	8	18	Buffalo	Aug.	20 1929	2097
Buffalo Creek	Jensen, Helena	Cozad	Jensen Canal	Irrig.		21	11	22	Dawson	Jan.	25 1930	2123
Dry Run	Buffington, Grace M.	Crawford	Buffington Canal	Irrig.		35	34	52	Dawes	Mar.	13 1930	2128
East Ash Creek	Stumph, John E.	Whitney	Stump Res.	Stor.		31	32	50	Dawes	Nov.	12 1928	2053
Elm Creek	Miller, Bert	Elm Creek	Miller Canal	Irrig.		29	9	18	Dawes	Aug.	3 1929	2092
Frenchman River	Krotter, F. C.	Palisade	Palisade Res. No. 1	Stor.		22	5	35	Hayes	Feb.	3 1927	1892
Frenchman River	Krotter, F. C.	Palisade	Palisade Power Plant	Power		32	5	34	Hayes	May	24 1927	1930
Frenchman River	Krotter, F. C.	Palisade	Palisade Reservoir	Stor.		33	5	34	Hayes	May	24 1927	1931
Frenchman River	Krotter, F. C.	Palisade	Palisade Power Plant	Power		34						
Grace River	Green, Chas. D.	Sidney		Irrig.		7	5	35	Hayes	Aug.	4 1927	1951
Niobrara River	Bradstreet, W. D.	Lawrence	Niobrara River Power Plant	Power						May	19 1926	1809
Loup River, N. B.	Steinmeyer, G. W.	Beatrice	Scotia Power Plant	Power		5	32	10	Boyd	June	2 1928	2020
Loup River, N. B.	McCauley, Wallace D.	Lawrence	Scotia Power Plant	Power		27	17	12	Greeley	June	2 1923	1719
No. Platte River	Lower Platte Irr. Ass'n	Lexington	South Canal	Irrig.		27	17	12	Greeley	Apr.	6 1928	2004
No. Platte River	Lower Platte Irr. Ass'n	Lexington	Sutherland Res.	Stor.		18	14	36	Keith	Jan.	12 1922	1633-A
Platte River	Lower Platte Irr. Ass'n	Lexington	North Canal	Irrig.		13	34	33	Keith	Jan.	12 1922	1635
						8	13	29	Lincoln	Jan.	12 1922	1633

DEPARTMENT OF PUBLIC WORKS

APPLICATIONS DISMISSED FROM NOVEMBER 30, 1928, TO NOVEMBER 30, 1930—Concluded

Source	Name of Claimant	Post Office	Carrier	Use to which appl'd	Sec. Feet gr'ted	Location of Headgate			Date of Priority		Doc. No.	App. No.		
						S	T	R	County	Month			D	Yr.
Platte River.....	Lower Platte Irr. Ass'n	Lexington.....	Rotan Reservoir,	Stor.		14	12	24	Lincoln.....	Jan.	12	1922	.....	1636
			Buffalo Reservoir,	Stor.		5	11	22	Dawson.....					
			Elm Creek Res.	Stor.		1	19	19	Dawson.....					
			Dry Fork Reservoir.....	Stor.		5	11	20	Dawson.....					
Platte River.....	Elmcreek Ditch Co.....	Elmcreek.....	Elmcreek Canal.....	Irrig.		18	10	23	Dawson.....	Apr.	24	1929	.....	2080
Smith Lake	Smith, Ira	Pony Lake.....	Smith Lake Drain Ditch	Drain			28	17	Rock.....	Oct.	24	1927	.....	1966
Spring Creek.....	Wengler, J. P.....	Overton.....	Wengler Canal.....	Irrig.		27	9	30	Dawson.....	Aug.	27	1929	.....	2101
Strevor Creek.....	Oldfather, F. P.....	Lexington.....	Oldfather Canal.....	Irrig.		15	10	22	Dawson.....	Jan.	26	1929	.....	2065
Strevor Creek.....	Sanderman, H.....	Lexington.....	Sanderman Canal.....	Irrig.		10	10	22	Dawson.....	Feb.	25	1929	.....	2073

PERMITS ISSUED TO RELOCATE WATER DIVERSIONS NOVEMBER 30, 1928, TO NOVEMBER 30, 1930

Appropriation Number which has Carrying Right	Stream	Claimant	Post Office	Old Location				Old Carrier	New Location				Amt.	Appropriation Number which covers the land	
					S	T	R			S	T	R			
D. 622	Platte River.....	Fellers, R. C.....	Lexington.....	{NE¼ SE¼ NW¼ NE¼	13 24	9 9	22 21	Platte River Canal Pump	Lot 1	18	10	23	Dawson Co. Canal.....	.57	D. 624
D. 622	Platte River.....	Malm, T. H.....	Lexington.....	{NE¼ SE¼ NE¼ SW¼	13 19	9 9	22 20	Platte River Canal Pump	Lot 1	18	10	23	Dawson Co. Canal.....	9.14	D. 624
D. 622	Platte River.....	Boyles, Carl J.....	Overton.....	{NE¼ SE¼ SE¼ SE¼	13 20	9 9	22 20	Platte River Canal..... Pump	Lot 1	18	10	23	Dawson Co. Canal.....	1.14	D. 624
D. 622	Platte River.....	Peterson, Elizabeth.....	Lexington.....	NW¼ SE¼	13	9	22	Pump	Lot 1	18	10	23	Dawson Co. Canal.....	2.30	D. 624
D. 622	Platte River.....	Kjar, H. C., et al	Lexington.....	Lot 4	25	10	23	Farmers Irrig. Canal.....	Lot 1	18	10	23	Dawson Co. Canal.....		D. 621
D. 622	Platte River.....	Dawson Co. Irrig. Co.....	Lexington.....	NE¼ SE¼	13	9	22	Platte River Canal.....	Lot 1	18	10	23	Dawson Co. Canal.....		D. 624*
D. 622	Platte River.....	Beatty, S. K.....	Lexington.....	NE¼ SE¼	13	9	22	Platte River Canal.....	Lot 1	18	10	23	Dawson Co. Canal.....		D. 624*

DEPARTMENT OF PUBLIC WORKS

* Petitions Pending.

PERMITS ISSUED TO RELOCATE WATER DIVERSIONS NOVEMBER 30, 1928, TO NOVEMBER 30, 1930

Appropriation Number which has Carrying Right	Stream	Claimant	Post Office	Old Location				Old Carrier	New Location				New Carrier	Amt.	Appropriation Number which covers the land		
				S	T	R			S	T	R						
D. 828	Pumpkinseed Cr.	Sweet, S. R.	Bridgeport	NE¼	NE¼	23	19	50	Meredith-Ammer Canal	SE¼	SW¼	18	20	51	Belmont Canal	18.86	D. 876
D. 876	Pumpkinseed Cr	Sweet, S. R.	Bridgeport	SE¼	SW¼	18	20	51	Belmont Canal	NE¼	NE¼	23	19	50	Meredith-Ammer Canal	18.86	D. 876
A. 1344	Plum Creek	Roblee, L. O.	Lewellen	NE¼	NE¼	23	16	42	Plum Creek Ditch and Reservoir	SE¼	SE¼	14	16	42	Plum Creek Ditch and Reservoir	.90	A. 1344
D. 735	Ash Creek	Cripps, Fred W.	Whitney	SW¼	NE¼	13	32	51	Cripps Canal	SW¼	SE¼	12	32	51	Pumps	1.14	A. 735
									SW¼	NE¼							

**AREA IRRIGATED BY COUNTIES
BASED ON ACREAGE REPORTS FILED WITH DEPARTMENT
OF PUBLIC WORKS, 1930**

County	Acres	County	Acres	County	Acres
Adams	543	Frontier		Nance	
Antelope		Furnas	350	Nemaha	
Arthur		Gage	70	Nuckolls	
Banner	309	Garden	26,700	Otoe	
Blaine		Garfield		Pawnee	
Boone		Gosper	270	Perkins	
Box Butte	1,672	Grant		Phelps	
Boyd		Greeley		Pierce	
Brown		Hall		Platte	280
Buffalo	20,000	Hamilton		Polk	
Burt		Harlan	1,200	Red Willow	180
Butler		Hayes	1,140	Richardson	
Cass		Hitchcock	13,750	Rock	30
Cedar		Holt		Saline	
Chase	3,229	Hooker		Sarpy	
Cherry		Howard		Saunders	
Cheyenne	3,045	Jefferson		Scotts Bluff	203,600
Clay	400	Johnson		Seward	
Colfax		Kearney	185	Sheridan	
Cuming		Keith	21,800	Sherman	185
Custer	884	Keya Paha		Sioux	40,481
Dakota		Kimball	9,618	Stanton	
Dawes	4,000	Knox		Thayer	
Dawson	168,000	Lancaster		Thomas	70
Deuel	2,307	Lincoln	52,700	Thurston	
Dixon		Logan		Valley	50
Dodge		Loup		Washington	
Douglas		McPherson		Wayne	
Dundy	1,410	Madison		Webster	165
Fillmore		Merrick		Wheeler	
Franklin	165	Morrill	101,000	York	
Total					679,788

PUMP IRRIGATION IN BUFFALO COUNTY

Alvah R. Hecht, County Agent

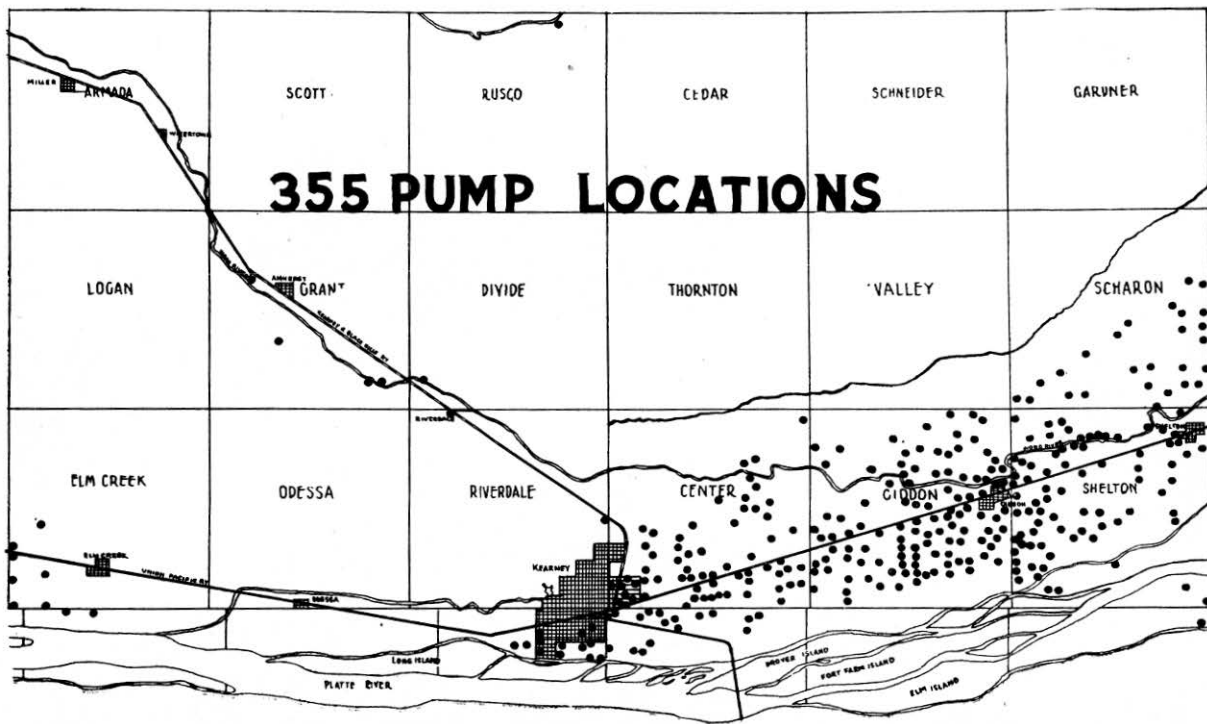
Irrigation is in a majority of cases associated with rivers, diversion dams and reservoirs, but we often forget that nature has provided a reservoir of water in the soil beyond the reach of plant life. This storage place holds much more water than the Pathfinder Dam, and the cost to apply to land through pump irrigation is about the same in many parts of Nebraska as ditch irrigation. Nebraska has approximately one thousand wells over half of which are in three counties, Buffalo, Dawson and Hall, located in the Platte Valley. And there are a large number of wells located in the Republican Valley.

The Platte Valley in Buffalo County is one of the places in Nebraska where this underground storage space is near enough to the surface that pump irrigation is practical. There are approximately 80,000 acres suitable for pump irrigation in this territory. Where pump irrigation is feasible the most ideal location for pump irrigation is where there are eight to ten feet of good soil under-laid with water bearing gravel at a depth between twenty and forty feet.

Buffalo County now has approximately 355 wells. The first wells were constructed over twenty years ago, but pump irrigation did not gain much headway until the last five years. At the present time the number of pumps are gradually increasing. There were fifty new wells built in Buffalo County within the last year and approximately one hundred built in Hall County in the last year.

COST OF A WELL AND EQUIPMENT

Until three years ago very little definite information was available as to the cost of construction, operation, and results. The University of Nebraska had a man in the Valley for two summers who made a survey as to costs and run tests on wells and made general observations. The results of this work shows that the average cost for a six inch well that will throw 900 gallons of water per minute is \$800.00. The survey also showed that the average number of acres irrigated was 55, or this would be a cost of less than fifteen dollars per acre for a well. By far, the majority of the wells are run with a tractor that is used for other things around the farm than pump irrigation. It would seem that five dollars an acre charge against the power equipment would be sufficient, or even that a figure of ten dollars per acre would leave the cost of the well with power at twenty-five dollars per acre which compares very favorably with ditch irrigation. In other words, a thousand dollars would construct and equip a well that will irrigate 55 acres of land in Buffalo County.



OPERATION COSTS

The operation cost varies from year to year, depending upon the amount of rainfall. In 1929 with only fifteen inches of rain, the average cost of pump irrigation was approximately four to five dollars per acre. This included gas and oil for the tractor and an attendant for the tractor. In 1930 with an abundance of rainfall, the cost was cut down materially as only one irrigation was required, whereas the year before two and three were required. The cost this year was approximately two dollars per acre. These figures check very closely with what the University found out three years ago, and also with figures gathered in Hall County by the County Agent there in 1928. As an average from one year to another, three dollars per acre is considered the average cost for operating an irrigation well. This again compares very favorably with ditch irrigation.

It is very hard to determine the depreciation on an irrigation well. The University of Nebraska run some tests on some wells in 1908 and 1909 and these same wells were tested again in 1927. They found that the well had depreciated practically nothing in the twenty years. That is to say, the well delivered just as many gallons of water as it had twenty years previous, but needless to say, the pump had depreciated some although the same pumps were still in use.

CROP YIELDS

Taken over a period of years, it is safe to say that pump irrigation in Buffalo County has doubled the crop yields of the adjoining land under dryland farming. Even this year with over thirty inches of rainfall, the corn that was irrigated yielded from ten to twenty bushels per acre more than the dryland corn. This was due to extremely hot July weather.

The greatest advantage to pump irrigation is that it takes the guessing out of farming, and it is possible to practice rotation, something that a dryland farmer can not do with any certainty. Again referring to the dry year of 1929, one farmer on 160 acres made a net labor income of \$7,000. It would be impossible for him to do this without irrigation, in that he had been practicing a seven year rotation of barley, sweet clover, corn and potatoes for the last six years, and has built up the fertility of the soil that was taken out the past fifty years.

ADVANTAGES AND DISADVANTAGES

There are some advantages of pump irrigation over ditch irrigation in that a person can be his own boss as far as when he shall irrigate his crops. Again, he can use as much water or as little water as he wants, depending on the amount of rainfall that is received.

Pump irrigation is available in many places where it is impossible to get ditch water. Many farms in Nebraska have streams running water through them, such land can be irrigated with pumps. In fact, in Buffalo County approximately twenty men are irrigating out of Loup and Wood Rivers. This is done by means of mounting a pump on one end of bridge planks and the pump is shoved down the bank of the river to the edge of the water. A suction pipe is then attached, the length of it depending upon the depth of the water, and a discharge pipe is also attached and a tractor set on the bank where it can be connected with the pump by means of a belt. Some men have even gone so far as to build dams across the river and pumping out of the water thus dammed.

Disadvantages of pump irrigation are that only row crops can be irrigated, as not a large enough head of water can be secured that is necessary in flooding alfalfa and small grains.

Many farmers put off pumping water on their crops hoping and thinking it will rain and by waiting reduce the maximum yield that they would receive had they applied the water at the proper time, which they are more apt to do under ditch irrigation since they have to pay the maintenance fee regardless of whether they use water or not. For this reason, the average farm under pump irrigation does not make all possible use of the water as is done under ditch irrigation.

Many places are not so favorably situated as to have water available for pump irrigation, and there is a possibility of having so many wells in the same territory that the seasonal drawdown becomes so great that it jeopardizes water supply for all wells. This is illustrated by the fact that in 1929 with only fifteen inches of rainfall, the seasonal drawdown was three to six feet all over the valley. This caused much concern as some of the wells were difficult to prime, a few windmills ceased to pump water, and it looked like they were getting ready for considerable neighborhood trouble, but then along came 1930 with over thirty inches of rainfall and during the pumping season the average drawdown over the Valley was approximately only six inches.

THE FUTURE OF PUMP IRRIGATION

Pump irrigation in Buffalo County is just in its infancy at the present time. In Gibbon township there are 105 wells, and in this township only one-third of the land is irrigated. Whether there is enough water available in this underground storage space to water the rest of the area is yet to be determined. This last fall the U. S. Geological Survey started some work in the county to determine the amount of underground water available, the rapidity and the direc-

tion of the underground flow, and when this information is available, it will mean much to the future of pump irrigation.

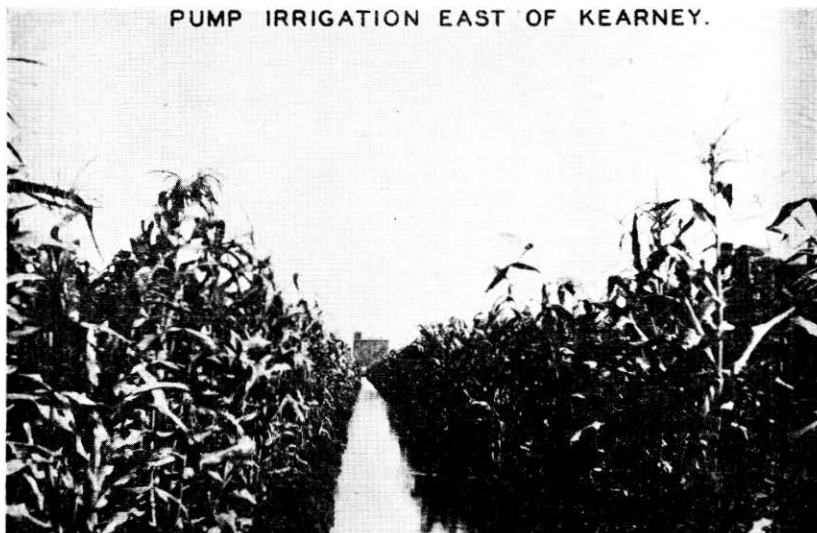
Within the last two years new types of wells have been constructed. The casings commonly used are 24 to 36 inches in diameter. This casing is eight feet in diameter. One of these wells throws 2400 gallons of water a minute and is located one-half mile west and one-half mile south of Buda. The second is located near Alda in Hall County, that throws 3,000 gallons of water a minute. The one at Buda took the place of two old wells and with this particular well, they have a large enough head of water so that it is possible to irrigate alfalfa. Up until recently, very little attention has been paid to the type of casings and strainers.

Another new phase that may have some future is the construction of farm reservoirs. Jim Kuntz at Wood River has constructed dirt reservoirs about a half acre in size into which he pumps day and night, and only spreads the water during daylight. By so doing, it is possible to get a much larger head of water, and covers more ground with less labor.

RELATIONSHIP OF DITCH IRRIGATION TO PUMP IRRIGATION

There is a direct relationship between ditch irrigation and pump irrigation. Especially in Buffalo County, because we learn that the Platte Valley has what is known in the oil fields as an anti-incline. That is, the water table in the Platte River is higher than it is north of the river even though the land slopes toward the river. Farmers are of the opinion that the water level in the ground is always higher when there is water in the Platte River than when the Platte River is dry. This is another question that the Geological Survey people will answer for us next year. In other words, the more water that is available for ditch irrigation, the more water there will be available for pump irrigation.

PUMP IRRIGATION EAST OF KEARNEY.



DRAINAGE

All plans for proposed drainage districts shall be approved by the Department of Public Works, as provided for in Section 8448 Compiled Statutes of Nebraska, 1922. Below is a complete list of drainage districts of record in this department:

County	Name of District	Date of Approval of Plans
Buffalo	John Swenson Drainage Ditch	Nov. 5, 1929
Burt-Washington	Burt-Washington Co. Drainage District	Aug. 2, 1915
Burt-Washington	Peterson Bend Protection District	Sept. 2, 1921 (Retards)
Burt-Washington	Burt-Washington Co. Drainage District	Febr. 19, 1925
Butler	Yanike Drainage District	.....
Butler	Drainage District No. 1	Aug. 5, 1918
Butler	Drainage District No. 2	July 26, 1917
Cedar	Laurel Drainage District	Dec. 15, 1925
Cherry	Gay Lake Drainage District	Sept. 1, 1922
Cherry	Boardman Drainage District	June 23, 1923
Cherry	Coffey Lake Drainage District	Dec. 16, 1924
Colfax	Platte Valley Drainage District	Dec. 28, 1920
Dakota	Drainage District No. 2	April 18, 1914
Dakota	Homer Drainage District	Jan. 10, 1919
Dakota	Dakota City Drainage District	April 3, 1922
Dakota	Omaida Drainage District	Dec. 13, 1924
Dakota	Drainage District No. 5	July 10, 1930
Dawson	Dawson County Drainage District No. 1	July 5, 1929
Dawson	Drainage District No. 2 of Dawson County	June 7, 1930
Dixon-Wayne-Thurston	Wakefield Drainage District	Jan. 18, 1917
Dixon-Cedar	Brookey Bottom Drainage District	Sept. 11, 1922 (Retards)
Dixon-Cedar	North and South Logan Drainage District	Febr. 17, 1925
Douglas	Little Papillion Drainage District	Mar. 2, 1920
Douglas	East Omaha Drainage District	Oct. 5, 1921
Douglas	Elkhorn Valley Drainage District (Safford Ditch)	Jan. 9, 1926
Douglas	Papio Drainage District	June 5, 1926
Douglas-Sarpy	Elkhorn Valley Drainage District	June 24, 1919
Frontier	Drainage District No. 1	Mar. 31, 1915
Knox	Frankfort Bottom Drainage District	Mar. 3, 1923 (Retards)
Lincoln	Lincoln County Drainage District No. 1	Mar. 23, 1922
Lincoln	Lincoln County Drainage District No. 2	Dec. 4, 1929
Madison	Norfolk Drainage District	Mar. 18, 1924
Merrick	Drainage District No. 1	Febr. 17, 1916
Merrick	Drainage District No. 2	May 10, 1924
Morrill	Minatare Drainage District	.....

DRAINAGE DISTRICTS—Concluded

County	Name of District	Date of Ap- proval of Plans
Nemaha	Drainage District No. 3	July 6, 1916
Nemaha	Peru Drainage District No. 6	April 19, 1927
Nuckolls	Drainage District No. 1	.....
Otoe-Johnson	Drainage District No. 1	Oct. 31, 1914
Platte	Holdrege Drainage District	.....
Richardson	Drainage District No. 1	.....
Richardson	Drainage District No. 2	.....
Richardson	Drainage District No. 3	Dec. 24, 1921
Richardson	Drainage District No. 4	April 13, 1916
Richardson	Drainage District No. 5	May 8, 1920
Richardson	Drainage District No. 6	Sept. 18, 1930
Richardson	Barada Drainage District	June 6, 1921
Sarpy	Western Sarpy Drainage District	Nov. 15, 1917
Sarpy	Bellevue Drainage District	Aug. 14, 1921
Sarpy	Chalco-Portal Drainage District	Mar. 15, 1922
Sarpy	South Buffalo Creek Drainage District	May 25, 1926
Sarpy	Rudersdorf Drainage District	Febr. 15, 1927
Sarpy	Zimmerman Drainage District	Mar. 16, 1929
Saunders	Clear Creek Drainage District (Johnson Creek-Ditch No. 6)	Aug. 13, 1925
Saunders	Clear Creek Drainage District (Extension of Main and Branch Ditch)	July 3, 1930
Saunders	Leshara Drainage District	Sept. 18, 1930
Scotts Bluff	Scotts Bluff Drainage District	Febr. 21, 1918
Scotts Bluff	Gering Drainage District	June 2, 1920
Scotts Bluff	Morrill Drainage District	.....
Stanton	Humbug Drainage District	Mar. 15, 1921
Thurston	Pender Drainage District	Febr. 21, 1918
Washington	Papio Valley Drainage District	Mar. 8, 1926

DAWSON COUNTY IRR. CO. v. McMULLEN

et al

No. 27264

Supreme Court of Nebraska

July 17, 1930.

1. Constitutional law 80 (2)

Statute empowering department of public works to cancel water appropriation after hearing, where water has not been put to beneficial use, held not void as giving department judicial powers, (Const. Art. 5, 1; Comp. St. 1922, 8428).

Syllabus by the Court

Section 8428, Comp. St. 1922, does not violate section 1, Art. 5 of the Constitution.

2. Constitutional law 278 (1).

Waters and water courses. 128.

Statute empowering department of public works to cancel water appropriations held not violative of due process, in view of provisions for notice and appeal to courts (Comp. St. 1922, 8428; Const. U. S. Amend, 14, 1; Const. Neb. Art. 1, 3.)

Syllabus by the Court

A statute conferring quasi judicial powers on an administrative board is not violative of the "due process" provisions of either the federal or state Constitution (Const. U. S. Amend, 14, 1, and Const. Neb. Art. 1, 3), where the statute also provides for due notice of any hearing and for an appeal to the courts by any person aggrieved by an order made by such board in the exercise of its quasi judicial functions.

3. Injunction 75.

Administrative board will not be enjoined from conducting hearing authorized by statute simply because it may make erroneous orders.

Syllabus by the Court

An administrative board, possessing quasi judicial functions, will not be enjoined from conducting a hearing authorized by statute, simply because it may make an erroneous order in the premises, where the statute also authorizes an appeal to the courts and where the order may be reviewed and any error corrected.

4. Statutes 176.

Courts generally refuse to construe statutes where construction is not necessarily involved in case.

Syllabus by the Court

Ordinarily, courts will refuse to construe statutes where such construction is not necessarily involved in the cause before them.

Appeal from District Court, Dawson County, Nisley, Judge.

Action by the Dawson County Irrigation Company against Adam McMullen, Roy L. Cochran, and another. From judgment of dismissal, plaintiff appeals.

Affirmed.

W. M. Cook, of Lexington, and Beeler, Crosby & Baskins, of North Platte, for appellant.

T. F. Neighbors, of Bridgeport, Halligan, Beatty & Halligan, of North Platte, and C. A. Sorenson, Att'y. Gen. for appellees.

W. V. Hoagland, of North Platte, amicus curiæ.

Heard before Goss, C. J., and Rose, Dean Good Thompson, Eberly, and Day, J. J.

Good, J.

This is an action to enjoin the state officials comprising the department of public works from conducting a hearing, pursuant to the provisions of section 8428, Comp. St. 1922, for the purpose of determining whether plaintiff's water appropriations for irrigation purposes should be declared forfeited and annulled because of abandonment or nonuse. To the amended petition general demurrers were sustained. Plaintiff elected to plead no further. Judgment of dismissal was entered, from which plaintiff appeals.

Plaintiff bases its right to injunctive relief on the grounds that said section 8428, as construed by defendants, is unconstitutional, and that defendants, therefore have no right or power to conduct hearings pursuant to its provisions.

Section 8428, Comp. St. 1922, inter alia, provides; All appropriations for water must be for some beneficial or useful purpose, and when the appropriator or his successor in interest ceases to use it for such purpose the right ceases. The department of public works shall, as often as necessary, examine into the condition of every water appropriation, * * * and shall compile information concerning the condition of every water appropriation, * * * and if it shall

appear that any water appropriation has not been used for some beneficial or useful purpose, or having been so used at one time has ceased to be used for such purpose, for more than three years, the department of public works shall appoint a place and time of hearing and shall serve notice upon the owners of such water appropriation * * * to show cause by such time and at such place, why the water appropriation owned by such person should not be declared forfeited and annulled, and shall also serve such notice upon the landowners under such water appropriation, ditch or canal. Such notice shall contain the date and place of hearing, a description of the water appropriation, the number thereof upon the books and records of the department of public works, the date of priority, the point of diversion and a description of the lands which are located under such water appropriation, and shall call upon all persons interested in said water appropriation to show cause why the same shall not be canceled or annulled. Such notice shall be served personally at least thirty days before said date of hearing upon those owning or controlling the water appropriation and the ditch, canal or reservoir for the purpose of using or storing water for any purpose whatsoever, * * * and a copy of such notice shall further be personally served or sent by registered mail to all persons appearing from the records of the county clerk or register of deeds to be landowners under such appropriation. At such hearing the verified report of the district superintendent shall be prima facie evidence for the forfeiture and annulment of such water appropriation. If no one appears at said hearing, such water appropriation shall be declared forfeited and annulled. If some one interested appears and contests the same, the department of public works shall hear evidence, and if it appears that such water has not been put to a beneficial use, or has ceased to be used for such purpose for more than three years, the same shall be declared canceled and annulled. An appeal may be taken from the decision of the department of public works upon said hearing to the district court of the county in which the point of diversions of such water appropriation is situated."

(1) The section of the statute quoted is attacked on several grounds. It is charged, in effect, that the statute is unconstitutional because it purports to give to the department of public works judicial powers, in violation of section 1, Art. 5, of the Constitution, which vests judicial powers in the tribunals therein named. That section of the Constitutional also gives to the legislature the power to create other courts inferior in jurisdiction to the supreme court. However, this court has held that the section in question does not create a court, but that it creates an administrative body, with quasi judicial powers.

In *Crawford Co. v. Hathaway*, 67 Neb. 325, page 367, 93 N. W. 781, 795, 60 L. R. A. 889, 108 Am. St. Rep. 647, it was said: "Such functions, it would seem, are clearly administrative in character, and not judicial. It is a judicial function to administer justice between litigants in cases where disputes arise and to settle these disputes according to law as administered in courts of justice. The board of irrigation (to which the department of public works is a successor), however, in many cases acts in advance of any dispute, and whether there is or will be a controversy in no way affected its powers. The courts can act only as controversies arise between litigants and then only by determining the questions presented by the litigation. While there are some questions affecting property rights which grow out of the administration of the law by the state board of irrigation, and in which are involved matters in dispute calling for action of a quasi judicial character, yet as to all these ample provisions are made for recourse to the courts. Powers of the same general nature and character are conferred upon almost every administrative body known to the statute, and regarding which it has frequently been decided they are of a quasi judicial nature; and yet such bodies are invariably held to be administrative, and to in no way conflict with the constitutional provisions regarding officers and bodies upon whom judicial power may be conferred. The state board of transportation, as heretofore organized in this state, the constitutionality of which has been invariably upheld, when attacked, in all respects, save as to the manner of passing the law providing for its creation, is a fair illustration of the validity of legislation of this character. Numerous other boards and offices created by statutes of an administrative character, and yet possessing powers of a quasi judicial nature, might also be referred to if thought to serve any useful purpose. For the reasons given, we are of the opinion that the sections of the act in question are not obnoxious to the Constitution on the objections raised by counsel, and that the authority of the board of irrigation to make the determinations contemplated by the act, and the requirement of its approval as a condition to the right of appropriation under its provisions, is a valid exercise of legislative power."

In *Farmer's Canal v. Frank*, 72 Nebr. 136, 100 N. W. 286, a case involving a hearing before the state board of irrigation, it was held: "The powers of the state board of irrigation exercised under section 16, Art. II, chapter 93a of the irrigation act of 1895, are quasi judicial in their nature."

In *Enterprise Irrigation District v. Tri-State Land Co.*, 92 Neb. 121, 138 N. W. 171, it was held: "The constitutionality of the Irrigation Act of 1895 and the provisions thereof creating the state board of irrigation and conferring on the board the right to determine

priorities, reaffirmed"—following *Crawford Co. v. Hathaway*, 67 Neb. 325, 93 N. W. 781, 60 L. R. A. 889, 108 Am. St. Rep. 647.

In *Kersenbrock v. Boyes*, 95 Neb. 407, 145 N. W. 837, it was held: "The state board of irrigation is a tribunal, quasi judicial in its nature, with authority to perform statutory duties in administering public waters, and is not disqualified to hear a controversy between the state and an appropriator whose right is contested by the state." That was a case where rival applicants had asserted the right to use of the same public water at the same site. The state board of irrigation directed plaintiff to appear and show cause why his application should not be canceled. Upon a trial of the issues the state board canceled the plaintiff's application. On appeal to the district court the findings and order of the board were upheld, and its judgment was affirmed in this court.

State v. Delaware-Hickman Ditch Co., 114 Neb. 806, 210 N. W. 279, involved a proceeding under section 8428 Comp. St. 1922, whereby the state, as here sought to cancel the water appropriation for irrigation purposes on the alleged ground of nonuser. A hearing was had. The finding of the board was adverse to the state, and such finding was affirmed both in the district and supreme courts.

In *Re Babson*, 105 Neb. 317, 180 N. W. 562, it was held: "The department of public works is an administrative body, having quasi judicial functions, and is vested with reasonable discretion in the exercise of its supervisory powers."

In *State v. Oliver Bros.*, 119 Neb., 228 N. W. 864, it was held: "The department of public works is an administrative body, having quasi judicial functions, and it is invested with reasonable discretion in the exercise of its supervisory powers."

"In proceeding under Comp. St. 1922, 8428, before department of public works to have defendants' water rights cancelled on ground that water had not been used by defendants for more than three years immediately last past, plaintiff's appeal from adverse determination of board was properly taken to district court, as against contention that appeal should have been taken directly to Supreme Court." 228 N. W. 864.

By a long line of decisions this court is firmly committed to the proposition that, under said section 8428, the state board of irrigation and its successor, the department of public works, is an administrative body, possessing quasi judicial powers, and that the section is not in violation of section 1, Art. 5, of the Constitution.

(2) It is further urged that the section is unconstitutional because the right of appeal from the decision of the department of public

works in a proceeding of this character is so uncertain that it amounts to a denial of the right to be heard in the court of last resort.

Counsel for plaintiff now concede that this question has been settled adversely to this contention in the case of *State v. Oliver Bros.*, supra, and no longer insist upon that proposition.

It is insisted that the statute is unconstitutional because it authorizes and permits the taking of private property without due process of law. The statute affords opportunity for any one, who may be aggrieved by any finding or order in the premises entered by the department of public works, to appeal to the district court and from that court to the supreme court. One cannot be said to be deprived of his property without due process of law so long as he has recourse to the courts for the protection of his rights. The statute affords ample opportunity to plaintiff in this case, if aggrieved by any action of the department of public works, to seek redress from its decision to the courts. See *Moise v. Powell*, 40 Neb. 671, 59 N. W. 79. In *Reed v. Reed*, 70 Neb. 779, page 785, 98 N. W. 73, 76, it was said: "Due process of law may be said to be satisfied whenever an opportunity is offered to invoke the equal protection of the law by judicial proceedings appropriate for the purpose, and adequate to secure the end and object sought to be attained." See, also, *Chicago, B. & Q. R. Co. v. Headrick*, 49 Neb. 286, 68 N. W. 489.

(3) Plaintiff further contends that, if the statute in question authorizes any action by the department of public works, it is to cancel or annul the entire appropriation; that the department is not vested with power to cancel or annul the appropriation in part, and that it is about to proceed to, and will, unless enjoined, enter an order beyond the power conferred by said section. This contention is wholly without merit. It cannot be determined in advance what order or ruling may be made by the department in the exercise of its quasi judicial functions, but, if any erroneous order is made, redress may be had by an appeal to the courts. Under the circumstances, plaintiff was not entitled to injunctive relief. The department was authorized to conduct a hearing. It will not be presumed in advance of such hearing that it will attempt to go beyond the powers conferred. Should it do so, redress may be had by an appeal from its decision.

(4) Plaintiff urges and insists that a construction of Section 8428, Comp. St. 1922, is imperative, to determine whether or not the department of public works is vested with the power to cancel and annul the water appropriation in part, or whether it is limited to the right to cancel and annul the appropriation in toto for nonuse or because of abandonment. That question is not properly before us at this time.

The only proposition presented here is whether or not plaintiff is entitled to enjoin a hearing by the department of public works. Had plaintiff submitted to a hearing before the department, a ruling made by it, and an appeal taken therefrom and brought to this court in that manner, the proper construction of the statute might have been involved, and, if so, would have been passed upon. The construction of the statute in that respect is not involved in this appeal. To undertake to pass upon it would amount to dictum, and would not be binding in a subsequent case where the question was properly involved.

We find no error in the record. The judgment of the district court is

Affirmed.

IN RE APPLICATION NO. 1284, STATE V. OLIVER BROTHERS

Filed January 24, 1930.

26996

1. The department of public works is an administrative body having quasi judicial functions, and it is invested with reasonable discretion in the exercise of its supervisory powers. In re Application of Babson, 105 Neb. 317.

2. "Abandonment is the relinquishment of a right by the owner thereof without any regard to future possession by himself or any other person but with the intention to forsake or desert the right." Union Grain & Elevator Co. v. McCammon Ditch Co., 41 Idaho, 216.

Heard before Goss, C. J., Rose, Dean, Good, Thompson and Eberly, J.J., and Landis, District Judge. DEAN, J.

F. C. Krotter, plaintiff, filed a complaint before the department of public works, hereinafter called the department, seeking to have the water rights of the defendants, Oliver Brothers, canceled. Number 1284 is the appropriation number. The application for cancelation is based on the alleged ground that the water had not been used by the defendants for more than three years immediately last past. After a hearing before the department the complaint was dismissed. Thereupon the plaintiff appealed to the district court for Hayes county and the decision of the department was there affirmed and Krotter's appeal was dismissed. Plaintiff has brought the record to this court to have it reviewed.

Counsel for the defendants Oliver contend that the appeal was improperly taken to the district court, and that this court therefore is without jurisdiction over the appeal. It is their contention that Section 8428, Comp. St. 1922, under which this complaint was filed, does not provide for a preceeding between individual claimants of

water but pertains to complaints originating with the department, and that the plaintiff should have appealed directly to this court from the department's decision as provided in sections 8433 and 8434, Comp. St. 1922. Section 8428, above cited, among other things, provides for an examination and hearing by the department of the condition of any water appropriation which does not appear to have been used for more than three years. The same section also provides for an appeal from the decision of the department to the district court for the county in which the point of diversion of such water appropriation is situated. Section 8433 provides that the department shall have jurisdiction over all matters pertaining to water rights and shall have power to hold public hearings on complaints in regard thereto. And section 8434 provides for an appeal to the supreme court by any party aggrieved by the decision of the department. After the complaint was filed by plaintiff, the department appointed a time and place of hearing and served notice on the defendants, as provided in Section 8428. Since the inquiry proceeded under section 8428, which provides that "an appeal may be taken from the decision of the department of public works upon said hearing to the district court of the county in which the point of diversions of such water appropriation is situated," as above noted, we think the district court did not err in overruling the special appearance of the defendants.

Application number 1284, filed by the defendants, has a priority date of April 28, 1913, and is a permit to divert 55 cubic feet of water per second from the Frenchman river near Wauneta, the water to be used in the operation of a pumping plant for irrigation purposes. The plant requires a dam not to exceed eight feet in height and is located in the SE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 7, township 5 north, range 35 west of the 6th P. M., in Hayes county. In a report filed by C. E. Franklin, hydrographer, June 25, 1927, it appears that the canal has been undermined by high water in the ravine and that the dam was almost completely ruined in 1922. The defendants began repair work to fill in the channel and by means of sheet piling, between which brush, rock and earth were placed, the channel was closed to the height of the dam, except for a small leak. It appears from the report of the hydrographer that much money has been expended by defendants for concrete work done in 1926 in an attempt to repair the dam.

From the evidence of Walter J. Oliver, one of the defendants, it appears that in the fall of 1923 new walls were constructed on the dam, and again in 1924 more work was done by the defendants, and it became necessary to "back the water about five feet to get it back over the original dam." The total cost of repair work during the summer of 1924 was \$3,800. Mr. Oliver also testified that in 1925 it was necessary for them to hire men to work 75 days to fill 2,000 yards of

dirt into the dam and otherwise repair it, and that \$650 was expended by them for labor in this behalf. And he further testified that more dirt was used in 1926 to fill in the banks.

An engineer who had charge of the dam when it was constructed testified in respect of the effort made by the defendants to repair the dam and operate the plant since it was washed out. It appears that approximately 200 acres of land were irrigated by the plant during the years it was being operated.

It must be conceded that the department of public works is an administrative body, having quasi judicial functions, and that as such it is invested with reasonable discretion in the exercise of its supervisory powers. In re Application of Babson, 105 Nebr. 317.

In *Union Grain & Elevator Co. v. McCammon Ditch Co.*, 41 Idaho, 216, the court held: "Abandonment is the relinquishment of a right by the owner thereof without any regard to future possession by himself or any other person but with the intention to forsake or desert the right."

And in *Gould v. Maricopa Canal Co.*, 8 Arizona, 429, it was held: "Abandonment of the right to water gained by appropriation is a matter of intent as such intent may be evidenced by the declaration of the party, or as may be fairly inferred from his acts."

There is nothing in the record that tends to establish that the defendants intended at any time to abandon the irrigation system now here under discussion. The evidence discloses that they have done much repair work on the dam and that no effort was spared to continue the operation of the plant for irrigation purposes and that they have done all that could reasonably be required of them in the premises.

The judgment of the learned trial court is

AFFIRMED.

IN RE APPLICATION NO. 1285, STATE V. OLIVER BROTHERS.

Filed January 24, 1930.

26997.

For syllabus see In Re Application No. 1284, ante, p. which is controlling herein.

Heard before Goss, C. J., Rose, Dean, Good, Thompson and Eberly, J.J., and Landis, District Judge, DEAN, J.

This is a companion case to In re Application No. 1284, ante, P. In the present case it was stipulated and agreed by and between

“the attorneys that the evidence at the hearing held under Application No. 1284 should be used as the record of hearing under water appropriation Application No. 1285.” Our decision in In re Application No. 1284 is controlling in this case and the judgment of the district court is therefore

AFFIRMED.

**IN THE DISTRICT COURT OF THE UNITED STATES
FOR THE DISTRICT OF NEBRASKA
NORTH PLATTE DIVISION**

United States of America,	}
Plaintiff,	
vs.	
The Bridgeport Irrigation District, a public Corpora- tion.	
	Defendant.

MEMORANDUM OF DEMURRER

BY THE COURT

J. W. Woodrough, District Judge.

This suit is brought by the United States to recover the amounts alleged to be due under a special contract entered into on July 9, 1915, between the United States and the Board of Directors of the Bridgeport Irrigation District. By the terms of the contract the United States agrees to supply the District with certain quantities of irrigation water from the Pathfinder dam and the District agrees to take the water so supplied in lieu of an uncertain and insufficient flow to which it was theretofore otherwise entitled (relinquishing its rights in that flow to the government) and to pay the government a stipulated sum annually for a number of years. The annual payments were made for five years by the installments thereafter accruing have not been paid. As there are no material facts in real dispute between the parties the judgment of the court is to be rendered on the pleadings, there being a demurrer to the answer.

On an earlier submission of the case it appeared to me that it could be inferred from the pleadings that without this contract this District would be left with no sufficient water supply, but the pleadings now present that other means are now available to the District if it should be held that the contract is void.

There is no question of the authority of those officers who made the contract on behalf of the United States pursuant to the Warren Act, and it is clear that the United States became bound on its part to carry out the contract, and it has done so. But it is contended on the part of the District that its Board of Directors were without any authority in law to bind the District to the contract. If it is liable to pay for any beneficial use of water that may have occurred to it by reason of the contract it asserts its willingness to respond in an appropriate action on a quantum meruit for the value thereof. It denies any liability on the special contract.

The contract was made and entered into by the Board of Directors on behalf of the District without any submission of the question to the vote of the electors or the creation of any special fund to meet the payments. The district insists that the Nebraska law made the creation of a special fund and the affirmative vote of the electors the conditions precedent to the authority of the Board to incur such an obligation as is used on, and it is upon this ground that the District claims that the contract was and is ultra vires and void. This pertinent state statutes are the irrigation laws revised in the statutes of 1913 and the Acts of March 18, 1915 (being chapter 205) and the Act of April 17, 1915 (being chapter 69).

Study of the several state statutes has persuaded me that the controlling provisions are those of Sections 3465 and 3466 Rev. Stat. Neb. 1913, and of the Act of April 17, 1915. By the terms of section 3465 the Board of Directors of an Irrigation District was invested with power to manage and conduct the business affairs of the District, make and execute all necessary contracts and generally to perform all such acts as shall be necessary to full carry out the purposes of the; and by section 3466 "To acquire by purchase all necessary waters and to do any and every lawful act necessary to be done that sufficient water may be furnished to each land owner in the district for irrigation purposes."

Admitting that these provisions, if they stood by themselves appear to vest broad powers in the board the district says that they are limited and dependent upon ensuing provisions in the law of 1913 and the law of 1915 which prescribe certain plans to be formulated, estimates of costs to be made, bonds to be issued for creation of a construction fund, and submission of the whole to the vote of the electors. And particularly it relies upon the opinion of the Supreme Court of Nebraska in Lincoln and Dawson Irrigation District vs. McNeal, 60 Neb. 613; as fixing the law for the time the contract was made. In that case the court dismissed a claim for work and labor done under contract with the board prior to sale or bonds or creation

of a construction fund. The court stressed particularly the provision of section 3487:

"The board shall have no power to incur any debt or liability whatever * * * in excess of the express provisions of this article, and any debt or liability incurred in excess of such express provision shall be and remain absolutely void."

It appears to me that the circumstances under which the contract in suit was entered into take this case out of the line of reasoning followed by the Nebraska court in that case and that the power of the board to make the contract was justified under that clause of the statute conferring the power to purchase all necessary waters and to do any and every lawful act necessary to be done that sufficient water may be furnished to each land owner in the District for irrigation purposes. The District was already established, and its works constructed, and homes and home owners were already upon the lands. Their necessities were obvious and so far as was known to the board at the time of this contract there was no possible way that sufficient water could be furnished to each land owner in the district for irrigation purposes except to buy it from the United States upon the fair terms and conditions prescribed by the laws, regulations and general practice of the United States at the time. This they did on behalf of the district, and, as it appears to me, they acted within the powers specifically conferred upon them.

But whatever doubt there might have been seems to me entirely dissipated when the later enactment of April, 1915 is considered. By the terms of that act the board is expressly given the power to enter into exactly the kind of a contract with the United States reflected by the contract in suit. (The matter of the existing water rights of the district being hereinafter discussed). It is true that the act had not gone into force and effect at the time of this contract. It had been passed by the legislature and approved by the governor of the state but there was no emergency clause and therefore its effective date was a few days later than the contract. I am satisfied that it should be construed to be curative. Its provisions refer not only to contracts with the United States which Irrigation Boards might make in the future but include the declaration that

"In case contract has been or may hereafter be made with the United States as herein provided * * * * * and if bonds of the district are not deposited it shall be the duty of the board of directors to include as part of any levy or assessment provided for in section 3475 R. S. Neb. 1913, an amount sufficient to meet each year all payments accruing under the terms of such contract."

It is true that in the Act of March, 1915, passed with an emergency clause and therefore effective before the Act of April 17, 1915, there

is a provision that contracts which may be made with the United States for purchase of water under the authority of that act, and calling for payments over a period of more than one year, shall be submitted to a vote of the legal voters of the district. But this act seems to me to have been passed to meet the situation of certain districts other than the defendant herein. The emergency declared and the title of the act show that its special purpose was to permit those districts which had issued bonds for their system and water supply to arrange for a rescission and enter into a new contract for water supply, such new contract, if the payments ran over a year, to be submitted to the voters. But the act expressly says that it shall not limit existing rights of any district and shall be cumulative thereto.

In the Act of April 17, 1915, which authorized the boards of directors of irrigation districts to enter into such contracts with the United States as this one (and which I think was curative of any former acts which might have been constructed to be insufficient to that end) no vote is required as condition precedent to the exercise of that board's authority. To that extent its provision may conflict with the requirement of the Act of March, 1915, that a vote be had where payments are to be made over a longer period of one year, as they are in this contract. If there is such conflict the Act of April, going into effect later than the Act of March should control.

A study of the history of the transactions leading up to and culminating in this contract, as revealed in public documents brought to my attention in briefs and arguments, satisfies that the contract was accompanied by the utmost publicity and resulted from general demand and to meet what was universally deemed a most urgent necessity. To void it except upon most convincing proof of invalidity would be unconscionable. The relinquishment of the District's existing water rights to the United States, embodied in the contract, was simply the effective means to fix the amount of water which the district should receive. The law limited its taking of water to the amount which could be beneficially and economically used. This amount is fixed and provided for by the contract. It being within the power of the board to contract for the sufficient water supply, as it did, the provision for relinquishment, therefore, was a matter of the form of the contract and not of substance.

Not denying the existence of some uncertainties I find no such obvious lack of authority in the Board as is contended for.

Furthermore, defendant is plainly estopped by reason of its long acquiescence and delay in asserting the claims of its answer against the government. It is but one of a number who have contracted to bear a ratable share in the expense of the dams and works which are the common source of the water used by all. If there was any defect

in the contract, related as it is to all the other contracts and made with reference to the other contracts, defendant could not acquiesce in it as it has done for five years, and long thereafter repudiate when sued.

Aside from this plain provisions of the statutes which appear to me to sustain the power of the board and the contract I think the case is ruled for the plaintiff by

Oshkosh v. Fairbanks, Morse & Co., 8 Fed. (2) 329;
N. Y. Trust Co. v. Farmers Irrigations Dist., 280 Fed. 785;
State vs. Gering Irrigation Dist. 192 N. W. 212;
Gas Securities Co. v. Antero etc. Co., 259 Fed. 425;
Omaha Gas Co. v. City of Omaha, 249 Fed. 350;
Village of Davenport vs. Meyer Hydro Electric Co., 193 N. W. 719;
Central Power Co. vs. Central City, 282 Fed. 998;
Slocum vs. North Platte, 192 Fed. 252;
Rogers vs. City of Omaha, 80 Neb. 591; 107 N. W. 214;
Vicksburg vs. Vicksburg Water Co. 206 U. S. 496;
Ohio & M. R. Co. vs. McCarthy, 96 U. S. 258;
Wyman vs. Searle, 128 N. W. 802;
23 C. J. 102, Sec. 1901;
U. S. vs. West Side Irrig. Co. 230 Fed. 284; 246 Fed. 212;
U. S. vs. Ramshorn Ditch Co., 254 Fed. 842.

There should be a judgment in favor of the United States and against the defendant for the amounts due under the contract, and interest as stipulated, and costs.

**IN THE DISTRICT COURT OF THE UNITED STATES
FOR THE DISTRICT OF NEBRASKA
CHADRON DIVISION**

Alice Slattery, et al, Complainants, vs. Clarence H. Dout, et al Defendants,	} } } }	Equity No. 49
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MEMORANDUM DISMISSING FOR WANT OF JURISDICTION

BY THE COURT,

Woodrough, District Judge.

The plaintiffs seek to present a controversy wholly between citizens of this state concerning rights to use water for irrigation and domestic purposes out of a little stream referred to as a rivulet. Trespasses by force are alleged, and former adjudications between predecessors in interest, and it is said some claims have been set up wrongfully by defendants to the effect that the state of Nebraska had given a right to use the water. Plaintiffs claim their suit arises under the laws of the United States because their lands where the waters flow were patented under the homestead laws and so their right to the water rests in federal law and that their suit arises under the constitution because they are threatened with deprivation of property without due process.

Neither ground is tenable. Non-navigable streams within the several states are subject to state and not federal sovereignty, and the states may, and usually do, regulate riparian uses of the water. By conveying to settlers the lands where the streams rise and flow the federal government surrendered its control of the water so that controversies arising between individuals over riparian uses cannot be said to arise under federal laws.

Plaintiffs do not set out any statute of the State of Nebraska which, either in its terms or in its operation, is violative of the due process clause of the federal constitution.

There is no ground of federal jurisdiction, and the bill should therefore, be dismissed.

Sept. 23, 1929.

Mr. R. H. Willis,
Chief of the Bureau of Irrigation,
Bridgeport, Nebraska.

Dear Mr. Willis:

Reference is made to a copy of your letter dated June 1, 1929, to Mr. George W. Ayers, Assistant Attorney General, in which you request an opinion relative to your jurisdiction and duties pertaining to the distribution of water for the purpose of irrigation along the North Platte River between the Wyoming-Nebraska line and Broadwater, Nebraska, and in particular whether the state or Federal government has jurisdiction to administer the distribution, in Nebraska, of storage water, under what are known as Warran Act contracts, entered into between appropriators and the Secretary of the Interior.

In my opinion the State of Nebraska, through its duly constituted officers, has exclusive jurisdiction to control and supervise the use of water from the North Platte River for irrigation purposes, and that the Federal government has no rights to the water of the stream for such purposes except such rights as are obtained in accordance with the laws of the state. As far as the right to use water and police non-navigable streams within the state of Nebraska are concerned, the federal government has no greater right than an individual.

When Nebraska was authorized to frame a constitution and was admitted to the Union it obtained exclusive jurisdiction over its waters subject only to the right of the Federal government to regulate navigable streams for the purposes of navigation.

Kansas v. Colorado (206 U. S.) 51 L. Ed. 957.

U. S. v. Kanson, 167 Fed. 881, p. 884.

Kinney on Irrigation, Second Ed. 813, p. 15.

Kirk Irrigation Dist. v. Conway, 94 Neb. 205.

Both the Reclamation Act, approved June 7, 1902, 32 Stat. 388, and the Warren Act, approved February 21, 1911, 36 Stat. (925) recognize the exclusive jurisdiction of the state to grant or deny appropriations of water for irrigation purposes within the boundaries of the state. Section 8 of the Reclamation Act provides:

"That nothing in this act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any state or territory relating to the control, appropriation, use, or distribution of water used in irrigation, or any vested right acquired thereunder."

Section 2 of the Warren Act, pursuant to which act contracts for storage, known as Warren Act contracts, were entered into, provides in part as follows:

"That nothing contained in this act shall be held or construed as enlarging or attempting to enlarge the right of the United States, under existing laws, to control the water of any stream in any state."

Section 8478, Compiled Statutes of Nebraska for 1922, authorizes the United States in conformity with the laws of the State of Nebraska to appropriate, develop and store any unappropriated water, and to rent or sell any undeveloped, stored or flood water to any person who has an appropriation from the natural flow of the stream. The stored water may be conducted into and along any natural stream of the state and taken out to supply an appropriator. That section then provides:

"The department (referring to the Department of Public Works) shall supervise and enforce the distribution of such water so delivered with like authority and under the same provisions as in case of general appropriators. A certified copy of all such contracts for the sale or rental of water by the United States, as herein provided, shall immediately upon their execution be furnished to the department, and the water superintendent and water commissioner of the district shall be notified of the date when such water shall be delivered."

Section 8423, C. S. 1922, makes it the duty of division superintendents under the direction of the Department of Public Works to see that the laws relative to the distribution of water are executed in accordance with the rights and priority of the appropriation.

Section 8430 C. S. 1922, provides how the priority and amount of appropriation shall be determined. As amended by Chapter 133 of the Laws of 1929 it also contains the following provision:

"Provided that these limitations do not apply to storage water, and provided further that where storage water is being used in addition to the natural flow, that the water superintendent shall, upon his request and within twenty-four hours thereof, be notified in writing by the user of such storage waters of the time of withdrawal from natural streams, to be distributed according to law."

That provision does not in any way relieve the Department of Public Works from the duty of administering storage water, which duty is not only expressly imposed upon the Department by Section 8478, C. S. 1922, but is completely interwoven with the laws of this state pertaining to appropriations and priorities. Section 8430, as amended, provides that the storage water shall be distributed according to law. Obviously it is the duty of the state, through the Department of Public Works, to ascertain whether or not there is any storage

water in the river, and to see that one Warren Act contractor does not take the water which belongs to another.

Taking up now the specific points, concerning which you desire an opinion, I would advise you as follows:

1. The water superintendent should supervise the distribution of storage water under the law as it now stands.

2. You should determine the rights of Warren Act contractors or other parties claiming storage water, from the contracts covering such storage on file in the Department of Public Works, and required to be filed there by Section 8478, C. S. 1922. If, however, the Secretary of the Interior, or other party furnishing storage water to an appropriator within this state, should notify you in writing that storage water is being furnished for a particular appropriator or carrier of appropriations you should treat such notice as a modification of the original contract and permit the diversion of water in accordance therewith. Provided, however, sufficient storage water is in the river at the point of diversion to supply such appropriator or carrier in accordance with his or its contract, and there is also sufficient storage water in the river to satisfy all other storage contracts. If there is not sufficient storage water to satisfy all Warren Act contracts and all contracts call for an equal right in the matter of time then you should prorate the available supply.

3. Water of the streams of this state, regardless of how it reaches the stream, should only be considered marked or storage water until the storage contracts have been supplied according to their terms. After that any water is out of control, is free water, and belongs to the people.

4. Chapter 133 of the Session Laws of 1929, does not take away any essential requirement of Section 8478, C. S. 1922, prior to the amendment insofar as the duties of the Department of Public Works are concerned with reference to its jurisdiction to supervise the distribution of storage water. Under the Warren Act contract between the Secretary of the Interior and the Tri-State Land Company, whose successor is now the Farmers Irrigation District, entered into April 26, 1913, the Farmers Irrigation District is only entitled to storage water as provided in Article One of said contract and the schedule of maximum and minimum amounts are clearly stated in said article. The provision of this contract shows that it was the intention that the storage water should supplement the natural flow, and that the storage water is not to be delivered in addition to the appropriation under the state law. That is, if there should be 713 cubic feet per second of water in the river at the diversion works of the Farmers Irrigation District on June 30th, of any year, then the district would not be

entitled to demand under this contract any storage water whatever. If there should be five hundred cubic feet on that date then the district would be entitled to 213 cubic feet per second of storage water. In Article One of the contract on page three, is the following:

“And does hereby agree to deliver for the use of said company an amount of water which will, with all the water the company may be entitled to by reason of any appropriations, and all water to which the lands of said irrigation district are entitled, and all water not otherwise appropriated, including drainage and seepage water developed by the United States, aggregate a flow of water as follows:”

Then follows the schedule of delivery of storage water.

This is the construction placed upon the contract by the United States Bureau of Reclamation and by all other Warren Act contractors except the Farmers Irrigation District. Since the storage works are located in Wyoming and are owned and controlled by the United States its construction of the contract for practical purposes at least, is necessarily binding upon the state. If the reclamation officials hold back the storage water in accordance with their interpretation of the contract, the result is that no storage water reaches the state in sufficient quantity to satisfy the contracts under any other interpretation. The state must supervise the distribution of such water as it has. If the parties to any of these contracts disagree as to their interpretation they should settle their controversies between themselves. If the department should recognize excessive claims to water under these contracts it would result in permitting such claimants to take water from some other justly entitled to use it.

5. The return flow from the government projects or any other irrigation project, after it has left the project, and would naturally find its way back to the river, should not be considered storage water or applied to the fulfilment of storage right contracts. This water should be considered public water subject to appropriations along the stream in the order of their priority.

Respectfully submitted,

C. A. SORENSON,
Attorney General.
By T. F. NEIGHBORS,
Special Assistant.

December 24, 1929.

**DIVISION OF HYDROGRAPHY
AND SURVEYS**

DESCRIPTION OF GAGING STATIONS

Pathfinder Reservoir

LOCATION:—The dam, constructed of granite masonry, is located in the channel of the North Platte River in Section 24, Township 29 N. Range 84 W, three miles below the mouth of the Sweet Water. Its capacity at spillway elevation 5852 feet above mean sea level, is 1,070,000 acre feet, at which elevation it submerges an area of about 22,000 acres. The outflow is measured one-quarter mile below the dam where a foot bridge has been installed.

ELEVATION OF OVERFLOW WEIR:—5852.00 ft. mean sea level.

DRAINAGE AREA:—10,700 square miles.

RECORDS AVAILABLE:—May 1st, 1909 to September 30, 1930.

GAGE:—Chain at left bank near foot bridge.

CHANNEL:—Very narrow and through solid granite.

OBSERVER:—Observations made and discharges furnished by the United States Bureau of Reclamation.

DISTANCE FROM RESERVOIR:—About one-quarter mile.

Guernsey Reservoir

The Guernsey Dam is located on the North Platte River near the north line of Section 27, Township 27 N, Range 66 W. It is about one and one-half miles northwest of the town of Guernsey, Wyoming. The dam is 192 miles below the Pathfinder dam. Height 105 feet above river bed and 500 feet in length.

It is a sluiced gravel and rock fill structure, with the following capacities:—

	Elevation		Acre Feet
50 ft. Level	4380.00	Zero Storage	11,270.
90 ft. Level	4420.00	Total Storage	72,700
Top of dam	4426.00	Net Storage	61,430
North Spillway	4370.00		

The dam was constructed to regulate and store water for irrigation and to maintain a power head. The ultimate development of power will be 12,000 KVA.

North Platte River at Whalen, Wyoming

LOCATION:—Section 11, Township 26 N, Range 65 W.

DRAINAGE AREA:—16,300 square miles.

RECORDS AVAILABLE:—May 1st, 1909 to September 30, 1930.

North Platte River at Whalen, Wyoming—Continued

Records of the river flow prior to May 1st, 1909 were made from the Guernsey gaging station and are available from June 14th, 1900 to November 17th, 1908. Guernsey is about eight miles above Whalen.

GAGE:—The discharges over the weir are determined by use of a vertical staff and computed by weir formula. In addition to this there are also sluice gates through which the discharge is computed. Usually the Ft. Laramie Canal carries water the year around for the Lingle Power Plant, the flow from the Power Plant through the tail race back to the river is not included in the discharge at the river weir for this biennium. The weir is constructed of concrete three hundred feet in length, and twelve and one-half feet in height above the river bed.

OBSERVER:—Observations made and discharge records furnished by the United States Bureau of Reclamation.

ELEVATION:—Elevation of concrete weir is 4278.50 feet above mean sea level.

North Platte River at Torrington, Wyoming

LOCATION:—Concrete highway bridge consisting of six fifty foot spans about one-half mile south of Torrington. In Section 15, Township 24 N, Range 61 W; twenty-five miles below mouth of Laramie River.

RECORDS AVAILABLE:—April 1st, 1926 to September 30, 1930.

GAGE:—The timber together with the porcelain rods were removed by the Wyoming Highway Department about the 22nd day of April, 1929. A temporary rod was attached to the seventh piling west of the south end of the concrete bridge. However, there is no relation between the elevation of the temporary gage and the original gage.

The bridge has six spans with clear water way of 46.5 feet each.

A control of sheet piling was driven into the sand bed of the river, the top of which is the bed of the river. The piling extends across the river parallel to the bridge at a distance of thirty feet east of bridge.

OBSERVER:—Geo. F. Shelton, Torrington, Wyoming.

ELEVATION:—Approximately 4180 feet above mean sea level.

HIGHEST GAGE READING FOR SEASON:—6.21 June 2, 1929 and 1.83 August 15, 1930.

LOWEST GAGE READING FOR SEASON:—1.10 February 1, 1929, and 0.44 April 5, 1930.

DISTANCE FROM PATHFINDER:—230 miles.

North Platte River at Henry, Nebraska.

(Cable Station)

LOCATION:—In NE $\frac{1}{4}$ Section 10, Township 23 N, Range 60 W, between the Mitchell Canal and the Gering Canal headgates, about one-fourth mile west of the Wyoming-Nebraska State Line.

RECORDS AVAILABLE:—Established April 29, 1929, by John A. Whiting, State Engineer of Wyoming, Robert Follansbee, District Engineer, United States Geological Survey, and R. H. Willis, Engineer in charge of Irrigation for Nebraska.

Records available from May 1, 1929 to September 30, 1930.

GAGE:—Boxed cantilever chain gage on right bank. Scale graduated from zero to six and seven-tenths feet. Length of chain 16.44 feet. Stevens continuous gage height recorder installed in housing over a stilling well near the gage rod. Installed November 6, 1929.

MEASUREMENTS:—Measurements are made from a 1 $\frac{1}{8}$ steel cable supported by three towers 20.5 feet high. South span 519 ft. between towers and north span 362 ft. between towers.

OBSERVER:—A. C. Ray, who lives 100 yards from station.

BENCH MARKS:—No. 1 is top of bolt in concrete on top of the tower anchorage, on the south bank of river. Elevation 5.04 feet.

ELEVATION:—

HIGHEST GAGE READING FOR SEASON:—2.83 August 15, 1930.

LOWEST GAGE READING FOR SEASON:—1.33 April 6, 1930.

DISTANCE FROM PATHFINDER:—239 miles.

North Platte River at Mitchell, Nebraska

LOCATION:—At highway bridge in Section 27, Township 23 N, Range 56 W, fourteen miles below the Wyoming-Nebraska State Line.

RECORDS AVAILABLE:—From June 2nd, 1901 to July 10th, 1913, and from 1916 to September 30, 1930.

GAGE:—Five foot wooden staff fastened to a pile about fifteen feet east of the south end of a concrete bridge. The bridge consists of twelve, fifty foot spans.

OBSERVER:—C. G. Waldo, Mail Carrier, Mitchell, Nebraska. Automatic Recorder.

North Platte River at Mitchell—Continued

RECORDER:—A Stevens automatic recorder was placed in the housing constructed over the stilling well located on the south bank of the river about fifty feet east of the south end of the concrete river bridge.

ELEVATION:—Approximately 3945 feet above mean sea level.

HIGHEST GAGE READING FOR SEASON:—5.95 June 2, 1929 and 2.30 August 15, 1930.

LOWEST GAGE READING FOR SEASON:—0.75 August 12, 1929 and 0.80 June 11, 1930.

DISTANCE FROM PATHFINDER:—253 miles.

North Platte River at Minatare, Nebraska

LOCATION:—West line of Section 18, Township 21 N, Range 53 W, one mile west and one and one-half miles south of Minatare. Concrete bridge consisting of twelve fifty-foot arches.

RECORDS AVAILABLE:—From May 1916 to September 30, 1930, with the exception of the year 1920.

GAGE:—Vertical staff five feet in length fastened to second concrete pier from south end of bridge on the down stream side. Five one foot porcelain sections fastened to staff.

OBSERVER:—F. W. Smith and M. L. Kent, Minatare, Nebraska.

ELEVATION:—Not known.

HIGHEST GAGE HEIGHT FOR SEASON:—4.50 June 3, 1929 and 2.51 August 16, 1930.

LOWEST GAGE HEIGHT FOR SEASON:—0.68 July 24, 1929 and 0.76 June 27, 1930.

BENCH MARKS:—The zero point of gage is 13.51 feet below top of hand rail next to gage.

DISTANCE FROM PATHFINDER:—270 miles.

North Platte River at Bridgeport, Nebraska

LOCATION:—In Section 28, Township 20 N, Range 50 W, one-half mile north of Bridgeport, on concrete highway bridge consisting of twenty-three spans of thirty-foot clear water way.

RECORDS AVAILABLE:—From May 1902 to 1906 and 1915 to September 30, 1930.

North Platte River at Bridgeport—Continued

GAGE:—Six foot vertical staff fastened to east side of south abutment of concrete bridge and a vertical staff on inside of stilling well on north wall.

RECORDER:—Stevens Long Distance automatic recorder placed in housing over stilling well constructed on south bank of river, and attached to abutment wing of wood piling and planking. Old concrete well abandoned because of surging.

OBSERVER:—Office Engineer during freezing weather.

ELEVATION:—Approximately 3675 feet above mean sea level.

HIGHEST GAGE READING FOR SEASON:—9.30 June 3, 1929 and 6.70 August 17, 1930.

LOWEST GAGE READING FOR SEASON:—5.35 July 24, 1929 and 5.25 July 1, 1930.

BENCH MARKS:—Zero of the gage is 18.75 feet below top of hand rail directly above the gage. Zero of gage is also 15.18 feet below top of northwest corner of iron door frame of concrete stilling well. Long distance recorder has been in use since June, 1917.

DISTANCE FROM PATHFINDER:—293 miles.

North Platte River at Oshkosh, Nebraska

LOCATION:—West line Section 2, Township 16 N, Range 44 W. About one mile south of Oshkosh. Steel truss bridge consisting of seven 98 foot spans.

RECORDS AVAILABLE:—From April 7, 1916 to October 30, 1917, and from March 1, 1928, to September 30, 1930.

GAGE:—Seven foot vertical staff nailed to a 2" x 6" plank which is bolted to the northeast corner of the first pier from the north end of the bridge.

OBSERVER:—Glenn E. Mong, Oshkosh, Nebraska.

BENCH MARKS:—The zero point of gage is 9.05 feet below top of concrete pier directly above the gage.

HIGHEST GAGE READING FOR SEASON:—4.30 June 4, 1929 and 2.75 August 17, 1930.

LOWEST GAGE READING FOR SEASON:—1.25 August 15, 1929 and 1.00 June 30, 1930.

DISTANCE FROM PATHFINDER:—348 miles.

North Platte River at North Platte, Nebraska

LOCATION:—On concrete highway bridge consisting of 14 spans, one-half mile north of the city of North Platte in Section 28, Township 14 N, Range 30 W, about four and one-half miles above the junction with the South Platte River.

RECORDS AVAILABLE:—February 25th, 1895 to September 30th, 1930, excepting the year 1910.

GAGE:—Four and one-half foot vertical staff fastened to the first pier from south end of bridge, on the down stream side.

RECORDER:—A six inch steel pipe closed at the lower end extending about two feet below low water mark is fastened to the first pier from south end of bridge. A housing was constructed over the stilling well in which was installed a Stevens automatic recorder.

OBSERVER:—A. W. Shilling, Jr., North Platte, Nebraska.

ELEVATION:—Approximately 2800 feet above mean sea level.

HIGHEST GAGE READING FOR SEASON:—6.00 June 5, 1929 and 4.30 May 12, 1930.

LOWEST GAGE READING FOR SEASON:—2.53 August 16, 1929 and 2.05 July 12, 1930.

BENCH MARKS:—Two nails in each side of telephone pole on west side of road at the south end of the bridge one foot above the ground. Elevation of nails is 7.55 feet above zero of gage.

DISTANCE FROM PATHFINDER:—422 miles.

South Platte River at Julesburg, Colorado

LOCATION:—South of Julesburg and approximately two miles from the Nebraska-Colorado line. The river is divided into four channels, numbered one, two, three and four, beginning with the south channel. Channels one and two are the principal channels. Channels three and four carry no water of consequence except during the flood periods. During floods the four channels become one channel.

RECORDS AVAILABLE:—April 1902 to November 14, 1906; May 12, 1908 to September 30, 1914; January 1st, 1923 to September 30, 1930.

GAGES:—All channels are provided with chain gages on the down stream side of the bridge. Channels one and two are provided with staff gages. Channel No. One has a vertical staff and Channel No. Two a sloping staff. Nebraska maintains a Stevens Continuous Automatic

South Platte River at Julesburg, Colorado—Continued

water level recorder in Channel No. One and Colorado maintains a Bristol Automatic Recorder in Channel No. Two.

OBSERVER:—Archie Joe Luxa, Julesburg, Colorado.

ELEVATION:—

BENCH MARKS:—

South Platte River at North Platte, Nebraska

LOCATION:—Concrete bridge consisting of ten spans, fifty feet each, in Section 9, Township 13 N. Range 30 W. about four miles above its junction with the North Platte River.

RECORDS AVAILABLE:—From June 1st, 1914 to September 30th, 1930.

GAGE:—A six foot vertical staff nailed to a fourteen inch wooden pile farthest up stream on south bank jetty.

OBSERVER:—A. W. Shilling, Jr., North Platte, Nebraska.

ELEVATION:—Approximately 2800 feet above mean sea level.

HIGHEST GAGE READING FOR SEASON:—4.30 March 5, 1929, and 3.55 March 4, 1930.

LOWEST GAGE READING FOR SEASON:—0.60 August 4, 1929 and 0.50 August 16, 1930.

BENCH MARKS:—Elevation of hand rail northeast corner of bridge 109.58, elevation of zero of rod 93.48. Elevation of spike in fifth telephone pole on north side of river 98.80.

Platte River at Overton, Nebraska

LOCATION:—Concrete highway bridge consisting of twenty-five spans 33.5 feet center to center, four miles south of Overton.

RECORDS AVAILABLE:—June, 1918, to September 30, 1930, with the exception of the year 1924.

GAGE:—Gage rod is fastened to a 4" x 6" x 4' staff wired to first pier of bridge from north end, on east side. Elevation of zero is 90.00 feet. Top of the post to which gage is attached is 91.95, top of concrete wheel guard on west side of Bridge at north end is 100.00. Gage rod was lowered two feet on September 12, 1928, to avoid negative readings. After that date readings are based on the zero elevation of 88.00 feet.

RECORDER:—On August 22, 1929, a Stevens continuous gage height recorder was installed in a housing placed over a wooden

Platte River at Overton—Continued

stilling well located about fifty feet east of the concrete highway bridge on south bank of river.

OBSERVER:—Nils Brunzell, Overton, Nebraska.

ELEVATION:—Approximately 2320 feet above mean sea level.

HIGHEST GAGE READING FOR SEASON:—5.70 June 7, 1929 and 4.50 May 19, 1930.

LOWEST GAGE READING FOR SEASON:—0.85 September 3, 1929 and 1.20 July 31, 1930.

DISTANCE FROM PATHFINDER:—490 miles.

Platte River at Duncan, Nebraska

LOCATION:—About one and a half miles due south of Duncan on highway, in Section 12, Township 16, Range 2 W, on concrete bridge consisting of 18 spans. Fifty feet between piers.

RECORDS AVAILABLE:—From March, 1929 to September 30, 1930.

GAGE:—10.10 feet regular U. S. G. S. porcelain gage rod fastened to a 4 x 4 inch timber bolted to first concrete piling south of north abutment on down stream side.

OBSERVER:—Miss Loretta Stachura, Duncan, Nebraska.

HIGHEST GAGE READING FOR SEASON:—4.90 June 9, 1929 and 4.40 June 6, 1930.

LOWEST GAGE READING FOR SEASON:—0.31 September 3, 1929 and 0.28 August 5, 1930.

Platte River at Ashland, Nebraska

LOCATION:—In Section 29, Township 13 N, Range 10 E, of Sixth P. M. on highway bridge three miles northeast of Ashland. Bridge is a steel six-span bridge.

RECORDS AVAILABLE:—The station was started by the U. S. G. S. on August 20th, 1928. Records are available from that date.

GAGE:—A box chain gage is bolted to a 4" x 6" timber ten feet in length. It is fastened to the down stream edge of bridge floor in the second span from the right bank of river. An enamel scale subdivided from zero to eight and one-half feet is fastened to the top of the 4" x 6" timber. An automatic recorder installed by State University was used during the 1930 season.

Platte River at Ashland—Continued

OBSERVER:—R. W. Reim, United States Rifle Range, Ashland, Nebraska.

BENCH MARKS:—B. M. No. 1 is two spikes driven in a 24-inch cottonwood tree located on right bank of stream; it is the one nearest the bridge on down stream side.

ELEVATION:—8.27 feet above zero of gage.

**ACTUAL DISCHARGE MEASUREMENTS AT REGULAR GAGING
STATIONS ON THE NORTH PLATTE, SOUTH PLATTE AND
PLATTE RIVERS, 1929-1930.**

**DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
TORRINGTON, WYOMING**

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-10-28	C. E. Franklin	305	2.80	1.62	853
11- 8-28	C. E. Franklin	265	3.15	1.65	839
11-27-28	C. E. Franklin	229	3.00	1.55	688
12- 6-28	C. E. Franklin	205	2.98	1.52	609
1-11-29	C. E. Franklin	223	3.15	1.50	697
1-30-29	C. E. Franklin	282	2.26	1.57	638
2-15-29	A. W. Hall	240	3.10	1.40	745
3- 2-29	C. E. Franklin	196	2.88	1.32	566
3-19-29	C. E. Franklin	762	3.15	2.49	2386
4-18-29	A. W. Hall	820	2.66	2.26	2181
5- 8-29	A. W. Hall	922	3.19	2.05	2943
5-20-29	A. W. Hall	1548	4.02	3.17	6217
6- 2-29	A. W. Hall	2618	5.50	6.19	14166
6-13-29	A. W. Hall	2115	5.10	5.25	10760
7- 3-29	A. W. Hall	1515	3.90	3.15	5905
7-12-29	A. W. Hall	1044	2.97	1.95	3073
7-24-29	A. W. Hall	1346	1.76	1.60	2371
8-16-29	A. W. Hall	972	2.39	1.59	2327
8-30-29	A. W. Hall	936	2.72	1.63	2551
9-14-29	A. W. Hall	1008	2.41	1.46	2434

**DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
INTERSTATE STATION**

Wyoming-Nebraska Line (Nebraska Measurements)

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
5-21-29	A. W. Hall	1567	2.98	3.48	4678
6-13-29	A. W. Hall	2569	4.19	4.77	10717
7- 3-29	A. W. Hall	1734	3.38	3.28	5862
7-12-29	A. W. Hall	1037	2.75	2.32	2855
7-24-29	A. W. Hall	770	3.98	2.00	2070
8-10-29	A. W. Hall	808	2.65	2.10	2138

**DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
INTERSTATE STATION**

Wyoming-Nebraska Line (Wyoming Measurements)

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
5-14-29	U. S. G. S.	.....	.....	3.20	3890
5-18-29	U. S. G. S.	.....	.....	3.72	5600
6- 4-29	J. A. Keimig	.....	.....	5.52	13290
6-17-29	U. S. G. S.	.....	.....	4.92	12300
6-21-29	F. M. Roush	.....	.....	4.26	7917
7- 1-29	Eisenhuth-Roush	1820	3.06	3.25	5570
7-10-29	P. V. Hodges	1390	3.69	3.12	5130
7-23-29	F. M. Roush	771	2.49	1.93	1918
7-25-29	F. F. LeFever	969	2.61	2.24	2530
8-13-29	H. P. Eisenhuth	978	2.53	2.40	2480
8-28-29	R. E. Cabell	920	2.50	2.30	2300
9-10-29	F. M. Roush	1135	2.40	2.59	2724

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
MITCHELL, NEBRASKA

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-18-28	C. E. Franklin	253	1.95	0.87	493
11- 8-28	C. E. Franklin	647	2.13	1.34	1378
11-27-28	C. E. Franklin	523	1.92	1.25	1105
12- 7-28	C. E. Franklin	582	2.18	1.32	1266
1- 8-29	C. E. Franklin	510	1.96	1.22	997
1-30-29	C. E. Franklin	382	1.77	1.66	677
2-14-29	C. E. Franklin	461	2.08	1.60	976
3- 3-29	C. E. Franklin	488	2.27	1.52	1110
3-17-29	C. E. Franklin	1081	2.50	1.95	2713
4-18-29	A. W. Hall	1006	2.14	1.77	2160
5- 7-29	A. W. Hall	1106	2.26	2.03	2498
5-21-29	A. W. Hall	1814	3.01	2.95	5460
6- 3-29	A. W. Hall	4097	4.04	5.25	16493
6-12-29	A. W. Hall	2902	3.76	4.15	10939
7- 2-29	A. W. Hall	1465	3.28	2.50	4816
7-12-29	A. W. Hall	796	2.13	1.70	1696
7-19-29	A. W. Hall	840	2.42	1.66	2030
7-24-29	A. W. Hall	365	2.19	1.08	800
8- 6-29	A. W. Hall	496	2.39	1.11	1186
8-11-29	A. W. Hall	385	2.20	0.83	850
8-23-29	A. W. Hall	385	2.21	0.96	852
9-13-29	A. W. Hall	1009	2.47	1.75	2498

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
MINATARE, NEBRASKA

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-12-28	C. E. Franklin	557	1.86	0.95	1037
11- 7-28	C. E. Franklin	839	2.22	1.33	1861
11-26-28	C. E. Franklin	843	2.02	1.20	1704
12-12-28	C. E. Franklin	856	1.75	1.26	1498
1-11-29	C. E. Franklin	770	1.82	1.68	1398
1-24-29	C. E. Franklin	430	1.26	1.80	542
2- 2-29	C. E. Franklin	619	1.68	2.20	1035
2-15-29	A. W. Hall	.....	.....	2.30	.....
2-21-29	C. E. Franklin	528	2.12	2.46	1118
3-16-29	C. E. Franklin	938	2.29	1.50	2156
4-19-29	C. E. Franklin	1096	2.42	1.70	2666
5- 6-29	A. W. Hall	1233	2.31	1.85	2844
5-23-29	A. W. Hall	1791	3.04	2.10	4164
6- 1-29	A. W. Hall	3003	4.06	3.70	12300
6- 4-29	A. W. Hall	3623	4.45	4.35	16109
6-11-29	A. W. Hall	2903	3.75	3.35	10970
7- 2-29	A. W. Hall	1510	2.98	1.90	4505
7-11-29	A. W. Hall	1164	2.23	1.40	2600
7-24-29	C. E. Franklin	664.5	1.72	0.70	1149
8-11-29	A. W. Hall	660.8	1.97	0.90	1309
9- 5-29	A. W. Hall	800	2.22	1.20	1777
9-13-29	A. W. Hall	1320	2.73	1.80	3600

DEPARTMENT OF PUBLIC WORKS

317

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
BRIDGEPORT, NEBRASKA

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-12-28	C. E. Franklin	720	2.24	5.60	1605
11- 7-28	A. E. Johnston	972	2.18	5.95	2110
12-14-28	C. E. Franklin	1026	1.91	7.15	1955
1-12-29	C. E. Franklin	1312	1.68	6.72	2203
1-25-29	C. E. Franklin	578	1.60	6.77	925
2- 3-29	C. E. Franklin	1035	1.35	6.90	1399
2-23-29	C. E. Franklin	879	2.02	6.86	1774
3-14-29	C. E. Franklin	501	1.76	5.35	884
3-20-29	A. W. Hall	1414	2.50	6.35	3540
4-16-29	A. W. Hall	1121	2.16	6.20	2423
5- 3-29	A. W. Hall	1405	2.10	6.29	2995
5-16-29	A. W. Hall	1760	2.46	6.70	4335
5-31-29	A. W. Hall	2984	3.21	7.66	9610
6- 3-29	C. E. Franklin	5133	3.94	8.86	20217
6-18-29	A. W. Hall	3524	3.45	7.62	12127
6-28-29	A. W. Hall	1833	2.56	6.30	4726
7- 8-29	A. W. Hall	1776	2.48	6.10	4420
7-15-29	A. W. Hall	1347	2.06	5.74	2786
7-23-29	A. W. Hall	951	2.18	5.56	2074
7-24-29	C. E. Franklin	719	1.93	5.45	1388
8-13-29	A. W. Hall	901	1.54	5.45	1390
8-22-29	C. E. Franklin	992	1.62	5.51	1611
9-12-29	A. W. Hall	1783	2.60	6.48	4568

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
OSHKOSH, NEBRASKA

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-19-28	A. E. Johnston	1124	2.44	1.90	2749
11- 5-28	A. E. Johnston	1273	2.66	2.15	3396
11-27-28	A. E. Johnston	939	2.41	1.90	2260
12- 4-28	A. E. Johnston	672	2.31	2.60	1551
12-19-28	A. E. Johnston	.....	.....	3.10	Frozen
1-19-29	A. E. Johnston	.....	.....	2.60	Frozen
2-11-29	A. W. Hall	886	1.54	2.80	1370
2-14-29	A. E. Johnston	1293	2.20	3.00	2426
3- 8-29	A. E. Johnston	1667	2.18	3.35	3620
3-29-29	A. E. Johnston	1170	2.71	2.05	3169
4- 2-29	A. E. Johnston	1167	2.51	2.00	2945
4-26-29	A. E. Johnston	1690	2.77	2.35	4692
5-23-29	A. E. Johnston	1948	3.24	2.60	6312
6- 4-29	C. E. Franklin	3551	5.07	4.15	17977
6-15-29	A. E. Johnston	2975	3.92	3.30	11637
6-25-29	A. E. Johnston	2172	3.67	2.75	7988
7- 9-29	A. W. Hall	1311	2.80	1.85	3675
7-20-29	A. E. Johnston	1089	2.08	1.50	2271
7-23-29	A. E. Johnston	.....	.....	1.55	.....
7-26-29	A. W. Hall	619	1.99	1.28	1235
8- 2-29	A. W. Hall	1007	2.20	1.55	2223
8-14-29	C. E. Franklin	611	2.05	1.25	1256
8-28-29	A. W. Hall	734	2.22	1.52	1631
9- 7-29	A. E. Johnston	1246	2.65	2.05	3301
9-20-29	A. W. Hall	1343	2.60	2.20	3503

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
NORTH PLATTE, NEBRASKA

September 30, 1928 to September 30, 1929					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-16-28	A. E. Johnston	1022	2.34	3.40	2389
11- 2-28	A. E. Johnston	959	2.26	3.40	2160
11-10-28	A. E. Johnston	1318	2.43	3.65	3211
11-23-28	A. E. Johnston	1153	2.48	3.55	2868
12- 5-28	A. E. Johnston	798	2.45	3.50	1955
12-17-28	A. E. Johnston	1129	2.55	3.90	2881
1- 7-29	A. E. Johnston	806	1.81	4.75	1458
1-17-29	A. E. Johnston	773	3.00	4.20	2313
2-11-29	A. E. Johnston	865	2.76	4.40	2522
3- 6-29	A. E. Johnston	1385	2.40	4.75	3324
3-27-29	A. E. Johnston	1592	2.75	3.90	4385
4- 4-29	A. E. Johnston	1357	2.70	3.55	3662
4-23-29	A. E. Johnston	1658	3.15	4.00	5227
5-20-29	A. E. Johnston	1656	2.96	3.90	4899
6- 5-29	C. E. Franklin	4209	4.95	6.00	20875
6-12-29	A. E. Johnston	3059	3.52	4.60	10844
6-28-29	A. E. Johnston	2172	3.36	3.90	7279
7-17-29	A. E. Johnston	1022	2.39	3.00	2449
7-24-29	A. E. Johnston	1127	2.39	3.20	2700
7-30-29	A. E. Johnston	549	2.27	2.55	1247
8- 1-29	A. E. Johnston	818	2.16	2.90	1772
8- 6-29	A. E. Johnston	816	1.85	2.70	1511
8- 7-29	A. E. Johnston	.....	.....	2.75	.....
8-11-29	A. E. Johnston	.....	.....	.....	0
8-12-29	A. E. Johnston	791	1.59	2.70	1261
8-13-29	A. E. Johnston	.....	.....	2.52	.....
8-14-29	A. E. Johnston	459	2.14	2.58	986
8-19-29	A. E. Johnston	689	2.09	2.90	1440
8-23-29	A. E. Johnston	818	1.85	3.00	1521
8-29-29	A. E. Johnston	685	1.90	2.80	1298
9- 4-29	A. E. Johnston	104	2.50	3.35	2603

DEPARTMENT OF PUBLIC WORKS

319

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
NORTH PLATTE, NEBRASKA

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-17-28	A. E. Johnston	.....	.....	1.20	5 Est.
11- 2-28	A. E. Johnston	299	1.45	2.25	434
11-10-28	A. E. Johnston	287	1.89	2.35	542
11-23-28	A. E. Johnston	243	1.76	2.30	428
12-17-28	A. E. Johnston	291	2.11	2.65	614
1- 7-29	A. E. Johnston	111	2.35	2.60	261
1-17-29	A. E. Johnston	99	2.46	2.80	244
2-11-29	A. E. Johnston	.....	.....	4.10	Frozen
2-19-29	A. E. Johnston	229	2.22	3.80	511
3- 6-29	A. E. Johnston	.....	.....	4.30	Frozen
3-26-29	A. E. Johnston	490	2.32	2.50	1141
4- 4-29	A. E. Johnston	434	2.12	2.60	926
4-24-29	A. E. Johnston	480	2.16	2.70	1036
5-20-29	A. E. Johnston	253	1.85	2.30	468
6- 5-29	C. E. Franklin	74	1.01	1.75	75
6-12-29	A. E. Johnston	.....	.....	1.40	25 Est.
7-17-29	A. E. Johnston	.....	.....	1.25	2 Est.
7-25-29	A. E. Johnston	.....	.....	0.90	0
7-30-29	A. E. Johnston	.....	.....	.....	0
8- 6-29	A. E. Johnston	.....	.....	.....	2.0 Est.
8-13-29	A. E. Johnston	.....	.....	.....	10.0
8-23-29	A. E. Johnston	.....	.....	1.45	20
8-27-29	A. E. Johnston	.....	.....	1.50	30 Est.
8-28-29	A. E. Johnston	.....	.....	1.50	30 Est.
9- 4-29	A. E. Johnston	.....	.....	1.55	40 Est.

