

STATE OF NEBRASKA
DEPARTMENT
OF
PUBLIC WORKS
REPORT OF SECRETARY

1931-1932

Nineteenth Biennial Report

of the

Department of Public Works

To

HONORABLE CHARLES W. BRYAN

Governor of the State of Nebraska

Lincoln, Nebraska

1931-1932

November 30, 1932

TO HIS EXCELLENCY, CHARLES W. BRYAN,
GOVERNOR OF THE STATE OF NEBRASKA.

MY DEAR GOVERNOR:

As provided in Section 81-6302 of the Compiled Statutes for 1929, 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 under your administration have considerably exceeded those of any like period since the activity of road construction and maintenance was undertaken by the State. Not only has construction on both the Federal Aid System and new State routes exceeded that of any previous biennium, but also there have been about one thousand miles of new highway added to the total mileage of State maintained highways. There are still approximately two thousand miles of routes which have been designated by the Legislature which have not been constructed, and which are not yet subject to State maintenance.

Particular attention is called to the parts of this report which show that a total of 353 miles, or approximately one-half of the total of 710 miles, of higher type pavement was placed under contract during 1931 and 1932; also, to that part of the report showing development in oil or bituminous-mat highways. It is the writer's belief, resulting from experience thus far gained, that this so called intermediate type of highway (which is not only an all-weather road but dustless as well) should play an important part in the future improvement of Nebraska's highway system.

Particular attention is also called to the great number of bridges built during the present biennium. The item of bridges and drainage structures generally have a very important bearing on the total costs per mile of construction of the various types.

During the present biennium very favorable prices have obtained, permitting the maximum in construction for the money made available. Gaps in important highways have been closed so as to provide a continuity of construction and traffic.

Due to reduced prices total maintenance costs have not increased, even though we have had an increased mileage to maintain and an unprecedented snowfall during the winter of 1931-1932.

For the first time in many years all Federal Aid apportioned to Nebraska has either been spent for construction or has been placed under contract.

One of the outstanding accomplishments of this department during the past two years has been the drought relief work with direct labor methods, doing the work on a force account basis in several counties in the northeastern part of Nebraska. In addition to the humanitarian character of this work, it is a notable fact that costs were well in line with contract work generally over the State.

Bureau of Irrigation, Water Power and Drainage

Water shortage for irrigation during the summer of 1931 was the most acute that had been experienced for a considerable number of years. This was due to light snowfall in the mountains for the two previous winters. Attention is called to the increase in land placed under irrigation during the past ten years. The only way in which a dependable water supply can be assured at all times during the irrigation season, from North Platte east, is by the construction of storage reservoirs. The report of the Bureau of Irrigation, Water Power and Drainage is given in considerable detail in Part II.

Respectfully submitted,

R. L. COCHRAN,
Secretary and State Engineer.

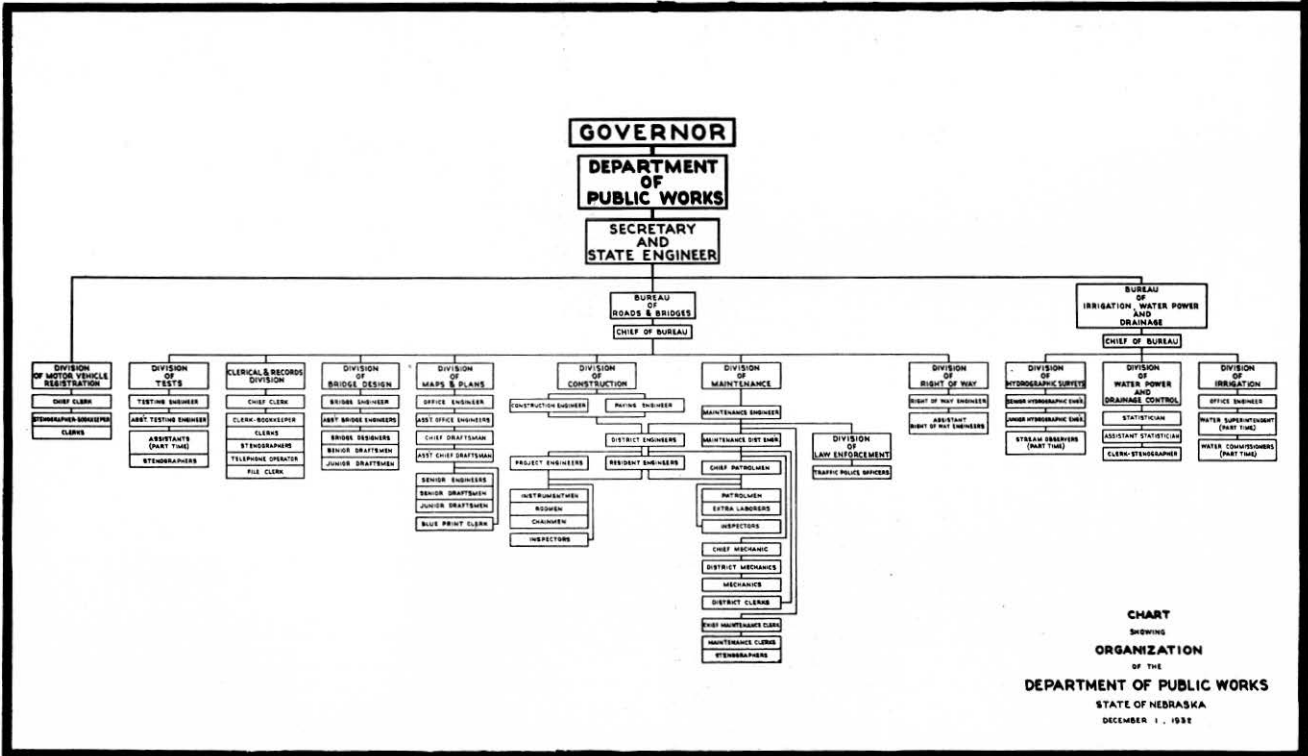
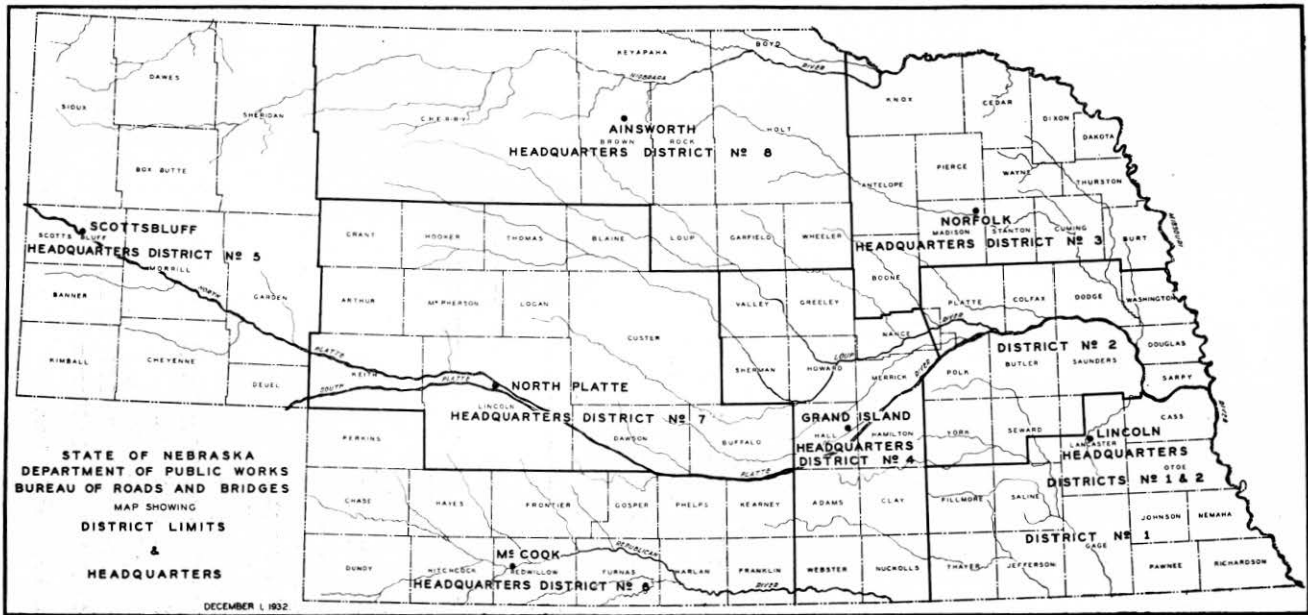


CHART
SHOWING
ORGANIZATION
OF THE
DEPARTMENT OF PUBLIC WORKS
STATE OF NEBRASKA
DECEMBER 1, 1932

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STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ROADS AND BRIDGES
MAP SHOWING
DISTRICT LIMITS
&
HEADQUARTERS

DECEMBER 1, 1932

PART I
 BUREAU OF ROADS AND BRIDGES
 CONTENTS

Organization Chart	IV
Map of the Eight Districts.....	V
List of Executives.....	8
Regular Employees (Table).....	9
Maps—Nebraska Highways	11- 13
Report of Nebraska State Highway Mileage.....	14
Mileage Contracted and Constructed (Table).....	15
Total Obligations by Bienniums (Table).....	16
Federal Aid Appropriations (Table).....	17
Auto Registration Fees (Table).....	17
Gasoline Tax Fund (Table).....	18- 19
County Apportionment Ratios (Table).....	20- 21
Contractors to Whom Contracts Were Awarded.....	22- 25
Reports of the Eight Districts.....	26- 35
Division of Construction.....	36- 49
Introduction	36
Construction Division Report.....	37
Oiled Roads	41
Paved Roads	44
Average Compressive Strength of Cores (Table).....	49
Division of Maintenance.....	50- 68
Organization	50
Equipment (Table).....	52
Snow Removal	53
Snow Fall (Table).....	54
Signs	57
Dust Prevention	57
Road Magnet	58
Traffic Census	59
Maintenance Costs	59
Traffic Flow in Nebraska (Map).....	60
Method of Purchase.....	65
Highway Law Enforcement.....	65
Report of State Traffic Officers' Activities (Table).....	66
Facts Not Generally Known.....	67
Division of Maps and Plans.....	69- 72

CONTENTS (Continued)

Division of Bridge Design.....	73-106
Bridges Constructed (Table).....	73
The Trend of Bridge Design and Construction.....	74
River Bridges.....	75
Grade Separations	77
Emergency Bridge Engineering Work.....	78
County Bridge Checks.....	79
Division of Accounts and Records.....	107-109
Compensation Claims Paid.....	109
Division of Tests.....	110-121
Organization	110
Functions	111
Sampling	112
Reports	112
Growth	113
Equipment	114
Materials	114
Research	116
Summary of Laboratory Tests (Table).....	120
Division of Right of Way.....	122-125
Expenditures for Right of Way (Table).....	124
Contracts Awarded, November 1, 1930-December 31, 1930 (Table)....	126-127
Contracts Awarded, January 1, 1931-December 31, 1931 (Table).....	128-139
Contracts Awarded, January 1, 1932-November 30, 1932 (Table).....	140-149
Improvement of Roads Connecting State Institutions and State Parks with Highways.....	150-152
Average Contract Prices for 1917-26 (Table).....	153-154
Average Contract Prices for 1927-28 (Table).....	155
Average Contract Prices for 1929-30 (Table).....	156-157
Average Contract Prices for 1931 (Table).....	158-159
Average Contract Prices for 1932 (Table).....	160-162
Average Contract Prices for Bridge Items, 1925-30 (Table).....	163
Average Contract Prices for Bridge Items, 1931 (Table).....	164
Average Contract Prices for Bridge Items, 1932 (Table).....	165
Division of Motor Vehicle Registration.....	166-179
Annual Report of Motor Vehicle Department, 1930 (Table)....	172
Annual Report of Motor Vehicle Department, 1931 (Table)....	176

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

R. L. Cochran, Secretary.....15 Yr. 5 Mo.

Bureau of Roads and Bridges

A. T. Lobdell, Chief of Bureau.....13 Yr. 4 Mo.
 A. M. Gaddis, Construction Engineer.....13 Yr. 9 Mo.
 M. B. Jones, Paving Engineer.....10 Yr. 7 Mo.
 A. C. Tilley, Maintenance Engineer.....13 Yr. 7 Mo.
 F. H. Klietsch, District Engineer, Dist. No. 1.....12 Yr. 1 Mo.
 Edwin Olmstead, District Engineer, Dist. No. 2.....11 Yr. 8 Mo.
 J. B. Martin, District Engineer, Dist. No. 3.....6 Yr. 8 Mo.
 W. H. Bauman, District Engineer, Dist. No. 4.....12 Yr. 0 Mo.
 T. C. Middleswart, District Engineer, Dist. No. 5.....13 Yr. 8 Mo.
 F. C. Smith, District Engineer, Dist. No. 6.....10 Yr. 8 Mo.
 C. W. Eubank, District Engineer, Dist. No. 7.....12 Yr. 0 Mo.
 R. F. Weller, District Engineer, Dist. No. 8.....5 Yr. 8 Mo.
 A. G. Williams, R. O. W. Engineer.....5 Yr. 9 Mo.
 R. J. Boyd, Office Engineer.....13 Yr. 1 Mo.
 R. N. Riddle, Asst. Office Engineer.....9 Yr. 9 Mo.
 E. J. Babcock, Jr., Asst. Office Engineer.....11 Yr. 3 Mo.
 J. G. Mason, Bridge Engineer.....6 Yr. 3 Mo.
 A. L. Ogle, Asst. Bridge Engineer.....13 Yr. 6 Mo.
 C. M. Duff, Testing Engineer.....10 Yr. 3 Mo.
 B. L. Schultz, Chief Clerk.....11 Yr. 7 Mo.
 Ruby Dobbins, Chief Maintenance Clerk.....14 Yr. 10 Mo.

Bureau of Irrigation, Water Power & Drainage

Robert H. Willis, Chief of Bureau.....37 Yr. 6 Mo.
 F. B. Shaffer, Office Engineer.....4 Yr. 1 Mo.
 K. I. Ward, Statistician.....14 Yr. 2 Mo.
 E. Clay, Assistant Statistician.....13 Yr. 6 Mo.
 A. W. Hall, Senior Hydrographer.....13 Yr. 6 Mo.
 A. E. Johnston, Junior Hydrographer.....12 Yr. 8 Mo.
 John J. Rasmussen, Superintendent Water Div. No. 2.....6 Yr. 0 Mo.

Motor Vehicle Division

Mabel G. Tracey, Chief of Division.....13 Yr. 10 Mo.

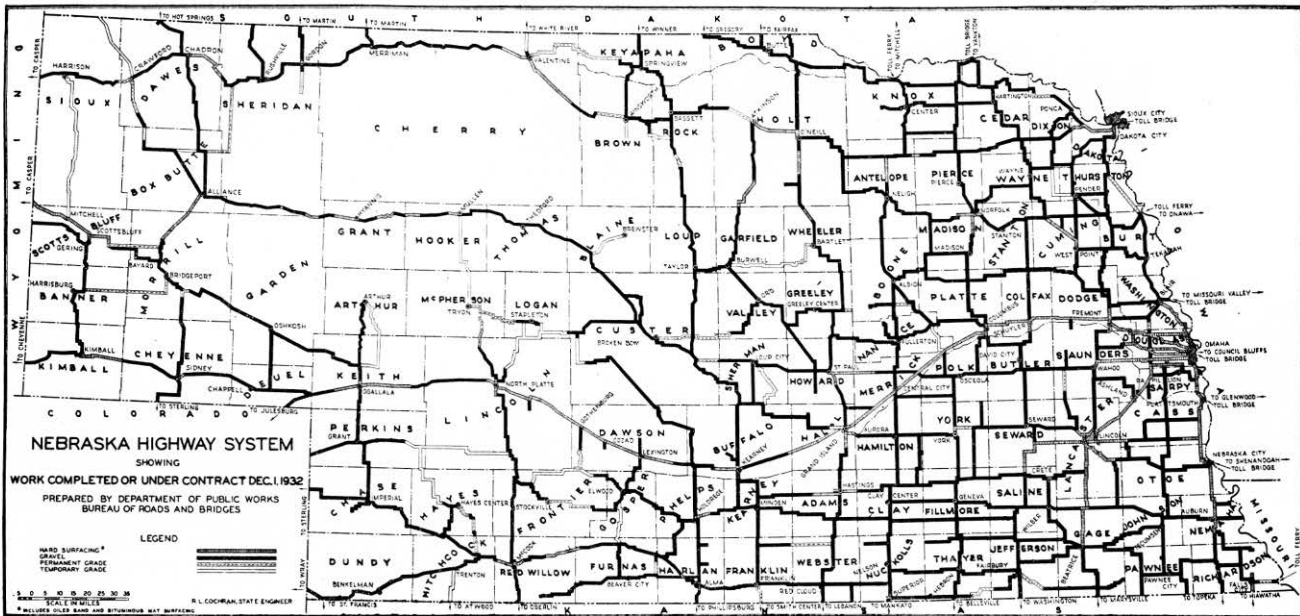
REGULAR EMPLOYEES OF THE DEPARTMENT OF PUBLIC WORKS NOVEMBER 1, 1930 to NOVEMBER 1, 1931

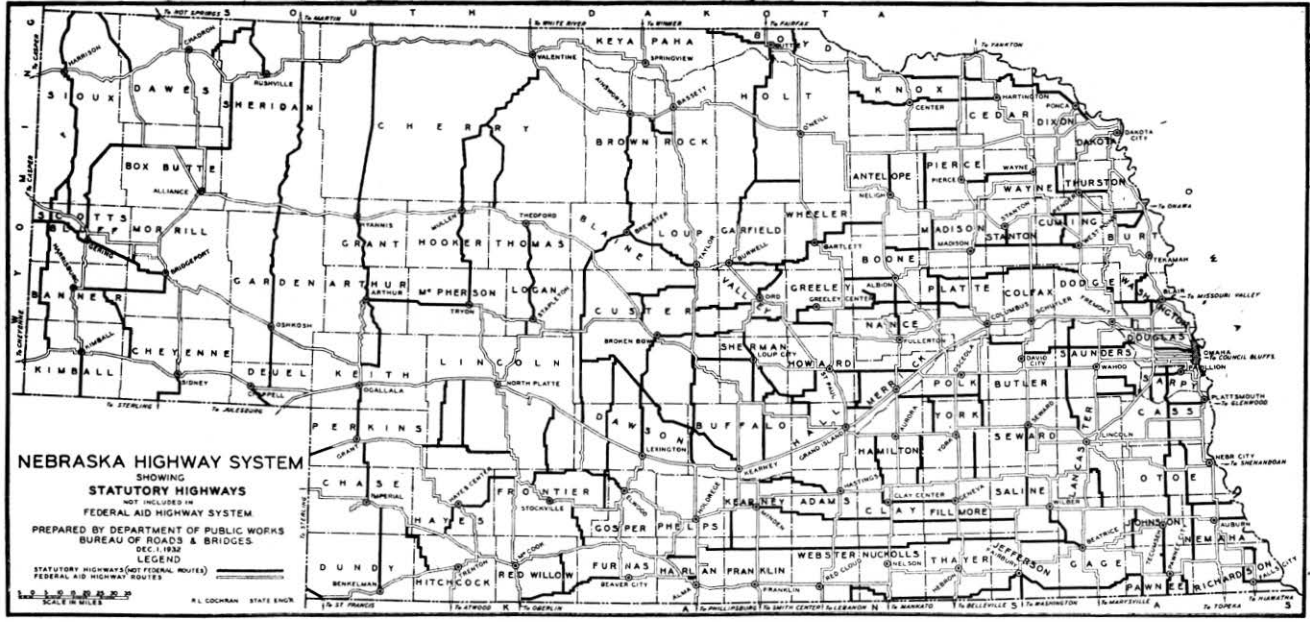
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Secretary	1	1	1	1	1	1	1	1	1	1	1	1
Chief, Bureau of Roads	1	1	1	1	1	1	1	1	1	1	1	1
Construction Engineer	1	1	1	1	1	1	1	1	1	1	1	1
Paving Engineer	1	1	1	1	1	1	1	1	1	1	1	1
District Engineers	8	8	8	8	8	8	8	8	8	8	8	8
R. O. W. Engineers	1	1	3	3	5	6	6	6	8	8	8	8
Clerical & Records	12	12	11	11	11	12	12	13	16	16	16	16
Office Engineer	1	1	1	1	1	1	1	1	1	1	1	1
Asst. Office Engineers	2	2	2	2	2	2	2	2	2	2	2	2
Bridge Engineers	16	16	4	4	4	4	4	4	4	4	4	4
Sr. Engineers & Draftsmen	25	21	30	37	35	50	48	58	44	44	37	37
Draftsmen, Part Time	4	—	4	7	12	29	12	6	—	—	1	13
Supply Clerk	1	1	1	1	1	1	1	1	1	1	1	1
Res. & Proj. Engineers	83	81	81	79	84	90	100	100	104	104	104	104
Instrument Men	30	27	28	32	35	35	55	64	69	73	66	66
Rodmen & Inspectors	96	68	73	83	98	137	189	233	245	256	218	208
Chainmen	47	32	29	32	40	63	69	83	78	79	69	66
Motor Vehicle	13	13	13	14	14	14	16	16	17	16	16	16
Irrigation Office	20	19	9	9	9	9	9	9	14	14	15	11
Special Survey	3	2	5	2	—	—	—	—	—	—	—	—
Subtotal	386	308	306	329	363	465	536	608	615	630	570	565
Maintenance Division												
Maintenance Engineer	1	1	1	1	1	1	1	1	1	1	1	1
Maintenance Clerks	8	8	9	9	9	10	11	11	11	12	12	12
Power Patrolmen, Regular	345	339	344	348	354	355	356	357	357	362	364	368
Team Patrolmen, Regular	25	25	26	26	26	25	25	25	25	25	26	26
Mechanics	16	16	19	18	20	21	23	23	26	27	29	29
Chief Patrolmen	36	36	40	40	40	40	40	40	39	39	39	39
Sign Department	2	3	2	2	2	2	1	1	1	1	1	1
District Clerks	8	8	8	8	8	8	8	9	9	9	9	9
Supply Base	—	—	—	—	—	—	1	2	3	3	3	3
Law Enforcement	—	—	2	2	1	1	1	—	—	3	3	3
Subtotal	441	436	451	454	461	463	467	469	472	482	487	491
Grand Total	807	744	757	783	824	928	1003	1077	1087	1112	1057	1056

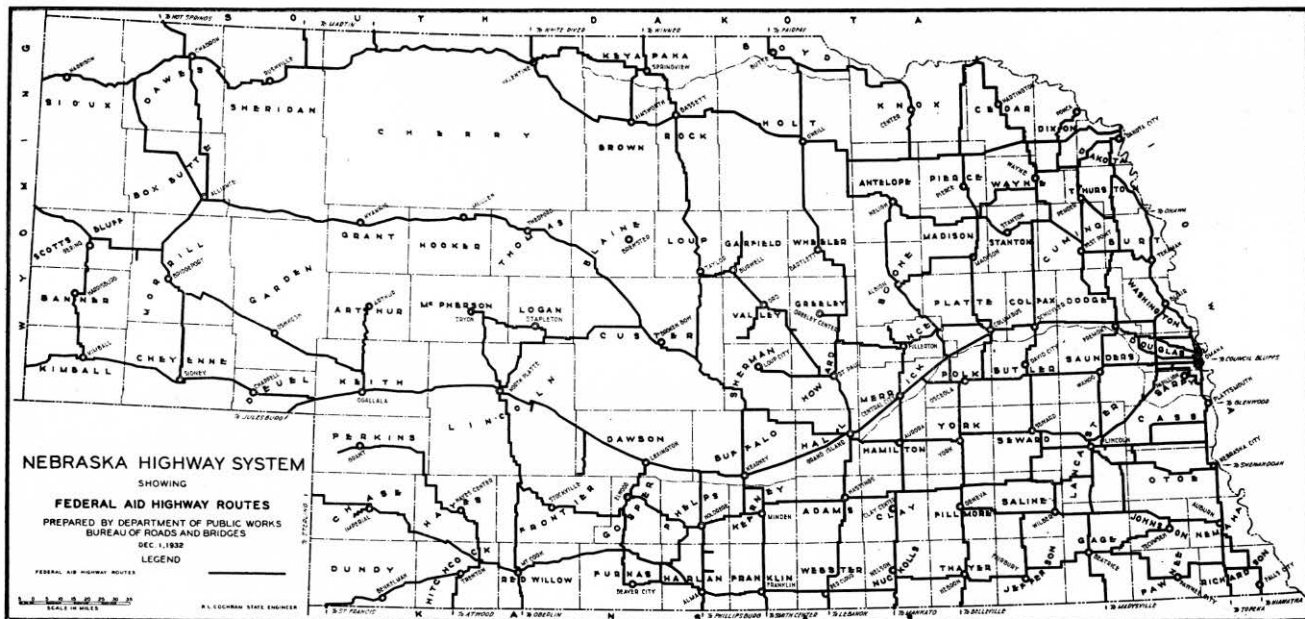
DEPARTMENT OF PUBLIC WORKS

REGULAR EMPLOYEES OF THE DEPARTMENT OF PUBLIC WORKS NOVEMBER 1, 1931 to DECEMBER 1, 1932

	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Secretary	1	1	1	1	1	1	1	1	1	1	1	1	1
Chief, Bureau of Roads	1	1	1	1	1	1	1	1	1	1	1	1	1
Construction Engineer	1	1	1	1	1	1	1	1	1	1	1	1	1
Paving Engineer	1	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	8
R. O. W. Engineers	8	8	8	8	9	7	7	7	8	8	9	12	12
Clerical & Records	15	15	15	15	15	15	15	15	15	15	15	15	15
Office Engineer	1	1	1	1	1	1	1	1	1	1	1	1	1
Asst. Office Engineers	2	2	2	2	2	2	2	2	2	2	2	2	2
Bridge Engineers	4	4	4	4	4	4	4	4	4	4	4	4	4
Sr. Engineers & Draftsmen	34	35	35	36	35	35	33	33	33	42	41	40	35
Draftsmen, Part Time	11										13		
Supply Clerk	1	1	1	1	1	1	1	1	1	1	1	1	1
Res. & Proj. Engineers	104	103	102	100	100	98	97	98	99	102	101	97	98
Instrument Men	64	65	61	62	62	60	62	63	67	69	69	72	65
Rodmen & Inspectors	183	89	74	71	81	107	118	116	145	163	205	231	176
Chainmen	59	8	5	6	13	16	17	13	23	32	46	59	38
Motor Vehicle	17	17	17	16	16	15	16	16	16	16	16	16	16
Irrigation Office	7	6	6	7	7	7	7	11	12	12	11	9	9
Guard Rail Crews						8	8	6	8	8	4		
Subtotal	522	366	343	341	358	388	398	397	442	485	550	571	484
Maintenance Division													
Maintenance Engineer	1	1	1	1	1	1	1	1	1	1	1	1	1
Maintenance Clerks	12	12	14	16	16	16	16	16	16	16	16	16	16
Power Patrolmen, Regular	372	371	371	372	372	378	372	293	259	264	253	144	81
Power Patrolmen, Part Time								48	54	53	68	171	234
Team Patrolmen, Regular	26	26	26	26	26	33	24	24	15	15	15	7	
Team Patrolmen, Part Time									8	8	8	16	19
Mechanics	30	31	31	31	31	33	34	34	35	36	37	38	37
Chief Patrolmen	39	39	39	39	39	39	39	38	38	37	37	37	37
Sign Department	1	2	2	2	2	2	2	2	2	2	2	2	1
District Clerks	9	9	9	9	9	9	9	9	9	9	9	9	9
Supply Base	3	3	3	3	3	3	3	3	3	3	3	3	3
Law Enforcement	3	3	3	3	3	3	3	3	3	3	3	3	3
Paint Crew						26	24						
Subtotal	496	497	499	502	502	543	527	471	443	447	452	447	441
Grand Total	1018	863	842	843	860	931	925	868	885	932	1002	1018	925







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 31, 1932.

The total mileage of State and Federal highways when completed equals approximately 9752 miles.

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 5630 miles are now on the Federal Aid System; and also 571 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 Federal 7% system in 1923.....	6201 miles
Highways number 10 to 161 inclusive, and not included in the above 6201 miles, approximately.....	2383 miles
Highways number 162 to 204 inclusive, approximately.....	1168 miles
Approximate total.....	9752 miles

At the time when the work now under contract is completed the status of the marked and maintained Nebraska State Highway System will be approximately as follows:

Paved roads.....	710 miles
Bituminous mat roads.....	292 miles
Gravel roads.....	5763 miles
Permanent grade without surfacing.....	980 miles
Temporary grade without surfacing.....	64 miles
Total marked and maintained, approximately.....	7809 miles
Mileage designated for the State system but not yet maintained, approximately	1943 miles
Approximate total.....	9752 miles

The above mileages include the following work now under construction or under contract.

Paved roads	95 miles
Bituminous mat roads.....	22 miles
Gravel roads	121 miles
Graded roads	159 miles
Bridges	95
Overpasses	3
Underpasses	2

The following chart gives the mileage contracted (and constructed) by the Department of Public Works by years. The totals are not the same as the totals given in the preceding paragraph which include some mileage improved by counties and cities, and some natural gravel roads which did not require construction.

MILEAGE CONTRACTED (AND CONSTRUCTED) BY THE DEPARTMENT OF PUBLIC WORKS

Year	Pavement							Gravel resurfacing (2nd course stage construction)	Number of bridges	Number of over-passes	Number of under-passes
	Grading	Re-grading	Concrete	Brick	Bituminous concrete	Sheet Asphalt	Bituminous mat surfacing				
1918	169.5	—	—	5.4	—	—	—	12.4	—	—	—
1919	655.1	—	6.8	1.1	—	—	—	10.9	1	—	—
1920	400.2	—	3.2	—	—	—	—	22.1	4	—	—
1921	384.3	—	1.6	0.9	—	—	—	40.2	12	—	—
1922	360.4	—	0.1	—	6.0	—	—	47.2	34	1	1
1923	13.4	—	18.0	8.7	1.6	—	—	10.0	13	—	—
1924	370.4	—	12.5	2.8	0.6	2.6	—	452.8	61	—	1
1925	452.7	7.0	18.8	0.6	0.7	—	—	913.6	59	—	—
1926	612.9	4.7	8.2	—	1.3	—	—	631.0	102	—	1
1927	547.0	90.5	9.7	—	1.5	0.2	—	1,194.6	76	—	—
1928	210.3	27.8	0.1	—	—	—	5.2	164.3	30	—	—
1929	547.3	131.2	88.4	—	1.1	—	15.8	527.4	92	—	2
1930	619.3	106.0	107.0	—	—	—	7.8	511.9	76	—	—
1931	1,053.4	107.9	207.4	—	—	—	65.8	1,062.6	113	9	—
1932	465.7	209.7	145.8	0.1	—	—	195.2	494.4	154	3	2
Total	6,861.9	684.6	627.6	19.6	12.8	2.8	289.8	6,095.4	827	13	7

TOTAL OBLIGATIONS BY BIENNIUMS

The following table shows the construction obligations by years from "Federal", "State", and "Other" funds up to November 30, 1932. These figures are obtained from final costs where these are known, and from contracts where final estimates are not yet prepared but where the division into funds is estimated.

Year	Federal	State	Other	Total
1918.....	\$ 248,443.93	\$ 248,903.47	\$ 147,985.45	\$ 645,332.85
1919.....	1,364,886.94	1,412,363.92	114,454.11	2,891,704.97
1920.....	1,496,896.48	1,788,279.61	46,016.18	3,331,192.27
1921.....	1,174,979.03	1,552,026.71	50,825.91	2,777,831.65
1922.....	1,049,348.72	1,011,211.07	181,385.79	2,241,945.58
1923.....	535,758.62	18,491.44	590,106.03	1,144,356.09
1924.....	1,883,440.15	1,390,762.61	707,184.21	3,981,386.97
1925.....	2,283,019.30	2,271,746.75	361,682.56	4,916,448.61
1926.....	2,345,765.43	2,846,162.31	179,140.70	5,371,068.44
1927.....	2,743,593.86	3,771,972.54	252,658.57	6,768,224.97
1928.....	459,392.66	914,135.27	83,312.81	1,456,840.74
1929.....	2,221,380.21	4,017,988.54	85,343.21	6,324,711.96
1930.....	2,026,198.46	3,755,757.28	65,618.53	5,847,574.27
1931.....	5,632,665.29	4,837,853.26	417,939.65	10,888,458.20
1932.....	5,325,858.58	2,500,928.48	45,171.22	7,871,958.28
TOTALS	\$30,791,627.66	\$32,338,583.26	\$ 3,328,824.93	\$66,459,035.85

Included in the above figures are the following costs of bridges:

Year	Cost
1923.....	\$ 139,959.37
1924.....	420,998.67
1925.....	245,899.83
1926.....	766,358.03
1927.....	984,800.82
1928.....	184,026.58
1929.....	673,964.98
1930.....	626,269.00
1931.....	1,548,246.21
1932.....	1,325,923.18

**SUMMARY OF ALL
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. 23, 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			655,516	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
April 4, 1930	June 30, 1933	1935	125,000,000	2,256,040.80	15,000
December 20, 1930 Emergency Advance Federal Aid for work performed before September 1, 1931				1,708,031.00	
July 21, 1932 Emergency Construction Highway Funds for work performed before July 1, 1933				2,544,773.00	
Nebraska's total apportionment of Federal Aid Funds to June 30, 1933				\$31,196,526.80	

All of the Federal Aid Funds apportioned to Nebraska have been expended or will be expended on construction work now under contract, or which will be under contract by the time this report is published.

AUTO REGISTRATION FEES

Year	Total auto registration fees	State's share for maintaining roads
1919 (Approx.)	\$2,300,000.00	None
1920 (Approx.)	2,424,332.50	None
1921	2,824,811.25	None
1922	3,036,697.35	None
1923	3,355,699.62	None
1924	3,597,260.75	None
1925	3,936,458.26	None
1926	3,636,096.92	\$1,058,114.66
1927	3,740,552.84	1,088,555.66
1928	3,967,530.42	1,154,630.97
1929	4,289,968.44	1,248,537.30
1930	3,804,949.84	1,106,503.32
1931	3,742,400.52	1,088,282.06
1932 (Estimated)	3,341,361.89	971,498.35

REPORT OF SECRETARY

GASOLINE TAX FUND

Month	Total receipts	Refunds	Transferred to counties	Transferred to state
1925				
May	\$ 198,461.16	None		\$ 198,461.16
June	235,010.21	None		235,010.21
July	247,275.75	None		247,275.75
Aug.	286,190.56	\$ 1,979.20		284,211.36
Sept.	286,354.07	1,162.32		285,191.75
Oct.	273,082.56	2,256.12		270,826.44
Nov.	244,296.48	1,059.48		243,237.00
Dec.	221,213.34	1,487.98		219,725.36
Totals	\$1,991,884.13	\$ 7,945.10		\$1,983,939.03
1926				
Jan.	\$ 209,949.04	\$ 341.86		\$ 209,607.78
Feb.	184,937.77	117.50		184,820.27
Mar.	190,249.27	163.10		190,086.17
Apr.	235,878.57	285.34		235,593.23
May	253,820.89	1,693.76		252,127.13
June	265,603.55	831.83		264,771.72
July	277,318.19	2,466.95		274,851.24
Aug.	315,179.41	2,202.46		312,976.95
Sept.	323,071.68	1,489.58		321,582.10
Oct.	279,056.08	3,150.76		275,905.32
Nov.	280,124.63	None		280,124.63
Dec.	226,929.33	2,566.08		224,363.75
Totals	\$3,042,119.51	\$15,409.22		\$3,026,710.29
1927				
Jan.	\$ 223,535.22	\$ 690.60		\$ 222,844.62
Feb.	217,384.21	270.72		217,113.49
Mar.	207,720.83	104.58		207,616.25
Apr.	228,192.53	None		228,192.53
May	236,827.21	1,232.04		235,595.17
June	297,353.22	3,052.19		294,301.03
July	294,660.27	1,288.07		293,372.20
Aug.	649,137.87	1,460.44		647,677.43
Sept.	370,559.33	2,585.32		367,974.01
Oct.	338,926.81	5,210.20		333,716.61
Nov.	309,539.10	2,826.54		306,712.56
Dec.	298,881.87	1,520.50		297,361.37
Totals	\$3,672,718.47	\$20,241.20		\$3,652,477.27
1928				
Jan.	\$ 252,199.90	\$ 1,990.58		\$ 250,209.32
Feb.	277,562.92	1,507.80		276,055.12
Mar.	269,895.04	1,844.44		268,050.60
Apr.	329,918.21	842.38		329,075.83
May	316,191.69	3,014.02		313,177.67
June	331,593.23	1,939.62		329,653.61
July	348,744.68	1,687.08		347,057.60
Aug.	409,021.53	2,545.72		406,475.81
Sept.	448,498.42	4,348.60		444,149.82
Oct.	355,207.22	2,654.04		352,553.18
Nov.	361,120.56	1,927.84		359,192.72
Dec.	267,886.74	1,480.84		266,405.90
Totals	\$3,967,840.14	\$25,782.96		\$3,942,057.18

DEPARTMENT OF PUBLIC WORKS

19

GASOLINE TAX FUND—Concluded

Month	Total receipts	Refunds	Transferred to counties	Transferred to state
1929				
Jan.	\$ 265,895.67	\$ 2,523.26	-----	\$ 263,282.41
Feb.	302,805.18	2,535.56	-----	300,269.62
Mar.	252,774.75	1,146.46	-----	251,628.29
*Apr.	591,643.40	1,215.52	\$ 147,294.47	443,133.41
May	737,081.71	5,223.94	182,651.94	549,205.83
June	756,925.83	3,492.88	188,045.74	565,387.21
July	685,473.64	9,177.91	168,917.68	507,378.05
Aug.	843,718.60	8,075.94	208,754.42	626,888.24
Sept.	946,341.35	6,029.12	234,921.81	705,390.42
Oct.	727,973.12	3,741.77	179,651.59	539,579.76
Nov.	789,647.05	7,985.94	195,259.03	586,402.08
Dec.	635,142.31	3,437.52	157,769.95	473,934.84
Totals	\$7,535,332.61	\$59,535.82	\$1,663,266.63	\$5,812,480.16
*Gas Tax increased from 2 to 4 cents per gallon, 1 cent going to the Counties and 3 cents to the State.				
1930				
Jan.	\$ 601,938.93	\$ 3,541.35	\$ 149,443.15	\$ 448,954.43
Feb.	622,018.16	5,231.15	154,040.50	462,746.51
Mar.	598,678.67	3,512.83	148,635.21	446,530.63
Apr.	763,580.01	4,026.24	189,732.19	569,821.58
May	809,325.74	8,915.82	199,946.23	600,463.69
June	717,137.90	7,966.24	177,136.66	532,035.00
July	788,658.05	7,223.54	193,202.38	586,232.13
Aug.	961,178.26	12,122.24	237,107.76	711,948.26
Sept.	871,544.94	10,355.58	215,141.09	646,048.27
Oct.	848,892.61	9,571.63	209,674.00	629,646.98
Nov.	798,607.43	8,826.30	197,289.03	592,492.10
Dec.	750,142.50	7,320.94	185,549.14	557,272.42
Totals	\$9,131,703.20	\$88,613.86	\$2,253,897.34	\$6,784,192.00
1931				
Jan.	\$ 651,206.89	\$ 4,769.30	\$ 162,225.65	\$ 483,301.94
Feb.	708,372.87	5,513.21	175,551.17	527,278.49
Mar.	675,168.02	6,038.24	167,113.85	501,968.53
Apr.	692,270.62	4,856.67	171,697.24	515,716.71
May	720,786.47	5,551.27	178,651.80	536,580.40
June	792,468.52	4,643.23	196,800.07	591,025.22
July	873,095.99	8,802.13	215,760.97	648,532.89
Aug.	961,186.75	8,069.12	237,966.91	715,150.72
Sept.	993,890.74	9,782.41	245,714.58	738,393.75
Oct.	770,926.77	11,884.07	186,479.53	572,563.17
Nov.	798,070.75	7,155.36	196,694.95	594,220.44
Dec.	668,597.95	5,179.98	165,253.45	498,159.51
Totals	\$9,309,132.94	\$82,327.97	\$2,299,915.17	\$6,926,889.80
1932				
Jan.	\$ 551,933.69	\$ 5,574.40	\$ 135,964.07	\$ 407,892.22
Feb.	517,290.32	7,186.29	127,213.51	381,640.52
Mar.	445,699.44	3,526.67	110,230.69	330,692.08
Apr.	643,476.89	4,088.04	159,534.71	478,604.14
May	793,540.62	3,415.96	197,218.66	591,656.00
June	698,236.19	11,190.04	171,449.04	514,347.11
July	877,914.90	12,238.12	216,106.69	648,320.09
Aug.	646,053.58	8,159.24	159,161.08	477,483.26
Sept.	738,194.98	7,910.46	182,253.63	546,775.89
Oct.	708,781.67	8,862.92	174,667.18	524,001.57
Nov.	672,965.15	5,571.48	168,535.91	499,807.76
Dec.	(Estimated) 560,000.00	5,000.00	140,000.00	413,750.00
Totals (estimated)	\$7,854,087.43	\$82,723.62	\$1,940,340.17	\$5,814,770.64
Grand Totals (estimated)	\$46,504,818.43	\$382,629.75	8,162,419.31	\$37,943,516.37

REPORT OF SECRETARY

**CHART SHOWING FACTORS MAKING UP COUNTY
APPORTIONMENT RATIOS—JULY 1, 1931**

County	Area in square miles	Population	Miles of rural & star mail routes	Ratio of county to state
Adams	565	26,275	571	.013996458
Antelope	872	15,206	674	.013587082
Arthur	721	1,344	168	.004980683
Banner	742	1,676	132	.004825013
Blaine	711	1,584	153	.004859042
Boone	692	14,738	428	.010457396
Box Butte	1,078	11,961	312	.010373887
Boyd	535	7,169	263	.006445788
Brown	1,235	5,772	369	.010108990
Buffalo	945	24,338	865	.017848490
Burt	475	13,062	403	.008883059
Butler	583	14,410	488	.010450207
Cass	538	17,684	495	.011110512
Cedar	735	16,427	539	.012061197
Chase	899	5,484	237	.007381627
Cherry	5,979	10,898	670	.034672108
Cheyenne	1,194	10,187	385	.011144364
Clay	579	13,571	589	.011147639
Colfax	405	11,434	360	.007794729
Cumming	577	14,327	550	.010967461
Custer	2,588	26,189	972	.028398854
Dakota	253	9,505	163	.004878382
Dawes	1,402	11,493	250	.011136280
Dawson	985	17,675	465	.012824019
Deuel	439	3,992	205	.004733616
Dixon	472	11,586	258	.008104093
Dodge	531	25,273	415	.012189006
Douglas	331	232,982	421	.061620983
Dundy	927	5,610	271	.007842566
Fillmore	576	12,971	602	.011107604
Franklin	578	9,094	376	.008124852
Frontier	975	8,114	494	.010682918
Furnas	721	12,140	316	.008937086
Gage	862	30,242	849	.018771094
Garden	1,687	5,099	339	.011635111
Garfield	575	3,207	181	.004915859
Gosper	464	4,287	274	.005540449
Grant	780	1,427	73	.004393582
Greeley	571	8,442	341	.007618720
Hall	528	27,117	415	.012622055
Hamilton	538	12,159	542	.010201089
Harlan	574	8,957	339	.007738147
Hayes	722	3,663	101	.004922679
Hitchcock	724	7,269	394	.008480552
Holt	2,393	16,509	274	.016868511
Hooker	722	1,180	30	.003691398
Howard	561	10,020	421	.008683974
Jefferson	578	16,409	557	.011539049
Johnson	374	9,157	388	.007363906
Kearney	516	8,094	416	.007977344
Keith	1,068	6,721	382	.009731850
Keya Paha	775	3,203	236	.006282621
Kimball	958	4,675	227	.007351111
Knox	1,114	19,110	708	.015890654
Lancaster	851	100,324	824	.035457914
Lincoln	2,536	25,627	623	.022866006
Logan	573	2,014	199	.004782149
Loup	576	1,818	143	.004238905
Madison	576	26,037	376	.012214794
McPherson	864	1,353	33	.004377972
Merrick	463	10,619	369	.007931067
Morrill	1,417	9,950	314	.011406664
Nance	446	8,718	246	.006279779
Nemaha	389	12,356	390	.008220925
Nuckolls	579	12,629	481	.009938413
Otoe	606	19,901	585	.012759714
Pawnee	431	5,423	318	.007039460
Perkins	896	5,834	326	.008218584

**CHART SHOWING FACTORS MAKING UP COUNTY
APPORTIONMENT RATIOS—JULY 1, 1931—Concluded**

County	Area in square miles	Population	Miles of rural & star mail routes	Ratio of county to state
Phelps	538	9,261	388	.008100696
Pierce	577	11,080	443	.009209734
Platte	673	21,181	510	.012678622
Polk	430	10,092	373	.007696717
Red Willow	720	13,859	360	.009748389
Richardson	545	19,826	532	.011965251
Rock	1,004	3,366	320	.008079147
Saline	573	16,356	560	.011531789
Sarpy	240	10,402	197	.005347896
Saunders	756	20,167	704	.014556341
Scotts Bluff	723	28,644	390	.013610542
Seward	574	15,938	592	.011725785
Sheridan	2,469	10,793	471	.017605683
Sherman	573	9,122	384	.008182618
Sioux	2,055	4,667	243	.012255350
Stanton	431	7,800	183	.005422336
Thayer	578	13,684	583	.011116115
Thomas	716	1,510	108	.004453943
Thurston	387	10,462	302	.006954459
Valley	570	9,533	418	.008577966
Washington	380	12,095	339	.007655312
Wayne	450	10,566	376	.007925435
Webster	578	10,210	474	.009285303
Wheeler	578	2,335	137	.004318128
York	575	17,239	624	.012335612
Totals	76,808	1,377,963	36,684	1.000000000

Note: The figures for area and population are taken from the 1930 Census. The miles of rural and star mail routes were secured from the U. S. Post Office Department.

Since the passage of the four cent gas tax law in 1929, funds subject to apportionment for construction work constitute a small percentage of the total funds available for construction, the reason being that the law provided that the revenue from one-half cent of gas tax shall be used to meet Federal Aid for pavement. In addition, revenues from an additional one-half cent of gas tax are to be used at the discretion of the Department of Public Works (intended to close gaps and obtain continuity of construction in the main routes). These routes are generally Federal routes, and hence Federal Aid is for the most part used in their construction. The use of the above mentioned funds to meet Federal Aid absorbed most of the Federal Aid made available even during 1929 and 1930. During 1931 and 1932, there has been made available also what is known as Emergency Federal Aid, which is used to meet regular Federal Aid. This Emergency Federal Aid amounted to approximately four and one-quarter million dollars during 1931 and 1932. The result has been that there have not actually been any funds subject to apportionment during 1931 and 1932, and practically none during 1929 and 1930. In actual practice, however, expenditures have been made for road construction in each county, generally, greatly in excess of what apportionments have amounted to in previous years. Also a continuity of road construction has been made possible, closing up many unimproved gaps.

**CONTRACTORS TO WHOM CONTRACTS WERE AWARDED
DURING THE PERIOD FROM NOVEMBER 1, 1930
TO NOVEMBER 1, 1932**

Abel Construction Company.....	Lincoln, Nebraska
Allen-Davison Company.....	Beatrice, Nebraska
Allied Contractors, Inc.....	Omaha, Nebraska
American Paving Corp.....	Omaha, Nebraska
Anderson-Lloyd	Henry, Nebraska
Artificial Stone Company.....	Bruning, Nebraska
Bacus, C. H.....	Litchfield, Nebraska
Bailey, A. F.....	Fremont, Nebraska
Baker, Porter C.....	Morrill, Nebraska
Beatrice Steel Tank Mfg. Co.....	Beatrice, Nebraska
Beaty Contracting Company.....	Blair, Nebraska
Biba, W. A., Engineering Co.....	Geneva, Nebraska
Blue Valley Gravel & Sand Company.....	Fairbury, Nebraska
Bolton, C. M.....	York, Nebraska
Booth & Olson, Inc.....	Sioux City, Iowa
Bowen, James F.....	Beverly, Nebraska
Busche, F. L.....	Omaha, Nebraska
Busche & Gavenman Construction Co.....	Omaha, Nebraska
Camp, Dean	Gibbon, Nebraska
Capital Bridge Company.....	Lincoln, Nebraska
Carstenson Sand Company.....	Columbus, Nebraska
Carswell, Firman L. Mfg. Co.....	Grand Island, Nebraska
Central Bridge & Construction Co.....	Wahoo, Nebraska
Christ, Carl W.....	Sidney, Nebraska
Clark & Francisco.....	Scottsbluff, Nebraska
Claussen & Henatsch.....	Scribner, Nebraska
Condon, George W. Company.....	Omaha, Nebraska
Cram, A. I. Company.....	Burwell, Nebraska
Cronkhite, George	Perry, Iowa
Crownover, L. G.....	Lincoln, Nebraska
David City Concrete Company.....	David City, Nebraska
Diamond Engineering Company.....	Grand Island, Nebraska
Dobson & Robinson.....	Lincoln, Nebraska
Dorn, Byron O.....	So. Sioux City, Nebraska
Eager, I. S.....	Fremont, Nebraska
Eaton, A. N. Metal Products Company.....	Omaha, Nebraska
Einung, Arthur.....	Nebraska City, Nebraska
Einung Bros.....	Wayne, Nebraska

Einung, Henry.....	Scribner, Nebraska
Einung, J. N.....	Wayne, Nebraska
England, George W. & Son.....	Murdo, South Dakota
Ferris, R. L.....	Boelus, Nebraska
Gardner, E. J.....	Gothenburg, Nebraska
Gavenman, J. D.....	Omaha, Nebraska
Geis & Sack.....	York, Nebraska
General Construction Company.....	Omaha, Nebraska
Gilmore Company.....	Omaha, Nebraska
Hawke, Homer.....	Gibbon, Nebraska
Haas, Roy.....	Lexington, Nebraska
Haddon, V. M. Dredging Company.....	Valley, Nebraska
Hargrave Construction Company.....	Cedar Rapids, Iowa
Haubrich Construction Company.....	Mapleton, Iowa
Heckes, Frank.....	Fremont, Nebraska
Honska, W. B. Construction Company.....	Concordia, Kansas
Hornby, C. T.....	Bassett, Nebraska
Humpal & Coxbill.....	Atkinson, Nebraska
Huston, J. J.....	Ragan, Nebraska
Inland Construction Company.....	Omaha, Nebraska
Interstate Concrete Company.....	Fairbury, Nebraska
Jensen Construction Company.....	Kimballton, Iowa
Jones Engineering & Construction Co.....	Omaha, Nebraska
Keim Construction Company.....	Tecumseh, Nebraska
Kiester, Robert L. Construction Company.....	Geneva, Nebraska
Klewit, Peter Sons' Company.....	Omaha, Nebraska
Knight, William B.....	Chapman, Nebraska
Koehler Construction Company.....	Sterling, Nebraska
Kolterman, E. W.....	Omaha, Nebraska
Krotter, William.....	Stuart, Nebraska
Krotter, F. C. & Sons.....	Palisade, Nebraska
Krueger, D. B.....	Kearney, Nebraska
Lamoreaux, J. J.....	Omaha, Nebraska
Landreth, Lyall.....	Scottsbluff, Nebraska
Lenz, William.....	Cairo, Nebraska
Liggett, M. M.....	Benedict, Nebraska
Lippincott, M. M.....	Hastings, Nebraska
Lund, A. C.....	Kearney, Nebraska
Lunger, Weaver.....	Gibbon, Nebraska
Lynn, Edwin.....	Minden, Nebraska
Lytle, C. F.....	Sioux City, Iowa
Marrs, E. L.....	Omaha, Nebraska

Martin-Day Company	Lincoln, Nebraska
Merritt, D. H. & Sons.....	Lincoln, Nebraska
Metz Construction Company.....	Springfield, Nebraska
Mid-State Construction Company.....	Hastings, Nebraska
Monarch Engineering Company.....	Falls City, Nebraska
Moran Construction Company.....	Omaha, Nebraska
Morrissey, M. F. Construction Company.....	Chadron, Nebraska
Moseman, H. A.....	Fremont, Nebraska
Murphy Gravel Company.....	Fremont, Nebraska
National Construction Company.....	Omaha, Nebraska
National Gunite Contracting Company.....	Chicago, Illinois
Nebraska Culvert & Mfg. Co.....	Wahoo, Nebraska
Nichols, E. W.....	Fairmont, Nebraska
Niefeldt, William, Jr.....	Grand Island, Nebraska
Norfolk Bridge & Construction Company.....	Norfolk, Nebraska
Nosky, Joe Construction Company.....	Nebraska City, Nebraska
Nutsch & Loch.....	Fairbury, Nebraska
Omaha Steel Works.....	Omaha, Nebraska
Patton Sand & Gravel Company.....	Fremont, Nebraska
Paxton-Vierling Iron Works.....	Omaha, Nebraska
Peterson, H. J. Company.....	Omaha, Nebraska
Plainview Gravel Company.....	Plainview, Nebraska
Quinton, Dan	Kearney, Nebraska
Read, A. H. Company.....	Cheyenne, Wyoming
Risk, H. A. Pipe & Construction Company.....	Nebraska City, Nebraska
Roberts Construction Company.....	Lincoln, Nebraska
Ross, A. C.....	Bayard, Nebraska
Sawyer, Paul	Holdrege, Nebraska
Schlueter Construction Company.....	Fremont, Nebraska
Schlueter, R. F.....	Kenesaw, Nebraska
Schmidt, Louis	Anselmo, Nebraska
Sevier, Roy	Theford, Nebraska
Shearer, J. E. & Sons.....	Hebron, Nebraska
Simmons Gravel Company.....	Scottsbluff, Nebraska
S & K Gravel Company.....	Sidney, Nebraska
Smith, Glenn E.....	Lincoln, Nebraska
Sokol, L. C.....	Duncan, Nebraska
Steele & Olinger.....	Sidney, Nebraska
Stevens, P. R.....	Gering, Nebraska
Superior Road Supply Company.....	Omaha, Nebraska
Theisen Brothers	Osmond, Nebraska
Tift, James E.....	Grand Island, Nebraska
Tophan & Ely.....	Inavale, Nebraska

Tri-State Cement Products Company.....	Lincoln, Nebraska
Ulrich, Fred	Ord, Nebraska
Walker, Edward.....	North Platte, Nebraska
Weidner & King.....	Fremont, Nebraska
Western Asphalt Paving Corporation.....	Sioux City, Iowa
Western Bridge & Construction Company.....	Omaha, Nebraska
Wickham Bridge & Pipe Company.....	Council Bluffs, Iowa
Woods Bros. Construction Company.....	Lincoln, Nebraska
Yant Construction Company.....	Omaha, Nebraska
Yoho Electrical Company.....	Lincoln, Nebraska

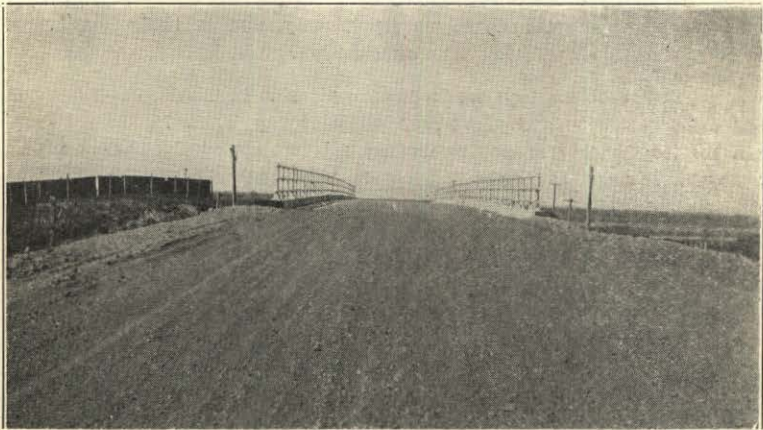
Total number of contractors awarded contracts 1927-28.....	103
Total number of contractors awarded contracts 1929-30.....	112
Total number of contractors awarded contracts 1931-32.....	134

70 contractors or 62% of those awarded work in 1929 and 1930 were awarded contracts in 1931 and 1932.

55 contractors or 53% of those awarded work in 1927 and 1928 were awarded contracts in 1931 and 1932.

64 contractors who had not been awarded work during 1929 and 1930 were awarded work during 1931 and 1932.

4 contractors who had work in 1927 and 1928 but not during 1929 and 1930 were awarded work during 1931 and 1932.



Gravel road leading to the new Johnstown Viaduct in Brown County on U. S. Highway No. 20.

REPORT OF THE EIGHT DISTRICTS

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

DISTRICT NO. 1

F. H. Klietsch, Lincoln, has been District Engineer for nearly five years. This district is composed of twelve counties in the southeast corner of the state, where soil conditions are favorable for good roads, providing weather conditions are also favorable. During this biennium, with the exception of considerable snow during the winter of 1931-1932, this district has been favored with desirable weather for road maintenance and construction. Beginning about Christmas 1931 and continuing for a period of about six weeks, hardly a day passed when either additional snow or old snow being shifted about by the wind did not block some road. This necessitated the continuous operation of snow removal equipment as well as a great deal of other maintenance equipment not particularly adapted for this purpose. Many of the regular patrolmen, mechanics and others worked additional time, some as much as forty-eight hours without rest, in order to keep the roads open. These men, although reliefs were provided, refused to leave their equipment, fearing something might happen to it and prevent the road from being opened. In many cases men had to be forced to rest and permit relief operators to replace them. It was, primarily, due to their loyalty and efficiency that the condition was effectively handled.

Important construction work in this district consisted of completing a ten mile gap with gravel surface on Highway U. S. 75 from Dawson south to the state line; paving between Lincoln and Beatrice on U. S. 77; paving Lincoln to Eagle and Union west six miles on highway No. 24; paving on U. S. 75 from Auburn north five miles and south five miles; also from Nebraska City to Union, which improvement involved the elimination of five railroad crossings, one by overhead separation and the others by relocation; paving from Falls City north two miles and south to the state line, the latter involving a railroad grade separation by a viaduct approximately six hundred feet long; two short paving projects north of Lincoln which provided an improvement of considerable merit, giving two important and desirable highway entrances to the city and provided the use of the Tenth Street viaduct for eliminating railroad grade crossing on Highway U. S. 77; approximately ten miles of oil gravel mat surfacing on highway No. 2 from Lincoln southeast and two miles on U. S. 75 from Auburn north, which method of surfacing has worked out entirely satisfactorily.

Considerable improvement of strictly state roads has been made which provides cut-offs and connections to the Federal System, some of which are: continuation of highway No. 4 from Beatrice west; highway No. 68 from Fairbury to Steele City; highway No 3S from Fairbury to Superior; highway No. 41 from Geneva to Clay Center; cut-off for highway No. 15 from Dorchester south to highway No. 41; and others.

Detours in this district have been given considerable attention, particularly for graveled highways which are being reconstructed for paving, and approximately thirty-five miles of such detours have been graveled to provide a safe and convenient road for traffic. Special attention has also been given to the marking of these temporary routes. Large 4'x4' sign boards with directions to towns, etc., have been erected in addition to the regular highway markers. In general, considerable effort has been made to more adequately mark the entire system with the outstanding improvement along this line being the erection of town directional markers at all junctions.

DISTRICT NO. 2

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

During the past biennium the following major projects have been completed:

The relocation and paving of the D. L. D. near Ashland and Gretna. This includes two railroad grade separations and a new bridge across the Platte River. This completes the pavement between Lincoln and Omaha and shortens the distance nearly six miles.

The completion of a paved surface between Columbus and Clarks, giving traffic a continuous pavement between Omaha and Grand Island.

The relocation and paving of U. S. No. 73 between Blair and Omaha.

The construction of two grade separations on U. S. No. 75 between Omaha and Plattsmouth.

The construction of a bridge across the Platte River south of Columbus.

The construction of a grade separation over the Union Pacific Railroad at Columbus.

During the past biennium, approximately seventy miles of paving, sixteen bridges and six grade separations have been built in the district.

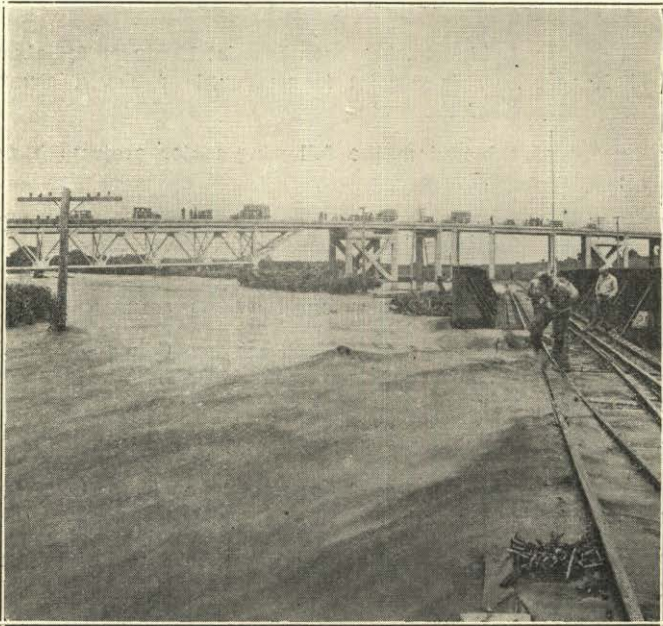
Starting New Year's Eve of 1932, this section of the state suffered

a period of nearly five weeks of continuous storms. The snow reached a depth of forty-eight inches in some sections and the wind blew from every point of the compass. It was only through the almost super-human efforts and the extreme loyalty of the maintenance employees that the main roads were kept open for traffic.

In August of 1932, six inches of rain fell in a little less than twelve hours over Douglas and Sarpy Counties. This caused the greatest flood in the Pappio Basin in the memory of the residents of the locality. A heavy loss was suffered through the washing out of fills and the destruction of bridges and culverts.

Otherwise, maintenance has been a routine problem during the past two years.

Approximately fifty-five miles of new highways have been graded, graveled, and added to the maintenance system since 1930.



View of Fort Crook Viaduct on U. S. Highways No. 72 & 75, 12 miles south of Omaha, showing Pappio Creek overflow of June 7, 1932

DISTRICT NO. 3

J. B. Martin, Norfolk, has been District Engineer for about two and one-half years. This district is composed of thirteen counties in the northeast corner of the state.

Many important connections were completed during the past biennium, a few of which are: from Center to Bloomfield, Creighton to Wausa, Niobrara through Crofton to Fordyce, Hartington west to Highway No. 81, Wynot to Ponca, and Pender to Walthill. All of the construction work in Knox, Cedar, and Dixon Counties was done with the use of local labor, local teams, and local trucks.

This drouth relief work consisted of grading, building small bridges, building culverts, and gravel surfacing. The reason for employing this



Loading a truck by hand shoveling on a drought relief project,
on the Center-Bloomfield Road.

method of construction was to provide employment to the residents of these counties, which were part of the drouth stricken area. This work began in the early summer of 1931 and continued until winter, 1932, and was undoubtedly the salvation of many of the residents who were practically destitute on account of the drouth and the grasshopper plague.

Thirty-five miles of concrete pavement were constructed over sections on which, in the past, the cost of maintenance had been excessive. Contracts have been awarded and work for the construction of the Decatur-Winnebago highway, Meadow Grove south highway, St. Edward west highway and Norfolk east paving.

Maintenance during this biennium has been difficult due to the drouth experienced in the summer of 1931 which was followed by one of the

most severe winters in history. In the spring of 1932 numerous heavy rains caused flood conditions, and it was not until late summer that normal conditions again existed. Due to these unusual weather conditions, practically every patrol received maintenance gravel.

DISTRICT NO. 4

F. C. Rolls, Grand Island, was District Engineer until May 9, 1932, and was followed by W. H. Bauman, who was transferred from Ainsworth in District No. 8. District No. 4 consists of twelve counties located in the east central part of Nebraska, having the Nebraska-Kansas State line as its southern boundary and the north county lines of Valley, Greeley and Nance Counties as its northern boundary. If a north and south line were drawn through Grand Island, the district headquarters, it would divide the district into two practically equal parts.

The district is traversed east and west by the Republican River Valley in the south portion, the Platte Valley in the center portion, and the Middle Loup, North Loup and Loup Valleys in the north portion, which coupled with the variety of soils met will make it evident why extreme difficulties and heavy expenditures are encountered in the construction and maintenance of highways. The area in this district supports a population of twenty-four persons to the square mile, divided about two-thirds rural and one-third urban.

Pavement has been completed on U. S. Highway No. 30 from Clarke east to the Merrick County line. Pavement is under contract on U. S. Highway No. 30 from Alda to Shelton. Upon completion of the latter, pavement will be continuous from Shelton to Omaha on U. S. Highway No. 30. Grading and gravel surfacing in Howard County from St. Paul north has been completed, making U. S. Highway No. 281 through this District a graded and either gravel surfaced or paved highway. Highway No. 2 from Grand Island west for five miles has been graded and oiled. Grading and surfacing from Fullerton north has been completed, making highway No. 13 through this district a gravel highway. Highway No. 4 has been graded and gravel surfaced from Lawrence east to highway No. 14 and is being graded between Campbell and U. S. Highway No. 281.

State Aid Bridges have been completed south of Alda in Hall County and south of Chapman between Merrick and Hamilton Counties across the Platte River.

Construction costs have been materially reduced since the last report. As a matter of economy, maintenance has been placed on a part time basis.

The major activity in this district is agriculture, with small grain farming, cattle, and sugar beet raising the principal feature.

DISTRICT NO. 5

T. C. Middleswart, Scottsbluff, has been District Engineer for five and one-half years. The district is composed of eleven counties in the extreme western part of the state and touches the three adjoining States of Colorado, Wyoming and South Dakota. The Counties of District No. 5 are Banner, Box Butte, Cheyenne, Dawes, Deuel, Garden, Kimball, Morrill, Scotts Bluff, Sheridan, and Sioux. This area is generally known as the Panhandle of Nebraska.

The weather conditions of western Nebraska have considerable influence on road maintenance. This area suffers from high winds during the fall, winter and spring seasons and inasmuch as the soil is very light over the entire district, considerable damage is often done by the severe winds. The work of erecting and maintaining snow fences as well as that of snow removal is one of the major activities of this district during the fall, winter and spring seasons. Some idea of the effort put forth to keep roads open can be illustrated by a record in Sioux County during the winters of 1931-1932 when the road between Harrison and Crawford was opened seventeen times. This particular section was well protected by snow fence, most of which was six feet high.

Further influences of extremes in weather were experienced in the year of 1931 when a total precipitation of less than seven inches of moisture fell over District No. 5. This is less than half of the average annual rainfall for this area. In dry weather where light soil is encountered it is very difficult to have good road surfaces on account of the constant wearing away of the soil and the continual recurrence of corrugations.

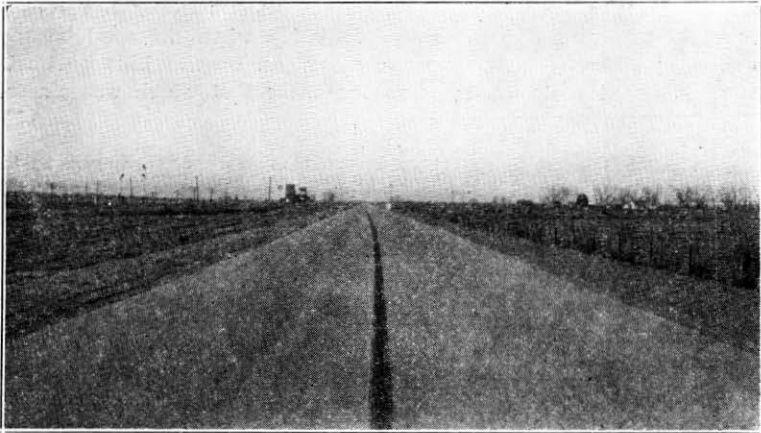
During the year of 1932, fifty-nine miles of oiled road were built. This fifty-nine miles consisted of forty-two miles of oiled gravel mat and seventeen miles of oiled sand. The oiled sand type of road has been built in this district before, but this year saw the first of the oiled gravel mat laid. From its present appearance this type of road should be well adapted to use on light traveled roads where light soil is encountered.

Some of the major projects built or contracted in 1931 and 1932 are as follows: Scottsbluff-Minatare, paving; Scottsbluff-Mitchell, paving; Mitchell-Henry, grading and oil work; Crawford-Marsland, grading; Minatare-Angora, grading and structures; Sidney-Lodgepole, grading, structures, one viaduct, one subway, and one mile of paving; Kimball-Dix, oil work; Chadron-Hay Springs, oil work; Alliance-Angora, grading and oil work; Fort Robinson, grading and structures.

DISTRICT NO. 6

F. C. Smith, McCook, has been District Engineer for six years. This district is composed of the thirteen counties south of the Platte River in the southwest corner of the state. With few exceptions the soil in these counties is a sandy loam, which is very suitable for road building as well as for agriculture. The topography varies from level plains to deep canyons but the greater part of this region is rolling land. The Republican River is the most important stream in this territory, flowing through the south tier of counties, with numerous tributaries. This stream carries most of the drainage from the district, as only the runoff from a part of the north tier of counties goes to the Platte River.

During the past two years the first paving to be built outside of city or village limits was laid in this district, as shown by the following picture.



Concrete paving was built east and west of McCook, and oil gravel surfacing was constructed between Indianola and Cambridge, both projects being on U. S. Highway No. 6.

A new bridge was built across the Republican River, south of McCook, and eighteen smaller bridges of a permanent type were constructed in connection with the various projects.

Among the most important projects which have closed gaps on the original highway system during the biennium are those between Parks and Haigler, Culbertson and Hayes Center, Alma and Holdrege, Beaver City and Orleans, and Franklin and Minden. In addition projects have been completed from McCook and Alma, south to the Kansas State line, and gravel was placed on several projects where the grading had been completed some years before.

In addition to the above, several important projects have been completed on the new state highways, among which are Imperial to Grant, between Palisade and Hayes Center, between Elwood and Curtis, on the Beaver Valley Highway, Orleans east, and Campbell west.

Maintenance is carried on in this district entirely with motor equipment and considerable improvement has been made in the equipment during the biennium. During the past two years the weather conditions have been favorable, floods and blizzards being local rather than general in the district, which has made it possible to keep the roads in very good condition without undue expenditure.

DISTRICT NO. 7

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

The two principal highways in this district are the Potash Highway, marked as State Highway No. 2, and the Lincoln Highway, marked as U. S. Highway No. 30.

State Highway No. 2 extends entirely across the state from Nebraska City in the southeast corner of the state to Crawford in the northwest corner. A large portion of this highway through District No. 7 runs through the sand hill section. This part of the highway was completed during the past two years, all of the gaps being closed either with clay and gravel or with oiled sand surfacing. The latter type of surface is no longer in the experimental state, since it has proven to be not only an economical type to construct but it also furnishes a smooth and durable riding surface with low maintenance cost.

U. S. Highway No. 30 is a transcontinental highway and carries very heavy traffic. Through this district it follows the Platte River Valley where soil conditions are not very favorable for graveled roads. The heavy traffic and unfavorable soil conditions have naturally brought the demand for a higher type of surface on this highway. Therefore, many of the bad sections were paved with concrete during the biennium. After the completion of the present contracts, there will remain only thirty-six miles of graveled road east of North Platte. West of North Platte, where the soil is more stable, it is thought that a bituminous mat surface will be adequate and economical. When the present contracts are completed, there will be such a surfaced road from Paxton through Ogallala to Brule.

DISTRICT NO. 8

W. H. Bauman was District Engineer until May 9, 1932, when R. F. Weller was appointed District Engineer with headquarters at Ainsworth.

This district is composed of nine counties in the north central part of the state. Approximately 95 per cent of this district lies in the sand-hill area of Nebraska with an average population of five persons per square mile.

Two distinct types of road construction are used in this district. The more common type consists of the sand subgrade topped with a clay mat and covered with a wearing coat of sand gravel surfacing. This method presents difficulties as suitable clay for topping is often not available at convenient locations. Suitable gravel for surfacing must often be shipped a considerable distance.

To overcome these difficulties, a new type of construction, "oiled sand surfacing", has been developed. This consists of coating the sand with oil to an average depth of five inches. By the addition of from 10 to 15 per cent of fine, powdered material to this mix a resultant roadway of high stability for this type of construction is obtained. Wherever this type of construction has been used, it has met with the approval of the traveling public.

Another type of road, which is basically stage construction, is being built from O'Neill to Atkinson on U. S. Highway No. 20. This consists of a bituminous mat, with an average thickness of one and one-fourth inches, composed of graded aggregate varying from one inch in size to filler material which will pass through a screen having two hundred openings per square inch. This aggregate is coated with oil and is spread over the roadway forming a wearing surface which is both smooth and free from dust. This type of construction is limited to locations where a stable subgrade is available.

One of the features of road construction in this district is the 289 foot arched cantilever bridge completed across the Niobrara River on the Ainsworth to Valentine Road, U. S. Highway No. 20. This is the only bridge of this type in the state. The re-routing of U. S. Highway No. 20 from Ainsworth through Wood Lake to Crookston, as the result of the construction of thirty-six miles of oiled sand road between Wood Lake and Crookston, has shortened the distance between Ainsworth and Crookston twenty-five miles.

Road building by use of local labor did much to relieve conditions brought on by the drought of 1931 in this district. Seventy-four and four-tenths miles of road were built in this manner. Twenty-two thousand and eighty-five cubic yards of gravel were placed by local trucks hired directly by the state. In addition to this practice, the construction specifications have been supplemented to specify the employment of local labor wherever available.

Maintenance costs are high in this district as the action of the elements is as much a factor as traffic. Dry, windy weather, when

coupled with the destructive action of traffic, wears out the light clay mat, requiring expensive and extensive replacements. The construction of oiled sand surfacing will insure lower maintenance costs. Another step toward the lowering of maintenance costs, effected by the close co-operation of construction and maintenance, is the practice of building protective work consisting of a covering of hay, straw, rushes or manure on the shoulders, the slopes and backslopes. By seeding down the slopes with rye and sweet clover, under this mat, a protective covering is afforded which prevents erosion.

Systematic improvements are making this region accessible, and generally the residents are well satisfied, although many requests are made for needed extensions and betterments of the present road system.

CONCLUSION

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

On construction work where the contractor employed two shifts, many engineering employees worked through two shifts and averaged sixteen to eighteen hours per day for weeks at a time without extra pay.

On maintenance work when regular patrolmen were reduced to a 3-day or 4-day week many of them worked full time in order to keep their roads in good shape knowing that they would be paid only for part time work.

In the Lincoln office when there were double shifts for several weeks at a time and a great deal of overtime required when there were not double shifts, many employees in the main drafting room and in the bridge division worked very many hours overtime without extra pay, endeavoring to get plans out as quickly as possible so that unemployment throughout the state could be relieved that much sooner.

DIVISION OF CONSTRUCTION

INTRODUCTION

In the work under the Division of Construction in the last biennium, the "Drought Relief Work" from State Funds in seven north-eastern counties was a major activity which was generally closed up in the late fall of 1932.

Another unusual construction condition resulted from the first Federal Emergency Act of December 20, 1930, in which the Federal Government appropriated \$80,000,000 to the states to use with Federal Aid to provide for Emergency construction on Federal projects for work performed before September 1, 1931, of which \$1,708,031 was Nebraska's share to match a like amount of Regular Federal Aid. This appropriation required speedy preparation of plans for early lettings in 1931 and resulted in unusually heavy construction work in the field. All of the work financed by the money allotted to Nebraska under this Act was completed, approved by Federal Engineers, and vouchered to the U. S. Government by August 28, 1931.

Another period of unusual construction activity resulted from a second Federal Government Emergency Relief and Construction Act dated July 21, 1932. The total amount of this appropriation was \$120,000,000, of which Nebraska's share was \$2,544,733, available to meet all of Nebraska's Regular Federal Aid in the amount of about \$1,175,000; all to be expended prior to July 1, 1933 on the Nebraska Federal Highway System.

This second Federal Emergency Relief and Construction appropriation bill dated July 21, 1932, provides that contracts let for constructing projects with these funds shall contain provisions establishing minimum rates of wages which contractors shall pay to skilled and unskilled labor; that so far as practicable, no individual employed, except in executive, administrative and supervisory positions, shall be permitted to work more than 30 hours in any one week; that maximum employment be given to local labor consistent with reasonable economy of construction and that in the employment of labor preference be given, where they are qualified, to ex-service men with dependents.

In carrying out the provisions of this Act, the U. S. Bureau of Public Roads prepared certain regulations and requirements which have been incorporated in all contracts. Some of the main requirements are as follows:

The Contractor shall employ labor, as far as it is available, from lists furnished by the County Employment Committee, giving preference in selection from such lists, where qualified, to ex-service men with dependents.

The Contractor may employ such men as are necessary for the supervision of the construction and for the operation of power equipment requiring skilled operators without regard to such lists.

Skilled and unskilled laborers shall not be permitted to work more than 30 hours in any one week.

Copies of all payrolls, certified under oath by the Contractor or his authorized representatives, shall be filed with the Engineer, showing the name of each employee, place of legal residence, class of work, rate paid, hours worked, and the county from which the name was obtained. Deviation from this procedure will not be permitted.

All subgrading or fine grading between forms for paving shall be done by hand labor methods.

The finishing or trimming of slopes, shoulders and ditches after the pavement is completed shall be done by hand labor methods.

Trenches for pipe, tiled rains and similar structures shall be dug by hand or team labor methods. The use of explosives will be permitted where necessary.

Backfilling of excavated material shall be done by hand or team labor methods.

Hand labor mixing of concrete for headwalls and pipe encasement will be required.

All excavation and backfilling for culverts and small bridges up to 50-foot span, shall be done by hand tools, such as picks, shovels, and wheel barrows, or by team tools, such as scrapers and carts.

Curing of concrete pavements shall be done by the earth covering method, except where the adjacent soil contains so much rock as to render it impracticable to obtain sufficient suitable covering material from the shoulders. Covering material shall be spread by hand labor methods.

Removal of earth cover shall be done by hand labor methods.

The minimum wage for unskilled labor on Emergency Relief Federal Aid projects in this state shall be 30 cents per hour.

The minimum wage for skilled labor shall be 50 cents per hour.

The minimum rate for horses shall be 7½ cents per horse per hour.

On State Construction projects the requirements were generally the same except that the limitation for time of work was changed to 60 hours in any one week on strictly State jobs.

CONSTRUCTION DIVISION REPORT

The functions of this division in general, under the Construction Engineer, are the handling of preliminary surveys, supervision of the preparation of plans, and supervision of field engineering on construction work. The details of design on all Federal Aid projects are approved by this division and submitted to the U. S. Bureau of Public Roads for their concurrence.

The so-called "Drought Relief Work" in the northeastern counties of Nebraska has been supervised through this division, and highly gratifying results were accomplished both as to quality and cost of work done. Cost and progress records were kept and submitted to the Lincoln office weekly, thus making possible a close check of the progress and cost of the work. Costs per unit compare very favorably with the cost of work contracted during the same period. Graveling of a great many miles has been completed by using hand loading methods as indicated in the accompanying picture.



Men loading gravel on "Drought Relief Work".

Unit prices for gravel so loaded, then hauled with trucks to point of delivery on the highway, averaged between 60 and 70 cents per cubic yard on most of the work.

A few desirable changes were made in State Highway Specifications, principally in the items of overhaul, and clearing and grubbing, to keep in line with the general tendency toward reduced prices and have resulted in much saving to the State.

Particular attention has been given to preliminary surveys and preparation of plans. Especially selected men have been assigned to the work of making the important preliminary surveys. Plans are prepared with the thought of being so complete and accurate that there can be no question after the award of contract. Preliminary and plan parties worked under considerable pressure during both years of the biennium due to the necessity for quick action on emergency projects.

New instructions for engineers in the field were prepared, the purpose of this being, further standardization of methods and perfection of engineering work done.

Oil road construction, all of which is discussed elsewhere in this report, has developed considerably during the biennium.

Projects of outstanding interest, due to character of work, location, etc., which have been completed or contracted during the biennium are as follows:

Valentine to Wood Lake, an oil-sand project which opened up a new route on U. S. Highway No. 20 between the two cities, shortened the distance approximately twenty miles and reduced driving time some forty-five minutes. The alignment and other construction features on this project are of the highest type and it is built in accordance with the most recent standards of highway construction. The bridge over the Niobrara River on this route is of unique design and is one of the most artistic designs to be found in the State.

The Valentine to Crookston oil-sand project eliminated the last unimproved portion of U. S. Highway No. 20 between Valentine and Chadron, and greatly improved the alignment as well as making a saving of five miles in distance.

The St. Paul to O'Neill project, most of which traverses a very hilly or sand territory, has been completed, and the driving time between these cities has been reduced approximately two hours.

The Crawford to Marsland project, a total distance of about twenty miles, traverses a very rugged country, and is one of the heaviest pieces of work which has been undertaken in this State. When completed it will be one of the most scenic drives in Nebraska. The route provides a new location for climbing the Belmont Hill from the White River Valley near Crawford. Approximately one hundred twenty-five thousand cubic yards of rock excavation is involved in the construction of this project.

The Crawford to Fort Robinson project lies in its entirety within the limits of a Government Reservation and completes the connection between Crawford and the Wyoming State line on U. S. Highway No. 20. All right of way on this project was made available to the State without cost through the cooperation of the War Department.

The Decatur to Winnebago project, a distance of approximately twenty-one miles on a direct route between these two cities, is several miles shorter than any previous road connecting these points. The road is laid out without regard to property lines, thus making it possible to take every advantage of topography in holding the construction costs to a minimum. This route when completed will make a very scenic drive as well as provide a more

direct route between Sioux City and Omaha. In selecting this route it was necessary to make surveys of alternate lines between certain control points, and in some instances relative costs on alternate routes were computed before a decision was made. It is estimated that more than fifteen thousand dollars in construction costs was saved by these studies. Much of the survey work was done during the winter of 1931-32. In this area snow was deep, and much of the time the survey party was compelled to go to work in sleds. Snow shoes were used during a part of the winter.



Survey party going to work on Decatur-Winnebago route.

The Niobrara-Crofton-Ponca project has been constructed and graveled during the biennium, all labor being done by local men, teams, and trucks, and the gravel was produced and hauled from local pits.

The Center to Hartington project is in the same status as the one just mentioned, it also being completed by local labor. These two highways were previously not under State maintenance.

Of particular interest are the two grade separations at Columbus and Grand Island, which were accomplished through the cooperation of the Union Pacific Railroad Company, and which have eliminated two very hazardous crossings of the Union Pacific Railroad and the Lincoln Highway. Other grade separations of interest are the Milford subway; Falls City viaduct, Maxwell viaduct, Sidney viaduct, Sidney subway, and Wyoming viaduct.

Important connections which have been completed, or placed under

contract, closing gaps during the biennium are as follows:

Potash Highway between Broken Bow and Alliance.
U. S. Highway No. 20 between Sioux City and Wyoming State Line.
Highway No. 19 between Alliance and Chadron.
U. S. Highway No. 6 between Omaha and Colorado State Line.
Bassett-Taylor on U. S. Highway No. 83.
Holdrege to State Line south of Alma on U. S. Highway No. 83.
Atkinson to Burwell to St. Paul on Highway No. 11.
O'Neill to Bartlett to St. Paul on U. S. Highway No. 281.
Highway No. 16 between Clarks and Broken Bow.
Highway No. 91 between Newman Grove and Scribner.
Highway No. 54 between Niobrara and Ponca.
Highway No. 14 between Albion and Fullerton.
Highway No. 50 between Omaha and Kansas State Line south of
Dubois.
Highway No. 1 between Elmwood and Murray.
Highway No. 4 between Beatrice and Davenport.
Highway No. 3S between Fairbury and Superior.
Highway No. 89 between Orleans and Danbury.
Highway No. 61 between Grant and Imperial.
Paved Highway on U. S. Route No. 30 between Grand Island and
Columbus.

OILED ROADS

More progress has been made in the construction of oiled-surfaced highways during the past biennium than in any previous period. Prior to this biennium the work had been restricted to comparatively small projects and was carried on in a more or less experimental way. However, due to the experience which was gained from these older projects, it was felt certain that the oiled-surface work had a proper place in the highway construction program and during the past biennium considerable mileage has been constructed. This applies to both the oiled-sand surface course which is used in sandhill country and also to the bituminous-mat surface course which is laid on an existing stable gravel base. As a result of experiments made by the Division of Tests and experience with projects heretofore constructed, it was learned that particular attention must be given to the grading of the material which goes into the oil mixture, whether it be sand, or sand and gravel. In either case a certain percentage of filler material must be added in order to provide the proper stability. This is expected to eliminate the softening of these roads under warm temperatures.

Oiled-sand surfacing is constructed by the application of an asphaltic road oil and a small percent of very fine material on a sand base, and thoroughly mixing them to a depth of about five inches. Mix-

ing is accomplished by the use of discs, harrows, and blades which are drawn over the surface until no free oil remains in the mixture. The mixture is then spread and is ready for traffic. Protection work is sometimes necessary on the shoulders and back slopes in order to prevent sand from blowing or washing away.

The bituminous-mat surfacing is constructed in a mat of not less than $1\frac{1}{4}$ inches in thickness for the first application. More material is to be added as weaknesses develop, the mat eventually reaching a thickness of $2\frac{1}{2}$ or 3 inches. In so far as possible, all available material on the roadway is incorporated into the mat. It is often necessary to add certain quantities of gravel, sand and fine material to the already existing material in order to obtain proper grading of materials and thickness of mat. About 25,000 gallons of oil per mile is then distributed and thoroughly mixed with the sand gravel aggregate.

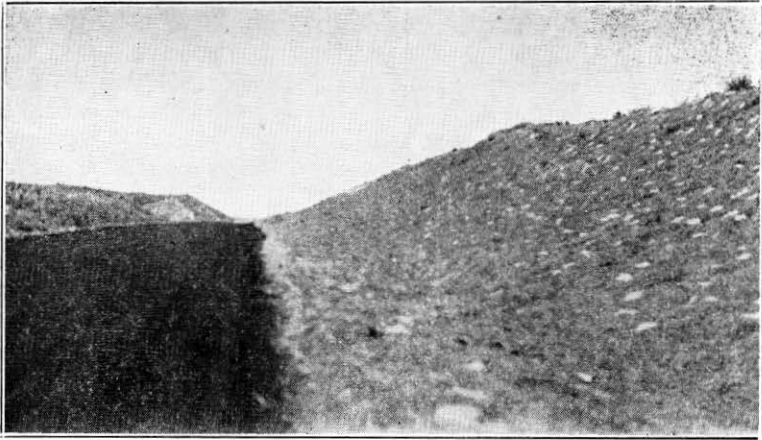
This type of construction provides a very satisfactory riding surface, is water proof, and above all eliminates dust.

Oiled-sand type of construction has replaced a type of construction which had previously been used but which has not been entirely satisfactory from a standpoint of wear, and also, construction and maintenance costs. The old sand-clay surface course, which was used prior to the adoption of oiled-sand surfacing, was in many cases not entirely satisfactory but had to be used on account of the extremely high cost of any competing type of surface.