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
JULESBURG, COLORADO—Channel No. 1

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-17-28	C. E. Franklin	76	2.30	1.88	174
11- 2-28	C. E. Franklin	47	1.95	1.88	91
11-20-28	C. E. Franklin	70	2.21	1.85	156
12-18-28	C. E. Franklin	77	1.81	1.85	138
1-16-29	C. E. Franklin	159	1.17	3.12	185
2-16-29	C. E. Franklin	96	2.05	3.78	197
3-11-29	C. E. Franklin	149	2.48	2.35	370
3-21-29	C. E. Franklin	115	2.31	2.18	266
5- 3-29	C. E. Franklin	240	2.60	2.90	626
5-17-29	C. E. Franklin	78	2.06	1.80	160
5-29-29	C. E. Franklin	18	1.51	1.15	27
6-14-29	C. E. Franklin	7	1.31	0.98	10
6-27-29	C. E. Franklin	5	1.62	0.90	8
7- 1-29	C. E. Franklin	6	1.15	.....	7
7-11-29	C. E. Franklin	5	1.18	0.95	6
7-15-29	C. E. Franklin	7	1.43	1.05	11
8-10-29	C. E. Franklin	3	.93	0.95	3
8-21-29	C. E. Franklin	3	.90	0.85	3
8-31-29	C. E. Franklin	3	1.17	0.83	4
9-17-29	C. E. Franklin	82	2.27	1.98	185

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
JULESBURG, COLORADO—Channel No. 2

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-17-28	C. E. Franklin	158	2.28	2.30	362
11- 2-28	C. E. Franklin	90	2.08	1.88	188
11-20-28	C. E. Franklin	111	2.22	2.10	246
12-18-28	C. E. Franklin	106	1.93	1.95	205
1-16-29	C. E. Franklin	180	1.85	2.42	332
2-16-29	C. E. Franklin	259	2.19	4.15	568
3-11-29	C. E. Franklin	266	2.38	2.90	634
3-21-29	C. E. Franklin	260	2.04	2.90	534
5- 3-29	C. E. Franklin	431	2.54	3.49	1095
5-17-29	C. E. Franklin	109	2.20	2.22	240
5-29-29	C. E. Franklin	25	1.48	1.30	38
6-14-29	C. E. Franklin	12	1.12	1.14	13
6-27-29	C. E. Franklin	10	1.23	1.11	13
7- 1-29	C. E. Franklin	9	1.26	1.10	12
7-11-29	C. E. Franklin	7	1.65	1.11	12
7-15-29	C. E. Franklin	8	1.65	1.13	13
8-10-29	C. E. Franklin	10	1.54	1.08	15
8-20-29	C. E. Franklin	13	1.63	1.07	21
8-31-29	C. E. Franklin	12	1.68	1.06	20
9-17-29	C. E. Franklin	145	2.27	2.22	329

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
JULESBURG, COLORADO—Channel No. 3

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-17-28	C. E. Franklin	7	1.27	2.55	9.3
11- 2-28	C. E. Franklin	.....	.....	2.25	0.3 Est.
11-20-28	C. E. Franklin	.....	.....	2.33	0.7 Est.
12-18-28	C. E. Franklin	.....	.....	2.00	0.5 Est.
1-16-29	C. E. Franklin	11	1.36	2.60	14
2-16-29	C. E. Franklin	41	2.10	4.45	87
3-11-29	C. E. Franklin	35	2.06	.....	72
3-21-29	C. E. Franklin	24	2.07	3.00	50
5- 3-29	C. E. Franklin	62	2.78	3.50	171
5-17-29	C. E. Franklin	14	1.20	2.70	17
5-29-29	C. E. Franklin	9	1.77	2.70	16
6-14-29	C. E. Franklin	7	1.10	2.50	8
6-27-29	C. E. Franklin	5	1.00	2.50	5
7- 1-29	C. E. Franklin	4	1.08	2.50	4
7-11-29	C. E. Franklin	4	0.92	2.60	4
7-15-29	C. E. Franklin	7	1.04	2.65	7
8-10-29	C. E. Franklin	.....	.....	1.90	.....
8-21-29	C. E. Franklin	.....	.....	2.00	0
8-31-29	C. E. Franklin	.....	.....	2.00	0
9-17-29	C. E. Franklin	20	1.14	3.10	23

DEPARTMENT OF PUBLIC WORKS

321

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
JULESBURG, COLORADO—Channel No. 4

September 30, 1928 to September 30, 1929					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-17-28	C. E. Franklin	4	1.00	3.15	3.8
11- 2-28	C. E. Franklin	.....	.....	2.80	0.5 Est.
11-20-28	C. E. Franklin	.....	.....	2.90	0.5 Est.
12-18-28	C. E. Franklin	.....	.....	2.80	0.5 Est.
1-16-29	C. E. Franklin	.....	.....	3.10	3.0 Est.
2-16-29	C. E. Franklin	21	1.57	3.60	33.0
3-11-29	C. E. Franklin	10	0.96	3.70	10.0
3-21-29	C. E. Franklin	9	1.55	3.50	14.0
5- 3-29	C. E. Franklin	46	1.23	3.90	56.0
5-17-29	C. E. Franklin	.....	.....	2.30	3.0 Est.
5-29-29	C. E. Franklin	.....	.....	3.10	2.0 Est.
6-14-29	C. E. Franklin	.....	.....	2.90	0.3 Est.
6-27-29	C. E. Franklin	.....	.....	3.00	0.3 Est.
7- 1-29	C. E. Franklin	.....	.....	3.00	0.3 Est.
7-11-29	C. E. Franklin	.....	.....	3.00	0.3 Est.
7-15-29	C. E. Franklin	.....	.....	2.90	0.2 Est.
8-10-29	C. E. Franklin	.....	.....	2.90	0.1 Est.
8-21-29	C. E. Franklin	.....	.....	2.90	0.3 Est.
8-31-29	C. E. Franklin	.....	.....	2.90	0.3 Est.
9-17-29	C. E. Franklin	.....	.....	3.20	1.0 Est.

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
OGALLALA, NEBRASKA

September 30, 1928 to September 30, 1929					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-18-28	A. E. Johnston	176	1.36	2.30	240
11- 3-28	A. E. Johnston	228	1.95	2.25	444
11-26-28	A. E. Johnston	234	2.14	2.80	502
1- 4-29	A. E. Johnston	.....	.....	4.30	Ice
2-12-29	A. E. Johnston	.....	.....	4.50	Ice
3- 7-29	A. E. Johnston	.....	.....	5.00	Ice
3-28-29	A. E. Johnston	428	2.62	3.20	1124
4- 3-29	A. E. Johnston	462	2.33	3.20	1076
4-25-29	A. E. Johnston	499	2.64	3.30	1320
5-22-29	A. E. Johnston	178	1.81	2.60	321
6-14-29	A. E. Johnston	37	1.68	0.75	63
6-26-29	A. E. Johnston	21	1.34	1.50	29
7-19-29	A. E. Johnston	4	0.97	1.45	4
7-23-29	A. E. Johnston	21	4.20	2.05	87
9- 5-29	A. E. Johnston	12	1.07	1.55	13

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
OVERTON, NEBRASKA

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-15-28	A. E. Johnston	1116	2.20	3.15	2480
11-13-28	A. E. Johnston	1567	2.57	3.65	4022
11-22-28	A. E. Johnston	1411	2.54	3.55	3587
12-15-28	A. E. Johnston	1337	2.40	3.80	3218
1- 8-29	A. E. Johnston	.....	.....	4.60	Ice
1-16-29	A. E. Johnston	.....	.....	4.45	Ice
2- 7-29	A. E. Johnston	.....	.....	4.65	Ice
2-21-29	A. E. Johnston	1490	2.38	5.00	3562
3- 4-29	A. E. Johnston	2002	2.45	5.35	4938
3-25-29	A. E. Johnston	2037	2.86	3.80	5820
4- 8-29	A. E. Johnston	1623	2.32	3.55	3775
4-22-29	A. E. Johnston	1562	2.86	3.65	4479
5-17-29	A. E. Johnston	2075	2.85	3.90	6069
6- 6-29	C. E. Franklin	4792	3.70	5.50	17764
6-10-29	A. E. Johnston	3691	3.64	4.60	13442
6-29-29	A. E. Johnston	2296	2.84	3.70	6510
7-15-29	A. E. Johnston	1108	2.13	3.05	2361
7-25-29	A. E. Johnston	216	1.52	2.20	330
7-29-29	A. E. Johnston	152	1.72	2.10	262
8- 3-29	A. E. Johnston	.....	.....	.....	10 Est.
8- 4-29	A. E. Johnston	3	1.03	1.25	3
8- 9-29	A. E. Johnston	.....	.....	1.18	2
8-22-29	A. E. Johnston	.....	.....	.....	0
9- 2-29	A. E. Johnston	.....	.....	.....	0
9-30-29	A. E. Johnston	1480	2.20	3.35	3252

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT COZAD, NEBRASKA

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7-29-29	A. E. Johnston	.....	.....	.....	75
7-30-29	A. E. Johnston	51	2.33	.....	118
8- 2-29	A. E. Johnston	148	1.17	.....	174
8- 4-29	A. E. Johnston	74	1.33	.....	99
8-10-29	A. E. Johnston	.....	.....	.....	25
8-12-29	A. E. Johnston	.....	.....	.....	20
8-17-29	A. E. Johnston	.....	.....	.....	14
8-24-29	A. E. Johnston	.....	.....	.....	220
8-26-29	A. E. Johnston	.....	.....	.....	55

DISCHARGE MEASUREMENTS OF PLATTE RIVER SOUTH OF
ELM CREEK, NEBRASKA

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7-30-29	A. E. Johnston	12	0.91	.....	11

DEPARTMENT OF PUBLIC WORKS

323

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
GOTHENBURG, NEBRASKA

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
8-14-29	A. E. Johnston	118	1.57	.....	185.
8-20-29	A. E. Johnston	466	2.21	.....	1032
8-23-29	A. E. Johnston	353	2.36	.....	835
8-27-29	A. E. Johnston	427	2.16	.....	926

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT DUNCAN, NEBRASKA

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
11-14-28	A. E. Johnston	1666	2.45	3.00	4093
12-12-28	A. E. Johnston	.....	.....	3.40	Frozen
12-14-28	A. E. Johnston	.....	.....	3.20	.....
1-11-29	A. E. Johnston	.....	.....	3.40	Ice
2- 1-29	A. E. Johnston	.....	.....	3.05	Ice
2-23-29	A. E. Johnston	1307	2.15	4.55	2810
3-20-29	A. E. Johnston	1972	2.82	2.75	5140
4-13-29	A. E. Johnston	1459	2.64	2.90	3844
5- 9-29	A. E. Johnston	2327	2.88	2.35	6710
6- 5-29	A. E. Johnston	1932	2.56	2.95	4943
6- 7-29	C. E. Franklin	3592	3.96	4.40	13854
6- 9-29	C. E. Franklin	4586	4.20	4.95	19310
7- 6-29	A. E. Johnston	1579	2.38	2.65	3750
7-26-29	A. E. Johnston	374	1.24	1.30	467
9-20-29	A. E. Johnston	1309	2.30	2.70	3010

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
DUNCAN, NEBRASKA

(U. S. G. S. Measurements)

September 30, 1928 to September 30, 1929

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-26-28	F. F. LeFever	1060	.....	2.54	2300
11- 9-28	F. F. LeFever	1840	.....	3.10	3970
11-25-28	F. F. LeFever	1470	.....	2.83	3040
3-13-29	P. V. Hodges	4650	.....	4.40	18300
3-25-29	F. F. LeFever	1800	.....	2.90	4760
4-17-29	Eisenhuth & Follansbee	1750	.....	3.15	4440
4-29-29	H. P. Eisenhuth	2790	.....	3.36	7740
5-30-29	F. F. LeFever	1620	.....	2.91	4050
6-15-29	F. F. LeFever	3300	.....	3.73	9800
7- 2-29	F. F. LeFever	1810	.....	2.92	4530
7-13-29	H. P. Eisenhuth	1210	.....	2.45	2420
8- 2-29	H. P. Eisenhuth	86	.....	0.70	70
8-24-29	H. P. Eisenhuth	64	.....	0.38	4
9-17-29	F. B. Campbell	1400	.....	2.82	2940

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT COLUMBUS, NEBRASKA

September 30, 1928 to September 30, 1929					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 8-28	A. E. Johnston	195	1.59	1.20	310
11- 5-28	A. E. Johnston	1748	1.98	3.75	3465
1-15-29	A. E. Johnston	.....	.....	3.00	Ice
2- 1-29	A. E. Johnston	.....	.....	2.50	Ice
2-23-29	A. E. Johnston	.....	.....	4.15	Ice

DISCHARGE MEASUREMENTS OF PLATTE RIVER SOUTH OF
FREMONT, NEBRASKA

September 30, 1928 to September 30, 1929					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 8-28	A. E. Johnston	940	2.52	1.05	2373
11-16-28	A. E. Johnston	2257	2.87	3.50	6458
12-13-28	A. E. Johnston	1607	3.36	3.65	5391
1-14-29	A. E. Johnston	.....	.....	4.55	Ice
3-21-29	A. E. Johnston	2089	2.64	3.50	5513
4-15-29	A. E. Johnston	2145	3.13	3.55	6740
5-10-29	A. E. Johnston	3687	3.02	4.10	11170
6- 6-29	A. E. Johnston	3051	3.22	3.95	9845

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT ASHLAND, NEBRASKA

(U. S. G. S. Measurements)

September 30, 1928 to September 30, 1929					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-27-28	F. F. LeFever	2050	.....	1.59	5000
11-10-28	F. F. LeFever	2840	.....	2.30	7750
11-28-28	F. F. LeFever	3050	.....	2.09	6710
1-28-29	F. F. LeFever	2550	.....	3.00	2980
2-18-29	F. F. LeFever	2040	.....	.....	3500
3-10-20	LeFever & Hodges	2490	.....	5.08	13100
3-12-29	P. V. Hodges	5290	.....	4.42	23100
3-16-29	P. V. Hodges	5400	.....	3.04	19400
3-23-29	F. F. LeFever	3240	.....	1.68	8980
4-15-29	Eisenhuth & Follansbee	3010	.....	1.77	7830
4-28-29	H. P. Eisenhuth	4620	.....	3.03	18300
5-27-29	F. F. LeFever	2830	.....	1.81	7160
6-13-29	F. F. LeFever	4950	.....	3.00	18000
7- 1-29	F. F. LeFever	2870	.....	1.69	9290
7-12-29	H. P. Eisenhuth	2110	.....	0.92	5810
8- 1-29	H. P. Eisenhuth	1590	.....	0.66	3790
8-23-29	H. P. Eisenhuth	1090	.....	1.41	2480
9-14-29	F. B. Campbell	1620	.....	1.94	3750
9-30-29	F. B. Campbell	3070	.....	2.64	6080

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
PLATTSMOUTH, NEBRASKA

September 30, 1928 to September 30, 1929					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7- 9-29	A. E. Johnston	3664	2.50	.....	9171
9-23-29	A. E. Johnston	2297	2.20	.....	5066

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
TORRINGTON, WYOMING

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-10-29	A. W. Hall	626	1.99	0.75	1244
12-18-29	A. E. Johnston	509	2.20	0.70	1123
2-18-30	A. E. Johnston	487	1.83	0.50	892
3-10-30	A. W. Hall	299	2.56	0.54	766
3-27-30	A. W. Hall	480	2.07	0.60	996
4-10-30	A. W. Hall	600	2.52	0.95	1513
5-21-30	A. W. Hall	555	2.26	0.85	1252
6-12-30	A. W. Hall	597	2.27	0.98	1353
6-27-30	A. W. Hall	813	2.93	1.47	2386
7-26-30	A. W. Hall	787	2.65	1.35	2087
9- 9-30	A. W. Hall	790	2.04	1.23	1614
9-30-30	C. E. Franklin	620	1.82	0.90	1128

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
INTERSTATE STATION

Wyoming-Nebraska Line (Nebraska Measurements)

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-10-29	A. W. Hall	756	2.20	1.84	1662
11- 4-29	A. E. Johnston	566	2.22	1.00	1254
12- 7-29	C. E. Franklin	402	1.99	1.42	802
12-18-29	A. E. Johnston	490	2.25	1.58	1010
1-13-30	A. E. Johnston	649	1.51	2.10	984
2-17-30	A. E. Johnston	441	2.19	1.48	965
3-27-30	A. W. Hall	476	2.15	1.40	1026
4-10-30	A. W. Hall	496	2.11	1.52	1048
6- 7-30	A. W. Hall	644	2.01	1.83	1292
6-12-30	A. W. Hall	643	1.99	1.86	1280

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
INTERSTATE STATION

Wyoming-Nebraska Line (Wyoming Measurements)

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 4-29	H. P. Eisenhuth	763	.....	2.01	1510
10-11-29	F. M. Roush	.....	.....	1.74	1190
11- 3-29	P. V. Hodges	434	.....	1.54	1010
3- 1-30	U. S. G. S.	542	.....	1.73	1180
4- 3-30	U. S. G. S.	399	1.00	1.35	702
4-26-30	U. S. G. S.	554	.....	1.63	1060
4-30-30	F. M. Roush	440	2.00	1.57	880
5- 8-30	U. S. G. S.	523	.....	1.44	1030
5-13-30	F. M. Roush	560	1.98	1.68	1110
5-19-30	F. M. Roush	668	1.88	1.80	1260
5-26-30	F. M. Roush	510	1.88	1.58	960
6- 4-30	F. M. Roush	670	2.12	1.89	1420
6- 6-30	U. S. G. S.	656	.....	1.86	1340
6-16-30	F. M. Roush	723	2.13	2.06	1540
6-26-30	F. M. Roush	872	2.41	2.31	2100
7- 7-30	F. M. Roush	826	2.23	2.31	1840
7-23-30	U. S. G. S.	854	.....	2.32	1880
7-31-30	F. M. Roush	769	2.26	2.24	1735
8-12-30	F. M. Roush	789	2.65	2.37	2090
8-23-30	U. S. G. S.	802	.....	2.20	2000
8-25-30	F. M. Roush	727	2.64	2.06	1810
9- 9-30	F. M. Roush	653	2.78	1.99	1820
9-16-30	L. F. Hanks	697	.....	1.98	1730
9-24-30	F. M. Roush	580	2.39	1.89	1385

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT

MITCHELL, NEBRASKA

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 9-20	A. W. Hall	851	2.40	1.70	2037
11- 7-29	A. E. Johnston	720	.....	1.45	1783
12- 7-29	C. E. Franklin	639	2.24	1.38	1431
12-18-29	A. E. Johnston	660	2.18	1.40	1437
2-15-30	A. E. Johnston	657	1.90	1.40	1246
3-11-30	A. W. Hall	615	2.03	1.25	1249
3-27-30	A. W. Hall	528	2.23	1.25	1178
4-11-30	A. W. Hall	678	2.24	1.47	1519
4-24-30	A. W. Hall	528	2.04	1.20	1078
5-20-30	A. W. Hall	786	2.32	1.48	1829
6-11-30	A. W. Hall	327	1.79	0.86	584
6-28-30	A. W. Hall	342	2.03	0.96	694
7-18-30	A. W. Hall	474	2.00	1.09	948
7-25-30	A. W. Hall	509	2.01	1.05	1026
8-13-30	A. W. Hall	613	2.15	1.35	1317
8-16-30	A. W. Hall	1255	2.35	2.14	2953
9-10-30	A. W. Hall	596	2.21	1.35	1315
9-24-30	A. W. Hall	445	2.02	1.14	917

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT

MINATARE, NEBRASKA

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 8-29	A. W. Hall	1115	2.14	1.45	2390
11- 8-29	A. E. Johnston	1002	.....	1.45	2135
12- 4-29	C. E. Franklin	806	2.20	1.40	1781
12-17-29	A. E. Johnston	799	2.42	1.30	1926
2-19-30	A. E. Johnston	801	2.12	1.40	1701
3-26-30	A. W. Hall	634	2.06	1.25	1305
4- 9-30	A. W. Hall	756	2.07	1.35	1565
4-23-30	A. W. Hall	800	2.07	1.35	1658
5-14-30	A. W. Hall	799	2.12	1.40	1696
6-10-30	A. W. Hall	673	1.96	1.25	1320
6-16-30	A. W. Hall	387	1.58	0.80	611
7- 2-30	A. W. Hall	408	1.55	0.88	633
7-26-30	A. W. Hall	579	2.04	1.20	1180
8-13-30	A. W. Hall	982	2.27	1.59	2232
8-16-30	A. W. Hall	1427	2.88	2.31	4109
9- 5-30	A. W. Hall	815	2.33	1.45	1901

DEPARTMENT OF PUBLIC WORKS

327

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
BRIDGEPORT, NEBRASKA .

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 7-29	A. W. Hall	1407	2.37	6.13	3351
11-12-29	A. E. Johnston	2147	1.10	6.08	2366
12- 7-29	A. W. Hall	979	2.36	6.00	2305
2-13-30	A. E. Johnston	1019	2.10	6.15	2134
3-25-30	A. W. Hall	912	2.07	5.95	1888
4- 8-30	A. W. Hall	801	2.05	5.77	1640
4-14-30	A. E. Johnston	933	2.20	6.05	2054
4-23-30	A. W. Hall	940	2.16	5.88	2030
5-13-30	A. W. Hall	996	2.68	6.07	2676
5-19-30	A. W. Hall	1652	2.25	6.32	3713
5-28-30	A. W. Hall	486	3.40	5.71	1653
6-14-30	A. W. Hall	464	1.87	5.42	869
6-25-30	A. W. Hall	408	1.91	5.31	778
7- 2-30	A. W. Hall	245	1.66	5.28	407
7-17-30	A. W. Hall	518	1.82	5.46	942
8- 1-30	A. W. Hall	525	1.89	5.49	992
8-14-30	A. W. Hall	1181	2.23	6.18	2634
8-17-30	A. W. Hall	2166	2.50	6.72	5402
9- 4-30	A. W. Hall	1137	1.96	6.10	2213
9- 7-30	A. W. Hall	1070	2.25	5.97	2401
9-23-30	A. W. Hall	1083	2.06	5.95	2246

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
OSHKOSH, NEBRASKA

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 4-29	A. E. Johnston	2180	3.27	2.80	7117
10-21-29	A. W. Hall	1169	2.41	1.75	2670
11-13-29	A. E. Johnston	1089	2.75	2.10	2987
11-30-29	A. E. Johnston	1460	2.58	2.65	3758
12-16-29	A. E. Johnston	1234	2.27	2.55	2803
1- 7-30	A. E. Johnston	1189	1.82	2.70	2161
3-13-30	A. E. Johnston	972	2.23	1.80	2170
4-16-30	A. E. Johnston	1304	3.03	2.35	3949
5-10-30	A. E. Johnston	1178	2.65	2.05	3115
5-19-30	A. W. Hall	1383	2.79	2.35	3858
6- 3-30	A. W. Hall	1063	2.33	2.05	2474
6-18-30	A. W. Hall	377	1.79	1.13	672
7- 5-30	A. W. Hall	330	1.30	1.16	429
7-10-30	A. W. Hall	331	1.35	1.15	446
7-15-30	A. W. Hall	534	1.54	1.42	821
7-24-30	A. E. Johnston	793	2.04	1.70	1619
8- 4-30	A. W. Hall	557	1.74	1.49	968
8-19-30	A. W. Hall	1644	2.69	2.55	4427
8-28-30	A. E. Johnston	1182	2.41	2.02	2846
9-24-30	A. E. Johnston	901	2.21	1.81	1988

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
SUTHERLAND, NEBRASKA

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6-30-30	A. E. Johnston	117	1.66	.....	196
7- 5-30	A. E. Johnston	11	1.35	.....	15
7-10-30	A. E. Johnston	.....	.....	.....	2 Est.
7-11-30	A. E. Johnston	.....	.....	.....	1 Est.
7-14-30	A. E. Johnston	35	1.34	.....	47
7-17-30	A. E. Johnston	143	1.38	1.80	197
7-18-30	A. E. Johnston	290	1.69	2.15	491
7-25-30	A. E. Johnston	511	2.07	2.50	1057
8- 5-30	A. E. Johnston	362	1.42	3.00	513
8- 9-30	A. E. Johnston	342	1.56	2.32	532

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER AT
NORTH PLATTE, NEBRASKA

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 2-29	A. E. Johnston	1359	2.66	3.70	3621
11-16-29	A. E. Johnston	1146	2.54	3.50	2910
11-27-29	A. E. Johnston	651	2.91	3.60	1896
12-13-29	A. E. Johnston	1319	2.53	3.75	3338
1- 6-30	A. E. Johnston	1236	2.12	3.90	2629
1-25-30	A. E. Johnston	1383	1.45	4.65	2004
2- 8-30	A. E. Johnston	1625	2.30	4.65	3739
3-10-30	A. E. Johnston	1333	2.74	3.45	3658
4- 7-30	A. E. Johnston	840	2.39	3.25	2008
4-19-30	A. E. Johnston	1357	2.46	3.75	3352
5- 8-30	A. E. Johnston	1016	2.28	3.40	2317
5-23-30	A. E. Johnston	1697	2.74	3.80	4645
6- 3-30	A. W. Hall	1138	2.29	3.39	2620
6- 6-30	A. E. Johnston	1302	2.46	3.62	3216
6-19-30	A. W. Hall	815	2.18	3.16	1780
6-25-30	A. E. Johnston	576	1.88	2.90	1078
6-27-30	A. E. Johnston	441	1.75	2.65	772
6-29-30	A. E. Johnston	297	1.67	2.45	494
7- 1-30	A. E. Johnston	293	1.62	2.40	472
7- 3-30	A. E. Johnston	166	1.55	2.23	257
7- 5-30	A. E. Johnston	170	1.62	2.20	276
7-10-30	A. E. Johnston	133	1.45	2.19	193
7-12-30	A. E. Johnston	102	1.37	2.05	140
7-14-30	A. E. Johnston	130	1.47	2.27	190
7-18-30	A. E. Johnston	312	1.65	2.60	514
7-22-30	A. E. Johnston	415	1.92	2.80	798
7-28-30	A. E. Johnston	442	1.87	2.83	827
8- 1-30	A. E. Johnston	547	1.86	2.96	1013
8- 5-30	A. E. Johnston	360	1.87	2.72	674
8- 9-30	A. E. Johnston	353	1.81	2.77	634
8-11-30	A. E. Johnston	516	1.88	3.02	967
8-13-30	A. E. Johnston	753	1.98	3.20	1496
8-25-30	A. E. Johnston	1607	2.82	4.02	4532
9-20-30	A. E. Johnston	1049	2.33	3.42	2442

DEPARTMENT OF PUBLIC WORKS

329

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
NORTH PLATTE, NEBRASKA

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 1-29	A. E. Johnston	57	1.32	1.75	76
10-29-29	A. E. Johnston	90	1.70	2.00	153
11-15-29	A. E. Johnston	384	1.82	2.50	700
11-27-29	A. E. Johnston	269	1.64	2.35	444
3-10-30	A. E. Johnston	560	2.36	2.60	1320
4- 8-30	A. E. Johnston	63	1.78	.....	113
5- 8-30	A. E. Johnston	72	1.60	1.90	116
5-22-30	A. E. Johnston	521	2.25	2.65	1175
6- 3-30	A. W. Hall	199	1.78	2.26	353
6- 6-30	A. E. Johnston	195	1.71	2.20	333
6-19-30	A. W. Hall	152	1.62	2.21	245
6-25-30	A. E. Johnston	43	1.32	1.80	57
6-29-30	A. E. Johnston	.....	.....	.....	15 Est.
7-29-30	A. E. Johnston	.....	.....	0.80	0
7-31-30	A. E. Johnston	.....	.....	0.70	0
8-25-30	A. E. Johnston	463	1.86	2.50	861
9-20-30	A. E. Johnston	.....	.....	1.34	10 Est.

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
JULESBURG, COLORADO—CHANNEL NO. 1

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
11-15-29	C. E. Franklin	79	2.22	1.83	177
11-27-29	C. E. Franklin	91	2.32	1.95	211
12-15-29	C. E. Franklin	104	2.24	2.00	233
2-21-30	C. E. Franklin	278	3.33	3.30	923
3- 8-30	C. E. Franklin	143	2.84	2.42	406
4-18-30	C. E. Franklin	54	2.14	1.70	116
5- 2-30	C. E. Franklin	22	1.54	1.11	33
5-16-30	C. E. Franklin	83	2.07	1.82	171
5-28-30	C. E. Franklin	49	1.99	1.54	98
6-20-30	C. E. Franklin	11	1.15	1.01	13
7- 3-30	C. E. Franklin	8	1.63	1.02	13
7- 8-30	C. E. Franklin	7	1.18	0.99	9
8- 2-30	C. E. Franklin	5	1.22	0.93	6
8- 9-30	C. E. Franklin	4	0.93	0.89	4
8-16-30	C. E. Franklin	19	1.26	1.14	24
8-17-30	C. E. Franklin	54	2.02	1.68	110
8-21-30	C. E. Franklin	141	2.84	2.65	400
9- 7-30	C. E. Franklin	14	1.31	.....	18
9-21-30	C. E. Franklin	17	1.50	0.95	19

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
JULESBURG, COLORADO—CHANNEL NO. 2

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
11-15-29	C. E. Franklin	194	1.92	2.24	374
11-27-29	C. E. Franklin	232	2.36	2.61	550
12-15-29	C. E. Franklin	209	1.97	2.50	413
2-21-30	C. E. Franklin	577	2.93	3.85	1689
3- 8-30	C. E. Franklin	366	2.99	3.20	1095
3-20-30	C. E. Franklin	122	2.14	1.96	261
4-18-30	C. E. Franklin	122	2.23	1.91	271
5- 2-30	C. E. Franklin	57	1.89	1.33	108
5-16-30	C. E. Franklin	193	1.80	2.10	346
5-28-30	C. E. Franklin	84	2.38	1.60	198
6-20-30	C. E. Franklin	18	1.55	1.02	28
6-25-30	C. E. Franklin	15	1.70	0.98	26
7- 3-30	C. E. Franklin	15	1.59	0.98	23
7- 8-30	C. E. Franklin	12	1.29	0.93	16
8- 2-30	C. E. Franklin	16	1.36	0.93	21
8- 9-30	C. E. Franklin	13	1.34	0.90	17
8-17-30	C. E. Franklin	133	2.07	2.13	275
8-21-30	C. E. Franklin	358	2.53	3.18	904
9-21-30	C. E. Franklin	34	1.90	1.18	65

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
JULESBURG, COLORADO—CHANNEL NO. 3

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
11-15-29	C. E. Franklin	19	1.53	2.90	29
11-27-29	C. E. Franklin	21	1.61	3.20	33
12-15-29	C. E. Franklin	17	1.53	3.00	26
2-21-30	C. E. Franklin	65	3.21	3.90	207
3- 8-30	C. E. Franklin	28	2.26	3.30	63
3-20-30	C. E. Franklin	.....	.....	3.40	2 Est.
4-18-30	C. E. Franklin	.....	.....	2.50	1 Est.
5- 2-30	C. E. Franklin	.....	.....	2.40	0
5-16-30	C. E. Franklin	7	1.20	2.80	8
5-28-30	C. E. Franklin	.....	.....	2.50	0.3 Est.
6-19-30	C. E. Franklin	.....	.....	2.30	0
6-25-30	C. E. Franklin	.....	.....	2.10	0
7- 3-30	C. E. Franklin	.....	.....	.....	0
7- 8-30	C. E. Franklin	.....	.....	.....	0
8- 2-30	C. E. Franklin	.....	.....	.....	0
8- 9-30	C. E. Franklin	.....	.....	.....	0
8-16-30	C. E. Franklin	.....	.....	.....	0
8-21-30	C. E. Franklin	32	1.22	3.60	39
9- 7-30	C. E. Franklin	.....	.....	.....	0
9-21-30	C. E. Franklin	.....	.....	.....	0

DEPARTMENT OF PUBLIC WORKS

331

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
JULESBURG, COLORADO—CHANNEL NO. 4

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
11-15-29	C. E. Franklin	.....	.....	3.10	1 Est.
11-27-29	C. E. Franklin	4	1.11	3.30	4
12-15-29	C. E. Franklin	.....	.....	.....	3 Est.
2-21-30	C. E. Franklin	37	1.49	4.30	55
3- 8-30	C. E. Franklin	20	1.57	3.80	31
3-20-30	C. E. Franklin	.....	.....	3.20	0.8 Est.
4-18-30	C. E. Franklin	.....	.....	3.20	0.8 Est.
5- 2-30	C. E. Franklin	.....	.....	3.20	0.5 Est.
5-16-30	C. E. Franklin	4	0.92	3.40	3
5-28-30	C. E. Franklin	.....	.....	3.10	1 Est.
6-19-30	C. E. Franklin	.....	.....	3.05	1 Est.
6-25-30	C. E. Franklin	.....	.....	3.05	0.5 Est.
7- 3-30	C. E. Franklin	.....	.....	3.05	0.2 Est.
7- 8-30	C. E. Franklin	.....	.....	.....	0
8- 2-30	C. E. Franklin	.....	.....	.....	0
8- 9-30	C. E. Franklin	.....	.....	3.00	0
8-16-30	C. E. Franklin	.....	.....	.....	0
8-21-30	C. E. Franklin	.....	.....	.....	3
9- 7-30	C. E. Franklin	.....	.....	.....	0.5 Est.
9-21-30	C. E. Franklin	.....	.....	.....	0.5 Est.

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER AT
OGALLALA, NEBRASKA

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 3-29	A. E. Johnston	34	1.51	.....	51
11-14-29	A. E. Johnston	243	2.35	.....	573
12-13-29	A. E. Johnston	565	2.00	.....	1131
12-14-29	A. E. Johnston	438	2.48	.....	1087
1- 7-30	A. E. Johnston	279	2.08	.....	582
2-10-30	A. E. Johnston	553	3.39	.....	1875
3-12-30	A. E. Johnston	392	2.87	.....	1127
4-12-30	A. E. Johnston	30	1.67	.....	49
4-17-30	A. E. Johnston	35	1.65	.....	57
5- 9-30	A. E. Johnston	77	2.04	.....	158
6- 4-30	A. E. Johnston	156	1.93	.....	301
7-11-30	A. E. Johnston	10	1.16	.....	12
7-23-30	A. E. Johnston	7	1.12	.....	10
7-26-30	A. E. Johnston	9	0.89	.....	8
8- 1-30	A. E. Johnston	7	1.00	.....	7
8- 4-30	A. E. Johnston	9	1.08	.....	9
8- 6-30	A. E. Johnston	7	0.96	.....	7
8-12-30	A. E. Johnston	8	1.12	.....	8
8-27-30	A. E. Johnston	229	2.14	2.00	491
9-23-30	A. E. Johnston	62	1.80	1.40	112

DISCHARGE MEASUREMENTS OF PLATTE RIVER BELOW
GOTHENBURG CANAL

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7-15-30	A. E. Johnston	9	0.95	.....	9

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
GOTHENBURG—NORTH CHANNEL

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7- 3-30	A. E. Johnston	157	1.96	1.60	306
7- 7-30	A. E. Johnston	25	1.36	0.55	35
7- 8-30	A. E. Johnston	19	1.21	0.45	23
7-15-30	A. E. Johnston	11	0.75	0.35	9
7-16-30	A. E. Johnston	9	0.98	0.34	9
7-19-30	A. E. Johnston	87	1.71	1.10	148
7-21-30	A. E. Johnston	80	1.73	1.10	138
7-29-30	A. E. Johnston	98	1.91	1.33	187
7-31-30	A. E. Johnston	127	2.07	1.52	262

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
GOTHENBURG—SOUTH CHANNEL

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7- 3-30	A. E. Johnston	74	1.21	1.60	90
7- 7-30	A. E. Johnston	3	1.00	.....	3
7- 8-30	A. E. Johnston	.....	.....	.....	4.0 Est.
7-15-30	A. E. Johnston	.....	.....	.....	1.0 Est.
7-16-30	A. E. Johnston	.....	.....	.....	0
7-19-30	A. E. Johnston	.....	.....	.....	0
7-21-30	A. E. Johnston	.....	.....	.....	5.0 Est.
7-29-30	A. E. Johnston	90	1.54	.....	139
7-31-30	A. E. Johnston	117	1.58	1.60	185

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT COZAD, NEBRASKA

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7-17-30	A. E. Johnston	.....	.....	.....	0
7-19-30	A. E. Johnston	.....	.....	.....	0
7-21-30	A. E. Johnston	.....	.....	.....	2.0 Est.

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT OVERTON, NEBRASKA

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-28-29	A. E. Johnston	1256	2.44	3.45	3068
11-18-29	A. E. Johnston	1424	2.57	3.65	3665
11-26-29	A. E. Johnston	.....	.....	4.05	Ice
12-10-29	A. E. Johnston	.....	.....	5.00	Ice
3- 7-30	A. E. Johnston	2754	3.52	4.70	9680
4- 4-30	A. E. Johnston	1305	2.20	3.45	2872
4-21-30	A. E. Johnston	1464	2.42	3.70	3545
5- 5-30	A. E. Johnston	2126	2.47	4.10	5256
5-21-30	A. E. Johnston	2669	3.09	4.30	8254
6- 9-30	A. E. Johnston	1678	2.47	3.48	4148
6-23-30	A. E. Johnston	1014	1.95	3.05	1972
6-26-30	A. E. Johnston	621	1.83	2.80	1135
7- 2-30	A. E. Johnston	187	1.70	2.35	319
7- 8-30	A. E. Johnston	9	1.65	1.70	15
7-15-30	A. E. Johnston	.....	.....	.....	0
7-16-30	A. E. Johnston	.....	.....	.....	0
7-20-30	A. E. Johnston	.....	.....	.....	0
7-30-30	A. E. Johnston	.....	.....	.....	0
8-13-30	A. E. Johnston	.....	.....	1.35	0
8-21-30	A. E. Johnston	1630	2.35	3.70	3836
9-18-30	A. E. Johnston	132	2.12	3.50	2800

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
DUNCAN, NEBRASKA

September 30, 1929 to September 30, 1930					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-19-29	A. E. Johnston	1278	2.36	2.60	3010
11-19-29	A. E. Johnston	1532	2.14	2.85	3263
3- 3-30	A. E. Johnston	1059	2.31	2.50	2441
3-28-30	A. E. Johnston	1290	2.36	2.60	3049
4-24-30	A. E. Johnston	1548	2.28	2.85	3530
6-13-30	A. E. Johnston	1792	2.60	2.80	4676
8-16-30	A. E. Johnston	57	1.15	0.65	65
9-11-30	A. E. Johnston	160	2.39	2.95	3816

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
DUNCAN, NEBRASKA

(U. S. G. S. Measurements)					
September 30, 1929 to September 30, 1930					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 2-29	F. B. Campbell	1070	.....	2.54	2280
12- 4-29	F. F. LeFever	343	.....	1.92	279
2- 8-30	Jenkins & Campbell	1670	.....	4.72	2970
2-25-30	D. S. Jenkins	2820	.....	3.68	8910
3-22-30	F. F. LeFever	1310	.....	2.59	2900
4- 4-30	F. F. LeFever	1090	.....	2.44	2120
4-22-30	F. F. LeFever	2070	.....	3.30	5020
5- 8-30	F. F. LeFever	2690	.....	3.86	8410
5-23-30	F. F. LeFever	2390	.....	3.50	7240
6-10-30	F. F. LeFever	2520	.....	3.44	6960
6-21-30	F. F. LeFever	907	.....	2.11	2250
7- 7-30	H. P. Eisenhuth	91	.....	0.79	122
7-19-30	H. P. Eisenhuth	19	.....	0.40	16
8- 8-30	H. P. Eisenhuth	15	.....	0.40	17
8-28-30	D. S. Jenkins	1130	.....	2.42	2420
9-19-30	R. E. Cabell	928	.....	2.32	1790

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
COLUMBUS, NEBRASKA

September 30, 1929 to September 30, 1930					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
1-15-29	A. E. Johnston	.....	.....	3.00	Ice
2- 1-29	A. E. Johnston	.....	.....	2.50	Ice
2-23-29	A. E. Johnston	.....	.....	4.15	Ice

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
ASHLAND, NEBRASKA

September 30, 1929 to September 30, 1930					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
11-21-29	A. E. Johnston	2509	2.74	2.65	6914
3- 4-30	A. E. Johnston	1506	3.54	2.20	5325
3-31-30	A. E. Johnston	2620	2.36	2.65	6177
4-26-30	A. E. Johnston	3047	3.16	3.30	9620
6-18-30	A. E. Johnston	2939	3.08	2.86	9080
8-19-30	A. E. Johnston	1842	2.37	2.38	4374
9-13-30	A. E. Johnston	2800	2.85	3.05	7990

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
ASHLAND, NEBRASKA

(U. S. G. S. Measurements)

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft..
11-27-29	F. F. LeFever	1730	1.74	1.54	3010'
1-10-30	LeFever & Campbell	3390	0.98	.....	3340'
2-27-30	D. S. Jenkins	3400	3.32	3.37	11300'
3-10-30	D. S. Jenkins	3390	3.13	3.31	10600'
3-26-30	F. F. LeFever	2740	2.67	2.95	7320'
4- 5-30	F. F. LeFever	2680	1.97	2.60	5280'
5- 6-30	F. F. LeFever	4220	3.24	4.19	13700'
5-28-30	F. F. LeFever	3160	2.00	2.94	8880'
6-13-30	F. F. LeFever	3040	2.73	2.78	8310'
6-24-30	F. F. LeFever	2250	2.60	2.32	5860'
7-10-30	H. P. Eisenhuth	1380	1.83	1.21	2540'
7-21-30	H. P. Eisenhuth	1220	.....	0.97	2070'
8- 5-30	D. S. Jenkins	1340	1.49	1.04	2000'
8- 9-30	H. P. Eisenhuth	1320	1.98	1.39	2620'
8-13-30	H. P. Eisenhuth	1440	.....	1.64	2730'
8-27-30	D. S. Jenkins	2480	2.38	2.98	5910'
9-20-30	R. E. Cabell	1810	2.18	2.09	3940'

DISCHARGE MEASUREMENTS OF PLATTE RIVER AT
PLATTSMOUTH, NEBRASKA

September 30, 1929 to September 30, 1930

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-22-29	A. E. Johnston	2418	2.52	.....	6101'

DEPARTMENT OF PUBLIC WORKS

335

PATHFINDER STORAGE RESERVOIR

Daily Contents in Acre Feet

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	415980	390830	427810	450460	467760	489340	542730	825810	1150120	1138250	974940	682110
2	412580	392180	428640	451100	468420	490150	546540	838240	1146470	1137770	965770	671750
3	408980	393530	429480	451750	469090	490960	549720	849910	1144290	1137050	956650	661260
4	405290	394890	430310	452400	469760	491770	555530	858240	1144040	1135120	947620	651800
5	401440	396250	431140	453050	470430	492580	564000	866270	1144290	1131520	938260	642440
6	397720	397620	431970	453590	471100	493400	576540	876090	1145740	1129130	927990	633030
7	394020	398990	432810	454130	471770	494220	589340	883710	1147440	1125780	918020	623860
8	390450	400360	433650	454670	472440	495620	597530	890820	1149140	1122680	908340	617180
9	386990	401730	434490	455220	473120	497020	605230	898180	1151580	1120070	899540	612300
10	383570	403110	435330	455760	473790	498430	611610	907360	1153050	1117230	891400	606470
11	380090	405190	436170	456310	474570	501380	618020	919010	1156470	1114380	882760	605090
12	376620	407280	437010	456850	475360	504480	622860	931810	1157450	1111060	874760	604125
13	373090	409380	437850	457510	476870	506870	626430	943950	1159660	1108460	865900	603160
14	369960	411480	438700	458160	477930	509030	630870	954180	1160150	1106110	856380	601450
15	368030	413580	439550	458820	477720	511080	635480	964930	1159170	1104230	846410	600540
16	368950	415680	440190	459480	478510	512650	640560	978090	1158190	1103070	837330	598490
17	370330	417800	440820	460140	479300	514230	650040	993970	1156960	1101670	828330	596430
18	371250	418400	441460	460800	480090	515820	664830	1011160	1155250	1100970	819370	594520
19	372630	419010	442090	461460	480880	517410	681490	1029290	1153540	1100500	810090	592330
20	374010	419610	442730	462120	481680	519010	703260	1046390	1151530	1093330	800420	590290
21	375590	420520	443370	462450	482480	520850	725130	1063220	1151090	1085150	790310	588250
22	377170	421440	444010	462780	483280	522700	743110	1079490	1146710	1073840	780820	586090
23	378770	422360	444650	463110	484080	524680	755650	1094240	1144290	1062550	771420	583390
24	380270	423380	445290	463440	484880	525920	767690	1104470	1142590	1051310	762110	580960
25	381680	424090	445940	463770	485790	527170	778420	1116040	1141870	1041930	752560	578940
26	383000	427710	446580	464100	486700	528420	787540	1129600	1141390	1032380	742780	572430
27	384140	425330	447220	464540	487620	529670	795350	1138010	1140660	1022700	733420	562690
28	385470	425950	447860	465090	488540	530920	801800	1144770	1140420	1012890	723840	552940
29	386800	426560	448510	465760	.....	532540	808500	1151340	1139700	1003600	713570	543360
30	388140	427190	449160	466420	.....	535420	815610	1152560	1138980	994180	703260	535540
31	389490	.....	449810	467090	.....	538950	.....	1152070	.....	984620	692460	.....

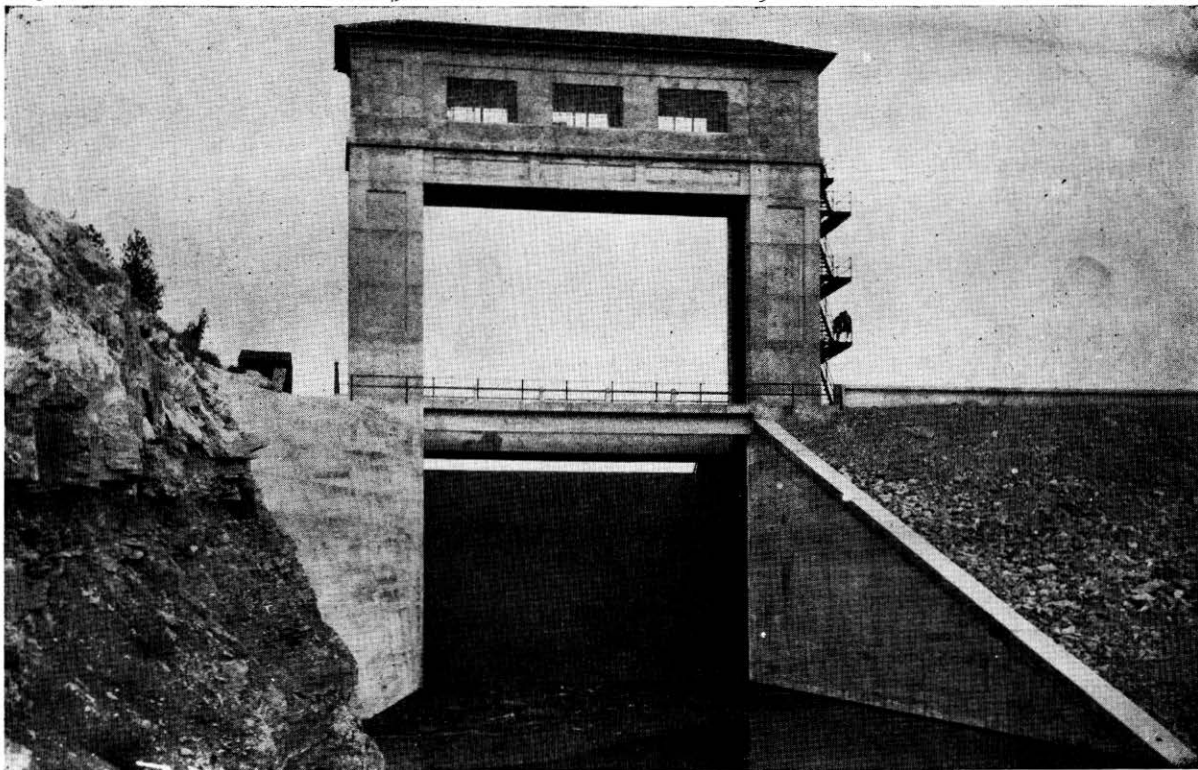
Record furnished by United States Bureau of Reclamation.

DISCHARGE IN SECOND FEET NORTH PLATTE RIVER INTO
PATHFINDER RESERVOIR

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	320	730	390	400	410	500	1980	5220	8730	8210	1380	1030
2	430	730	490	400	410	510	2000	6340	7810	8260	1680	970
3	340	730	500	400	410	510	1680	5960	8030	7980	1640	1020
4	280	740	490	400	410	510	3010	4280	8790	7110	1860	1000
5	240	740	540	400	410	510	4350	4130	8990	5910	1510	1010
6	280	740	540	350	410	510	6400	5030	9780	5850	1050	670
7	310	740	540	350	410	490	6530	3920	10050	4610	1250	910
8	380	740	520	350	410	780	4210	3660	10410	4300	1390	1050
9	450	740	500	350	420	780	3960	3790	11110	4240	1910	1600
10	470	750	500	350	410	790	3350	4700	11030	3850	2240	1170
11	440	1100	500	350	470	1560	3390	5950	12280	3500	1530	1650
12	320	1100	500	350	470	1640	2600	6530	11990	2830	1450	1700
13	290	1110	500	410	470	1280	1960	6380	13230	2610	1450	1730
14	490	1110	500	410	470	1290	2300	5540	12760	2380	1000	1560
15	850	1110	500	410	510	1110	2390	5850	11920	2400	830	1500
16	570	1110	400	410	530	870	2620	6920	11870	2750	1280	1030
17	840	1120	390	410	500	870	4840	8410	11570	2280	1220	1090
18	570	350	400	410	500	880	7520	8980	10970	2380	1220	1240
19	770	360	390	410	500	880	8480	9440	11940	2600	970	1090
20	780	380	400	410	500	880	11050	9060	10560	2180	910	1100
21	870	540	400	240	500	1000	11100	8810	9780	2490	740	1130
22	890	540	400	240	500	1000	9140	8580	8280	2100	1040	1120
23	920	560	400	240	500	1070	6350	9060	8410	2110	980	880
24	850	570	400	240	500	700	6190	9440	8440	2060	1060	950
25	800	430	400	240	560	710	5440	10000	8840	1770	990	1050
26	750	390	400	240	560	710	4670	11810	8840	1610	840	1070
27	680	390	400	300	560	710	4010	11070	8750	1550	1040	1160
28	720	390	400	350	560	710	3330	11780	8760	1530	870	1080
29	720	380	400	410	.....	890	3450	11080	8480	1620	890	1140
30	730	390	400	410	.....	1530	3660	10460	8310	1620	1090	970
31	730	.....	400	410	.....	1860	.....	9820	.....	1490	820	.....
Mean	583	694	448	356	474	905	4398	7484	10024	3430	1240	1155
Max.	920	1120	540	410	560	1860	11050	11810	13230	8260	2240	1730
Min.	240	350	390	240	410	490	1680	3660	7810	1530	740	670
A. F.	35861	41276	27550	21917	26321	55617	281577	460172	596458	210608	76305	68768.

Total 1,902,430 Acre Feet.
Record furnished by United States Bureau of Reclamation.



Spillway Gate in the Guernsey Dam 50'x50' Said to be the largest single gate in the world.

**DISCHARGE IN SECOND FEET NORTH PLATTE RIVER OUT OF
PATHFINDER RESERVOIR**

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	2000	50	75	75	75	100	75	75	9520	8200	6050	6030
2	2000	50	75	75	75	100	75	75	9220	8120	6040	6000
3	1980	50	75	75	75	100	75	75	8840	7990	6010	6070
4	1980	50	75	75	75	100	75	75	8600	7700	6040	6070
5	2070	50	120	75	75	100	75	75	8700	7250	6070	5700
6	2070	50	120	75	75	100	75	75	8830	6780	6050	5550
7	2070	50	120	75	75	75	75	75	9020	6330	6010	5530
8	2070	50	95	75	75	75	75	75	9290	5620	5990	4420
9	2070	50	75	75	75	75	75	75	9570	5340	6010	4010
10	2070	50	75	75	75	75	130	75	9810	4910	6010	4040
11	2070	50	75	75	75	75	160	75	10100	4490	5600	2260
12	2070	50	75	75	75	75	160	75	11550	4040	5500	2020
13	2070	50	75	75	75	75	160	75	11900	3620	5540	2020
14	2070	50	75	75	75	200	60	75	12150	3280	5520	2010
15	2070	50	75	75	170	75	60	75	12150	3000	5480	2010
16	150	50	75	75	130	75	60	75	11970	2820	5540	2010
17	55	50	75	75	100	75	60	75	11750	2640	5550	2020
18	50	50	75	75	100	75	60	75	11500	2500	5550	2020
19	50	50	75	75	100	75	75	75	11380	2420	5540	2020
20	50	80	75	75	100	75	75	75	11160	5540	5520	2020
21	50	80	75	75	100	75	75	75	10550	6100	5500	2020
22	50	80	75	75	100	75	75	170	9960	7510	5480	2020
23	50	80	75	75	100	75	75	1410	9390	7400	5480	2030
24	50	155	75	75	100	75	75	3960	9030	7340	5470	2030
25	50	75	75	75	100	75	75	3860	8860	6100	5550	2030
26	50	75	75	75	100	75	75	5560	8750	6030	5540	4490
27	50	75	75	75	100	75	75	7140	8620	6010	5520	5980
28	50	75	75	75	100	75	75	8250	8520	5960	5490	5960
29	50	75	75	75	.....	75	75	9140	8430	6050	5910	5920
30	50	75	75	75	.....	75	75	9730	8310	6030	6070	5890
31	50	.....	75	75	.....	75	.....	9800	.....	5990	6060	.....
Mean	1020	63	80	75	91	84	82	1950	9916	5400	5700	3740
Max.	2070	155	120	75	130	200	160	9800	12150	8200	6070	6070
Min.	50	50	75	75	75	75	60	75	8310	2420	5470	2010
A. F.	62748	3719	4919	4611	5058	5157	4929	120190	590071	332375	352448	222549

Total 1,708,774 Acre Feet.

Record furnished by United States Bureau of Reclamation.

GUERNSEY STORAGE RESERVOIR

Daily Contents in Acre Feet

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	48470	71405	68750	64470	58378	55050	39580	53920	68566	69210	24340	25570
2	48280	71405	68865	64404	58180	55050	40040	57477	68024	68635	25125	26060
3	48185	71405	68405	64184	58114	55092	39544	60056	64624	68635	26135	26940
4	49240	71405	68185	64096	57960	55250	39050	62490	64360	68520	26865	27850
5	49240	71405	67505	63920	57708	55460	38852	65250	65590	68520	27775	28920
6	49830	71405	66930	63656	57393	56479	38996	68001	66930	67840	28840	31280
7	50420	71405	66820	63370	57225	58996	39320	68796	66930	66436	29925	34940
8	51900	71290	66820	63260	57015	60268	39796	68865	69716	66420	31600	38600
9	53010	71060	66820	63040	56973	61520	39760	69210	70301	62490	32948	40904
10	54125	70669	66820	62886	56847	64392	39410	69210	69670	62490	34100	42040
11	55355	70485	66820	62820	56805	66779	38960	69601	68796	61180	34940	43620
12	56910	70255	66820	62600	56700	67827	38138	69785	68911	59345	34430	44280
13	57960	70255	66930	62600	56600	68070	37272	69394	69601	56500	33335	42970
14	60310	69900	66820	62490	56560	67160	36626	69739	69785	52400	32420	41670
15	62270	69440	66776	62380	56395	64920	35946	70646	69555	47980	31845	40210
16	64250	69325	66820	62270	56395	61914	35280	71060	69785	45980	30800	38780
17	67620	69210	66710	62083	56500	59198	34940	70531	68796	40580	30240	37010
18	69785	68865	66595	61940	56290	56868	34855	68405	68635	34600	30160	35280
19	71060	68750	66030	61767	56269	54493	35565	66595	67840	27540	30000	33760
20	71520	68589	65810	61620	55891	52200	36405	64700	68444	22290	29925	32100
21	71750	67840	65360	61400	55702	50910	37980	63260	70140	18658	29818	30960
22	71520	67730	65140	60897	55660	48820	38870	61830	69785	19950	29540	30000
23	71635	67275	65030	60486	55355	47320	39544	60486	68114	22820	29070	27390
24	71865	67275	64854	60100	55292	45315	41120	58688	67735	25350	28610	25860
25	71405	67505	64516	59946	55250	44822	42600	58941	68290	26720	28075	24284
26	71635	67505	64470	59775	55155	41670	44090	62314	69785	27165	27420	23230
27	71635	68405	64404	59712	55155	41364	45068	67804	69854	26430	26990	20578
28	71405	68635	64656	59408	55050	38744	45125	70347	70020	25770	26760	16760
29	71405	68750	64404	59135	.....	38070	45695	70699	69900	24980	25350	12660
30	71405	68750	64404	58820	.....	38600	49440	71359	.....	24340	24630	11190
31	71405	.....	64426	58495	.....	39388	.....	70899	.....	24200	25095	.....

Record furnished by United States Bureau of Reclamation.

REPORT OF SECRETARY

NORTH PLATTE RIVER INTO GUERNSEY RESERVOIR

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	2484	350	350	337	312	310	1172	3145	12925	7102	5821	5890
2	2504	450	338	377	277	337	1407	2838	13777	7240	5695	5900
3	2312	470	138	319	261	293	954	2500	11935	7250	5659	6193
4	2302	400	268	361	300	393	961	2553	10567	6992	5578	6233
5	1800	550	57	308	263	400	1102	2698	10365	7100	5658	6240
6	1968	500	101	242	200	808	1263	2863	10825	6507	5687	5790
7	2138	475	360	256	288	1564	1238	2802	10986	5943	5747	5695
8	2275	432	390	335	229	978	1355	2410	11270	5581	6069	5495
9	2059	396	315	259	302	969	1132	2674	11295	5075	5755	4842
10	2132	358	345	297	230	1707	921	2575	11882	4830	5655	4247
11	2020	393	350	347	301	1484	893	3922	11910	4689	5898	4772
12	1964	379	310	239	268	1278	675	2893	12358	4475	5693	4208
13	1820	573	430	285	276	1272	703	2803	12798	4015	5222	2639
14	2484	451	420	289	301	1066	709	3124	13143	4085	5313	2570
15	2168	368	378	310	238	755	732	3457	13184	3327	5510	2338
16	1997	457	377	330	298	663	701	3784	13666	4637	5298	2255
17	2130	482	320	251	225	860	859	4109	13202	2830	5467	2433
18	1392	276	382	288	313	1695	1007	3627	13119	2586	5535	2377
19	952	517	195	273	346	652	1322	3663	12550	1740	5494	2483
20	832	469	339	266	155	667	1563	3418	11564	2340	5502	2313
21	466	267	200	329	247	1200	2220	3149	10851	2568	5486	2500
22	264	505	314	178	299	707	1488	3152	10421	5350	5380	2517
23	498	216	321	233	169	1009	1394	3172	9757	6696	5310	2005
24	616	410	326	208	240	414	1769	2945	9509	7025	5318	2629
25	188	461	170	266	297	582	1766	3773	8282	6991	5330	2455
26	496	350	257	285	242	286	1812	5100	8553	6374	5320	2519
27	350	854	380	260	265	1571	1618	7218	8034	5730	5332	2213
28	214	496	527	229	265	324	1834	8230	7984	5818	5082	3775
29	340	338	273	243	.....	276	2112	10765	7665	5802	5217	6233
30	380	340	325	221	.....	587	2448	11548	7177	5953	5330	5809
31	280	.....	410	209	.....	887	.....	11818	.....	5979	5985	.....
Mean	1414	433	312	278	264	838	1304	4281	11049	5246	5527	3886
Max.	2504	854	527	377	346	1695	2448	11818	13777	7250	6069	6240
Min.	188	216	57	178	155	276	675	2410	7171	1740	5082	2005
A. F.	86925	25750	19175	17120	14690	51560	77615	263265	657520	322575	339865	231215

Total 2,107,275 Acre Feet.

Record furnished by United States Bureau of Reclamation.

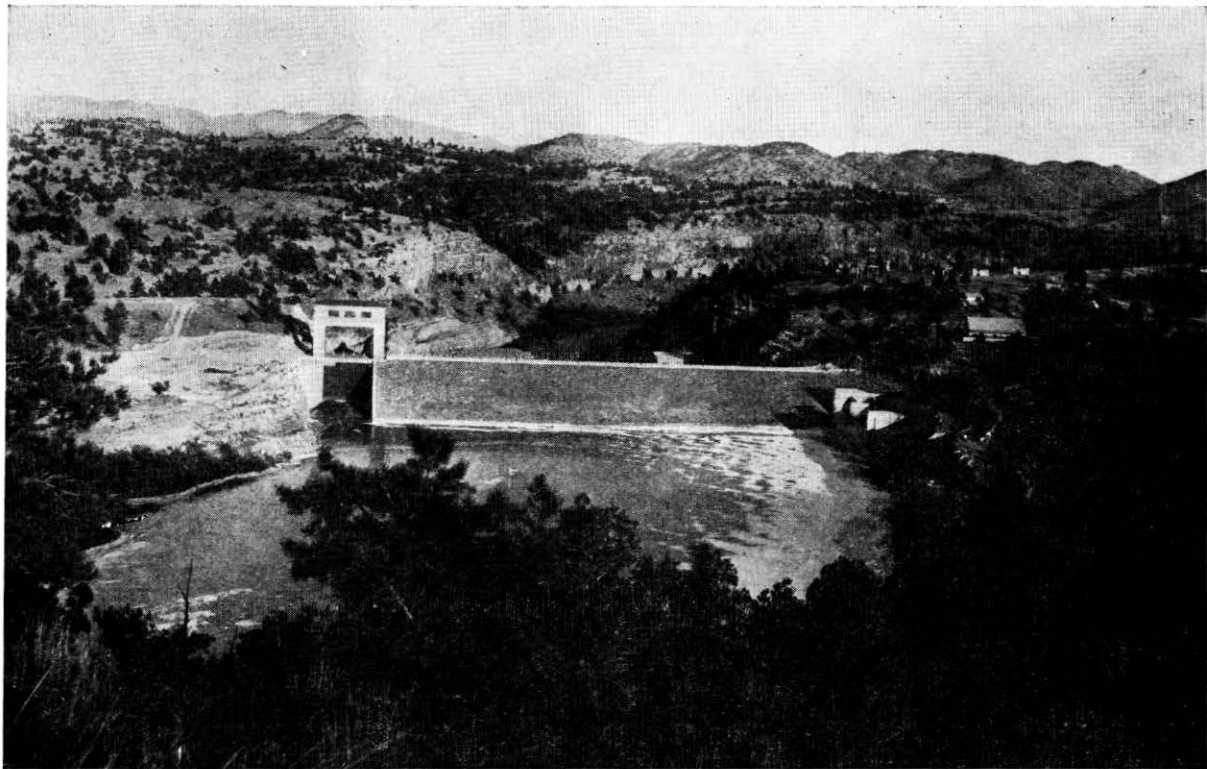
NORTH PLATTE RIVER, OUTFLOW OF GUERNSEY RESERVOIR

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	2580	350	350	315	371	310	1075	885	14100	7450	5750	5650
2	2600	450	280	410	377	337	1180	1045	14050	7530	5300	5650
3	2360	470	370	430	294	272	1200	1210	13650	7250	5150	5750
4	1770	400	380	405	376	313	1210	1325	10700	7050	5200	5775
5	1800	550	400	397	390	294	1202	1305	9745	7100	5200	5700
6	1670	500	390	375	359	294	1190	1475	10150	6850	5150	4600
7	1840	475	415	400	373	295	1075	2400	10300	6650	5200	3850
8	1530	490	390	390	335	336	1115	2375	10550	6350	5225	3650
9	1500	512	315	370	323	337	1150	2500	11000	6300	5075	3680
10	1570	555	345	375	293	257	1098	2575	12200	4830	5075	3675
11	1400	486	350	380	322	280	1120	3725	12350	5350	5475	3475
12	1180	495	365	350	321	750	1090	2800	12300	5400	5950	3375
13	1290	573	375	285	326	1150	1140	3000	12450	5450	5775	3300
14	1300	630	398	344	321	1525	1033	2950	13050	6150	5775	3225
15	1180	600	400	365	321	1885	1075	3000	13300	5600	5800	3075
16	1000	515	355	385	298	2180	1074	3575	13550	5600	5825	2975
17	430	540	375	345	278	2230	1030	4375	13700	5550	5750	3325
18	300	450	440	360	366	2225	1050	4700	13200	5600	5575	3250
19	310	575	480	360	356	1850	1065	4575	12950	5300	5575	3250
20	600	550	450	340	345	1825	1040	4375	11200	4990	5540	3150
21	350	645	427	440	342	1850	925	3875	10000	4400	5540	3075
22	380	560	425	431	320	1760	1040	3875	10600	4700	5520	3000
23	440	445	376	440	323	1765	1060	3850	10600	5250	5550	3325
24	500	410	415	403	272	1425	975	3850	9700	5750	5550	3400
25	420	345	340	343	318	840	1020	3650	8000	6300	5600	3250
26	380	350	380	371	290	1865	1060	3400	7800	6150	5650	3050
27	350	400	413	292	265	1725	1125	4450	8000	6100	5650	3550
28	330	380	400	382	318	1645	1805	6950	7900	6150	5450	5700
29	340	280	400	381	.....	615	1825	10600	7700	6200	5575	8300
30	380	340	325	380	.....	310	560	11200	7200	6275	5700	6550
31	280	.....	400	373	.....	490	.....	12050	.....	6050	5750	.....
Mean	1044	477	384	374	328	1072	1120	3933	11066	5989	5513	4119
Max.	2600	645	480	440	377	2230	1825	12050	14100	7530	5825	8300
Min.	280	280	280	292	265	272	560	885	7200	4400	5075	2975
A. F.	64185	28405	23650	23040	18235	65920	66660	241830	658510	368285	338980	245120

Total 2,200,931 Acre Feet.

Record furnished by United States Bureau of Reclamation.



Guernsey Reservoir looking down stream toward the dam. This is an earth fill dam—height 105 feet above the river bed.

REPORT OF SECRETARY

NORTH PLATTE RIVER ABOVE WHALEN, WYOMING

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	2145	300	364	409	325	258	1372	1027	13564	8476	5728	5589
2	2189	340	284	424	307	307	959	1203	13277	8456	5663	5727
3	2146	385	360	418	332	250	1181	1235	12826	7852	5385	5541
4	1659	250	410	400	366	273	1224	1465	11057	7706	5496	5525
5	1611	320	394	432	328	294	1183	1351	95c2	7642	5574	5562
6	1528	400	361	387	289	280	1181	1388	9561	7584	5459	5728
7	1680	320	405	437	205	301	1176	2858	9526	7412	5444	4171
8	1274	360	400	418	303	299	1319	2992	9610	6777	5499	4050
9	1168	350	300	433	283	298	1369	2986	9860	6295	5357	3876
10	1358	380	376	443	267	233	1300	3080	10735	4709	5238	3811
11	1173	330	394	448	255	290	1344	3142	10947	5659	5561	3809
12	1091	370	380	440	265	675	1344	3580	10953	5659	6127	3544
13	1248	385	384	410	251	854	1421	3861	11030	5725	5967	3555
14	1148	400	400	400	284	932	1196	3838	11200	5828	5922	3545
15	1038	419	386	396	239	982	1237	3623	11633	5880	5845	3271
16	1115	460	364	384	297	1461	1094	4066	11907	5790	6016	3648
17	711	434	370	410	219	1784	1350	5314	12082	5740	5653	3560
18	337	290	400	425	184	1773	1340	5579	11704	5781	5609	3619
19	312	370	416	380	354	1822	1370	5387	11281	5648	5655	3389
20	340	420	398	360	248	1795	1250	5141	10677	5432	5469	3371
21	300	400	380	380	311	1825	1080	4642	10019	4759	5478	3344
22	350	480	418	400	235	1755	1320	4684	10251	4807	5475	3152
23	360	440	360	200	304	1697	1335	4665	10362	5098	5439	3582
24	400	300	426	438	253	1672	1103	4496	9684	5593	5495	3867
25	490	240	415	173	233	300	1450	4052	8490	5985	5537	3503
26	425	180	400	268	273	1865	1340	3944	8018	5872	5589	3328
27	342	200	422	285	233	1747	1435	4885	8265	5799	5607	3398
28	295	320	397	303	259	1626	2305	7095	8316	5879	5625	5443
29	290	340	406	333	.....	932	2320	9992	8271	6028	5783	7617
30	385	310	378	427	.....	322	747	11872	8263	5866	5595	7306
31	272	.....	402	289	.....	280	.....	13190	.....	5771	5740	.....
Mean	940	353	386	380	274	940	1321	4400	10431	6180	5610	4310
Max.	2189	480	426	448	366	1865	2320	13190	13564	8476	6127	7617
Min.	272	180	284	173	184	250	747	1027	8018	4709	5238	3152
A. F.	57828	21050	23756	23306	15277	57882	78636	271010	620696	379856	345188	256726

Total 2,151,261 Acre Feet.

Note:—Compiled by adding the North Platte River passing Whalen and the Ft. Laramie and Interstate Canal Diversions.

NORTH PLATTE RIVER PASSING WHALEN DAM

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	290	300	364	409	275	164	1372	245	11210	4901	2208	1976
2	380	340	284	424	260	231	959	353	11297	4856	2068	2142
3	495	385	360	418	282	195	1181	305	11046	4262	1805	1968
4	360	250	410	400	316	186	1224	515	9292	4081	1901	1980
5	505	320	394	432	282	208	1183	401	7725	3992	1959	2106
6	485	400	361	387	252	280	1181	425	7796	3909	1864	2681
7	600	320	405	437	159	301	1176	1901	7761	3742	1859	2072
8	230	360	400	418	173	253	1319	2028	7875	3117	1949	1996
9	150	350	300	433	187	253	1369	1949	8155	2625	1772	1996
10	345	380	376	443	186	208	1300	2123	8970	2213	1643	1965
11	200	330	394	448	150	290	1344	2185	9043	2050	1956	1947
12	135	370	380	440	150	675	1344	2543	8891	2015	2532	1809
13	255	385	384	410	150	854	1421	2810	8816	2085	2382	1837
14	150	400	400	400	173	932	1196	2781	8970	2390	2292	1827
15	145	419	386	396	150	982	1237	2486	9347	2240	2226	1539
16	275	460	364	384	222	1461	964	2909	9501	2150	2394	1995
17	350	434	397	410	150	1784	850	3980	9502	2100	2028	2007
18	337	290	400	425	150	1773	740	4189	9043	2141	1974	2099
19	312	370	416	380	236	1822	770	4094	8446	1997	2022	1869
20	340	420	398	360	150	1795	850	3748	7729	1792	1836	1797
21	300	460	380	380	195	1825	680	3149	7050	1119	1860	1707
22	350	480	418	400	150	1755	870	3141	7177	1167	1872	1473
23	360	440	360	200	231	1697	835	3122	7177	1458	1836	1847
24	400	300	426	207	195	1672	1020	2782	6505	1953	1872	2015
25	490	240	415	88	150	300	1450	2177	5319	2345	1914	1653
26	425	180	400	177	173	1865	940	2045	4737	2257	1956	1503
27	342	260	422	225	150	1747	935	2912	4952	2184	1974	1569
28	295	320	397	257	177	1626	1805	5058	4901	2304	1992	3618
29	290	340	406	288	.....	932	1790	7848	4805	2488	2150	5965
30	385	310	378	377	.....	322	210	9666	4725	2366	1962	5838
31	272	.....	402	245	.....	280	.....	10882	.....	2231	2100	.....
Mean	331	353	386	358	195	926	1117	3060	7925	2600	2005	2226
Max.	505	480	426	448	316	1865	1805	10882	11297	4901	2394	5965
Min.	135	180	284	88	150	164	210	245	4725	1119	1643	1473
A. F.	20326	21050	23756	22013	10858	56863	66477	187940	471603	159731	123290	132490

Total 1,296,397 Acre Feet.

Record furnished by United States Bureau of Reclamation.

NORTH PLATTE RIVER AT TORRINGTON, WYOMING

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	1150	750	600	600	700	500	1000	2700	13600	5600	2550	2200
2	1150	700	600	600	700	500	1450	2750	14200	5700	2400	2375
3	1150	680	600	600	700	500	1450	2800	14000	5200	2050	2225
4	1200	700	575	700	700	500	1450	2800	13400	5100	2050	2075
5	1050	700	575	725	700	600	1600	2850	10800	5100	2050	2200
6	1350	750	575	700	700	600	1800	2900	10600	4800	2000	2450
7	1000	750	575	600	700	600	2200	2900	10450	5000	1900	2725
8	1200	700	575	700	700	600	2200	2950	10450	4800	2200	2550
9	950	700	575	700	700	600	2100	3000	10450	4400	2000	2400
10	950	800	525	650	700	600	2200	3500	10900	4300	1850	2275
11	950	800	525	700	600	650	2000	3500	11300	3400	1850	2250
12	800	700	525	650	600	720	1800	3800	11000	2950	2450	2150
13	800	750	525	650	600	1080	1800	3800	11500	2950	2450	2075
14	800	800	525	600	600	1450	1800	3800	10900	3600	2300	2025
15	800	800	525	650	600	1600	1800	4000	11700	3600	2300	2025
16	800	800	525	650	600	2200	1650	4300	11700	2900	2450	1900
17	850	750	525	700	600	2200	1800	5100	11500	2850	2450	2025
18	1000	750	525	650	600	2250	2000	5900	11500	2800	2200	2000
19	850	680	525	630	600	2400	2250	6100	10900	2900	2200	1925
20	950	750	525	630	600	2200	2450	6000	10100	2400	2100	1850
21	1000	750	525	630	500	2400	2400	4800	8500	2400	2050	1850
22	975	800	525	630	500	2400	2400	4500	8700	1750	2050	1750
23	950	800	525	630	500	2400	2450	4250	9000	1850	2050	1750
24	1025	750	525	630	500	2200	2500	4100	8600	2200	2200	1925
25	950	680	525	630	500	1850	2500	3900	7400	2900	2050	1700
26	950	600	525	630	500	2100	2550	3800	6500	3200	2100	1875
27	950	600	525	630	500	2050	2600	4000	5700	2800	2250	1750
28	900	700	525	630	500	2100	2600	6200	5600	2850	2250	2950
29	900	680	525	630	.....	2100	2650	9700	5300	2800	2450	5500
30	900	600	525	630	.....	1000	2700	12300	5300	2800	2350	6300
31	950	.....	525	630	.....	850	.....	12900	.....	2700	2250	.....
Mean	974	725	541	645	607	1410	3071	4700	10531	3500	2180	2368
Max.	1350	800	600	700	700	2400	2700	12900	14200	5700	2550	6300
Min.	800	600	525	630	500	500	1000	2700	5300	1750	1900	1700
A. F.	59901	43180	33222	39700	33720	86877	123164	289392	598124	215408	134580	140928

Total 1,798,196 Acre Feet.

Highest Gage Height 6.21 June 2, 1929.

Lowest Gage Height 1.10 Feb. 19, 1929.

DISCHARGE IN SECOND FEET, NORTH PLATTE RIVER AT

HENRY, NEBRASKA

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	1800	18500	5560	2820	2450
2	1890	21600	5780	2630	2330
3	1760	18800	5480	2230	2480
4	1710	17800	5090	2090	2330
5	1990	12400	4810	1860	2400
6	1970	11500	4850	1990	2700
7	2130	10800	4850	1970	3320
8	2900	10600	4450	1990	2900
9	3070	10700	4090	2050	2820
10	3360	10500	4780	1840	2700
11	3440	12100	3170	1780	2600
12	3570	10900	2730	1900	2330
13	3680	11200	2630	2400	2280
14	3880	11300	2940	2280	2190
15	3770	11800	3140	2260	2210
16	3770	12300	2940	2120	1880
17	4670	12200	2820	2280	1880
18	5150	12200	2940	1970	2030
19	5720	11000	2920	1990	2140
20	5520	10100	2900	2050	1920
21	4610	8000	2610	1970	1920
22	4050	8000	1910	1900	1800
23	3800	8790	1850	1860	1690
24	3880	8840	1980	1990	1800
25	3410	7240	2500	2080	1800
26	3170	5830	3250	2100	1710
27	1460	3000	5720	2940	2210
28	1880	4110	5600	3170	2360
29	2300	7950	5520	3000	2310
30	2470	13700	5560	3120	2430
31	15200	.....	3000	2360	.....
Mean	2040	4280	10900	3490	2430
Max	2470	15200	21600	5780	2820
Min.	1460	1710	5520	1850	1610
A. F.	20200	265000	649000	215000	131000

Total 1,420,000 Acre Feet.

Record furnished by United States Geological Survey.

NORTH PLATTE RIVER AT MITCHELL, NEBRASKA

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	800	1350	1125	*700	*1000	*800	1325	2600	13200	4300	1450	1200
2	700	1350	1125	700	1000	800	1475	2350	18300	4500	1300	1200
3	600	1250	1050	700	1000	800	1650	2350	15800	4500	1100	1250
4	550	1250	1050	700	1000	800	1725	2475	15300	3900	1000	1225
5	550	1250	1125	700	1000	800	1725	2475	12200	3500	1000	1225
6	500	1125	1050	700	1000	800	1825	2475	10700	3500	1000	1475
7	500	1250	1125	700	1000	800	1950	2475	10500	3500	950	2200
8	400	1250	1250	700	1000	800	2150	3100	10700	3500	900	2400
9	400	1250	1350	700	1000	800	2050	3100	10700	3200	850	2400
10	500	1350	1350	700	1000	800	2150	3400	10900	3200	775	2300
11	500	1500	1350	700	1000	1000	2050	3700	11750	2550	700	2200
12	500	1500	1250	700	1000	1000	1950	3700	11750	2200	700	2000
13	500	1350	1050	700	1000	1000	1950	4000	11750	2050	900	2100
14	800	1350	1050	700	1000	1000	2150	4200	11750	2200	950	2100
15	950	1250	950	700	1000	*1000	1825	4000	11550	2300	1000	2100
16	1125	1250	950	700	1000	1550	1950	4200	11550	2200	950	1975
17	1050	1250	950	700	1000	1825	1950	4350	11125	2050	1000	1850
18	1125	1350	950	700	1000	2025	1950	4900	11125	2050	1050	1975
19	1250	1250	950	700	1000	2100	2150	5500	10250	1950	950	1975
20	1250	1250	950	700	1000	2100	2700	5500	9400	1850	950	2000
21	1250	1250	950	700	1000	2300	2475	5100	8100	1650	950	1975
22	1250	1350	950	700	1000	2300	2475	4200	7275	1400	900	1850
23	1125	1350	950	700	1000	2300	2475	3875	7900	1100	900	1675
24	1250	1125	950	700	1000	2100	2700	3550	8100	1100	850	1575
25	1350	1250	950	700	1000	2025	2475	3000	7250	1400	850	1750
26	1350	1250	950	700	1000	1575	2475	2700	5500	1650	850	1675
27	1350	1125	950	700	1000	1825	2350	2475	4700	1650	900	1700
28	1125	1125	950	700	1000	2025	2250	3250	4700	1550	1000	1850
29	1125	1125	950	700	.....	2100	2475	6125	4500	1550	950	€200
30	1125	1125	950	700	.....	1950	2600	10200	4300	1650	1000	7900
31	1350	.....	950	700	.....	1475	.....	12375	.....	1550	1100	.....
Mean	910	1227	1046	*700	*1000	1438	2113	4120	10088	2428	957	2176
Max.	1350	1500	1350	700	1000	2300	2700	12375	18300	4500	1450	7900
Min.	400	1125	950	700	1000	800	1325	2350	4300	1100	700	1200
A. F.	55934	75472	64364	43042	55538	88415	125754	253293	600257	149258	58961	129523

Total 1,099,811 Acre Feet. Lowest Gage Height 0.80 Oct. 8, 1928.
 Highest Gage Height 5.95 June 2, 1929. * Estimated.

NORTH PLATTE RIVER AT MINATARE, NEBRASKA

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	1750	2100	1600	1400	1000	1200	2200	2850	12850	4450	1700	1550
2	1650	2100	1350	1400	1050	1200	2200	2825	16300	4525	1500	1475
3	1500	2100	1350	1400	1050	1200	2200	2850	16800	4525	1450	1700
4	1300	2100	1250	1400	1050	1200	2300	2850	16200	4300	1475	1750
5	1300	2100	1250	1400	1050	1200	2300	3350	14700	3625	1250	1725
6	1300	2000	1350	1400	1050	1500	2200	3050	12750	3600	1250	2850
7	1300	2000	1500	1400	1050	1500	2250	3000	12250	3575	1100	3600
8	1300	2000	1500	1400	1050	1500	2700	3350	11800	3600	1175	4400
9	1300	2000	1500	1400	1050	1500	2700	3750	11500	3550	1325	4 00
10	1300	1975	1350	1400	1050	1500	2750	4125	11300	3575	1250	3600
11	1300	1975	1250	1400	1050	1500	2700	4125	11500	3600	1250	3800
12	1300	2000	1250	1300	1050	1500	2700	4650	11825	2000	1100	3400
13	1300	2000	1250	1200	1050	1500	2700	4650	11825	1750	1200	3475
14	1500	2000	1350	1100	1050	1500	2700	4675	12000	2300	1225	3475
15	2300	2000	1350	1000	1050	1500	2600	5200	11800	2450	1300	3525
16	2400	2000	1350	900	1050	2100	2600	5200	11825	2025	1300	3200
17	2300	2000	1350	800	1050	2100	2400	4950	11825	2000	1175	2850
18	2050	2000	1350	700	1050	2100	2400	5800	11325	1750	1275	3000
19	2050	1975	1350	600	1050	2100	2400	6750	10300	1700	1050	2975
20	2050	1900	1900	600	1050	2100	3600	6750	9400	1750	1125	2950
21	2000	1925	2000	600	1150	2100	3400	6300	8400	1550	1125	2850
22	2000	1900	1600	600	1150	2100	3400	4675	8000	1300	1125	2675
23	2000	1925	1600	600	1150	2100	3400	4125	7725	900	1025	2525
24	2000	1925	1600	600	1150	2100	3500	3750	8350	875	1050	2025
25	2025	1700	3300	600	1150	2100	3400	3000	7200	925	1175	2250
26	2025	1700	3300	600	1150	2100	3000	2825	5950	1300	1150	2300
27	2025	1900	3300	700	1150	2100	3000	2650	4525	1750	1150	2375
28	2025	2000	2300	700	1150	2100	2800	2825	4500	1700	1400	2475
29	2000	2000	2300	800	.....	2100	2700	6750	4500	1950	1300	3050
30	2000	1975	2300	800	.....	2100	3200	9700	4500	1900	1500	7000
31	2300	.....	2000	900	.....	2100	.....	12600	.....	1900	1500	.....
Mean	1708	1975	1721	1036	1070	1760	2720	4630	10457	2470	1250	2960
Max.	2400	2100	3300	1400	1150	2100	3600	12600	16800	4525	1700	4400
Min.	1300	1900	1250	600	1050	1200	2200	2650	4500	875	1050	1475
A. F.	105026	117571	105819	61687	59902	108299	163440	285252	622273	152134	77307	176184

Total 1,955,167 Acre Feet. Lowest Gage Height 0.97 Oct. 13, 1928.
 Highest Gage Height 4.50 June 3, 1929.

NORTH PLATTE RIVER AT BRIDGEPORT, NEBRASKA

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	1900	2000	2200	1600	2100	2600	1925	3100	11400	4050	2200	2200
2	1900	2000	2500	1600	1900	3100	1925	2950	15300	4050	2200	2200
3	1800	2500	2400	1950	1900	3400	2000	2800	20220	4050	2200	2350
4	1800	2500	2200	2400	1900	4000	2400	2600	18300	4750	1900	2500
5	1800	2500	2100	2900	1900	3600	2600	2800	16500	4050	2100	3150
6	1800	2500	2000	3100	2100	3600	2400	2950	14700	3850	1875	3800
7	1800	2500	2000	3100	2250	3100	2150	2950	13500	3850	1950	4900
8	1650	2200	2000	3275	1900	2400	2150	3400	13200	3850	1950	4500
9	1600	2200	2000	3275	1600	2400	2400	4000	12900	3850	1875	4500
10	1600	2500	2000	2900	1775	2150	2600	3800	12300	3625	1750	4500
11	1600	2500	2000	2500	1900	1700	2500	4000	12300	3275	1750	4500
12	1600	2200	2300	2400	2100	1500	2500	4000	12900	2750	1650	4300
13	1600	2200	2300	1800	2100	1450	2500	4000	12550	2050	1400	4300
14	1650	2200	2300	1350	2100	1450	2400	4800	12300	1850	1550	4050
15	2200	2200	2300	1050	2100	1600	2400	4600	12900	1850	1650	4050
16	2800	2000	2300	1050	1900	2150	2275	4200	12550	1850	1650	3650
17	2000	2200	2300	1050	1775	2275	2275	4000	12900	2325	1650	3400
18	2450	2200	2300	1050	1350	2500	2400	4200	12550	2325	1650	3400
19	2300	2200	2100	275	1100	2600	2600	4800	12900	2225	2100	3400
20	2300	2250	2100	650	1350	2600	3275	5300	12300	2200	1750	3400
21	2300	2250	2100	690	1600	2800	3275	5300	11700	1875	1650	3400
22	2200	2250	1400	500	1600	2950	3100	4800	10800	1750	1650	3300
23	2200	2400	1400	1400	1350	2950	3400	4000	9575	1650	1550	2900
24	2200	2200	1400	1200	1350	2950	3600	3600	9000	1275	1550	2750
25	2200	2250	1300	1100	1000	2800	3100	3275	9000	1350	1550	3300
26	2200	2250	1200	1100	875	2800	3100	2950	7475	1550	1650	3100
27	2200	2200	1200	1200	775	2400	2800	2800	5950	1975	1750	3100
28	2200	2250	1200	1400	675	2500	2500	2600	4750	2200	2100	3400
29	2200	2400	1200	1525	.....	2500	2600	2800	4300	2200	2100	6300
30	2200	2500	1200	1700	.....	2500	3100	4800	4050	2200	2100	8900
31	2200	.....	1200	1525	.....	2400	.....	8450	.....	2200	2100	.....
Mean	2033	2283	1887	1695	1610	2570	2604	3880	11700	2680	1825	3750
Max.	2800	2500	2500	3275	2250	4000	3600	8450	20220	4750	2200	8900
Min.	1600	2200	1200	275	675	1450	1925	2600	4050	1275	1450	2200
A. F.	125059	135869	116034	104183	91885	158134	155209	239260	696347	164432	112167	225127
Total 2,323,706 Acre Feet.											Lowest Gage Height 5.35 July 24, 1929.	
Highest Gage Height 9.30 June 3, 1929.												

NORTH PLATTE RIVER AT OSHKOSH, NEBRASKA

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	2250	2500	1550	2200	1200	1000	3050	3500	12400	3950	2350	1725
2	2250	2500	1550	2200	1300	2000	3050	3950	14000	3950	2150	1725
3	2400	2500	1550	2150	1400	3000	2675	3500	16100	3450	2150	2025
4	2300	2500	1550	2100	1500	3500	2675	3500	19150	3700	1975	2025
5	2250	2500	1550	2050	1600	4000	3050	3725	16850	3950	1800	2175
6	2250	2400	1550	2000	1700	3700	3050	3950	14800	3450	1550	3050
7	2250	2300	1550	1950	1800	3200	3050	3950	12250	3450	1800	3050
8	2250	2100	1550	1900	1900	3150	3050	4200	9350	3450	1650	2650
9	2250	2100	1550	1850	2000	2500	3300	3950	9350	3200	1450	6100
10	2000	2300	1550	1800	2100	2500	3950	6100	9350	3200	1450	5750
11	1900	2300	2000	1750	2200	2200	3950	5050	9350	3200	1650	4750
12	1900	2300	2000	1700	2300	1850	3700	5050	9350	2975	1800	5050
13	2000	2250	2000	1650	2400	1600	3050	4750	9950	2550	1200	4450
14	2000	2400	2000	1600	2400	1500	3175	4900	9950	2350	1225	3950
15	3100	2250	2000	1550	2400	1500	3300	5050	12250	2150	1255	3950
16	2500	1900	2500	1500	2300	1700	3300	5050	9350	2150	1500	3950
17	2800	2000	2500	1450	2200	2250	3500	5050	12250	2150	1500	3500
18	2500	2000	2500	1400	2000	2350	3050	5050	12250	2150	1500	3500
19	2200	1900	2500	1350	1900	2500	3950	6125	11400	2150	1600	3500
20	2200	2250	2500	1300	1800	2700	5050	7200	10500	2150	1950	3500
21	2200	2250	3000	1250	1600	2900	5050	7950	9650	2150	1550	3500
22	2200	2250	3000	1250	1400	2900	5050	7200	9000	2150	1500	3250
23	2100	2250	3000	1250	1300	3000	4200	6100	8350	2150	1375	3050
24	2200	2250	3000	1250	1200	3200	5750	5050	8350	1450	1300	2675
25	2200	2250	3000	1250	1100	3400	4450	4450	9000	1425	1300	2475
26	2200	2000	3000	1200	1000	3500	4750	4200	9000	1400	1375	2475
27	2200	2250	3000	1200	900	3200	3700	3950	7050	1450	1450	3050
28	2200	2000	3000	1200	800	3150	3500	3500	5150	1450	1650	3050
29	2200	2000	3000	1200	.....	3150	3300	3700	4225	2150	1725	3050
30	2100	2000	3000	1200	.....	3150	3050	6000	4050	2150	1725	3050
31	2500	.....	3000	1200	.....	3150	.....	8300	.....	2150	1850	.....
Mean	2253	2225	2290	1575	1710	2690	3650	4970	10470	2580	1620	3345
Max.	3100	2500	3000	2200	2400	4000	5750	8300	19150	3950	2350	6100
Min.	1900	1900	1550	1200	800	1000	2675	3500	4050	1400	1225	1725
A. F.	138547	132398	140828	96993	94613	165424	217639	305459	622868	158283	99780	199143
Total 2,515,283 Acre Feet.											Lowest Gage Height 1.25 Aug. 15, 1929.	
Highest Gage Height 4.30 June 4, 1929.												

REPORT OF SECRETARY

NORTH PLATTE RIVER AT NORTH PLATTE, NEBRASKA

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	2100	2200	2200	600	1975	3000	4700	4300	3900	3375	2050	1675
2	2100	2000	2200	700	2000	3050	4700	4100	8800	3900	1900	1700
3	2000	2600	1900	800	2050	3100	3500	4300	12000	2950	1750	1675
4	2100	2600	1900	900	2100	3150	3600	4700	13200	2750	1600	2400
5	2100	3800	1900	1000	2150	3200	3300	4900	18300	2750	1600	2800
6	2100	3600	1600	1100	2200	3250	3000	5100	18400	3375	1475	2800
7	2200	3800	1400	1200	2250	3300	3300	4900	17200	3650	1400	2900
8	2200	3100	1200	1250	2300	3250	3500	4700	18400	3375	1075	3550
9	2200	3100	1400	1300	2350	3200	3500	4700	13200	3175	1200	2900
10	2100	3000	1700	1300	2400	3150	3700	4700	12600	2950	1100	4550
11	2100	3000	1900	1350	2450	3100	4500	4700	12300	2950	1150	4950
12	2200	3000	2300	1400	2500	3050	4500	5400	12000	2950	1200	5200
13	2200	3000	2500	1400	2500	3000	3900	5400	12000	2750	1050	4875
14	2450	3000	2800	1450	2550	2950	4100	5400	12000	2750	900	4650
15	2450	3000	2800	1500	2600	2900	4100	5400	12300	3650	925	4450
16	2450	3000	2800	1550	2625	3000	4100	5400	12300	3375	875	4100
17	3800	3000	2800	1600	2650	3100	3700	5100	12300	2375	900	4050
18	3700	3000	2800	1625	2675	3200	3600	4900	11650	2375	900	4050
19	3700	3000	2800	1650	2700	3300	3600	5100	12000	2200	1300	4050
20	3100	2500	2500	1675	2725	3400	3700	4900	11650	2050	1425	4200
21	3100	2600	2500	1700	2750	3500	4100	5100	11300	1750	1425	3825
22	2900	2600	2600	1725	2775	3700	4900	5900	10300	1750	1525	3650
23	2900	2600	2600	1750	2800	4000	5400	6500	9400	2375	1700	3650
24	2900	2500	2800	1775	2825	4100	7200	6500	9050	3175	1600	3650
25	2900	2500	2800	1800	2850	4200	7200	5900	7750	2200	1500	3450
26	2900	2600	3000	1825	2875	4300	5600	4900	7425	1600	1425	3450
27	2700	2600	3000	1850	2900	4400	5100	4500	7750	1375	1300	2950
28	2700	2600	3500	1875	2950	4450	5100	4700	7075	1050	1525	2800
29	2700	2600	3500	1900	.....	4450	4700	4900	5450	950	1300	3300
30	2850	2500	3500	1925	.....	4100	4500	4500	3900	950	1425	3300
31	3300	.....	3500	1950	.....	4300	.....	4100	.....	1250	1600	.....
Mean	2643	2833	2474	1450	2500	3489	4347	5020	11197	2520	1365	3549
Max.	3800	3800	3500	1950	2950	4450	7200	6500	18400	3900	2050	5200
Min.	2000	2000	1200	600	1975	2900	3000	4100	3900	950	875	1675
A. F.	157311	168597	152134	90100	139785	214516	258648	308633	666258	154911	83952	211193

Total 2,606,038 Acre Feet. Lowest Gage Height 2.53 Aug. 16, 1929.
 Highest Gage Height 6.00 June 5, 1929.

SOUTH PLATTE RIVER AT NORTH PLATTE, NEBRASKA

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	2	600	500	250	250	3000	900	1500	60	Dry	0	15
2	2	450	500	250	250	3000	900	1300	60	Dry	0	15
3	2	450	500	250	250	3000	900	1300	60	Dry	0	15
4	2	450	500	250	250	3000	750	1350	60	Dry	0	15
5	2	550	500	250	250	3000	750	1350	60	Dry	0	15
6	2	550	350	250	250	3000	650	1500	80	Dry	2	40
7	2	550	350	250	250	3000	700	1500	80	Dry	2	50
8	2	550	350	250	250	3000	700	1350	80	Dry	2	60
9	2	550	350	250	250	3000	700	1300	60	Dry	2	50
10	2	450	350	250	250	3000	750	1350	50	Dry	2	50
11	2	450	350	250	350	2500	750	1350	40	Dry	2	20
12	2	400	350	250	350	1700	850	1150	40	Dry	2	20
13	2	400	350	250	350	900	900	1050	30	Dry	2	10
14	5	500	350	250	350	700	1150	950	30	Dry	2	10
15	5	450	350	250	350	700	1050	900	25	Dry	2	10
16	5	550	500	250	350	700	1050	750	20	Dry	2	10
17	5	500	500	250	350	700	900	750	20	Dry	0	600
18	3	550	500	250	350	700	750	650	20	Dry	0	600
19	4	550	500	250	350	700	750	650	20	Dry	0	600
20	4	550	500	250	350	700	750	450	20	Dry	15	600
21	2	550	500	250	500	700	600	350	10	Dry	15	450
22	2	450	500	250	500	700	500	350	10	Dry	20	450
23	350	450	500	250	500	700	500	350	10	Dry	20	350
24	350	450	500	250	500	700	1050	250	10	Dry	15	300
25	300	450	500	250	500	700	900	150	10	Dry	10	300
26	300	550	500	250	500	800	1050	50	5	Dry	15	200
27	250	550	500	250	500	800	1550	60	5	Dry	15	200
28	250	550	500	250	500	800	1500	300	0	Dry	15	200
29	250	550	500	250	.....	800	1500	300	0	Dry	15	125
30	250	450	500	250	.....	800	1500	150	0	Dry	15	125
31	700	.....	500	250	.....	800	.....	60	.....	Dry	15	.....
Mean	99	502	451	250	750	1558	908	800	34	Dry	6	183
Max.	350	600	500	250	750	3000	1550	1500	80	Dry	20	600
Min.	2	400	350	250	750	700	500	50	0	Dry	0	10
A. F.	6071	29851	27769	15372	19835	95800	54050	49230	2033	Dry	410	10920

Total 311,341 Acre Feet. Lowest Gage Height 0.60 Aug. 4, 1929.
 Highest Gage Height 4.30 March 5, 1929.

SOUTH PLATTE RIVER AT JULESBURG, COLORADO

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	17	269	439	.....	.....	.....	854	1480	36	17	27	26
2	33	230	428	.....	.....	.....	807	1540	44	18	27	22
3	29	437	401	.....	.....	.....	812	1660	35	17	26	28
4	52	532	397	.....	.....	.....	718	1580	36	18	24	37
5	62	546	384	.....	.....	.....	646	1540	44	18	23	35
6	72	490	316	.....	.....	.....	593	1540	53	21	23	58
7	82	434	322	.....	.....	.....	542	1580	59	20	22	74
8	80	403	329	.....	.....	.....	519	1610	64	19	21	88
9	76	367	343	.....	.....	.....	658	1470	56	20	21	117
10	77	355	338	.....	.....	.....	854	1380	49	21	19	232
11	79	346	361	.....	.....	.....	1030	1170	48	22	19	603
12	90	452	362	.....	.....	.....	1000	1220	44	22	16	896
13	112	463	365	.....	.....	.....	985	937	40	21	16	1040
14	165	491	397	.....	.....	.....	897	827	37	25	16	984
15	307	485	385	.....	.....	.....	713	691	42	29	15	847
16	355	479	384	.....	.....	.....	617	575	34	33	14	712
17	490	468	386	.....	.....	.....	469	461	30	42	14	525
18	556	452	366	.....	.....	.....	386	377	30	32	14	390
19	505	434	343	.....	.....	.....	457	293	24	26	18	294
20	450	428	358	.....	.....	.....	470	236	19	25	18	242
21	398	458	379	.....	.....	.....	466	211	17	22	16	199
22	361	447	401	.....	.....	.....	459	189	22	87	16	160
23	320	441	433	.....	.....	.....	538	167	20	130	15	127
24	296	444	428	.....	.....	.....	836	141	17	65	17	97
25	276	430	448	.....	.....	.....	1770	107	15	51	16	95
26	261	425	461	.....	.....	.....	1880	98	19	45	14	85
27	258	425	461	.....	.....	.....	1820	70	18	37	15	93
28	245	439	459	.....	.....	.....	1740	64	18	31	31	81
29	244	421	459	.....	.....	.....	1660	62	17	29	28	74
30	242	446	442	.....	.....	.....	1580	43	17	29	25	69
31	249	.....	431	.....	.....	.....	.....	35	.....	29	26	.....
Mean	221	432	394	*580	*850	*870	893	753	33.5	32.9	19.7	278
Max.	556	546	461	.....	.....	.....	1880	1660	64	130	31	1040
Min.	17	230	316	.....	.....	.....	386	35	15	17	14	22
A. F.	13600	25700	24200	.....	.....	.....	53100	46300	1990	2020	1210	16500

Total 184,620 Acre Feet.

Record furnished by State of Colorado.

* Estimated.

PLATTE RIVER AT OVERTON, NEBRASKA

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	1350	6200	4000	800	2500	4000	5750	6800	4800	5625	30	1
2	1350	4000	3500	800	2500	4800	6050	6800	4500	3650	20	1
3	1600	4500	3200	800	2500	5000	6050	6450	4100	3650	5	1
4	1200	4700	3200	800	2500	5000	6050	5750	11900	3650	3	50
5	1200	5000	3200	800	2500	5100	6800	6250	13900	2875	3	125
6	1200	4500	2900	800	2500	5500	4825	6800	16800	3650	3	875
7	1600	6200	2600	800	2500	5500	4450	7550	18800	3375	2	1975
8	1800	5700	2400	800	2500	5500	4050	7550	17800	3125	2	2500
9	1800	5700	2400	1000	2500	5500	4300	7550	15700	3650	2	3350
10	1800	4500	2400	2000	2500	6000	4825	6800	13400	3125	2	4000
11	1700	4300	2100	2000	3500	5500	4825	6800	13000	3125	2	4275
12	1800	4100	2400	1800	3500	3500	4825	6400	12000	2900	2	4850
13	1700	4100	2700	1800	3500	3500	5750	6050	12000	2675	2	5400
14	2000	4200	3200	1800	3500	3500	5900	7900	12300	2460	2	5400
15	2500	3600	3200	1800	3500	4000	6050	6800	12300	2250	2	5100
16	2500	4000	2900	1800	3500	4000	6050	6050	12300	2250	1	4850
17	2100	4000	2600	1900	3500	3900	5750	6050	12300	2250	1	4275
18	2200	4000	2600	1900	3500	3800	5400	6800	12300	2200	1	4275
19	3600	4000	2600	1900	3500	3800	5400	6400	12000	1785	1	3800
20	3600	3600	2400	1900	3500	3800	4825	6050	12000	1375	1	4275
21	3500	4200	2600	2000	3500	5300	4675	6450	11500	1060	1	4275
22	3400	3800	2600	2000	3500	4800	4525	6050	10000	750	1	4275
23	3400	4000	2600	2000	3500	4800	5400	6800	9600	750	1	4275
24	3200	4000	2600	2000	3500	5000	10475	7900	8100	1100	1	3800
25	3100	4000	2600	2000	3500	5400	10475	6800	7300	325	1	3800
26	3200	4000	2900	2000	3500	5750	8275	6425	5000	1900	1	3800
27	3600	4200	2900	2000	3500	6050	8275	6050	6200	925	1	3375
28	3600	4200	2900	2000	3500	6050	7900	4825	7300	585	1	3375
29	3600	4300	2900	2000	.....	6050	7550	9000	6900	250	1	3250
30	3600	4500	2900	2000	.....	5400	7550	6800	6400	125	1	3175
31	3800	.....	2900	2000	.....	5400	.....	6050	.....	50	1	.....
Mean	2471	4403	2803	*1613	*3142	4877	6100	6669	10750	2176	3	3225
Max.	3800	6200	4000	2000	3500	6050	10475	9000	18800	5600	30	5400
Min.	1200	3600	2100	800	2500	3800	4050	4825	4100	50	1	1
A. F.	151936	262020	172366	99175	174548	299905	363030	410088	639678	133761	194	191959

Total 2,898,660 Acre Feet.

Highest Gage Height 5.70 June 7, 1929.

Lowest Gage Height 0.85 Sept. 3, 1929.

* Partly estimated on account of ice.

REPORT OF SECRETARY

PLATTE RIVER AT DUNCAN, NEBRASKA

Year Ending September 30, 1929

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	5000	5000	7400	7600	4650	Dry	0
2	5000	5000	7400	8000	4250	Dry	0
3	5000	5000	7400	6200	4850	Dry	0
4	5000	5000	5900	5500	4650	Dry	0
5	5000	5000	5500	4800	3600	Dry	0
6	5000	5000	5500	5200	3600	Dry	0
7	5000	4000	5200	14800	3200	Dry	0
8	5000	4000	5500	16800	3200	Dry	0
9	5000	3300	6700	19500	3200	Dry	0
10	5000	3500	7800	16400	3100	Dry	0
11	8000	3500	10400	15200	2800	Dry	0
12	8000	3700	8500	12400	3300	Dry	0
13	8000	3800	6600	10700	3200	Dry	1400
14	8000	3500	5900	10300	2700	Dry	2000
15	8000	3800	5800	9100	2500	Dry	2700
16	8000	4000	5800	8700	2450	Dry	3300
17	7000	5200	6200	8700	2400	Dry	3300
18	4500	4800	5600	9000	1800	Dry	3300
19	3500	4800	5000	8800	2000	Dry	3100
20	5100	5100	4800	10500	2000	Dry	3100
21	4000	5100	5300	9600	2200	Dry	3100
22	4000	5900	5600	8600	1500	Dry	3100
23	5000	6200	4800	8600	1150	Dry	3100
24	4500	6200	4600	8700	900	Dry	2900
25	4500	6000	4500	8300	650	Dry	2900
26	4500	8500	5900	7600	462	Dry	2700
27	4500	10000	6600	7000	100	Dry	2700
28	4500	11500	5600	8200	50	Dry	3300
29	5000	9700	4800	5200	0	Dry	3600
30	5000	8200	3900	4500	0	Dry	2900
31	5000	.....	6700	.....	0	Dry	.....
Mean	*5503	5476	6038	9048	2273	Dry	1750
Max.	8000	11500	7400	19500	4850	Dry	3600
Min.	4000	3300	3900	4500	0	Dry	0
A. F.	338385	325889	371311	564305	139761	Dry	104133

7 months total 1,843,784 Acre Feet.
 Highest Gage Height 4.90 June 9, 1929.
 Lowest Gage Height 0.31 Sept. 3, 1929.
 * Partly Estimated.

PATHFINDER STORAGE RESERVOIR

Daily Contents in Acre Feet

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	532290	517160	550360	584340	602740	629010	686110	913270	1037258	943340	621140	457730
2	527920	518390	551650	585150	603160	630730	687650	919800	1043260	932610	610640	451750
3	521860	519740	552940	585960	603570	632460	689200	925390	1050640	921200	600270	445414
4	514960	521100	554230	586770	604120	634180	690750	931430	1056240	909320	590260	439232
5	508550	522450	555530	587440	604680	635920	699020	938870	1060970	897400	580280	434800
6	501860	523820	556830	588120	605230	637660	707370	945990	1063450	885630	570320	426770
7	495620	525180	558130	588800	605780	639440	715810	952120	1065480	874190	561380	419310
8	489340	526540	559300	589340	606330	640700	724320	957680	1067290	863650	551830	411680
9	483170	527920	560470	589880	606880	642010	732940	963260	1068190	852680	542720	406780
10	481460	529290	561640	590430	607440	643310	741620	967420	1070000	842400	535790	403700
11	482940	530420	563350	590970	608130	644620	750400	970340	1072940	831030	528290	400160
12	484540	531540	565050	591650	608830	646220	760760	973890	1073840	821700	520730	393820
13	486130	532670	566750	592330	609520	647840	771250	976830	1072710	812760	514250	388810
14	487960	533790	568470	593010	610220	649450	781850	979560	1070680	803040	509030	383660
15	489920	534920	569790	593690	610910	651510	792570	981990	1067288	793610	511200	378490
16	491890	536040	570980	594380	612160	653720	802700	983780	1064120	784610	513500	373640
17	493870	537290	572030	595060	613420	655930	812940	985630	1059400	775680	514720	370050
18	495740	538550	573090	595750	614670	658150	823310	990130	1055120	767010	515940	367210
19	497260	539810	574140	596430	615920	660370	830130	992900	1048840	757908	515450	364207
20	498790	541070	575210	597120	617180	662600	836250	996310	1042590	747240	513620	360480
21	500320	541580	576270	597800	618440	664830	841490	999310	1035040	736360	510840	357750
22	501860	542090	577070	598350	619720	666780	846410	1001450	1025550	725130	507590	354500
23	503400	542600	577870	598900	621000	668730	851570	1004675	1019210	714370	504000	350360
24	504950	543360	578670	599450	622280	670690	857680	1009640	1010720	704050	499850	346240
25	506510	544120	579480	599860	623570	672650	865520	1013320	1002740	693700	495850	341880
26	508070	544880	580150	600270	624860	674620	873060	1018330	995030	684110	491770	338110
27	509630	545650	580830	600680	626150	676600	881230	1022700	986110	674320	487840	336110
28	511200	546790	581500	601090	627430	678580	889660	1024450	976410	663780	481460	334880
29	512770	547930	582180	601500	.....	680570	898370	1025770	964930	653130	475690	334260
30	514350	549080	582850	601920	.....	682570	905990	1028850	954590	642300	469980	334440
31	515940	.....	583530	602330	.....	684570	.....	1031277	.....	631450	463550	.....

Record furnished by United States Bureau of Reclamation.

NORTH PLATTE RIVER INTO PATHFINDER RESERVOIR

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	1200	710	740	500	300	890	870	3690	5460	1100	1080	870
2	1000	710	740	500	300	960	870	3650	5810	1380	930	755
3	900	770	740	500	300	960	870	3230	6310	1220	800	670
4	630	780	740	500	370	960	870	3340	5610	970	690	600
5	900	770	750	430	370	970	4260	3830	5000	910	900	590
6	760	780	750	430	370	970	4300	3410	4000	920	890	440
7	900	780	750	430	370	970	4350	3020	3820	1040	1220	380
8	870	780	680	360	370	750	4380	2720	3710	1270	1050	250
9	920	790	680	360	370	750	4440	3880	3270	1100	730	670
10	1010	780	680	360	370	750	4470	3110	3710	910	1710	900
11	1310	660	950	360	440	750	4520	2470	4270	600	1340	580
12	1370	660	950	430	440	900	5320	2850	3400	690	990	510
13	1350	660	950	430	440	910	5380	2650	4840	690	1470	530
14	1240	660	960	430	440	900	5440	2520	4390	530	1900	380
15	1150	660	760	430	440	1130	5500	2100	4840	780	4490	320
16	1150	660	690	440	720	1210	5200	1940	4260	1070	4530	470
17	1200	720	620	430	730	1210	5250	2000	3520	1140	4030	330
18	1100	730	630	440	720	1210	5320	2390	3700	1210	3615	500
19	930	730	620	430	720	1210	3530	2020	2980	920	2775	460
20	860	730	630	440	730	1220	3090	2400	3120	580	2135	230
21	860	350	630	430	730	1220	2640	2500	3140	780	1645	410
22	870	350	490	370	740	1070	2570	1580	2920	620	1335	320
23	870	350	490	370	740	1090	2690	2130	2710	820	1215	290
24	870	940	490	370	740	1080	3170	3220	2600	1020	895	260
25	880	940	500	300	740	1080	4040	2690	2810	1030	975	140
26	880	940	430	300	740	1080	3890	3260	2970	1340	895	220
27	880	950	430	300	740	1090	4380	2970	2310	1370	855	400
28	880	1320	430	300	740	1090	4520	2630	2000	860	485	520
29	880	1320	430	300	.....	1090	4680	3440	1100	870	915	730
30	890	1330	430	300	.....	1100	4150	4350	1630	720	965	590
31	890	.....	430	300	.....	1100	.....	4210	.....	750	670	.....
Mean	980	777	651	396	545	1020	3830	2900	3670	942	1550	490
Max.	1370	1330	960	500	740	1100	5500	4210	6310	1380	4530	990
Min.	630	350	430	300	300	750	870	1580	1100	580	670	140
A. F.	60298	46235	40046	24337	30189	62817	228023	178912	218600	57938	95456	29187

Total 1,072,038 Acre Feet.

Reported by United States Bureau of Reclamation.

NORTH PLATTE RIVER, OUTFLOW OF PATHFINDER RESERVOIR

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	1730	90	90	90	90	90	90	90	2510	6450	5980	3710
2	3150	90	90	90	90	90	90	90	2500	6430	5960	3695
3	4040	90	90	90	90	90	90	90	2500	6520	5790	3680
4	4020	90	90	90	90	90	90	90	2510	6530	5730	3720
5	4010	90	90	90	90	90	90	90	2510	6510	5720	3170
6	3980	90	90	90	90	90	90	90	2520	6490	5710	3980
7	3980	90	90	90	90	90	90	90	2520	6490	5690	4000
8	3980	90	90	90	90	90	90	90	2500	6230	5670	4000
9	3980	90	90	90	90	90	90	1070	2500	6120	5210	3090
10	1800	90	90	90	90	90	90	1010	2500	6100	5060	2320
11	490	90	90	90	90	90	90	1000	2530	5620	5040	2270
12	490	90	90	90	90	90	90	1000	4400	5340	5030	3550
13	490	90	90	90	90	90	90	1000	4840	5360	5010	2919
14	240	90	90	90	90	90	90	1000	4960	5340	4590	2840
15	90	90	90	90	90	90	90	1000	5450	5330	3830	2830
16	90	90	90	90	90	90	90	1000	5520	5330	3310	2810
17	90	90	90	90	90	90	90	550	5520	5270	3300	2070
18	90	90	90	90	90	90	90	490	5520	5270	2915	1840
19	90	90	90	90	90	90	90	500	5920	5290	2855	1830
20	90	90	90	90	90	90	90	500	6290	6010	2855	1850
21	90	90	90	90	90	90	90	500	6530	6030	2855	1850
22	90	90	90	90	90	90	90	500	6530	6020	2855	1850
23	90	90	90	90	90	90	90	500	6530	6000	2855	2260
24	90	90	90	90	90	90	90	500	6510	5990	2855	2290
25	90	90	90	90	90	90	90	500	6490	5980	2855	2280
26	90	90	90	90	90	90	90	500	6490	5960	2855	1890
27	90	90	90	90	90	90	90	500	6490	5940	2855	1510
28	90	90	90	90	90	90	90	1420	6470	5930	3655	1060
29	90	90	90	90	.....	90	90	2490	6470	6010	3745	990
30	90	90	90	90	.....	90	90	2530	6470	6000	3735	810
31	90	.....	90	90	.....	90	.....	2540	.....	5990	3710	.....
Mean	1220	90	90	90	90	90	90	750	4700	5920	4200	3565
Max.	4040	90	90	90	90	90	90	2540	6530	6530	5980	4000
Min.	90	90	90	90	90	90	90	90	2500	5270	2855	810
A. F.	75194	5355	5533	5534	4998	5534	5355	46255	279670	364725	258013	152658

Total 1,208,824 A. F.

Record furnished by United State Bureau of Reclamation.

GUERNSEY STORAGE RESERVOIR

Daily Contents in Acre Feet

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	14550	72210	70600	69095	61940	63700	62490	59580	49360	41840	46740	51900
2	20416	72210	70600	68865	61725	63590	62600	58820	50890	42230	47490	52100
3	21448	71635	70485	68750	61510	63150	62600	57520	51980	42600	48150	52260
4	26032	71405	70485	68750	61180	63040	62600	55460	52950	43400	48780	52280
5	31248	70945	70485	68750	60855	62930	62710	53590	53570	44030	49320	52260
6	36910	70600	70600	68865	60530	63040	62930	51640	53920	44990	50300	52240
7	41418	70830	70600	68405	60530	63040	63590	50260	54060	45680	51460	51700
8	44375	71060	70715	67955	60900	63480	64250	48510	54100	46510	52560	51680
9	51360	71290	70830	67505	61400	63810	64250	46790	54150	47220	55310	52750
10	57960	71520	70945	67390	62050	64250	65096	45410	53880	47450	56420	54250
11	64539	71750	71175	67045	62600	64360	65986	44750	52660	47550	56700	55010
12	69555	71750	71405	66710	63150	64585	66145	44280	50620	47620	56950	54350
13	71750	71290	71750	66820	63590	61725	66200	45070	47550	47760	57220	52700
14	72440	71175	71980	66480	63700	60750	66145	45960	44200	49690	57830	51700
15	73084	71175	72325	66030	64030	60310	66145	47220	42780	49520	59970	51840
16	73130	71290	71980	65700	64250	60205	66145	48970	41860	48720	62630	51500
17	73245	71750	72095	65475	64700	60530	65920	52020	41250	47590	65290	51070
18	73130	71635	71865	65140	65360	60750	65475	55050	40580	46400	67620	50600
19	72785	71865	71060	65030	66145	60960	64096	57500	39300	45144	68000	49870
20	72670	71635	70715	64700	67160	60960	63150	59490	38210	43820	67390	47880
21	72325	70830	70140	64470	68750	61070	62358	60530	37890	42950	66210	45790
22	72049	70370	69900	64250	70370	61180	62050	61220	37840	42820	64800	43750
23	71980	70255	69670	64030	71980	61290	61896	61530	38100	42970	63260	41530
24	72095	70255	69325	63700	70020	61510	61422	61810	38600	43320	61700	38690
25	71980	70020	69900	63480	67390	61620	61026	61920	39070	43670	60200	36680
26	71750	70370	69670	63370	64920	61830	60728	61620	39670	44090	58260	36470
27	71750	70020	69440	63150	63810	62050	60684	60420	40210	44450	55890	36730
28	71635	70020	69210	62820	63920	62160	60662	57690	40780	44860	53610	36980
29	71865	70485	69325	62600	.....	62380	60552	54680	41270	45160	51640	37150
30	71980	70600	69325	62380	.....	62380	60184	51340	41560	45540	51100	37360
31	71980	.....	69095	62160	.....	62380	.....	49240	.....	46170	51520	.....

Record furnished by United State Bureau of Reclamation.

NORTH PLATTE RIVER INTO GUERNSEY RESERVOIR

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	7144	566	330	345	357	339	590	921	2731	5958	5762	3882
2	4383	600	375	317	249	345	580	832	3269	5964	5782	3847
3	2095	380	347	413	309	258	525	690	3104	5930	5808	3846
4	3861	559	420	452	281	495	575	708	3087	6002	5792	3794
5	4055	358	400	358	261	545	645	816	2938	6013	5723	3783
6	3905	351	480	480	321	530	561	786	2831	6059	5922	3774
7	3898	591	400	200	451	640	908	996	2814	5995	6012	3402
8	2866	481	398	236	692	747	998	774	2808	6041	6055	3793
9	3847	486	478	204	535	691	1060	781	2813	5981	6673	4087
10	3854	401	453	353	706	692	1389	857	2867	5793	5818	4026
11	3651	511	553	294	660	580	1402	1114	2729	5721	5399	3949
12	2939	365	580	159	650	639	1119	1210	2662	5706	5336	3025
13	1431	158	715	444	588	456	1589	1815	2505	5887	5276	2405
14	948	352	697	213	438	459	1526	1866	2750	6620	5389	2683
15	1124	315	749	194	554	678	1574	2065	3888	5586	5896	3241
16	898	463	389	259	446	510	1627	2289	4399	5244	5519	2950
17	1058	536	647	268	578	688	1428	2945	4774	5102	5214	2937
18	893	392	401	290	716	636	1413	2934	4950	5071	5066	2917
19	702	651	86	265	766	671	932	2632	4951	5038	4047	2853
20	543	289	266	276	913	555	1170	2910	5243	5004	3548	2234
21	616	70	157	282	1253	620	1028	1941	5670	5256	3205	2067
22	511	214	212	299	1254	630	1124	1806	5867	5690	3139	2077
23	367	317	346	287	1290	530	1001	1679	6073	5746	3116	2085
24	583	285	337	242	707	621	976	1704	6069	5823	3106	1906
25	512	237	638	313	772	555	1006	1662	6054	5776	3007	2208
26	484	556	256	264	1028	601	1017	1585	5974	5739	3008	2481
27	450	194	376	322	1105	586	1145	1395	5967	5708	3001	2465
28	517	295	364	268	575	525	1176	1473	6008	5707	3330	2412
29	616	554	402	328	.....	636	1210	1256	6015	5678	3244	2076
30	473	428	345	291	.....	465	1079	1001	5963	5693	3695	1819
31	475	.....	396	295	.....	470	.....	1596	.....	5916	3940	.....
Mean	1926	398	419	297	659	561	1079	1501	4259	5721	4702	2968
Max.	7144	651	749	480	1290	747	1627	2945	6073	6620	6673	4087
Min.	450	70	86	159	249	258	525	690	2505	5004	3001	1819
A. F.	118415	23715	25770	18270	36605	34500	64210	92310	253440	351785	289150	176600

Total 1,484,770 Acre Feet.

Record furnished by United State Bureau of Reclamation.

NORTH PLATTE RIVER, OUTFLOW OF GUERNSEY RESERVOIR

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	5450	450	330	345	468	450	535	1225	2671	5817	5475	3691
2	1425	609	375	433	358	400	525	1215	2498	5768	5404	3747
3	1575	670	405	476	418	480	525	1345	2555	5743	5475	3766
4	1550	675	420	452	447	550	575	1747	2598	5599	5475	3784
5	1425	590	400	358	425	600	590	1758	2626	5695	5451	3803
6	1050	525	365	417	485	475	450	1769	2655	5575	5427	3784
7	1625	475	400	432	451	640	575	1691	2743	5647	5427	3674
8	1375	365	340	463	475	525	665	1658	2788	5623	5451	3803
9	325	370	420	431	313	525	1060	1648	2788	5623	5287	3548
10	531	285	395	416	378	470	962	1552	3003	5647	5258	3270
11	440	395	437	468	383	525	953	1447	3344	5671	5258	3566
12	410	365	464	328	373	525	1039	1447	3690	5671	5210	3357
13	325	390	541	384	366	1900	1531	1417	4052	5817	5140	3237
14	600	410	581	384	383	950	1584	1417	4438	5647	5081	3187
15	800	315	575	421	388	900	1574	1430	4603	5671	4817	3171
16	875	405	563	425	335	565	1627	1407	4862	5647	4178	3121
17	1000	305	584	382	351	525	1541	1407	5081	5671	3873	3154
18	950	450	517	459	383	525	1637	1407	5287	5671	3892	3154
19	875	535	492	325	371	565	1627	1397	5596	5671	3855	3221
20	600	405	440	442	401	555	1647	1407	5792	5671	3855	3237
21	790	475	446	398	451	565	1427	1417	5831	5695	3800	3121
22	650	445	333	410	436	575	1275	1458	5892	5695	385	3105
23	540	375	462	398	477	475	1235	1521	5942	5671	3892	3204
24	525	285	511	408	1696	510	1215	1563	5817	5647	3892	3338
25	570	355	348	424	2100	500	1205	1607	5817	5599	3763	3221
26	600	380	372	324	2275	495	1167	1936	5671	5527	3986	2586
27	450	370	492	433	1665	475	1167	2000	5695	5527	4198	2334
28	575	295	480	434	515	470	1187	2849	5720	5501	4479	2286
29	500	320	339	439	-----	525	1265	2773	5768	5527	4237	1991
30	415	370	345	402	-----	465	1265	2685	5817	5501	3967	1713
31	475	-----	512	406	-----	470	-----	2655	-----	5599	3728	-----
Mean	945	426	441	410	627	586	1121	1679	4388	5648	4615	3205
Max.	5450	675	584	476	2275	1900	1647	2849	5892	5817	5475	3803
Min.	325	285	330	324	313	400	525	1215	2498	5501	3728	1713
A. F.	58110	25090	27140	25225	34845	36050	66705	103250	261110	347180	283810	190760

Total 1,459,275. Acre Feet

Record furnished by United State Bureau of Reclamation.

NORTH PLATTE RIVER ABOVE WHALEN, WYOMING

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	6124	453	91	409	585	468	520	1335	2651	5872	5529	3702
2	1578	735	83	380	550	400	490	1303	2495	5886	5454	3684
3	1589	770	61	480	610	380	500	1506	2542	5822	5539	3710
4	1642	751	144	399	535	455	480	1778	2591	5604	5522	3752
5	1540	566	56	415	558	420	460	1784	2635	5610	5499	3747
6	1256	500	46	419	616	400	300	1694	2647	5624	5486	3732
7	1663	378	46	481	601	430	470	1660	2704	5621	5409	3630
8	1546	348	329	378	619	440	480	1634	2804	5550	5434	3755
9	912	414	401	424	441	340	732	1701	2790	5583	5370	3697
10	512	327	369	402	436	420	1165	1559	2965	5584	5215	3340
11	538	431	401	438	572	480	1629	1495	3134	5575	5334	3520
12	622	447	383	395	517	400	1029	1465	3412	5600	5190	3517
13	480	427	497	291	457	900	1223	1441	3957	5772	5281	3232
14	600	459	458	356	497	908	1431	1435	4201	5621	5249	3166
15	737	399	503	347	467	880	1431	1429	4616	5653	5154	3201
16	724	431	561	440	467	700	1428	1423	4755	5609	4866	3107
17	755	359	560	460	457	420	1569	1409	4872	5663	4195	3129
18	789	488	406	479	471	400	1527	1402	5388	5640	4147	3131
19	717	591	414	513	480	390	1438	1413	5603	5651	4130	3184
20	548	511	326	511	488	440	1429	1409	5977	5662	3984	3218
21	642	415	345	568	496	490	1450	1419	5978	5656	3897	3113
22	634	359	283	553	500	520	1224	1477	5920	5637	3902	2951
23	585	313	382	401	430	380	1222	1536	5971	5654	3994	3140
24	497	277	481	529	1239	420	1156	1563	6087	5611	3991	3220
25	528	270	362	425	2167	470	1204	1632	5919	5550	3606	3330
26	530	369	314	481	1885	490	1128	1856	5760	5494	3675	3031
27	437	421	461	453	1934	470	1236	2134	5849	5514	4059	2298
28	561	343	437	424	460	420	1242	2864	5807	5511	4406	2204
29	460	345	323	434	-----	480	1249	2703	5802	5471	4488	1821
30	409	345	324	439	-----	400	1286	2679	5868	5489	4155	1493
31	506	-----	371	500	-----	460	-----	2701	-----	5530	3795	-----
Mean	990	427	330	440	695	486	1071	1710	4390	5600	4710	3191
Max.	6124	770	561	568	2167	908	1629	2864	6087	5886	5539	3755
Min.	409	270	46	291	430	340	300	1303	2495	5471	3606	1493
A. F.	60816	26265	20267	27023	38748	29893	63726	104870	261227	345762	289502	189932

Total 1,458,031 Acre Feet.

Note:—Obtained by adding the North Platte River passing Whalen and the Ft. Laramie and Interstate Canal Divisions.

NORTH PLATTE RIVER PASSING WHALEN

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	4647	384	51	379	525	468	520	180	859	2250	1915	1264
2	550	697	45	350	485	400	490	168	756	2264	1846	1315
3	525	770	21	450	540	380	500	198	738	2200	1922	1320
4	600	751	83	351	465	455	480	264	721	1979	19	2 1320
5	550	566	13	369	495	420	460	270	736	1985	1894	1276
6	450	500	26	379	560	400	300	204	754	1996	1869	1261
7	677	340	26	431	545	430	470	198	777	1993	1810	1105
8	755	203	309	313	575	440	480	174	829	1922	1820	1200
9	692	295	381	354	410	340	732	288	728	1955	1783	1262
10	425	227	349	332	405	420	815	240	754	1960	1765	1119
11	450	339	381	360	550	480	1040	276	863	1944	1895	1348
12	500	363	363	305	505	400	440	246	969	1977	1787	1394
13	480	345	477	208	445	900	634	222	1272	2123	1890	1227
14	600	375	438	279	485	908	701	216	1387	1978	1996	1160
15	664	315	483	284	455	880	666	210	1617	2015	2010	1136
16	640	347	541	360	455	700	634	204	1644	1948	2000	1078
17	662	275	540	384	445	420	769	190	1644	2017	1900	1126
18	714	435	369	407	465	400	727	183	2020	1994	1885	1074
19	644	551	350	464	480	390	428	194	2054	2020	1879	1069
20	508	471	246	446	488	440	439	190	2387	2010	1732	1092
21	592	358	265	503	496	490	450	200	2388	2034	1680	949
22	544	253	203	488	500	520	224	169	2330	2006	1685	787
23	528	169	307	336	430	380	222	181	2394	2002	1730	895
24	467	138	426	464	1239	420	162	162	2534	1965	1713	912
25	484	169	332	300	2167	470	258	159	2319	1920	1333	970
26	482	280	284	416	1885	490	120	185	2185	1879	1324	842
27	369	318	431	388	1934	470	174	352	2237	1884	1254	526
28	492	255	407	359	460	420	180	992	2188	1884	1458	476
29	388	277	293	369	.....	480	180	732	2186	1859	1503	337
30	341	289	294	379	.....	400	210	775	2258	1875	1470	291
31	435	.....	341	440	.....	460	.....	859	.....	1916	1360	.....
Mean	673	368	293	378	675	486	470	392	1550	1990	1740	1004
Max.	755	697	541	503	2167	908	1040	992	2534	2264	2010	1394
Min.	341	138	13	208	410	340	120	159	721	1859	1254	291
A. F.	41365	21923	18004	23221	37466	29893	27580	18012	92288	122429	107129	59764

Total 599,074 Acre Feet.

Record furnished by United State Bureau of Reclamation.

NORTH PLATTE RIVER AT TORRINGTON, WYOMING

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	4000	1100	925	950	1000	1200	850	1400	1500	2250	1900	1600
2	2725	1150	925	900	1000	1100	850	1050	1500	2400	1900	1650
3	1650	1200	925	900	1000	1000	850	1050	1700	2250	1900	1675
4	1400	1275	925	900	1000	1000	850	1050	1650	2225	1900	1600
5	1400	1250	1050	900	1000	1000	750	1050	1500	2300	1900	1600
6	1300	1200	1000	950	950	950	850	1075	1500	2050	1950	1600
7	1275	1150	1000	950	850	950	950	1050	1475	2050	2150	1600
8	1250	1100	950	950	850	950	1050	1075	1475	2200	2200	1600
9	1200	1100	950	950	850	950	1050	1200	1500	2050	2200	1600
10	1150	1050	950	950	850	950	1375	1350	1475	2050	2350	1450
11	1100	1050	950	900	900	950	1200	1250	1500	2200	2350	1550
12	1075	1100	1050	900	900	1000	1200	1225	1550	2400	2350	1500
13	1050	950	1100	900	900	1050	1050	1225	1550	2225	2350	1475
14	1000	950	1050	900	900	2000	1375	1225	1800	2200	2500	1650
15	1150	950	1075	900	900	1500	1800	1225	1800	2100	3000	1625
16	1200	950	1150	850	950	1350	1500	1100	2100	2300	2500	1500
17	1275	950	1200	850	950	1100	1500	1225	2200	2450	2300	1500
18	1275	950	1200	850	950	950	1425	1225	2200	2225	2350	1625
19	1300	950	1200	900	950	850	1425	1350	2000	2250	2300	1500
20	1275	900	1200	950	950	950	1425	1250	2225	2200	2300	1625
21	1250	900	1200	950	1000	950	1350	1250	2300	2050	2300	1550
22	1200	900	1200	950	1000	950	1200	1225	2375	2000	2300	1475
23	1200	875	1200	1000	1000	850	950	1225	2100	2200	2300	1475
24	1200	850	1200	1000	1000	850	950	1225	2525	2050	2300	1500
25	1200	850	1200	1000	1000	875	950	1150	2400	2050	1900	1725
26	1175	925	1200	950	2000	950	950	1100	2300	2030	1900	1500
27	1150	925	1200	950	2400	875	950	1100	2250	1900	1900	1475
28	1150	925	1200	950	1800	875	950	1550	2250	1800	2150	1300
29	1100	950	1200	1000	.....	950	1050	1450	2400	1850	1925	1150
30	1075	950	1200	1000	.....	875	1050	1500	2400	1800	1925	1150
31	1075	.....	1200	1000	.....	875	.....	1650	.....	1850	1675	.....
Mean	1350	1010	1100	*935	*1080	1020	1122	1230	1930	2160	2160	1525
Max.	2725	1275	1200	1000	2400	2000	1800	1650	2525	2450	3000	1725
Min.	1000	850	925	850	850	850	750	1050	1475	1800	1675	1150
A. F.	82960	60150	67389	57422	59902	62728	66794	75522	114844	130564	133341	90894

Total 1,002,510 Acre Feet.

Highest Gage Height 1.83 Aug. 15, 1930.

Lowest Gage Height 0.44 April 5, 1930.

* Estimated.

NORTH PLATTE RIVER AT WYOMING-NEBRASKA LINE

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	5340	1020	816	901	800	1200	705	1120	1480	1960	1770	1840
2	4640	1010	890	934	800	934	695	956	1410	1960	1730	1790
3	2720	1050	890	945	800	890	745	901	1460	1980	1730	1840
4	1490	1060	816	945	800	838	755	1020	1440	1890	1700	1820
5	1440	1100	880	923	800	880	715	1010	1360	1890	1730	1840
6	1370	1100	890	912	950	901	796	912	1300	1860	1830	1790
7	1280	1110	848	880	950	890	838	880	1250	1840	1900	1730
8	1350	1060	848	695	950	901	848	816	1340	1830	2000	1820
9	1560	1040	849	534	950	890	880	869	1290	1860	2040	1630
10	1280	1020	880	465	950	849	978	956	1160	1770	2040	1620
11	1200	956	912	395	930	816	1080	1160	1190	1830	2120	1860
12	1130	967	901	670	930	848	1130	1190	1260	1900	2120	1750
13	1060	978	901	830	930	838	1050	1200	1360	1900	2080	1730
14	956	934	912	830	930	1020	1250	1180	1350	1830	2170	1720
15	967	923	901	830	930	1410	1250	1190	1450	1790	3070	1730
16	1120	901	890	735	890	1170	1220	1180	1440	1750	2830	1730
17	1100	890	912	735	869	1060	1170	1200	1500	1800	2480	1760
18	1120	880	1010	735	890	912	1180	1230	1530	1790	2380	1730
19	1190	890	923	735	890	880	1160	1250	1610	1800	2290	1700
20	1240	967	880	735	869	827	1170	1310	1800	1830	2190	1630
21	1110	1110	967	715	880	806	1140	1230	1900	1860	2080	1610
22	1060	989	945	715	848	806	1070	1100	1990	1870	2050	1480
23	1040	967	1020	715	890	806	967	1020	1990	1860	2020	1440
24	1040	838	945	715	858	775	838	1010	1900	1860	1940	1370
25	1040	838	912	715	1220	745	796	1010	1890	1840	1820	1590
26	1040	838	890	725	1860	806	775	978	1800	1840	1700	1530
27	1010	838	848	725	1930	796	755	967	1820	1820	1680	1410
28	1000	880	848	725	1920	785	880	1120	1860	1790	1930	1320
29	989	901	880	725	.....	745	1000	1250	1840	1790	1980	1250
30	1010	816	858	725	.....	755	901	1250	1920	1770	1940	1180
31	967	.....	848	725	.....	735	.....	1340	.....	1770	1860	.....
Mean	1450	962	895	751	1010	888	958	1090	1560	1840	2040	1640
Max.	5340	1110	1020	945	1930	1410	1250	1340	1990	1980	3070	1860
Min.	956	816	816	395	800	735	695	816	1160	1750	1680	1180
A. F.	89200	57200	55000	46200	56100	54600	57000	67000	92800	113000	125000	97600

Total 911,000 Acre Feet. Highest Gage Height 2.83 Aug. 15, 1930.
 Lowest Gage Height 1.33 Apr. 6, 1930.
 Record furnished by the United States Geological Survey.

NORTH PLATTE RIVER AT MITCHELL, NEBRASKA

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	7900	1600	1300	1450	1250	1750	1100	1300	925	900	810	1550
2	6850	1600	1300	1400	1250	1450	1250	1300	1000	900	750	1350
3	3700	1600	1400	1400	1250	1350	1100	925	1100	850	700	1350
4	2600	1600	1400	1400	1250	1150	1150	925	925	800	700	1450
5	2300	1750	1400	1400	1250	1250	1250	1200	1000	800	750	1400
6	2100	1700	1400	1500	1300	1250	1150	1100	925	800	700	1650
7	1850	1700	1350	1500	1300	1250	1150	1300	775	800	750	1750
8	1850	1750	1300	1500	1300	1250	1250	925	650	800	1080	2000
9	2100	1625	1300	1500	1300	1150	1350	1100	650	800	750	1875
10	1950	1625	1300	1500	1300	1150	1450	1100	575	740	900	1575
11	1750	1625	1400	1450	1250	1150	1550	1300	500	800	1080	2500
12	1750	1625	1400	1450	1250	1150	1650	1300	650	800	1250	1850
13	1500	1625	1400	1450	1250	1100	1550	1300	575	900	1250	1400
14	1500	1625	1400	1450	1250	1150	1750	1200	650	900	1340	1200
15	1500	1550	1400	1450	1200	2050	1500	1200	575	900	3450	1300
16	1500	1550	1400	1450	1100	1650	1750	1300	500	850	2950	1200
17	1650	1550	1400	1550	1100	1650	1750	2300	560	900	2600	1200
18	1650	1625	1400	1550	1100	1450	1550	2300	620	1050	2375	1250
19	1750	1550	1400	1550	1100	1450	1550	2100	560	900	2250	1225
20	1650	1550	1400	1550	1200	1300	1550	1950	1250	900	1925	1150
21	1650	1550	1400	1550	1200	1450	1450	1675	1000	900	1820	800
22	1500	1550	1400	1600	1200	1250	1450	1425	725	980	1820	1000
23	1750	1550	1400	1600	1200	1250	1350	1100	725	940	1660	1000
24	1500	1550	1400	1550	1250	1150	1350	925	850	850	1520	900
25	1450	1550	1400	1600	1100	1150	1100	800	725	980	1435	1150
26	1450	1500	1400	1500	2200	1250	1100	675	725	900	1250	1450
27	1400	1500	1400	1400	2200	1150	1000	600	620	900	1125	1200
28	1450	1300	1400	1300	2300	1150	1650	725	700	860	1625	1325
29	1600	1300	1400	1200	.....	1150	1950	800	600	850	1700	1450
30	1600	1300	1400	1200	.....	1150	1250	850	725	940	1760	1450
31	1600	.....	1400	1200	.....	1100	.....	925	.....	900	1620	.....
Mean	2140	*1575	*1382	*1450	*1330	1300	1408	1220	754	875	1470	1398
Max.	7900	1750	1400	1600	2300	1750	1950	2300	1250	1050	3450	2500
Min.	1450	1300	1300	1200	1100	1150	1000	600	500	740	700	800
A. F.	131704	93770	84992	89555	73786	79935	83803	75224	44896	53733	90497	83208

Total 985,103 Acre Feet. Lowest Gage Height 0.80 June 11, 1930.
 Highest Gage Height 2.30 Aug. 15, 1930.
 * Estimated.

REPORT OF SECRETARY

NORTH PLATTE RIVER AT NATARE, NEBRASKA

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	9300	2050	1800	1600	1400	2300	1200	1650	1700	575	825	2300
2	8350	1900	1800	1600	1400	2250	1200	1650	1725	600	875	2225
3	6850	2000	1800	1600	1400	1500	1200	1650	1725	625	800	2200
4	3050	2050	1800	1600	1400	1425	1200	1425	1700	650	825	1950
5	2850	2100	1800	1600	1400	1425	1200	1425	1650	625	800	1900
6	2800	2125	1800	1600	1450	1400	1250	1500	1600	650	900	1950
7	2525	2150	1800	1650	1450	1425	1425	1500	1550	650	825	1700
8	2475	2150	1800	1700	1450	1425	1450	1525	1500	575	1425	1500
9	2675	2150	1800	1700	1450	1425	1550	1525	1450	550	1700	1750
10	2850	2125	1800	1700	1450	1425	1675	1450	1400	550	1800	1950
11	2500	2125	1900	1700	1400	1425	1700	2050	1000	625	1850	1900
12	2300	2100	1900	1700	1400	1400	1700	2150	850	600	1900	2475
13	2275	2050	1900	1650	1400	1375	1700	2000	600	1000	2250	1900
14	2250	2050	1900	1650	1400	1700	1725	1725	600	1025	2200	1750
15	2250	2100	1900	1650	1400	1950	1950	1700	550	1025	3300	1700
16	2250	2125	1900	1700	1450	1725	1950	2200	525	925	4150	1675
17	2400	2075	1900	1700	1450	1725	1850	2250	525	950	3750	1425
18	2500	2075	1900	1700	1450	1700	1750	2925	550	925	3600	1425
19	2700	2050	1900	1700	1450	1550	1700	2500	600	900	3300	1300
20	2550	2050	1900	1700	1450	1425	1700	2200	800	1200	3050	1325
21	2500	2075	1900	1750	1500	1400	1700	2000	1000	1250	2850	1300
22	2500	2100	1900	1750	1500	1325	1700	1725	825	1250	2750	1300
23	2275	2100	1900	1750	1500	1425	1700	1400	550	1300	2750	1250
24	2275	2050	1900	1750	1500	1325	1550	1250	650	1200	2800	800
25	2250	2000	1900	1750	1500	1300	1525	1200	650	1200	2500	2450
26	2250	2050	1900	1700	1550	1225	1425	1200	600	1200	2100	2500
27	2000	2050	1900	1600	1700	1200	1375	1200	500	1025	1700	2500
28	2000	2050	1900	1500	2100	1275	1425	1000	500	875	2050	2300
29	2275	2050	1900	1400	.....	1375	1475	1300	550	875	2100	2200
30	2275	2050	1900	1400	.....	1400	1575	1375	575	1000	2500	2250
31	2250	.....	1900	1400	.....	1300	.....	1225	.....	850	2475	.....
Mean	2960	2070	1867	1640	1470	1500	1550	1670	965	880	2150	1838
Max.	9300	2150	1900	1750	2100	2300	1950	2925	1725	13.0	4150	2500
Min.	2000	1900	1800	1400	1400	1200	1200	1000	500	550	800	800
A. F. 183573	123324	114844	101059	82018	.....	92282	92084	102894	57522	54149	132299	109390

Total 1,243,242 Acre Feet. Lowest Gage Height 0.76 June 27, 1930.
 Highest Gage Height 3.00 Oct. 1, 1929. * Estimated.

NORTH PLATTE RIVER AT BRIDGEPORT, NEBRASKA

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	9200	2750	2150	1850	1700	2400	1800	2300	2075	400	950	2400
2	8900	2725	2000	1850	1700	2800	1650	2000	2325	400	850	2200
3	7500	2700	1700	1850	1700	2800	1650	2000	2675	500	850	2200
4	4300	2675	1900	1850	1700	2900	1650	2450	2325	650	850	2200
5	3300	2650	2000	1850	1700	3000	1650	2450	2300	825	900	2150
6	3100	2625	2300	1800	1700	3200	1800	2450	2300	900	850	2300
7	3100	2600	2300	1800	1700	3200	1650	2100	2300	950	1050	2300
8	3250	2575	2150	1800	1700	3200	1800	2000	2150	1000	1350	2300
9	3250	2550	2150	1800	1700	3200	1800	2250	2000	900	1550	2800
10	3500	2500	2200	1800	1700	3200	1650	2400	2000	825	1800	3150
11	3650	2450	2200	1900	1750	3100	1750	3500	1900	850	2000	2800
12	3500	2400	2150	1900	1750	3100	2450	3350	1700	850	1900	3350
13	3250	2350	2200	1900	1750	3100	2600	3000	1500	1300	2200	3000
14	3100	2350	2200	1900	1750	3100	2800	2800	1200	1650	2500	2800
15	2900	2300	2300	1900	1750	3100	2800	2800	1200	1900	3300	2600
16	2800	2200	2300	1850	1800	2900	3350	3000	1200	1700	4200	2400
17	2900	2200	2150	1850	1800	2900	2900	3700	1200	900	5400	2250
18	2900	2200	1800	1850	1800	2900	2675	4150	1025	1100	4700	2250
19	2900	2200	1800	1850	1800	2900	2800	3700	1025	1400	4200	2250
20	2900	2300	1800	1850	1800	2900	2600	3000	1500	2100	3800	2250
21	2900	2300	1800	1800	1800	2700	2450	2600	1900	2000	3500	2100
22	2900	2200	1800	1800	1800	2650	2450	2100	1600	1900	3300	2100
23	2900	2300	1800	1800	1800	2500	2100	2100	1450	1800	3300	2100
24	2800	2200	1800	1800	1800	2400	2100	2100	1200	1750	3200	2100
25	2800	2300	1800	1800	1800	2300	1950	2100	1150	1600	3100	2100
26	2800	2300	1800	1700	1800	2300	1800	1950	1000	1600	2800	2250
27	2600	2300	1800	1700	1900	2300	1650	1800	850	1500	2400	2600
28	2600	2350	1800	1700	2000	2300	1800	1500	700	1300	2000	3350
29	2775	2300	1800	1700	.....	2300	1950	1500	600	1250	2400	3350
30	2800	2300	1800	1700	.....	2300	1950	1600	500	1150	2500	2700
31	2775	.....	1800	1700	.....	2300	.....	1800	.....	1100	2500	.....
Mean	3570	2400	1985	1780	1760	1780	2134	2460	1560	1220	2460	2490
Max.	9200	2750	2300	2000	2000	3200	3150	4150	2675	2000	5400	3350
Min.	2600	2200	1700	1700	1700	2300	1650	1500	500	400	850	2100
A. F. 219870	143099	122084	111472	98084	.....	169093	126993	151242	92927	75472	151143	148167

Total 1,609,646 Acre Feet. Lowest Gage Height 5.25 July 1, 1930.
 Highest Gage Height 6.70 Aug. 17, 1930. * Estimated.

NORTH PLATTE RIVER AT OSHKOSH, NEBRASKA

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	6500	3200	2600	2100	1850	3500	2400	3700	2100	525	1160	2900
2	9900	3100	2600	2100	1850	2900	2400	2600	2100	425	1100	3000
3	8800	2800	2600	2100	1850	2700	2300	2400	2350	425	900	2750
4	7200	2500	2600	2100	1850	3700	2200	2900	2600	425	1000	2600
5	4200	2500	2600	2100	1850	4000	2200	2500	2350	425	1000	2600
6	3600	2500	2600	2100	1800	3000	2300	2400	2200	425	1100	2600
7	3000	2500	2600	2100	1800	2400	2300	2500	2200	525	1300	2600
8	3000	2550	2600	2100	1800	2400	2200	2500	2100	500	1450	2300
9	3200	2500	2600	2100	1800	2100	2050	2500	2100	450	1600	2600
10	3200	2500	2600	2100	1800	2100	2050	3700	2100	425	1850	2600
11	3500	2550	2600	2200	2000	2100	2300	4800	2100	425	2400	3200
12	3500	2550	2600	2200	2000	2100	2300	3700	1950	700	2400	2600
13	3200	3000	2600	2200	2000	2200	2300	2750	1850	1000	2400	3200
14	3200	3000	2600	2200	2000	2300	2750	2750	1850	1000	3100	2900
15	3000	3100	2600	2200	2000	2300	3050	2750	1225	900	3450	2450
16	3000	2500	2600	2100	2050	2400	3800	2750	1850	1200	3600	2300
17	2800	2400	2600	2100	2050	2750	3600	3700	1050	1100	5300	2150
18	2800	2300	2600	2100	2050	2750	2900	3700	800	1200	4650	2000
19	3200	2300	2600	2100	2050	2750	2900	3700	700	1200	4400	1900
20	3200	2350	2600	2100	2050	2600	2700	3700	700	1500	3900	1900
21	3200	2300	2600	2000	2250	2400	2500	2700	525	1850	3900	1900
22	3000	2150	2600	2000	2250	2400	2700	2700	1000	1700	3550	1900
23	2800	2150	2600	2000	2250	2300	2700	2500	700	1700	3400	2000
24	3000	2500	2600	2000	2250	2200	2700	2600	700	1600	3900	2000
25	3200	2700	2600	2000	2250	2200	2700	2600	500	1325	3200	2600
26	2900	2800	2600	1900	2400	2200	2700	2600	450	1325	3050	2900
27	2900	2800	2600	1800	2400	2200	2500	2400	600	1325	2750	3200
28	2950	2800	2600	1700	2400	2200	2400	2400	600	1450	2700	3200
29	3200	2800	2600	1700	.....	2200	2700	2300	400	1325	2700	3200
30	3200	2800	2600	1700	.....	2400	3600	2200	300	1325	2700	3200
31	3200	.....	2600	1700	.....	2400	.....	2150	.....	1200	2800	.....
Mean	4100	2616	2600	*2030	*2030	*2510	2600	2870	1400	1000	2660	2575
Max.	9900	3200	2600	2200	2400	4000	3800	4800	2600	1850	5300	3200
Min.	2800	2150	2600	1700	1800	2100	2050	2150	300	425	900	1900
A. F.	239507	155704	159473	124960	112960	155010	154911	176829	83406	61290	163936	153225

Total 1,741,608 Acre Feet.

Lowest Gage Height 1.00 June 30, 1930.

Highest Gage Height 2.75 Aug. 17, 1930.

* Estimated

NORTH PLATTE RIVER AT NORTH PLATTE, NEBRASKA

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	3500	3650	2900	2600	1800	2700	2200	2700	2100	375	850	2750
2	3500	3650	2900	2600	1800	2300	2200	3300	2100	300	650	2850
3	10000	3500	2900	2600	2000	1900	2200	4000	2500	250	525	3000
4	10000	3500	2900	2600	2300	1600	2200	3300	3200	225	525	3350
5	8500	3500	2100	2600	2800	3600	2200	2900	3200	225	600	3000
6	6200	3300	2500	2600	3100	4300	1900	2900	3200	225	600	2750
7	3850	3300	2600	2600	3500	4000	1900	2400	3000	225	650	2750
8	3300	3650	3350	2600	4060	4100	1800	2400	2600	175	550	2550
9	3000	4200	3500	2500	3800	3800	1700	2900	2300	175	600	2350
10	2800	3850	3700	2400	3700	3600	1600	3600	3300	175	700	2325
11	3000	3500	3500	2300	3700	3600	1900	5300	2800	175	1000	2200
12	3000	3500	3200	2200	3700	3600	2000	5400	2800	150	1100	2200
13	3300	3000	3200	2100	3700	3600	2200	4700	2300	225	1450	3200
14	3300	3000	3200	2000	3700	3600	2500	4100	2000	200	2100	2750
15	3000	2800	3200	2000	3700	3600	2800	3500	1700	200	2350	2850
16	3000	3000	3200	2000	3700	3600	3300	3400	1400	400	3100	3000
17	3000	3500	3200	2000	3700	3500	3400	3900	1100	350	3500	2600
18	2800	3300	3200	2000	3700	3300	3800	4700	900	500	3500	2550
19	2800	3300	3200	2000	3700	3100	3200	4600	1550	600	4600	2350
20	3000	3300	3200	2000	3700	2900	2800	4500	1300	675	5000	2350
21	3000	3300	3200	2000	3700	2700	2700	4300	1200	675	4300	2200
22	3100	2500	3200	2000	3700	2700	2500	3900	950	775	3900	2250
23	3100	1500	3200	2000	3700	2700	2300	3200	900	975	3700	2050
24	3100	1200	3200	2000	3700	2700	2300	3000	1000	1200	4600	2050
25	3100	1700	3200	2000	3700	2700	2700	2600	1100	1200	4500	2200
26	3000	2200	3200	2000	3500	2400	2700	2300	1100	1000	4300	2600
27	3000	2600	3200	2000	3000	2400	2700	2300	800	1000	3900	2850
28	3100	3300	3200	2000	3200	2400	2500	2600	800	850	3500	2925
29	3500	2900	3200	2000	.....	2400	2500	2600	700	1000	3350	3500
30	3650	2900	3200	2000	.....	2400	2500	2000	500	1200	3000	3650
31	3650	.....	3200	2000	.....	2400	.....	2200	.....	1100	2750	.....
Mean	3920	2960	3124	*2200	*3360	*3040	2440	3430	1810	545	2440	2660
Max.	10000	4200	3700	2600	4000	3600	3400	5400	3300	1200	4600	3650
Min.	2800	1200	2900	2000	1800	1600	1600	2200	500	150	525	2050
A. F.	238317	176333	192100	135473	186449	186846	145192	210449	107900	33323	150250	158680

Total 1,921,312 Acre Feet.

Lowest Gage Height 2.05 July 12, 1930.

Highest Gage Height 4.30 May 12, 1930.

* Estimated.

REPORT OF SECRETARY

SOUTH PLATTE RIVER AT NORTH PLATTE, NEBRASKA

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	75	350	350	600	1000	1650	300	150	350	15	0	200
2	75	450	350	600	1000	2550	250	65	350	10	0	175
3	75	450	350	600	1000	3750	250	75	350	10	0	175
4	150	450	350	600	1000	3900	250	250	650	10	0	500
5	150	550	350	600	1000	2550	150	100	650	10	0	500
6	125	450	350	600	1000	2250	150	100	650	5	0	350
7	125	450	350	600	1000	1250	150	75	500	5	0	250
8	125	600	350	600	1000	1250	65	75	150	0	0	175
9	100	600	350	600	1000	1250	65	150	150	0	0	175
10	100	550	350	600	1000	1250	50	300	350	0	0	175
11	20	550	350	600	1500	1100	50	750	250	0	0	175
12	20	550	350	600	1500	1100	50	1500	250	0	0	65
13	20	550	350	600	1500	1100	50	1625	150	0	0	50
14	20	650	350	600	1500	850	50	1550	150	0	0	50
15	20	650	350	600	1500	850	50	1550	100	0	0	35
16	10	650	350	600	1800	1100	65	1250	65	0	0	20
17	10	650	350	600	1800	1100	100	1500	50	0	0	20
18	10	650	350	600	1800	1100	100	1750	65	0	25	15
19	5	650	350	600	1800	850	65	1750	350	0	20	10
20	5	650	350	600	1800	850	60	1625	250	0	15	10
21	0	650	350	600	1800	850	50	1250	250	15	10	10
22	0	350	350	600	1800	850	50	1200	125	15	15	10
23	0	350	350	600	1800	850	50	1350	100	15	850	5
24	0	350	350	600	1800	850	65	750	65	5	1500	0
25	0	350	350	600	1800	850	100	350	65	0	1100	0
26	0	450	350	600	1800	650	200	550	50	0	850	10
27	0	650	350	600	1800	650	200	500	20	0	850	15
28	0	700	350	600	1800	650	100	550	15	0	650	15
29	175	400	350	600	.....	300	100	500	15	0	650	65
30	350	650	350	600	.....	300	20	500	15	0	500	65
31	350	.....	350	600	.....	300	.....	350	.....	0	350	.....
Mean	68	533	350	*600	*1400	1250	106	775	218	4	24	110
Max.	350	700	350	600	1800	3900	300	1750	650	15	1100	500
Min.	0	350	350	600	1500	300	50	65	15	0	0	0
A. F.	4195	31736	21520	36893	81125	76860	6317	47683	12992	228	14648	6585

Total 340,782 Acre Feet.

Lowest Gage Height 0.50 Aug. 16, 1930.

Highest Gage Height 3.55 March 4, 1930.

* Estimated.

SOUTH PLATTE RIVER AT JULESBURG, COLORADO

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	70	439	562	483	409	1220	248	136	190	27	33	141
2	74	456	562	463	393	1200	226	123	158	30	30	115
3	69	399	542	443	468	1150	205	116	137	30	27	107
4	68	378	564	422	556	1040	178	113	155	33	28	96
5	67	369	584	402	666	1230	166	110	158	30	28	85
6	57	375	634	382	928	1490	139	101	135	27	25	82
7	53	369	676	382	1110	1400	121	93	107	23	25	81
8	48	400	716	352	1330	1280	126	80	84	23	25	75
9	65	414	760	352	1640	750	111	86	79	23	26	77
10	60	366	748	352	1710	732	90	268	73	23	27	72
11	54	415	733	323	2280	714	70	786	61	24	25	72
12	54	452	679	303	2490	733	71	765	49	45	27	73
13	45	471	618	309	2490	617	66	625	47	171	29	71
14	50	482	620	305	2620	546	62	528	43	143	28	79
15	53	519	585	293	2780	485	65	524	37	80	43	114
16	56	531	550	293	2930	443	119	533	24	57	117	115
17	58	551	505	283	3220	402	326	600	34	48	513	122
18	64	564	504	273	2820	403	403	807	32	44	1130	108
19	91	564	481	274	2590	455	387	860	36	45	1980	99
20	120	509	484	273	2380	415	327	770	37	39	2420	91
21	178	445	468	273	2620	374	253	644	37	34	1580	86
22	222	293	478	273	2560	370	202	562	35	35	1230	82
23	244	317	478	273	2430	343	173	517	36	37	925	91
24	210	346	476	275	2180	295	171	477	34	33	720	91
25	190	331	486	287	1910	300	177	372	32	34	483	88
26	184	529	496	318	1710	279	196	339	30	39	361	121
27	169	643	496	318	1600	268	175	288	33	39	285	138
28	187	650	494	320	1360	276	165	271	32	38	239	162
29	243	570	494	342	.....	317	165	238	29	36	260	162
30	349	560	494	342	.....	299	168	223	27	37	203	173
31	439	.....	492	366	.....	270	.....	211	.....	35	172	.....
Mean	126	457	563	334	1860	649	178	392	66.7	43.9	421	102
Max.	439	650	760	483	3220	1490	403	860	190	171	2420	173
Min.	45	293	468	273	393	268	62	80	24	23	25	71
A. F.	7750	27200	34600	20500	103000	39800	10600	24100	3970	2700	25900	6070

Total 306,190 Acre Feet.

Record furnished by State of Colorado.

PLATTE RIVER AT OVERTON, NEBRASKA

Date	Year Ending September 30, 1930											
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	2900	4300	3800	3000	3000	4500	2900	6800	3800	550	0	3300
2	2900	4100	3800	3000	3000	4000	2800	5000	3200	400	0	2850
3	2900	4100	3800	3000	3000	3500	2800	3900	6400	225	0	2800
4	3200	3700	3800	3000	3000	3000	2800	5000	7100	200	0	3100
5	7500	3600	3800	3000	3000	2400	2900	5600	8000	200	0	3500
6	6500	3600	3800	3000	3000	2000	2800	4800	6800	175	0	3800
7	5700	3400	3800	3000	3000	5000	2800	3900	5900	125	0	3500
8	4700	3900	3800	3000	3000	5000	2500	3500	4900	100	0	4100
9	3700	3900	3800	3000	3000	3600	2500	3600	4100	10	0	3500
10	3500	3900	3800	3000	3000	4800	2500	3900	5600	10	0	2500
11	3200	3800	3800	3000	3000	4500	2500	6100	6400	10	0	2500
12	2900	3800	3800	3000	3000	4100	2500	8700	6400	10	0	2300
13	3200	3800	3800	3000	3000	3900	2900	9800	4600	8	0	2200
14	3200	3800	3800	3000	3000	3600	2900	9000	4100	6	0	2600
15	3200	3800	3800	3000	3000	3600	5300	8100	3400	0	0	2900
16	3200	3800	3800	3000	3000	3400	4800	7600	2900	0	300	2600
17	3000	3800	3800	3000	3000	3300	6500	7600	1800	0	650	2900
18	3100	3800	3800	3000	3000	3100	7500	8500	1800	0	900	2800
19	3200	3800	3800	3000	3000	3600	7100	9300	2500	0	1300	2800
20	3200	3800	3800	3000	3000	4100	6700	8500	3400	0	1650	2500
21	3000	3800	3800	3000	3000	4100	4500	7800	3900	50	3650	2400
22	3200	3800	3800	3000	3000	3800	3700	7500	3200	25	4300	2400
23	3400	3800	3800	3000	3000	3600	3300	6600	2200	25	3900	2400
24	3100	3800	3800	3000	3000	3300	3100	5900	1300	15	4300	1900
25	3100	3800	3800	3000	3000	2900	4100	4600	1100	15	4100	1575
26	3100	3800	3800	3000	3000	3300	5000	4100	1100	0	5500	2200
27	3100	3800	3800	3000	3000	2600	5000	3800	1000	0	5000	2000
28	3100	3800	3800	3000	3000	2900	5000	4100	1000	0	4800	2200
29	3700	3800	3800	3000	.....	2900	5800	5100	1000	0	4300	2700
30	4100	3800	3800	3000	.....	2600	7100	5100	800	0	4100	2600
31	4300	.....	3800	3000	.....	2900	.....	4400	.....	0	3700	.....
Mean	3616	*3816	*3800	*3000	*3000	3450	4770	6060	3680	69	1690	2715
Max.	7500	4300	3800	3000	3000	5000	7100	9800	8000	550	5500	4100
Min.	2900	3400	3800	3000	3000	2000	2500	3500	800	0	0	1575
A. F.	222350	227110	233656	184465	166614	217987	242582	373096	218978	4263	104034	161506

Total 2,356,641 Acre Feet. Lowest Gage Height 1.20 July 31, 1930.

Highest Gage Height 4.50 May 19, 1930. * Estimated.

Record furnished by the State of Nebraska.

PLATTE RIVER AT DUNCAN, NEBRASKA

Date	Year Ending September 30, 1930											
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	2410	4690	.....	.....	.....	5000	2380	4980	3220	756	9	3150
2	2290	4280	.....	.....	.....	3000	2320	5560	2940	660	9	3120
3	2350	4030	.....	.....	.....	2500	2290	6360	3080	463	8	2810
4	3590	4410	.....	.....	.....	2200	2180	5500	5890	427	7	2410
5	3520	4280	.....	.....	.....	2040	1920	4500	17600	336	9	2290
6	4200	3520	.....	.....	.....	2720	1820	4280	18600	236	10	2210
7	3790	3290	.....	.....	.....	2650	1820	7460	17700	146	17	2560
8	8100	3480	.....	.....	.....	2980	1780	8020	13100	87	17	2940
9	7540	3400	.....	.....	.....	7860	1720	10100	9100	60	17	3400
10	6660	3590	.....	.....	.....	5290	1550	14900	6850	40	17	3400
11	5890	4930	.....	.....	.....	5840	1510	14100	4640	31	17	4030
12	5190	4030	.....	.....	.....	4980	1590	10100	3710	21	17	3260
13	4410	4930	.....	.....	.....	3950	1630	7860	4790	21	17	2500
14	3290	5450	.....	.....	.....	4070	1550	8800	6160	21	69	2410
15	3040	3630	.....	.....	.....	3750	2590	9940	4840	21	60	2040
16	2840	3560	.....	.....	.....	3560	2980	8100	3120	21	78	1760
17	2720	4160	.....	.....	.....	3330	3440	6850	2410	21	55	1590
18	2590	4280	.....	.....	.....	3480	5400	7620	2260	21	45	1720
19	2620	3560	.....	.....	.....	3370	5140	7780	2410	19	63	1920
20	2350	3300	.....	.....	.....	2910	5610	7780	2530	17	106	1780
21	2210	3000	.....	.....	.....	3010	6300	8800	2260	21	257	2020
22	2260	2000	.....	.....	.....	2880	4640	8600	2260	17	168	2020
23	2120	2000	.....	.....	.....	2780	4410	7380	2650	16	141	1850
24	2380	2000	.....	.....	.....	3220	3290	6600	2650	15	1240	1700
25	2440	2000	.....	.....	.....	3520	2750	5610	2840	15	2720	1420
26	2320	1200	.....	.....	.....	3260	3480	4690	1720	15	2810	1700
27	2320	1200	.....	.....	.....	2810	4790	3870	1170	14	2720	1850
28	2880	1200	.....	.....	.....	2840	4840	3670	1050	10	2500	1630
29	3790	1200	.....	.....	.....	2620	4460	3560	948	10	3710	1400
30	4070	1200	.....	.....	.....	2500	5030	3330	800	9	3710	1460
31	4640	.....	.....	.....	.....	2440	.....	3010	.....	10	3790	.....
Mean	3570	3260	*632	*1000	*4980	3460	3180	7090	5110	115	788	2280
Max.	8100	5450	.....	.....	.....	7860	6360	14900	18600	756	3790	4030
Min.	2120	1200	.....	.....	.....	2040	1510	3010	800	9	7	1400
A. F.	220000	194000	.....	.....	.....	213000	189000	436000	304000	7070	48500	136000

Total 2,120,000 Acre Feet. Lowest Gage Height 0.28 Aug. 15, 1930.

Highest Gage Height 4.40 June 26, 1930. * Estimated.

Record furnished by the United States Geological Survey.

REPORT OF SECRETARY

PLATTE RIVER AT ASHLAND, NEBRASKA

Year Ending September 30, 1930

Date	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1	5620	11300	.....	.....	5200	10800	5890	12600	8470	3800	1770	7330
2	5400	9870	.....	.....	5200	8000	5850	13100	7430	3590	1750	7040
3	5780	8920	.....	.....	5200	4060	5700	12400	7130	3510	1733	7130
4	5250	8080	.....	.....	5200	3000	5470	11500	6700	3170	1780	6330
5	5930	7590	.....	.....	5200	2800	5290	10600	17700	2890	1860	5880
6	6570	7480	.....	.....	6000	2890	5140	13000	21600	2770	2210	5280
7	5970	7060	.....	.....	6000	5140	5220	14300	18100	2710	3220	5110
8	6760	6850	.....	.....	6000	6220	5180	21600	17300	2570	3320	5660
9	6620	6760	.....	.....	6000	7880	5250	22000	15900	2590	2560	5880
10	10100	7770	.....	.....	6000	8220	5290	27600	14300	2520	2590	15000
11	5220	7770	.....	.....	6200	6900	5220	30700	12200	2410	2710	9210
12	5890	7830	.....	.....	6200	8840	5110	33500	10500	2270	2920	7890
13	8920	7940	.....	.....	6200	7710	5400	28800	8580	2180	3560	7630
14	8150	7000	.....	.....	6200	7940	5440	23900	10700	2160	4160	6890
15	7320	7000	.....	.....	6200	7880	5890	19700	2,000	2070	3960	6140
16	6480	7000	.....	.....	12000	8000	7420	17900	18100	2020	3270	5620
17	6350	6300	.....	.....	12000	8150	13200	16100	12500	1920	3270	4870
18	6180	6480	.....	.....	12000	7940	13800	15800	9030	1910	6420	4640
19	6010	5000	.....	.....	39800	7710	13700	14000	7580	1880	5320	4130
20	6050	3000	.....	.....	27600	7880	13600	13500	6420	1910	5460	3920
21	6260	3000	.....	.....	22000	7370	13900	15200	9030	2030	5440	3890
22	6300	3000	.....	.....	15700	7260	13700	14800	13600	2120	11400	3740
23	6390	3000	.....	.....	13700	6810	13200	15700	7090	2000	9030	3800
24	6140	2470	.....	.....	14000	6430	11700	14300	6010	1990	7130	3710
25	6350	2270	.....	.....	13400	6180	10200	14000	6190	2050	5070	3510
26	6570	2920	.....	.....	12300	7060	8520	12200	6060	1860	4870	3460
27	6300	2000	.....	.....	11200	7420	8150	10200	6470	1770	5200	3200
28	6050	2000	.....	.....	10100	6710	11300	8600	6240	1790	5920	4300
29	6480	2000	.....	.....	.....	6180	12500	8080	4830	1760	5740	4270
30	8220	2000	.....	.....	.....	6050	11800	8220	4130	1800	6100	3960
31	11700	.....	.....	.....	.....	5930	.....	6620	.....	1820	7230	.....
Mean	6670	5660	*2000	*3100	10800	6820	8660	16100	10700	2320	4420	5650
Max.	11700	11300	2000	3100	39800	10800	13900	33500	21600	3800	11400	15000
Min.	5180	2000	2000	3100	5200	2890	5110	6620	4130	1760	1730	3200
A. F.	410000	337000	123000	191000	600000	419000	512000	990000	637000	143000	272000	336000

Total 4,970,000 Acre Feet.

Highest Gage Height 6.05 Feb. 19.

Lowest Gage Height 0.78 July 29.

* Estimated

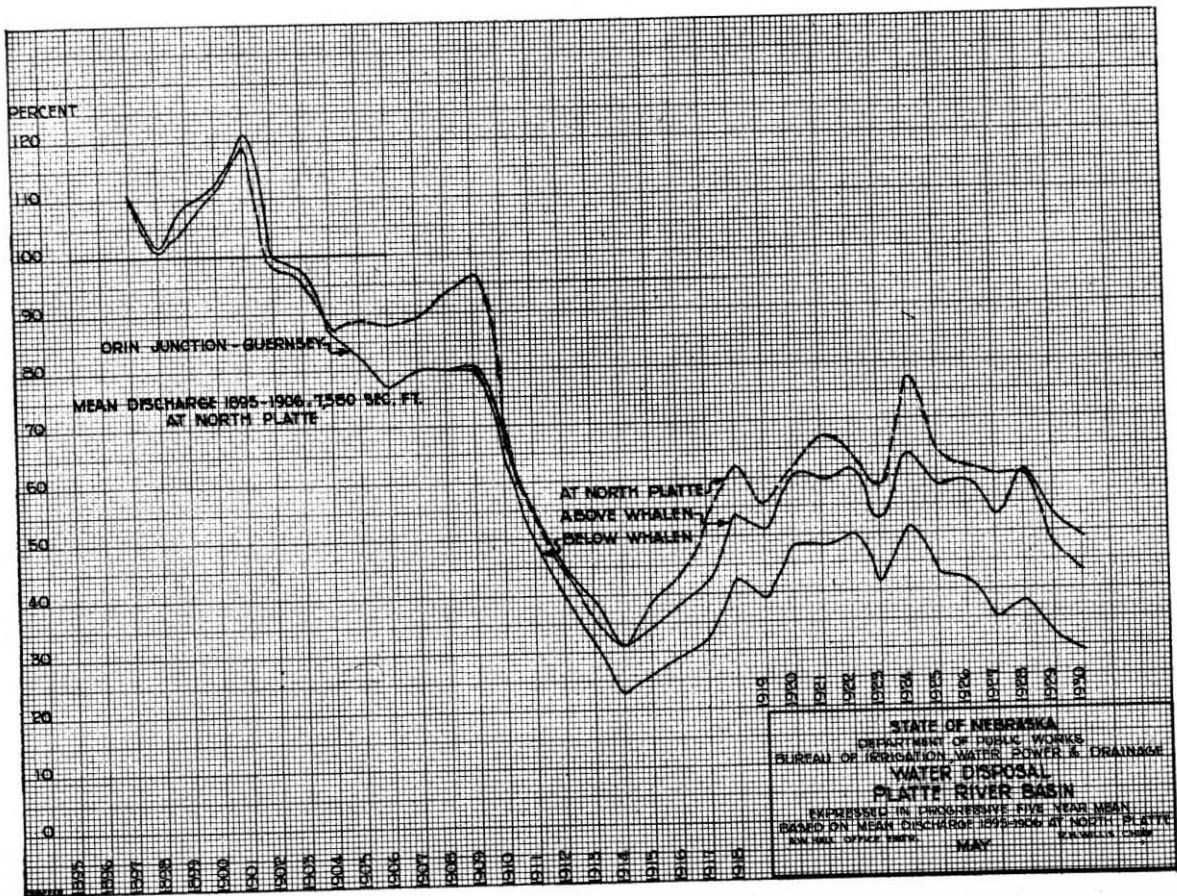
Record furnished by the United States Geological Survey.