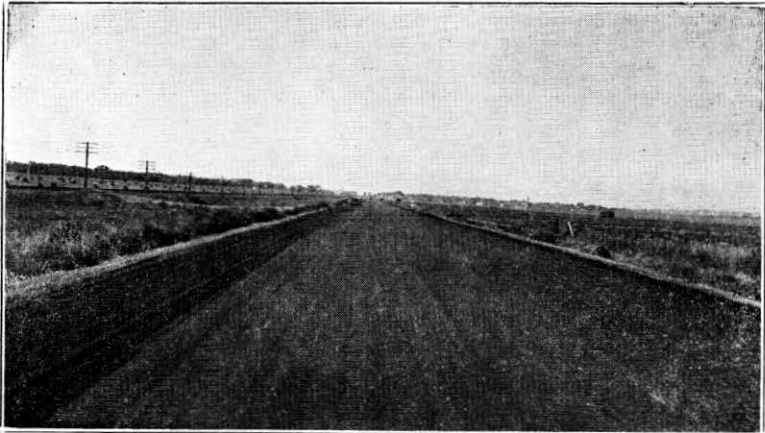
The principal oil projects which have been constructed during the biennium are as follows:

Oiled Sand	Bituminous Gravel Mat
Hyannis to Ashby	College View-Bennet
Whitman West	Cambridge to Indianola
Mullen West	Ogallala to Paxton
Valentine to Wood Lake	Kimball to Potter
Valentine to Crookston	Morrill to Henry
Neligh North	Chadron East
Bartlett North	O'Neill to Atkinson
Atkinson South	
Alliance to Angora	
Mitchell to Morrill	

The total mileage of oiled-surface roads is 292 miles.



Oil-sand surfacing near Valentine, showing ditch and back slope protection.



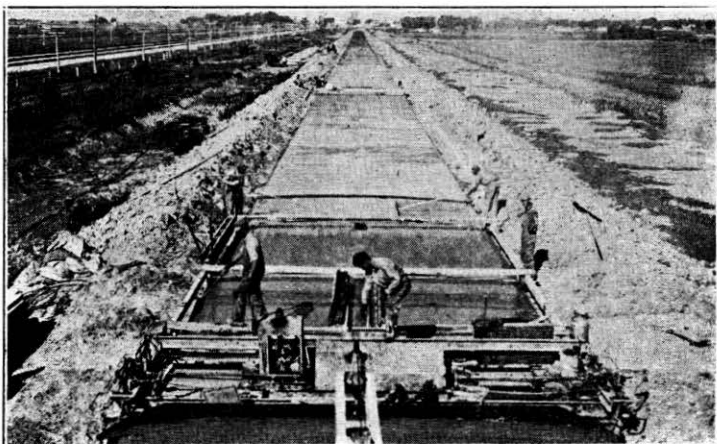
Typical bituminous mat surfacing.

PAVED ROADS

The total mileage of pavement which has been constructed or placed under contract by this Department is 663 miles, as of December 31, 1932. There were 229 miles built during 1931 of which 24.5 miles were carried over from contracts awarded in 1930. In 1932, contracts were awarded for 146 miles of paving. On account of the contracts being awarded late in the season there were only 60 miles constructed, the balance, or 86 miles are to be completed prior to June 30, 1933. There were 3 miles carried over from contracts awarded in 1931 which makes a total of 63 miles actually constructed and completed during 1932.

The construction of paving projects is carried on under the direction of the Paving Engineer through the District and Project Engineers. The engineering organization in direct charge of construction in the field is composed of a Project Engineer in charge of all operations; under the Project Engineer the work is divided into general engineering duties, grade inspection, culvert and bridge inspection, plant inspection, and slab inspection. General engineering covers the instrument work of taking cross-sections, setting slope stakes, setting form stakes for paving, staking out drainage structures, etc. On some of the larger projects there have been three to five grading outfits, two culvert crews, one or two bridge crews, and two paving outfits, in operation at the same time, which required about three instrument parties to keep ahead of construction. There is one grade inspector placed with each grading outfit. In the construction of fills or embankments where the plans call for paving, the dirt is placed in successive horizontal layers of not more than 6 inches in depth and each layer is rolled at least twice with a roller having a weight of 275 pounds per inch width of tread. This is to obtain compaction of the fills and avoid future settlements in the paving. It is the duty of the grade inspectors to see that fills are built up in 6 inch uniform layers and each layer rolled until maximum compaction is obtained. Culvert and bridge inspectors are placed on culvert and bridge work to see that the structures are built in accordance with the plans and specifications, to check the size and spacing of reinforcing steel, to see that the proper proportions are used in mixing concrete and to see that the concrete is placed, cured and finished properly. 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. All materials that enter into the concrete are weighed, with the exception of water which is measured by an accurate water measuring device attached to the mixer. Bulk cement, which is used almost exclusively on paving projects is unloaded from cars by hand, shoveled into concrete buggies, weighed, and dumped into the trucks. The slab inspector is responsible for the preparation of the subgrade, setting forms, and for the mixing, placing, finishing and curing of the concrete.

Special attention is given to the smoothness of the concrete as a riding surface. During the progress of construction the surface of the concrete is finished to a true surface. The morning following the pouring of the concrete, the surface is tested with a 10 foot straight edge. If there are any variations greater than $\frac{3}{16}$ of an inch, the contractor is required to eliminate such variations with a carborundum brick.



Acceptance of the concrete is based upon the compressive strength of cylinders made during the progress of the work. Two 6x12-inch cylinders are made from each day's run of concrete. The cylinders are sent to the testing laboratory in Lincoln and tested at 7 and 28 days for compression. The strength requirement in the specifications for compression is 2,000 pounds per square inch at 7 days and 3,000 pounds

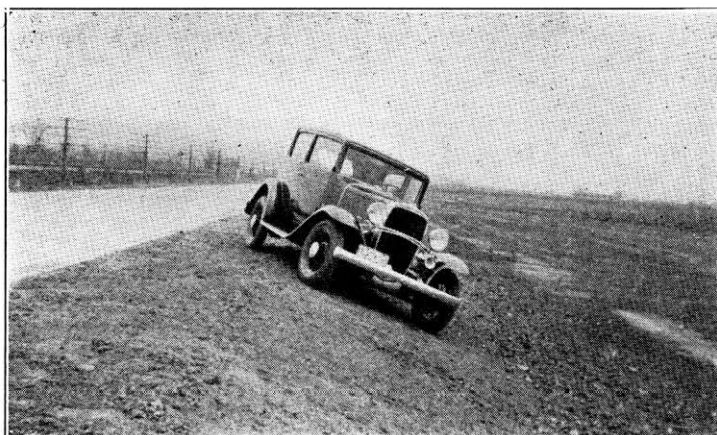
per square inch at 28 days. The average strength of cylinders made during 1931 is 3,606 pounds per square inch at 7 days and 4,706 pounds per square inch at 28 days. For 1932, the strengths averaged 4,279 pounds at 7 days and 5,414 pounds at 28 days. The difference in strength of the concrete in 1931 and 1932 is due to the difference in cement content. In 1931, 7 sacks of cement were used per cubic yard of concrete and in 1932, 7½ sacks were used per cubic yard.

The time for opening pavement to traffic is based on the strength of the concrete as determined from results of tests of beam specimens made during the progress of the work. Two 6x6x30-inch beams are made from each day's run. Two tests can be made from each beam. These beams are tested in the field, by a special beam testing machine, at the age of 7, 10, 14 and 28 days. The strength requirement of beams for opening the pavement to traffic is 550 pounds per square inch. The average strength of beams for 1931 was 613 pounds at 7 days, 649 pounds at 10 days, 663 pounds at 14 days and 702 pounds at 28 days. For 1932 the average strength was 694 pounds at 7 days, 721 pounds at 10 days, 744 pounds at 14 days and 813 pounds at 28 days. The increased strength obtained in 1932 over over 1931 is also due to the difference in cement content.

The acceptance of the pavement is also based on the thickness, determined by the measurements of cores cut from the pavement which shall be at least equal to the specified thickness within ¼ inch. If any part of the pavement is found to be more than ½ inch deficient in thickness, no payment is made for the pavement found so deficient. The borings are made at 750 foot intervals with additional check borings as conditions warrant. In 1931 a very few small areas were found deficient and the average thickness of all pavements was 7.10 inches. The required thickness is 7.00 inches.

The contractor's rate of progress in the construction of concrete pavement has exceeded that of previous years. In 1931 several projects were constructed by placing two mixers in tandem which increased the progress considerably. The maximum lineal feet of pavement laid per day for a single mixer was 1,823 feet and for tandem mixers 2,204 feet. The highest average "run" with a single mixer was 111 lineal feet per hour and for tandem mixers 139 lineal feet per hour.

The standard width of pavement constructed by this department is 20 feet which is 2 feet wider than pavement in other states where an earlier program had started. Due to the increased bus and truck traffic 20 feet is much safer. In 1929 and 1930 the standard thickness was 9 inches at the edges and 6 inches at the center. The 9 inches tapered to 6 inches at 3 feet from the edges. Eight sacks of cement were used per cubic yard of concrete. This section with 8 sacks of cement was ample to carry all traffic but it was thought that a pave-



ment using a 7-inch center thickness and less cement per cubic yard could be constructed at about the same cost and would withstand heavier loads. During the winter of 1930 tests were made in the highway testing laboratory to determine whether such a design would be feasible. Concrete beams 6, 7, and 8 inches in thickness were made using 6, 7, and 8 sacks of cement per cubic yard for each thickness. The load in pounds required to rupture these beams at 7 days of age is as follows:

Thickness of Beams	Sacks of Cement per Cu. Yd. of Concrete		
	6	7	8
6"	4265	5350	5865
7"	5640	6405	8090
8"	6515	8670	10275

The above tabulation shows that a 7 inch beam using 7 sacks of cement per cubic yard will withstand a greater load than a 6 inch beam using 8 sacks of cement. As the result of these tests the standard paving section for construction in 1931 was changed from a 6 inch center to a 7 inch center using 7 sacks of cement per cubic yard of concrete.

All of the above information is based on the use of sand gravel aggregate which prior to 1932 was used almost exclusively in the construction of concrete pavement. Sand gravel is found along the entire length of the Platte River across the state from east to west as well as in other locations. The low cost of production of this material almost eliminated the use of crushed lime stone and coarse gravel. The only location where lime stone is available is in the southeast portion of the state. Prior to 1932 there was only one project in which crushed lime stone was used for coarse aggregate. This project is located between Havelock and Waverly and was constructed in 1929.

Nebraska is practically the only state in which sand gravel is found. It is not an ideal aggregate for concrete but on account of its abundance in this state and the low cost of production, together with the scarcity and higher cost of crushed stone and coarse gravel, this department has pioneered the use of this material for concrete and has experimented with it for several years.

Sand gravel is produced as a combined aggregate and is not separated into two or more sizes for use in concrete. It is a fine aggregate with a maximum size of about $\frac{3}{8}$ inch. By using a little more cement with this aggregate, strengths can be obtained which will equal the strengths of concrete made from fine and coarse aggregates. The density of concrete made from sand gravel aggregate is lower than when fine and coarse aggregate is used.

A special study has been made of the cracks in concrete pavement. This was started in 1929 and a survey has been made once a year on each project. It is found that concrete made from the sand gravel aggregate is subject to considerable more cracking than concrete made from sand and crushed lime stone. The surveys show that at the age of 2½ years the average distance between transverse cracks in the pavement where sand gravel aggregate was used, is about 20 feet while the average distance between transverse cracks on the Havelock-Waverly pavement where crushed lime stone was used, is 93 feet.

There were no expansion joints used in the construction of pavement before 1931. It was thought best to build the pavement as a continuous slab and let nature crack it at the weakest points. It was found that the cracks were ragged, unsightly, and subject to spalling. During 1931 and 1932 an effort has been made to control the cracking as much as possible and give the slab a more uniform appearance by using expansion and contraction joints and the use of wire mesh or bar mat reinforcement. In 1931 the joints were placed at various spacings in order to observe the results and determine the correct spacing for future work. In 1932 a standard spacing was adopted, using 1-inch expansion joints at 100-foot intervals, with contraction joints placed at 25-foot intervals between the expansion joints when sand gravel aggregate is used and with contraction joints placed at 33-foot 4-inch intervals between the expansion joints when crushed lime stone is used for coarse aggregate.

On roads which are subject to heavy traffic or where ideal sub-grade conditions cannot be obtained, our experience has shown that the use of wire mesh or bar mat reinforcement in sand gravel concrete will reduce the amount of cracking, thereby reducing the cost of maintenance and increasing the life of the pavement. It is also found that under these conditions, sand gravel concrete with wire mesh or bar mat reinforcement will compare favorably with and will give the same

service as concrete made from fine and coarse aggregates without wire mesh or bar mat reinforcement.

During the past season alternate bids for concrete, using sand gravel aggregate with wire mesh or bar mat reinforcement, and for concrete using fine and coarse aggregate without wire mesh or bar mat reinforcement, were called for on all paving projects in the southeast portion of the state where the cost of transportation would not make the use of fine and coarse aggregates prohibitive. At other locations in the state, where coarse aggregate was not available, wire mesh or bar mat reinforcement was either required or omitted, depending on the amount of traffic and the subgrade conditions.

A special study is being made of the strength of concrete by cutting cores from the pavement each year and comparing the compressive strengths. About five cores are taken from each project, each being cut within a short distance from the original core. This experiment is being conducted on several projects. The results by years are shown in the following tabulation:

AVERAGE COMPRESSIVE STRENGTH OF CORES AT VARIOUS AGES

Project No.	Year constructed	Type of aggregate	Age			Age			Age		
			Yr.	Mo.	Lbs. per sq. in.	Yr.	Mo.	Lbs. per sq. in.	Yr.	Mo.	Lbs. per sq. in.
17	1929	Sand and limestone	0	1	4686	1	7	8745	2	10	9702
17	1930	Sand gravel	0	4	6501	1	8	8286			
19	1930	Sand gravel	0	2	8095	1	11	8609			
28	1929	Sand gravel	0	3	6734	1	4	7251	2	7	7670
28	1930	Sand gravel	0	2	6560	1	11	7902			
100	1924	Sand gravel	6	4	8941	7	8	10346			
100	1926	Sand gravel	4	5	6700	5	9	7188			
138-A	1929	Sand gravel	0	2	6823	1	4	7655	2	7	8394
138-C	1929	Sand gravel	0	4	6303	1	5	7436	2	8	8715
138-D	1930	Sand gravel	0	3	5960	2	0	8711			
234-A	1929	Sand gravel	0	2	6562	1	5	8243	2	8	7704
664-A	1930	Sand gravel	0	2	6045	1	7	7586			

It is noted that the strength of concrete on every project except 234-A has increased each year. This experiment will be carried on until such time as the ultimate strength of the concrete has been reached.

REPORT OF SECRETARY

DIVISION OF MAINTENANCE

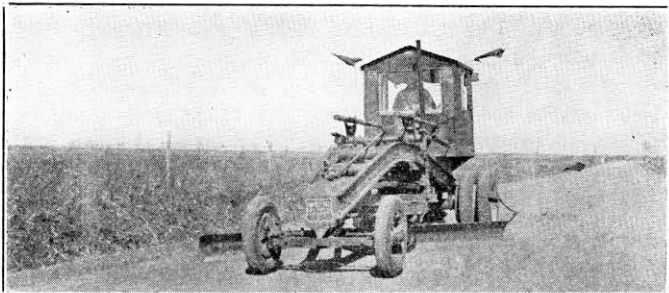
ORGANIZATION

The general structure of the maintenance organization has undergone no major change during the biennium. The general supervision of maintenance is through the Maintenance Engineer, who in turn works through eight District Engineers. Each District Engineer has charge of about eleven to twelve counties. Each district is subdivided into maintenance divisions and in charge of each division there is a Resident Engineer or a Chief Patrolman, who is responsible to the District Engineer for the maintenance work in his respective division. The number of divisions into which each district has been subdivided averages about six and the mileage of highways in each Resident Engineer's or Chief Patrolman's division varies with the traffic, topography and climatic conditions. The highways in each Resident Engineer's or Chief Patrolman's division have been divided into patrols of varying lengths to suit the conditions. A patrolman with proper equipment is assigned to each patrol. His duties, except in emergencies, are routine and his instructions have been designed to provide for the proper upkeep of the road and for the welfare, comfort and convenience of the traveling public.

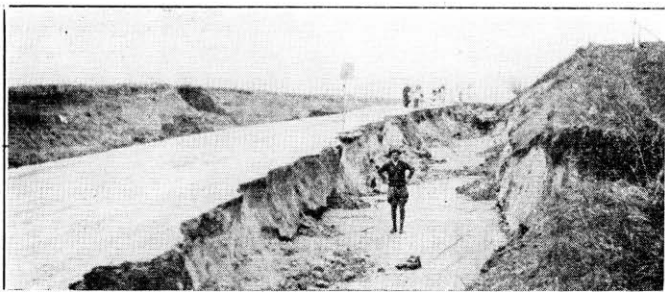
Another important part of the organization is the Mechanical Division which keeps the equipment in condition so that the road maintenance forces can carry out their work.

The Mechanical Division is in charge of a Chief Mechanic, working directly under the Maintenance Engineer, who has general supervision of all mechanical work. In each district, there is a District Mechanic who works under the District Engineer and each district is divided into four mechanical divisions with an assistant mechanic assigned to each division. The assistant mechanics have definite equipment assigned to their care and are held responsible for keeping those pieces of equipment in proper repair. At Lincoln a main repair shop is located where complete motor overhauling jobs and other heavy work is done for all districts, the work done at Lincoln being of such nature that it would not pay to equip each district repair shop to perform it.

During this biennium a problem of organization was introduced by reason of a distinct falling off in the volume of traffic and consequent reduction in income from gasoline taxes and license fees. The lessened traffic made it possible to keep a relatively high standard of maintenance with materially reduced forces. This was accomplished in two ways: namely, by consolidation of patrols and by reduced working time. In those cases where consolidation of patrols was considered more practical such procedure was followed and resulted in the elimination of about seventy patrols.



Typical gravel road maintenance.



Washout near Bayard following a six-inch rainfall which fell in one hour in May, 1932.



Typical damage caused by debris piling up against one of the older type bridges.

However in order to distribute work to as many men as possible and in order to retain many trained men within the organization so that expansion could be accomplished at such time as traffic volume again increases, many patrolmen were put on a four-day week instead of a six-day week basis. Except on the main and heaviest traffic highways, all present patrols are on the four-day week basis with the exception of a few cases of two-day and three-day week bases. On a few of the very lightest traffic roads, no patrolman is assigned and the work is accomplished by hiring extra help, as required.

In the past when heavy traffic volume made it necessary for patrolmen to confine their work largely to surface maintenance and only a few special duties, extra labor had to be hired in considerable numbers, not only on routine maintenance but also to accomplish reshaping and work in the nature of temporary improvement. Under present conditions, regular patrolmen are able to accomplish much of the routine work previously done at extra cost, and it has been possible to practically discontinue reshaping and improvement work. The result is that the expenditures for extra work, not accomplished by regular forces, have been very materially reduced in spite of the retrenchment in the regular organization.

EQUIPMENT

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

Type of equipment	On hand	Purchased	Purchased	On hand
	Jan, 1 1931	during 1931	during 1932	in 1932
Tractors	154	5	0	140
Trucks	198	5	12	180
Maintainers & graders.....	369	17	0	327
One-man units	278	52	27	327
Cars	135	12	2	86
Mowers	159	42	0	160
Snow plows	82	22	5	104
Air compressors	3	0	2	5
Scarifiers	5	0	0	5
Concrete mixers	3	1	1	5
Elevator graders	15	4	0	18
Hoist	1	0	0	1
Pressure sand blast & paint spray outfit	2	0	0	2
Fuel tank wagons.....	2	0	2	4
Nail picker	1	0	0	1
Pavement breaker	1	0	1	2
Paving striper	1	1	0	1

Core driller.....	1	0	0	1
Trailers	4	3	3	10
Willett scrapers	49	0	0	49
Gravel loaders	2	0	0	2
Tar kettles	1	6	2	9
Snow fence, lin. ft.....	2,504,586	0	527,250	3,031,836
Snow fence posts.....	156,540	2540	41,920	201,000

SNOW REMOVAL

The prevention of snow drifts and the removal of snow has become a very important function of the maintenance forces. Only a few years ago, it was common practice to put the car up for the winter and the public generally did not expect to travel with assurance or much convenience in bad winter weather. In fact roads were then patrolled only nine months of the year and little or no effort was made at snow removal.

Today, due partly to the increase in the use of the truck for commercial purposes, the public expects a reasonably good road to travel on the year around, and expects drifted roads to be cleared quickly.

To accomplish this eight tractor "V" type plows and fourteen truck "V" type plows were purchased in the fall of 1931, and in 1932 purchase was made of four powerful four wheel drive trucks with "V" type plows, together with fifteen more "V" type truck plows for four ton capacity trucks already owned. In addition to this, eleven blade plows for use with one and one-half ton trucks were purchased for cleaning snow from paved roads.

To own sufficient equipment for snow removal work only, and to have it properly distributed throughout the state to permit immediate opening of roads after snow storms, would entail an expenditure of hundreds of thousands of dollars for equipment which would work only a few days, or at most, a few weeks each year, and many pieces of equipment so provided would not work at all some years because of the varying snow conditions. The policy, therefore, has been to utilize heavy tractors used in summer for grading purposes, and regular maintenance trucks used for surface patrol work during the entire year.

One serious problem encountered in a snow removal program is the uncertainty of where severe snow storms will occur and the difficulty of locating a reasonable amount of equipment at points most likely to be affected. Another problem is that of equipment repair. Snow removal is most strenuous work and hard on machinery, making it difficult to keep equipment used for other purposes in first class condition for the special problem of snow removal.

The winter of 1931-32 was one of the worst for snow in a great many years and doubtless the worst in the history of the department. The table below indicates this.

REPORT OF SECRETARY

SNOW FALL

(In inches)

Town	Winter 1931-32	Previous maximum snow fall	Average over a period of
Beatrice	36	1914-15 69.1	32 years 22.4
Columbus	41.3	1914-15 71.6	32 years 25.1
Lincoln	36	1914-15 59.4	34 years 23
Hartington	48	1926-27 50.0	36 years 26.6
Ravenna	45	1914-15 64.0	41 years 28.6
Scottsbluff	41.3	1926-27 61.4	37 years 35.1
Beaver City	26.0	1928-29 31.1	36 years 19.7
Broken Bow	45.5	1916-17 52.5	33 years 24.8
Albion	59.5	1914-15 68.2	28 years 30.1
Kimball	34.2	1929-30 43.0	36 years 40.7
Chadron	40.2	1928-29 60.7	17 years 53.0
Gordon	60.0	1926-27 67.0	23 years 45.3
North Platte	20.2	1929-30 20.7	47 years 26.1
Valentine	26.4	1929-30 77.5	38 years 41.8
O'Neill	47.5	(greatest snow fall since 1916-17. Re- cords incomplete previous to 1916- 17)	27 years 28.8
North Loup	43.8	1928-29 47.9	32 years 26.6
Curtis	22.0	1929-30 25.5	28 years 28.7
Minden	20.3	1928-29 26.5	36 years 26.3
Stanton	52.2	(Record incomplete in 1914-15 & 1915- 16)	32 years 29.4
Newport	44.6	1928-29 54.6	34 years 32.1

In spite of the severity of the successive storms, excellent co-operation on the part of the entire personnel and their fine morale made possible a successful snow removal program wherein the main roads were kept open, except for a few hours, at all times and the lighter traffic roads were opened with a minimum of delay.

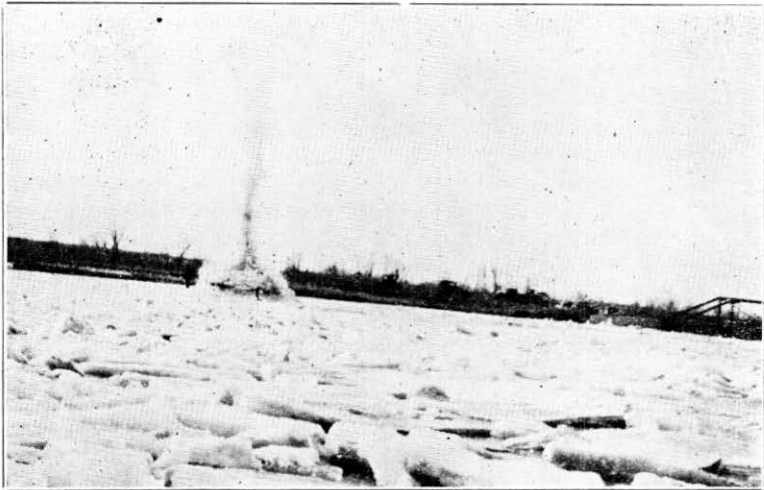
Unusual performances of merit on the part of employees were the rule rather than the exception, many working voluntarily and at their own initiative or own request for periods of two days and two nights. Equipment was operated both night and day for long periods without even stopping the motor. For instance, on one unit working out of Lincoln the motor was stopped for only about fifteen minutes in six days and then stopped only to change oil.



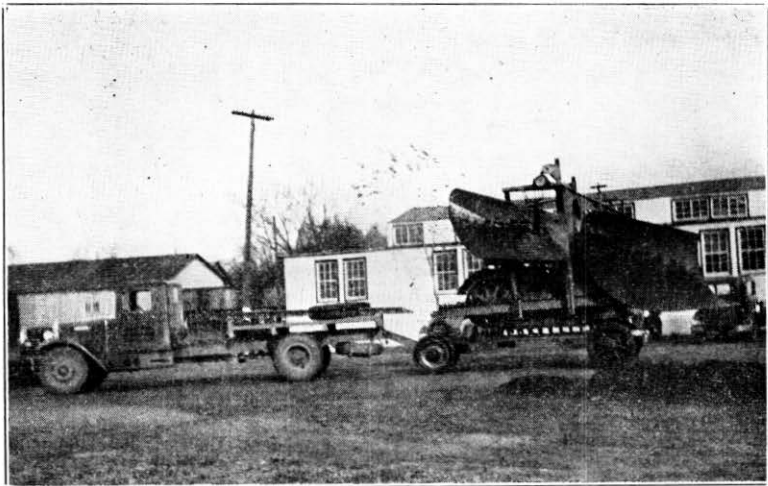
Typical view after drifts are opened.



It required caterpillar tractor and plow with the help of shovelers, to open this drift.



Typical view of dynamiting river ice to protect bridges.



Trailer built at Department's shop, capable of hauling largest caterpillar type tractor and plow, makes possible great mobility of heavy snow-fighting equipment which, under its own power, would move at only three miles per hour.

SIGNS

Special effort has been put into the item of properly placing and maintaining signs to mark turns, curves, railroad crossings, and other points where caution is necessary and in the placing and maintaining of markers to direct traffic.

Distance arrow signs at junctions are maintained to inform the traveler regarding the main towns and distance to them in each direction from the junction. Distance arrow signs have also been erected at the approach roads to towns lying off the highway to further help the traveler in finding his way.

A survey has been made and the data compiled for a system of signs to be placed at city limits so that upon entering, a traveler would be informed of the name and population of the town and on leaving would be informed as to the name and distance to the next town.

The maintenance of the sign system is made one of the items of major importance and it is a "Daily Duty" of patrolmen to see that all signs are in place and are kept straight and neat appearing.

The sign refinishing department has increased its functions to include the making of all special signs, in addition to the refinishing of rusty, bent and defaced signs. Improved and new methods now permit the reclaiming of many signs formerly discarded for lack of facilities and means of reclaiming.

New specifications for use in purchasing signs have been made during the biennium whereby a close control of the materials furnished is possible. Heat treated, zinc coated signs are now purchased instead of black metal signs previously used. Also a two year service bond is required to protect the State against discoloring, rusting, or other failure of the signs due to faulty material or workmanship.

DUST PREVENTION

An experiment in dust prevention work was undertaken and is still being continued on an eight mile stretch of Highway No. 2, starting at the junction of Highway No. 2 and Highway No. 42 and extending east, where each alternate mile has been treated with calcium chloride and further applications will be made as required.

This experiment is being conducted jointly by the State and the Highway Research Board, a division of Engineering and Industrial Research of the National Research Council, Washington, D. C. The calcium chloride is furnished by the manufacturers without cost and is distributed by the State. The experiment will be conducted over a period of one year and careful records are being kept by the State during the period of the experiment. An engineer representing the

Research Council, in company with a representative of the State, also conducts periodic investigations.

The purpose of the experiment is to determine the feasibility of the use of calcium chloride as a dust preventing agent and also as a means of building up thicker gravel mats by its ability to attract moisture. Determinations of the saving that may be possible by preventing loss of gravel due to wind and traffic will also be made.

The first application of calcium chloride was made early in July, 1931. Samples were taken immediately after this application and were used in an attempt to determine what happens to the calcium chloride after it is placed on the road surface. Consequently samples of the road were taken at various depths. Five samples were taken in all. The first sample consisted of the top one-half inch and the remaining samples of each succeeding inch. One set of samples was taken on the treated section and another set taken on the untreated section. The untreated samples or blanks were taken to see if any calcium chloride was already present in the soil.

Additional samples were taken in September just before and just after the second application of calcium chloride. Another set of samples was taken in November. In addition to determining the calcium chloride content of each sample, the water content was also obtained.

Visual inspections of the treated sections were made at various times. The dust conditions were noted as well as the mat forming possibilities of the calcium chloride.

Continued periodic tests and observations will be made until the experiment is completed. Varying amounts and types of maintenance are being tried. When completed, it will be possible to tabulate and summarize the results and the costs so that it can be determined whether or not the use of calcium chloride in this section of the United States is practical.

The experiment is being conducted at practically no expense to the State.

ROAD MAGNET

The road magnet has been operated with good results over a considerable portion of the main highways. During 1931, this magnet covered 1,731 miles picking up 4,536 pounds of nails, wire, and other metal, a great proportion of which would puncture a tire. The heaviest "pickup" was made on Highway No. 81 between Humphrey and the end of the paving south of Norfolk, where in a distance of 20 miles the magnet picked up 116 pounds of metal or 5.8 pounds per mile.

In 1932 the distance covered was 1080 miles with a total "pickup" of 3577 pounds or an average of 3.3 pounds per mile. The heaviest "pickup" was made between Seward and Waco, where in 19 miles 114 pounds, or 6 pounds per mile were picked up.

TRAFFIC CENSUS

During 1929 and 1930 a traffic census was made in cooperation with the U. S. Bureau of Public Roads. This survey covered a period from September 3, 1929 to September 3, 1930 and was taken at 72 stations throughout the State. The survey was conducted simultaneously in Nebraska, Wyoming, Colorado, New Mexico, Arizona, Utah, Idaho, Nevada, California, Oregon, and Washington.

During 1931 the data from this survey was tabulated and analyzed by the U. S. Bureau of Public Roads at Washington, D. C., and 200 copies of the printed report in book form, "Report of a Survey of Traffic on the Federal Aid Highway Systems of Eleven Western States", were received. The traffic flow map shown on page 60. was prepared from the data taken during the survey.

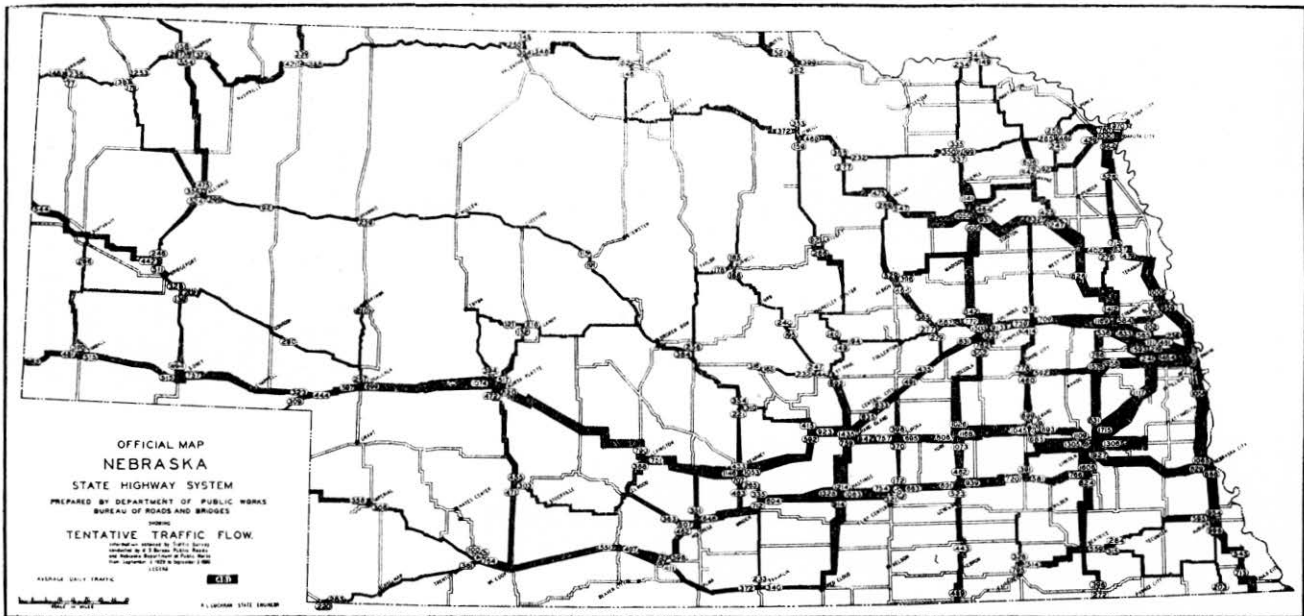
Because of present economic conditions which have caused a material reduction in traffic, the figures are not representative of present conditions but do provide a comparative study of the traffic flow on Nebraska Highways.

MAINTENANCE COSTS

Average maintenance costs per mile have been lowered materially by reason of improved methods, improved equipment, bulk purchasing, lowered cost of materials and supplies and by the paving of sections of gravel roads which were unusually costly to maintain.

The table below shows the total cost of maintenance each year since 1926 together with the miles maintained. It is to be noted that the total cost of maintenance for 1931 is materially lower compared to mileage maintained, and this in spite of unusually heavy expenditures in 1931 for snow removal and in spite of the greatly increased mileage of gravel roads which increase maintenance cost by reason of gravel replacements.

Year	Miles	Total cost
1926.....	6156.2	\$1,817,877.08
1927.....	6201.7	2,256,057.17
1928.....	6273.9	2,157,987.54
1929.....	6281.6	2,833,527.00
1930.....	6882.0	3,043,508.80
1931.....	7222.9	2,854,968.36



The accompanying table and charts require little explanation and show the cost of maintenance per mile per year by types, the increase in mileage of gravel roads maintained each year from 1926 to the present time, distribution of maintenance costs on all types of roads and also on gravel roads only, and a chart giving the analysis of gravel road maintenance costs per mile.

MAINTENANCE COSTS PER MILE PER YEAR BY TYPES FOR 1931

Type of surface	Cost per mile	Miles
Gravel	\$448.10	5117
Earth	237.80	1485
Pavement (concrete)	261.28	477
Pavement (brick)	545.95	51
Pavement (asphalt)	284.02	9
Oiled sand & oiled gravel.....	262.25	83

MAINTENANCE EXPENDITURES BY DISTRICTS

Dist. No.	No. of miles	Expenditures
	1930	
1.....	930.0	\$ 527,111.05
2.....	852.9	526,451.28
3.....	834.6	389,641.18
4.....	817.8	353,565.97
5.....	868.1	291,516.98
6.....	847.1	338,980.01
7.....	924.9	367,376.32
8.....	806.5	248,866.01
Total.....		\$3,043,508.80
	1931	
1.....	1088.8	\$ 546,139.11
2.....	884.9	381,712.84
3.....	908.5	354,178.57
4.....	882.4	354,681.02
5.....	937.1	287,989.61
6.....	864.4	328,064.90
7.....	942.2	372,972.42
8.....	714.7	229,229.89
Total.....		\$2,854,968.36

ANALYSIS 1931 GRAVEL MAINTENANCE COST

100% or 5117 Miles of Gravel. Average Cost Per Mile Per Year \$448.10

27.0% or 1378 Miles Costing Less Than \$300 Per Mile Per Year.

40.3% or 2062 Miles Costing Between \$300-\$500 Per Mile Per Year.

23.4% or 1200 Miles Costing Between \$500-\$750 Per Mile Per Year.

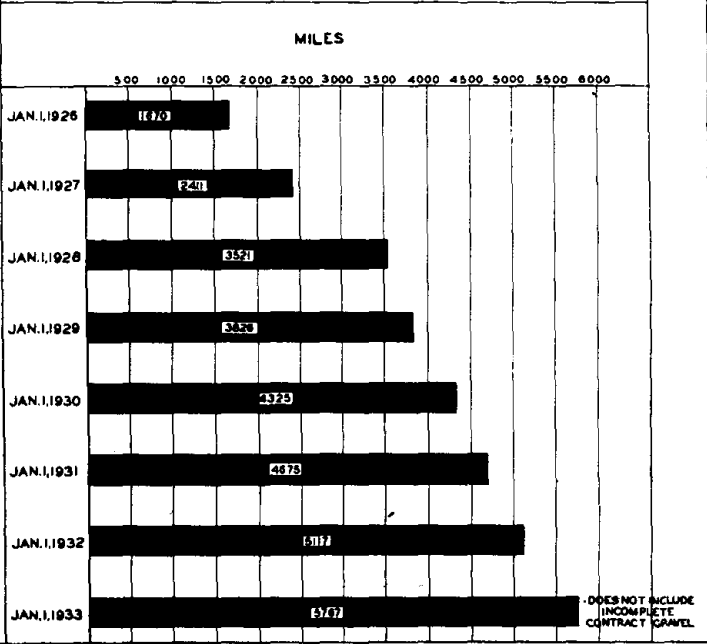
6.5% or 333 Miles Costing Between \$750-\$1000 Per Mile Per Year.

2.2% or 111 Miles Costing Between \$1000-\$1250 Per Mile Per Year.

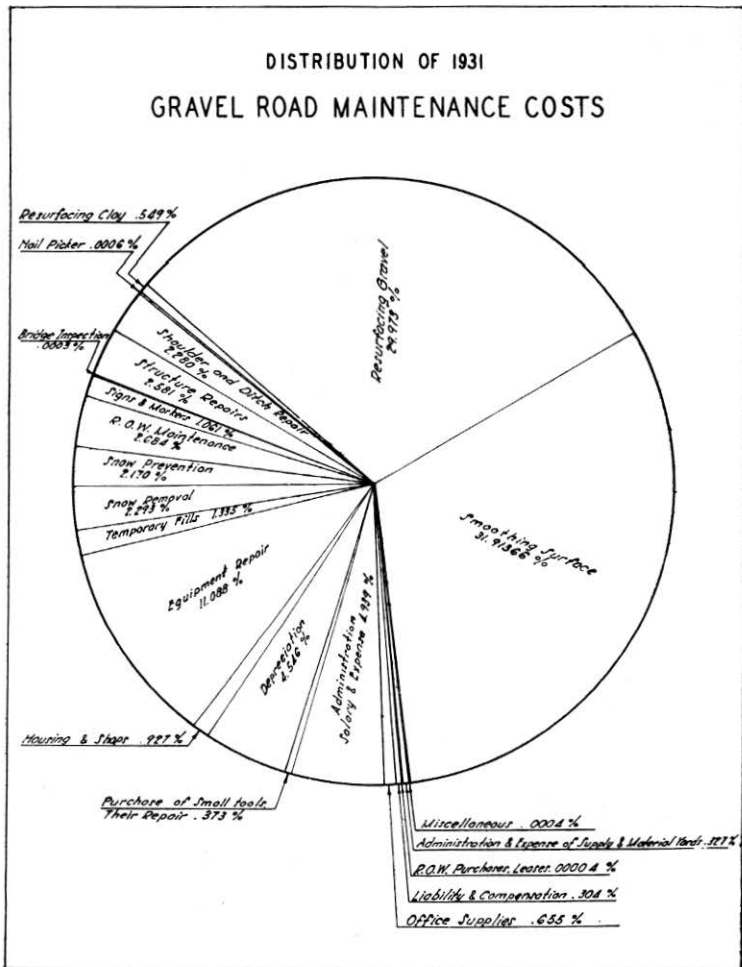
0.28% or 15 Miles Costing Between \$1250-\$1500 Per Mile Per Year.

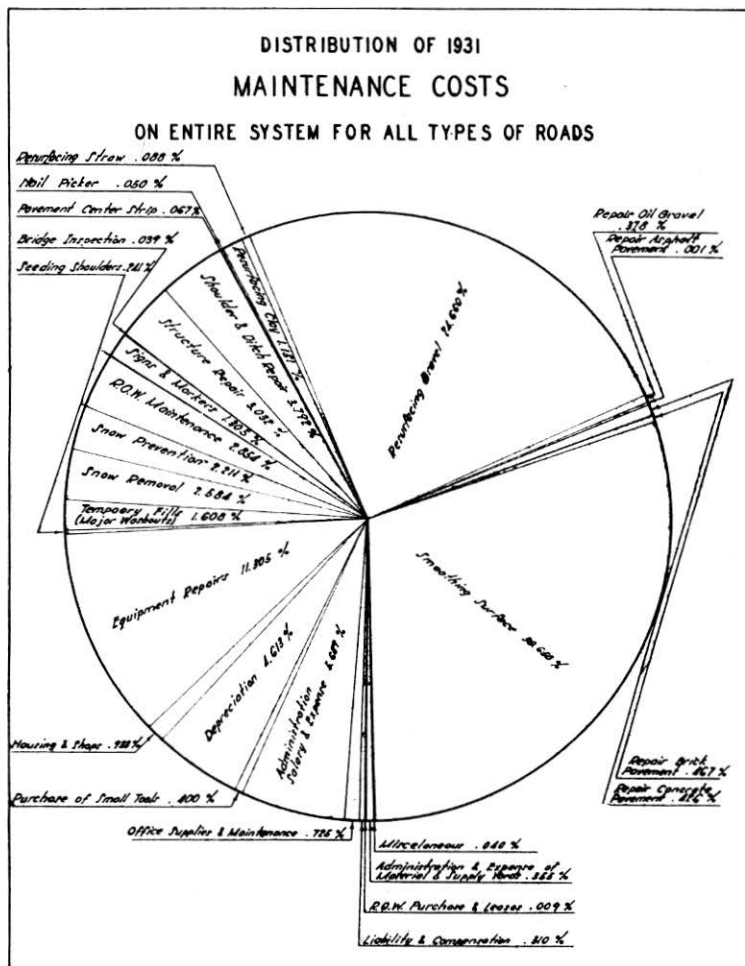
0.32% or 18 Miles Costing Over \$1500 Per Mile Per Year.

MILEAGES OF GRAVEL SURFACING MAINTAINED
JANUARY 1, 1926 TO JANUARY 1, 1933



DISTRIBUTION OF 1931
GRAVEL ROAD MAINTENANCE COSTS





METHOD OF PURCHASE

A major change in the method of purchasing material and supplies was effected during this biennium in the establishment of a large supply base at the State Shop at 6th and South Streets, Lincoln. Here a quantity of materials, supplies and repair parts that are in current use are stocked. This permits the purchasing of such items on specification and gives the advantage in savings that result from quantity buying.

Generally speaking a sixty to ninety days supply is kept on hand making allowance, of course, for seasonal work which requires supplies that do not turn over so rapidly. However, stocks are held at a minimum and include only those items in current use. A perpetual inventory is kept up to date at all times, and once a year the perpetual card inventory is checked against a physical inventory of each bin.

Those field men who are authorized to do so obtain materials, supplies or parts from stock through a requisition system which is so arranged that the quantities desired and the disposition to be made of same in the field are shown.

All purchases for stock are made directly through the State Purchasing Agent, whose excellent cooperation and interest have expedited this work materially. Slow moving items, not carried in stock, and other items which it is not practical to stock are purchased, as required, directly by the Purchasing Agent except in cases of emergencies. In emergencies purchases are made by field men in charge who have been authorized to act as agent for the Purchasing Agent.

Through the above method a systematic, advantageous, and controlled policy of purchasing has been effected.

HIGHWAY LAW ENFORCEMENT

The enforcement of highway laws is carried on by three State Traffic Police Officers, who are so located that they cover the entire state. In view of the large mileage of highways, it is not possible to apprehend all offenders or more than a relatively small portion. However, very effective work has been carried on with particular effort being given to educating the driving public in the matter of the highway laws. No attempt at wholesale arrests have been made, in fact the policy has been largely toward effecting the cooperation of the public through warnings for first offenses rather than arrests.

In the case of improper licenses as well as improper equipment, tags have been given requesting the violator to correct the offense by buying a license or by having improper equipment repaired or by purchase of equipment which is lacking. Each tag has a return address to the department and a place where the County Treasurer can certify to a license having been purchased or where a dealer can certify to

illegal equipment having been repaired or new equipment purchased as the case requires. Offenders receiving the tags are asked to return same by mail after the offense is corrected and the tag properly certified. Good cooperation from the public has been had. In those cases where an offender fails to return the tags properly certified, the case is placed in the hands of the officer who gave the tag, for further handling.

Considerable work has been done in the way of weighing trucks, much more than the table of activities which follows would indicate, for the reason that an officer stops many trucks and checks the way-bills or estimates the load only to find that it is entirely legal so that the number of actual checkups made in such cases far outnumber the ones which actually have to be weighed and which show in the table.

An appropriation of \$50,000.00 was made by the 1931 legislature for Highway Law Enforcement. The total cost of the operations of this department from August 1, 1931 to November 1, 1932 has been \$12,896.10. It is to be noted that the total amount of money collected for fines and licenses is practically equal to the cost of operation so that all of the educational work and other work in weighing trucks, checking illegal equipment, etc., might be said to have been accomplished without expense.

**REPORT OF STATE TRAFFIC POLICE OFFICERS' ACTIVITIES
FROM AUG. 1, 1931 to NOV. 1, 1932**

Arrests	33
No driver's license	44
One license plate.....	156
No license	323
Expired paper numbers.....	148
One set of plates on two cars.....	63
Touring cars with truck license.....	24
Trucks with touring car license.....	51
No trailer license.....	62
Out-of-state cars & trucks with no Nebraska license.....	226
No license on busses.....	6
Improper use of dealer plates.....	143
Trucks too heavy.....	32
Trucks too high.....	15
Trucks too wide.....	18
No vision mirrors.....	424
No reflectors	557
Speeders	204
Failed to stop at stop sign.....	322
Passing cars on hill.....	69
Parked on highway.....	80

Stolen cars recovered.....	1	
Trucks weighed	98	
Foreign cars in state over 60 days.....	3	
Expired 1931 licenses.....	1010	
Aid to motorists.....	71	
Careless driving	10	
Defective or no headlights.....	62	
Defective or no tail lights.....	114	
Coasting down hill.....	4	
Illegal use of right of way.....	15	
Estimated money received from fines.....		\$ 394.75
Estimated money received from licenses.....		12,162.34
Money expended to operate Law Enforcement Department.....		\$12,896.10

FACTS NOT GENERALLY KNOWN

Contrary to general opinion, the upkeep or smoothing of surface is a relatively small item of the total yearly maintenance costs. Using the 1931 cost data, the following is developed. The cost of smoothing surface represents, in fact, just 32 percent of the total maintenance expenditure.

Replacement gravel is carried in our records as a maintenance charge. Many states do not include this item as a maintenance charge. The replacing of gravel represents 30 percent of the total maintenance expenditure.

Snow prevention and snow removal represent $4\frac{1}{2}$ percent of the total expenditure.

The cost of owning and keeping in repair suitable equipment for proper maintenance, including snow removal equipment represents 15 $\frac{1}{2}$ percent of the total.

The four above items represent 82 percent or slightly over four-fifths of the total maintenance expenditure.

The remaining 18 percent, or one-fifth, is expended for shoulder and ditch repair, structure repair, signs and markers, right of way maintenance, temporary improvement such as raising fills, or light construction to make a satisfactory roadbed pending further construction, maintenance of supply base, right of way purchases and leases, liability and compensation, office supplies, and administration.

The cost of administration, including all salaries and expense, represents only 5 percent of the total expenditures in spite of the fact that maintenance of roads requires proportionately more supervision than many other kinds of business, representing the same total expenditure, because maintenance is detail work accomplished over a large mileage.

The expenditures are individually quite small and the forces to accomplish the work are spread out rather than being bunched in easily controlled units.

An idea of the magnitude of the labor and materials required to maintain Nebraska's System of Highways can best be shown by the following illustrations:

In 1931 approximately 2,450,547 gallons of gasoline and 439,600 quarts of oil were consumed.

Every year approximately 3,031,836 lineal feet or 574 miles of snow fence is hauled out and erected and later taken down and hauled in. To do so requires the driving and later the pulling of 201,000 posts.

Incidentally this amount of fence would be sufficient to enclose an area $16\frac{1}{2}$ times the size of the State of Rhode Island. It represents sufficient length of fence to enclose with one line a square containing 13,178,880 acres.

A large percentage of the maintenance expenditures goes for the employment of labor. Heavy snows during the winter of 1931-32, which caused drifted roads, made necessary the hiring of much labor for the removal of same. During the snow season, in addition to the regular maintenance forces, approximately 579,000 man-hours of extra labor were used. Considering the unemployment situation, this work afforded many men, in dire need of it, an opportunity to earn a little money to help through the hardest part of the winter.

DIVISION OF MAPS AND PLANS

The preparation of the plans and the estimates or calculations of the cost of all State and Federal Aid highway construction work which is performed under the supervision of the Department of Public Works constitute the principal duties of the Division of Maps and Plans. Minor functions of this division include the preparation of the plans for a part of the work which is performed under the supervision of the Division of Maintenance, keeping records of the cost of all state highway construction work which has been completed or is under construction, preparing the maps, charts and blue prints which are required for use in connection with the work which is performed by the Bureau of Roads and Bridges, procuring and distributing supplies and equipment for field survey parties, and the performance of other routine office work.

A greater volume of work was performed by this division during this biennium than during any corresponding period in its history. This increased volume of work was occasioned for the most part by the appropriations of emergency Federal Aid funds which were made for the purpose of increasing employment and were provided through acts of Congress which were approved December 20, 1930 and July 21, 1932. Plans for projects to be constructed in accordance with the provisions of the act of December 20, 1930 were completed so that bids for work which required the expenditure of all of Nebraska's share of the emergency Federal Aid funds provided by that act, were received at lettings held prior to or very soon after the beginning of the 1931 construction season. The plans for most of the projects which it is contemplated will require the expenditure of practically the entire amount of Nebraska's share of the emergency Federal Aid funds which are provided by the act of July 21, 1932, were prepared after its enactment was an assured fact, and so that bids for most of that work could be received at five lettings, the last of which was held November 17, 1932.

Four large rooms which are located on the ground floor of the State House are used jointly by the Division of Bridge Design and the Division of Maps and Plans as drafting rooms. The largest of these rooms is approximately one hundred feet in length and about thirty feet in width. This room is well lighted by large windows throughout the entire length of its north side and is ideally suited for the purpose for which it is used. Three other smaller rooms are used as an office, blueprint room and supply and cloak room. Two fire-proof vaults have been provided for the storage of the more valuable supplies and records of these divisions. On two separate occasions during the past biennium, two other rooms in the State House were used temporarily as drafting rooms. Two of these rooms, which are now considered as being included in the permanent quarters of the Division of Bridge Design and the Division of Maps and Plans, and are being used as drafting rooms by these divisions, were not made available for this use until after the

adjournment of the 1931 Legislature, nor were the other two rooms which were occupied temporarily as drafting rooms used for that purpose prior to that time. Because of limited space available during the period between January 15, 1931 and March 16, 1931, it was necessary in the performance of the work required of that division, to divide the greater portion of the personnel of the Division of Maps and Plans into two groups. The members of the first group were employed from 7:00 o'clock A. M. until 3:30 o'clock P. M. each of the first five days of each week and from 7:00 o'clock A. M. until 2:30 o'clock P. M. on Saturdays, and those who comprised the second group were employed between the hours of 3:30 o'clock P. M. and 12:00 o'clock Midnight each week day except Saturday, when the working hours for that group were from 2:30 o'clock P. M. to 10:00 o'clock P. M.

The personnel of this division, as well as that of the entire Bureau of Roads and Bridges has been strengthened materially in this biennium through the acquisition of the services of several engineers of marked ability, many of whom have had valuable experience and training with other organizations, particularly the railroad companies that have curtailed their engineering activities to a great extent during the past few years.

After a portion of a road which is included in the State Highway System is designated for improvement, a preliminary survey of that part of the highway is made. The preliminary survey parties usually consist of three men, an engineer, a rodman and a chainman, although under unusual conditions these survey parties are increased in size. The preliminary survey parties work under the direct supervision of the District Engineer in whose territory the work is located. The survey notes are submitted to the office of the Division of Maps and Plans where the plans are plotted and tentative grade lines are indicated. Blue prints are then made and are given to the Construction Engineer who, usually in company with the District Engineer affected and a representative of the Division of Bridge Design, when the construction of large drainage structures is involved, makes a plan-in-hand inspection of the road. Studies are made to determine the sizes, types, and locations of the drainage structures which will be required, suggested changes in the channels of streams or rivers are indicated and changes in the tentative grade lines and other features of the improvement are shown on the blue-prints. The blue prints are then returned to the office of this division and the recommended changes and other data shown on those blue prints are used in the preparation of the plans for the proposed improvement. After the plans have been corrected in conformity with the recommendations made in the plan-in-hand inspection, they are checked in the field by the Construction Engineer. Any necessary changes in the plans, as well as the locations of all right of way which must be acquired, are indicated and all other

pertinent data are shown and the information thus obtained is delivered to the office of the Division of Maps and Plans where it is incorporated in the finished plans for the project.

If the project in question is a part of the Federal Aid Highway System and it is desired to obtain Federal Aid funds for use in payment for the proposed construction work, a request is then made of the United States Bureau of Public Roads that such funds as may be available for such use be set aside for that purpose. The plans, specifications and an estimate of the cost of the proposed work must be submitted with that request. If the request is granted and the plans, specifications and estimate are approved, a contract, which is termed a "Project Agreement" and provides for the payment of Federal Aid funds is executed by the United States Department of Agriculture and the Department of Public Works.

The next step after the approval of the plans, specifications and estimate by the United States Bureau of Public Roads or the completion of the plans, if the proposed work is not a part of a Federal Aid project, is the advertising for bids and the awarding of contracts. Usually the bids are received in the Lincoln office of the Department of Public Works, and in most instances, unit price bids are received. The unit bids are tabulated and total bids are calculated by this division for use in determining the low bids for the proposed work.

The highway departments of several of the other states furnish prospective bidders with prints of the general plans for their proposed construction work. Prints of such plans are generally sold or furnished upon payment of deposits which are remitted upon the return of the prints. The blue printing facilities of this department are limited to such an extent that the possibility of our adopting either of these practices is precluded. Arrangements have been made, however, to provide for furnishing the County Clerks of the counties in which the work is located, with three sets of prints of the general plans for all proposed construction work, and provisions are made for their lending two of such sets of prints of the plans for each project to prospective bidders, who may require the use of the plans in their investigations of the work which is contemplated.

In addition to furnishing supplies and blue prints of plans, this division keeps a record of the progress made in all construction work and handles all orders requesting approval of changes in the plans for construction work.

Another activity of this division consists of handling the surveying equipment which is owned by the Department of Public Works. Transits and levels, as well as the minor equipment required for the use of field survey parties, are purchased and issued to the field parties through this division. Surveying equipment which requires repairs that can not

be made by the field engineers is sent to the Lincoln office to be repaired. With only a very few exceptions, all repairs necessary to restore all transits and levels to such condition as is required for accurate work, have been made in this office. In a very few instances during this biennium, it has been necessary to return transits to the factories where they were made, but in all such cases that procedure was required because of the need of extensive repairs which necessitated the use of tools or equipment which were available only in such factories. Since the Department of Public Works does not own all of the equipment and tools which are required for repairing surveying instruments, it has been necessary to make arrangements with the Department of Mechanical Engineering and the Department of Physics, both of the University of Nebraska, for frequent use of their mechanical facilities.

The field engineers in charge of the construction work measure all quantities of work performed under their supervision and usually compute the quantities upon which payments to the contractors are based. If such calculations are not made by the field engineers, they are prepared in the Division of Maps and Plans. All calculations of quantities used in the preparation of the final estimates, upon which payments to the contractors are based, whether made in the field or in this division, are checked thoroughly in this division. After the contractors' final estimates have been prepared and all quantities shown in those estimates have been checked, plans which show the project as constructed, are prepared.

All final vouchers to the United States government for work performed in completed Federal Aid projects are checked in the Division of Maps and Plans.

There were several occasions during the past biennium when the volume of work performed in the Division of Maps and Plans was so great that overtime work was required of the entire personnel of this division. In one month, practically all of the members of this division worked approximately fifty percent more time than was included in the customary office hours. One of the most outstanding features of these periods was the fact that an exceedingly commendable spirit of zeal-ousness was shown even though it was known that payment could not be made for overtime work as such, and that the only compensation which might be expected would consist of possible increases in vacation privileges.

DIVISION OF BRIDGE DESIGN

During the years 1931 and 1932 the items of bridge design and construction have increased to a volume far in excess of any previous biennium in Nebraska's history.

During these two years 281 structures consisting of bridges, viaducts and subways were placed under contract. This does not include box culverts and arches. In addition there were 37 bridges repaired and protected.

Table "A" shown below groups these structures into various types showing the total length, total cost and average cost per foot of each different group for the years 1931 and 1932.

These "per foot" prices do not represent the true comparative values of the various structures owing to variations in spans and roadway widths. However, the great majority of them have a roadway width of 24 feet.

From these groups attention is directed to the type designated as "Deck steel girders with concrete substructures". This particular group is now considered to represent one of the most permanent and adequate types of structure yet devised for this region. While various other groups show a cheaper first cost it is believed that, owing to the long life and low maintenance cost of deck steel girders with concrete substructures, they will prove to have a lower annual cost over a long term of years.

TABLE A
Bridges Constructed 1931-32

No.	Type	Floor	Total length in ft.	Total cost	Cost per ft.
1	Steel arch span.....	Concrete	289.21	\$ 55,563.98	\$192.12
2	Subways	Treated timber	268.84	35,206.85	130.96
1	Steel truss	Concrete	380.00	47,946.78	126.18
2	City viaducts, 30' roadway.....	Concrete	2,527.16	306,724.34	121.37
7	Steel truss, deck steel gir- der approaches	Concrete	4,202.62	451,023.76	107.32
52	Deck steel girders, con- crete substructure	Concrete	9,366.22	840,931.17	89.78
10	Rural viaducts	Concrete	2,557.94	213,198.97	83.35
3	Transverse joist girders, city viaduct, 24' roadway.....	Concrete	594.85	42,756.71	71.88
1	Deck steel girder, treated timber trestle approaches.....	Concrete	70.00	4,928.11	70.40
34	Deck steel girders, wood substructure	Concrete	2,079.00	134,552.43	64.72
83	Concrete slab spans.....	Concrete	3,862.00	201,323.62	52.13
28	Treated timber trestles.....	Concrete	1,182.00	59,239.87	50.12
2	Experimental type treated timber trestles	Laminated red wood with as- phalt mastic surface	114.00	4,792.51	42.04
41	Treated timber trestles.....	Wood	993.88	33,573.71	33.78
13	Untreated timber trestles.....	Wood	227.86	4,683.83	20.56
281	Totals.....		29,460.58	\$2,490,491.83	

A more condensed summary of all bridge construction for the biennium follows: This is exclusive of concrete box culverts and other special structures.

TABLE B

No.	Description	Total length in ft.	Total cost	Cost per ft.
266	Bridges	23,512	\$1,902,604.96	\$ 80.80
10	Rural viaducts	2,558	203,198.97	83.35
2	City viaducts, 30' roadway	2,527	306,724.34	121.37
1	City viaduct, 24' roadway	595	42,756.71	71.88
2	Subways	269	35,206.85	130.96
37	Miscellaneous repairs and protection		122,389.44	
318	Total	29,461	\$2,612,881.27	

The percentage of jobs repaired and protected, based on the total number tabulated, amounts to about 11.6 per cent as to number but only about 4.7 per cent of the total cost of construction.

Another item of interest is, that 21.6 per cent of the jobs tabulated are either skewed or curved in plan. No exact count has been taken but a great many of these structures are constructed on ascending grades and to fit vertical curves.

Considerable space could be used in discussing the relative merits of the various groups and types shown in tables "A" and "B". Suffice it here to state that each of these types has a distinct place in Nebraska bridge design depending upon location, types of roads they serve, the degree of development of traffic, character of soil and streams, and many other factors which influence the selection of type.

THE TREND OF BRIDGE DESIGN AND CONSTRUCTION

There are several departures in the 1931-32 construction from the trend of design and development mentioned in the 1929-30 Biennial Report. For instance no mention was made then of concrete slab bridges with substructure of creosoted timber piles capped with reinforced concrete beams. This type was developed during the biennium.

Table "A" shows that 83 of the 281 bridges built during the biennium were of this type. This is a ratio of 30 per cent. These structures are generally used as overflow bridges where the wide low valley of a drainage way is subject to overflow with a discharge beyond the capacity of the central natural channel. This economy is shown in Table "A".

and may be illustrated as follows: Generally, bridges with approaches, over the main channel will cost from \$64.72 to \$107.32 per foot of bridge. By confining such a bridge with its approaches to a minimum length just sufficient to span from bank to bank there results a low cost of the main bridge. Then to accommodate overflow the concrete slab type of structure may be placed at some distances from the main bridge where they will best serve to pass overflow waters through the roadway fill.

The average overflow structure may be installed at the low cost of about \$52.13 per foot.

These slab structures may also serve in locations where, before their advent, it was customary to use concrete box culverts. The advantage of their use now is due to the lower first cost and also to their ability to accommodate a lowering stream bed from year to year without serious danger to the stability of the structure.

Another 1931-32 development is in the adoption of the cantilever type of deck steel girder bridge. This type is superior to the simple steel deck girder spans in two outstanding features:

First, they are so devised that with the use of the same sections of girders, a much longer central span may be obtained, or in the case of multiple spans, alternate spans may be increased in length.

Second, where multiple spans are used, a reduction in the number of piers for a given total length of bridge is possible which of course reduces the cost of structure.

A comparison of 1931 prices with 1932 prices verifies this statement. In 1931 and prior thereto the simple spans were in use. Then in 1932 the cantilever types were adopted. The average cost of deck steel girders in 1931 is \$97.90 per lineal foot and the average cost of the deck steel girders of 1932 is only \$84.60, a difference of \$13.30 per foot. There were 5705 feet of these bridges built in 1932 at an apparent saving of \$75,876.50.

RIVER BRIDGES

The most notable instances of improvements in river bridge construction accomplished during 1931-32 may be noted in the Ashland Platte River bridge and the Columbus Platte River bridge.

The old Ashland bridge consisted of a series of six 160-foot trusses with plank floor and only a 16-foot roadway, built in 1908. The tremendous present day traffic, consisting of private cars, passenger busses, and commercial and live stock trucks, made this river crossing a hazardous undertaking—especially at night, due to the long narrow

lane and to the two way traffic. The new bridge was relocated to a new position, down stream from the C. B. & Q. Railroad bridge, which action alone was a maneuver of great benefit to the design on account of the exchange of relative positions with the railroad bridge with respect to the hazards of ice, debris and flood. The width of roadway first contemplated was 20 feet, but when probable construction became imminent it was decided to increase this to 22 feet. This decision is greatly appreciated now by the traveling public. In order to match the spans of the railroad bridge it was necessary to design both ends of the new highway bridge in combinations of 100-foot and 80-foot trusses, while the intermediate spans were designed with the deck steel girder type supported on concrete encased steel pile piers. This deck construction permits a clear and unobstructed view of the beautiful Platte River with its low bars, green islands and wooded shores.

The old Columbus Platte River bridge consisted of twenty-three 80-foot truss spans and two 50-foot truss approaches with 16-foot roadway and plank floor. This old bridge was supported on 10-inch, H steel pile bents unencased with concrete or other protection. The old floor and narrow roadway were as hazardous as the Ashland bridge described above. Just prior to the construction of the new bridge one of the trusses in the old bridge gave way under a comparatively light highway traffic load.

The new structure consists of eighteen 60-foot simple span deck steel girders with a 22-foot roadway which provides a safe, comfortable crossing. The principal distinctive feature of this design is the provision made for expansion. The first four spans from each end are tied together and expansion is forced at the fourth pier from each end. Then the next five spans from each end are also tied together, and expansion is forced at the center pier of the entire series of spans. Thus expansion is provided at the center and at the fourth pier from each end, dividing the bridge into four chains, the links of which are the individual spans tied together with web tie plates. Thus, instead of having eight expansion devices, there are only three in this structure. The three expansion piers are of massive concrete on steel foundation piles. The intermediate piers are flexible steel pile bents encased in concrete.

In contrast to this type of expansion with movable ends of girders sliding on plates separated by copper sheets, is the girder bridge over the Republican River south of McCook, Nebraska. These simple deck girder spans are secured by cast steel pedestals at fixed ends and by cast steel cradles or saddles suspended from pins at the expansion ends. Thus free expansion is obtained by means of the suspended link method. The critical advantage of this method over the pedestal rolling type of expansion lies in the detail of design which reduces the distance from grade to bridge seat and thus permits lower grade lines for the bridge.

There were two other bridges placed under contract during the biennium which are worthy of special mention.

One of these is the Loup River bridge at Columbus consisting of seven 160-foot high trusses with a 75-foot deck steel girder approach at each end. The intermediate piers for the trusses are of massive concrete dumb-bells connected by thick diaphragms. Sharp nosed ice breakers form the upstream ends of piers. Each of these piers is supported by thirty 12 in.x65 lb. H steel piles. Twenty of these are foundation piles 60 feet long and the other ten are 75 feet long and extend up through the pedestals and diaphragms to the plane of high water elevation. It is of interest to note that these piles were driven with a Vulcan No. 1 steam hammer without any cut offs. The average rated bearing power as tested by the Engineering News driving formula was over 50 tons per pile. These piles penetrate the deep glacial deposits of gravel common to the region.

The other bridge referred to above is the Bryan Bridge at Valentine, Nebraska, over the Niobrara River, which consists of one central steel cantilever arch of 145-foot span and of half arch anchor arms 72 feet long at each end. The two piers supporting this bridge are similar in design to those described above for the Columbus bridge. Each pier is founded on forty-one 12 in.x65 lb. H steel piles, nine of which extend up through the pier to the bottoms of caps and are 60 feet long. The other thirty-two piles are 45 feet long and extend only 2 feet, 6 inches into the footing. These piles penetrate thick beds of hard packed sand and soft sand rock. They were driven with a Vulcan No. 1 steam hammer and have an average bearing capacity, as tested by the driving formula, of 57 tons each.

GRADE SEPARATIONS

During this biennium plans were made for 15 structures eliminating railroad grade crossings. All of these have been placed under contract. Ten of these are now complete and the other five will be completed before July 1, 1933. Thirteen of these structures are overhead crossings, and two of them are to be subways under the railroad.

Four overhead crossings on the Lincoln Highway over the Union Pacific Railroad are improvements of vast importance owing to the heavy traffic on both the highway and the railroad. Two of these overheads are on the limits of the cities of Columbus and Grand Island, Nebraska.

The Columbus Viaduct. This structure is 1342 feet in length from end to end of retaining walls. The roadway is 30 feet clear and in addition there is a 5-foot sidewalk on each side. Ornamental lamp posts, in harmony with the cast iron hand rail posts and pipe rails, create a pleasing appearance for this structure. The changes of grade

are made in gentle transitions by means of long vertical curves which not only add to the comfort of the riding surface but also enhance the appearance of the structure. This viaduct is constructed of concrete and structural steel. All structural steel bents are encased in concrete to give the entire structure a monolithic appearance.

The contract price for this structure from end to end of retaining walls including the earth fill therein and the concrete pavement thereon was \$181,697.66.

This work was started January 31, 1931 and was opened to traffic on or about October 18, 1931.

The Grand Island Viaduct. This structure is similar in design to the Columbus Viaduct except that the sidewalks were omitted and the length is only 1185 feet from end to end of retaining walls. It presents a more striking appearance to the motorist than does the Columbus Viaduct on account of being on a horizontal curve which, combined with the rising grades and vertical curves, gives the appearance from either approach, of a huge spiral.

The contract price for this structure from end to end of retaining walls including the earth fills therein and the concrete pavement thereon was \$125,026.68.

Actual construction was begun on June 1, 1931 and the structure was opened to public traffic on March 15, 1932.

Other viaducts constructed or placed under contract were varied in design to suit local conditions. Some of them consisted of creosoted timber bent approaches with steel spans over the tracks only. Others were made up of concrete pedestals with unencased steel bents and stringers.

The Fort Crook Viaduct is unique in that it serves as a railroad grade separation and at the same time bridges the Pappio Creek which has been the source of much trouble and inconvenience to traffic on Highway No. 75 for many years.

All of these structures were built with concrete floors and curbs, and in most cases the steel and cast iron handrails were painted with aluminum paint.

EMERGENCY BRIDGE ENGINEERING WORK

The emergency funds for Federal Aid projects were appropriated with the principal object of creating employment for labor. Since the various states were made the agencies for getting plans and estimates

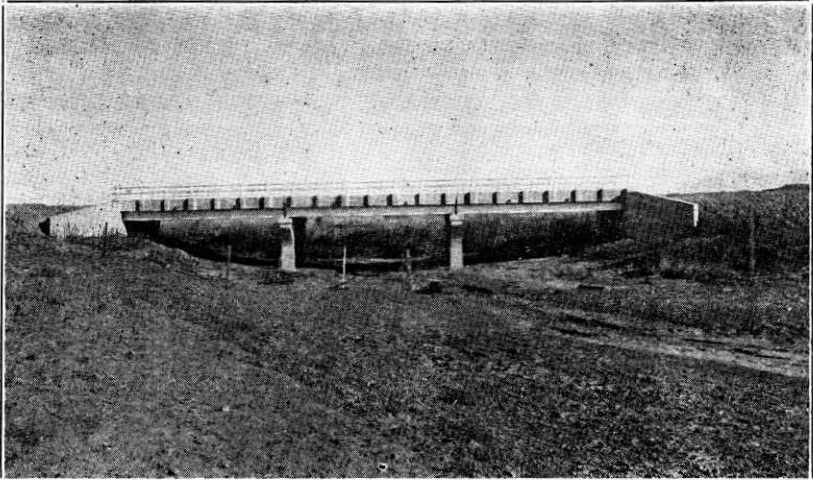
ready and placing the projects under contract in short order, there was of necessity an expansion of the engineering staffs of the various states. This was especially necessary in Nebraska. Thus relief was given to many engineers who had been thrown out of employment by the retrenchment policies of the railroads, architectural and municipal offices and other employers of engineers.

An efficient corps of designers and draftsmen were assembled for the prosecution of this emergency work. These men worked diligently and untiringly throughout those comparatively short periods of time allotted for this portion of the production. To the regular full time employees credit should be given for their loyal and hearty efforts in the supervision and instruction given to the recruited forces. All men reported for duty regularly, days, nights, and Sundays without a whisper of complaint. It was sensed by all that the quicker the plans were completed the sooner relief to less fortunate people could be accomplished.

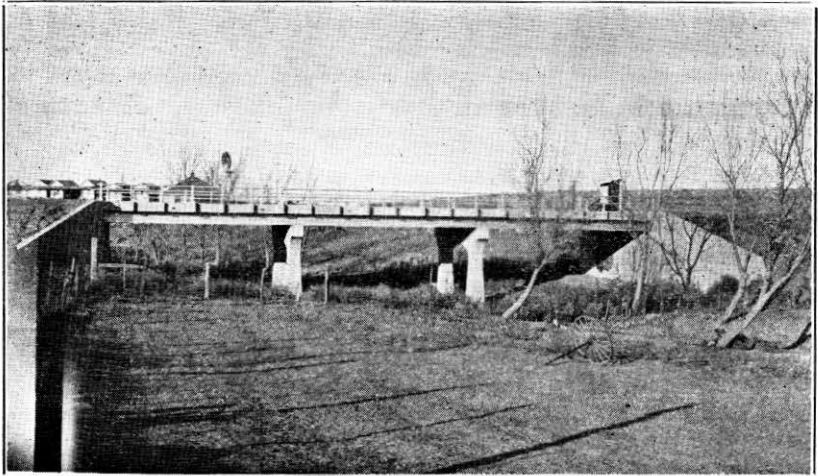
COUNTY BRIDGE CHECKS

During the biennium three counties called on the State Engineer for checks on county bridge work done by contract. This activity consists of inspecting and measuring up various bridges and like structures as constructed by contract for the counties concerned, and the comparison of finished construction with the original plans, specifications, and orders for their construction, including an audit of payments made the contractors by the counties for such construction.

These investigations consisted of checking up 82 structures for Kimball county, 13 bridges for Buffalo county, and two long span steel truss bridges for Pawnee county.



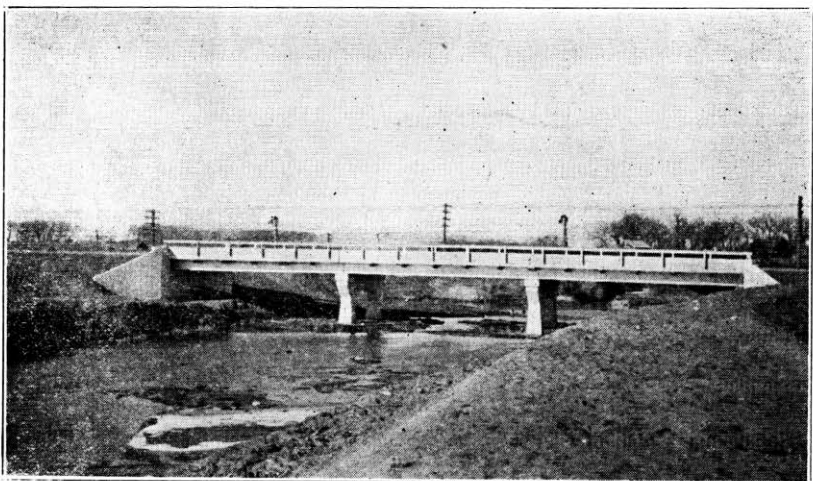
Project No. 46 east of McCook. Three 30-foot deck steel girders, east edge Dry Creek on Highway No. 183.



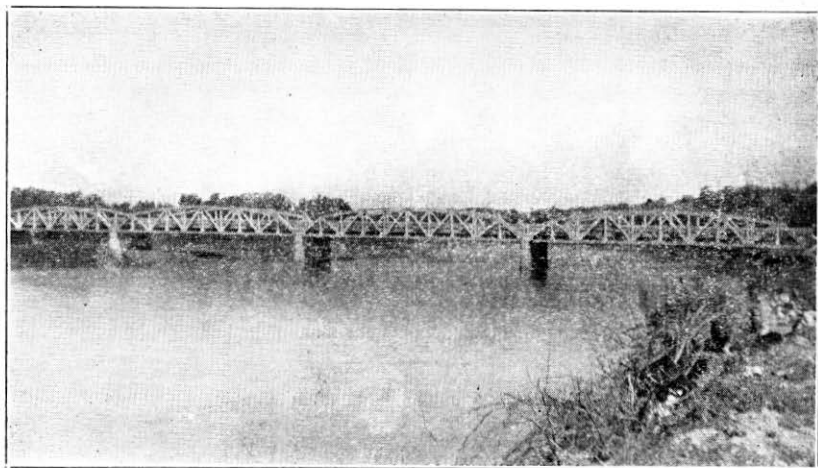
Project No. 46 east of McCook. Three 30-foot deck steel girders, east edge of McCook on Highway No 38.



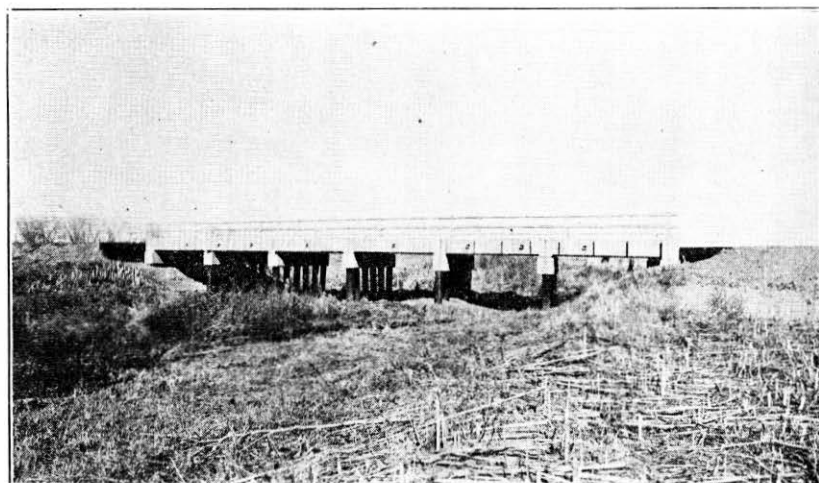
Project No. 91-A, Florence-Blair. One 76-foot and one 48-foot deck steel girder on Highway No. 36 over Mill Creek.



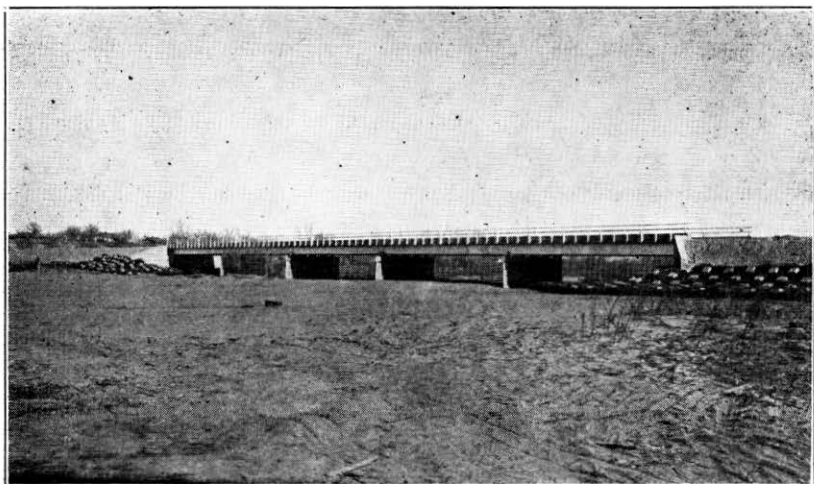
Project No. 278-B, Columbus-Central City. Three 35-foot deck steel girders, west edge of Silver Creek on Highway No. 30.



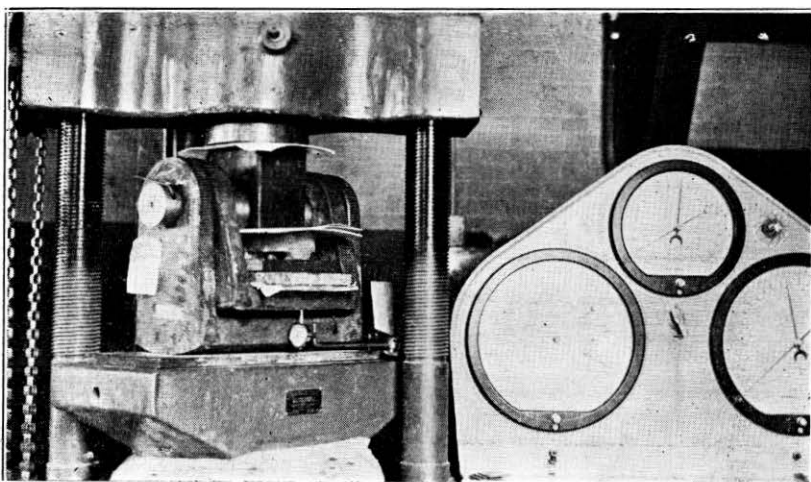
Project No. 258-C, Blair-Fremont. Three 100-foot and one 80-foot pony trusses over Elkhorn River west of Arlington on Highway No 30.



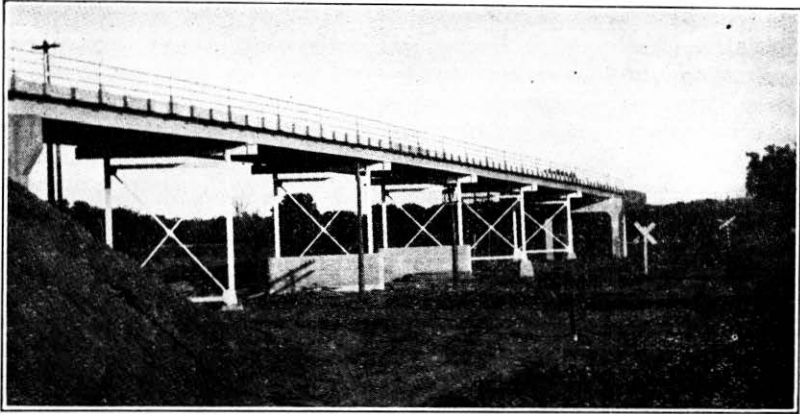
Project No. 68-B, McCook-Trenton. Six 16-foot concrete slab spans skewed, west of McCook on Highway No. 38.



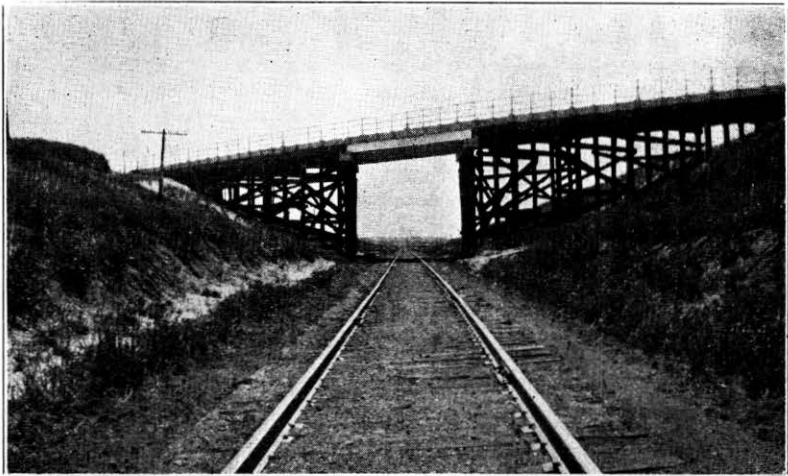
Project No. 293-B, south of McCook. Five 65-foot deck steel girders over the Republican River on Highway No. 183.



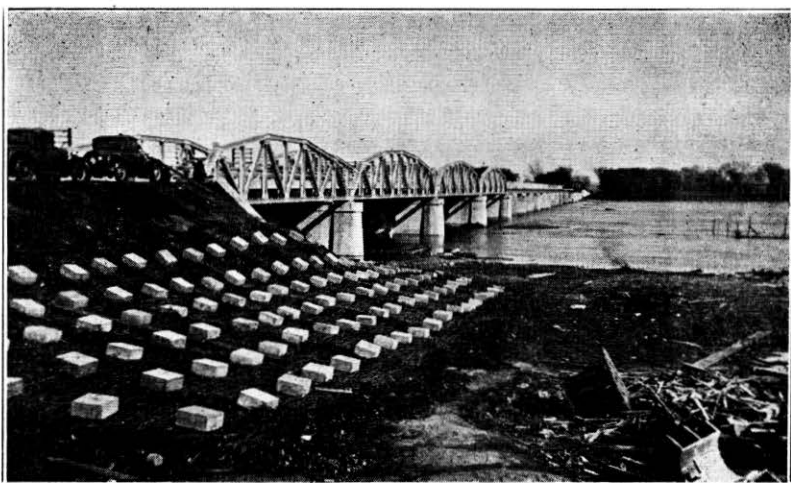
Testing cast steel rockers and saddles for above bridge.



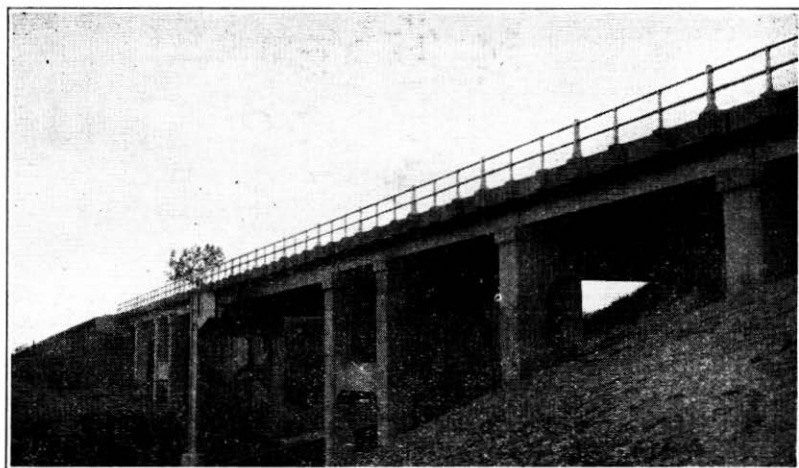
Project No. 138-B, Plattsmouth-Omaha. LaPlatte Overhead, crossing Mo. Pacific Railroad on Highway No. 75.



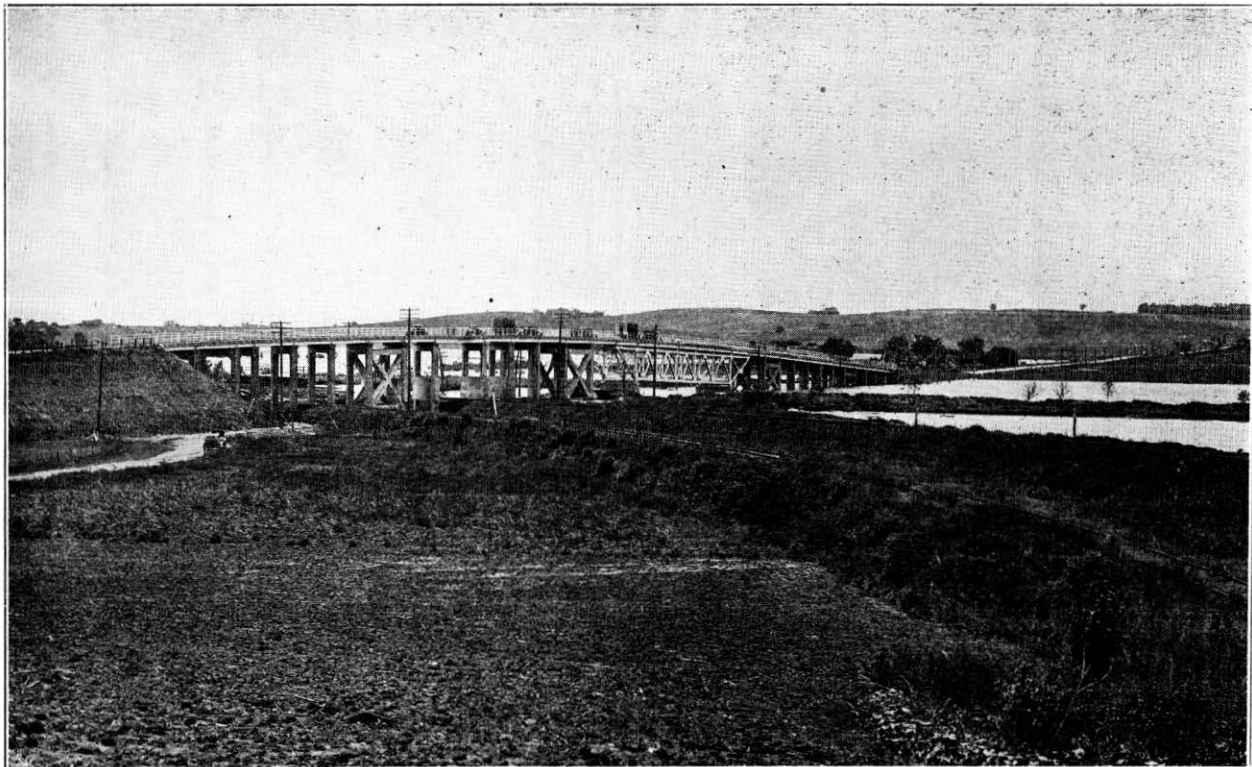
Project No. 317-A, Ainsworth-Valentine. Johnstown Overhead, crossing C. & N. W. Railroad west of Johnstown.