PATHFINDER RESERVOIR

STORAGE QUANTITIES AT END OF MONTH IN ONE THOUSAND
ACRE FEET FROM JANUARY 1909, TO SEPTEMBER 30, 1930

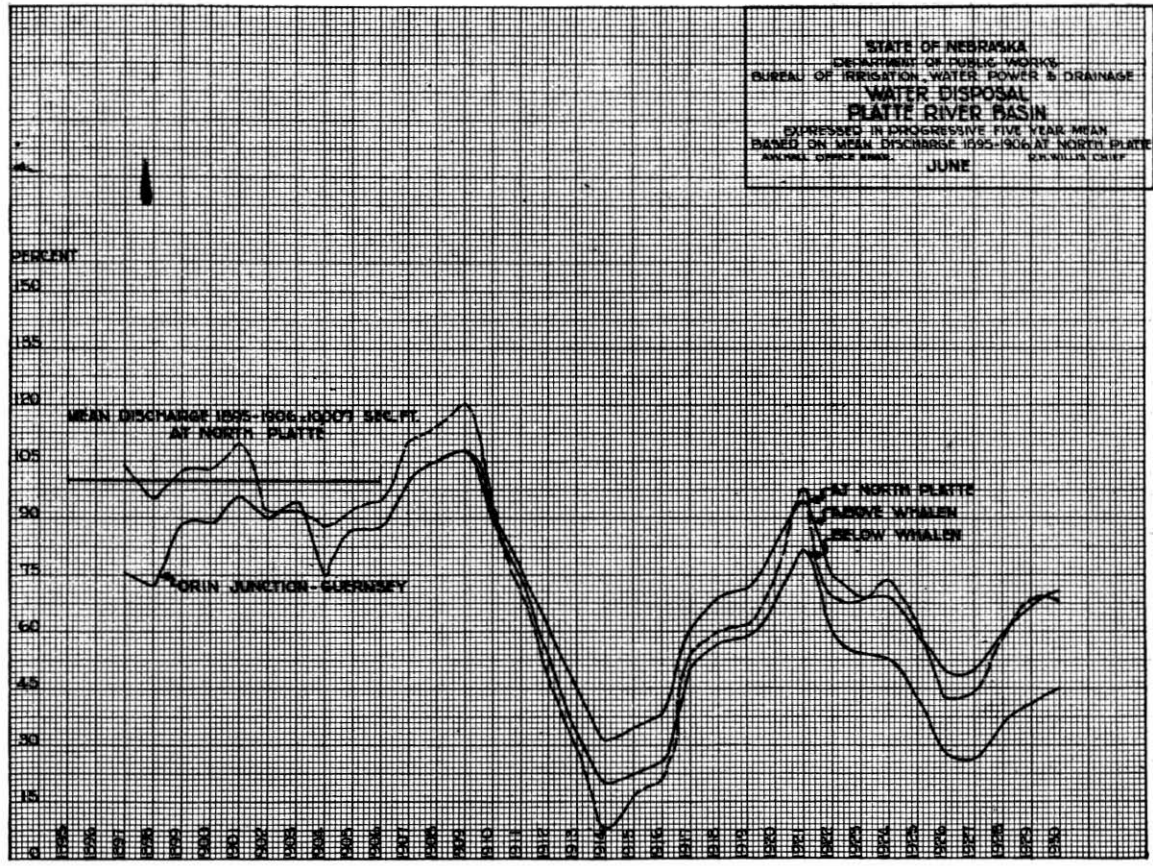
Furnished by the United States Bureau of Reclamation

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1909	0	0	0	32	114	655	520	227	125	0	0	0
1910	0	0	0	55	242	297	192	85	0	0	0	0
1911	0	0	17	2	170	390	270	122	0	0	0	0
1912	0	20	54	225	567	966	870	576	303	50	3	4
1913	4	24	71	378	567	609	474	324	209	229	268	288
1914	308	328	386	578	840	1082	890	636	378	310	332	348
1915	363	379	410	502	600	669	468	324	277	320	350	377
1916	400	429	561	684	760	799	586	398	314	351	383	412
1917	436	456	492	742	1102	1176	1055	846	647	628	665	700
1918	729	752	822	884	920	1107	909	696	568	580	612	641
1919	659	681	725	858	921	778	549	350	233	173	199	222
1920	244	277	347	501	1017	1129	954	768	659	633	671	691
1921	715	742	840	845	1085	1126	929	735	577	529	557	584
1922	604	620	682	803	869	934	693	465	304	249	277	296
1923	320	342	374	465	812	1119	981	792	657	710	756	774
1924	792	820	851	1019	1004	1070	746	407	208	237	278	305
1925	330	360	451	582	671	730	503	266	120	198	246	280
1926	299	333	414	727	991	1062	870	590	399	432	454	460
1927	456	472	515	658	1040	1121	880	668	504	553	608	626
1928	637	667	776	900	1167	1117	959	678	420	389	427	450
1929	467	490	539	816	1152	1139	985	692	534	516
1930	602	629	685	906	1031	955	631	464	334

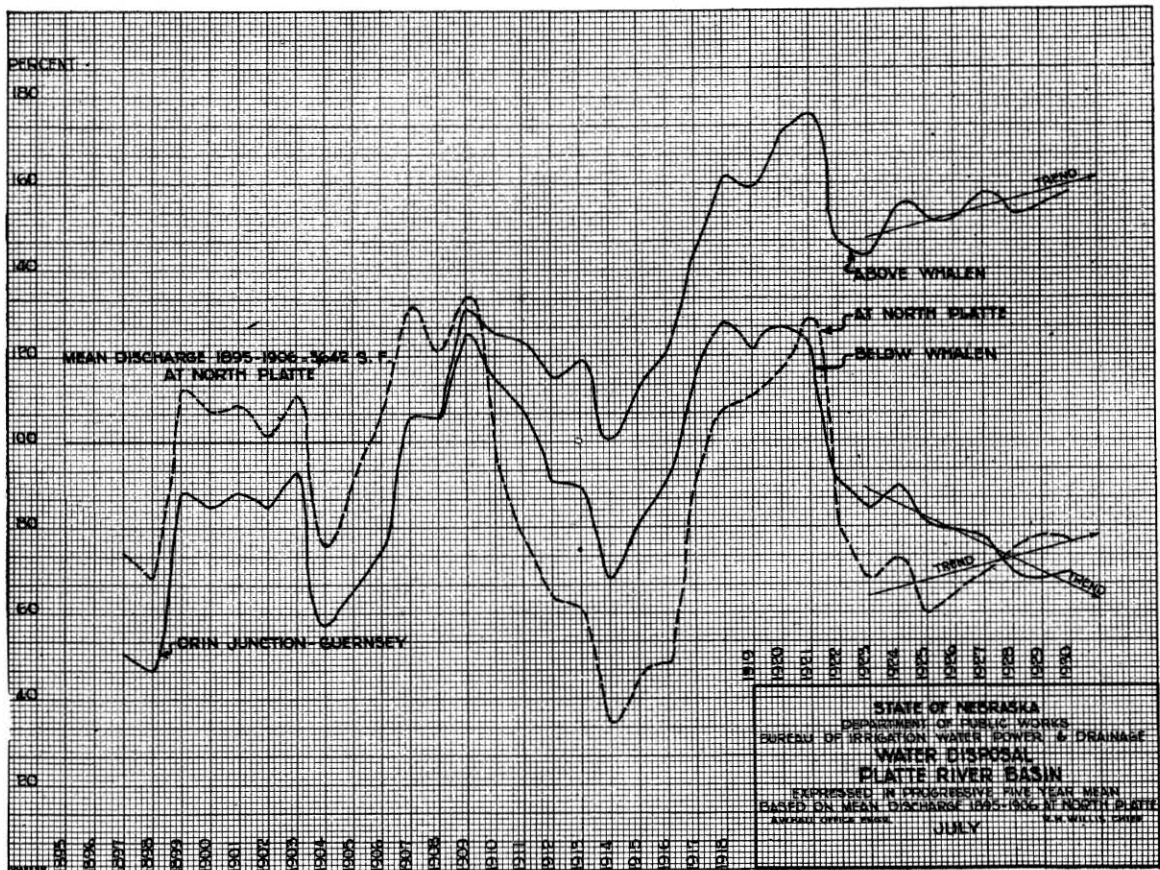


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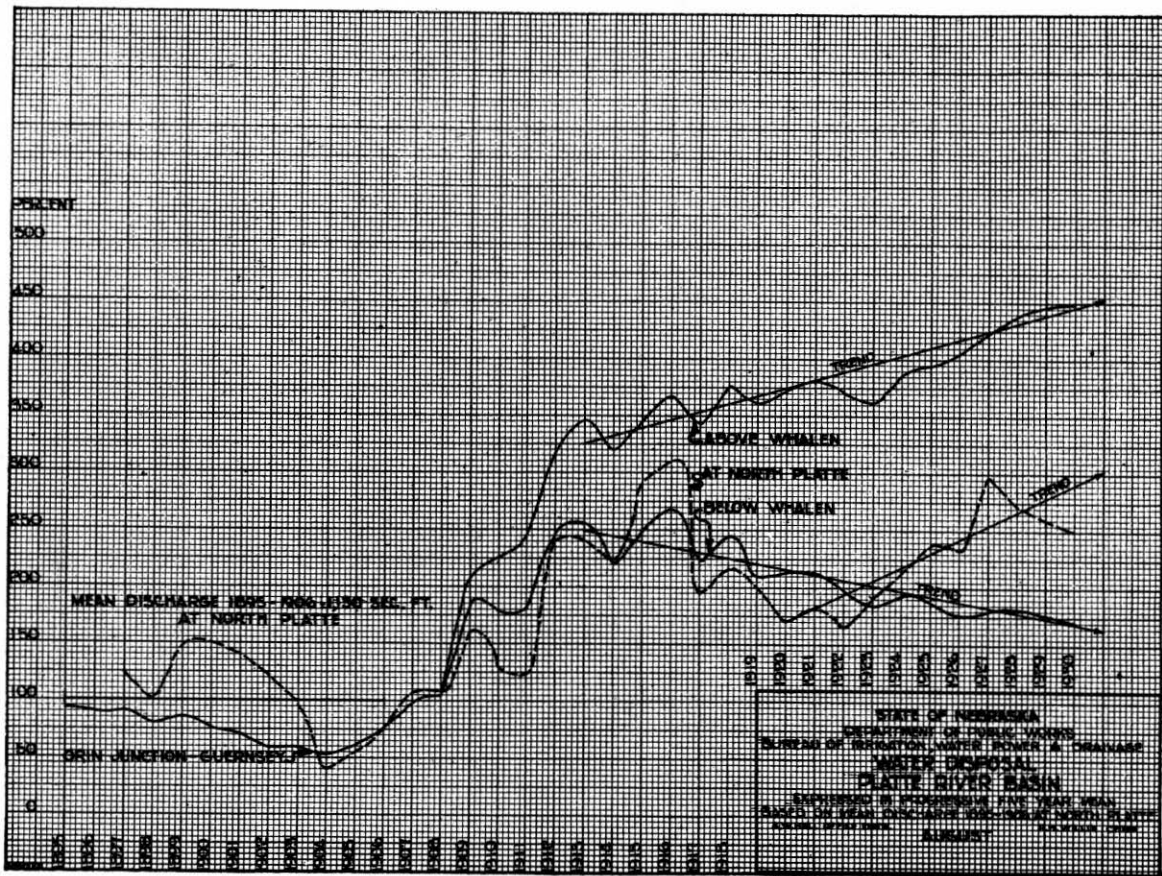
STATE OF NEBRASKA
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF IRRIGATION, WATER, POWER & DRAINAGE
WATER DISPOSAL
PLATTE RIVER BASIN
 EXPRESSED IN DEGRESSIVE FIVE YEAR MEAN
 BASED ON MEAN DISCHARGE 1895-1904 AT NORTH PLATTE
 ANNUAL OFFICE MEAN. JUNE R.C. MILLER, CHIEF



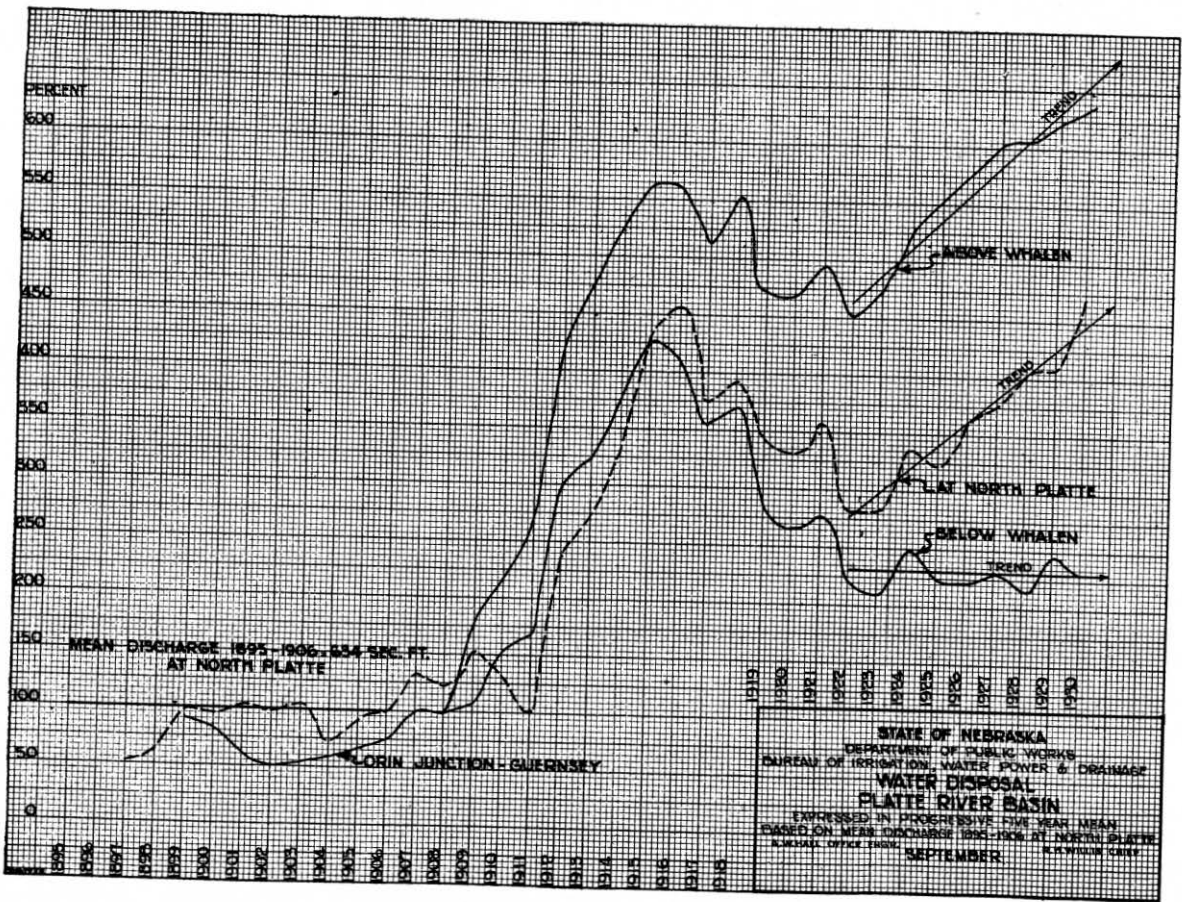
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**WATER DISPOSAL OF THE UPPER SECTIONS OF THE NORTH
PLATTE RIVER DURING THE PERIOD OF SHORTAGE
SEASON 1980**

Water shortage in the Platte River basin existed from about June 18th to August 7th.

To acquaint the water users with the manner in which the available water flowing in the North Platte river was distributed above Mitchell, Nebraska, tabulations were made showing the quantity of storage and natural flow reaching Whalen, Wyoming; Wyoming-Nebraska State Line and Mitchell, Nebraska, as follows:

**WATER ANALYSIS OF NORTH PLATTE RIVER
REACHING WHALEN**

June 14th to August 21st, 1980

Date	JUNE			JULY			AUGUST		
	Natural	Storage	Total	Natural	Storage	Total	Natural	Storage	Total
1				1910	3962	5872	1027	4502	5529
2				1148	4738	5886	906	4548	5454
3				1589	4233	5822	967	4572	5539
4				1045	4559	5604	1074	4322	5396
5				1272	4338	5610	1278	4221	5499
6				1230	4394	5624	1440	4046	5486
7				886	4735	5621	1308	4101	5409
8				833	4717	5550	1555	3879	5434
9				846	4757	5603	2271	3099	5370
10				921	4706	5627	1642	3573	5215
11				1164	4487	5651	1185	4149	5334
12				1022	4629	5651	1181	4009	5190
13				1015	4757	5772	2332	2949	5281
14	4201	0	4201	1933	3688	5621	2149	3100	5249
15	3024	1592	4616	1268	4385	5653	2514	2640	5154
16	4302	453	4755	9c2	4707	5609	2949	1917	4866
17	4074	798	4872	648	5015	5663	3078	1117	4195
18	4500	888	5388	842	4798	5640	4147	0	4147
19	3835	1768	5603	1081	4570	5651	4130	0	4130
20	3575	2402	5977	1181	4481	5662	3679	305	3984
21	4129	1849	5978	1482	4174	5656			
22	3156	2764	5920	1564	4073	5637			
23	3037	2934	5971	665	4989	5654			
24	5199	2888	6087	900	4711	5611			
25	2819	3100	5919	715	4835	5550			
26	2687	3183	5870	884	5610	5494			
27	2548	3301	5849	1160	4454	5514			
28	3612	2195	5807	1102	4409	5511			
29	2795	3007	5802	1344	4127	5471			
30	2224	3644	5868	1421	4068	5489			
31				1162	4368	5530			
A. F. 118449	72925	187407	69690	276647	346139	80871	121091	202041	

REPORT OF SECRETARY

**WATER ANALYSIS OF NORTH PLATTE RIVER
REACHING STATE LINE
June 18th to August 21st, 1930**

Date	JUNE			JULY			AUGUST		
	Natural	Storage	Total	Natural	Storage	Total	Natural	Storage	Total
1				1680	280	1960	1046	724	1770
2				1638	322	1960	902	828	1730
3				898	1082	1980	949	781	1730
4				1306	584	1890	933	767	1700
5				1020	870	1890	1124	616	1740
6				1313	707	2020	1263	567	1830
7				1079	761	1840	1530	380	1910
8				948	882	1830	1606	474	2080
9				984	876	1860	1787	253	2040
10				911	859	1770	2040	0	2040
11				948	882	1830	1918	202	2120
12				1286	614	1900	1371	749	2120
13				1122	778	1900	1418	662	2080
14				925	905	1830	2170	0	2170
15				1747	43	1790	3070	0	3070
16				1161	589	1750	2830	0	2830
17				997	803	1800	2480	0	2480
18	1750	0	1750	833	857	1690	2380	0	2380
19	1610	0	1610	927	873	1800	2405	0	2405
20	1800	0	1800	1016	814	1830	2190	0	2190
21	1900	0	1900	1077	783	1860	2080	0	2080
22	1990	0	1990	1355	515	1870			
23	1990	0	1990	1463	397	1860			
24	1900	0	1900	899	961	1860			
25	1890	0	1890	981	859	1840			
26	1860	0	1860	896	944	1840			
27	1920	0	1920	945	875	1820			
28	1860	0	1860	958	832	1790			
29	1840	0	1840	1013	777	1790			
30	1920	0	1920	1282	488	1770			
31				1365	405	1770			
A. F.	47862	0	47862	69368	44067	113436	74365	13890	88256

**WATER ANALYSIS OF THE NORTH PLATTE RIVER
REACHING MITCHELL
June 18th to August 21st, 1930**

Date	JUNE			JULY			AUGUST		
	Natural	Storage	Total	Natural	Storage	Total	Natural	Storage	Total
1				900	0	900	810	0	810
2				900	0	900	634	116	750
3				850	0	850	488	212	700
4				284	516	800	533	167	700
5				778	22	800	596	154	750
6				499	301	800	548	152	700
7				661	139	800	750	0	750
8				610	190	800	1080	0	1080
9				522	278	800	750	0	750
10				491	249	740	900	0	900
11				589	211	800	1080	0	1080
12				518	282	800	1250	0	1250
13				500	0	900	1080	170	1250
14				811	89	900	1269	71	1340
15				691	209	900	3450	0	3450
16				870	0	850	2950	0	2950
17				930	0	900	2600	0	2600
18	620	0	620	945	105	1050	2375	0	2375
19	560	0	560	743	157	900	2250	0	2250
20	1250	0	1250	715	185	900	1925	0	1925
21	1000	0	1000	786	114	900	1820	0	1820
22	725	0	725	893	87	980			
23	725	0	725	940	0	940			
24	850	0	850	870	0	850			
25	725	0	725	611	369	980			
26	725	0	725	631	269	900			
27	620	0	620	549	351	900			
28	700	0	700	576	284	860			
29	660	0	660	623	227	850			
30	725	0	725	778	162	940			
31				900	0	900			
A. F.	19607	0	19607	44220	9509	53729	57795	2067	59862

**WATER ANALYSIS OF CANAL DIVERSIONS AT WHALEN
(Goshen, Pathfinder Irrigation District and Ft. Laramie)
June 14th to August 21st, 1980**

The following tabulations show the quantity of storage and natural flow diverted by the three projects diverting from the North Platte river at Whalen, Wyoming; and the Northport project diverting from the North Platte river east of the state line and through the Farmers Irrigation District's headgate and canal. These four projects own the Pathfinder and Guernsey Reservoirs:

Date	JUNE			JULY			AUGUST		
	Natural	Storage	Total	Natural	Storage	Total	Natural	Storage	Total
1	.....	.....	.....	0	3622	3622	0	3614	3614
2	.....	.....	.....	0	3622	3622	0	3608	3608
3	.....	.....	.....	0	3622	3622	0	3617	3617
4	.....	.....	.....	0	3625	3625	0	3620	3620
5	.....	.....	.....	0	3625	3625	0	3605	3605
6	.....	.....	.....	0	3628	3628	0	3617	3617
7	.....	.....	.....	0	3628	3628	0	3599	3599
8	.....	.....	.....	0	3628	3628	0	3614	3614
9	.....	.....	.....	0	3628	3628	0	3587	3587
10	.....	.....	.....	0	3624	3624	0	3450	3450
11	.....	.....	.....	0	3631	3631	0	3439	3439
12	.....	.....	.....	0	3623	3623	0	3403	3403
13	.....	.....	.....	0	3649	3649	442	2949	3391
14	2814	0	2814	0	3643	3643	153	3100	3253
15	1407	1592	2999	0	3638	3638	504	2640	3144
16	2658	453	3111	0	3661	3661	949	1917	2866
17	2430	798	3228	0	3646	3646	1178	1117	2295
18	2480	888	3368	0	3646	3646	2262	0	2262
19	1781	1768	3549	0	3631	3631	2251	0	2251
20	1188	2402	3590	0	3652	3652	1947	305	2252
21	1741	1849	3590	0	3652	3652	.....	.....	.....
22	826	2764	3590	0	3631	3631	.....	.....	.....
23	643	2934	3577	0	3652	3652	.....	.....	.....
24	665	2888	3553	0	3646	3646	.....	.....	.....
25	500	3100	3600	0	3630	3630	.....	.....	.....
26	402	3183	3585	0	3615	3615	.....	.....	.....
27	311	3301	3612	0	3630	3630	.....	.....	.....
28	1424	2195	3619	0	3627	3627	.....	.....	.....
29	609	3007	3616	0	3612	3612	.....	.....	.....
30	0	3610	3610	0	3614	3614	.....	.....	.....
31	.....	.....	.....	0	3614	3614	.....	.....	.....
A. F.	43397	72858	116255	0	223332	223332	19212	108698	127910

REPORT OF SECRETARY

**WATER ANALYSIS OF DIVERSIONS
FOR THE NORTHPORT IRRIGATION DISTRICT
June 18th to August 21st, 1930**

Date	JUNE			JULY			AUGUST		
	Natural	Storage	Total	Natural	Storage	Total	Natural	Storage	Total
1				355	0	355	0	355	355
2				80	275	355	0	355	355
3				37	318	355	0	355	355
4				0	355	355	0	355	355
5				0	355	355	0	355	355
6				0	355	355	0	355	355
7				0	355	355	0	355	355
8				0	355	355	0	355	355
9				0	355	355	0	355	355
10				0	355	355	116	239	355
11				0	355	355	355	0	355
12				0	355	355	156	199	355
13				0	455	455	0	355	355
14				0	455	455	0	355	355
15				0	455	455	355	0	355
16				413	42	455	355	0	355
17				25	430	455	355	0	355
18	355	0	355	0	455	455	355	0	355
18	355	0	355	0	455	455	355	0	355
20	355	0	355	0	455	455	355	0	355
21	355	0	355	0	455	455	355	0	355
22	355	0	355	0	455	455			
23	355	0	355	0	455	455			
24	355	0	355	0	355	355			
25	355	0	355	0	355	355			
26	355	0	355	0	355	355			
27	355	0	355	0	355	355			
28	355	0	355	0	355	355			
29	355	0	355	0	355	355			
30	355	0	355	0	355	355			
31				0	355	355			
A. F.	9858	0	9858	1804	22205	24010	6173	8614	14787

VISIBLE RETURN FLOW IN NORTH PLATTE VALLEY IN ACRE FEET—1927
WYOMING-NEBRASKA STATE LINE TO BRIDGEPORT

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Bayard Sugar Factory Drain.....	3136	2555	3045	3660	2613	2490	3900	3984	3570	3505	3080	2459	37997
Camp Clark Seep.....	285	222	123	178	184	178	307	799	1488	553	426	369	5112
Fairfield Seep.....	369	389	492	1547	405	238	246	611	297	184	178	61	5017
Fanning Seep.....	395	587	448	357	615	357	553	1138	714	615	555	553	6887
Gering Drain.....	684	666	922	1179	1680	220	2828	5336	3868	2336	1547	1291	22548
Horse Creek.....	3066	4599	2663	5416	13172	12498	29427	26015	17851	8731	10086	3197	136721
Indian Creek.....	506	833	863	575	2582	2975	492	2336	4760	1666	496	553	18637
*Katzer Drain.....	222	222	258	551	970	1666	1230	3193	2152	892	387	184	11927
Melbeta Seep.....	325	167	246	535	242	119	238	307	297	492	535	430	3933
Morrill Drain.....	0	0	0	0	51	59	0	333	119	141	119	0	822
Mitchell Spillway.....	307	278	278	1130	2646	10165	3372	5455	1240	1107	833	892	27703
Red Willow.....	2874	2444	2376	2924	6303	5986	2751	7658	4957	4796	3590	3259	49918
Scottsbluff Drain.....	492	722	1353	773	369	357	861	1497	1190	1107	734	676	10131
Sheep Creek.....	5534	4732	5406	5128	4712	416	1045	2041	535	5964	5742	4550	45805
Stewarts Drain.....	184	166	151	178	83	357	123	198	119	123	119	123	1924
Snell-Nine Mile Drain.....	7382	7498	7599	10126	7561	6664	8977	15003	13091	13466	10484	8777	116628
Spotted Tail (Dry).....	2346	1833	1876	2499	1813	2083	4365	7216	3273	2890	2380	2029	34603
Spotted Tail (Wet)-Kronberg	738	555	712	714	658	714	738	1551	1190	863	1041	662	10136
Tub Springs.....	2448	1722	2301	2559	1337	4582	3443	5835	3094	4487	3362	3874	38894
Toohy Drain.....	369	248	145	654	151	238	246	397	416	369	268	246	3747
Toohy Spillway.....	728	970	984	952	704	0	0	0	0	1609	952	1783	8682
Winters Creek.....	3260	3332	3174	3987	3752	5474	1968	5837	5474	5767	5148	2938	50111
Wild Horse Drain.....	2057	1888	2210	2204	1997	2856	4932	10835	7566	4366	3887	3320	48118
Total.....	38038	36877	37870	48062	55263	61677	72399	108583	77790	66546	56425	42656	696001
Arnold Drain.....	246	168	807	496	470	873	799	1125	893	922	803	492	8094
Cherry Creek.....	1107	1438	613	1011	1138	1071	1476	2057	2380	615	386	369	13661
Lincoln County Drain.....	3443	2499	3197	3709	3828	5097	6964	6649	5653	4939	4205	3765	53948
Silvernail Drain.....	331	249	245	245	663	985	357	1158	529	517	476	430	6185
**Grand Total.....	43165	41231	42732	53523	61362	69703	81995	119572	87245	73539	62295	47712	777889

* Over the State Line in Wyoming.
 Total visible return flow between the State Line and Bridgeport 696201 Acre Feet.
 Average daily flow, May to September inclusive.....1402 Second Feet.
 Average daily flow for the twelve months.....961 Second Feet.

** Total between Whalen, Wyoming and North Platte, Nebraska.

Revised March 8, 1929.

**VISIBLE RETURN FLOW IN NORTH PLATTE VALLEY IN ACRE FEET—1928
BETWEEN WYOMING-NEBRASKA STATE LINE AND BRIDGEPORT**

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Bayard Sugar Factory Drain.....	3320	1981	1577	1537	3320	3064	2890	2826	2440	4072	3045	2951	33023
Camp Clark Seep.....	246	172	123	119	121	208	246	676	773	492	300	303	3779
Fairfield Seep.....	246	230	339	186	184	535	492	305	238	246	178	246	3425
Fanning Seep.....	492	518	553	476	676	803	754	553	803	922	476	738	7764
Gering Drain.....	983	690	984	654	1950	3511	4044	1906	3154	2275	2529	1968	24648
Horse Creek.....	4427	978	1353	863	12942	10949	8961	5226	12050	5350	4681	3074	70854
Indian Creek.....	737	518	653	357	656	734	1309	738	1309	1783	387	952	10133
Lane Drain.....	60	59	61	60	91	178	369	401	416	246	198	123	2262
Melbeta Seep.....	303	345	246	268	268	297	0	0	714	738	218	492	3939
Morrill Drain.....	246	163	123	89	0	0	0	0	0	217	60	62	960
Mitchell Spillway.....	833	1380	369	119	5994	8269	2081	2761	99	635	1517	861	24918
Red Willow Drain.....	2644	2071	2213	1964	11389	11544	4120	6696	1428	3136	4106	2547	53858
Scottsbluff Drain.....	615	863	912	387	587	1249	958	676	1041	1906	1130	922	11246
Sheep Creek.....	4735	4141	4919	4344	4374	1904	2273	861	1190	1168	5435	4735	40079
Stewarts Drain.....	123	58	123	119	0	0	0	0	0	123	119	123	788
Snell-Nine Mile Drain.....	7133	6500	6579	6813	6329	7587	9832	13553	12377	11314	11294	8985	107296
Spotted Tail (Dry) Creek.....	2090	2013	1930	1220	3687	3669	3620	4256	5534	4304	1755	1968	36046
Spotted Tail & Krongberg S.	799	690	615	654	861	1190	946	922	1031	1230	952	1414	11304
Tub Springs.....	2644	1898	1968	1517	3267	4374	2180	3505	3154	2705	4820	3505	35537
Toohey Drain.....	246	234	184	119	155	178	293	460	387	553	208	492	3509
Toohey Spillway.....	861	633	861	1309	0	0	0	0	0	436	1547	1414	7061
Winters Creek.....	3443	3392	3986	3005	4227	1577	676	3233	4522	6026	4314	3935	42336
Wild Horse Drain.....	2275	2243	2091	1706	1753	5831	3443	4496	4701	5103	4877	2553	41072
Total.....	39501	31770	32762	27885	62831	67651	49487	54050	57361	54980	53196	44363	575837

**VISIBLE RETURN FLOW IN NORTH PLATTE VALLEY IN ACRE FEET—1928
BETWEEN WHALEN AND WYOMING-NEBRASKA STATE LINE**

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Arnold Drain.....	738	690	238	179	224	714	708	641	791	684	476	307	6390
Cherry Creek.....	799	230	430	357	702	1093	2013	3715	3963	2124	654	922	17004
Katzer Drain.....	492	460	369	238	1827	1664	1031	2342	3144	246	535	246	12594
Pullen Drain.....	28	28	50	48	50	20	20	70	60	60	30	30	494
Total.....	2057	1408	1087	822	2873	3491	3772	6768	7960	3114	1695	1505	36482

BETWEEN BRIDGEPORT AND NORTH PLATTE

Lincoln County Drain.....	3802	3358	3334	2618	4978	5018	6514	6611	7696	4919	4750	4181	57779
Silvernail Drain.....	492	348	377	268	369	595	466	329	436	1291	506	430	5907
Total.....	4294	3706	3711	2886	5347	5613	6980	6940	8123	6210	5256	4611	63686

Total return flow in Acre Feet between the State Line and Bridgeport 575,837 Acre Feet.

Average daily flow May to September inclusive 960. Second Feet.

Average daily flow for the twelve months 795. Second Feet.

VISIBLE RETURN FLOW IN THE NORTH PLATTE VALLEY IN ACRE FEET— 1929
WYOMING-NEBRASKA STATE LINE TO BRIDGEPORT

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Bayard Sugar Factory Drain.....	2317	2249	2999	3293	3316	3838	4243	3491	3818	3045	2440	2460	37509
Camp Clark Seep.....	184	137	123	149	153	238	430	430	506	676	357	373	3756
Fairfield Seep.....	184	117	246	297	430	506	547	246	178	123	397	329	3600
Fanning Seep.....	401	666	436	565	585	625	738	672	654	492	476	528	6838
Gering Drain.....	1537	1142	1107	1130	2277	2499	2094	1967	2023	2172	2063	2634	22647
Horse Creek.....	2150	1555	3804	7438	18125	19904	7757	6472	6188	6456	5256	6129	91234
Indian Creek.....	615	278	615	357	184	863	922	1763	1606	1537	991	575	10306
Lane Drain.....	141	55	123	149	123	149	184	184	208	246	218	246	2026
Melbeta Seep.....	430	163	184	208	278	446	553	71	238	676	416	369	4032
Morrill Drain.....	156	0	0	119	75	0	0	0	0	123	178	60	711
Mitchell Spillway.....	1047	1051	1065	714	1806	2479	0	0	6843	2029	1725	1045	19804
Red Willow Drain.....	2926	2186	1841	2440	6549	6238	1908	2969	5766	5595	4383	4550	47351
Scottsbluff Drain.....	922	543	492	506	450	892	916	1406	1446	1351	1071	1079	11074
Sheep Creek.....	4925	4498	4800	4879	4951	3933	246	575	4102	7194	7061	5589	52752
Stewarts Drain.....	123	111	91	59	38	0	0	0	0	31	60	154	697
Snell-Nine Mile Drain.....	5595	8430	7061	6188	6978	7855	10126	11891	11603	11484	8826	7968	104005
Spotted Tail (Dry) Creek.....	1785	1537	1604	2063	3114	5930	4899	5359	5910	4120	2826	2243	41390
Spotted Tail & Kronberg S.	768	1125	841	982	734	714	1045	861	1011	1168	952	1121	11322
Tub Springs.....	2358	1928	2707	1388	1595	3372	2303	1612	2440	5472	4106	3731	32312
Toohy Drain.....	91	111	218	267	182	159	218	369	297	246	357	278	2793
Toohy Spillway.....	1251	1424	1430	1309	438	0	0	0	0	1844	1487	1142	10325
Winters Creek.....	2091	3019	3433	3064	2414	892	4185	4550	4106	5657	5177	3767	42365
Wild Horse Drain.....	1844	1280	1767	1398	1543	2083	2172	5028	5355	3005	1934	2717	30135
Total.....	33851	33605	36287	38962	56338	63615	45486	6940	8132	6210	5256	4611	63686

VISIBLE RETURN FLOW IN NORTH PLATTE VALLEY IN ACRE FEET—1929
BETWEEN WHALEN AND WYOMING-NEBRASKA STATE LINE

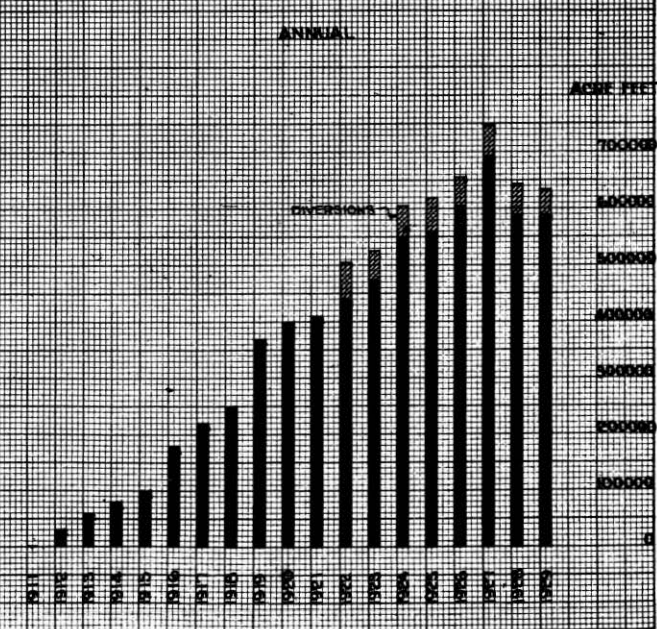
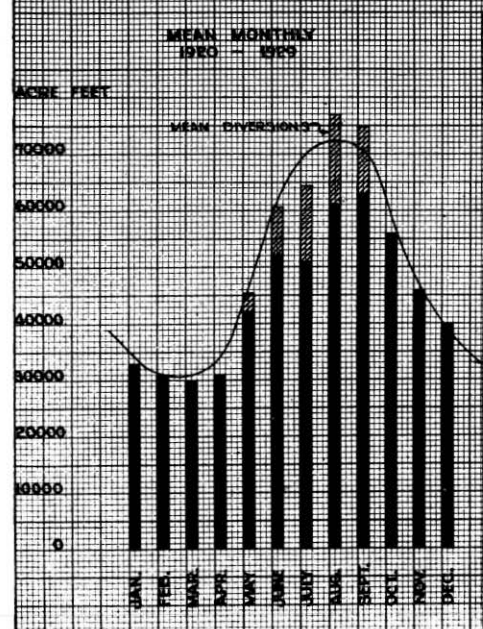
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Arnold Drain.....	583	250	547	357	305	297	420	771	781	861	715	405	6292
Cherry Creek.....	555	444	661	714	371	1567	3608	4655	2291	1220	803	551	17440
Katzer Drain.....	184	192	246	297	1067	1428	1293	1908	1477	508	238	184	9022
Pullen Drain.....	12	16	18	59	45	44	61	99	103	61	59	61	638
Total.....	1334	902	1472	1427	1788	3336	5382	7433	4652	2650	1815	1201	33392

BETWEEN BRIDGEPORT AND NORTH PLATTE

Lincoln County Drain.....	3364	3250	3858	3570	4058	5921	7430	8864	7081	6395	4840	3935	62566
Silvermail Drain.....	476	325	309	438	351	535	847	738	1011	615	476	658	6779
Total.....	3840	3575	4167	4008	4409	6456	8277	9602	8092	7010	5316	4593	69345

Total visible return flow in Acre Feet between the State Line and Bridgeport 588,984,
 Average daily flow May to September inclusive 921. Second Feet,
 Average daily flow for the twelve months 813. Second Feet.

STATE OF MISSISSIPPI
 DEPARTMENT OF WATER RESOURCES
 BUREAU OF MISSISSIPPI WATER POWER & DRAINAGE
 DIVISION OF WATER RESOURCES
VISIBLE RETURN FLOW IN NORTH PLATE VALLEY
 HENRY TO WINSTON



**DAILY EVAPORATION IN INCHES
MITCHELL EXPERIMENTAL FARM**

Mitchell, Nebraska

Date	1929			1930		
	June	July	August	June	July	August
1	.197	.144	.218	.169	.256	.230
2	.470	.158	.178	.179	.306	.251
3	.162	.166	.149	.100	.372	.257
4	.263	.423	.300	.113	.148	.222
5	.125	.337	.496	.173	.210	.0
6	.027	.162	.203	.166	.233	.0
7	.064	.306	.266	.172	.233	.0
8	.146	.242	.189	.198	.219	.0
9	.112	.220	.173	.154	.313	.222
10	.219	.201	.258	.145	.341	.191
11	.190	.130	.158	.128	.275	.213
12	.353	.112	.348	.199	.228	.111
13	.105	.167	.358	.207	.189	.164
14	.253	.575	.277	.376	.132	.087
15	.195	.269	.285	.179	.161	.0
16	.322	.204	.172	.199	.198	.165
17	.260	.211	.196	.211	.216	.165
18	.136	.232	.152	.239	.206	.184
19	.255	.294	.386	.158	.300	.246
20	.305	.139	.242	.195	.082	.302
21	.170	.263	.164	.164	.160	.364
22	.115	.216	.278	.256	.157	.262
23	.140	.228	.274	.148	.180	.190
24	.378	.198	.294	.239	.189	.308
25	.050	.226	.246	.235	.209	.184
26	.320	.259	.175	.245	.245	.214
27	.219	.260	.116	.222	.236	.196
28	.267	.238	.267	.203	.374	.337
29	.248	.410	.178	.268	.250	.146
30	.413	.100	.113	.215	.230	.123
31	.....	.218	.211	.....	.184	.122
Total	6.479	7.308	7.320	5.855	7.032	5.456
Mean	.186	.236	.236	.193	.226	.176
Max.	.470	.575	.496	.376	.374	.364
Min.	.027	.100	.113	.100	.082	.0

Standard Class "A" Pan.

REPORT OF SECRETARY

DAILY EVAPORATION IN INCHES
NORTH PLATTE EXPERIMENTAL FARM

North Platte, Nebraska

Date	1929			1930		
	June	July	August	June	July	August
1	.203	.172	.319	.238	.309	.224
2	.080	.338	.338	.247	.364	.284
3	.115	.274	.413	.130	.281	.362
4	.047	.389	.375	.187	.262	.086
5	.044	.175	.272	.160	.185	.158
6	.146	.287	.172	.126	.365	.152
7	.132	.247	.245	.281	.175	.249
8	.091	.189	.211	.260	.420	.121
9	.110	.266	.272	.164	.325	.358
10	.240	.183	.208	.063	.334	.220
11	.318	.296	.294	.070	.414	.052
12	.210	.273	.332	.176	.293	.186
13	.149	.303	.278	.305	.309	.139
14	.240	.226	.330	.311	.079	.115
15	.300	.251	.372	.113	.331	.067
16	.255	.509	.300	.233	.271	.203
17	.311	.220	.....	.315	.335	.150
18	.307	.303	.291	.461	.277	.165
19	.326	.368	.091	.133	.240	.207
20	.341	.330	.271	.208	.303	.178
21	.270	.313	.289	.090	.247	.257
22	.215	.279	.192	.240	.212	.167
23	.199	.187	.278	.282	.297	.303
24	.218	.183	.274	.330	.180	.192
25	.291	.322	.223	.231	.291	.066
26	.247	.439	.162	.312	.271	.262
27	.280	.384	.....	.267	.261	.193
28	.360	.341	.183	.225	.369	.253
29	.342	.263	.285	.322	.165	.180
30	.191	.290	.259	.309	.112	.118
31	.....	.337	.212	.....	.084	.191
Total	6.578	8.937	8.102	6.789	8.361	5.858
Mean	.219	.288	.261	.226	.270	.189
Max.	.360	.509	.413	.461	.420	.362
Min.	.047	.172	.091	.063	.084	.052

Standard Class "A" Pan.

DEPARTMENT OF PUBLIC WORKS

377

STREAM MEASUREMENTS

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Arapahoe Star Mill Waste.....	NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 27-4-23, Arapahoe.....	C. E. Franklin	10- 2-28	46.3
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	10-21-28	83.2
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	11-22-28	111.3
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	1-20-29	0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	2-19-29	0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	3- 9-29	0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	3-22-29	0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	5-14-29	107.0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	5-31-29	82.0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	6-11-29	140.0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	6-29-29	0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	7-13-29	34.0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	8- 6-29	9.2
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	8-18-29	0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	8-25-29	0
Arapahoe Star Mill Waste.....	do.....	C. E. Franklin	9-26-29	37.0
Arickaree River.....	Section 28-1-41, Haigler.....	C. E. Franklin	10- 4-28	6.2
Arickaree River.....	do.....	C. E. Franklin	10-23-28	15.9
Arickaree River.....	do.....	C. E. Franklin	11- 3-28	27.2
Arickaree River.....	do.....	C. E. Franklin	11-23-28	19.0
Arickaree River.....	do.....	C. E. Franklin	12-22-28	16.1
Arickaree River.....	do.....	C. E. Franklin	1-23-29	32.6
Arickaree River.....	do.....	C. E. Franklin	2-20-29	29.0
Arickaree River.....	do.....	C. E. Franklin	3-10-29	57.4
Arickaree River.....	do.....	C. E. Franklin	3-23-29	14.0
Arickaree River.....	do.....	C. E. Franklin	5-16-29	24.4
Arickaree River.....	do.....	C. E. Franklin	6- 1-29	61.7
Arickaree River.....	do.....	C. E. Franklin	6-13-29	23.0
Arickaree River.....	do.....	C. E. Franklin	6-30-29	6.3
Arickaree River.....	do.....	C. E. Franklin	7-14-29	1.0*
Arickaree River.....	do.....	C. E. Franklin	8- 7-29	15.0
Arickaree River.....	do.....	C. E. Franklin	8-20-29	0.3
Arickaree River.....	do.....	C. E. Franklin	8-29-29	16.1
Arickaree River.....	do.....	C. E. Franklin	9-28-29	10.2
Akers Draw.....	East Line, Section 12-23-57.....	A. W. Hall	7- 3-29	10.6
Arnold Drain.....	Section 12-24-61, 3 Miles East of Torrington, Wyo.....	C. E. Franklin	11-17-28	8.2
Arnold Drain.....	do.....	C. E. Franklin	11-28-28	7.7
Arnold Drain.....	do.....	C. E. Franklin	12- 6-28	5.5
Arnold Drain.....	do.....	C. E. Franklin	1-10-29	10.4
Arnold Drain.....	do.....	C. E. Franklin	1-30-29	8.9
Arnold Drain.....	do.....	A. W. Hall	2-15-29	2.0*
Arnold Drain.....	do.....	C. E. Franklin	3- 2-29	12.2
Arnold Drain.....	do.....	C. E. Franklin	3-19-29	6.3
Arnold Drain.....	do.....	A. W. Hall	5- 8-29	5.5
Arnold Drain.....	do.....	A. W. Hall	5-20-29	3.8

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Ash Creek	Section 7-32-50	A. E. Johnston	10-25-28	2.0
Ash Creek	do	A. E. Johnston	5-19-29	10.3
Ash Creek	do	A. E. Johnston	6-21-29	3.0
Ash Creek	do	A. E. Johnston	9-11-29	2.1
Ash Creek	Section 32-32-50	A. E. Johnston	10-25-28	1.0
Ash Creek	do	A. E. Johnston	6-21-29	3.1
Austin Creek	Section 28-4-6 E	A. E. Johnston	4-17-29	2.1
Austin Creek	do	A. E. Johnston	7-10-29	0.8
Bayard Sugar Factory Drain	Section 34-21-52	A. W. Hall	10-17-28	63.5
Bayard Sugar Factory Drain	do	C. E. Franklin	11-13-28	42.7
Bayard Sugar Factory Drain	do	C. E. Franklin	11-25-28	56.3
Bayard Sugar Factory Drain	do	C. E. Franklin	12-11-28	56.0
Bayard Sugar Factory Drain	do	C. E. Franklin	12-26-28	48.3
Bayard Sugar Factory Drain	do	A. W. Hall	1-19-29	27.6
Bayard Sugar Factory Drain	do	C. E. Franklin	2- 5-29	46.8
Bayard Sugar Factory Drain	do	C. E. Franklin	2-28-29	32.9
Bayard Sugar Factory Drain	do	C. E. Franklin	3-15-29	52.1
Bayard Sugar Factory Drain	do	A. W. Hall	5- 6-29	56.2
Bayard Sugar Factory Drain	do	A. W. Hall	5-24-29	51.9
Bayard Sugar Factory Drain	do	A. W. Hall	6-11-29	67.0
Bayard Sugar Factory Drain	do	A. W. Hall	6-24-29	69.2
Bayard Sugar Factory Drain	do	A. W. Hall	7-16-29	60.1
Bayard Sugar Factory Drain	do	A. W. Hall	8-13-29	54.5
Bayard Sugar Factory Drain	do	A. W. Hall	9-16-29	65.8
Battle Creek	Section 1-23-3, Battle Creek	A. E. Johnston	1-30-29	36.7
Bazille Creek	Section 4-29-5 W	A. E. Johnston	12-25-28	15.1
Bear Creek	Section 25-34-36	A. E. Johnston	10- 1-28	10.1
Bear Creek	do	A. E. Johnston	10-26-28	17.6
Bear Creek	do	A. E. Johnston	12-22-28	32.1
Bear Creek	do	A. E. Johnston	1-25-29	20.5
Bear Creek	do	A. E. Johnston	5- 3-29	47.8
Bear Creek	do	A. E. Johnston	5-30-29	39.4
Bear Creek	do	A. E. Johnston	9-12-29	26.9
Beaver Creek	Section 15-20-6	A. E. Johnston	10- 5-28	44.5
Beaver Creek	do	A. E. Johnston	3-20-29	103.4
Beaver Creek	do	A. E. Johnston	5- 8-29	106.0
Beaver Creek	do	A. E. Johnston	6- 4-29	317.0
Beaver Creek	do	A. E. Johnston	9-19-29	57.0
Beaver Creek	Sec. 19-21-19, Orleans	C. E. Franklin	6-29-29	93.3
Beaver Creek	do	C. E. Franklin	7-13-29	105.0
Beaver Creek	do	C. E. Franklin	8- 6-29	84.7
Beaver Creek	do	C. E. Franklin	8-18-29	51.6
Beaver Creek	do	C. E. Franklin	8-25-29	35.0
Beaver Creek	do	C. E. Franklin	9-26-29	24.0

DEPARTMENT OF PUBLIC WORKS
STREAM MEASUREMENTS—Continued
Year Ending September 30, 1929

379

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Birdwood Creek	Section 2-14-33	A. E. Johnston	10-17-28	166.7
Birdwood Creek	do	A. E. Johnston	11- 9-28	194.6
Birdwood Creek	do	A. E. Johnston	11-24-28	191.9
Birdwood Creek	do	A. E. Johnston	12-18-28	191.4
Birdwood Creek	do	A. E. Johnston	1- 5-29	187.3
Birdwood Creek	do	A. E. Johnston	1-18-29	218.3
Birdwood Creek	do	A. E. Johnston	2-12-29	198.1
Birdwood Creek	do	A. E. Johnston	3- 6-29	261.0
Birdwood Creek	do	A. E. Johnston	3-27-29	176.3
Birdwood Creek	do	A. E. Johnston	4- 3-29	183.9
Birdwood Creek	do	A. E. Johnston	4-25-29	277.0
Birdwood Creek	do	A. E. Johnston	5-21-29	177.0
Birdwood Creek	do	A. E. Johnston	6-13-29	163.0
Birdwood Creek	do	A. E. Johnston	6-27-29	144.0
Birdwood Creek	do	A. E. Johnston	7-18-29	148.0
Birdwood Creek	do	A. E. Johnston	7-24-29	154.0
Birdwood Creek	do	A. E. Johnston	7-31-29	170.0
Birdwood Creek	do	A. E. Johnston	8-13-29	174.3
Birdwood Creek	do	A. E. Johnston	8-28-29	148.0
Birdwood Creek	do	A. E. Johnston	9- 5-29	210.6
Blue Creek	Below Paisley Headgate	A. W. Hall	8- 8-29	107.5
Blue Creek	North Line Section 30-16-42	A. E. Johnston	10-19-28	99.8
Blue Creek	do	A. E. Johnston	11- 5-28	139.7
Blue Creek	do	A. E. Johnston	11- 8-28	128.5
Blue Creek	do	A. E. Johnston	11-26-28	122.0
Blue Creek	do	A. E. Johnston	12- 4-28	125.1
Blue Creek	do	A. E. Johnston	12-18-28	139.8
Blue Creek	do	A. E. Johnston	1- 3-29	127.6
Blue Creek	do	A. E. Johnston	1-18-29	131.0
Blue Creek	do	A. E. Johnston	2-13-29	Ice
Blue Creek	do	A. E. Johnston	3- 7-29	122.9
Blue Creek	do	A. E. Johnston	3-28-29	121.0
Blue Creek	do	A. E. Johnston	4- 2-29	126.4
Blue Creek	do	A. E. Johnston	4-26-29	137.4
Blue Creek	do	A. E. Johnston	5-22-29	117.0
Blue Creek	do	A. E. Johnston	6-14-29	1.2
Blue Creek	do	A. E. Johnston	6-25-29	0.5
Blue Creek	do	A. W. Hall	6-29-29	94.9
Blue Creek	do	A. E. Johnston	7-19-29	92.2
Blue Creek	do	A. E. Johnston	7-23-29	105.5
Blue Creek	do	A. W. Hall	8- 2-29	12.4
Blue Creek	do	C. E. Franklin	8-15-29	21.2
Blue Creek	do	A. E. Johnston	9- 6-29	86.8
Blue River	Beatrice	A. E. Johnston	4-17-29	218.0
Blue River	do	A. E. Johnston	7-10-29	616.0
Blue River (Big)	Section 28-11-3 E, Below Power Plant at Seward	A. E. Johnston	10-10-28	51.4
Blue River (Big)	do	A. E. Johnston	11-19-28	62.4
Blue River (Big)	do	A. E. Johnston	5-13-29	110.0
Blue River (Big)	do	A. E. Johnston	9-24-29	74.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Blue River (Little)	Section 15-2-2 E, Fairbury	A. E. Johnston	4-17-29	202.0
Blue River (Little)	do	A. E. Johnston	7-11-29	
Blue River (Little)	Section 6-2-2, Hebron	A. E. Johnston	4-18-29	156.0
Blue River (Little)	do	A. E. Johnston	7-11-29	156.9

Furnished by the United States Geological Survey

Little Blue River	Endicott	H. P. Eisenhuth	4-28-29	169.
Little Blue River	do	F. F. LeFever	5-29-29	123.
Little Blue River	do	F. F. LeFever	6-14-29	124.
Little Blue River	do	H. P. Eisenhuth	7-11-29	125.
Little Blue River	do	H. P. Eisenhuth	7-31-29	118.
Little Blue River	do	H. P. Eisenhuth	8-22-29	59.
Little Blue River	do	F. B. Campbell	9-13-29	94.
Little Blue River	do	F. B. Campbell	9-28-29	98.
Boggy Creek	Section 31-33-54	A. E. Johnston	6-20-29	0.9
Bogus Creek	Section 12-18-5, South of St. Edward	A. E. Johnston	3-20-29	6.8
Boone Creek	Section 25-30-22, Ainsworth	A. E. Johnston	10-29-28	10.8
Boone Creek	do	A. E. Johnston	1-28-29	3.4
Boone Creek	do	A. E. Johnston	6-3-29	79.5
Bordeaux Creek (Big)	Section 14-33-48	A. E. Johnston	10-25-28	4.4
Bordeaux Creek (Big)	do	A. E. Johnston	12-21-28	5.4
Bordeaux Creek (Big)	do	A. E. Johnston	1-24-29	5.2
Bordeaux Creek (Big)	do	A. E. Johnston	3-15-29	22.7
Bordeaux Creek (Big)	do	A. E. Johnston	5-2-29	6.9
Bordeaux Creek (Big)	do	A. E. Johnston	5-29-29	9.3
Bordeaux Creek (Big)	do	A. E. Johnston	6-21-29	4.1
Bordeaux Creek (Big)	do	A. E. Johnston	9-11-29	3.4
Bordeaux Creek (Little)	Section 13-33-48	A. E. Johnston	10-25-28	3.2
Bordeaux Creek (Little)	do	A. E. Johnston	12-21-28	4.3
Bordeaux Creek (Little)	do	A. E. Johnston	1-24-29	1.4
Bordeaux Creek (Little)	do	A. E. Johnston	3-15-29	12.6
Bordeaux Creek (Little)	do	A. E. Johnston	5-2-29	5.4
Bordeaux Creek (Little)	do	A. E. Johnston	5-29-29	4.8
Bordeaux Creek (Little)	do	A. E. Johnston	6-21-29	3.6
Bordeaux Creek (Little)	do	A. E. Johnston	9-11-29	3.0
Buffalo Creek	Mouth, Section 20-1-40	C. E. Franklin	10-4-28	11.2
Buffalo Creek	do	C. E. Franklin	10-23-28	10.0
Buffalo Creek	do	C. E. Franklin	11-3-28	13.3
Buffalo Creek	do	C. E. Franklin	11-23-28	13.7
Buffalo Creek	do	C. E. Franklin	12-22-28	20.6
Buffalo Creek	do	C. E. Franklin	1-23-29	8.8
Buffalo Creek	do	C. E. Franklin	2-20-29	11.9
Buffalo Creek	do	C. E. Franklin	3-10-29	14.2
Buffalo Creek	do	C. E. Franklin	3-23-29	11.5
Buffalo Creek	do	C. E. Franklin	5-16-29	14.6
Buffalo Creek	do	C. E. Franklin	6-1-29	10.9
Buffalo Creek	do	C. E. Franklin	6-13-29	11.3
Buffalo Creek	do	C. E. Franklin	6-30-29	8.7

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Buffalo Creek.....	do.....	C. E. Franklin.....	7-14-29	7.3
Buffalo Creek.....	do.....	C. E. Franklin.....	8- 7-29	10.0
Buffalo Creek.....	do.....	C. E. Franklin.....	8-20-29	8.0
Buffalo Creek.....	do.....	C. E. Franklin.....	8-29-29	9.1
Buffalo Creek.....	do.....	C. E. Franklin.....	9-28-29	10.6
Buffalo Creek.....	Section 33-9-18, South of Elm Creek	A. E. Johnston.....	10-15-28	80.3
Buffalo Creek.....	do.....	A. E. Johnston.....	11- 1-28	16.8
Buffalo Creek.....	do.....	A. E. Johnston.....	11-22-28	2.6
Buffalo Creek.....	do.....	A. E. Johnston.....	3-25-29	6.1
Buffalo Creek.....	do.....	A. E. Johnston.....	4- 8-29	2.4
Buffalo Creek.....	do.....	A. E. Johnston.....	4-22-29	3.1
Buffalo Creek.....	do.....	A. E. Johnston.....	5-17-29	3.2
Buffalo Creek.....	do.....	A. E. Johnston.....	6-10-29	88.5
Buffalo Creek.....	do.....	A. E. Johnston.....	6-29-29	29.6
Buffalo Creek.....	do.....	A. E. Johnston.....	7-15-29	6.6
Buffalo Creek.....	do.....	A. E. Johnston.....	7-29-29	16.2
Buffalo Creek.....	do.....	A. E. Johnston.....	8- 4-29	8.3
Buffalo Creek.....	do.....	A. E. Johnston.....	8- 3-29	6.7
Buffalo Creek.....	do.....	A. E. Johnston.....	8- 5-29	48.5
Buffalo Creek.....	do.....	A. E. Johnston.....	8- 6-29	59.5
Buffalo Creek.....	do.....	A. E. Johnston.....	8-21-29	28.1
Buffalo Creek.....	do.....	A. E. Johnston.....	8-22-29	49.0
Buffalo Creek.....	do.....	A. E. Johnston.....	8-26-29	54.0
Buffalo Creek.....	do.....	A. E. Johnston.....	8-31-29	79.4
Buffalo Creek.....	do.....	A. E. Johnston.....	9- 2-29	62.0
Buffalo Creek.....	do.....	A. E. Johnston.....	9-30-29	57.0
Burton Creek.....	Section 19-34-19.....	A. E. Johnston.....	10- 3-28	1.6
Burton Creek.....	do.....	A. E. Johnston.....	12-24-28	5.0*
Burton Creek.....	do.....	A. E. Johnston.....	3-18-29	7.6
Burton Creek.....	do.....	A. E. Johnston.....	5- 6-29	13.8
Burton Creek.....	do.....	A. E. Johnston.....	9-17-29	1.2
Cache Creek.....	Section 22-26-9.....	A. E. Johnston.....	10- 4-28	1.7
Cache Creek.....	do.....	A. E. Johnston.....	3-19-29	10.7
Cache Creek.....	do.....	A. E. Johnston.....	5- 7-29	34.7
Cache Creek.....	do.....	A. E. Johnston.....	6- 4-29	279.8
Cache Creek.....	do.....	A. E. Johnston.....	9-18-29	1.5
Calamus River.....	Section 22-23-18.....	A. E. Johnston.....	10-12-28	260.0
Calamus River.....	do.....	A. E. Johnston.....	10-30-28	240.0
Calamus River.....	do.....	A. E. Johnston.....	12-10-28	283.0
Calamus River.....	do.....	A. E. Johnston.....	1-10-29	290.0
Calamus River.....	do.....	A. E. Johnston.....	3- 1-29	244.0
Calamus River.....	do.....	A. E. Johnston.....	4-11-29	279.0
Calamus River.....	do.....	A. E. Johnston.....	5-15-29	320.0
Calamus River.....	do.....	A. E. Johnston.....	7- 2-29	239.0
Calamus River.....	do.....	A. E. Johnston.....	9-26-29	212.0
Camp Clark Seep.....	North Line Section 9-20-51.....	A. W. Hall.....	10-17-28	8.4
Camp Clark Seep.....	do.....	C. E. Franklin.....	11-13-28	5.9
Camp Clark Seep.....	do.....	C. E. Franklin.....	11-24-28	4.0
Camp Clark Seep.....	do.....	C. E. Franklin.....	12- 8-28	7.0

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Camp Clark Seep.....	do.....	C. E. Franklin.....	12-26-28	3.3
Camp Clark Seep.....	do.....	A. W. Hall.....	1-19-29	3.1
Camp Clark Seep.....	do.....	C. E. Franklin.....	2- 4-29	2.1
Camp Clark Seep.....	do.....	C. E. Franklin.....	2-26-29	2.6
Camp Clark Seep.....	do.....	C. E. Franklin.....	3-15-29	1.6
Camp Clark Seep.....	do.....	A. W. Hall.....	5- 4-29	2.5
Camp Clark Seep.....	do.....	A. W. Hall.....	5-24-29	1.8
Camp Clark Seep.....	do.....	A. W. Hall.....	6-12-29	4.0
Camp Clark Seep.....	do.....	A. W. Hall.....	7-17-29	6.9
Camp Clark Seep.....	do.....	A. W. Hall.....	8-13-29	7.4
Camp Clark Seep.....	do.....	A. W. Hall.....	9-16-29	10.3
Cedar Creek.....	Section 11-18-48, ¼ mile above Mouth.....	A. E. Johnston.....	11- 6-28	14.8
Cedar Creek.....	do.....	A. E. Johnston.....	11-27-28	13.8
Cedar Creek.....	do.....	A. E. Johnston.....	12-19-28	23.9
Cedar Creek.....	do.....	A. E. Johnston.....	1- 3-29	12.6
Cedar Creek.....	do.....	A. E. Johnston.....	1-19-29	14.9
Cedar Creek.....	do.....	A. E. Johnston.....	2-14-29	14.9
Cedar Creek.....	do.....	A. E. Johnston.....	3- 8-29	16.6
Cedar Creek.....	do.....	A. E. Johnston.....	3-29-29	19.0
Cedar Creek.....	do.....	A. E. Johnston.....	4-27-29	13.2
Cedar Creek.....	do.....	A. E. Johnston.....	5-24-29	9.9
Cedar Creek.....	do.....	A. E. Johnston.....	6-17-29	3.9
Cedar Creek.....	do.....	A. E. Johnston.....	7-22-29	5.8
Cedar Branch Creek.....	Section 17-14-35, 100 yds. above mouth.....	A. E. Johnston.....	10-17-28	1.7
Cedar Branch Creek.....	do.....	A. E. Johnston.....	11-24-28	2.3
Cedar Branch Creek.....	do.....	A. E. Johnston.....	12-18-28	3.9
Cedar Branch Creek.....	do.....	A. E. Johnston.....	1- 5-29	2.5
Cedar Branch Creek.....	do.....	A. E. Johnston.....	1-18-29	3.2
Cedar Branch Creek.....	do.....	A. E. Johnston.....	2-12-29	3.8
Cedar Branch Creek.....	do.....	A. E. Johnston.....	3- 6-29	3.8
Cedar Branch Creek.....	do.....	A. E. Johnston.....	3-27-29	4.2
Cedar Branch Creek.....	do.....	A. E. Johnston.....	4- 3-29	2.6
Cedar Branch Creek.....	do.....	A. E. Johnston.....	4-25-29	2.7
Cedar Branch Creek.....	do.....	A. E. Johnston.....	5-21-29	3.1
Cedar Branch Creek.....	do.....	A. E. Johnston.....	6-13-29	2.0
Cedar Branch Creek.....	do.....	A. E. Johnston.....	6-27-29	2.0
Cedar Branch Creek.....	do.....	A. E. Johnston.....	7-18-29	2.3
Cedar Branch Creek.....	do.....	A. E. Johnston.....	7-24-29	2.5
Cedar Branch Creek.....	do.....	A. E. Johnston.....	7-31-29	2.0
Cedar Branch Creek.....	do.....	A. E. Johnston.....	8-13-29	1.9
Cedar Branch Creek.....	do.....	A. E. Johnston.....	8-28-29	2.3
Cedar Branch Creek.....	do.....	A. E. Johnston.....	9- 5-29	2.2
Cedar River.....	Section 11-16-6, West of Fullerton.....	A. E. Johnston.....	10- 5-28	216.0
Cedar River.....	do.....	A. E. Johnston.....	11-20-28	266.0
Cedar River.....	do.....	A. E. Johnston.....	12-12-28	287.0
Cedar River.....	do.....	A. E. Johnston.....	1-12-29	225.0
Cedar River.....	do.....	A. E. Johnston.....	2- 1-29	166.0
Cedar River.....	do.....	A. E. Johnston.....	2-25-29	160.0
Cedar River.....	do.....	A. E. Johnston.....	3-22-29	299.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Cedar River.....	do.....	A. E. Johnston.....	4-12-29	330.0
Cedar River.....	do.....	A. E. Johnston.....	5- 8-29	284.0
Cedar River.....	do.....	A. E. Johnston.....	6- 7-29	2873.0
Cedar River.....	do.....	A. E. Johnston.....	7- 5-29	198.0
Cedar River.....	do.....	A. E. Johnston.....	7-27-29	179.0
Cedar River.....	do.....	A. E. Johnston.....	9-19-29	197.0
Cedar River.....	Section 5-18-7, Cedar Rapids.....	A. E. Johnston.....	10- 5-28	161.0
Cedar River.....	do.....	A. E. Johnston.....	5- 8-29	287.0
Cedar River.....	do.....	A. E. Johnston.....	9-19-29	169.0
Center Creek.....	Sec. 1-1-15, 1 mile West of Franklin.....	A. E. Johnston.....	4-19-29	23.8
Center Creek.....	do.....	A. E. Johnston.....	7-12-29	2.6
Chadron Creek No. 1.....	Section 19-32-48, ½ mile above City Reservoir.....	A. E. Johnston.....	10-25-28	3.1
Chadron Creek No. 1.....	do.....	A. E. Johnston.....	12-21-28	4.5
Chadron Creek No. 1.....	do.....	A. E. Johnston.....	1-23-29	7.6
Chadron Creek No. 1.....	do.....	A. E. Johnston.....	3-15-29	13.5
Chadron Creek No. 1.....	do.....	A. E. Johnston.....	5- 2-29	4.7
Chadron Creek No. 1.....	do.....	A. E. Johnston.....	5-29-29	5.9
Chadron Creek No. 1.....	do.....	A. E. Johnston.....	6-22-29	4.5
Chadron Creek No. 1.....	do.....	A. E. Johnston.....	9-11-29	4.2
Chadron Creek No. 2.....	Section 18-32-48, 100' below City Reservoir.....	A. E. Johnston.....	10-25-28	0.3*
Chadron Creek No. 2.....	do.....	A. E. Johnston.....	12-21-28	0.9
Chadron Creek No. 2.....	do.....	A. E. Johnston.....	1-23-29	0.3
Chadron Creek No. 2.....	do.....	A. E. Johnston.....	3-15-29	2.4
Chadron Creek No. 2.....	do.....	A. E. Johnston.....	5- 2-29	1.5
Chadron Creek No. 2.....	do.....	A. E. Johnston.....	5-29-29	1.4
Chadron Creek No. 2.....	do.....	A. E. Johnston.....	6-22-29	0.7
Chadron Creek No. 2.....	do.....	A. E. Johnston.....	9-11-29	0.2
Chadron Creek No. 3.....	Section 12-32-49, Sta. 36 of Pipe Line.....	A. E. Johnston.....	10-25-28	0.2*
Chadron Creek No. 3.....	do.....	A. E. Johnston.....	12-21-28	0.5
Chadron Creek No. 3.....	do.....	A. E. Johnston.....	1-23-29	0.5
Chadron Creek No. 3.....	do.....	A. E. Johnston.....	3-15-29	3.0
Chadron Creek No. 3.....	do.....	A. E. Johnston.....	5- 2-29	2.6
Chadron Creek No. 3.....	do.....	A. E. Johnston.....	5-29-29	2.0
Chadron Creek No. 3.....	do.....	A. E. Johnston.....	6-22-29	0.5
Chadron Creek No. 3.....	do.....	A. E. Johnston.....	9-11-29	0.3
Chadron Creek No. 4.....	Section 15-33-49, Chadron- Crawford Highway.....	A. E. Johnston.....	10-25-28	0.3
Chadron Creek No. 4.....	do.....	A. E. Johnston.....	12-21-28	1.6
Chadron Creek No. 4.....	do.....	A. E. Johnston.....	1-23-29	0.7
Chadron Creek No. 4.....	do.....	A. E. Johnston.....	3-12-29	10.8
Chadron Creek No. 4.....	do.....	A. E. Johnston.....	5- 1-29	6.0
Chadron Creek No. 4.....	do.....	A. E. Johnston.....	5-29-29	4.4
Chadron Creek No. 4.....	do.....	A. E. Johnston.....	6-21-29	1.4
Chadron Creek No. 4.....	do.....	A. E. Johnston.....	9-11-29	0.7

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Cherry Creek	Sec. 22-24-61, So. Torrington, Wyo.	C. E. Franklin	11-17-28	10.6
Cherry Creek	do	C. E. Franklin	11-27-28	10.7
Cherry Creek	do	C. E. Franklin	12- 6-28	14.6
Cherry Creek	do	C. E. Franklin	1-10-29	8.1
Cherry Creek	do	C. E. Franklin	1-30-29	9.9
Cherry Creek	do	C. E. Franklin	3- 2-29	5.9
Cherry Creek	do	C. E. Franklin	3-19-29	15.7
Cherry Creek	do	A. W. Hall	5- 8-29	4.4
Cherry Creek	do	A. W. Hall	5-20-29	6.7
Clear Creek	Section 5-15-41	A. E. Johnston	10-18-28	6.2
Clear Creek	do	A. E. Johnston	11- 5-28	11.6
Clear Creek	do	A. E. Johnston	11- 9-28	7.1
Clear Creek	do	A. E. Johnston	11-26-28	10.9
Clear Creek	do	A. E. Johnston	12- 4-28	7.9
Clear Creek	do	A. E. Johnston	12-18-28	9.4
Clear Creek	do	A. E. Johnston	1- 4-29	9.2
Clear Creek	do	A. E. Johnston	1-18-29	13.3
Clear Creek	do	A. E. Johnston	2-13-29	11.9
Clear Creek	do	A. E. Johnston	3- 7-29	10.0
Clear Creek	do	A. E. Johnston	3-28-29	16.5
Clear Creek	do	A. E. Johnston	4- 2-29	9.2
Clear Creek	do	A. E. Johnston	4-26-29	9.7
Clear Creek	do	A. E. Johnston	5-22-29	13.1
Clear Creek	do	A. E. Johnston	6-14-29	0.5
Clear Creek	do	A. E. Johnston	6-26-29	1.3
Clear Creek	do	A. E. Johnston	7-19-29	11.2
Clear Creek	do	A. E. Johnston	7-23-29	22.8
Clear Creek	do	A. E. Johnston	8- 2-29	8.0
Clear Creek	do	A. E. Johnston	9- 6-29	4.8
Clear Creek	Section 26-14-16, East of Litchfield.	A. E. Johnston	10-11-28	0.3
Clear Creek	do	A. E. Johnston	10-31-28	2.5
Clear Creek	do	A. E. Johnston	12- 8-28	3.2
Clear Creek	do	A. E. Johnston	1- 9-29	1.9
Clear Creek	do	A. E. Johnston	2- 4-29	1.3
Clear Creek	do	A. E. Johnston	2-27-29	7.1
Clear Creek	do	A. E. Johnston	4- 9-29	6.6
Clear Creek	do	A. E. Johnston	5-16-29	7.7
Clear Creek	do	A. E. Johnston	7- 1-29	2.1
Clear Creek	do	A. E. Johnston	9-28-29	2.0
Clear Creek (Upper)	Section 35-13-9 E, North of Ashland.	A. E. Johnston	10- 9-28	3.1
Clear Creek (Upper)	do	A. E. Johnston	11-17-28	8.2
Clear Creek (Upper)	do	A. E. Johnston	4-16-29	16.5
Clear Creek (Upper)	do	A. E. Johnston	5-13-29	21.8
Clear Creek (Upper)	do	A. E. Johnston	7- 9-29	49.6
Clear Creek (Upper)	do	A. E. Johnston	9-23-29	3.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Clear Water Creek.....	Section 6-25-29.....	A. E. Johnston.....	10- 4-28	35.0
Clear Water Creek.....	do.....	A. E. Johnston.....	1-29-29	57.7
Clear Water Creek.....	do.....	A. E. Johnston.....	3-19-29	59.7
Clear Water Creek.....	do.....	A. E. Johnston.....	5- 7-29	63.5
Clear Water Creek.....	do.....	A. E. Johnston.....	6- 4-29	158.8
Clear Water Creek.....	do.....	A. E. Johnston.....	9-18-29	29.6
Cold Water Creek.....	Section 34-18-46.....	A. E. Johnston.....	10-20-28	4.8
Cold Water Creek.....	do.....	A. E. Johnston.....	11- 6-28	4.8
Cold Water Creek.....	do.....	A. E. Johnston.....	11- 8-28	3.9
Cold Water Creek.....	do.....	A. E. Johnston.....	11-27-28	0.9
Cold Water Creek.....	do.....	A. E. Johnston.....	12- 3-28	0.3
Cold Water Creek.....	do.....	A. E. Johnston.....	12-19-28	0.3
Cold Water Creek.....	do.....	A. E. Johnston.....	1- 3-29	0.5
Cold Water Creek.....	do.....	A. E. Johnston.....	1-19-29	1.8
Cold Water Creek.....	do.....	A. E. Johnston.....	2-14-29	3.1
Cold Water Creek.....	do.....	A. E. Johnston.....	3- 8-29	3.8
Cold Water Creek.....	do.....	A. E. Johnston.....	3-29-29	3.8
Cold Water Creek.....	do.....	A. E. Johnston.....	4- 1-29	2.9
Cold Water Creek.....	do.....	A. E. Johnston.....	4-27-29	1.5
Cold Water Creek.....	do.....	A. E. Johnston.....	5-24-29	2.8
Cold Water Creek.....	do.....	A. E. Johnston.....	6-15-29	4.4
Cold Water Creek.....	do.....	A. E. Johnston.....	6-24-29	6.4
Cold Water Creek.....	do.....	A. E. Johnston.....	7-20-29	7.4
Cold Water Creek.....	do.....	C. E. Franklin.....	8-14-29	2.0
Cold Water Creek.....	do.....	A. W. Hall.....	9-20-29	1.5
Cottonwood Creek.....	Section 27-29-48, ¼ mile North of Dunlap.....	A. E. Johnston.....	10-23-28	1.7
Cottonwood Creek.....	do.....	A. E. Johnston.....	3-11-29	5.6
Cottonwood Creek.....	do.....	A. E. Johnston.....	4-30-29	7.1
Cottonwood Creek.....	do.....	A. E. Johnston.....	5-27-29	2.7
Cottonwood Creek.....	do.....	A. E. Johnston.....	6-18-29	1.2
Cottonwood Creek.....	do.....	A. E. Johnston.....	6-22-29	0.5
Cottonwood Creek.....	do.....	A. E. Johnston.....	9-10-29	2.6
Cottonwood Creek (Little).....	Section 8-32-51, So. Whitney Pipe Line Outlet.....	A. E. Johnston.....	10-25-28	3.3
Cottonwood Creek (Little).....	do.....	A. E. Johnston.....	12-21-28	3.2
Cottonwood Creek (Little).....	do.....	A. E. Johnston.....	1-23-29	3.5
Cottonwood Creek (Little).....	do.....	A. E. Johnston.....	3-12-29	19.9
Cottonwood Creek (Little).....	do.....	A. E. Johnston.....	5- 1-29	23.1
Cottonwood Creek (Little).....	do.....	A. E. Johnston.....	5-29-29	20.6
Cottonwood Creek (Little).....	do.....	A. E. Johnston.....	6-21-29	2.9
Cottonwood Creek (Little).....	do.....	A. E. Johnston.....	9-11-29	3.5
Cottonwood Creek (Little).....	Section 8-32-52.....	A. E. Johnston.....	5-28-29	7.2
Cottonwood Creek (Little).....	do.....	A. E. Johnston.....	6-20-29	4.3
Cottonwood Creek (Big).....	West of Riverton, below mill.....	A. E. Johnston.....	4-19-29	13.7
Cottonwood Creek (Big).....	do.....	A. E. Johnston.....	7-12-29	1.8

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Crooked Creek.....	Section 19-34-19, South of Burton..	A. E. Johnston.....	10- 3-28	0.7
Crooked Creek.....	do.....	A. E. Johnston.....	12-24-28	1.7
Crooked Creek.....	do.....	A. E. Johnston.....	3-18-29	0.9
Crooked Creek.....	do.....	A. E. Johnston.....	5- 6-29	1.6
Crooked Creek.....	do.....	A. E. Johnston.....	9-17-29	0.9
Dane Creek.....	Section 21-19-14, West of Ord.....	A. E. Johnston.....	7- 3-29	0
Deadhorse Creek.....	Section 32-33-49.....	A. E. Johnston.....	10-25-28	1.3
Deadhorse Creek.....	do.....	A. E. Johnston.....	6-21-29	2.3
Deadhorse Creek.....	do.....	A. E. Johnston.....	9-11-29	0.6
Dismal River.....	Section 4-21-24, Dunning.....	A. E. Johnston.....	2-5-29	245.0
Dismal River.....	do.....	A. E. Johnston.....	2-28-29	366.0
Dismal River.....	do.....	A. E. Johnston.....	4-10-29	476.0
Dismal River.....	do.....	A. E. Johnston.....	9-27-29	401.0
Dry Creek.....	Section 20-34-37, Merriman.....	A. E. Johnson.....	10- 1-28	1.1
Dry Creek.....	do.....	A. E. Johnston.....	3-16-29	13.5
Dry Creek.....	do.....	A. E. Johnston.....	5- 3-29	21.3
Dry Creek.....	do.....	A. E. Johnston.....	5-30-29	12.3
Dry Creek.....	do.....	A. E. Johnston.....	9-12-29	6.4
Dugout Creep (Upper).....	West Line Section 21-20-50.....	A. W. Hall.....	10-18-28	5.4
Dugout Creek (Upper).....	do.....	C. E. Franklin.....	11-12-28	5.6
Dugout Creek (Upper).....	do.....	C. E. Franklin.....	11-24-28	4.2
Dugout Creek (Upper).....	do.....	C. E. Franklin.....	12- 8-28	6.5
Dugout Creek (Upper).....	do.....	C. E. Franklin.....	12-24-28	5.7
Dugout Creek (Upper).....	do.....	A. W. Hall.....	1-18-29	2.3
Dugout Creek (Upper).....	do.....	C. E. Franklin.....	2- 4-29	3.3
Dugout Creek (Upper).....	do.....	C. E. Franklin.....	2-26-29	2.1
Dugout Creek (Upper).....	do.....	C. E. Franklin.....	3-15-29	11.4
Dugout Creek (Upper).....	do.....	A. W. Hall.....	4- 6-29	0.5
Dugout Creek (Upper).....	do.....	A. W. Hall.....	5- 4-29	0.9
Dugout Creek (Upper).....	do.....	A. W. Hall.....	5-24-29	14.1
Dugout Creek (Upper).....	do.....	A. W. Hall.....	6-10-29	33.2
Dugout Creek (Upper).....	do.....	A. W. Hall.....	6-24-29	1.4
Dugout Creek (Upper).....	do.....	A. W. Hall.....	7-15-29	8.5
Dugout Creek (Upper).....	do.....	A. W. Hall.....	8-13-29	6.7
Dugout Creek (Upper).....	do.....	A. W. Hall.....	9-12-29	49.0
Dugout Creek (Lower).....	Section 4-19-48, Below Cooper Canal..	A. E. Johnston.....	4- 1-29	2.3
Dugout Creek (Lower).....	do.....	A. E. Johnston.....	6-17-29	0.2
Dugout Creek (Lower).....	do.....	A. W. Hall.....	8- 9-29	1.8

STREAM MEASUREMENTS—Continued

Furnished by the United States Geological Survey

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Elkhorn River.....	Waterloo.....	F. F. LeFever.....	10-26-28	552.
Elkhorn River.....	do.....	F. F. LeFever.....	11-10-28	1050.
Elkhorn River.....	do.....	F. F. LeFever.....	11-26-28	621.
Elkhorn River.....	do.....	LeFever & Hodges..	3-11-29	1680.
Elkhorn River.....	do.....	P. V. Hodges.....	3-15-29	2860.
Elkhorn River.....	do.....	F. F. LeFever.....	3-21-29	1100.
Elkhorn River.....	do.....	Eisenhuth & Follansbee.....	4-16-29	1100.
Elkhorn River.....	do.....	H. P. Eisenhuth.....	4-29-29	2720.
Elkhorn River.....	do.....	F. F. LeFever.....	5-28-29	767.
Elkhorn River.....	do.....	F. F. LeFever.....	6-11-29	2030.
Elkhorn River.....	do.....	H. P. Eisenhuth.....	7-18-29	2260.
Elkhorn River.....	do.....	H. P. Eisenhuth.....	8- 6-29	691.
Elkhorn River.....	do.....	H. P. Eisenhuth.....	8-29-29	448.
Elkhorn River.....	do.....	F. B. Campbell.....	9-17-29	520.
Elkhorn River.....	Section 20-25-6, Neligh.....	A. E. Johnston.....	10- 5-28	100.0
Elkhorn River.....	do.....	A. E. Johnston.....	1-29-29	188.7
Elkhorn River.....	do.....	A. E. Johnston.....	3-19-29	410.0
Elkhorn River.....	do.....	A. E. Johnston.....	5- 8-29	484.0
Elkhorn River.....	do.....	A. E. Johnston.....	6- 4-29	1800.0
Elkhorn River.....	do.....	A. E. Johnston.....	9-18-29	193.9
Elkhorn River.....	Section 13-17-9 East of Arlington.....	A. E. Johnston.....	10- 9-28	336.0
Elkhorn River.....	do.....	A. E. Johnston.....	11-16-28	803.0
Elkhorn River.....	do.....	A. E. Johnston.....	12-13-28	Ice
Elkhorn River.....	do.....	A. E. Johnston.....	1-14-29	694.0
Elkhorn River.....	do.....	A. E. Johnston.....	3-21-29	687.0
Elkhorn River.....	do.....	A. E. Johnston.....	4-16-29	1026.0
Elkhorn River.....	do.....	A. E. Johnston.....	5-11-29	1188.0
Elkhorn River.....	do.....	A. E. Johnston.....	6- 6-29	2122.0
Elkhorn River.....	do.....	A. E. Johnston.....	7- 8-29	888.0
Elkhorn River.....	do.....	A. E. Johnston.....	9-21-29	507.5
Elkhorn River.....	Section 34-27-9 W, North of Ewing.....	A. E. Johnston.....	10- 4-28	21.9
Elkhorn River.....	do.....	A. E. Johnston.....	3-19-29	154.0
Elkhorn River.....	do.....	A. E. Johnston.....	5- 7-29	282.0
Elkhorn River.....	do.....	A. E. Johnston.....	6-4-29	1168.0
Elkhorn River.....	do.....	A. E. Johnston.....	9-18-29	71.5
Elkhorn River (So. Branch).....	Section 34-27-9 W, South of Ewing.....	A. E. Johnston.....	10- 3-28	27.0
Elkhorn River (South Branch).....	do.....	A. E. Johnston.....	3-19-29	69.0
Elkhorn River (South Branch).....	do.....	A. E. Johnston.....	5- 7-29	86.0
Elkhorn River (South Branch).....	do.....	A. E. Johnston.....	6- 4-29	344.0
Elkhorn River (South Branch).....	do.....	A. E. Johnston.....	9-18-29	25.2
Elm Creek.....	Section 10-1-10, near Lester.....	A. E. Johnston.....	4-18-29	24.6
Elm Creek.....	do.....	A. E. Johnston.....	7-11-29	8.2
Fairfield Seep.....	Section 18-21-53.....	A. W. Hall.....	10-17-28	4.4
Fairfield Seep.....	do.....	C. E. Franklin.....	11-14-28	1.8
Fairfield Seep.....	do.....	C. E. Franklin.....	11-25-28	3.7
Fairfield Seep.....	do.....	C. E. Franklin.....	12- 3-28	4.4

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Fairfield Seep.....	do.....	A. W. Hall.....	1-19-29	3.0
Fairfield Seep.....	do.....	A. W. Hall.....	2- 5-29	2.3
Fairfield Seep.....	do.....	C. E. Franklin.....	2-28-29	2.6
Fairfield Seep.....	do.....	C. E. Franklin.....	3-16-29	3.7
Fairfield Seep.....	do.....	A. W. Hall.....	5- 9-29	6.9
Fairfield Seep.....	do.....	A. W. Hall.....	6-11-29	7.4
Fairfield Seep.....	do.....	A. W. Hall.....	7- 5-29	12.0
Fairfield Seep.....	do.....	A. W. Hall.....	7-16-29	5.7
Fairfield Seep.....	do.....	A. W. Hall.....	8-14-29	4.3
Fanning Seep.....	Section 28-23-56, North of Mitchell Bridge.....	A. W. Hall.....	10-16-28	15.0
Fanning Seep.....	do.....	C. E. Franklin.....	11-15-28	8.4
Fanning Seep.....	do.....	C. E. Franklin.....	11-27-28	7.7
Fanning Seep.....	do.....	C. E. Franklin.....	12- 7-28	11.7
Fanning Seep.....	do.....	C. E. Franklin.....	1- 8-29	6.3
Fanning Seep.....	do.....	C. E. Franklin.....	1-29-29	6.8
Fanning Seep.....	do.....	A. W. Hall.....	2-15-29	11.9
Fanning Seep.....	do.....	C. E. Franklin.....	3- 2-29	4.2
Fanning Seep.....	do.....	C. E. Franklin.....	3-19-29	9.8
Fanning Seep.....	do.....	A. W. Hall.....	5- 7-29	9.3
Fanning Seep.....	do.....	A. W. Hall.....	5-21-29	10.1
Fanning Seep.....	do.....	A. W. Hall.....	7-20-29	12.0
Farmers Creek.....	Section 5-1-12, 5 miles west of Riverton.....	A. E. Johnston.....	4-18-29	2.9
Farmers Creek.....	do.....	A. E. Johnston.....	7-12-29	0.8
Flag Creek.....	Section 19-2-19, Orleans.....	C. E. Franklin.....	6-29-29	0.7
Frenchman River.....	SE¼ NE¼ Section 10-6-41, Above Maranville Reservoir.....	C. E. Franklin.....	10-18-28	3.8
Frenchman River.....	do.....	C. E. Franklin.....	11- 5-28	1.6
Frenchman River.....	do.....	C. E. Franklin.....	11-21-28	4.0
Frenchman River.....	do.....	C. E. Franklin.....	12-19-28	3.5
Frenchman River.....	do.....	C. E. Franklin.....	1-18-29	4.7
Frenchman River.....	do.....	C. E. Franklin.....	2-17-29	4.2
Frenchman River.....	do.....	C. E. Franklin.....	3- 7-29	4.2
Frenchman River.....	do.....	C. E. Franklin.....	3-21-29	4.1
Frenchman River.....	do.....	C. E. Franklin.....	5-11-29	4.9
Frenchman River.....	do.....	C. E. Franklin.....	5-29-29	6.7
Frenchman River.....	do.....	C. E. Franklin.....	6- 7-29	3.9
Frenchman River.....	do.....	C. E. Franklin.....	6-12-29	5.1
Frenchman River.....	do.....	C. E. Franklin.....	7-11-29	4.4
Frenchman River.....	do.....	C. E. Franklin.....	8- 2-29	3.2
Frenchman River.....	do.....	C. E. Franklin.....	8-20-29	3.5
Frenchman River.....	do.....	C. E. Franklin.....	9-23-29	4.3
Frenchman River.....	SE¼ SE¼ Section 11-6-41, Below Maranville Reservoir.....	C. E. Franklin.....	10-18-28	7.8
Frenchman River.....	do.....	C. E. Franklin.....	11- 5-28	13.2
Frenchman River.....	do.....	C. E. Franklin.....	11-21-28	4.2
Frenchman River.....	do.....	C. E. Franklin.....	12-19-28	5.0
Frenchman River.....	do.....	C. E. Franklin.....	1-18-29	6.0

DEPARTMENT OF PUBLIC WORKS

389

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Frenchman River.....do.....	C. E. Franklin.....	2-17-29	8.0	
Frenchman River.....do.....	C. E. Franklin.....	3- 7-29	5.3	
Frenchman River.....do.....	C. E. Franklin.....	3-21-29	5.0	
Frenchman River.....do.....	C. E. Franklin.....	5-11-29	5.7	
Frenchman River.....do.....	C. E. Franklin.....	5-29-29	0.2	
Frenchman River.....do.....	C. E. Franklin.....	6-12-29	3.5	
Frenchman River.....do.....	C. E. Franklin.....	6-27-29	0.5	
Frenchman River.....do.....	C. E. Franklin.....	7-11-29	0.3	
Frenchman River.....do.....	C. E. Franklin.....	8- 2-29	2.0	
Frenchman River.....do.....	C. E. Franklin.....	8-20-29	2.3	
Frenchman River.....do.....	C. E. Franklin.....	8-26-29	2.5	
Frenchman River.....do.....	C. E. Franklin.....	9-25-29	3.6	
Frenchman River.....SE¼ SW¼ Section 17-6-40, Below Inman Canal.....	C. E. Franklin.....	10-18-28	15.2	
Frenchman River.....do.....	C. E. Franklin.....	11- 5-28	16.9	
Frenchman River.....do.....	C. E. Franklin.....	11-21-28	16.3	
Frenchman River.....do.....	C. E. Franklin.....	12-19-28	12.2	
Frenchman River.....do.....	C. E. Franklin.....	1-18-29	13.7	
Frenchman River.....do.....	C. E. Franklin.....	2-17-29	22.4	
Frenchman River.....do.....	C. E. Franklin.....	3- 7-29	19.5	
Frenchman River.....do.....	C. E. Franklin.....	3-21-29	28.7	
Frenchman River.....do.....	C. E. Franklin.....	5-11-29	18.7	
Frenchman River.....do.....	C. E. Franklin.....	5-29-29	2.4	
Frenchman River.....do.....	C. E. Franklin.....	6-12-29	12.4	
Frenchman River.....do.....	C. E. Franklin.....	6-27-29	5.0	
Frenchman River.....do.....	C. E. Franklin.....	7-11-29	6.2	
Frenchman River.....do.....	C. E. Franklin.....	8- 2-29	9.0	
Frenchman River.....do.....	C. E. Franklin.....	8-20-29	3.7	
Frenchman River.....do.....	C. E. Franklin.....	8-26-29	4.0	
Frenchman River.....do.....	C. E. Franklin.....	9-25-29	3.6	
Frenchman River.....NW¼ NW¼ Section 22-6-40, Above Champion—Kilpatrick Reservoir.....	C. E. Franklin.....	10-18-28	27.6	
Frenchman River.....do.....	C. E. Franklin.....	11- 5-28	27.1	
Frenchman River.....do.....	C. E. Franklin.....	11-21-28	28.1	
Frenchman River.....do.....	C. E. Franklin.....	12-19-28	27.7	
Frenchman River.....do.....	C. E. Franklin.....	1-18-29	25.6	
Frenchman River.....do.....	C. E. Franklin.....	2-17-29	27.0	
Frenchman River.....do.....	C. E. Franklin.....	3- 7-29	26.8	
Frenchman River.....do.....	C. E. Franklin.....	3-21-29	33.4	
Frenchman River.....do.....	C. E. Franklin.....	5-11-29	25.6	
Frenchman River.....do.....	C. E. Franklin.....	5-29-29	15.6	
Frenchman River.....do.....	C. E. Franklin.....	6-12-29	15.5	
Frenchman River.....do.....	C. E. Franklin.....	6-27-29	9.8	
Frenchman River.....do.....	C. E. Franklin.....	7-11-29	13.2	
Frenchman River.....do.....	C. E. Franklin.....	8- 2-29	15.4	
Frenchman River.....do.....	C. E. Franklin.....	8-20-29	10.6	
Frenchman River.....do.....	C. E. Franklin.....	9-25-29	12.0	

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Frenchman River	SW¼ Section 23-6-40, Below Champion—Kilpatrick Reservoir	C. E. Franklin	10-18-28	29.1
Frenchman River	do	C. E. Franklin	11- 5-28	25.8
Frenchman River	do	C. E. Franklin	11-21-28	18.6
Frenchman River	do	C. E. Franklin	12-19-28	27.8
Frenchman River	do	C. E. Franklin	1-18-29	27.6
Frenchman River	do	C. E. Franklin	2-17-29	31.0
Frenchman River	do	C. E. Franklin	3- 7-29	31.9
Frenchman River	do	C. E. Franklin	3-21-29	7.2
Frenchman River	do	C. E. Franklin	5-11-29	18.7
Frenchman River	do	C. E. Franklin	5-29-29	6.8
Frenchman River	do	C. E. Franklin	6-12-29	12.0
Frenchman River	do	C. E. Franklin	6-27-29	1.2
Frenchman River	do	C. E. Franklin	7-11-29	1.0*
Frenchman River	do	C. E. Franklin	8- 2-29	1.7
Frenchman River	do	C. E. Franklin	8-20-29	6.2
Frenchman River	do	C. E. Franklin	8-26-29	6.3
Frenchman River	do	C. E. Franklin	8-30-29	11.4
Frenchman River	do	C. E. Franklin	9-25-29	17.5
Frenchman River	NE¼ SE¼ Section 21-6-39, Champion	C. E. Franklin	10-18-28	54.0
Frenchman River	do	C. E. Franklin	11- 5-28	56.1
Frenchman River	do	C. E. Franklin	11-21-28	40.1
Frenchman River	do	C. E. Franklin	12-19-28	35.1
Frenchman River	do	C. E. Franklin	1-18-29	33.3
Frenchman River	do	C. E. Franklin	2-17-29	53.7
Frenchman River	do	C. E. Franklin	3- 7-29	52.0
Frenchman River	do	C. E. Franklin	3-21-29	32.0
Frenchman River	do	C. E. Franklin	5-11-29	33.0
Frenchman River	do	C. E. Franklin	5-29-29	21.0
Frenchman River	do	C. E. Franklin	6-12-29	24.0
Frenchman River	do	C. E. Franklin	6-27-29	41.0
Frenchman River	do	C. E. Franklin	7-11-29	18.0
Frenchman River	do	C. E. Franklin	8- 2-29	36.0
Frenchman River	do	C. E. Franklin	9-25-29	38.5
Frenchman River	SW¼ SW¼ Section 30-6-38, South of Imperial	C. E. Franklin	10-18-28	47.6
Frenchman River	do	C. E. Franklin	11- 5-28	50.0
Frenchman River	do	C. E. Franklin	11-21-28	65.0
Frenchman River	do	C. E. Franklin	12-19-28	61.8
Frenchman River	do	C. E. Franklin	1-18-29	67.2
Frenchman River	do	C. E. Franklin	2-17-29	51.8
Frenchman River	do	C. E. Franklin	3- 7-29	56.0
Frenchman River	do	C. E. Franklin	3-21-29	54.0
Frenchman River	do	C. E. Franklin	5-11-29	63.0
Frenchman River	do	C. E. Franklin	5-29-29	49.0
Frenchman River	do	C. E. Franklin	6-12-29	16.6
Frenchman River	do	C. E. Franklin	6-27-29	0
Frenchman River	do	C. E. Franklin	7-11-29	50.0
Frenchman River	do	C. E. Franklin	8- 2-29	65.0
Frenchman River	do	C. E. Franklin	9-25-29	60.6

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Frenchman River.....	NW¼ NE¼ Section 11-5-36, Wauneta.....	C. E. Franklin.....	10-18-28	99.5
Frenchman River.....	do.....	C. E. Franklin.....	11- 4-28	154.3
Frenchman River.....	do.....	C. E. Franklin.....	11-21-28	114.9
Frenchman River.....	do.....	C. E. Franklin.....	12-19-28	115.5
Frenchman River.....	do.....	C. E. Franklin.....	1-18-29	147.7
Frenchman River.....	do.....	C. E. Franklin.....	2-17-29	105.8
Frenchman River.....	do.....	C. E. Franklin.....	3- 7-29	124.0
Frenchman River.....	do.....	C. E. Franklin.....	3-21-29	113.0
Frenchman River.....	do.....	C. E. Franklin.....	5-11-29	105.0
Frenchman River.....	do.....	C. E. Franklin.....	5-29-29	98.0
Frenchman River.....	do.....	C. E. Franklin.....	6-12-29	112.0
Frenchman River.....	do.....	C. E. Franklin.....	6-28-29	117.0
Frenchman River.....	do.....	C. E. Franklin.....	7-12-29	80.0
Frenchman River.....	do.....	C. E. Franklin.....	8- 3-29	82.0
Frenchman River.....	do.....	C. E. Franklin.....	8-19-29	81.0
Frenchman River.....	do.....	C. E. Franklin.....	9-25-29	125.6
Frenchman River.....	Section 32-5-33, North of Palisade	C. E. Franklin.....	10- 1-28	63.7
Frenchman River.....	do.....	C. E. Franklin.....	10-19-28	77.1
Frenchman River.....	do.....	C. E. Franklin.....	11- 4-28	213.1
Frenchman River.....	do.....	C. E. Franklin.....	11-21-28	169.3
Frenchman River.....	do.....	C. E. Franklin.....	12-19-28	133.6
Frenchman River.....	do.....	C. E. Franklin.....	1-19-29	131.1
Frenchman River.....	do.....	C. E. Franklin.....	2-18-29	205.9
Frenchman River.....	do.....	C. E. Franklin.....	3- 8-29	133.0
Frenchman River.....	do.....	C. E. Franklin.....	3-21-29	226.0
Frenchman River.....	do.....	C. E. Franklin.....	5-12-29	163.0
Frenchman River.....	do.....	C. E. Franklin.....	5-30-29	96.0
Frenchman River.....	do.....	C. E. Franklin.....	6-12-29	280.0
Frenchman River.....	do.....	C. E. Franklin.....	6-28-29	20.0
Frenchman River.....	do.....	C. E. Franklin.....	7-12-29	7.0
Frenchman River.....	do.....	C. E. Franklin.....	8- 3-29	2.4
Frenchman River.....	do.....	C. E. Franklin.....	8-19-29	3.0
Frenchman River.....	do.....	C. E. Franklin.....	9-25-29	41.0
Frenchman River.....	Section 16-3-31, West of Culbertson.....	C. E. Franklin.....	10- 1-28	67.4
Frenchman River.....	do.....	C. E. Franklin.....	10-20-28	143.9
Frenchman River.....	do.....	C. E. Franklin.....	11- 4-28	191.4
Frenchman River.....	do.....	C. E. Franklin.....	11-21-28	179.4
Frenchman River.....	do.....	C. E. Franklin.....	12-19-28	161.0
Frenchman River.....	do.....	C. E. Franklin.....	1-19-29	135.4
Frenchman River.....	do.....	C. E. Franklin.....	2-18-29	203.0
Frenchman River.....	do.....	C. E. Franklin.....	3- 8-29	204.0
Frenchman River.....	do.....	C. E. Franklin.....	3-22-29	191.0
Frenchman River.....	do.....	C. E. Franklin.....	5-13-29	186.0
Frenchman River.....	do.....	C. E. Franklin.....	5-30-29	165.0
Frenchman River.....	do.....	C. E. Franklin.....	6-10-29	457.0
Frenchman River.....	do.....	C. E. Franklin.....	6-28-29	46.0
Frenchman River.....	do.....	C. E. Franklin.....	7-12-29	61.4
Frenchman River.....	do.....	C. E. Franklin.....	8- 3-29	12.9
Frenchman River.....	do.....	C. E. Franklin.....	8-16-29	21.1

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Frenchman River.....	do.....	C. E. Franklin.....	8-19-29	0
Frenchman River.....	do.....	C. E. Franklin.....	8-28-29	22.4
Frenchman River.....	do.....	C. E. Franklin.....	9-27-29	53.0
Frenchman River.....	Below Culbertson Canal.....	C. E. Franklin.....	7-12-29	3.0*

Furnished by the United States Geological Survey

Frenchman River.....	Hamlet.....	Eisenhuth & Follansbee	4-12-29	89.
Frenchman River.....	do.....	H. P. Eisenhuth.....	4-23-29	110.
Frenchman River.....	do.....	F. F. LeFever.....	6- 2-29	93.
Frenchman River.....	do.....	F. F. LeFever.....	6-19-29	95.
Frenchman River.....	do.....	H. P. Eisenhuth.....	7- 9-29	74.
Frenchman River.....	do.....	H. P. Eisenhuth.....	7-29-29	70.
Frenchman River.....	do.....	H. P. Eisenhuth.....	8-20-29	70.
Frenchman River.....	do.....	F. B. Campbell.....	9-11-29	98.
Frenchman River.....	do.....	F. B. Campbell.....	9-26-29	90.
Gering Drain.....	Section 6-21-54.....	A. W. Hall.....	10-17-28	36.8
Gering Drain.....	do.....	C. E. Franklin.....	11-14-28	44.3
Gering Drain.....	do.....	C. E. Franklin.....	11-26-28	40.6
Gering Drain.....	do.....	C. E. Franklin.....	12- 7-28	32.4
Gering Drain.....	do.....	A. W. Hall.....	1-19-29	25.3
Gering Drain.....	do.....	C. E. Franklin.....	2- 6-29	21.8
Gering Drain.....	do.....	C. E. Franklin.....	2-28-29	17.4
Gering Drain.....	do.....	A. W. Hall.....	5- 7-29	19.6
Gering Drain.....	do.....	A. W. Hall.....	5-23-29	52.7
Gering Drain.....	do.....	A. W. Hall.....	6-12-29	44.0
Gering Drain.....	do.....	A. W. Hall.....	7- 5-29	32.4
Gering Drain.....	do.....	A. W. Hall.....	7-20-29	35.6
Gering Drain.....	do.....	A. W. Hall.....	8-14-29	31.9
Gering Waste.....	Henry Bridge.....	A. W. Hall.....	5-21-29	47.0
Gering Waste.....	do.....	A. W. Hall.....	6- 3-29	80.1
Gordon Creek.....	Section 30-33-28, at Mouth.....	A. E. Johnston.....	10- 2-28	9.2
Gordon Creek.....	do.....	A. E. Johnston.....	10-27-28	8.7
Gordon Creek.....	do.....	A. E. Johnston.....	12-22-28	15.3
Gordon Creek.....	do.....	A. E. Johnston.....	1-26-29	12.9
Gordon Creek.....	do.....	A. E. Johnston.....	3-17-29	21.0
Gordon Creek.....	do.....	A. E. Johnston.....	5- 4-29	13.9
Gordon Creek.....	do.....	A. E. Johnston.....	5-31-29	30.4
Gordon Creek.....	do.....	A. E. Johnston.....	9-13-29	11.7
Gothenburg Power Waste.....	W. 16th St., Gothenburg.....	A. E. Johnston.....	10-16-28	171.8
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	11-13-28	249.5
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	11-23-28	245.5
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	12- 6-28	Ice
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	12-15-28	130.2
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	1- 7-29	170.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	1-17-29	252.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	2- 8-29	243.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	2-20-29	157.0

* Estimated

DEPARTMENT OF PUBLIC WORKS

393

STREAM MEASUREMENTS—Continued
For Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Date	Discharge Sec. Ft.
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	3- 5-29	209.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	3-26-29	200.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	4- 5-29	207.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	4-23-29	225.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	5-18-29	156.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	6-11-29	182.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	6-29-29	183.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	7-16-29	171.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	7-25-29	205.2
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	7-30-29	208.5
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	8- 2-29	198.9
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	8- 5-29	253.2
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	8-14-29	191.5
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	8-23-29	192.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	8-27-29	192.0
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	8-30-29	149.7
Gothenburg Power Waste.....	do.....	A. E. Johnston.....	9- 3-29	190.0
Government Spring.....	Below Ft. Robinson Pump Plant.....	A. E. Johnston.....	10-24-28	0.7
Government Spring.....	do.....	A. E. Johnston.....	12-20-28	0.6
Government Spring.....	do.....	A. E. Johnston.....	1-22-29	0.6
Government Spring.....	do.....	A. E. Johnston.....	3-12-29	0.7
Government Spring.....	do.....	A. E. Johnston.....	5- 1-29	0.7
Government Spring.....	do.....	A. E. Johnston.....	5-28-29	0.6
Government Spring.....	do.....	A. E. Johnston.....	6-20-29	0.9
Government Spring.....	do.....	A. E. Johnston.....	9-20-29	0.6
Gravel Creek.....	Section 9-14-36, 3' weir.....	A. E. Johnston.....	10-18-28	2.0
Gravel Creek.....	do.....	A. E. Johnston.....	11- 9-28	3.0
Gravel Creek.....	do.....	A. E. Johnston.....	11-24-28	2.5
Gravel Creek.....	do.....	A. E. Johnston.....	12-18-28	3.0
Gravel Creek.....	do.....	A. E. Johnston.....	1- 4-29	2.6
Gravel Creek.....	do.....	A. E. Johnston.....	1-18-29	2.1
Gravel Creek.....	do.....	A. E. Johnston.....	2-12-29	1.7
Gravel Creek.....	do.....	A. E. Johnston.....	3- 7-29	3.0
Gravel Creek.....	do.....	A. E. Johnston.....	3-27-29	3.0
Gravel Creek.....	do.....	A. E. Johnston.....	4- 3-29	1.7
Gravel Creek.....	do.....	A. E. Johnston.....	5-21-29	2.6
Gravel Creek.....	do.....	A. E. Johnston.....	6-26-29	0
Gravel Creek.....	do.....	A. E. Johnston.....	7-18-29	1.7
Greenwood Creek.....	So. Line, Section 25-19-50, Mouth A.....	W. Hall.....	10-18-28	0.5*
Greenwood Creek.....	do.....	C. E. Franklin.....	11-12-28	0.4*
Greenwood Creek.....	do.....	C. E. Franklin.....	11-24-28	0.1*
Greenwood Creek.....	do.....	C. E. Franklin.....	12-13-28	1.0*
Greenwood Creek.....	do.....	C. E. Franklin.....	12-24-28	Frozen
Greenwood Creek.....	do.....	A. W. Hall.....	1- 8-29	Frozen
Greenwood Creek.....	do.....	C. E. Franklin.....	2- 4-29	1.0*
Greenwood Creek.....	do.....	C. E. Franklin.....	2-23-29	1.0*
Greenwood Creek.....	do.....	C. E. Franklin.....	3-11-29	1.1
Greenwood Creek.....	do.....	A. W. Hall.....	5- 4-29	0.6
Greenwood Creek.....	do.....	A. W. Hall.....	5-24-29	0
Greenwood Creek.....	do.....	A. W. Hall.....	6-10-29	0
Greenwood Creek.....	do.....	A. W. Hall.....	6-25-29	0

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Greenwood Creek.....	SE¼ NE¼ Section 28-18-50, Below Trinner Canal.....	A. W. Hall.....	5-24-29	6.3
Greenwood Creek.....	do.....	A. W. Hall.....	6-10-29	4.8
Greenwood Creek.....	do.....	A. W. Hall.....	6-25-29	3.5
Greenwood Creek.....	Below Nelson Canal.....	A. E. Johnston.....	6-25-29	0.7
Greenwood Creek.....	do.....	A. E. Johnston.....	7-30-29	0.9
Haines Branch.....	Section 3-9-6.....	A. E. Johnston.....	10-10-28	0.6
Haines Branch.....	do.....	A. E. Johnston.....	11-19-28	1.7
Haines Branch.....	do.....	A. E. Johnston.....	4-17-29	4.6
Haines Branch.....	do.....	A. E. Johnston.....	5-13-29	4.2
Haines Branch.....	do.....	A. E. Johnston.....	7-10-29	1.9
Haines Branch.....	do.....	A. E. Johnston.....	9-24-29	0.7
Hat Creek.....	Section 35-33-56, Above Diversion Coffee Canal.....	A. E. Johnston.....	10-24-29	1.7
Hat Creek.....	do.....	A. E. Johnston.....	6-20-29	3.3
Horse Creek.....	Section 25-23-58.....	A. W. Hall.....	10-13-28	86.6
Horse Creek.....	do.....	C. E. Franklin.....	11-16-28	56.8
Horse Creek.....	do.....	C. E. Franklin.....	11-27-28	121.8
Horse Creek.....	do.....	C. E. Franklin.....	12- 6-28	49.8
Horse Creek.....	do.....	C. E. Franklin.....	1-10-29	36.2
Horse Creek.....	do.....	C. E. Franklin.....	1-30-29	34.4
Horse Creek.....	do.....	A. W. Hall.....	2-15-29	28.3
Horse Creek.....	do.....	C. E. Franklin.....	3- 2-29	33.7
Horse Creek.....	do.....	C. E. Franklin.....	3-19-29	87.5
Horse Creek.....	do.....	A. W. Hall.....	5- 8-29	222.0
Horse Creek.....	do.....	A. W. Hall.....	5-22-29	363.0
Horse Creek.....	do.....	A. W. Hall.....	6-13-29	431.0
Horse Creek.....	do.....	A. W. Hall.....	7-19-29	119.0
Horse Creek.....	do.....	A. W. Hall.....	8-15-29	103.0
Horse Creek.....	Section 23-1-39, Pringle's Ranch.....	C. E. Franklin.....	10- 4-28	1.0
Horse Creek.....	do.....	C. E. Franklin.....	10-23-28	1.6
Horse Creek.....	do.....	C. E. Franklin.....	11- 3-28	1.7
Horse Creek.....	do.....	C. E. Franklin.....	11-23-28	1.2
Horse Creek.....	do.....	C. E. Franklin.....	1-23-29	1.7
Horse Creek.....	do.....	C. E. Franklin.....	2-20-29	1.8
Horse Creek.....	do.....	C. E. Franklin.....	3-10-29	2.3
Horse Creek.....	do.....	C. E. Franklin.....	3-23-29	1.9
Horse Creek.....	do.....	C. E. Franklin.....	5-16-29	0.1*
Horse Creek.....	do.....	C. E. Franklin.....	6- 1-29	2.0
Horse Creek.....	do.....	C. E. Franklin.....	6-13-29	0.8*
Horse Creek.....	do.....	C. E. Franklin.....	6-30-29	0.4
Horse Creek.....	do.....	C. E. Franklin.....	7-14-29	3.6
Horse Creek.....	do.....	C. E. Franklin.....	8- 7-29	1.5
Horse Creek.....	do.....	C. E. Franklin.....	8-20-29	0.7
Horse Creek.....	do.....	C. E. Franklin.....	8-29-29	0.7
Horse Creek.....	do.....	C. E. Franklin.....	9-28-29	2.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Indian Creek	Section 19-20-50, Northport Wye	A. W. Hall	10-18-28	29.5
Indian Creek	do	A. W. Hall	11-12-28	13.1
Indian Creek	do	A. W. Hall	11-24-28	15.0
Indian Creek	do	A. W. Hall	12- 8-28	20.5
Indian Creek	do	A. W. Hall	12-24-28	12.1
Indian Creek	do	A. E. Johnston	1- 2-29	10.4
Indian Creek	do	A. W. Hall	1-19-29	9.6
Indian Creek	do	C. E. Franklin	2- 4-29	5.2
Indian Creek	do	C. E. Franklin	2-26-29	4.5
Indian Creek	do	C. E. Franklin	3-15-29	9.7
Indian Creek	do	A. W. Hall	4- 6-29	6.2
Indian Creek	do	A. W. Hall	5- 4-29	3.1
Indian Creek	do	A. W. Hall	5-24-29	3.4
Indian Creek	do	A. W. Hall	6-24-29	18.3
Indian Creek	do	A. W. Hall	7-16-29	14.7
Indian Creek	do	A. W. Hall	8-13-29	38.8
Indian Creek	do	A. W. Hall	9-16-29	26.8
Indian Creek	Section 23-2-36, Powell's Ranch	C. E. Franklin	10- 4-28	1.9
Indian Creek	do	C. E. Franklin	10-23-28	3.8
Indian Creek	do	C. E. Franklin	11- 3-28	7.6
Indian Creek	do	C. E. Franklin	11-22-28	6.3
Indian Creek	do	C. E. Franklin	12-22-28	4.0
Indian Creek	do	C. E. Franklin	1-22-29	2.5
Indian Creek	do	C. E. Franklin	2-20-29	2.3
Indian Creek	do	C. E. Franklin	3-10-29	4.9
Indian Creek	do	C. E. Franklin	3-23-29	7.1
Indian Creek	do	C. E. Franklin	5-15-29	6.7
Indian Creek	do	C. E. Franklin	6- 1-29	3.0
Indian Creek	do	C. E. Franklin	6-30-29	1.6
Indian Creek	do	C. E. Franklin	7-14-29	0.7
Indian Creek	do	C. E. Franklin	8-29-29	1.6
Indian Creek	do	C. E. Franklin	9-28-29	3.6
Indian Creek	Section 5-32-50	C. E. Franklin	7-14-29	0.7
Indian Creek	do	C. E. Franklin	8- 7-29	3.9
Katzer Drain	Section 10-23-60	A. W. Hall	10-13-28	4.5
Katzer Drain	do	C. E. Franklin	11-16-28	11.2
Katzer Drain	do	C. E. Franklin	11-27-28	5.0
Katzer Drain	do	C. E. Franklin	12- 6-28	3.7
Katzer Drain	do	C. E. Franklin	1-10-29	3.2
Katzer Drain	do	C. E. Franklin	1-30-29	3.2
Katzer Drain	do	C. E. Franklin	3- 2-29	3.9
Katzer Drain	do	A. W. Hall	5- 8-29	5.5
Katzer Drain	do	A. W. Hall	5-21-29	28.2
Keya Paha River	Section 9-34-17, Brocksburg	A. E. Johnston	10- 3-28	31.8
Keya Paha River	do	A. E. Johnston	12-24-28	89.0
Keya Paha River	do	A. E. Johnston	3-18-29	217.0
Keya Paha River	do	A. E. Johnston	5- 6-29	231.0
Keya Paha River	do	A. E. Johnston	9-17-29	34.3

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Date	Discharge Sec. Ft.
Lane Drain	Section 30-23-57	C. E. Franklin	11-16-28	2.7
Lane Drain	do	C. E. Franklin	11-27-28	2.0
Lane Drain	do	C. E. Franklin	12- 6-28	2.2
Lane Drain	do	C. E. Franklin	1-10-29	2.8
Lane Drain	do	C. E. Franklin	1-30-29	1.3
Lane Drain	do	C. E. Franklin	3- 2-29	0.7
Lane Drain	do	C. E. Franklin	3-19-29	2.1
Lane Drain	do	A. W. Hall	7-19-29	3.2
Lawrence Fork	Section 36-19-52, Bridgeport- Redington Highway	A. W. Hall	10-18-28	7.1
Lawrence Fork	do	C. E. Franklin	11-12-28	5.2
Lawrence Fork	do	C. E. Franklin	11-24-28	5.1
Lawrence Fork	do	C. E. Franklin	12-13-28	5.0
Lawrence Fork	do	C. E. Franklin	12-24-28	4.7
Lawrence Fork	do	C. E. Franklin	1-26-29	4.0*
Lawrence Fork	do	C. E. Franklin	2- 4-29	3.7
Lawrence Fork	do	C. E. Franklin	2-23-29	6.2
Lawrence Fork	do	C. E. Franklin	3-11-29	4.7
Leander Creek	Section 33-34-37, South of Merriman	A. E. Johnston	10- 1-28	0.5*
Leander Creek	do	A. E. Johnston	10-26-28	0.4
Leander Creek	do	A. E. Johnston	5- 3-29	7.2
Leander Creek	do	A. E. Johnston	5-30-29	9.6
Leander Creek	do	A. E. Johnston	9-12-29	0.9
Lincoln County Drain	Section 30-14-30, 1 mile west of No. Platte	A. E. Johnston	10-17-28	80.1
Lincoln County Drain	do	A. E. Johnston	11- 3-28	98.9
Lincoln County Drain	do	A. E. Johnston	11- 9-28	81.7
Lincoln County Drain	do	A. E. Johnston	11-24-28	71.8
Lincoln County Drain	do	A. E. Johnston	12-18-28	67.7
Lincoln County Drain	do	A. E. Johnston	1- 5-29	48.3
Lincoln County Drain	do	A. E. Johnston	1-18-29	61.0
Lincoln County Drain	do	A. E. Johnston	2-12-29	58.9
Lincoln County Drain	do	A. E. Johnston	2-19-29	58.1
Lincoln County Drain	do	A. E. Johnston	3- 6-29	71.0
Lincoln County Drain	do	A. E. Johnston	3-27-29	55.3
Lincoln County Drain	do	A. E. Johnston	4- 3-29	52.1
Lincoln County Drain	do	A. E. Johnston	4-25-29	68.4
Lincoln County Drain	do	A. E. Johnston	5-21-29	66.5
Lincoln County Drain	do	A. E. Johnston	6-12-29	82.4
Lincoln County Drain	do	A. E. Johnston	6-27-29	117.0
Lincoln County Drain	do	A. E. Johnston	7-18-29	107.2
Lincoln County Drain	do	A. E. Johnston	7-24-29	107.0
Lincoln County Drain	do	A. E. Johnston	7-31-29	145.6
Lincoln County Drain	do	A. E. Johnston	8-13-29	136.5
Lincoln County Drain	do	A. E. Johnston	8-28-29	149.3
Lincoln County Drain	do	A. E. Johnston	9- 5-29	124.0

* Estimated

STREAM MEASUREMENTS—Continued
Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Lodgepole Creek	Section 11-14-59, Wyo.-Nebr. Line	C. E. Franklin	10-16-28	8.7
Lodgepole Creek	.....do.....	C. E. Franklin	10-26-28	4.6
Lodgepole Creek	.....do.....	C. E. Franklin	11-19-28	11.7
Lodgepole Creek	.....do.....	C. E. Franklin	12-17-28	5.9
Lodgepole Creek	.....do.....	C. E. Franklin	1-15-29	5.6
Lodgepole Creek	.....do.....	C. E. Franklin	2-14-29	6.9
Lodgepole Creek	.....do.....	C. E. Franklin	3- 5-29	20.5
Lodgepole Creek	.....do.....	C. E. Franklin	5- 7-29	9.8
Lodgepole Creek	.....do.....	C. E. Franklin	5-23-29	4.8
Lodgepole Creek	.....do.....	C. E. Franklin	6-25-29	4.0
Lodgepole Creek	.....do.....	C. E. Franklin	7- 8-29	4.2
Lodgepole Creek	.....do.....	C. E. Franklin	9-17-29	6.1
Lodgepole Creek	Section 33-15-57,			
	Above Kimball Reservoir	C. E. Franklin	10-16-28	15.2
Lodgepole Creek	.....do.....	C. E. Franklin	10-26-28	11.4
Lodgepole Creek	.....do.....	C. E. Franklin	11-19-28	15.4
Lodgepole Creek	.....do.....	C. E. Franklin	12-17-28	8.1
Lodgepole Creek	.....do.....	C. E. Franklin	1-15-29	13.1
Lodgepole Creek	.....do.....	C. E. Franklin	2-14-29	13.8
Lodgepole Creek	.....do.....	C. E. Franklin	3- 5-29	27.0
Lodgepole Creek	.....do.....	C. E. Franklin	5- 7-29	26.4
Lodgepole Creek	.....do.....	C. E. Franklin	5-23-29	20.2
Lodgepole Creek	.....do.....	C. E. Franklin	6-25-29	17.8
Lodgepole Creek	.....do.....	C. E. Franklin	7- 8-29	9.0
Lodgepole Creek	.....do.....	C. E. Franklin	8- 7-29	13.3
Lodgepole Creek	.....do.....	C. E. Franklin	9-17-29	14.2
Lodgepole Creek	Section 36-15-57, Below			
	Kimball Reservoir	C. E. Franklin	10-16-28	4.5
Lodgepole Creek	.....do.....	C. E. Franklin	10-26-28	2.2
Lodgepole Creek	.....do.....	C. E. Franklin	11-19-28	3.4
Lodgepole Creek	.....do.....	C. E. Franklin	12-17-28	1.6
Lodgepole Creek	.....do.....	C. E. Franklin	1-15-29	2.9
Lodgepole Creek	.....do.....	C. E. Franklin	2-14-29	2.3
Lodgepole Creek	.....do.....	C. E. Franklin	3- 5-29	3.1
Lodgepole Creek	.....do.....	C. E. Franklin	5- 7-29	2.6
Lodgepole Creek	.....do.....	C. E. Franklin	5-23-29	3.5
Lodgepole Creek	.....do.....	C. E. Franklin	6-25-29	2.7
Lodgepole Creek	.....do.....	C. E. Franklin	7- 8-29	1.9
Lodgepole Creek	.....do.....	A. W. Hall	8- 7-29	2.5
Lodgepole Creek	.....do.....	C. E. Franklin	9-17-29	3.7
Lodgepole Creek	Section 29-15-55, North of Kimball	C. E. Franklin	10-15-28	12.1
Lodgepole Creek	.....do.....	C. E. Franklin	10-25-28	16.9
Lodgepole Creek	.....do.....	C. E. Franklin	11-19-28	11.9
Lodgepole Creek	.....do.....	C. E. Franklin	12-17-28	13.9
Lodgepole Creek	.....do.....	C. E. Franklin	1-15-29	18.2
Lodgepole Creek	.....do.....	C. E. Franklin	2-14-29	11.2
Lodgepole Creek	.....do.....	C. E. Franklin	3- 6-29	12.3
Lodgepole Creek	.....do.....	C. E. Franklin	5- 7-29	13.5
Lodgepole Creek	.....do.....	C. E. Franklin	5-23-29	25.7
Lodgepole Creek	.....do.....	C. E. Franklin	6-25-29	10.1
Lodgepole Creek	.....do.....	C. E. Franklin	7- 9-29	2.9
Lodgepole Creek	.....do.....	C. E. Franklin	9-17-29	14.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Lodgepole Creek	Section 26-15-54, North of Dix	C. E. Franklin	10-16-28	1.2
Lodgepole Creek	do	C. E. Franklin	11-19-28	0
Lodgepole Creek	do	C. E. Franklin	12-17-28	0
Lodgepole Creek	do	C. E. Franklin	1-15-29	3.0
Lodgepole Creek	do	C. E. Franklin	3- 6-29	12.5
Lodgepole Creek	do	C. E. Franklin	5- 8-29	18.0
Lodgepole Creek	do	C. E. Franklin	5-23-29	8.0
Lodgepole Creek	do	C. E. Franklin	6-25-29	0
Lodgepole Creek	do	C. E. Franklin	7- 9-29	0
Lodgepole Creek	SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 32-14-49, South of Sidney	C. E. Franklin	10-17-28	6.3
Lodgepole Creek	do	C. E. Franklin	10-31-28	5.1
Lodgepole Creek	do	C. E. Franklin	11-20-28	3.3
Lodgepole Creek	do	C. E. Franklin	12-18-28	2.3
Lodgepole Creek	do	C. E. Franklin	1-16-29	3.7
Lodgepole Creek	do	C. E. Franklin	2-15-29	1.7
Lodgepole Creek	do	C. E. Franklin	3- 6-29	2.8
Lodgepole Creek	do	C. E. Franklin	5-10-29	7.0
Lodgepole Creek	do	C. E. Franklin	5-24-29	2.5
Lodgepole Creek	do	C. E. Franklin	6-26-29	4.8
Lodgepole Creek	do	C. E. Franklin	7-10-29	0.6
Lodgepole Creek	do	C. E. Franklin	9-14-29	3.0
Lodgepole Creek	SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 30-14-46, West of Lodgepole	C. E. Franklin	10-17-28	14.0
Lodgepole Creek	do	C. E. Franklin	11- 2-28	16.4
Lodgepole Creek	do	C. E. Franklin	11-20-28	6.1
Lodgepole Creek	do	C. E. Franklin	12-18-28	11.8
Lodgepole Creek	do	C. E. Franklin	1-16-29	10.5
Lodgepole Creek	do	C. E. Franklin	2-16-29	9.2
Lodgepole Creek	do	C. E. Franklin	3- 6-29	12.5
Lodgepole Creek	do	C. E. Franklin	5-10-29	19.1
Lodgepole Creek	do	C. E. Franklin	5-25-29	6.5
Lodgepole Creek	do	C. E. Franklin	6-26-29	0.2*
Lodgepole Creek	do	C. E. Franklin	7-10-29	0
Lodgepole Creek	do	C. E. Franklin	9-15-29	1.0
Lodgepole Creek	Section 21-13-45, Chappell	C. E. Franklin	10-17-28	7.6
Lodgepole Creek	do	C. E. Franklin	11- 2-28	12.6
Lodgepole Creek	do	C. E. Franklin	11-20-28	14.0
Lodgepole Creek	do	C. E. Franklin	12-18-28	16.3
Lodgepole Creek	do	C. E. Franklin	1-16-29	18.4
Lodgepole Creek	do	C. E. Franklin	2-16-29	21.8
Lodgepole Creek	do	C. E. Franklin	3- 6-29	22.7
Lodgepole Creek	do	C. E. Franklin	5-28-29	6.9
Lodgepole Creek	do	C. E. Franklin	5-26-29	0.3*
Lodgepole Creek	do	C. E. Franklin	7-10-29	3.0
Lodgepole Creek	do	C. E. Franklin	9-16-29	0.2

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Date	Discharge Sec. Ft.
Lodgepole Creek	NE¼ NW¼ Section 12-12-45, Interstate Station	C. E. Franklin	10-17-28	6.7
Lodgepole Creek	do	C. E. Franklin	11- 2-28	14.8
Lodgepole Creek	do	C. E. Franklin	11-20-28	18.9
Lodgepole Creek	do	C. E. Franklin	12-18-28	13.8
Lodgepole Creek	do	C. E. Franklin	1-16-29	12.8
Lodgepole Creek	do	C. E. Franklin	2-16-29	11.3
Lodgepole Creek	do	C. E. Franklin	3- 6-29	24.1
Lodgepole Creek	do	C. E. Franklin	5-18-29	21.5
Lodgepole Creek	do	C. E. Franklin	6-27-29	5.0
Lodgepole Creek	do	C. E. Franklin	7-11-29	1.5*
Lodgepole Creek	do	C. E. Franklin	9-16-29	2.8
Lodgepole Creek	Section 28-15-55, Above Bennett Reservoir	C. E. Franklin	10-15-28	2.2
Lodgepole Creek	do	C. E. Franklin	10-25-28	13.5
Lodgepole Creek	do	C. E. Franklin	11-19-28	11.9
Lodgepole Creek	do	C. E. Franklin	12-17-28	3.3
Lodgepole Creek	do	C. E. Franklin	1-15-29	7.7
Lodgepole Creek	do	C. E. Franklin	2-14-29	7.6
Lodgepole Creek	do	C. E. Franklin	3- 6-29	6.2
Lodgepole Creek	do	C. E. Franklin	5- 7-29	11.3
Lodgepole Creek	do	C. E. Franklin	5-23-29	12.5
Lodgepole Creek	do	C. E. Franklin	6-25-29	0.5*
Lodgepole Creek	do	C. E. Franklin	7- 9-29	0.5*
Lodgepole Creek	do	C. E. Franklin	9-17-29	5.3
Lonergan Creek	Section 19-15-39	A. E. Johnston	10-18-28	6.2
Lonergan Creek	do	A. E. Johnston	11- 5-28	7.0
Lonergan Creek	do	A. E. Johnston	11- 9-28	7.2
Lonergan Creek	do	A. E. Johnston	11-26-28	5.4
Lonergan Creek	do	A. E. Johnston	12- 4-28	5.1
Lonergan Creek	do	A. E. Johnston	12-18-28	7.2
Lonergan Creek	do	A. E. Johnston	1- 4-29	6.0
Lonergan Creek	do	A. E. Johnston	1-18-29	7.5
Lonergan Creek	do	A. E. Johnston	2-13-29	8.5
Lonergan Creek	do	A. E. Johnston	3- 7-29	6.9
Lonergan Creek	do	A. E. Johnston	3-28-29	7.6
Lonergan Creek	do	A. E. Johnston	4- 2-29	8.2
Lonergan Creek	do	A. E. Johnston	4-26-29	7.9
Lonergan Creek	do	A. E. Johnston	5-22-29	4.1
Lonergan Creek	do	A. E. Johnston	6-14-29	4.8
Lonergan Creek	do	A. E. Johnston	6-26-29	3.7
Lonergan Creek	do	A. E. Johnston	7-19-29	4.3
Lonergan Creek	do	A. E. Johnston	7-23-29	12.3
Lonergan Creek	do	A. E. Johnston	9- 6-29	4.9
Lost Creek	Section 26-1-7, Merriman	A. E. Johnston	10-26-28	6.6
Lost Creek	do	A. E. Johnston	12-21-28	4.2
Loup River	Columbus	A. E. Johnston	10- 8-28	2372.0
Loup River	do	A. E. Johnston	11-15-28	2733.0
Loup River	do	A. E. Johnston	12-12-28	2435.0
Loup River	do	A. E. Johnston	1-15-29	Ice

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Loup River.....	do.....	A. E. Johnston.....	2- 1-29	Ice
Loup River.....	do.....	A. E. Johnston.....	2-23-29	Ice
Loup River.....	do.....	A. E. Johnston.....	3-21-29	2674.0
Loup River.....	do.....	A. E. Johnston.....	4-13-29	3259.0
Loup River.....	do.....	A. E. Johnston.....	5- 9-29	4020.0
Loup River.....	do.....	A. E. Johnston.....	6- 5-29	5490.0
Loup River.....	do.....	A. E. Johnston.....	7- 6-29	2984.0
Loup River.....	do.....	A. E. Johnston.....	7-26-29	2085.3
Loup River.....	do.....	A. E. Johnston.....	9-20-29	2477.5

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Loup River (Middle).....	St. Paul.....	F. F. LeFever.....	10-23-28	1070..
Loup River (Middle).....	do.....	F. F. LeFever.....	11- 8-28	1570.
Loup River (Middle).....	do.....	F. F. LeFever.....	11-23-28	1110.
Loup River (Middle).....	do.....	LeFever & Cabell...	1-30-29	521..
Loup River (Middle).....	do.....	F. F. LeFever.....	2-13-29	809..
Loup River (Middle).....	do.....	F. F. LeFever.....	3- 9-29	2650..
Loup River (Middle).....	do.....	F. F. LeFever.....	3-27-29	1200..
Loup River (Middle).....	do.....	Eisenhuth & Follansbee.....	4-18-29	1250..
Loup River (Middle).....	do.....	H. P. Eisenhuth.....	5- 1-29	1260..
Loup River (Middle).....	do.....	F. F. LeFever.....	5-31-29	3570..
Loup River (Middle).....	do.....	F. F. LeFever.....	6-17-29	878..
Loup River (Middle).....	do.....	H. P. Eisenhuth.....	7-16-29	1020..
Loup River (Middle).....	do.....	H. P. Eisenhuth.....	8- 3-29	790..
Loup River (Middle).....	do.....	H. P. Eisenhuth.....	8-26-29	862..
Loup River (Middle).....	do.....	F. B. Campbell.....	9-19-29	831..
Loup River (North).....	St. Paul.....	F. F. LeFever.....	10-24-28	946..
Loup River (North).....	do.....	F. F. LeFever.....	11- 8-28	1210..
Loup River (North).....	do.....	F. F. LeFever.....	11-22-28	1040..
Loup River (North).....	do.....	LeFever & Cabell...	1-31-29	701..
Loup River (North).....	do.....	F. F. LeFever.....	2-14-29	637..
Loup River (North).....	do.....	F. F. LeFever.....	3-27-29	1100..
Loup River (North).....	do.....	H. P. Eisenhuth.....	4-18-29	1080..
Loup River (North).....	do.....	H. P. Eisenhuth.....	5- 1-29	1420..
Loup River (North).....	do.....	F. F. LeFever.....	5-31-29	1300..
Loup River (North).....	do.....	F. F. LeFever.....	6-17-29	874..
Loup River (North).....	do.....	F. F. LeFever.....	6-18-29	6290..
Loup River (North).....	do.....	H. P. Eisenhuth.....	7-15-29	838..
Loup River (North).....	do.....	H. P. Eisenhuth.....	8- 2-29	666..
Loup River (North).....	do.....	H. P. Eisenhuth.....	8-25-29	790..
Loup River (North).....	do.....	F. B. Campbell.....	9- 3-29	819..
Loup River (North).....	do.....	F. B. Campbell.....	9-18-29	715..
Loup River.....	Genoa.....	F. F. LeFever.....	10-24-28	2200..
Loup River.....	do.....	F. F. LeFever.....	11- 9-28	2980..
Loup River.....	do.....	F. F. LeFever.....	11-23-28	2310..
Loup River.....	do.....	P. V. Hodges.....	3-14-29	7030..
Loup River.....	do.....	F. F. LeFever.....	3-26-29	3050..
Loup River.....	do.....	Follansbee & Eisenhuth.....	4-17-29	2680..

DEPARTMENT OF PUBLIC WORKS

401

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Date	Discharge Sec. Ft.
Loup River	do	H. P. Eisenhuth	4-30-29	3550.
Loup River	do	F. F. LeFever	5-30-29	9090.
Loup River	do	F. F. LeFever	6-16-29	2490.
Loup River	do	H. P. Eisenhuth	7-15-29	2000.
Loup River	do	H. P. Eisenhuth	8- 2-29	1630.
Loup River	do	H. P. Eisenhuth	8-24-29	2030.
Loup River	do	F. B. Campbell	9-18-29	1970.
Loup River (North)	Section 15-15-10, North of St. Paul	A. E. Johnston	11-20-28	1058.0
Loup River (North)	do	A. E. Johnston	12-11-28	878.0
Loup River (North)	do	A. E. Johnston	1-11-29	794.0
Loup River (North)	do	A. E. Johnston	2- 1-29	Ice
Loup River (North)	do	A. E. Johnston	2-26-29	817.0
Loup River (North)	do	A. E. Johnston	3-22-29	1279.0
Loup River (North)	do	A. E. Johnston	4-12-29	1536.0
Loup River (North)	do	A. E. Johnston	6- 7-29	2188.0
Loup River (North)	do	A. E. Johnston	7- 5-29	1010.0
Loup River (North)	do	A. E. Johnston	7-27-29	804.5
Loup River (North)	do	A. E. Johnston	9-25-29	854.0
Loup River (North)	Section 22-21-18, Taylor	A. E. Johnston	10-12-28	594.0
Loup River (North)	do	A. E. Johnston	10-30-28	580.0
Loup River (North)	do	A. E. Johnston	12-10-28	665.0
Loup River (North)	do	A. E. Johnston	1-10-29	400.0
Loup River (North)	do	A. E. Johnston	3- 1-29	595.0
Loup River (North)	do	A. E. Johnston	4-11-29	874.0
Loup River (North)	do	A. E. Johnston	5-15-29	812.0
Loup River (North)	do	A. E. Johnston	7- 2-29	484.0
Loup River (North)	do	A. E. Johnston	9-26-29	492.5
Loup River (North)	Section 15-21-16, Burwell	A. E. Johnston	12-11-28	973.0
Loup River (North)	do	A. E. Johnston	1-11-29	843.0
Loup River (North)	do	A. E. Johnston	4-11-29	1196.0
Loup River (North)	do	A. E. Johnston	7- 3-29	954.0
Loup River (South)	Pleasanton	A. E. Johnston	10-11-28	100.4
Loup River (South)	do	A. E. Johnston	10-31-28	175.1
Loup River (South)	do	A. E. Johnston	12- 8-28	90.5
Loup River (South)	do	A. E. Johnston	1- 9-29	126.3
Loup River (South)	do	A. E. Johnston	2- 4-29	73.8
Loup River (South)	do	A. E. Johnston	3- 2-29	163.0
Loup River (South)	do	A. E. Johnston	4- 9-29	178.0
Loup River (South)	do	A. E. Johnston	5-16-29	268.0
Loup River (South)	do	A. E. Johnston	7- 1-29	124.0
Loup River (South)	do	A. E. Johnston	9-28-29	156.0
Loup River (South)	Callaway	A. E. Johnston	12- 8-28	90.0
Loup River (South)	do	A. E. Johnston	1- 9-29	76.3
Loup River (South)	do	A. E. Johnston	2- 5-29	73.0
Loup River (South)	do	A. E. Johnston	2-28-29	98.0
Loup River (South)	do	A. E. Johnston	4- 9-29	100.0
Loup River (South)	do	A. E. Johnston	5-15-29	152.0
Loup River (South)	do	A. E. Johnston	7- 1-29	86.0
Loup River (South)	do	A. E. Johnston	9-27-29	81.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Loup River (Middle)	Section 10-14-10,			
	South of St. Paul	A. E. Johnston	11-20-28	1623.0
Loup River (Middle)	do	A. E. Johnston	12-11-28	1138.0
Loup River (Middle)	do	A. E. Johnston	1-11-29	Ice
Loup River (Middle)	do	A. E. Johnston	2- 2-29	1346.0
Loup River (Middle)	do	A. E. Johnston	2-26-29	1575.0
Loup River (Middle)	do	A. E. Johnston	3-23-29	1907.0
Loup River (Middle)	do	A. E. Johnston	4-12-29	1507.0
Loup River (Middle)	do	A. E. Johnston	6- 8-29	5613.0
Loup River (Middle)	do	A. E. Johnston	7- 5-29	1098.0
Loup River (Middle)	do	A. E. Johnston	7-27-29	786.0
Loup River (Middle)	do	A. E. Johnston	9-25-29	1179.0
Loup River (Middle)	Section 11-19-18, Sargent	A. E. Johnston	10-13-28	1006.0
Loup River (Middle)	do	A. E. Johnston	10-30-28	1042.0
Loup River (Middle)	do	A. E. Johnston	12-10-28	948.0
Loup River (Middle)	do	A. E. Johnston	1-10-29	785.0
Loup River (Middle)	do	A. E. Johnston	3- 1-29	987.0
Loup River (Middle)	do	A. E. Johnston	4-10-29	1339.0
Loup River (Middle)	do	A. E. Johnston	5-14-29	1063.0
Loup River (Middle)	do	A. E. Johnston	7- 2-29	995.0
Loup River (Middle)	do	A. E. Johnston	9-26-29	956.0
Loup River (Middle)	Dunning	A. E. Johnston	2- 5-29	342.0
Loup River (Middle)	do	A. E. Johnston	2-28-29	388.0
Loup River (Middle)	do	A. E. Johnston	4-10-29	582.0
Loup River (Middle)	do	A. E. Johnston	9-27-29	429.0
Louse Creek	Section 12-32-10	A. E. Johnston	10- 4-28	6.6
Louse Creek	do	A. E. Johnston	12-25-28	4.0
Louse Creek	do	A. E. Johnston	3-19-29	16.1
Louse Creek	do	A. E. Johnston	5- 7-29	12.1
Louse Creek	do	A. E. Johnston	9-18-29	3.8
McGuire's Slough	NW¼ NW¼ Section 21-6-40	C. E. Franklin	10-18-28	2.8
McGuire's Slough	do	C. E. Franklin	11- 5-28	4.9
McGuire's Slough	do	C. E. Franklin	11-21-28	2.6
McGuire's Slough	do	C. E. Franklin	12-19-28	2.4
McGuire's Slough	do	C. E. Franklin	1-18-29	3.2
McGuire's Slough	do	C. E. Franklin	2-17-29	5.3
McGuire's Slough	do	C. E. Franklin	3- 7-29	2.6
McGuire's Slough	do	C. E. Franklin	3-21-29	2.8
McGuire's Slough	do	C. E. Franklin	5-11-29	3.0
McGuire's Slough	do	C. E. Franklin	5-29-29	3.9
McGuire's Slough	do	C. E. Franklin	6-27-29	2.4
McGuire's Slough	do	C. E. Franklin	7-11-29	2.1
McGuire's Slough	do	C. E. Franklin	9-25-29	2.5
Medicine Creek	NE¼ SE¼ Section 18-4-25,			
	Cambridge	C. E. Franklin	10- 2-28	11.6
Medicine Creek	do	C. E. Franklin	10-21-28	40.8
Medicine Creek	do	C. E. Franklin	11-22-28	47.4
Medicine Creek	do	C. E. Franklin	12-21-28	46.5
Medicine Creek	do	C. E. Franklin	1-20-29	42.5

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Medicine Creek	do	C. E. Franklin	2-19-29	48.4
Medicine Creek	do	C. E. Franklin	3- 9-29	95.7
Medicine Creek	do	C. E. Franklin	3-22-29	82.3
Medicine Creek	do	C. E. Franklin	5-14-29	86.0
Medicine Creek	do	C. E. Franklin	5-31-29	94.0
Medicine Creek	do	C. E. Franklin	6-11-29	102.0
Medicine Creek	do	C. E. Franklin	6-29-29	29.0
Medicine Creek	do	C. E. Franklin	7-13-29	43.0
Medicine Creek	do	C. E. Franklin	8- 6-29	30.6
Medicine Creek	do	C. E. Franklin	8-18-29	10.8
Medicine Creek	do	C. E. Franklin	8-25-29	15.0
Medicine Creek	do	C. E. Franklin	9-26-29	84.0
Melbeta Seep	Section 24-21-54, ½ mile West of Melbeta Bridge	A. W. Hall	10-17-28	11.7
Melbeta Seep	do	C. E. Franklin	11-14-28	4.1
Melbeta Seep	do	C. E. Franklin	11-25-28	6.2
Melbeta Seep	do	C. E. Franklin	12- 3-28	8.3
Melbeta Seep	do	A. W. Hall	1-19-29	7.4
Melbeta Seep	do	C. E. Franklin	2- 5-29	2.5
Melbeta Seep	do	C. E. Franklin	2-28-29	3.6
Melbeta Seep	do	C. E. Franklin	3-16-29	3.0*
Melbeta Seep	do	A. W. Hall	5- 9-29	4.3
Melbeta Seep	do	A. W. Hall	5-23-29	4.7
Melbeta Seep	do	A. W. Hall	7- 5-29	6.1
Melbeta Seep	do	A. W. Hall	7-16-29	8.9
Melbeta Seep	do	A. W. Hall	8-14-29	Dry
Minnechuduza Creek	Section 28-34-27, at Mouth	A. E. Johnston	10- 3-28	14.3
Minnechuduza Creek	do	A. E. Johnston	10-29-28	22.0
Minnechuduza Creek	do	A. E. Johnston	12-24-28	24.9
Minnechuduza Creek	do	A. E. Johnston	1-28-29	21.8
Minnechuduza Creek	do	A. E. Johnston	3-18-29	27.3
Minnechuduza Creek	do	A. E. Johnston	5- 6-29	48.7
Minnechuduza Creek	do	A. E. Johnston	6- 1-29	97.3
Minnechuduza Creek	do	A. E. Johnston	9-14-29	13.8
Mitchell Spillway	Section 35-23-56, From Tri-state Canal	C. E. Franklin	11-15-28	31.0
Mitchell Spillway	do	C. E. Franklin	11-27-28	19.7
Mitchell Spillway	do	C. E. Franklin	12- 7-28	13.8
Mitchell Spillway	do	C. E. Franklin	1- 7-29	15.9
Mitchell Spillway	do	C. E. Franklin	1-29-29	18.3
Mitchell Spillway	do	C. E. Franklin	3- 2-29	23.1
Mitchell Spillway	do	C. E. Franklin	3-19-29	12.2
Mitchell Spillway	do	A. W. Hall	5- 7-29	12.0
Mitchell Spillway	do	A. W. Hall	5-22-29	69.0
Mitchell Spillway	do	A. W. Hall	6-12-29	134.0
Mitchell Spillway	do	A. W. Hall	7-18-29	0
Mitchell Spillway	do	A. W. Hall	8-15-29	0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Morrill Drain.....	South Line Section 14-23-57.....	A. W. Hall.....	10-16-28	7.0
Morrill Drain.....	do.....	C. E. Franklin.....	11-16-28	2.5
Morrill Drain.....	do.....	C. E. Franklin.....	11-27-28	2.0
Morrill Drain.....	do.....	C. E. Franklin.....	12- 6-28	1.9
Morrill Drain.....	do.....	C. E. Franklin.....	1-10-29	1.5
Morrill Drain.....	do.....	C. E. Franklin.....	1-30-29	4.0
Morrill Drain.....	do.....	A. W. Hall.....	2-15-29	Frozen
Morrill Drain.....	do.....	C. E. Franklin.....	3- 2-29	Frozen
Morrill Drain.....	do.....	C. E. Franklin.....	3-19-29	0
Morrill Drain.....	do.....	A. W. Hall.....	5- 9-29	0.5
Morrill Drain.....	do.....	A. W. Hall.....	5-22-29	1.5*
Morrill Drain.....	do.....	A. W. Hall.....	7- 3-29	1.0*
Morrill Drain.....	do.....	A. W. Hall.....	7-19-29	1.3
Morrill Drain.....	do.....	A. W. Hall.....	8-15-29	2.6
Morrill Drain.....	do.....	A. W. Hall.....	9-14-29	3.9
Muddy Creek.....	NW¼ SW¼ Section 16-4-23, Arapahoe	C. E. Franklin.....	10- 2-28	1.0
Muddy Creek.....	do.....	C. E. Franklin.....	10-21-28	1.3
Muddy Creek.....	do.....	C. E. Franklin.....	11-22-28	2.1
Muddy Creek.....	do.....	C. E. Franklin.....	1-20-29	3.1
Muddy Creek.....	do.....	C. E. Franklin.....	2-19-29	4.5
Muddy Creek.....	do.....	C. E. Franklin.....	3- 9-29	4.0*
Muddy Creek.....	do.....	C. E. Franklin.....	3-22-29	4.4
Muddy Creek.....	do.....	C. E. Franklin.....	5-14-29	1.8
Muddy Creek.....	do.....	C. E. Franklin.....	5-31-29	5.9
Muddy Creek.....	do.....	C. E. Franklin.....	6-11-29	5.3
Muddy Creek.....	do.....	C. E. Franklin.....	6-29-29	2.6
Muddy Creek.....	do.....	C. E. Franklin.....	7-13-29	2.7
Muddy Creek.....	do.....	C. E. Franklin.....	8- 6-29	0.3
Muddy Creek.....	do.....	C. E. Franklin.....	8-18-29	0
Muddy Creek.....	do.....	C. E. Franklin.....	8-26-29	0.2*
Muddy Creek.....	do.....	C. E. Franklin.....	9-26-29	1.0
Muddy Creek.....	Section 16-16-19, Berwyn.....	A. E. Johnston.....	10-11-28	2.0
Muddy Creek.....	do.....	A. E. Johnston.....	10-31-28	4.5
Muddy Creek.....	do.....	A. E. Johnston.....	12- 8-28	1.9
Muddy Creek.....	do.....	A. E. Johnston.....	1- 9-29	2.8
Muddy Creek.....	do.....	A. E. Johnston.....	2- 4-29	3.3
Muddy Creek.....	do.....	A. E. Johnston.....	2-27-29	4.4
Muddy Creek.....	do.....	A. E. Johnston.....	4- 9-29	7.0
Muddy Creek.....	do.....	A. E. Johnston.....	5-16-29	2.2
Muddy Creek.....	do.....	A. E. Johnston.....	7- 1-29	8.9
Muddy Creek.....	do.....	A. E. Johnston.....	9-28-29	2.0
Muddy Creek.....	Section 31-15-17, Mason City.....	A. E. Johnston.....	10-11-28	8.1
Muddy Creek.....	do.....	A. E. Johnston.....	10-31-28	22.0
Muddy Creek.....	do.....	A. E. Johnston.....	12- 8-28	22.8
Muddy Creek.....	do.....	A. E. Johnston.....	1- 9-29	20.7
Muddy Creek.....	do.....	A. E. Johnston.....	2- 4-29	31.3
Muddy Creek.....	do.....	A. E. Johnston.....	2-27-29	38.5
Muddy Creek.....	do.....	A. E. Johnston.....	4- 9-29	20.2
Muddy Creek.....	do.....	A. E. Johnston.....	5-16-29	13.8
Muddy Creek.....	do.....	A. E. Johnston.....	7- 1-29	16.0
Muddy Creek.....	do.....	A. E. Johnston.....	9-28-29	13.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Muddy Creek.....	Section 30-13-15, Hazard.....	A. E. Johnston.....	10-11-28	18.2
Muddy Creek.....	do.....	A. E. Johnston.....	10-31-28	35.2
Muddy Creek.....	do.....	A. E. Johnston.....	12- 8-28	37.6
Muddy Creek.....	do.....	A. E. Johnston.....	1- 9-29	35.6
Muddy Creek.....	do.....	A. E. Johnston.....	2- 4-29	32.6
Muddy Creek.....	do.....	A. E. Johnston.....	2-27-29	69.4
Muddy Creek.....	do.....	A. E. Johnston.....	4- 9-29	34.8
Muddy Creek.....	do.....	A. E. Johnston.....	5-16-29	34.0
Muddy Creek.....	do.....	A. E. Johnston.....	7- 1-29	29.1
Muddy Creek.....	do.....	A. E. Johnston.....	9-28-29	21.0

Furnished by the United States Geological Survey

Niobrara River.....	Gordon.....	R. E. Cabell.....	10- 6-28	116.
Niobrara River.....	do.....	F. F. LeFever.....	11- 3-28	201.
Niobrara River.....	do.....	R. E. Cabell.....	11- 6-28	259.
Niobrara River.....	do.....	F. F. LeFever.....	11-19-28	175.
Niobrara River.....	do.....	R. E. Cabell.....	12- 3-28	150.
Niobrara River.....	do.....	F. F. LeFever.....	12- 5-28	118.
Niobrara River.....	do.....	F. F. LeFever.....	3-29-29	227.
Niobrara River.....	do.....	H. P. Eisenhuth.....	4-22-29	247.
Niobrara River.....	do.....	F. F. LeFever.....	5-19-29	192.
Niobrara River.....	do.....	F. F. LeFever.....	6- 4-29	213.
Niobrara River.....	do.....	F. F. LeFever.....	6-21-29	103.
Niobrara River.....	do.....	H. P. Eisenhuth.....	8-10-29	107.
Niobrara River.....	do.....	H. P. Eisenhuth.....	9- 4-29	103.
Niobrara River.....	do.....	F. B. Campbell.....	9-23-29	135.
Niobrara River.....	Valentine.....	R. E. Cabell.....	10- 5-28	786.
Niobrara River.....	do.....	F. F. LeFever.....	11- 2-28	914.
Niobrara River.....	do.....	F. F. LeFever.....	11-17-28	987.
Niobrara River.....	do.....	R. E. Cabell.....	12- 2-28	924.
Niobrara River.....	do.....	F. F. LeFever.....	12- 5-28	692.
Niobrara River.....	do.....	LeFever & Cabell.....	1-17-29	719.
Niobrara River.....	do.....	F. F. LeFever.....	2-20-29	697.
Niobrara River.....	do.....	F. F. LeFever.....	3-28-29	1170.
Niobrara River.....	do.....	H. P. Eisenhuth.....	4-21-29	1030.
Niobrara River.....	do.....	F. F. LeFever.....	5-20-29	858.
Niobrara River.....	do.....	F. F. LeFever.....	6- 5-29	1190.
Niobrara River.....	do.....	F. F. LeFever.....	6-22-29	670.
Niobrara River.....	do.....	H. P. Eisenhuth.....	7-22-29	738.
Niobrara River.....	do.....	H. P. Eisenhuth.....	8- 9-29	686.
Niobrara River.....	do.....	H. P. Eisenhuth.....	9- 4-29	780.
Niobrara River.....	do.....	F. B. Campbell.....	9-21-29	713.
Niobrara River.....	Section 20-31-58, Wyo. State Line.....	A. E. Johnston.....	10-24-28	10.1
Niobrara River.....	do.....	A. E. Johnston.....	6-19-29	9.2
Niobrara River.....	Section 7-28-53, Below Mouth			
	Whistle Creek.....	A. E. Johnston.....	10-23-28	22.8
Niobrara River.....	do.....	A. E. Johnston.....	6-19-29	10.8
Niobrara River.....	Section 7-28-55, Agate.....	A. E. Johnston.....	10-23-28	18.3
Niobrara River.....	do.....	A. E. Johnston.....	6-19-29	10.3

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Niobrara River	Section 4-28-53, Octave			
	Harris Ranch	A. E. Johnston	10-23-28	19.4
Niobrara River	do	A. E. Johnston	6-19-29	1.6
Niobrara River	Section 9-29-56, South of Harrison	A. E. Johnston	10-23-28	16.2
Niobrara River	do	A. E. Johnston	6-19-29	14.7
Niobrara River	Section 5-28-51, South of Marsland	A. E. Johnston	10-23-28	24.2
Niobrara River	do	A. E. Johnston	12-20-28	38.4
Niobrara River	do	A. E. Johnston	1-22-29	37.9
Niobrara River	do	A. E. Johnston	4-30-29	84.2
Niobrara River	do	A. E. Johnston	5-28-29	45.0
Niobrara River	do	A. E. Johnston	6-19-29	21.1
Niobrara River	do	A. E. Johnston	9-10-29	15.4
Niobrara River	Section 27-29-48, Dunlap	A. E. Johnston	10-23-28	44.5
Niobrara River	do	A. E. Johnston	1-22-29	66.0
Niobrara River	do	A. E. Johnston	3-11-29	111.3
Niobrara River	do	A. E. Johnston	4-30-29	130.0
Niobrara River	do	A. E. Johnston	5-27-29	67.4
Niobrara River	do	A. E. Johnston	6-18-29	26.7
Niobrara River	do	A. E. Johnston	6-22-29	25.0
Niobrara River	do	A. E. Johnston	9-10-29	45.9
Niobrara River	Section 8-33-35, South of Eli	A. E. Johnston	10- 1-28	251.0
Niobrara River	do	A. E. Johnston	10-26-28	262.0
Niobrara River	do	A. E. Johnston	12-22-28	260.0
Niobrara River	do	A. E. Johnston	1-25-29	231.0
Niobrara River	do	A. E. Johnston	5- 3-29	411.0
Niobrara River	do	A. E. Johnston	5-30-29	448.0
Niobrara River	do	A. E. Johnston	9-12-29	341.0
Niobrara River	Section 28-34-27, Below Dam			
	at Valentine	A. E. Johnston	10- 3-28	942.0
Niobrara River	do	A. E. Johnston	10-29-28	1017.0
Niobrara River	do	A. E. Johnston	12-24-28	1125.0
Niobrara River	do	A. E. Johnston	1-28-29	676.0
Niobrara River	do	A. E. Johnston	3-18-29	1881.0
Niobrara River	do	A. E. Johnston	5- 6-29	1643.0
Niobrara River	do	A. E. Johnston	6- 1-29	1522.0
Niobrara River	do	A. E. Johnston	9-14-29	972.0
Niobrara River	Section 1-32-10, 5 miles			
	South of Lynch	A. E. Johnston	10- 4-28	832.0
Niobrara River	do	A. E. Johnston	12-25-28	1280.0
Niobrara River	do	A. E. Johnston	3-19-29	3302.0
Niobrara River	do	A. E. Johnston	5- 7-29	2731.0
Niobrara River	do	A. E. Johnston	9-18-29	1029.8
Norfolk River	Below Mill at Norfolk	A. E. Johnston	1-30-29	87.7
Oak Creek	Capital Beach—near Lincoln	A. E. Johnston	9-24-29	0.6

DEPARTMENT OF PUBLIC WORKS

407

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Otter Creek.....	Section 9-15-40.....	A. E. Johnston.....	10-18-28	20.2
Otter Creek.....	do.....	A. E. Johnston.....	11- 5-28	28.1
Otter Creek.....	do.....	A. E. Johnston.....	11- 9-28	27.1
Otter Creek.....	do.....	A. E. Johnston.....	11-26-28	31.5
Otter Creek.....	do.....	A. E. Johnston.....	12- 4-28	29.1
Otter Creek.....	do.....	A. E. Johnston.....	12-18-28	25.4
Otter Creek.....	do.....	A. E. Johnston.....	1- 4-29	25.0
Otter Creek.....	do.....	A. E. Johnston.....	1-18-29	7.5
Otter Creek.....	do.....	A. E. Johnston.....	2-13-29	29.9
Otter Creek.....	do.....	A. E. Johnston.....	3- 7-29	22.8
Otter Creek.....	do.....	A. E. Johnston.....	3-28-29	28.7
Otter Creek.....	do.....	A. E. Johnston.....	4- 2-29	32.8
Otter Creek.....	do.....	A. E. Johnston.....	4-26-29	29.1
Otter Creek.....	do.....	A. E. Johnston.....	5-22-29	17.9
Otter Creek.....	do.....	A. E. Johnston.....	6-14-29	6.7
Otter Creek.....	do.....	A. E. Johnston.....	6-26-29	14.3
Otter Creek.....	do.....	A. E. Johnston.....	7-19-29	22.4
Otter Creek.....	do.....	A. E. Johnston.....	7-23-29	25.6
Otter Creek.....	do.....	A. E. Johnston.....	9- 6-29	30.6
Papillion Creek (Little).....	Section 35-15-13 E.....	A. E. Johnston.....	10- 9-28	5.3
Papillion Creek (Little).....	do.....	A. E. Johnston.....	11-17-28	5.4
Papillion Creek (Little).....	do.....	A. E. Johnston.....	4-16-29	9.0
Papillion Creek (Little).....	do.....	A. E. Johnston.....	5-13-29	15.4
Pawnee Creek.....	West Line Section 4-12-27.....	A. E. Johnston.....	10-16-28	7.8
Pawnee Creek.....	do.....	A. E. Johnston.....	11-13-28	10.2
Pawnee Creek.....	do.....	A. E. Johnston.....	11-23-28	16.8
Pawnee Creek.....	do.....	A. E. Johnston.....	12- 5-28	11.6
Pawnee Creek.....	do.....	A. E. Johnston.....	12-15-28	25.0
Pawnee Creek.....	do.....	A. E. Johnston.....	1- 7-29	7.5
Pawnee Creek.....	do.....	A. E. Johnston.....	1-17-29	11.4
Pawnee Creek.....	do.....	A. E. Johnston.....	2-20-29	9.6
Pawnee Creek.....	do.....	A. E. Johnston.....	3- 5-29	12.5
Pawnee Creek.....	do.....	A. E. Johnston.....	3-26-29	22.9
Pawnee Creek.....	do.....	A. E. Johnston.....	4- 5-29	14.1
Pawnee Creek.....	do.....	A. E. Johnston.....	4-23-29	10.5
Pawnee Creek.....	do.....	A. E. Johnston.....	5-18-29	5.7
Pawnee Creek.....	do.....	A. E. Johnston.....	6-11-29	8.9
Pawnee Creek.....	do.....	A. E. Johnston.....	6-28-29	4.6
Pawnee Creek.....	do.....	A. E. Johnston.....	7-17-29	4.4
Pawnee Creek.....	do.....	A. E. Johnston.....	8-14-29	0.4
Pine Creek.....	Section 33-30-44.....	A. E. Johnston.....	10-26-28	16.3
Pine Creek.....	do.....	A. E. Johnston.....	10-29-28	51.4
Pine Creek.....	do.....	A. E. Johnston.....	12-21-28	18.8
Pine Creek.....	do.....	A. E. Johnston.....	1-24-29	24.1
Pine Creek.....	do.....	A. E. Johnston.....	5- 2-29	27.6
Pine Creek.....	do.....	A. E. Johnston.....	5-29-29	30.0
Pine Creek.....	do.....	A. E. Johnston.....	9-12-29	24.0
Pine Creek.....	Below Mill at Long Pine.....	A. E. Johnston.....	1-28-29	46.8
Pine Creek.....	do.....	A. E. Johnston.....	6- 3-29	65.6

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Plum Creek.....	West of Johnstown.....	A. E. Johnston.....	1-28-29	28.3
Ponca Creek.....	Section 14-33-10, Lynch.....	A. E. Johnston.....	10- 4-28	0
Ponca Creek.....	do.....	A. E. Johnston.....	12-25-28	0
Ponca Creek.....	do.....	A. E. Johnston.....	3-19-29	34.4
Ponca Creek.....	do.....	A. E. Johnston.....	5- 7-29	21.9
Ponca Creek.....	do.....	A. E. Johnston.....	9-17-29	2.1
Prairie Creek.....	Section 24-16-3, 5 miles East of Silver Creek.....	A. E. Johnston.....	10- 6-28	0.4
Prairie Creek.....	do.....	A. E. Johnston.....	11-14-28	22.8
Prairie Creek.....	do.....	A. E. Johnston.....	12-12-28	17.8
Prairie Creek.....	do.....	A. E. Johnston.....	1-12-29	19.8
Prairie Creek.....	do.....	A. E. Johnston.....	2- 1-29	24.6
Prairie Creek.....	do.....	A. E. Johnston.....	2-22-29	39.6
Prairie Creek.....	do.....	A. E. Johnston.....	3-22-29	31.1
Prairie Creek.....	do.....	A. E. Johnston.....	4-12-29	28.6
Prairie Creek.....	do.....	A. E. Johnston.....	5- 9-29	25.5
Prairie Creek.....	do.....	A. E. Johnston.....	6- 5-29	28.0
Prairie Creek.....	do.....	A. E. Johnston.....	7- 6-29	19.0
Prairie Creek.....	do.....	A. E. Johnston.....	7-26-29	4.6
Prairie Creek.....	do.....	A. E. Johnston.....	9-20-29	5.0
Pullen Drain.....	Section 24-24-61.....	C. E. Franklin.....	11-17-28	0.2*
Pullen Drain.....	do.....	C. E. Franklin.....	11-27-28	0.2*
Pullen Drain.....	do.....	C. E. Franklin.....	12- 6-28	0.5*
Pullen Drain.....	do.....	C. E. Franklin.....	1-10-29	0.2*
Pullen Drain.....	do.....	C. E. Franklin.....	1-30-29	0.3*
Pullen Drain.....	do.....	C. E. Franklin.....	3- 2-29	0.3*
Pullen Drain.....	do.....	A. W. Hall.....	5- 8-29	1.3
Pullen Drain.....	do.....	A. W. Hall.....	5-20-29	0.4
Pumpkinseed Creek.....	Section 12-19-50, Mouth.....	A. W. Hall.....	10-18-28	40.2
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	11- 8-28	53.9
Pumpkinseed Creek.....	do.....	C. E. Franklin.....	11-12-28	47.5
Pumpkinseed Creek.....	do.....	C. E. Franklin.....	11-24-28	42.8
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	12- 1-28	55.2
Pumpkinseed Creek.....	do.....	C. E. Franklin.....	12-13-28	54.5
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	12-19-28	54.2
Pumpkinseed Creek.....	do.....	C. E. Franklin.....	12-24-28	53.9
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	1- 2-29	55.4
Pumpkinseed Creek.....	do.....	A. W. Hall.....	1-18-29	58.1
Pumpkinseed Creek.....	do.....	C. E. Franklin.....	2- 4-29	37.5
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	2-16-29	48.1
Pumpkinseed Creek.....	do.....	C. E. Franklin.....	2-23-29	41.7
Pumpkinseed Creek.....	do.....	A. W. Hall.....	4- 6-29	66.7
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	4-27-29	122.0
Pumpkinseed Creek.....	do.....	A. W. Hall.....	5- 4-29	75.8
Pumpkinseed Creek.....	do.....	A. W. Hall.....	5-10-29	117.2
Pumpkinseed Creek.....	do.....	A. W. Hall.....	5-24-29	62.6
Pumpkinseed Creek.....	do.....	A. W. Hall.....	6-10-29	63.7
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	6-17-29	17.1
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	6-25-29	18.5
Pumpkinseed Creek.....	do.....	A. W. Hall.....	7-15-29	19.5
Pumpkinseed Creek.....	do.....	A. W. Hall.....	8-28-29	26.5

* Estimated

DEPARTMENT OF PUBLIC WORKS

409

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Pumpkinseed Creek	5 miles south of Bridgeport	A. W. Hall	10-18-28	15.7
Pumpkinseed Creek	do	A. W. Hall	1-18-29	35.2
Pumpkinseed Creek	do	C. E. Franklin	3-11-29	48.6
Pumpkinseed Creek	do	A. W. Hall	4- 6-29	43.4
Pumpkinseed Creek	do	A. W. Hall	5- 4-29	61.6
Pumpkinseed Creek	do	A. W. Hall	5-24-29	42.1
Pumpkinseed Creek	do	A. W. Hall	6-10-29	50.6
Pumpkinseed Creek	do	A. W. Hall	6-25-29	4.0
Pumpkinseed Creek	do	A. W. Hall	7-15-29	7.0
Pumpkinseed Creek	do	A. W. Hall	7-30-29	8.1
Pumpkinseed Creek	do	A. W. Hall	9-18-29	11.0
Pumpkinseed Creek	Section 4-19-55, Gering-Kimball Highway	C. E. Franklin	10-15-28	2.5
Pumpkinseed Creek	do	C. E. Franklin	11-19-28	6.2
Pumpkinseed Creek	do	C. E. Franklin	12-17-28	8.3
Pumpkinseed Creek	do	C. E. Franklin	2-14-29	3.2
Pumpkinseed Creek	do	C. E. Franklin	3- 5-29	13.9
Pumpkinseed Creek	do	C. E. Franklin	5-22-29	8.8
Pumpkinseed Creek	do	C. E. Franklin	7- 6-29	3.7
Pumpkinseed Creek	do	C. E. Franklin	9-18-29	9.2
Red Bird Creek	Section 11-32-10	A. E. Johnston	10- 4-28	18.8
Red Bird Creek	do	A. E. Johnston	12-25-28	23.6
Red Bird Creek	do	A. E. Johnston	3-19-29	61.0
Red Bird Creek	do	A. E. Johnston	5- 7-29	72.8
Red Bird Creek	do	A. E. Johnston	9-18-29	22.5
Red Willow Creek	SW Corner Section 6-20-51	A. W. Hall	10-17-28	51.4
Red Willow Creek	do	C. E. Franklin	11-13-28	68.8
Red Willow Creek	do	C. E. Franklin	11-24-28	68.8
Red Willow Creek	do	C. E. Franklin	12- 8-28	43.9
Red Willow Creek	do	C. E. Franklin	12-26-28	38.9
Red Willow Creek	do	A. W. Hall	1-19-29	48.8
Red Willow Creek	do	C. E. Franklin	2- 4-29	40.3
Red Willow Creek	do	C. E. Franklin	2-26-29	33.6
Red Willow Creek	do	C. E. Franklin	3-15-29	28.4
Red Willow Creek	do	A. W. Hall	4- 6-29	41.5
Red Willow Creek	do	A. W. Hall	5- 4-29	73.7
Red Willow Creek	do	A. W. Hall	5-24-29	142.0
Red Willow Creek	do	A. W. Hall	6-12-29	173.0
Red Willow Creek	do	A. W. Hall	6-24-29	5.0
Red Willow Creek	do	A. W. Hall	7-17-29	6.5
Red Willow Creek	do	A. W. Hall	8-13-29	46.8
Red Willow Creek	do	A. W. Hall	9-16-29	228.9
Red Willow Creek	NE¼ NE¼ Section 17-3-28,			
	Red Willow	C. E. Franklin	10- 2-28	10.7
Red Willow Creek	do	C. E. Franklin	10-21-28	27.1
Red Willow Creek	do	C. E. Franklin	11-22-28	23.4
Red Willow Creek	do	C. E. Franklin	12-20-28	24.4
Red Willow Creek	do	C. E. Franklin	1-20-29	17.9
Red Willow Creek	do	C. E. Franklin	2-19-29	21.8

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Red Willow Creek	do	C. E. Franklin	3- 9-29	30.9
Red Willow Creek	do	C. E. Franklin	3-22-29	33.4
Red Willow Creek	do	C. E. Franklin	5-14-29	33.0
Red Willow Creek	do	C. E. Franklin	5-31-29	44.0
Red Willow Creek	do	C. E. Franklin	6-11-29	96.0
Red Willow Creek	do	C. E. Franklin	6-29-29	10.8
Red Willow Creek	do	C. E. Franklin	7-13-29	20.2
Red Willow Creek	do	C. E. Franklin	8- 6-29	2.9
Red Willow Creek	do	C. E. Franklin	8-18-29	1.0*
Red Willow Creek	do	C. E. Franklin	9-26-29	9.3
Republican River	Section 9-1-42, Colorado- Nebraska Line	C. E. Franklin	10- 4-28	33.5
Republican River	do	C. E. Franklin	10-23-28	64.1
Republican River	do	C. E. Franklin	11- 3-28	74.6
Republican River	do	C. E. Franklin	11-23-28	74.5
Republican River	do	C. E. Franklin	12-22-28	68.3
Republican River	do	C. E. Franklin	1-23-29	62.1
Republican River	do	C. E. Franklin	2-20-29	57.6
Republican River	do	C. E. Franklin	3-10-29	87.1
Republican River	do	C. E. Franklin	3-23-29	79.0
Republican River	do	C. E. Franklin	5-16-29	69.0
Republican River	do	C. E. Franklin	6- 1-29	35.0
Republican River	do	C. E. Franklin	6-13-29	45.6
Republican River	do	C. E. Franklin	6-30-29	6.8
Republican River	do	C. E. Franklin	7-14-29	15.7
Republican River	do	C. E. Franklin	8- 7-29	11.1
Republican River	do	C. E. Franklin	8-20-29	12.4
Republican River	do	C. E. Franklin	8-29-29	17.0
Republican River	do	C. E. Franklin	9-28-29	31.0
Republican River	Section 11-1-42, Sanborn	C. E. Franklin	10- 4-28	41.2
Republican River	do	C. E. Franklin	10-23-28	49.8
Republican River	do	C. E. Franklin	11- 3-28	76.1
Republican River	do	C. E. Franklin	11-23-28	65.5
Republican River	do	C. E. Franklin	12-22-28	59.6
Republican River	do	C. E. Franklin	1-23-29	72.9
Republican River	do	C. E. Franklin	2-20-29	105.0
Republican River	do	C. E. Franklin	3-10-29	77.0
Republican River	do	C. E. Franklin	3-23-29	84.0
Republican River	do	C. E. Franklin	5-16-29	54.0
Republican River	do	C. E. Franklin	6- 1-29	36.5
Republican River	do	C. E. Franklin	6-13-29	35.3
Republican River	do	C. E. Franklin	6-30-29	8.0
Republican River	do	C. E. Franklin	7-14-29	8.4
Republican River	do	C. E. Franklin	8- 7-29	14.3
Republican River	do	C. E. Franklin	8-20-29	13.6
Republican River	do	C. E. Franklin	8-29-29	21.0
Republican River (So. Branch)	Section 19-1-37, South of Benkelman	C. E. Franklin	10-23-28	64.6
Republican River (So. Branch)	do	C. E. Franklin	11- 3-28	101.7
Republican River (So. Branch)	do	C. E. Franklin	11-22-28	69.3
Republican River (So. Branch)	do	C. E. Franklin	12-22-28	43.0

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Republican River (So. Branch).....do.....		C. E. Franklin.....	1-22-29	53.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	2-20-29	45.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	3-10-29	88.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	3-23-29	70.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	5-15-29	65.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	6- 1-29	50.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	6-13-29	45.8
Republican River (So. Branch).....do.....		C. E. Franklin.....	6-30-29	58.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	7-14-29	1.0*
Republican River (So. Branch).....do.....		C. E. Franklin.....	8- 7-29	24.5
Republican River (So. Branch).....do.....		C. E. Franklin.....	8-20-29	0.8*
Republican River (So. Branch).....do.....		C. E. Franklin.....	9-28-29	26.0
Republican River (No. Branch).....Section 19-1-37				
	Benkelman	C. E. Franklin.....	10- 4-28	32.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	10-23-28	109.2
Republican River (No. Branch).....do.....		C. E. Franklin.....	11- 3-28	223.1
Republican River (No. Branch).....do.....		C. E. Franklin.....	11-22-28	155.5
Republican River (No. Branch).....do.....		C. E. Franklin.....	12-22-28	111.6
Republican River (No. Branch).....do.....		C. E. Franklin.....	1-22-29	120.5
Republican River (No. Branch).....do.....		C. E. Franklin.....	2-20-29	86.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	3-10-29	255.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	3-23-29	147.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	5-15-29	140.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	6- 1-29	72.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	6-13-29	87.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	6-30-29	56.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	7-14-29	3.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	8- 7-29	58.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	8-20-29	3.3
Republican River (No. Branch).....do.....		C. E. Franklin.....	8-29-29	27.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	9-28-29	84.0
Republican River.....SW¼ SW¼ Section 16-3-31,				
	Culbertson	C. E. Franklin.....	10- 1-28	76.0
Republican River.....do.....		C. E. Franklin.....	10-20-28	193.0
Republican River.....do.....		C. E. Franklin.....	11- 4-28	324.0
Republican River.....do.....		C. E. Franklin.....	11-21-28	184.9
Republican River.....do.....		C. E. Franklin.....	12-19-28	91.4
Republican River.....do.....		C. E. Franklin.....	1-19-29	150.7
Republican River.....do.....		C. E. Franklin.....	2-18-29	113.3
Republican River.....do.....		C. E. Franklin.....	3- 8-29	361.0
Republican River.....do.....		C. E. Franklin.....	3-22-29	396.0
Republican River.....do.....		C. E. Franklin.....	5-13-29	305.0
Republican River.....do.....		C. E. Franklin.....	5-30-29	229.0
Republican River.....do.....		C. E. Franklin.....	6-10-29	226.0
Republican River.....do.....		C. E. Franklin.....	6-28-29	34.0
Republican River.....do.....		C. E. Franklin.....	7-12-29	7.0
Republican River.....do.....		C. E. Franklin.....	8- 3-29	50.3
Republican River.....do.....		C. E. Franklin.....	8-16-29	0.1*
Republican River.....do.....		C. E. Franklin.....	9-27-29	89.0

* Estimated

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Republican River.....	Section 31-3-29, McCook.....	C. E. Franklin.....	10- 1-28	120.2
Republican River.....	do.....	C. E. Franklin.....	10-20-28	300.5
Republican River.....	do.....	C. E. Franklin.....	11- 4-28	686.0
Republican River.....	do.....	C. E. Franklin.....	11-21-28	411.0
Republican River.....	do.....	C. E. Franklin.....	12-20-28	210.8
Republican River.....	do.....	C. E. Franklin.....	1-19-29	334.0
Republican River.....	do.....	C. E. Franklin.....	2-18-29	346.0
Republican River.....	do.....	C. E. Franklin.....	3- 8-29	764.0
Republican River.....	do.....	C. E. Franklin.....	3-22-29	487.0
Republican River.....	do.....	C. E. Franklin.....	5-13-29	473.0
Republican River.....	do.....	C. E. Franklin.....	5-30-29	626.0
Republican River.....	do.....	C. E. Franklin.....	6-10-29	887.0
Republican River.....	do.....	C. E. Franklin.....	6-28-29	49.0
Republican River.....	do.....	C. E. Franklin.....	7-12-29	39.0
Republican River.....	do.....	C. E. Franklin.....	8- 3-29	23.1
Republican River.....	do.....	C. E. Franklin.....	8-28-29	0
Republican River.....	do.....	C. E. Franklin.....	9-27-29	151.0
Republican River.....	SE¼ Section 22-14-24, Holbrook.....	C. E. Franklin.....	10- 2-28	151.0
Republican River.....	do.....	C. E. Franklin.....	10-21-28	389.6
Republican River.....	do.....	C. E. Franklin.....	11-22-28	512.8
Republican River.....	do.....	C. E. Franklin.....	12-21-28	292.7
Republican River.....	do.....	C. E. Franklin.....	1-20-29	366.0
Republican River.....	do.....	C. E. Franklin.....	2-19-29	281.0
Republican River.....	do.....	C. E. Franklin.....	3- 9-29	334.0
Republican River.....	do.....	C. E. Franklin.....	3-22-29	663.0
Republican River.....	do.....	C. E. Franklin.....	5-14-29	690.0
Republican River.....	do.....	C. E. Franklin.....	5-31-29	985.0
Republican River.....	do.....	C. E. Franklin.....	6-11-29	980.0
Republican River.....	do.....	C. E. Franklin.....	6-29-29	173.0
Republican River.....	do.....	C. E. Franklin.....	7-13-29	219.0
Republican River.....	do.....	C. E. Franklin.....	8- 6-29	37.0
Republican River.....	do.....	C. E. Franklin.....	8-18-29	7.0
Republican River.....	do.....	C. E. Franklin.....	8-25-29	4.0
Republican River.....	do.....	C. E. Franklin.....	9-26-29	176.0

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Republican River.....	Bloomington.....	Follansbee-		
		Eisenhuth.....	4-13-29	496.
Republican River.....	do.....	H. P. Eisenhuth.....	4-24-29	882.
Republican River.....	do.....	F. F. LeFever.....	6- 1-29	2790.
Republican River.....	do.....	F. F. LeFever.....	6-18-29	895.
Republican River.....	do.....	H. P. Eisenhuth.....	7-10-29	630.
Republican River.....	do.....	H. P. Eisenhuth.....	7-29-29	1210.
Republican River.....	do.....	H. P. Eisenhuth.....	8-21-29	124.
Republican River.....	do.....	F. B. Campbell.....	9-12-29	150.
Republican River.....	do.....	F. B. Campbell.....	9-27-29	128.
Republican River.....	Max.....	F. F. LeFever.....	10-22-28	134.
Republican River.....	do.....	F. F. LeFever.....	11- 6-28	233.
Republican River.....	do.....	F. F. LeFever.....	11-21-28	192.
Republican River.....	do.....	F. F. LeFever.....	3- 8-29	280.