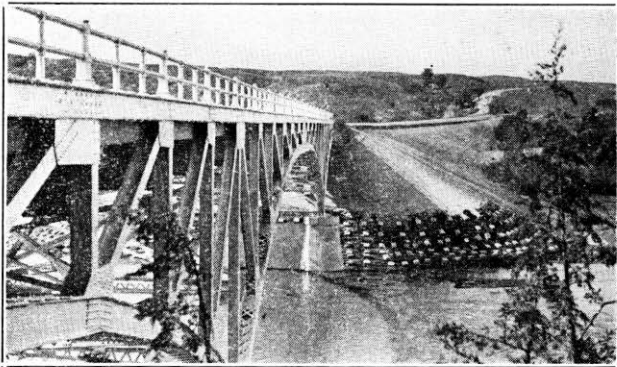
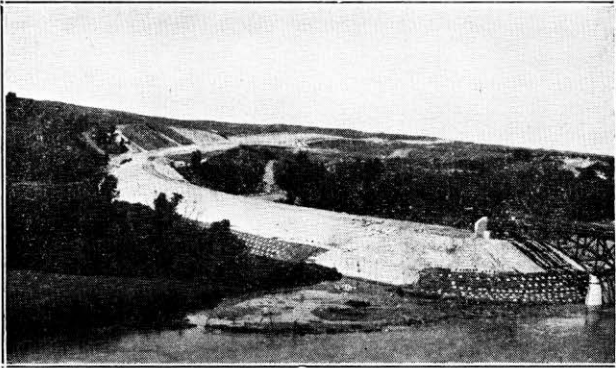
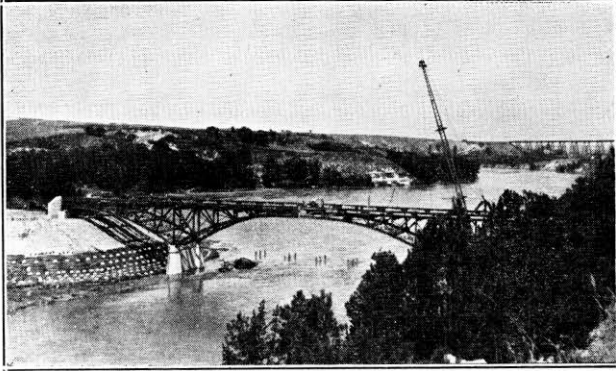
Project No. 107-G, Greenwood-Chalco. Platte River Bridge east of Ashland, on Highway No. 38.



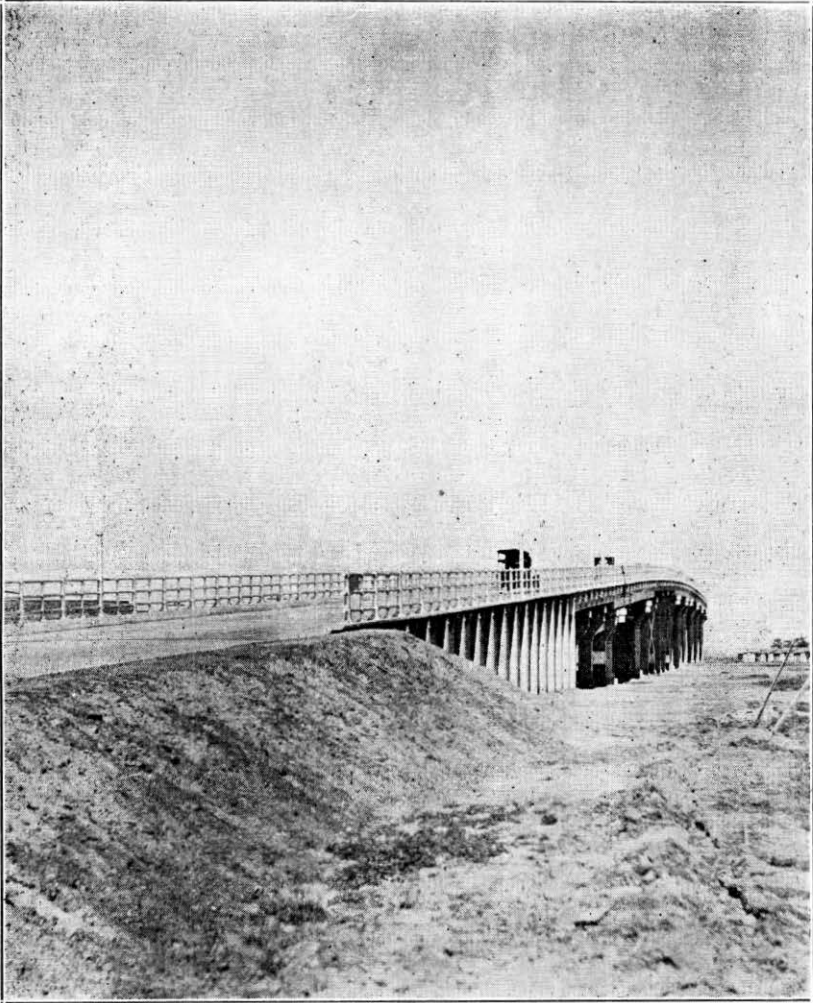
Project No. 107B, Greenwood-Chalco. Louisville Branch Overhead, crossing C. B. & Q. Railroad on Highway No. 38



Project No. 138-E, Plattsmouth-Omaha. Fort Crook Overhead, crossing Mo. Pacific and C. B. & Q. Railroads, and Pappio Creek on Highway No. 75.

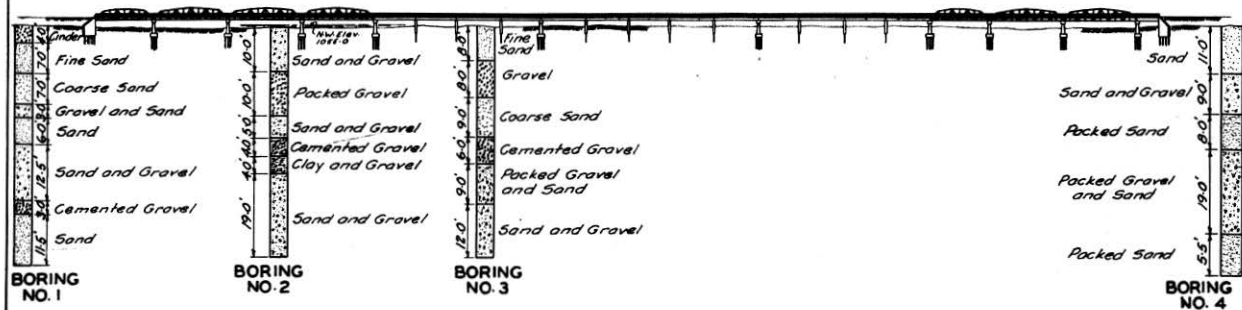


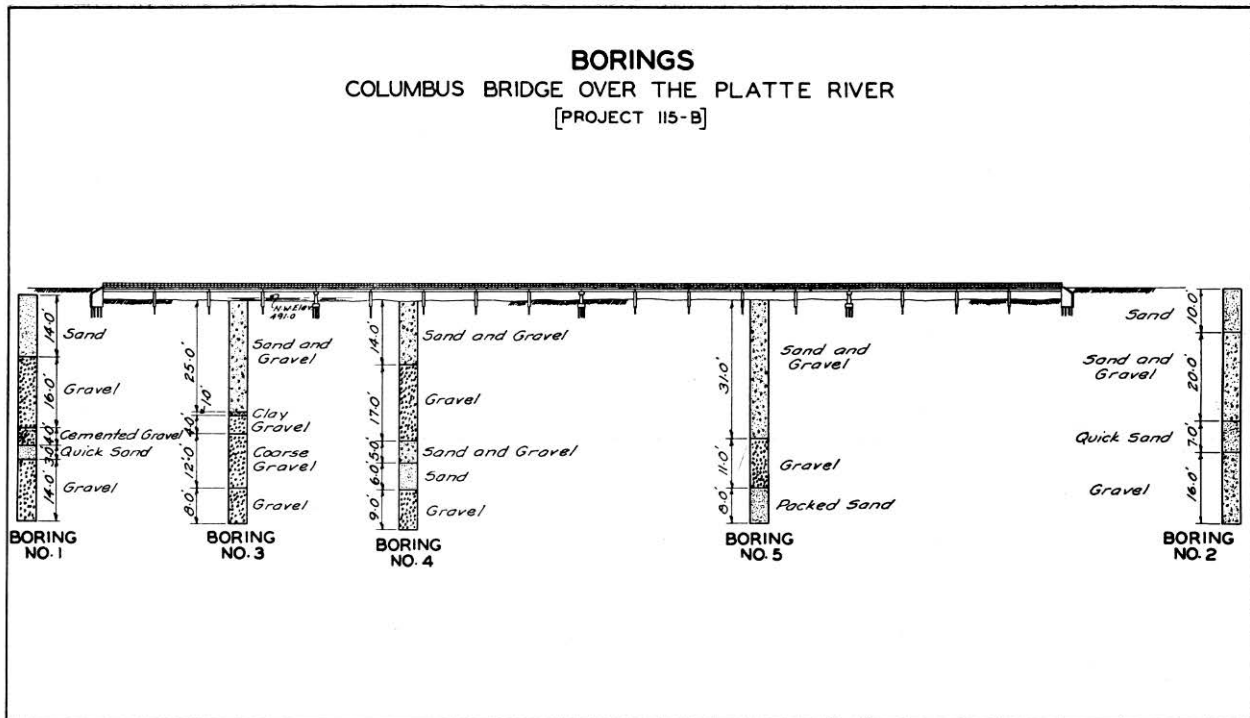
Project No. 317-C, Ainsworth-Valentine.
Bryan Bridge over the Niobrara River, east of Valentine.
One 145-foot cantilever arch central span, two 72-foot anchor arms, 24-foot roadway. Roadway is 36 feet above normal water.



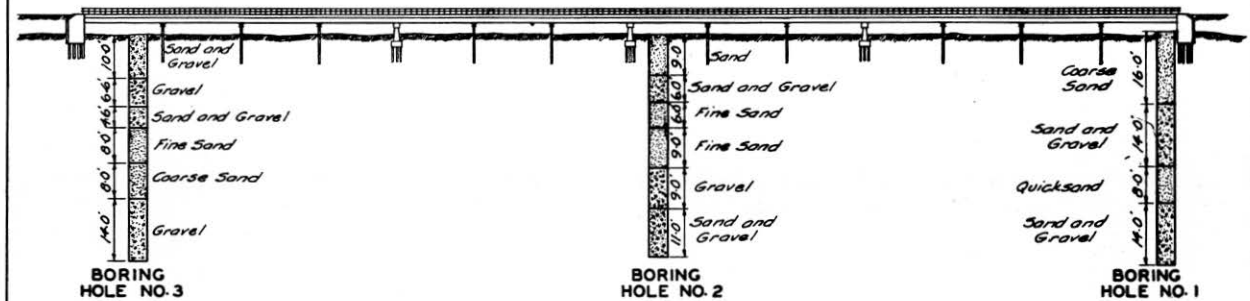
Project No. 3. Viaduct over the Union Pacific Railroad west of Grand Island on Highway No. 30.

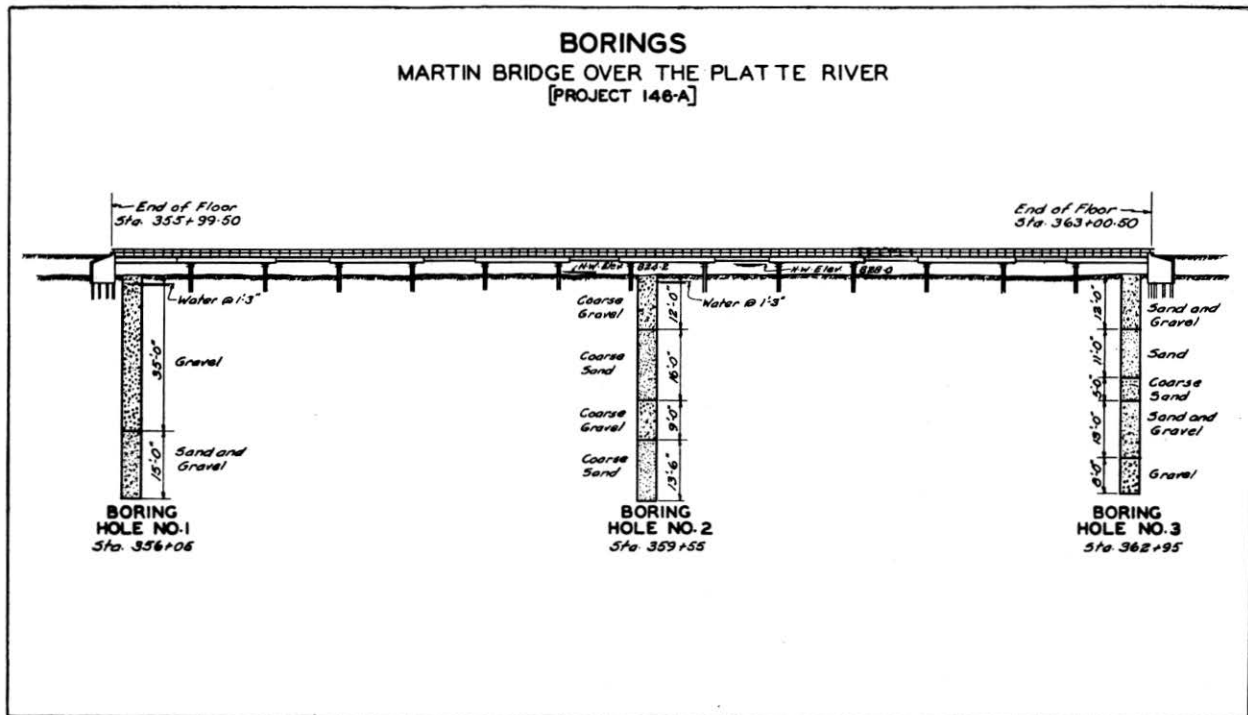
BORINGS
ASHLAND BRIDGE OVER THE PLATTE RIVER
[PROJECT 107-G]



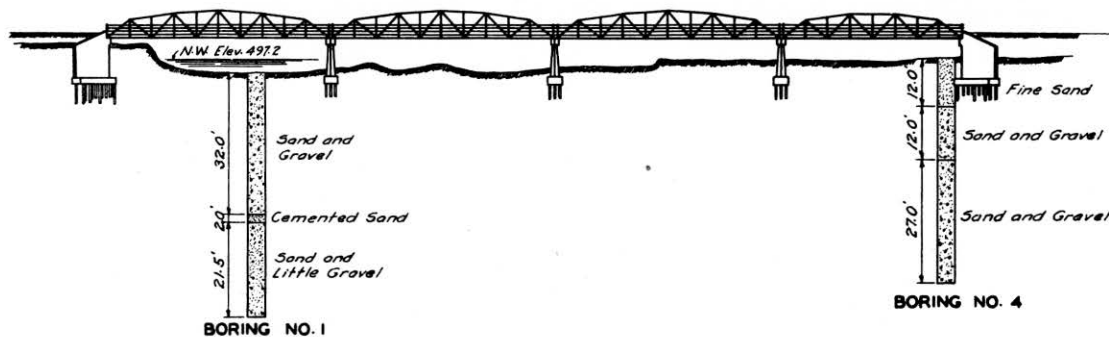


BORINGS
CHAPMAN STATE AID BRIDGE
(PROJECT 866)





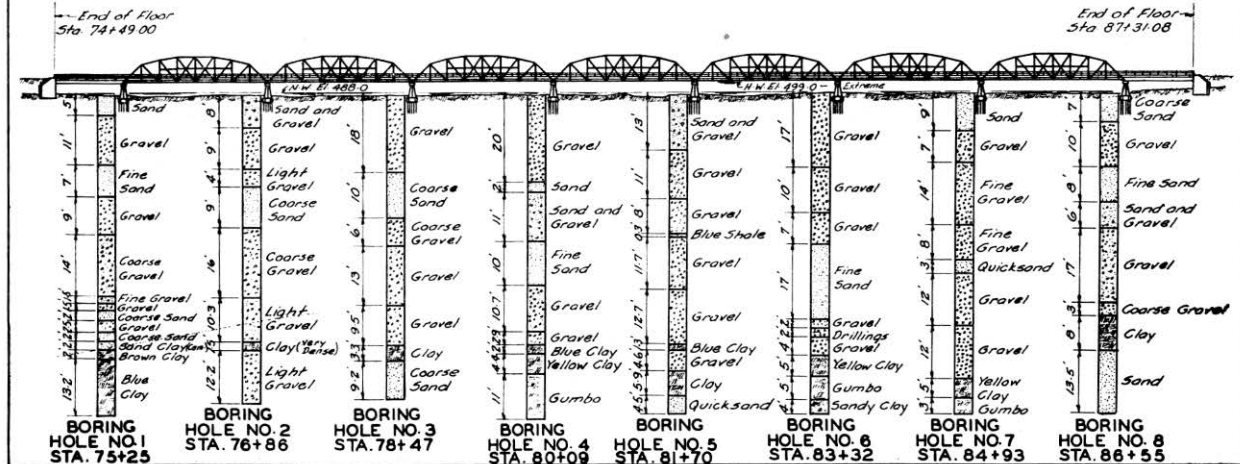
BORINGS
ARLINGTON BRIDGE OVER THE ELKHORN RIVER
[PROJECT 258-C]



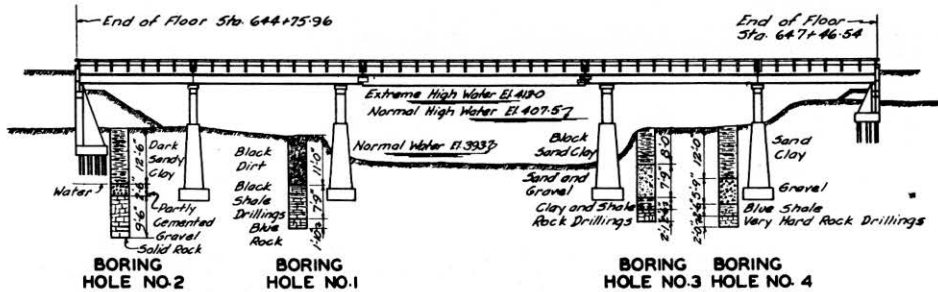
BORINGS

LOUP RIVER BRIDGE NEAR COLUMBUS

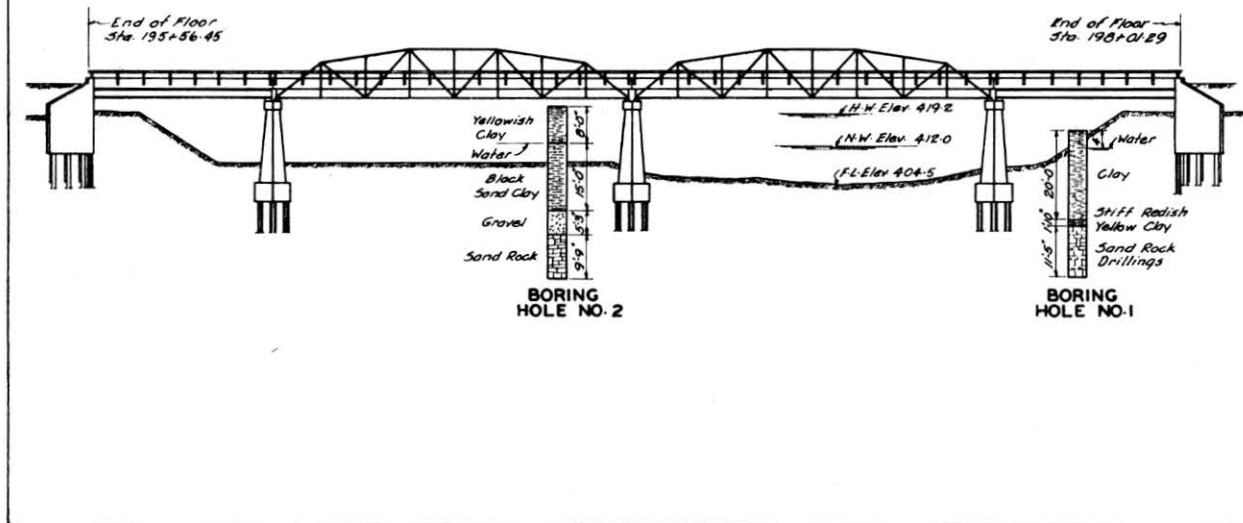
[PROJECT 278-A]



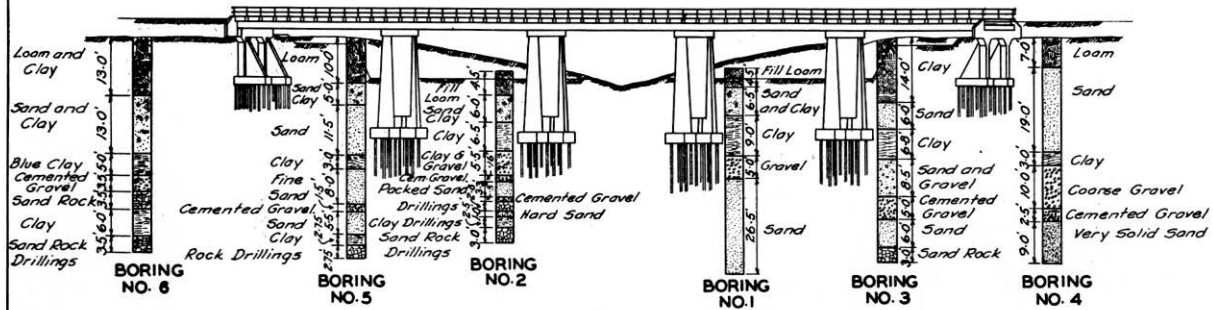
BORINGS
BLUE RIVER BRIDGE NEAR MILFORD
[PROJECT 134-A]

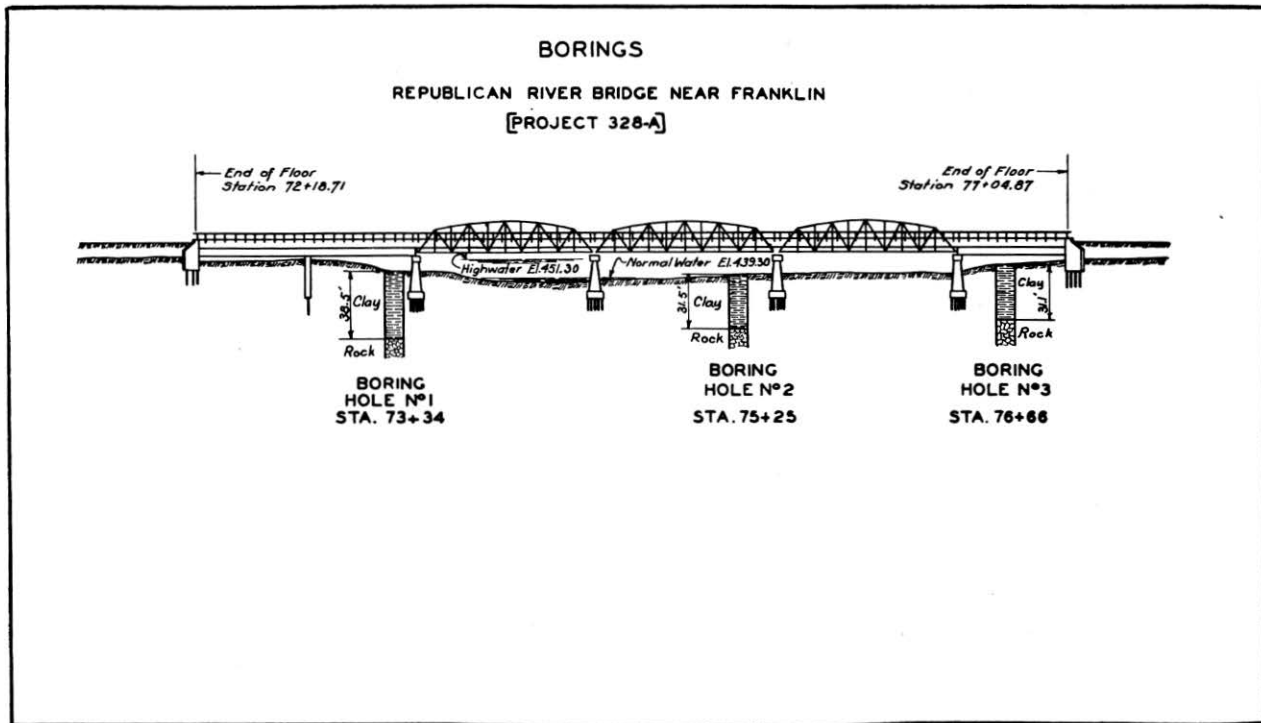


BORINGS
WEST BLUE RIVER BRIDGE NEAR DORCHESTER
[PROJECT 134-B]

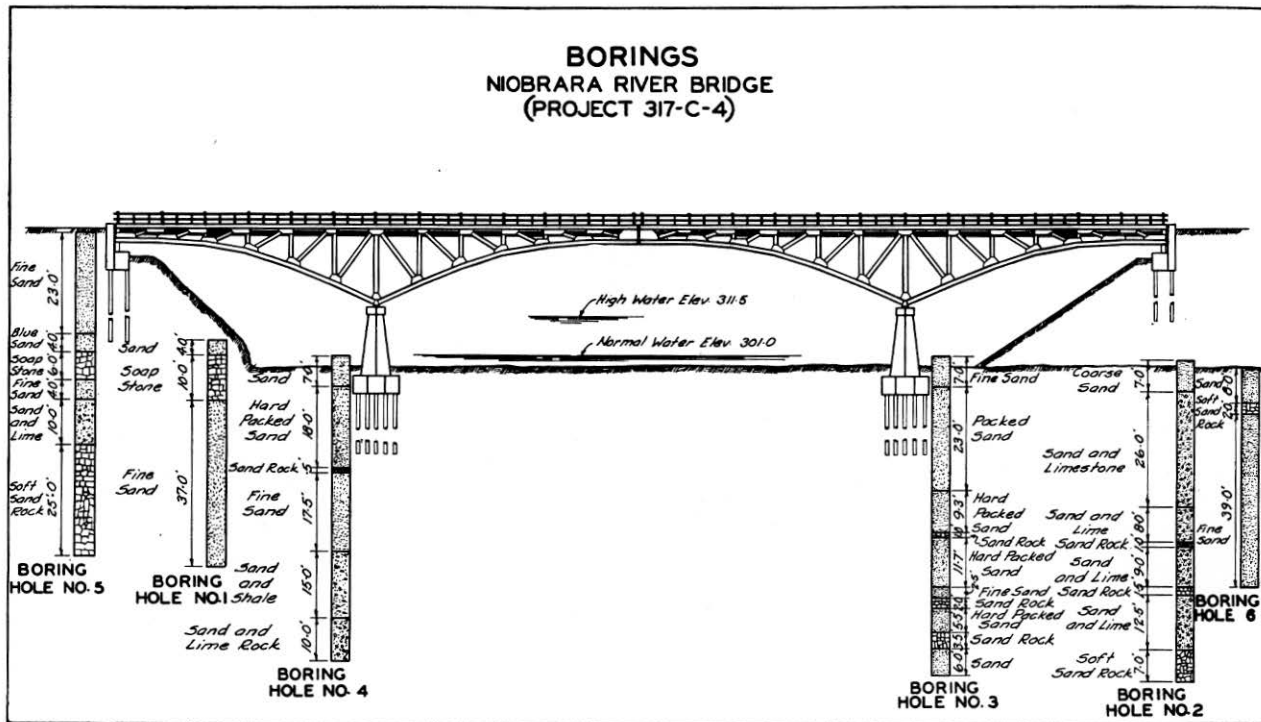


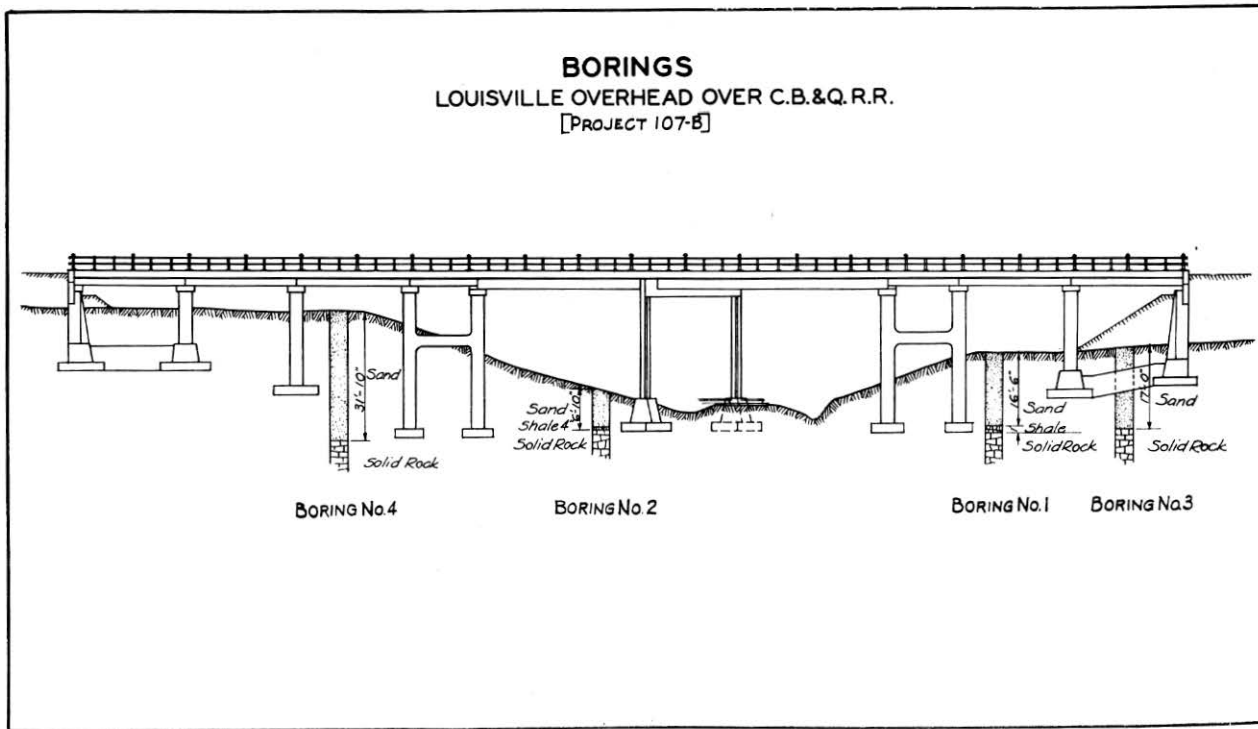
BORINGS
SALT CREEK BRIDGE OVER SALT CREEK
[PROJECT 312-A]



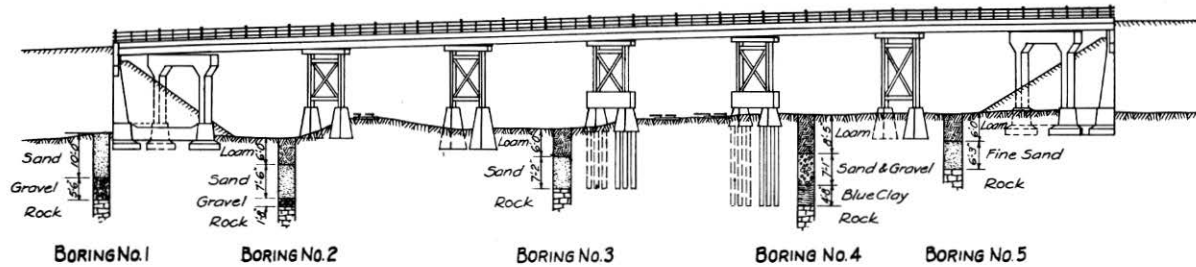


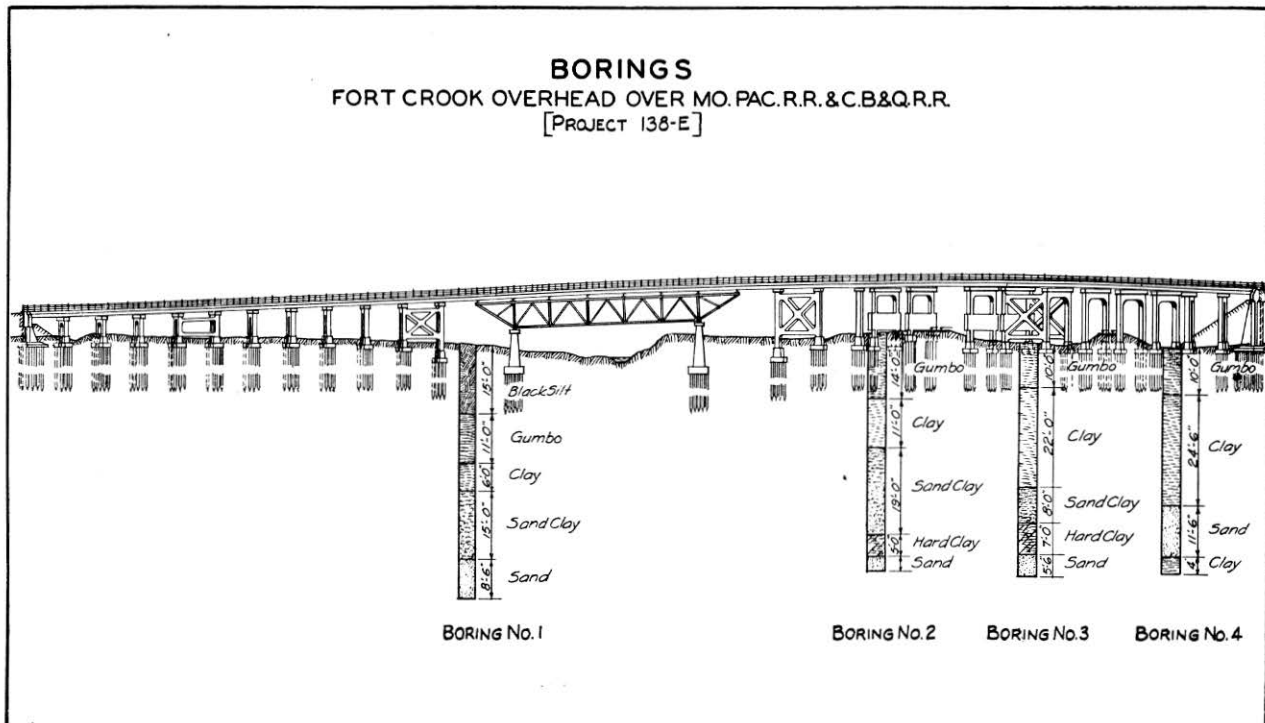
BORINGS NIobrARA RIVER BRIDGE (PROJECT 317-C-4)



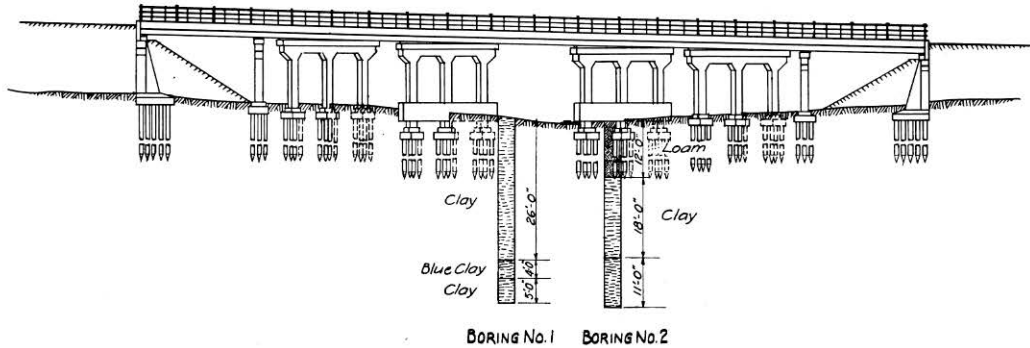


BORINGS
LA PLATTE OVERHEAD OVER C.B.&Q. R.R. AND MO. PAC.R.R.
[PROJECT 138-B]

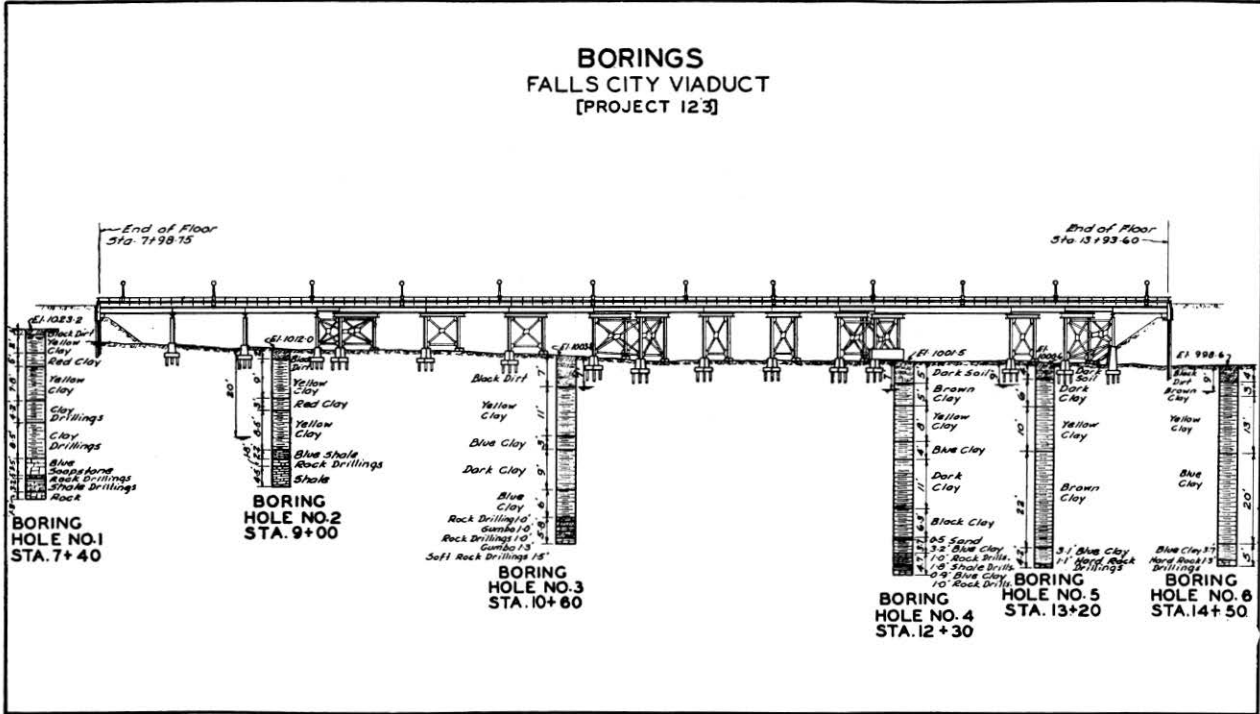




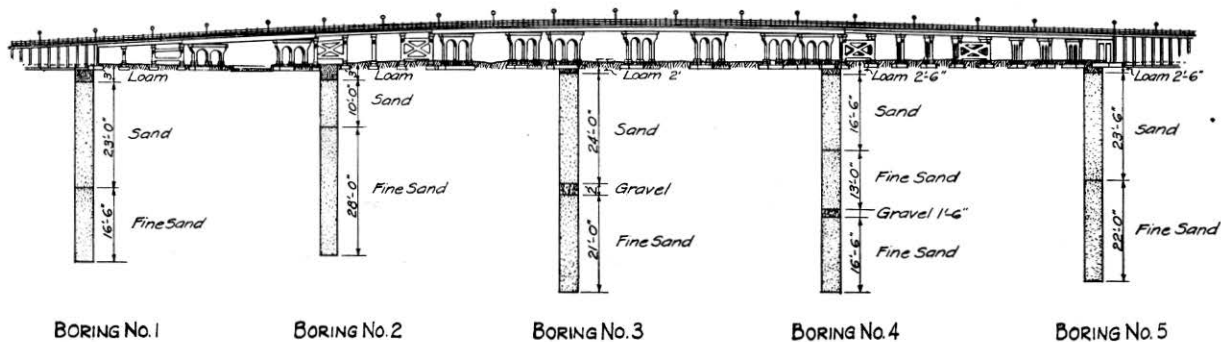
BORINGS
WYOMING OVERHEAD OVER MO. PAC. R.R.
[PROJECT 28]



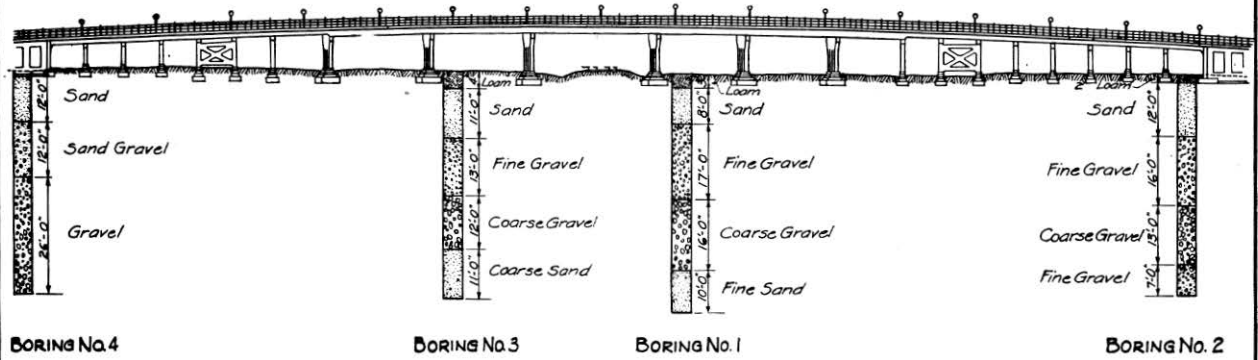
BORINGS FALLS CITY VIADUCT [PROJECT 123]



BORINGS
GRAND ISLAND OVERHEAD OVER U.P.R.R.
[PROJECT 3]



BORINGS
COLUMBUS OVERHEAD OVER U.P.R.R.
[PROJECT 278-D]



DIVISION OF ACCOUNTS AND RECORDS

APPROPRIATION FOR THE BIENNIUM OF JULY 1, 1931,

TO JUNE 30, 1933

DEPARTMENT OF PUBLIC WORKS

State Aid Road, Administration and Engineering

Code. No.

181	Salaries and wages (to be paid from 1.6% of receipts from 3 cent tax on gasoline), estimated.....	\$ 260,000.00
182	Maintenance (to be paid from .4% of receipts from 3 cent tax on gasoline), estimated.....	80,000.00

Bureau of Irrigation

183	Salaries and wages.....	37,380.00
184	Maintenance	32,300.00
185	Special Survey	1,500.00

State Highway Administration and Purchase Auto License Plates

186	Two and one-half percent of motor vehicle registration fees, balance and estimated fees.....	190,000.00
186B	Motor vehicle operators license.....	55,200.00
187A	Enforcement motor vehicle laws (from gas tax), estimated	50,000.00

Public Improvements

187	Road maintenance, 30% of motor vehicle registration, including unexpended balance.....	2,200,000.00
188	Road maintenance from gasoline tax.....	4,800,000.00
189	All funds derived from a 3 cents per gallon gasoline tax, not otherwise appropriated for road purposes to be distributed as provided by law, estimated.....	8,320,000.00
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.....	7,352,757.00
196	Irrigation building, Bridgeport.....	1,500.00

This division makes up quarterly estimates, estimating the amounts necessary 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 has charge of the publication of notices in the proper newspapers; handles all certified checks filed with bids; writes up the minutes of meetings 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 the contractor for certification before a Notary Public. On the return of these vouchers they are passed on to the Tax Commission office for payment.

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.

Payments for medical claims and compensation cases in the Department of Public Works have steadily increased from 1926 to-date. A statement of these payments for the last two years, which were made under the provisions of the "Nebraska Workmen's Compensation Laws", exclusive of sick absences, is given below.

LIABILITY AND COMPENSATION CLAIMS PAID 1931-32

Dist.	Maintenance			Construction		
	No. of cases	Medical claims	Compensation	No. of cases	Medical claims	Compensation
Nov. 1, 1930 to Nov. 1, 1931						
0	6	\$ 94.00	\$ 67.37	1	\$ 10.00	\$.....
1	17	1,342.75	1,014.95	7	42.75	.....
2	33	1,911.85	1,370.28	3	750.94	533.59
3	22	114.50	59.06	7	104.50	35.00
4	8	33.50	63.33	4	71.00	253.72
5	7	39.00	.....	3	6.00	.....
6	16	418.25	423.65	1	.....	.....
7	16	52.00	89.64	8	283.00	.....
8	10	111.50	.....	6	352.50	333.43
Totals	135	\$4,117.35	\$3,088.28	40	\$1,620.69	\$1,155.74
Nov. 1, 1931 to Nov. 1, 1932						
0	15	\$ 140.50	\$ 45.00	2	\$.....	\$.....
1	29	2,969.05	4,457.10	6	338.00	259.26
2	27	358.40	2,198.49	3	21.00	584.98
3	23	668.04	1,322.79	19	126.50	331.69
4	19	398.25	414.60	5	25.00	44.10
5	10	464.25	561.54	1	.....	.....
6	21	1,577.65	1,454.86	2	8.00	.....
7	14	741.79	964.50	5	42.50	186.00
8	9	526.78	688.56	12	661.20	1,360.14
Totals	167	\$7,844.71	\$12,107.44	55	\$1,222.20	\$2,766.17

DIVISION OF TESTS

ORGANIZATION

Through an agreement between the Department of Public Works and the State University the activities of this division are conducted at the Mechanic Arts Hall of the University. The Division of Tests is designated by the University as Highway Testing and operates under the Department of Applied Mechanics. Under this agreement the University furnishes the necessary office and laboratory facilities, the testing equipment and supplies, and the personnel for making and reporting tests and for making field inspections and investigations of various materials and construction. For these services the Department of Public Works makes payments directly to the University, such payments being based upon a nominal monthly allowance in addition to a scheduled price for each test which varies with the amount of testing done each month.

This work is supervised by Professor C. M. Duff of the Department of Applied Mechanics, College of Engineering, University of Nebraska, who is designated as the Materials and Testing Engineer by the Department of Public Works. Professor Duff, who devotes part time to teaching during the school year, has five men working in the capacities of Assistant Testing Engineers in addition to from fifteen to twenty-five office and laboratory assistants. More than half of the office and laboratory assistants are students, who during the school year attend the University and work only part time. This arrangement is very satisfactory at present as less help is usually required during the winter months, and due to the crowded condition of the laboratories during class periods, much of the testing must necessarily be done before and after classes. This not only affords the part-time assistants an opportunity to earn part of their expenses while attending the University, but, at the same time, gives them practical and valuable experience.

Most of the testing is done in the Department of Applied Mechanics Laboratories at the University of Nebraska. However, temporary laboratories are maintained at a number of cement mills and oil refineries during the construction season for testing cement and road oil prior to shipment. The inspection of both treated and untreated timber is handled chiefly by commercial testing laboratories located near the source of supply. For some types of construction work where field control of certain materials is found desirable or necessary, temporary laboratory quarters are maintained on the job. These laboratories are equipped with only the necessary testing equipment to make the required tests. Such laboratories are established on most of the projects where concrete pavements and oiled roads are under construction. The field testing is confined chiefly to making such tests as grading of aggregate, moisture determination, transverse tests of concrete beams, and determination of oil content in oiled aggregates.

Due to the increasing need of accurate control of the gradation of aggregates used in both concrete and oiled roads, a number of portable mechanical shakers and sieves have been purchased. Part of these have been placed at the gravel pits supplying aggregate and the remainder placed on projects under construction. The shakers are operated by either electric motors or gasoline engines depending on the availability of electric current. Most of this field work is under the direct supervision of the Paving, Construction, Maintenance, or District Engineer. The Project Engineer or inspector makes his own reports, which are not submitted through the testing laboratory at the University. However, at frequent intervals samples are sent to the Testing Engineer as checks and for more complete analyses.

FUNCTIONS

One of the principal functions of the testing division is to test, analyze, or otherwise inspect 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 of such materials and the advisability of using them.

Another function of this division is to investigate new sources of materials and determine the relative merits of several competitive products. The knowledge of the availability and source of many materials will often save in construction costs many times the cost of making the investigation. Also, many companies are endeavoring to sell their products through over promotion by the sales organization and through advertising propaganda rather than on the real merits of the products. It is not uncommon to find products that are nationally advertised, and therefore thought to be superior to all other brands and makes, offered for sale at a materially higher price than other products which tests show are actually better in quality.

The testing of road materials is often considered by some people to be an unnecessary expense, but a careful survey of the materials offered for use clearly demonstrates its necessity. The mere fact that a contractor or producer knows that each shipment of material will be tested, and rejected if found unsatisfactory serves as an incentive for supplying only satisfactory material. Questionable or rejected materials nearly always cause delays and losses far in excess of any possible saving, and very few producers will knowingly offer such materials for use.

In order that the test results obtained in one laboratory will be comparable with those obtained in any other laboratory it is necessary that, in so far as possible, all testing and analyzing be done according to standard methods. Unless otherwise specified either the methods outlined in the United States Department of Agriculture, Department

Bulletin No. 1216, "Tentative Standard Methods of Sampling and Testing", or the Standards and Tentative Standards of the American Society for Testing Materials are used. Occasionally, in order to determine the suitability and acceptability of certain materials, or to make comparative tests on a number of competitive products or materials submitted for the same purpose or use, it becomes necessary to improvise special tests which are not standard. This is also necessary when sampling, testing, or analyzing materials for which no standard methods have been adopted.

SAMPLING

Too much emphasis cannot be placed on the importance and necessity of careful, accurate, and intelligent sampling. This requires the cooperation of the entire field organization as the sampling and submitting of materials for testing is usually done by men of this group. Unless the samples of material submitted for test are taken by men having judgment, skill, and honesty, the testing division has no way of knowing whether the samples are representative. If the material submitted for testing is not representative it is more than a waste of time to make the tests as the results obtained may indicate the material to be either satisfactory or unsatisfactory where the opposite condition might prevail if a representative sample had been submitted. If sampling is done by careless, indifferent, incompetent, or dishonest persons a great injustice may be wrought on some innocent party, and if inferior materials are used disastrous results may follow. No amount of care or accuracy in the testing laboratory can produce a report that correctly represents the acceptability of the material unless the sample is representative. Samples should always be accompanied by a complete and accurate field report covering all the available information, 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, a suitable field identification and other special information listed on the standard field report blanks.

REPORTS

After samples have been submitted to the laboratory they are tested, the results summarized, and a report written. Where samples are submitted to determine their compliance with the requirements of some material specification the laboratory findings are usually indicated on the report by the word "Accepted" or "Rejected". When samples of competitive products or preliminary materials are submitted from different sources the test results are summarized and compared, and recommendations made on the basis of economy and the service expected. It should always be remembered that a test report shows only

the qualities or properties of the particular sample tested and unless the sample submitted is representative the report is of little value. Test reports in addition to being supplied to the various engineers in the Department of Public Works and the United States Bureau of Public Roads are also sent to the contractor, jobber, and manufacturer. The Department has received numerous expressions of appreciation for this service from the contractors and producers.

GROWTH

The growth of the testing division has been very rapid during the past ten years as may be observed from the accompanying diagram which shows the number of tests made during each of the past five biennial periods. A second diagram shows the monthly distribution of tests for each year. The kinds of materials tested and the number of tests made on each is shown in the general summary.

If the amount of testing continues to increase at the present rate and the Testing Division is to continue under the supervision of the University some kind of permanent arrangements should be made for the future. This could be made possible by the construction of a joint building with the University that could be used for class and laboratory purposes as well as for a highway testing laboratory. Such a building could provide the necessary class rooms and laboratories for all courses offered by the University in mechanics and strength of materials.

The highway testing at present is taxing the facilities of the University to the limit and unless some steps are taken in the near future to provide more adequate quarters it will not be possible for them to meet the requirements of the United States Bureau of Public Roads for an approved laboratory.

During the past year the engine room of the old power house was equipped as an auxiliary testing laboratory and during the past summer it was found necessary to provide additional space and testing facilities to properly take care of the testing of road oil and other bituminous materials. This was accomplished at considerable expense by installing a blower and hoods in one end of an already over crowded general laboratory. At the present time the laboratory facilities are inadequate for properly taking care of both instructional work and highway testing. The cement testing laboratory does not meet all the requirements of the Cement Reference Laboratory and the deficiencies must be corrected next year or the laboratory will not continue to be approved by the Government for the testing of cement for use on Federal Aid construction work.

EQUIPMENT

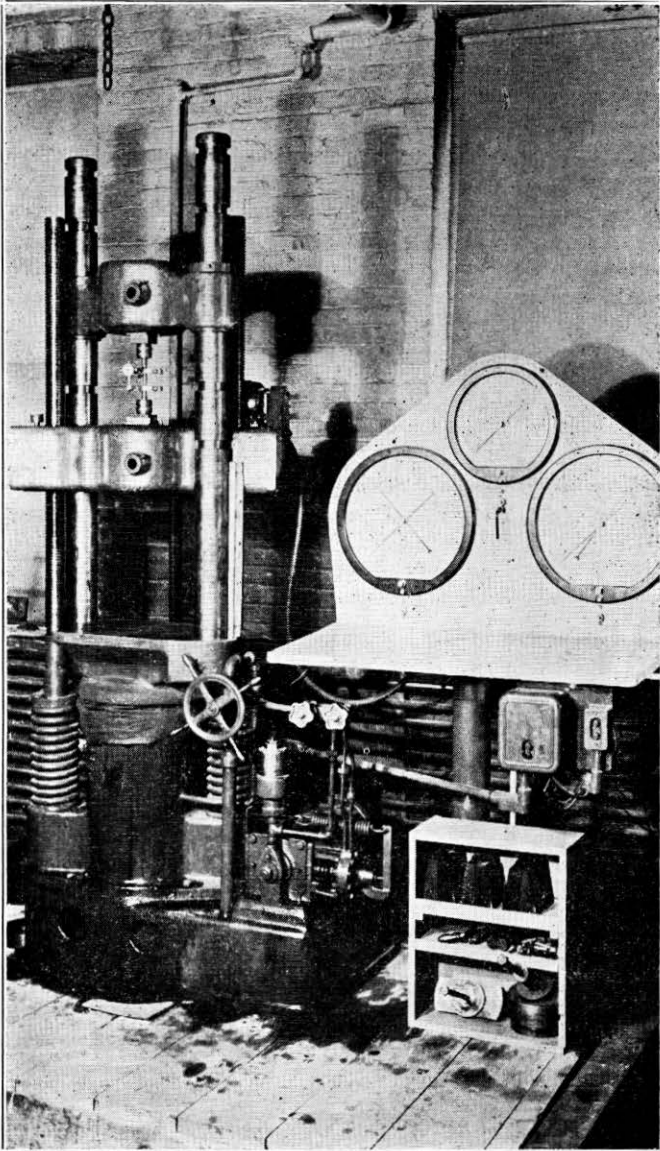
During the past two years the University has purchased considerable new equipment and testing apparatus for the testing laboratories. One of the major additions was the installation of another Southwark-Emery Universal Testing Machine having a capacity of 100,000 pounds. This machine and the 300,000-pound capacity machine previously installed are of the hydraulic type, but have a weighing system that is entirely independent of the loading cylinder. The testing loads are shown on dial gauges which are operated by an Emery weighing cell which has a sensitivity and accuracy unobtainable in the ordinary hydraulic machine. The hydraulic loading cylinder of each machine is operated by a Hele-Shaw pump which produces a uniform flow of oil to the cylinder which is free from any pulsations. By simply opening or closing valves the supply of oil to the loading cylinder may be varied to produce any testing speed desired between zero and a maximum. A picture of the new 100,000-pound capacity machine is shown below, in which a tensile test is being made on a cast iron specimen. Attached to the specimen is a Moore's Extensometer which measures the elongation in one ten-thousandths of an inch.

Other additional equipment and testing apparatus installed during the past year includes a soapstone-storage tank, cement moist closet, cement briquette machine, cement steam apparatus, asphalt ductility machine, electric oven, muffle furnace, two-tube automatic viscosimeter, Pensky-Martin closed cup flash apparatus, constant temperature water bath apparatus, one RoTap and one Marsh sieve shaker, cold bend testing machine, and other miscellaneous laboratory apparatus.

MATERIALS

A complete list of materials tested will be found in the Summary of Laboratory tests. The bulk of the testing is confined to cement, concrete and oiled road aggregates, concrete cylinders and cores, reinforcing steel, culvert metal, road oil, oiled aggregates, clays, and lubricating oils. During the past year there has been a marked increase in the amount of corrugated metal culvert pipe used with a corresponding decrease in use of concrete pipe. The testing of aggregates and fillers for oiled roads and the analysis and extraction tests made on oiled aggregates obtained from the finished road have required considerable attention during the past year. The extensive use of road oil during the past season necessitated the placing of inspectors at a number of oil refineries in order that the road oils might be tested and accepted prior to shipment. Most of the tests made on road oil are more or less technical, and specially trained inspectors are required for this work.

The field of materials tested has also been somewhat broadened due to the testing of more materials used by the Maintenance Division.



Southwark-Emery Universal Testing Machine, 100,000-pound capacity.

A number of rather comprehensive comparative tests have been made on such maintenance materials as automobile tires, valve stems, brake linings, chassis and equipment paint, and other materials used for special purposes. More attention is being given to the testing of special products in order to obtain the best material for the lowest price consistent with quality.

RESEARCH

Due to the lack of adequate research appropriations only a limited amount of research work has been done. The following is a brief outline of some of the research work undertaken.

Concrete. Early in 1931 a series of tests were made on Platte River-gravel concrete to determine the relation between cement content, structural strength, and depth of pavement. The results obtained from these tests indicated that by increasing the thickness of the slab and making a slight reduction in the cement content a pavement having materially higher supporting strength and a satisfactory wearing surface could be constructed at no material increase in cost.

In the spring of 1932 an investigation was made to check the design of several new concrete mixes which were proposed for use. This work consisted of making and testing 114 concrete beams and 171 cylinders and represented six series of concrete mixes in which varying proportions of cement, sand, and stone were used. Density, compressive strength, and modulus of rupture were determined for each of the mixes.

A summary covering part of the results obtained from these tests may be found in the paving section of this report.

Calcium chloride. The investigation of calcium chloride as a dust palliative for use in maintenance of gravel roads was undertaken during the summer of 1932 jointly with the Highway Research Board of the National Research Council. This investigation was made to determine the effective life of the calcium chloride application, the probable cause and manner of the dissolution of the calcium chloride after the application, the mat-forming tendencies, and the general effect on the road surface as compared with untreated adjoining sections of the road. Additional information concerning this investigation will be found in the maintenance section of this report. A complete report on calcium chloride as a dust palliative will probably be given in the Annual Proceedings of the Highway Research Board.

Subgrade soils. A study of soil characteristics is now being made to determine the tests which will best indicate the suitability of various soils for subgrade material. A number of soils have been analyzed and the test results to some extent correlated with their behavior as subgrade material.

During the past summer samples of soil were obtained from fills, cuts, and borrow pits on one of the paving projects and these were tested to determine the comparative density of the soil in its original state as compared to the density after being placed in a fill. These tests show that the compaction of soil is a function of the amount of moisture present in the soil at the time it is placed in the fill and rolled. The indications are that a satisfactory compaction may be obtained with varying percentages of moisture, but the range will vary with the type of soil. The tests showed also that by taking preliminary samples and obtaining the initial densities of the materials in their natural state and comparing these results with the maximum density of the given material a balance factor can be determined prior to construction which should materially reduce overruns and underruns.

Fillers for bituminous mixtures. In connection with the study of sub-grade soils a study is also being made to determine the types of fillers which will be most satisfactory in bituminous mixtures. The tests usually made on fillers are mechanical analysis or fineness, and cementation, but these have been found to be inadequate. Tests are now being developed to show the bulking action of fillers with oil and also the effect of water on different types of fillers.

Much work is yet to be done in order to determine the best types of fillers.

Bituminous aggregate mixtures. This investigation was made to determine the effect of the grading of the aggregates, type and quantity of filler, and the quantity and viscosity of the asphaltic oil, on the stability and density of oiled-gravel mixtures.

The results of this investigation were used in the design of mixtures of oil and aggregate for the oiled-gravel roads constructed in 1932.

In order to lower the cost of oiled-gravel surfacing further investigation is needed to make use of different types of local aggregates.

Some of the oiled-sand roads constructed prior to 1932 have developed soft spots. These conditions have been investigated and found in most cases to be due to a poor grading of the sand and lack of material passing the 200-mesh sieve. In the oiled sand roads constructed in 1932 fillers containing 200-mesh material have been added where a deficiency was found in the existing sand.

The results of the investigation of bituminous aggregate mixtures have been compiled and are available at the testing laboratory.

Cutback asphalt. This investigation was undertaken jointly with an oil company at Casper, Wyoming to determine proper tests, types of products, and specifications for cutback asphalts for use in oiled-road construction.

Four asphalts of varying consistencies and four naphtha distillates of different volatility were made up in four proportions. This made a total of 64 mixtures each of which was tested at Casper and also at Lincoln. Over 1400 individual tests were made in this investigation.

By making the tests in both laboratories it was possible to make a study of the effect of altitude on the various tests. The effect of altitude must be known in order that comparable results of tests can be obtained from different parts of the country. A comparison was also obtained of the uniformity of results that may be expected where different testing equipment is used.

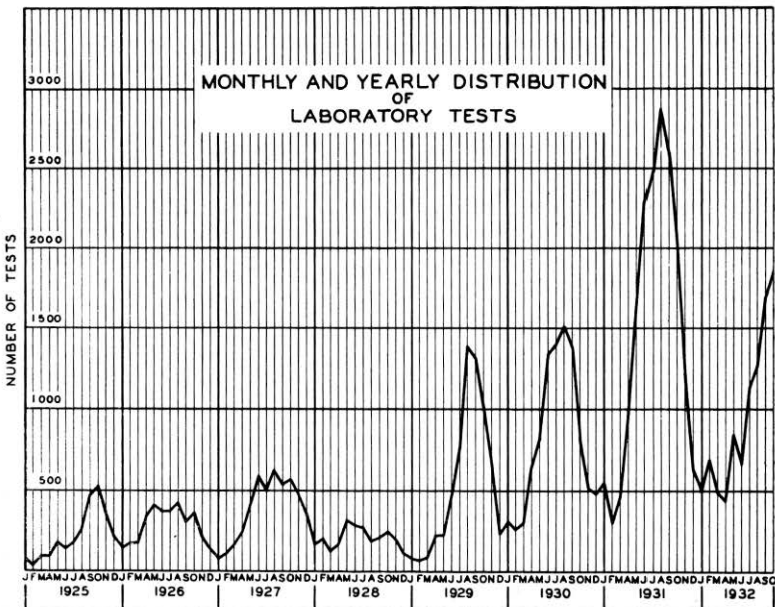
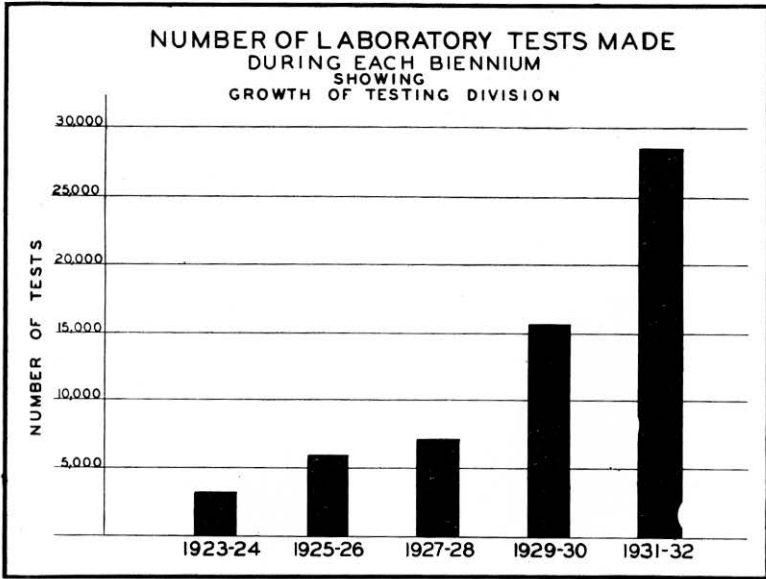
The results obtained from this investigation make it possible to write workable specifications for any type of cutback asphalt desired for a particular purpose.

This investigation was completed in April, 1932 and tabulated results are on file at the Testing Laboratory.

Road oil. During the summer of 1931 a cooperative investigation of road oils was made by a number of states, the Federal Bureau of Public Roads, and a number of oil refineries. This investigation was made to determine proper tests and to standardize the tests made on asphaltic oils for use in highway construction. A summary of this work has been compiled by the Bureau of Public Roads.

During the fall of 1932 a further investigation of road oils was undertaken to determine, if possible, the suitability and probable length of life of various road oils when used in bituminous mixtures. The solution of this problem is very necessary if oiled roads are to be used to any great extent in the future as many oils appear to lose their binding qualities and become dead after the oiled aggregate has been in service a short time. As a result the surface ravel, pits, and becomes rough, and in order to keep a satisfactory riding surface excessive maintenance is required.

It is hoped that tests may be developed which will differentiate between oils which act differently in service yet meet the same standard specification.



**SUMMARY OF
LABORATORY TESTS MADE DURING THE PAST
FIVE BIENNIAL PERIODS**

Material	Biennium				
	1923-24	1925-26	1927-28	1929-30	1931-32
Abrasions (stone and gravel).....				41	105
Aggregate for oiling.....			42	81	2314
Asphalt	33	21	11	18	7
Asphalt bridge plank.....					4
Bituminous concrete (analysis)....		31	106	28	
Bituminous concrete aggregate....		30	6	10	
Brick paving	2	34			4
Cement	725	1044	951	4281	6115
Clay surfacing	42	319	1082	692	596
Clay sewer pipe & drain tile.....	6			23	5
Concrete beams				494	12
Concrete cores		137	13	959	2518
Concrete cylinders	938	1658	2109	4311	8393
Concrete prisms				846	53
Concrete pipe	1	69	158	113	63
Concrete posts					7
Creosote oil		37	52	43	46
Creosoted timber and piling.....		42	45	20	14
Corrugated metal pipe.....	23	613	803	810	1388
Gasoline					8
Gravel	933	1211	813	990	1622
Greases					65
Guard rail cable.....		21	30	45	5
Lubricating oil				246	659
Oiled aggregate (analysis).....			85	59	661
Paint	13	67	14	7	64
Pile capping				10	2
Premoulded joint filler.....				16	145
Reinforcing bars	38	491	554	1004	1582
Reinforcing mesh		9	10	61	93
Reinforcing bar mat.....					3
Revetment cable				49	73
Road oil			29	183	1422
Road signs			13		34
Rock asphalt					8
Snow fence			2	16	96
Steel piling			62	56	61
Steel posts		7	8	69	30

Material	Biennium				
	1923-24	1925-26	1927-28	1929-30	1931-32
Stone (analysis)	1	.....	28	.....	12
Stone (soundness)	33
Subgrade paper	88
Tires	4
Unclassified (miscellaneous)	2	7	79
Valves	17
Water	5	2	50	83
Wire	6
Woven wire guard.....	56	136	23	5
TOTAL	2755	5902	7166	15,661	28,605

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.

The right of way activities cover a large range including city property with relatively high value to farm property with a lesser value, and also include special purchases of materials for gravel and oil roads

Right of way for changing water courses, borrow dirt, and clay surfacing may also be obtained in this manner. 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.

Many public spirited citizens have donated land for right of way and have cooperated very satisfactorily in the purchase of right of way. In many cases however, there is a tendency to hold the value of land required for right of way at an excessive figure.

The Federal Government does not participate in the purchase of the right of way for State or Federal highways.

Frequently the securing of right of way is the last step in the preparatory work of highway construction and often in the rush of the Emergency Construction projects, negotiations have to be made hurriedly and often after the contractors are on the work.

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 the Secretary of the Department of Public Works, following which it is passed to the Department of Finance. In appraisal of 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.

All right of way records are kept in the Lincoln office of the Department of Public Works and include all contracts entered into with the land owners or their representative, railroad leases, and right of way deeds.

The expenditures for right of way during the 1927-28 biennium were \$204,203.23, and for the 1929-30 biennium the expenditures amounted to \$466,922.39; the total number of transactions during this latter biennium being 1,384.

During the present 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 and the Emergency Federal Aid projects, a resulting increase in activities of the Division of Right of Way has steadily taken place.

The following table shows the total amount spent for right of way in each county, and includes all road materials and channel changes, beginning October 25, 1930, and ending November 6, 1932, both dates inclusive, and includes all purchases for which a voucher has been approved with a total number of transactions of 2,538.

**ITEMIZED STATEMENT OF EXPENDITURES FOR RIGHT OF WAY
FROM OCTOBER 25, 1930 TO NOVEMBER 6, 1932**

County	Construction					Maintenance		Total
	Right of way	Borrow	Channel change	Clay surfacing	Bituminous mat surfacing materials	Right of way	Clay surfacing	
Adams	532.80	2,528.27	665.00					3,726.07
Antelope		842.96			72.68		100.00	1,015.64
Arthur				702.50				702.50
Banner	52.30							52.30
Blaine	4,146.89	780.00		1,481.42			75.00	6,483.31
Boone	3,154.92	1,607.71	60.00					4,822.63
Box Butte	265.90	110.00						375.90
Boyd	6,164.90	28.98		31.68	200.00	26.10		6,451.66
Brown	2,131.76	1,274.91		2,346.39				5,753.06
Buffalo	2,785.89	1,873.43	98.70				50.00	4,808.02
Burt	294.13	1,000.00						1,294.13
Butler	5,213.19	4,862.96	140.00					10,216.15
Cass	716.34	1,567.95	55.00					2,339.29
Cedar	10,706.63	383.00	172.20			126.10		11,387.93
Chase	119.98	103.81		575.00				798.79
Cherry	12,661.25	641.00	240.00	1,084.10		12.00		14,638.35
Cheyenne	13.00	1,049.70	25.00					1,087.70
Clay	678.00							678.00
Colfax	6,513.19	1,896.63	10.00					8,419.82
Cunning	14,334.18	16,581.35						30,915.53
Custer	24,947.52	3,731.00	457.50	412.39		20.00		29,568.41
Dakota	37,634.01	724.15	150.00			98.60		38,606.76
Dawes	4,178.33	186.02	230.00		50.00			4,644.35
Dawson	19,165.12	2,432.22	46.66				100.00	21,744.00
Deuel		130.00						130.00
Dixon	708.01	413.28						1,121.29
Dodge	7,030.91	10,039.29						17,070.20
Douglas	111.15							111.15
Dundy	393.23	150.00						543.23
Fillmore	356.65							356.65
Franklin	4,672.62	903.92	91.00	60.00				5,727.54
Frontier	1,267.95							1,267.95
Furnas	4,688.79	421.70						5,110.49
Gage	4,123.43	1,231.22	310.00		25.00			5,664.65
Garden	627.70	25.00			184.38			677.70
Garfield	8,707.70	1,248.30						10,140.38
Gosper	1,362.25							1,362.25
Grant	4,147.46	538.14		99.15				4,784.75
Greeley	5,348.69	192.43						5,541.12
Hall	14,680.20	3,930.48						18,610.68
Hamilton	1,309.70	20.00	50.00					1,379.70
Harlan	4,091.25	353.50	369.42					4,814.17
Hayes	3,557.60	100.00						3,657.60
Hitchcock	101.00							101.00
Holt	3,933.77	1,440.66		2,149.50		37.55	100.00	7,661.48
Hooker	3,771.15	330.00		527.26				4,628.41
Howard	30,603.85	2,440.41	707.34	850.00				34,601.60
Jefferson	2,721.75							2,721.75
Johnson	23,159.23	5,446.01	200.00					28,805.24
Kearney	804.65		50.00	100.00				954.65
Keith	10,836.05	3,355.47	40.00	970.50	40.00			15,242.02
Keya Paha	153.80	200.49		332.68		2.60		689.57
Kimball	475.62	50.00						525.62
Knox	7,846.18	122.48						7,968.66
Lancaster	15,881.69	5,471.23	445.00		300.00			22,097.92
Lincoln	1,987.69	5,104.92	125.00	375.00				7,492.61
Logan	152.45			244.00				396.45
Loup				112.40	351.00			463.40
Madison	270.60	6,866.00					92.00	7,228.60
McPherson	47.50							47.50
Merrick	20,465.99	21,162.88	1,125.00					42,753.87
Morrill	1,015.87							1,565.87
Nance	2,762.00							2,762.00
Nemaha	2,481.70	940.79	170.00					3,592.49
Nuckolls	451.96	243.60						695.56
Otoe	917.81	902.13	45.00					1,864.94

ITEMIZED STATEMENT OF EXPENDITURES FOR RIGHT OF WAY
FROM OCTOBER 25, 1930 TO NOVEMBER 6, 1932—Concluded

County	Construction					Maintenance		Total
	Right of way	Borrow	Channel change	Clay surfacing	Bituminous mat surfacing materials	Right of way	Clay surfacing	
Pawnee	506.20							506.20
Perkins	625.00							625.00
Phelps	1,386.20	529.70						1,915.90
Pierce	7,148.02	3,242.28	482.00					10,872.30
Platte	20,284.46	4,984.10	24.00	80.00		503.45		25,876.01
Polk	21.00							21.00
Red Willow	18,162.41	1,624.38	195.55					19,982.34
Richardson	7,420.95	3,398.09	602.60					11,421.64
Rock	131.00	65.00		54.24	22.00		274.75	546.99
Saline	1,643.75	43.43	40.00			75.00		1,807.18
Sarpy	84,088.18	7,231.13						91,319.31
Saunders	31,520.50	4,984.21	565.73	50.00				36,520.44
Scotts Bluff	36,718.30	8,642.65						45,360.95
Seward	12,239.25	323.36	110.00					12,672.61
Sheridan	100.00	235.00						335.00
Sherman	147.50		100.00			424.10		671.60
Sioux	224.97							224.97
Stanton	138.70							138.70
Thayer	43.80	76.13	50.00					169.93
Thomas	1,425.58	100.00		893.72		101.10		2,520.40
Thurston	1,204.45	2,745.45						3,949.90
Valley	23,667.33	4,655.90						28,323.23
Washington	28,717.49	3,723.33	369.30					32,810.12
Wayne	2,308.55	2,599.15	66.75					5,074.45
Webster	33.00	150.00	250.00					433.00
Wheeler	4,016.32	149.36		457.22			406.75	5,629.65
York	15,170.75	3,582.84						18,753.59
Total	654,032.39	171,120.87	8,933.75	14,198.53	1,035.68	1,426.60	1,198.50	851,946.32

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 1, 1930 TO DECEMBER 31, 1930**

For the work prior to November 1, 1930 please refer to the preceeding biennial reports.

Proj.		County	Length miles	Funds			
No.	Name			Federal	State	Other	
41	Max-Doane	Dundy	2.272	\$	\$ 1,000.00	\$	
53K	Genoa-Albion	Boone	1.672		22,539.58		
105L	Cozad-Gothenburg	Dawson			1,203.48		
137M	Springview-Bassett	Rock	6.500		5,330.11		
155A	Havelock-Ceresco	Lancaster		13,476.27		13,476.28	
169K	Hastings-Hansen	Hall	0.403		251.38		
197K	Springview-Ainsworth	Keya Paha			2,600.00		
222C	St. Paul-North Loup	Howard	3.066	2,563.95	2,563.96		
222C	St. Paul-North Loup	Greeley	4.587	5,337.12	5,337.13		
222D	St. Paul-North Loup	Howard	6.502	5,122.13	5,122.14		
249B	Lemoyno-Oshkosh	Garden			1,886.00		
308A	Alma-Holdrege	Phelps	6.173	5,317.09	5,523.60		
312	Lincoln-Havelock	Lancaster			11,308.99		
313B	O'Neill-Bartlett	Holt	4.039	2,187.53	2,187.53		
627B	Arnold-Kearney	Dawson	4.167		7,626.00		
627E	Arnold-Kearney	Buffalo	1.500		1,378.00		
631C	Creighton South	Antelope	4.025		6,835.08		
648E	Newman Grove-Scribner	Platte	7.000		770.00		
656A	Tryon-Mullen	McPherson	13.500		8,500.00		
662A	Burwell-Taylor	Loup	10.750		6,898.71		
662B	Burwell-Taylor	Garfield	5.250		3,452.69		
672A	Butte Northwest	Boyd	16.500		12,316.50		
673A	Rockville-Ravenna	Sherman	0.500		2,000.00		
TOTALS				\$	\$ 34,004.09	\$ 113,178.10	\$ 13,476.28

Symbols:

R Regrading
Br. Bridge

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
NOVEMBER 1, 1930 TO DECEMBER 31, 1930—Concluded

Total Cost	Earth	Paving	Gravel		No. bridges, under- passes and over- passes	Date awarded
			2"	3"		
\$ 1,000.00	2.272R					11- 4-30
22,539.58	1.672			1.672	1 Br.	11-13-30—12- 5-30
1,203.48						12- 3-30
5,330.11	6.500					12-12-30
26,952.55						12- 4-30
251.38			1 "	0.403		11-12-30
2,600.00					1 Br.	12-12-30
5,127.91				3.066		11- 6-30
10,674.25				4.587		11- 6-30
10,244.27				6.502		11- 6-30
1,886.00						12-26-30
10,840.89	6.173					11-28-30
11,308.99						12-30-30
4,375.06				4.039		12-28-30
7,626.00			1½ "	2.000		11-15-30
1,378.00	1.500		1½ "	1.500		11-15-30
6,835.08				4.025		12-29-30
770.00	7.000					11-26-30
8,500.00	13.500					12-26-30
6,898.71			1½ "	10.750		11-13-30
3,452.89			1½ "	5.250		11-13-30
12,316.50			1½ "	16.500		11-13-30
2,000.00	0.500					11- 5-30
\$ 160,658.56	36.845		1½ "	30.750		2 Br.
	2.272R		1 "	0.403		

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1931 TO DECEMBER 31, 1931**

Proj.		Length		Funds		
No.	Name	County	miles	Federal	State	Other
2	Nebr. City-Falls City	Nemaha	-----	\$ 211,839.72	\$ 12,698.72	\$ -----
3	Grand Island West	Hall	-----	80,627.64	5,627.64	75,000.00
3II	Grand Island West	Hall	7.165	-----	4,217.10	-----
7C	Hastings-Heartwell	Adams	-----	256,097.32	58,624.59	-----
12	Stapleton-Ringgold	Logan	11.540	-----	4,127.62	-----
18II	Lincoln-Beatrice	Lancaster	16.700	173,948.23	12,196.24	-----
18II	Lincoln-Beatrice	Gage	18.698	173,844.46	15,457.71	-----
25	Beatrice-Fairbury	Gage	10.567	-----	7,629.30	-----
28	Union-Plattsmouth	Otoe	8.318	270,035.05	13,065.00	13,500.00
28	Union-Plattsmouth	Cass	16.684	84,577.47	3,146.05	-----
29	Osceola-David City	Butler	-----	12,625.95	12,625.95	-----
30A	Beaver City-Arapahoe	Furnas	-----	-----	411.65	-----
39	Lexington-Overton	Dawson	24.222	191,576.86	46,055.68	-----
46	Bartley-McCook	Red Willow	16.750	56,738.68	81,285.34	-----
51C	Franklin-Minden	Franklin	13.448	-----	46,772.83	-----
56	York-Waco	York	6.912	149,270.25	44,003.87	-----
59A	Bartlett-Spalding	Wheeler	13.616	12,450.86	12,462.31	-----
59B	Bartlett-Spalding	Wheeler	5.035	5,169.40	5,180.69	-----
59C	Bartlett-Spalding	Greeley	4.047	3,117.27	3,129.25	-----
60D	St. Paul-Wolbach	Howard	2.596	7,206.84	16,062.47	-----
60L	St. Paul-Wolbach	Howard	9.848	-----	56,093.77	-----
68B	McCook-Trenton	Red Willow	7.941	87,685.21	97,563.13	-----
71	Franklin-Orleans	Franklin	-----	-----	650.00	-----
74B	Parks-Haigler	Dundy	9.524	4,712.23	4,712.24	-----
74K	Parks-Haigler	Dundy	0.464	-----	1,241.77	-----
76L	Alliance-Chadron	Box Butte	1.978	-----	2,055.76	-----
76M	Alliance-Chadron	Dawes	4.100	-----	2,059.71	-----
80D	Whitman-Hecla	Hooker	6.954	-----	851.99	-----
80E	Mullen-Hecla	Hooker	6.873	47,926.73	13,751.16	-----
80F	Mullen-Seneca	Hooker	3.139	16,350.87	21,983.88	-----
80L	Hyannis-Whitman	Grant	4.525	-----	31,397.78	-----
82K	Oshkosh-Broadwater	Garden	5.000	-----	10,500.00	-----
84B	Greeley Center-Wolbach	Greeley	0.086	-----	131.98	-----
84C	Greeley Center-Wolbach	Greeley	1.783	-----	4,291.20	-----
84K	Spalding South	Greeley	10.000	-----	26,229.11	-----
84L	Wolbach-Fullerton	Greeley	0.450	-----	1,225.85	-----
84L	Wolbach-Fullerton	Howard	0.150	-----	470.17	-----
84M	Greeley Center-Wolbach	Greeley	8.385	-----	50,431.89	-----
89L	Taylor-Bassett	Loup	11.347	-----	46,496.19	-----
91A	Florence-Blair	Washington	7.460	96,039.59	128,741.85	-----
91B	Florence-Blair	Washington	1.848	60,873.62	9,628.02	-----
91C	Florence-Blair	Washington	2.778	96,814.41	14,380.61	-----
94A	Lemoyne-Arthur	Arthur	14.351	5,755.97	5,755.97	-----
94B	Lemoyne-Arthur	Keith	7.169	3,722.18	3,722.19	-----
94C	Lemoyne-Arthur	Keith	3.738	21,472.13	5,112.78	-----
96A	Arnold-Stapleton	Custer	2.870	1,609.43	1,626.86	-----
96D	Arnold-Stapleton	Logan	1.439	1,439.52	402.03	-----
97A	Table Rock-Lewiston	Pawnee	0.561	-----	407.97	-----
105C	Cozad-Gothenburg	Dawson	9.536	126,641.80	104,422.87	266.80
107B	Greenwood-Chalco	Cass	0.086	1,610.43	2,369.95	-----

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
 JANUARY 1, 1931 TO DECEMBER 31, 1931—Continued

Total Cost	Earth	Paving		Gravel		No. bridges, under- passes and over- passes	Date awarded
				2"	3"		
\$224,538.44	7.600R	Conc.	7.600				4-10-31
161,255.28						1 OP.	5-20-31
4,217.10				1 1/2"	7.165		3-21-31
314,721.91	12.481	Conc.	12.481			2 Br.	4-11-31
4,127.62				1 1/2"	3.317		7- 9-31
186,144.47	7.500R	Conc.	7.500			2 Br.	4-16-31-- 5-29-31
189,302.17	6.898R	Conc.	6.898			1 Br.	4-16-31
7,629.30						1 Br.	3-20-31
270,035.05	8.318	Conc.	8.318			1OP.	3- 2-31-- 6-30-31
84,577.47	2.047	Conc.	2.047			3 Br.	3- 2-31
25,251.90						9.311	3-20-31
411.65							11-16-31
237,632.54	9.722	Conc.	9.722			3 Br.	4- 9-31
138,024.02	3.800	Conc.	3.800			1 Br.	5-29-31
46,772.93	13.448			1 1/2"	13.448		4-30-31
193,283.12	6.912	Conc.	6.912				3-20-31
24,913.17					13.616		3- 2-31
10,350.09					5.035		3- 2-31
6,246.52					4.047		3- 2-31
23,269.31	2.596					2.596	7-24-31--10-16-31
56,093.77	9.848			1 1/2"	9.848		7- 9-31--10-24-31
185,248.34	5.600R	Conc.	5.600				5-29-31
650.00							4-24-31
9,424.47					9.524		3- 2-31
1,241.77	0.464				0.464		6-15-31-- 3- 2-31
2,055.76	1.978						7-13-31-- 8-20-31
2,059.71	4.100						7-13-31-- 8-20-31
851.99							3-20-31
61,677.89	6.873	Oil	6.647		0.231		5-13-31-- 8- 7-31
38,334.75	3.139				3.139		7-31-31-- 8-26-31
31,397.78	4.525	Oil	4.525				8- 6-31-- 8-20-31
10,500.00	5.000			1 1/2"	5.000		10-13-31
131.98				1 1/2"	0.086		4-30-31
4,291.20				1 1/2"	1.783		4-30-31-- 8-31-31
26,229.11	2.613			1 1/2"	10.000		3-20-31-- 4-30-31
1,225.85						0.450	3- 2-31
470.17						0.150	3- 2-31
50,431.89	8.385			1 1/2"	8.385		4-30-31--11-19-31
46,496.19	11.347						4- 7-31-- 8-20-31
224,781.44	7.460R	Conc.	7.460			2 Br.	7-21-31
70,501.64	1.848	Conc.	1.848				1-10-31
111,195.02	2.778	Conc.	2.778				2-19-31-- 3- 2-31
11,511.94					14.351		3-20-31
7,444.37					7.189		3-20-31
26,584.91	3.738				3.738		4-10-31-- 8- 6-31
3,236.29					2.870		3- 2-31
1,841.55					1.489		3- 2-31
407.97				1"	0.561*		4-30-31
231,430.97	9.536	Conc.	9.536				5- 6-31
3,980.38	0.086	Conc.	0.086				3- 2-31

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1931 TO DECEMBER 31, 1931—Continued

Proj. No.	Name	County	Length miles	Funds		
				Federal	State	Other
107B	Greenwood-Chalco	Saunders	3.671	100,876.06	122,173.01	3,000.00
107C	Greenwood-Chalco	Sarpy	3.137	65,824.14	61,991.27	
107D	Greenwood-Chalco	Saunders	0.612	16,776.78	11,385.71	
107F	Greenwood-Chalco	Sarpy	4.155	75,520.82	37,981.18	
107G	Greenwood-Chalco	Saunders		40,381.96	34,807.97	
107G	Greenwood-Chalco	Sarpy		40,381.96	34,807.97	
107H	Ashland Spur	Saunders	0.909	20,385.37	14,385.37	6,000.00
115B	Columbus-David City	Butler	0.095	12,949.98	449.98	12,500.00
115B	Columbus-David City	Platte	0.191	25,899.95	899.96	25,000.00
115B	Columbus-David City	Polk	0.095	12,949.98	449.98	12,500.00
137L	Riverview-Bassett	Rock	4.750		4,324.86	
137M	Riverview-Bassett	Rock	6.750		6,414.82	
138B	Ft. Crook-Plattsmouth	Sarpy	0.900	60,103.66	14,136.33	10,344.50
138E	Ft. Crook-Omaha		1.147	52,551.81	37,200.05	30,316.00
139B	Norfolk-Ewing	Madison	5.675	86,052.63	94,709.57	
141K	Bassett-Long Pine	Rock			480.85	
141L	Bassett-Long Pine	Rock	0.750		2,759.20	
143B	York-Waco	York	1.512	15,236.19	15,236.20	
153C	Eagle-Murdock	Cass	4.016	5,121.93	964.50	
153D	Eagle-Murray	Cass	5.432	8,747.26	233.97	
153K	Eagle-Murray	Cass	1.500		2,600.00	
153L	Eagle-Murray	Cass	14.079		42,128.60	
170A	North Platte-Maxwell	Lincoln	19.088	191,773.39	9,655.67	
170C	Brady-Vrooman's Crossing	Lincoln	9.189	27,598.54	1,585.31	
172	West Point-Wisner	Cuming	12.664	294,841.69	54,740.31	
175K	Adams North	Gage	4.000		2,425.63	
176A	Curtis-Maywood	Frontier	5.689		12,011.51	
177	Kearney-Simmonds	Buffalo		62,392.45	6,097.63	
184A	Elwood-Stockville	Gosper	11.540	5,126.65	1,353.98	
185	Geneva-Milligan	Fillmore			2,291.13	
185	Geneva-Milligan	Saline			481.96	
193C	Ord-Arcadia	Valley	7.328	9,626.00	739.98	
202I	Crookston-Valentine	Cherry	11.309	26,457.04	26,457.04	
202K	Valentine-Gordon	Cherry	1.023		1,069.76	
203C	Platnview-Orchard	Antelope	0.655	9,284.99	9,560.89	
203L	Orchard West	Antelope	3.500		2,877.60	
203L	Orchard West	Holt	2.000		1,642.63	
205A	Red Cloud-Superior	Webster	9.905		7,810.76	
208H	Dawson South	Richardson	9.152	97,258.75	66,736.55	
210	Superior Southwest	Nuckolls			22,709.67	
216A	Central City-Clarks	Merrick	6.274	120,250.35	13,237.28	
216B	Central City-Clarks	Merrick	3.998	67,026.78	5,555.40	
218K	Sterling-Adams	Johnson	2.723		1,334.48	
222C	Cotesfield-Scotia Jct	Greeley		1,030.92	1,030.92	
222C	Cotesfield-Scotia Jct	Howard		87.12	87.12	
222D	Cotesfield-Scotia Jct	Howard		462.82	462.83	
233G	North Platte-Tryon	McPherson	4.569		17,454.00	
233F	North Platte-Tryon	Lincoln	7.195		24,962.98	
234A	Gretna-Millard	Sarpy	2.497	5,822.16	8,850.22	
234B	Gretna-Millard	Sarpy	1.322	32,086.97	19,108.23	5,800.00