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Republican River.....	do.....	P. V. Hodges.....	3-17-29	238.
Republican River.....	do.....	Follansbee-		
		Eisenhuth.....	4-12-29	164.
Republican River.....	do.....	H. P. Eisenhuth.....	4-24-29	325.
Republican River.....	do.....	F. F. LeFever.....	6- 2-29	129.
Republican River.....	do.....	F. F. LeFever.....	6-19-29	82.
Republican River.....	do.....	H. P. Eisenhuth.....	7- 9-29	13.0
Republican River.....	do.....	H. P. Eisenhuth.....	7-29-29	111.
Republican River.....	do.....	H. P. Eisenhuth.....	8-20-29	0.4
Republican River.....	do.....	F. B. Campbell.....	9-11-29	145.
Republican River.....	do.....	F. B. Campbell.....	9-26-29	75.
Republican River.....	Superior.....	A. E. Johnston.....	4-18-29	554.0
Republican River.....	Bostwick.....	A. E. Johnston.....	7-11-29	1771.0
Rock Creek.....	Section 21-1-39, Parks.....	C. E. Franklin.....	10- 4-28	12.5
Rock Creek.....	do.....	C. E. Franklin.....	10-23-28	7.9
Rock Creek.....	do.....	C. E. Franklin.....	11- 3-28	12.0
Rock Creek.....	do.....	C. E. Franklin.....	11-23-28	16.0
Rock Creek.....	do.....	C. E. Franklin.....	12-22-28	10.0
Rock Creek.....	do.....	C. E. Franklin.....	1-23-29	10.7
Rock Creek.....	do.....	C. E. Franklin.....	2-20-29	24.5
Rock Creek.....	do.....	C. E. Franklin.....	3-10-29	14.3
Rock Creek.....	do.....	C. E. Franklin.....	3-23-29	20.2
Rock Creek.....	do.....	C. E. Franklin.....	5-16-29	9.2
Rock Creek.....	do.....	C. E. Franklin.....	6- 1-29	12.5
Rock Creek.....	do.....	C. E. Franklin.....	6-13-29	15.0
Rock Creek.....	do.....	C. E. Franklin.....	6-30-29	11.2
Rock Creek.....	do.....	C. E. Franklin.....	7-14-29	11.8
Rock Creek.....	do.....	C. E. Franklin.....	8- 7-29	14.0
Rock Creek.....	do.....	C. E. Franklin.....	8-20-29	10.7
Rock Creek.....	do.....	C. E. Franklin.....	8-29-29	11.2
Rock Creek.....	do.....	C. E. Franklin.....	9-28-29	12.0
Rock Creek.....	South of Springview on Highway No.20.....	A. E. Johnston.....	6- 3-29	9.0
Rock Creek.....	Meadville.....	A. E. Johnston.....	10-29-28	5.3
Rush Creek.....	Section 17-17-45, ½ mile above mouth.....	A. E. Johnston.....	1- 3-29	2.5
Rush Creek.....	do.....	A. E. Johnston.....	1-19-29	2.8
Rush Creek.....	do.....	A. E. Johnston.....	3-29-29	2.6
Rush Creek.....	do.....	A. E. Johnston.....	4- 1-29*	2.9
Rush Creek.....	do.....	A. E. Johnston.....	6-24-29	0
Rush Creek.....	do.....	A. E. Johnston.....	7-22-29	0
Salt Creek.....	Section 2-9-6, Below C. B. & Q. Dam.....	A. E. Johnston.....	10-10-28	2.0*
Salt Creek.....	do.....	A. E. Johnston.....	11-19-28	23.6
Salt Creek.....	do.....	A. E. Johnston.....	4-17-29	12.6
Salt Creek.....	do.....	A. E. Johnston.....	5-13-29	30.1
Salt Creek.....	do.....	A. E. Johnston.....	7-10-29	7.5
Salt Creek.....	do.....	A. E. Johnston.....	9-24-29	3.5*

* Estimated

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Sand Creek	Section 10-15-40	A. E. Johnston	10-18-28	4.5
Sand Creek	do.	A. E. Johnston	11-5-28	3.7
Sand Creek	do.	A. E. Johnston	11-9-28	2.6
Sand Creek	do.	A. E. Johnston	11-26-28	4.2
Sand Creek	do.	A. E. Johnston	12-4-28	2.0
Sand Creek	do.	A. E. Johnston	12-18-28	7.2
Sand Creek	do.	A. E. Johnston	1-4-29	3.9
Sand Creek	do.	A. E. Johnston	1-18-29	4.4
Sand Creek	do.	A. E. Johnston	2-13-29	5.8
Sand Creek	do.	A. E. Johnston	2-28-29	4.9
Sand Creek	do.	A. E. Johnston	3-7-29	4.8
Sand Creek	do.	A. E. Johnston	3-28-29	4.5
Sand Creek	do.	A. E. Johnston	4-2-29	5.8
Sand Creek	do.	A. E. Johnston	4-26-29	6.1
Sand Creek	do.	A. E. Johnston	5-15-29	4.8
Sand Creek	do.	A. E. Johnston	5-22-29	5.1
Sand Creek	do.	A. E. Johnston	6-14-29	3.8
Sand Creek	do.	A. E. Johnston	6-26-29	4.5
Sand Creek	do.	A. E. Johnston	7-19-29	5.9
Sand Creek	do.	A. E. Johnston	7-23-29	9.0
Sand Creek	do.	A. E. Johnston	9-6-29	5.6
Sand Creek	do.	A. E. Johnston	9-27-29	1.0
Sand Creek	½ mile East of Callaway	A. E. Johnston	4-9-29	2.4
Sand Creek	do.	A. E. Johnston	5-15-29	4.8
Schlagel Creek	Section 24-33-28, Mouth	A. E. Johnston	10-2-28	10.3
Schlagel Creek	do.	A. E. Johnston	10-27-28	13.1
Schlagel Creek	do.	A. E. Johnston	12-24-28	5.5
Schlagel Creek	do.	A. E. Johnston	1-28-29	8.3
Schlagel Creek	do.	A. E. Johnston	3-18-29	10.3
Schlagel Creek	do.	A. E. Johnston	5-6-29	12.1
Schlagel Creek	do.	A. E. Johnston	5-31-29	15.4
Schlagel Creek	do.	A. E. Johnston	9-14-29	12.2
School Creek	Orleans	C. E. Franklin	7-13-29	0.5
Scottsbluff Drain	Section 25-22-54	A. W. Hall	10-17-28	20.9
Scottsbluff Drain	do.	C. E. Franklin	11-15-28	20.1
Scottsbluff Drain	do.	C. E. Franklin	11-26-28	17.6
Scottsbluff Drain	do.	C. E. Franklin	12-3-28	14.6
Scottsbluff Drain	do.	A. W. Hall	1-19-29	15.2
Scottsbluff Drain	do.	C. E. Franklin	2-6-29	7.1
Scottsbluff Drain	do.	A. W. Hall	2-15-29	14.4
Scottsbluff Drain	do.	C. E. Franklin	2-25-29	7.7
Scottsbluff Drain	do.	C. E. Franklin	3-16-29	8.5
Scottsbluff Drain	do.	A. W. Hall	5-7-29	8.7
Scottsbluff Drain	do.	A. W. Hall	5-23-29	12.4
Scottsbluff Drain	do.	A. W. Hall	7-5-29	15.5
Scottsbluff Drain	do.	A. W. Hall	7-17-29	17.3
Scottsbluff Drain	do.	A. W. Hall	8-14-29	23.8

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Sheep Creek.....	NW¼ Section 21-23-37.....	A. W. Hall.....	10-13-28	19.1
Sheep Creek.....	do.....	C. E. Franklin.....	11-16-28	86.6
Sheep Creek.....	do.....	C. E. Franklin.....	11-27-28	97.7
Sheep Creek.....	do.....	C. E. Franklin.....	12- 6-28	76.9
Sheep Creek.....	do.....	C. E. Franklin.....	1-10-29	77.0
Sheep Creek.....	do.....	C. E. Franklin.....	1-29-29	82.9
Sheep Creek.....	do.....	A. W. Hall.....	2-15-29	81.2
Sheep Creek.....	do.....	C. E. Franklin.....	3- 2-29	76.3
Sheep Creek.....	do.....	C. E. Franklin.....	3-19-29	81.6
Sheep Creek.....	do.....	A. W. Hall.....	5- 9-29	80.3
Sheep Creek.....	do.....	A. W. Hall.....	5-22-29	81.0
Sheep Creek.....	do.....	A. W. Hall.....	6-13-29	84.9
Sheep Creek.....	do.....	A. W. Hall.....	7- 3-29	3.7
Sheep Creek.....	do.....	A. W. Hall.....	8-16-29	10.4
Sheep Creek.....	do.....	A. W. Hall.....	9-14-29	114.1
Shell Creek.....	Section 12-17-3 E, East of Schuyler.....	A. E. Johnston.....	10- 8-28	8.4
Shell Creek.....	do.....	A. E. Johnston.....	11-16-28	47.1
Shell Creek.....	do.....	A. E. Johnston.....	12-13-28	24.9
Shell Creek.....	do.....	A. E. Johnston.....	1-14-29	43.5
Shell Creek.....	do.....	A. E. Johnston.....	3-21-29	61.1
Shell Creek.....	do.....	A. E. Johnston.....	4-15-29	46.8
Shell Creek.....	do.....	A. E. Johnston.....	5-10-29	42.8
Shell Creek.....	do.....	A. E. Johnston.....	6- 6-29	47.5
Shell Creek.....	do.....	A. E. Johnston.....	7- 8-29	42.9
Shell Creek.....	do.....	A. E. Johnston.....	9-21-29	16.0
Silver Creek.....	Section 6-15-3, 1 mile West of Silver Creek.....	A. E. Johnston.....	10- 6-28	0.2
Silver Creek.....	do.....	A. E. Johnston.....	11-14-28	8.8
Silver Creek.....	do.....	A. E. Johnston.....	12-12-28	5.0
Silver Creek.....	do.....	A. E. Johnston.....	1-12-29	1.3
Silver Creek.....	do.....	A. E. Johnston.....	2- 1-29	6.7
Silver Creek.....	do.....	A. E. Johnston.....	2-22-29	5.3
Silver Creek.....	do.....	A. E. Johnston.....	3-22-29	13.0
Silver Creek.....	do.....	A. E. Johnston.....	4-12-29	13.1
Silver Creek.....	do.....	A. E. Johnston.....	5- 9-29	5.5
Silver Creek.....	do.....	A. E. Johnston.....	6- 5-29	12.5
Silver Creek.....	do.....	A. E. Johnston.....	6-17-29	13.2
Silver Creek.....	do.....	A. E. Johnston.....	7- 6-29	6.9
Silver Creek.....	do.....	A. E. Johnston.....	7-26-29	0.8
Silver Creek.....	do.....	A. E. Johnston.....	9-20-29	0.4
Silvernail Drain.....	Section 6-19-49.....	A. W. Hall.....	10-18-28	21.1
Silvernail Drain.....	do.....	C. E. Franklin.....	11-12-28	10.6
Silvernail Drain.....	do.....	C. E. Franklin.....	11-24-28	5.8
Silvernail Drain.....	do.....	C. E. Franklin.....	12- 1-28	8.8
Silvernail Drain.....	do.....	C. E. Franklin.....	12- 8-28	6.3
Silvernail Drain.....	do.....	C. E. Franklin.....	12-24-28	7.4
Silvernail Drain.....	do.....	A. E. Johnston.....	1- 2-29	6.1
Silvernail Drain.....	do.....	A. W. Hall.....	1-18-29	8.8
Silvernail Drain.....	do.....	C. E. Franklin.....	2- 4-29	5.0
Silvernail Drain.....	do.....	A. E. Johnston.....	2-16-29	8.4

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Silvernail Drain.....	do.....	C. E. Franklin.....	2-26-29	3.2
Silvernail Drain.....	do.....	C. E. Franklin.....	3-14-29	6.1
Silvernail Drain.....	do.....	A. E. Johnston.....	4-1-29	5.5
Silvernail Drain.....	do.....	A. W. Hall.....	4-6-29	8.5
Silvernail Drain.....	do.....	A. W. Hall.....	5-4-29	4.6
Silvernail Drain.....	do.....	A. W. Hall.....	6-10-29	6.8
Silvernail Drain.....	do.....	A. E. Johnston.....	6-17-29	13.2
Silvernail Drain.....	do.....	A. W. Hall.....	6-24-29	9.7
Silvernail Drain.....	do.....	A. W. Hall.....	7-15-29	12.3
Silvernail Drain.....	do.....	A. E. Johnston.....	7-22-29	23.5
Silvernail Drain.....	do.....	C. E. Franklin.....	8-12-29	11.7
Silvernail Drain.....	do.....	A. W. Hall.....	9-12-29	20.0
Skunk Creek.....	Section 1-14-37.....	A. E. Johnston.....	10-18-28	1.4
Skunk Creek.....	do.....	A. E. Johnston.....	11-9-28	4.6
Skunk Creek.....	do.....	A. E. Johnston.....	11-24-28	3.7
Skunk Creek.....	do.....	A. E. Johnston.....	12-18-28	3.0
Skunk Creek.....	do.....	A. E. Johnston.....	1-4-29	3.4
Skunk Creek.....	do.....	A. E. Johnston.....	2-5-29	4.6
Skunk Creek.....	do.....	A. E. Johnston.....	2-12-29	5.0
Skunk Creek.....	do.....	A. E. Johnston.....	3-7-29	6.7
Skunk Creek.....	do.....	A. E. Johnston.....	4-27-29	5.6
Skunk Creek.....	do.....	A. E. Johnston.....	4-3-29	4.6
Skunk Creek.....	do.....	A. E. Johnston.....	5-21-29	2.9
Skunk Creek.....	do.....	A. E. Johnston.....	6-26-29	0.2
Skunk Creek.....	do.....	A. E. Johnston.....	7-18-29	0.6
Snake Creek.....	Section 8-24-48, Alliance- Bridgeport Highway.....	A. E. Johnston.....	10-22-28	0
Snake Creek.....	do.....	A. E. Johnston.....	12-20-28	0
Snake Creek.....	do.....	A. E. Johnston.....	1-21-29	0
Snake Creek.....	do.....	A. E. Johnston.....	3-11-29	0.6
Snake Creek.....	do.....	A. E. Johnston.....	4-29-29	21.0
Snake Creek.....	do.....	A. E. Johnston.....	5-27-29	5.5
Snake Creek.....	do.....	A. E. Johnston.....	6-22-29	1.0*
Snake Creek.....	do.....	A. E. Johnston.....	9-10-29	0
Snake River.....	Section 9-31-30, above Falls.....	A. E. Johnston.....	10-2-28	260.0
Snake River.....	do.....	A. E. Johnston.....	10-27-28	242.0
Snake River.....	do.....	A. E. Johnston.....	12-22-28	261.0
Snake River.....	do.....	A. E. Johnston.....	1-26-29	230.5
Snake River.....	do.....	A. E. Johnston.....	3-17-29	306.0
Snake River.....	do.....	A. E. Johnston.....	5-4-29	298.0
Snake River.....	do.....	A. E. Johnston.....	5-31-29	333.0
Snake River.....	do.....	A. E. Johnston.....	9-13-29	306.3
Snell & Nine Mile Drains.....	Section 25-21-53.....	A. W. Hall.....	10-17-28	184.0
Snell & Nine Mile Drains.....	do.....	C. E. Franklin.....	11-13-28	177.0
Snell & Nine Mile Drains.....	do.....	C. E. Franklin.....	11-25-28	169.0
Snell & Nine Mile Drains.....	do.....	C. E. Franklin.....	12-4-28	155.0
Snell & Nine Mile Drains.....	do.....	C. E. Franklin.....	12-26-28	120.0
Snell & Nine Mile Drains.....	do.....	A. W. Hall.....	1-19-29	91.1
Snell & Nine Mile Drains.....	do.....	C. E. Franklin.....	2-5-29	174.9

* Estimated

DEPARTMENT OF PUBLIC WORKS

417

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Snell & Nine Mile Drains.....do.....	C.	E. Franklin.....	2-28-29	125.0
Snell & Nine Mile Drains.....do.....	C.	E. Franklin.....	3-15-29	110.0
Snell & Nine Mile Drains.....do.....	A.	W. Hall.....	5- 6-29	98.0
Snell & Nine Mile Drains.....do.....	A.	W. Hall.....	5-24-29	128.0
Snell & Nine Mile Drains.....do.....	A.	W. Hall.....	6-11-29	134.0
Snell & Nine Mile Drains.....do.....	A.	W. Hall.....	7- 5-29	159.0
Snell & Nine Mile Drains.....do.....	A.	W. Hall.....	7-16-29	218.0
Snell & Nine Mile Drains.....do.....	A.	W. Hall.....	8-14-29	195.0
Soldier Creek.....	Section 19-31-52.....	A. E. Johnston.....	10-24-28	5.2
Soldier Creek.....do.....	A.	E. Johnston.....	12-20-28	6.3
Soldier Creek.....do.....	A.	E. Johnston.....	1-22-29	5.3
Soldier Creek.....do.....	A.	E. Johnston.....	3-12-29	6.5
Soldier Creek.....do.....	A.	E. Johnston.....	5- 1-29	10.8
Soldier Creek.....do.....	A.	E. Johnston.....	5-28-29	4.9
Soldier Creek.....do.....	A.	E. Johnston.....	6-20-29	4.0
Soldier Creek.....do.....	A.	E. Johnston.....	9-10-29	2.8
Sow Belly Creek.....	Section 33-33-55.....	A. E. Johnston.....	10-24-28	2.0
Sow Belly Creek.....do.....	A.	E. Johnston.....	6-20-29	2.9
Spotted Tail (Dry).....NW corner	Section 28-23-56.....	A. W. Hall.....	10-16-28	70.3
Spotted Tail (Dry).....do.....	C.	E. Franklin.....	11-15-28	38.8
Spotted Tail (Dry).....do.....	C.	E. Franklin.....	11-27-28	40.5
Spotted Tail (Dry).....do.....	C.	E. Franklin.....	12- 6-28	32.2
Spotted Tail (Dry).....do.....	C.	E. Franklin.....	1- 9-29	28.5
Spotted Tail (Dry).....do.....	C.	E. Franklin.....	1-29-29	30.4
Spotted Tail (Dry).....do.....	A.	W. Hall.....	2-15-29	30.0
Spotted Tail (Dry).....do.....	C.	E. Franklin.....	3- 2-29	22.8
Spotted Tail (Dry).....do.....	C.	E. Franklin.....	3-19-29	28.6
Spotted Tail (Dry).....do.....	A.	W. Hall.....	5- 7-29	40.0
Spotted Tail (Dry).....do.....	A.	W. Hall.....	6- 3-29	114.0
Spotted Tail (Dry).....do.....	A.	W. Hall.....	7- 2-29	70.5
Spotted Tail (Dry).....do.....	A.	W. Hall.....	7-18-29	78.0
Spotted Tail (Dry).....do.....	A.	W. Hall.....	8-15-29	92.5
Spotted Tail (Dry).....do.....	A.	W. Hall.....	9-14-29	115.8
Spotted Tail (Dry).....	Section 28-23-56, Great Western Sugar Co.....	C. E. Franklin.....	11-15-28	10.1
Spotted Tail (Dry).....do.....	C.	E. Franklin.....	11-27-28	5.0
Spotted Tail (Dry).....do.....	C.	E. Franklin.....	12- 6-28	8.2
Spotted Tail (Wet) & Kronberg Seep.....	Section 1-22-56.....	A. W. Hall.....	8-23-28	15.4
Spotted Tail (Wet) & K'b'g Seep...do.....	A.	W. Hall.....	10-16-28	20.2
Spotted Tail (Wet) & K'b'g Seep...do.....	C.	E. Franklin.....	11-15-28	17.9
Spotted Tail (Wet) & K'b'g Seep...do.....	C.	E. Franklin.....	11-26-28	14.4
Spotted Tail (Wet) & K'b'g Seep...do.....	C.	E. Franklin.....	12- 7-28	23.4
Spotted Tail (Wet) & K'b'g Seep...do.....	C.	E. Franklin.....	1- 7-29	13.2
Spotted Tail (Wet) & K'b'g Seep...do.....	C.	E. Franklin.....	1-29-29	11.5
Spotted Tail (Wet) & K'b'g Seep...do.....	C.	E. Franklin.....	2- 6-29	13.0
Spotted Tail (Wet) & K'b'g Seep...do.....	A.	W. Hall.....	2-15-29	18.8
Spotted Tail (Wet) & K'b'g Seep...do.....	C.	E. Franklin.....	3- 2-29	8.4
Spotted Tail (Wet) & K'b'g Seep...do.....	C.	E. Franklin.....	3-18-29	19.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Spotted Tail (Wet) & K'b'g Seep	do	A. W. Hall	5- 7-29	13.6
Spotted Tail (Wet) & K'b'g Seep	do	A. W. Hall	5-22-29	9.9
Spotted Tail (Wet) & K'b'g Seep	do	A. W. Hall	7-18-29	17.6
Spotted Tail (Wet) & K'b'g Seep	do	A. W. Hall	8-15-29	14.3
Spotted Tail (Wet)	Section 10-23-56, Above Tri-State Canal	A. E. Johnston	5-23-29	7.5
Spring Creek	Section 9-34-18, at Mills	A. E. Johnston	10- 3-28	6.5
Spring Creek	do	A. E. Johnston	12-24-28	5.1
Spring Creek	do	A. E. Johnston	3-18-29	22.0
Spring Creek	do	A. E. Johnston	5- 6-29	16.8
Spring Creek	do	A. E. Johnston	9-17-29	12.8
Spring Creek	Section 7-32-51	A. E. Johnston	10-25-28	2.5
Spring Creek	Section 35-9-20, West Line	A. E. Johnston	3-25-29	7.4
Spring Creek	Trib. to Little Cottonwood	A. E. Johnston	3-12-29	2.6
Spring Creek	do	A. E. Johnston	5- 1-29	2.6
Spring Creek	do	A. E. Johnston	5-29-29	2.4
Spring Creek	do	A. E. Johnston	6-21-29	0.6
Spring Creek	do	A. E. Johnston	9-11-29	1.5
Squaw Creek	Section 12-31-52, above McDowell Reservoir	A. E. Johnston	10-24-28	1.1
Squaw Creek	do	A. E. Johnston	12-20-28	0.8
Squaw Creek	do	A. E. Johnston	4-30-29	1.4
Squaw Creek	do	A. E. Johnston	5-28-29	2.1
Squaw Creek	do	A. E. Johnston	6-20-29	0.5
Squaw Creek	do	A. E. Johnston	9-10-29	1.7
Squaw Creek	Section 1-31-52, below McDowell Reservoir	A. E. Johnston	10-24-28	0.1
Squaw Creek	do	A. E. Johnston	4-30-29	0.2
Squaw Creek	do	A. E. Johnston	5-28-29	0.5
Squaw Creek	do	A. E. Johnston	6-20-29	0.7
Squaw Creek	do	A. E. Johnston	9-10-29	4.0
Stewart's Drain	Section 13-23-57	A. W. Hall	10-16-28	1.6
Stewart's Drain	do	C. E. Franklin	11-16-28	1.5
Stewart's Drain	do	C. E. Franklin	11-27-28	2.1
Stewart's Drain	do	C. E. Franklin	12- 6-28	2.4
Stewart's Drain	do	C. E. Franklin	1- 9-29	1.7
Stewart's Drain	do	C. E. Franklin	1-29-29	1.9
Stewart's Drain	do	C. E. Franklin	2-15-29	1.2
Stewart's Drain	do	C. E. Franklin	3- 2-29	1.7
Stewart's Drain	do	C. E. Franklin	3-19-29	0.5
Stewart's Drain	do	A. W. Hall	5- 9-29	1.0
Stewart's Drain	do	A. W. Hall	5-22-29	0.6
Stewart's Drain	do	A. W. Hall	7- 3-29	0.6
Stewart's Drain	do	A. W. Hall	7-19-29	0.5*
Stewart's Drain	do	A. W. Hall	8-15-29	1.4
Stewart's Drain	do	A. W. Hall	9-14-29	1.1

* Estimated

STREAM MEASUREMENTS—Continued
Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Stinking Water Creek.....	SE¼ NE¼ Section 25-5-34, Palisade.....	C. E. Franklin.....	10- 1-28	27.1
Stinking Water Creek.....	do.....	C. E. Franklin.....	10-19-28	64.1
Stinking Water Creek.....	do.....	C. E. Franklin.....	11- 4-28	67.8
Stinking Water Creek.....	do.....	C. E. Franklin.....	11-21-28	47.5
Stinking Water Creek.....	do.....	C. E. Franklin.....	12-19-28	42.9
Stinking Water Creek.....	do.....	C. E. Franklin.....	1-19-29	48.9
Stinking Water Creek.....	do.....	C. E. Franklin.....	2-18-29	16.6
Stinking Water Creek.....	do.....	C. E. Franklin.....	3- 8-29	77.6
Stinking Water Creek.....	do.....	C. E. Franklin.....	3-21-29	77.8
Stinking Water Creek.....	do.....	C. E. Franklin.....	5-12-29	53.0
Stinking Water Creek.....	do.....	C. E. Franklin.....	5-30-29	41.5
Stinking Water Creek.....	do.....	C. E. Franklin.....	6-12-29	208.0
Stinking Water Creek.....	do.....	C. E. Franklin.....	6-28-29	25.0
Stinking Water Creek.....	do.....	C. E. Franklin.....	7-12-29	22.0
Stinking Water Creek.....	do.....	C. E. Franklin.....	8- 3-29	22.3
Stinking Water Creek.....	do.....	C. E. Franklin.....	8-10-29	20.0
Stinking Water Creek.....	do.....	C. E. Franklin.....	9-25-29	22.6
Strever Creek.....	Section 15-10-22.....	A. E. Johnston.....	3-25-29	7.3
Thompson Creek.....	Section 2-1-13, Riverton.....	A. E. Johnston.....	4-18-29	25.6
Thompson Creek.....	do.....	A. E. Johnston.....	7-12-29	16.3
Timber Creek (Big).....	Section 32-1-37, Benkelman.....	C. E. Franklin.....	10-23-28	0.7
Timber Creek (Big).....	do.....	C. E. Franklin.....	11- 3-28	1.2
Timber Creek (Big).....	do.....	C. E. Franklin.....	1-22-29	1.5
Timber Creek (Big).....	do.....	C. E. Franklin.....	2-20-29	0.9
Timber Creek (Big).....	do.....	C. E. Franklin.....	3-10-29	1.1
Timber Creek (Big).....	do.....	C. E. Franklin.....	3-23-29	1.1
Timber Creek (Big).....	do.....	C. E. Franklin.....	5-15-29	1.1
Timber Creek (Big).....	do.....	C. E. Franklin.....	6- 1-29	1.6
Timber Creek (Big).....	do.....	C. E. Franklin.....	6-13-29	0.8*
Timber Creek (Big).....	do.....	C. E. Franklin.....	6-30-29	1.5
Timber Creek (Big).....	do.....	C. E. Franklin.....	7-14-29	0.7
Timber Creek (Big).....	do.....	C. E. Franklin.....	8- 7-29	0.9
Timber Creek (Big).....	do.....	C. E. Franklin.....	8-20-29	0.5
Timber Creek (Big).....	do.....	C. E. Franklin.....	8-29-30	0.8*
Timber Creek (Big).....	do.....	C. E. Franklin.....	9-28-29	1.0*
Toohey Drain.....	Section 29-23-56.....	A. W. Hall.....	10-16-28	8.6
Toohey Drain.....	do.....	C. E. Franklin.....	11-15-28	4.1
Toohey Drain.....	do.....	C. E. Franklin.....	11-27-28	2.8
Toohey Drain.....	do.....	C. E. Franklin.....	12- 6-28	3.2
Toohey Drain.....	do.....	C. E. Franklin.....	1- 9-29	2.2
Toohey Drain.....	do.....	C. E. Franklin.....	1-29-29	0.7
Toohey Drain.....	do.....	C. E. Franklin.....	2-15-29	2.2
Toohey Drain.....	do.....	C. E. Franklin.....	3- 2-29	2.1
Toohey Drain.....	do.....	C. E. Franklin.....	3-19-29	4.6
Toohey Drain.....	do.....	A. W. Hall.....	5- 9-29	4.0
Toohey Drain.....	do.....	A. W. Hall.....	5-22-29	1.4
Toohey Drain.....	do.....	A. W. Hall.....	7- 3-29	3.5
Toohey Drain.....	do.....	A. W. Hall.....	7-18-29	3.9
Toohey Drain.....	do.....	A. W. Hall.....	8-15-29	6.1

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM		LOCATION	Hydrographer	Date	Discharge Sec. Ft.
Toohey Spillway	From Tristate Canal	A. W. Hall	9-25-28	0	
Toohey Spillway	do	A. W. Hall	10-16-28	0	
Toohey Spillway	do	C. E. Franklin	11-16-28	25.0	
Toohey Spillway	do	C. E. Franklin	11-27-28	27.5	
Toohey Spillway	do	C. E. Franklin	12- 6-28	22.8	
Toohey Spillway	do	C. E. Franklin	1- 9-29	25.4	
Toohey Spillway	do	C. E. Franklin	1-29-29	16.1	
Toohey Spillway	do	A. W. Hall	2-15-29	31.3	
Toohey Spillway	do	C. E. Franklin	3- 2-29	15.3	
Toohey Spillway	do	C. E. Franklin	3-19-29	31.0	
Toohey Spillway	do	A. W. Hall	5- 9-29	12.8	
Toohey Spillway	do	A. W. Hall	5-22-29	0	
Toohey Spillway	do	A. W. Hall	7- 3-29	0	
Toohey Spillway	do	A. W. Hall	7-18-29	0	
Toohey Spillway	do	A. W. Hall	8-15-29	0	
Trunk Butte Creek	Section 25-33-50	A. E. Johnston	10-25-28	0.6	
Trunk Butte Creek	do	A. E. Johnston	6-21-29	1.4	
Trunk Butte Creek	do	A. E. Johnston	9-11-29	2.6	
Tub Springs	Section 8-22-55	A. W. Hall	10-16-28	43.9	
Tub Springs	do	C. E. Franklin	11-15-28	98.2	
Tub Springs	do	C. E. Franklin	11-26-28	64.5	
Tub Springs	do	C. E. Franklin	12- 7-28	57.0	
Tub Springs	do	C. E. Franklin	1- 7-29	43.1	
Tub Springs	do	C. E. Franklin	1-29-29	33.7	
Tub Springs	do	C. E. Franklin	2- 6-29	35.9	
Tub Springs	do	A. W. Hall	2-15-29	33.5	
Tub Springs	do	C. E. Franklin	3- 2-29	33.9	
Tub Springs	do	C. E. Franklin	3-18-29	32.3	
Tub Springs	do	A. W. Hall	5- 7-29	16.2	
Tub Springs	do	A. W. Hall	5-22-29	44.0	
Tub Springs	do	A. W. Hall	6-12-29	63.0	
Tub Springs	do	A. W. Hall	7-13-29	28.7	
Tub Springs	do	A. W. Hall	7-17-29	61.0	
Tub Springs	do	A. W. Hall	8-15-29	23.2	
Tub Springs	Above Enterprise Canal	A. W. Hall	5-22-29	22.7	
Tub Springs	do	A. W. Hall	6-12-29	43.3	
Tub Springs	do	A. W. Hall	7-17-29	82.3	
Tub Springs	do	A. W. Hall	8-15-29	62.5	
Turkey Creek	Section 4-1-16, Naponee	A. E. Johnston	4-19-29	27.1	
Turkey Creek	do	A. E. Johnston	7-12-29	35.0	
Turtle Creek	Section 36-20-15, 3 miles southeast of Elyra	A. E. Johnston	12-11-28	2.8	
Turtle Creek	do	A. E. Johnston	1-11-29	0.7	
Turtle Creek	do	A. E. Johnston	4-11-29	3.6	
Turtle Creek	do	A. E. Johnston	7- 3-29	1.4	
Union Creek	Below Mill at Madison	A. E. Johnston	1-31-29	77.9	

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Victoria Creek.....	Section 1-19-21.....	A. E. Johnston.....	10-12-28	8.8
Victoria Creek.....	do.....	A. E. Johnston.....	10-30-28	10.9
Victoria Creek.....	do.....	A. E. Johnston.....	12-10-28	13.8
Victoria Creek.....	do.....	A. E. Johnston.....	11-10-29	18.5
Victoria Creek.....	do.....	A. E. Johnston.....	3- 1-29	18.1
Victoria Creek.....	do.....	A. E. Johnston.....	4-10-29	12.5
Victoria Creek.....	do.....	A. E. Johnston.....	5-15-29	11.0
Victoria Creek.....	do.....	A. E. Johnston.....	7- 2-29	10.5
Victoria Creek.....	do.....	A. E. Johnston.....	9-26-29	8.0
Wahoo Creek.....	Section 35-13-9 E, North of Ashland.....	A. E. Johnston.....	10- 9-28	50.5
Wahoo Creek.....	do.....	A. E. Johnston.....	11-17-28	80.0
Wahoo Creek.....	do.....	A. E. Johnston.....	4-16-29	57.5
Wahoo Creek.....	do.....	A. E. Johnston.....	5-13-29	92.6
Wahoo Creek.....	do.....	A. E. Johnston.....	7- 9-29	83.3
Wahoo Creek.....	do.....	A. E. Johnston.....	9-23-29	43.0
Whistle Creek.....	Section 12-28-54, Mouth.....	A. E. Johnston.....	10-23-28	0.1
Whistle Creek.....	do.....	A. E. Johnston.....	6-19-29	0.05
White Clay Creek.....	Section 2-31-52, East of Crawford.....	A. E. Johnston.....	10-24-28	2.9
White Clay Creek.....	do.....	A. E. Johnston.....	12-20-28	3.4
White Clay Creek.....	do.....	A. E. Johnston.....	1-22-29	4.5
White Clay Creek.....	do.....	A. E. Johnston.....	3-12-29	11.6
White Clay Creek.....	do.....	A. E. Johnston.....	4-30-29	7.1
White Clay Creek.....	do.....	A. E. Johnston.....	5-28-29	6.2
White Clay Creek.....	do.....	A. E. Johnston.....	6-20-29	4.5
White Clay Creek.....	do.....	A. E. Johnston.....	9-10-29	3.2
White Horse Creek.....	Section 5-13-29, Gannett.....	A. E. Johnston.....	10-16-28	12.9
White Horse Creek.....	do.....	A. E. Johnston.....	11-13-28	16.7
White Horse Creek.....	do.....	A. E. Johnston.....	11-23-28	18.1
White Horse Creek.....	do.....	A. E. Johnston.....	12- 5-28	17.4
White Horse Creek.....	do.....	A. E. Johnston.....	12-15-28	37.1
White Horse Creek.....	do.....	A. E. Johnston.....	1- 7-29	17.1
White Horse Creek.....	do.....	A. E. Johnston.....	1-17-29	12.8
White Horse Creek.....	do.....	A. E. Johnston.....	2-20-29	17.0
White Horse Creek.....	do.....	A. E. Johnston.....	3- 5-29	36.7
White Horse Creek.....	do.....	A. E. Johnston.....	3-26-29	39.6
White Horse Creek.....	do.....	A. E. Johnston.....	4- 5-29	32.1
White Horse Creek.....	do.....	A. E. Johnston.....	4-23-29	19.8
White Horse Creek.....	do.....	A. E. Johnston.....	5-18-29	11.8
White Horse Creek.....	do.....	A. E. Johnston.....	6-11-29	12.8
White Horse Creek.....	do.....	A. E. Johnston.....	6-28-29	8.0
White Horse Creek.....	do.....	A. E. Johnston.....	7-17-29	8.8
White Horse Creek.....	do.....	A. E. Johnston.....	8-12-29	4.8
White Horse Creek.....	do.....	A. E. Johnston.....	8-29-29	27.8
White Horse Creek.....	do.....	A. E. Johnston.....	9- 4-29	11.2
White River.....	Section 9-31-52, Military Road.....	A. E. Johnston.....	10-24-28	26.8
White River.....	do.....	A. E. Johnston.....	12-20-28	23.1
White River.....	do.....	A. E. Johnston.....	1-22-29	27.6
White River.....	do.....	A. E. Johnston.....	3-12-29	47.3
White River.....	do.....	A. E. Johnston.....	5- 1-29	49.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
White River.....	do.....	A. E. Johnston.....	5-28-29	38.5
White River.....	do.....	A. E. Johnston.....	6-20-29	25.3
White River.....	do.....	A. E. Johnston.....	9-10-29	30.0
White River.....	Section 18-33-49, 6 miles west Chadron.....	A. E. Johnston.....	10-25-28	28.0
White River.....	do.....	A. E. Johnston.....	12-21-28	11.1
White River.....	do.....	A. E. Johnston.....	1-23-29	11.0
White River.....	do.....	A. E. Johnston.....	3-12-29	98.8
White River.....	do.....	A. E. Johnston.....	5- 1-29	71.6
White River.....	do.....	A. E. Johnston.....	5-29-29	102.7
White River.....	do.....	A. E. Johnston.....	6-21-29	23.6
White River.....	do.....	A. E. Johnston.....	9-11-29	36.0
White River.....	Section 26-32-52, above Whitney Dam, below Harrison -Cooper Canal.....	A. E. Johnston.....	10-25-28	21.7
White River.....	do.....	A. E. Johnston.....	12-21-28	38.5
White River.....	do.....	A. E. Johnston.....	1-23-29	35.3
White River.....	do.....	A. E. Johnston.....	3-12-29	76.1
White River.....	do.....	A. E. Johnston.....	5- 1-29	67.8
White River.....	do.....	A. E. Johnston.....	5-29-29	61.1
White River.....	do.....	A. E. Johnston.....	6-21-29	29.2
White River.....	do.....	A. E. Johnston.....	9-11-29	25.5
White River.....	Section 26-32-52, Below Whitney Pipe Line.....	A. E. Johnston.....	10-25-28	6.6
White River.....	do.....	A. E. Johnston.....	12-21-28	0
White River.....	do.....	A. E. Johnston.....	1-23-29	0
White River.....	do.....	A. E. Johnston.....	3-12-29	58.7
White River.....	do.....	A. E. Johnston.....	5- 1-29	54.9
White River.....	do.....	A. E. Johnston.....	5-29-29	40.1
White River.....	do.....	A. E. Johnston.....	6-21-29	4.6
White River.....	do.....	A. E. Johnston.....	9-11-29	2.1
White Tail Creek.....	Section 36-15-38.....	A. E. Johnston.....	10-18-28	26.5
White Tail Creek.....	do.....	A. E. Johnston.....	11- 9-28	28.2
White Tail Creek.....	do.....	A. E. Johnston.....	11-24-28	32.5
White Tail Creek.....	do.....	A. E. Johnston.....	12- 4-28	28.9
White Tail Creek.....	do.....	A. E. Johnston.....	12-18-28	29.4
White Tail Creek.....	do.....	A. E. Johnston.....	1- 4-29	33.0
White Tail Creek.....	do.....	A. E. Johnston.....	1-18-29	28.8
White Tail Creek.....	do.....	A. E. Johnston.....	2-12-29	Ice
White Tail Creek.....	do.....	A. E. Johnston.....	3- 7-29	28.1
White Tail Creek.....	do.....	A. E. Johnston.....	3-27-29	34.3
White Tail Creek.....	do.....	A. E. Johnston.....	4- 3-29	38.0
White Tail Creek.....	do.....	A. E. Johnston.....	4-25-29	34.9
White Tail Creek.....	do.....	A. E. Johnston.....	5-21-29	30.0
White Tail Creek.....	do.....	A. E. Johnston.....	6-13-29	27.0
White Tail Creek.....	do.....	A. E. Johnston.....	6-26-29	14.5
White Tail Creek.....	do.....	A. E. Johnston.....	7-18-29	15.9
White Tail Creek.....	do.....	A. E. Johnston.....	7-23-29	30.3
White Tail Creek.....	do.....	A. E. Johnston.....	9- 5-29	34.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Wild Horse Drain.....	Section 1-20-52.....	A. W. Hall.....	10-17-28	82.8
Wild Horse Drain.....	do.....	C. E. Franklin.....	11-13-28	63.4
Wild Horse Drain.....	do.....	C. E. Franklin.....	11-24-28	49.2
Wild Horse Drain.....	do.....	C. E. Franklin.....	12- 8-28	40.7
Wild Horse Drain.....	do.....	C. E. Franklin.....	12-26-28	41.6
Wild Horse Drain.....	do.....	A. W. Hall.....	1-19-29	29.6
Wild Horse Drain.....	do.....	C. E. Franklin.....	2- 4-29	24.0
Wild Horse Drain.....	do.....	C. E. Franklin.....	2-26-29	22.2
Wild Horse Drain.....	do.....	C. E. Franklin.....	3-15-29	31.2
Wild Horse Drain.....	do.....	A. W. Hall.....	4- 6-29	25.5
Wild Horse Drain.....	do.....	A. W. Hall.....	5- 4-29	22.1
Wild Horse Drain.....	do.....	A. W. Hall.....	5-24-29	27.9
Wild Horse Drain.....	do.....	A. W. Hall.....	6-12-29	35.2
Wild Horse Drain.....	do.....	A. W. Hall.....	7-17-29	30.1
Wild Horse Drain.....	do.....	A. W. Hall.....	8-13-29	84.1
Wild Horse Drain.....	do.....	A. W. Hall.....	9-16-29	100.6
Willow Creek.....	Section 15-14-35, North of Sarben.....	A. E. Johnston.....	10-17-28	1.9
Willow Creek.....	do.....	A. E. Johnston.....	11-24-28	1.8
Willow Creek.....	do.....	A. E. Johnston.....	12-18-28	1.8
Willow Creek.....	do.....	A. E. Johnston.....	1- 5-29	1.7
Willow Creek.....	do.....	A. E. Johnston.....	1-18-29	1.2
Willow Creek.....	do.....	A. E. Johnston.....	2-12-29	1.6
Willow Creek.....	do.....	A. E. Johnston.....	3- 6-29	2.3
Willow Creek.....	do.....	A. E. Johnston.....	3-27-29	1.5
Willow Creek.....	do.....	A. E. Johnston.....	4- 3-29	1.0
Willow Creek.....	do.....	A. E. Johnston.....	4-25-29	2.6
Willow Creek.....	do.....	A. E. Johnston.....	5-21-29	1.8
Willow Creek.....	do.....	A. E. Johnston.....	6-13-29	0.7
Willow Creek.....	do.....	A. E. Johnston.....	6-27-29	0.9
Willow Creek.....	do.....	A. E. Johnston.....	7-18-29	0.9
Willow Creek.....	do.....	A. E. Johnston.....	7-24-29	1.2
Willow Creek.....	do.....	A. E. Johnston.....	7-31-29	1.2
Willow Creek.....	do.....	A. E. Johnston.....	8-13-29	0.9
Willow Creek.....	do.....	A. E. Johnston.....	8-28-29	0.8
Willow Creek.....	do.....	A. E. Johnston.....	9- 5-29	1.8
Willow Creek.....	West of Long Pine.....	A. E. Johnston.....	6- 3-29	6.9
Winters Creek.....	Section 19-22-54, East of Scottsbluff Sugar Factory.....	A. W. Hall.....	10-17-28	97.6
Winters Creek.....	do.....	C. E. Franklin.....	11-15-28	70.8
Winters Creek.....	do.....	C. E. Franklin.....	11-26-28	73.5
Winters Creek.....	do.....	C. E. Franklin.....	12- 3-28	64.0
Winters Creek.....	do.....	A. W. Hall.....	1-19-29	34.1
Winters Creek.....	do.....	C. E. Franklin.....	2- 6-29	54.9
Winters Creek.....	do.....	A. W. Hall.....	2-15-29	53.5
Winters Creek.....	do.....	C. E. Franklin.....	2-25-29	64.2
Winters Creek.....	do.....	C. E. Franklin.....	3-16-29	56.4
Winters Creek.....	do.....	A. W. Hall.....	5- 7-29	47.3
Winters Creek.....	do.....	A. W. Hall.....	5-23-29	31.9
Winters Creek.....	do.....	A. W. Hall.....	6-12-29	14.6
Winters Creek.....	do.....	A. W. Hill.....	7- 5-29	27.8

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1929

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Winters Creek.....	do.....	A. W. Hall.....	7-17-29	102.0
Winters Creek.....	do.....	A. W. Hall.....	8-14-29	41.0
Winters Creek.....	do.....	A. W. Hall.....	8-27-29	57.0
Winters Creek.....	North Line Section 19-23-54, Above Winters Creek Canal.....	A. W. Hall.....	6-12-29	67.4
Winters Creek.....	do.....	A. W. Hall.....	7- 5-29	86.9
Winters Creek.....	do.....	A. W. Hall.....	7-17-29	83.7
Winters Creek.....	do.....	A. W. Hall.....	8-14-29	95.1
Winters Creek.....	do.....	A. W. Hall.....	8-27-29	115.0
Wood River.....	Section 13-10-12, North of Wood River.....	A. E. Johnston.....	10-11-28	0
Wood River.....	do.....	A. E. Johnston.....	12-14-28	0
Wood River.....	do.....	A. E. Johnston.....	1-16-29	0
Wood River.....	do.....	A. E. Johnston.....	2- 2-29	0
Wood River.....	do.....	A. E. Johnston.....	2-22-29	0
Wood River.....	Section 12-9-16, Northwest of Kearney.....	A. E. Johnston.....	10-11-28	0.8
Wood River.....	do.....	A. E. Johnston.....	10-31-28	3.0
Wood River.....	do.....	A. E. Johnston.....	12- 8-28	1.1
Wood River.....	do.....	A. E. Johnston.....	4- 9-29	6.5
Wood River.....	do.....	A. E. Johnston.....	5-16-29	9.4
Wood River.....	do.....	A. E. Johnston.....	7- 1-29	3.7
Wood River.....	do.....	A. E. Johnston.....	9-28-29	4.0
Wood River.....	Section 20-12-7, 2 miles south of Chapman.....	A. E. Johnston.....	12-14-28	28.2
Wood River.....	Section 22-11-9, Grand Island.....	A. E. Johnston.....	10-10-28	5.6
Wood River.....	do.....	A. E. Johnston.....	11-14-28	8.2
Wood River.....	do.....	A. E. Johnston.....	12-14-28	3.3

DEPARTMENT OF PUBLIC WORKS

425

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Antelope Creek	Main Street of Gordon	A. E. Johnston	3-21-30	4.0
Antelope Creek	do	A. E. Johnston	5-15-30	15.4
Antelope Creek	do	A. E. Johnston	9- 5-30	0.2
Arapahoe Star Mille Waste	NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 27-4-23, Arapahoe	C. E. Franklin	11-20-29	72.0
Arapahoe Star Mill Waste	do	C. E. Franklin	11-29-29	64.0
Arapahoe Star Mill Waste	do	C. E. Franklin	12-19-29	50.0
Arapahoe Star Mill Waste	do	C. E. Franklin	12-31-29	58.0
Arapahoe Star Mill Waste	do	C. E. Franklin	2- 7-30	74.0
Arapahoe Star Mill Waste	do	C. E. Franklin	2-25-30	73.0
Arickaree River	Section 28-1-41, Haigler	C. E. Franklin	11-21-29	21.0
Arickaree River	do	C. E. Franklin	11-30-29	31.0
Arickaree River	do	C. E. Franklin	12-21-29	17.0
Arickaree River	do	C. E. Franklin	1- 4-30	29.3
Arickaree River	do	C. E. Franklin	2- 8-30	56.0
Arickaree River	do	C. E. Franklin	2-27-30	18.9
Arickaree River	do	C. E. Franklin	3-13-30	10.2
Arickaree River	do	C. E. Franklin	3-25-30	12.5
Arickaree River	do	C. E. Franklin	4-23-30	7.9
Arickaree River	do	C. E. Franklin	4-30-30	24.6
Arickaree River	do	C. E. Franklin	5-20-30	51.5
Arickaree River	do	C. E. Franklin	6- 5-30	120.0
Arickaree River	do	C. E. Franklin	6-24-30	25.9
Arickaree River	do	C. E. Franklin	7-16-30	15.6
Arickaree River	do	C. E. Franklin	8- 1-30	32.6
Arickaree River	do	C. E. Franklin	8-14-30	35.4
Arickaree River	do	C. E. Franklin	8-30-30	7.4
Arickaree River	do	C. E. Franklin	9-12-30	18.0
Arnold Drain	Section 12-24-61, 3 Miles East of Torrington, Wyo.	C. E. Franklin	12- 6-29	10.0
Arnold Drain	do	A. E. Johnston	12-19-29	3.9
Arnold Drain	do	A. E. Johnston	1-14-30	15.0
Arnold Drain	do	A. E. Johnston	2-18-30	12.0
Ash Creek	Section 7-32-50, South of Whitney	A. E. Johnston	10-11-29	4.0
Ash Creek	do	A. E. Johnston	2-22-30	6.7
Ash Creek	do	A. E. Johnston	3-20-30	8.3
Ash Creek	do	A. E. Johnston	9- 4-30	3.6
Ash Creek	do	A. E. Johnston	9-29-30	1.9
Ash Creek (East)	Section 32-32-50, Below Cripp's Farm	A. W. Hall	8- 6-30	0.48
Ash Creek (East)	Section 32-32-50 Below Ox Yoke Canal	A. W. Hall	8- 6-30	0.34
Ash Creek (East)	Section 32-32-50 Above Tomlin Ox Yoke Canal	A. W. Hall	8- 6-30	0.83
Ash Creek (West)	Section 24-32-51, Mouth	A. W. Hall	8- 6-30	0.35

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Austin Creek.....	Section 28-1-6 E, 1 Mile			
	North of Beatrice.....	A. E. Johnston.....	3- 5-30	0.4
Austin Creek.....	do.....	A. E. Johnston.....	4-28-30	0.50
Austin Creek.....	do.....	A. E. Johnston.....	9-15-30	14.1
Bald Seep.....	Section 32-23-56.....	A. W. Hall.....	10-10-29	7.0
Bald Seep.....	do.....	A. W. Hall.....	6-11-30	3.9
Bayard Sugar Factory Drain.....	Section 34-21-52.....	A. W. Hall.....	10-10-29	52.0
Bayard Sugar Factory Drain.....	do.....	A. E. Johnston.....	11- 8-29	41.0
Bayard Sugar Factory Drain.....	do.....	C. E. Franklin.....	12- 8-29	60.0
Bayard Sugar Factory Drain.....	do.....	A. E. Johnston.....	12-19-29	40.0
Bayard Sugar Factory Drain.....	do.....	A. E. Johnston.....	1-10-30	40.0
Bayard Sugar Factory Drain.....	do.....	A. E. Johnston.....	2-14-30	39.0
Bayard Sugar Factory Drain.....	do.....	A. W. Hall.....	3-25-30	29.0
Bayard Sugar Factory Drain.....	do.....	A. W. Hall.....	5-14-30	40.0
Bayard Sugar Factory Drain.....	do.....	A. W. Hall.....	5-31-30	46.0
Bayard Sugar Factory Drain.....	do.....	A. W. Hall.....	7-14-30	55.0
Bayard Sugar Factory Drain.....	do.....	A. W. Hall.....	8-18-30	75.0
Bayard Sugar Factory Drain.....	do.....	A. W. Hall.....	8-25-30	51.0
Bayard Sugar Factory Drain.....	do.....	A. W. Hall.....	9-23-30	75.0
Bazile Creek.....	Section 4-29-5 W, Bazile Mills.....	A. E. Johnston.....	1- 2-30	22.0
Bazile Creek.....	do.....	A. E. Johnston.....	6-16-30	26.0
Bear Creek.....	Section 25-34-36, South of Eli.....	A. E. Johnston.....	10-14-29	22.0
Bear Creek.....	do.....	A. E. Johnston.....	12- 5-29	31.0
Bear Creek.....	do.....	A. E. Johnston.....	2-24-30	40.0
Bear Creek.....	do.....	A. E. Johnston.....	3-21-30	48.0
Bear Creek.....	do.....	A. E. Johnston.....	5-16-30	118.0
Bear Creek.....	do.....	A. E. Johnston.....	9- 6-30	9.0
Beauty Creek.....	Sec. 31-2-14, 1 Mile East of Franklin.....	A. E. Johnston.....	4-30-30	2.4
Beauty Creek.....	do.....	A. E. Johnston.....	6-20-30	0.5
Beauty Creek.....	do.....	A. E. Johnston.....	9-16-30	0.0
Beaver Creek.....	Section 15-20-6, North of Albion.....	A. E. Johnston.....	10-18-29	71.0
Beaver Creek.....	do.....	A. E. Johnston.....	2-28-30	97.0
Beaver Creek.....	do.....	A. E. Johnston.....	3-26-30	92.0
Beaver Creek.....	do.....	A. E. Johnston.....	9-10-30	59.0
Beaver Creek.....	Section 19-12-19, Orleans.....	C. E. Franklin.....	11-20-29	23.0
Beaver Creek.....	do.....	C. E. Franklin.....	11-29-29	8.0
Beaver Creek.....	do.....	C. E. Franklin.....	12-19-29	14.0
Beaver Creek.....	do.....	C. E. Franklin.....	12-31-29	18.0
Beaver Creek.....	do.....	C. E. Franklin.....	2- 7-30	6.1
Beaver Creek.....	do.....	C. E. Franklin.....	2-25-30	18.2
Beaver Creek.....	do.....	C. E. Franklin.....	3-11-30	20.0
Beaver Creek.....	do.....	C. E. Franklin.....	3-24-30	9.8
Beaver Creek.....	do.....	C. E. Franklin.....	4-21-30	49.3
Beaver Creek.....	do.....	C. E. Franklin.....	5- 6-30	89.0
Beaver Creek.....	do.....	C. E. Franklin.....	6- 3-30	44.0
Beaver Creek.....	do.....	C. E. Franklin.....	6-21-30	162.0
Beaver Creek.....	do.....	C. E. Franklin.....	7-13-30	37.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Beaver Creek.....	do.....	C. E. Franklin.....	8-12-30	14.0
Beaver Creek.....	do.....	C. E. Franklin.....	8-27-30	83.0
Beaver Creek.....	do.....	C. E. Franklin.....	9-24-30	18.0
Birdwood Creek.....	Section 2-14-33.....	A. E. Johnston.....	10- 2-29	163.0
Birdwood Creek.....	do.....	A. E. Johnston.....	11-15-29	177.0
Birdwood Creek.....	do.....	A. E. Johnston.....	11-29-29	178.0
Birdwood Creek.....	do.....	A. E. Johnston.....	12-14-29	195.0
Birdwood Creek.....	do.....	A. E. Johnston.....	1- 6-30	222.0
Birdwood Creek.....	do.....	A. E. Johnston.....	1-24-30	134.0
Birdwood Creek.....	do.....	A. E. Johnston.....	2-10-30	215.0
Birdwood Creek.....	do.....	A. E. Johnston.....	3-11-30	184.0
Birdwood Creek.....	do.....	A. E. Johnston.....	4-11-30	173.0
Birdwood Creek.....	do.....	A. E. Johnston.....	4-18-30	191.0
Birdwood Creek.....	do.....	A. E. Johnston.....	5- 6-30	161.0
Birdwood Creek.....	do.....	A. E. Johnston.....	6- 5-30	190.0
Birdwood Creek.....	do.....	A. W. Hall.....	6-19-30	500.0
Birdwood Creek.....	do.....	A. E. Johnston.....	6-30-30	172.0
Birdwood Creek.....	do.....	A. E. Johnston.....	7- 5-30	155.0
Birdwood Creek.....	do.....	A. E. Johnston.....	7-10-30	179.0
Birdwood Creek.....	do.....	A. E. Johnston.....	7-11-30	129.0
Birdwood Creek.....	do.....	A. E. Johnston.....	7-14-30	159.0
Birdwood Creek.....	do.....	A. E. Johnston.....	7-16-30	158.0
Birdwood Creek.....	do.....	A. E. Johnston.....	7-18-30	183.0
Birdwood Creek.....	do.....	A. E. Johnston.....	7-22-30	153.0
Birdwood Creek.....	do.....	A. E. Johnston.....	7-26-30	147.0
Birdwood Creek.....	do.....	A. E. Johnston.....	7-28-30	161.0
Birdwood Creek.....	do.....	A. E. Johnston.....	8- 1-30	167.0
Birdwood Creek.....	do.....	A. E. Johnston.....	8- 4-30	191.0
Birdwood Creek.....	do.....	A. E. Johnston.....	8- 5-30	137.0
Birdwood Creek.....	do.....	A. E. Johnston.....	8- 6-30	131.0
Birdwood Creek.....	do.....	A. E. Johnston.....	8- 7-30	148.0
Birdwood Creek.....	do.....	A. E. Johnston.....	8- 9-30	175.0
Birdwood Creek.....	do.....	A. E. Johnston.....	8-12-30	177.0
Birdwood Creek.....	do.....	A. E. Johnston.....	8-26-30	173.0
Birdwood Creek.....	do.....	A. E. Johnston.....	9-22-30	168.0
Birdwood Creek (East).....	Section 34-17-33.....	Johnston and Willis.....	5- 7-30	74.0
Birdwood Creek (East).....	do.....	A. E. Johnston.....	6- 5-30	91.0
Birdwood Creek (East).....	do.....	A. E. Johnston.....	7-11-30	72.0
Birdwood Creek (East).....	do.....	A. E. Johnston.....	9-22-30	71.0
Birdwood Creek (West).....	Section 12-16-34.....	Johnston and Willis.....	5- 7-30	50.0
Birdwood Creek (West).....	do.....	A. E. Johnston.....	6- 5-30	59.0
Birdwood Creek (West).....	do.....	A. E. Johnston.....	7-11-30	52.0
Birdwood Creek (West).....	do.....	A. E. Johnston.....	9-22-30	49.0
Birdwood Creek.....	Below proposed reservoir site, Bridge center of Section 10-15-33.....	A. E. Johnston.....	5- 6-30	157
Birdwood Creek.....	do.....	A. E. Johnston.....	6- 5-30	195
Birdwood Creek.....	do.....	A. E. Johnston.....	7-11-30	154

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Blue Creek	North Line Section 30-16-42	A. E. Johnston	10- 4-29	102
Blue Creek	do	A. E. Johnston	11-14-29	137
Blue Creek	do	A. E. Johnston	11-29-29	115
Blue Creek	do	A. E. Johnston	12-16-29	116
Blue Creek	do	A. E. Johnston	1- 7-30	70
Blue Creek	do	A. E. Johnston	1-23-30	104
Blue Creek	do	A. E. Johnston	2-11-30	138
Blue Creek	do	A. E. Johnston	3-12-30	126
Blue Creek	do	A. E. Johnston	4-12-30	104
Blue Creek	do	A. E. Johnston	4-17-30	192
Blue Creek	do	A. E. Johnston	5- 9-30	115
Blue Creek	do	A. E. Johnston	6- 3-30	113
Blue Creek	do	A. E. Johnston	6-18-30	0
Blue Creek	do	A. W. Hall	7- 5-30	18
Blue Creek	do	A. W. Hall	7-11-30	14
Blue Creek	do	A. W. Hall	7-16-30	34
Blue Creek	do	A. E. Johnston	7-23-30	67
Blue Creek	do	A. W. Hall	8- 4-30	5
Blue Creek	do	A. E. Johnston	8- 9-30	0
Blue Creek	do	A. W. Hall	8-19-30	44
Blue Creek	do	A. E. Johnston	8-28-30	93
Blue Creek	do	A. E. Johnston	9-24-30	31
Blue Creek	Sec. 33-17-42, Below Paisley Headgate	A. W. Hall	7-11-30	106
Blue River	Section 4-3-6 E, Beatrice	A. E. Johnston	3- 5-30	355
Blue River	do	A. E. Johnston	4- 1-30	139
Blue River	do	A. E. Johnston	6-19-30	802
Blue River	do	A. E. Johnston	9-15-30	755
Blue River (Big)	Section 28-11-3 E, Below Power Plant at Seward	A. E. Johnston	10-23-29	72
Blue River (Big)	do	A. E. Johnston	11-22-29	79
Blue River (Big)	do	A. E. Johnston	2- 5-30	85
Blue River (Big)	do	A. E. Johnston	4-28-30	241
Blue River (Big)	do	A. E. Johnston	8-20-30	151
Blue River (Little)	Section 15-2-2 E, Fairbury	A. E. Johnston	3- 5-30	156
Blue River (Little)	do	A. E. Johnston	4- 2-30	175
Blue River (Little)	do	A. E. Johnston	4-28-30	241
Blue River (Little)	do	A. E. Johnston	6-20-30	1109
Blue River (Little)	do	A. E. Johnston	9-15-30	153
Blue River (Little)	Section 6-2-2, Hebron	A. E. Johnston	3- 6-30	140
Blue River (Little)	do	A. E. Johnston	4- 2-30	146
Blue River (Little)	do	A. E. Johnston	4-29-30	250
Blue River (Little)	do	A. E. Johnston	6-20-30	1708
Blue River (Little)	do	A. E. Johnston	9-16-30	131
Furnished by the United States Geological Survey				
Little Blue	Endicott	F. F. LeFever	11-22-29	14.2
Little Blue	do	Campbell & LeFever	1- 9-30	78.
Little Blue	do	D. S. Jenkins	3- 1-30	139.

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Little Blue.....	do.....	F. F. LeFever.....	3-28-30	129.
Little Blue.....	do.....	F. F. LeFever.....	5- 5-30	1410.
Little Blue.....	do.....	F. F. LeFever.....	5-29-30	261.
Little Blue.....	do.....	H. P. Eisenhuth.....	7- 8-30	194.
Little Blue.....	New Section, Endicott.....	H. P. Eisenhuth.....	7-31-30	109.
Little Blue.....	do.....	H. P. Eisenhuth.....	8-11-30	90.
Little Blue.....	do.....	D. S. Jenkins.....	8-27-30	131.
Little Blue.....	do.....	R. E. Cabell.....	9-15-30	161.
Boone Creek.....	Section 25-30-22, Ainsworth.....	A. E. Johnston.....	12- 7-29	5
Boone Creek.....	do.....	A. E. Johnston.....	5-17-30	15
Bordeaux Creek (Big).....	Section 14-33-43.....	A. E. Johnston.....	10-12-29	4
Bordeaux Creek (Big).....	do.....	A. E. Johnston.....	12- 5-29	11
Bordeaux Creek (Big).....	do.....	A. E. Johnston.....	2-22-30	6
Bordeaux Creek (Big).....	do.....	A. E. Johnston.....	8-27-30	5
Bordeaux Creek (Big).....	do.....	A. E. Johnston.....	5-14-30	8
Bordeaux Creek (Big).....	do.....	A. E. Johnston.....	9- 5-30	4
Bordeaux Creek (Big).....	do.....	A. E. Johnston.....	9-29-30	3
Bordeaux Creek (Little).....	Section 13-33-48.....	A. E. Johnston.....	10-12-29	6
Bordeaux Creek (Little).....	do.....	A. E. Johnston.....	12- 5-29	3
Bordeaux Creek (Little).....	do.....	A. E. Johnston.....	2-22-30	5
Bordeaux Creek (Little).....	do.....	A. E. Johnston.....	3-20-30	7
Bordeaux Creek (Little).....	do.....	A. E. Johnston.....	5-14-30	8
Bordeaux Creek (Little).....	do.....	A. E. Johnston.....	9- 5-30	4
Bordeaux Creek (Little).....	do.....	A. E. Johnston.....	9-29-30	2
Bordeaux Creek (Little).....	Section 29-33-47.....	A. E. Johnston.....	6- 5-30	7
Bordeaux Creek (Little).....	do.....	A. E. Johnston.....	9- 5-30	7
Bridgeport Slough.....	East of Bridgeport.....	A. W. Hall.....	5- 1-30	1
Bridgeport Slough.....	Highway South of Bridgeport.....	A. W. Hall.....	5- 1-30	1
Bridgeport Slough.....	do.....	A. W. Hall.....	5-26-30	3
Buffalo Creek.....	Section 33-9-18, South of Elm Creek.....	A. E. Johnston.....	10-28-29	48
Buffalo Creek.....	do.....	A. E. Johnston.....	11-18-29	8
Buffalo Creek.....	do.....	A. E. Johnston.....	4- 4-30	5
Buffalo Creek.....	do.....	A. E. Johnston.....	4-22-30	30
Buffalo Creek.....	do.....	A. E. Johnston.....	5- 5-30	38
Buffalo Creek.....	do.....	A. E. Johnston.....	5-21-30	45
Buffalo Creek.....	do.....	A. E. Johnston.....	6- 9-30	116
Buffalo Creek.....	do.....	A. E. Johnston.....	6-23-30	250
Buffalo Creek.....	do.....	A. E. Johnston.....	7- 2-30	32
Buffalo Creek.....	do.....	A. E. Johnston.....	7- 8-30	20
Buffalo Creek.....	do.....	A. E. Johnston.....	7-15-30	12
Buffalo Creek.....	do.....	A. E. Johnston.....	7-16-30	13
Buffalo Creek.....	do.....	A. E. Johnston.....	7-20-30	8
Buffalo Creek.....	do.....	A. E. Johnston.....	7-30-30	30
Buffalo Creek.....	do.....	A. E. Johnston.....	8-13-30	66
Buffalo Creek.....	do.....	A. E. Johnston.....	8-21-30	75
Buffalo Creek.....	do.....	A. E. Johnston.....	9-18-30	119

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Buffalo Creek	Mouth, Section 20-1-40.			
	Jenkin's Ranch	C. E. Franklin	11-21-29	12
Buffalo Creek	do	C. E. Franklin	11-30-29	13
Buffalo Creek	do	C. E. Franklin	12-21-29	14
Buffalo Creek	do	C. E. Franklin	1- 4-30	13
Buffalo Creek	do	C. E. Franklin	2- 8-30	13
Buffalo Creek	do	C. E. Franklin	2-27-30	9
Buffalo Creek	do	C. E. Franklin	3-13-30	17
Buffalo Creek	do	C. E. Franklin	3-25-30	14
Buffalo Creek	do	C. E. Franklin	4-23-30	19
Buffalo Creek	do	C. E. Franklin	5- 7-30	10
Buffalo Creek	do	C. E. Franklin	5-20-30	15
Buffalo Creek	do	C. E. Franklin	6- 5-30	9
Buffalo Creek	do	C. E. Franklin	6-24-30	6
Buffalo Creek	do	C. E. Franklin	7-16-30	10
Buffalo Creek	do	C. E. Franklin	8- 1-30	14
Buffalo Creek	do	C. E. Franklin	8-14-30	17
Buffalo Creek	do	C. E. Franklin	8-30-30	10
Buffalo Creek	do	C. E. Franklin	9-12-30	11
Buffalo Creek	do	C. E. Franklin	9-26-30	11
Burton Creek	Section 19-34-19, East of Burton	A. E. Johnston	10-16-29	4
Burton Creek	do	A. E. Johnston	2-26-30	10
Burton Creek	do	A. E. Johnston	3-24-30	7
Burton Creek	do	A. E. Johnston	9- 8-30	0
Cache Creek	Section 22-26-9	A. E. Johnston	10-17-29	2.4
Cache Creek	do	A. E. Johnston	2-27-30	9.5
Cache Creek	do	A. E. Johnston	3-25-30	6.8
Cache Creek	do	A. E. Johnston	9- 9-30	2.1
Calamus River	Section 22-23-18, North of Taylor	A. E. Johnston	10-24-29	214.0
Calamus River	do	A. E. Johnston	11-23-29	225.0
Calamus River	do	A. E. Johnston	12- 7-29	240.0
Calamus River	do	A. E. Johnston	1-30-30	223.0
Calamus River	do	A. E. Johnston	5- 1-30	403.0
Calamus River	do	A. E. Johnston	5-17-30	296.0
Calamus River	do	A. E. Johnston	6-11-30	282.0
Calamus River	do	A. E. Johnston	8-15-30	226.0
Camp Clark Seep	North Line, Section 9-20-51	A. W. Hall	10- 7-29	11.0
Camp Clark Seep	do	C. E. Franklin	12- 9-29	3.5
Camp Clark Seep	do	A. W. Hall	12-13-29	4.0
Camp Clark Seep	do	A. E. Johnston	12-19-29	7.6
Camp Clark Seep	do	A. E. Johnston	1-15-30	4.1
Camp Clark Seep	do	A. E. Johnston	2-14-30	5.5
Camp Clark Seep	do	A. W. Hall	3-25-30	4.6
Camp Clark Seep	do	A. W. Hall	4- 8-30	1.7
Camp Clark Seep	do	A. W. Hall	4-22-30	1.8
Camp Clark Seep	do	A. W. Hall	5-14-30	1.6
Camp Clark Seep	do	A. W. Hall	5-31-30	1.5
Camp Clark Seep	do	A. W. Hall	7-14-30	3.7
Camp Clark Seep	do	A. W. Hall	8-18-30	4.5
Camp Clark Seep	do	A. W. Hall	8-25-30	8.1
Camp Clark Seep	do	A. W. Hall	9-23-30	6.4

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Date	Gage Height
Carnine Lake.....	At Gage Rod.....	A. E. Johnston.....	10- 8-29	11.9
Carnine Lake.....	do.....	A. E. Johnston.....	12- 2-29	12.2
Carnine Lake.....	do.....	A. E. Johnston.....	2-20-30	12.0
Carnine Lake.....	do.....	A. E. Johnston.....	3-17-30	12.3
Carnine Lake.....	do.....	A. E. Johnston.....	5-13-30	13.0
				Discharge Sec. Ft.
Cedar Creek.....	Section 11-18-48, ¼ mile above mouth.....	A. E. Johnston.....	10- 7-29	19.0
Cedar Creek.....	do.....	A. E. Johnston.....	11-14-29	5.0
Cedar Creek.....	do.....	A. E. Johnston.....	1- 8-30	15.0
Cedar Creek.....	do.....	A. E. Johnston.....	1-22-30	20.0
Cedar Creek.....	do.....	A. E. Johnston.....	2-12-30	22.0
Cedar Creek.....	do.....	A. E. Johnston.....	3-14-30	19.0
Cedar Creek.....	do.....	A. E. Johnston.....	4-15-30	14.0
Cedar Creek.....	do.....	A. E. Johnston.....	5-12-30	4.5
Cedar Creek.....	do.....	A. E. Johnston.....	6- 2-30	12.0
Cedar Creek.....	do.....	A. W. Hall.....	7-15-30	11.0
Cedar Creek.....	do.....	A. E. Johnston.....	8-29-30	12.1
Cedar Creek.....	do.....	A. E. Johnston.....	9-26-30	18.9
Cedar Branch Creek.....	Section 17-14-35, 100 yards above mouth.....	A. E. Johnston.....	10- 2-29	2.0
Cedar Branch Creek.....	do.....	A. E. Johnston.....	11-15-29	2.0
Cedar Branch Creek.....	do.....	A. E. Johnston.....	11-29-29	1.0
Cedar Branch Creek.....	do.....	A. E. Johnston.....	12-14-29	2.0
Cedar Branch Creek.....	do.....	A. E. Johnston.....	1- 6-30	2.0
Cedar Branch Creek.....	do.....	A. E. Johnston.....	2-10-30	3.4
Cedar Branch Creek.....	do.....	A. E. Johnston.....	3-11-30	2.9
Cedar Branch Creek.....	do.....	A. E. Johnston.....	4-11-30	3.5
Cedar Branch Creek.....	do.....	A. E. Johnston.....	4-18-30	3.3
Cedar Branch Creek.....	do.....	A. E. Johnston.....	5- 8-30	3.1
Cedar Branch Creek.....	do.....	A. E. Johnston.....	6- 5-30	2.5
Cedar Branch Creek.....	do.....	A. E. Johnston.....	6-30-30	1.7
Cedar Branch Creek.....	do.....	A. E. Johnston.....	7- 5-30	1.9
Cedar Branch Creek.....	do.....	A. E. Johnston.....	7-10-30	1.7
Cedar Branch Creek.....	do.....	A. E. Johnston.....	7-14-30	2.4
Cedar Branch Creek.....	do.....	A. E. Johnston.....	7-22-30	1.6
Cedar Branch Creek.....	do.....	A. E. Johnston.....	7-28-30	1.7
Cedar Branch Creek.....	do.....	A. E. Johnston.....	8- 2-30	2.1
Cedar Branch Creek.....	do.....	A. E. Johnston.....	8- 4-30	1.6
Cedar Branch Creek.....	do.....	A. E. Johnston.....	8- 6-30	1.7
Cedar Branch Creek.....	do.....	A. E. Johnston.....	8- 7-30	2.2
Cedar Branch Creek.....	do.....	A. E. Johnston.....	8-26-30	2.4
Cedar Branch Creek.....	do.....	A. E. Johnston.....	9-22-30	2.0
Cedar River.....	Section 5-18-7, Cedar Rapids.....	A. E. Johnston.....	10-18-29	210.0
Cedar River.....	do.....	A. E. Johnston.....	3-26-30	190.0
Cedar River.....	Section 11-16-6 West of Fullerton.....	A. E. Johnston.....	10-18-29	212.0
Cedar River.....	do.....	A. E. Johnston.....	2- 1-30	194.0
Cedar River.....	do.....	A. E. Johnston.....	2-28-30	309.0
Cedar River.....	do.....	A. E. Johnston.....	3-26-30	250.0
Cedar River.....	do.....	A. E. Johnston.....	4-24-30	299.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Date	Discharge Sec. Ft.
Cedar River	do	A. E. Johnston	6-12-30	290.0
Cedar River	do	A. E. Johnston	8-16-30	203.0
Cedar River	do	A. E. Johnston	9-10-30	537.0
Center Creek	Sec. 1-1-15 1 mile West of Franklin	A. E. Johnston	3- 7-30	4.5
Center Creek	do	A. E. Johnston	4- 3-30	4.7
Center Creek	do	A. E. Johnston	4-30-30	8.7
Center Creek	do	A. E. Johnston	6-21-30	6.2
Center Creek	do	A. E. Johnston	9-17-30	2.7
Chadron Creek No. 1	Section 19-32-48, ½ mile above city reservoir	A. E. Johnston	10-11-29	3.0
Chadron Creek No. 1	do	A. E. Johnston	12- 4-29	5.0
Chadron Creek No. 1	do	A. E. Johnston	2-22-30	6.0
Chadron Creek No. 1	do	A. E. Johnston	3-23-30	5.3
Chadron Creek No. 1	do	A. E. Johnston	5-14-30	6.3
Chadron Creek No. 1	do	A. W. Hall	8- 6-30	1.7
Chadron Creek No. 1	do	A. E. Johnston	9- 5-30	3.6
Chadron Creek No. 1	do	A. E. Johnston	9-27-30	2.4
Chadron Creek No. 2	Section 18-32-48, 100' below city reservoir	A. E. Johnston	10-11-29	0.9
Chadron Creek No. 2	do	A. E. Johnston	12- 4-29	0.4
Chadron Creek No. 2	do	A. E. Johnston	2-22-30	1.5
Chadron Creek No. 2	do	A. E. Johnston	3-20-30	0.9
Chadron Creek No. 2	do	A. E. Johnston	5-14-30	0.4
Chadron Creek No. 2	do	A. W. Hall	8- 6-30	.0
Chadron Creek No. 2	do	A. E. Johnston	9- 5-30	0.2
Chadron Creek No. 2	do	A. E. Johnston	9-27-30	0.2
Chadron Creek No. 3	Section 12-32-49, Station 36 of Pipe Line	A. E. Johnston	10-11-29	1.0
Chadron Creek No. 3	do	A. E. Johnston	12- 4-29	1.0
Chadron Creek No. 3	do	A. E. Johnston	2-22-30	4.2
Chadron Creek No. 3	do	A. E. Johnston	3-20-30	1.6
Chadron Creek No. 3	do	A. E. Johnston	5-14-30	6.1
Chadron Creek No. 3	do	A. E. Johnston	9- 5-30	.0
Chadron Creek No. 3	do	A. E. Johnston	9-27-30	.0
Chadron Creek No. 4	Section 22-33-49 Chadron-Crawford Highway	A. E. Johnston	10-11-29	1.6
Chadron Creek No. 4	do	A. E. Johnston	12- 4-29	2.0
Chadron Creek No. 4	do	A. E. Johnston	2-22-30	4.9
Chadron Creek No. 4	do	A. E. Johnston	3-20-30	3.4
Chadron Creek No. 4	do	A. E. Johnston	5-14-30	7.1
Chadron Creek No. 4	do	A. E. Johnston	9- 4-30	0.2
Chadron Creek No. 4	do	A. E. Johnston	9-29-30	1.*
Cherry Creek	Section 22-24-61, South of Torrington, Wyo.	C. E. Franklin	12- 6-29	16.0
Cherry Creek	do	A. E. Johnston	2-18-30	12.8

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Clear Creek 1-A	Section 5-15-41	A. E. Johnston	10- 3-29	10.0
Clear Creek 1-A	do	A. E. Johnston	11-14-29	10.0
Clear Creek 1-A	do	A. E. Johnston	11-29-29	13.0
Clear Creek 1-A	do	A. E. Johnston	12-16-29	6.0
Clear Creek 1-A	do	A. E. Johnston	1- 7-30	9.5
Clear Creek 1-A	do	A. E. Johnston	1-23-30	17.7
Clear Creek 1-A	do	A. E. Johnston	2-11-30	13.5
Clear Creek 1-A	do	A. E. Johnston	3-12-30	11.0
Clear Creek 1-A	do	A. E. Johnston	4-12-30	9.0
Clear Creek 1-A	do	A. E. Johnston	4-17-30	8.9
Clear Creek 1-A	do	A. E. Johnston	5- 9-30	11.7
Clear Creek 1-A	do	A. E. Johnston	6- 4-30	13.1
Clear Creek 1-A	do	A. W. Hall	6-20-30	17.3
Clear Creek 1-A	do	A. E. Johnston	7-23-30	10.7
Clear Creek 1-A	do	A. E. Johnston	7-25-30	0.0
Clear Creek 1-A	do	A. W. Hall	7-31-30	0.0
Clear Creek 1-A	do	A. W. Hall	8- 9-30	4.6
Clear Creek 1-A	do	A. W. Hall	8-20-30	0.7
Clear Creek 1-A	do	A. E. Johnston	8-27-30	12.3
Clear Creek 1-A	do	A. E. Johnston	9-23-30	12.7
Clear Creek	Section 26-14-16, East of Litchfield	A. E. Johnston	10-26-29	2.0
Clear Creek	do	A. E. Johnston	11-26-29	4.0
Clear Creek	do	A. E. Johnston	12- 9-29	3.0
Clear Creek	do	A. E. Johnston	1-29-30	2.0
Clear Creek	do	A. E. Johnston	5- 1-30	18.5
Clear Creek	do	A. E. Johnston	5-20-30	51.0
Clear Creek	do	A. E. Johnston	6-10-30	16.3
Clear Creek	do	A. E. Johnston	8-14-30	181.0
Clear Creek (Upper)	Section 35-13-9 E, North of Ashland	A. E. Johnston	10-22-29	5.0
Clear Creek (Upper)	do	A. E. Johnston	11-21-29	5.0
Clear Creek (Upper)	do	A. E. Johnston	3- 4-30	9.8
Clear Creek (Upper)	do	A. E. Johnston	3-31-30	8.2
Clear Creek (Upper)	do	A. E. Johnston	4-26-30	15.2
Clear Creek (Upper)	do	A. E. Johnston	6-18-30	11.3
Clear Creek (Upper)	do	A. E. Johnston	9-13-30	6.5
Clear Water Creek	Section 6-25-7	A. E. Johnston	10-17-29	41.0
Clear Water Creek	do	A. E. Johnston	2-27-30	50.0
Clear Water Creek	do	A. E. Johnston	3-25-30	40.0
Clear Water Creek	do	A. E. Johnston	9- 9-30	36.5
Cleveland Drain	West Line Section 6-20-52	A. W. Hall	4- 7-30	3.5
Cleveland Drain	do	A. W. Hall	5-31-30	5.8
Cleveland Drain	do	A. W. Hall	6-16-30	4.9
Cleveland Drain	do	A. W. Hall	8-25-30	2.9
Cold Water Creek	Section 34-18-46	A. E. Johnston	10- 5-29	5.0
Cold Water Creek	do	A. E. Johnston	11-13-29	2.0
Cold Water Creek	do	A. E. Johnston	12-16-29	4.0
Cold Water Creek	do	A. E. Johnston	1- 8-30	1.4
Cold Water Creek	do	A. E. Johnston	1-22-30	2.2

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Cold Water Creek	do	A. E. Johnston	2-12-30	2.8
Cold Water Creek	do	A. E. Johnston	3-13-30	3.2
Cold Water Creek	do	A. E. Johnston	4-15-30	1.4
Cold Water Creek	do	A. E. Johnston	5-10-30	11.2
Cold Water Creek	do	A. E. Johnston	6- 2-30	6.6
Cold Water Creek	do	A. W. Hall	6-18-30	1.2
Cold Water Creek	do	A. W. Hall	7- 5-30	0.7
Cold Water Creek	do	A. E. Johnston	7-24-30	0.0*
Cold Water Creek	do	A. E. Johnston	8-29-30	3.0
Cold Water Creek	do	A. E. Johnston	9-26-30	3.2
Cottonwood Creek (Big)	Section 6-1-15, Below Bloomington Power House	A. E. Johnston	3- 7-30	4.2
Cottonwood Creek (Big)	do	A. E. Johnston	4- 3-30	4.5
Cottonwood Creek (Big)	do	A. E. Johnston	4-30-30	6.7
Cottonwood Creek (Big)	do	A. E. Johnston	6-21-30	2.6
Cottonwood Creek (Big)	do	A. E. Johnston	9-17-30	1.6
Cottonwood Creek (Big)	Section 27-29-48, ½ mile north of Dunlap	A. E. Johnston	10- 9-29	1.0
Cottonwood Creek (Big)	do	A. E. Johnston	2-20-30	5.3
Cottonwood Creek (Big)	do	A. E. Johnston	5-13-30	4.0
Cottonwood Creek (Big)	do	A. E. Johnston	9- 1-30	1.4
Cottonwood Creek (Big)	do	A. E. Johnston	9-27-30	1.5
Cottonwood Creek	Section 4 & 9-1-11 West of Red Cloud	A. E. Johnston	4-29-30	13.0
Cottonwood Creek (Little)	Section 8-32-51, South of Whitney Pipe Line outlet	A. E. Johnston	10-11-29	4.0
Cottonwood Creek (Little)	do	A. E. Johnston	12- 4-29	9.0
Cottonwood Creek (Little)	do	A. E. Johnston	2-22-30	4.7
Cottonwood Creek (Little)	do	A. E. Johnston	3-20-30	2.7
Cottonwood Creek (Little)	do	A. E. Johnston	5-14-30	4.0
Cottonwood Creek (Little)	do	A. E. Johnston	9- 3-30	0.7
Cottonwood Creek (Little)	do	A. E. Johnston	9- 4-30	2.4
Cottonwood Creek (Little)	do	A. E. Johnston	9-29-30	0.7
Cottonwood Creek (Little)	Section 8-32-52	A. E. Johnston	9-29-30	1.0
Cottonwood Creek	Section 12-15-23, East of Callaway	A. E. Johnston	8-14-30	1.6
Crooked Creek	Section 19-34-19, South of Burton	A. E. Johnston	10-16-29	2.0
Crooked Creek	do	A. E. Johnston	2-26-30	2.3
Crooked Creek	do	A. E. Johnston	3-24-30	1.3
Crooked Creek	do	A. E. Johnston	9- 8-30	0.3
Dane Creek	Section 21-19-14, West of Ord	A. E. Johnston	7- 3-29	0
Dane Creek	do	A. E. Johnston	8-15-30	0
Dawson County Drain	Section 14-9-21, East Side	A. E. Johnston	10-28-29	5
Dawson County Drain	do	A. E. Johnston	11-18-29	7
Dawson County Drain	do	A. E. Johnston	11-26-29	6
Dawson County Drain	do	A. E. Johnston	12-12-29	17
Dawson County Drain	do	A. E. Johnston	1- 4-30	19

DEPARTMENT OF PUBLIC WORKS

435

STREAM MEASUREMENTS—Continued
Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Dawson County	Drain.....do.....	A. E. Johnston.....	1-28-30	15
Dawson County	Drain.....do.....	A. E. Johnston.....	2- 6-30	14
Dawson County	Drain.....do.....	A. E. Johnston.....	3- 7-30	9
Dawson County	Drain.....do.....	A. E. Johnston.....	4- 4-30	16
Dawson County	Drain.....do.....	A. E. Johnston.....	4-22-30	47
Dawson County	Drain.....do.....	A. E. Johnston.....	5- 5-30	34
Dawson County	Drain.....do.....	A. E. Johnston.....	5-21-30	116
Dawson County	Drain.....do.....	A. E. Johnston.....	6- 9-30	107
Dawson County	Drain.....do.....	A. E. Johnston.....	6-23-30	75
Dawson County	Drain.....do.....	A. E. Johnston.....	6-26-30	38
Dawson County	Drain.....do.....	A. E. Johnston.....	7- 1-30	28
Dawson County	Drain.....do.....	A. E. Johnston.....	7- 2-30	26
Dawson County	Drain.....do.....	A. E. Johnston.....	7- 8-30	23
Dawson County	Drain.....do.....	A. E. Johnston.....	7-16-30	22
Dawson County	Drain.....do.....	A. E. Johnston.....	7-20-30	15
Dawson County	Drain.....do.....	A. E. Johnston.....	7-30-30	17
Dawson County	Drain.....do.....	A. E. Johnston.....	8-13-30	16
Dawson County	Drain.....do.....	A. E. Johnston.....	8-21-30	30
Dawson County	Drain.....do.....	A. E. Johnston.....	9-18-30	27
Deadhorse Creek	.....Section 32-33-49.....	A. E. Johnston.....	3-20-30	3
Deadhorse Creek	.....do.....	A. E. Johnston.....	9- 4-30	1
Deadhorse Creek	.....do.....	A. E. Johnston.....	9-29-30	0
DeGraw Drain	.....Below Schermerhorn Canal.....	A. W. Hall.....	4-22-30	2
DeGraw Drain	.....do.....	A. W. Hall.....	5-31-30	5
DeGraw Drain	.....do.....	A. W. Hall.....	7-14-30	7
DeGraw Drain	.....do.....	A. W. Hall.....	8-25-30	7
DeGraw Drain	.....do.....	A. W. Hall.....	9-23-30	8
Dismal River	.....Section 4-21-24, Dunning.....	A. E. Johnston.....	11-25-29	350
Dismal River	.....do.....	A. E. Johnston.....	5- 2-30	430
Dismal River	.....do.....	A. E. Johnston.....	6-11-30	422
Dry Creek	.....Section 20-34-37, Merriman.....	A. E. Johnston.....	12- 5-29	8
Dry Creek	.....do.....	A. E. Johnston.....	3-21-30	16
Dry Creek	.....do.....	A. E. Johnston.....	5-15-30	39
Dry Creek	.....do.....	A. E. Johnston.....	9- 6-30	3
Dugout Creek (Lower)	.....Section 4-19-48, Below Cooper Canal.....	A. E. Johnston.....	10- 7-29	3
Dugout Creek (Lower)	.....do.....	A. E. Johnston.....	3-14-30	2
Dugout Creek (Lower)	.....do.....	A. E. Johnston.....	4-15-30	2
Dugout Creek (Lower)	.....do.....	A. E. Johnston.....	5-12-30	2
Dugout Creek (Lower)	.....do.....	A. E. Johnston.....	6- 2-30	1
Dugout Creek (Lower)	.....do.....	A. E. Johnston.....	8-29-30	1
Dugout Creek (Lower)	.....do.....	A. E. Johnston.....	9-26-30	1
Dugout Creek (Upper)	.....Section 21-20-50.....	A. W. Hall.....	10- 7-29	4.0
Dugout Creek (Upper)	.....do.....	C. E. Franklin.....	12- 9-29	0.8
Dugout Creek (Upper)	.....do.....	A. W. Hall.....	12-13-29	3.0
Dugout Creek (Upper)	.....do.....	A. W. Hall.....	3-25-30	1.4
Dugout Creek (Upper)	.....do.....	A. W. Hall.....	4- 8-30	4.6
Dugout Creek (Upper)	.....do.....	A. W. Hall.....	4-21-30	0.6
Dugout Creek (Upper)	.....do.....	A. W. Hall.....	5-14-30	3.1

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Dugout Creek (Upper)	do	A. W. Hall	5-31-30	5.5
Dugout Creek (Upper)	do	A. W. Hall	6-16-30	2.2
Dugout Creek (Upper)	do	A. W. Hall	7- 2-30	0.5
Dugout Creek (Upper)	do	A. W. Hall	7-14-30	1.9
Dugout Creek (Upper)	do	A. W. Hall	8-18-30	12.7
Dugout Creek (Upper)	do	A. W. Hall	8-25-30	11.2
Dugout Creek (Upper)	do	A. W. Hall	9- 5-30	29.0
Dugout Creek (Upper)	do	A. W. Hall	9-23-30	5.3
Eli Lake	Section 12-34-36, At Gage Rod	A. E. Johnston	10-14-29	10.4
Eli Lake	do	A. E. Johnston	12- 5-29	10.7
Eli Lake	do	A. E. Johnston	2-24-30	11.0
Eli Lake	do	A. E. Johnston	3-21-30	11.0
Eli Lake	do	A. E. Johnston	5-15-30	11.4
Eli Lake	do	A. E. Johnston	9- 6-30	10.2
Elkhorn River	Section 13-17-9 E, Arlington	A. E. Johnston	10-21-29	571.0
Elkhorn River	Section 34-27-9 W, North of Ewing	A. E. Johnston	10-17-29	85.0
Elkhorn River	do	A. E. Johnston	2-27-30	177.0
Elkhorn River	do	A. E. Johnston	3-25-30	153.0
Elkhorn River	do	A. E. Johnston	9- 9-30	442.0
Elkhorn River	Section 3-26-9, South of Ewing	A. E. Johnston	10-17-29	41.0
Elkhorn River	do	A. E. Johnston	2-27-30	52.0
Elkhorn River	do	A. E. Johnston	3-25-30	49.0
Elkhorn River	do	A. E. Johnston	9- 9-30	14.8
Elkhorn River	Section 20-25-6 W, Neligh	A. E. Johnston	10-18-29	217.0
Elkhorn River	do	A. E. Johnston	2-28-30	414.0
Elkhorn River	do	A. E. Johnston	3-26-30	318.0
Elkhorn River	do	A. E. Johnston	9-10-30	169.0
Elkhorn River	Section 3-15-10 E, Waterloo	A. E. Johnston	11-20-29	621.0
Elkhorn River	do	A. E. Johnston	3- 3-30	442.0
Elkhorn River	do	A. E. Johnston	3-29-30	691.0
Elkhorn River	do	A. E. Johnston	4-25-30	1446.0
Elkhorn River	do	A. E. Johnston	6-17-30	1279.0
Elkhorn River	do	A. E. Johnston	8-18-30	1058.0
Elkhorn River	do	A. E. Johnston	9-12-30	520.0
Furnished by the United States Geological Survey				
Elkhorn River	Waterloo	F. B. Campbell	10- 2-29	441.
Elkhorn River	do	F. F. LeFever	11-27-29	473.
Elkhorn River	do	D. S. Jenkins	2-26-30	1090.
Elkhorn River	do	F. F. LeFever	3-24-30	793.
Elkhorn River	do	F. F. LeFever	4-23-30	1650.
Elkhorn River	do	F. F. LeFever	5- 7-30	2560.
Elkhorn River	do	F. F. LeFever	5- 9-30	7200.
Elkhorn River	do	F. F. LeFever	5-24-30	2100.
Elkhorn River	do	F. F. LeFever	6-11-30	1230.
Elkhorn River	do	F. F. LeFever	6-26-30	1100.
Elkhorn River	do	H. P. Eisenhuth	7-12-30	459.
Elkhorn River	do	H. P. Eisenhuth	8-13-30	514.
Elkhorn River	do	R. E. Cabell	9-14-30	737.

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Elm Creek	Section 33-9-18, South of Elm Creek	A. E. Johnston	10-28-29	3.0
Elm Creek	do	A. E. Johnston	11-18-29	0.0
Elm Creek	do	A. E. Johnston	5- 5-30	17.4
Elm Creek	do	A. E. Johnston	7-16-30	3.2
Elm Creek	do	A. E. Johnston	7-20-30	0.0
Elm Creek	do	A. E. Johnston	7-30-30	0.0
Elm Creek	do	A. E. Johnston	8-13-30	5.1
Elm Creek	do	A. E. Johnston	8-21-30	0.4
Elm Creek	do	A. E. Johnston	9-18-30	0.5
Elm Creek	Section 3-1-10, Near Lester	A. E. Johnston	3- 6-30	36.0
Elm Creek	do	A. E. Johnston	4- 2-30	9.3
Elm Creek	do	A. E. Johnston	4-29-30	30.0
Elm Creek	do	A. E. Johnston	6-20-30	38.0
Elm Creek	do	A. E. Johnston	7-30-30	0.0
Elm Creek	do	A. E. Johnston	9-16-30	15.0
Fairfield Seep	Section 18-21-53	A. W. Hall	10- 8-29	2.0
Fairfield Seep	do	A. E. Johnston	11- 8-29	6.3
Fairfield Seep	do	C. E. Franklin	12- 4-29	1.2
Fairfield Seep	do	A. E. Johnston	12-17-29	5.9
Fairfield Seep	do	A. E. Johnston	1-10-30	1.9
Fairfield Seep	do	A. E. Johnston	2-14-30	4.7
Fairfield Seep	do	A. W. Hall	3-26-30	5.6
Fairfield Seep	do	A. W. Hall	4- 9-30	1.0
Fairfield Seep	do	A. W. Hall	5-20-30	9.9
Fairfield Seep	do	A. W. Hall	6-10-30	3.4
Fairfield Seep	do	A. W. Hall	7-18-30	3.2
Fairfield Seep	do	A. W. Hall	8-18-30	7.2
Fairfield Seep	do	A. W. Hall	9- 5-30	5.5
Fanning Seep	Section 28-23-56, Mitchell Bridge	A. W. Hall	10-10-29	8.0
Fanning Seep	do	A. E. Johnston	11- 7-29	8.0
Fanning Seep	do	C. E. Franklin	12- 5-29	12.0
Fanning Seep	do	A. E. Johnston	1-14-30	8.0
Fanning Seep	do	A. E. Johnston	2-18-30	4.0
Fanning Seep	do	A. W. Hall	3-11-30	2.8
Fanning Seep	do	A. W. Hall	4-11-30	4.2
Fanning Seep	do	A. W. Hall	4-24-30	6.1
Fanning Seep	do	A. W. Hall	6-11-30	8.5
Fanning Seep	do	A. W. Hall	7-18-30	6.3
Fanning Seep	do	A. W. Hall	7-30-30	8.1
Fanning Seep	do	A. W. Hall	8-12-30	13.9
Fanning Seep	do	A. W. Hall	9- 9-30	18.1
Fanning Seep	do	A. W. Hall	9-25-30	13.7
Farmers Creek	Section 5-1-12, 5 miles East of Riverton	A. E. Johnston	3- 6-30	2.0
Farmers Creek	do	A. E. Johnston	4- 2-30	1.7
Farmers Creek	do	A. E. Johnston	4-29-30	4.17
Farmers Creek	do	A. E. Johnston	6-20-30	12.0
Farmers Creek	do	A. E. Johnston	9-16-30	0.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Frenchman River	NE¼ SE¼ Section 21-6-39, Champion	C. E. Franklin	11-16-29	25.0
Frenchman River	do	C. E. Franklin	11-28-29	24.0
Frenchman River	do	C. E. Franklin	12-16-29	35.0
Frenchman River	do	C. E. Franklin	1- 2-30	31.0
Frenchman River	do	C. E. Franklin	2- 3-30	50.0
Frenchman River	do	C. E. Franklin	2-22-30	47.0
Frenchman River	do	C. E. Franklin	3- 9-30	25.0
Frenchman River	do	C. E. Franklin	3-21-30	44.0
Frenchman River	do	C. E. Franklin	4-19-30	28.0
Frenchman River	do	C. E. Franklin	5- 3-30	20.0
Frenchman River	do	C. E. Franklin	5-16-30	44.0
Frenchman River	do	C. E. Franklin	5-31-30	59.0
Frenchman River	do	C. E. Franklin	6-20-30	54.0
Frenchman River	do	C. E. Franklin	7-11-30	24.0
Frenchman River	do	C. E. Franklin	7-31-30	40.0
Frenchman River	do	C. E. Franklin	8- 9-30	60.0
Frenchman River	do	C. E. Franklin	8-29-30	7.0
Frenchman River	do	C. E. Franklin	9-11-30	45.0
Frenchman River	do	C. E. Franklin	9-21-30	45.0
Frenchman River	NW¼ NW¼ Section 22-6-40, Above Champion Reservoir	C. E. Franklin	11-16-29	26.0
Frenchman River	do	C. E. Franklin	11-28-29	30.0
Frenchman River	do	C. E. Franklin	12-16-29	17.0
Frenchman River	do	C. E. Franklin	1- 2-30	20.0
Frenchman River	do	C. E. Franklin	2- 3-30	27.0
Frenchman River	do	C. E. Franklin	2-22-30	40.0
Frenchman River	do	C. E. Franklin	3- 9-30	29.0
Frenchman River	do	C. E. Franklin	3-21-30	26.0
Frenchman River	do	C. E. Franklin	4-19-30	13.0
Frenchman River	do	C. E. Franklin	5- 3-30	10.0
Frenchman River	do	C. E. Franklin	5-16-30	15.0
Frenchman River	do	C. E. Franklin	5-31-30	21.0
Frenchman River	do	C. E. Franklin	6-20-30	29.0
Frenchman River	do	C. E. Franklin	7-11-30	16.0
Frenchman River	do	C. E. Franklin	7-31-30	22.0
Frenchman River	do	C. E. Franklin	8- 9-30	9.0
Frenchman River	do	C. E. Franklin	8-29-30	16.0
Frenchman River	do	C. E. Franklin	9-11-30	18.0
Frenchman River	do	C. E. Franklin	9-21-30	16.0
Frenchman River	SW¼ Section 23-6-40, Below Champion Reservoir	C. E. Franklin	11-16-29	17.0
Frenchman River	do	C. E. Franklin	11-28-29	15.0
Frenchman River	do	C. E. Franklin	12-16-29	26.00
Frenchman River	do	C. E. Franklin	1- 2-30	27.0
Frenchman River	do	C. E. Franklin	2- 3-30	31.0
Frenchman River	do	C. E. Franklin	2-22-30	12.0
Frenchman River	do	C. E. Franklin	3- 9-30	21.0
Frenchman River	do	C. E. Franklin	3-21-30	29.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Frenchman River	do	C. E. Franklin	4-19-30	7.3
Frenchman River	do	C. E. Franklin	5- 3-30	3.7
Frenchman River	do	C. E. Franklin	5-16-30	16.5
Frenchman River	do	C. E. Franklin	5-31-30	21.0
Frenchman River	do	C. E. Franklin	6-20-30	12.0
Frenchman River	do	C. E. Franklin	7-11-30	2.3
Frenchman River	do	C. E. Franklin	7-31-30	5.4
Frenchman River	do	C. E. Franklin	8- 9-30	3.6
Frenchman River	do	C. E. Franklin	8-29-30	4.1
Frenchman River	do	C. E. Franklin	9-11-30	10.5
Frenchman River	do	C. E. Franklin	9-21-30	10.1
Frenchman River	Section 16-3-31, West of Culbertson	C. E. Franklin	11-18-29	234.0
Frenchman River	do	C. E. Franklin	11-28-29	166.0
Frenchman River	do	C. E. Franklin	12-17-29	175.0
Frenchman River	do	C. E. Franklin	12-30-29	174.0
Frenchman River	do	C. E. Franklin	2- 5-30	122.0
Frenchman River	do	C. E. Franklin	2-24-30	242.0
Frenchman River	do	C. E. Franklin	3-10-30	194.0
Frenchman River	do	C. E. Franklin	3-22-30	141.0
Frenchman River	do	C. E. Franklin	4-20-30	162.0
Frenchman River	do	C. E. Franklin	5- 5-30	141.0
Frenchman River	do	C. E. Franklin	5-19-30	184.0
Frenchman River	do	C. E. Franklin	6- 1-30	206.0
Frenchman River	do	C. E. Franklin	6- 4-30	206.0
Frenchman River	do	C. E. Franklin	6-22-30	77.0
Frenchman River	do	C. E. Franklin	7-29-30	124.0
Frenchman River	do	C. E. Franklin	8-19-30	129.0
Frenchman River	do	C. E. Franklin	8-26-30	70.0
Frenchman River	do	C. E. Franklin	9- 9-30	115.0
Frenchman River	do	C. E. Franklin	9-23-30	42.0
Frenchman River	SW¼ SW¼ Section 30-6-38, Below Culbertson Canal, South of Imperial	C. E. Franklin	7-11-30	0.1
Frenchman River	do	C. E. Franklin	11-28-29	51.0
Frenchman River	do	C. E. Franklin	12-16-29	41.0
Frenchman River	do	C. E. Franklin	1- 2-30	63.0
Frenchman River	do	C. E. Franklin	2- 3-30	65.0
Frenchman River	do	C. E. Franklin	2-22-30	57.0
Frenchman River	do	C. E. Franklin	3- 9-30	42.0
Frenchman River	do	C. E. Franklin	3-21-30	66.0
Frenchman River	do	C. E. Franklin	4-19-30	39.0
Frenchman River	do	C. E. Franklin	5- 3-30	25.0
Frenchman River	do	C. E. Franklin	5-16-30	71.0
Frenchman River	do	C. E. Franklin	5-31-30	47.0
Frenchman River	do	C. E. Franklin	6-20-30	71.0
Frenchman River	do	C. E. Franklin	7-11-30	25.0
Frenchman River	do	C. E. Franklin	7-31-30	47.0
Frenchman River	do	C. E. Franklin	8- 9-30	7.8
Frenchman River	do	C. E. Franklin	8-29-30	65.0
Frenchman River	do	C. E. Franklin	9-11-30	55.0
Frenchman River	do	C. E. Franklin	9-21-30	39.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Frenchman River.....	SE¼ SW¼ Section 17-6-40, Below Inman Canal...	C. E. Franklin.....	11-16-29	6.0
Frenchman River.....	do.....	C. E. Franklin.....	11-28-29	11.0
Frenchman River.....	do.....	C. E. Franklin.....	12-16-29	9.0
Frenchman River.....	do.....	C. E. Franklin.....	11- 3-30	16.3
Frenchman River.....	do.....	C. E. Franklin.....	2- 3-30	19.5
Frenchman River.....	do.....	C. E. Franklin.....	2-22-30	16.8
Frenchman River.....	do.....	C. E. Franklin.....	3- 9-30	23.1
Frenchman River.....	do.....	C. E. Franklin.....	3-21-30	20.2
Frenchman River.....	do.....	C. E. Franklin.....	4-19-30	4.0
Frenchman River.....	do.....	C. E. Franklin.....	5- 3-30	2.7
Frenchman River.....	do.....	C. E. Franklin.....	5-16-30	7.3
Frenchman River.....	do.....	C. E. Franklin.....	5-31-30	10.6
Frenchman River.....	do.....	C. E. Franklin.....	6-20-30	13.4
Frenchman River.....	do.....	C. E. Franklin.....	7-11-30	2.4
Frenchman River.....	do.....	C. E. Franklin.....	7-31-30	2.0
Frenchman River.....	do.....	C. E. Franklin.....	8- 9-30	3.3
Frenchman River.....	do.....	C. E. Franklin.....	8-29-30	2.8
Frenchman River.....	do.....	C. E. Franklin.....	9-11-30	14.2
Frenchman River.....	do.....	C. E. Franklin.....	9-21-30	5.8
Frenchman River.....	SE¼ NE¼ Section 10-6-41, Above Maranville Reservoir...	C. E. Franklin.....	11-16-29	4.0
Frenchman River.....	do.....	C. E. Franklin.....	11-28-29	3.0
Frenchman River.....	do.....	C. E. Franklin.....	12-16-29	5.0
Frenchman River.....	do.....	C. E. Franklin.....	1- 3-30	3.3
Frenchman River.....	do.....	C. E. Franklin.....	2- 3-30	8.1
Frenchman River.....	do.....	C. E. Franklin.....	2-22-30	3.8
Frenchman River.....	do.....	C. E. Franklin.....	3- 9-30	5.3
Frenchman River.....	do.....	C. E. Franklin.....	3-21-30	8.3
Frenchman River.....	do.....	C. E. Franklin.....	4-19-30	4.9
Frenchman River.....	do.....	C. E. Franklin.....	5- 3-30	5.5
Frenchman River.....	do.....	C. E. Franklin.....	5-16-30	6.5
Frenchman River.....	do.....	C. E. Franklin.....	5-31-30	4.4
Frenchman River.....	do.....	C. E. Franklin.....	6-20-30	6.6
Frenchman River.....	do.....	C. E. Franklin.....	7-11-30	2.7
Frenchman River.....	do.....	C. E. Franklin.....	7-31-30	6.3
Frenchman River.....	do.....	C. E. Franklin.....	8- 9-30	3.8
Frenchman River.....	do.....	C. E. Franklin.....	8-29-30	5.9
Frenchman River.....	do.....	C. E. Franklin.....	9-11-30	3.4
Frenchman River.....	do.....	C. E. Franklin.....	9-21-30	4.0
Frenchman River.....	SE¼ SE¼ Section 11-6-41, Below Maranville Reservoir...	C. E. Franklin.....	11-16-29	2.0
Frenchman River.....	do.....	C. E. Franklin.....	11-28-29	5.0
Frenchman River.....	do.....	C. E. Franklin.....	12-16-29	3.0
Frenchman River.....	do.....	C. E. Franklin.....	1- 3-30	2.6
Frenchman River.....	do.....	C. E. Franklin.....	2- 3-30	2.4
Frenchman River.....	do.....	C. E. Franklin.....	2-22-30	3.8
Frenchman River.....	do.....	C. E. Franklin.....	3- 9-30	3.0
Frenchman River.....	do.....	C. E. Franklin.....	3-21-30	3.2
Frenchman River.....	do.....	C. E. Franklin.....	4-19-30	6.7
Frenchman River.....	do.....	C. E. Franklin.....	5- 3-30	0.7

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Frenchman River	do	C. E. Franklin	5-16-30	3.3
Frenchman River	do	C. E. Franklin	5-31-30	0.1*
Frenchman River	do	C. E. Franklin	6-20-30	5.1
Frenchman River	do	C. E. Franklin	7-11-30	0.6
Frenchman River	do	C. E. Franklin	7-31-30	3.0
Frenchman River	do	C. E. Franklin	8- 9-30	2.4
Frenchman River	do	C. E. Franklin	8-29-30	1.7
Frenchman River	do	C. E. Franklin	9-21-30	2.0
Furnished by the United States Geological Survey				
Frenchman River	Hamlet	F. F. LeFever	11-19-29	91.
Frenchman River	do	Jenkins & Campbell	2-10-30	121.
Frenchman River	do	F. F. LeFever	3-18-30	87.
Frenchman River	do	F. F. LeFever	4-16-30	93.
Frenchman River	do	F. F. LeFever	5-19-30	133.
Frenchman River	do	H. P. Eisenhuth	7- 2-30	65.
Frenchman River	do	H. P. Eisenhuth	8- 5-30	70.
Frenchman River	do	D. S. Jenkins	8-28-30	214.
Frenchman River	North of Palisade	C. E. Franklin	11-17-29	151.0
Frenchman River	do	C. E. Franklin	11-28-29	147.0
Frenchman River	do	C. E. Franklin	12-17-29	176.0
Frenchman River	do	C. E. Franklin	12-30-29	112.0
Frenchman River	do	C. E. Franklin	2- 4-30	106.0
Frenchman River	do	C. E. Franklin	2-23-30	151.0
Frenchman River	do	C. E. Franklin	3-10-30	131.0
Frenchman River	do	C. E. Franklin	3-22-30	111.0
Frenchman River	do	C. E. Franklin	4-20-30	114.0
Frenchman River	do	C. E. Franklin	5- 5-30	140.0
Frenchman River	do	C. E. Franklin	5-18-30	199.0
Frenchman River	do	C. E. Franklin	6- 1-30	145.0
Frenchman River	do	C. E. Franklin	6-23-30	53.0
Frenchman River	do	C. E. Franklin	7-11-30	7.0
Frenchman River	do	C. E. Franklin	7-29-30	128.0
Frenchman River	do	C. E. Franklin	8-10-30	60.0
Frenchman River	do	C. E. Franklin	8-29-30	106.0
Frenchman River	do	C. E. Franklin	9- 9-30	99.0
Frenchman River	do	C. E. Franklin	9-22-30	36.0
Frenchman River	NW¼ NE¼ Section 11-5-36, Wauneta	C. E. Franklin	11-16-29	100.0
Frenchman River	do	C. E. Franklin	11-28-29	90.0
Frenchman River	do	C. E. Franklin	12-16-29	105.0
Frenchman River	do	C. E. Franklin	1- 2-30	109.0
Frenchman River	do	C. E. Franklin	2- 3-30	119.0
Frenchman River	do	C. E. Franklin	2-22-30	95.0
Frenchman River	do	C. E. Franklin	3- 9-30	90.0
Frenchman River	do	C. E. Franklin	3-21-30	85.0
Frenchman River	do	C. E. Franklin	4-19-30	93.0
Frenchman River	do	C. E. Franklin	5- 7-30	90.0
Frenchman River	do	C. E. Franklin	5-16-30	98.0
Frenchman River	do	C. E. Franklin	5-31-30	103.0
Frenchman River	do	C. E. Franklin	6-20-30	95.0

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Frenchman River	do.	C. E. Franklin	7-11-30	92.0
Frenchman River	do.	C. E. Franklin	7-31-30	79.0
Frenchman River	do.	C. E. Franklin	8-10-30	78.0
Frenchman River	do.	C. E. Franklin	8-29-30	94.0
Frenchman River	do.	C. E. Franklin	9- 8-30	95.0
Frenchman River	do.	C. E. Franklin	9-22-30	82.0
Gebauer Drain		A. E. Johnston	2-13-30	0.14
Gebauer Drain		A. E. Johnston	3-15-30	0
Gebauer Drain		A. W. Hall	4- 8-30	0
Gebauer Drain		A. W. Hall	4-21-30	0
Gebauer Drain		A. E. Johnston	5-12-30	1.06
Gebauer Drain		A. E. Johnston	5-28-30	0.32
Gebauer Drain		A. E. Johnston	6- 2-30	0.68
Gebauer Drain		A. W. Hall	9- 4-30	0
Gebauer Drain		A. E. Johnston	9-26-30	0.2
Gering Drain	Section 6-21-54	A. W. Hall	10- 8-29	36.0
Gering Drain	do.	A. E. Johnston	11- 8-29	37.0
Gering Drain	do.	C. E. Franklin	12- 4-29	48.0
Gering Drain	do.	A. E. Johnston	12-17-29	38.0
Gering Drain	do.	A. E. Johnston	1-10-30	33.0
Gering Drain	do.	A. E. Johnston	2-14-30	23.0
Gering Drain	do.	A. W. Hall	3-11-30	20.0
Gering Drain	do.	A. W. Hall	3-26-30	24.0
Gering Drain	do.	A. W. Hall	4- 9-30	23.0
Gering Drain	do.	A. W. Hall	4-23-30	20.0
Gering Drain	do.	A. W. Hall	6-10-30	32.0
Gering Drain	do.	A. W. Hall	7-26-30	51.7
Gering Drain	do.	A. W. Hall	8-13-30	127.0
Gering Drain	do.	A. W. Hall	9-11-30	46.0
Gordon Creek	Section 30-33-28, at mouth	A. E. Johnston	10-15-29	10.0
Gordon Creek	do.	A. E. Johnston	12- 6-29	13.0
Gordon Creek	do.	A. E. Johnston	2-25-30	15.8
Gordon Creek	do.	A. E. Johnston	3-22-30	39.2
Gordon Creek	do.	A. E. Johnston	5-16-30	232.0
Gordon Creek	do.	A. E. Johnston	9- 6-30	7.0
Gothenburg Power Waste	W. 16th St.	A. E. Johnston	10- 1-29	208.0
Gothenburg Power Waste	do.	A. E. Johnston	10-29-29	211.0
Gothenburg Power Waste	do.	A. E. Johnston	11-18-29	141.0
Gothenburg Power Waste	do.	A. E. Johnston	11-27-29	95.0
Gothenburg Power Waste	do.	A. E. Johnston	12-12-29	0.0
Gothenburg Power Waste	do.	A. E. Johnston	1- 4-30	173.0
Gothenburg Power Waste	do.	A. E. Johnston	1-27-30	158.0
Gothenburg Power Waste	do.	A. E. Johnston	2- 7-30	124.0
Gothenburg Power Waste	do.	A. E. Johnston	3- 8-30	142.0
Gothenburg Power Waste	do.	A. E. Johnston	4- 5-30	112.0
Gothenburg Power Waste	do.	A. E. Johnston	4-21-30	137.0
Gothenburg Power Waste	do.	A. E. Johnston	5- 6-30	144.0
Gothenburg Power Waste	do.	A. E. Johnston	5-22-30	145.0
Gothenburg Power Waste	do.	A. E. Johnston	6- 7-30	122.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Date	Discharge Sec. Ft.
Gothenburg Power Waste	do	A. E. Johnston	7- 1-30	149.0
Gothenburg Power Waste	do	A. E. Johnston	7- 3-30	181.0
Gothenburg Power Waste	do	A. E. Johnston	7- 7-30	141.0
Gothenburg Power Waste	do	A. E. Johnston	7- 8-30	139.0
Gothenburg Power Waste	do	A. E. Johnston	7- 9-30	108.0
Gothenburg Power Waste	do	A. E. Johnston	7-15-30	62.0
Gothenburg Power Waste	do	A. E. Johnston	7-16-30	65.0
Gothenburg Power Waste	do	A. E. Johnston	7-19-30	116.0
Gothenburg Power Waste	do	A. E. Johnston	7-21-30	136.0
Gothenburg Power Waste	do	A. E. Johnston	7-29-30	184.0
Gothenburg Power Waste	do	A. E. Johnston	7-31-30	164.0
Gothenburg Power Waste	do	A. E. Johnston	8-13-30	186.0
Gothenburg Power Waste	do	A. E. Johnston	8-22-30	193.0
Gothenburg Power Waste	do	A. E. Johnston	9-19-30	167.0
Government Spring	Below Ft. Robinson Pumping Plant	A. E. Johnston	2-21-30	0.4
Government Spring	do	A. E. Johnston	3-19-30	0.4
Government Spring	do	A. E. Johnston	5-14-30	1.2
Government Spring	do	A. E. Johnston	9- 3-30	0.4
Government Spring	do	A. E. Johnston	9-30-30	.43
Gravel Creek	Section 9-14-36, Maddox Dam	A. E. Johnston	10- 3-29	1.66
Gravel Creek	do	A. E. Johnston	11-14-29	3.0
Gravel Creek	do	A. E. Johnston	11-29-29	3.0
Gravel Creek	do	A. E. Johnston	1- 6-30	2.2
Gravel Creek	do	A. E. Johnston	2-10-30	3.1
Gravel Creek	do	A. E. Johnston	3-11-30	2.1
Gravel Creek	do	A. E. Johnston	4-11-30	2.6
Gravel Creek	do	A. E. Johnston	4-17-30	2.6
Gravel Creek	do	A. E. Johnston	6- 4-30	3.1
Gravel Creek	do	A. E. Johnston	7-11-30	2.5
Gravel Creek	do	A. E. Johnston	7-17-30	2.5
Gravel Creek	do	A. E. Johnston	7-25-30	3.0
Gravel Creek	do	A. E. Johnston	8- 2-30	2.1
Gravel Creek	do	A. E. Johnston	8- 7-30	2.6
Gravel Creek	do	A. E. Johnston	8-12-30	2.6
Gravel Creek	do	A. E. Johnston	8-27-30	3.1
Greenwood Creek	Section 26-19-50, South line mouth	C. E. Franklin	12-10-29	5.0
Greenwood Creek	do	A. W. Hall	3-24-30	0
Greenwood Creek	do	A. W. Hall	4-22-30	0
Greenwood Creek	do	A. W. Hall	5-26-30	0
Greenwood Creek	do	A. W. Hall	8-22-30	0
Greenwood Creek	Below Nelson Canal	A. W. Hall	8-22-30	4.1
Haines Branch	Section 3-9-6	A. E. Johnston	10-23-29	2.0
Haines Branch	do	A. E. Johnston	11-22-29	2.0
Haines Branch	do	A. E. Johnston	2- 4-30	43.4
Haines Branch	do	A. E. Johnston	3- 4-30	1.7
Haines Branch	do	A. E. Johnston	4- 1-30	1.8
Haines Branch	do	A. E. Johnston	4-28-30	3.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Date	Discharge Sec. Ft.
Haines Branch	do	A. E. Johnston	6-19-30	1.5
Haines Branch	do	A. E. Johnston	8-20-30	5.5
Haines Branch	do	A. E. Johnston	9-15-30	0.5
Haskel Creek	Section 4-19-14, 3 miles north- west of Ord	A. E. Johnston	10-24-29	0.1
Haskel Creek	do	A. E. Johnston	8-15-30	0.3
Hat Creek	Section 35-33-56, above Div. Coffee Canal	A. E. Johnston	10-10-29	3.0
Hat Creek	do	A. E. Johnston	2-21-30	5.2
Hat Creek	do	A. E. Johnston	3-19-30	8.4
Hat Creek	do	A. W. Hall	7-22-30	0.6
Hat Creek	do	A. E. Johnston	9- 3-30	1.9
Hat Creek	do	A. E. Johnston	9-30-30	1.4
Horse Creek	Section 25-23-58	A. W. Hall	10-10-29	105.0
Horse Creek	do	C. E. Franklin	12- 6-29	110.0
Horse Creek	do	A. E. Johnston	1-13-30	90.0
Horse Creek	do	A. E. Johnston	2-17-30	164.0
Horse Creek	do	A. W. Hall	3-27-30	41.0
Horse Creek	do	A. W. Hall	4-10-30	26.0
Horse Creek	do	A. W. Hall	4-25-30	21.0
Horse Creek	do	A. W. Hall	5-21-30	242.0
Horse Creek	do	A. W. Hall	6-12-30	58.0
Horse Creek	do	A. W. Hall	6-27-30	70.0
Horse Creek	do	A. W. Hall	7-25-30	133.0
Horse Creek	do	A. W. Hall	8-12-30	195.0
Horse Creek	do	A. W. Hall	9-11-30	782.0
Horse Creek	do	A. W. Hall	9-24-30	151.0
Horse Creek	Section 23-1-39, Pringle's Ranch	C. E. Franklin	11-21-29	2.0*
Horse Creek	do	C. E. Franklin	11-30-29	1.0
Horse Creek	do	C. E. Franklin	12-21-29	1.3
Horse Creek	do	C. E. Franklin	1- 4-30	1.5*
Horse Creek	do	C. E. Franklin	2-27-30	1.5
Horse Creek	do	C. E. Franklin	3-13-30	1.3
Horse Creek	do	C. E. Franklin	3-25-30	0.7
Horse Creek	do	C. E. Franklin	4-23-30	0.6
Horse Creek	do	C. E. Franklin	5- 7-30	2.1*
Horse Creek	do	C. E. Franklin	5-20-30	1.2
Horse Creek	do	C. E. Franklin	6-20-30	2.9
Horse Creek	do	C. E. Franklin	6-24-30	0.2*
Horse Creek	do	C. E. Franklin	7-16-30	0.6
Horse Creek	do	C. E. Franklin	8- 1-30	1.6
Horse Creek	do	C. E. Franklin	8-14-30	3.0
Horse Creek	do	C. E. Franklin	8-30-30	1.1
Horse Creek	do	C. E. Franklin	9-12-30	2.0
Horse Creek	do	C. E. Franklin	9-26-30	0.7
Indian Creek	Section 19-20-50, Northport Wye	A. W. Hall	10- 7-29	25.0
Indian Creek	do	A. W. Hall	12-13-29	10.0
Indian Creek	do	C. E. Franklin	12- 9-29	9.0
Indian Creek	do	A. E. Johnston	1- 9-30	9.0

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Indian Creek	do	A. E. Johnston	2-13-30	10.0
Indian Creek	do	A. E. Johnston	3-15-30	7.4
Indian Creek	do	A. W. Hall	3-25-30	5.2
Indian Creek	do	A. W. Hall	4- 8-30	6.0
Indian Creek	do	A. W. Hall	4-21-30	4.9
Indian Creek	do	A. W. Hall	5-14-30	9.8
Indian Creek	do	A. W. Hall	5-31-30	3.8
Indian Creek	do	A. W. Hall	6-16-30	5.1
Indian Creek	do	A. W. Hall	7- 2-30	21.0
Indian Creek	do	A. W. Hall	7-14-30	15.2
Indian Creek	do	A. W. Hall	8-18-30	14.0
Indian Creek	do	A. W. Hall	8-25-30	21.0
Indian Creek	do	A. W. Hall	9- 5-30	49.0
Indian Creek	do	A. W. Hall	9-23-30	27.0
Indian Creek	do	A. E. Johnston	9-27-30	58.0
Indian Creek	Section 23-2-36, 2 miles East of Max.	C. E. Franklin	11-21-29	4.0
Indian Creek	do	C. E. Franklin	11-30-29	4.0
Indian Creek	do	C. E. Franklin	12-21-29	3.0
Indian Creek	do	C. E. Franklin	1- 4-30	4.6
Indian Creek	do	C. E. Franklin	3-25-30	3.8
Indian Creek	do	C. E. Franklin	4-22-30	3.8
Indian Creek	do	C. E. Franklin	5-20-30	6.6
Indian Creek	do	C. E. Franklin	7-15-30	2.8
Indian Creek	do	C. E. Franklin	8- 1-30	3.7
Indian Creek	do	C. E. Franklin	8-13-30	3.5
Indian Creek	Section 5-32-50	A. E. Johnston	4- 1-30	*0.50
Indian Creek	do	A. E. Johnston	6-19-30	*0.50
Katzer Drain	Section 10-23-60	C. E. Franklin	12- 6-29	6.0
Keith-Lincoln County Drain	½ mile East of Sarben	A. E. Johnston	11-15-29	4.0
Keith-Lincoln County Drain	do	A. E. Johnston	11-29-29	3.0
Keith-Lincoln County Drain	do	A. E. Johnston	12-14-29	4.0
Keith-Lincoln County Drain	do	A. E. Johnston	1- 6-30	2.2
Keith-Lincoln County Drain	do	A. E. Johnston	1-24-30	3.2
Keith-Lincoln County Drain	do	A. E. Johnston	2-10-30	2.4
Keith-Lincoln County Drain	do	A. E. Johnston	3-11-30	2.6
Keith-Lincoln County Drain	do	A. E. Johnston	4-11-30	2.6
Keith-Lincoln County Drain	do	A. E. Johnston	4-18-30	3.5
Keith-Lincoln County Drain	do	A. E. Johnston	5- 8-30	1.4
Keith-Lincoln County Drain	do	A. E. Johnston	6- 5-30	3.1
Keith-Lincoln County Drain	do	A. E. Johnston	6-30-30	2.5
Keith-Lincoln County Drain	do	A. E. Johnston	7- 5-30	3.2
Keith-Lincoln County Drain	do	A. E. Johnston	7-10-30	1.5
Keith-Lincoln County Drain	do	A. E. Johnston	7-14-30	2.3
Keith-Lincoln County Drain	do	A. E. Johnston	7-22-30	1.6
Keith-Lincoln County Drain	do	A. E. Johnston	7-26-30	2.2
Keith-Lincoln County Drain	do	A. E. Johnston	7-28-30	4.4
Keith-Lincoln County Drain	do	A. E. Johnston	8- 2-30	5.4
Keith-Lincoln County Drain	do	A. E. Johnston	8- 4-30	9.1
Keith-Lincoln County Drain	do	A. E. Johnston	8- 6-30	4.0

* Estimated

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued
Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Keith-Lincoln County Drain.....do.....		A. E. Johnston.....	8-12-30	3.7
Keith-Lincoln County Drain.....do.....		A. E. Johnston.....	8-26-30	7.2
Keith-Lincoln County Drain.....do.....		A. E. Johnston.....	9-22-30	3.3
Keya Paha River.....Section 9-34-17, Brocksburg.....		A. E. Johnston.....	10-16-29	56.0
Keya Paha River.....do.....		A. E. Johnston.....	2-26-30	221.0
Keya Paha River.....do.....		A. E. Johnston.....	3-24-30	165.0
Keya Paha River.....do.....		A. E. Johnston.....	9- 8-30	60.7
Lane Drain.....Section 30-23-57.....		A. W. Hall.....	10-10-29	4.0
Lane Drain.....do.....		C. E. Franklin.....	12- 6-29	4.0
Lane Drain.....do.....		A. E. Johnston.....	2-17-30	1.9
Lane Drain.....do.....		A. W. Hall.....	3-27-30	2.0
Lane Drain.....do.....		A. W. Hall.....	4-10-30	2.1
Lane Drain.....do.....		A. W. Hall.....	5-21-30	5.7
Lane Drain.....do.....		A. W. Hall.....	6-27-30	7.9
Lane Drain.....do.....		A. W. Hall.....	7-30-30	2.2
Lane Drain.....do.....		A. W. Hall.....	8-12-30	4.3
Lane Drain.....do.....		A. W. Hall.....	9-11-30	3.2
Lawrence Fork.....Section 36-19-52, Bridgeport				
	Redington Highway.....	C. E. Franklin.....	12-10-29	5.8
Lawrence Fork.....do.....		A. W. Hall.....	8-22-30	0
Leander Creek.....Section 33-34-37, South of Merriman		A. E. Johnston.....	10-14-29	0.5
Leander Creek.....do.....		A. E. Johnston.....	2-24-30	14.5
Leander Creek.....do.....		A. E. Johnston.....	3-21-30	10.1
Leander Creek.....do.....		A. E. Johnston.....	5-15-30	31.9
Leander Creek.....do.....		A. E. Johnston.....	9- 6-30	1.1
Lincoln County Drain.....Section 30-14-30, 1 mile				
	West of North Platte.....	A. E. Johnston.....	10- 2-29	104.0
Lincoln County Drain.....do.....		A. E. Johnston.....	11-15-29	70.0
Lincoln County Drain.....do.....		A. E. Johnston.....	11-29-29	58.0
Lincoln County Drain.....do.....		A. E. Johnston.....	12-14-29	64.0
Lincoln County Drain.....do.....		A. E. Johnston.....	1- 6-30	61.0
Lincoln County Drain.....do.....		A. E. Johnston.....	1-24-30	61.0
Lincoln County Drain.....do.....		A. E. Johnston.....	2-10-30	57.0
Lincoln County Drain.....do.....		A. E. Johnston.....	3-11-30	55.0
Lincoln County Drain.....do.....		A. E. Johnston.....	4-11-30	51.0
Lincoln County Drain.....do.....		A. E. Johnston.....	4-18-30	44.0
Lincoln County Drain.....do.....		A. E. Johnston.....	5- 8-30	51.0
Lincoln County Drain.....do.....		A. E. Johnston.....	6- 6-30	69.0
Lincoln County Drain.....do.....		A. E. Johnston.....	6-19-30	100.0
Lincoln County Drain.....do.....		A. E. Johnston.....	6-25-30	88.0
Lincoln County Drain.....do.....		A. E. Johnston.....	6-30-30	100.
Lincoln County Drain.....do.....		A. E. Johnston.....	7- 5-30	106.0
Lincoln County Drain.....do.....		A. E. Johnston.....	7-10-30	82.0
Lincoln County Drain.....do.....		A. E. Johnston.....	7-12-30	83.0
Lincoln County Drain.....do.....		A. E. Johnston.....	7-13-30	97.0
Lincoln County Drain.....do.....		A. E. Johnston.....	7-14-30	109.0
Lincoln County Drain.....do.....		A. E. Johnston.....	7-17-30	115.0
Lincoln County Drain.....do.....		A. E. Johnston.....	7-18-30	119.0
Lincoln County Drain.....do.....		A. E. Johnston.....	7-22-30	117.0

DEPARTMENT OF PUBLIC WORKS

447

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Lincoln County Drain.....	do.....	A. E. Johnston.....	7-28-30	103.0
Lincoln County Drain.....	do.....	A. E. Johnston.....	8- 5-30	109.0
Lincoln County Drain.....	do.....	A. E. Johnston.....	8- 6-30	95.0
Lincoln County Drain.....	do.....	A. E. Johnston.....	8- 9-30	123.0
Lincoln County Drain.....	do.....	A. E. Johnston.....	8-26-30	131.0
Lincoln County Drain.....	do.....	A. E. Johnston.....	9-22-30	98.0
Lodgepole Creek.....	Below Kruger's Lake.....	C. E. Franklin.....	7-26-30	0.2*
Lodgepole Creek.....	do.....	C. E. Franklin.....	8- 8-30	1.6
Lodgepole Creek.....	Section 11-14-59, Wyoming-Nebraska Line.....	C. E. Franklin.....	11-26-29	7.0
Lodgepole Creek.....	do.....	C. E. Franklin.....	12-28-29	5.6
Lodgepole Creek.....	do.....	C. E. Franklin.....	1-13-30	6.0
Lodgepole Creek.....	do.....	C. E. Franklin.....	1-28-30	6.8
Lodgepole Creek.....	do.....	C. E. Franklin.....	2-17-30	15.7
Lodgepole Creek.....	do.....	C. E. Franklin.....	3-15-30	14.2
Lodgepole Creek.....	do.....	C. E. Franklin.....	4-24-30	9.3
Lodgepole Creek.....	do.....	C. E. Franklin.....	5- 9-30	17.7
Lodgepole Creek.....	do.....	C. E. Franklin.....	5-24-30	7.6
Lodgepole Creek.....	do.....	C. E. Franklin.....	6-11-30	7.7
Lodgepole Creek.....	do.....	C. E. Franklin.....	6-28-30	1.9
Lodgepole Creek.....	do.....	C. E. Franklin.....	7-18-30	3.7
Lodgepole Creek.....	do.....	C. E. Franklin.....	8- 7-30	6.3
Lodgepole Creek.....	do.....	C. E. Franklin.....	8-23-30	12.4
Lodgepole Creek.....	do.....	C. E. Franklin.....	9- 5-30	5.1
Lodgepole Creek.....	do.....	C. E. Franklin.....	9-19-30	7.9
Lodgepole Creek.....	Section 29-15-55, North of Kimball.....	C. E. Franklin.....	11-13-29	17.0
Lodgepole Creek.....	do.....	C. E. Franklin.....	11-26-29	17.0
Lodgepole Creek.....	do.....	C. E. Franklin.....	12-13-29	34.0
Lodgepole Creek.....	do.....	C. E. Franklin.....	12-27-29	12.0
Lodgepole Creek.....	do.....	C. E. Franklin.....	1-14-30	10.6
Lodgepole Creek.....	do.....	C. E. Franklin.....	1-28-30	13.1
Lodgepole Creek.....	do.....	C. E. Franklin.....	2-17-30	14.7
Lodgepole Creek.....	do.....	C. E. Franklin.....	3-14-30	17.6
Lodgepole Creek.....	do.....	C. E. Franklin.....	3-26-30	17.2
Lodgepole Creek.....	do.....	C. E. Franklin.....	4-24-30	8.3
Lodgepole Creek.....	do.....	C. E. Franklin.....	5- 9-30	11.0
Lodgepole Creek.....	do.....	C. E. Franklin.....	5-23-30	7.6
Lodgepole Creek.....	do.....	C. E. Franklin.....	6-10-30	8.2
Lodgepole Creek.....	do.....	C. E. Franklin.....	6-27-30	2.6
Lodgepole Creek.....	do.....	C. E. Franklin.....	7-18-30	8.8
Lodgepole Creek.....	do.....	C. E. Franklin.....	8- 7-30	8.7
Lodgepole Creek.....	do.....	C. E. Franklin.....	8-22-30	10.2
Lodgepole Creek.....	do.....	C. E. Franklin.....	9- 5-20	11.0
Lodgepole Creek.....	do.....	C. E. Franklin.....	9-19-30	7.0
Lodgepole Creek.....	Below Kimball Reservoir.....	C. E. Franklin.....	11-26-29	3.0
Lodgepole Creek.....	do.....	C. E. Franklin.....	12-28-29	3.0
Lodgepole Creek.....	do.....	C. E. Franklin.....	1-14-30	2.8
Lodgepole Creek.....	do.....	C. E. Franklin.....	1-28-30	1.8
Lodgepole Creek.....	do.....	C. E. Franklin.....	2-17-30	5.1
Lodgepole Creek.....	do.....	C. E. Franklin.....	3-14-30	4.3

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Lodgepole Creek	do	C. E. Franklin	4-24-30	3.1
Lodgepole Creek	do	C. E. Franklin	5- 9-30	3.9
Lodgepole Creek	do	C. E. Franklin	5-25-30	4.8
Lodgepole Creek	do	C. E. Franklin	6-11-30	4.8
Lodgepole Creek	do	C. E. Franklin	6-28-30	4.6
Lodgepole Creek	do	C. E. Franklin	7-18-30	4.4
Lodgepole Creek	do	C. E. Franklin	8- 7-30	3.5
Lodgepole Creek	do	C. E. Franklin	8-23-30	3.3
Lodgepole Creek	do	C. E. Franklin	9- 5-30	3.5
Lodgepole Creek	do	C. E. Franklin	9-19-30	3.5
Lodgepole Creek	Section 33-15-57, above			
	Kimball Reservoir	C. E. Franklin	11-26-29	17.0
Lodgepole Creek	do	C. E. Franklin	12-28-29	16.0
Lodgepole Creek	do	C. E. Franklin	1-13-30	11.6
Lodgepole Creek	do	C. E. Franklin	1-28-30	11.2
Lodgepole Creek	do	C. E. Franklin	2-17-30	24.8
Lodgepole Creek	do	C. E. Franklin	3-15-30	23.4
Lodgepole Creek	do	C. E. Franklin	4-24-30	17.2'
Lodgepole Creek	do	C. E. Franklin	5- 9-30	19.3
Lodgepole Creek	do	C. E. Franklin	5-25-30	20.0
Lodgepole Creek	do	C. E. Franklin	6-11-30	18.1
Lodgepole Creek	do	C. E. Franklin	6-28-30	7.3
Lodgepole Creek	do	C. E. Franklin	7-18-30	6.2
Lodgepole Creek	do	C. E. Franklin	8- 7-30	8.8
Lodgepole Creek	do	C. E. Franklin	8-23-30	148.0
Lodgepole Creek	do	C. E. Franklin	9- 5-30	24.0
Lodgepole Creek	do	C. E. Franklin	9-19-30	14.5
Lodgepole Creek	Section 28-15-55, above			
	Bennett Reservoir	C. E. Franklin	11-26-29	12.0
Lodgepole Creek	do	C. E. Franklin	1-28-30	11.2
Lodgepole Creek	do	C. E. Franklin	3-26-30	15.1
Lodgepole Creek	do	C. E. Franklin	4-24-30	7.3
Lodgepole Creek	do	C. E. Franklin	5- 9-30	9.6
Lodgepole Creek	do	C. E. Franklin	5-23-30	9.8
Lodgepole Creek	do	C. E. Franklin	6-10-30	1.1
Lodgepole Creek	do	C. E. Franklin	6-27-30	0
Lodgepole Creek	do	C. E. Franklin	7-18-30	0
Lodgepole Creek	do	C. E. Franklin	8- 7-30	0
Lodgepole Creek	do	C. E. Franklin	8-22-30	0
Lodgepole Creek	do	C. E. Franklin	9- 5-30	0.5
Lodgepole Creek	do	C. E. Franklin	9-19-30	1.5
Lodgepole Creek	NE¼ NW¼ Section 12-12-45			
	Ralton—Interstate Station	C. E. Franklin	11-15-29	19.0
Lodgepole Creek	do	C. E. Franklin	11-27-29	15.0
Lodgepole Creek	do	C. E. Franklin	12-14-29	17.0
Lodgepole Creek	do	C. E. Franklin	12-29-29	13.0
Lodgepole Creek	do	C. E. Franklin	1-17-30	9.3
Lodgepole Creek	do	C. E. Franklin	1-31-30	13.7
Lodgepole Creek	do	C. E. Franklin	2-19-30	16.8
Lodgepole Creek	do	C. E. Franklin	3- 7-30	17.9

DEPARTMENT OF PUBLIC WORKS

449

STREAM MEASUREMENTS—Continued
Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft..
Lodgepole Creek	.....do.....	C. E. Franklin	3-20-30	17.0
Lodgepole Creek	.....do.....	C. E. Franklin	4-17-30	14.2
Lodgepole Creek	.....do.....	C. E. Franklin	5- 1-30	17.1
Lodgepole Creek	.....do.....	C. E. Franklin	5-30-30	22.1
Lodgepole Creek	.....do.....	C. E. Franklin	6-20-30	7.7
Lodgepole Creek	.....do.....	C. E. Franklin	6-28-30	1.9
Lodgepole Creek	.....do.....	C. E. Franklin	7- 8-30	2.7
Lodgepole Creek	.....do.....	C. E. Franklin	7-27-30	5.6
Lodgepole Creek	.....do.....	C. E. Franklin	8- 9-30	3.3
Lodgepole Creek	.....do.....	C. E. Franklin	8-21-30	11.4
Lodgepole Creek	.....do.....	C. E. Franklin	9- 6-30	10.7
Lodgepole Creek	.....do.....	C. E. Franklin	9-20-30	8.3
Lodgepole Creek	.....NE¼ NE¼ Section 21-13-45, Chappell	C. E. Franklin	.....11-15-29	6.0
Lodgepole Creek	.....do.....	C. E. Franklin	.....11-27-29	7.0
Lodgepole Creek	.....do.....	C. E. Franklin	.....12-14-29	7.2
Lodgepole Creek	.....do.....	C. E. Franklin	.....12-29-29	12.3
Lodgepole Creek	.....do.....	C. E. Franklin	.....1-17-30	6.1
Lodgepole Creek	.....do.....	C. E. Franklin	.....1-31-30	14.3
Lodgepole Creek	.....do.....	C. E. Franklin	.....3-20-30	13.3
Lodgepole Creek	.....do.....	C. E. Franklin	.....4-17-30	15.4
Lodgepole Creek	.....do.....	C. E. Franklin	.....5- 1-30	13.8
Lodgepole Creek	.....do.....	C. E. Franklin	.....5-29-30	21.5
Lodgepole Creek	.....do.....	C. E. Franklin	.....6-20-30	0.4
Lodgepole Creek	.....do.....	C. E. Franklin	.....6-28-30	3.5
Lodgepole Creek	.....do.....	C. E. Franklin	.....7- 8-30	3.5
Lodgepole Creek	.....do.....	C. E. Franklin	.....7-27-30	8.0
Lodgepole Creek	.....do.....	C. E. Franklin	.....8- 9-30	3.0
Lodgepole Creek	.....do.....	C. E. Franklin	.....8-21-30	8.8
Lodgepole Creek	.....do.....	C. E. Franklin	.....9- 6-30	10.6
Lodgepole Creek	.....do.....	C. E. Franklin	.....9-20-30	0.9
Lodgepole Creek	.....SW¼ SW¼ Section 30-14-46, West of Lodgepole	C. E. Franklin	.....11-15-29	10.0
Lodgepole Creek	.....do.....	C. E. Franklin	.....11-27-29	7.0
Lodgepole Creek	.....do.....	C. E. Franklin	.....12-14-29	11.0
Lodgepole Creek	.....do.....	C. E. Franklin	.....12-29-29	6.0
Lodgepole Creek	.....do.....	C. E. Franklin	.....1-17-30	4.8
Lodgepole Creek	.....do.....	C. E. Franklin	.....1-31-30	4.8
Lodgepole Creek	.....do.....	C. E. Franklin	.....2-19-30	22.6
Lodgepole Creek	.....do.....	C. E. Franklin	.....3- 5-30	13.3
Lodgepole Creek	.....do.....	C. E. Franklin	.....3-20-30	23.7
Lodgepole Creek	.....do.....	C. E. Franklin	.....4-17-30	19.1
Lodgepole Creek	.....do.....	C. E. Franklin	.....4-30-30	19.6
Lodgepole Creek	.....do.....	C. E. Franklin	.....5-14-30	24.8
Lodgepole Creek	.....do.....	C. E. Franklin	.....5-29-30	11.1
Lodgepole Creek	.....do.....	C. E. Franklin	.....6-20-30	1.6
Lodgepole Creek	.....do.....	C. E. Franklin	.....7- 8-30	0.3*
Lodgepole Creek	.....do.....	C. E. Franklin	.....7-26-30	0.2*
Lodgepole Creek	.....do.....	C. E. Franklin	.....8- 8-30	0.9
Lodgepole Creek	.....do.....	C. E. Franklin	.....9- 6-30	6.8
Lodgepole Creek	.....do.....	C. E. Franklin	.....9-20-30	2.6

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Lodgepole Creek	SE¼ NE¼ Section 32-14-49			
	South of Sidney	C. E. Franklin	11-14-29	3.0*
Lodgepole Creek	do	C. E. Franklin	11-27-29	4.0
Lodgepole Creek	do	C. E. Franklin	12-13-29	3.7
Lodgepole Creek	do	C. E. Franklin	12-28-29	3.3
Lodgepole Creek	do	C. E. Franklin	1-16-30	4.7
Lodgepole Creek	do	C. E. Franklin	1-29-30	2.5
Lodgepole Creek	do	C. E. Franklin	2- 1-30	3.5
Lodgepole Creek	do	C. E. Franklin	3- 5-30	4.4
Lodgepole Creek	do	C. E. Franklin	4-15-30	5.5
Lodgepole Creek	do	C. E. Franklin	4-29-30	5.2
Lodgepole Creek	do	C. E. Franklin	5-14-30	5.4
Lodgepole Creek	do	C. E. Franklin	6-17-30	3.5
Lodgepole Creek	do	C. E. Franklin	7- 7-30	1.6
Lodgepole Creek	do	C. E. Franklin	7-26-30	1.0
Lodgepole Creek	do	C. E. Franklin	8- 9-30	1.1
Lodgepole Creek	do	C. E. Franklin	9- 3-30	2.5
Lodgepole Creek	do	C. E. Franklin	9-20-30	2.0
Lodgepole Creek	Section 26-15-54, North of Dix	C. E. Franklin	11-13-29	2.0
Lodgepole Creek	do	C. E. Franklin	11-26-29	6.0
Lodgepole Creek	do	C. E. Franklin	12-12-29	0.0
Lodgepole Creek	do	C. E. Franklin	1-16-30	Ice
Lodgepole Creek	do	C. E. Franklin	1-28-30	Ice
Lodgepole Creek	do	C. E. Franklin	2-18-30	15.4
Lodgepole Creek	do	C. E. Franklin	3-14-30	7.0
Lodgepole Creek	do	C. E. Franklin	3-26-30	15.6
Lodgepole Creek	do	C. E. Franklin	4-24-30	2.2
Lodgepole Creek	do	C. E. Franklin	5- 9-30	5.8
Lodgepole Creek	do	C. E. Franklin	5-25-30	2.6
Lodgepole Creek	do	C. E. Franklin	6-11-30	0.1*
Lodgepole Creek	do	C. E. Franklin	6-28-30	0
Lodgepole Creek	do	C. E. Franklin	7-17-30	0
Lodgepole Creek	do	C. E. Franklin	8- 7-30	0
Lodgepole Creek	do	C. E. Franklin	8-22-30	0
Lodgepole Creek	do	C. E. Franklin	9- 5-30	0
Lodgepole Creek	do	C. E. Franklin	9-19-30	0
Lonregan Creek	Section 19-15-39	A. E. Johnston	10- 3-29	3.0
Lonregan Creek	do	A. E. Johnston	11-14-29	7.0
Lonregan Creek	do	A. E. Johnston	11-29-29	6.0
Lonregan Creek	do	A. E. Johnston	12-16-29	5.0
Lonregan Creek	do	A. E. Johnston	1- 7-30	10.0
Lonregan Creek	do	A. E. Johnston	1-23-30	4.8
Lonregan Creek	do	A. E. Johnston	2-11-30	7.5
Lonregan Creek	do	A. E. Johnston	3-12-30	6.1
Lonregan Creek	do	A. E. Johnston	4-12-30	6.5
Lonregan Creek	do	A. E. Johnston	4-17-30	6.1
Lonregan Creek	do	A. E. Johnston	5- 9-30	5.6
Lonregan Creek	do	A. E. Johnston	6- 4-30	10.6
Lonregan Creek	do	A. W. Hall	6-20-30	5.5
Lonregan Creek	do	A. E. Johnston	7-23-30	4.2
Lonregan Creek	do	A. E. Johnston	7-25-30	3.7

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Lonregan Creek.....	do.....	A. E. Johnston.....	8- 2-30	5.6
Lonregan Creek.....	do.....	A. E. Johnston.....	8- 4-30	3.8
Lonregan Creek.....	do.....	A. E. Johnston.....	8- 7-30	2.5
Lonregan Creek.....	do.....	A. E. Johnston.....	8-11-30	2.3
Lonregan Creek.....	do.....	A. E. Johnston.....	8-27-30	7.7
Lonregan Creek.....	do.....	A. E. Johnston.....	9-23-30	6.8
Lost Creek—Merriman, ½ mile East of Oshkosh.....		A. E. Johnston.....	2-24-30	27.0
Lost Creek.....	do.....	A. E. Johnston.....	1- 7-30	2.7
Lost Creek.....	do.....	A. E. Johnston.....	1-23-30	2.1
Lost Creek.....	do.....	A. E. Johnston.....	2-11-30	5.4
Lost Creek.....	do.....	A. E. Johnston.....	3-12-30	5.7
Lost Creek.....	do.....	A. E. Johnston.....	4-17-30	20.6
Lost Creek.....	do.....	A. E. Johnston.....	5- 9-30	7.9
Lost Creek.....	do.....	A. E. Johnston.....	6- 3-30	4.5
Lost Creek.....	do.....	A. E. Johnston.....	7- 5-30	1.6
Lost Creek.....	do.....	A. E. Johnston.....	8-28-30	5.0
Lost Creek.....	do.....	A. E. Johnston.....	9-24-30	7.8
Looking Glass Creek.....	East of Genoa.....	A. E. Johnston.....	2- 1-30	5.5
Loup River (Middle).....	Section 11-19-19, South of Sargent.....	A. E. Johnston.....	10-25-29	851.0 ^a
Loup River (Middle).....	do.....	A. E. Johnston.....	12- 9-29	1005.0 ^a
Loup River (Middle).....	do.....	A. E. Johnston.....	1-29-30	1059.0 ^a
Loup River (Middle).....	do.....	A. E. Johnston.....	5- 2-30	1296.0 ^a
Loup River (Middle).....	do.....	A. E. Johnston.....	5-19-30	1602.0 ^a
Loup River (Middle).....	do.....	A. E. Johnston.....	8-15-30	980.0 ^a
Loup River (Middle).....	Section 9-19-19, West of Sargent.....	A. E. Johnston.....	11-25-29	704.0 ^a
Loup River (Middle).....	do.....	A. E. Johnston.....	6-11-30	1200.0 ^a
Loup River (Middle).....	Dunning.....	A. E. Johnston.....	11-25-29	443.0 ^a
Loup River (Middle).....	do.....	A. E. Johnston.....	5- 2-30	452.0 ^a
Loup River (Middle).....	do.....	A. E. Johnston.....	6-11-30	582.0 ^a
Furnished by the United States Geological Survey				
Loup River.....	Genoa.....	F. B. Campbell.....	10- 3-29	2220..
Loup River.....	do.....	D. S. Jenkins.....	2-24-30	3193..
Loup River.....	do.....	D. S. Jenkins.....	3- 7-30	5130..
Loup River.....	do.....	F. F. LeFever.....	3-21-30	2660..
Loup River.....	do.....	F. F. LeFever.....	4- 4-30	2130..
Loup River.....	do.....	F. F. LeFever.....	4-19-30	4560..
Loup River.....	do.....	F. F. LeFever.....	5- 3-30	3690..
Loup River.....	do.....	F. F. LeFever.....	5-22-30	3580..
Loup River.....	do.....	F. F. LeFever.....	6- 9-30	3020..
Loup River.....	do.....	F. F. LeFever.....	6-21-30	7730..
Loup River.....	do.....	H. P. Eisenhuth.....	7- 7-30	2280..
Loup River.....	do.....	H. P. Eisenhuth.....	7-18-30	1650..
Loup River.....	do.....	H. P. Eisenhuth.....	8- 2-30	1900..
Loup River.....	do.....	H. P. Eisenhuth.....	8- 7-30	1850..
Loup River.....	do.....	D. S. Jenkins.....	8-28-30	2030..
Loup River.....	do.....	R. E. Cabell.....	9-18-30	1990..

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued
Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Loup River (Middle)	St. Paul	F. B. Campbell	10- 4-29	1070.
Loup River	do	F. F. LeFever	12- 3-29	283.
Loun River	do	LeFever & Campbell	1- 7-30	819.
Loup River	do	D. S. Jenkins	2-23-30	1790.
Loup River	do	F. F. LeFever	3-20-30	1100.
Loup River	do	F. F. LeFever	4- 3-30	923.
Loup River	do	F. F. LeFever	4-18-30	3360.
Loup River	do	F. F. LeFever	5- 3-30	1500.
Loup River	do	F. F. LeFever	5-21-30	1600.
Loup River	do	F. F. LeFever	6- 7-30	1630.
Loup River	do	F. F. LeFever	6-19-30	7620.
Loup River	do	F. F. LeFever	6-23-30	1300.
Loup River	do	H. P. Eisenhuth	7- 5-30	954.
Loup River	do	H. P. Eisenhuth	7-18-30	753.
Loup River	do	H. P. Eisenhuth	8- 2-30	866.
Loup River	do	H. P. Eisenhuth	8- 6-30	781.
Loup River	do	D. S. Jenkins	8-29-30	1030.
Loup River (North)	St. Paul	F. F. LeFever	12- 3-29	225.0
Loup River (North)	do	Campbell & LeFever	1- 6-30	730.0
Loup River (North)	do	D. S. Jenkins	2-23-30	1130.0
Loup River (North)	do	F. F. LeFever	3-20-30	1090.0
Loup River (North)	do	F. F. LeFever	4- 3-30	900.0
Loup River (North)	do	F. F. LeFever	4-18-30	1760.0
Loup River (North)	do	F. F. LeFever	5- 3-30	1400.0
Loup River (North)	do	F. F. LeFever	5-21-30	1420.0
Loup River (North)	do	F. F. LeFever	6- 6-30	1540.0
Loup River (North)	do	F. F. LeFever	6-19-30	1020.0
Loup River (North)	do	H. P. Eisenhuth	7- 5-30	771.0
Loup River (North)	do	H. P. Eisenhuth	7-17-30	625.0
Loup River (North)	do	H. P. Eisenhuth	8- 7-30	769.0
Loup River (North)	do	D. S. Jenkins	8-28-30	873.0
Loup River (North)	do	R. E. Cabell	9-16-30	794.0
Loup River (North)	North of Burwell	A. E. Johnston	10-24-29	829.
Loup River (North)	Section 14-15-10			
Loup River (North)	North of St. Paul	A. E. Johnston	10-24-29	924.
Loup River (North)	do	A. E. Johnston	1-30-30	1578. *
Loup River (North)	do	A. E. Johnston	2- 1-30	1210.
Loup River (North)	do	A. E. Johnston	2-28-30	1271.
Loup River (North)	do	A. E. Johnston	3-27-30	1218.
Loup River (North)	do	A. E. Johnston	4-23-30	1425.
Loup River (North)	do	A. E. Johnston	6-12-30	947.
Loup River (North)	do	A. E. Johnston	8-16-30	1331.
Loup River (North)	do	A. E. Johnston	9-10-30	1045.
Loup River (North)	Section 22-21-18, Taylor	A. E. Johnston	10-24-29	524.
Loup River (North)	do	A. E. Johnston	11-23-29	328.
Loup River (North)	do	A. E. Johnston	12- 7-29	548.
Loup River (North)	do	A. E. Johnston	1-30-30	388.
Loup River (North)	do	A. E. Johnston	5- 1-30	918.
Loup River (North)	do	A. E. Johnston	5-17-30	1121.

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Loup River (North)	do	A. E. Johnston	6-11-30	795.
Loup River (North)	do	A. E. Johnston	8-15-30	469.8
Loup River (South)	Pleasanton	A. E. Johnston	10-26-29	137.
Loup River (South)	do	A. E. Johnston	11-26-29	119.
Loup River (South)	do	A. E. Johnston	12- 9-29	233.
Loup River (South)	do	A. E. Johnston	1-29-30	143.
Loup River (South)	do	A. E. Johnston	5- 1-30	585.
Loup River (South)	do	A. E. Johnston	5-20-30	525.
Loup River (South)	do	A. E. Johnston	6-10-30	467.
Loup River (South)	do	A. E. Johnston	8-14-30	1997.
Loup River (South)	Callaway	A. E. Johnston	10-25-29	70.
Loup River (South)	do	A. E. Johnston	5- 5-30	142.
Loup River (South)	do	A. E. Johnston	6-10-30	139.
Loup River (South)	do	A. E. Johnston	8-14-30	74.
Loup River (South)	Section 10-14-10, South of St. Paul	A. E. Johnston	10-24-29	1197.
Loup River (South)	do	A. E. Johnston	3- 1-30	1179.
Loup River (South)	do	A. E. Johnston	3-29-30	1079.
Loup River (South)	do	A. E. Johnston	4-23-30	1314.
Loup River (South)	do	A. E. Johnston	6-12-30	1861.
Loup River (South)	do	A. E. Johnston	8-16-30	2624.
Loup River (South)	do	A. E. Johnston	9-10-30	1217.
Loup River	Columbus	A. E. Johnston	10-19-29	2266.
Loup River	do	A. E. Johnston	11-20-29	2447.
Loup River	do	A. E. Johnston	1- 3-30	Ice
Loup River	do	A. E. Johnston	2- 3-30	Ice
Loup River	do	A. E. Johnston	3- 3-30	908.
Loup River	do	A. E. Johnston	3-28-30	2922.
Loup River	do	A. E. Johnston	4-25-30	3377.
Loup River	do	A. E. Johnston	6-13-30	3730.
Loup River	do	A. E. Johnston	8-17-30	3597.
Loup River	do	A. E. Johnston	9-11-30	3252.
Louse Creek	Section 12-32-10 Mouth	A. E. Johnston	10-17-29	7.0
Louse Creek	do	A. E. Johnston	2-27-30	10.1
Louse Creek	do	A. E. Johnston	3-25-30	14.5
Louse Creek	do	A. E. Johnston	9- 9-30	7.6
Lovely Creek	Section 35-2-14 W, East of Franklin	A. E. Johnston	4-29-30	4.8
Lovely Creek	do	A. E. Johnston	6-20-30	1.7
Lovely Creek	do	A. E. Johnston	9-16-30	0.3
McGuires Slough NW½ NW¼	Section 21-6-40 Mouth	C. E. Franklin	11-16-29	3.0
McGuires Slough	do	C. E. Franklin	11-28-29	3.0
McGuires Slough	do	C. E. Franklin	1- 3-30	3.2
McGuires Slough	do	C. E. Franklin	3- 9-30	2.5
McGuires Slough	do	C. E. Franklin	3-21-30	3.5
McGuires Slough	do	C. E. Franklin	4-19-30	3.7
McGuires Slough	do	C. E. Franklin	5- 3-30	2.8
McGuires Slough	do	C. E. Franklin	5-16-30	4.1

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
McGuire's Slough	do	C. E. Franklin	5-31-30	2.8
McGuire's Slough	do	C. E. Franklin	6-20-30	2.9
McGuire's Slough	do	C. E. Franklin	7-11-30	1.8
McGuire's Slough	do	C. E. Franklin	7-31-30	2.9
McGuire's Slough	do	C. E. Franklin	8- 9-30	2.6
McGuire's Slough	do	C. E. Franklin	8-29-30	2.9
McGuire's Slough	do	C. E. Franklin	9-11-30	2.6
McGuire's Slough	do	C. E. Franklin	9-21-30	2.5
Medicine Creek	NE¼ SE¼ Section 18-4-25, Cambridge	C. E. Franklin	11-20-29	37.0
Medicine Creek	do	C. E. Franklin	11-29-29	157.0
Medicine Creek	do	C. E. Franklin	12-19-29	75.0
Medicine Creek	do	C. E. Franklin	12-31-29	61.0
Medicine Creek	do	C. E. Franklin	2- 7-30	50.0
Medicine Creek	do	C. E. Franklin	2-25-30	79.0
Medicine Creek	do	C. E. Franklin	3-11-30	67.0
Medicine Creek	do	C. E. Franklin	3-24-30	65.0
Medicine Creek	do	C. E. Franklin	4-21-30	94.0
Medicine Creek	do	C. E. Franklin	5- 6-30	74.0
Medicine Creek	do	C. E. Franklin	6- 3-30	626.0
Medicine Creek	do	C. E. Franklin	6-21-30	149.0
Medicine Creek	do	C. E. Franklin	7-13-30	112.0
Medicine Creek	do	C. E. Franklin	8-12-30	221.0
Medicine Creek	do	C. E. Franklin	8-27-30	30.0
Medicine Creek	do	C. E. Franklin	9-24-30	30.0
Melbeta Seep	Section 24-21-54, ¼ mile West of Melbeta Bridge	A. W. Hall	10- 8-29	11.0
Melbeta Seep	do	A. E. Johnston	11- 8-29	7.0
Melbeta Seep	do	C. E. Franklin	12- 4-29	5.0
Melbeta Seep	do	A. E. Johnston	12-17-29	6.4
Melbeta Seep	do	A. E. Johnston	1-10-30	5.1
Melbeta Seep	do	A. E. Johnston	2-14-30	5.2
Melbeta Seep	do	A. W. Hall	3-26-30	3.5
Melbeta Seep	do	A. W. Hall	4- 9-30	2.9
Melbeta Seep	do	A. W. Hall	5-20-30	5.0
Melbeta Seep	do	A. W. Hall	6-10-30	4.0
Melbeta Seep	do	A. W. Hall	7- 2-30	0.0
Melbeta Seep	do	A. W. Hall	7-18-30	1.8
Melbeta Seep	do	A. W. Hall	8-18-30	13.7
Melbeta Seep	do	A. W. Hall	9- 5-30	1.5
Minnechduza Creek	Section 28-34-27, at mouth	A. E. Johnston	10-16-29	34.0
Minnechduza Creek	do	A. E. Johnston	12- 6-29	54.0
Minnechduza Creek	do	A. E. Johnston	2-26-30	71.0
Minnechduza Creek	do	A. E. Johnston	3-24-30	61.0
Minnechduza Creek	do	A. E. Johnston	5-16-30	123.0
Minnechduza Creek	do	A. E. Johnston	9- 8-30	10.8
Mira Creek	Section 26-18-13, North Loup	A. E. Johnston	10-24-29	0.1

DEPARTMENT OF PUBLIC WORKS

455

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Mitchell Spillway	Section 35-23-56			
	From Tri-State Canal	A. W. Hall	10- 9-29	33.0
Mitchell Spillway	do	A. E. Johnston	11- 7-29	29.0
Mitchell Spillway	do	C. E. Franklin	12- 5-29	17.0
Mitchell Spillway	do	A. E. Johnston	2-15-30	22.0
Mitchell Spillway	do	A. W. Hall	3-11-30	23.0
Mitchell Spillway	do	A. W. Hall	4-11-30	0.0†
Mitchell Spillway	do	A. W. Hall	4-24-30	14.0
Mitchell Spillway	do	A. W. Hall	6-28-30	0.0
Mitchell Spillway	do	A. W. Hall	7-18-30	0.0†
Mitchell Spillway	do	A. W. Hall	7-30-30	0.0†
Mitchell Spillway	do	A. W. Hall	8-12-30	105.0
Mitchell Spillway	do	A. W. Hall	9-11-30	0.0
Mitchell Spillway	do	A. W. Hall	9-25-30	0.0
Morrill Drain	South Line Section 13-23-57	A. W. Hall	10- 9-29	2.0
Morrill Drain	do	A. E. Johnston	11- 6-29	3.0
Morrill Drain	do	C. E. Franklin	12- 6-29	0.8*
Morrill Drain	do	A. E. Johnston	2-17-30	4.5
Morrill Drain	do	A. W. Hall	3-10-30	0.5*
Morrill Drain	do	A. W. Hall	4-11-30	0.2
Morrill Drain	do	A. W. Hall	4-24-30	0.5*
Morrill Drain	do	A. W. Hall	5-21-30	1.1
Morrill Drain	do	A. W. Hall	6-13-30	0.4
Morrill Drain	do	A. W. Hall	6-27-30	0.3
Morrill Drain	do	A. W. Hall	7-30-30	3.4
Morrill Drain	do	A. W. Hall	8-12-30	9.9
Morrill Drain	do	A. W. Hall	9- 9-30	8.9
Morrill Drain	do	A. W. Hall	9-24-30	4.8
Muddy Creek	NW¼ SW¼ Section 16-4-23,			
	Arapahoe	C. E. Franklin	11-20-29	3.0
Muddy Creek	do	C. E. Franklin	11-29-29	3.0
Muddy Creek	do	C. E. Franklin	12-19-29	2.3
Muddy Creek	do	C. E. Franklin	12-31-29	1.8
Muddy Creek	do	C. E. Franklin	2- 7-30	2.8
Muddy Creek	do	C. E. Franklin	2-25-30	4.5
Muddy Creek	do	C. E. Franklin	3-11-30	2.9
Muddy Creek	do	C. E. Franklin	3-24-30	3.8
Muddy Creek	do	C. E. Franklin	4-21-30	9.6
Muddy Creek	do	C. E. Franklin	5- 6-30	15.9
Muddy Creek	do	C. E. Franklin	6- 3-30	16.3
Muddy Creek	do	C. E. Franklin	6-21-30	16.6
Muddy Creek	do	C. E. Franklin	7-12-30	3.7
Muddy Creek	do	C. E. Franklin	8-12-30	2.5
Muddy Creek	do	C. E. Franklin	8-27-30	1.6
Muddy Creek	do	C. E. Franklin	9-10-30	24.5
Muddy Creek	do	C. E. Franklin	9-24-30	1.1
Muddy Creek	Section 16-16-19, Berwyn	A. E. Johnston	10-26-29	3.0
Muddy Creek	do	A. E. Johnston	11-26-29	1.0

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Muddy Creek	do	A. E. Johnston	12- 9-29	1.0
Muddy Creek	do	A. E. Johnston	1-31-30	4.3
Muddy Creek	do	A. E. Johnston	5- 3-30	8.4
Muddy Creek	do	A. E. Johnston	5-20-30	22.4
Muddy Creek	do	A. E. Johnston	6-10-30	5.7
Muddy Creek	do	A. E. Johnston	8-14-30	18.6
Muddy Creek	Section 29-13-15, Hazard	A. E. Johnston	10-26-29	25.0
Muddy Creek	do	A. E. Johnston	11-26-29	43.0
Muddy Creek	do	A. E. Johnston	12- 9-29	31.0
Muddy Creek	do	A. E. Johnston	1-29-30	41.0
Muddy Creek	do	A. E. Johnston	5- 1-30	108.0
Muddy Creek	do	A. E. Johnston	5-20-30	227.0
Muddy Creek	do	A. E. Johnston	6-10-30	44.0
Muddy Creek	do	A. E. Johnston	8-14-30	280.0
Muddy Creek	Section 31-15-17, Mason City	A. E. Johnston	10-26-29	12.0
Muddy Creek	do	A. E. Johnston	11-26-29	19.0
Muddy Creek	do	A. E. Johnston	12- 9-29	24.0
Muddy Creek	do	A. E. Johnston	1-29-30	26.0
Muddy Creek	do	A. E. Johnston	5- 1-30	76.0
Muddy Creek	do	A. E. Johnston	5-20-30	47.0
Muddy Creek	do	A. E. Johnston	6-10-30	25.0
Muddy Creek	do	A. E. Johnston	8-14-30	137.0
Niobrara River	Crane Bridge South of Eli	A. E. Johnston	10-14-29	337.0
Niobrara River	do	A. E. Johnston	12- 5-29	400.0
Niobrara River	do	A. E. Johnston	5-24-30	867.0
Niobrara River	do	A. E. Johnston	3-21-30	427.0
Niobrara River	do	A. E. Johnston	5-15-30	595.0
Niobrara River	do	A. E. Johnston	9- 6-30	297.0
Niobrara River	Section 28-34-27, Below Dam at Valentine	A. E. Johnston	10-16-29	906.0
Niobrara River	do	A. E. Johnston	12- 6-29	1107.0
Niobrara River	do	A. E. Johnston	2-28-30	1158.0
Niobrara River	do	A. E. Johnston	3-24-30	1075.0
Niobrara River	do	A. E. Johnston	5-16-30	1691.0
Niobrara River	do	A. E. Johnston	9- 8-30	950.0
Niobrara River	Section 5-28-51, South of Marsland	A. E. Johnston	10- 9-29	23.0
Niobrara River	do	A. E. Johnston	12- 3-29	42.0
Niobrara River	do	A. E. Johnston	2-20-30	119.0
Niobrara River	do	A. E. Johnston	3-18-30	72.0
Niobrara River	do	A. E. Johnston	5-13-30	47.0
Niobrara River	do	A. E. Johnston	9- 1-30	46.0
Niobrara River	Section 27-29-48, Dunlap	A. E. Johnston	10- 9-29	43.0
Niobrara River	do	A. E. Johnston	2-20-30	132.0
Niobrara River	do	A. E. Johnston	5-13-30	135.0
Niobrara River	do	A. E. Johnston	9- 1-30	51.8
Niobrara River	do	A. E. Johnston	9-27-30	47.0

DEPARTMENT OF PUBLIC WORKS

457

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Niobrara River	Section 9-29-56, South of Harrison	A. E. Johnston	10- 9-29	16.0
Niobrara River	.....do.....	A. E. Johnston	3-18-30	29.0
Niobrara River	.....do.....	A. E. Johnston	9- 2-30	10.8
Niobrara River	.....do.....	A. E. Johnston	9-30-30	13.2
Niobrara River	Section 4-28-53, Octave- Harris Branch	A. E. Johnston	3-18-30	44.0
Niobrara River	Section 7-28-55, Agate	A. E. Johnston	10- 9-29	14.0
Niobrara River	.....do.....	A. E. Johnston	3-18-30	38.0
Niobrara River	.....do.....	A. E. Johnston	9- 2-30	18.9
Niobrara River	Section 7-28-53, Below Mouth of Whistle Creek	A. E. Johnston	10- 9-29	15.0
Niobrara River	.....do.....	A. E. Johnston	3-18-30	52.0
Niobrara River	.....do.....	A. E. Johnston	9- 1-30	33.0
Niobrara River	Section 20-31-58, Wyoming State Line	A. E. Johnston	10-10-29	9.0
Niobrara River	.....do.....	A. E. Johnston	3-19-30	12.8
Niobrara River	.....do.....	A. E. Johnston	9- 2-30	8.2
Niobrara River	.....do.....	A. E. Johnston	9-30-30	9.2

Furnished by the United States Geological Survey

Niobrara River	Gordon	F. B. Campbell	10- 9-29	147.0
Niobrara River	.....do.....	F. F. LeFever	12- 8-29	164.0
Niobrara River	.....do.....	LeFever & Campbell	1-17-30	121.0
Niobrara River	.....do.....	D. S. Jenkins	3-16-30	221.0
Niobrara River	.....do.....	F. F. LeFever	4-11-30	187.0
Niobrara River	.....do.....	F. F. LeFever	5-15-30	323.0
Niobrara River	.....do.....	F. F. LeFever	7-14-30	107.0
Niobrara River	.....do.....	H. P. Eisenhuth	7-16-30	93.0
Niobrara River	.....do.....	H. P. Eisenhuth	8-19-30	118.0
Niobrara River	.....do.....	D. S. Jenkins	9-26-30	179.0
Niobrara River	Valentine	F. B. Campbell	10- 8-29	747.0
Niobrara River	.....do.....	LeFever & Campbell	1-17-30	768.0
Niobrara River	.....do.....	D. S. Jenkins	3-16-30	988.0
Niobrara River	.....do.....	F. F. LeFever	4-11-30	876.0
Niobrara River	.....do.....	F. F. LeFever	5-14-30	1790.0
Niobrara River	.....do.....	F. F. LeFever	7-12-30	712.0
Niobrara River	.....do.....	H. P. Eisenhuth	7-16-30	747.0
Niobrara River	.....do.....	H. P. Eisenhuth	8-19-30	790.0
Niobrara River	.....do.....	D. S. Jenkins	9-26-30	850.0
Niobrara River	5 Miles South of Lynch	A. E. Johnston	10-17-29	1083.0
Niobrara River	.....do.....	A. E. Johnston	2-27-30	1963.0
Niobrara River	.....do.....	A. E. Johnston	3-25-30	1392.0
Niobrara River	.....do.....	A. E. Johnston	9- 9-30	851.0
Norfolk River	Below Mill at Norfolk	A. E. Johnston	1- 3-30	68.0
Norfolk River	.....do.....	A. E. Johnston	6-14-30	93.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Oak Creek	Capital Beach, near Lincoln	A. E. Johnston	10-23-29	0.7
Oak Creek	do	A. E. Johnston	3- 4-30	12.1
Oak Creek	do	A. E. Johnston	4- 1-30	10.7
Oak Creek	do	A. E. Johnston	4-28-30	13.8
Oak Creek	do	A. E. Johnston	6-19-30	26.4
Oak Creek	do	A. E. Johnston	9-15-30	5.3
Otter Creek	Section 9-15-40	A. E. Johnston	10- 3-29	25.0
Otter Creek	do	A. E. Johnston	11-14-29	24.0
Otter Creek	do	A. E. Johnston	11-29-29	26.0
Otter Creek	do	A. E. Johnston	12-16-29	24.0
Otter Creek	do	A. E. Johnston	1- 7-30	23.4
Otter Creek	do	A. E. Johnston	1-23-30	25.0
Otter Creek	do	A. E. Johnston	2-11-30	23.0
Otter Creek	do	A. E. Johnston	3-12-30	28.0
Otter Creek	do	A. E. Johnston	4-12-30	29.0
Otter Creek	do	A. E. Johnston	4-17-30	26.3
Otter Creek	do	A. E. Johnston	5- 9-30	31.0
Otter Creek	do	A. E. Johnston	6- 4-30	30.0
Otter Creek	do	A. W. Hall	6-20-30	10.7
Otter Creek	do	A. W. Hall	7-23-30	2.1
Otter Creek	do	A. W. Hall	7-25-30	22.0
Otter Creek	do	A. W. Hall	8- 2-30	9.0
Otter Creek	do	A. W. Hall	8- 4-30	20.0
Otter Creek	do	A. W. Hall	8- 7-30	26.0
Otter Creek	do	A. W. Hall	8-11-30	24.0
Otter Creek	do	A. W. Hall	8-27-30	30.5
Otter Creek	do	A. W. Hall	9-23-30	28.0
Papillion Creek (Little)	Section 35-15-13 E	A. E. Johnston	11-21-29	7.0
Papillion Creek (Little)	do	A. E. Johnston	2- 4-30	7.4
Papillion Creek (Little)	do	A. E. Johnston	3- 4-30	5.1
Papillion Creek (Little)	do	A. E. Johnston	3-31-30	7.1
Papillion Creek (Little)	do	A. E. Johnston	4-26-30	6.6
Papillion Creek (Little)	do	A. E. Johnston	6-18-30	6.3
Papillion Creek (Little)	do	A. E. Johnston	8-18-30	20.0
Papillion Creek (Little)	do	A. E. Johnston	9-13-30	3.5
Pawnee Creek	West Line Section 4-12-27	A. E. Johnston	12-12-29	14.0
Pawnee Creek	do	A. E. Johnston	1- 4-30	11.1
Pawnee Creek	do	A. E. Johnston	1-28-30	5.7
Pawnee Creek	do	A. E. Johnston	2- 7-30	10.8
Pawnee Creek	do	A. E. Johnston	3- 8-30	12.1
Pawnee Creek	do	A. E. Johnston	4- 5-30	8.8
Pawnee Creek	do	A. E. Johnston	4-21-30	15.0
Pawnee Creek	do	A. E. Johnston	5- 6-30	12.1
Pawnee Creek	do	A. E. Johnston	5-22-30	13.8
Pawnee Creek	do	A. E. Johnston	6- 7-30	9.4
Pawnee Creek	do	A. E. Johnston	6-24-30	8.2
Pawnee Creek	do	A. E. Johnston	7- 3-30	6.3
Pawnee Creek	do	A. E. Johnston	7- 7-30	7.3
Pawnee Creek	do	A. E. Johnston	7-19-30	5.5
Pawnee Creek	do	A. E. Johnston	7-29-30	5.1

STREAM MEASUREMENTS—Continued
Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Pawnee Creek.....	do.....	A. E. Johnston.....	7-31-30	6.6
Pawnee Creek.....	do.....	A. E. Johnston.....	8-13-30	6.7
Pawnee Creek.....	do.....	A. E. Johnston.....	8-22-30	4.8
Pawnee Creek.....	do.....	A. E. Johnston.....	9-19-30	9.4
Pepper Creek.....	Section 35-30-48, Alliance- Chadron Highway.....	A. E. Johnston.....	9-27-30	0.6*
Pine Creek.....	Below Mill at Long Pine.....	A. E. Johnston.....	12- 7-29	60.0
Pine Creek.....	do.....	A. E. Johnston.....	5-17-30	64.0§
Pine Creek.....	Section 33-30-44 Colclesser Mill.....	A. E. Johnston.....	10-12-29	22.0
Pine Creek.....	do.....	A. E. Johnston.....	12- 5-29	22.0
Pine Creek.....	do.....	A. E. Johnston.....	2-24-30	25.9
Pine Creek.....	do.....	A. E. Johnston.....	3-21-30	32.2
Pine Creek.....	do.....	A. E. Johnston.....	5-15-30	31.2
Pine Creek.....	do.....	A. E. Johnston.....	9- 5-30	35.7
Plum Creek.....	Section 22-32-22, at Mouth.....	A. E. Johnston.....	5-17-30	452.0
Ponca Creek.....	Section 14-33-10, Lynch.....	A. E. Johnston.....	10-17-25	1.0
Ponca Creek.....	do.....	A. E. Johnston.....	2-27-30	17.7
Ponca Creek.....	do.....	A. E. Johnston.....	3-25-30	30.0
Ponca Creek.....	do.....	A. E. Johnston.....	9- 9-30	102.0
Prairie Creek.....	Section 24-16-3, 5 miles East of Silver Creek.....	A. E. Johnston.....	10-19-29	5.0
Prairie Creek.....	do.....	A. E. Johnston.....	11-19-29	9.0
Prairie Creek.....	do.....	A. E. Johnston.....	3- 1-30	12.9
Prairie Creek.....	do.....	A. E. Johnston.....	3-28-30	13.7
Prairie Creek.....	do.....	A. E. Johnston.....	4-24-30	38.5
Prairie Creek.....	do.....	A. E. Johnston.....	6-13-30	242.0
Prairie Creek.....	do.....	A. E. Johnston.....	8-16-30	19.6
Prairie Creek.....	do.....	A. E. Johnston.....	9-11-30	14.4
Pullen Drain.....	Section 24-24-61.....	C. E. Franklin.....	12- 6-29	0.6*
Pumpkinseed Creek.....	Section 12-19-50 Mouth.....	A. E. Johnston.....	10- 7-29	34.0
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	11-13-29	33.0
Pumpkinseed Creek.....	do.....	C. E. Franklin.....	12-10-29	62.0
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	1- 9-30	61.0
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	1-22-30	68.6
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	2-12-30	86.0
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	3-14-30	66.0
Pumpkinseed Creek.....	do.....	A. W. Hall.....	3-24-30	46.0
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	4-15-30	65.0
Pumpkinseed Creek.....	do.....	A. W. Hall.....	4-22-30	39.0
Pumpkinseed Creek.....	do.....	A. E. Johnston.....	5-12-30	108.0
Pumpkinseed Creek.....	do.....	A. W. Hall.....	5-26-30	62.0
Pumpkinseed Creek.....	do.....	A. W. Hall.....	7- 5-30	25.9
Pumpkinseed Creek.....	do.....	A. W. Hall.....	7-15-30	45.9
Pumpkinseed Creek.....	do.....	A. W. Hall.....	7-23-30	31.9
Pumpkinseed Creek.....	do.....	A. W. Hall.....	8- 9-30	40.7
Pumpkinseed Creek.....	do.....	A. W. Hall.....	8-19-30	54.9