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1931 TO DECEMBER 31, 1931—Continued

Total Cost	Earth	Paving		Gravel		No. bridges, under-passes and over-passes	Date awarded
				2"	3"		
226,046.07	3.671	Conc.	3.671			2 Br., 1 OP.	3- 2-31
127,815.41	3.137	Conc.	3.137			3 Br.	3- 2-31
28,162.49	0.612	Conc.	0.612				3- 2-31
113,501.50	4.155	Conc.	4.155				3- 2-31
75,189.93						½ Br.	3- 2-31
75,189.93						½ Br.	3- 2-31
40,770.74	0.909	Conc.	0.909			1 Br.	4-30-31—10-23-31
25,899.96	0.095					¼ Br.	7-16-31
51,799.91	0.191					¼ Br.	7-16-31
25,899.96	0.095					¼ Br.	7-16-31
4,324.86			1½"	4.750			3-20-31
6,414.82			1½"	6.750			3-20-31
84,584.49						1 OP.	1- 9-31— 2- 4-31
120,067.86	1.147					1 OP.	4-30-31—11-23-31
180,762.20	5.675	Conc.	5.675			4 Br.	6- 1-31
480.85							5- 2-31
2,759.20	0.750		1½"	0.750			6- 8-31
30,472.39	1.512	Conc.	1.030		0.482		3-20-31
6,086.43			¾"	0.150			
			1½"	0.950			3- 2-31
8,981.24					2.916		3- 2-31
					4.514		3- 2-31
2,800.00	1.500				1.500		1-19-31
42,128.80	14.079		1½"	14.079			8-20-31
201,429.06	9.208R	Conc.	9.208				3-17-31
29,183.85	1.457R	Conc.	1.457				3-17-31
349,082.00	12.011R	Conc.	12.664			6 Br.	4-11-31
	0.653						
2,425.63			1 "	4.000			7- 9-31
12,011.51					5.639		3-20-31
68,490.08	3.020R	Conc.	3.020				3-17-31
6,480.63					4.634		3- 2-31
2,291.13	2.000R		1½"	1.521			2-28-31— 3- 2-31
481.96			1½"	0.050			3-20-31
10,365.98					7.328		3- 2-31
52,914.08	11.309					1 Br.	9- 3-31
1,069.76			1 "	1.023*			4-30-31
18,845.88	0.655	Conc.	0.655				8-31-31
2,877.60			1½"	3.500			8-20-31
1,642.63			1½"	2.000			8-20-31
7,810.76							7- 9-31
163,995.30	9.152				9.152	1 Br.	5-16-31
22,709.67						3 Br.	6-11-31
						1 Br.	
133,487.63	6.274	Conc.	6.274				3-25-31
72,582.18	3.998R	Conc.	3.998				3-25-31
1,334.48			1 "	2.723*			7- 9-31
2,061.84							3-20-31
174.24							3-20-31
925.65							3-20-31
17,454.00	4.509	Oil	4.509				9- 4-31
24,962.98	7.195	Oil	7.195				8-15-31
14,672.40	0.503	Conc.	0.503				5- 6-31
56,995.20	1.322	Conc.	1.322			1 OP.	5- 6-31— 7-17-31

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1931 TO DECEMBER 31, 1931—Continued

Proj. No.	Name	County	Length miles	Funds		
				Federal	State	Other
235A	Millard-Wahoo	Saunders	0.597	14,727.52	4,132.94	
235B	Millard-Wahoo	Saunders	3.521	52,318.78	41,591.52	
235C	Millard-Wahoo	Saunders	8.345	177,768.89	11,551.29	
236C	Scottsbluff-Minatare	Scotts Bluff	4.677	64,225.42	47,576.67	
239	Wilber-Geneva	Saline	9.980	20,868.42	444.36	
246K	Falls City-Pawnee City	Pawnee	1.639		1,191.93	
255C	Sterling-Tecumseh	Johnson	11.733	41,351.52	41,351.52	
258C	Fremont-Blair	Washington	1.260	45,561.39	27,628.43	
258D	Fremont-Blair	Dodge	6.235	27,398.53	11,030.97	
258E	Fremont-Blair	Washington	0.767	10,728.44	4,373.76	7,500.00
261K	Grant-Venango	Perkins			2,221.93	
265A	Chadron-Crawford	Dawes			1,400.00	
265C	Chadron-Crawford	Dawes	7.258	7,266.49	3,511.35	
265K	Chadron-Crawford	Dawes	1.918		2,621.25	
265L	Chadron-Crawford	Dawes	0.450		2,053.52	
268A	Randolph-Plainview	Pierce	14.672	36,381.77	32,247.98	
268B	Randolph-Plainview	Pierce	9.191	65,956.21	27,101.51	
269D	Randolph-Plainview	Cedar	0.520	2,500.64	10,505.63	
271A	So. Sioux City-Allen	Dakota	7.610	112,094.44	112,094.45	
271B	Jackson-Waterbury	Dakota			800.00	
274C	Winside-Wayne	Wayne	7.963	8,960.10	8,960.10	
277F	Hyannis-Ashby	Grant	7.969	41,021.83	37,054.66	
278B	Columbus-Central City	Merrick	1.174	16,737.82	5,588.75	
278D	Columbus Overhead	Platte	0.332	117,336.93	42,500.00	159,836.93
279A	Wolbach-Fullerton	Greeley	2.509	2,102.09	2,117.65	
279A	Wolbach-Fullerton	Howard	2.509	2,102.09	2,117.65	
279K	Wolbach-Fullerton	Nance	19.000		30,987.66	
280L	Niobrara-Verdell	Knox	16.765		39,310.93	
281C	Theftford-Halsey	Thomas	5.052	2,319.95	1,209.33	
281D	Dunning-Halsey	Blaine	9.556	4,599.31	4,599.32	
281E	Theftford-Seneca	Thomas	3.619	29,153.41	23,634.74	
281K	Theftford-Seneca	Blaine	0.441		2,454.68	
283K	Kearney-Axtell	Buffalo	0.876		32,666.93	
284C	Merna-Anselmo	Custer	11.384	27,990.29	26,061.65	
284K	Linscott-Dunning	Blaine	2.209		9,626.66	
299A	McCook South	Red Willow	12.949	38,041.87	38,041.87	
296B	Ogalalla-Roscoe	Keith	6.823		45,438.18	
297B	Gothenburg-Farnum	Dawson	8.522	9,458.14	52.83	
300B	Scottsbluff-Henry	Scotts Bluff	9.168	123,631.51	105,148.08	
303A	Grand Island-Chapman	Merrick	8.424	161,314.95	15,361.92	
303B	Grand Island-Chapman	Hall	3.076	71,635.13	3,989.01	
308A	Alma-Holdrege	Phelps	6.173	5,999.44	4,652.34	
308B	Alma-Holdrege	Harlan	8.105	6,880.54	6,880.55	
308K	Alma-Holdrege	Harlan	9.300		11,623.50	
311A	Red Cloud South	Webster	5.875	2,531.75	2,700.98	
312	Lincoln-Havelock	Lancaster	4.349	100,501.03	77,589.08	7,046.05
313C	O'Neill-Bartlett	Wheeler	5.490	3,840.55	3,840.56	
313D	O'Neill-Bartlett	Polk	7.988	22,182.88	22,182.88	
313E	O'Neill-Bartlett	Wheeler	10.732	23,944.53	33,688.33	
314K	Adams-Wilber	Gage			1,538.57	

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
 JANUARY 1, 1931 TO DECEMBER 31, 1931—Continued

Total Cost	Earth	Paving	Gravel		No. bridges, under- passes and over- passes	Date awarded	
			2"	3"			
18,860.46	0.597R	Conc.	0.597			4- 4-31	
93,910.30	3.521R	Conc.	3.521		1 Br.	4- 4-31	
189,320.18	8.345R	Conc.	8.345		1 Br.	4- 4-31	
111,802.09	4.677	Conc.	4.677			5-12-31	
21,312.78					7.952	3- 2-31	
1,191.93			1 "	1.639*		4-30-31	
82,703.04	11.733				3 Br.	7-27-31	
73,189.82	1.260				1 Br.	6- 1-31	
38,429.50	6.235				2 Br.	6- 1-31	
22,602.20	0.767				1 OP.	6- 1-31	
2,221.93						7- 9-31	
1,400.00						2-28-31	
10,777.84					7.258	3-20-31	
2,621.25	1.916			1.916		3- 2-31	
2,053.52	0.450			0.450		8-21-31— 9- 5-31	
68,629.75	2.976R	Conc.	2.976			5-16-31	
93,057.72	9.191				9.191	4- 9-31	
13,006.27	0.520				0.520	4- 9-31	
224,188.89	7.610R	Conc.	7.610			7-14-31	
800.00					1 Br.	3- 3-31	
17,920.20					7.963	3-20-31	
78,076.49	7.969	Oil	7.969			5-20-31	
22,324.57	1.174R	Conc.	1.174			3-25-31	
319,673.86	0.332	Conc.	0.332			1- 9-31	
4,219.74					2.509	3- 2-31	
4,219.74					2.509	3- 2-31	
30,987.66	19.000		1 1/2 "	19.000		3- 2-31— 8- 6-31	
39,310.93	16.765		1 1/2 "	16.765		4-30-31	
3,529.28					5.052	3- 2-31	
9,198.63					9.556	3- 2-31	
52,788.15	3.619				3.619	2 Br.	5-12-31
2,454.68	0.441						5-14-31— 9-12-31
32,966.93	0.876	Conc.	0.876	1 1/2 "	0.441		4-30-31
54,051.94	11.384					3 Br.	5-20-31
9,626.66	2.209						7- 9-31
76,083.74	12.949						7- 1-31—10-16-31
45,438.18	6.823				12.949		7-31-31
9,510.97					8.522		3- 2-31
228,779.59	9.166	Conc.	9.166			4 Br.	6-12-31— 9-22-31
176,676.87	8.424R	Conc.	8.424				3- 2-31
75,625.04	3.076	Conc.	3.076				3- 2-31
10,651.78					6.173		3- 2-31
13,761.09					8.105		3- 2-31
11,623.50			1 1/2 "	9.300			3- 2-31
5,232.73					5.875		3-20-31
185,136.16	4.343	Conc.	4.343			2 Br.	3- 2-31
7,681.11					5.490		8- 6-31
44,365.76	7.968					2 Br.	7-31-31
57,632.86	10.732					2 Br.	8- 6-31— 8-10-31
1,538.57			1 "	2.500			7- 9-31

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1931 TO DECEMBER 31, 1931—Continued

Proj.		Length		Funds		
No.	Name	County	miles	Federal	State	Other
314L	Adams-Wilber	Gage	5.840		3,476.18	
314M	Adams-Wilber	Gage	12.787		20,670.52	
314N	Adams-Wilber	Gage	3.000		4,627.71	
314O	Adams-Wilber	Saline	4.500		6,545.86	
316A	Bushnell West	Kimball	7.955	2,889.56	2,889.56	
317A	Ainsworth-Valentine	Brown	7.850	3,299.30	2,804.65	
317A	Ainsworth-Valentine	Cherry	10.968	31,466.65	21,231.11	7,467.07
317B	Ainsworth-Valentine	Cherry	8.593	54,123.38	54,123.38	
317D	Ainsworth-Valentine	Cherry	5.840	36,125.04	36,125.05	
317E	Ainsworth-Valentine	Cherry	4.883	28,090.39	28,090.40	
318	Maxwell-Ft. McPherson	Lincoln	3.893	77,418.88	12,413.52	38,750.00
321A	Pender-Emerson	Dixon	0.364		425.35	
321A	Pender-Emerson	Thurston	11.710	8,296.93	8,722.27	
322A	Ord-Burwell	Valley	4.913	22,479.22	7,542.83	
322B	Ord-Burwell	Valley	6.389	31,127.03	24,796.38	
322C	Ord-Burwell	Garfield	3.976	6,769.44	11,201.20	
322K	Ord-Burwell	Valley	1.500		1,115.19	
323	U. S. Veteran's Hosp. North	Lancaster	0.224	5,780.20	641.85	
607D	Odell-Steele City	Gage	6.044		5,013.25	
607E	Odell-Steele City	Jefferson	5.669		4,868.66	
611E	Ohiowa-Western	Fillmore	20.452		11,361.67	
611G	Norman-Holstein	Adams	3.864		9,354.56	
611H	Norman-Holstein	Kearney	4.000		9,690.42	
611I	Ohiowa-Western	Saline	9.029		24,944.45	
611J	Ohiowa-Western	Fillmore	4.000		3,574.23	
612A	Woodlawn West	Lancaster	7.154		5,597.39	
615B	Hubbard East	Dakota	5.875		3,247.20	3,111.90
619A	Albion-Fullerton	Boone	8.049		8,918.70	
619B	Albion-Fullerton	Boone	4.017		14,167.15	
619C	Albion-Fullerton	Nance	9.026		27,340.10	
620A	St. Edward- Cedar Rapids	Boone	7.880		8,747.48	
621D	Prague South	Saunders	7.187		6,881.07	
622A	Elwood-Eustice	Gosper	9.381		14,399.48	
622BCDE	Elwood-Eustice	Frontier			5,433.09	
625C	Oshkosh-Chappell	Garden	8.780		21,038.28	
625D	Oshkosh-Chappell	Deuel	9.015		10,699.02	
626A	Hampton-Sutton	Hamilton	11.774		38,096.09	
626B	Hampton-Sutton	Clay	6.500		13,051.89	
627A	Arnold-Kearney	Buffalo	1.750		1,736.85	
627B	Arnold-Kearney	Dawson	6.167		4,585.77	
627D	Arnold-Kearney	Buffalo	4.161		3,252.95	
627F	Arnold-Kearney	Custer	6.500		14,480.80	
627G	Arnold-Kearney	Dawson	11.525		12,679.58	
631D	Creighton South	Antelope	9.982		11,878.72	
632D	Upland-Daykin	Jefferson	9.000		8,143.94	
632E	Upland-Daykin	Nuckolls	9.984		37,974.12	
632F	Upland-Daykin	Jefferson	10.000		21,305.16	
632G	Upland-Daykin	Thayer	10.166		17,906.17	
632H	Upland-Daykin	Franklin	11.648		47,536.06	
633B	Wisner-Bancroft	Cuming	10.954		30,216.80	

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1931 TO DECEMBER 31, 1931—Continued

Total Cost	Earth	Paving	Gravel		No. bridges, under- passes and over- passes	Date awarded
			2"	3"		
3,476.18			1 "	5.840*		4-30-31
20,670.52			1 ½ "	12.087		7- 9-31
4,627.71	3.000		1 "	0.700	1 Br.	4-30-31— 5-18-31
6,545.86	3.700		1 ½ "	3.700		4-30-31— 5-18-31
5,779.12				7.955		4- 4-31
6,103.95				4.785		3- 2-31
60,165.73	7.850			10.968	1 Br., 1 OP.	3- 2-31— 7-29-31
108,246.72	8.593	Oil	8.593		3 Br.	7-31-31—10- 8-31
72,250.09	5.840	Oil	5.840		1 Br.	7-29-31— 9-30-31
57,980.79	4.883	Oil	4.883			7-21-31
128,582.40	3.893				3.893	1 Br.
425.33			1 ½ "	0.364		3-17-31
17,019.20			1 ½ "	0.364		3-20-31
30,022.05	4.913			11.346		3-20-31
55,923.41	6.389			4.913	5 Br.	4- 4-31— 5-29-31
				6.389		5-29-31
17,970.64	3.976					1 Br.
1,115.19	1.500			3.976		5-29-31
				1.500		8- 8-31—12- 7-31
6,422.05	0.224	Conc.	0.224			
5,013.25			1 ½ "	6.044		3-21-31
4,868.66			1 ½ "	5.669		3-20-31
						3-20-31
11,361.67			1 "	0.652		
			1 "	19.800*		8-20-31
9,354.56	3.864		1 ½ "	3.864		3-20-31—10-16-31
9,690.42	4.000		1 ½ "	4.000		3-20-31
24,044.45	9.029		1 ½ "	9.029		7- 9-31
3,574.23			1 ½ "	4.000		7- 9-31
5,597.39			1 ½ "	7.154*		7- 9-31
6,359.10			1 ½ "	5.875		4- 8-31
8,918.70			1 ½ "	8.049		3-20-31
14,167.15	4.017		1 ½ "	4.017	2 Br.	7- 9-31— 8-20-31
27,340.10	9.026		1 ½ "	9.026	1 Br.	7- 9-31— 8-20-31
8,747.48			1 ½ "	7.890		3-20-31
6,881.07			1 ½ "	7.187		4-30-31
14,399.48	9.381		1 ½ "	9.381		4-30-31— 7-29-31
5,433.09			1 ½ "	3.500		2- 9-31— 4-30-31
21,038.26	8.780		1 ½ "	8.780	1 Br.	4-30-31— 5- 8-31
19,699.02	9.015		1 ½ "	9.015	2 Br.	4-30-31— 5- 8-31
38,096.09	11.774		1 ½ "	11.774		3-20-31
13,051.89	6.500		1 ½ "	6.500		7- 9-31
1,736.85			1 ½ "	1.750		3-22-31— 7- 9-31
4,585.77			1 ½ "	4.161		7- 9-31
3,252.95			1 ½ "	4.161		7- 9-31
14,480.80	6.500		1 ½ "	6.500		7- 9-31— 8-20-31
12,679.58	11.525		1 ½ "	7.800		10-16-31
11,878.72	9.982					8-20-31— 9-21-31
8,143.04			1 ½ "	9.000		3-20-31
37,974.12	9.984		1 ½ "	9.984	1 Br.	7- 9-31— 8-20-31
21,305.16	10.000		1 ½ "	10.000		7- 9-31
17,906.17	1.250		1 ½ "	10.166	1 Br.	7- 9-31
47,536.06	11.648		1 ½ "	11.648	2 Br.	8-20-31—10-16-31
30,216.80	10.954		1 ½ "	10.954		8-20-31—11-30-31

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1931 TO DECEMBER 31, 1931—Continued**

Proj. No.	Name	County	Length miles	Funds		
				Federal	State	Other
638A	Beatrice-DeWitt	Gage	13.032		6,068.65	
638B	Beatrice-DeWitt	Saline	0.329		282.85	
637A	Chadron North	Dawes	12.952		9,092.72	
639A	Deverre-Atkinson	Holt	8.522		7,105.50	
639B	Deverre-Atkinson	Garfield	6.299		4,729.23	
639C	Deverre-Atkinson	Holt	6.410		37,398.30	
639D	Deverre-Atkinson	Holt	12.547		53,586.01	
640A	Pender-Walthill	Thurston	11.135		44,018.17	
642B	Crawford Northwest	Sioux	3.000		2,505.10	
644A	Syracuse-Weeping Water	Cass	2.031		2,259.11	
644B	Syracuse-Weeping Water	Otoe	10.842		11,505.06	
644C	Dubois North	Pawnee	11.950		10,180.17	
644D	Steinauer South	Pawnee	8.804		8,611.63	
644E	Tecumseh-Steinauer	Pawnee	3.759		26,864.27	
644F	Tecumseh-Steinauer	Johnson	7.246		49,425.03	
644G	Chalco-Pawnee City	Johnson	8.000		11,664.80	
644H	Chalco-Pawnee City	Otoe	4.937		3,074.89	
644I	Chalco-Pawnee City	Otoe	8.097		36,486.36	
645A	Beaver City-Hendley	Furnas	4.109		6,077.95	
645B	Beaver City-Marion	Red Willow	7.026		10,794.16	
645C	Beaver City-Marion	Furnas	13.481		20,618.33	
645D	Beaver City-Marion	Red Willow	4.893		7,091.00	
646A	Waco-Exeter	York	13.014		11,478.69	
646E	Waco-Exeter	Fillmore	4.000		5,954.26	
647C	Bloomfield-Hartington	Knox	2.000		2,775.00	
647D	Bloomfield-Hartington	Cedar	12.000		5,750.00	
647E	Bloomfield-Hartington	Knox	13.408		22,500.00	
648B	Newman Grove- Scribner	Platte	11.333		11,716.30	
648D	Newman Grove- Scribner	Platte	6.500		11,231.15	
648E	Newman Grove- Scribner	Platte			9,063.03	
648F	Newman Grove- Scribner	Platte	6.451		20,714.63	
648G	Newman Grove- Scribner	Colfax	8.184		19,992.73	
648H	Newman Grove- Scribner	Dodge	12.500		7,935.70	
648I	Newman Grove- Scribner	Colfax	5.400		9,211.05	
650A	Ponca-Willis	Dakota	5.200		7,126.27	
650B	Ponca-Willis	Dixon	1.850		2,835.02	
650C	Wynot-Fordyce	Cedar	7.100		8,289.57	
650D	Fordyce-Willis	Dixon	10.500		13,007.54	
650E	Wynot-Overton	Cedar	11.000		8,250.00	
650F	Obert-Newcastle	Dixon	10.000		13,750.00	
654B	Beemer North	Cuming	5.368		6,534.10	
660B	Gering-Lyman	Scotts Bluff	14.800		3,068.83	
661D	Dickens-Maywood	Lincoln	5.000		4,400.00	
666A	Fairbury-Superior	Jefferson	12.037		29,206.16	
668B	Hubbell-Byron	Thayer	15.952		27,545.43	

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1931 TO DECEMBER 31, 1931—Continued

Total Cost	Earth	Paving	Gravel		No. bridges, under- passes and over- passes	Date awarded
			2"	3"		
6,068.65			1½"	7.057		3-20-31
282.85			1½"	0.329		3-20-31
9,692.72			1"	12.952*		7- 9-31
7,105.50			1½"	8.522		3-20-31
4,729.23			1"	6.299		7- 9-31
37,398.30	6.410		1½"	6.410	4 Br.	7- 9-31— 8-20-31
53,586.01	12.547					10-14-31
44,018.17	11.135					7- 9-31
2,505.10						7- 9-31
2,259.11			1½"	2.031		4-30-31
11,505.06			1½"	10.842		4-30-31
10,180.17			1½"	9.451		3-20-31
8,611.63			1½"	8.804		3-20-31
26,864.27	3.759		1½"	3.759	1 Br.	3-20-31— 4-30-31
49,425.03	7.246		1½"	7.246	4 Br.	3-20-31— 7- 9-31
11,664.80	8.000		1½"	7.667		
			¾"	0.333		7- 9-31— 7-18-31
3,074.89	4.937		1½"	4.937		6- 8-31— 7- 9-31
36,486.36	8.087		1½"	8.087	1 Br.	8-20-31
6,077.95			1½"	4.109	1 Br.	3-20-31
10,794.16			1½"	7.026		2- 9-31— 3-20-31
20,618.33			1½"	13.481	1 Br.	2- 9-31— 3-20-31
7,091.00	4.893					11-14-31
11,478.69	4.870		1½"	13.014		2-17-31— 3-20-31
5,954.26	4.000		1½"	4.000		4-30-31— 8-21-31
2,775.00	2.000					10-30-31
5,758.00	12.000					9-21-31
22,500.00	13.408					10-30-31
11,716.30			1½"	11.333		4-30-31
11,231.15			1½"	6.500		4-30-31
9,063.03	0.500		1½"	7.500		6- 7-31—10-16-31
20,714.63	6.451		1½"	6.451		7- 9-31— 8-31-31
19,992.73	7.684		1½"	8.184		7- 9-31— 8-31-31
7,935.70			1"	12.500		10-19-31
9,211.05	5.409		1½"	5.409		8-20-31
7,126.27	5.200		1½"	5.200		3-20-31
2,835.02	1.650		1½"	1.650		3-20-31
8,289.57	7.100		1½"	7.100		9- 7-31— 9-21-31
13,007.54	10.500		1½"	10.500		10-16-31—10-30-31
8,250.00	11.000					10-30-31
13,750.00	10.000					10-30-31
6,534.10			1½"	5.368		8-20-31
3,068.83	14.800		1"	4.997		7- 9-31
4,400.00	5.000					8-31-31
29,206.16	12.057		1½"	11.754		7- 9-31— 8-20-31
27,545.43	15.952		1 ½"	15.952		4-30-31— 7- 9-31

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1931 TO DECEMBER 31, 1931—Continued**

Proj. No.	Name	County	Length miles	Funds		
				Federal	State	Other
668A	Loup City-Ansley	Sherman	12.302		20,133.00	
670A	Hay Springs-Alliance	Sheridan	18.500		10,552.48	
672A	Butte-Naper	Boyd	16.500		14,236.20	
672B	Naper-Jamison	Boyd	6.000		2,000.00	
677A	Imperial-Grant	Perkins	11.838		9,123.47	
677B	Imperial-Grant	Chase	13.390		25,997.02	
678A	Hayes Center-Pallsade	Hayes	13.318		27,095.51	
679A	Springview North	Keya Paha	3.000		5,885.00	
679B	Springview North	Keya Paha	9.000		18,232.36	
680A	Hemingford-Crawford	Box Butte	14.810		22,268.63	
681A	St. Paul-Clarks	Merrick	6.673		13,607.04	
681B	St. Paul-Clarks	Howard	7.806		75,690.19	
681C	St. Paul-Clarks	Merrick	7.879		71,876.72	
681D	St. Paul-Clarks	Merrick	6.958		14,288.78	
682B	Parshall S. A. Br. Approach	Holt	1.000		500.00	
683A	Creighton-Wausa	Knox	18.000		31,770.49	
684A	Lyons-Decatur	Burt	15.650		29,531.70	
685A	Broken Bow-Arcadia	Custer	2.426		2,942.43	
686	Ashland-Swedeburg	Saunders	19.777		34,126.30	
687A	Falls City-Rulo	Richardson	3.150		3,994.93	
688A	Beaver City-Orleans	Harlan	7.000		16,327.11	
688B	Beaver City-Orleans	Furnas	6.877		8,151.14	
689A	Burchard South	Pawnee	7.654		19,928.99	
690	Barada-Shubert	Richardson	6.000		5,875.00	
691A	Dorchester South	Saline	12.000		6,000.00	
692A	Loup City-Sweetwater	Sherman	15.800		13,313.65	
693	Henderson West	Hamilton	1.000		1,192.91	
693	Henderson West	York	1.237		1,563.95	
694A	Clay Center-Geneva	Clay	12.000		6,500.00	
694B	Waco-Exeter	Fillmore	11.250		3,000.00	
696	Chambers East	Holt	4.829		16,208.00	
697A	Crofton-Fordyce	Knox	0.500		350.00	
697B	Crofton-Fordyce	Cedar	6.500		2,650.00	
698A	App. to Carns S. A. Bridge	Rock	1.000		568.75	
698B	App. to Carns S. A. Bridge	Keya Paha	1.000		568.75	
699A	App. to Red Bird S. A. Bridge	Boyd	2.000		300.00	
700A	Stuart-Naper	Holt	0.603		5,132.75	
700B	Stuart-Naper	Boyd	1.000		5,348.30	
TOTALS				\$5,632,665.29	\$4,837,853.28	\$ 417,939.65

Symbols:

R Regrading
 * Second Course
 Conc. Concrete
 Oil Oiled Sand
 Br. Bridges
 OP Overpass

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1931 TO DECEMBER 31, 1931—Concluded

Total Cost	Earth	Paving	Gravel		No. bridges, under- passes and over- passes	Date awarded
			2"	3"		
20,133.00			1½"	12.302	2 Br.	3-20-31—4-30-31
10,552.48	18.500					6-29-31—7- 9-31
14,236.20	16.500					5- 2-31—8-14-31
2,000.00	6.000					10-31-31
9,123.47	11.838					4- 7-31
25,997.02	13.390					7- 9-31
27,095.51	13.348		1½"	13.348		7- 9-31—8-20-31
5,685.00	2.700		1½"	3.000		3-16-31—3-20-31
18,232.36	9.000					10-12-31
22,268.63	14.810		1½"	14.810		4-30-31—6- 8-31
13,607.04	6.673		1½"	6.673	1 Br.	3-20-31
75,690.19	7.806	Oil			1 Br.	4-30-31—7- 9-31
71,876.72	7.879	Oil			1 Br.	4-30-31—7- 9-31
14,288.78	1.360		1½"	6.958	3 Br.	4-30-31—7- 9-31
500.00	1.000					12-18-31
31,770.49	18.000		1½"	18.000		4-30-31—8-21-31
29,531.70	15.650		1½"	15.650		4-30-31—5-25-31
2,942.43	2.426					7- 9-31
34,126.30	19.777		1½"	19.777		8-20-31—9-12-31
3,904.93			1 "	3.150		7- 9-31
16,327.11	7.000		1½"	7.000		7-22-31—8-20-31
8,151.14	6.877					7-22-31—10-16-31
19,928.99			1½"	7.654		8-20-31
5,875.00			1 "	6.600		10-16-31
6,000.00	12.000					9- 1-31
13,313.65	15.800		1 "	15.800		10-12-31—10-16-31
1,192.91	1.000		1½"	1.000		9-28-31
1,563.95	1.237		1½"	1.237		9-28-31
6,500.00	12.000					9-22-31
3,000.00	11.250					10-17-31
16,208.00	4.829					7- 5-31
350.00	0.500					1931
2,650.00	6.500					10-30-31
568.75			1 "	1.000		10-28-31
568.75			1 "	1.000		10-28-31
300.00	2.000					10-28-31
5,132.75	0.603					11-24-31
5,348.30	0.920					11-24-31
\$10,888,458.20	1,053,386 107,852R	Conc. Oil	207,364 65,846	1½" 724,838 1 " 60,798 ¾ " 0,483 1½" 7,154* 1 " 42,338*	183,492 93,004	113 Br. 9 OP.

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1932 TO NOVEMBER 30, 1932**

Proj. No.	Name	County	Length miles	Funds		
				Federal	State	Other
2 & 123	Falls City South	Richardson	2.159	\$ 28,056.44	\$ 51,455.37	
E2-III	Falls City-Nebr. City	Richardson	2.219	82,534.99	7,133.44	
3	Grand Island West	Hall		14,791.78	14,791.78	
E3-II	Grand Island-Shelton	Hall	7.144	135,578.15		
E3-III	Grand Island-Shelton	Hall	7.231	151,544.89	18,790.00	
E3-III	Grand Island-Shelton	Buffalo	0.630	13,177.92	1,640.00	
14A & 158A	O'Neill-Atkinson	Holt	18.600	24,112.41	28,964.98	
E18-III	Lincoln-Beatrice	Lancaster	9.200	254,742.01	7,600.00	
E18-IV	Lincoln-Beatrice	Gage	11.800	332,927.20	9,815.00	
28	Nebr. City-Plattsmouth	Otoe			300.00	
E28 & 256A	Union West	Cass	6.196	188,370.80	3,500.00	
30A	Beaver City-Arapahoe	Furnas	5.700		4,826.30	
38	Curtis-Stockville	Frontier	12.090		6,817.59	
E39	Lexington-Overton	Dawson	13.500	350,513.78	21,080.00	
E45C	Harrison-Crawford	Sioux	1.456	10,095.90	17.91	
E45D	Harrison-Crawford	Dawes	4.276	62,312.12	52.97	
46	Bartley-McCook	Red Willow	16.750	5,487.82	5,739.06	
E46	Bartley-McCook	Red Willow	4.209	57,263.66	366.16	
E55AB	Milford-Dorchester	Saline	2.798	87,136.80	3,598.79	
E56 & 128AB	Seward East and West	Seward	5.000	71,931.49	18,079.60	
60L	St. Paul-Wolbach	Howard			1,964.29	
E67A	Oxford-Bartley	Furnas	0.860	37,074.85	300.00	
E68A	Trenton-McCook	Hitchcock		14,503.42		
76L	Alliance-Chadron	Box Butte	1.978		2,710.18	
76M	Alliance-Chadron	Dawes	4.100		6,295.18	
79A	Bridgeport North	Morrill			8,162.15	
E79BD	Baird-Broadwater	Morrill	8.721	89,091.69	5,075.60	
80E	Mullen-Hecla	Hooker	6.873		633.30	
E87A	Norfolk-Stanton	Madison	2.601	59,609.04	4,394.39	19,637.31
E87B	Norfolk-Stanton	Stanton	1.822		13,995.30	
89K	Harrop-Bassett	Rock	34.000		59,573.63	
89L	Harrop-Bassett	Loup	11.347		2,882.38	
96K	Arnold-Stapleton	Logan	4.850		2,871.00	
E114B	Trenton-Max	Hitchcock	0.568	15,119.55		
115A & 278A	Columbus-Clarks	Platte	1.257	212,732.94	5,000.00	
115B	Columbus-David City	Platte	0.191		423.50	
115B	Columbus-David City	Polk	0.095		211.75	
115B	Columbus-David City	Butler	0.095		211.75	
E123	Falls City South	Richardson	1.126	105,795.43	114.08	1,088.50
124BC	Hay Springs-Chadron	Dawes	11.886	18,098.82	18,765.33	
124K	Hays Springs-Chadron	Dawes	2.141		6,784.47	
125A	Long Pine-Alnsworth	Brown	7.690		3,421.54	
126	Culbertson-Hayes Cen.	Hayes	11.000		5,850.75	
133C	Lincoln-Eagle	Cass		20,704.09	25,628.09	
133E	Lincoln-Eagle	Lancaster	8.719	82,005.63	85,065.77	
E134AB	Milford-Dorchester	Seward	11.993	404,777.00	20,500.00	
138E	Ft. Crook-Omaha	Sarpy			1,976.26	
141K	Bassett-Long Pine	Rock	10.740		7,693.40	
E145A	Holdrege-Axtell	Phelps		181,740.82	1,525.00	
E146A	Ogallala-Belmar	Keith	1.547	65,315.20	3,200.00	

DEPARTMENT OF PUBLIC WORKS

141

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1932 TO NOVEMBER 30, 1932—Continued

Total Cost	Earth	Paving	Gravel		No. bridges, under- passes and over- passes	Date awarded
			2"	3"		
\$ 79,511.81	2.159R	Conc.	2.159			7- 1-32
89,668.43	2.219	Conc.	2.219		2 Br.	1932
29,583.56	4.339R	Oil	4.339			7- 1-32
135,578.15	7.144R	Conc.	7.144			10- 3-32
170,334.89	7.231	Conc.	7.231			10- 3-32
14,817.92	0.630	Conc.	0.630			10- 3-32
53,077.39	5.300R	Bit. Mat	18.600			6- 3-32— 7- 1-32
262,342.01	3.600					
	5.600R	Conc.	9.200		1 Br.	9-22-32
342,742.20	5.800					
	6.000R	Conc.	11.800		1 Br.	9-22-32
300.00						8-25-32
191,870.80	6.196R	Conc.	6.196		4 Br.	8-27-32
4,826.30			1 1/2 " 5.700			6- 6-32— 8-25-32
6,817.59			1 1/2 " 12.090			1932
371,598.78	14.500	Conc.	11.500		6 Br.	9-14-32
10,113.81	1.456					10- 3-32
62,365.09	4.276				3 Br.	10- 3-32
11,226.88		Bit. Mat	5.873			7- 1-32
57,629.82	4.209				2 Br.	1932
90,645.59	2.798R	Conc.	2.798		1 Br.	9-14-32
90,011.09	5.000				2 Br.	1932
1,964.29					1 Br.	4- 1-32
37,374.85	0.860R				1 Br.	10- 3-32
14,503.42					1 Br.	1932
2,710.18			1 1/2 " 1.978			9- 8-32
6,295.18			1 1/2 " 4.100			9- 8-32
8,162.15	0.328R	Conc.	0.328			4-29-32
94,167.29	8.721				4 Br.	9-14-32—10- 6-32
633.30		Bit. Mat	0.231			9- 7-32
83,640.64	2.601	Conc.	1.666	1 1/2 " 0.935	2 Br.	10- 3-32
13,995.30	1.822			1 1/2 " 1.822	7 Br.	10- 3-32
59,573.63	27.000R			3/4 " 27.000		5-13-32— 9-14-32
2,882.38				1 1/2 " 11.347		5-13-32— 8- 2-32
2,871.00	4.850					3-22-32— 7-18-32
15,119.55	0.568R				1 Br.	10- 3-32
217,732.94	1.257	Conc.	1.257		2 Br.	8-27-32
423.50				1/2 " 0.191		5- 2-32
211.75				1/2 " 0.095		5- 2-32
211.75				1/2 " 0.095		5- 2-32
107,598.01	1.126R	Conc.	1.126		1 Br., 1 OP.	1932
36,864.15	11.886R	Bit. Mat	11.886			7- 1-32— 7-18-32
6,784.47	2.141R	Bit. Mat	2.141			6-30-32
3,421.54				1 " 7.690*		4- 8-32
5,650.75	11.000R					7-15-32— 8-11-32
46,332.18	1.931R	Conc.	1.931			7- 1-32
167,071.40	7.850R	Conc.	7.850			7- 1-32
425,277.00	1.600				3 Br.	
1,976.26	10.363R	Conc.	11.963		1 UP.	9-14-32—10- 6-32
7,693.40				1 " 10.740		1932
163,265.82	7.576R	Conc.	6.217			4- 8-32
68,515.20	1.547				1 Br.	9-14-32
						8-27-32

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JAUARY 1, 1932 TO NOVEMBER 30, 1932—Continued

Proj.	Name	County	Length miles	Funds		
				Federal	State	Other
147AB	Kimball-Sidney	Kimball		13,721.24	14,221.24	
E149AC	Lodgepole-Potter	Cheyenne	5.316	47,831.09	3,000.00	
E149B	Lodgepole-Potter	Cheyenne	5.798	117,409.22	2,600.00	11,181.80
149D	Lodgepole-Potter	Cheyenne	10.214	20,297.02	6,000.00	
149F	Sidney-Lodgepole	Cheyenne	6.977	17,123.10	17,277.84	
E155A	Havelock-Ceresco	Lancaster	2.040	40,040.05	1,200.00	
E158B	O'Neill-Stuart	Holt	9.517	28,732.47	2,500.00	
E170A	Brady-Vroman's Cross	Lincoln	1.564	58,592.06	2,910.40	10,604.79
172	West Point-Wisner	Cuming	1.476	21,193.47	36,428.31	
175A	College View-Bennett	Lancaster	11.141	7,952.04	9,022.04	
179	Papillion Creek Bridge	Sarpy			1,520.66	
E183B	Gretna-Kennard	Douglas	0.266		5,630.31	
E183B	Gretna-Kennard	Washington	3.503	17,084.56	1,000.00	
184	Elwood-Stockville	Gosper	11.540		4,446.31	
193C	Ord-Arcadia	Valley	7.328		155.00	
202I	Crookston-Valentine	Cherry	11.309	32,891.60	33,051.60	
203L	Orchard West	Holt	2.900		1,145.85	
203L	Orchard West	Antelope	3.500		2,005.26	
E224D	Ogallala-Brule	Keith	9.018	73,286.22	14,261.04	
E225	Lincoln-Woodlawn	Lancaster	3.612	96,057.12	3,900.00	
E229	Tekamah-Decatur	Burt	1.232	28,988.75	2,500.00	
E236A	Minatare-Angora	Scotts Bluff	7.187	63,443.15	4,113.55	
E236A	Minatare-Angora	Morrill	1.994	17,602.02	1,159.25	
242A	Bridgeport-Alliance	Box Butte	8.167		35,117.19	
242B	Bridgeport-Alliance	Morrill	12.734		54,735.51	
E243B	Palisade-Beverly	Hitchcock	0.511	15,745.06		
244	Elwood-Stockville	Frontier	7.013		5,004.06	
254C	Arapahoe-McCook	Furnas	1.014	1,004.77	1,051.58	
254C	Arapahoe-McCook	Red Willow	6.800	6,341.97	6,527.73	
255C	Sterling-Tecumseh	Johnson	11.733	12,612.80	12,612.80	
258C	Fremont-Blair	Washington	1.260	774.44	774.44	
E258C	Arlington-Fremont	Washington		2,667.28		
258D	Fremont-Blair	Dodge	6.635	3,260.51	3,260.51	
E260	Big Springs-Chappell	Deuel	5.272	11,093.78	2,000.00	
261K	Schuyler-Pilger	Stanton	8.008		16,991.20	
261-L	Schuyler-Pilger	Colfax	1.197		4,379.45	
262A	West Point-Pilger	Cuming		19,296.36	21,750.23	
263B	Fremont-Hooper	Dodge			1,029.40	2,058.82
E263B	Fremont-Hooper	Dodge	3.591	90,879.89	5,000.00	
E266A	Hooper-West Point	Dodge	0.680	53,349.30	400.00	
271B	So. Sioux City-Allen	Dakota	4.312	39,358.27	50,449.17	
E271B	So. Sioux City-Allen	Dakota	4.398	107,946.96		
E271B	So. Sioux City-Allen	Dixon	0.319	7,993.29		
274D	Norfolk-Wayne	Madison			1,239.56	
278B	Columbus-Central City	Merrick	14.877	150,225.97	171,225.97	
278CE	Clarks-Columbus	Platte	11.731	120,243.26	127,743.37	
280L	Niobrara-Verdel	Knox	16.785		6,269.17	
284C	Merna-Selmo	Custer	11.384	8,460.11	8,460.12	
285K	Alma South	Harlan	0.250		195.99	
285L	Alma South	Harlan	6.172		55,568.04	

DEPARTMENT OF PUBLIC WORKS

143

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1932 TO NOVEMBER 30, 1932—Continued

Total Cost	Earth	Paving		Gravel		No. bridges, underpasses and overpasses	Date awarded
				2"	3"		
27,942.48		Bit. Mat	14.809				7- 1-32
50,831.09	5.316R					2 Br.	10- 3-32
131,191.02	4.700					1 Br., 1 OP.	10- 3-32
26,297.02	1.098R	Bit. Mat	10.214			1 UP	1932
34,400.94	6.977						10- 3-32
							7- 7-32
41,240.05	0.837R						
	1.203					5 Br.	10- 3-32
31,232.47	9.517						9-14-32
73,107.25	1.564	Conc.	1.564			1 OP.	10- 3-32
57,619.78	1.476	Conc.	1.476				5- 2-32
18,974.08	5.874R	Bit. Mat	5.874				5-30-32— 7- 1-32
1,520.66							1932
5,630.31	0.266						9-11-32
18,084.56	3.503						9-11-32
4,446.31				1½"	6.835		7- 7-32
155.00							5-23-32
65,943.20		Oil	11.309				7- 1-32
1,145.85				1 "	2.000*		4- 1-32
2,005.26				1 "	3.500*		4- 1-32
87,547.26	9.018	Bit. Mat	9.018			9 Br.	10- 7-32
99,957.12	1.590						
	2.052	Conc.	3.642				8-27-32
31,486.75	1.232R					1 Br.	10- 3-32
67,556.70	7.187					5 Br.	10- 3-32
18,761.27	1.894					1 Br.	10- 3-32
35,117.19		Bit. Mat	8.167				6-30-32
54,735.51		Oil	12.734				6-30-32
15,745.06	0.511			1½"	7.013	1 Br.	1932
5,004.06							7- 7-32
2,056.35		Bit. Mat	1.014				7- 1-32
12,769.70		Bit. Mat	6.800				7- 1-32
25,225.60							7- 1-32
						11.733	
1,548.88						1.260	7- 1-32
2,667.28							10- 3-32
6,521.02				1½"	0.400*	6.235	7- 1-32
13,093.78		Bit. Mat	5.272				1932
16,991.20	8.008			1½"	8.008		6-30-32— 9-14-32
4,379.45	1.197			1½"	1.197	2 Br.	6-30-32
41,046.59	1.484	Conc. Brick	1.393				7-16-32
			0.092				10- 5-32
3,088.22							10- 3-32
95,879.89	3.591R	Conc.	3.591			1 Br.	10- 3-32
53,749.30	0.689R					1 Br.	9-14-32
						0.689	
89,807.44	4.312	Conc.	4.312				7- 1-32
107,946.96	4.308R	Conc.	4.308				1932
7,993.29	0.319R	Conc.	0.319				1932
1,239.56							1932
321,451.94	14.877R	Conc.	14.877			1 Br.	7- 1-32
247,986.63	4.850						
	6.881R	Conc.	11.731				7- 1-32
6,269.17				1 "	16.765*		4- 1-32
16,920.23							7- 1-32
195.99				1½"	0.250		10-19-32
35,568.04	6.172	Conc.	1.222	1½"	4.950		6-30-32—10-19-32

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JAUARY 1, 1932 TO NOVEMBER 30, 1932—Continued

Proj.		Length		Funds		
No.	Name	County	miles	Federal	State	Other
286L	Lynch-Spencer	Boyd	3.484		1,935.00	
290	Culbertson-Hayes Cen.	Hitchcock	7.300		3,914.50	
292K	Loup City-St. Paul	Howard	5.300		2,916.86	
292L	Loup City-St. Paul	Sherman	4.000		2,338.49	
293B	McCook South	Red Willow	1.519	31,840.92	31,840.92	
296AB	Ogallala East	Keith	18.714		56,015.16	
E297C	Gothenburg-Farnam	Dawson	8.021	50,119.37	4,500.00	
300A	Morrill-Henry	Scotts Bluff	6.007	5,850.09	6,150.10	
300C	Scottsbluff-Henry	Scotts Bluff	5.918	28,537.57	28,537.53	
300D	Scottsbluff-Henry	Scotts Bluff	1.386	6,337.66	6,337.66	
300D	Scottsbluff-Henry	Sioux	0.167	762.71	762.71	
304L	Winslow-Oakland	Dodge	11.367		6,518.82	
304M	Winslow-Oakland	Burt	6.880		3,917.79	
308C	Ragan West	Harlan	4.039		11,698.89	
308D	Huntley West	Harlan	4.267		12,075.18	
313D	O'Neill-Bartlett	Holt	7.988	3,443.22	3,443.23	
313E	O'Neill-Bartlett	Wheeler		16,058.01	16,113.01	
316K	Bushnell West	Kimball	0.964		10,513.98	
317C	Ainsworth-Valentine	Cherry	5.161	78,305.32	77,620.15	
E317F	Ainsworth-Valentine	Brown	10.570	55,364.68	10,077.00	
321K	Thurston Spur	Thurston	1.405		3,007.26	
325A	Marsland-Belmont	Dawes	6.658	17,359.95	20,059.95	
325B	Crawford-Belmont	Dawes	11.371	141,795.42	3,795.84	
E326A	Decatur-Winnebago	Burt	3.861	37,792.92	736.48	
E326B	Decatur-Winnebago	Thurston	7.943	103,234.62	2,279.60	
E326C	Decatur-Winnebago	Thurston	7.650	85,294.84	2,103.00	
E328A	Franklin South	Franklin	6.823	121,719.36	7,972.04	
329A	Stromsburg-Silver Cr.	Polk	8.500	30,493.08	31,882.46	
602A	Osceola-Clarks	Polk	11.060		1,331.41	
606A	Stromsburg-Cen. City	Polk	11.996		4,927.23	
607F	Fairbury-Steele City	Jefferson	11.000		31,862.04	
614A	Valley-Colon	Saunders	0.682		225.33	
614C	Valley-Colon	Saunders	9.966		2,118.28	
619A	Albion-Fullerton	Boone	8.049		5,724.75	
620A	St. Edward-Cedar Rapids	Boone	7.880		5,608.57	
620C	St. Edward-Cedar Rapids	Boone	6.100		21,926.13	
621A	Lincoln-Valparaiso	Lancaster	15.780		9,684.05	
621B	Lincoln-Valparaiso	Saunders	2.099		1,288.14	
621C	Lincoln-North Bend	Dodge	0.607		170.54	
621C	No. Bend-Morse Bluffs	Saunders	1.142		320.10	
621D	Prague South	Saunders	7.187		3,945.37	
621E	Prague-Morse Bluffs	Saunders	2.700		636.90	
621F	Valparaiso North	Saunders	9.000		20,913.34	
624A	Harrisburg-Bridgeport	Banner	8.100		28,544.26	
627B	Miller-Sumner	Dawson	6.167		876.98	
627G	Arnold-Kearney	Dawson	11.525		8,349.00	
627H	Arnold-Kearney	Custer	15.237		37,700.23	
629	Auburn-Brownville	Nemaha	9.433		7,812.15	
631D	Creighton South	Antelope	9.982		45,621.92	
632B	Hoag-Plymouth	Gage	2.979		1,545.32	

DEPARTMENT OF PUBLIC WORKS

145

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1932 TO NOVEMBER 30, 1932—Continued

Total Cost	Earth	Paving	Gravel		No. bridges, under- passes and over- passes	Date awarded
			2"	3"		
1,935.00			1½"	3.484		5-13-32
3,914.50	7.300		1 "	5.300*		7-15-32—8-11-32
2,916.86			1 "	4.000*		4- 8-32
2,338.49						4- 8-32
63,681.84	1.519	Conc. 0.034			1.485	3 Br. 3- 4-32
56,015.16		Bit. Mat 18.714				6-30-32
54,619.37	8.021					1932
12,000.19		Bit. Mat 6.007				2 Br. 7- 1-32
57,075.15	-5.918	Bit. Mat 2.648				1 Br. 7- 1-32
12,075.32	1.386	Oil 3.270				7- 1-32
		Bit. Mat 1.386				7- 1-32
1,525.42	0.167	Bit. Mat 0.167				7- 1-32
6,518.82			1 "	2.400		
			1 "	8.967*		4- 1-32
3,947.79			1 "	6.880		4- 1-32
11,698.89	4.039		1½"	4.039		6-30-32—8-25-32
12,075.18	4.267		1½"	4.267		6-30-32—8-25-32
6,886.45					7.988	7- 1-32
32,171.02		Oil 7.085			3.647	7- 1-32
10,513.98	0.964				0.964	1 Br. 9-14-32
155,925.47	5.161	Oil 5.161				1 Br. 3- 4-32—7- 1-32
65,441.68	10.570					1 Br. 9-14-32
3,007.26	1.405		1½"	1.405		6-30-32—7-15-32
37,419.90	6.658		6 "	6.658		7- 1-32
145,591.26	11.371					8-27-32—10-17-32
38,529.40	3.861					1 Br. 9-23-32
105,514.22	7.943					2 Br. 10- 3-32
87,337.84	7.650					10- 3-32
129,091.40	6.823					2 Br. 10- 3-32
62,375.54	8.500				8.500	4 Br. 1932
1,381.41			1½"	11.060		4- 8-32
4,927.23			1 "	11.096*		4- 8-32
31,862.04	11.000					8 Br. 9-14-32
225.33			1 "	0.682*		4- 1-32
2,118.28			1½"	9.966*		4- 1-32
5,724.75			1 "	8.049*		4- 1-32
5,608.57			1 "	7.880*		4- 1-32
21,926.13	6.100					3 Br. 9-14-32
9,654.05			1 "	15.780*		4- 1-32
1,288.14			1 "	2.099*		4- 1-32
170.54			½"	0.607		4- 8-32
320.10			½"	1.142*		4- 8-32
3,945.37			1 "	7.187*		4- 1-32
636.90			½"	2.300*		
				0.400*		
20,913.34	9.000					1 Br. 4- 1-32
28,544.26	8.100					2 Br. 10-17-32
876.98			1 "	1.905*		1932
						4- 1-32
8,349.00			1½"	3.725		
			1½"	7.800*		3 Br. 5-25-32
37,700.23	*15.237		1½"	15.237		15 Br. 4-25-32—8-25-32
7,812.15			1 "	9.433		4- 1-32
45,621.92		Oil 9.982				6-30-32
1,545.32			1 "	2.979*		4- 1-32

**ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JAUARY 1, 1932 TO NOVEMBER 30, 1932—Continued**

Proj.		Length		Funds		
No.	Name	County	miles	Federal	State	Other
632C	Hoag-Plymouth	Jefferson	3.987		2,065.21	
632D	Upland-Daykin	Jefferson	9.000		4,364.25	
632J	Campbell East	Webster	14.939		34,875.89	
632J	Campbell East	Franklin	0.287		623.32	
635B	Anselmo-Victoria Springs State Park	Custer	5.800		4,006.79	
636A	Beatrice-DeWitt	Gage	13.032		6,760.25	
636B	Beatrice-DeWitt	Saline	0.329		170.66	
636C	Beatrice-Wilber	Saline	7.688		3,988.06	
637C	Wayside East	Dawes	1.700		2,614.99	
639A	Deverre-Atkinson	Holt	8.522		1,197.42	
639C	Deverre-Atkinson	Holt	6.410		767.91	
639D	Deverre-Atkinson	Holt	12.547		44,133.18	
640A	Pender-Walthill	Thurston	11.135		11,938.29	
643A	Rushville North	Sheridan	8.795		3,940.76	
643B	Rushville North	Sheridan	13.750		6,160.94	
644A	Syracuse-Weeping Water	Cass	3.031		2,431.48	
644B	Syracuse-Weeping Water	Otoe	10.842		7,455.02	
644C	DuBois South	Pawnee	2.500		3,763.53	
644D	Steinauer South	Pawnee	8.894		6,878.84	
644E	Tecumseh-Steinauer	Pawnee	3.759		2,973.84	
644F	Tecumseh-Steinauer	Johnson	7.246		5,612.49	
644G	Chalco-Pawnee City	Johnson	8.000		6,050.73	
644H	Chalco-Pawnee City	Otoe	4.937		1,648.74	
644J	Louisville-Weeping Water	Pawnee	3.500		4,475.74	
644K	Springfield-Louisville	Sarpy	0.500		5,219.61	
645D	Beaver City-Marion	Red Willow	6.988		4,122.69	
645E	Beaver City-Marion	Red Willow	10.000		5,100.00	
647C	Verdigre-Hartington	Knox	2.000		900.00	
647D	Verdigre-Hartington	Cedar	11.000		4,850.00	
647E	Bloomfield-Center	Knox	13.000		7,927.21	
650A	Ponca-Willis	Dakota	5.200		2,365.62	
650B	Ponca-Willis	Dixon	1.650		931.06	
650E	Fordyce-Willis	Cedar	11.000		5,000.00	
652C	Bartlett-Ericson	Wheeler	14.000		13,965.39	
665A	Blair-Nickerson	Washington	16.600		10,236.71	
665B	Blair-Nickerson	Dodge	3.200		1,155.00	
666C	Byron-Hardy	Nuckolls	6.000		6,382.50	
666D	Reynolds-Hubbell	Thayer	9.763		24,938.20	
666E	Reynolds-Hubbell	Jefferson	1.926		4,126.24	
666F	Byron West	Thayer	3.050		2,776.35	
668B	Ansley-Loup City	Custer	8.510		53,016.32	
670C	Hay Springs-Alliance	Sheridan	1.000		1,631.66	
672B	Butte Northwest	Boyd	6.000		3,712.50	
676A	Taylor-Brewster	Loup	0.500		420.40	
677A	Imperial-Grant	Perkins	11.838		11,496.72	

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
 JANUARY 1, 1932 TO NOVEMBER 30, 1932—Continued

Total Cost	Earth	Paving	Gravel		No. bridges, under- passes and over- passes	Date awarded
			2"	3"		
2,068.91			1 "	3,987*		4- 1-32
4,364.25			1 "	9,000*		4- 1-32
34,875.89	14,939				3 Br.	10-17-32
623.32	0.267					10-18-32
4,006.79			1 "	5,800*		4- 1-32
6,760.25			1 "	13,032*		4- 1-32
170.06			1 "	0.329*		4- 1-32
3,988.06			1 "	7,688*		4- 1-32
2,614.99	1,700		1 "	1,700	1 Br.	8-17-32
1,197.42					2 Br.	7- 1-32
767.91					1 Br.	4- 1-32
44,133.18		Oil 12,547			3 Br.	4- 1-32— 6-30-32
11,938.29			1½ "	11,135		6-30-32
3,940.76			1½ "	8,795		6-30-32
6,160.94			1½ "	13,750		6-30-32
2,431.38			1 "	2,031*		
			1½ "	1,000		4- 1-32
7,455.02	2,500		1½ "	10,842		4- 1-32
3,783.53			1½ "	2,500		1932
6,879.84			1 "	8,804*		4- 1-32
2,973.84			1 "	3,759*		4- 1-32
5,612.49			1 "	7,246*		4- 1-32
6,050.73			1 "	7,667*		
			¾ "	0,333*		4- 1-32
1,648.74			1 "	4,937*		4- 1-32
4,475.74	3,500		1½ "	3,500		8-25-32— 9-12-32
5,219.61	0,500		1½ "	0,500		1932
4,122.69	2,065					6-30-32
5,106.00	10,000					9- 6-32
900.00			1 "	2,000		8-14-32
4,950.00			1 "	11,000		8-14-32
7,927.21			1 "	13,000		6-30-32— 8- 8-32
2,365.62			1 "	5,200*		4- 1-32
931.06			1 "	1,650*		4- 1-32
5,000.00			1 "	11,000		8-14-32
13,965.39	14.00					9-15-32
10,236.71			1½ "	16,600		8-25-32
1,155.00			1 "	3,200		8-25-32
6,382.50	6,000		1½ "	6,000		8-25-32
24,938.20	9,763				3 Br.	8-25-32
4,126.24	1,928					8-25-32
2,776.35			1½ "	3,050		8- 7-32— 8-25-32
53,016.32	8,510				6 Br.	8-25-32
1,631.66			1½ "	1,000		9-14-32
3,712.50			1½ "	6,000		5-13-32— 5- 8-32
420.40	0,500					4-30-32
11,496.72			1 "	1,347		
			1½ "	10,491		6-30-32

REPORT OF SECRETARY

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JAUARY 1, 1932 TO NOVEMBER 30, 1932—Continued

Proj. No.	Name	County	Length miles	Funds		
				Federal	State	Other
677B	Imperial-Grant	Chase	13.390		3,940.82	
678A	Hayes Center-Palisade	Hayes	13.348		7,411.01	
679B	Springview North	Keya Paha	9.000		7,048.50	
680K	Hemingford-Marsland	Box Butte	3.000		850.00	
684A	Lyons-Decatur	Burt	15.650		11,663.93	
685B	Broken Bow-Arcadia	Valley	4.000		5,000.00	
685C	Broken Bow- Westerville	Custer	21.812		44,487.43	
687A	Falls City-Rulo	Richardson	3.150		4,787.45	
687B	Falls City-Rulo	Richardson	4.200		14,747.90	
688B	Beaver City-Orleans	Furnas	6.877		8,862.06	
688C	Beaver City-Orleans	Harlan	2.050		4,780.50	
690	Barada-Shubert	Richardson	6.000		8,752.59	
691A	Dorchester South	Saline	12.000		8,567.63	
692A	Loup City-Sweetwater	Sherman	15.800		8,689.10	
694A	Clay Center-Geneva	Clay	12.000		9,200.55	
694B	Waco-Exeter	Fillmore	11.250		9,103.42	
696	Chambers East	Holt	4.829		3,476.35	
697A	Crofton-Fordyce	Knox	0.500		275.00	
697B	Crofton-Fordyce	Cedar	6.500		3,000.00	
697C	Crofton-Fordyce	Knox	20.000		53,867.74	
704A	Meadow Grove- Newman Grove	Madison	12.000		21,843.60	
705A	Appr. to Haugen S. A. Bridge	Rock	1.000		717.75	
705B	Appr. to Haugen S. A. Bridge	Keya Paha	1.000		717.75	
709A	Orleans East	Harlan	4.299		14,994.04	
712A	Gordon South	Sheridan	11.000		7,989.57	
713A	Appr. to Odessa S. A. Bridge	Buffalo	1.000		745.00	
713D	Appr. to Odessa S. A. Bridge	Phelps	0.200		430.00	
715A	Dannebrog-Midway	Howard	7.000		3,451.14	
716A	Greeley-Scotia	Greeley	14.800		17,092.90	
717A	Gulde Rock South	Webster	4.200		2,434.35	
718A	Dickens-Wellfleet	Lincoln	2.000	*	200.00	
TOTALS				\$5,325,858.58	\$2,500,928.48	\$ 45,171.22

Symbols:

R Regrading
 * Second Course
 Conc. Concrete
 Bit. Mat Bituminous Mat
 Oil Oiled Sand
 Br. Bridges
 OP Overpass
 UP Underpass

ESTIMATED COST OF WORK FOR WHICH CONTRACTS WERE AWARDED,
JANUARY 1, 1932 TO NOVEMBER 30, 1932—Concluded

Total Cost	Earth	Paving	Gravel	2"	3"	No. bridges, under-passes and over-passes	Date awarded
3,940.82			¾"	6.269			
			1"	6.158			
7,411.01			1½"	0.963			6-30-32
7,048.50			1"	9.000		2 Br.	6-30-32
950.00	3.000				3.000		7-22-32— 9-16-32
11,663.93			1"	15.650*			10-10-32
							4- 1-32
5,000.00	4.000						9-24-32
44,487.43	17.400		1½"	3.150*		1 Br.	7-16-32— 9-14-32
4,787.45							4- 1-32
14,747.90	4.200		1½"	6.877		1 Br.	9-14-32
8,862.06							8-25-32— 6-30-32
4,780.50	2.050		1½"	2.050		1 Br.	6-30-32
8,752.59			1½"	6.000*			4- 1-32
8,567.63			1½"	12.000			6-30-32
9,689.10			1"	15.800*			4- 1-32
9,200.55			1½"	12.000			6-30-32
9,103.42			1½"	11.250			6-30-32
3,476.35			1½"	4.829			6-30-32
275.00			1"	0.500			8-14-32
3,000.00			1"	6.500			8-14-32
53,667.74	20.000		1"	20.000			6-30-32— 8-11-32
21,843.60	12.000		1½"	12.000			9-14-32
717.75					1.000		3-17-32
717.75					1.000		3-17-32
14,694.04	4.299		1½"	4.299			8-25-32
7,989.57	11.000		1½"	2.000			6-30-32— 9-11-32
745.00	1.000		1½"	1.000			8- 2-32
430.00	0.200		1½"	0.200			8- 2-32
3,451.14			1½"	7.000			8-25-32
17,092.90	14.800		1½"	14.800			8-25-32—10- 7-32
2,434.35			1½"	4.200			1932
200.00	2.000						8-10-32
\$ 7,871,958.28	465.658	Conc. 145.781	6 "	6.658	27.468	32.964	154 Br.
	209.656R	Brick 0.092	1½"	278.171			3 OP.
		Bit. Mat. 128.821	1 "	114.858			2 UP.
		Oil 66.427	¾"	33.269			
			½"	0.988			
			1½"	39.252*			
			1 "	219.359*			
			¾"	0.333*			
			½"	13.408*			

**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 paying 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 and the 1931 Legislatures 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 30, 1932:

Proj. No.	Institution	Length miles	Type of improvement	Amount
S. A. 6	Geneva Girls' Training School	0.97	3" Gravel surfacing	\$ 3,295.22
S. A. 7	Geneva Girls' Training School	0.76	3" Gravel surfacing 3" Resurfacing	2,890.05
S. A. 8	Kearney Boys' Industrial 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 and $\frac{3}{4}$ " and $1\frac{1}{2}$ " resurfacing	6,067.07
S. A. 12	Peru State Normal School	6.12	3" Gravel surfacing	22,917.98

Proj. No.	Institution	Length miles	Type of improvement	Amount
S. A. 13	Beatrice—State Institution for Feeble Minded.....	0.65	3" Gravel surfacing	1,869.27
S. A. 14	Norfolk State Hospital	2.07	3" Gravel surfacing	6,097.65
107-K	National Guard Camp Road	0.414	Grading and 1" gravel surfacing	1,535.36
603-A	Stolley Park Road....	0.91	Concrete pavement	21,031.79
605-A	Milford Soldiers' and Sailors' Home	0.250	3" Gravel surfacing and bridge	919.38
608-A	Gretna State Fish Hatchery	0.170	Grading, 1½" gravel surfacing, bridge and 1" resurfacing	4,853.64
608-B	Gretna State Fish Hatchery	5.391	Grading, draining, 1½" gravel surfacing and 1" resurfacing	34,130.56
616	Havelock—State Farm	0.373	Bituminous concrete pavement	9,441.87
635-A	Victoria Springs State Park—Merna	10.035	Grading, 2" gravel surfacing and ½" resurfacing	25,842.14
659	Nebraska City School for the Blind		Bridge	7,997.57
669-A	Hastings—Ingleside	0.899	Grading, paving	24,278.07
675-A	Massacre Canyon Park Road	0.151	Grading	500.00
Total from 1925 to November 30, 1932.....				\$182,582.18

AVERAGE CONTRACT PRICES FOR 1917-26

Item	Unit	1917-18		1919-20		1921-22		1923-24		1925-26	
		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.....	station					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 sur- facing material.....	cu. yd. mi.			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
Gravel surfacing, 2" depth.....	sq. yd.			144,432	0.247			1,872,355	0.160	7,300,985	0.1405
Gravel surfacing, 3" depth.....	sq. yd.					132,231	0.200	2,429,873	0.205	11,505	0.2010
Gravel surfacing, 4" depth.....	sq. yd.			368,498	0.325	815,863	0.388	1,529,694	0.243	271,963	0.2505
Gravel surfacing, 6" depth.....	sq. yd.							40,483	0.239	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 pavement.....	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	8,101	29.980	2,858	23.070	1,258,896	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

(Concluded on following page)

AVERAGE CONTRACT PRICES FOR 1917-26

Item	Unit	1917-18		1919-20		1921-22		1923-24		1925-26	
		Quantity	Price	Quantity	Price	Quantity	Price	Quantity	Price	Quantity	Price
18" reinforced concrete pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	9,120	1.87759
24" reinforced concrete pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	17,122	2.69674
30" reinforced concrete pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	3,756	3.69545
36" reinforced concrete pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	3,752	4.93059
42" reinforced concrete pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
48" reinforced concrete pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
60" reinforced concrete pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	642	7.75386
18" corrugated metal pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	24	13.8167
24" corrugated metal pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	9,706	1.64020
30" corrugated metal pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	16,290	2.79577
36" corrugated metal pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	3,756	3.60221
42" corrugated metal pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	3,918	4.44630
48" corrugated metal pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	78	7.16667
60" corrugated metal pipe	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	1,046	7.28618
Cable guard rail	lin. ft.	.....	.....	.....	.....	.....	.....	.....	.....	972	10.45680
Anchors for cable guard rail	each	.....	.....	.....	.....	52,806	0.457	85,032	0.402	106,194	0.3901
Wood guard rail	lin. ft.	.....	.....	43,469	0.740	Included above	.....	782	5.334	1,126	6.1576
Woven wire guard rail	lin. ft.	.....	.....	.....	.....	107,034	0.464	.....	.....	.....	.....
		.....	.....	.....	.....	.....	.....	90,354	0.506	.....	0.4681

DEPARTMENT OF PUBLIC WORKS

155

AVERAGE CONTRACT PRICES FOR 1927-28

Item	Unit	Quantity	Unit prices		Amount
			Minimum	Average	
Grading Items					
Solid rock excavation.....	cu. yd.	29,215	\$0.60	\$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. sta.	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. mi.	362,210	.25	.44	160,205.30
Sand gravel surfacing Items					
Class "A", 4" depth.....	sq. yd.	41,021	.19	.19	7,711.95
Class "A", 3" depth.....	sq. yd.	9,086,213	.08	.20	1,803,000.39
Class "A", 2" depth.....	sq. yd.	4,423,627	.05	.14	613,297.88
Class "A", 1½" depth.....	sq. yd.	1,774,135	.04	.09	161,450.13
Class "A", 1" depth.....	sq. yd.	2,557,770	.04	.07	188,026.98
Class "C", 3" depth.....	sq. yd.	1,012,930	.09	.15	156,067.72
Class "C", 1" depth.....	sq. yd.	392,000	.04	.05	20,214.90
Class "D", 3" depth.....	sq. yd.	174,600	.15	.15	26,898.40
Class "D", 1" depth.....	sq. yd.	270,780	.06	.06	16,214.85
Pavement Items					
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 & 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
Culvert Items					
(a) General					
Common excavation.....	cu. yd.	45,571	.45	.76	36,025.80
Wet excavation.....	cu. yd.	105	2.00	2.81	295.00
Reinforced concrete.....	cu. yd.	23,610	16.00	19.78	466,887.36
(b) Furnishing, hauling & installing culvert pipe for roadway culverts					
18" reinforced concrete.....	lin. ft.	3,278	1.40	1.82	5,975.90
24" reinforced concrete.....	lin. ft.	9,534	2.20	2.54	24,182.24
30" reinforced concrete.....	lin. ft.	2,014	2.90	3.39	6,836.50
36" reinforced concrete.....	lin. ft.	2,436	3.75	4.74	11,557.90
48" reinforced concrete.....	lin. ft.	168	7.00	7.50	1,300.00
60" reinforced concrete.....	lin. ft.	60	11.00	11.53	692.00
18" corrugated metal.....	lin. ft.	6,885	1.50	1.70	11,734.89
24" corrugated metal.....	lin. ft.	18,835	2.00	2.66	50,182.71
30" corrugated metal.....	lin. ft.	5,279	3.00	3.36	17,744.88
36" corrugated metal.....	lin. ft.	3,896	4.75	5.15	20,081.77
42" corrugated metal.....	lin. ft.	34	5.30	5.30	180.30
48" corrugated metal.....	lin. ft.	188	7.00	8.36	1,564.89
60" corrugated metal.....	lin. ft.	216	10.20	10.48	2,251.60
84" corrugated metal.....	lin. ft.	340	11.50	11.91	5,069.44
(c) Furnishing, hauling & installing culvert pipe for driveways					
18" reinforced concrete.....	lin. ft.	734	1.30	1.46	1,070.10
24" reinforced concrete.....	lin. ft.	408	2.00	2.22	906.80
30" reinforced concrete.....	lin. ft.	146	2.75	2.79	407.90
18" corrugated metal, class "A".....	lin. ft.	112	1.65	1.81	202.40
18" corrugated metal, class "B".....	lin. ft.	2,622	1.20	1.46	3,836.90
24" corrugated metal, class "B".....	lin. ft.	954	2.10	2.36	2,249.40
30" corrugated metal, class "B".....	lin. ft.	208	2.64	2.80	583.20
18" vitrified clay.....	lin. ft.	48	1.50	1.50	72.00
Miscellaneous Items					
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	34,648.36
Braces for woven wire guard rail.....	each	946	1.00	1.56	1,473.90
Extra posts.....	each	355	.30	.98	347.50

AVERAGE CONTRACT PRICES FOR 1929-30

Item	Unit	Quantity	Unit prices		Amount
			Minimum	Average	
Grading Items					
Hauling & installing reinforced concrete & vitrified clay driveway culverts	lin. ft.	2,710	\$0.07	\$0.80	\$2,153.96
Hauling & installing corrugated metal driveway culverts	lin. ft.	11,734	.07	.54	6,305.02
Unclassified excavation (includes "rock" which had a separate classification prior to this biennium)					
Station excavation	station	7,455.24	8.00	10.62	79,147.67
Overhaul	cu. yd. sta.	6,531,609	.02	.02	130,632.18
Top soil or sand clay excavation	cu. yd.	459,535	.10	.26	118,422.03
Hauling top soil or sand clay	cu. yd. ml.	459,443	.20	.40	183,647.70
Sand gravel surfacing items					
Class "A", 3" depth	sq. yd.	4,290,381	.0789	.18	781,830.32
Class "A", 2" depth	sq. yd.	4,417,785	.0518	.12	532,893.00
Class "A", 1½" depth	sq. yd.	3,835,360	.0446	.083	318,927.71
Class "A", 1" depth	sq. yd.	5,014,892	.0275	.063	316,552.36
Class "A", ¾" depth	sq. yd.	6,107,686	.0323	.046	281,244.37
Class "A", ½" depth	sq. yd.	10,542,333	.015	.033	346,181.27
Class "C", 6" depth	sq. yd.	125,600	.1398	.14	17,558.88
Class "C", 3" depth	sq. yd.	62,900	.1653	.165	10,397.37
Class "C", 2" depth	sq. yd.	137,800	.05755	.058	7,930.39
Class "C", 1½" depth	sq. yd.	95,700	.08043	.08	7,697.15
Class "C", 1" depth	sq. yd.	115,900	.0445	.048	5,572.30
Class "D", 3" depth	sq. yd.	356,855	.134	.149	53,101.67
Class "D", 1½" depth	sq. yd.	95,500	.0447	.045	4,268.85
Class "E", ½" depth	sq. yd.	129,400	.0274	.027	3,558.50
Class "G", 1½" depth	sq. yd.	23,400	.0945	.085	2,211.30
Class "G", 1" depth	sq. yd.	87,400	.0277	.039	3,400.42
Fuel oil applied to sand gravel	gal.	937,316	.084	.093	86,961.16
Discing & manipulating sand for oil surfacing	sq. yd.	231,329	.078	.085	19,946.49
Pavement Items					
Unclassified excavation	cu. yd.	1,752,549	.17	.27	479,020.58
Shoulder finishing	station	5,844.05	5.00	9.65	56,400.26
Jetting fills	cu. yd.	87,922	.05	.079	6,945.80
Concrete pavement (9"-6"-9" depth, 8 sacks cement per cu. yd.)	sq. yd.	2,340,209.93	1.44	1.70	3,968,015.65
Bituminous concrete surface course (modified Topeka type)					
Concrete base course	sq. yd.	16,568	1.02	1.02	16,899.36
Concrete base course & curb	sq. yd.	10,890	1.02	1.41	15,367.80
Reinforcing steel	lb.	2,967	1.29	1.29	3,827.43
Reinforcing fabric	lb.	159,250	.03	.041	6,483.20
Reinforcing fabric	lb.	275,552	.05	.058	16,896.12
Culvert Items					
(a) General					
Unclassified excavation	cu. yd.	70,363	.30	.80	55,922.50
Wet excavation	cu. yd.	1,342	1.00	2.19	2,945.00
Class "A" concrete	cu. yd.	22,522.48	13.50	16.74	377,061.86
Class "AA" concrete	cu. yd.	84.4	18.00	22.80	1,924.50
Reinforcing steel	lb.	1,837,934	.03	.048	89,019.17

(Concluded on following page)

AVERAGE CONTRACT PRICES FOR 1929-30

Item	Unit	Quantity	Unit prices		Amount
			Minimum	Average	
(b) Furnishing, hauling & installing culvert pipe for roadway culverts					
18" reinforced concrete.....	lin. ft.	5,206	\$1.40	\$1.77	\$ 9,202.44
24" reinforced concrete.....	lin. ft.	11,068	1.70	2.44	27,019.72
30" reinforced concrete.....	lin. ft.	2,270	2.75	3.22	7,302.56
36" reinforced concrete.....	lin. ft.	4,128	3.00	4.65	19,212.62
42" reinforced concrete.....	lin. ft.	162	5.00	6.38	1,033.40
48" reinforced concrete.....	lin. ft.	1,232	6.00	8.39	10,333.88
60" reinforced concrete.....	lin. ft.	20	12.00	12.48	249.60
15" corrugated metal.....	lin. ft.	20	1.40	2.04	40.80
18" corrugated metal, class "L" or "M".....	lin. ft.	11,148	1.25	1.84	20,519.18
24" corrugated metal, class "L" or "M".....	lin. ft.	28,632	1.90	2.41	69,053.41
30" corrugated metal, class "L" or "M".....	lin. ft.	7,514	2.10	3.19	23,957.76
36" corrugated metal, class "L" or "M".....	lin. ft.	10,206	1.75	4.70	48,422.00
42" corrugated metal, class "L" or "M".....	lin. ft.	556	5.25	6.31	3,507.80
48" corrugated metal, class "L" or "M".....	lin. ft.	1,660	7.00	7.96	13,207.72
60" corrugated metal, class "L" or "M".....	lin. ft.	758	8.30	10.44	7,913.76
84" corrugated metal, class "L" or "M".....	lin. ft.	140	15.30	15.57	2,180.40
10" vitrified clay.....	lin. ft.	120	1.20	1.20	144.00
12" vitrified clay.....	lin. ft.	545	1.25	1.34	731.25
(c) Furnishing driveway culvert pipe, delivered freight paid at railway station					
18" reinforced concrete.....	lin. ft.	4,514	1.05	1.35	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	2.69	902.24
36" reinforced concrete.....	lin. ft.	440	3.00	4.14	1,821.36
48" reinforced concrete.....	lin. ft.	40	7.40	7.40	296.00
15" corrugated metal, class "L" or "M".....	lin. ft.	24	1.31	1.31	31.44
18" corrugated metal, class "L" or "M".....	lin. ft.	1,689	.50	1.52	2,565.06
24" corrugated metal, class "L" or "M".....	lin. ft.	1,274	.65	1.78	2,263.16
30" corrugated metal, class "L" or "M".....	lin. ft.	238	2.45	2.82	670.62
18" corrugated metal, class "N" or "O".....	lin. ft.	7,701	1.23	1.41	10,839.25
24" corrugated metal, class "N" or "O".....	lin. ft.	2,914	1.60	1.88	5,488.64
30" corrugated metal, class "N" or "O".....	lin. ft.	270	2.10	2.30	626.74
36" corrugated metal, class "N" or "O".....	lin. ft.	88	3.35	4.40	387.56
42" corrugated metal, class "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	1.61	984.60
24" vitrified clay.....	lin. ft.	32	1.75	2.20	70.40
30" vitrified clay.....	lin. ft.	136	3.60	3.80	517.20
Miscellaneous items					
Wire cable guard rail.....	lin. ft.	89,776	.23	.28	25,375.96
Anchors for wire cable guard rail.....	each	1,144	5.00	5.97	6,828.00
Woven wire guard rail.....	lin. ft.	4,768	.442	.47	2,221.54
Braces for woven wire guard rail.....	each	120	.98	1.39	166.65
Extra posts.....	each	301	.70	1.03	300.10

AVERAGE CONTRACT PRICES FOR 1931

Item	Unit	Quantity	Unit prices		Amount
			Minimum	Average	
Grading Items					
Hauling & installing rein- forced concrete & vitrified clay driveway culverts.....lin. ft.		5,452	gratis	\$0.44	\$ 2,410.36
Hauling & installing corrugated metal driveway culverts.....lin. ft.		15,388	.10	.43	6,547.57
Unclassified excavation.....cu. yd.		5,778,450	.119	.16	907,553.36
Station excavation.....station		3,327.79	7.99	9.43	31,377.69
Top soil or sand clay excavation.....cu. yd.		223,553	.12	.21	47,485.20
Hauling top soil or sand clay.....cu. yd. ml.		248,389	.22	.29	73,121.34
Sand fill.....cu. yd.		131,615	.15	.19	24,797.00
Relaying reinforced concrete & vitrified clay pipe for driveways.....lin. ft.		1,144	.40	.56	637.10
Relaying corrugated metal pipe for driveways.....lin. ft.		2,845	.10	.56	1,581.50
Sand gravel surfacing items					
Class "A", 3" depth.....sq. yd.		1,324,735	.0517	.132	175,162.09
Class "A", 2" depth.....sq. yd.		2,197,731	.045	.094	207,581.22
Class "A", 1½" depth.....sq. yd.		9,733,034	.0338	.066	646,302.55
Class "A", 1" depth.....sq. yd.		4,366,515	.0208	.044	192,669.92
Class "A", ¾" depth.....sq. yd.		6,077,525	.021	.037	221,800.84
Class "A", ½" depth.....sq. yd.		8,895,790	.0132	.023	203,279.57
Pavement Items					
Unclassified excavation.....cu. yd.		3,689,550	.15	.19	687,596.49
Jetting fills.....cu. yd.		150	.30	.30	45.00
Concrete pavement (9"-7"-9" depth, 7 sacks cement per cu. yd.).....sq. yd.		2,446,565.20	1.225	1.44	3,522,500.59
Reinforcing steel.....lb.		9,817	.025	.04	391.55
Reinforcing fabric.....lb.		413,231	.04	.048	19,728.06
Shoulder finishing.....station		10,992.30	5.00	9.52	104,695.96
Type "A" flumes.....each		347	35.00	61.98	21,507.00
Type "B" flumes.....each		82	35.00	62.38	5,115.00
Metal slope drains.....lin. ft.		2,754	1.50	2.34	6,436.45
Concrete slope drains.....lin. ft.		1,479	1.50	2.36	3,487.43
Class "A" concrete for discharge basins.....cu. yd.		310.97	9.91	18.08	5,621.42
Class "A" concrete for pavement.....cu. yd.		57.99	10.00	11.85	687.41
Class "A" concrete for paving approaches.....cu. yd.		1,348.16	10.00	14.98	20,199.60
Reinforcing steel for paving approaches.....lb.		164,980	.025	.04	6,557.98
Class "A" concrete for headers.....cu. yd.		11.90	8.00	18.32	218.00
Culvert Items					
(a) General					
Unclassified excavation.....cu. yd.		65,563	.40	.63	41,573.65
Wet excavation.....cu. yd.		3,739	.45	2.45	9,151.25
Class "A" concrete.....cu. yd.		22,084.21	11.50	14.80	326,914.43
Reinforcing steel.....lb.		2,083,713	.03	.039	81,146.13
Relaying reinforced concrete & vitrified clay culvert pipe.....lin. ft.		2,128	.25	.57	1,203.30
Relaying corrugated metal culvert pipe.....lin. ft.		4,693	.20	.43	2,028.20
(b) Furnishing, hauling & installing culvert pipe for roadway culverts					
12" reinforced concrete.....lin. ft.		12	.80	.80	9.60
15" reinforced concrete.....lin. ft.		64	1.30	1.30	83.20
18" reinforced concrete.....lin. ft.		1,880	.70	1.30	2,444.00
24" reinforced concrete.....lin. ft.		6,418	1.09	1.92	12,321.24

(Concluded on following page)

DEPARTMENT OF PUBLIC WORKS

159

AVERAGE CONTRACT PRICES FOR 1931

Item	Unit	Quantity	Unit prices		Amount
			Minimum	Average	
30" reinforced concrete.....	lin. ft.	1,236	\$1.53	\$2.85	\$ 3,274.44
36" reinforced concrete.....	lin. ft.	2,328	2.80	4.23	9,852.60
42" reinforced concrete.....	lin. ft.	196	2.89	4.62	906.12
48" reinforced concrete.....	lin. ft.	276	5.50	6.91	1,907.20
60" reinforced concrete.....	lin. ft.	56	13.20	14.74	825.60
8" corrugated metal.....	lin. ft.	928	.63	.63	584.64
15" corrugated metal.....	lin. ft.	24	.90	.90	21.60
18" corrugated metal.....	lin. ft.	3,066	.90	1.20	3,663.72
24" corrugated metal.....	lin. ft.	4,934	1.15	1.58	7,808.27
30" corrugated metal.....	lin. ft.	1,080	1.59	2.25	2,429.68
36" corrugated metal.....	lin. ft.	1,304	2.45	3.29	4,285.12
42" corrugated metal.....	lin. ft.	18	6.50	6.50	117.00
48" corrugated metal.....	lin. ft.	216	3.95	4.26	918.48
60" corrugated metal.....	lin. ft.	124	5.20	5.85	725.40
18" corrugated metal, class "L" or "M".....	lin. ft.	38	1.46	1.56	59.28
24" corrugated metal, class "L" or "M".....	lin. ft.	980	1.85	2.08	2,035.20
30" corrugated metal, class "L" or "M".....	lin. ft.	336	2.40	2.84	953.00
36" corrugated metal, class "L" or "M".....	lin. ft.	218	5.00	5.02	1,094.80
(c) Hauling & installing pipe for roadway culverts					
18" reinforced concrete.....	lin. ft.	1,530	.10	.28	421.02
24" reinforced concrete.....	lin. ft.	1,968	.11	.35	688.32
30" reinforced concrete.....	lin. ft.	756	.17	.37	279.36
36" reinforced concrete.....	lin. ft.	780	.25	.52	408.08
42" reinforced concrete.....	lin. ft.	182	.35	.39	70.40
48" reinforced concrete.....	lin. ft.	212	.40	.83	175.60
18" corrugated metal.....	lin. ft.	13,722	.08	.24	3,227.92
24" corrugated metal.....	lin. ft.	26,916	.12	.27	7,348.18
30" corrugated metal.....	lin. ft.	7,304	.15	.38	2,763.76
36" corrugated metal.....	lin. ft.	8,472	.23	.38	3,192.34
42" corrugated metal.....	lin. ft.	6	.40	.40	2.40
48" corrugated metal.....	lin. ft.	608	.35	.45	273.20
54" corrugated metal.....	lin. ft.	88	.50	.50	44.00
60" corrugated metal.....	lin. ft.	120	.60	.60	72.00
72" corrugated metal.....	lin. ft.	112	.95	.95	106.40
(d) Furnishing roadway & driveway culvert pipe delivered freight paid at railway station					
18" reinforced concrete.....	lin. ft.	5,294	.80	1.02	5,383.58
24" reinforced concrete.....	lin. ft.	2,198	1.10	1.37	3,002.64
30" reinforced concrete.....	lin. ft.	628	1.62	1.91	1,199.48
36" reinforced concrete.....	lin. ft.	664	2.32	2.61	1,735.88
42" reinforced concrete.....	lin. ft.	134	3.00	3.00	402.00
48" reinforced concrete.....	lin. ft.	240	3.78	4.89	1,173.92
12" corrugated metal.....	lin. ft.	4	1.00	1.00	4.00
18" corrugated metal.....	lin. ft.	29,194	.76	.90	26,400.80
24" corrugated metal.....	lin. ft.	33,356	1.00	1.21	40,203.62
30" corrugated metal.....	lin. ft.	7,470	1.28	1.51	11,280.52
36" corrugated metal.....	lin. ft.	9,480	2.11	2.43	22,980.44
42" corrugated metal.....	lin. ft.	6	3.05	3.05	18.30
48" corrugated metal.....	lin. ft.	652	3.58	3.76	2,448.72
54" corrugated metal.....	lin. ft.	88	4.38	4.38	385.44
60" corrugated metal.....	lin. ft.	120	4.83	4.83	579.60
72" corrugated metal.....	lin. ft.	112	5.76	5.76	645.12
18" corrugated metal, class "N" or "O".....	lin. ft.	268	1.35	1.39	372.80
24" corrugated metal, class "N" or "O".....	lin. ft.	44	1.50	1.66	73.00
30" corrugated metal, class "N" or "O".....	lin. ft.	20	2.45	2.45	49.00
Miscellaneous items					
Wire cable guard rail.....	lin. ft.	9,928	.30	.31	3,110.00
Anchor for wire cable guard rail.....	each	158	6.00	6.15	972.06
Extra posts for wire cable guard rail.....	each	76	.75	.89	67.80

AVERAGE CONTRACT PRICES FOR 1932

Item	Unit	Quantity	Unit prices		Amount
			Minimum	Average	
Grading Items					
Hauling & installing rein- forced concrete & vitrified clay driveway culverts.....lin. ft.		108	\$1.00	\$1.00	\$108.00
Hauling & installing corrugated metal driveway culverts.....lin. ft.		16,880	.10	.31	5,225.80
Unclassified excavation*.....cu. yd.		6,910,812	.08	.144	997,479.13
Station excavation .....station		1,032.86	.14	8.42	8,699.96
Top soil or sand clay excavation .....cu. yd.		58,387	.085	.134	7,840.17
Hauling top soil or sand clay .....cu. yd. mi.		45,255	.17	.21	9,828.17
Sand fill .....cu. yd.		157,425	.12	.145	22,840.50
Relaying reinforced concrete & vitrified clay pipe for driveways .....lin. ft.		1,480	.25	.58	851.00
Relaying corrugated metal pipe for driveways.....lin. ft.		1,927	.10	.40	779.75
Sand gravel surfacing items					
Class "A", 3/4" depth.....sq. yd.		501,226	.0498	.092	45,917.69
Class "A", 2" depth.....sq. yd.		348,715	.03	.081	28,143.54
Class "A", 1 1/2" depth.....sq. yd.		3,403,185	.0266	.062	177,631.36
Class "A", 1" depth.....sq. yd.		10,697,130	.0123	.039	416,224.73
Class "A", 3/4" depth.....sq. yd.		8,144,440	.0125	.03	242,012.85
Class "A", 1/2" depth.....sq. yd.		7,789,990	.0069	.018	137,345.81
Pavement Items					
Unclassified excavation .....cu. yd.		3,364,575	.12	.15	494,862.70
Concrete pavement, (9"-7"-9" depth, 7 1/2 sacks cement per cu. yd.).....sq. yd.		157,266	1.35	1.502	236,281.11
Concrete pavement, reinforced, (9"-7"-9" depth, 7 1/2 sacks cement per cu. yd.)†.....sq. yd.		816,588	1.34	1.436	1,172,873.64
Concrete pavement, fine coarse aggregate, (9"-7"-9" depth, 7 1/2 sacks cement per cu. yd.)†.....sq. yd.		722,762	1.45	1.695	1,224,987.84
Reinforcing steel .....lb.		1,112	.04	.065	61.35
Reinforcing fabric .....lb.		2,832	.065	.065	184.08
Wire mesh or bar mat reinforcement .....sq. yd.		4,610	.17	.22	1,003.22
Type "A" flumes.....each		412	42.00	53.88	22,198.00
Type "B" flumes.....each		95	42.00	50.82	4,828.00
Metal slope drains.....lin. ft.		2,742	1.00	1.78	4,867.05
Concrete slope drains.....lin. ft.		1,748.5	1.60	1.93	3,375.15
Class "A" concrete for discharge basins .....cu. yd.		364,276	10.00	13.04	4,750.61
Class "A" concrete for pavement .....cu. yd.		27,955	8.00	13.43	375.42
Class "A" concrete for paving approaches .....cu. yd.		2,102,555	8.00	10.31	21,670.98
Class "A" concrete—fine coarse aggregate for paving approaches.....cu. yd.		349,664	12.00	12.00	4,195.97
Reinforcing steel for paving approaches .....lb.		182,543	.03	.035	6,459.22
Class "A" concrete for headers .....cu. yd.		10.62	8.00	13.09	139.00
Removal of old headers.....each		22	2.00	6.34	139.50

*The unit price for overhaul was reduced from 2 cents to 1 cent per cu. yd. station and the free haul limit was increased from 500 feet to 1,000 feet. On a few contracts no payment was made for overhaul.

†Shoulder finishing was not paid for directly.

Alternate bids were received for concrete pavement using sand gravel with bar mat or mesh reinforcement and *for concrete pavement using fine and coarse aggregate, without reinforcement.

(Continued on following page)

AVERAGE CONTRACT PRICES FOR 1932

Item	Unit	Quantity	Unit prices		Amount
			Minimum	Average	
Culvert items					
(a) General					
Unclassified excavation					
(separate from wet excavation)	cu. yd.	42,585	\$0.30	\$0.52	\$21,951.05
Wet excavation	cu. yd.	5,900	.50	1.37	8,109.50
Unclassified excavation (all excavation for culverts).....					
Class "A" concrete.....	cu. yd.	28,565	.30	.75	21,480.75
Reinforcing steel	lb.	23,141.79	10.00	13.55	313,633.27
Relaying corrugated metal pipe	lin. ft.	2,198,611	.026	.035	76,109.08
Relaying reinforced concrete pipe	lin. ft.	1,696	.15	.45	765.60
Relaying reinforced concrete pipe	lin. ft.	1,831	.40	.60	1,091.95
(b) Furnishing, hauling & installing culvert pipe for roadway culverts					
18" reinforced concrete.....	lin. ft.	360	1.50	1.65	594.20
24" reinforced concrete.....	lin. ft.	704	2.10	2.48	1,743.00
30" reinforced concrete.....	lin. ft.	204	2.85	3.48	709.60
36" reinforced concrete.....	lin. ft.	186	3.75	4.21	783.00
42" reinforced concrete.....	lin. ft.	28	6.50	6.50	182.00
48" reinforced concrete.....	lin. ft.	24	7.00	7.00	168.00
18" corrugated metal.....	lin. ft.	452	1.05	1.49	673.00
24" corrugated metal.....	lin. ft.	780	.25	1.57	1,221.80
30" corrugated metal.....	lin. ft.	96	.35	1.09	101.50
36" corrugated metal.....	lin. ft.	138	2.60	3.42	472.00
48" corrugated metal.....	lin. ft.	14	4.75	4.75	66.50
60" corrugated metal.....	lin. ft.	316	6.25	6.46	2,041.00
72" corrugated metal.....	lin. ft.	296	7.80	8.16	2,416.40
84" corrugated metal.....	lin. ft.	278	8.00	9.41	2,616.60
(c) Hauling & installing pipe for roadway culverts					
18" reinforced concrete.....	lin. ft.	64	.15	.15	9.60
24" reinforced concrete.....	lin. ft.	356	.25	.25	89.00
30" reinforced concrete.....	lin. ft.	304	.30	.30	91.20
36" reinforced concrete.....	lin. ft.	132	.35	.35	46.20
12" corrugated metal.....	lin. ft.	40	.35	.35	14.00
18" corrugated metal.....	lin. ft.	4,214	.05	.19	819.02
24" corrugated metal.....	lin. ft.	28,288	.05	.24	6,739.86
30" corrugated metal.....	lin. ft.	8,196	.07	.32	2,621.54
36" corrugated metal.....	lin. ft.	8,096	.08	.42	3,426.00
42" corrugated metal.....	lin. ft.	292	.25	.33	97.00
48" corrugated metal.....	lin. ft.	1,214	.15	.39	471.80
(d) Furnishing roadway & driveway culvert pipe delivered freight paid at railway station					
18" reinforced concrete.....	lin. ft.	116	.75	.75	87.00
24" reinforced concrete.....	lin. ft.	392	1.10	1.10	431.20
30" reinforced concrete.....	lin. ft.	324	1.31	1.31	424.44
36" reinforced concrete.....	lin. ft.	132	2.10	2.10	277.20
12" corrugated metal.....	lin. ft.	40	.58	.58	23.20
18" corrugated metal.....	lin. ft.	15,498	.66	.72	11,194.16
24" corrugated metal.....	lin. ft.	35,654	.87	.96	34,370.63
30" corrugated metal.....	lin. ft.	9,694	1.09	1.23	11,902.95
36" corrugated metal.....	lin. ft.	9,248	1.76	1.95	18,026.58
42" corrugated metal.....	lin. ft.	156	2.24	2.32	362.44
48" corrugated metal.....	lin. ft.	1,518	2.93	3.24	4,924.78
Miscellaneous items					
Wire cable guard rail.....	lin. ft.	1,784	.45	.79	1,410.80
Anchors for wire cable guard rail	each	58	1.50	2.74	159.00
Extra posts for wire cable guard rail	each	58	.50	1.47	85.00
Woven wire guard rail.....	lin. ft.	2,416	.35	.61	1,474.40
Braces for woven wire guard rail	each	108	1.00	2.74	296.00

(Concluded on following page)

AVERAGE CONTRACT PRICES FOR 1932

Item	Unit	Quantity	Unit prices		Amount
			Minimum	Average	
Bituminous mat surfacing items					
Special aggregate—waste					
sand.....ton		2,210.6	\$0.50	\$0.87	\$ 1,927.84
Special aggregate—concrete.....ton		31,155.9	.55	1.19	36,997.73
Special aggregate—road					
gravel.....ton		1,573.7	1.75	1.75	2,753.98
Special mineral filler.....ton		3,060	1.35	1.45	4,436.25
Loading & screening mineral aggregate from local pit.....ton		31,782.9	.20	.34	10,874.89
Loading & screening mineral filler from local pit.....ton		24,308.6	.20	.29	7,137.48
Hauling mineral aggregate					
from local pit.....ton mi.		136,249.4	.06	.066	9,054.73
Hauling mineral filler					
from local pit.....ton mi.		91,215.2	.05	.069	6,310.05
Stripping.....cu. yd.		9,925	.10	.149	1,477.50
Redistributing windrow material.....cu. yd. mi.		10,479	.19	.24	2,560.95
Oil treated mineral aggregate.....cu. yd.		3,857	.50	.72	2,764.99
Asphaltic oil (road oil No. 1), applied.....gal.		2,211,815	.051	.06	184,425.45
Asphaltic oil (road oil No. 2), applied.....gal.		51,090	.056	.056	2,861.04
Discing & manipulating.....station		6,793.968	5.28	6.08	41,887.99
Oiled sand surfacing items					
Mineral filler.....ton		1,694	2.35	2.35	3,980.90
Natural soil filler.....cu. yd.		25,408.5	.15	.24	6,082.28
Hauling natural soil filler.....cu. yd. mi.		45,135	.05	.078	3,527.24
Stripping.....cu. yd.		2,200	.15	.17	365.00
Asphaltic oil (road oil No. 1), applied.....gal.		2,699,844	.056	.066	177,862.49
Discing & manipulating.....station		3,483.209	12.00	16.37	57,022.09

AVERAGE CONTRACT PRICES FOR BRIDGES FOR 1925-30

Item	Unit	1925-26			1927-28			1929-30		
		Quantity	Unit price	Amount	Quantity	Unit price	Amount	Quantity	Unit price	Amount
Common excavation	cu. yd.	20,845	\$ 0.66	\$13,483.05	9,329	\$ 0.97	\$ 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	20,093.96	4,349	4.19	18,220.35
Untreated bridge timber	M. ft. b. m.	-----	-----	-----	27	68.44	1,863.55	204	72.04	14,706.19
Treated bridge timber	M. ft. b. m.	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	lb.	945,263	.05	45,209.04	662,105	.05	32,004.40	797,619	.05	40,661.71
Superstructure steel	lb.	4,000,564	.06	238,748.29	4,092,932	.05	200,877.27	1,629,461	.06	103,457.90
Extra structural steel	lb.	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	0.83	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 in.x32 lb. H	lin. ft.	47,934	2.15	103,106.40	51,806	2.19	113,508.50	22,890	2.31	52,907.00
Steel piling, 8 in.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.	7,684	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 in.x49.5 lb. H	lin. ft.	-----	-----	-----	-----	-----	-----	1,885	2.82	5,314.50
Driving only, 8 in.x32.0 lb. H piling	lin. ft.	-----	-----	-----	-----	-----	-----	570	1.45	826.50
Driving only, 10 in.x49.5 lb. H piling	lin. ft.	-----	-----	-----	-----	-----	-----	2,530	1.50	3,795.00
Cast iron pile points	each	-----	-----	-----	-----	-----	-----	238	2.26	537.00
Copper drains	each	-----	-----	-----	-----	-----	-----	407	2.09	851.75
Galvanized iron strip	lin. ft.	-----	-----	-----	-----	-----	-----	683	.42	272.04
Gas pipe handrail	lin. ft.	-----	-----	-----	-----	-----	-----	2,426	2.77	6,704.86

AVERAGE CONTRACT PRICES FOR BRIDGES FOR 1931

Item	Unit	Quantity	Unit price	Amount
Unclassified excavation (separate from wet excavation)	cu. yd.	16,496	\$ 0.81	\$ 13,370.55
Wet excavation	cu. yd.	7,432	4.19	31,193.00
Unclassified excavation (all excavation for bridges)	cu. yd.			
Untreated bridge timber	M. ft. b. m.	27,489	61.71	1,696.45
Treated bridge timber	M. ft. b. m.	411,457	91.34	37,584.20
Class "AA" concrete	cu. yd.	12,235.3	15.40	188,469.09
Class "A" concrete	cu. yd.	14,262.1	15.13	215,772.41
Class "D" concrete	cu. yd.			
Reinforcing steel	lb.	3,845,426	0.038	145,929.53
Superstructure steel	lb.	6,799,684	0.040	273,169.27
Extra structural steel	lb.	207,352	0.065	13,517.15
Untreated timber piling	lin. ft.	12,480	0.77	9,629.60
Treated timber piling	lin. ft.	72,549	0.82	60,659.63
Cast in place concrete piling	lin. ft.	474	2.50	1,185.00
Steel piling, 6 in.x40.5 lb.	lin. ft.	400	2.00	800.00
Steel piling, 8 in.x31 lb.	lin. ft.	24,012	1.78	42,629.00
Steel piling, 10 in.x49 lb.	lin. ft.	41,725	2.33	97,340.60
Steel piling, 12 in.x85 lb.	lin. ft.			
Carnegie steel sheet piling, 16 in.x29.3 lb.	sq. ft.	1,312	0.93	1,220.16
Wakefield piling	sq. ft.			
Steel reinforcing fabric	lb.	488	0.083	40.70
Structural steel for handrail	lb.	18,213	0.069	1,272.09
Pipe handrail	lin. ft.	22,023.72	3.15	69,270.50
Copper drains	each	1,598	1.44	2,306.70
Cast iron scuppers	each	252	3.18	801.00
Placing only, treated bridge timber	M. ft. b. m.	1,978	25.00	49.45
Driving only, treated timber piling	lin. ft.	1,150	0.40	460.00
Driving only, 8 in.x31 lb. steel piling	lin. ft.	3,196	0.61	1,962.80
Driving only, 10 in.x49 lb. steel piling	lin. ft.	1,375	0.60	825.00
Cast iron pile points	each	100	2.63	263.20
Galvanized iron strips	lin. ft.	170	0.15	25.50
Willow mattress	sq. yd.	13,740	1.80	24,759.45
Rock riprap	sq. yd.	145	3.00	435.00
Concrete riprap	sq. yd.			
Tree riprap	lin. ft.	1,990	0.95	1,890.50
Current retards	lin. ft.			
Asphalt mastic surfacing	sq. yd.	305.87	0.35	107.05
Asphalt plank	sq. ft.			
Dowels	each	202	1.45	293.00
Light posts	each	49	23.28	1,114.00
Galvanized iron cable, 3/4"	lin. ft.	386.4	0.12	46.37
Galvanized cable clamps	each	40	0.30	12.00
Untreated redwood bridge timber	M. ft. b. m.	32,737	71.61	2,344.34

AVERAGE CONTRACT PRICES FOR BRIDGES FOR 1932

Item	Unit	Quantity	Unit price	Amount
Unclassified excavation (separate from wet excavation)	cu. yd.	5,530	1.20	6,645.55
Wet excavation	cu. yd.	5,368	4.55	24,401.75
Unclassified excavation (all excavation for bridges)	cu. yd.	10,718	2.30	24,668.05
Untreated bridge timber	M. ft. b. m.	238,756	43.98	10,501.32
Treated bridge timber	M. ft. b. m.	414,779	85.12	35,306.69
Class "AA" concrete	cu. yd.	9,756.8	13.95	136,096.90
Class "A" concrete	cu. yd.	9,814.1	14.40	141,323.77
Class "D" concrete	cu. yd.	75	20.00	144.00
Reinforcing steel	lb.	2,448,801	0.031	76,794.98
Superstructure steel	lb.	8,238,335	0.041	339,535.98
Extra structural steel	lb.	236,780	0.047	11,113.23
Untreated timber piling	lin. ft.	8,302	8.55	4,639.28
Treated timber piling	lin. ft.	84,989	0.77	69,153.28
Cast in place concrete piling	lin. ft.			
Steel piling, 6 in.x40.5 lb.	lin. ft.			
Steel piling, 8 in.x31 lb.	lin. ft.	16,862	1.23	20,667.70
Steel piling, 10 in.x40 lb.	lin. ft.	42,229	2.10	88,707.31
Steel piling, 12 in.x65 lb.	lin. ft.	20,432	2.30	46,955.16
Carnegie steel sheet piling, 16 in.x29.3 lb.	sq. ft.			
Wakefield piling	sq. ft.	747	0.75	560.25
Steel reinforcing fabric	lb.	1,300	0.17	221.00
Structural steel for handrail	lb.	104,325	0.06	6,248.42
Pipe handrail	lin. ft.	1,848.76	2.88	5,315.25
Copper drains	each	796	1.15	916.50
Cast iron scuppers	each	248	6.56	1,625.00
Placing only, treated bridge timber	M. ft. b. m.	708	15.00	10.62
Driving only, treated timber piling	lin. ft.	1,104	0.24	264.96
Driving only, 8 in.x31 lb. steel piling	lin. ft.			
Driving only, 10 in.x49 lb. steel piling	lin. ft.			
Cast iron pile points	each	72	1.75	126.00
Galvanized iron strips	lin. ft.			
Willow mattress	sq. yd.	11,666	1.53	17,965.20
Rock riprap	sq. yd.	530	1.50	795.00
Concrete riprap	sq. yd.	1,381	1.92	2,656.10
Tree riprap	lin. ft.	1,772	1.31	2,328.50
Current retards	lin. ft.	552	13.35	7,371.00
Asphalt mastic surfacing	sq. yd.			
Asphalt plank	sq. ft.	16,500	0.114	1,881.00
Dowels	each	294	1.35	396.00
Light posts	each	12	30.00	360.00
Galvanized iron cable, 3/4"	lin. ft.	7,750	0.031	238.70
Galvanized cable clamps	each	376	0.13	48.96
Untreated redwood bridge timber	M. ft. b. m.	60,908	65.00	3,959.02

DIVISION OF MOTOR VEHICLE REGISTRATION

The Automobile Division was organized in 1913 with a registration of 25,617 cars, increasing as follows to 1930 with percentage of increase based upon 1913 registrations.

Year	Number	Total % Increase	% increase or decrease 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	1484.4	05.1
1929.....	418,226	1532.3	06.4
1930.....	440,650	1620.1	05.4
1931 and 1932 registration show a decrease as follows:			
1931.....	435,562	1600.3	-01.2
1932 Approx.....	400,000	1461.5	-08.2

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.

In accordance with the Statutes passed in 1919 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 registrations five cents for each original motor vehicle registration, said five cents to be accounted for as other fees passing through their hands. After five cents was deducted the County Treasurers transmitted to the State Treasurer two and one-half per cent of all such funds collected by them; said two and one-half per cent 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.

The 1925 Legislature provided that after January 1, 1926 thirty per cent of the balance remaining (after deduction of the five cents by the County Treasurer for each registration and the two and one-half per cent for the State General Fund) shall 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, by registration number for each county 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 eight 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 its 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 it possible to keep the records in a much more up-to-date condition. It 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 seventy-five cents of which fifty cents is retained by the County Treasurer who credits twenty-five cents to the County Road Fund, which is included in his report of fees as provided by law, and twenty-five cents is credited to the County General Fund. The remaining twenty-five cents is remitted by the County Treasurer to the State Treasurer and credited by him to the Motor Vehicle Operator's License Fund, and the Department of Public Works is authorized to draw upon the said fund in the hands of the State Treasurer for all expenses of printing, recording and general operation of the law.

Six hundred fourteen thousand nine hundred ninety-five operator's licenses have been issued from September 1, 1929 to October 1, 1932.

Number of suspensions.....	192
Number of revocations.....	382

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

The Financial Responsibility Law went into effect August 3, 1931, and provides that the motor vehicle operator's license and all of the registration certificates of any person who shall by a judgment have been convicted shall be suspended for any of the following offenses:

- (1) Operating a motor vehicle while under the influence of intoxicating liquor or narcotic drugs;

- (2) Homicide or assault arising out of the operation of a motor vehicle;
- (3) Reckless driving, resulting in personal injury or damage to property;
- (4) Leaving the scene of an automobile accident without making identity known;
- (5) Operating a motor vehicle upon public ways without being licensed to do so;
- (6) Operating an unregistered motor vehicle upon public highways and such other violations as require suspension or revocation of licenses in the State.

Sec. 3. If within thirty days after it becomes final, any person fails to satisfy any judgment rendered against him by a court of competent jurisdiction in this or any other State or in a District Court of the United States for damages on account of personal injury, including death, or damage to property resulting from the operation by him, his agent or any other person with his express or implied consent of a motor vehicle owned by him, or the operation by him or his agent of a motor vehicle not owned by him, his operator's license and all of his registration certificates shall be forthwith suspended by the Department upon receiving a certified copy of such final judgment from the court in which the same was rendered and the Department shall endorse such suspension upon the operator's license and such operator's license shall remain suspended and shall not be renewed, nor shall any other motor vehicle be thereafter registered in his name: (a) until he has furnished proof of financial responsibility for future accidents; and (b) while any such judgment remains unsatisfied and subsisting and until every such judgment is satisfied or discharged.

The following will be deemed evidence of ability to respond in damages: (a) the written certificate of an insurance carrier duly authorized to transact business within this State, that it has issued to or for the benefit of the person applying for such registration or for the termination of the suspension thereof, a motor vehicle liability policy which at the date of the certificate is in full force and effect and will so continue until at least ten days' notice of cancellation shall first have been given to the Department and the County Treasurer where the insured's operator's license and registration certificate or certificates were issued.

REPORT OF SECRETARY

(b) A bond conditioned for the payment of the amounts as required in his act for injury to or the death of persons and damage to property arising out of the ownership, maintenance, use or operation by the principal or his agent of any motor vehicle within the United States of America, having as surety a corporation duly authorized to transact a surety business within this State.

(c) In any case, the deposit with the Department of the sum of eleven thousand dollars in cash, which the Department shall turn over to the State Treasurer as custodian, and which the Department shall employ in paying within the limits specified in this act any final judgment or judgments which may be entered against the depositor for injury to or the death of persons and damages to property arising out of the maintenance or operation of a vehicle by the depositor, or his agent with his express or implied consent, subsequent to the date of the deposit.

Any person whose operator's license or certificate or certificates of registration shall have been suspended, as herein provided, shall immediately return to the Department his operator's license and certificate or certificates of registration and the number plates issued thereunder. If any person fail to return to the Department such operator's license, the certificate or certificates of registration and the number plates issued thereunder, as provided herein, the Department shall forthwith direct any enforcement officer to secure possession thereof and to return the same to the office of the Department. Any person failing so to return such operator's license, certificate or certificates, and/or number plates shall be guilty of a misdemeanor and upon conviction thereof shall be fined not less than twenty-five dollars nor more than one hundred dollars.

Upon termination of suspension of any operator's license or owner's registration certificate or certificates, as in this act provided, there shall be returned immediately to such operator and/or owner, his operator's license and certificate or certificates of registration and license plates, together with a certificate from the Department of such termination of suspension and such termination shall be endorsed upon such operator's license, upon presentation of such certificate of termination to the Court or other competent authority which shall have previously endorsed the suspension upon such license.

SENATE FILE NO. 218—RECIPROCITY ACT

Passenger Vehicles: Sixty days.

Commercial Vehicles: Reciprocal exemption from payment of registration fees in Nebraska is allowed on commercial trucks owned in other states which operate on interstate routes partly in Nebraska. No exemption from registration shall apply to trucks and busses entering the state for the purpose of doing intra-state business.

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, January 1 to December 31, 1930

County	Regular		Trucks		Busses		Motorcycles		Trailers	
	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.
State Treasurer.....					\$26,278.75	155				
Adams	\$ 56,042.50	6,623	\$ 6,600.50	757	400.00	4	\$ 54.00	15	\$ 118.00	136
Antelope	34,859.00	4,255	3,798.00	436			15.00	6	123.75	147
Arthur	2,650.00	317	672.00	80					4.50	6
Banner	4,074.00	471	2,092.00	249			7.00	2	1.50	2
Blaine	3,084.00	396	484.00	59					19.75	17
Boone	34,455.59	4,208	4,281.50	512			37.00	12	74.50	91
Box Butte.....	25,748.00	3,124	6,097.05	801			49.00	17	51.00	55
Boyd	14,495.28	1,755	1,212.50	157			47.00	13	62.75	31
Brown	12,070.62	1,494	1,655.00	185					76.75	68
Buffalo	57,345.49	6,824	8,835.00	1,036			32.00	10	330.75	357
Burt	32,750.88	3,589	5,775.50	621			25.00	6	69.25	67
Butler	35,145.00	4,232	5,929.09	691			24.00	7	83.90	86
Cass	40,765.74	4,931	7,813.25	864	24.00	2	59.00	16	50.75	59
Cedar	37,083.75	4,492	5,770.38	565			4.00	1	88.00	99
Chase	13,038.00	1,588	3,306.00	388					213.45	120
Cherry	20,549.50	2,485	3,850.00	456			11.00	4	50.50	61
Cheyenne	24,650.00	2,999	9,238.00	1,165			6.00	2	61.50	63
Clay	32,693.38	3,892	4,700.75	573			13.00	5	287.50	314
Colfax	28,650.26	3,410	6,558.88	735			11.00	3	54.25	66
Cuming	35,838.09	4,252	6,546.75	726			13.00	5	81.75	77
Custer	60,754.25	7,411	7,836.91	898			19.00	5	558.25	417
Dakota	19,478.12	2,402	3,063.75	355			18.00	6	8.25	9
Dawes	24,435.63	2,840	3,596.75	419			7.00	2	26.25	34
Dawson	42,561.53	4,996	8,114.63	920			26.00	7	396.00	403
Deuel	9,687.00	1,165	4,241.50	569			12.00	3	45.00	26
Dixon	25,247.00	3,081	3,178.50	333					17.25	23
Dodge	66,072.06	7,760	11,832.37	1,286			78.00	23	104.25	116
Douglas	431,179.52	48,801	67,569.26	6,602	9.00	1	603.00	186	326.25	252
Dundy	12,084.00	1,479	2,924.00	335			2.00	1	64.25	41
Fillmore	32,249.50	3,896	4,297.75	521			30.00	9	256.25	236
Franklin	22,111.43	2,632	3,925.75	351			19.00	8	113.25	101
Frontier	18,981.20	2,311	3,956.50	457			9.00	3	57.00	61
Furnas	29,811.88	3,562	3,575.00	421			10.00	3	312.25	139
Gage	69,442.86	8,203	11,517.25	1,352			100.00	30	350.70	320
Garden	10,209.00	1,169	2,201.00	261					15.75	16
Garfield	7,176.00	898	625.00	83			6.00	2	45.25	51
Gosper	11,417.90	1,405	1,564.00	188			3.00	1	128.75	77
Grant	3,691.00	439	653.00	77			3.00	1	5.50	6
Greeley	16,298.00	1,994	1,363.00	156	0.00	1	17.00	6	42.50	50
Hall	63,458.80	7,421	11,084.30	1,278			179.00	53	253.25	259
Hamilton	30,277.00	3,429	4,558.25	555	0.00	1	21.00	7	287.25	171
Harlan	21,069.00	2,537	2,414.00	276	60.00	1	9.00	3	243.75	190
Hayes	8,940.00	1,105	2,344.75	259					37.25	32
Hitchcock	16,888.00	2,083	3,761.00	431			11.00	4	129.50	112
Holt	31,400.00	3,932	3,970.50	476			8.25	3	93.50	107
Hooker	2,747.00	343	391.00	43			3.00	1	16.75	21
Howard	24,015.00	2,886	2,722.25	315			14.00	5	154.95	163
Jefferson	40,403.00	4,818	5,630.25	679			23.00	7	159.00	146
Johnson	22,420.00	2,737	3,527.50	404			20.00	7	48.50	55
Kearney	20,387.88	2,443	2,401.50	294			11.00	4	197.50	210
Keith	16,299.00	1,946	4,513.75	527			16.00	5	59.00	61
Keya Paha.....	6,628.00	839	921.50	112					123.75	50
Kimball	11,203.37	1,340	5,453.50	672			16.00	6	24.75	20
Knox	40,072.37	4,854	5,655.00	611			9.00	3	71.50	81

DEPARTMENT OF PUBLIC WORKS

178

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, January 1 to December 31, 1930

Dealers			Transfers		Lost plates		Lost Certif.		Refunds		Totals		
Fees	Plates	App.	Fees	No.	Fees	No.	Fees	No.	Amt.	No. Plates	Reg.	Fees	
\$ 1,105.50	107	46	\$ 39.00	4	\$ 9.00	9	\$ 9.00	9			155	177	\$ 26,335.75
365.00	35	35	1,935.00	1,467	48.00	48	21.00	21			7,581	9,117	66,324.50
38.00	3	3	905.75	735	22.00	22	84.00	84			4,879	5,720	40,172.50
			81.00	66			10.00	10			406	492	3,453.50
			140.00	94	1.00	1	18.00	18			724	837	6,333.50
38.00	4	4	80.00	74	5.00	5	5.00	5			476	560	3,715.75
492.50	47	47	1,198.00	939	55.00	56	32.00	32			4,870	5,897	40,626.09
552.00	53	53	944.00	677	23.00	21	225.00	225	\$ 37.00	11	4,050	4,973	33,679.06
157.00	17	17	401.00	308	5.00	5	8.00	9			1,973	2,295	16,388.53
232.00	25	22	339.50	285	12.00	13	44.00	44	65.25	20	1,769	2,111	14,429.87
885.50	85	85	1,805.75	1,345	45.00	46	323.00	327			8,312	10,030	69,602.49
458.00	44	45	973.50	778	20.00	20	125.00	127	68.00	12	4,328	5,253	40,197.13
468.50	44	44	788.50	611	28.00	28	43.00	42			5,060	5,741	42,509.90
619.00	58	59	1,506.75	1,091	29.00	29	104.00	104	188.00	47	5,931	7,155	50,971.49
492.00	47	47	1,240.25	917	32.00	32	86.00	59	79.50	19	5,204	6,212	44,776.38
204.00	19	19	529.00	364	6.00	6	48.00	49	14.50	3	2,115	2,534	17,344.45
362.00	33	33	672.00	488	6.00	8	68.00	69	24.00	6	3,039	3,604	25,572.00
448.00	44	44	1,091.00	792	20.00	20	211.00	212			4,173	5,197	35,725.50
468.50	45	31	1,041.00	790	20.00	20	24.00	27	46.00	11	4,815	5,652	39,248.13
444.50	40	40	826.00	662	16.00	16	85.00	85			4,254	5,017	36,645.89
385.50	36	25	800.75	610	23.00	23	31.00	40			5,085	5,758	43,719.84
1,028.50	107	106	1,909.00	1,531	61.00	60	410.00	421	116.00	27	8,837	10,849	72,576.91
153.50	15	15	593.75	396	9.00	9	33.00	33	78.00	20	2,787	3,225	23,357.37
336.00	33	33	685.00	485	13.00	14	56.00	58	16.00	3	3,323	3,885	29,155.63
734.00	71	39	1,388.00	1,034	36.00	37	153.00	161	120.00	30	6,365	7,597	53,409.16
76.00	7	7	463.75	292	6.00	6	16.00	16			1,770	2,084	14,547.25
398.50	37	37	661.50	518	13.00	13	37.00	40	9.00	3	3,474	4,045	29,552.75
1,172.00	110	53	2,503.50	1,796	73.00	73	207.00	210			8,238	11,317	82,042.18
5,179.25	462	180	16,001.14	10,077	638.00	638	4,320.00	4,177	1,831.88	455	56,022	71,544	525,825.42
307.00	29	29	545.00	390	2.00	2	11.00	11			1,885	2,288	15,939.25
445.50	44	44	913.00	741	20.00	20	86.00	86	57.50	15	4,706	5,553	38,298.00
403.00	41	30	599.00	421	12.00	12	25.00	27	26.00	7	3,122	3,582	26,308.43
209.00	20	20	694.00	450	7.00	7	103.00	104			2,852	3,413	23,926.70
608.00	56	36	860.00	633	9.00	9	111.00	115	51.00	17	4,161	4,918	35,297.13
975.00	94	94	1,795.75	1,314	53.00	53	255.00	255	144.50	36	9,999	11,621	84,489.56
188.00	17	17	83.00	61	1.00	1	5.00	5			1,463	1,530	12,792.75
163.00	17	17	216.00	163	7.00	7	8.00	8			1,049	1,227	8,246.25
34.00	3	3	269.00	240	7.00	7	6.00	6			1,674	1,927	13,427.65
120.00	11	11	87.00	83	2.00	2	6.00	4			534	623	4,567.50
163.00	19	19	356.00	311	7.00	8	28.00	31	9.00	1	2,226	2,576	18,304.50
1,206.00	118	61	3,451.25	2,011	79.00	79	305.00	303	304.00	83	9,072	11,465	80,014.60
282.00	26	26	961.50	769	25.00	25	60.00	57	41.50	11	4,189	5,040	36,472.00
289.00	30	20	672.00	530	11.00	11	8.00	8			3,027	3,576	24,775.75
90.00	8	8	319.00	246	3.00	3	6.00	6			1,404	1,659	11,740.00
358.00	32	32	501.00	415	4.00	4	10.00	8	38.00	9	2,662	3,080	21,462.50
384.00	34	34	779.00	617	12.00	12	19.00	21	12.00	3	4,552	5,202	36,666.25
134.00	13	13	84.00	63	1.00	1	15.00	15			421	500	3,394.75
253.50	25	25	632.50	488	22.00	22	28.00	27			3,394	3,931	27,642.20
698.00	67	40	1,114.50	969	30.00	30	195.00	195	64.00	16	5,690	6,784	48,252.75
421.50	40	43	548.50	548	20.00	16	34.00	34	95.50	19	3,246	3,844	27,040.00
196.50	19	19	551.50	418	11.00	11	27.00	24			2,970	3,423	23,783.88
316.00	33	33	547.39	398	13.00	18	34.00	32	78.00	14	2,572	3,020	21,833.14
41.00	4	4	187.75	159	3.00	3	6.00	7			1,065	1,174	7,911.00
214.00	20	20	453.00	297	22.00	22	36.00	38	10.00	2	2,058	2,415	17,423.63
534.00	55	41	1,237.00	962	32.00	32	104.00	108	76.50	17	5,590	6,692	47,784.87

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, January 1 to December 31, 1930

County	Regular		Trucks		Busses		Motorcycles		Trailers	
	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.
Lancaster	235,648.82	27,477	31,960.87	3,534	125.00	5	465.00	138	368.00	432
Lincoln	52,409.39	6,166	8,936.50	1,065			33.00	11	148.50	152
Logan	4,718.00	576	527.00	82			1.00	1	33.00	35
Loup	4,012.00	503	468.00	56					47.50	47
Madison	59,444.87	6,996	10,022.30	1,222			53.00	17	214.75	221
McPherson	2,065.00	327	593.00	67					11.50	13
Merrick	26,002.93	3,088	4,510.50	532			23.00	5	147.25	166
Morrill	19,066.25	2,338	3,364.28	431			1.00	1	27.00	38
Nance	21,662.88	2,630	3,335.75	396	89.50	1	15.00	5	47.25	51
Nemaha	28,682.00	3,464	8,644.00	432			49.00	13	44.00	55
Nuckolls	29,244.00	3,483	3,828.42	448			13.00	3	85.50	94
Otoe	49,479.01	5,974	9,942.63	1,155			55.00	20	51.70	51
Pawnee	21,997.00	3,207	2,964.00	392			11.00	3	65.25	73
Perkins	14,384.00	1,748	5,799.00	712			4.00	1	85.25	85
Phelps	24,579.00	2,979	3,756.50	471			22.00	6	325.50	345
Pierce	26,949.02	3,286	3,593.00	389			7.00	3	83.75	109
Platte	48,132.00	5,641	9,414.88	1,085			29.00	11	124.50	135
Polk	26,013.00	3,072	5,068.25	594			8.00	3	108.00	129
Red Willow	30,646.35	3,709	5,447.25	676	4.00	3	32.00	11	71.25	82
Richardson	43,979.77	5,100	6,181.75	715			31.00	10	180.00	197
Rock	6,106.00	784	1,289.00	131			4.00	1	51.00	51
Saline	40,974.00	4,858	9,091.25	1,081			26.00	8	214.00	198
Sarpy	23,612.46	2,794	5,513.00	626	12.00	1	26.00	7	18.75	16
Saunders	52,962.89	6,325	9,473.07	1,061			32.00	10	51.75	63
Scotts Bluff	60,323.50	7,316	14,811.25	1,899	0.00	1	53.00	19	78.75	100
Seward	39,851.00	4,693	7,252.00	849	0.00	1	50.00	16	298.75	230
Sheridan	25,019.19	3,052	5,051.00	579			41.00	13	69.75	48
Sherman	19,535.00	2,369	2,435.50	278			6.00	3	58.50	69
Sioux	8,511.00	1,020	2,309.00	377			4.00	1	16.00	19
Stanton	20,402.00	2,449	2,075.50	336			3.00	1	40.50	45
Thayer	30,920.25	4,582	4,386.88	514			11.00	3	247.00	275
Thomas	2,622.00	323	308.00	41					10.50	12
Thurston	17,597.00	2,203	2,301.50	253			4.00	1	14.75	16
Valley	22,685.90	2,706	2,598.00	287			11.00	3	81.25	79
Washington	30,179.88	3,612	6,743.25	752			14.00	4	54.00	48
Wayne	29,444.00	3,541	4,073.87	471			9.00	5	47.50	54
Webster	24,727.37	3,302	2,659.50	314			2.00	1	149.50	143
Wheeler	4,476.00	559	861.00	104			11.00	3	3.25	6
York	45,343.00	4,766	5,622.75	633			37.00	13	483.50	365
Totals	\$3,090,511.11	367,410	\$513,966.23	58,592	\$20,996.25	177	\$2,911.25	900	\$10,943.70	10,820

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, January 1 to December 31, 1930

Dealers			Transfers		Lost plates		Lost Certif.		Refunds		Totals		
Fees	Plates	App.	Fees	No.	Fees	No.	Fees	No.	Amt.	No.	Plates	Reg.	Fees
2,988.75	269	169	7,737.00	5,883	372.00	374	1,340.00	1,341	1,102.24	254	31,753	39,351	281,044.44
940.00	92	55	1,946.75	1,278	46.00	46	641.00	644	135.00	31	7,449	9,417	65,001.14
12.00	1	1	111.00	80	4.00	4	1.00	2			675	771	5,407.00
20.00	3	3	88.00	80	2.00	2	1.00	1			609	692	4,638.50
853.00	80	44	2,007.50	1,488	72.00	72	166.00	168			8,500	10,228	73,733.42
30.00	3	3	68.00	47	2.00	3	10.00	10	4.00	1	410	470	3,379.50
410.50	41	40	860.50	652	34.00	34	73.00	75	61.00	13	3,831	4,592	32,061.68
228.00	22	22	757.00	514	19.00	19	138.00	143	4.00	1	2,830	3,506	23,600.53
296.00	27	27	649.75	509	24.00	24	89.00	100	24.00	5	3,110	3,743	26,299.13
249.00	25	24	798.00	593	23.00	23	81.00	81	2.00	1	3,988	4,685	33,570.00
203.00	20	16	723.00	549	13.00	13	46.00	45	42.00	10	4,044	4,651	34,155.92
681.00	64	67	1,713.50	1,299	40.00	40	58.00	163			7,267	8,769	62,120.84
297.00	28	16	426.00	378	7.00	7	29.00	29			3,691	4,105	25,799.25
406.00	40	40	623.13	422	10.00	10	25.00	25			2,586	3,043	21,336.38
230.00	24	24	834.00	717	14.00	14	52.00	53			3,825	4,609	29,813.00
302.50	29	20	725.50	572	21.00	20	105.00	105	75.50	20	3,807	4,504	31,788.77
674.00	67	41	1,349.00	1,046	37.00	37	221.00	221	34.00	8	6,913	8,217	59,961.38
294.00	28	17	744.50	667	44.00	45	55.00	55	52.00	12	3,815	4,582	32,334.75
783.50	72	47	1,134.00	865	41.00	42	313.00	313	137.00	33	4,538	5,758	38,468.35
563.00	52	35	1,238.25	976	41.00	41	137.00	137			6,057	7,211	52,351.77
48.00	5	5	135.00	113	6.00	6	8.00	8			972	1,099	7,647.00
822.00	77	78	1,005.00	686	31.00	30	160.00	158	110.00	26	6,223	7,097	52,323.25
185.50	19	19	850.00	680	27.00	28	63.00	65	42.00	11	3,463	4,236	30,307.71
750.50	67	67	1,199.50	904	33.00	33	146.00	154			7,526	8,707	64,678.71
848.50	84	84	2,154.00	1,858	122.00	121	695.00	699	217.00	44	9,419	12,097	79,066.00
541.00	48	39	991.00	776	44.00	44	55.00	53	20.00	5	5,828	6,701	49,062.75
677.00	66	40	951.50	679	26.00	26	118.00	118			3,782	4,555	32,553.44
293.00	26	26	533.00	423	18.00	18	13.00	14	13.00	2	2,745	3,290	22,892.00
86.00	8	8	217.00	176	4.00	5	10.00	11			1,425	1,617	11,167.00
155.00	14	14	538.50	448	14.00	14	27.00	29			2,845	3,336	24,155.50
567.50	58	35	908.00	644	20.00	21	91.00	99			5,409	6,164	37,051.63
121.00	11	12	71.00	63	2.00	2	6.00	6	8.00	2	388	459	3,140.50
182.00	18	18	428.00	349	12.00	12	48.00	48			2,491	2,900	20,587.25
365.50	36	32	652.00	514	13.60	14	16.00	15			3,107	3,650	26,422.65
232.00	23	23	553.25	735	18.00	17	85.00	85			4,434	5,271	38,279.38
307.00	25	25	813.39	663	17.00	18	9.00	9	66.00	17	4,096	4,786	34,720.76
339.00	33	33	675.25	531	6.00	6	13.00	14			3,793	4,343	28,571.62
24.00	2	2	127.00	111	1.00	1	6.00	6	4.00	1	674	792	5,509.25
751.50	69	72	1,290.00	1,019	30.00	30	149.00	149	164.00	44	5,839	7,037	53,716.75
\$ 44,131.50	4,179	3,251	\$98,737.80	73,540	\$3,004.00	3,011	\$13,746.00	13,690	\$6,015.37	1,458	440,650	530,891	\$3,804,949.84

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, January 1 to December 31, 1931

County	Regular		Trucks		Busses		Motorcycles		Trailers	
	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.
State Treasurer inter-county buss registration					\$22,360.75	124				
Adams	\$ 56,256.00	6,595	\$ 7,734.00	827	54.00	3	48.00	14	257.75	277
Antelope	32,996.00	3,975	4,217.25	464			16.00	3	234.50	261
Arthur	2,482.00	296	756.00	88			3.00	1	6.00	8
Banner	3,911.00	447	1,971.50	219			4.00	1	3.25	4
Blaine	2,937.00	364	715.00	71					11.00	12
Boone	32,446.00	3,900	5,340.50	615			15.00	4	183.25	212
Box Butte	20,005.00	2,979	6,295.00	695			36.00	11	54.25	59
Boyd	14,167.00	1,720	2,051.50	211			19.00	5	85.25	87
Brown	11,586.00	1,430	1,730.50	201			2.00	1	92.50	90
Buffalo	55,846.00	6,594	10,028.50	1,083			37.00	13	415.25	450
Burt	31,620.00	3,717	5,955.00	629			19.00	5	142.75	165
Butler	34,863.00	4,012	6,404.00	730			13.00	5	164.50	157
Cass	40,204.00	4,769	8,538.50	893			69.00	20	112.25	134
Cedar	35,561.00	4,208	5,448.25	532			13.00	4	92.50	280
Chase	12,941.00	1,546	3,741.00	391			8.00	3	138.25	119
Cherry	15,297.50	2,419	3,956.88	447			11.00	3	59.50	71
Cheyenne	24,305.00	2,796	8,872.25	1,020			13.00	4	95.00	84
Clay	31,379.00	3,696	5,045.75	585			21.00	7	413.75	98
Colfax	27,963.00	3,323	6,345.50	738			11.00	3	129.50	130
Cuming	34,762.00	4,113	6,636.75	714			30.00	8	162.75	169
Custer	60,964.00	7,290	8,351.25	934	00.00	1	16.00	5	476.25	503
Dakota	19,580.00	2,332	4,396.25	444	00.00	1	28.00	9	63.25	56
Dawes	24,037.00	2,773	1,061.00	147			17.00	3	47.00	50
Dawson	41,344.00	4,884	7,961.25	883			25.00	9	433.25	448
Deuel	9,936.00	1,138	7,027.50	752			4.00	1	459.50	33
Dixon	24,088.00	2,904	3,304.25	329	4.50	1	4.00	3	108.75	125
Dodge	63,276.00	7,340	12,822.00	1,325			63.00	20	243.50	247
Douglas	436,653.25	49,741	71,132.00	6,967	637.00	32	509.00	163	776.25	499
Dundy	11,958.00	1,430	3,269.00	345	00.00	1			52.25	41
Fillmore	31,359.00	3,732	4,525.00	520			34.00	11	387.25	391
Franklin	21,493.00	2,545	3,394.00	364			24.00	8	127.75	128
Frontier	18,363.00	2,019	4,362.00	473			19.00	5	93.25	81
Furnas	29,001.00	3,467	4,122.50	465			7.00	2	210.00	222
Gage	67,666.00	7,902	11,323.00	1,293	00.00	3	90.00	24	421.25	421
Garden	11,354.00	1,358	3,237.50	362			17.00	5	23.50	27
Garfield	6,597.00	810	849.00	102			4.00	1	51.25	59
Gosper	11,070.00	1,350	1,780.25	204					108.25	111
Grant	3,323.00	391	662.00	80			4.00	1	1.00	1
Greeley	15,786.00	1,895	1,621.00	181			7.00	3	67.00	73
Hall	65,291.00	7,450	12,003.25	1,333			119.00	36	419.00	416
Hamilton	29,408.00	3,452	4,957.00	562			15.00	4	295.50	289
Harlan	20,540.00	2,440	2,651.50	289	60.00	1	4.00	2	249.00	255
Hayes	8,281.00	996	2,437.00	255					45.75	44
Hitchcock	15,718.00	1,916	4,166.00	452			18.00	6	171.25	131
Holt	29,981.00	3,685	4,229.50	485			15.00	5	160.00	186
Hooker	2,805.00	352	463.00	49					9.25	11
Howard	23,239.00	3,305	3,010.50	329			20.00	5	190.75	199
Jefferson	38,980.00	4,678	5,730.50	617			24.00	9	219.25	207
Johnson	21,718.00	2,611	3,743.50	399			15.00	4	108.00	103
Kearney	19,858.00	2,354	3,071.50	349			18.00	5	255.00	263
Keith	16,222.12	1,889	4,761.50	523			7.00	2	60.50	73
Keya Paha	6,245.00	774	1,131.00	123			9.00	3	146.00	69
Kimball	10,653.00	1,250	4,998.50	534			14.00	4	18.25	19
Knox	38,215.00	4,621	5,790.50	620			12.00	3	206.00	201

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, January 1 to December 31, 1931

Dealers			Transfers		Lost plates		Lost Certif.		Refunds		Totals		
Fees	Plates	App.	Fees	No.	Fees	No.	Fees	No.	Amt.	No.	Plates	Reg.	Fees
			2.00	2	1.00	1					124	127	\$ 22,363.75
870.00	82	27	1,337.25	995	42.00	42	\$ 12.00	9	\$ 21.00	5	7,743	8,789	66,611.00
213.00	21	21	609.50	475	17.00	15	97.00	97			4,724	5,311	38,394.25
20.00	2	2	54.00	35	2.00	2	2.00	2	12.00	3	395	494	3,325.00
			70.00	47	3.00	3	8.00	8			671	729	5,970.75
44.00	4	4	58.75	43	2.00	2	1.00	1			451	497	3,768.75
500.50	49	48	716.25	552	27.00	27	24.00	24			4,779	5,382	39,252.50
452.00	41	41	767.00	471	18.00	18	228.00	214	71.00	15	3,785	4,488	33,858.25
210.00	20	20	282.75	190	5.00	5	22.00	22			2,043	2,250	18,842.50
187.50	21	20	310.00	211	14.00	13	17.00	16			1,742	1,982	13,939.50
742.50	71	71	1,428.75	1,083	70.00	71	295.00	294			8,211	9,059	68,863.00
328.00	30	30	623.00	460	19.00	19	90.00	94	60.50	12	4,546	5,119	38,796.75
423.00	40	39	536.25	405	28.00	28	28.00	28			4,843	5,404	42,458.75
456.00	43	44	896.75	658	27.00	27	96.00	96	150.75	40	5,880	6,641	50,399.50
420.00	40	40	639.25	441	23.00	23	76.00	73	76.50	17	5,944	5,581	42,421.00
164.00	15	15	243.00	184	3.00	3	87.00	83	14.50	5	2,074	2,344	17,325.25
337.50	31	31	461.50	342	15.00	17	130.00	95			2,971	3,425	29,270.88
475.00	44	44	692.75	499	16.00	17	135.00	123	30.00	7	3,948	4,587	34,604.00
418.50	39	30	458.00	390	16.00	16	5.00	6	15.00	4	4,416	4,823	37,757.00
328.00	30	30	588.00	436	14.00	14	62.00	62			4,224	4,736	35,441.00
296.00	27	18	519.50	395	20.00	20	23.00	29			5,022	5,467	42,450.00
907.00	90	90	1,241.00	941	47.00	47	328.00	334	90.00	21	8,823	10,145	72,330.50
102.00	9	9	330.75	337	15.00	16	56.00	57	108.00	25	2,851	3,261	24,771.25
310.00	30	30	607.00	430	15.00	15	57.00	57	50.00	12	3,012	3,514	26,151.00
598.00	57	32	842.25	625	40.00	40	163.00	163	105.00	24	6,256	7,084	51,406.75
104.00	10	10	250.00	190	7.00	7	14.00	14	6.00	1	1,934	2,145	17,811.00
356.00	32	32	387.50	271	12.00	12	25.00	32	34.00	9	3,394	3,709	28,290.00
981.50	92	49	1,777.00	1,193	57.00	57	203.00	208			8,981	10,439	79,423.00
4,291.50	362	177	14,306.50	9,699	547.00	554	4,647.00	4,518	1,923.25	481	57,579	72,347	583,499.50
179.50	17	17	233.00	181	1.00	1	9.00	9			1,834	2,025	15,701.75
419.50	42	42	587.00	460	19.00	19	68.00	68	34.00	8	4,696	5,243	37,398.75
403.00	39	32	359.50	285	5.00	5	36.00	36	16.00	4	3,077	3,403	26,842.25
183.00	18	18	353.00	256	8.00	8	84.00	86			2,596	2,946	23,470.25
477.50	46	30	508.25	403	12.00	13	124.00	128	52.00	11	4,186	4,730	34,462.25
822.00	81	81	1,311.50	943	49.00	49	244.00	229	133.00	31	9,724	10,945	81,926.75
180.00	18	18	315.00	242	9.00	9	37.00	36			1,770	2,057	15,173.00
96.00	10	10	130.00	94	9.00	8	3.00	3			982	1,087	7,739.25
24.00	2	2	163.00	152	9.00	9	4.00	4			1,667	1,832	13,158.50
100.00	9	9	90.00	74							482	556	4,180.00
216.00	21	20	258.00	207	9.00	9	46.00	41	23.00	3	2,172	2,429	19,012.00
1,027.50	112	47	2,152.00	1,538	107.00	107	342.00	325	190.50	52	9,282	11,252	81,460.75
291.00	25	25	655.00	496	18.00	18	40.00	40	51.00	13	4,332	4,886	35,679.50
243.00	26	18	478.00	368	11.00	11	9.00	6			3,005	3,390	24,245.50
36.00	3	3	124.00	98	6.00	6	2.00	2			1,298	1,404	10,931.75
296.00	26	26	255.00	201	4.00	4	8.00	8	24.00	6	2,531	2,744	20,636.25
281.00	25	25	490.00	377	5.00	5	12.00	15	34.00	8	4,386	4,783	35,173.50
108.00	11	11	45.75	34	2.00	2	18.00	18	4.00	1	423	477	3,451.00
283.50	26	26	445.00	336	21.00	21	11.00	11			3,864	4,232	27,220.75
571.00	56	31	779.00	618	24.00	24	147.00	146	75.50	16	5,542	6,330	46,474.75
341.00	33	33	378.50	299	9.00	9	45.00	45			3,150	3,593	26,358.00
159.50	15	15	414.00	321	17.00	18	35.00	35			2,986	3,360	23,828.00
281.00	28	28	355.00	267	14.00	14	76.00	77	37.00	8	2,515	2,873	21,778.12
44.00	4	4	110.50	82			2.00	2			873	1,057	7,687.50
104.00	9	9	280.50	185	12.00	12	38.00	40	20.00	5	1,816	2,053	16,127.25
435.00	42	33	715.25	482	15.00	16	68.00	72	66.83	15	5,478	6,048	45,459.75

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, January 1 to December 31, 1931

County	Regular		Trucks		Busses		Motorcycles		Trailers	
	Fees	No.	Fees	No.	Fees	No.	Fees	No.	Fees	No.
Lancaster	234,402.00	26,885	32,277.25	3,331	678.00	23	439.00	145	709.00	751
Lincoln	51,520.00	5,964	8,882.00	1,004			40.00	13	151.00	178
Logan	4,574.00	557	677.00	84			4.00	1	25.25	28
Loup	3,725.00	451	596.00	82					54.75	58
Madison	58,466.00	6,782	11,337.25	1,252	00.00	1	50.00	15	453.25	434
McPherson	2,271.00	280	659.50	72					7.25	8
Merrick	25,307.00	2,970	4,479.00	515			18.00	6	198.00	216
Morrill	19,253.00	2,304	4,023.50	480			18.00	5	44.50	50
Nance	20,208.00	2,422	3,572.50	384	179.00	2	17.00	6	141.00	131
Nemaha	26,591.00	3,155	4,804.25	517	00.00	2	38.00	12	96.25	88
Nuckolls	27,830.00	3,278	3,892.25	436			5.00	2	153.75	168
Otoe	47,844.00	5,647	11,693.25	1,355			70.00	22	161.25	142
Pawnee	20,885.00	2,505	2,830.00	312			14.00	4	128.75	135
Perkins	13,940.00	1,628	5,814.00	637	00.00	2	13.00	4	79.00	84
Phelps	24,249.00	2,888	4,247.00	504			3.00	1	403.50	448
Pierce	25,485.00	3,064	3,991.75	401			11.00	3	191.00	206
Platte	47,266.00	5,492	9,490.50	1,061			42.00	14	326.25	330
Polk	25,200.00	2,939	5,360.00	604			12.00	5	223.00	234
Red Willow	30,868.00	3,671	6,297.50	733	00.00	6	19.00	6	104.50	123
Richardson	42,625.00	4,984	6,890.25	781			30.00	11	187.75	204
Rock	5,522.00	699	1,282.00	147			6.00	2	52.25	53
Saline	39,990.00	4,685	9,550.75	1,087			25.00	7	302.25	316
Sarpy	24,362.00	2,937	4,713.50	650	00.00	1	44.00	14	41.50	31
Saunders	49,813.00	5,898	10,355.00	1,127	00.00	1	37.00	12	119.25	139
Scotts Bluff	59,815.01	7,106	16,940.50	1,873	00.00	6	102.00	29	159.25	172
Seward	39,374.00	4,587	7,317.00	848	00.00	3	62.00	19	358.50	350
Sheridan	24,527.00	2,845	6,002.00	658			28.00	8	105.75	117
Sherman	19,432.00	2,340	2,619.75	293			23.00	6	111.50	127
Stoddard	8,737.00	1,046	2,682.00	301			4.00	1	37.25	37
Stanton	19,552.00	2,329	3,793.00	421					111.75	102
Thayer	30,737.00	3,645	4,397.50	508			17.00	5	327.50	344
Thomas	2,377.00	297	468.00	56			2.00	1	19.00	20
Thurston	17,278.00	2,118	2,737.75	279			23.00	8	34.25	35
Valley	21,900.00	2,575	3,674.00	401			12.00	3	140.75	158
Washington	29,631.50	3,516	6,701.00	759	151.00	1	22.00	6	107.75	102
Wayne	28,227.00	3,349	5,002.25	517			26.00	8	181.00	150
Webster	23,659.00	2,827	3,187.00	364			9.00	3	157.00	165
Wheeler	4,239.00	532	860.75	100			4.00	2	12.50	16
York	41,656.00	4,918	6,140.50	674			50.00	12	501.25	459
Totals	\$3,025,870.38	356,066	\$548,849.63	59,948	\$24,124.25	215	\$2,883.00	897	\$16,418.00	15,737

ANNUAL REPORT MOTOR VEHICLE DEPARTMENT
Lincoln, Nebraska, January 1 to December 31, 1931

Dealers			Transfers		Lost plates		Lost Certif.		Refunds		Totals		
Fees	Plates	App.	Fees	No.	Fees	No.	Fees	No.	Amt.	No	Plates	Reg.	Fees
2,370.00	211	151	6,151.25	4,747	362.00	371	1,169.00	1,172	917.00	222	31,286	37,576	278,557.50
700.00	66	48	1,259.50	993	39.00	41	439.00	425	98.00	26	7,207	8,666	63,030.50
44.00	4	4	130.00	98			5.00	5			674	777	5,456.25
16.00	2	2	53.75	37	3.00	3					593	633	4,448.50
851.50	75	44	1,656.75	1,177	52.00	53	159.00	159			8,528	9,917	73,025.75
29.00	3	3	54.00	33	1.00	1	3.00	3	4.00	1	363	400	3,024.75
393.50	37	37	609.25	455	11.00	11	65.00	64	11.00	3	3,744	4,274	31,080.75
257.00	23	23	607.00	413	11.00	11	111.00	110	75.00	18	2,962	3,395	24,325.50
255.00	28	28	341.00	248	16.00	16	70.00	67	34.00	6	2,973	3,304	24,799.50
234.00	21	20	462.50	344	17.00	17	71.00	69	2.00	1	3,794	4,224	32,314.00
168.00	18	14	483.00	377	12.00	12	46.00	46	37.00	10	3,998	4,333	32,588.00
668.00	61	61	1,014.00	769	59.00	54	125.00	127	88.00	20	7,227	8,157	61,575.50
238.00	22	14	345.00	263	5.00	5	26.00	25	4.00	1	2,970	3,263	24,483.75
455.00	42	42	292.00	211	12.00	12	28.90	27			2,397	2,647	20,633.00
305.00	32	32	768.00	616	14.00	14	70.00	70			3,873	4,573	30,056.50
230.00	21	15	431.00	326	19.00	16	80.00	81			3,689	4,122	30,435.75
562.00	54	51	951.00	710	44.00	44	233.00	233			6,928	7,915	58,914.75
290.00	27	17	563.00	422	19.00	19	37.00	37	81.00	11	3,799	4,777	31,704.00
631.00	57	37	876.00	623	26.00	36	263.00	245	132.00	24	4,576	5,419	38,895.00
464.00	43	27	922.00	701	27.00	27	135.00	127			6,007	6,962	51,281.00
40.00	4	4	98.25	75			5.00	5			905	985	7,005.50
540.50	50	50	601.00	473	28.00	23	45.00	45	31.00	9	6,125	6,966	51,077.50
205.00	19	19	668.50	489	28.00	28	74.00	76	85.00	19	3,652	4,185	30,076.50
538.50	50	50	864.00	629	19.00	19	139.00	132	74.37	16	7,227	7,998	61,824.75
759.50	71	71	2,174.00	1,529	27.00	27	764.00	766	183.00	44	9,257	11,641	79,911.26
514.50	52	40	691.00	540	22.00	22	60.00	57			5,845	6,464	48,399.00
620.00	59	34	852.00	608	18.00	18	166.00	126	37.00	9	3,662	4,214	32,018.75
207.00	19	19	377.00	284	16.00	16	10.00	8	15.00	4	2,785	3,103	22,796.25
54.00	5	5	148.00	116	4.00	4	37.00	37			1,380	1,537	11,693.25
187.50	17	17	251.00	211	14.00	14	10.00	12			2,969	3,106	23,919.25
535.50	52	37	552.00	425	19.00	19	60.00	59	4.00	1	4,539	5,042	36,645.50
100.00	9	9	59.00	29			6.00	8			383	429	3,024.00
162.00	16	16	260.75	201	3.00	3	35.00	35			2,456	2,696	20,523.75
306.50	33	33	404.00	319	14.00	13	34.00	31			3,170	3,533	25,885.25
204.50	20	20	518.50	397	13.00	13	64.00	64			4,404	4,883	37,418.25
266.00	20	20	506.75	392	19.00	19	8.00	8			4,044	4,463	34,230.00
311.00	28	28	327.00	264	1.00	1	26.00	26	62.00	14	3,387	3,678	27,677.00
20.00	2	2	90.00	67	4.00	4	1.00	1	20.00	5	652	744	5,240.25
568.50	56	56	1,002.00	767	25.00	25	87.00	87			6,119	6,968	50,080.25
\$37,439.00	3,505	2,797	\$71,018.25	62,064	\$2,591.00	2,615	\$13,207.00	12,916	\$5,523.20	1,340	435,562	503,157	\$3,742,400.51

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PART II

**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**

DEPARTMENT OF PUBLIC WORKS
EXECUTIVES AND EMPLOYEES

OF

BUREAU OF IRRIGATION, WATER POWER AND DRAINAGE

R. L. Cochran, Lincoln.....Secretary and State Engineer
Robert H. Willis.....Chief
F. B. Shaffer, Bridgeport.....Office Engineer
K. I. Ward, Lincoln.....Statistician
E. Clay, Lincoln.....Assistant Statistician
A. W. Hall, Bridgeport.....Senior Hydrographer
A. E. Johnston, Bridgeport.....Junior Hydrographer
John J. Rasmussen, Crawford.....Superintendent Water Division No. 2
Fern Sharp, Bridgeport.....Clerk—Stenographer

WATER COMMISSIONERS

W. F. Chaloupka, Bridgeport.....District No. 2, Division No. 1-A
S. B. Hanna, Kimball.....District No. 1, Division No. 1-E
Charles Gardner, Sidney.....District No. 2, Division No. 1-E
C. T. Korell, Culbertson.....District No. 1, Division No. 1-B

ACTING WATER COMMISSIONERS

James Boodry, Bridgeport.....Division No. 1-A
Joe V. Ruzicka, Lewellen.....Division No. 1-A
F. C. Edwards, Gothenburg.....Division No. 1-A
Fred Frame, Hershey.....Division No. 1-A

OBSERVERS

J. L. Long.....March, 1931 to October 31, 1931*
Jack Jones.....March, 1931 to October 31, 1931*
John Todd.....March, 1931 to September 30, 1931*
John Zailer.....March, 1931 to October 31, 1931*
Frank Leonard.....February, 1931 to October 31, 1931*
H. H. Wasserburger.....April, 1931 to October 31, 1931*
R. O. Burton.....March, 1931 to November 30, 1931*
Gladys Phinney.....February, 1931 to October 31, 1931*
C. L. Bogle.....March, 1931 to October 31, 1931*
George Soderquist.....March, 1931 to October 31, 1931*
Henry Ronneker.....March, 1931 to October 31, 1931*
William A. Mueller.....March, 1931 to October 31, 1931*
Bina Montague Wegezyn.....February, 1931 to October 31, 1931*
A. F. Ayers.....March, 1931 to November 30, 1931*
R. R. Deist.....April, 1931 to October 31, 1931*
E. L. Jimerson.....February, 1931 to October 31, 1931*
Tom Megas.....February, 1931 to October 31, 1931*
Mrs. Miles Jones.....March, 1931 to October 31, 1931*

J. W. Keifer.....	April, 1931 to November 30, 1931*
Mrs. T. M. Ashton.....	March, 1931 to November 30, 1931*
W. E. Worthington.....	March, 1931 to October 31, 1931*
Leonard Denbo.....	March, 1931 to July 31, 1931*
T. A. Schumacher.....	April, 1931 to October 31, 1931*
Ben Itzkovetch.....	February, 1931 to October 31, 1931*
Fred Wolff.....	March, 1931 to October 31, 1931*
V. C. Horne.....	March, 1931 to October 31, 1931*
A. C. Ray.....	December, 1930 to October 31, 1931*
C. G. Waldo.....	December, 1930 to November 30, 1931*
F. W. Smith.....	December, 1930 to October 31, 1931*
Glen Mong.....	December, 1930 to October 31, 1931*
A. W. Shilling, Jr.....	December, 1930 to November 30, 1931*
Dale McClara.....	April, 1931 to October 31, 1931*
E. D. Long.....	December, 1930 to October 31, 1931*
Ralph Lindley.....	April, 1931 to September 30, 1931*
R. W. Reim.....	December, 1930 to September 30, 1931*
L. H. Weyl.....	March, 1931 to October 31, 1931*
Lucille Brockstrup.....	May, 1931 to October 31, 1931*
Fred Rohlfing.....	April, 1931 to October 31, 1931*
Robert Cornett.....	April, 1931 to October 31, 1931*
Adolph Kasparek.....	March, 1931 to September 30, 1931*
L. D. Carnine.....	March, 1931 to November 30, 1931*
Mrs. A. E. Gentle.....	April, 1931 to November 30, 1931*
W. H. Briscoe.....	August, 1931 to September 30, 1931*
Glen Lewis.....	September, 1931 to October 31, 1931*
George W. Anderson.....	October, 1931 to November 30, 1931*
George F. Shelton.....	December, 1930 to June 30, 1932*
Wilber Yarger.....	April 1, 1931 to April 30, 1931*
Loretta Stachura Euse.....	December, 1930 to March 31, 1931*
Archie Joe Luxa.....	December, 1930 to November 30, 1932

*Date of Dismissal.

Bridgeport, Nebraska,
November 15, 1932.

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

Dear Sir:

I am submitting herewith my report on the general activities coming before the Bureau of Irrigation, Water Power and Drainage during the biennium ending September 30, 1932.

Water Supply

The United States Weather Bureau and Forest Service, cooperating with this Bureau, reported snowfall in the higher elevations of the North Platte Basin at the close of April, 1931 and 1932, as 70 per cent and 105 per cent of normal, respectively.

The inflow of the Pathfinder Reservoir for the year ending September 30, 1931, was 701,000 acre feet, or 48 per cent of mean; and for 1932, ending September 30, there were 1,509,000 acre feet, or 104 per cent of mean. Of the above amounts 350,000 acre feet and 830,000 acre feet were stored in 1931 and 1932, respectively.

Although the annual discharge of the North Platte and Platte Rivers for 1932 at all stations, was considerably less than 1931, the flow for May to September inclusive (Fig. 2) was some better.

During the 1931 season, water users having priorities subsequent to June 1, 1890, were closed for a few days, and those having priorities subsequent to December 26, 1892, were without water after July 1. Projects depending upon the reserved supply in the Pathfinder Reservoir were restricted to approximately sixty per cent of the normal supply, and the reservoir was emptied September 8. The 1931 season is the first serious shortage experienced since 1910.

The water supply for the 1932 season was some better, particularly so east of North Platte and west of Mitchell. However, water users having priorities subsequent to December 28, 1894, were without water more or less after July 12, 1932.

The water supply of Lodgepole Creek, the Niobrara River, White River, Frenchman River, Republican River, and other streams, for the 1931 and 1932 seasons, was thirty to fifty per cent below normal; and the South Platte River was much diminished in flow. Reference to discharge records tabulated elsewhere in this report should be made for more detailed information.

Distribution

Four water commissioners were employed from June 1 to September 30, 1931, to administer the available water supply in the Platte River Basin. The river from the Wyoming-Nebraska Line to Kearney was divided into four sections and each water commissioner covered his entire section once each day. In 1932, three water commissioners were employed from June 1 to September 30. The river was divided into three sections and each water commissioner covered half of his territory each day. However, the demand on the time of the water commissioners, during the two seasons, was so great at times that two hydrographers were taken from their regular duties to render assistance.

The available water supply of Lodgepole Creek was satisfactorily administered by two water commissioners employed part time; of the Frenchman and Republican Rivers by one water commissioner employed part time; and of the Niobrara River, White River, and tributaries by one water superintendent employed part time.

Because of storage appropriations on the White River, and in the Hat Creek Basin, it is necessary to employ a water superintendent part time during the entire year.

Hydrography

Stream measurements published in this biennial were made under a cooperative agreement between the United States Geological Survey and the State of Nebraska. The Survey hydrographers made all measurements in the North Platte River Basin between the Wyoming-Nebraska Line and Lisco, and at all stations east of Kearney on the Platte River, east of McCook on the Republican River, and east of Valentine on the Niobrara River. Nebraska employs one hydrographer the year round to make measurements on streams not covered by the United States Geological Survey, and in addition employs one hydrographer during the summer months to make measurements on Lodgepole Creek, the Frenchman River, and the Republican River west of McCook, including tributaries.

Daily discharge data have been collected and tabulated bearing on the flow of fifty streams other than the Platte River, North Platte River, and South Platte River, which data are being published in this Biennial Report.

Administration

The public waters of the State available for beneficial use, are administered by the Bureau of Irrigation, Water Power and Drainage, as a division of the Department of Public Works.

To administer the water of a stream with some degree of intelligence, information as to the amount available and the quantity required by water users is necessary.

The information as to the available supply of water in any basin is obtained through frequent observations made by some authorized person, at stations previously established on the stream. The more frequently observations are made the more intelligently the distribution of water can be made.

The administration of water in streams such as the Republican River, Frenchman River, Lodgepole Creek, White River, Niobrara River, and other small streams, is performed by Water Commissioners acting under general instructions from the Department of Public Works. These Water Commissioners are permitted to use their own initiative more or less. However, the waters of the North Platte, South Platte, and Platte Rivers, together with tributaries, are administrated by Acting Water Commissioners under the direct supervision of the department.

The Platte River Basin not only extends across the entire state but it is an interstate stream. The sources of water supply, the diversions, and destinations are so numerous and intricate that a system is necessarily maintained to conduct an orderly distribution of the available water supply.

No one Water Commissioner in this organization or system is permitted very much initiative. The distribution of water in his division cannot be conducted independently of other divisions. Hence, the necessity of a central control from which Water Commissioners receive instructions to guide them as to that part of their duties concerning distribution.

The administration of the water within the State is not entirely independent of influence outside the State. Cooperation with the officials of Colorado, Wyoming, and the United States Government is essential to orderly distribution of the water in the Platte River Basin. The State of Wyoming and the United State Bureau of Reclamation demand daily information as to the diversions and available water supply in the various sections of the Platte River Basin. Hence, exchange of available data related to the water supply and its disposition has been maintained during recent years.

Interstate Problems

Part of the water used by water users under the Pathfinder, Fort Laramie, Northport, Farmers, and Gering irrigation districts is stored in the Pathfinder and Guernsey Reservoirs. When the flow of the North Platte River has diminished to the point that there is not sufficient water to supply the natural flow rights in the order of priority, storage water from the reservoirs is released to supplement their respective natural flow rights.

The Pathfinder Reservoir is about two hundred forty miles (240) west of the Wyoming-Nebraska Line. Storage water mingles with nat-

ural flow water as it flows down-stream, passing the headgates of many canals in Wyoming. During the seasons of 1931 and 1932 Wyoming water users diverted natural flow, regardless of priorities, and storage water to which they had no claim. This is a problem to be tolerated until such time as it can be disposed of by the States interested.

Water Commissioners

The importance of having daily reports as to the water supply and the disposal of water to appropriators in the Platte River Basin was emphasized during the critical water situation of 1931 and 1932. Four Water Commissioners were employed for the 1931 season. The Platte River Basin between the Wyoming-Nebraska Line and Kearney was divided into four divisions. The total distance necessarily traveled by four Water Commissioners each day was approximately seven hundred forty (740) miles, or about one hundred fifty (150) miles to each Commissioner, visiting more than one hundred ninety (190) projects.

In the 1932 season three Water Commissioners were employed to cover the same distance each day from June 1 to July 15. The work was found to be too strenuous for three men, and after July 15 to the end of the season the Commissioners were instructed to cover half of their respective divisions each day.

Observers

About forty observers were employed to read gage rods each day during the 1931 season. After November 1, 1931, the services of all observers were suspended, with the exception of one observer on the South Platte River at Julesburg, Colorado. This observer was retained because of the compact between Colorado and Nebraska, requiring observations.

After June 1, 1932, the Water Commissioners took over this work on the Platte and North Platte Rivers and some of the tributaries. In other basins the United States Geological Survey employed the observers as a part of the cooperative plan.

Sandhill Lakes

Attention has been attracted to the possibility of water percolating from the sandhill regions to the Platte River. Four "water stage" stations were established by installing graduated staffs in the lakes, and readings of the staffs were made twice a month to record the water surface fluctuations.

Observations on the Carnine Lake, situated about five miles north of Angora, Nebraska, were begun in October, 1929. The range of fluctuation between October, 1929, and October, 1932, was five feet. The highest was in April, 1931, and the lowest in October, 1932.

Tabulations of the rise and fall of the water surface of these lakes

are published elsewhere in this report. Observations on all but the Carmine Lake were discontinued after November 1, 1931.

Precipitation

The annual precipitation in the vicinity of Mitchell was forty per cent of normal for 1931, and eighty per cent of normal for 1932. For the territory around Bridgeport the annual precipitation was seventy and eighty per cent for 1931 and 1932, respectively. In the vicinity of Oshkosh the annual precipitation was seventy and seventy-six per cent of normal for 1931 and 1932, respectively. At North Platte the precipitation was eighty-two and ninety-five per cent of normal for 1931 and 1932, respectively; and around Lexington the annual precipitation was ninety-two and one hundred six per cent of normal for 1931 and 1932, respectively. The deficiency was greater in the sections west of Oshkosh after April 1 for both seasons.

The precipitation in the vicinity of Fort Robinson was eighty per cent of normal in 1931, and normal in 1932. Around Culbertson the precipitation was above normal in 1931, and eighty per cent of normal in 1932.

Automatic Records

Through cooperative arrangements the United States Geological Survey installed four automatic recorders in 1931. There are now eight recorders on the North Platte, South Platte and Platte Rivers, and two on the Frenchman River. The United States Geological Survey furnished the two on the Frenchman River, and two on the North Platte River.

The North Platte River is now fairly well supplied with recorders west of the Wyoming-Nebraska Line. Recorders maintained by Wyoming, the United States Reclamation Bureau, and the United States Geological Survey, in Wyoming and Colorado, are seven in number.

The automatic record sheets are removed from the river recorders once a month by our hydrographers.

There are forty-eight automatic recorders installed on canals in the State. The record sheets are removed from the canal recorders once a week by our Water Commissioners.

Statistical Summary

Streams and Canals Measurements—Nebraska.....	8975
Streams and Canals Measurements—U. S. Geological Survey.....	1700
Applications Filed	113
Water Appropriations Permits.....	105
Applications Canceled	26
Applications Dismissed	10
Applications Pending	49

Hearings Held	6
Relocation Permits	13
Relocation Petitions Dismissed.....	5
Water Power Leases.....	3
Deeds Recorded	38
Drainage Districts Organized.....	3
Maps and Plans Filed.....	149
Field Inspections	188
Fees Turned Over to State Treasurer.....	\$2409.20

Recommendations

To efficiently administer the distribution of the available water supply, four Water Commissioners should be employed in the Platte River Basin between the Wyoming-Nebraska line and Kearney, for period beginning May 1 to September 30.

Studies of the available water supply and disposal in the Platte River Basin should be continued, and for that purpose data should be acquired by the department, and published each biennium. Storage, hydro-electric power and irrigation possibilities depend entirely upon the available water supply.

Acknowledgment

Credit is due to those individuals who contributed, assisted and cooperated in the performance of the duties of our department, including T. F. Neighbors, Special Assistant Attorney General on Irrigation; K. I. Ward, Stastitician; Esther Clay, Assistant Statistician, of the Lincoln office; A. W. Hall, Hydrographer; F. B. Shaffer, Office Engineer; A. E. Johnston, Hydrographer; and Fern Sharp, Clerk and Stenographer, of the Bridgeport office; John J. Rasmussen, Superintendent of Water Division Number 2, Crawford; S. B. Hanna, Water Commissioner; C. H. Gardner, Water Commissioner; C. T. Korell, Water Commissioner; James Boodry, Acting Water Commissioner; J. V. Ruzicka, Acting Water Commissioner, and F. C. Edwards, Acting Water Commissioner.

Cooperative work was carried on with J. A. Whiting, State Engineer of Wyoming; F. M. Roush, Second Assistant State Engineer of Wyoming; C. F. Gleason, Superintendent of Power, United States Bureau of Reclamation, Guernsey, Wyoming; Robert Follansbee, District Engineer, United States Geological Survey, and his assistant engineers.

Respectfully submitted,

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



State Irrigation Office Building at Bridgeport

Division of Statistics

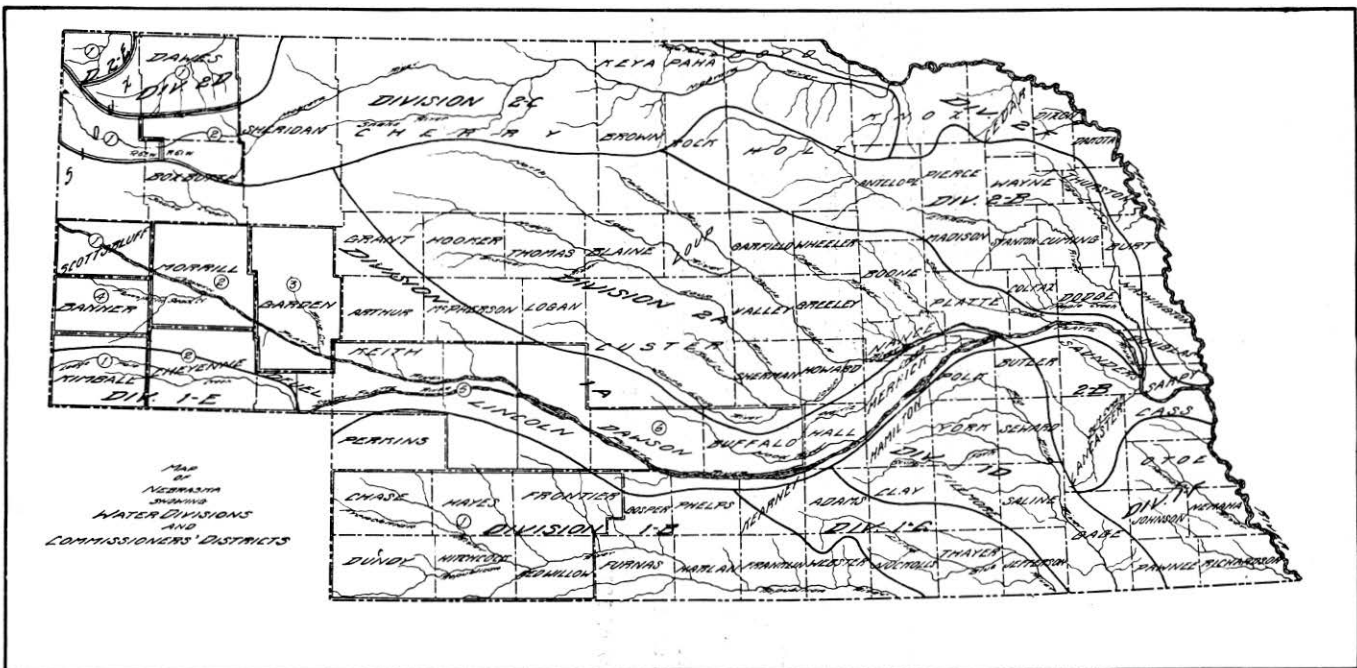
WATER DIVISIONS AND WATER DISTRICTS

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; C. S. 1929, 46-510).

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; C. S. 1929, 46-511).

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; C. S. 1929, 46-512).

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, 2-A, 2-B, 2-C, 2-D, 2-E, and 2-F, as shown on the opposite page.



CLAIMS AND APPLICATIONS

The following table gives a complete list of all claims and applications of record in the Bureau of Irrigation, Water Power and Drainage of the Department of Public Works which have not been canceled, and the list also includes applications which have been filed and not approved.

The claims and applications have been arranged in each Water Division by stream in alphabetical order, and appropriations on each stream are arranged in order of priority.

Appropriations having docket numbers are claims made covering rights 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	Mo.	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
Anderson Seep (No. Platte R.)	Clarke, M. G.	Okmulgee, Okla.	Gordon Canal	O. D.		26	20	51	Morrill	Nov.	7	1931	853	2248
Atkins Drain (No. Platte R.)	Atkins, A. W.	Bridgeport	Atkins Canal	O. D.		15	19	49	Morrill	Mar.	27	1916	828	1450
Ash Creek	Noetzelman, Mrs. Anna	Lewellen	Gilliard Canal	Irrig.	1.43	3	16	42	Garden	Dec.	31	1890	812	—
Bayard Sugar Factory 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	Dom.	1.00	8	12	14	Buffalo	July	26	1919	—	1550
Beaver Creek	Yanda, Geo. J.	Ravenna	Yanda Pump	Irrig.	.90	8-9	12	14	Buffalo	Apr.	4	1927	—	1920
Birdwood Creek	Birdwood Irr. Dist.	North 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.	18.80	18	16	42	Garden	May	16	1890	763	—
Blue Creek	Union Irr. & Water Power Company	Lewellen	Graf Canal	Irrig.	1.20	19	16	42	Garden	May	16	1890	763'R'	—
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	Meecker Ditch Co.	Lewellen	Graf Canal	Irrig.	32.73	19	16	42	Garden	Apr.	2	1894	788	—
Blue Creek	Hooper Irr. Dist.	Lewellen	Hooper Canal	Irrig.	.27	6	16	42	Garden	Apr.	2	1894	788'R'	—
Blue Creek	Blue Creek Irr. Dist.	Lewellen	Blue Creek Canal	Irrig.	3.79	33	17	42	Garden	Sept.	27	1894	795	—

DEPARTMENT OF PUBLIC WORKS

"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	Mo.	D			Yr.
Blue Creek.....	Paisley Irr. Dist.....	Lewellen.....	West Side Canal.....	Irrig.	15.55	28	17	42	Garden.....	Nov.	20	1894	800	—
Blue Creek..... (No. Platte R.)	Robinson, A. A.....	Gering.....	Midland-Overland Canal.....	O. D.		4	16	44	Garden.....	Nov.	20	1894	800	1742'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
Buckhorn Spgs.....	Maddox, P. P.....	North Platte.....	Maddox Canal.....	Irrig.	2.28	8	14	36	Keith.....	Oct.	3	1908	—	918
Buffalo Creek..... (Platte River)	Savins, Richard.....	Lexington.....	Savins Pump.....	O. D.		22	10	21	Dawson.....	Aug.	18	1917	622	1495
Buffalo Creek..... (Platte River)	Doughty, Wm. T. and R. H.....	Lexington.....	Doughty Pump.....	O. D.		21	10	21	Dawson.....	Mar.	24	1922	622	1648
Buffalo Creek.....	Kopf, Walter W.....	Buffalo.....	Kopf Pump.....	Irrig.	.57	21	12	22	Dawson.....	Mar.	3	1926	—	1799
Buffalo Creek.....	Broe, John L. and Thos. F.....	Elm Creek.....	Streiff Pump.....	Irrig.	1.80	35	9	19	Dawson.....	Sept.	15	1926	—	1859
Buffalo Creek..... (Platte River)	Hodgson, Martha.....	Lexington.....	Hodgson Pump.....	O. D.		33	10	20	Dawson.....	Oct.	28	1926	622	1868
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	—	1959
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.	4.43	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

"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	Mo.			D	Yr.
Buffalo Creek & Mud Creek	Ulrich, Maria	Lexington	Ulrich Canal	Irrig.	.52	1	8	19	Dawson	Feb.	4	1929	.....	2068
Buffalo Creek	Gilmore, Eliza A.	Murray	Gilmore Pump	Irrig.	1.03	21	9	19	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.	1.57	12	9	20	Dawson	July	13	1929	.....	2089
Buffalo Creek	Jensen, Peter F.	Cozad	Jensen Pump	Irrig.	1.00	21	11	22	Dawson	July	17	1929	.....	2090
Buffalo Creek	Kopf, Walter W.	Buffalo	Kopf Reservoir	Supple. Storage	†756A	21	12	22	Dawson	Dec.	23	1930	.....	2180
(Res. A-2180)	Kopf, Walter W.	Buffalo	Kopf Reservoir	Irrig.	2.90	21	12	22	Dawson	Dec.	23	1930	.....	2181
Buffalo Creek	Mitchell, Geo. E.	Elm Creek	Mitchell Pump	Irrig.		36	9	19	Dawson	Mar.	31	1932	.....	2265*
Bull Drain	Norris, David	Maxwell	Norris Pump	Irrig.	.93	29	13	28	Lincoln	Feb.	18	1932	.....	2253
Camp Creek	Wehn, J. W.	Alliance	Camp Creek Canal	Irrig.	1.43	13	18	49	Morrill	Mar.	16	1892	866	.....
Camp Clark Sp. (No. Platte R.)	Schermerhorn Irr. Company	Bridgeport	Schermerhorn Canal	O. D.	A-118	9	20	51	Morrill	June	22	1929	.....	2088
Carter Creek	Gardner, Wm. E.	Gering	Carter Canal	Irrig.	3.70	27	21	56	Scotts Bluff	Oct.	13	1922	.....	1691
Cedar Creek	Radcliffe, Mack	Sidney	Nelson-Radcliffe 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 Co.	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 Creek Canal	Irrig.	2.86	32	16	41	Keith	July	1	1888	748	.....