§ Snowing

* Estimated

REPORT OF SECRETARY

 STREAM MEASUREMENTS—Continued
 Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Pumpkinseed Creek	Gering-Kimball Highway	C. E. Franklin	11-13-29	12.0
Pumpkinseed Creek	do	C. E. Franklin	12-12-29	17.0
Pumpkinseed Creek	do	C. E. Franklin	12-27-29	10.0
Pumpkinseed Creek	do	C. E. Franklin	1-11-30	9.8
Pumpkinseed Creek	do	C. E. Franklin	1-27-30	7.8
Pumpkinseed Creek	do	C. E. Franklin	2-17-30	17.4
Pumpkinseed Creek	do	C. E. Franklin	4-25-30	1.0
Pumpkinseed Creek	do	C. E. Franklin	5-9-30	10.7
Pumpkinseed Creek	do	C. E. Franklin	5-23-30	16.7
Pumpkinseed Creek	do	C. E. Franklin	6-9-30	8.5
Pumpkinseed Creek	do	C. E. Franklin	6-27-30	1.2
Pumpkinseed Creek	do	C. E. Franklin	8-23-30	5.9
Pumpkinseed Creek	do	A. E. Johnston	9-26-30	76.9
Pumpkinseed Creek	Section 28-19-50, 5 miles			
	South of Bridgeport	A. W. Hall	3-24-30	33.0
Pumpkinseed Creek	do	A. W. Hall	4-21-30	10.0
Pumpkinseed Creek	do	A. W. Hall	5-26-30	54.0
Pumpkinseed Creek	do	A. W. Hall	7-23-30	9.4
Pumpkinseed Creek	do	A. W. Hall	8-8-30	5.8
Pumpkinseed Creek	do	A. W. Hall	8-22-30	14.5
Pumpkinseed Creek	do	A. W. Hall	9-4-30	24.9
Red Bird Creek	Section 11-32-10	A. E. Johnston	10-17-29	33.0
Red Bird Creek	do	A. E. Johnston	2-27-30	52.0
Red Bird Creek	do	A. E. Johnston	3-25-30	39.0
Red Bird Creek	do	A. E. Johnston	9-9-30	30.0
Red Willow Creek	Southwest corner Section 6-20-51	A. W. Hall	10-7-29	91.0
Red Willow Creek	do	A. W. Hall	12-13-29	68.0
Red Willow Creek	do	C. E. Franklin	12-9-29	56.0
Red Willow Creek	do	A. E. Johnston	12-19-30	74.0
Red Willow Creek	do	A. E. Johnston	1-15-30	49.0
Red Willow Creek	do	A. E. Johnston	2-14-30	53.0
Red Willow Creek	do	A. W. Hall	3-25-30	39.0
Red Willow Creek	do	A. W. Hall	4-8-30	29.0
Red Willow Creek	do	A. W. Hall	4-22-30	30.0
Red Willow Creek	do	A. W. Hall	5-14-30	127.0
Red Willow Creek	do	A. W. Hall	5-31-30	160.0
Red Willow Creek	do	A. W. Hall	7-14-30	3.6
Red Willow Creek	do	A. W. Hall	8-18-30	300.0
Red Willow Creek	do	A. W. Hall	8-25-30	212.0
Red Willow Creek	do	A. W. Hall	9-23-30	83.6
Red Willow Creek	NE¼ NE¼ Section 17-3-28	C. E. Franklin	11-18-29	15.0
Red Willow Creek	do	C. E. Franklin	11-29-29	27.0
Red Willow Creek	do	C. E. Franklin	12-19-29	20.0
Red Willow Creek	do	C. E. Franklin	12-31-29	18.0
Red Willow Creek	do	C. E. Franklin	2-6-30	21.0
Red Willow Creek	do	C. E. Franklin	2-25-30	36.0
Red Willow Creek	do	C. E. Franklin	3-11-30	27.0
Red Willow Creek	do	C. E. Franklin	3-23-30	30.0
Red Willow Creek	do	C. E. Franklin	4-21-30	45.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Red Willow Creek.....do.....		C. E. Franklin.....	5- 6-30	36.0
Red Willow Creek.....do.....		C. E. Franklin.....	5-19-30	78.0
Red Willow Creek.....do.....		C. E. Franklin.....	6- 3-30	32.0
Red Willow Creek.....do.....		C. E. Franklin.....	6-21-30	39.0
Red Willow Creek.....do.....		C. E. Franklin.....	7-13-30	104.0
Red Willow Creek.....do.....		C. E. Franklin.....	8-12-30	35.0
Red Willow Creek.....do.....		C. E. Franklin.....	8-27-30	14.0
Red Willow Creek.....do.....		C. E. Franklin.....	9-10-30	33.0
Red Willow Creek.....do.....		C. E. Franklin.....	9-24-30	11.4
Republican River (So. Branch).....Section 19-1-37,				
	South of Benkelman.....	C. E. Franklin.....	11-21-29	24.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	11-30-29	50.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	12-21-29	34.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	1- 4-30	25.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	2- 8-30	97.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	2-27-30	62.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	3-13-30	39.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	3-25-30	40.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	4-22-30	47.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	5- 7-30	48.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	5-20-30	207.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	6- 5-30	257.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	6-24-30	29.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	7-16-30	1.0*
Republican River (So. Branch).....do.....		C. E. Franklin.....	8- 1-30	71.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	8-13-30	102.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	8-30-30	56.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	9-12-30	60.0
Republican River (So. Branch).....do.....		C. E. Franklin.....	9-26-30	26.0
Republican River (No. Branch).....Section 19-1-37,				
	Benkelman.....	C. E. Franklin.....	11-21-29	90.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	11-30-29	240.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	12-21-29	81.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	1- 4-30	125.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	2- 8-30	243.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	2-27-30	153.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	3-13-30	70.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	3-25-30	165.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	4-22-30	54.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	5- 7-30	69.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	5-20-30	194.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	6- 5-30	435.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	6-24-30	69.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	7-16-30	45.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	8- 1-30	83.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	8-13-30	38.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	8-30-30	37.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	9-12-30	51.0
Republican River (No. Branch).....do.....		C. E. Franklin.....	9-26-30	23.0

* Estimated

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Republican River	Bostwick	A. E. Johnston	3- 6-30	849.0
Republican River	do	A. E. Johnston	4- 2-30	593.0
Republican River	do	A. E. Johnston	4-29-30	847.0
Republican River	Section 9-1-42,			
	Colorado-Nebraska Line	C. E. Franklin	11-21-29	62.0
Republican River	do	C. E. Franklin	11-30-29	65.0
Republican River	do	C. E. Franklin	12-21-29	67.0
Republican River	do	C. E. Franklin	1- 4-30	85.0
Republican River	do	C. E. Franklin	2- 8-30	63.0
Republican River	do	C. E. Franklin	2-27-30	59.0
Republican River	do	C. E. Franklin	3-13-30	106.0
Republican River	do	C. E. Franklin	3-25-30	77.0
Republican River	do	C. E. Franklin	4-23-30	59.0
Republican River	do	C. E. Franklin	5- 8-30	44.0
Republican River	do	C. E. Franklin	5-20-30	64.0
Republican River	do	C. E. Franklin	6- 5-30	104.0
Republican River	do	C. E. Franklin	6-24-30	33.0
Republican River	do	C. E. Franklin	7-16-30	54.0
Republican River	do	C. E. Franklin	8- 1-30	31.0
Republican River	do	C. E. Franklin	8-14-30	35.0
Republican River	do	C. E. Franklin	8-30-30	51.0
Republican River	do	C. E. Franklin	9-12-30	21.9
Republican River	do	C. E. Franklin	9-26-30	34.0
Republican River	Between Section 16 & 17-3-31,			
	Culbertson	C. E. Franklin	11-18-29	89.0
Republican River	do	C. E. Franklin	11-28-29	179.0
Republican River	do	C. E. Franklin	12-17-29	178.0
Republican River	do	C. E. Franklin	12-30-29	116.0
Republican River	do	C. E. Franklin	2- 5-30	75.0
Republican River	do	C. E. Franklin	2-24-30	242.0
Republican River	do	C. E. Franklin	3-10-30	246.0
Republican River	do	C. E. Franklin	3-22-30	219.0
Republican River	do	C. E. Franklin	4-20-30	105.0
Republican River	do	C. E. Franklin	5- 5-30	216.0
Republican River	do	C. E. Franklin	5-19-30	552.0
Republican River	do	C. E. Franklin	6- 1-30	118.0
Republican River	do	C. E. Franklin	6- 4-30	259.0
Republican River	do	C. E. Franklin	6-22-30	98.0
Republican River	do	C. E. Franklin	7-11-30	0.0
Republican River	do	C. E. Franklin	7-29-30	138.7*
Republican River	do	C. E. Franklin	8-11-30	27.0
Republican River	do	C. E. Franklin	8-26-30	152.0
Republican River	do	C. E. Franklin	9- 9-30	212.0
Republican River	do	C. E. Franklin	9-23-30	38.0
Republican River	SE¼ Section 22-14-24, Holbrook	C. E. Franklin	11-20-29	445.0
Republican River	do	C. E. Franklin	11-29-29	489.0
Republican River	do	C. E. Franklin	12-19-29	405.0
Republican River	do	C. E. Franklin	12-31-29	431.0
Republican River	do	C. E. Franklin	2- 7-30	522.0
Republican River	do	C. E. Franklin	2-25-30	454.0

STREAM MEASUREMENTS—Continued

Furnished by the United States Geological Survey
Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Republican River	Max	F. F. LeFever	11-20-29	156.
Republican River	do	F. F. LeFever	3-18-30	174.
Republican River	do	F. F. LeFever	4-17-30	225.
Republican River	do	F. F. LeFever	5- 1-30	133.
Republican River	do	F. F. LeFever	5-19-30	412.
Republican River	do	H. P. Eisenhuth	7- 2-30	19.
Republican River	do	H. P. Eisenhuth	8- 4-30	67.
Republican River	do	D. S. Jenkins	8-30-30	159.
Republican River	Bloomington	F. F. LeFever	11-21-29	458.
Republican River	do	LeFever & Campbell	1- 8-30	327.
Republican River	do	F. F. LeFever	3-19-30	498.
Republican River	do	F. F. LeFever	4-17-30	1380.
Republican River	do	F. F. LeFever	5- 2-30	1970.
Republican River	do	F. F. LeFever	5-20-30	1970.
Republican River	do	H. P. Eisenhuth	7- 3-30	400.
Republican River	do	H. P. Eisenhuth	8- 5-30	272.
Republican River	do	D. S. Jenkins	8-29-30	350.
Republican River	Section 31-3-29, McCook	C. E. Franklin	11-18-29	464.0
Republican River	do	C. E. Franklin	11-28-29	598.0
Republican River	do	C. E. Franklin	12-17-29	492.0
Republican River	do	C. E. Franklin	12-30-29	300.0
Republican River	do	C. E. Franklin	2- 5-30	119.0
Republican River	do	C. E. Franklin	2-24-30	469.0
Republican River	do	C. E. Franklin	3-12-30	444.0
Republican River	do	C. E. Franklin	3-23-30	391.0
Republican River	do	C. E. Franklin	4-20-30	392.0
Republican River	do	C. E. Franklin	5- 5-30	310.0
Republican River	do	C. E. Franklin	5-19-30	921.0
Republican River	do	C. E. Franklin	6- 1-30	331.0
Republican River	do	C. E. Franklin	6- 4-30	592.0
Republican River	do	C. E. Franklin	6-22-30	188.0
Republican River	do	C. E. Franklin	7-29-30	275.0
Republican River	do	C. E. Franklin	8-11-30	87.0
Republican River	do	C. E. Franklin	8-26-30	238.0
Republican River	do	C. E. Franklin	9- 9-30	300.0
Republican River	do	C. E. Franklin	9-23-30	107.0
Republican River	Oxford	A. E. Johnston	4-30-29	4781.0
Republican River	Section 11-1-42, Sanborn	C. E. Franklin	11-21-29	65.0
Republican River	do	C. E. Franklin	11-30-29	78.0
Republican River	do	C. E. Franklin	12-21-29	71.0
Republican River	do	C. E. Franklin	5- 8-30	34.0
Republican River	do	C. E. Franklin	5-20-30	79.0
Republican River	do	C. E. Franklin	6- 5-30	97.0
Republican River	do	C. E. Franklin	6-24-30	37.0
Republican River	do	C. E. Franklin	7-16-30	64.0
Republican River	do	C. E. Franklin	8- 1-30	34.0
Republican River	do	C. E. Franklin	8-14-30	40.0
Republican River	do	C. E. Franklin	8-30-30	50.0
Republican River	do	C. E. Franklin	9-12-30	26.8

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Republican River.....	Superior.....	A. E. Johnston.....	6-20-30	2707.0
Republican River.....	do.....	A. E. Johnston.....	9-16-30	770.0
Rock Creek.....	Section 21-1-39, Parks.....	C. E. Franklin.....	11-21-29	13.0
Rock Creek.....	do.....	C. E. Franklin.....	11-30-29	13.0
Rock Creek.....	do.....	C. E. Franklin.....	12-21-29	10.0
Rock Creek.....	do.....	C. E. Franklin.....	1- 4-30	17.0
Rock Creek.....	do.....	C. E. Franklin.....	2- 8-30	14.0
Rock Creek.....	do.....	C. E. Franklin.....	2-27-30	15.0
Rock Creek.....	do.....	C. E. Franklin.....	3-13-30	18.0
Rock Creek.....	do.....	C. E. Franklin.....	3-25-30	16.0
Rock Creek.....	do.....	C. E. Franklin.....	4-23-30	15.0
Rock Creek.....	do.....	C. E. Franklin.....	5- 7-30	14.0
Rock Creek.....	do.....	C. E. Franklin.....	5-20-30	16.0
Rock Creek.....	do.....	C. E. Franklin.....	6- 5-30	17.0
Rock Creek.....	do.....	C. E. Franklin.....	6-24-30	15.0
Rock Creek.....	do.....	C. E. Franklin.....	7-16-30	12.0
Rock Creek.....	do.....	C. E. Franklin.....	8- 1-30	12.0
Rock Creek.....	do.....	C. E. Franklin.....	8-14-30	18.0
Rock Creek.....	do.....	C. E. Franklin.....	8-30-30	12.0
Rock Creek.....	do.....	C. E. Franklin.....	9-12-30	14.0
Rock Creek.....	do.....	C. E. Franklin.....	9-26-30	13.0
Rock Creek.....	Section 12-32-22, South of Spring- view on Highway No. 20.....	A. E. Johnston.....	5-17-30	5.6
Rush Creek.....	Section 17-17-45, above mouth ½ mile.....	A. E. Johnston.....	11-13-29	0.0
Rush Creek.....	do.....	A. E. Johnston.....	3-13-30	1.9
Rush Creek.....	do.....	A. E. Johnston.....	4-15-30	0.0
Rush Creek.....	do.....	A. E. Johnston.....	8-29-30	5.1
Rush Creek.....	do.....	A. E. Johnston.....	9-26-30	6.0
Salt Creek.....	Section 2-9-6, Below C. B. & Q. Dam.....	A. E. Johnston.....	10-23-29	6.0
Salt Creek.....	do.....	A. E. Johnston.....	11-22-29	8.0
Salt Creek.....	do.....	A. E. Johnston.....	2- 4-30	67.0
Salt Creek.....	do.....	A. E. Johnston.....	3- 4-30	6.0
Salt Creek.....	do.....	A. E. Johnston.....	4- 1-30	8.0
Salt Creek.....	do.....	A. E. Johnston.....	4-28-30	13.0
Salt Creek.....	do.....	A. E. Johnston.....	6-19-30	7.0
Salt Creek.....	do.....	A. E. Johnston.....	8-20-30	513.0
Salt Creek.....	do.....	A. E. Johnston.....	9-15-30	6.8
Sand Creek.....	Section 10-15-40.....	A. E. Johnston.....	10- 3-29	5.0
Sand Creek.....	do.....	A. E. Johnston.....	11-14-29	5.0
Sand Creek.....	do.....	A. E. Johnston.....	11-29-29	4.0
Sand Creek.....	do.....	A. E. Johnston.....	12-16-29	5.0
Sand Creek.....	do.....	A. E. Johnston.....	1- 7-30	5.0
Sand Creek.....	do.....	A. E. Johnston.....	1-23-30	3.7
Sand Creek.....	do.....	A. E. Johnston.....	2-11-30	4.8
Sand Creek.....	do.....	A. E. Johnston.....	3-12-30	5.0
Sand Creek.....	do.....	A. E. Johnston.....	4-12-30	4.1
Sand Creek.....	do.....	A. E. Johnston.....	4-17-30	3.9
Sand Creek.....	do.....	A. E. Johnston.....	5- 9-30	4.2

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Sand Creek.....	do.....	A. E. Johnston.....	6- 4-30	6.4
Sand Creek.....	do.....	A. E. Johnston.....	6-20-30	7.8
Sand Creek.....	do.....	A. E. Johnston.....	7-23-30	3.4
Sand Creek.....	do.....	A. E. Johnston.....	7-25-30	1.1
Sand Creek.....	do.....	A. E. Johnston.....	8- 2-30	4.0
Sand Creek.....	do.....	A. E. Johnston.....	8- 4-30	4.0
Sand Creek.....	do.....	A. E. Johnston.....	8- 7-30	3.0
Sand Creek.....	do.....	A. E. Johnston.....	8-11-30	3.7
Sand Creek.....	do.....	A. E. Johnston.....	8-27-30	3.8
Sand Creek.....	do.....	A. E. Johnston.....	9-23-30	3.1
Sand Creek.....	½ Mile East of Callaway.....	A. E. Johnston.....	5- 3-30	2.5
Sand Creek.....	do.....	A. E. Johnston.....	6-10-30	4.8
Schlager Creek.....	Section 24-33-28, Mouth.....	A. E. Johnston.....	10-15-29	10.0
Schlager Creek.....	do.....	A. E. Johnston.....	12- 6-29	13.0
Schlager Creek.....	do.....	A. E. Johnston.....	2-25-30	13.9
Schlager Creek.....	do.....	A. E. Johnston.....	3-24-30	15.5
Schlager Creek.....	do.....	A. E. Johnston.....	5-16-30	19.5
Schlager Creek.....	do.....	A. E. Johnston.....	9- 8-30	15.0
Scottsbluff Drain.....	Section 25-22-54.....	A. W. Hall.....	10- 8-29	23.0
Scottsbluff Drain.....	do.....	A. E. Johnston.....	11- 8-29	21.0
Scottsbluff Drain.....	do.....	C. E. Franklin.....	12- 4-29	16.0
Scottsbluff Drain.....	do.....	A. E. Johnston.....	12-19-29	19.0
Scottsbluff Drain.....	do.....	A. E. Johnston.....	1-14-30	22.0
Scottsbluff Drain.....	do.....	A. E. Johnston.....	2-19-30	11.4
Scottsbluff Drain.....	do.....	A. W. Hall.....	3-11-30	7.9
Scottsbluff Drain.....	do.....	A. W. Hall.....	3-26-30	6.5
Scottsbluff Drain.....	do.....	A. W. Hall.....	4- 9-30	7.4
Scottsbluff Drain.....	do.....	A. W. Hall.....	4-23-30	5.1
Scottsbluff Drain.....	do.....	A. W. Hall.....	7-18-30	17.0
Scottsbluff Drain.....	do.....	A. W. Hall.....	8-13-30	20.2
Scottsbluff Drain.....	do.....	A. W. Hall.....	9-11-30	21.3
Sheep Creek.....	NW¼ Section 21-23-57.....	A. W. Hall.....	10-10-29	117.0
Sheep Creek.....	do.....	A. E. Johnston.....	11- 6-29	124.0
Sheep Creek.....	do.....	C. E. Franklin.....	12- 6-29	94.0
Sheep Creek.....	do.....	A. E. Johnston.....	12-18-29	88.0
Sheep Creek.....	do.....	A. E. Johnston.....	1-13-30	81.0
Sheep Creek.....	do.....	A. E. Johnston.....	2-18-30	89.0
Sheep Creek.....	do.....	A. W. Hall.....	3-27-30	70.0
Sheep Creek.....	do.....	A. W. Hall.....	4-10-30	71.0
Sheep Creek.....	do.....	A. W. Hall.....	4-25-30	75.0
Sheep Creek.....	do.....	A. W. Hall.....	5-21-30	78.0
Sheep Creek.....	do.....	A. W. Hall.....	6-27-30	5.1
Sheep Creek.....	do.....	A. W. Hall.....	7-30-30	2.2
Sheep Creek.....	do.....	A. W. Hall.....	8-12-30	20.0
Sheep Creek.....	do.....	A. W. Hall.....	9-11-30	22.0
Sheep Creek.....	do.....	A. W. Hall.....	9-24-30	14.9
Shell Creek.....	Section 12-17-3E, East of Schuyler.....	A. E. Johnston.....	10-21-29	17.0
Shell Creek.....	do.....	A. E. Johnston.....	11-20-29	19.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Shell Creek	do.	A. E. Johnston	3- 3-30	31.0
Shell Creek	do.	A. E. Johnston	3-29-30	29.0
Shell Creek	do.	A. E. Johnston	4-25-30	44.0
Shell Creek	do.	A. E. Johnston	6-17-30	43.0
Shell Creek	do.	A. E. Johnston	8-18-30	31.0
Shell Creek	do.	A. E. Johnston	9-12-30	17.4
Silver Creek	Section 6-15-3, 1 Mile West of Silver Creek	A. E. Johnston	10-19-29	3.0
Silver Creek	do.	A. E. Johnston	11-19-29	3.0
Silver Creek	do.	A. E. Johnston	1- 3-30	1.8
Silver Creek	do.	A. E. Johnston	3- 1-30	4.4
Silver Creek	do.	A. E. Johnston	3-28-30	3.6
Silver Creek	do.	A. E. Johnston	4-24-30	4.7
Silver Creek	do.	A. E. Johnston	6-13-30	64.0
Silver Creek	do.	A. E. Johnston	8-16-30	1.1
Silver Creek	do.	A. E. Johnston	9-11-30	1.2
Silvernail Drain	Section 6-19-49	A. E. Johnston	10- 7-29	10.0
Silvernail Drain	do.	A. W. Hall	12-13-29	12.0
Silvernail Drain	do.	C. E. Franklin	12- 9-29	8.0
Silvernail Drain	do.	A. E. Johnston	1- 9-30	9.0
Silvernail Drain	do.	A. E. Johnston	2-13-30	9.0
Silvernail Drain	do.	A. E. Johnston	3-15-30	8.0
Silvernail Drain	do.	A. W. Hall	3-25-30	6.0
Silvernail Drain	do.	A. W. Hall	4- 8-30	9.0
Silvernail Drain	do.	A. W. Hall	4-21-30	5.0
Silvernail Drain	do.	A. E. Johnston	5-12-30	8.0
Silvernail Drain	do.	A. E. Johnston	5-28-30	11.0
Silvernail Drain	do.	A. E. Johnston	6- 2-30	10.0
Silvernail Drain	do.	A. W. Hall	6-20-30	7.2
Silvernail Drain	do.	A. W. Hall	7-10-30	6.8
Silvernail Drain	do.	A. W. Hall	8-20-30	6.9
Silvernail Drain	do.	A. W. Hall	9- 4-30	9.3
Silvernail Drain	do.	A. E. Johnston	9-26-30	30.0
Skunk Creek	Section 1-14-37	A. E. Johnston	10- 3-29	2.0
Skunk Creek	do.	A. E. Johnston	11-14-29	4.0
Skunk Creek	do.	A. E. Johnston	11-29-29	3.0
Skunk Creek	do.	A. E. Johnston	1- 6-30	3.7
Skunk Creek	do.	A. E. Johnston	2-10-30	8.6
Skunk Creek	do.	A. E. Johnston	3-11-30	1.9
Skunk Creek	do.	A. E. Johnston	4-11-30	3.1
Skunk Creek	do.	A. E. Johnston	4-17-30	4.2
Skunk Creek	do.	A. E. Johnston	6- 4-30	2.9
Skunk Creek	do.	A. E. Johnston	7-11-30	0.5
Skunk Creek	do.	A. E. Johnston	7-17-30	2.0
Skunk Creek	do.	A. E. Johnston	7-25-30	2.1
Skunk Creek	do.	A. E. Johnston	8- 2-30	0.2
Skunk Creek	do.	A. E. Johnston	8- 7-30	2.5
Skunk Creek	do.	A. E. Johnston	8-12-30	2.0
Skunk Creek	do.	A. E. Johnston	8-27-30	2.2
Skunk Creek	do.	A. E. Johnston	9-23-30	2.4

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Snake Creek.....	Section 8-24-48, Alliance- Bridgeport Highway.....	A. E. Johnston.....	10- 8-29	0.0
Snake Creek.....	do.....	A. E. Johnston.....	12- 3-29	0.0
Snake Creek.....	do.....	A. E. Johnston.....	2-20-30	8.5
Snake Creek.....	do.....	A. E. Johnston.....	3-17-30	10.2
Snake Creek.....	do.....	A. E. Johnston.....	5-13-30	96.1
Snake Creek.....	do.....	A. E. Johnston.....	8-30-30	0.0
Snake Creek.....	do.....	A. E. Johnston.....	9-27-30	0.0
Snake River.....	Section 9-31-30, Above Falls.....	A. E. Johnston.....	10-15-29	265.0
Snake River.....	do.....	A. E. Johnston.....	12- 6-29	276.0
Snake River.....	do.....	A. E. Johnston.....	2-25-30	302.0
Snake River.....	do.....	A. E. Johnston.....	3-22-30	278.0
Snake River.....	do.....	A. E. Johnston.....	5-16-30	348.0
Snake River.....	do.....	A. E. Johnston.....	9- 6-30	350.0
Snell & Nine Mile Drains.....	Section 25-21-53.....	A. W. Hall.....	10- 8-29	196.0
Snell & Nine Mile Drains.....	do.....	A. E. Johnston.....	11- 8-29	169.0
Snell & Nine Mile Drains.....	do.....	C. E. Franklin.....	12- 4-29	111.0
Snell & Nine Mile Drains.....	do.....	A. E. Johnston.....	12-19-29	147.0
Snell & Nine Mile Drains.....	do.....	A. E. Johnston.....	1-10-30	120.0
Snell & Nine Mile Drains.....	do.....	A. E. Johnston.....	2-14-30	118.0
Snell & Nine Mile Drains.....	do.....	A. W. Hall.....	3-26-30	93.0
Snell & Nine Mile Drains.....	do.....	A. W. Hall.....	4- 9-30	100.0
Snell & Nine Mile Drains.....	do.....	A. W. Hall.....	4-23-30	86.0
Snell & Nine Mile Drains.....	do.....	A. W. Hall.....	5-20-30	113.0
Snell & Nine Mile Drains.....	do.....	A. W. Hall.....	6-10-30	118.0
Snell & Nine Mile Drains.....	do.....	A. W. Hall.....	7-18-30	196.0
Snell & Nine Mile Drains.....	do.....	A. W. Hall.....	8-19-30	268.0
Soldier Creek.....	Section 19-31-52.....	A. E. Johnston.....	10-10-29	4.0
Soldier Creek.....	do.....	A. E. Johnston.....	12- 4-29	7.0
Soldier Creek.....	do.....	A. E. Johnston.....	2-21-30	4.8
Soldier Creek.....	do.....	A. E. Johnston.....	3-19-30	10.1
Soldier Creek.....	do.....	A. E. Johnston.....	5-14-30	9.3
Soldier Creek.....	do.....	A. E. Johnston.....	9- 3-30	1.2
Soldier Creek.....	do.....	A. E. Johnston.....	9-30-30	4.3
Sow Belly Creek.....	Section 33-33-55.....	A. E. Johnston.....	10-10-29	2.0
Sow Belly Creek.....	do.....	A. E. Johnston.....	2-21-30	3.3
Sow Belly Creek.....	do.....	A. E. Johnston.....	3-19-30	3.6
Sow Belly Creek.....	do.....	A. W. Hall.....	7-22-30	0.7
Sow Belly Creek.....	do.....	A. E. Johnston.....	9- 3-30	1.7
Sow Belly Creek.....	do.....	A. E. Johnston.....	9-30-30	2.1
Spotted Tail (Dry).....	Northwest Corner Section 28-23-56.....	A. W. Hall.....	10- 9-29	67.0
Spotted Tail (Dry).....	do.....	A. E. Johnston.....	11- 6-29	49.0
Spotted Tail (Dry).....	do.....	C. E. Franklin.....	12- 5-29	37.0
Spotted Tail (Dry).....	do.....	A. E. Johnston.....	12-18-29	36.0
Spotted Tail (Dry).....	do.....	A. E. Johnston.....	1-11-30	44.0
Spotted Tail (Dry).....	do.....	A. E. Johnston.....	2-17-30	43.0
Spotted Tail (Dry).....	do.....	A. W. Hall.....	3-11-30	28.0
Spotted Tail (Dry).....	do.....	A. W. Hall.....	4-11-30	25.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Spotted Tail (Dry)	do.	A. W. Hall	4-24-30	23.0
Spotted Tail (Dry)	do.	A. W. Hall	5-22-30	40.0
Spotted Tail (Dry)	do.	A. W. Hall	6-13-30	39.0
Spotted Tail (Dry)	do.	A. W. Hall	6-28-30	45.0
Spotted Tail (Dry)	do.	A. W. Hall	7-26-30	115.0
Spotted Tail (Dry)	do.	A. W. Hall	8-12-30	72.0
Spotted Tail (Dry)	do.	A. W. Hall	9- 9-30	103.0
Spotted Tail (Dry)	do.	A. W. Hall	9-24-30	84.0
Spotted Tail (Wet) & K'b'g Seep	Section 1-22-56	A. W. Hall	10- 9-29	19.0
Spotted Tail (Wet) & K'b'g Seep	do.	A. E. Johnston	11- 7-29	15.0
Spotted Tail (Wet) & K'b'g Seep	do.	C. E. Franklin	12- 5-29	11.0
Spotted Tail (Wet) & K'b'g Seep	do.	A. E. Johnston	12-19-29	25.0
Spotted Tail (Wet) & K'b'g Seep	do.	A. E. Johnston	1-11-30	17.0
Spotted Tail (Wet) & K'b'g Seep	do.	A. E. Johnston	2-15-30	13.0
Spotted Tail (Wet) & K'b'g Seep	do.	A. W. Hall	4-11-30	14.0
Spotted Tail (Wet) & K'b'g Seep	do.	A. W. Hall	4-24-30	7.0
Spotted Tail (Wet) & K'b'g Seep	do.	A. W. Hall	6-11-30	11.5
Spotted Tail (Wet) & K'b'g Seep	do.	A. W. Hall	8-12-30	34.8
Spotted Tail (Wet) & K'b'g Seep	do.	A. W. Hall	9-11-30	21.6
Spotted Tail (Wet) & K'b'g Seep	do.	A. W. Hall	9-25-30	21.0
Spotted Tail (Wet)	Section 10-23-56, Above Tri-State Canal	A. E. Johnston	1-11-30	16.0
Spotted Tail (Wet)	do.	A. E. Johnston	2-18-30	15.0
Spotted Tail (Wet)	do.	A. W. Hall	5-22-30	13.0
Spotted Tail (Wet)	do.	A. W. Hall	6- 7-30	11.0
Spotted Tail (Wet)	do.	A. W. Hall	6-13-30	11.0
Spotted Tail (Wet)	do.	A. W. Hall	6-26-30	30.0
Spotted Tail (Wet)	do.	A. W. Hall	7-12-30	25.0
Spotted Tail (Wet)	do.	A. W. Hall	8-12-30	37.0
Spotted Tail (Wet)	do.	A. W. Hall	9-10-30	39.0
Spotted Tail (Wet)	do.	A. W. Hall	9-24-30	30.0
Spring Creek	Section 9-34-18, At Mills	A. E. Johnston	10-16-29	10.0
Spring Creek	do.	A. E. Johnston	2-26-30	20.7
Spring Creek	do.	A. E. Johnston	3-24-30	11.7
Spring Creek	do.	A. E. Johnston	9- 8-30	8.4
Spring Creek	Trib to Little Cottonwood	A. E. Johnston	10-11-29	2.0
Spring Creek	do.	A. E. Johnston	12- 4-29	4.0
Spring Creek	do.	A. E. Johnston	2-22-30	2.5
Spring Creek	do.	A. E. Johnston	3-20-30	2.9
Spring Creek	do.	A. E. Johnston	5-14-30	1.8
Spring Creek	do.	A. E. Johnston	9- 4-30	3.5
Spring Creek	do.	A. E. Johnston	9-29-30	0.8
Spring Creek	Callaway	A. E. Johnston	10-25-29	1.0
Squaw Creek	Section 12-31-52, above McDowell's Reservoir	A. E. Johnston	10-11-29	1.0
Squaw Creek	do.	A. E. Johnston	12- 4-29	2.0
Squaw Creek	do.	A. E. Johnston	2-21-30	2.1

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Squaw Creek	do.	A. E. Johnston	3-19-30	1.5
Squaw Creek	do.	A. E. Johnston	5-14-30	2.6
Squaw Creek	do.	A. E. Johnston	9- 4-30	1.0
Squaw Creek	do.	A. E. Johnston	9-29-30	1.0
Squaw Creek	Section 1-31-52, Below McDowell's Reservoir	A. E. Johnston	10-11-29	1.0
Squaw Creek	do.	A. E. Johnston	12- 4-29	1.7
Squaw Creek	do.	A. E. Johnston	2-21-30	0.5
Squaw Creek	do.	A. E. Johnston	3-19-30	0.5
Squaw Creek	do.	A. E. Johnston	5-14-30	0.3
Squaw Creek	do.	A. E. Johnston	9- 3-30	0.2
Squaw Creek	do.	A. E. Johnston	9-29-30	7.0
Stewart's Drain	Section 13-23-57	A. W. Hall	10- 9-29	0.0
Stewart's Drain	do.	A. E. Johnston	11- 6-29	1.0
Stewart's Drain	do.	C. E. Franklin	12- 6-29	2.0
Stewart's Drain	do.	A. E. Johnston	12-18-29	3.4
Stewart's Drain	do.	A. E. Johnston	1-13-30	2.2
Stewart's Drain	do.	A. E. Johnston	2-17-30	2.2
Stewart's Drain	do.	A. W. Hall	3-10-30	1.0
Stewart's Drain	do.	A. W. Hall	4-11-30	0.8
Stewart's Drain	do.	A. W. Hall	4-24-30	0.4
Stewart's Drain	do.	A. W. Hall	5-21-30	0.5
Stewart's Drain	do.	A. W. Hall	6-13-30	0.5
Stewart's Drain	do.	A. W. Hall	6-27-30	0.0
Stewart's Drain	do.	A. W. Hall	7-30-30	0.5
Stewart's Drain	do.	A. W. Hall	9- 9-30	3.2
Stewart's Drain	do.	A. W. Hall	9-24-30	2.4
Stinking Water Creek	Section 25-5-34, Palisade	C. E. Franklin	11-17-29	50.0
Stinking Water Creek	do.	C. E. Franklin	11-28-29	48.0
Stinking Water Creek	do.	C. E. Franklin	12-17-29	46.0
Stinking Water Creek	do.	C. E. Franklin	12-30-29	31.0
Stinking Water Creek	do.	C. E. Franklin	2- 4-30	60.0
Stinking Water Creek	do.	C. E. Franklin	2-23-30	64.0
Stinking Water Creek	do.	C. E. Franklin	3-10-30	49.0
Stinking Water Creek	do.	C. E. Franklin	3-22-30	45.0
Stinking Water Creek	do.	C. E. Franklin	4-20-30	58.0
Stinking Water Creek	do.	C. E. Franklin	5- 5-30	54.0
Stinking Water Creek	do.	C. E. Franklin	5-18-30	39.0
Stinking Water Creek	do.	C. E. Franklin	6- 1-30	66.0
Stinking Water Creek	do.	C. E. Franklin	6-23-30	36.0
Stinking Water Creek	do.	C. E. Franklin	7-11-30	10.0
Stinking Water Creek	do.	C. E. Franklin	7-29-30	30.0
Stinking Water Creek	do.	C. E. Franklin	8- 9-30	26.0
Stinking Water Creek	do.	C. E. Franklin	8-29-30	29.0
Stinking Water Creek	do.	C. E. Franklin	9- 8-30	89.0
Stinking Water Creek	do.	C. E. Franklin	9-22-30	20.0
Strever Creek	Section 1-8-19, South of Overton	A. E. Johnston	10-28-29	16.0
Strever Creek	do.	A. E. Johnston	11-18-29	9.0
Strever Creek	do.	A. E. Johnston	11-26-29	8.0

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Strever Creek	.....do.....	A. E. Johnston	12-12-29	7.0
Strever Creek	.....do.....	A. E. Johnston	7-30-30	20.0
Strever Creek	.....do.....	A. E. Johnston	8-13-30	27.0
Strever Creek	.....do.....	A. E. Johnston	8-21-30	64.0
Strever Creek	.....do.....	A. E. Johnston	9-18-30	38.0
Strever Cree	.....Section 14-9-21, East Side.....	A. E. Johnston	10-28-29	6.0
Strever Creek	.....do.....	A. E. Johnston	5- 5-30	25.0
Strever Creek	.....do.....	A. E. Johnston	5-21-30	47.0
Strever Creek	.....do.....	A. E. Johnston	9-18-30	5.6
Strever Creek	.....Sections 13 and 14-9-21, Above Junction.....	A. E. Johnston	1- 4-30	5.0
Strever Creek	.....do.....	A. E. Johnston	1-28-30	3.0
Strever Creek	.....do.....	A. E. Johnston	2- 6-30	6.0
Strever Creek	.....do.....	A. E. Johnston	3- 7-30	8.0
Strever Creek	.....do.....	A. E. Johnston	4- 4-30	3.0
Strever Creek	.....do.....	A. E. Johnston	4-22-30	17.0
Strever Creek	.....do.....	A. E. Johnston	6- 9-30	52.0
Strever Creek	.....do.....	A. E. Johnston	6-26-30	10.0
Strever Creek	.....do.....	A. E. Johnston	7- 1-30	7.0
Strever Creek	.....do.....	A. E. Johnston	7- 2-30	6.0
Strever Creek	.....do.....	A. E. Johnston	7-16-30	2.0
Strever Creek	.....do.....	A. E. Johnston	7-20-30	2.0
Strever Creek	.....do.....	A. E. Johnston	7-30-30	1.0
Strever Creek	.....do.....	A. E. Johnston	8-13-30	4.0
Strever Creek	.....do.....	A. E. Johnston	8-21-30	34.0
Strever Creek	.....do.....	A. E. Johnston	9-18-30	6.0
Thompson Creek (Big)	.....Section 2-1-13, Riverton.....	A. E. Johnston	3- 6-30	27.0
Thompson Creek (Big)	.....do.....	A. E. Johnston	4- 2-30	17.0
Thompson Creek (Big)	.....do.....	A. E. Johnston	4-29-30	33.0
Thompson Creek (Big)	.....do.....	A. E. Johnston	6-20-30	55.0
Thompson Creek (Big)	.....do.....	A. E. Johnston	9-16-30	16.0
Timber Creek (Big)	.....Section 32-1-37, Benkelman.....	C. E. Franklin	11-21-29	1.0
Timber Creek (Big)	.....do.....	C. E. Franklin	11-30-29	1.0
Timber Creek (Big)	.....do.....	C. E. Franklin	12-25-29	1.0*
Timber Creek (Big)	.....do.....	C. E. Franklin	1- 4-30	1.0*
Timber Creek (Big)	.....do.....	C. E. Franklin	3-13-30	1.1
Timber Creek (Big)	.....do.....	C. E. Franklin	3-25-30	1.2
Timber Creek (Big)	.....do.....	C. E. Franklin	6-24-30	1.2
Timber Creek (Big)	.....do.....	C. E. Franklin	8- 1-30	1.2
Timber Creek (Big)	.....do.....	C. E. Franklin	8-13-30	1.1
Timber Creek (Big)	.....do.....	C. E. Franklin	8-30-30	1.0
Timber Creek (Big)	.....do.....	C. E. Franklin	9-26-30	1.2
Timber Creek (Big)	.....Belgrade-Fullerton Highway.....	A. E. Johnston	3-26-30	2.6
Toohy Drain	.....Section 20-23-56.....	A. W. Hall	10- 9-29	4.0
Toohy Drain	.....do.....	A. E. Johnston	11- 6-29	8.0
Toohy Drain	.....do.....	C. E. Franklin	12- 5-29	4.0
Toohy Drain	.....do.....	A. E. Johnston	12-18-29	5.0

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Toohey Drain	do	A. E. Johnston	1-13-30	4.7
Toohey Drain	do	A. E. Johnston	2-17-30	2.1
Toohey Drain	do	A. W. Hall	3-11-30	2.3
Toohey Drain	do	A. W. Hall	4-11-30	2.1
Toohey Drain	do	A. W. Hall	4-24-30	1.6
Toohey Drain	do	A. W. Hall	5-22-30	4.2
Toohey Drain	do	A. W. Hall	6-13-30	1.4
Toohey Drain	do	A. W. Hall	7-30-30	3.2
Toohey Drain	do	A. W. Hall	6-27-30	3.2
Toohey Drain	do	A. W. Hall	8-12-30	3.5
Toohey Drain	do	A. W. Hall	9- 9-30	7.0
Toohey Drain	do	A. W. Hall	9-23-30	5.0
Toohey Spillway	Section 19-23-56, From Tri-State Canal	A. W. Hall	10- 9-29	30.0
Toohey Spillway	do	A. E. Johnston	11- 6-29	25.0
Toohey Spillway	do	C. E. Franklin	12- 6-29	16.0
Toohey Spillway	do	A. E. Johnston	12-18-29	21.0
Toohey Spillway	do	A. E. Johnston	1-12-30	23.0
Toohey Spillway	do	A. E. Johnston	2-17-30	18.0
Toohey Spillway	do	A. W. Hall	3-10-30	15.0
Toohey Spillway	do	A. W. Hall	4-11-30	16.0
Toohey Spillway	do	A. W. Hall	4-24-30	14.0
Toohey Spillway	do	A. W. Hall	5-22-30	0.0
Toohey Spillway	do	A. W. Hall	6-13-30	0.0
Toohey Spillway	do	A. W. Hall	6-27-30	0.0
Toohey Spillway	do	A. W. Hall	7-18-30	0.0
Toohey Spillway	do	A. W. Hall	8-12-30	0.0
Toohey Spillway	do	A. W. Hall	9-10-30	119.0
Trunk Butte Creek	Section 25-33-50	A. E. Johnston	3-20-30	1.4
Trunk Butte Creek	do	A. E. Johnston	9- 4-30	0.5
Tub Springs	Section 8-22-55	A. W. Hall	10- 9-29	89.0
Tub Springs	do	A. E. Johnston	11- 7-29	69.0
Tub Springs	do	C. E. Franklin	12- 5-29	71.0
Tub Springs	do	A. E. Johnston	12-19-29	51.0
Tub Springs	do	A. E. Johnston	1-11-30	51.0
Tub Springs	do	A. E. Johnston	2-15-30	45.0
Tub Springs	do	A. W. Hall	3-11-30	33.0
Tub Springs	do	A. W. Hall	4- 9-30	24.0
Tub Springs	do	A. W. Hall	4-24-30	30.0
Tub Springs	do	A. W. Hall	5-22-30	43.0
Tub Springs	do	A. W. Hall	8-12-30	89.0
Tub Springs	do	A. W. Hall	9-11-30	140.0
Tub Springs	Section 33-23-55, Above Enterprise Canal	A. W. Hall	5-22-30	47.0
Tub Springs	do	A. W. Hall	6- 7-30	34.0
Tub Springs	do	A. W. Hall	6-11-30	43.0
Tub Springs	do	A. W. Hall	6-28-30	51.0
Tub Springs	do	A. W. Hall	7-18-30	57.0
Tub Springs	do	A. W. Hall	7-30-30	85.0
Tub Springs	do	A. W. Hall	8-12-30	86.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
Tub Springs.....	Section 32-23-55, Below Enterprise Canal.....	A. W. Hall.....	5-22-30	39.0
Tub Springs.....	do.....	A. W. Hall.....	6- 7-30	31.0
Tub Springs.....	do.....	A. W. Hall.....	6-11-30	31.0
Tub Springs.....	do.....	A. W. Hall.....	6-28-30	63.0
Tub Springs.....	do.....	A. W. Hall.....	7-18-30	55.0
Tub Springs.....	do.....	A. W. Hall.....	8-12-30	82.0
Tub Springs.....	do.....	A. W. Hall.....	9-11-30	125.0
Turkey Creek.....	Section 3-7-3 E, Dorchester-Pleasant Hill.....	A. E. Johnston.....	11-22-29	15.0
Turkey Creek.....	Section 4-1-16, Naponee.....	A. E. Johnston.....	3- 7-30	17.0
Turkey Creek.....	do.....	A. E. Johnston.....	4- 3-30	21.0
Turkey Creek.....	do.....	A. E. Johnston.....	4-30-30	32.0
Turkey Creek.....	do.....	A. E. Johnston.....	6-21-30	45.0
Turkey Creek.....	do.....	A. E. Johnston.....	9-17-30	10.0
Turtle Creek.....	Section 36-20-15, 3 Miles Southeast of Elyra.....	A. E. Johnston.....	8-15-30	1.3
Union Creek.....	Below Mill at Madison.....	A. E. Johnston.....	1- 3-30	12.0
Union Creek.....	do.....	A. E. Johnston.....	6-14-30	54.0
Victoria Creek.....	Section 1-19-21.....	A. E. Johnston.....	10-25-29	10.0
Victoria Creek.....	do.....	A. E. Johnston.....	11-25-29	10.0
Victoria Creek.....	do.....	A. E. Johnston.....	12- 9-29	10.0
Victoria Creek.....	do.....	A. E. Johnston.....	5- 2-30	13.3
Victoria Creek.....	do.....	A. E. Johnston.....	5-19-30	24.6
Victoria Creek.....	do.....	A. E. Johnston.....	6-11-30	15.5
Verdigree Creek.....	St. Verdigree.....	A. E. Johnston.....	1- 2-30	82.0
Verdigree Creek.....	do.....	A. E. Johnston.....	6-16-30	93.0
Wahoo Creek.....	North of Ashland, Section 35-13-9 E.....	A. E. Johnston.....	10-22-29	8.0
Wahoo Creek.....	do.....	A. E. Johnston.....	11-21-29	21.0
Wahoo Creek.....	do.....	A. E. Johnston.....	3- 4-30	48.0
Wahoo Creek.....	do.....	A. E. Johnston.....	3-31-30	32.0
Wahoc Creek.....	do.....	A. E. Johnston.....	4-26-30	54.0
Wahoo Creek.....	do.....	A. E. Johnston.....	6-18-30	52.0
Wahoo Creek.....	do.....	A. E. Johnston.....	8-19-30	847.0
Wahoo Creek.....	do.....	A. E. Johnston.....	9-13-30	41.0
Whistle Creek.....	Section 12-28-54, Mouth.....	A. E. Johnston.....	10- 9-29	0.1*
Whistle Creek.....	do.....	A. E. Johnston.....	3-18-30	1.8
Whistle Creek.....	do.....	A. E. Johnston.....	9- 1-30	0.0
White Clay Creek.....	Section 2-31-52, East of Crawford.....	A. E. Johnston.....	10-11-29	4.0
White Clay Creek.....	do.....	A. E. Johnston.....	12- 4-29	5.0
White Clay Creek.....	do.....	A. E. Johnston.....	2-21-30	6.4
White Clay Creek.....	do.....	A. E. Johnston.....	3-19-30	6.3
White Clay Creek.....	do.....	A. E. Johnston.....	5-14-30	6.3
White Clay Creek.....	do.....	A. E. Johnston.....	9- 3-30	2.5
White Clay Creek.....	do.....	A. E. Johnston.....	9-29-30	2.6

* Estimated

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Discharge	
			Date	Sec. Ft.
White Horse Creek	Section 5-13-29, Gannett	A. E. Johnston	10- 1-29	8.0
White Horse Creek	do	A. E. Johnston	11-16-29	12.0
White Horse Creek	do	A. E. Johnston	11-27-29	8.0
White Horse Creek	do	A. E. Johnston	12-12-29	21.0
White Horse Creek	do	A. E. Johnston	1-27-30	16.9
White Horse Creek	do	A. E. Johnston	2- 7-30	39.5
White Horse Creek	do	A. E. Johnston	3- 8-30	23.5
White Horse Creek	do	A. E. Johnston	4- 5-30	21.4
White Horse Creek	do	A. E. Johnston	4-21-30	39.4
White Horse Creek	do	A. E. Johnston	5- 6-30	46.4
White Horse Creek	do	A. E. Johnston	5-22-30	58.0
White Horse Creek	do	A. E. Johnston	6- 7-30	18.0
White Horse Creek	do	A. E. Johnston	6-25-30	22.0
White Horse Creek	do	A. E. Johnston	7- 7-30	7.0
White Horse Creek	do	A. E. Johnston	7-12-30	6.5
White Horse Creek	do	A. E. Johnston	8-23-30	7.0
White Horse Creek	do	A. E. Johnston	9-19-30	8.0
White River	Section 9-31-52, Military Road	A. E. Johnston	10-10-29	25.0
White River	do	A. E. Johnston	12- 4-29	32.0
White River	do	A. E. Johnston	2-21-30	39.0
White River	do	A. E. Johnston	3-19-30	34.0
White River	do	A. E. Johnston	5-14-30	33.0
White River	do	A. E. Johnston	9- 3-30	21.0
White River	do	A. E. Johnston	9-30-30	18.0
White River	Section 18-33-49, 6 Miles West of Chadron	A. E. Johnston	10-11-29	26.0
White River	do	A. E. Johnston	12- 4-29	18.0
White River	do	A. E. Johnston	2-22-30	59.0
White River	do	A. E. Johnston	3-20-30	77.0
White River	do	A. E. Johnston	5-14-30	64.0
White River	do	A. E. Johnston	9- 4-30	9.6
White River	do	A. E. Johnston	9-29-30	9.0
White River	Below Whitney Diversion Dam	A. E. Johnston	12- 4-29	11.6
White River	do	A. E. Johnston	2-22-30	33.0
White River	do	A. E. Johnston	3-20-30	36.0
White River	do	A. E. Johnston	5-14-30	34.0
White River	do	A. E. Johnston	9- 4-30	0.0
White River	do	A. E. Johnston	9-29-30	0.0
White River	Section 26-32-52, Above Whitney Diversion, Below Harris-Cooper Canal	A. E. Johnston	10-11-29	20.0
White River	do	A. E. Johnston	12- 4-29	42.0
White River	do	A. E. Johnston	2-22-30	48.0
White River	do	A. E. Johnston	3-20-30	38.0
White River	do	A. E. Johnston	5-14-30	32.0
White River	do	A. E. Johnston	9- 4-30	16.0
White River	do	A. E. Johnston	9-29-30	10.0
White River	Section 26-32-52, Below Whitney Pipe Line	A. E. Johnston	10-11-29	6.0
White River	do	A. E. Johnston	12- 4-29	40.0

REPORT OF SECRETARY

STREAM MEASUREMENTS—Continued

Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Date	Discharge Sec. Ft.
White Tail Creek	Section 36-15-38	A. E. Johnston	10- 3-29	30.0
White Tail Creek	do	A. E. Johnston	11-14-29	35.0
White Tail Creek	do	A. E. Johnston	11-29-29	35.0
White Tail Creek	do	A. E. Johnston	1- 6-30	27.0
White Tail Creek	do	A. E. Johnston	1-23-30	28.0
White Tail Creek	do	A. E. Johnston	2-10-30	37.0
White Tail Creek	do	A. E. Johnston	3-11-30	33.0
White Tail Creek	do	A. E. Johnston	4-11-30	33.0
White Tail Creek	do	A. E. Johnston	4-17-30	36.0
White Tail Creek	do	A. E. Johnston	6- 4-30	42.0
White Tail Creek	do	A. E. Johnston	7-11-30	15.8
White Tail Creek	do	A. E. Johnston	7-17-30	11.0
White Tail Creek	do	A. E. Johnston	7-22-30	33.0
White Tail Creek	do	A. E. Johnston	7-25-30	33.0
White Tail Creek	do	A. E. Johnston	8- 2-30	19.0
White Tail Creek	do	A. E. Johnston	8- 4-30	35.0
White Tail Creek	do	A. E. Johnston	8- 7-30	35.0
White Tail Creek	do	A. E. Johnston	8-11-30	23.0
White Tail Creek	do	A. E. Johnston	8-12-30	20.0
White Tail Creek	do	A. E. Johnston	8-27-30	25.0
White Tail Creek	do	A. E. Johnston	9-23-30	28.0
Wild Horse Drain	Section 12-20-52	A. W. Hall	10- 7-29	55.0
Wild Horse Drain	do	A. W. Hall	12-13-29	38.0
Wild Horse Drain	do	A. E. Johnston	12-10-29	36.0
Wild Horse Drain	do	C. E. Franklin	12-19-29	50.0
Wild Horse Drain	do	A. E. Johnston	1-15-30	41.0
Wild Horse Drain	do	A. E. Johnston	2-14-30	41.0
Wild Horse Drain	do	A. W. Hall	3-25-30	25.0
Wild Horse Drain	do	A. W. Hall	4- 8-30	28.0
Wild Horse Drain	do	A. W. Hall	4-21-30	23.0
Wild Horse Drain	do	A. W. Hall	5-14-30	29.0
Wild Horse Drain	do	A. W. Hall	5-31-30	50.0
Wild Horse Drain	do	A. W. Hall	7-14-30	21.0
Wild Horse Drain	do	A. W. Hall	8-18-30	55.0
Wild Horse Drain	do	A. W. Hall	8-25-30	103.0
Wild Horse Drain	do	A. W. Hall	9-23-30	88.0
Wild Horse Drain	do	C. E. Franklin	10- 6-	
Willow Creek	Section 15-14-35, North of Sarben	A. E. Johnston	10- 2-29	1.0
Willow Creek	do	A. E. Johnston	11-15-29	1.0
Willow Creek	do	A. E. Johnston	11-29-29	2.0
Willow Creek	do	A. E. Johnston	12-14-29	1.0
Willow Creek	do	A. E. Johnston	1- 5-30	0.8
Willow Creek	do	A. E. Johnston	2-10-30	1.1
Willow Creek	do	A. E. Johnston	3-11-30	1.7
Willow Creek	do	A. E. Johnston	4-11-30	1.5
Willow Creek	do	A. E. Johnston	4-18-30	1.6
Willow Creek	do	A. E. Johnston	5- 8-30	1.1
Willow Creek	do	A. E. Johnston	6- 5-30	1.8
Willow Creek	do	A. E. Johnston	6-30-30	0.8
Willow Creek	do	A. E. Johnston	7- 5-30	0.6

STREAM MEASUREMENTS—Continued
Year Ending September 30, 1930

STREAM	LOCATION	Hydrographer	Date	Sec. Ft.
Willow Creek	do	A. E. Johnston	7-10-30	0.0
Willow Creek	do	A. E. Johnston	7-22-30	1.0
Willow Creek	do	A. E. Johnston	7-28-30	1.8
Willow Creek	do	A. E. Johnston	8- 2-30	2.7
Willow Creek	do	A. E. Johnston	8- 4-30	1.4
Willow Creek	do	A. E. Johnston	8-26-30	16.2
Winters Creek	Section 19-22-54, So. Line, East of Scotsbluff Sugar Factory	A. W. Hall	10- 8-29	92.0
Winters Creek	do	A. E. Johnston	11- 8-29	87.0
Winters Creek	do	C. E. Franklin	12- 4-29	68.0
Winters Creek	do	A. E. Johnston	12-19-29	55.0
Winters Creek	do	A. E. Johnston	1-14-30	76.0
Winters Creek	do	A. E. Johnston	2-19-30	57.0
Winters Creek	do	A. W. Hall	3-11-30	55.0
Winters Creek	do	A. W. Hall	3-26-30	50.0
Winters Creek	do	A. W. Hall	4- 9-30	62.0
Winters Creek	do	A. W. Hall	4-23-30	43.0
Winters Creek	do	A. W. Hall	6-10-30	6.7
Winters Creek	do	A. W. Hall	6-28-30	4.8
Winters Creek	do	A. W. Hall	7-13-30	101.0
Winters Creek	do	A. W. Hall	7-18-30	35.0
Winters Creek	do	A. W. Hall	8-13-30	178.0
Winters Creek	do	A. W. Hall	9-11-30	121.0
Winters Creek	Section 19-23-54, North Line, Above Winters Creek Canal	A. W. Hall	5-20-30	75.0
Winters Creek	do	A. W. Hall	6- 6-30	78.0
Winters Creek	do	A. W. Hall	6-10-30	67.0
Winters Creek	do	A. W. Hall	6-28-30	75.0
Winters Creek	do	A. W. Hall	7-18-30	122.0
Wood River	Grand Island	A. E. Johnston	3-27-30	10.8
Wood River	do	A. E. Johnston	9-11-30	309.0
Wood River	Section 12-9-16, Northwest of Kearney	A. E. Johnston	10-26-29	1.0
Wood River	do	A. E. Johnston	11-26-29	2.0
Wood River	do	A. E. Johnston	5- 1-30	360.0
Wood River	do	A. E. Johnston	5-20-30	160.0
Wood River	do	A. E. Johnston	6-10-30	62.0
Wood River	do	A. E. Johnston	8-14-30	9.0
Wood River	Wood River	A. E. Johnston	1- 4-30	0.0‡
Wood River	do	A. E. Johnston	4-23-30	46.3

‡ Ice

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INDEX

PART I.—BUREAU OF ROADS AND BRIDGES

	Page
Accounts and Records, Division of.	
Appropriations for biennium	142
Functions	142
Appropriations.	
For department for biennium	142
Federal aid	47
Status of federal aid	47
Bridges.	
Applications for state aid	141
Descriptions of some bridges constructed	136
Descriptions of different types used in Nebraska	111
Construction, division of.	
Accomplishments, a few outstanding	64
Functions	63
Contract Prices.	
Average for biennium	40
Average for 1927-1928	42
Average for 1917-1926	44
Average for bridge items	46
Contractors to Whom Contracts Were Awarded	37
Contracts Awarded for Biennium	16
Districts, report of	52
Employees, number of	9, 10
Executives, list of and length of service	8
Expenditures.	
For right of way	146
From federal, state and other funds	48
Federal Aid Appropriations	47
Highways.	
Mileage of different types constructed	14
Origin	14
Preparation of plans and estimates	107
Maintenance, division of.	
Budgets	96
Costs, distribution of	96
Cost of maintaining various types of surface	101
Dust, oil palliative	89
Equipment, inventory	86

	Page
Functions	81
Highway law enforcement	103
Organization	82
Patrolmen, duties of	83
Road magnet	91
Signs	88
Snow removal	87
Traffic census	92
Maps and Plans, division of.	
Final contract quantities, determination of	109
Functions	107
Preparation of plans and estimates, procedure	107
Motor Vehicle Registration, division of.	
Annual report for 1928	160
Annual report for 1929	164
Increase in automobile registration	157
Patrolmen, duties of	83
Research, to determine suitability of road materials	152
Right of Way, division of.	
Expenditures for right of way	146
Purchase of right of way	144
Road Funds, factors making up county apportionment ratios.....	49
Roads, graveled	69
Roads, oiled	71
Roads, paved.	
Design of	65
Inspection and supervision of construction	66
Tests for smoothness, strength, and thickness	66
Signs, maintenance of	88
Snow Removal	87
State Institutions and Parks, roads connecting with highways.....	34
Tests, division of.	
Functions	148
Materials tested	151, 155
Needs of department	149
Organization	148
Research, importance of	152
Traffic Census	92

**PART II—BUREAU OF IRRIGATION, WATER POWER AND
DRAINAGE**

Applications—Appropriations:	
Appropriations canceled	271
Approved	266
Canceled (Including Dockets)	271
Dismissed	273
Acreage:	
Area Irrigated by Counties	277
Claims and Applications Granted and Pending:	
Water Division No. 1-A	183
Water Division No. 1-B	210
Water Division No. 1-C	222
Water Division No. 1-D	224
Water Division No. 1-E	227
Water Division No. 1-F	232
Water Division No. 2-A	233
Water Division No. 2-B	240
Water Division No. 2-C	242
Water Division No. 2-D	250
Water Division No. 2-E	259
Water Division No. 2-F	265
Canals: See Hydrographic Report Index:	
Charts	180-357-359-361-363-365-374
Claims Canceled	271
Court Decisions	286
Districts:	
Drainage	284
Water Commissioners	180-181
Executives—Employees	
Evaporation—Experimental Farm—Mitchell	375
—Experimental Farm—North Platte	376
Fees	177
Graphs	180-357-359-361-363-365-374
Headgate, Relocation	275
Land:	
Area Irrigated by Counties	273
Maps:	
See Graphs and Charts	
Water Divisions and Water Districts	180
Pump Location	279
Money:	
Fees Deposited with State Treasurer	177
Observers	170

	Page
Officers—Employees	170
Opinions:	
Dawson Co. Irr. Co. v. McMullen	286
State v. Oliver Bros.	292
U. S. Of America v. Bridgeport Irr. District	295
Slattery, et al, v. Dout, et al	300
Jurisdiction—Duties—Distribution of Water—T. F. Neighbors.....	301
Pump:	
Well Irrigation—Alvah R. Hecht	278
Map—Pump Locations	279
Relocation, Headgate	275
Reports:	
Chief of Bureau	171
Summary	177
Water Commissioners	170
Water Commissioners' Districts	180
Wells:	
Pump Irrigation	278
Pump Locations	279

HYDROGRAPHIC REPORT

Hydrographic Report	305
Creeks, Drains, Rivers and Seeps	377

A

Akers Draw—1929	377
Antelope Creek—1930	425
Arapahoe Star Mill Waste—1929	377
Arapahoe Star Mill Waste—1930	425
Arnold Drain—1929	377
Arnold Drain—1930	425
Ash Creek—1929	378
Ash Creek—1930	425
Austin Creek—1929	378
Austin Creek—1930	426

B

Bald Seep—1930	426
Battle Creek—1929	378
Bayard Sugar Factory Drain—1929	378
Bayard Sugar Factory Drain—1930	426
Bazille Creek—1929	378
Bazille Creek—1930	426
Bear Creek—1929	378

DEPARTMENT OF PUBLIC WORKS

481

	Page
Bear Creek—1930	426
Beaver Creek—1929	378
Beaver Creek—1930	426
Beauty Creek—1930	426
Birdwood Creek—1929	379
Birdwood Creek—1930	427
Blue Creek—1929	379
Blue Creek—1930	428
Boggy Creek—1929	380
Bogus Creek—1929	380
Boone Creek—1929	380
Boone Creek—1930	429
Bordeaux Creek—1929	380
Bordeaux Creek—1930	429
Bridgeport Slough—1930	429
Buffalo Creek—1929	380
Buffalo Creek—1930	429
Burton Creek—1929	381
Burton Creek—1930	430

C

Cache Creek—1929	381
Cache Creek—1930	430
Camp Clark Seep—1929	381
Camp Clark Seep—1930	430
Carnine Lake—1930	431
Cedar Creek—1929	382
Cedar Creek—1930	431
Cedar Branch Creek—1929	382
Cedar Branch Creek—1930	431
Center Creek—1929	383
Center Creek—1930	432
Chadron Creek No. 1—1929	383
Chadron Creek No. 1—1930	432
Chadron Creek No. 2—1929	383
Chadron Creek No. 2—1930	432
Chadron Creek No. 3—1929	383
Chadron Creek No. 3—1930	432
Chadron Creek No. 4—1929	383
Chadron Creek No. 4—1930	432
Cherry Creek—1929	384
Cherry Creek—1930	432
Clear Creek—1929	384
Clear Creek—1930	433
Clear Creek-1-A—1930	433

	Page
Clear Creek—Upper—1929	384
Clear Creek—Upper—1930	433
Clear Water Creek—1929	385
Clear Water Creek—1930	433
Cleveland Drain—1930	433
Cold Water Creek—1929	385
Cold Water Creek—1930	433
Cottonwood Creek—1929	385
Cottonwood Creek—1930	434
Crooked Creek—1929	386
Crooked Creek—1930	434

D

Dane Creek—1929	386
Dane Creek—1930	434
Dawson County Drain—1930	434
Deadhorse Creek—1929	386
Deadhorse Creek—1930	435
DeGraw Drain—1930	435
Dry Creek—1929	386
Dry Creek—1930	435
Dugout Creek—1929	386
Dugout Creek—1930	435

E

Eli Lake—1930	436
Elm Creek—1929	387
Elm Creek—1930	437

F

Fairfield Seep—1929	387
Fairfield Seep—1930	437
Fanning Seep—1929	388
Fanning Seep—1930	437
Farmers Creek—1929	388
Farmers Creek—1930	437
Flag Creek—1929	388

G

Gebauer Drain—1930	442
Gering Drain—1929	392
Gering Drain—1930	442
Gering Waste—1929	392
Gordon Creek—1929	392
Gordon Creek—1930	442
Gothenburg Power Waste—1929	392

	Page
Gothenburg Power Waste—1930	442
Government Spring—1929	393
Government Spring—1930	443
Gravel Creek—1929	393
Gravel Creek—1930	443
Greenwood Creek—1929	393
Greenwood Creek—1930	443

H

Haines Branch—1929	394
Haines Branch—1930	443
Haskel Creek—1930	444
Hat Creek—1929	394
Hat Creek—1930	444
Horse Creek—1929	394
Horse Creek—1930	444

I

Indian Creek—1929	395
Indian Creek—1930	444

K

Katzer Drain—1929	395
Katzer Drain—1930	445
Keith-Lincoln County Drain—1930	445

L

Lane Drain—1929	396
Lane Drain—1930	446
Lawrence Fork—1929	396
Lawrence Fork—1930	446
Leander Creek—1929	396
Leander Creek—1930	446
Lincoln County Drain—1929	396
Lincoln County Drain—1930	446
Lodgepole Creek—1929	397
Lodgepole Creek—1930	447
Lonergan Creek—1929	399
Lonergan Creek—1930	450
Looking Glass Creek—1930	451
Lost Creek—1929	399
Lost Creek—1930	451
Louse Creek—1929	402
Louse Creek—1930	453
Lovely Creek—1930	453

M

McGuires Slough—1929	402
McGuires Slough—1930	453
Medicine Creek—1929	402
Medicine Creek—1930	454
Melbeta Seep—1929	403
Melbeta Seep—1930	454
Minnechuduza Creek—1929	403
Minnechuduza Creek—1930	454
Mira Creek—1930	454
Mitchell Spillway—1929	403
Mitchell Spillway—1930	455
Morrill Drain—1929	404
Morrill Drain—1930	455
Muddy Creek—1929	404
Muddy Creek—1930	455

O

Oak Creek—1929	406
Oak Creek—1930	458
Otter Creek—1929	407
Otter Creek—1930	458

P

Papillion Creek (Little)—1929	407
Papillion Creek (Little)—1930	458
Pawnee Creek—1929	407
Pawnee Creek—1930	458
Pepper Creek—1930	459
Pine Creek—1929	407
Pine Creek—1930	459
Plum Creek—1929	408
Plum Creek—1930	459
Ponca Creek—1929	408
Ponca Creek—1930	459
Prairie Creek—1929	408
Prairie Creek—1930	459
Pullen Drain—1929	408
Pullen Drain—1930	459
Pumpkinseed Creek—1929	408
Pumpkinseed Creek—1930	459

R

Rivers (See Rivers)	487
Red Bird Creek—1929	409
Red Bird Creek—1930	460
Red Willow Creek—1929	409
Red Willow Creek—1930	460
Rock Creek—1929	413
Rock Creek—1930	464
Rush Creek—1929	413
Rush Creek—1930	464

S

Salt Creek—1929	413
Salt Creek—1930	464
Sand Creek—1929	414
Sand Creek—1930	464
Schlagel Creek—1929	414
Schlagel Creek—1930	465
School Creek—1929	414
Scottsbluff Drain—1929	414
Scottsbluff Drain—1930	465
Sheep Creek—1929	415
Sheep Creek—1930	465
Shell Creek—1929	415
Shell Creek—1930	465
Silver Creek—1929	415
Silver Creek—1930	466
Silver Nail Drain—1929	415
Silver Nail Drain—1930	466
Skunk Creek—1929	416
Skunk Creek—1930	466
Snake Creek—1929	416
Snake Creek—1930	467
Snell and Nine Mile Drain—1929	416
Snell and Nine Mile Drain—1930	467
Soldier Creek—1929	417
Soldier Creek—1930	467
Sow Belly Creek—1929	417
Sow Belly Creek—1930	467
Spotted Tail (Dry)—1929	417
Spotted Tail (Dry)—1930	467
Spotted Tail (Wet)—1929	418
Spotted Tail (Wet)—1930	468
Spotted Tail (Wet) & Kronberg Seep—1929	417

Spotted Tail (Wet) & Kronberg Seep—1930	468
Spring Creek—1929	418
Spring Creek—1930	468
Squaw Creek—1929	418
Squaw Creek—1930	468
Stewarts Drain—1929	418
Stewarts Drain—1930	469
Stinking Water Creek—1929	419
Stinking Water Creek—1930	469
Strever Creek—1929	419
Strever Creek—1930	469

T

Thompson Creek—1929	419
Thompson Creek (Big)—1930	470
Timber Creek (Big)—1929	419
Timber Creek (Big)—1930	470
Toohey Drain—1929	419
Toohey Drain—1930	470
Toohey Spillway—1929	420
Toohey Spillway—1930	471
Trunk Butte Creek—1929	420
Trunk Butte Creek—1930	471
Tub Springs—1929	420
Tub Springs—1930	471
Turkey Creek—1929	420
Turkey Creek—1930	472
Turtle Creek—1929	420
Turlte Creek—1930	472

U

Union Creek—1929	420
Union Creek—1930	472

V

Verdigree Creek—1930	472
Victoria Creek—1929	421
Victoria Creek—1930	472

W

Wahoo Creek—1929	421
Wahoo Creek—1930	472
Whistle Creek—1929	421
Whistle Creek—1930	472

	Page
White Clay Creek—1929	421
White Clay Creek—1930	472
White Horse Creek—1929	421
White Horse Creek—1930	473
White Tail Creek—1929	422
White Tail Creek—1930	474
Wild Horse Drain—1929	423
Wild Horse Drain—1930	474
Willow Creek—1929	423
Willow Creek—1930	474
Winters Creek—1929	423
Winters Creek—1930	475

RIVERS

A

Analysis—North Platte River—See "Water Analysis".....	496
Arickaree River, Section 28-1-41, Haigler—1929	377
Arickaree River, Section 28-1-41, Haigler—1930	425

B

Blue River, Beatrice—1929	379
Blue River, Beatrice, Section 4-3-6 E;—1930	428
Blue River, (Big), Section 28-11-3E, Below Power Plant at Seward—1929	379
Blue River (Big), Section 28-11-3E, Below Power Plant at Seward—1930	428
Blue River (Little), Section 15-2-2E, Fairbury—1929.....	380
Blue River (Little), Section 15-2-2E, Fairbury—1930.....	428
Blue River (Little), Section 6-2-2, Hebron—1929.....	380
Blue River (Little), Section 6-2-2, Hebron—1930.....	428
Blue River (Little), Endicott—1929	380
Blue River (Little) Endicott—1930	428
Blue River (Little), New Section, Endicott—1930.....	429

C

Calamus River, Section 22-23-18—1929	381
Calamus River, Section 22-23-18, North of Taylor—1930.....	430
Cedar River, Section 11-16-6, West of Fullerton—1929.....	382
Cedar River, Section 11-16-6, West of Fullerton—1930.....	431
Cedar River, Section 5-18-7, Cedar Rapids—1929	383
Cedar River, Section 5-18-7, Cedar Rapids—1930.....	431

	Page
Charts:	
See Graphs	479
D	
Dismal River, Section 4-21-24, Dunning—1929	386
Dismal River, Section 4-21-24, Dunning—1930	435
E	
Elkhorn River, Waterloo—1929	387
Elkhorn River, Waterloo—1930	436
Elkhorn River, Section 20-25-6, Neligh—1929	387
Elkhorn River, Section 20-25-6, Neligh—1930	436
Elkhorn River, Section 13-17-9, East of Arlington—1929.....	387
Elkhorn River, Section 13-17-9, East of Arlington—1930.....	436
Elkhorn River, Section 34-27-9, North of Ewing—1929.....	387
Elkhorn River, Section 34-27-9, North of Ewing—1930.....	436
Elkhorn River, (South Branch), Section 34-27-9, South of Ewing—1929	387
Elkhorn River, Section 3-26-9, South of Ewing—1930.....	436
Elkhorn River, Section 3-5-10E, Waterloo—1930	436
F	
Frenchman River, SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 10-6-41, above Maranville Reservoir—1929	388
Frenchman River, SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 10-6-41, above Maranville Reservoir—1930	440
Frenchman River, SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 11-6-41, Below Maranville Reservoir—1929	388
Frenchman River, SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 11-6-41, Below Maranville Reservoir—1930	440
Frenchman River, SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 17-6-40, Below Inman Canal—1929	389
Frenchman River, SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 17-6-40, Below Inman Canal—1930	440
Frenchman River, NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 22-6-40, Above Champion-Kilpatrick Reservoir—1929	389
Frenchman River, NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 22-6-40, Above Champion Reservoir—1930	438
Frenchman River, SW $\frac{1}{4}$ Section 23-6-40, Below Champion-Kilpatrick Reservoir—1929	390
Frenchman River, SW $\frac{1}{4}$ Section 23-6-40, Below Champion Reservoir—1930	438
Frenchman River, NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 21-6-39, Champion—1929	390

	Page
Frenchman River, NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 21-6-39, Champion—1930	438
Frenchman River, SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 30-6-38, South of Imperial—1929	390
Frenchman River, SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 30-6-38, South of Imperial—1930	439
Frenchman River, NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 11-5-36, Wauneta—1929	391
Frenchman River, NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 11-5-36, Wauneta—1930	441
Frenchman River, Section 32-5-33, North of Palisade—1929.....	391
Frenchman River, North of Palisade—1930	441
Frenchman River, Section 16-3-31, West of Culbertson—1929.....	391
Frenchman River, Section 16-3-31, West of Culbertson—1930.....	439
Frenchman River, Below Culbertson Canal—1929	392
Frenchman River, Hamlet—1929	392
Frenchman River, Hamlet—1930	441

G

Gaging Stations:

Pathfinder Reservoir	306
Guernsey Reservoir	306
North Platte River at Whalen, Wyoming	306
North Platte River at Torrington, Wyoming	307
North Platte River at Henry, Nebraska	308
North Platte River at Mitchell	308
North Platte River at Minatare	309
North Platte River at Bridgeport	309
North Platte River at Oshkosh	310
North Platte River at North Platte	311
South Platte River at Julesburg, Colorado	311
South Platte River at North Platte, Nebraska	312
Platte River at Overton	312
Platte River at Duncan	313
Platte River at Ashland	313

Graphs:

Water Disposal—Platte River Basin—May	357
Water Disposal—Platte River Basin—June	359
Water Disposal—Platte River Basin—July	361
Water Disposal—Platte River Basin—August	363
Water Disposal—Platte River Basin—September	365
Visible Return Flow—North Platte Valley— Henry to Bridgeport	374

	Page
Guernsey Reservoir:	
Station Description	306
Storage—1929	337
Storage—1930	348
Inflow—1929	338
Inflow—1930	348
Outflow—1929	338
Outflow—1930	349

K

Keya Paha River, Section 9-34-17, Brocksburg—1929.....	395
Keya Paha River, Section 9-34-17, Brocksburg—1930.....	446

L

Loup River, Columbus—1929	399
Loup River, Columbus—1930	453
Loup River, Genoa—1929	400
Loup River, Genoa—1930	451
Loup River (Middle), St. Paul—1929	400
Loup River (Middle), St. Paul—1930	452
Loup River (Middle), Section 10-14-10, South of St. Paul—1929	402
Loup River (Middle), Section 10-14-10, South of St. Paul—1930	453
Loup River (Middle), Section 11-19-18, Sargent—1929	402
Loup River (Middle), Section 11-19-19, South of Sargent—1930	451
Loup River (Middle), Section 9-19-19, West of Sargent—1930	451
Loup River (Middle), Dunning—1929	402
Loup River (Middle), Dunning—1930	451
Loup River (North), St. Paul—1929	400
Loup River (North), St. Paul—1930	452
Loup River (North), Section 15-15-10, North of St. Paul—1929	401
Loup River (North), Section 14-15-10, North of St. Paul—1930	452
Loup River (North), Section 22-21-28, Taylor—1929	401
Loup River (North), Section 22-21-28, Taylor—1930	452
Loup River (North), Section 15-21-16, Burwell—1929	401
Loup River (North), North of Burwell—1930	452
Loup River (South), Pleasanton—1929	401
Loup River (South), Pleasanton—1930	453
Loup River (South), Callaway—1929	401
Loup River (South), Callaway—1930	453

N

Niobrara River, Gordon—1929	405
Niobrara River, Gordon—1930	457
Niobrara River, Valentine—1929	405
Niobrara River, Valentine—1930	457
Niobrara River, Section 28-34-27, Below Dam at Valentine—1929	406
Niobrara River, Section 28-34-27, Below Dam at Valentine—1930	456
Niobrara River, Section 20-31-58, Wyoming State Line—1929.....	405
Niobrara River, Section 20-31-58, Wyoming State Line—1930.....	457
Niobrara River, Section 7-28-53, Below Mouth Whistle Creek—1929	405
Niobrara River, Section 7-28-53, Below Mouth Whistle Creek—1930	457
Niobrara River, Section 7-28-55, Agate—1929	405
Niobrara River, Section 7-28-55, Agate—1930	457
Niobrara River, Section 4-28-53, Octave Harris Ranch—1929.....	406
Niobrara River, Section 4-28-53, Octave Harris Ranch—1930.....	457
Niobrara River, Section 9-29-56, South of Harrison—1929.....	406
Niobrara River, Section 9-29-56, South of Harrison—1930.....	457
Niobrara River, Section 5-28-51, South of Marsland—1929.....	406
Niobrara River, Section 5-28-51, South of Marsland—1930.....	456
Niobrara River, Section 27-29-48, Dunlap—1929	406
Niobrara River, Section 27-29-48, Dunlap—1930	456
Niobrara River, Section 8-33-35, South of Eli—1929	406
Niobrara River, Crane Bridge South of Eli—1930	456
Niobrara River, Section 1-32-10, South of Lynch—1929	406
Niobrara River, South of Lynch—1930	457
Norfolk River, Below Mill at Norfolk—1929	406
Norfolk River, Below Mill at Norfolk—1930	457
North Platte River Analysis—1930:	
Reaching Whalen, Wyoming	367
Diversions at Whalen	369
Reaching State Line	368
Reaching Mitchell	368
Diversions for Northport Irrigation District	370
North Platte River—Pathfinder Reservoir:	
Station Description	306
Storage—1929	335
Storage—1930	346
Inflow—1929	335
Inflow—1930	347

Outflow—1929	337
Outflow—1930	347
North Platte River—Guernsey Reservoir:	
Station Description	306
Storage—1929	337
Storage—1930	348
Inflow—1929	338
Inflow—1930	348
Outflow—1929	338
Outflow—1930	349
Storage Quantities 1000 Acre Feet—1909-1930	356
North Platte River above Whalen, Wyoming:	
Station Description	306
Daily Discharge—1929	340
Daily Discharge—1930	349
Analysis of North Platte River Reaching Whalen—1930.....	367
Analysis of North Platte River—	
Diversions at Whalen—1930	369
North Platte River Passing Whalen Dam:	
Station Description	306
Daily Discharge—1929	340
Daily Discharge—1930	350
North Platte River—Torrington:	
Station Description	307
Daily Discharge—1929	341
Daily Discharge—1930	350
Discharge Measurements—1929	315
Discharge Measurements—1930	325
North Platte River—Interstate Station—Wyoming-Nebraska:	
Daily Discharge—1930	351
Discharge Measurements—1929	315
Discharge Measurements—1930	325
North Platte River—Henry:	
Station Description	308
Daily Discharge—1929	341
North Platte River—Mitchell:	
Station Description	308
Daily Discharge—1929	342
Daily Discharge—1930	351
Discharge Measurements—1929	316
Discharge Measurements—1930	326
North Platte River—Minatare:	
Station Description	309
Daily Discharge—1929	342

DEPARTMENT OF PUBLIC WORKS

493

	Page
Daily Discharge—1930	352
Discharge Measurements—1929	316
Discharge Measurements—1930	326
North Platte River—Bridgeport:	
Station Description	309
Daily Discharge—1929	343
Daily Discharge—1930	352
Discharge Measurements—1929	317
Discharge Measurements—1930	327
North Platte River—Oshkosh:	
Station Description	310
Daily Discharge—1929	343
Daily Discharge—1930	353
Discharge Measurements—1929	317
Discharge Measurements—1930	327
North Platte River—Sutherland:	
Discharge Measurements—1930	328
North Platte River—North Platte:	
Station Description	311
Daily Discharge—1929	344
Daily Discharge—1930	353
Discharge Measurements—1929	318
Discharge Measurements—1930	328

P

Pathfinder Reservoir:	
Station Description	306
Storage—1929	335
Storage—1930	346
Inflow—1929	335
Inflow—1930	347
Outflow—1929	337
Outflow—1930	347
Storage Quantities—1000 Acre Feet 1909-1930	356
Platte River—Overton:	
Station Description	312
Daily Discharge—1929	345
Daily Discharge—1930	355
Discharge Measurements—1929	322
Discharge Measurements—1930	332
Platte River—Cozad:	
Discharge Measurements—1929	322
Discharge Measurements—1930	332
Platte River—South of Elm Creek:	
Discharge Measurements—1929	322

	Page
Platte River—Gothenburg:	
Discharge Measurements—1929	323
Discharge Measurements, Below Gothenburg Canal—1930.....	331
Discharge Measurements, North Channel—1930	332
Discharge Measurements, South Channel—1930	332
Platte River—Duncan:	
Station Description	313
Daily Discharge—1929	346
Daily Discharge—1930	355
Discharge Measurements—1929	323
Discharge Measurements—1930	333
Platte River—Columbus:	
Discharge Measurements—1929	324
Discharge Measurements—1930	333
Platte River—South of Fremont:	
Discharge Measurements—1929	324
Platte River—Ashland:	
Station Description	313
Daily Discharge—1929	333
Daily Discharge—1930	356
Discharge Measurements—1929	324
Discharge Measurements—1930	333-334
Platte River—Plattsmouth:	
Discharge Measurements—1929	324
Discharge Measurements—1930	334

R

Republican River, Section 9-1-42, Colorado- Nebraska Line—1929	410
Republican River, Section 9-1-42, Colorado- Nebraska Line—1930	462
Republican River, Section 11-1-42, Sanborn—1929	410
Republican River, Section 11-1-42, Sanborn—1930	463
Republican River, SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 16-3-31, Culbertson—1929	411
Republican River, between Section 16 & 17-3-31, Culbertson—1930	462
Republican River, Section 31-3-29, McCook—1929.....	412
Republican River, Section 31-3-29, McCook—1930	463
Republican River, SE $\frac{1}{4}$ Section 22-14-24, Holbrook—1929....	412
Republican River, SE $\frac{1}{4}$ Section 22-14-24, Holbrook—1930....	462
Republican River, Bloomington—1929	412
Republican River, Bloomington—1930	463
Republican River, Max—1929	412

DEPARTMENT OF PUBLIC WORKS

495

	Page
Republican River, Max—1930	463
Republican River, Superior—1929	413
Republican River, Superior—1930	464
Republican River, Bostwick—1929	413
Republican River, Bostwick—1930	462
Republican River, (South Branch), Section 19-1-37, South of Benkelman—1929	410
Republican River, (South Branch), Section 19-1-37, South of Benkelman—1930	461
Republican River (North Branch), Section 19-1-37, Benkelman—1929	411
Republican River (North Branch), Section 19-1-37, Benkelman—1930	461
Republican River, Oxford—1930	463
Return Flow:	
Whalen, Wyoming-Nebraska State Line—1928	372
Whalen, Wyoming-Nebraska State Line—1929	373
Wyoming-Nebraska State Line—Bridgeport—1927	371
Wyoming-Nebraska State Line—Bridgeport—1928	372
Wyoming-Nebraska State Line—Bridgeport—1929	373
Bridgeport—North Platte—1928	372
Bridgeport—North Platte—1929	373

S

Snake River, Section 9-31-30, Above Falls—1929	416
Snake River, Section 9-31-30, Above Falls—1930	467
South Platte River—Julesburg Colorado:	
Station Description	311
Daily Discharge—1929	345
Daily Discharge—1930	354
Channel No. 1:	
Discharge Measurements—1929	319
Discharge Measurements—1930	329
Channel No. 2:	
Discharge Measurements—1929	320
Discharge Measurements—1930	330
Channel No. 3:	
Discharge Measurements—1929	320
Discharge Measurements—1930	330
Channel No. 4:	
Discharge Measurements—1929	321
Discharge Measurements—1930	331
South Platte River at Ogallala:	
Discharge Measurements—1929	321
Discharge Measurements—1930	331

	Page
South Platte River at North Platte:	
Daily Discharge—1929	344
Daily Discharge—1930	354
Discharge Measurements—1929	319
Discharge Measurements—1930	329

V

Visible Return Flow:

Whalen, Wyoming-Nebraska State Line—1928	372
Whalen, Wyoming-Nebraska State Line—1929	373
Wyoming-Nebraska State Line—Bridgeport—1927	371
Wyoming-Nebraska State Line—Bridgeport—1928	372
Wyoming-Nebraska State Line—Bridgeport—1929	373
Bridgeport-North Platte—1928	372
Bridgeport-North Platte—1929	373

W

Water Analysis—North Platte River Reaching Whalen—1930	367
Water Analysis—North Platte River Reaching State Line—1930	368
Water Analysis—North Platte River Reaching Mitchell—1930	368
Water Analysis—Diversions at Whalen—1930	369
Water Analysis of Diversions for Northport Irrigation District—1930	370
White River, Section 9-31-52, Military Road—1929	421
White River, Section 9-31-52, Military Road—1930	473
White River, Section 18-33-49, 6 miles west of Chadron—1929	422
White River, Section 18-33-49, 6 miles west of Chadron—1930	473
White River, Section 26-32-52, Above Whitney Dam, Below Harrison-Cooper Canal—1929	422
White River, Section 26-32-52, Above Whitney Dam, Below Harrison-Cooper Canal—1930	473
White River, Section 26-32-52, Below Whitney Pipe Line—1929	422
White River, Section 26-32-52, Below Whitney Pipe Line—1930	473
White River, Below Whitney Diversion Dam—1930	473
Wood River, Section 13-10-12, North of Wood River—1929	424
Wood River, Section 12-9-16, Northwest of Kearney—1929	424
Wood River, Section 12-9-16, Northwest of Kearney—1930	475
Wood River, Section 20-12-7, South of Chapman—1929	424
Wood River, Section 22-11-9, Grand Island—1929	424
Wood River, Grand Island—1930	475
Wood River, Wood River—1930	475