*Application Pending.
†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	Mo.	D			Yr.
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
Clear Creek	Scripter, Henrietta	Lewellen	Scripter Canal	Irrig.		32	16	41	Keith	Oct.	6	1932	.....	2288
Cold Water Cr.	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	1912	.....	1225
Crescent Lake	Lake Water Carry. Co.	Lewellen	Crescent Lake Project	Supple.	148.57	21	20	44	Garden	Jan.	30	1920	.....	1575
(Blue Creek)	Lake Water Carry. Co.	Lewellen	Union Canal	Irrig.	20.00	18	16	42	Garden	May	16	1890	763	1575
(Blue Creek)	Lake Water Carry. Co.	Lewellen	Hooper Canal	Irrig.	12.86	6	16	42	Garden	Sept.	7	1893	781	1575
(Blue Creek)	Lake Water Carry. Co.	Lewellen	Blue Creek Canal	Irrig.	39.00	33	17	42	Garden	Dec.	27	1893	785	1575
(Blue Creek)	Lake Water Carry. Co.	Lewellen	Graf Canal	Irrig.	32.73	19	16	42	Garden	Apr.	2	1894	788	1575
(Blue Creek)	Lake Water Carry. Co.	Lewellen	Hooper Canal	Irrig.	.27	19	16	42	Garden	Apr.	2	1894	788	1575
(Blue Creek)	Lake Water Carry. Co.	Lewellen	Blue Creek Canal	Irrig.	3.79	21	17	42	Garden	Sept.	27	1894	795	1575
(Blue Creek)	Lake Water Carry. Co.	Lewellen	West Side Canal	Irrig.	15.55	28	17	42	Garden	Nov.	20	1894	800	1575
(Blue Creek)	Lake Water Carry. 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 (1575)

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	Mo.	D			Yr.
Dawson County Drainage Ditch No. 1 (Platte River)	Orthman, Vernon C.	Lexington	Orthman Pump	O. D.		14	9	21	Dawson	Mar.	15	1930	624	2129
Dawson Drain	Baalhorn, Fred	Cozad	Baalhorn Pump	Irrig.		3	10	23	Dawson	Sept.	5	1931		2234*
Deep Cold Creek	Finn, J. L.	Dalton	Finn Brothers 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	Mar.	17	1924		1740
Dougout Creek (Lower)	Hecht, Tilford M.	Broadwater	Cooper Canal	Irrig.	.86	4	19	48	Morrill	Aug.	15	1892	872	
Dougout Creek (Lower)	Mulloy, Francis C.	Broadwater	Mulloy Canal	Irrig.	1.00	27	27	48	Morrill	July	18	1907		865
Dougout Creek (Lower)	Hecht, Tilford M.	Broadwater	Hagerty Canal	Irrig.	1.00	4	19	48	Morrill	Oct.	26	1912		1238
Dougout Creek (Lower)	Hecht, Tilford M.	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	18	Buffalo	Jan.	28	1929		2066
Farmers Canal Seep (North Platte River)	Warner, Frank	Morrill	Warner Canal	O. D.		12	23	57	Scotts Bluff	Sept.	16	1887	918	1769
Gebauer Seep Lake	Gebauer, Paul G.	Northport	Gebauer Canal	Irrig.	.80	28	20	50	Morrill	Apr.	25	1930		2138

*Application Pending.
†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	Mo.	D			Yr.
Golden Creek	Theis, M. J.	Ogalalla	Theis Canal	Irrig.	2.71	25	15	39	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	11	36	Keith	Jan.	3	1910	.....	874
Greenwood Cr.	Keenan, Marry K.	Bridgeport	Trinnier Canal	Irrig.	6.29	28	18	50	Morrill	Apr.	6	1891	849	.....
Greenwood Cr.	Keenan, Marry K.	Bridgeport	Nelson Canal	Irrig.	3.00	33	18	50	Morrill	Apr.	1	1892	845	.....
Greenwood Cr.	Shannon, Ray	Bridgeport	Capron Canal	Irrig.	2.00	15	18	50	Morrill	Jan.	1	1893	890	.....
Greenwood Cr.	Meglemre, C. E.	Bridgeport	Meglemre Canal	Irrig.	.50	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
Greenwood Cr.	Keenan, Mary K.	Bridgeport	Trinnier Canal	Irrig.	1.65	28	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 Assn	Morrill	Gilmore Canal	Irrig.	9.00	33	23	58	Scotts Bluff	Feb.	21	1910	.....	983
Horse Creek	Mihan, John, Estate	Morrill	State Line Canal	Irrig.	2.00	33	23	58	Scotts Bluff	Apr.	21	1910	.....	994
Horse Creek	Castell and Husted	Henry	Jackson Extension	Irrig.	1.00	27	23	58	Scotts Bluff	May	19	1910	.....	1000
Horse Creek	Marsh and Braziel	Morrill	Marsh-Braziel											
Horse Creek	Great Western Sugar Company	Scottsbluff	Extension	Irrig.	13.00	4	22	60	Wyoming	Sept.	18	1911	.....	1126
			Lyman Factory	Mfg.	15.00	34	23	58	Scotts Bluff	June	16	1926	.....	1819
Horse Creek	Mitchell Irr. Dist.	Mitchell	Mitchell Irr. District	Supple.		25	23	58	Scotts Bluff	June	9	1931	.....	2206*
Horse Creek	Mitchell Irr. Dist.	Mitchell	Mitchell Irr. District Power Plant	Power	60.00	25	23	58	Scotts Bluff	June	9	1931	.....	2207
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	Great Western Sugar Company	Scottsbluff	Bayard Factory	Mfg.	15.00	34	21	52	Morrill	Oct.	4	1920	.....	1593

*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	Mo.	D			Yr.
Hoth Draw	O'Holloran, Jas.	Bayard	O'Holloran Pump	Power		28	21	52	Morrill	July	16	1930		2147*
Huntington Springs	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 and Crigler, E. S.	Redington	Redington Canal	Irrig.	.57	36	19	52	Morrill	Oct.	9	1889	820	
Lawrence Fork	Lindberg, Fred R.	Bridgeport	E. S. Crigler Canal	Irrig.	.57	1	18	52	Morrill	Sept.	11	1891	861	
Lawrence Fork	Neihus, Pearl E.	Redington	Spring Branch Canal	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 Canal	Irrig.	1.43	1	18	52	Morrill	Nov.	25	1898		486
Lawrence Fork	Willis, Mrs. Anna	Bridgeport	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 and Postal	Henry	Randall Canal	Irrig.	2.57	21	18	52	Morrill	May	15	1911		1100
Lawrence Fork	King, Wm. O.	Kearney	King Canal	Irrig.	2.46	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
Loneragan Creek	Soehl, Herman A.	Lemoyno	Soehl Canal	Irrig.	2.00	17	15	39	Keith	May	10	1889	697a	
Loneragan Creek	Jacobs, Lee	Lemoyno	East Loneragan Canal	Irrig.	9.14	17	15	39	Keith	May	25	1889	699	
Loneragan Creek	Soehl, Herman A.	Lemoyno	Soehl Canal	Irrig.	.86	17	15	39	Keith	Apr.	27	1893	697b	
Loneragan Creek	Harris, F. H.	Lemoyno	Haney Canal	Irrig.	1.14	17	15	39	Keith	July	1	1893	719	
Lost Creek	Campbell, Wm. N.	Oshkosh	Campbell Canal	Irrig.	1.69	11	17	44	Garden	Dec.	23	1929		2118

*Application Pending.

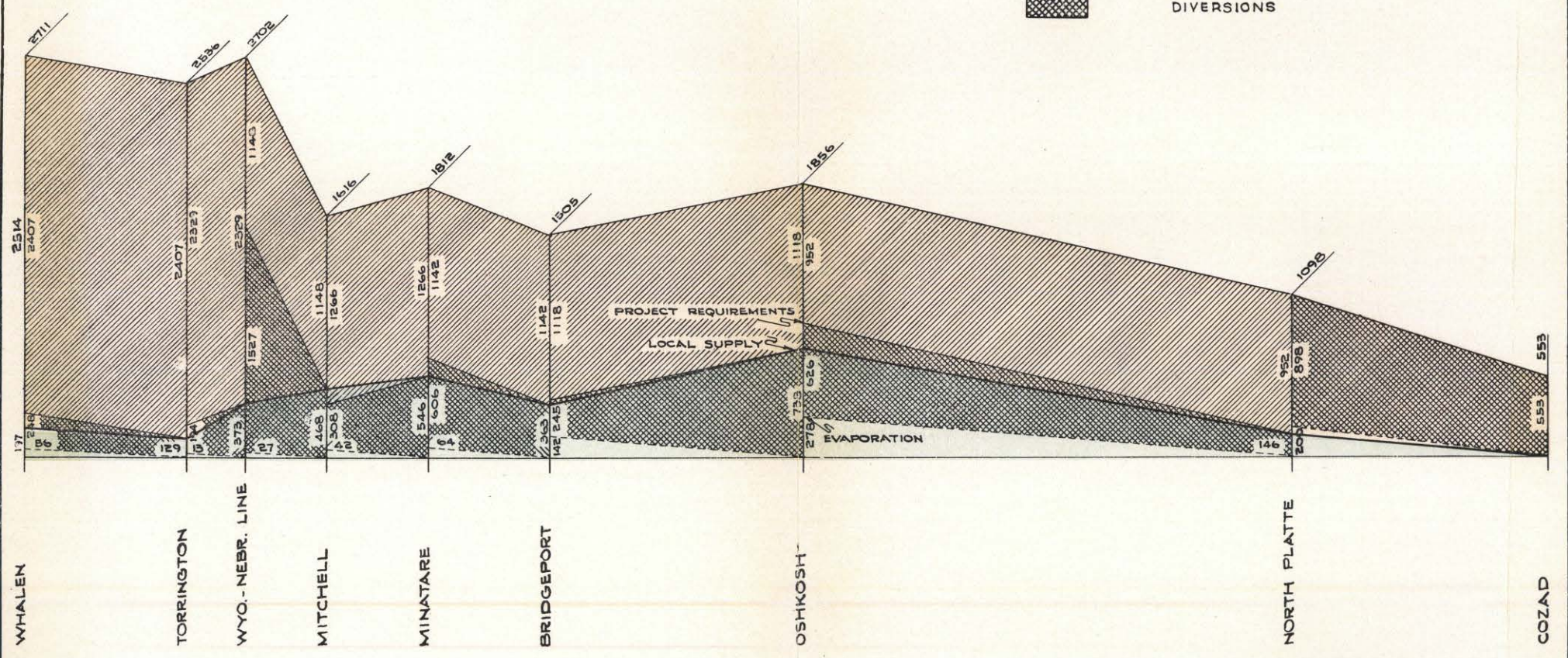
CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-A—Continued

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	Mo.			D	Yr.
Mathews Creek	Mathews, Benj. G.	Keystone	Mathews Canal	Irrig.	1.14	28	15	37	Keith	Apr.	1	1893	750	—
Medicine Creek	Game, Forestation & Parks Commission	Lincoln	Wellfleet Pleasure Resort	Resort	†80AF	46	9	30	Lincoln	June	15	1931	—	2210
Middle Creek, Springs, Tributary to	Bartling, Henry	Redington	Bartling Canal	Irrig.	.29	28	18	51	Morrill	July	31	1891	870	—
Middle Creek, Springs, Tributary to	Bartling, Henry	Redington	Bartling Canal	Irrig.	.29	28	18	51	Morrill	June	1	1894	891	—
Mud Creek and Buffalo Creek	Ulrich, Maria	Lexington	Ulrich Canal	Irrig.	4.20	1	8	18	Dawson	Feb.	4	1929	—	2068
Nine Mile Draw (No. Platte R.)	Nine Mile Irr. Dist.	Bayard	Nine Mile Canal	O. D.		10	21	53	Morrill	Aug.	19	1915	925	1431
North Platte R.	Platte Valley Irr. Dist.	Hershey	North Platte Canal	Irrig.	300.00	13	14	31	Lincoln	May	31	1884	635	—
North Platte R.	Farmers Irr. Dist.	Scottsbluff	Tri-State (Farmers) Canal	Irrig.	1142.86	3	23	58	Scotts Bluff.	Sept.	16	1887	918	—
North Platte R.	Farmers Irr. Dist.	Scottsbluff	Ramshorn Canal	Irrig.	3.07	13	23	58	Scotts Bluff.	Sept.	16	1887	918	1398
North Platte R. (Sheep Creek)	Sheep Creek Lateral Company	Morrill	Sheep Creek Lateral	O. D.		8	23	57	Scotts Bluff.	Sept.	16	1887	918	1176
North Platte R. (Sheep Creek)	Sheep Creek Lateral Company	Morrill	Sheep Creek Lateral	O. D.		8	23	57	Scotts Bluff.	Sept.	16	1887	918	1398
North Platte R. (Dry Spotted Tail)	Hrasky, Frank and Chas.	Mitchell	Roberts Canal	O. D.		16	23	56	Scotts Bluff.	Sept.	16	1887	918	1241

†Acre feet per annum.
"R" Denotes relocation.

STATE OF NEBRASKA
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF IRRIGATION, WATER POWER AND DRAINAGE
 R.H. WILLIS, CHIEF
**THEORETICAL REQUIREMENTS
 FOR JULY AND AUGUST.
 PROJECTS ANTEDATING SEPT. 19, 1904
 PLATTE RIVER BASIN**

LEGEND
 FOREIGN SUPPLY
 LOCAL SUPPLY
 DIVERSIONS



Shaffer

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	Mo.	D			Yr.
North Platte R. (Wet Spotted Tail)	Stewart, H. G.	Mitchell	Stewarts Canal	O. D.		10	23	56	Scotts Bluff	Sept.	16	1887	918	449
North Platte R. (Hoth Draw)	O'Holloran, Jas.	Bayard	O'Holloran Canal	O. D.		28	21	52	Morrill	Sept.	16	1887	918	1473
North Platte R. (Seep Farmers Canal)	Warner, Frank	Morrill	Warner Canal	O. D.		12	23	57	Scotts Bluff	Sept.	16	1887	918	1769
North Platte R.	Minatare Mut. Canal & Irr. Co.	Minatare	Minatare Canal	Irrig.	249.43	32	22	54	Scotts Bluff	Jan.	14	1888	919	.....
North Platte R.	Winter Creek Irr. Co.	Scottsbluff	Winter Creek Canal	Irrig.	124.29	17	22	55	Scotts Bluff	Oct.	18	1888	952	.....
North Platte R. (Winters Cr.)	Winter Creek Irr. Co.	Scottsbluff	Winter Creek Canal	O. D.		19	22	54	Scotts Bluff	Oct.	18	1888	952	1446
North Platte R. (Akers Draw)	Enterprise Irr. Dist.	Scottsbluff	Enterprise Canal	Irrig.	138.90	27	23	57	Scotts Bluff	Mar.	28	1889	920	.....
North Platte R.	Enterprise Irr. Dist.	Scottsbluff	Enterprise Canal	O. D.		13	23	57	Scotts Bluff	Mar.	28	1889	920	1290
North Platte R.	Castle Rock Irr. Dist.	McGrew	Castle Rock Canal	Irrig.	82.57	4	21	51	Scotts Bluff	Apr.	18	1889	921	.....
North Platte R.	Logan Irr. Co.	Bridgeport	Logan Canal	Irrig.	5.71	24	20	51	Morrill	Oct.	17	1889	821	.....
North Platte R. (Atkins Drain)	Bridgeport Irr. Dist.	Bridgeport	Belmont Canal	Irrig.	270.00	18	20	51	Morrill	Dec.	19	1889	828	.....
North Platte R.	Atkins, A. W.	Bridgeport	Atkins Canal	O. D.		15	19	49	Morrill	Dec.	19	1889	828	1450
North Platte R.	Central Irr. Dist.	Gering	Central Canal	Irrig.	36.00	27	22	55	Scotts Bluff	June	23	1890	926	.....
North Platte R.	Sheridan, J. Wake, Estate	Paxton	Sheridan-Wilson Canal	Irrig.	10.00	18	14	35	Keith	Oct.	9	1890	710	.....

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	Mo.	D			Yr.
North Platte R.	Chimney Rock Irr. Dist.	Chimney Rock	Chimney-Rock Canal	Irrig.	60.00	1	20	53	Morrill	Dec.	3	1890	844	.....
North Platte R.	Chimney Rock Irr. Dist.	Chimney Rock	Chimney-Rock Canal	Irrig.		1	20	53	Morrill	Dec.	3	1890	1031	.....
North Platte R.	Empire Canal Co.	Bridgeport	Empire Canal	Irrig.	28.57	18	20	51	Morrill	June	25	1891	858	.....
North Platte R.	Clarke, M. G. (Anderson Sp.)	Okmulgee, Okla.	Gordon Canal	O. D.		26	20	51	Morrill	June	25	1891	858	2248
North Platte R.	Jurgen, Otto, (Admr. Estate of D. Kah)	Minatare	Kah Canal	Irrig.	4.57	11	21	54	Scotts Bluff	Nov.	1	1891	944	.....
North Platte R.	Brown Creek Irr. Dist.	Bridgeport	Brown Creek Canal	Irrig.	188.71	20	20	50	Morrill	Jan.	20	1892	857	.....
North Platte R.	Brown Creek Irr. Dist.	Bridgeport	Brown Creek Canal	Irrig.		20	20	50	Morrill	Jan.	20	1892	1033	.....
North Platte R.	Alliance Irr. Dist.	Bridgeport	Alliance Canal	Irrig.	86.00	5	20	52	Morrill	Dec.	26	1892	874	.....
North Platte R.	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
North Platte R.	Alliance Irr. Dist. (Bayard Sugar Factory Drain)	Bridgeport	Alliance Canal	O. D.		5	20	52	Morrill	Dec.	26	1892	874	1776
North Platte R.	Ramshorn Irr. Dist. (Sheep Creek)	Morrill	Ramshorn Canal	Irrig.	45.71	18	23	58	Scotts Bluff	Mar.	20	1893	945	.....
		Morrill	Ramshorn Canal	O. D.		20	23	57	Scotts Bluff	Mar.	20	1893	945	1465
						21	23	57						
North Platte R.	Short Line Irr. Dist.	Bayard	Short Line Canal	Irrig.	65.57	25	21	53	Scotts Bluff	May	1	1893	946	.....
North Platte R.	Lisco Irr. Dist.	Lisco	Lisco Canal	Irrig.	19.85	14	18	47	Morrill	July	1	1893	856	.....
North Platte R.	Nine Mile Irr. Dist. (9 Mile Draw)	Bayard	Nine Mile Canal	Irrig.	100.00	18	21	53	Scotts Bluff	Dec.	6	1893	925	.....
		Bayard	Nine Mile Canal	O. D.		10	21	53	Scotts Bluff	Dec.	6	1893	925	1431

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	Mo.	D			Yr.
North Platte R.	Cody Land and Cattle Co.	North Platte	Cody-Dillon Canal	Irrig.	127.00	9	14	31	Lincoln	Dec.	29	1893	649	
North Platte R.	Keith-Lincoln County Irr. Dist.	Sutherland	Keith-Lincoln Canal	Irrig.	95.00	18	14	36	Keith	Feb.	2	1894	722	
North Platte R.	Paxton-Hershey Water Co.	Hershey	Paxton-Hershey Canal	Irrig.	130.00	18	14	33	Lincoln	Feb.	12	1894	653	
North Platte R.	Lisco Irr. Dist.	Lisco	Lisco Canal	Irrig.	5.37	14	18	47	Morrill	Mar.	27	1894	787	
North Platte R.	North River Irr. Dist.	Oshkosh	North River Canal	Irrig.	16.00	14	18	47	Morrill	Mar.	27	1894	787	'R'
North Platte R.	Suburban Irr. Dist.	North Platte	Suburban Canal	Irrig.	124.00	12	14	33	Lincoln	May	22	1894	662	
North Platte R.	Roberts, C. F.	Lewellen	Midland-Overland Canal	Irrig.	12.00	4	16	44	Garden	June	9	1894	789	
North Platte R.	Countryman, Chas.	Oshkosh	Midland-Overland Canal	Irrig.	15.77	4	16	44	Garden	Aug.	14	1894	791	
North Platte R.	Hannah Irr. Co.	Lisco	Hannah Canal	Irrig.	5.71	24	18	47	Morrill	Sept.	24	1894	886	
North Platte R.	Oshkosh Irr. Dist.	Oshkosh	Oshkosh Canal	Irrig.	40.00	33	17	41	Garden	Oct.	5	1894	797	
North Platte R.	Beerline Canal Co.	Broadwater	Beerline Canal	Irrig.	30.00	24	19	49	Morrill	Oct.	13	1894	887	
North Platte R.	Spohn, William	Oshkosh	Spohn Canal	Irrig.	11.89	13	17	45	Garden	Dec.	6	1894	801	
North Platte R.	North River Irr. Dist.	Oshkosh	North River Canal	Irrig.	1.25	14	18	47	Morrill	Dec.	6	1894	801	'R'
North Platte R.	Rush Creek Irr. Co.	Lisco	Rush Creek Canal	Irrig.	9.64	2	17	46	Garden	Dec.	11	1894	802	
North Platte R.	Lyons Irr. Dist.	Oshkosh	Lyons Canal	Irrig.	42.14	30	17	44	Garden	Dec.	22	1894	803	
North Platte R.	Western Land & Cattle Co., W. R. Taylor	Omaha	Signal Bluff Canal	Irrig.	30.13	16	16	43	Garden	Jan.	16	1895	807	
North Platte R.	Alfalfa Irr. Dist.	Ogalalla	Alfalfa Canal	Irrig.	100.00	1	15	42	Keith	Mar.	25	1895	738	
North Platte R.	Steamboat Irr. Dist.	Melbeta	Steamboat Canal	Irrig.	6.20	4	21	54	Scotts Bluff	Oct.	27	1895		186
North Platte R.	North River Irr. Dist.	Oshkosh	North River Canal	Irrig.	64.71	14	18	47	Morrill	Feb.	24	1896		243
North Platte R.	North River Irr. Dist.	Oshkosh	Oshkosh Canal	Irrig.	2.29	33	17	44	Garden	Feb.	24	1896		243R
North Platte R.	Lisco Irr. Dist.	Lisco	Lisco Canal	Irrig.	9.00	14	18	47	Morrill	Feb.	24	1896		243
North Platte R.	Lees Cr. Mut. Irr. Co	Broadwater	Lamore Canal	Irrig.	20.00	34	19	48	Morrill	July	18	1896		327
North Platte R.	Steamboat Irr. Dist.	Melbeta	Steamboat Canal	Irrig.	.71	4	21	54	Scotts Bluff	July	22	1896		350

DEPARTMENT OF PUBLIC WORKS

"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	Mo.	D			Yr.
North Platte R.	Gering Irr. Dist.	Gering	Gering Canal	Irrig.	208.62	4	23	58	Scotts Bluff	Mar.	15	1897	.....	365
North Platte R. (Camp Clark Seep and Red Willow Cr.)	Schermerhorn Irr. Co.	Bridgeport	Schermerhorn Canal	Irrig.	29.71	16	20	51	Morrill	Oct.	25	1897	.....	418
North Platte R.	Farmers Irr. Dist.	Scottsbluff	Tri-State (Columbia Canal)	Irrig.	600.00	3	23	58	Scotts Bluff	Apr.	14	1902	.....	660
North Platte R.	Secretary of Interior Bureau of Reclamation	Mitchell	Pathfinder Reservoir	Stor.	†1070000 AF	34	29	84	Wyoming	Sept.	19	1904	.....	768
North Platte R.	Gering & Ft. Laramie Irr. Dist.	Gering	Gering and Ft. Laramie Canal	Irrig.	1530.00	11	26	65	Wyoming	Sept.	19	1904	.....	768
North Platte R.	Northport Irr. Dist.	Bridgeport	Tri-State Canal	Irrig.	230.00	3	23	58	Scotts Bluff	Sept.	19	1904	.....	768
North Platte R.	Pathfinder Irr. Dist.	Scottsbluff	Inter-State Canal	Irrig.	1643.00	11	26	65	Wyoming	Sept.	19	1904	.....	768
North Platte R.	Liebhardt Bros.	Denver	Empire Extension	Irrig.	1.00	18	20	51	Morrill	July	20	1907	.....	866
North Platte R.	Lisco Irr. Dist.	Lisco	Lisco Canal	Irrig.	3.00	14	18	47	Garden	Apr.	6	1910	.....	991
North Platte R.	French Ditch Co.	Hampton	French Canal	Irrig.	11.00	9	23	60	Wyoming	Dec.	21	1911	.....	1149
North Platte R. (Red Willow Cr.)	Dobson, W. A.	Carrollton, Mo.	Dobson Canal	Irrig.	1.15	5	20	52	Morrill	Feb.	28	1912	.....	1181
	Dobson, W. A.	Carrollton, Mo.	Dobson Lateral	Supple. A-1181		12	20	51	Morrill	Sept.	10	1915	.....	1432-S
North Platte R.	Stone, Myron H.	Escanto, Cal.	Stone Canal	Irrig.	1.00	28	18	46	Morrill	Jan.	19	1915	.....	1401
North Platte R.	French Ditch Co.	Hampton	French Canal	Irrig.	3.00	9	23	60	Wyoming	Sept.	11	1915	.....	1433
North Platte R. & Red Willow Cr.	Dobson, W. A.	Carrollton, Mo.	Dobson Lateral	Irrig.	.25	5	20	52	Morrill	Nov.	3	1915	.....	1436
North Platte R.	Liebhardt, Harry G.	Denver	Liebhardt Lateral	Irrig.	2.90	6	20	52	Morrill	Mar.	1	1916	.....	1448

†Acres 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	Mo.	D			Yr.
North Platte R.	Intermountain Ry. Light & Power Co.	Colorado Springs	Gering Hydro Electric Plant	Power	250.00	10	23	60	Wyoming	Apr.	15	1916	1452
North Platte R.	U. P. Railway Co.	Omaha	Locomotive Water Supply	Dom.	1.00	29	14	30	Keith	Jan.	19	1917	1472
North Platte R.	French Ditch Co.	Hampton	French Canal	Irrig.	.60	9	23	60	Wyoming	Mar.	20	1920	1581
North Platte R. (Blue Creek)	Robinson, A. A.	Gering	Midland-Overland Canal	O. D.		4	16	44	Garden	Mar.	31	1924	800 1742
North Platte R.	North Platte Water Department	North Platte	Water Supply	Steam	.125	29	14	30	Lincoln	Mar.	16	1927	1912
North Platte R.	Great Western Sugar Company	Scottsbluff	Gering Factory	Mfg.	15.00	36	22	55	Morrill	Nov.	15	1928	2054
North Platte R.	Maddox, P. P., et al.	North Platte	Pawnee Canal	Irrig.		35	14	30	Lincoln	Nov.	24	1928	2055*
North Platte R.	Great Western Sugar Company	Scottsbluff	Gering Factory	O. D.	A-2051	26	22	55	Scotts Bluff	July	24	1930	2150
North Platte R.	Chimney Rock Irr. Dist.	Bayard	Chimney Rock Canal	Irrig.	.67	1	20	53	Scotts Bluff	Feb.	2	1931	2190
North Platte R.	Austin, Wm. F.	Bayard	Morrill County Power Plant	Power	200.00	18	21	53	Morrill	July	27	1931	2221
North Platte R.	Central Nebr. Supplemental Water Assn.	Holdrege	Sutherland Reservoir	Stor. Power					Lincoln	Feb.	26	1932	2256*
North Platte R.	Central Nebr. Supplemental Water Assn.	Holdrege	North Platte Regulating Reservoir	Stor. Power					Lincoln	Feb.	26	1932	2257*
North Platte R.	Central Nebr. Supplemental Water Assn.	Holdrege	Sutherland Power Plant	Power					Keith	Feb.	26	1932	2258*

*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	Mo.	D			Yr.
North Platte R.	Central Nebr. Supplemental Water Assn.	Holdrege.....	North Platte Power Plant	Power				Lincoln.....	Feb.	26	1932	.....	2259*	
North Platte R.	Central Nebr. Supplemental Water Assn.	Holdrege.....	Bignell Power Plant.....	Power				Lincoln.....	Feb.	26	1932	.....	2260*	
North Platte R. & Tributaries.	Farmers Irr. Dist.....	Scottsbluff.....	Farmers Irr. District Power Plant	Power		10	23	58	Scotts Bluff..	Nov.	17	1932	.....	2291*
North Platte R. (Spring Creek, Tributary to)	U. P. Railway Co.....	Omaha.....	Frazier Lake.....	Ice	4.00	35	14	30	Lincoln.....	Sept.	6	1907	.....	868
North Platte R. (Spring Creek, Tributary to)	Gatch, Chas.....	Melbeta.....	Gatch Canal.....	Irrig.	.93	25	21	51	Scotts Bluff..	Aug.	21	1912	.....	1220
North Platte R. (Barrow Pit, Tributary to)	Taylor, A. O.....	Minatare.....	Barrow Pit Canal.....	Irrig.	.29	19	21	52	Scotts Bluff..	Apr.	23	1904	.....	751
Otter Creek.....	Deist, R. R.....	Lemoyne.....	Otter Creek (Cascade) Canal.....	Irrig.	3.30	5	15	40	Keith.....	Apr.	1	1891	1032	.....
Otter Creek.....	The Otter Cr. Mut. Irr. Co.	Lemoyne.....	Otter Creek Canal.....	Irrig.	10.29	5	15	40	Keith.....	May	21	1912	.....	1198
Otter Creek.....	The Otter Cr. Mut. Irr. Co.	Lemoyne.....	Otter Creek (Holcomb) Canal.....	Irrig.	15.49	5	15	40	Keith.....	Nov.	6	1912	.....	1
Otter Creek.....	The Otter Cr. Mut. Irr. Co.	Lemoyne.....	Otter Creek (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

*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	Mo.	D			Yr.
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 Canal No. 2	Irrig.	1.14	12	22	58	Scotts Bluff.	Nov.	29	1907	879
Owl Creek	Kellums, John H.	Morrill	Sunflower Canal No. 1	Irrig.	.57	12	22	58	Scotts Bluff.	Nov.	29	1907	881
Pawnee Creek	Kent-Burke Co.	Genoa	Holcombe Canal	Irrig.	8.00	13	13	28	Lincoln	Oct.	18	1890	636
Pawnee Creek	Kent-Burke Co.	Genoa	Kent-Burke Canal	Irrig.	5.85	18	13	27	Lincoln	Nov.	16	1922	1694
Pawnee Creek	Janssen, H.	Gothenburg	Janssen Canal	Irrig.	8.42	20	13	27	Lincoln	Aug.	31	1931	2231
Peden's Lake (Platte River)	Bean, Smith & Good	Cozad	Excell Canal	O. D.		12	11	23	Dawson	Sept.	16	1926	645b 1860
Platte River	Central Power Co.	Grand Island	Kearney Canal	Irrig. Power	22.00 140.00	4	8	18	Buffalo	Sept.	10	1882	1023
Platte River	Gothenburg Light & Power Co.	Gothenburg	Gothenburg Canal	Irrig. Power	200.00	29	12	26	Lincoln	July	5	1890	645a
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 Cr.)	Savins, Richard T.	Lexington	Savins Pump	O. D.		22	10	21	Dawson	June	26	1894	622 1495
Platte River (Buffalo Cr.)	Doughty, Wm. T. and R. H.	Lexington	Doughty Pump	O. D.		21	10	21	Dawson	June	26	1894	622 1648
Platte River (Buffalo Cr.)	Hodgson, Martha	Lexington	Hodgson Pump	O. D.		33	10	20	Dawson	June	26	1894	622 1868
Platte River	Beatty, H. T.	Overton	Dawson County Canal	Irrig.	1.71	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 Co. Irr. Co.	Lexington	Dawson County Canal	Irrig.	23.54	18	10	23	Dawson	Sept.	15	1894	624'R'

'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	Mo.			D	Yr.
Platte River..... (Strever Cr.)	Jurgenson, John.....	Overton.....	Jurgenson Canal.....	O. D.		35	9	20	Dawson.....	Sept.	15	1894	624	2049
Platte River..... (Dawson Co. Drain. Ditch No. 1)	Orthman, Vernon C.....	Lexington.....	Orthman Pump.....	O. D.		14	9	21	Dawson.....	Sept.	15	1894	624	2129
Platte River.....	Beatty, Henry M.....	Lexington.....	Beatty Well Pump.....	O. D.		20	9	20	Dawson.....	Sept.	15	1894	624	2281*
Platte River.....	Gothenburg Light & Power Co.	Gothenburg.....	Gothenburg Canal.....	Irrig.	340.00	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	16	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 Co.....	Grand Island.....	Central Power Plant.....	Power	485.00	4	8	18	Buffalo.....	Feb.	12	1920	.....	1577
Platte River.....	Central Power Co.....	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
Platte River.....	Central Nebr. Supplemental Water Assn.....	Holdrege.....	Tri-County Project.....	Irrig.		14	12	28	Lincoln.....	Nov.	29	1922	.....	1696*
						2	8	21	Gosper.....					
						30	9	21	Dawson.....					
						17-20	8	15	Buffalo.....					
Platte River.....	Central Nebr. Supplemental Water Assn.....	Holdrege.....	Plum Creek Reservoir.....	Storage		14	12	28	Lincoln.....	Nov.	15	1923	.....	1727*
Platte River.....	Central Nebr. Supplemental Water Assn.....	Holdrege.....	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

*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	Mo.	D			Yr.
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	Lincoln	Sept.	7	1926	1853
Platte River	Robertson, Nina	Cozad	Robertson Pump	Irrig.	.74	9	10	21	Dawson	Nov.	2	1926	1870
Platte River	Van Nortwick, Mrs. 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	Lincoln	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 Cr. Ditch Co.	Elm Creek	Elm Creek Canal	Irrig.	227.00	6	8	19	Dawson	Sept.	17	1929	2104
Platte River	Dawson Co. Irr. Co.	Lexington	Dawson County Extension	Irrig.	284.01	18	10	23	Dawson	Oct.	25	1929	2110
Platte River	Dawson Co. Irr. Co.	Lexington	Beatty Lateral	Irrig.	11.21	18	10	23	Dawson	June	14	1930	2145
Platte River	Eavey, W. J.	Hastings	Eavey Pump	Irrig.	1.70	3	12	27	Lincoln	Feb.	20	1931	2191
Platte River	Central Nebr. Supplemental Water Assn.	Holdrege	Lower Snell Canyon Plant	Power					Lincoln	Feb.	26	1932	2261*
Platte River	Dawson Co. Irr. Co.	Lexington	Dawson County Canal Enlargement	Irrig.	12.71	18	10	23	Dawson	Mar.	1	1932	2262
Platte River (So. Channel)	Johnson, P. L.	Hastings	Johnson Pump	Irrig.	2.56	1	8	13	Adams	Feb.	13	1926	1706
Platte River (No. Channel)	Hagge, Fred, et al.	Grand Island	Hagge Pump	Irrig.	4.58	28	11	9	Hall	Aug.	24	1926	1849

*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	Mo.			D	Yr.
Plum Creek	Roblee, L. O.	Berwyn	Plum Creek Reservoir	Irrig.	1.14	14	16	42	Garden	Jan.	12	1914	1344
Prairie Creek	MacQueen, Glen D.	Silver Creek	Braeside Pump	Irrig.	7.89	29	16	3	Merrick	Sept.	8	1931	2235
Pumpkinseed Cr.	Kelley, Wm. J.	Harrisburg	Kelley Canal	Irrig.	1.43	5	19	51	Banner	May	10	1888	915
Pumpkinseed Cr.	Zingg, Henry N.	Platte Center	Heard Canals Nos. 1 and 2	Irrig.	1.29	14	19	54	Banner	June	1	1887	916
Pumpkinseed Cr.	Olsen, Albert H.	Harrisburg	Logan Canal	Irrig.	4.00	7	19	53	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.	Mutual Ditch Co.	Redington	Mutual Canal	Irrig.		30	19	50	Morrill	Oct.	8	1890	1028
Pumpkinseed Cr.	Sweet, S. R.	Bridgeport	Meredith-Ammer Canal	Irrig.	8.57	33	19	52	Morrill	Nov.	1	1890	843
Pumpkinseed Cr.	Finn and Trott	Bridgeport	Last Chance Canal	Irrig.	12.60	23	19	50	Morrill	Feb.	29	1893	876
Pumpkinseed Cr.	McCord, Mrs. Gracie A.	San Bernardino, Calif.	Round House Rock Canal	Irrig.	6.33	27	19	50	Morrill	Apr.	12	1894	883
Pumpkinseed Cr.	Quinn, T. E.	Bridgeport	Bird Cage Canal	Irrig.	3.00	28	19	51	Morrill	May	29	1894	884
Pumpkinseed Cr.	Trinnter, Daisy A.	Denver	Smith-Wheeler North Canal	Irrig.	1.00	20	19	51	Morrill	June	1	1895	892
Pumpkinseed Cr.	Cluck, Millard	Harrisburg	Peter Canal	Irrig.	.71	26	19	51	Morrill	June	1	1896	812
Pumpkinseed Cr.	Airedale Ranch & Cattle Co.	Scottsbluff	Airedale Canal No. 1	Irrig.	2.57	2	19	56	Banner	July	1	1902	913
Pumpkinseed Cr.	Airedale Ranch & Cattle Co.	Scottsbluff	Airedale Canal No. 2	Irrig.	5.52	2	19	55	Banner	Jan.	24	1903	698
							1	19	55				
					3.22	1	19	55	Banner	Jan.	24	1903	699

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	Mo.	D			Yr.
Pumpkinseed Cr.	Gifford, Owen	Atlanta	Reservoir Nos. 1, 2 and 3.	Irrig. Stor.	1.31	7	19	55	Banner	June	24	1903	—	711
Pumpkinseed Cr.	Seybolt, Albert	Bridgeport	Swanger Canal	Irrig.	.43	30	19	50	Morrill	Feb.	23	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
Pumpkinseed Cr.	Sears, Willis G.	Omaha	Sears Pump	Irrig.		25	19	53	Banner	June	2	1932	—	2272*
Red Willow Cr. (No. Platte R.)	Alliance Irr. Dist.	Bridgeport	Alliance Canal	O. D.		6	20	51	Morrill	Aug.	5	1915	874	1429
Red Willow Cr. (No. Platte R.)	Dobson, W. A.	Carrolton, Mo.	Dobson Lateral	Irrig.	.87	12	20	51	Morrill	Sept.	10	1915	—	1432
Red Willow Cr. (No. Platte R.)	Dobson, W. A.	Carrolton, Mo.	Dobson Lateral	Supple. A-1181		12	20	51	Morrill	Sept.	10	1915	—	1432
Red Willow Cr. & No. Platte R.	Dobson, W. A.	Carrolton, Mo.	Dobson Lateral	Irrig.		12	20	51	Morrill	Nov.	3	1915	—	1436
Red Willow Cr. and Camp Clark Seep (No. Platte R.)	Schermerhorn Irr. Co.	Bridgeport	Schermerhorn Canal	O. D.	A-418	6	20	51	Morrill	June	22	1929	—	2088
Sand Creek	Harris, Arch	Lemoyme	Patrick Canal	Irrig.	2.43	10	15	40	Keith	May	31	1891	725	—

*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	Mo.			D	Yr.
Sand Creek	Nissen, Peter	Lemoine	Nissen Canal	Irrig.	3.07	10	15	40	Keith	Mar.	18	1901	606	
Seep from Lake	Huffman, M. J.	Gering	Huffman Canal	Irrig.	6.43	26	21	54	Scotts Bluff	Mar.	19	1909	937	
Schuetz Springs, Tributary to Greenwood Cr.	Schuetz, Louis	Bridgeport	Schuetz 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	
Sheep Creek	Covert, Pitt	Cheyenne	Nebraska Reservoir	Irrig.	3.57	36	27	58	Sioux	May	18	1907	859	
Sheep Creek	West Fork Ditch Co.	Exeter	West Fork Canal	Irrig.	5.14	1	26	58	Sioux	Sept.	21	1907	871	
Sheep Creek	Junningham, H. D.	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 R.)	Sheep Cr. Lateral Co.	Morrill	Sheep Creek Lateral	O. D.		8	23	57	Scotts Bluff	Feb.	26	1912	918	1176
Sheep Creek	Sheep Cr. Lateral Co.	Morrill	Sheep Creek Lateral	Irrig.	.10	8	23	57	Scotts Bluff	Feb.	26	1912	1176	
Sheep Creek (No. Platte R.)	Sheep Cr. Lateral Co.	Morrill	Sheep Creek Lateral	O. D.		8	23	57	Scotts Bluff	Jan.	12	1915	918	1398
Sheep Creek (No. Platte R.)	Ramshorn Irr. Dist.	Morrill	Ramshorn Canal	O. D.		20	23	57	Scotts Bluff	Sept.	12	1916	945	1465
Sheep Creek, Draw, Tributary to	Sheep Cr. Lateral 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	
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 Creek 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	

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	Mo.			D'Yr.
Snake Creek	Kilpatrick Bros.	Beatrice	Kilpatrick Reservoir No. 1	Storage	+1500 AF	1	24	52	Box Butte	June 7 1911		1104
(Res. A-1104)	Kilpatrick Bros.	Beatrice	Kilpatrick Reservoir No. 1	Irrig.	200.00	6	24	51	Box Butte	Jan. 25 1912		1159
So. Platte River	Hollingsworth, Clark	Ogallala	Hollingsworth Canal	Irrig.	30.00	7	13	38	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	29	13	41	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		Storage					Deuel	Dec. 17 1921		1630*
So. Platte River	Western Irr. Dist.	Big Springs	Western Canal	Irrig.	11.43	29	13	41	Keith	Apr. 13 1926		1864
So. Platte River	Junge, M. F.	Big Springs	Junge Canal	Irrig.	1.07	31	13	41	Keith	Sept. 11 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 River)	Hrasky, Frank and 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	20	23	56	Scotts Bluff	Mar. 24 1920		1582
Spotted Tail, Wet, (North Platte River)	Stewart, H. G.	Mitchell	Stewart Canal	O. D.		10	23	56	Scotts Bluff	May 2 1898	918	449
Spotted Tail, Wet	Storz, G.	Omaha	Stewart Reservoir	Irrig.	1.43	26	24	56	Scotts Bluff	Mar. 2 1904		743
Spotted Tail, Wet	Storz, G.	Omaha	Brown Canal	Irrig.	2.28	2	23	56	Scotts Bluff	Mar. 17 1911		1072

*Application Pending.

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

†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	Mo.	D			Yr.
Spotted Tail, Wet	Young, Thos. H.	Mitchell	Spring Creek Reservoir	Ice	†152AF	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
Spring Creek	Otter Cr. Mut. Irr. Co.	Lemoyne	Spring Creek Canal	Irrig.	.57	12	15	40	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, Little	Keystone Irr. Co.	Keystone	Little Spring Canal	Irrig.	.57	29	15	37	Keith	Apr.	1	1903	—	659
Spring Creek, Little	Beatty, Wallace D.	Scottsbluff	Shramek Canal	Irrig.	1.50	22	22	55	Scotts Bluff	June	9	1913	—	1295
Spring Creek, Little	Gilchrist, M. B.	Scottsbluff	Gilchrist Canal	Irrig.	.14	22	22	55	Scotts Bluff	July	29	1913	—	1310
Spring Creek, Little	Scottsbluff Inv. Co.	Scottsbluff	Schramek Extension	Irrig.	.57	22	22	55	Scotts Bluff	July	30	1917	—	1492
Spring Creek, Little	Nelson, Hank, et al	Scottsbluff	Schramek Extension	Irrig.	.14	22	22	55	Scotts Bluff	June	3	1918	—	1515
Strever Creek (Buffalo Cr.)	Jensen, Anton	Cozad	Jensen Canal	Irrig.	.56	23	11	23	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
Strever Creek (Buffalo Cr.)	Siebenaler, Mat	Elm Creek	Siebenaler Pump	Irrig.	2.31	6	8	19	Dawson	Nov.	22	1927	—	1909
Strever Creek (Buffalo Cr.)	Jurgenson, John	Overton	Jurgenson Canal	O. D.		35	9	20	Dawson	Oct.	19	1928	624	2049

†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	Mo.	D			Yr.
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 Pump	Irrig.	1.11	18	9	20	Dawson	Aug.	8	1929	2094
Strever Creek	Bend, John T.	Overton	Bend Canal	Irrig.	1.63	36	9	20	Dawson	Aug.	26	1929	2099
Strever Creek	Jurgenson, Henry	Overton	Jurgenson Pump	Irrig.	1.03	35	9	20	Dawson	May	7	1931	2202
White Horse Cr.	Lamplough, Harry	North Platte	Lamplough Lake	Irrig.	2.86	8	14	30	Lincoln	Dec.	31	1883	658
White Horse Cr.	Bratt, John	North Platte	Bratt Canal	Irrig.	5.60	9	14	30	Lincoln	Aug.	25	1913	1316
White Horse Cr.	McCrone, Scott	North Platte	McCrone Pump	Irrig.	1.71	5	14	30	Lincoln	Mar.	10	1930	2127
White Tail Cr.	McCarty, J. M.	Keystone	McCarthy Canal	Irrig.	1.00	36	15	38	Keith	July	15	1890	749
White Tail Cr.	McGinley, Geo., et al.	Keystone	Halloway-Phelps Canal	Irrig.	3.86	36	15	38	Keith	June	1	1892	717
White Tail Cr.	McGinley, Geo., et al.	Keystone	Foster-Keystone Canal	Irrig.	8.57	26	15	38	Keith	Oct.	30	1894	730
White Tail Cr.	Noble, Bert A.	Keystone	Reed Canal	Irrig.	.57	15	15	38	Keith	May	15	1895	751
White Tail Cr.	Keystone Irr. Co.	Keystone	Keystone Canal	Irrig.	39.00	26	15	38	Keith	Apr.	26	1902	662b
White Tail Cr.	Keystone Irr. Co.	Keystone	Keystone Canal	Irrig.	4.30	26	15	38	Keith	Nov.	30	1906	843
White Tail Cr.	Keystone Irr. Co.	Keystone	Keystone Canal	Irrig.	7.41	26	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
Winters Creek	Bouton, Chas. A.	Gering	Bouton Canal	Irrig.	1.00	3	22	64	Scotts Bluff	Aug.	17	1889	923

CLAIMS AND APPLICATIONS BY STEAMS 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	Mo.	D			Yr.
Winters Creek. (No. Platte R.)	Winters Creek Irr. Co.	Scottsbluff.....	Winters Creek Canal.....	O. D.		19	22	54	Scotts Bluff..	Feb.	2	1916	952	1446
Winters Creek.....	Great Western 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	16	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.....	Storage	90.00	31	10	10	Buffalo.....	Feb.	3	1920	.....	1576
Wood River.....	Haug, James.....	Shelton.....	Haug Pump.....	Irrig.	.64	7	9	12	Buffalo.....	Sept.	7	1920	.....	1590
Wood River.....	Petersen, C.	Shelton.....	Petersen 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.	.39	14	9	14	Buffalo.....	Feb.	4	1922	.....	1641
Wood River.....	Nebr. Conf. Assn. of Seven Day Adventist	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.....	Storage	12.24	5	9	16	Buffalo.....	Apr.	4	1922	.....	1654
Wood River.....	Hallen, Hjalmar.....	Kearney.....	Hallen Dam.....	Irrig.	.47	5	9	16	Buffalo.....	Apr.	17	1922	.....	1656
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	11	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 F.	Shelton.....	Smith Pump.....	Irrig.	1.09	1	9	13	Buffalo.....	Jan.	12	1923	.....	1702

1 Acre feet per annum.

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	Mo.	D			Yr.
Wood River	Ross, W. M.	Gibbon	Ross Pump	Irrig.	.26	13	9	14	Buffalo	Apr.	28	1924	.....	1743
Wood River	Nebr. Securities Corp.	Omaha	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	.....	1783
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	14	9	14	Buffalo	Feb.	23	1926	.....	1797
						16	9	14	Buffalo					
Wood River	Langan, Thos.	Wood River	Langan Pump	Irrig.	1.14	19	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	.....	1887
Wood River	Oliver, Henry E., Jr.	Shelton	Oliver Pump	Irrig.	.86	9	9	13	Buffalo	Feb.	29	1928	.....	1987
Wood River	Nickel, Emil	Kearney	Nickel Pump	Irrig.	1.95	12	9	16	Buffalo	July	16	1930	.....	2148
Wood River	Abels, Carl H.	Amherst	Abels Pump	Irrig.	1.23	6	10	17	Buffalo	Jan.	10	1931	.....	2186

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	Mo.	D			Yr.	
Arickaree R.	Jenkins, Chas. T.	Haigler	Haigler Res. Canal	Irrig.	171.00	15	1	42	State of Colorado	Jan.	21	1910	.....	979
Askey Lake Tributary to Republican R.	Pleas, Walter P.	Oxford	Pleas Pump	Irrig.	2.31	5	3	21	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.	1.43	17	1	26	Red Willow	Aug.	8	1930	.....	2156
Bell Creek Tributary to Republican R.	Bell, J. E.	Superior	Valley Reservoir	Storage	†300	AF	29	1	6	Nuckolls	Apr.	30	1928	2013
Berger Creek & School Creek	Sughrone, Edward	Indianola	Sughrone Pump	Irrig.		15	3	27	Red Willow	Aug.	16	1932	.....	2280
Buffalo Creek	Allen, Frank B., et al	Haigler	Allen-Larned Canal	Irrig.	6.00	18	1	40	Dundy	Oct.	16	1890	117	.....
Buffalo Creek	Porter & Son., J. R.	Haigler	Porter Canal	Irrig.	2.68	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 & Invest- ment Co.	Haigler	Porter Canal	Irrig.	3.32	1	1	41	Dundy	June	23	1913	.....	1298
Brush Creek	Lofton, Frank S.	McCook	Brush Creek Reservoir	Storage	†1250	3	2	29	Red Willow	June	1	1912	.....	1201
Bushy Creek	Young, Lee	Maywood	Young Canal	Irrig.	.20	33	8	29	Frontier	Apr.	5	1927	.....	1921

†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	Mo.	D			Yr.
Canyon No. 10. (Frenchman River)	Wacker, Geo.	Culbertson	Wacker Canal	O. D.	17	3	31	Hitchcock	Sept.	4	1918	10	1523	
Canyon No. 10 (Frenchman River)	Crews, C. G.	Culbertson	Farmers Canal	O. D.	17	3	31	Hitchcock	Jan.	21	1920	10	1573	
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 Creek 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	Storage	†4AF	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	Power Irrig.	6.00	25	2	16	Franklin	Nov.	23	1898	.....	483
Cottonwood, Little	Gardner, C. D.	Bloomington	Gardner Canal	Irrig.	1.14	6	1	15	Franklin	Mar.	20	1922	.....	1647
Cottonwood, Little	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	Storage	†5AF	1	1	11	Webster	Aug.	8	1912	.....	1213
Crooked Creek	Perry, Loro B.	Red Cloud	Weesner Canal	Irrig.	.30	2	11	38	Webster	June	23	1925	.....	1765

†Acre feet per annum.

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	Mo.	D			Yr.
Crystal Springs	Newbold, W. G.	Riverton	Crystal Springs Canal	Irrig.	28	10	2	13	Franklin	Aug.	17	1921	1615
Crystal Springs	Newbold, Wm. G.	Riverton	North Spring Canal	Irrig.	10	2	13	Franklin	July	27	1932	2278	
Curtis Creek	Nelson, D. O. & H. L.	Curtis	Nelson Pump	Irrig.	27	36	8	28	Frontier	Apr.	19	1927	1927
Deep Creek	Runck, John J.	Republican	Runck Pump No. 2	Irrig.	65	22	3	20	Harlan	Sept.	18	1928	2030
Driftwood Cr.	Schmitz, Mrs. J. A.	McCook	Schmitz Canal	Irrig.	1.50	12	2	30	Red Willow	May	3	1913	1287
Driftwood Cr.	Hesterworth, John T.	McCook	Hesterworth Canal	Irrig.	1.00	14	2	30	Red Willow	Nov.	17	1913	1332
Driftwood Cr.	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 R.	Athey, H. E.	Wauneta	Wauneta Mills	Power	35.00	11	5	36	Chase	July	31	1886	178
Frenchman R.	Daschosifsky, G.	Lamar	Lamar Rolling Mills	Power	30.00	18	6	40	Chase	Dec.	30	1887	1013
Frenchman R.	Estate of M. H. Yaw	Champion	Champion Mills	Power	28.30	21	6	39	Chase	Dec.	31	1887	179
Frenchman R.	Roe, Albert	Imperial	Aberdeen Canal	Irrig.	2.00	3	5	38	Chase	July	1	1888	50a
Frenchman R.	Grosbach, H. H. and Rose	Wauneta	Harlan Canal	Irrig.	2.00	1	5	38	Chase	July	1	1888	56
Frenchman R. & Stinking Water Cr.	Frenchman Valley Irr. Dist.	Culbertson	Culbertson Canal	Irrig.	215.00	131	5	3	Hayes	May	16	1890	24-25 29-30
Frenchman R.	Kilpatrick Bros.	Beatrice	Champion Canal	Irrig.	***24.00	23	6	40	Chase	Dec.	23	1890	47
Frenchman R.	Roe, Albert	Imperial	Aberdeen Canal	Irrig.	.50	3	5	38	Chase	Feb.	2	1891	50b
Frenchman R.	Farmers Canal Co.	Culbertson	Farmers Canal	Irrig.	10.00	11	3	32	Hitchcock	Dec.	19	1893	10

***This amount affirmed by Supreme Court.

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	Mo.	D			Yr.
(Canyon No. 10)	Wacker, Geo.	Culbertson	Wacker Canal	O. D.		17	3	31	Hitchcock	Dec.	19	1893	10	1523
(Canyon No. 10)	Crews, C. G.	Culbertson	Farmers Canal	O. D.		17	3	31	Hitchcock	Dec.	19	1893	10	1573
Frenchman R.	Fuller, C. D.	Imperial	Fuller Canal	Irrig.	25.00	4	5	36	Chase	June	12	1894	62	.....
Frenchman R.	Riverside Irr. Co.	Culbertson	Riverside Canal	Irrig.	12.00	33	4	32	Hitchcock	July	28	1894	18	.....
Frenchman R.	Disssmore, Geo. A.	Des Moines	Frenchman Valley Canal	Irrig.	10.00	31	5	33	Hayes	Aug.	23	1894	38	.....
Frenchman R.	Grosbach, H. H. and Rose	Wauneta	Gould Canal	Irrig.	2.00	1	5	38	Chase	Oct.	9	1894	67	.....
Frenchman R.	Roe, Albert & Grant, Allen	Imperial	Grant-Aberdeen Canal	Irrig.	2.00	3	5	38	Chase	Oct.	16	1894	68	.....
Frenchman R.	Maranville, E., et al.	Champion	Maranville Canal	Irrig.	6.00	12	6	41	Chase	Dec.	8	1894	70-71	.....
Frenchman R.	Wise, J. S.	Palisade	Wise Canal	Irrig.	2.00	15	5	35	Hayes	Dec.	28	1894	42	.....
Frenchman R.	Woods, John and Francis	Wauneta	North Guernsey Canal	Irrig.	5.00	3	5	37	Chase	Jan.	14	1895	74	.....
Frenchman R.	Woods, John and Francis	Wauneta	South Guernsey Canal	Irrig.	24.00	10	5	37	Chase	Jan.	14	1895	75	.....
Frenchman R.	Inman, Norton	Champion	Inman Canal	Irrig.	1.50	17	6	40	Chase	Feb.	28	1895	79	.....
Frenchman R.	Kilpatrick Bros.	Beatrice	North Side Canal	Irrig.	.79	21	6	39	Chase	Feb.	25	1896	.....	246
Frenchman R.	Shallenberger, Geo.	Elwood	Shallenberger Canal	Irrig.	1.77	25	6	39	Chase	Dec.	21	1897	.....	423
Frenchman R.	Inman Irr. Co.	Imperial	Inman Canal	Irrig.	6.43	17	6	40	Chase	Feb.	10	1898	.....	436
Frenchman R.	Hoke, J. A.	Champion	Creamery Canal	Power	34.40	21	6	39	Chase	Dec.	12	1900	.....	591
Frenchman R.	Follett-Krotter	Palisade	Follett-Krotter Pump	Irrig.	4.29	35	5	34	Hayes	Apr.	30	1903	.....	705
Frenchman R.	Follett-Krotter	Palisade	Follett-Krotter Pump	Irrig.	2.57	35	5	34	Hayes	Aug.	11	1903	.....	720
Frenchman R.	Hagerman, Wm	Hamlet	Hagerman Canal	Irrig.	.86	19	5	34	Hayes	Mar.	11	1909	.....	935
Frenchman R.	Krotter, F. C.	Palisade	Follett-Krotter Canal	Irrig.	10.46	35	5	34	Hayes	Jan.	15	1910	.....	975
Frenchman R.	Krotter, F. C.	Palisade	Krotter Power Plant	Power	55.00	35	5	34	Hayes	Aug.	17	1910	.....	1021
Frenchman R.	Krotter, F. C.	Palisade	Krotter Power Plant No. 3	Irrig.	2.42	35	5	34	Hayes	Dec.	15	1910	.....	1047

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	Mo.	D			Yr.
Frenchman R.	Hoke, J. A.	Champion	Hokes Pump and Power Plant	Irrig.	2.28	21	6	39	Chase	May	1	1911	1094
Frenchman R.	Kilpatrick Bros.	Beatrice	Kilpatrick Res. No. 1	Storage	†1000	23	6	40	Chase	June	22	1911	1108
Frenchman R.	Roe, Albert	Imperial	Ext. Aberdeen Canal	Irrig.	1.57	2	5	38	Chase	July	29	1911	1117
Frenchman R.	Theobald & Athey	Wauneta	Wauneta Power Plant	Power	75.00	11	5	36	Chase	Nov.	16	1911	1136
Frenchman R.	Arteburn, E. E.	Lincoln	Arteburn Storage Res.	Storage	†1176	11	6	41	Chase	Nov.	28	1911	1142
Frenchman R.	Bishop, Stephen S.	Lincoln	Inman Storage Res.	Storage	†2540	17	6	40	Chase	Dec.	8	1911	1145
Frenchman R. (Res. A-1168)	Kilpatrick Bros.	Beatrice	Kilpatrick Reservoir	Irrig.	17.00	30	6	39	Chase	Jan.	25	1912	1160
Frenchman R.	Oliver Bros.	Wauneta	Oliver Bros. Power P't	Power	50.00	7	5	35	Hayes	Apr.	28	1913	1284
Frenchman R.	Oliver Bros.	Wauneta	Oliver Bros. Canal	Irrig.	3.20	7	5	35	Hayes	Apr.	28	1913	1285
Frenchman R.	Krotter, F. C.	Palisade	Krotter Power Plant	Power	65.00	35	5	34	Hayes	Dec.	2	1913	1339
Frenchman R.	Village of Imperial	Imperial	Imperial Power Plant	Power	55.00	25	6	39	Chase	Feb.	7	1917	1474
Frenchman R.	Shallenberger, O. P.	Imperial	Lake Imperial	Irrig.	4.57	25	6	39	Chase	May	14	1917	1487
Frenchman R.	Riverside Ditch Co.	Culbertson	Riverside Canal	Irrig.	2.90	33	4	32	Hitchcock	July	3	1922	1674
Frenchman R.	Severns, Fred	Palisade	Severns Pump	Irrig.	2.01	9	4	33	Hitchcock	Sept.	11	1926	1856
Frenchman R.	Krotter, F. C.	Palisade	Krotter-Imperial Res.	Storage	†23700	3	5	38	Chase	Feb.	10	1928	1979
Frenchman R.	Krotter, F. C.	Palisade	Krotter-Imperial Power Plant	Power	50.00	3	5	38	Chase	Feb.	10	1928	1980
Frenchman R.	Wauneta Light & Power Co.	Wauneta	Wauneta Power Plant	Rs. dam	D-178	11	5	38	Chase	May	7	1928	2015
Frenchman R.	Oliver Bros.	Wauneta	Oliver Bros. Power P't.	Rs. dam	A-1136	7	5	35	Hayes	Jan.	16	1929	2061
					A-1284	7	5	35	Hayes	Jan.	16	1929	2061

†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	Mo.	D			Yr.
Horse Creek	Pringle, Geo. N.	Parks	Horse Creek Canal	Irrig.	1.86	23	1	39	Dundy	Aug.	31	1885	159	—
Horse Creek, Springs, Tributary to	Pringle, Geo. N.	Parks	Pringle Canal	Irrig.	1.57	14	1	39	Dundy	May	11	1906	173	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, Ill.	Chamberlain Canal	Irrig.	.06	18	2	36	Dundy	Oct.	4	1895	—	240
Indian Creek (Rock Canyon 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
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, Tributary to Republican R.	Bradley, Francis E.	Trenton	Bradley Pump	Irrig.	.36	1	2	34	Hitchcock	Mar.	7	1928	—	1989
Macklin Creek, Tributary to Republican R.	Thuman, A.	Trenton	Cemer Pump	Irrig.	.09	36	3	34	Hitchcock	Mar.	28	1928	—	1992
Mauer Springs	C. B. & Q. R. R. Co.	Lincoln	Burlington Pipe Line	Dom.	1.48	23	2	11	Webster	Nov.	28	1911	—	1143
Medicine Creek	Cambridge Mill. 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 Irr. & Imp. Co.	Arapahoe	Cambridge-Arapahoe Canal	Irrig.	170.00	29	4	25	Furnas	Dec.	7	1897	89	—

DEPARTMENT OF PUBLIC WORKS

*Claim 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	Mo.	D			Yr.
Medicine Creek	Maywood Mill. 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	1928	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
Republican R.	Western Pub. Serv. Co.	Scottsbluff	Arapahoe Star Mills	Power	196.00	27	4	23	Furnas	July	24	1879	1029
Republican R.	Carson, A.	McCook	Carson Canal No. 1	Irrig.	1.43	27	3	30	Red Willow	July	1	1888	103
Republican R.	Pioneer Irr. Dist.	Haigler	Haigler Canal	Irrig.	77.00	2	1	43	Dundy	Apr.	4	1890	1025
Republican R.	Brown, W. A.	Haigler	Sand Point Canal	Irrig.	11.00	11	1	42	Dundy	Sept.	25	1890	115
Republican R.	Dundy Co. Irr. Co.	Benkelman	Dundy County Canal	Irrig.	45.00	24	1	39	Dundy	Nov.	22	1890	118
Republican R.	Frite, W. H., et al.	Culbertson	Trites-Davenport Canal	Irrig.	7.00	19	3	31	Hitchcock	Dec.	18	1890	3
Republican R.	McCook Irr. & Water Power Co.	McCook	Meeker Canal	Irrig.	143.00	15	3	31	Hitchcock	Dec.	22	1890	4-9-8-7
Republican R.	Trenton Farmers Irr. Assn.	Trenton	Trenton Farmers Canal	Irrig.	32.00	10	2	31	Hitchcock	Dec.	24	1890	5
Republican R.	Carson, A.	McCook	Carson Canal No. 2	Irrig.	18.00	27	3	30	Red Willow	May	5	1891	102
Republican R.	Neighbors, E. G.	Benkelman	Neighbors Canal	Irrig.	2.86	24	1	39	Dundy	Mar.	18	1891	133
Republican R.	Republican Irr. Co.	Benkelman	Republican R. Canal	Irrig.	30.00	29	1	38	Dundy	May	2	1892	147
Republican R.	Larned, W. H., et al.	Haigler	White-Larned Canal	Irrig.	3.00	22	1	40	Dundy	Apr.	29	1893	150
Republican R.	Marr, Lorenzo	Culbertson	Marr Canal	Irrig.	4.29	16	3	31	Hitchcock	Jan.	22	1894	11
Republican R.	Anderson, Anders	Max	Anderson Canal	Irrig.	1.90	1	1	37	Dundy	Jan.	26	1894	151

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	Mo.	D			Yr.
Republican R.	Thomas, A. J.	Haigler	Thomas Canal	Irrig.	2.00	23	1	40	Dundy	June	5	1894	154	—
Republican R.	Ballard, Henry L.	Oxford	Ballard Canal	Irrig.	8.00	8	3	21	Furnas	June	9	1894	91	—
Republican R.	Wilcox, F. S.	McCook	Wilcox Canal	Irrig.	4.50	32	3	29	Red Willow	Oct.	4	1894	109	—
Republican R.	Delaware-Hickman Ditch Co.	Benkelman	Delaware-Hickman Canal	Irrig.	20.00	17	1	37	Dundy	Jan.	7	1895	157	—
Republican R.	Allen, E. M., et al.	Arapahoe	Allen Canal	Irrig.	14.00	2	3	26	Red Willow	Jan.	26	1895	110	—
Republican R.	Spooners, J. A.	Parks	Private Canal	Irrig.	1.00	25	1	40	Dundy	Oct.	7	1897	—	413
Republican R.	Hamilton, Henry L.	McCook	Harmon Canal	Ice	10.00	32	3	29	Red Willow	Jan.	22	1900	—	535
Republican R.	Walsh, Patrick	McCook	Walsh Canal	Irrig.	11.00	35	3	30	Red Willow	Jan.	31	1900	—	537
Republican R.	Rogers, W. N.	McCook	Shadeland Park Canal	Irrig.	38.00	26	3	29	Red Willow	Jan.	3	1911	—	1049
Republican R.	McConnell Bros.	Trenton	McConnell Bros. Canal	Irrig.	180.00	10	2	34	Hitchcock	Jan.	23	1911	—	1055
Republican R.	Hurst, J. C., et al.	Trenton	Hurst-Day Canal	Irrig.	7.00	28	2	35	Hitchcock	Mar.	2	1911	—	1068
Republican R.	Cappel, Geo.	McCook	Cappel Canal	Irrig.	1.57	19	3	30	Red Willow	May	1	1911	—	1093
Republican R.	Rogers, W. N.	McCook	Shadeland Park Canal	Irrig.	7.00	25	3	29	Red Willow	Sept.	28	1911	—	1129
Republican R.	Anderson, C., et al.	Benkelman	Cottonwood Canal	Irrig.	3.35	6	1	36	Dundy	Feb.	19	1912	—	1172
Republican R.	Rupert Ditch Co.	Culbertson	Rupert Canal	Irrig.	20.00	32	3	32	Red Willow	Apr.	1	1912	—	1192
Republican R.	Pringle, Geo. N.	Parks	Parks Canal	Irrig.	17.00	20	1	39	Dundy	June	18	1912	—	1202
Republican R.	Kirtland, E. S.	Orleans	Orleans Mill & Elevator Co.	Power Storage		27	2	19	Harlan				1043*	—
Republican R.	Bartlett, Wm. C.	Alma	Lake Dissappointment	Storage	†180 AF	32	2	18	Harlan	Dec.	18	1915	—	1442
Republican R.	Everson, P. M. and Mitchell, J. C.	Alma	Everson Canal	Irrig.	1.07	13	2	18	Harlan	Dec.	18	1915	—	1443
Republican R.	Ham, Roy O.	Benkelman	Ham Canal	Irrig.	3.47	9	1	37	Dundy	Sept.	14	1921	—	1618
Republican R.	Campbell, W. E.	Trenton	Campbell Canal	Irrig.	9.27	9	2	34	Dundy	Nov.	26	1921	—	1627
Republican R.	Luther, Walter	Cambridge	Dunlay Pump	Irrig.	5.00	26	2	19	Harlan	July	8	1925	—	1768
Republican R.	Fishback, Geo.	Orleans	Fishback Pump	Irrig.	1.58	33	2	19	Harlan	Aug.	27	1925	—	1778
Republican R.	Stevenson, L. E.	Alma	Stevenson Pump	Irrig.	6.34	5	1	18	Harlan	Sept.	30	1925	—	1781

†Acre feet per annum.
*Claim 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	Mo.	D			Yr.
Republican R.	Drummond, Dean	Republican	Drummond Pump	Irrig.	2.37	11	1	17	Harlan	Oct.	13	1925	1782
Republican R.	Scott, C. E.	Alma	Scott Pump	Irrig.	3.37	36	2	19	Harlan	Dec.	22	1925	1789
Republican R.	Haeker, K. G.	Orleans	Haeker Pump	Irrig.	4.60	35	2	19	Harlan	Mar.	2	1926	1798
Republican R.	Peterson, Elam	Orleans	Republican Val. Pump	Irrig.	2.06	27	3	20	Harlan	June	18	1926	1821
Republican R.	Olson, L.	Orleans	Lake View Project	Irrig.	2.50	27	3	20	Harlan	June	29	1926	1824
Republican R.	Crews, L. E.	Haigler	Crews North Side Canal No. 3	Irrig.	4.00	20	1	41	Dundy	June	30	1926	1826
Republican R.	Worden, Dorsey	Superior	Worden Bros. Pump	Irrig.	1.04	1	6	32	Nuckolls	Sept.	23	1926	1862
Republican R.	Workman, Rich	Republican	Workman Pump	Irrig.	1.10	16	1	17	Harlan	Jan.	19	1927	1886
Republican R.	Sheffrey, C. E.	Oxford	Sheffrey Pump	Irrig.	1.85	16	3	20	Harlan	Feb.	28	1927	1906
Republican R.	Wintersteen, V. L.	Republican	Wintersteen Pump	Irrig.	.11	12	1	17	Harlan	Mar.	17	1927	1914
Republican R.	Best, John H.	Oxford	Best Pump	Irrig.	1.33	27	3	20	Harlan	June	30	1927	1936
Republican R.	Wilson, J. F., Jr.	Guide Rock	Wilson Pump	Irrig.	.57	14	1	9	Webster	July	8	1927	1937
Republican R.	Romjue, Carl M.	Red Cloud	Romjue Pump	Irrig.	2.03	12	1	10	Webster	Apr.	16	1928	2005
Republican R.	Jansen, Wm.	Superior	Jansen Pump	Irrig.	1.60	29	1	7	Nuckolls	May	14	1928	2017
Republican R.	Runck, John J.	Republican	Runck Pump No. 1	Irrig.	3.29	22	3	20	Harlan	Sept.	18	1928	2029
Republican R.	Keifer, J. Warren, Jr.	Bostwick	Keifer Canal No. 1	Irrig.	9.93	21	1	8	Nuckolls	Sept.	22	1930	2167
Republican R.	Fury, Cameron J.	Franklin	Furry Pump	Irrig.	2.26	12	1	15	Franklin	Nov.	10	1930	2171
Republican R.	Keifer, J. Warren, Jr.	Bostwick	Keifer Canal No. 2	Irrig.	9.15	26	1	9	Nuckolls	Nov.	17	1930	2175
Republican R.	Hevner, Clyde W.	Franklin	Hevner Pump	Irrig.	4.66	6	1	14	Franklin	Aug.	5	1931	2224
Republican R.	Mendell, B. C., et al.	Superior		Irrig.		34	1	7	Nuckolls	Sept.	7	1932	2283*
(Tail Race Southern Neb. Power Co.)	Mendell, B. C., et al.	Superior		O. D.		36	1	7	Nuckolls	Sept.	7	1932	2284*
Republican R.	Pringle, Geo. N.	Parks	Parks Canal	Irrig.	2.00	20	1	39	Dundy	Dec.	31	1915	1444

*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	Mo.	D			Yr.
Republican R. North Fork	Pringle, Geo. N.	Parks	Parks Extension	Irrig.	1.14	20	1	39	Dundy	Sept.	5	1919	1555
Republican R. North Fork	Crews, L. E.	Haigler	Crews Canal No. 2	Irrig.	2.59	20	1	41	Dundy	Mar.	29	1923	1709
Republican R. South Fork	Southern Nebraska Power Co.	Superior	Guthrie Canal	Power	400.00	34	1	7	Nuckolls	Sept.	1	1877	1036
Republican R. South Fork	Karr, J. W.	Benkelman	Karr Canal	Irrig.	2.00	20	1	37	Dundy	July	28	1894	155
Republican R. South Fork	Riverside Ditch Co.	Benkelman	Riverside Canal	Irrig.	13.00	29	1	37	Dundy	Aug.	5	1894	156
Republican R. South Fork	McDonald, J. A.	Benkelman	McDonald Canal	Irrig.	.79	36	1	38	Dundy	Nov.	13	1901	644
Republican R. South Fork	Bailey, W. J.	Oxford	Bailey Canal	Irrig.	64.00	6	3	21	Furnas	Sept.	8	1913	1321
Republican R., Springs, Tributary 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.	4.20	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 L. Assn.	Benkelman	Benkelman L. Assn.	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 Creek	Kara Cattle Co.	Parks	Kara Lakes	Storage	†480AF	20	1	39	Dundy	Oct.	31	1931	2246
Rock Canon Cr.	Rudisell, L. C.	Benkelman	Rudisell Dam	Storage	†10AF	35	3	37	Harlan	Nov.	26	1927	1970
Sappa Creek	Zulauf, Geo. W.	Stamford	Stamford Mills	Power		21	2	20	Harlan				997*

*Claim not adjudicated.
†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	Mo.	D			Yr.
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	
Sappa Creek	Winslow, Orin E.	Beaver City	Winslow Pump	Irrig.	.86	15	1	22	Furnas	Feb.	10	1932	2252	
School Creek & Berger Creek	Sughrone, Edward	Indianola	Sughrone Pump	Irrig.		15	3	27	Red Willow	Aug.	16	1932	2280	
Spring Creek	Carlton, J. C.	Benkelman	Benkelman Canal	Irrig.	1.29	19	1	37	Dundy	Dec.	31	1896	373	
Spring Creek	Twin Lakes Co.	Benkelman	Twin Lakes Reservoir	Storage	†7	AF	34	2	38	Dundy	Apr.	16	1930	2133
Stinking Water Creek	Kilpatrick Bros.	Beatrice	Chase County Land & Live Stock Canal	Irrig.	2.86	10	7	38	Chase	Mar.	10	1894	57	
Stinking Water Creek	Crandall and Taylor	Imperial	McLain Canal	Irrig.	2.43	28	7	37	Chase	Sept.	24	1894	65	
Stinking Water Creek	Kilpatrick Bros.	Beatrice	Chase County Land & Live Stock Canal No. 7	Irrig.	4.57	36	7	37	Chase	Dec.	21	1894	72 } 175 }	
Stinking Water Creek	Kilpatrick Bros.	Beatrice	Chase County Land & Live Stock Canal No. 6	Irrig.	2.00	13	7	38	Chase	Jan.	28	1895	76	
Stinking Water Creek	Kilpatrick Bros.	Beatrice	Chase County Land & Live Stock Canal No. 5	Irrig.	1.50	14	7	38	Chase	Jan.	29	1895	77	

†Acre feet per annum.

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	Mo.			D	Yr.
Stinking Water Creek	Kilpatrick Bros.	Beatrice	Chase County Land & Live Stock Canal No. 3	Irrig.	1.71	14	7	38	Chase	Jan.	29	1895	78	.....
Stinking Water Creek	Kilpatrick Bros.	Beatrice	Chase County Land & Live Stock Canal No. 4	Irrig.	.91	14	7	38	Chase	June	27	1895	.....	56
Stinking Water Creek	Kilpatrick Bros.	Beatrice	Chase County Land & Live Stock Canal No. 1	Irrig.	.70	4	7	38	Chase	June	27	1895	.....	57
Stinking Water Creek	Krotter, F. C.	Pallsade	Krotter Power Plant	Irrig.	3.00	25	5	34	Hayes	Dec.	15	1910	.....	1046
Turkey Creek	Wilt and 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, Stream, Tributary to	Sindt, Henry	Naponee	Sindt Pump	Irrig.	1.00	17	2	16	Franklin	July	30	1926	.....	1838
Valley Home Cr.	Lunt, W. A.	Superior	Lunt Reservoir	Storage	†2304	28	1	6	Nuckolls	Nov.	19	1930	.....	2176
(Res. A-2176)	Lunt, W. A.	Superior	Lunt Reservoir Canal	Irrig.	AF 2.20	28	1	6	Nuckolls	May	4	1931	.....	2201

DEPARTMENT OF PUBLIC WORKS

†Acre feet per annum.

CLAIMS AND APPLICATIONS BY STREAMS 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	Mo.	D			Yr.
Little Blue R.	Southern Nebraska Power Co.	Superior	Oak Mill Race	Power Stor.		16	3	5	Nuckolls				991*	
Little Blue R.	Buzzard, O. S.	Ayr	Crystal Lake		†32A	27	6	10	Adams	Aug.	17	1912		1219
Little Blue R.	Lyon, Geo., Jr.	Nelson	Lyon Little Blue Electric Co.	Power Irrig.	150.00	29	4	6	Nuckolls	Apr.	26	1915		1410
Little Blue R.	Lyon, Geo., Jr.	Nelson	Lyon Canal		4.00	18	4	6	Nuckolls	Apr.	26	1915		1411
Little Blue R.	Southern Nebraska Power Co.	Superior	Meyer Hydro Electric Power Plant	Power Irrig.	150.00	16	3	5	Nuckolls	July	27	1916		1467
Little Blue R.	Buzzard, O. S.	Ayr	Crystal Lake		.70	27	6	10	Adams	Nov.	9	1918		1526
Little Blue R.	Bozarth-Carter	Hebron	Hebron Power Plant	Power Irrig.	216.00	9	2	2	Thayer	Mar.	31	1919		1538
Little Blue R.	Campbell, J. T.	Hebron	Blue Valley Power Co.	Power Irrig.	200.00	5	2	1	Thayer	May	28	1919		1542
Little Blue R.	Buzzard, O. S.	Ayr	Larkins & Son Canal	Power Irrig.	1.50	27	6	10	Adams	Nov.	20	1920		1594
Little Blue R.	Hulbert, Chas.	Fairbury	Hulbert Canal	Power Irrig.	.02	22	2	2E	Jefferson	Aug.	7	1922		1685
Little Blue R.	Kassebaum, Wm.	Hebron	Kassebaum Power Pl.	Power Irrig.	250.00	29	3	2E	Jefferson	Nov.	13	1923		1726
Little Blue R.	Dunn, F. J.	Hastings	Blue Val. Yacht Club	Resort		10	5	9	Adams	May	23	1924		1745
Little Blue R.	Steel, R. B.	Fairbury	Steel, Sand & Mining Project	Mfg.		22	2	2E	Jefferson	Aug.	16	1926		1847*
Little Blue R.	Kistler, Geo. S.	Roseland	Kistler Pump	Irrig.	.08	9	5	11	Adams	Nov.	1	1926		1860
Little Blue R.	Coxbill, James	Deweese	Vap Pump	Irrig.	.81	31	5	7	Clay	Dec.	8	1926		1878
Little Blue R.	Gaudreault, I. S.	Hastings	Gaudreault Pump	Irrig.	.39	26	6	10	Adams	Feb.	22	1927		1903
Little Blue R.	Pratt, H. G.	Hastings	Pratt Pump	Irrig.	1.01	28	6	10	Adams	Feb.	23	1927		1904
Little Blue R.	Logan, John S.	Fairfield	Logan Canal	Irrig.	1.88	33	5	7	Clay	Mar.	7	1927		1907
Little Blue R.	Knopf, Clyde L.	Pauline	Knopf Pump	Irrig.	1.60	25	6	10	Adams	Mar.	8	1927		1908
Little Blue R.	Graham, Harry	Ayr	Graham Pump	Irrig.		31	6	9						
					.80	13	5	11	Adams	Mar.	8	1927		1909

*Application Pending—Claim not adjudicated.

†Acre feet per annum.

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	Mo.	D			Yr.
Little Blue R.	City of Fairbury	Fairbury		Mfg.	16.70	15	2	2E	Jefferson	Oct.	22	1927	-----	1963
Little Blue R.	Hornberger, Thos.	Ayr	Hornberger Pump	Irrig.	2.19	14	5	11	Adams	Jan.	24	1928	-----	1978
Little Blue R.	Grant, Wm.	Lincoln	Little Blue Plant No. 1	Power		9	2	2E	Jefferson	Oct.	16	1928	-----	2043*
Little Blue R.	Grant, Wm.	Lincoln	Little Blue Plant No. 2	Power		26	2	2E	Jefferson	Oct.	16	1928	-----	2044*
Little Blue R.	Bergt, Theodore	Davenport	Bergt Pump	Irrig.	1.50	22	3	4	Thayer	Apr.	17	1930	-----	2134
Little Blue R.	Dutton, K. M. J.	Hastings	Blue Haven Pump	Irrig.	5.24	29	3	3	Thayer	Aug.	4	1930	-----	2152
						30	3	3						
Little Blue R.	Jones, E. H.	Fairbury	Midwest Garden Pump	Irrig.	1.74	26	2	2E	Jefferson	Sept.	4	1930	---	2165
Little Blue R.	Heinrich, C. W.	Davenport	Riverside Pump	Irrig.	2.23	20	4	3	Thayer	Feb.	24	1931	---	2193
Little Blue R.	Nehrig, Henry H.	Davenport	Nehrig Pump	Irrig.	5.00	26	3	4	Thayer	Mar.	10	1931	---	2194
Little Blue R.	Sanford, Harry K.	Ayr	Sanford Pump	Irrig.	.20	4	5	10	Adams	Sept.	22	1931	---	2238
Little Blue R.	Heiler, H. H.	Hastings	Heller Pump	Irrig.	.46	27	6	10	Adams	Sept.	30	1931	---	2241
Little Blue R.	Weyenberg, John T.	Hastings	Weyenberg Pump	Irrig.	1.20	17	5	8	Clay	Oct.	8	1931	---	2243
Little Blue R.	Zweifel, Albert	Fairbury	Zweifel Pump	Irrig.		9	2	2E	Jefferson	July	25	1932	---	2277

*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	Mo.	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 Institute Pump	Irrig.	.95	36	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	6E	Gage.....	Jan.	11	1860	1048	.....
Big Blue River..	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Milford Mills	Power	300.00	2	9	3E	Seward.....			1866	1044	.....
Big Blue River..	Gage County Electric Co., The	Beatrice.....	Black Bros. Plant No. 2 (Blue Springs).....	Power	450.00	17	2	7E	Gage.....			1868	1047	.....
Big Blue River..	Zwonechek & Askamit	Wilber.....	DeWitt Mill	Power	200.00	19	5	5E	Gage.....	Jan.	1	1875	1046	.....
				Rs. dam		19	5	5E	Gage.....	Jan.	1	1903	1046	.....
Big Blue River..	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Holmesville Pw. Plant	Power	500.00	29	3	7E	Gage.....	Apr.		1882	1021	.....
Big Blue River..	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Blue River Power Sta. No. 1	Power	200.00	19	9	4E	Seward.....	July	8	1910	.....	1006
Big Blue River..	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Holmesville Pw. Plant	Rs. dam	D-1021	29	3	7E	Gage.....	May	3	1911	.....	1095
Big Blue River..	Jacobs, E.....	Staplehurst.....	Jacobs Power Plant.....	Power	41.00	26	12	2E	Seward.....	Nov.	13	1911	.....	1135
Big Blue River..	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Big Blue Plant No. 2.....	Power	100.00	32	9	3E	Seward.....	Jan.	3	1912	.....	1153
Big Blue River..	Beatrice Power Co.....	Barneston.....	Barneston Pw. Plant.....	Power	500.00	13	1	7E	Gage.....	Feb.	18	1913	.....	1262
	(See A-1585-A-1788)													

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	Mo.	D			Yr.
Big Blue River. (See A-1521- 1599-1733-1751)	Iowa-Nebraska Light & Power Co.	Lincoln	Blue River Plant No. 3	Power	100.00	5	8	4E	Saline	Mar.	13	1913	.....	1265
Big Blue River.	Mares, Frank	Wilber	Mares Canal	Irrig.	2.28	2	6	4E	Saline	Aug.	12	1913	.....	1314
Big Blue River.	C. B. & Q. R. R. Co.	Lincoln	C. B. & Q. Pipe Line	Dom.	.50	2	9	3E	Seward	Apr.	30	1914	.....	1366
Big Blue River.	C. B. & Q. R. R. Co.	Lincoln	Pipe Line at Wymore	Dom.	.50	21	2	7E	Gage	Dec.	24	1914	.....	1394
Big Blue River.	C. B. & Q. R. R. Co.	Lincoln	Pipe Line at Seward	Dom.	.50	21	11	3E	Seward	Dec.	14	1914	.....	1395
Big Blue River. (See A-1752)	Iowa-Nebraska Light & Power Co.	Lincoln	Blue River Plant No. 4	Power	100.00	32	9	4E	Seward	Aug.	14	1916	.....	1463
Big Blue River.	Iowa-Nebraska Light & Power Co.	Lincoln	Power Plant No. 5	Power	100.00	11	8	3E	Seward	Feb.	13	1917	.....	1476
Big Blue River. (See A-1761)	Iowa-Nebraska Light & Power Co.	Lincoln	Shestak Power Plant	Power	200.00	35	7	4E	Saline	Feb.	6	1918	.....	1566
Big Blue River. (See A-1153)	Iowa-Nebraska Light & Power Co.	Lincoln	Big Blue Plant No. 2	Rs. dam	A-1153	32	9	3E	Seward	Aug.	21	1918	.....	1520
Big Blue River. (See A-1265)	Iowa-Nebraska Light & Power Co.	Lincoln	Blue River Plant No. 3	Rs. dam	A-1265	5	8	4E	Saline	Aug.	21	1918	.....	1521
Big Blue River.	Beatrice Power Co.	Barneston	Beatrice Power Co.	Rs. dam	A-1262	13	1	7E	Gage	May	27	1920	.....	1585
Big Blue River.	Iowa-Nebraska Light & Power Co.	Lincoln	Wilber Power Plant	Power	200.00	12	5	4E	Saline	Dec.	17	1920	.....	1597
Big Blue River. (See A-1265)	Iowa-Nebraska Light & Power Co.	Lincoln	Blue River Plant No. 3	Rs. dam	A-1265	5	8	4E	Saline	Dec.	28	1920	.....	1599
Big Blue River. (See A-1731)	Gage County Electric Co., The	Beatrice	Power Plant No. 3	Power	400.00	2	3	6E	Gage	Oct.	7	1922	.....	1690
Big Blue River.	Gage County Electric Co., The	Beatrice	Power Plant No. 2	Dredge	D-1047	17	2	7E	Gage	Nov.	7	1922	.....	1692
Big Blue River.	Gage County Electric Co., The	Beatrice	Power Plant No. 2	Dredge	D-1047	17	2	7E	Gage	Dec.	15	1922	.....	1698
Big Blue River.	Seward City Mills	Seward	Ruby Power Station	Power	40.00	15	10	3E	Seward	Apr.	17	1923	.....	1715

*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	Mo.	D			Yr.
Big Blue River.	Black Bros. Flour Mills	Beatrice.....	Power Plant No. 3.....	Dredge	A-1690	2	3	6E	Gage.....	Nov.	26	1923	.....	1731*
Big Blue River.	Black Bros. Flour Mills	Beatrice.....	Fower Plant No. 2.....	Rs. dam	D-1047	17	2	7E	Gage.....	Dec.	15	1923	.....	1732*
Big Blue River.	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Blue River Plant No. 3.....	Dredge	A-1265	5	8	4E	Saline.....	Jan.	30	1924	.....	1733
Big Blue River.	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Blue River Plant No. 3.....	Dredge	A-1265	5	8	4E	Saline.....	Nov.	21	1924	.....	1751
Big Blue River.	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Blue River Plant No. 3.....	Dredge	A-1463	32	9	4E	Seward.....	Nov.	25	1924	.....	1752
Big Blue River.	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Shestak Power Plant.....	Dredge	A-1506	35	7	4E	Saline.....	Mar.	30	1925	.....	1761
Big Blue River.	Beatrice Power Co.....	Barneston.....	Barneston Pw. Plant.....	Dredge	A-1262	13	1	7E	Gage.....	Dec.	17	1925	.....	1788
Big Blue River.	Gage County Electric Co., The	Beatrice.....	Plant No. 5.....	Power	300.00	13	4	5E	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 & Seed House	Beatrice.....	Sonderegger Pump.....	Irrig.	.43	3	3	6E	Gage.....	Aug.	29	1930	.....	2164
Big Blue River.	Andrews, W. E.....	Beatrice.....	Andrews Pump.....	Irrig.	.20	10	3	6E	Gage.....	Apr.	3	1931	.....	2196
Big Blue River. North Branch	Nelson, Louie E.....	Inland.....	Nelson Pump.....	Irrig.	.48	27	8	8	Clay.....	Feb.	11	1927	.....	1899
Big Blue River. West Fork	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Bow Span Plant.....	Power	100.00	26	9	2E	Saline.....	Dec.	17	1920	.....	1595
Big Blue River. West Fork	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Big Bend Plant.....	Power	100.00	11	8	3E	Saline.....	Dec.	17	1920	.....	1596

REPORT OF SECRETARY

*Application Pending.

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	Mo.	D			Yr.
Big Blue River. West Fork	Warren, Herbert F.	Trumbull	Warren Pump	Irrig.	.16	13	8	9	Adams	Nov.	26	1927	1971
Big Blue River. West Fork	Show, Frank	McCool Jct.	Show Pump	Irrig.	.42	18	9	2	York	Oct.	19	1928	2048
Big Blue River. West Fork	Iowa-Nebraska Light & Power Co.	Lincoln	Beaver Crossing Hydro Plant	Power		2	9	1E	Seward	July	17	1931	2218*
Big Blue River. South Branch	Swanson, S. A.	Hastings	Swanson Pump	Irrig.	1.90	4	7	9	Adams	Apr.	4	1929	2076
Big Blue River. East Fork	Iowa-Nebraska Light & Power Co.	Lincoln	Ulysses Hydro Plant	Power		27	13	2E	Butler	July	17	1931	2217*
Big Blue River & School Cr.	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	3E	Saline				990*
Turkey Creek	Lane, J. K.	Pleasant Hill	Lane Model Canal	Irrig.	.09	4	7	3E	Saline	July	16	1895	81
Turkey Creek	Lane, J. K.	Pleasant Hill	Lane Model Canal	Irrig.					Saline	July	18	1895	84

*Application Pending.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-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	Mo.	D			Yr.
Lodge Pole Cr.	Forsling, Alfred	Kimball	Owasco Canal	Irrig.	1.20	29	15	55	Kimball	Dec.	31	1876	347R	
Lodge Pole Cr.	Gieseking, Herman	Altamont Ill.	Bickel Canal	Irrig.	.30	29	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, Herbert R.	Sidney	Runge Canal No. 1.	Irrig.	1.71	20	14	50	Cheyenne	Apr.	15	1880	339	
Lodge Pole Cr.	Fuller, Herbert R.	Sidney	Runge Canal No. 2.	Irrig.	.50	28	14	50	Cheyenne	Apr.	15	1882	338	
Lodge Pole Cr.	Connelly, Mrs 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	30	15	54	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.	Likens, M. C.	Kimball	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.	Krueger, R. & F. W.	Sidney	Krueger Canal No. 3.	Irrig.	1.14	32	14	48	Cheyenne	May	1	1885	323	
Lodge Pole Cr.	Wolf, Mrs. H. D.	Chappell	Wolf Canal	Irrig.	1.00	18	13	45	Deuel	Dec.	31	1885	813	
Lodge Pole Cr.	Peters Trust Co.	Omaha	McIntosh Canal	Irrig.	3.31	23	15	55	Kimball	Apr.	16	1886	351	
Lodge Pole Cr.	Krueger, R. & F. W.	Sidney	Krueger Canal No. 2.	Irrig.	2.29	32	14	48	Cheyenne	Oct.	10	1886	324	
Lodge Pole Cr.	Helfrich, Peter	Sidney	Borquist Canal	Irrig.	1.29	34	14	49	Cheyenne	Apr.	30	1887	300	
Lodge Pole Cr.	Helfrich, Peter	Sidney	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	

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	Mo.			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.	Equitable Life Ins. Co.	Des Moines	Tobin Canal	Irrig.	2.29	28	14	47	Cheyenne	July	31	1888	330	
Lodge Pole Cr.	Peetz, 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	59	Kimball	Apr.	11	1889	340	
Lodge Pole Cr.	Peetz, 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	312	
Lodge Pole Cr.	Wearin, Wm. H.	Carleton	Independent Canal	Irrig.	3.14	7	14	58	Kimball	May	6	1889	313	
Lodge Pole Cr.	Atkins, D. K.	Kimball	Atkins Canal	Irrig.	.43	30	15	55	Kimball	May	6	1889	314	
Lodge Pole Cr.	Likens, M. C.	Kimball	Kinn-y 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, Thos. B., Administrator	Lodge Pole	Bullock Canal	Irrig.	1.13	3	13	46	Deuel	June	25	1889	296	
Lodge Pole Cr.	Searcy, Mrs. Geo. H.	Tuscaloosa, Ala.	Persinger Canal	Irrig.	1.57	33	14	46	Deuel	June	25	1889	297	
Lodge Pole Cr.	Krueger, R. & F. W.	Sidney	Krueger 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.	Gross, Wm. A. & Chas. C.	Pine Bluff, Wyo.	Hoover Canal	Irrig.	1.13	12	11	59	Kimball	Sept.	4	1889	353	
Lodge Pole Cr.	Equitable Life Ins. Co.	Des Moines	Ickes Canal	Irrig.	2.50	28	14	50	Cheyenne	Mar.	25	1891	329	
Lodge Pole Cr.	Johnson, Chas. W.	Potter	Adams Canal	Irrig.	1.43	3	14	59	Cheyenne	July	1	1891	371	
Lodge Pole Cr.	Atkins, D. K. & Garrard, Robt. P.	Kimball	Hurley-Lilly-Polly Canal	Irrig.	2.57	26	15	56	Kimball	Oct.	1	1891	354	

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	Mo.	D			Yr.
Lodge Pole Cr.	Thorstensen, Nels	Sidney	Christensen Canal	Irrig.	.57	7	14	51	Cheyenne	Apr.	15	1893	366	—
Lodge Pole Cr.	Thorstensen, Nels	Sidney	Christensen Canal	Irrig.	.43	7	14	51	Cheyenne	Apr.	15	1893	367	—
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.	Krueger, R. S.	Sidney	Krueger 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.	Searcy, Mrs. Geo. H.	Tuscaloosa, Ala.	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	38	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 Co.	Omaha	Bennett Reservoir (See A-1974)	Storage	†700.AF	22	15	55	Kimball	Mar.	13	1902	—	657
Lodge Pole Cr.	Nasland, John	Chappell	Nasland Canal	Irrig.	.90	1	12	45	Deuel	Apr.	16	1902	—	661
Lodge Pole Cr.	Peters Trust Co.	Omaha	Bennett Res. Canal	Irrig.	1.22	29	15	55	Kimball	Oct.	2	1902	—	691
(Res. A-657)	Peters Trust Co.	Omaha	Bennett Res. Canal	Supple.		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.	Thomason, Chas. E.	Kimball	Kinney-Forsling Canal	Irrig.	.75	33	15	56	Kimball	July	25	1903	—	718
Lodge Pole Cr.	Thomason, Chas. E.	Kimball	Ruttner-Kinney Canal	Irrig.	.75	31	15	56	Kimball	July	25	1903	—	718"R"
Lodge Pole Cr.	Gieseking, Herman	Altamont, Ill.	Bickel Canal	Irrig.	.93	30	15	55	Kimball	Aug.	3	1903	—	719

REPORT OF SECRETARY

†Acre feet per annum.

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	Mo.	D			Yr.
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
(Res. A-657)	Peters Trust Co.	Omaha	Owasco Canal	Supple.		29	15	55	Kimball	Sept.	12	1903	725
Lodge Pole Cr.	Lehmkuhl, John	Kimball	New Ruttner Canal	Irrig.	.51	38	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
Lodge Pole Cr.	Soderquist, Peter	Chappell	Ralton Irr. System	Irrig.	19.14	12	12	45	Deuel	Jan.	4	1907	847
Lodge Pole Cr.	Thomason, Chas. E.	Kimball	Yoder Extension	Irrig.	2.71	38	15	57	Kimball	Apr.	9	1907	857
Lodge Pole Cr.	Walker, I. S.	Kimball	Walker Canal	Irrig.	.63	38	15	57	Kimball	Sept.	16	1907	869 ^R
Lodge Pole Cr.	Gross, Wm. & Chas.	Pine Bluff, Wyo.	Tracy Canal	Irrig.	.50	12	14	50	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)	Storage Irrig.	†20,000 AF	38	15	57	Kimball	Apr.	15	1908	897
Lodge Pole Cr.	Wilds, Turner,	Chappell	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	51	Kimball	Feb.	17	1909	934
Lodge Pole Cr.	Maginnis, P.	Kimball	McGinnis Ice Pond	Storage	†1000	26	15	30	Kimball	Sept.	19	1911	1127
Lodge Pole Cr.	Brown, Cyrus D., et al	Chappell	Soderquist Canal	Irrig.	2.00	36	13	45	Deuel	Oct.	22	1912	1237
Lodge Pole Cr.	Heming, Howard C.	Chappell	Weigend Canal No. 3	Irrig.	1.28	16	13	45	Deuel	Sept.	10	1913	1322
Lodge Pole Cr.	Heming, Howard C.	Chappell	Weigend Canal No. 2	Irrig.	.42	18	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	Storage	†5AF	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

†Acre feet per annum.

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	Mo.	D			Yr.
Lodge Pole Cr.	McAuliffe, Frank	Chappell	McAuliffe Canal	Irrig.	1.77	21	13	45	Deuel	Oct.	6	1919	1559	
Lodge Pole Cr.	Ruttner, Joseph B.	Sunol	Ruttner Canal	Irrig.	.20	31	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.	Gieseking, C. H.	Altamont, Ill.	Gieseking 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	50	Kimball	July	14	1926	1823	
Lodge Pole Cr.	Wearin, 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 (See A-657)	Storage	†524A	F	22	15	55	Kimball	Jan.	13	1928	1974
Lodge Pole Cr.	Peters Trust Co.	Omaha	Bennett Reservoir (See A-657)	Irrig.	5.97	22	15	55	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	31	14	48	Cheyenne	Nov.	15	1929	2113	
Lodge Pole Cr., Springs, Tributary to	Oberfelder, R. S.	Sidney	Oberfelder Canal	Irrig.	2.29	31	14	46	Cheyenne	May	29	1889	307	
Lodge Pole Cr., Springs, Tributary to	Chambers, Chas. P.	Sidney	Private Canal	Irrig.	.04	14	13	51	Cheyenne	Mar.	19	1895	335	

†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	Mo.	D			Yr.
Lodge Pole Cr., Springs, Tributary to	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
Underground Water Supply	Foster Lbr. Co., S. A.	Lincoln	Foster Pump Wells	Irrig.	.66	8	13	46	Cheyenne	Apr.	29	1931	.....	2200

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	Mo.	D			Yr.
Weeping Water Creek	Gilmore, Chas.	Weeping Water	Gilmore Canal	Ice	8.00	2	10	11E	Cass	Aug.	5	1909	955
Nemaha River	C. B. & Q. R. R. Co.	Lincoln	C. B. & Q. Water Sup.	Dom.	1.00	33	3	12E	Pawnee	Aug.	8	1922	1687
Nemaha River, Great	Estes, E. B.	Tecumseh	Estes Canal	Irrig.	1.43	19	5	11E	Johnson	Aug.	15	1930	2159
						29	5	11E					

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	Mo.	D			Yr.
Ash Creek, Tributary to Loup River, Middle Branch	Swenson, John E.	Eddyville	Tierney Pump	Irrig.	2.95	7	14	20	Custer	May	17	1932	.....	2271
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	1	Nance	Mar.	31	1896	.....	277
Beaver River	Central West Public Serv. Co. of Nebr.	Omaha	Albion Power Plant	Power	67.00	26	20	6	Boone	Oct.	3	1901	.....	630
Beaver River	Iowa-Nebraska Light & Power Co.	Lincoln	St. Edward Pw. Plant	Power	134.00	27	19	5	Boone	Feb.	11	1911	.....	1058
Beaver River	The Ravenna Mills	Ravenna	The Ravenna Mills	Power	.....	8	12	11	Buffalo	.....	.....	.....	1037*	.....
Beaver River	Central West Public Serv. 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 Reservoir	Storage	.....	5	24	20	Loup	June	8	1926	.....	1816
Calamus River	Phillipps, J. C., et al	Burwell	Phillipps Pump	Irrig.	.53	25	25	21	Brown	June	13	1932	.....	2273
Cedar River	Central Power Co.	Grand Island	Van Ackeren Power Plant	Power	290.00	5	18	7	Boone	May	1	1881	1049	.....
Cedar River	Iowa-Nebraska Light & Power Co.	Lincoln	Fullerton Power Plant	Power	200.00	12	16	6	Nance	Sept.	9	1901	.....	636
Cedar River	Western Pub. Serv. Co.	Scottsbluff	Ericson Power Plant	Power	175.00	25	21	12	Wheeler	May	24	1915	.....	1415
Cedar River	Iowa-Nebraska Light & Power Co.	Lincoln	Fullerton Power Plant	Rs. dam	250.00	12	16	6	Nance	Aug.	8	1922	.....	1686

*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	Mo.	D			Yr.
Cedar River	Iowa-Nebraska Light & Power Co.	Lincoln	Fullerton Power Plant	Rs. dam A-636 A-1686		12	16	6	Nance	Jan.	27	1925	1758	
Cedar River	Western Pub. Serv. Co.	Scottsbluff	Lake Ericson Power Plant	Rs. dam A-1415		25	21	12	Wheeler	May	17	1929	2081	
Cedar River	Christensen, Chas.	Fullerton	Christensen Pump	Irrig.	2.37	30	17	6	Nance	Sept.	29	1931	2210	
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	
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	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	21	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	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	Myers, W. F.	Anselmo	Myers Canal	Irrig.		.11	15	19	20	Custer	Aug.	30	1927	1950
Looking Glass Creek	Girard, E. A. & F. H.	Monroe	Monroe Canal	Irrig.	2.86	1	17	3	Platte	June	12	1894	289	

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	Mo.	D			Yr.
Lost Creek (Warm Slgh)	Dworak, Helen	Schuyler	Dworak Pump	Irrig.	1.30	28	17	3E	Colfax	Oct.	12	1928	2041
Loup River	Hockenberger, Phil R.	Columbus	Mid Nebr. Pw. Plant	Power		32	17	4	Nance	Sept.	15	1932	2287*
Loup Riv., M. B.	Western Pub. Serv. Co	Scottsbluff	Lundy M. & P. Plant	Power	200.00	4	19	19	Custer	Aug.	1	1886	1021
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	1891	202
Loup Riv., M. B.	Douglas Grove Irr. Dist.	Comstock	Westcott Canal	Irrig.	38.57	15	19	18	Custer	Aug.	8	1891	211
Loup Riv., M. B.	Sherman County Irr. & Water Power Co.	Loup City	Sherman Co. Canal	Irrig.	244.00	26	17	16	Valley	Aug.	13	1891	229b
Loup Riv., M. B.	Thedford Irr. & Power Co.	Thedford	Thedford Canal	Irrig.	43.00	4	23	29	Thomas	Aug.	25	1891	198
Loup Riv., M. B.	Purdum, J. W.	Thedford	Norway Canal	Irrig.	2.86	31	24	29	Thomas	Sept.	8	1891	199
Loup Riv., M. B.	Lillian Precinet Ditch & Power Co.	Gates	Lillian Precinet Canal	Irrig.	140.00	30	21	21	Blaine	Oct.	19	1891	201 } 216 j
Loup Riv., M. B.	Rieck, Emil	Dunning	Jewett Canal	Irrig.	4.29	30	22	21	Blaine	Aug.	12	1895	113
Loup Riv., M. B.	Harris, L. H.	Duning	Harris Canal	Irrig.	5.71	16	22	25	Blaine	Feb.	21	1896	248
Loup Riv., M. B.	Webster Irr. & 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 & L. P.	Power	124.00	6	24	32	Hooker	Mar.	12	1912	1185
Loup Riv., M. B.	St. Paul Electric Light Works	St. Paul	St. Paul Power Plant	Power	2000.00	3	14	10	Howard	Aug.	12	1912	1218

*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	Mo.	D			Yr.
Loup Riv., M. B.	Western Pub. Serv. Co.	Scottsbluff	Lundy M. & P. Plant.	Rs. dam D-1024	400.00	4	19	19	Custer	Sept.	16	1912	1224
Loup Riv., M. B.	United States of America	Halsey	Bessey Nursery Canal	Irrig.	1.00	3	22	26	Thomas	Sept.	16	1912	1226
Loup Riv., M. B.	Midwest Life Ins. Co.	Lincoln	Loup Valley Canal	Irrig.	.85	36	29	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	Storage	†4500	2	19	19	Custer	July	19	1913	1306
(Res. A-1306)	Lundy, Laura E.	Sargent	Lundy Lake	Irrig.	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
Loup Riv., M. B.	Central Power Co.	Grand Island	Central Power Plant	Power	1000.00	30	13	12	Howard	July	14	1914	1373
Loup Riv., M. B.	C. B. & Q. R. R. Co.	Lincoln	Pipe Line at Seneca	Dom.	.50	18	24	3	Thomas	Dec.	28	1914	1396
Loup Riv., M. B.	Carter, T. H.	Hebron	Loup River Pw. Plant	Power	600.00	35	18	17	Custer	Sept.	14	1926	1858
Loup Riv., M. B.	Stancilff, 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.	11	1927	1925*
Loup Riv., M. B.	Knapp, Harry R.	Broken Bow	Knapp Pump	Irrig.	5.49	32	15	11	Sherman	July	18	1927	1943
Loup Riv., M. B.	Klausen, Paul	Rockville	Klausen Canal	Irrig.	2.17	36	14	11	Sherman	Aug.	14	1929	2095
Loup Riv., M. B.	John, Vincent L.	Loup City	John Canal	Irrig.	.59	18	15	11	Sherman	Sept.	18	1929	2105
Loup Riv., M. B.	Obermiller, Robert	Boelus	Obermiller Pump	Irrig.	.97	28	13	12	Howard	May	7	1930	2139
Loup Riv., M. B.	Haesler, John	Loup City	Haesler Pump	Irrig.	1.75	13	15	15	Sherman	July	27	1931	2222
Loup Riv., M. B.	U. S. Forest Service	Halsey	Bessey Nursery Canal	Irrig.	.03	3	22	26	Thomas	July	30	1931	2223
Loup Riv., N. B.	North Loup Irr. & Improvement Co.	North Loup	North Loup Canal	Irrig.	143.00	27	19	14	Valley	Sept.	30	1893	227 } 228 } 232 }

†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	Mo.	D			Yr.
Loup Riv., N. B.	Lee, J. R.	Brownlee	Lee Canal	Irrig.	40.00	25	27	29	Cherry	Aug.	7	1894	188 189 356	—
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 Irr. & Power Co.	North Loup	North Loup Pw. Plant	Power	1000.00	35	19	13	Valley	Nov.	29	1922	—	1687
Loup Riv., N. B.	Loup Valley Irr. & Power 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	North Loup Pw. 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. Irr. 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.	2.25	9	19	14	Valley	Aug.	6	1930	—	2154
Loup Riv., N. B.	Mortensen, Crawford J.	Ord	Mortensen Pump	Irrig.	1.94	5	19	11	Valley	Aug.	8	1930	—	2155
Loup Riv., N. B.	Stewart, Wm. J.	Ord	Stewart Pump	Irrig.	.54	9	19	14	Valley	Aug.	11	1930	—	2158
Loup Riv., N. B.	Bloomquist, O. V.	St. Paul	Bloomquist Pump	Irrig.	.83	16	15	10	Howard	Nov.	26	1930	—	2178
Loup Riv., N. B.	Sailing, Ira L.	Cushing	Sailing Pump	Irrig.	.86	7	15	9	Howard	Jan.	14	1931	—	2187
Loup Riv., N. B.	Cox, R. K.	Purdum	Cox Pump	Irrig.	4.87	9	24	25	Blaine	Feb.	25	1932	—	2255
Loup Riv., N. B.	Newton Irr. Dist.	Moulton	Newton Canal	Irrig.	—	16	24	25	Blaine	Mar.	18	1932	—	2263*
Loup Riv., N. B.	Newton Irr. Dist.	Moulton	Newton Canal	Irrig.	—	35	23	21	Blaine	Mar.	18	1932	—	2263*
Loup Riv., S. B.	Callaway Milling & Electric 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	—

*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	Mo.	D			Yr.	
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.	.96	31	17	21	Custer	Feb.	23	1897		363	
Loup Riv., S. B.	Hartzell, B. F.	Logan.	Hartzell Canal	Irrig.	.37	27	18	20	Logan	May	18	1897		390	
Loup Riv., S. B.	C. B. & Q. R. R. Co.	Lincoln.	Pipe Line at Ravenna	Dom.	.50	9	12	14	Buffalo	Dec.	24	1914		1393	
Loup Riv., S. B.	Central Power Co.	Grand Island	Grand Island Electric Plant	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.	Quest, C. E.	Boelus.	Quest Canal	Irrig.	1.55	33	13	12	Howard	June	13	1930		2143	
Mira Creek	McClellan, C. W.	North Loup.	Mira Reservoir	Storage	†140	AF	26	18	13	Valley	Mar.	8	1912		1182
(Res. A-1182)	McClellan, C. W.	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 & Light Plant	Mason City	Mason City Mill & 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	
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	

*Claim not adjudicated.

†Acre feet per annum.

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	Mo.	D			Yr.
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 Cr. 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	Irrig. Power	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
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	1891	290

DEPARTMENT OF PUBLIC WORKS

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	Mo.	D			Yr.
Turkey Creek (Res. A-2222)	Mortensen, M. C.	Dannebrog	Mortensen Reservoir	Storage	234AF	21	14	11	Howard	Aug.	31	1931	.....	2232
	Mortensen, M. C.	Dannebrog	Mortensen Canal	Irrig.	1.00	21	14	11	Howard	Dec.	17	1931	.....	2251
Victoria Creek	Myers, Perry A.	Anselmo	Victoria Canal No. 1	Irrig.	.71	1	19	21	Custer	Mar.	17	1894	210 } 212 }	.....
Victoria Creek	Victoria Ditch Assn.	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	Myers, Perry A.	Anselmo	Myers Canal	Irrig.	1.51	1	19	21	Custer	Aug.	5	1926	.....	1843
Victoria Creek	Victoria Ditch Assn.	Broken Bow	Victoria Canal No. 2 Enlargement	Irrig.	1.01	1	19	20	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
Wiggie Creek	Morrison, F. W.	Callaway	Morrison Pump	Irrig.	.30	3	15	23	Custer	Oct.	17	1928	.....	2045

‡Acre feet per annum.

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	Mo.	D			Yr.
Battle Creek	Scheerger, George	Battle Creek	Battle Creek Mill	Power	10.67	36	24	3	Madison	Nov.	12	1898	484
Battle Creek	Scheerger, George	Battle Creek	Battle Creek Mill	Power	20.00	36	24	3	Madison	Apr.	20	1906	818
Cedar Creek	Iowa-Nebraska Light & Power Co.	Lincoln	Oakdale Plant No. 1	Power		11	24	6	Antelope	June	29	1931	2211*
Cedar Creek	Iowa-Nebraska Light & Power Co.	Lincoln	Oakdale Plant No. 2	Power		15	24	6	Antelope	June	29	1931	2212*
Clear Creek	Lyons Drainage Dist.	Lyons	Main Ditch No. 1	Drain		14	23	8E	Burt	Mar.	9	1911	1069
Clear Creek	Gilmore, E. L. C.	Ashland	Gilmore Canal	Irrig.	.86	35	13	9E	Saunders	Aug.	10	1927	1950
Elkhorn River	Norfolk Cereal Flour Mills	Norfolk	Norfolk Cereal & Flour Mill	Power	100.00	23	24	1	Madison	Mar.	1	1870	906
Elkhorn River	Skrda, Jos.	Atkinson	Atkinson Mill	Power	38.50	30	30	14	Holt	Nov.	1	1893	271
Elkhorn River	Elkhorn Irr. Co.	O'Neill	Elkhorn Canal	Irrig.	131.43	22	29	13	Holt	Feb.	3	1894	259 } 263 }
Elkhorn River	Davis, Jos.	O'Neill	Davis Canal	Irrig.	1.43	31	29	11	Holt	Feb.	8	1894	260
Elkhorn River	Carlton, Thos.	O'Neill	Carlton Canal No. 1	Irrig.	1.00	32	29	11	Holt	Feb.	8	1894	261
Elkhorn River	Carlton, Thos.	O'Neill	Carlton Canal No. 2	Irrig.	5.00	30	29	11	Holt	Feb.	8	1894	262
Elkhorn River	Cain, N. E., et al.	O'Neill	Cain Canal	Irrig.	5.00	32	29	11	Holt	Feb.	20	1895	283
Elkhorn River	Ross, Chas. P.	Omaha	Platte River Hydro Electric Plant	Power	500.00	14	15	10E	Douglas	Nov.	24	1909	971
Elkhorn River	Neligh, W. T. S.	West Point	West Point Hydro Electric Plant	Power	400.00	18	22	8E	Cuming	Dec.	26	1912	1250
Elkhorn River	Sibberson Bros.	Omaha	Sibberson Canal	Irrig.	2.50	10	29	14	Holt	Sept.	5	1925	1778
Elkhorn River, North Fork	Iowa-Nebraska Light & Power Co.	Lincoln	Cooling System	Mfg.	35.00	22	24	1	Madison	Feb.	21	1928	1988

*Application Pending.

DEPARTMENT OF PUBLIC WORKS

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-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	Mo.	D			Yr.	
Elkhorn River, North Fork.....	Norfolk Packing Co.....	Norfolk.....	Warfield Pump	Irrig.	1.03	15	24	1	Madison.....	June	15	1929	.....	2085
Elkhorn River, North Fork.....	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Pierce Plant	Power		26	26	2	Pierce.....	June	29	1931	.....	2213*
Elkhorn River, South Fork.....	Rothleuter, Albert	Ewing.....	Flouring Mill	Power	33.00	3	26	9	Holt.....	Aug.	21	1898	.....	464
Logan Creek (Oakland Drain)	Johnson, Harry G.....	Oakland.....	Johnson Pump	Irrig.		35	22	8E	Burt.....	Feb.	20	1931	.....	2192
Middle Creek.....	Malone, Robert	Lincoln.....	Malone Ice Plant.....	Ice	10.00	30	10	6E	Lancaster.....	Dec.	26	1907	.....	883
Oak Creek.....	Eiche, Herman	Lincoln.....	Eiche Plant	Irrig.	.71	17	10	6E	Lancaster.....	Jan.	4	1899	.....	489
Oak Creek.....	Central Realty & Investment Co.	Lincoln.....	Capitol Beach Dam.....	Stor.	59.00	AF	16	10	6E	Lancaster.....	June	5	1918	1516
Oak Creek.....	Cheney, 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.	.11	17	10	6E	Lancaster.....	Apr.	11	1930	.....	2132
Oak Creek.....	Iowa-Nebraska Light & Power Co.....	Lincoln.....	Valparaiso Plant	Power		22	13	5E	Saunders.....	Sept.	1	1931	.....	2233*
Oak Creek.....	Cheney, L. H.....	McCook.....	Cheney Pump	Irrig.	.66	8	10	6E	Lancaster.....	Sept.	22	1931	.....	2239
Oakland Drain (Logan Cr.)	Johnson, Harry G.....	Oakland.....	Johnson Pump	Irrig.	1.71	35	22	8E	Burt.....	Feb.	20	1931	.....	2192
Oakland Drain.....	Johnson, J. A.....	Oakland.....	Johnson Pump	Irrig.	.92	36	22	8E	Burt.....	Sept.	10	1931	.....	2236

*Application Pending.
†Acre feet per annum.

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	Mo.	D			Yr.
Platte River.....	Ross, Chas. P.....	Omaha.....	Platte River Hydro Electric Plant	Power	2500.00	6	14	10	Douglas.....	Nov.	24	1909	.....	970
Platte River.....	Farmlee & Rawls.....	Plattsmouth.....	Plattsmouth Pw. Plant	Power	2000.00	32	13	13	Cass.....	Sept.	4	1914	.....	1379
Rock Creek.....	Stark, Chris.	Ceresco.....	Stark Pump	Irrig.	1.08	31	13	7E	Saunders.....	Aug.	6	1931	.....	2225
Ryans Lake.....	Elkhorn River Drainage Dist.	Fremont.....	Cutoff "H"	Drain		4	17	9E	Dodge.....	Oct.	16	1909	.....	966
Salt Creek.....	C. B. & Q. R. R. Co.....	Lincoln.....	C. B. & Q. Wat. Sup.....	Dom.	2.00	3	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.....	Uni. Shooting Club.....	Resort		32	11	7E	Lancaster.....	July	29	1926	.....	1837
Springs	Newton Land Co.....	Omaha.....	Spring Branch Canal.....	Irrig.	.07	13	14	13E	Sarpy.....	June	18	1895	.....	29
Silver Creek.....	Game, Forestation & Parks Commission.....	Lincoln.....	Armour & Co. Res.....	Ice	10.00	7	13	9E	Saunders.....	Oct.	18	1897	.....	415
Silver Creek.....	Swift & Co.....	Chicago.....	Swift & Co. Ice Plant.....	Ice	10.00	7	13	9E	Saunders.....	Dec.	6	1899	.....	524
Stevens Creek.....	Moore, R. E.....	Lincoln.....	Stevens Creek Canal.....	Irrig.	1.00	2	10	7E	Lancaster.....	Nov.	19	1913	.....	1335
Union Creek & Taylor Creek.....	Bley, Louis G.....	Madison.....	Union Valley Roller Mills	Power		32	22	1	Madison.....				998*	.....
Wahoo Creek.....	Wahoo Hunting Club.....	Lincoln.....	Ayr Lake	Resort		28	13	9E	Saunders.....	Dec.	30	1930	.....	2184

*Application Pending.

CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-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	Mo.	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	26	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 and 2	Irrig.	.02	3	32	21	Keya Paha	Oct.	3	1898	---	479
Bear Creek	Woods Bros. Realty Co.	Lincoln	Woods Bros. Canal	Irrig.	.24	34	36		Cherry	Sept.	21	1928	---	2035
Bear Creek	Cole, Jason D.	Merriman	Cole Project	Irrig.	8.19	13	34	37	Cherry	Feb.	24	1932	---	2254
Bear Creek	Bates, Harold S.	Merriman	Bates Project	Irrig.		14	34	37						
Bear Creek	Bowring, Arthur	Merriman	Bar Ninety Nine Ranch Canal	Irrig.		7-8	34	36						
Bear Creek	Bowring, Arthur	Merriman	Bar Ninety Nine Ranch Canal	Irrig.		8	34	37	Cherry	July	12	1932	---	2276
Bear Creek	Bowring, Arthur	Merriman	Bar Ninety Nine Ranch Canal	Irrig.		7	34	37						
Bear Creek	Bowring, Arthur	Merriman	Bar Ninety Nine Ranch Canal	Irrig.		12	34	36						
Bear Creek	Bowring, Arthur	Merriman	Bar Ninety Nine Ranch Canal	Irrig.		15	31	37	Cherry	Aug.	31	1932	---	2282
Beaver Creek	Tulloss, Frank L.	Hay Springs	Tullos Pond	Storage	99 AF	3	32	46	Sheridan	May	22	1930	---	2141
Beeman Creek	Barnard, C. O.	Springview	Barnard Canal	Irrig.	.13	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 Cr.	Pickler, W. S.	Cody	Badger Canal	Irrig.	1.11	12	33	11	Holt	May	16	1902	---	667
Big Sandy Cr.	Johnson, C. A.	Butte	Badger Mill	Power	35.00	12	33	14	Holt	Aug.	28	1902	---	685

REPORT OF SECRETARY

†Acre feet per annum.

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	Mo.	D			Yr.
Blackbird Cr.	Mullen, A. F.	O'Neill	Mullen Canal	Irrig.	1.00	20	31	11	Holt	Aug.	18	1894	267	—
Blue Bird Cr.	Murphy, P.	O'Neill	Murphy Canal	Irrig.	1.00	26	30	11	Holt	Sept.	7	1894	273	—
Boardman Cr.	Lee, Jos. S.	Chesterfield	Lee Canal	Irrig.	6.88	6	29	33	Cherry	Apr.	25	1895	972	—
Boardman Cr.	Sachelor, J. H.	Valentine	Boardman Canal	Irrig.	28.57	33	30	32	Cherry	Jan.	17	1912	—	1155
Box Butte Cr.	Sandoz, Wm.	Marsland	Billys Canal	Irrig.	21	29	29	45	Sheridan	Jan.	13	1900	—	533
Brush Creek, Brush Creek, East Branch	Neb. Townsite Co.	Perry	Brush Cr. Pw. Plant	Power	15.00	23	33	13	Holt	Sept.	28	1898	—	474
Brush, Creek, West Branch	McCarthy, M. H.	O'Neill	McCarthy Canal No. 1	Irrig.	.50	24	32	14	Holt	July	1	1894	264	—
	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	South Omaha	Gilmore Canal	Irrig.	14.29	36	30	51	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 Lake, et al	Coffey Lake Drainage Dist.	Valentine	Coffey Lake Ditch	Drain	—	—	33	39	Cherry	Nov.	22	1923	—	1720
							33	38						
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

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	Mo.			D	Yr.
Crooked Cr.....	Mutz, Otto	Springview.....	Mutz Canal	Power	3.00	19	31	19	Keya Paha.....	Dec.	31	1889	608a	.....
Crooked Cr.....	Mutz, Otto	Springview.....	Mutz Canal	Irrig.	1.00	19	31	19	Keya Paha.....	June	30	1895	608b	.....
Cross Creek.....	Hutchinson, W. H.....	Norden.....	Hutchinson Canal	Irrig.	.21	8	33	24	Keya Paha.....	Sept.	1	1888	615	.....
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, South Branch.....	Becker, Samuel	Atkinson.....	Becker Canal	Irrig.	1.11	8	30	13	Holt.....	Nov.	30	1894	274	.....
Fairfield Creek.....	Kuhre, Wm. M.....	Johnstown.....	Kuhre Pond	Irrig.	.11	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 Spgs.....	Bakewell, Geo. C.....	Johnstown.....	Glencove Canal	Irrig.	.86	26	33	21	Brown.....	Mar.	1	1911	.....	1067
Gordon Creek.....	Neb. Game, Foresta- tion & Parks Com.....	Lincoln.....	Hackberry Reservoir.....	Fish		7	30	25	Cherry.....	Oct.	18	1932	.....	2289
Holt Creek.....	Schoettger, F. J.....	Burton.....	Schoettger Canal	Irrig.	.11	32	35	20	Keya Paha.....	Feb.	23	1895	595	.....
Holt Cr., East.....	Akers, J. W.....	Springview.....	Akers Canal	Irrig.	.11	1	31	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

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	Mo.	D			Yr.
Horse Shoe Lake, et al.	Horshoe Lake Drain- age Dist.	Irwin	Horseshoe Ditch	Drain		13	33	10	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	500	.....
Keyapaha River	Yocum, J. C.	Butte	Yocum Canal	Irrig.	1.14	23	34	15	Boyd	Sept.	7	1894	573	.....
Keyapaha River	Bruce, Andrew & Son.	Naper	Bruce Roller Mills	Power	100.19	21	31	16	Boyd	Oct.	5	1903	.....	729
Kibby Creek	Green, Martha J.	Hillside	Green Canal	Irrig.	.01	28	34	16	Boyd	Apr.	1	1904	.....	747
Larabee Creek	Sawyer, C. O.	Rushville	Larabee Canal	Irrig.	1.12	6	31	11	Sheridan	Apr.	14	1931	.....	2197
Lewis Springs	Lewis, Ralph	Burton	Lewis Canal	Irrig.	.14	29	35	19	Keya Paha	Aug.	30	1895	.....	139
Long Pine Cr.	Kyner, S. H.	Long Pine	Long Pine Light & Power Plant	Power	48.00	30	30	20	Brown	Apr.	2	1909	.....	941
Louse Cr., Trib- utary to Nio- brara River	Lansberry, I. F.	Red Bird	Lansberry Canal	Irrig.	.50	12	32	10	Boyd	Sept.	18	1930	.....	2166
Middle Creek, East Branch	McGuire, M. W.	Norden	McGuire Canal	Irrig.	.71	32	33	23	Keya Paha	June	1	1884	606	.....
Middle Creek, West Branch	Allen, M. M.	Norden	Allen Canal	Irrig.	.50	29	33	23	Keya Paha	June	1	1891	616	.....
Middle Creek, West Branch	Allen, M. M.	Norden	Allen Canal	Irrig.	1.00	29	33	23	Keya Paha	May	2	1904	.....	758

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	Mo.	D			Yr.
Mile Board Lake	Board of Co. Com'rs..	Valentine.....	Mile Board Drain Ditch	Drain		5	34	35	Cherry.....	Sept.	17	1924	.....	1750
Minnechadua Creek	Interstate Power Co. of Nebraska	Dubuque, Ia.	Pierce Milling Plant.....	Power	35.00	30	34	27	Cherry.....	Sept.	12	1896	.....	359
Minnechadua Creek	City of Valentine.....	Valentine.....	Valentine Pw. 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.....	Lakatoth Canal	Irrig.	5.85	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	511a	.....
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 North 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.	Hedgecock, Geo., et al	Marsland.....	McLaughlin Canal	Irrig.	7.14	9	28	52	Box Butte...	May	1	1888	566	.....
Niobrara River.	Cook, J. H.	Agate.....	McGinley-Stover Lower South Canal.....	Irrig.	1.71	25	29	56	Sioux.....	May	1	1890	513b	.....
Niobrara River.	Hughes, John, Est. of.	Marsland.....	Hughes Canal	Irrig.	.57	1	28	52	Box Butte...	May	31	1890	987a	.....
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.	3.54	2	28	56	Sioux.....	May	31	1891	980	.....
Niobrara River.	Ellicott Bros.	Van Tassel, Wyo.	Bigelow & Seymour Canal	Irrig.	2.40	19	31	57	Sioux.....	June	8	1891	510	.....
Niobrara River.	Skavdahl, Oscar, et al	Harrison.....	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	.....

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	Mo.			D Yr.
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	Hughes, John, Est. of	Marsland	Hughes Canal	Irrig.	.30	1	28	52	Box Butte	Apr.	15 1894	897b	—
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 Canal	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, Caroline M.	Marsland	LaBelle Canal	Irrig.	2.00	6	28	51	Sioux	Mar.	12 1895	518	—
Niobrara River	Furman, H. G.	Marsland	Snow Canal	Irrig.	2.88	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	Mann, John E.	Harrison	Bourett Canal	Irrig.	1.60	33	30	56	Sioux	June	8 1895	—	4
Niobrara River	Bourett, John S.	Harrison	Bourett South Canal	Irrig.	.63	29	30	56	Sioux	June	10 1895	—	5
Niobrara River	Harris, Caroline M.	Marsland	LaBelle Canal	Irrig.	3.14	6	28	51	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	Thompson, Mrs. Addie	Antioch	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.	4.90	4	28	54	Sioux	Apr.	27 1896	—	292
Niobrara River	Neeland, Sarah J.	Hemingford	McManus-Neeland Canal	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. S.	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.	2.00	19	30	56	Sioux	Mar.	17 1900	—	546

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	Mo.			D	Yr.
Niobrara River	Montague, James	Dunlap	Montague-Lichte Canal	Irrig.	.43	27	29	48	Dawes	Sept.	27	1900	.....	575
Niobrara River	Montague, James	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 Pw. 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 Cr.	Taylor, D. T.	Hay Springs	Taylor Canal	Irrig.	4.57	28	29	47	Dawes	Aug.	8	1904	.....	766
Niobrara River	Kirk, E. L.	Sioux City	Neb. Pw. Co. Plant	Power	900.00	34	32	7	Knox	Sept.	24	1909	.....	961
Niobrara River	Kirk, E. L.	Sioux City	Neb. Pw. Co. Plant	Power	700.00	34	32	7	Knox	Aug.	9	1910	.....	1019
Niobrara River	Mann, John E.	Harrison	Beiser Canal	Irrig.	.50	4	29	56	Sioux	Jan.	23	1911	.....	1056
Niobrara River	Mann, John E.	Harrison	Ext. Bourett Canal	Irrig.	.75	33	30	56	Sioux	Jan.	23	1911	.....	1057
Niobrara River	Iodence, W. M.	Hemingford	Lichte Canal	Irrig.	2.25	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.	.45	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 Canal No. 1	Irrig.	.11	29	30	56	Sioux	Mar.	25	1912	.....	1188
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 Canal No. 2	Irrig.	.21	29	32	56	Sioux	July	19	1912	.....	1209
Niobrara River	Davison, F. B. & C. T.	Hemingford	Mettlen Canal	Irrig.	.75	4	28	51	Sioux	Dec.	18	1912	.....	1248
Niobrara River	Davison, F. B. & C. T.	Hemingford	Bennett Canal	Irrig.	3.45	1	28	51	Sioux	Dec.	18	1912	.....	1249
Niobrara River	Bushnell, Esther N.	Marsland	Geo. Hitshew 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 Neb. Pw. Co.	Spencer	Northern Neb. Pw. Plant No. 1	Power	1450.00	30	33	11	Boyd	Oct.	30	1923	.....	1725

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	Mo.	D			Yr.
Niobrara River.	Northern Neb. Pw. Co.	Spencer.	Northern Neb. Pw. Plant No. 1.	Rs. dam A-1725		30	33	11	Boyd	Aug.	20	1925	1777	
Niobrara River.	Northern Neb. Pw. Co.	Spencer.	Northern Neb. Pw. Plant No. 1.	Rs. dam A-1725		30	33	11	Boyd	Aug.	29	1927	1955	
Niobrara River.	Bradstreet, W. D.	Spencer.	Verdigris Power Plant	Power		32	32	7	Knox	Dec.	30	1930	2183*	
Niobrara River.	Griffith, Harry B.	Omaha	Bristow Power Plant.	Power			4	31	7					
Niobrara River.	Sandoz, Geo. E.	Marsland.	Mettlen Canal.	Irrig.	1.14	4	28	51	Sioux	Oct.	13	1931	2244	
Niobrara River.	Kay, D. L.	Marsland.	Kay Canal No. 2.	Irrig.	.43	9	28	53	Sioux	Oct.	15	1931	2245	
Niobrara River.	Lewis, W. H.	Chicago.	Bristow Power Plant.	Power			6	32	10	Boyd	Nov.	3	1931	2247*
Niobrara River.	Kay, D. L.	Marsland.	Kay Canal	Irrig.	3.14	1	28	51	Sioux	Nov.	18	1931	2250	
Niobrara River.	Hughes, John R.	Marsland.	Hughes Canal	Irrig.	1.92	10	28	52	Box Butte	Mar.	28	1932	2264	
Niobrara River.	Montague, James, Estate of	Dunlap.	Montague Canal	Irrig.	1.76	28	29	48	Dawes	Mar.	31	1932	2266	
Niobrara River.	Harris, Frank, et al.	Marsland.	Harris-Neece Canal	Irrig.	7.27	3	28	55	Sioux	July	11	1932	2275	
			Enlargement											
Pine Creek	Colclessor, 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	32	Brown	May	15	1909	947	
Pole Creek	Julian & Wells.	Gordon.	Pole Creek Canal.	Irrig.	.57	28	32	40	Cherry	June	29	1905	799	

*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	Mo.	D			Yr.	
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	Dugger Bros.	Bassett	Dugger Canal	Irrig.	4.57	33	32	18	Rock	Apr.	24	1919	-----	1539	
Rock Creek	Van Koten, J.	Springview	Van Koten Canal	Irrig.	.07	25	33	22	Keya Paha	Jan.	1	1885	619	-----	
Rock Spgs. Cr.	Chase, Albert B.	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 Electric Plant	Power	180.00	9	31	30	Cherry	Feb.	16	1914	-----	1352	
Snake River	Western, Water Power & Irr. Co.	Scottsbluff	Snake R. 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 Cr. Canal No. 2	Irrig.	2.00	35	33	23	Keya Paha	May	11	1904	-----	754	

*Application Pending.

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	Mo.	D			Yr.
Verdigris Creek	Hanson, J. W.....	Emmetburg, Ia.	Drayton Canal	Irrig.	2.86	8	28	S	Antelope.....	Aug.	11	1894	248	—
Whistle Creek	Miller, Wm. K.....	Alliance.....	Home Canal	Irrig.	.86	13	28	51	Sioux.....	June	6	1895	—	65
Whistle Creek	Watson, Matilda	Lawn.....	Whistle Creek Canal.....	Irrig.	1.00	12	28	54	Sioux.....	June	28	1895	—	58
Wyman Creek	McCully, R. A.....	Carns.....	McCully Canal	Irrig.	.80	19	32	19	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	11	Holt.....	June	13	1896	—	311

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	Mo.	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 Estate, H. B. C. A. Minnick, Adm.	Crawford	Ox Yoke Canal	Irrig.	1.40	29	32	50	Dawes	May	31	1880	447	---
Ash Cr., E. Br.	Ivins, Myrtle L., Stumph, John E.	Crawford	Stumph Canal	Irrig.	1.00	32	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	32	32	50	Dawes	Sept.	5	1892	1023 1/4	---
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	Storage	1552 AF	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.	Seegrist, Cloid	Whitney	Seegrist Power Plant	Power	3.00	8	31	50	Dawes	May	20	1930	---	2140
(Res. A-1953)	Norman, Harry	Whitney	Harry Canal	Irrig.	10.06	8	32	50	Dawes	Dec.	4	1930	---	2179
Ash Cr., E. Br.	Stumph, John E.	Whitney	Ox Yoke-Stumph Canal	Irrig.		31	32	50	Dawes	June	6	1931	---	2205*
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., et al	Crawford	West Ash Creek Canal	Irrig.	1.62	36	32	51	Dawes	July	4	1893	452	---
Ash Cr., W. Br.	Ivins, Orville R.	Crawford	Woodward Canal	Irrig.	.57	36	32	51	Dawes	Feb.	3	1898	---	434 'R'

*Application Pending.
†Acres 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	Mo.	D			Yr.
Beaver Creek	Braddock, Mrs. William	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, Mrs. William	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
Beaver Creek	U. R. Land & Cattle Company	Chadron	Clek 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 Enlargement	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	Meyer, Henry J.	Albion	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 Enlargement	Irrig.	.63	9	34	48	Dawes	Sept.	22	1928	—	2038
Bordeaux, Big	Kelso, S. M.	Chadron	Belle Isle Reservoir	Storage	†15A	23	33	48	Dawes	June	13	1930	—	2144
Bordeaux, Big	Kelso, S. M.	Chadron	Kelso Pump	Irrig.	.10	14	33	48	Dawes	July	24	1930	—	2151
Bordeaux, Big	Nelson, P. B.	Chadron	Nelson Ditch, Ext. of Kelso Canal (A-2151)	Irrig.		14	33	48	Dawes	Aug.	11	1932	—	2279

†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	Mo.	D			Yr.
Bordeaux, Little	Schmidt, Elwin	Chadron	Hartzell Canal	Irrig.	.57	13	33	48	Dawes	June	1	1893	448	—
Bordeaux, Little	Butler, J. A.	Chadron	Butler Canal	Irrig.	.11	33	33	47	Dawes	June	1	1894	443	—
Bordeaux, Little	Fraday, C. H.	Chadron	Fraday Canal	Irrig.		30	33	47	Dawes				1009*	—
Chadron Creek	City of Chadron	Chadron	Chadron Water Works	W. S.	1.00	18	32	49	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 Works Enlargement	Storage	4.50	18	32	48	Dawes	Apr.	8	1920	1583	—
Chadron Creek	State Park Board	Chadron	Chadron State Park Lake	Dam	†10AF	31	32	48	Dawes	Apr.	17	1928	—	2007
Chadron Creek	McDowell, M. B.	Chadron	McDowell Canal	Irrig.		1	32	49	Dawes	May	9	1932	—	2270
Cottonwood, Lit.	Golden, T. F.	Crawford	Thos. Stuart Canal	Irrig.	.36	8	32	52	Dawes	Dec.	21	1890	425	—
Cottonwood, Lit.	Price, J. A. B. & Golden, T. F.	Crawford	Stuart Bros. Canal	Irrig.	2.86	18	32	52	Dawes	June	10	1895	—	8
Cottonwood, Lit.	Kusel, William T.	Chadron	Kusel Canal No. 2	Irrig.	.43	8	32	51	Dawes	May	19	1900	—	560
Cottonwood, Lit.	Abbott, Wm. J.	Whitman	Dunn Canal	Irrig.	1.43	9	32	52	Dawes	Jan.	14	1902	—	649
Cottonwood, Lit.	Erickson, John R.	Crawford	Stuart-Maple Canal	Irrig.	.70	3	32	52	Dawes	Mar.	10	1902	—	656
Cottonwood, Lit.	Kusel, William T.	Chadron	Kusel-Spearman Canal	Irrig.	.71	8	32	51	Dawes	June	30	1902	—	677
Cottonwood, Lit.	Lawrence, Fay	Crawford	Broadhurst Canal	Irrig.	1.03	7	32	51	Dawes	Feb.	25	1913	—	1264
Cottonwood, Lit.	Dodd & McDowell	Crawford	Dodd-McDowell Canal	Storage	†180AF	13	32	53	Sioux	Apr.	15	1913	—	1276
(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	31	49	Dawes	Sept.	1	1890	493	—
Dead Horse Cr.	Woodruff, F. B. & E. F.	Chadron	Flag Butte Canal	Irrig.	.03	32	32	49	Dawes	Apr.	10	1891	427	—

†Acre feet per annum.
*Claim not adjudicated.

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	Mo.			D. Yr.	
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 Enlargement	Irrig.	.55	32	33	49	Dawes	June	15	1928	2021	
Dead Horse Cr., Springs, Trib- utary to	Goff, T. L.	Chadron	Goff Canal	Irrig.	.14	30	32	49	Dawes	Apr.	2	1891	411	
Dead Horse Cr., Cuff Canyon, Tributary to	Sanders, Warren	Chadron	Sanders Canal	Irrig.		5	31	49	Dawes	Nov.	2	1932	2290	
Deep Creek	Barnum, W. E.	Glen	Deep Creek Canal	Irrig.	.06	9	30	53	Sioux	May	1	1887	525	
Dry Canyon	Betson, Wm. A.	Crawford	Betson Canal	Irrig.	1.00	33	32	51	Dawes	Mar.	22	1917	1481	
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., Heath, W. E., Agent	Crawford	Heath Reservoir	Storage	70	AF	12	32	53	Sioux	Feb.	7	1917	1475
(Res. A-1475)	Heath, W. E.	Crawford	Heath Canal	Irrig.	.71	12	32	53	Sioux	July	25	1921	1612	
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	Storage	2300	AF	35	34	52	Dawes	Jan.	13	1914	1345
Dry Run	Harrison & Weston	Whitney	Harsh-Weston Canal	Irrig.	3.00	31	31	51	Dawes	Mar.	11	1914	1361	
English Creek	McDowell, E. C.	Crawford	McDowell Stor. System	Irrig.	.87	12	31	52	Dawes	Oct.	21	1904	772	
English Creek	McDowell, Edw. C.	Crawford	McDowell Res. No. 3	Fish	35	AF	2	31	52	Dawes	Jan.	22	1929	2064
			McDowell Res. No. 1	Fish	36	AF	12	31	52					
Flood Waters	Lenehan, Della	Crawford	Lenehan Reservoir	Stoarge	122	AF	25	34	52	Dawes	Apr.	16	1913	1278

†Acre feet per annum.

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

270

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	Mo.			D Yr.	
Flood Waters	Arner, Jessie B.	Crawford	Arner Canal	Irrig.	.14	27	33	53	Sioux	May	6	1913	1289	
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	52	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 (Res. A-1822)	Renfro, Oscar S.	Chadron	Seegrist Canal	Irrig.	.03	3	31	50	Dawes	Nov.	1	1893	489	
	Renfro, Oscar S.	Chadron	Seegrist Enlarge- ment No. 1	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 (Res. A-1822)	Renfro, Oscar S.	Chadron	Renfro Reservoir	Storage	†550	AF	3	31	50	Dawes	June	21	1926	1822
	Renfro, Oscar S.	Chadron	Seegrist Enlarge- ment 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 & East Ash Cr.	Norman, Harry	Whitney	Norman Reservoir	Storage	†1552	AF	7	32	50	Dawes	Aug.	22	1927	1953
(Res. A-1953)	Norman, Harry	Whitney	Harry Canal	Irrig.			8	32	50	Dawes	Dec.	4	1930	2179
Indian Creek	Renfro, Oscar S.	Chadron	Flood Canal	Irrig.	.10	34	32	50	Dawes	July	16	1931	2216	
Indian Creek, Tributary to	Honnold Bros.	Whitney	Honnold-Wilson Canal	Irrig.	.07	3	31	50	Dawes	May	25	1912	1199	

†Acre feet per annum.

REPORT OF SECRETARY

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	Mo.	D			Yr.
Madden Creek & North Creek	Flannigan, O. R.	Chadron	Dams	Irrig.	57	31	35	48	Dawes	Oct.	17	1904	771
Minneapolis Cr.	Smoke, Wm. H.	Chadron	Minneapolis Res.	Irrig.	.02	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
Sand Cr., Tributary to Cottonwood Cr.	Everson, Jas. T. & Arner, Lloyd C.	Crawford	Bendix Canal	Irrig.	.57	35	33	53	Sioux	Nov.	19	1895	189
Sand Cr., Tributary to Cottonwood Cr.	Arner, J. H.	Crawford	Arner Canal	Irrig.	2.57	26	33	52	Sioux	Jan.	12	1905	779
Sand Cr., Tributary to Cottonwood Cr.	Everson, Jas. T. & Arner, Lloyd C.	Crawford	Bendix Canal Enlargement	Irrig.	.83	55	33	53	Sioux	May	27	1922	1669
Saw Log. East.	Stewart, H. E.	Crawford	Little Saw Log Canal	Irrig.	.71	12	30	52	Dawes	Jan.	23	1907	849
Saw Log. East.	Young, Chas. A.	Crawford	Stephenson Canal	Irrig.	.33	25	31	52	Dawes	Mar.	5	1907	852
Saw Log. East.	Baker, A. D.	Crawford	Baker Canal	Irrig.	.01	5	30	51	Dawes	Jan.	3	1908	884
Saw Log. East.	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	Storage	†35.47	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

†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	Mo.	D			Yr.
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, Tributary to Chadron Creek	Benthack, Peter L.	Chadron	Benthack Canal	Irrig.	4.71	11	33	49	Dawes	Sept.	12	1924	—	1749
Spring Branch, Tributary to White River (Tucker Cr.)	Cutler, Jennie R.	Glen	Tucker Canal	Irrig.	.17	34	31	51	Sioux	June	1	1883	557	—
Spring Creek, Tributary to Little Cottonwood Creek	Swinbank, Sam, et al.	Crawford	Mozeter Canal	Irrig.	1.14	13	32	52	Dawes	May	3	1888	1014	—
Spring Creek, Tributary to Little Cottonwood Creek	Forbes, J. D.	Crawford	Forbes Canal No. 1	Irrig.	.57	20	32	52	Dawes	Apr.	28	1902	—	663
Spring Creek, Tributary to Little Cottonwood Creek	Pinney, R. B.	Crawford	Squaw Creek Canal	Irrig.	.40	13	32	52	Dawes	May	10	1894	466	—
Spring Creek, Tributary to Little Cottonwood Creek	Lawrence, Fay E.	Crawford	Spring Cr. Canal No. 1	Irrig.	1.30	13	32	52	Dawes	Dec.	1	1894	473	—

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	Mo.	D.			Yr.
Spring Creek, Tributary to Little Cottonwood Creek	Lawrence, Fay E.	Crawford	Spring Creek Canal	O. D.		7	32	51	Dawes	Apr.	19	1929	473	2078
Squaw Creek	Hall, LeRoy & Frank	Crawford	Cooper Canal	Irrig.	2.01	36	32	52	Dawes	May	8	1896		333
Squaw Creek (Res. A-1132)	McDowell, E. C.	Crawford	Squaw Creek Canal	Storage	†200AF	12	31	52	Dawes	Oct.	3	1911		1132
Squaw Creek	McDowell, E. C.	Crawford	Squaw Creek Canal	Irrig.	2.96	12	31	52	Dawes	Jan.	4	1922		1631
Squaw Creek	McDowell, Robt. H.	Crawford	Reservoir No. 4	Storage	†2AF	12	31	52	Dawes	Nov.	12	1931		2249
Trunk Butte Cr.	Smock, M.	Whitney	Smock Canal	Irrig.	.07	26	32	50	Dawes	June	23	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. N.	Crawford	McFarland Canal	Irrig.	1.64	35	32	52	Dawes	May	18	1891	960	
White Clay Cr. (See White R.)	White River Irr. Co.	Crawford	White River Canal	Irrig.	1.00	34	32	52	Dawes	Dec.	31	1894	477	
White Clay Cr.	Hall, LeRoy & 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
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	Handschugel Lake	Storage	†22AF	11	31	52	Dawes	Dec.	17	1915		1441
White Clay Cr.	McDowell, Edw. C.	Crawford	McDowell Res. No. 1	Fish	†24AF	2	31	52	Dawes	Jan.	22	1929		2063

*Claim not adjudicated.

†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	Mo.	D			Yr.
White Clay Cr., East Branch	Stewart, H. E.	Crawford	Little Saw Log Canal	Irrig.	.71	12	30	52	Dawes	Jan.	23	1907	.....	849
White River	Hall, LeRoy	Crawford	Hall's Mill	Power	24.83	34	32	52	Dawes	Sept.	10	1885	478a	.....
White River	City of Crawford	Crawford	Crawford Water Sys.	Dom.	5.00	26	31	53	Dawes	Oct.	1	1890	1026	.....
White River	Pinney, B. G., et al.	Crawford	Harris-Cooper Canal	Irrig.	16.78	34	32	52	Dawes	Mar.	9	1894	461a	.....
White River	Pinney, B. G., et al.	Crawford	Harris-Cooper Canal	Irrig.	1.57	34	32	52	Dawes	June	15	1894	461b	.....
White River	Pinney, B. G., et al.	Crawford	Harris-Cooper Canal	Irrig.	.28	34	32	52	Dawes	Oct.	31	1894	461c	.....
White River	Forbes, Wm. T.	Crawford	Rasher Canal	Irrig.	1.14	19	32	51	Dawes	June	20	1891	467	.....
White River (White Clay Creek)	White River Irr. Co.	Crawford	White River Canal	Irrig.	8.71	34	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	L. B. & Q. R. R. Co.	Lincoln	C. B. & Q. Line at Crawford	Dom.	.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	Schwabe, August	Chadron	Schwabe Canal	Irrig.	.57	24	34	49	Dawes	June	13	1904	.....	758
White River	Schwabe, August	Chadron	Schwabe Pw. Plant	Power	5.00	24	34	49	Dawes	June	13	1904	.....	759
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 River Canal South Branch	Irrig.	2.57	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

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			Date of Priority			Doc. No.	App. No.	
						S	T	R	County	Mo.	D			Yr.
White River	Pinney & Denslow	Crawford	Pinney and Denslow Reservoir No. 2	Storage	†53 AF	17	32	51	Dawes	Aug.	10	1911	-----	1122
White River	Forbes, Wm. T.	Crawford	Forbes Enlargement	Irrig.	.50	19	32	51	Dawes	Sept.	26	1911	-----	1128
White River	Whitney Irr. Dist.	Whitney	Whitney Reservoir and Pipe Line	Storage	†10,000 AF	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. Dist.	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. Dist.	Whitney	Whitney Pipe Line	Irrig.	139.00	4	32	51	Dawes	Dec.	7	1925	-----	1787
						34	33	51						
						35	33	51						
White River	Northwest Fin. Serv.	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
White River	Bartlett, Arthur M.	Chadron	Bartlett Canal	Irrig.		19	34	48	Dawes	Sept.	8	1932	-----	2285

†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	Mo.	D			Yr.
Antelope Creek.	Gayhart, M. J.	Montrose	Gayhart Canal	Irrig.	2.43	16	34	55	Sioux	June	18	1904	760	
Antelope Creek, North Branch.	Story, O. W.	Story	Story Canal	Irrig.	2.00	8	34	56	Sioux	Nov.	11	1895	168	
Antelope Creek, North Branch.	Story, O. W.	Story	Story Canal	Irrig.	5.71	9	34	56	Sioux	Mar.	26	1918	1509	
Antelope Creek, North Branch.	Schnurr, Albert	Harrison	Grammercy Dam	Storage	†10AF	13	34	57	Sioux	Sept.	24	1920	1591	
Antelope Creek, South Branch.	Turner, Geo. H., Estate of	Harrison	Turner Canal	Irrig.	.80	26	34	57	Sioux	Oct.	31	1894	537	1676"S"
Antelope Creek, South Branch.	Dryer, F. W.	Harrison	Ellis Canal	Irrig.	.29	9	33	57	Sioux	May	17	1896	338	
Antelope Creek, South Branch.	Turner, Sarah A.	Harrison	Turner Reservoir	Storage	†166AF	26	34	57	Sioux	July	3	1922	1675	
(Res. A-1675)	Turner, Sarah A.	Harrison	Turner Res. Canal	Supple. D-537		26	34	57	Sioux	July	3	1922	1676	
(Res. A-1675)	Turner, Sarah A.	Harrison	Turner Res. Canal	Irrig.	1.68	26	34	57	Sioux	July	3	1922	1677	
Boggy Creek	Holly, Thos.	Crawford	Holly Canal	Irrig.	.11	30	33	51	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-Read- inger Cattle. Co.	Harrison	Wickersham Canal	Irrig.		3	31	33	54	Sioux	Feb.	28	1903	701
Boggy Creek	Wickersham-Read- inger Cattle. Co.	Harrison	Wickersham Reservoir	Storage	†1500 AF	30	33	54	Sioux	Dec.	24	1930	2182	
(Res. A-2182)	Wickersham-Read- inger Cattle. Co.	Harrison	Wickersham Reservoir Canal	Irrig.	2.30	30	33	54	Sioux	May	15	1931	2203	

REPORT OF SECRETARY

†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	Mo.	D			Yr.
Boggy Creek	Wickersham-Reader Cattle Co.	Harrison	Wickersham Canal Enlargement	Irrig.	.96	31	33	54	Sioux	May	15	1931	2204
Boggy Creek, Middle Br.	Bannon, J. F.	Harrison	Bannon Canal	Irrig.	.06	7	32	54	Sioux	July	1	1896	560
Boggy Creek, Middle Br.	Marten, Wm.	Harrison	Marten Canal	Irrig.	.36	18	32	54	Sioux	May	19	1896	342
Boggy Creek, Middle Br.	Hill, Albert E.	Harrison	Hill Canal	Irrig.	.86	11	32	55	Sioux	Jan.	20	1908	886
Cedar Creek (Prairie Dog Creek)	Knori, Samuel	Harrison	Shilts Cedar Creek Canal	Irrig. O. D.	.57	35	33	56	Sioux	May	15	1885	507 } 508 }
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	1911	1376
Gieke Creek	Gieke, August	Harrison	Gieke Canal	Irrig.	.13	19	33	56	Sioux	Nov.	4	1927	1967
Hat Creek	Thayer, John A.	Harrison	West Hat Cr. Canal	Irrig.	.43	16	32	55	Sioux	June	1	1880	553a
Hat Creek	Coffee, Charles F.	Harrison	Coffee Canal	Irrig.	1.29	26	33	55	Sioux	Sept.	1	1881	512
Hat Creek	Thayer, John A.	Harrison	West Hat Cr. Canal	Irrig.	.57	16	32	55	Sioux	May	31	1886	553b

*Claim not adjudicated.

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	Mo.			D	Yr.
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, John 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	Storage	†63AF	35	33	55	Sioux	Mar.	25	1915	1407
Hat Creek	Wasserburger, Jacob	Montrose	Wasserburger Project	Dom.		24	34	55	Sioux	May	2	1932	2268*
Hat Creek	Konrath, Theresa	Harrison	Konrath Project	Dom.		25	34	55					
Hat Creek	Konrath, Theresa	Harrison	Konrath Project	Dom.		13	34	55	Sioux	May	2	1932	2269*
Hat Creek, Canyons, Tributary to	Konrath, James	Harrison	Konrath Canal	Irrig.		7	34	54					
Jim Creek	Dout, Clarence H.	Montrose	Dout Bros. Canal	Irrig.	.65	17	34	54	Sioux	Dec.	28	1905	808
Jim Creek	Slattery, James	Harrison	Woodruff South Canal	Irrig.	.34	14	33	57	Sioux	May	15	1889	981
Jim Creek	Snyder, Thos. A.	Harrison	Jim Creek Canal	Irrig.	.43	8	33	56	Sioux	May	1	1890	536
Jim Creek	Slattery, William	Harrison	Slattery Canal	Irrig.	.20	13	33	57	Sioux	Dec.	15	1890	502
(Res. A-1680)	Slattery, William	Harrison	Slattery Canal	Supple.	.20	13	33	57	Sioux	May	31	1891	543
Jim Creek	Coffee, John T.	Harrison	Hunter Canal	Irrig.	.03	26	33	54	Sioux	.....	.....	.....	543
Jim Creek	Slattery, William	Harrison	Caladonia Dam	Storage	†42AF	13	33	57	Sioux	.....	.....	.....	1683-S
(Res. A-1680)	Slattery, William	Harrison	Caladonia Canal	Irrig.	.28	13	33	57	Sioux	May	12	1898	451
Jim Creek	Slattery, William	Harrison	High Line Canal	Irrig.	.34	13	33	57	Sioux	July	20	1922	1880
(Res. A-1680)	Slattery, William	Harrison	Caladonia Canal	Irrig.	.24	13	33	57	Sioux	July	20	1922	1681
Jim Creek and North Jim Cr.	Dout, Clarence	Harrison	Dout Reservoir No. 1	Storage	†145AF	7	33	56	Sioux	July	20	1922	1682
(Res. A-1999)	Dout, Clarence	Harrison	Dout Canal No. 1	Irrig.	1.39	7	33	56	Sioux	July	20	1922	1683

*Application Pending.
†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	Mo.	D			Yr.
Jim Creek (Res. A-2001)	Dout, Clarence	Harrison	Dout Reservoir No. 2	Storage	†16AF	7	33	56	Sioux	Apr.	2	1928	2001
	Dout, Clarence	Harrison	Dout Canal No. 2	Irrig.		.21	7	33	56	Sioux	Apr.	2	1928	2002
Jim Creek, East Fork	Wasserburger, J.	Montrose	Wasserburger Canal	Irrig.	2.29	29	34	54	Sioux	Oct.	13	1900	581
Jim Creek, Stream, Tributary to	Coffee, S. D.	Harrison	Homestead Canal	Irrig.	.22	22	33	54	Sioux	May	31	1890	984
Jordan Draw (Res. A-2071)	Jordan, Dan	Harrison	Dan Jordan Reservoir	Storage	†200AF	32	33	55	Sioux	Feb.	20	1929	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
						34	33	54					
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
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	Schilts-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, Cornelious	Montrose	Jordan Canal	Irrig.	2.20	13	33	56	Sioux	Nov.	12	1906	841
(Res. A-841)	Jordan, Cornelious	Montrose	Jordan Reservoir	Storage	†271AF	13	33	56	Sioux	Nov.	12	1906	841

*Claim not adjudicated.

†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	Mo.	D			Yr.
Monroe Creek	Jordan, Cornelious	Montrose	Jordan Canal	Irrig.	2.00	13	33	56	Sioux	July	30	1914	1375
Monroe Creek	Jordan, Richard	Harrison	Wooden Shoe Res.	Storage	†72AF	22	33	56	Sioux	Aug.	14	1914	1377
Monroe Creek	Jordan, Cornelious	Montrose	Enlargement A-841	Storage	†600AF	13	33	56	Sioux	Jan.	14	1915	1399
(Res. A-1399)	Jordan, Cornelious	Montrose	Kite Canal	Supple. A-841		13	33	56	Sioux	Dec.	26	1916	1469-S
(Res. A-1399)	Jordan, Cornelious	Montrose	Kite Canal	Supple. A-1375		13	33	56	Sioux	Dec.	26	1916	1470-S
Monroe Creek	Jordan, Richard	Harrison	Jordan Canal	Irrig.	1.67	22	33	56	Sioux	Sept.	19	1928	2032
Monroe Creek	Keel, Birdie V.	Harrison	Keel Canal	Irrig.	.02	5	32	56	Sioux	Aug.	20	1931	2228
Monroe Creek	Knori, Samuel	Harrison	Big Monroe Canal	O. D.		35	33	56	Sioux	May	2	1932	2267
Prairie Dog Cr. (Cedar Creek)	Knori, Samuel	Harrison	Schilts Prairie Dog Canal	O. D.		35	33	56	Sioux	May	31	1886	508 507
Prairie Dog Cr.	Plunkett, Thos.	Harrison	Plunkett Reservoir	Storage	†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 Cr.	Schaefer, Nick J.	Harrison	Old Sou Belly Canal	Irrig.	3.00	7	32	55	Sioux	June	1	1887	533
Sou Belly Cr.	Zerbe, Frank	Harrison	Montgomery Canal	Irrig.	1.00	21	33	55	Sioux	Dec.	1	1890	559
Sou Belly Cr.	Jordan, Sarah	Harrison	Jordan Canal	Irrig.	.43	21	33	55	Sioux	June	1	1895	556
Sou Belly Cr.	Nutto, F.	Harrison	Nutto Canal	Irrig.	.43	24	32	56	Sioux	Sept.	4	1897	404
Sou Belly Cr.	Jordan, Sarah	Harrison	Jordan Canal	Irrig.	.50	21	33	55	Sioux	May	11	1896	424
Sou Belly Cr.	Carroll, M. J.	Harrison	Carroll Canal	Irrig.	.14	7	32	55	Sioux	July	12	1899	516
Sou Belly Cr.	Zimmerman, Irvin S.	Harrison	Zimmerman Canal	Irrig.	.71	34	33	55	Sioux	Jan.	11	1900	532
Sou Belly Cr.	Jordan, S.	Harrison	Jordan Canal	Irrig.	.14	21	33	55	Sioux	May	26	1902	668

†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	Mo.	D			Yr.
Sou Belly Cr.	Barnes, Paul T.	Harrison	Barnes Reservoir	Storage	†390AF	19	32	55	Sioux	Mar.	24	1913	1268
Sou Belly Cr.	O'Connell, M. J.	Montrose	O'Connell Canal	Irrig.	10.00	9	33	55	Sioux	May	5	1913	1288
Sou Belly Cr., Springs, Tributary to	Hall, W. S. and F. M.	Harrison	Hall Spring Canal	Irrig.	.57	6	32	55	Sioux	Mar.	26	1889	550
Sou Belly Cr., Springs, Tributary to	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	Storage	†80AF	6	32	55	Sioux	Aug.	22	1927	1954
(Res. A-1954)	Hall, F. M.	Harrison	Crystal Lake Reservoir Canal	Irrig.		6	32	55	Sioux	Sept.	8	1932	2286*
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	Shepherd Cattle Co.	Harrison	Dunn Reservoir Canal	Irrig.	.57	10	33	57	Sioux	Aug.	5	1895	100
Squaw Creek	Shepherd Cattle Co.	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.	3.16	36	34	57	Sioux	Oct.	24	1927	1965
Squaw Creek, South Branch	Shepherd Cattle Co.	Harrison	Shepherd Reservoir	Storage	†1440 AF	2	33	57	Sioux	Jan.	29	1931	2189
Warbonnet Cr.	Anderson, John A.	Harrison	Warbonnet Canal	Irrig.	3.63	21	33	56	Sioux	July	31	1880	548
Warbonnet Cr.	Slattery, James	Harrison	Nolan Canal No. 1	Irrig.	.01	23	33	57	Sioux	Mar.	15	1887	957
Warbonnet Cr.	Slattery, James	Harrison	Nolan Canal No. 2	Irrig.	.29	23	33	57	Sioux	May	1	1888	959
Warbonnet Cr.	Anderson, John A.	Harrison	Dout 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
Warbonnet Cr.	Zerbst, Carl F.	Harrison	Zerbst Canal No. 2	Irrig.	.17	25	33	57	Sioux	Mar.	6	1915	1404

*Application Pending.
†Acre feet per annum.

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	Mo.			D	Yr.
Warbonnet Cr.	O'Connell, Mike	Montrose	O'Connell Canal	Irrig.		17	33	55	Sioux	June	20	1932	2274*
Warbonnet Cr., Branch of	Zerbst, Carl F.	Harrison	Zerbst Canal No. 1	Irrig.	.03	26	33	57	Sioux	Mar.	6	1915	1405
Warbonnet Cr., North Branch	Anderson, John A.	Harrison	Dout Canal	Irrig.	.71	30	33	56	Sioux	May	31	1889	539a
Warbonnet Cr., North Branch	Anderson, John A.	Harrison	Kay Canal	Irrig.	.14	26	33	57	Sioux	May	1	1887	958
Warbonnet Cr., Spring Branch, Tributary to	Biehle, Chas.	Harrison	Biehle Canal	Irrig.	.23	32	33	56	Sioux	Apr.	1	1891	538
Warbonnet Cr., Spring Branch, Tributary to	Anderson, John A.	Harrison	Garton Canal	Irrig.	1.43	31	33	56	Sioux	Oct.	16	1893	503
Whitehead Cr., Spring Branch, Tributary to	Richardson, Margaret E.	Orella	Harrison Canal	Irrig.	.06	13	33	54	Sioux	May	30	1888	547

*Application Pending.

CLAIMS AND APPLICATIONS BY STREAMS 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	Mo.	D			Yr.
Bazille Creek	Packard, J. L.	Creighton	Creighton Mill Race	Power		21	29	5	Knox				1002*	
Bazille Creek	Moss, O. H. and Buckler, Fred	Battle Creek	Creighton Mills	Power	30.00	21	29	5	Knox	Sept.	24	1908		914
Bazille Creek	Benedict, Guy	Creighton	Benedict Water Wheel	Irrig.	.13	28	29	5	Knox	Apr.	17	1931		2198
Bazille Creek	McGill, Wm. R.	Center	McGill Pump	Irrig.	1.63	27	31	5	Knox	Oct.	1	1931		2242
Elk Creek (Jackson Chute)	Crystal Lake Co.	South Sioux City	Crystal Lake Dam	Dom.	15.00	26	29	8E	Dakota	Apr.	12	1923		1714
Springs & Underground Water	Village of Crofton	Crofton	Crofton Municipal Project	Dom.	.25	26	32	2	Knox	Oct.	29	1930		2169

*Claim not adjudicated.

APPLICATIONS APPROVED FROM NOVEMBER 30, 1930, TO NOVEMBER 30, 1932

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	Mo.			D' Yr.
Jim Creek (Res. A-2001)	Dout, Clarence	Harrison	Dout Canal No. 2	Irrig.	.21	7	33	56	Sioux	Apr.	2	1928	2002
Bear Creek	Woods Bros. Rlty. Co.	Lincoln	Woods Bros. Canal	Irrig.		24	34	36	Cherry	Sept.	21	1928	2035
Frenchman R.	Oliver Bros.	Wauneta	Oliver Bros. Pw. Plant	Power	See								
Strever Creek	Bend, John T.	Overton	Bend Canal	Irrig.	A-1284	7	5	35	Hayes	Jan.	16	1929	2061
Lost Creek	Campbell, Wm. N.	Oshkosh	Campbell Pump	Irrig.	1.63	36	9	20	Dawson	Aug.	26	1929	2099
White Horse Cr.	McCrone, Scott	North Platte	McCrone Pump	Irrig.	1.69	11	17	44	Garden	Dec.	23	1929	2118
Dawson County Drainage					1.71	5	14	30	Lincoln	Mar.	10	1930	2127
Ditch No. 1	Orthman, Vernon C.	Lexington	Orthman Pump	O. D.		11	9	21	Dawson	Mar.	15	1930	621 2129
Spring Creek	Twin Lakes Corp.	Benkelman	Twin Lakes	Stor.	7AF	34	2	38	Dundy	Apr.	16	1930	2133
Platte River	Dawson Co. Irr. Co.	Lexington	Beatty Lateral	Irrig.	14.21	18	10	23	Dawson	June	14	1930	2145
Minnepazuta Creek	Smoke, Wm. H.	Chadron	Minnepazuta Res.	Irrig.	02	19	33	48	Dawes	July	21	1930	2149
Little Blue R.	Dutton, K. M. J.	Hastings	Blue Haven Pump	Irrig.	5.24	29	3	3	Thayer	Aug.	4	1930	2152
Loup River, North Branch	Mortensen, Crawford Jay	Ord	Mortensen Pump	Irrig.	1.94	5	19	14	Valley	Aug.	8	1930	2155
Beaver Creek	Weber, John	Lebanon	Weber Pump	Irrig.	1.43	17	1	26	Red Willow	Aug.	8	1930	2156
Nemaha River, Great	Estes, E. B.	Tecumseh	Estes Canal	Irrig.	1.43	29	5	11	Johnson	Aug.	15	1930	2159
Little Blue R.	Mendenhall, Thad E.	Fairbury	Mendenhall Pump	Irrig.	23	2	2E	1	Jefferson	Aug.	16	1930	2160
Big Blue River	Sonderegger Nurseries & Seed House	Beatrice	Sonderegger Pump	Irrig.	.43	3	3	6E	Gage	Aug.	29	1930	2164

REPORT OF SECRETARY

*Acre feet per annum.

APPLICATIONS APPROVED FROM NOVEMBER 30, 1930, TO NOVEMBER 30, 1932—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	Mo.	D			Yr.	
Louse Cr., Tributary to Niobrara River.....	Lansberry, I. F.....	Red Bird.....	Lansberry Canal	Irrig.	.50	12	32	10	Holt.....	Sept.	18	1930	.....	2166
Springs and Underground	Village of Crofton.....	Crofton.....	Crofton Municipal Water Supply	Dom.	.25	26	32	2	Knox.....	Oct.	29	1930	.....	2169
Loup River, South Branch.	Smith, Lizzie B.....	Long Beach, Cal.....	Smith Pump	Irrig.		16	15	22	Custer.....	Nov.	1	1930	.....	2170
Republican R.....	Furry, Cameron J.....	Franklin.....	Furry Pump	Irrig.	2.26	12	1	15	Franklin.....	Nov.	10	1930	.....	2171
Niobrara R.....	Niobrara R. Pw. Co.....	Spencer.....	Bristow Power Plant.....	Power	880.00	6	32	10	Boyd.....	Nov.	11	1930	.....	2172
Turtle Creek.....	Sorensen, Soren H.....	Ord.....	Soren Pump	Irrig.		5	19	11	Valley.....	Nov.	12	1930	.....	2173
Crosby Creek.....	Worden, Dorsey	Superior.....	Crosby Reservoir	Stor.		34	1	6	Nuckolls.....	Nov.	14	1930	.....	2174
Republican R.....	Keifer, J. Warren, Jr.....	Bostwick.....	Keifer Canal No. 2.....	Irrig.	9.15	26	1	8	Nuckolls.....	Nov.	17	1930	.....	2175
Valley Home Cr.	Lunt, W. A.....	Superior.....	Lunt Reservoir	Stor.	†2304	28	1	6	Nuckolls.....	Nov.	19	1930	.....	2176
Beaver Creek.....	Miller, T. H.....	Danbury.....	Miller Pump	Irrig.		29	1	28	Red Willow.....	Nov.	24	1930	.....	2177
Loup River, North Branch.	Bloomquist, O. V.....	St. Paul.....	Bloomquist Pump	Irrig.	.83	16	15	10	Howard.....	Nov.	26	1930	.....	2178
Ash Creek, East Branch, and Indian Creek (Res. A-1953)	Norman, Harry	Whitney.....	Harry Canal	Irrig.	10.06	8	32	50	Dawes.....	Dec.	4	1930	.....	2179
Buffalo Creek.....	Kopf, Walter W.....	Buffalo.....	Kopf Reservoir	Supple. Irrig.	†756	AF	21	12	22	Dawson.....	Dec.	23	1930	2180
Buffalo Creek (Res. A-2180)	Kopf, Walter W.....	Buffalo.....	Kopf Reservoir	Stor.	2.90	21	12	22	Dawson.....	Dec.	23	1930	.....	2181

DEPARTMENT OF PUBLIC WORKS

†Acre feet per annum.

APPLICATIONS APPROVED FROM NOVEMBER 30, 1930, TO NOVEMBER 30, 1932—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	Mo.	D			Yr.
Boggy Creek	Wickersham, Geo.	Harrison	Wickersham Res.	Stor.	†1500	30	33	54	Sioux	Dec.	24	1930	—	2182
					AF									
Wahoo Creek	Wahoo Hunting Club	Lincoln	Ayr Lake	Resort		28	13	9E	Saunders	Dec.	30	1930	—	2184
Logan Creek	Logan Valley Inv. Co.	Oakland	Logan Valley Pump	Irrig.		1	21	8E	Burt	Jan.	8	1931	—	2185
						36	22	8E						
Wood River	Abels, Carl H.	Amherst	Abels Pump	Irrig.	1.23	6	10	17	Buffalo	Jan.	10	1931	—	2186
Loup River	Sailing, Ira L.	Cushing	Sailing Pump	Irrig.	.86	7	15	9	Howard	Jan.	14	1931	—	2187
Dry Run	Konrath, Elizabeth	Montrose	Konrath Reservoir	Stor.		17	34	54	Sioux	Jan.	19	1931	—	2188
						8								
Squaw Creek, South Branch	Shepherd Cattle Co.	Harrison	Shepherd Reservoir	Stor.	†1440	2	33	57	Sioux	Jan.	29	1931	—	2189
					AF									
North Platte R.	Chimney Rock Irr. Dist.	Bayard	Chimney Rock Canal	Irrig.	.67	1	20	53	Scotts Bluff	Feb.	2	1931	—	2190
Platte River	Eavey, W. J.	Hastings	Eavey Pump	Irrig.	1.70	3	12	27	Lincoln	Feb.	20	1931	—	2191
Oakland Drain (Logan Cr.)	Johnson, Harry G.	Oakland	Johnson-Johanson Pump	Irrig.	1.71	35	22	8E	Burt	Feb.	20	1931	—	2192
Little Blue R.	Heinrich, C. W.	Davenport	Riverside Pump	Irrig.	2.23	20	4	3	Thayer	Feb.	24	1931	—	2193
Little Blue R.	Nehrig, Henry H.	Davenport	Nehrig Pump	Irrig.	5.09	26	3	4	Thayer	Mar.	10	1931	—	2194
Big Blue River	Andrews, W. E.	Beatrice	Andrews Pump	Irrig.	.20	10	3	6E	Gage	Apr.	3	1931	—	2196
Larabee Creek	Sawyer, C. O.	Rushville	Larabee Canal	Irrig.	1.12	6	34	41	Sheridan	Apr.	11	1931	—	2197
Bazille Creek	Benedict, Guy	Creighton	Benedict Water Wheel	Irrig.	.13	28	29	5	Knox	Apr.	17	1931	—	2198
Strever Creek	Beatty, Henry M.	Lexington	Beatty Canal	O. D.		18	9	20	Dawson	Apr.	28	1931	624	2199
Underground Water Supply	S. A. Foster Lbr. Co.	Lincoln	Foster Pump Wells	Irrig.	.66	8	13	46	Cheyenne	Apr.	29	1931	—	2200
Valley Home Cr. (Res. A-2176)	Lunt, W. A.	Superior	Lunt Reservoir	Irrig.	2.20	28	1	6	Nuckolls	May	4	1931	—	2201

†Acre feet per annum.

APPLICATIONS APPROVED FROM NOVEMBER 30, 1930, TO NOVEMBER 30, 1932—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	Mo.	D			Yr.
Strever Creek	Jurgenson, Henry	Overton	Jurgenson Pump	Irrig.	1.03	35	9	20	Dawson	May	7	1931	2202
Boggy Creek (Res. A-2182)	Wickersham-Reader Cattle Co.	Harrison	Wickersham Reservoir Canal	Irrig.	2.30	30	33	54	Sioux	May	15	1931	2203
Boggy Creek	Wickersham-Reader Cattle Co.	Harrison	Wickersham Extension	Irrig.	.96	31	33	54	Sioux	May	15	1931	2204
Horse Creek	Mitchell Irr. Dist.	Mitchell	Mitchell Irr. Dist. Power Plant	Power	60.00	25	23	58	Scotts Bluff	June	9	1931	2207
Medicine Creek	Game, Forestation & Parks Commission	Lincoln	Wellfleet Pleasure Resort	Resort	†80AF	16	9	30	Lincoln	June	15	1931	2210
Lost Creek	Wellman, F. A.	Omaha	Cottonwood Lodge	Resort		22	17	3E	Colfax	June	30	1931	2214
Indian Creek	Renfro, Oscar S.	Chadron	Flood Canal	Irrig.	.10	34	32	50	Dawes	July	16	1931	2216
Crescent Lake, et al.	Arnold, L. M., et al.	Cozad	Lower Platte Water Carrying Project	Supp.	†100,000 AF	20	21	44	Garden	July	22	1931	2219
North Platte R. Loup River, Middle Branch	Austin, Wm. F.	Bayard	Morrill County Plant	Power	200.00	18	21	53	Scotts Bluff	July	27	1931	2221
Loup River, Middle Branch	Haesler, John	Loup City	Haesler Pump	Irrig.	1.75	13	15	15	Sherman	July	27	1931	2222
Loup River, Middle Branch	U. S. Forest Service	Halsey	Bessey Nursery	Irrig.	.03	3	22	26	Thomas	July	30	1931	2223
Republican R.	Hevner, Clyde W.	Franklin	Hevner Pump	Irrig.	4.66	6	1	14	Franklin	Aug.	5	1931	2224
Rock Creek	Stark, Chris.	Ceresco	Stark Pump	Irrig.	1.08	31	13	7E	Saunders	Aug.	6	1931	2225

†Acre feet per annum.

DEPARTMENT OF PUBLIC WORKS

APPLICATIONS APPROVED FROM NOVEMBER 30, 1930, TO NOVEMBER 30, 1932—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	Mo.	D			Yr.
Buffalo Creek, West	Christensen, Niels	Cozad	Christensen Reservoir	Stor.		8	11	22	Dawson	Aug.	17	1931	2227
Monroe Creek	Keel, Birdie V.	Harrison	Keel Canal	Irrig.	.02	5	32	56	Sioux	Aug.	20	1931	2228
Shell Creek	Jonas, J. C.	Schuyler	Jonas Pump	Irrig.		35	18	3E	Colfax	Aug.	20	1931	2229
Ash Creek, East Branch	Neusbaum, Mose M.	Whitney	Neusbaum Reservoir	Stor.		30	32	50	Daves	Aug.	25	1931	2230
Pawnee Creek	Janssen, H.	Gothenburg	Janssen Canal	Irrig.	8.42	20	13	27	Lincoln	Aug.	31	1931	2231
Turkey Creek	Mortensen, M. C.	Dannebrog	Mortensen Reservoir	Stor.	†231AF	21	14	11	Howard	Aug.	31	1931	2232
Prairie Creek	MacQueen, Glen D.	Silver Creek	Braeside Pump	Irrig.	7.89	29	16	3	Merrick	Sept.	8	1931	2235
Oakland Drain	Johnson, Ralph	Oakland	Johnson Pump	Irrig.	.92	36	22	8E	Burt	Sept.	10	1931	2236
Lost Creek	Spohn, Geo. J., et al.	Superior	Spohn's Pump	Irrig.		23	1	7	Nuckolls	Sept.	12	1931	2237
Little Blue R.	Sanford, Harry K.	Ayr.	Sanford Pump	Irrig.	.28	4	5	10	Adams	Sept.	22	1931	2238
Oak Creek	Cheney, L. H.	McCook	Cheney Pump	Irrig.	.66	8	10	6E	Lancaster	Sept.	22	1931	2239
Cedar River	Christensen, Chas.	Pullerton	Christensen Pump	Irrig.	2.37	30	17	6	Nance	Sept.	29	1931	2240
Little Blue R.	Heiler, H. H.	Hastings	Heller Pump	Irrig.	.46	27	6	10	Adams	Sept.	30	1931	2241
Bazille Creek	McGill, Wm. R.	Center	McGill Pump	Irrig.	1.03	27	31	5	Knox	Oct.	1	1931	2242
Little Blue R.	Weyenberg, John T.	Hastings	Weyenburg Pump	Irrig.	1.20	17	5	8	Clay	Oct.	8	1931	2243
Niobrara River	Sandoz, Geo. E.	Marsland	Mettlen Canal	Irrig.	1.14	4	28	54	Sioux	Oct.	13	1931	2244
Niobrara River	Kay, D. L.	Marsland	Kay Canal No. 2	Irrig.	.43	9	28	52	Sioux	Oct.	15	1931	2245
Rock Creek	Kara Cattle Co.	Parks	Kara Lakes	Stor.	†180AF	20	1	39	Dundy	Oct.	31	1931	2246
Anderson Seep. (No. Platte R.)	Clarke, M. G.	Okmulgee, Okla.	Gordon Canal	O. D.		26	20	51	Morrill	Nov.	7	1931	858
Squaw Creek	McDowell, Robt. H.	Crawford	Reservoir No. 4	Stor.	†2AF	12	31	52	Dawes	Nov.	12	1931	2249
Niobrara River	Kay, D. L.	Marsland	Kay Canal	Irrig.	3.14	1	28	54	Sioux	Nov.	18	1931	2250
Turkey Creek	Mortensen, M. C.	Dannebrog	Mortensen Canal	Irrig.	1.00	21	14	11	Howard	Dec.	17	1931	2251
Sappa Creek	Winslow, Orin E.	Beaver City	Winslow Pump	Irrig.	.86	15	1	22	Furnas	Feb.	10	1932	2252

†Acre feet per annum.

APPLICATIONS APPROVED FROM NOVEMBER 30, 1930, TO NOVEMBER 30, 1932—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	Mo.	D			Yr.
Bull Drain.....	Norris, David	Maxwell.....	Norris Pump	Irrig.	.93	29	13	28	Lincoln.....	Feb.	18	1932	.....	2253
Bear Creek.....	Cole, Jason D.....	Merriman.....	Coles Project	Irrig.	8.19	14-	34	27	Cherry.....	Feb.	24	1932	.....	2254
						13								
						7-8	34	36						
Loup River, North Branch.	Cox, R. K.....	Purdum.....	Cox Pump	Irrig.	4.87	9	24	25	Blaine.....	Feb.	25	1932	.....	2255
						16								
Platte River.....	Dawson Co. Irr. Co.....	Lexington.....	Dawson Co. Canal Ext.	Irrig.	12.71	18	10	23	Dawson.....	Mar.	1	1932	.....	2262
Niobrara River.	Hughes, John R.....	Marsland.....	Hughes Canal	Irrig.	1.92	10	28	52	Box Butte.....	Mar.	28	1932	.....	2264
Niobrara River.	Montague Est., James	Dunlap.....	Montague Canal	Irrig.	1.76	28	29	48	Dawes.....	Mar.	31	1932	.....	2266
Monroe Creek.....	Knori, Samuel	Harrison.....	Big Monroe Canal	Irrig.		33	33	56	Sioux.....	May	2	1932	.....	2267
Chadron Creek.	McDowell, M. B.....	Chadron.....	McDowell Canal	Irrig.		1	32	49	Dawes.....	May	9	1932	.....	2270
Ash Creek, Tributary to Loup River, Middle Branch	Swenson, John E.....	Eddyville.....	Tierney Pump	Irrig.		7	14	20	Custer.....	May	17	1932	.....	2271
Calamus River.	Phillips, J. C., et al.	Burwell.....	Phillipp Pump	Irrig.		25	25	21	Brown.....	June	13	1932	.....	2273
Niobrara River.	Harris, Frank, et al.	Marsland.....	Harris-Neece Canal	Irrig.	7.27	3	28	55	Sioux.....	July	11	1932	.....	2275
						8	34	37	Cherry.....	July	12	1932	.....	2276
Bear Creek.....	Bates, Harold S.....	Merriman.....	Bates Project	Irrig.		7	34	37						
						12	34	38						
						9	2	13	Jefferson.....	July	25	1932	.....	2277
Little Blue R.	Zweifel, Albert	Fairbury.....	Zweifel Pump	Irrig.		10	2	13	Franklin.....	July	27	1932	.....	2278
Crystal Springs.	Newbold, Wm. G.....	Riverton.....	North Spring Canal.....	Irrig.		10	2	13						
Bordeaux, Big.	Nelson, P. B.....	Chadron.....	Nelson Ditch, Ext. of Kelso Canal, A-2151.	Irrig.		14	33	48	Dawes.....	Aug.	11	1932	.....	2279

DEPARTMENT OF PUBLIC WORKS

APPLICATIONS APPROVED FROM NOVEMBER 30, 1930, TO NOVEMBER 30, 1932—Concluded

290

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	Mo.	D			Yr.
Berger Creek & School Creek	Sughrone, Edward	Indianola	Sughrone Pump	Irrig.		15	3	27	Red Willow	Aug.	16	1932	.....	2280
Bear Creek	Bowring, Arthur	Merriman	Bar Ninety Nine Canal	Irrig.		15	34	37	Cherry	Aug.	31	1932	.....	2282
White River	Bartlett, Arthur M.	Chadron	Bartlett Canal	Irrig.		19	34	38	Dawes	Sept.	8	1932	.....	2285
Clear Creek	Scripter, Henrietta	Lewellen	Scripter Canal	Irrig.		32	16	41	Keith	Oct.	6	1932	.....	2288
Gordon Creek, Hackberry Lake, et al.	Nebr. Game, Forestation & Parks Com.	Lincoln	Hackberry Reservoir	Fish		7	30	29	Cherry	Oct.	18	1932	.....	2289
Cuff Canyon, Trib. to Dead Horse Creek	Sanders, Warren	Chadron	Sanders Canal	Irrig.		5	31	49	Dawes	Nov.	2	1932	.....	2290

REPORT OF SECRETARY

APPLICATIONS CANCELED FROM NOVEMBER 30, 1930, TO NOVEMBER 30, 1932

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	Mo.	D			Yr.
Ash Creek, East Branch.....	Neusbaum, Mose M.....	Whitney.....	Neusbaum Reservoir.....	Stor.	11.78	30	32	50	Dawes.....	Aug.	25	1931	.....	2230
Bear Creek.....	Belsky, Ed.....	Eli.....	Belsky Hereford Canal	Irrig.		25	34	36	Cherry.....	May	3	1922	.....	1664
Beaver Creek.....	Miller, T. H.....	Danbury.....	Miller Pump.....	Irrig.		29	1	8	Red Willow.....	Nov.	24	1930	.....	2177
Buffalo Creek, West Branch.....	Christensen, Niels and Matina.....	Cozad.....	Christensen Reservoir.....	Stor.	100,000 AF	11	22		Dawson.....	Aug.	17	1931	.....	2227
Crosby Creek.....	Worden, Dorsey.....	Superior.....	Crosby Reservoir.....	Stor.		34	1	6	Nuckolls.....	Nov.	14	1930	.....	2174
Crescent Lake, et al.....	Arnold, L. M., et al.....	Cozad.....	Lower Platte Water Carrying Project.....	Supp.						July	22	1931	.....	2219
Dry Run.....	Konrath, Elizabeth.....	Montrose.....	Konrath Reservoir.....	Stor.	17	34	54	Sioux.....	Jan.	19	1931	.....	2188	
Little Blue R.....	Mendenhall, Thad E.....	Fairbury.....	Mendenhall Pump.....	Irrig.	8	23	22	8E	Jefferson.....	Aug.	16	1930	.....	2160
Logan Creek.....	Logan Valley Inv. Co.....	Oakland.....	Logan Valley.....	Irrig.		1	21	8E	Burt.....	Jan.	8	1931	.....	2185
						36	22	8E						
Lost Creek.....	Wellman, F. A.....	Omaha.....	Cottonwood Lodge.....	Resort	22	17	3E	Colfax.....	June	30	1931	.....	2214	
Lost Creek.....	Spohn, Geo. J., et al.....	Superior.....	Spohn Pump.....	Irrig.	23	1	7	Nuckolls.....	Sept.	12	1931	.....	2237	
Loup River, South Branch.....	Perkins, Nina.....	Arnold.....	Nina Perkins Canal.....	Irrig.	25	17	23	Custer.....	Jan.	8	1929	.....	2060	
Loup River, South Branch.....	Alter, I. R.....	Grand Island.....	Alter Pump.....	Irrig.	35	13	12	Howard.....	Aug.	21	1930	.....	2162	
Loup River, South Branch.....	Smith, Lizzie B.....	Long Beach, Cal.....	Smith Pump.....	Irrig.	16	15	22	Custer.....	Nov.	1	1930	.....	2170	

†Acres feet per annum.

APPLICATIONS CANCELED FROM NOVEMBER 30, 1930, TO NOVEMBER 30, 1932—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	Mo.	D			Yr.
Niobrara River	Hughes Estate, John	Marsland	Hughes Canal	Irrig.	1.00	1	28	32	Box Butte	June	26	1895	53
Niobrara River	Kay, John L.	Marsland	Kay Canal	Irrig.	2.00	6	28	53	Dawes	May	12	1905	791
Niobrara River	Niobrara R. Pw. Co.	Spencer		Power	880.00	6	32	10	Boyd	Jan.	2	1929	2058
Niobrara River	Niobrara R. Pw. Co.	Spencer	Bristow Power Plant	Power		6	32	10	Boyd	Nov.	11	1930	2172
Sandy Cr., Big Seep D-918, No. Platte R.	Busing, Fred	Powell	Busing Pump	Irrig.		22	3	1E	Jefferson	Aug.	9	1930	2157
	Rossell, Olin	Scottsbluff	Rossell Canal	Irrig.		21	22	54	Scotts Bluff	Apr.	2	1931	2195
Shell Creek	Wolfe, Wm. L.	Schuyler	Wolfe Pump	Irrig.		28	18	3E	Colfax	Aug.	4	1930	2153
Shell Creek	Jonas, J. C.	Schuyler	Jonas Pump	Irrig.		35	18	3E	Colfax	Aug.	20	1931	2229
Slough, Warm (Spring Br.)	Walter, Jacob J.	Gibbon	Walter Pump	Irrig.	1.14	31	9	13	Buffalo	Feb.	17	1927	1900
Strever Creek	Beatty, Henry M.	Lexington	Beatty Canal	O. D.		18	9	20	Dawson	Apr.	28	1931	624 2199
Turtle Creek	Beran, John, Jr.	Ord	Beran Pump	Irrig.		6	19	14	Valley	Aug.	21	1930	2161
Turtle Creek	Sorensen, Soren H.	Ord	Soren Pump	Irrig.		5	19	14	Valley	Nov.	12	1930	2173

APPLICATIONS DISMISSED FROM NOVEMBER 30, 1930. TO NOVEMBER 30, 1932

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	Mo.			D	Yr.
Buffalo Creek	Kopf, Walter W.	Buffalo	Kopf's Canal	Irrig.		21	12	22	Dawson	Dec.	26	1929	2119
Crosby Creek, Trib. to Republican R.	Worden, Dorsey	Superior	Worden Res.	Stor.		34	1	6	Nuckolls	Mar.	30	1928	1993
Crescent Lake, et al	Alfalfa Irr. Dist.	Belmar	Alfalfa Lake Water Carrier	Supp.		20	44		Garden	July	23	1931	2220
Frenchman R. Stinking Water Creek	Krotter, F. C.	Pallsade	Krotter Power Plant No. 2	Power		31	5	33	Hayes	Sept.	30	1930	2168
Lincoln County Drain No. 2	Kloninger, Adolph	Hershey	Kloninger Pump	Irrig.		10	14	33	Lincoln	Aug.	7	1931	2226
North Platte R., Hoth Draw	Austin, Wm. F.	Bayard	Morrill Co. Pw. Plant	Power		18	21	53	Morrill	July	11	1930	2146
Oak Creek	Cheney, L. H.	McCook	Cheney Pump	Irrig.		8	10	6E	Lancaster	June	10	1931	2208
Platte River	Jacobson, John E.	Lexington	Jacobson Pump	Irrig.		18	10	23	Dawson	Jan.	14	1930	2122
Wells, Irrig.	S. A. Foster Lbr. Co.	Lincoln	Foster Wells	Irrig.		8	13	4C	Cheyenne	Feb.	8	1930	2124
Wood River	Hallen, Hjalmar	Kearney	Hallen Power Plant	Power		5	9	16	Buffalo	Apr.	17	1922	1657

DEPARTMENT OF PUBLIC WORKS

PERMITS ISSUED TO RELOCATE WATER DIVERSIONS NOVEMBER 30, 1930, TO NOVEMBER 30, 1932

Appropriation Number which has Carrying Right	Stream	Claimant	Post Office	Old Location			Old Carrier	New Location			New Carrier	Amt.	Appropriation No. which covers the land
				S	T	R		S	T	R			
D- 622	Platte River	Dawson Co. Irr. Co.	Lexington	NE¼	SE¼	13 9 22	Platte River Canal	Lot 1	18 10 23	Dawson Co. Canal	28.54	D- 624	
D- 447	Ash Creek, East Branch	Ivins, Myrtle L.	Crawford	NE¼	NE¼	31 32 50	Ox Yoke Canal	SW¼ SW¼	29 32 50	Ox Yoke Canal	.65	D- 447	
D-1023½	Ash Creek, East Branch	Stumph, John E.	Whitney	NE¼	NE¼	31 32 50	Ox Yoke Canal	NW¼ SW¼	32 32 50	Stumph Canal	.35	D- 447	
D- 791	North Platte River	Roberts, C. F.	Oshkosh	NE¼	SE¼	2 16 44	Midland Canal	Lot 7	4 16 44	Overland Canal	12.00	D- 789	
D- 791	North Platte River	Countryman, Chas.	Oshkosh	NE¼	SE¼	2 16 44	Overland-Midland Canal	Lot 7	4 16 44	Overland-Midland Canal	15.77	D- 791	
D- 789 D- 791	Blue Creek or North Platte River	Robinson, Mrs. A. A.	Gering	NE¼	SE¼	2 16 44	Overland-Midland Canal	Lot 7	4 16 44	Overland-Midland Canal	1.45	A-1742 O. D.- D- 800	
D-1023½	Ash Creek, East Branch	Ivins, Myrtle L.	Crawford	SW¼	SW¼	29 32 50	Ox Yoke Canal	NW¼ SW¼	32 32 50	Stumph Canal	.65	D- 447	
A- 5	Niobrara River	Bouret, John S.	Harrison	SW¼	SE¼	29 30 56	Bourett Senior Canal	SW¼ SW¼	29 30 56	Bouret Senior Canal	.63	A- 5	

REPORT OF SECRETARY

PERMITS ISSUED TO RELOCATE WATER DIVERSIONS NOVEMBER 30, 1930, TO NOVEMBER 30, 1932—Concluded

Appropriation Number which has Carrying Right	Stream	Claimant	Post Office	Old Location			Old Carrier	New Location			New Carrier	Amt.	Appropriation No. which covers the land
				S	T	R		S	T	R			
D- 351	Lodge Pole Cr.	Kennedy, Howard	Omaha	NW ¼	NW ¼	29 15 55	Owasco Canal	SW ¼	SE ¼	23 15 55	McIntosh Canal	3.31	D- 351
D- 346	Lodge Pole Cr.	Kennedy, Howard	Omaha	NW ¼	NW ¼	29 15 55	Owasco Canal	SW ¼	NW ¼	30 15 54	Circle Arrow Canal	3.71	D- 346
D- 788	Blue Creek	Nissen, Mrs. Louise	Lemoyne	NE ¼	NW ¼	18 16 42	Union Canal	NW ¼	SE ¼	19 16 42	Graf Canal	1.20	D- 783
D- 65	Stinking Water Creek	Crandall and Taylor	Imperial	NW ¼	SE ¼	28 7 37	McLain Canal	NW ¼	SW ¼	28 7 37	McLain Canal		D- 65
D- 478-c	White River	Harris-Cooper Irr. Co.	Crawford	NE ¼	SE ¼	26 32 52	Harris-Cooper Canal	NW ¼	SE ¼	34 32 52	Hall Canal No. 2		D- 464

DEPARTMENT OF PUBLIC WORKS

**IRRIGATED AREA BY COUNTIES
BASED ON ACREAGE REPORTS FILED IN 1932**

County	Acres	County	Acres	County	Acres
Adams	295	Frontier		Nance	
Antelope		Furnas	562	Nemaha	
Arthur		Gage	102	Nuckolls	1328
Banner	418	Garden	28400	Otoe	
Blaine		Garfield		Pawnee	
Boone		Gosper		Perkins	
Box Butte	1830	Grant		Phelps	
Boyd		Greeley		Pierce	
Brown		Hall	60	Platte	160
Buffalo	8010	Hamilton	17	Polk	
Burt	120	Harlan	913	Red Willow	3080
Butler		Hayes		Richardson	
Cass		Hitchcock	11924	Rock	
Cedar		Holt	35	Saline	
Chase	1021	Hooker		Sarpy	
Cherry		Howard	101	Saunders	76
Cheyenne	2860	Jefferson	122	Scotts Bluff	209850
Clay		Johnson	100	Seward	
Colfax	158	Kearney	100	Sheridan	
Cuming		Keith	21200	Sherman	485
Custer	543	Keya Paha	233	Sioux	37850
Dakota		Kimball	9350	Stanton	
Dawes	8010	Knox	72	Thayer	523
Dawson	172000	Lancaster	496	Thomas	27
Deuel	1500	Lincoln	45540	Thurston	
Dixon		Logan		Valley	160
Dodge		Loup	72	Washington	
Douglas		McPherson		Wayne	
Dundy	3160	Madison		Webster	
Fillmore		Merrick	135	Wheeler	
Franklin	258	Morrill	112400	York	
				Total	* 65657

*Does not include large area irrigated in Buffalo and Hall Counties from wells.

**SUMMARY OF WATER DIVERTED IN THE PLATTE RIVER BASIN
IN ACRE FEET
BETWEEN WYOMING-NEBRASKA LINE AND OVERTON**

Season 1931

	May	June	July	Aug.	Sept.	Total
Wyoming-Nebraska						
Line-Mitchell	31390	93602	93189	86819	54092	359092
Mitchell-Melbeta	5372	16068	15966	16270	9890	63566
Melbeta-Bridgeport	3694	20769	22217	19633	14527	80840
Bridgeport-Oshkosh	3332	13692	8793	11355	7764	44937
Oshkosh-North Platte	14389	37148	29348	37752	31214	149851
North Platte-Overton	13566	24560	12476	12920	27986	91508
Total	71743	205839	181989	184749	145473	789794

Season 1932

	May	June	July	Aug.	Sept.	Total
Wyoming Nebraska						
Line-Mitchell	26508	85824	98627	93432	78775	383166
Mitchell-Melbeta	4129	15480	17250	15161	10917	62937
Melbeta-Bridgeport	6106	18567	23786	18532	16800	83841
Bridgeport-Oshkosh	5712	10688	10796	13400	10306	50802
Oshkosh-North Platte	29184	34840	45357	39777	34332	183490
North Platte-Overton	33477	21933	48138	47077	43572	194197
Total	105112	187332	243954	227422	194702	958433

Note: Diversion by the Mitchell Irrigation District not included in the above tabulations for the reason that the headgate of the Mitchell Canal is in Wyoming.

REPORT OF SECRETARY

DRAINAGE DISTRICTS

Below is a complete list of drainage districts of record in this Bureau:

County	Name of District	Date of Approval of Plans	
Buffalo	John Swenson Drainage Ditch	Nov.	5, 1929
Burt-Thurston	Lyons Drainage District	.....
Burt-Washington	Burt-Washington County Drainage District No. 1	Aug.	2, 1915
Burt-Washington	Burt-Washington County Drainage District No. 2	Feb.	19, 1925
Burt-Washington	Peterson Bend Protection District..	Sept.	2, 1921 (Retards)
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	Horseshoe Lake Drainage District	Aug.	8, 1916
Cherry	Gay Lake Drainage District	Sept.	1, 1922
Cherry	Boardman Drainage District	June	23, 1923
Cherry	Coffey Lake Drainage District	Dec.	16, 1924
Cherry	Mile Board Drainage District	Sept.	30, 1925
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	Omadi Drainage District	Dec.	13, 1924
Dakota	Drainage District No. 5	July	10, 1930
Dawson	Drainage District No. 1	July	5, 1929
Dawson	Drainage District No. 2	June	7, 1930
Dawson	Drainage District No. 3	May	1, 1931
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	Feb.	17, 1925
Dodge-Washington	Elkhorn River Drainage District (Cut-Off "H")	.....
Douglas	Little Papillion Drainage District	Mar.	2, 1920
Douglas	East Omaha Drainage District	Oct.	8, 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
Douglas-Sarpy	Elkhorn Valley Drainage District (Elkhorn River Cut-Off and Ex- tension of Main Ditch No. 3)	Nov.	8, 1922
Douglas-Sarpy	Elkhorn Valley Drainage District	May	26, 1923 (Retards)
Fillmore	Drainage District	.....
Franklin	Republican River Drainage District	.....
Frontier	Drainage District No. 1	Mar.	31, 1915
Furnas	Republican River Control	July	22, 1931

DRAINAGE DISTRICTS—Concluded

County	Name of District	Date of Approval of Plans
Garden	Garden County Improvement and Drainage District No. 1 (Osh- kosh Drainage District)	June 28, 1932
Knox	Frankfort Bottom Drainage District	Mar. 3, 1923 (Retards)
Lancaster	Salt Creek Drainage District— Lancaster Drainage District No. 1	.....
Lincoln	Drainage District No. 1	Mar. 23, 1922
Lincoln	Drainage District No. 2	Dec. 4, 1929
Madison	Norfolk Drainage District	Mar. 18, 1924
Merrick	Drainage District No. 1	Feb. 17, 1916
Merrick	Drainage District No. 2	May 10, 1921
Morrill	Minatare Drainage District	.....
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
Otoe-Johnson	Drainage District No. 1 (Spring Creek Cut-Off Ditch)	Sept. 15, 1932
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	Western Sarpy Drainage District (Extension of Hendrichs Ditch)	Aug. 19, 1924
Sarpy	Bellevue Drainage District	Aug. 4, 1921
Sarpy	Chalco-Portal Drainage District	Mar. 15, 1922
Sarpy	South Buffalo Creek Drainage District	May 25, 1926
Sarpy	Rudersdorf Drainage District	Feb. 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	Feb. 28, 1918
Scotts Bluff	Scotts Bluff Drainage District No. 2	Feb. 2, 1932
Scotts Bluff	Gering Drainage District	June 2, 1920
Scotts Bluff	Morrill Drainage District	.....
Seward	Utica Drainage District	.....
Stanton	Humbug Drainage District	Mar. 15, 1921
Thurston	Pender Drainage District	Feb. 21, 1918
Thurston	Drainage District No. —	Sept. 2, 1932
Washington	Papio Valley Drainage District	Mar. 8, 1926

INCREASE IN FLOW OF THE NORTH PLATTE RIVER FROM WHALEN DAM TO NORTH PLATTE

By Robert Follansbee

District Engineer, U. S. Geological Survey.

Scope and Purpose of Investigation

The investigation of the increase in flow of the North Platte River for the water year ending September 30, 1931, covered the section of river valley extending from the Whalen diversion dam in eastern Wyoming to the mouth of the North Platte River at North Platte, Nebraska, (a distance of 231 miles) within which are located the principal irrigated areas.

The 1931 water year was a dry one, the precipitation between Whalen and Bridgeport being 63 per cent of normal, and between Bridgeport and North Platte, 81 per cent of normal. The discharge of the North Platte River above Pathfinder reservoir was the lowest in 28 years of record, being only 48 per cent of the mean annual flow as shown by the Saratoga records. The maximum amount in storage in Pathfinder reservoir during the year was 685,000 acre-feet and that was exhausted by September 8. This was the first time since being placed in operation in 1911 that the reservoir was emptied.

The investigation had two purposes. (1) To determine the actual increase ^a in the river not only from visible inflow from all sources but also the invisible inflow from ground water entering the river through the soil. (2) To determine, if possible, the amount of return flow from irrigation.

The investigation was carried on under a cooperative agreement between the State Engineer of Nebraska and the United States Geological Survey. The field work was performed principally by assistants of R. H. Willis, Chief, Bureau of Irrigation, Water Power and Drainage. The office work was performed by F. F. LeFever, Assistant Engineer, U. S. Geological Survey, and A. W. Hall, Assistant Engineer, State of Nebraska. The special studies were made, and the report prepared by the writer.

Acknowledgments are due the Bureau of Reclamation for discharge records at Guernsey and Whalen dam, officials of the Pathfinder and Goshen Irrigation districts for records of operation, and the Wyoming State Engineer's office for records of diversions between Whalen dam and the State line.

^aIncrease is used in this report to denote the "pick up" of the river discharge between river gaging stations.

Irrigated Area

The total irrigated area of 502,000 acres lying in the North Platte valley below Whalen dam may be divided into two main groups, the first extending from Whalen dam to Bridgeport, a distance of 98 miles, comprising an almost continuous body of 393,800 acres lying on both sides of the river, and the second comprising 108,200 acres, extending on both sides of the river from Bridgeport to North Platte, a distance of 133 miles. This latter area includes land irrigated from the North Platte River and also land lying in the valley which is irrigated from tributary streams.

In the upper group much of the land depends upon storage in Pathfinder reservoir, which is released as required. The greater part of the storage water is diverted by the Interstate and Fort Laramie canals, which have their headgates at the Whalen diversion dam. The remainder of the storage water continues down the river to headgates of other canals. To regulate more efficiently the release of storage water, a service reservoir having a capacity of 70,000 acre-feet is located near Guernsey, 7 miles above Whalen.

The areas not supplied by storage water from Pathfinder are dependent upon direct diversion from the river. Of the 393,800 acres in the upper group, 238,000 acres receive most of their supply after July first from Pathfinder, 90,000 acres have rights to Pathfinder storage, and the remaining 65,800 acres depend wholly upon direct diversion from the river.

Visible and Invisible Increase in Flow

The increase in flow of the North Platte River is divided into two classes. (1) Visible flow in the tributary streams and the many artificial drains of which 175 miles have been constructed in the area extending from Whalen to Bridgeport, and 35 miles in the group between Bridgeport and North Platte. (2) Invisible flow which percolates through the soil into the river throughout the irrigated areas.

Method of Investigation

To determine the increase in flow, gaging stations were maintained on the North Platte River at Guernsey, Whalen dam, Torrington, State line, Mitchell, Minatare, Bridgeport, Oshkosh, and North Platte for which records from October 1, 1930 to September 30, 1931 are available. Of these, the Guernsey and Whalen dam stations were maintained by the Bureau of Reclamation. The Guernsey, State line, Mitchell, Bridgeport, and North Platte stations were equipped with water-stage recorders, and the other with staff gages, which were read daily. Stations were also maintained on all canal diversions and all tributary channels, either natural or artificial. To define the changes in rating curves,

frequent discharge measurements were made at all stations throughout the year, or in the case of canal stations, throughout the irrigation season. An attempt was also made to measure the amount of water wasted into the river. For the larger canals, this information is fairly complete, but it is probable that for the smaller canals some waste water was not measured. This, however, is taken into account as invisible increase in flow.

To determine the increase in flow, the river was divided into the following sections which were automatically determined by the location of the river stations: Whalen dam to State line, State line to Mitchell, Mitchell to Minatare, Minatare to Bridgeport, Bridgeport to Oshkosh, and Oshkosh to North Platte.

The visible flow was determined directly by records of surface inflow to the river at the stations maintained on all the inflow channels.

The invisible flow was determined by adding to the river flow at the upper end of the section the visible inflow to the section, subtracting the diversions, and comparing this result with the river flow at the lower end.

The computations for June between Mitchell and Minatare will illustrate the method used.

Record of North Platte River at Mitchell	35,800	acre feet
Measured visible inflow.....	12,100	do
Diversions	—14,100	do
<hr/>		
Expected flow at Minatare.....	33,810	do
Record of North Platte River at Minatare.....	42,600	do
<hr/>		
Invisible gain (inflow).....	8,790	do

As this section of the report shows the actual increase in the river, from all sources available for diversion, no account is taken of evaporation losses. These are considered in the second section, which deals with return flow from irrigation.

Increase in Flow of the River

The increase in flow, both visible and invisible, from all sources is shown in the following table by months for each section of river:

Increase in Flow (acre-feet) of North Platte River from Whalen Dam to North Platte

Month	Whalen dam to State line		State line to Mitchell		Mitchell to Minatare		Minatare to Bridgeport		Bridgeport to Oshkosh		Oshkosh to North Platte	
	Visible	Invisible	Visible	Invisible	Visible	Invisible	Visible	Invisible	Visible	Invisible	Visible	Invisible
Oct.....	34,700	6,100	27,000	5,510	18,400	12,600	35,000	23,400	7,150	-16,100	33,700	6,300
Nov.....	20,000	13,500	19,000	13,700	13,800	4,780	25,600	2,410	5,480	38,500	31,300	-28,300
Dec.....	22,000	3,200	18,600	19,400	13,400	-1,740	22,400	-3,200	6,360	31,800	31,400	594
Jan.....	21,600	-3,000	16,100	15,100	12,000	10,800	19,400	11,800	6,640	24,400	28,700	-24,700
Feb.....	19,600	-1,300	12,200	19,300	9,050	14,900	1,700	5,950	24,400	27,400	31,700	6,610
Mar.....	19,100	-2,600	12,700	3,540	9,100	11,700	13,200	-2,180	5,450	26,800	31,700	-3,730
Apr.....	15,300	-12,700	11,900	13,000	8,200	1,900	12,400	13,200	5,160	-2,760	30,000	16,800
May.....	16,500	-4,500	11,700	13,200	11,200	315	13,000	14,400	4,010	5,100	23,300	3,000
June.....	15,500	-2,500	12,200	7,000	12,100	8,790	15,800	10,400	1,690	-1,810	21,800	5,860
July.....	11,100	-900	10,100	8,630	9,560	11,500	20,200	2,750	2,270	-830	21,700	-12,300
Aug.....	18,000	9,400	9,040	13,400	9,580	5,470	22,600	7,900	3,100	-1,120	19,700	-8,670
Sept.....	22,600	20,600	6,900	7,220	12,300	9,150	25,900	3,990	4,270	4,180	21,600	-8,400
Year.....	236,000	25,300	167,400	129,900	139,900	83,300	241,000	86,600	57,500	132,400	322,300	-46,900

REPORT OF SECRETARY

The preceding table with the return per mile of river added is summarized as follows:

Summary of preceding table

Section of river	Distance in miles	Visible		Invisible		Total	
		Total	Per mile	Total	Per mile	Total	Per mile
Whalen dam to State line	42	236,000	5,620	25,300	600	261,300	6,220
State line to Mitchell.....	14	167,400	12,000	129,900	9,280	297,300	21,200
Mitchell to Minatare.....	20	139,900	7,060	83,300	4,160	223,200	11,200
Minatare to Bridgeport.....	22	241,000	11,000	86,600	3,940	327,600	14,900
Bridgeport to Oshkosh.....	45	57,500	1,280	132,400	2,940	189,900	4,220
Oshkosh to North Platte..	88	322,300	3,660	-16,900	-533	275,400	3,130
Total.....	231	1,164,100		410,600		1,574,700	

Of the total increase, amounting to 1,574,700 acre-feet, 74 per cent was visible inflow, and 26 per cent invisible inflow. Above Bridgeport the increase was 1,109,400 acre-feet of which 71 per cent was visible, and 29 per cent invisible flow. Below Bridgeport the increase was 465,300 acre-feet of which 82 per cent was visible, and 18 per cent invisible.

Although the increase in flow is shown in the preceding table for the entire year, the increase for the irrigation season, May to September, is chiefly of value to irrigation interests, and such increase is summarized as follows:

Summary of Increase in Flow (acre-feet) of the North Platte River from Whalen Dam to North Platte for the Irrigation Season May to September

Section of river	Distance in miles	Visible		Invisible		Total	
		Total	Per mile	Total	Per mile	Total	Per mile
Whalen dam to State line	42	83,700	1,990	22,100	526	105,800	2,520
State line to Mitchell.....	14	49,900	3,560	49,400	3,530	99,300	7,090
Mitchell to Minatare.....	20	54,700	2,740	35,200	1,760	89,900	4,500
Minatare to Bridgeport.....	22	97,500	4,430	39,400	1,790	136,900	6,220
Bridgeport to Oshkosh.....	45	15,300	340	5,520	123	20,820	463
Oshkosh to North Platte..	88	108,100	1,230	-20,500	-233	87,600	1,000
Total.....	231	409,200		131,100		540,300	

Of the total increase amounting to 540,300 acre-feet, 76 per cent was visible, an 24 per cent invisible. Above Bridgeport the increase was 431,900 acre-feet, 66 per cent being visible, and 34 per cent invisible. Below Bridgeport the total increase was 108,400 acre-feet. The visible flow was 123,400 acre-feet, leaving a net loss of 15,000 acre-feet in invisible flow. This was accounted for by evaporation losses in the river channel.

Method of Determining Return Flow from Irrigation

The preceding tabulations of increase in flow include all inflow to the river from whatever source, and while this increase is available for diversion from the river, it is not a true measure of the return flow from irrigation.

To determine, if possible, the amount of return flow from irrigation, it is necessary to eliminate so far as known the increase in flow from sources other than irrigation. Also evaporation losses must be considered as these represent an increase in invisible flow, as the latter would be greater by the amount of such losses if the latter did not exist.

When these changes have been made, the inflow remaining can be deducted from the amount of water diverted for irrigation to determine the apparent consumptive use by irrigation. The total apparent consumptive use divided by the area irrigated will give the apparent consumptive use per acre. If this value appears reasonable, it may be concluded that the increase in discharge is return flow from irrigation. This is an indirect method of approaching the problem, but the only one possible with the available information.

Possible Sources of Inflow

The possible sources of inflow are return flow from irrigation, flow of tributary streams originating outside the irrigated area, rainfall and foreign ground water which does not originate directly in irrigation.

Several tributary streams have a considerable portion of their drainage basins beyond the irrigated area of the North Platte valley, and the corresponding discharge has either been measured or estimated and deducted from the inflow reaching the North Platte. Although most of the drains are not connected with outside areas a few are, and for those the discharge has been similarly deducted.

The effect of rainfall was chiefly shown by heavy rains during October and November, 1930 and a reduction in the flow of the tributary streams during those months was made. During the remainder of the year a few rains showed slight increases in the discharge of the streams and drains and these increases were eliminated from the records.

The foreign ground water inflow has two possible sources. The first is that from the sand hills area lying north of the North Platte valley, and the second, is the depletion of the ground water level in the North Platte valley itself as a result of deficient precipitation during the year. Although this depletion must have been considerable, it is not possible to estimate it due to the lack of records showing the recession of water table in wells, uninfluenced by local conditions.

Of the three possible sources of inflow (other than return flow from irrigation) corrections have been made for two, leaving only possible foreign ground water increase unaccounted for.

Several canals divert drainage water from irrigation and such diversions have been added to the visible inflow to determine the total amount of visible return to the river. Diversions of other canals from tributary streams, which do not represent return flow, have not been added. (These latter diversions are all east of Bridgeport).

Modified Record of Increase in Flow

The following table shows the increase in flow of the North Platte River after deductions for flow from all known sources other than irrigation, and additions for evaporation losses, and return flow from irrigation diverted by canals before reaching the river have been made:

Increase in Flow (acre-feet) of North Platte River from Whalen Dam to North Platte Corrected for Known Discharge not from Irrigation, for Rediverted Return Flow from Irrigation, and for Evaporation Losses.

Month	Whalen dam to State line		State line to Mitchell		Mitchell to Minatare		Minatare to Bridgeport		Bridgeport to Oshkosh		Oshkosh to North Platte	
	Visible	Invisible	Visible	Invisible	Visible	Invisible	Visible	Invisible	Visible	Invisible	Visible	Invisible
	Oct.....	4,700	6,800	18,700	5,800	18,200	13,000	35,600	24,000	2,650	-14,700	8,460	8,600
Nov.....	4,040	13,900	15,600	13,800	13,600	5,000	25,600	2,700	2,660	39,200	6,780	-27,200
Dec.....	3,060	3,400	11,000	19,500	13,200	-1,600	22,400	-3,000	2,790	32,000	6,270	1,200
Jan.....	2,380	-2,800	13,300	15,200	11,800	10,900	10,400	11,900	2,520	24,700	5,880	-24,200
Feb.....	2,000	-1,100	9,700	10,300	10,100	8,200	14,900	1,900	2,090	24,800	5,220	7,300
Mar.....	1,960	-2,100	11,900	3,700	8,900	12,000	13,200	-1,700	2,010	27,900	5,790	-1,550
Apr.....	1,130	-11,400	9,400	13,500	8,000	2,900	12,400	14,500	1,950	100	6,240	22,500
May.....	2,570	-2,500	7,900	14,000	12,100	1,800	13,000	16,200	1,640	9,300	5,950	11,000
June.....	4,390	500	9,800	8,100	15,600	10,700	19,500	12,900	1,690	4,700	7,960	17,000
July.....	5,860	2,600	11,400	9,700	15,900	13,400	23,800	5,400	1,910	6,000	7,240	800
Aug.....	5,600	11,500	12,200	14,100	18,500	6,800	27,700	9,500	1,870	3,100	7,220	-1,500
Sept.....	4,800	22,100	12,000	7,700	18,400	10,000	30,700	5,000	1,940	6,900	7,490	-2,600
Year.....	42,500	40,900	145,000	135,400	164,000	93,100	258,200	99,300	25,700	164,000	80,500	9,800

The preceding table, with the increase per mile added, is summarized as follows:

Summary of Preceding Table

Section of river	Distance in miles	Visible		Invisible		Total	
		Total	Per mile	Total	Per mile	Total	Per mile
Whalen dam to State line	42	12,500	1,010	40,900	974	83,400	1,890
State line to Mitchell.....	11	115,000	10,400	135,400	9,670	280,400	20,000
Mitchell to Minatare.....	20	164,000	8,200	93,100	4,660	257,100	12,900
Minatare to Bridgeport....	22	258,200	11,700	99,300	1,510	357,500	16,200
Bridgeport to Oshkosh.....	45	25,700	570	164,000	3,640	189,700	4,220
Oshkosh to North Platte..	88	80,500	915	9,800	111	90,300	1,030
Total.....	231	715,900		542,500		1,258,400	

Of the total increase in flow between Whalen dam and North Platte, amounting to 1,258,400 acre-feet, 715,900 acre-feet, or 57 per cent was visible, and 542,500 acre-feet, or 43 per cent, invisible inflow. Above Bridgeport, the total inflow was 978,400 acre-feet of which 609,700 acre-feet, or 62 per cent was visible, and 368,700 acre-feet, or 38 per cent, invisible flow. Below Bridgeport, the total was 280,000 acre feet, of which 106,200 acre-feet, or 38 per cent was visible, and 173,800 acre-feet, or 62 per cent, was invisible inflow.

Apparent Consumptive Duty Per Acre

For a direct comparison of the amount of water diverted, and the increase in flow of the river, with the area irrigated to determine the apparent consumptive use per acre, it is necessary to reduce the six sections of river to two, one extending from Whalen dam to Bridgeport, and the other from Bridgeport to North Platte. This comparison is shown by the following table, together with the computed diversion in acre-feet per acre:

Apparent Consumptive Duty and Diversion Duty in Acre-feet

Item	Whalen dam to Bridgeport	Bridgeport to North Platte
Total diversion	1,294,700 ¹	250,300
Increased flow:		
Visible	609,700	106,200
Invisible	368,700	173,800
Apparent consumptive use.....	316,300	29,700
Area irrigated ² (acres).....	393,800	108,200
Apparent consumptive use (per acre) .....	.80	
Diversion (per acre).....	3.29	2.31

¹ Includes amount withdrawn from storage on the project of the Pathfinder Irrigation District.

² Based chiefly on areas reported to the Bureau of Irrigation, Water Power and Drainage by the canal users.

During the irrigation season, the flow of the North Platte River below Whalen dam was from 18 to 28 per cent of that for the 10-year mean (1922-1931) as shown by the following table:

Comparison Between North Platte River Discharge May to September, 1931 and Mean for 10-year Period, 1922-1931

	Discharge in acre-feet May to September		Per cent of 1931 to mean
	1931	10-year mean (1922-1931)	
Whalen ^a	702,000	753,000 ^b	93
Mitchell	134,000	728,000	18
Bridgeport	242,000	869,000	28
North Platte	197,000	982,000	20

^a Amount diverted for irrigation by Fort Laramie and Interstate Canals.

^b 8-year period, 1924-1931.

The total diversion from Whalen to Bridgeport, including that by the Fort Laramie and Interstate canals, was 1,294,700 acre-feet, or 98 per cent of the 1,323,000 acre-feet diverted in 1930. From Bridgeport to North Platte, an exact comparison can not be made, as complete 1930 records of diversion for the smaller canals are not available. However, a comparison between diversion of the larger canals indicates that the total diversion for 1931 was about 12 per cent **greater** than in 1930.

From the deficient flow during the irrigation season it would be expected that the total diversions would be less, particularly in the section below Bridgeport, where the canals depend wholly upon the natural flow of the river. The records, however, indicate that above Bridgeport they were practically normal (as measured by those in 1930, a nearly normal year) and below, were actually **greater**. The only explanation the writer has to offer at this time, for this apparent paradox, is that return flow is a most important factor in furnishing water for re-diversion from the river.

Return Flow from Irrigation

During the growing season, from April to September, the precipitation over the irrigated area between Whalen dam and the State line was 6.33 inches, or 72 per cent of normal; between the State line and Bridgeport, in the heart of the irrigated area, it was only 4.56 inches, or 38 per cent of normal. Thus the total amount of moisture applied to the land was considerably below normal. This undoubtedly resulted in more intensive cultivation, and from this condition, together with the very thor-

ough drainage of that area, it is believed that the apparent consumptive duty of .80 acre-feet per acre for the section above Bridgeport does not fall very far short of the actual value. It is believed that the amount of the land fully irrigated was less than that reported, although there is little definite information on which to base this, and if so, the apparent consumptive duty per acre would be correspondingly increased. It is therefore the writer's opinion, at this time, that only a comparatively small amount of foreign ground water entered the river above Bridgeport, and the greater part of the increase in flow was return flow from irrigation. This belief is strengthened by the following:

The increase in flow due to foreign ground water would be expected to show most clearly in the section of river containing the smallest irrigated area, and for the river above Bridgeport, that is the section between Whalen dam and the State line. An inspection of the summary of the table of modified flow shows that the invisible gain is only 974 acre-feet per mile, by far the smallest gain above Bridgeport. During five consecutive months, from January to May, losses occurred which would not be the case if any considerable amount of foreign ground water entered the river in that section.

For the section of river below Bridgeport, the increase in flow is greater than the diversions for irrigation, showing immediately that a large proportion of the invisible increase must come from foreign ground water. This is the section of river in which such ground water increase would be expected to show most clearly, as it is bounded by the vast sand hills area on the north. The inconsistent monthly values of invisible inflow between Oshkosh and North Platte can only be accounted for by inaccuracies in the records on which they are based. This is also believed to be the cause of the scattering erratic values above Bridgeport.

The source of the increase in flow in the North Platte River involves so many factors, some of them obscure, that it is impossible to draw any definite conclusions from the records of one dry year like 1931, for use in normal years. It is hoped that the records for 1932 will throw further light on the source of the increase in flow.

COURT OPINIONS

IN RE APPLICATION, THE CITY OF FAIRBURY V. FAIRBURY MILL
AND ELEVATOR COMPANY

27949

Filed July 19, 1932.

1. Dedication of water of natural streams to the use of the people of the state by Constitution and statutes does not divest one of the right to use the water acquired prior to the adoption of constitutional and statutory provisions recognizing such previously acquired rights.

2. Right to use of water of natural stream acquired prior to enactment of chapter 69, Laws 1895, is a vested property right, which could not be taken away by legislative action.

3. After an appropriation, the residue may be appropriated by others out of water of same stream, if there is no interference with or impairment of prior appropriation.

4. "A riparian's right to the use of the flow of the stream passing through or by his land is a right inseparably annexed to the soil, not as an easement or appurtenance, but as a part and parcel of the land; such right being a property right, and entitled to protection as such, the same as private property rights generally." Crawford Co. v. Hathaway, 67 Neb. 325.

5. Owner of mill-dam, who secured the right to flow back the water of a natural stream and to use such water to operate mill prior to the enactment of chapter 69, Laws 1895, has the right to use all the water, but a riparian owner of the stream within the mill-pond may make such use of the water as does not interfere with or injure the rights of the mill owner.

6. Department of public works may grant such appropriation for the use of the water of a natural running stream as does not impair prior appropriations and rights to use the water. Said department may issue permits for improvements of streams, for the beneficial use of such water, but cannot determine damages or property rights involved.

7. Evidence examined, and held, that the permit to construct improvements and to use the water, issued to the city of Fairbury in this case, does not interfere with or impair the right to use the water heretofore acquired by the Fairbury Mill & Elevator Company.

Heard before Goss, C. J., Rose, Dean, Good, Eberly, Day and Paine, JJ.

DAY, J.

This is an appeal from an order of the department of public works, permitting the city of Fairbury to construct certain retards and de-

flectors in the Little Blue river near Fairbury, Nebraska. The appellant is the Fairbury Mill & Elevator Company, which has dammed and used the water of the Little Blue for more than 58 years, for manufacturing purposes. The city of Fairbury takes water out of the mill-pond about a third of a mile up stream for cooling its turbine engines used in connection with the municipal light and water plant. The city has appropriated 16.7 cubic feet per second of water subject to all prior rights of the mill company to the use of the water. After using the water it is returned to the stream and passes down to the mill-dam. The river now divides into two branches about one-half mile above the dam, most of the water running down the south branch of the stream. Prior to 1901, when the south channel was cut by a flood, all the water of the stream ran down the present north channel. The city takes its water out of the north branch. The branches unite above the mill-dam, which backs its pondage up both branches. The north branch did not carry enough water to supply the city's necessity and it sought to divert enough water into the north branch to meet its requirements. To accomplish this it sought to build a deflector where the stream branches and another at its intake. These furnish the basis of the mill's objections. Another was built at a point to keep the water in the north branch from running between two islands back into the south branch; but, since no objection is made to this deflector, it need not be mentioned again. In order that the situation may be more apparent to the reader, we reproduce a map from the record:

The first proposition advanced by the mill is that the department of public works has not the right or the jurisdiction to impair or interfere with appropriations of water existing under the law previous to 1895. Chapter 69, Laws 1895, dedicated the water of every natural stream, not heretofore appropriated to the use of the people of the state, subject to appropriation. Section 49 specially provided that the act should not interfere with or impair the rights to water appropriated and acquired prior to the passage of the act. These provisions have been carried down through the years into the present statutes. Comp. St. 1929, secs. 46-502, to 46-506. The legislature did not intend to interfere with prior acquired rights. *Black Bros. Flour Mills v. Umpenour*, 111 Neb. 218. Our investigation does not reveal any authority to the contrary. The right to the use of water acquired prior to the enactment of the statute of 1895 was a vested property right, with which the legislature could not have interfered. *Nine Mile Irrigation District v. State*, 118 Neb. 522, 225 N. W. 679; *Southern Nebraska Power Co. v. Taylor*, 109 Neb. 683, 192 N. W. 317. The extent of the appropriation of the mill is not decided here, as it is not necessary to a decision of this case. Assuming, for the purpose of this case alone, that the mill had appropriated for its use as a manufacturing plant all the water of the Little Blue river at this point, the department of public works could grant an

appropriation of water, which did not interfere with or impair the right of the mill to the use of the water. The particular appropriation of water granted the city for use in cooling its engines is such that it does not interfere with the right to the use of water acquired by the mill. The testimony is substantially in accord upon this phase of the case. It is that the water is taken from the stream, used and then returned to the stream. The department of public works may grant an appropriation which does not interfere with a previous appropriation. Section 81-6307, Comp. St. 1929, provides: "The department of public works shall make proper arrangements for the determination of priorities of right to use the public waters of the state, and determine the same. The method of determining the priority and amount of appropriation shall be fixed by the department." It has been determined that the department of public works is an administrative department having quasi judicial functions. *Cline v. Stock*, 71 Neb. 79; In re application of Babson, 105 Neb. 317; *Dawson County Irrigation Co. v. McMullen*, 120 Neb. 245. The mill does not own the water of the stream, for it is the general rule that such water is not the subject of private ownership. A right may be acquired for its use, which will be regarded as a property right, but the right carries no specific property in the water. *Kidd v. Laird*, 15 Cal. 161. The residue, after a prior appropriation, may be appropriated by others out of the water of the same stream, if there is no interference with a prior appropriator. 27 R. C. L. 1264, sec. 173; *Johnston v. Little Horse Creek Irrigating Co.*, 13 Wyo. 208.

Considering the rights of the parties as riparian owners, the use of the water desired by the city is reasonable and is not an interference with any use which the mill desires to make of the stream as a riparian owner. The mill owns the land for some distance above its dam on both sides of the river, including the islands, except 100 feet owned by the city at their intake. Both the city and the mill are riparian owners. "A riparian's right to the use of the flow of the stream passing through or by his land is a right inseparably annexed to the soil, not as an easement or appurtenance, but as a part and parcel of the land; such right being a property right, and entitled to protection as such, the same as private property right generally." *Crawford Co. v. Hathaway*, 67 Neb. 325. See *Meng v. Coffee*, 67 Neb. 504. But the president of the milling company testified that the city's use of the water did not interfere with the use desired by the mill. It seems, however, that both parties to this litigation are relying upon appropriations of the water to a beneficial use more than upon their rights as riparian owners. But whether we consider the rights as between two appropriators or two riparian owners, the outstanding fact that permeates this record is that the use made of the water by the city does not interfere with or impair the use to which the mill is entitled. The conclusion then follows naturally that the city has a right to use the water in the stream for

the purpose of cooling its engines as long as it returns the water to the stream practically undiminished.

The rights of the mill company to maintain their dam and to use the water of the Little Blue river are determinable under the law as it existed prior to 1895. Chapter 69, Laws 1895, did not interfere with, impair or change the rights of the appellant to the use of the water. This court held in *Culver v. Garbe*, 27 Neb. 312, that the owner of the dam had a vested right in the stream and water within the land covered by the lease, and that appellee had no right or authority to interfere with it, and would be enjoined from changing the course of the stream, constructing the dam, or diminishing appellant's reservoir or supply of water. The owner of such mill, after procuring the right to dam a stream, and cause the water to flow back upon said stream, was held to have a vested right, not only in the water, which he would have by reason of his title to the land through which it runs, and to the fall caused by his dam, but to the reservoir of water created thereby and in this right he is entitled to protection the same as in any other. The parties involved in the foregoing situation or their successors in interest had the same controversy passed upon in a later case, *Smith v. Garbe* (1910) 86 Neb. 91. In this case the court held: "The main question involved in the case is the right of defendant to maintain a certain ditch and two dams which the undisputed evidence shows were dug and constructed within the dead water zone of plaintiffs mill-dam. The rights of the parties with regard to this question we think were fully settled by the court in *Culver v. Garbe*, 27 Neb. 312." This case approved and followed the former case and quoted the following language: "A careful examination of the evidence and plat of the river at the point where it is proposed to construct the ditch and dams satisfies us that the proposed improvement cannot be made without endangering plaintiff's property. This being true, the law will afford relief and protection." It is clear that these cases hold that the owner of a mill-dam has a vested right to the uses of the water, which could not be impaired. In *Eidemiller Ice Co. v. Guthrie*, 42 Neb. 238, this court held: "The owner of a mill who has the right to maintain a pond or flow back the water of a stream upon the land of another and to use such water to operate his mill possesses, as to the water, the dominant right, and while not the absolute owner of ice which may form on the pond, is entitled to have it remain there during the time and when its so remaining will, be, or is, useful and necessary to the legitimate exercise of his right to use the water as motive power for the mill or to successfully operate the mill, but the owner of the land, if upon a non-navigable stream, may make any use he desires of ice which forms over and above so much of the bed of the stream to which his ownership extends as does not interfere with, or injure, the rights of the mill owner." The opinion in this case cites with approval *Culver v. Garbe*, *supra*, with the following observation, "The rights of a mill

owner in the water of the stream upon which his mill is situated and in which he has constructed a dam, and to the full and necessary supply of water, have been recognized in this court." Paraphrasing the language of these cases, with reference to the case before us, the mill, which secured its right to flow back the water of the stream and to use such water to operate its mill prior to the law of 1895, has the vested right to use all of the water as motive power for the mill, but a riparian owner may use the water over and above so much of the bed of the stream to which his ownership extends as does not interfere with or injure the rights of the mill owner.

But the appellant complains about the permit issued by the department of public works for the construction by the city of certain retards, deflectors or dams in the river in order to secure the use of the water to which it is entitled. The construction referred to as number 3 is a dam at the point of the city intake. It is located on the north branch of the stream. It is constructed below the level of the water and does not retard the flow when the mill's dam is closed. In addition, it has a gate which is left open, thereby entirely obviating the possibility of its causing an interference with the flow. There is testimony in the record that, when the water in the mill-pond is so low that the dam will interfere with the flow, the water is too low anyway to run the mill. On the contrary, there is evidence that the water so retarded would run the mill a few hours. If on account of low water, this situation were created, the mill company would have the undoubted right to the release of the water. But the evidence is that the city needs this dam to make available water, when the mill releases the water in the mill-pond for the purpose of cleaning. This controversy arose because the mill company let the water out of their mill-pond, which compelled the city to shut down its light and power plant.

The predecessor in title to the city, in 1887, acquired a perpetual right to remove water from the mill-pond, to which the city has succeeded. The city has been given an appropriation by the department of public works. The dam at the intake is necessary to an enjoyment of that right. It is not an interference with the right of the mill to use the water.

The deflector or dam, which it is proposed to construct at the point of the division of the two branches of the stream, presents numerous problems, many of which have been disposed of by this opinion. The appellant contends that it has a right to have the stream continue to run in its natural channel (*Flader v. Central Realty & Investment Co.*, 114 Neb. 161) and that the department of public works is without jurisdiction to change the course of a running stream. Both branches of the Little Blue river are natural courses of the running stream. *Clark v. Cedar County*, 118 Neb. 465. The north branch, having always carried water of the stream, is as much a channel as the south. The most

that could be contended is that it is proposed to change the proportion of water in the two diverging channels. In the absence of damage the appellant is not entitled to complain. But, again, the evidence establishes the fact that the north channel is filling up and that the deflectors heretofore built and the proposed improvement has for its purpose the retention of the flow in the north channel without stopping the flow in the south channel. The construction approved by the department will not prevent the flow in the south channel. This is not such a case as cited by the appellant where the entire course of a stream is suddenly changed. In such a case, the riparian owner, if at all, must put the stream back in the old channel within a reasonable time. The mill suffers no damage to its right to the use of the water by the diversion of a part of the water into another channel of the stream which ultimately reaches its mill-pond, such diversion causing no damage. The gist of this decision is that, no damage resulting from the proposed improvements, the order of the department was a proper one.

The language of this opinion is clear, but in order to eliminate the possibility of a misunderstanding, this decision passes only upon the right to the use of the water in the Little Blue river. Only this is within the jurisdiction of the department of public works, and our jurisdiction upon appeal is likewise limited. Obviously, the question of damages from the flow back or the question of the acquisition of property upon which to build improvements is not determined.

AFFIRMED.

IN THE DISTRICT COURT OF CHASE COUNTY, NEBRASKA

The Frenchman Valley,
Irrigation District,

Plaintiff,

vs.

Inman Ditch Company,
et al.,

Defendants.

DECREE

Case No. 2375

This case having been heard and submitted April 7, 1932, upon the amended petition of the plaintiff, answer of the defendants and the reply and upon the evidence adduced by the parties and their stipulation for the rendition of judgment and the same having been taken under advisement and now July 25, 1932, coming on for final disposition. the Court finds, and adjudges as follows:

1. That the plaintiff owns and operates an irrigation canal and system taking waters from the Frenchman River therefore and having its headgate and point of intake located in Section 31, Township 5, Range 33, in Hayes County, Nebraska.

2. That the defendant Inman Ditch Company owns and operates an irrigation canal and system taking its waters therefore from the Frenchman River and having its headgate or point of intake located on the same stream and above that of the plaintiff near the southeast corner of the Southwest Quarter of Section 17, Townsship 6, Range 40, in Chase County, Nebraska.

3. That there are other irrigation canals or systems also taking waters from the same stream and having their headgates or points of intake located between the locations of the plaintiff and defendant hereinbefore specified, and that the rights of water appropriation and priorities as between said parties and for each of them have been determined in due and regular course by the proper authority of this state and are of record in the Department of Public Works, Bureau of Irrigation, Water Power and Drainage, which determination and adjudication of rights and priorities is in force and unmodified and that thereunder the right and appropriation of the plaintiff is prior in point of time and superior to that of defendants and in the operation and conduct of their activities in the matter of the use and application of such waters for irrigation purposes all of the parties are and have been under the authority and control of the proper officers and agents of said department and bureau as provided by law.

4. That in times of scarcity of water it is both the right and duty of the officers and agents of said department to supervise and regulate the distribution and apportionment of available water among those appropriators entitled to its use and in accordance with their respective rights and priorities as above determined and of record and between such appropriators the first in time is the first in right.

5. That in the summer of 1931 in July and August there was a scarcity of water in the supply of the Frenchman River which warranted the supervision and direction of said officers and agents and in the doing of which the water commissioner of the water division in which said property is situated did close and direct the closing of the intake of the defendants' ditch so as to prevent the water from flowing therein and caused it to continue on down stream toward the plaintiff's ditch for the use of the same and posted notice and gave due notice thereof to the defendants. That the defendants disregarded such acts and in violation of such closing on different occasions readjusted the headworks of defendants' ditch so as to again divert water contrary to said closing and direction of the water commissioner into defendants' ditch, which acts were done at different times and a continuance of which were threatened and the defendants assert in this case the right so to do.

6. The claim of right so asserted by the defendants is based upon the allegation that the said Frenchman River is different in its formation and characteristics from ordinary rivers and streams in that it is

a section of sheet water and not what is commonly understood as a flowing stream and that a diversion of the water may be made at defendants' point of intake without affecting the flow of water at the plaintiffs' point of intake. Wherefore the defendants claim the right and authority of diversion at their own will and in disregard of the directional control of the water commissioner. The Court finds the evidence not sufficient to sustain this claim or contention on the part of defendants, and finds that if such claim is a verity as to the quality and characteristics of said stream that in order to obtain any benefits therefrom such as those for which defendants here contend it would need to be established by clear and convincing evidence and in equity would require a revision and readjudication of the priorities as between the appropriators on said stream.

7. That it was and is the duty of the defendant and of all appropriators to observe and conform to the regulational control of the state superintendent and the water commissioner of the water division in which said irrigation works are located in accordance with the rights and priorities as heretofore adjudicated and now of record unless and until the same are modified upon proper procedure and by competent authority.

8. That the interference and threatened interference on the part of defendants has been sufficiently established by the evidence and the plaintiff is entitled to an injunction permanently restraining the defendants, their servants and employees from opening the headgates of defendants' ditch or irrigation works and from diverting the waters of the Frenchman River into said ditch or elsewhere and from preventing said water from flowing down to the headgates of the plaintiff's ditch or irrigation works contrary to the control or direction of the Department of Public Works, Bureau of Irrigation, or the officers or employees thereof.

To all of which findings and conclusions severally the defendants except.

IT IS THEREFORE NOW CONSIDERED, ADJUDGED AND DECREED BY the Court that the defendants Inman Ditch Company, Charles Kimberly, John Nolan, Carl Statz and each of them, their agents, servants and employees, be and they are perpetually enjoined and restrained from, contrary to the direction control of the state superintendent or water commissioner of the district, opening the headgates of the Inman Ditch and from diverting the waters of the Frenchman River into said ditch or elsewhere and from preventing the said water from flowing down to the headgates of the plaintiff's ditch, and that the plaintiff recover its costs in this case taxed at the sum of \$.....

LEWIS H. BLACKLEDGE,
Presiding Judge.

On this same date, July 25, 1932, the cause came on further to be heard on motion for new trial on the part of defendants and the same was submitted and is overruled and denied, to which ruling the defendants excepted, gave notice of appeal and are allowed 40 days from this date to prepare and submit to the adverse party a bill of exceptions.

LEWIS H. BLACKLEDGE,
Presiding Judge.

IN THE DISTRICT COURT IN AND FOR CHEYENNE COUNTY
NEBRASKA.

Emil H. Blum, Mildred C. Vacik, and Patsey Booth, Plaintiffs,	}	JOURNAL ENTRY
vs.		
Earl C. La Grange, Defendant.		

Now on this 8th day of September, the same being one of the regular days of the September, 1932, term of the District Court in and for Cheyenne County, Nebraska, this cause came on for trial and all parties to the suit being present, and the plaintiffs being represented by their attorney, Patrick J. Heaton, and the defendant being represented by his attorney, F. E. Williams, and Radcliffe and Wehmiller.

The trial was had and the cause argued and submitted to the court, and by the court taken under advisement.

Now on this 13th day of September, 1932, the same being one of the regular days of the September, 1932, term of the District Court in and for Cheyenne County, Nebraska, the Court having taken the above under advisement, and being fully advised in the premises finds that the plaintiffs were the owners of the land as alleged in the petition; that the defendant is the owner of the Southeast Quarter (SE $\frac{1}{4}$) of Section Twenty-seven (27), Township Fourteen (14), Range Forty-eight (48), Cheyenne County, Nebraska, as alleged in the petition and that the Lodgepole Creek is a natural water course and flows across the said land of each of the plaintiffs and across the said land of the defendant.

The court further finds that the defendant built a dam across said Lodgepole Creek, a short distance west of the east line of said Southeast Quarter (SE $\frac{1}{4}$) of Section Twenty-seven (27), Township Fourteen (14), Range Forty-eight (48), Cheyenne County, Nebraska, and used the water of said creek impounded by such dam for domestic purposes only, and in doing so did not appreciably diminish the amount of water that flowed down said creek to the lands of the plaintiffs.

The court further finds that said creek has a tendency to flow less water above the surface of the ground as it crosses all lands involved herein than it so flows a few miles above and a few miles below said lands; that in the years 1931 and 1932 the smallness of waters that flowed down said creek to the lands of the plaintiffs was caused by dry weather and said tendency of said creek rather than from the said dam erected by the defendant; that defendant as owner of his said land has a usufructuary interest in the water flowing in the said creek and over his said land; that prior to the commencement of this action, or at any time since, the defendant has not made an unreasonable use of such interest or of said water.

The court further finds, except as above specially found, for the defendant and against the plaintiffs and each of them.

WHEREFORE IT IS ORDERED, ADJUDGED AND DECREED by the court that the injunction heretofore granted be dissolved and a permanent injunction denied, and that petition of the plaintiffs be dismissed at the cost of the plaintiff jointly and severally without prejudice to the plaintiffs' rights in the future as to the acts of the defendant, his heirs or assigns, relative to the water in the said creek.

BY THE COURT.

SLATTERY V. DOUT

27814

Filed June 19, 1931

A patent for land upon which a perpetual spring is the fountain-head of a stream, flowing naturally in a well-defined channel in the course of drainage through other lands, grants to patentee riparian rights in the waters of the stream, but not exclusive use of such waters without regard to the rights of lower riparian proprietors.

Heard before Goss, C. J., Rose, Dean, Eberly and Day, JJ.

ROSE, J.

This is a controversy over water rights. In Sioux County plaintiffs own lands upon which there are perpetual springs at the head of Jim Creek, a perennial stream flowing naturally in a well-defined channel through lands of plaintiffs and lands of lower riparian owners. The action is in the form of a suit in equity to quiet in plaintiffs title to the springs and the waters flowing therefrom and to enjoin defendants from interfering with the exclusive right of plaintiffs to the use thereof for domestic purposes, for watering stock and for irrigation. The asserted right of plaintiffs to the relief sought by them is based on pleas that they acquired their lands and the exclusive right to the spring waters under United States patents which relates back to homestead entries as early as 1885, 1886 and 1889,, and that this is a vested right protected

by the Constitution of the United States and the Constitution of the state of Nebraska.

The only lower riparian owner named as defendant is Clarence H. Dout. The other defendants are Roy L. Cochran, secretary of the Department of Public Works of the state of Nebraska; Robert H. Willis, chief of the Bureau of Irrigation under the Department of Public Works; John J. Rasmussen, superintendent of the local water division. It is charged in the petition that Rasmussen, incited by Dout, unlawfully opened dams and head-gates on the premises of plaintiffs and permitted legally stored waters to escape and run down Jim Creek.

In the answers of defendants they denied the commission of any wrongful act charged, and pleaded that Dout is a lower riparian proprietor on Jim Creek, a perpetual stream of public waters of the state; that, by adjudicated state appropriations granted under the irrigation laws of Nebraska, Dout and plaintiffs acquired water rights in Jim Creek; that Dout's appropriation was first in right and time and established a priority dating from May 15, 1889; that the patents procured by plaintiffs from the United States did not convey title the entire flow of the waters of the springs and of Jim Creek; that Dout is entitled to waters from the natural flow of the stream for domestic purposes and for watering stock and is also entitled to the waters appropriated to him for irrigation; that in 1930 plaintiffs impounded in dams and reservoirs the entire flow of the stream without regard to the rights of Dout, a lower riparian proprietor and prior appropriator; that plaintiffs, by acquiring and exercising the rights of appropriators, waived superior rights, if any, based on absolute ownership of the waters.

The reply of plaintiffs contained in general denial and a plea that the appropriations were void for want of power of the state to administer waters belonging exclusively to plaintiffs under their patents.

Upon a trial the district court found the issues of law and fact in favor of defendant and dismissed the suit. Plaintiffs appealed.

Upon the record presented for trial *de novo*, plaintiffs are not entitled to the relief sought by them unless their patents conveyed to them the title to, and the exclusive right to control and use, the waters which flow from springs on their lands and form Jim Creek, which is shown by the evidence to be a perennial stream flowing in a well-defined natural channel through the lands of Dout and other lower riparian proprietors in the regular drainage of the watershed in which the springs are located. A conveyance of land upon which a perpetual spring is the fountainhead of a stream, flowing naturally in a well-defined channel in the course of drainage through other lands, grants riparian rights in the waters of the stream, but not absolute ownership and exclusive use of such waters without regard to the rights of lower riparian proprietors. See

cases cited in 55 A. L. R. 1502. In this view of the law the dismissal of the suit was free from error.

AFFIRMED.

LIVANIS V. NORTHPORT IRRIGATION DISTRICT

27067

Filed October 10, 1930

1. "A plaintiff must recover, if at all, on the cause of action stated in his petition. It is not the province of a reply to introduce new causes of action." Wigton v. Smith, 46 Neb. 461.

2. Pleadings examined and found to sustain the trial court in entering judgment thereon.

Heard before Goss, C. J., Rose, Dean, Good, Thompson, Eberly and Day, JJ.

DAY, J.

This is an action to recover damages for injury to crops caused by seepage water, resulting from the operation of the defendant's irrigation works, including the application of water to plaintiff's land by lease, and other lands within the district. From a judgment on the pleadings in favor of defendant, plaintiff appeals.

The defendant attempted to prosecute a cross appeal to reverse the order of the district court in vacating the judgment first entered in this case. It was entered on March 17, 1926. It was vacated by the court after a hearing, July 2, 1928. The only assignment of error to this proceeding is, quoting from defendants brief, "the cross-appellant insists that this setting aside of this judgment is not sustained by the evidence." This court has heretofore on November 18, 1929, entered an order quashing and striking from the files the bill of exceptions relative to this phase of the case. The evidence upon which the trial court entered the order is therefore not before the court. In that state of the record, it will be presumed that there was sufficient evidence to sustain the finding of the trial court. Subsequent to the vacation of the first judgment, the trial court, upon a reconsideration of the case, sustained the motion for a judgment upon the pleadings, from which judgment the plaintiff now appeals.

This action was brought by plaintiff to recover damages to his beet crop, which he alleges was destroyed by seepage in 1924. The plaintiff was a tenant upon land within the irrigation district upon which this crop was grown. He seeks to recover his loss upon two theories exemplified in two causes of action. In his first cause of action, he alleges that the defendant, an irrigation district, "operated an irrigation canal by means of which it diverted * * * large quantities of water from the North Platte river," and that "large quantities of water escaped

and percolated from said canal through the sides and bottom thereof," and seeped the land on which his crop was growing, thereby causing his damage.

The second cause of action, in addition to the facts stated in the first cause of action, alleges that the damage was the result of certain acts of negligence on the part of the defendant in the construction and operation of the irrigation works.

The defendant filed an answer to the petition of the plaintiff, in which, *inter alia*, it alleges that the irrigation system was constructed, operated and maintained by the United States of America under the act of congress of June 17, 1902, known as the "Reclamation Law" and acts amendatory thereof and supplemental thereto; that said system is known as the Northport division of the North Platte project, and that said land is within the Northport division and was irrigated from the irrigation system of said Northport division of the North Platte project; that said irrigation works were constructed, operated and maintained by the employees of the department of the interior of the United States government, and that this defendant has no supervision over the construction of said irrigation system or over the operation and maintenance of the same; that said construction, operation and maintenance are paid for by money appropriated by the congress of the United States from the reclamation fund of the United States for that purpose, and that the only function of the district is to levy and collect taxes from the individual water users to reimburse said reclamation fund.

The plaintiff then filed a reply in which he admits that the United States constructed the irrigation works, and sets out the contract of the Northport Irrigation District with the United States, and alleges that the irrigation works were constructed by the United States of America under and by virtue of said contract and have since the construction thereof been operated under said contract.

A motion for judgment on the pleadings was based upon two grounds; (1) That the petition did not state a cause of action; (2) that the petition and reply admit facts constituting a bar to recovery.

The ruling of the court does not state the grounds upon which the motion was sustained. Numerous reasons were argued *pro* and *con* by counsel. However, it appears that the plaintiff alleges a cause of action based upon the assumption that the defendant herein constructed and operated the irrigation works; while in his reply the plaintiff admits that said canal was constructed and operated by the United States under the reclamation service. The reply, after such admission, seeks to establish a contractual liability on the part of the defendant by virtue of a contract entered into between it and the United States. The pleadings establish the fact that the damage alleged occurred during the time the defendant was not operating or maintaining said works, but

was only acting as fiscal agent of the United States with reference to the irrigation project. The petition alleges that the district is liable for damage from the operation of the canal. Then, in the reply, the contract between the district and United States is pleaded. It is urged that the United States was the agent of or contractor for the district. It is urged that the district by virtue of this contract secured the United States to build the works and is therefore liable. These contentions introduce new causes of action. "A plaintiff must recover, if at all, on the cause of action stated in his petition. It is not the province of a reply to introduce new causes of action." *Wigton v. Smith*, 46 Neb. 461. See *Hastings School District v. Caldwell, Hamilton & Co.*, 16 Neb. 68; *Savage v. Aiken*, 21 Neb. 605; *Hallner v. Union Transfer Co.*, 79 Neb. 215.

In the instant case, the petition, contradicted by the admission in the reply and not being aided by the new allegations therein, required the judgment of the trial court. The judgment is accordingly

AFFIRMED.

Rose and Good, JJ., dissent.

LIVANIS V. NORTHPORT IRRIGATION DISTRICT

27607

Filed October 29, 1931.

Contract between the United States and the irrigation district under the provisions of 32 U. S. St. at Large, ch. 1093, p. 388, known as the "Reclamation Act," and sections 46-197, 46-198, Comp. St. 1929, construed, and held, not to establish either the relation of a partnership; of principal and agent; of master and servant, or the like between the parties such as will impute the negligence of the United States or its employees to the irrigation district.

Heard before Goss, C. J., Rose, Good, Eberly, Day and Paine, JJ.
DAY, J.

This case is now before the court for the second time, a motion for rehearing having been allowed. For a statement of the case, reference is made to the former opinion, 120 Neb. 314, 232 N. W. 583.

The plaintiff alleged two causes of action. The first was brought under section 21, art. I of the Constitution, which provides: "The property of no person shall be taken or damaged for public use without just compensation therefor." This raised the identical question which was presented and decided in *Spurrier v. Mitchell Irrigation District*, 119 Neb. 401, 229 N. W. 273. The plaintiff cannot recover on the first cause of action and the trial court was right in entering a judgment on the pleadings adverse to the plaintiff.

The second cause of action is based upon the negligence of the defendant in the construction, maintenance and operation of the irrigation

works. As will be noted by reference to the former opinion, we held that the reply admitted the allegations of the answer and attempted to plead a new cause of action, which amounted to a departure; that upon the allegations of the petition and the admissions of the answer the plaintiff was entitled to a judgment on the pleadings. It was the opinion of this court that, when the plaintiff alleged that the defendant operated irrigation works and sought to recover for negligence upon that theory, he could not recover upon a cause of action based upon a contract, even though this contract provided that they must ultimately pay the damage. It seemed to change the basis of recovery from an action sounding in tort to one in contract, which was in the nature of an indemnity agreement. It seems obvious that such a pleading is a departure from the original cause of action. The test of departure in a reply is whether evidence of facts alleged in it could be received under allegations of plaintiff's original pleading, or whether such evidence would contradict the facts originally alleged. Applying this test to the case at bar, the writer is still of the opinion that the reply in this case, unexplained, amounts to a departure. It has been held that where the petition for damages for death caused by the escape of electricity charges the defendant as the owner of the wires, and the reply charges it as having sold and delivered electricity to a distributor on such wires, it amounts to a departure. *Pressley v. Bloomington & Normal Ry. Co.*, 271 Ill. 622.

However, the plaintiff in its motion for a rehearing filed in this court states that the action is not based upon the contract, but that he pleaded the contract to show that it did not bar the right of the plaintiff to recover after the defendant had alleged the contract as a defense. In other words, he contends the effect of the contract upon the rights of the parties was squarely before the court so that it required construction.

The issue resolves itself into one proposition: If the setting up of the contract with the United States in the amended reply does not amount to a departure, does a proper construction of the contract and pleadings sustain the judgment of the trial court? This was the limitation by the court upon the argument upon the rehearing. Stated in another way: Is the relationship of the district and the United States under their contract, considered in connection with the federal and state statutes, such that the negligence of the United States in the construction, operation and maintenance of the irrigation works is imputable to the irrigation district?

From the four corners of the contract it appears that the United States will construct, maintain and operate the irrigation works for the benefit of the district. The district agrees to pay the United States the entire cost of such works, using its taxing power to collect the sums of money due. The cost of operation and maintenance shall be paid

by the district. When, at last, the payments are made, which are due the United States, the care, operation and maintenance of the irrigation works will be transferred, not unrestricted, to the district, but "under such rules and regulations as the secretary of the interior may prescribe." The construction work to be done is such as in the opinion of the secretary may be necessary. This is not the contract of a principal with an agent, with the Northport Irrigation District in the role of principal and the United States as agent. The contention of the plaintiff that the district is operating an irrigation system through the instrumentality of the United States is untenable. The contract in positive terms negatives such a construction. The only function of the district under the contract is to collect and pay for the service of carrying water to the lands within the district and included in that expense is the cost of the construction, maintenance and operation of the works. All of the expense is to be, not such as the district may direct, but such as the United States may deem necessary. The doctrine of imputed negligence is not in vogue in this state except with respect to the relation of partnership, principal and agent, or master and servant. *Anderson v. Omaha & C. B. Street R. Co.*, 116 Neb. 489; *Hajsek v. Chicago, B. & Q. R. R. Co.*, 68 Neb. 539. It is obvious from the pleadings, including the contract set out in the reply, that the construction, operation and maintenance of the irrigation works was in the exclusive control of the United States, and that the negligent acts complained of were solely the acts of the United States. The relationship is neither that of principal and agent, nor of master and servant, and the negligence of the United States cannot be imputed to the district. Aside from these two relationships, there is no theory of the law whereby the negligence of one may be imputed to another, making that other responsible for the consequent damage.

However, the contract must be construed with reference to the federal and state statutes, which are as much a part thereof as though incorporated into the body of it. The powers, duties and liabilities of the district and the United States are only such as each is authorized by statute to assume. The federal statute applicable to this case is 43 U. S. C. A. secs. 523-524. These statutes authorize the secretary of the interior to dispose of surplus water impounded for the purpose of irrigating public lands to, among others, irrigation districts. The method of carrying out the provisions of this act is provided in that canals and ditches may be constructed. It is also provided that, when the payments required by the act are made, then the management and operation of such irrigation works shall pass to the owners of the land, to be maintained at their expense under such rules and regulations as may be acceptable to the secretary of the interior. It is further provided that the title to and the management and operation of the reservoirs and the works necessary for their protection and operation shall remain in the government until otherwise provided by congress. Surely

there is nothing in the federal statutes which indicates that, in the construction, maintenance and operation of irrigation works, the United States was to become the contractor for, or the agent of, the irrigation district formed to take advantage of its facilities for impounding and carrying water to the land. In effect, the federal statutes negative such a relationship, by the retention of title to the works; by absolute control of the construction and maintenance; and finally by providing that when the works are eventually turned over to the district it shall be under such rules and regulations as are acceptable to the secretary of the interior.

But the federal statutes, pertinent to this case, provide that the United States in its irrigation projects shall proceed in accordance with the state laws. From this premise it is argued that congress could not relieve or release irrigation districts from any of the obligations and liabilities imposed by the statutes of the states. We will state the substance of the state statutes, because to quote them would unreasonably extend this opinion. The contract between the United States and the district was executed February 24, 1919. Section 3466, Rev. St. 1913, was amended by ch. 205, Laws 1915, now section 46-110, Comp. St. 1929, for the purpose of authorizing irrigation districts to contract with the United States for the construction, maintenance and operation of works to carry to and distribute water on the lands of the district. Sections 46-201 to 46-205, Comp. St. 1929 (Laws 1915, ch. 205) empower irrigation districts to contract with the United States for a supply of water for the irrigation of lands in the district. Later, the legislature passed another act authorizing irrigation districts to cooperate with the United States under Act of June 17, 1902, for the purchase, extension, operation or maintenance of irrigation works. Comp. St. 1929, secs. 46-197, 46-198, Laws 1917, ch. 191. This statute is evidently the authority under which the contract in question was executed. Does this create a new type of irrigation district? Possibly not, considered as a corporate entity. But it does enable the district to contract for delivery at the land for water, without liability for negligence in the construction, operation and maintenance of the ditches of another, who is a common carrier so far as the owners of land in the district are concerned.

Another statutory obligation which it is urged devolves upon the district is to drain all subirrigated lands in the district, as provided by section 46-132, Comp. St. 1929. This is a contractual obligation imposed by statute, independent of negligence, and arises from the mutual agreement of the organizers of the district to drain each other's land. This is pointed out in *State v. Farmers Irrigation District*, 116 Neb. 373. The remedy afforded by this statute is exclusive to the owners of land within the district. *Spurrier v. Mitchell Irrigation District*, 119 Neb. 401. The plaintiff in this case, as lessee of the land involved, may avail himself of this remedy.

The contract in plain unequivocal terms provides that the United States shall have full control of the construction and operation of the works. The plaintiff is not aggrieved in this respect. The records in the office of the state engineer, of which we take judicial notice, show that the owner of the land, under and through whom the plaintiff, a tenant, acquires his rights to possession and enjoyment, signed the petition for the organization of the district for the purpose of entering into this very contract. This assumes that C. F. Haggerty and Catherine Haggerty is one and the same person. Even if this is not true, nevertheless the record is that the district was organized upon the petition of a majority of the owners of the land. The statutes of the state may not create a new type of district, but they do place upon districts a different function and duty, and they do specifically authorize such a contract as the one in question. It appears from the pleadings that, as the United States and not the district had been and was at the time in absolute control of the construction, maintenance and operation of the irrigation works, the negligence, if any, was its negligence, for which the district was not liable, and that, therefore, this action was brought against the wrong party. This is not altered by the provision in the contract which contemplates that, when payment is made by the district to the United States, the works will then be turned over to the district. Until that time comes, and the district is negligent in some manner in the construction, maintenance and operation of the works, such an action as this cannot be maintained.

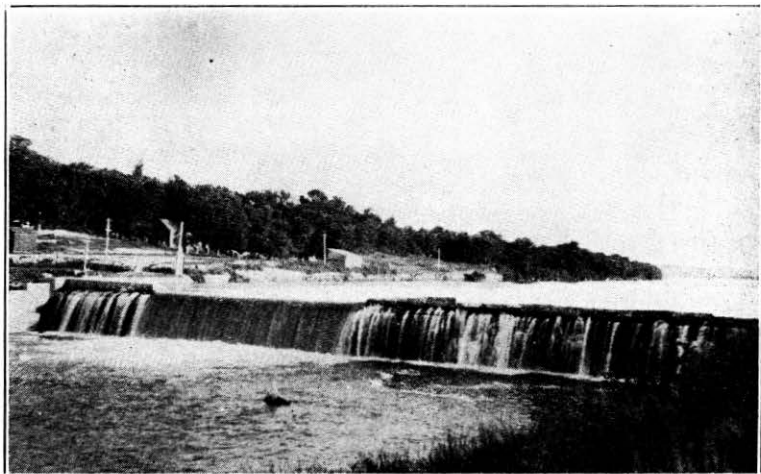
The relationship between the United States and the district must be determined from the contract and the statutes, both state and federal. The only obligation thus assumed by the district is to collect and pay—collect from the landowners and pay the United States. The contract requires the United States to (1) store water in the Pathfinder reservoir; (2) grant to lands in the district a perpetual water right; (3) to use its carriage right in Farmers Irrigation District canal for benefit of district; (4) to construct the necessary irrigation works to irrigate the lands in the district; (5) to construct drainage works, and (6) to operate and maintain the system until the district complies with certain conditions; while the only obligation of the district is to collect and repay the money to the United States. This relationship has been denominated that of fiscal agent. *Malone v. El Paso County Water Improvement District (Texas)* 20 S. W. (2d) 815, see, also, *Twin Falls Canal Co. v. American Falls Reservoir District No. 2*, 49 Fed. (2d) 632.

It is vaguely hinted by appellant that the words used in the state statute, "co-operate with," may indicate a partnership. Since we have stated in substance the provisions of the contract, it seems unnecessary to state that no such relationship exists. The co-operation indicated here is best illustrated by that ancient classic example of the co-operation between the lion and the lamb.

In conclusion, whether we consider the pleading of the contract in the reply, together with the admissions to allegations in the answer, as a departure, or consider it as a denial of the allegations of the answer, and construe the contract to determine if the negligence of the United States in the construction, operation and maintenance of the irrigation work is imputable to the district, we conclude that the judgment of the trial court should be affirmed.

AFFIRMED.

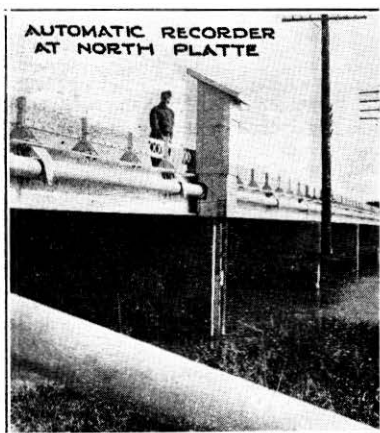
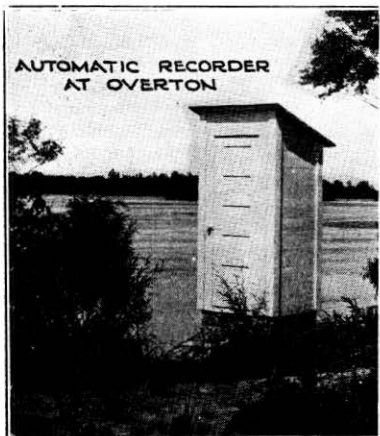
Rose and Good, JJ., dissent.



Valentine Power Project, Niobrara River

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**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 North, Range 84 West, 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.

DISTANCE FROM RESERVOIR:—About one-quarter mile.

DRAINAGE AREA:—10,700 square miles.

ELEVATION OF OVERFLOW WEIR:—5852.00 feet mean sea level.

RECORDS AVAILABLE:—May 1, 1909, to September 30, 1932.

GAGE:—Chain at north bank near foot bridge.

CHANNEL:—Very narrow and through solid granite.

OBSERVER:—Observations made and discharges furnished by the United States Bureau of Reclamation.

Guernsey Reservoir

LOCATION:—The Guernsey Dam is located on the North Platte River near the north line of Section 27, Township 27 North, Range 66 West. 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.

A gaging station is maintained by the United States Bureau of Reclamation a short distance below the Guernsey Dam. An automatic recorder is used in connection with this station.

North Platte River at Whalen, Wyoming

LOCATION:—Section 11, Township 26 North, Range 65 West.

DISTANCE FROM PATHFINDER:—200 miles.

DRAINAGE AREA:—16,300 square miles.

ELEVATION:—Elevation of concrete weir is 4278.50 feet above mean sea level.

RECORDS AVAILABLE:—May 1, 1909, to September 30, 1932.

GAGE:—The discharges over the weir are determined by use of a vertical staff and computed by weir formula. In addition to this there

North Platte River at Whalen—Continued

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.

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 North, Range 61 West; twenty-five miles below the mouth of the Laramie River.

DISTANCE FROM PATHFINEDR:—230 miles.

DRAINAGE AREA:—

ELEVATION:—Approximately 4180 feet above mean sea level.

BENCH MARKS:—No. 1, is a cross chiseled in concrete, twelve feet from south end on down-stream handrail, elevation 18.12. Established February 27, 1931. No. 2, heads of two spikes driven horizontally in blaze half a foot above base of 12 inch cottonwood tree, 30 feet south and 80 feet down-stream from south end of bridge. Elevation 7.70 feet. Established October 16, 1931.

RECORDS AVAILABLE:—April 1, 1926, to September 30, 1932.

GAGE:—On October 6, 1931, a new gage graduated from 0 to 3.3 feet, and two one foot sections attached to a 2"x6" plank bolted to down-stream end of the second pier from south end of bridge, was set to read same as old gage on piling number nine. It was later found by levels to be 0.10 lower than the old gage.

RECORDER:—Stevens Type A continuous recorder, installed on south bank by the United States Geological Survey cooperating with the State of Nebraska. Records are removed by a United States Geological Survey hydrographer.

HIGHEST GAGE READING FOR SEASON:—June 10 and 11, 1931, 1.61; July 4, 1932, 1.80.

LOWEST GAGE READING FOR SEASON:—May 13, 1931, 0.26; May 3, 1932, 0.21.

North Platte River at Henry, Nebraska

(Cable Station)

LOCATION:—In NE $\frac{1}{4}$ of Section 10, Township 23 North, Range 60 West, between the Mitchell Canal and the Gering Canal headgates, about one fourth mile west of the Wyoming-Nebraska State Line.

DISTANCE FROM PATHFINDER:—240 miles.

DRAINAGE AREA:—22,100 square miles.

ELEVATION:—

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.

RECORDS AVAILABLE:—From May 1, 1929, to September 30, 1932.

GAGE:—Boxed cantilever chain gage on south 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, November 6, 1929. On April 16, 1932, the recorder was moved to the north bank near the north cable tower.

RECORDER:—Stevens Type A continuous recorder, installed in a housing on the north bank of the river, by the United States Geological Survey cooperating with the State of Nebraska. Records removed by United States Geological Survey hydrographer.

HIGHEST GAGE READING FOR SEASON:—June 5, 1931, 2.34; July 5, 1932, 2.69.

LOWEST GAGE READING FOR SEASON:—March 27, 1931, 0.86; April 16, 1932, 0.92.

North Platte River at Mitchell, Nebraska

LOCATION:—At highway bridge near southwest corner of Section 27, Township 23 North, Range 56 West. Three-quarters of a mile south of Mitchell, and 14 miles down-stream from the Wyoming-Nebraska State Line.

DISTANCE FROM PATHFINDER:—253 miles.

DRAINAGE AREA:—24,400 square miles.

ELEVATION:—Approximately 3945 feet above mean sea level.

BENCH MARKS:—No 1 is a cross chiseled in concrete near corner of ledge at approximately floor level on down-stream side and at end of south down-stream wingwall. Elevation 11.39 feet. No. 2 is the heads of 2 spikes driven horizontally in 18" cottonwood, near base, 200 feet

North Platte River at Mitchell—Continued

down-stream from bridge, and 10 feet from south bank. Elevation 6.15 feet

RECORDS AVAILABLE:—From June 2, 1901, to July 10, 1913, and from 1916 to September 30, 1932.

GAGE:—Vertical staff gage consisting of six one foot enamel sections attached to scantling fastened on down-stream side of first pier from south end of bridge, by two one-half inch lag screws, 24 inches long in expansion shields.

RECORDER:—Stevens Type A continuous recorder, installed in a housing constructed over the stilling well located on the south bank of the river, about 50 feet east of the south end of the concrete bridge. Records removed by United States Geological Survey hydrographer.

HIGHEST GAGE READING FOR SEASON:—October 6-7, 1930, 2.22; January 18, 1932, 1.92.

LOWEST GAGE READING FOR SEASON:—September 26, 1931, 0.56; October 3-4, 1931, 0.59.

North Platte River at Minatare, Nebraska

LOCATION:—West line of Section 18, Township 21 North, Range 52 West, one mile west and one and one-half miles south of Minatare. Concrete bridge consisting of twelve fifty-foot arches.

DISTANCE FROM PATHFINDER:—270 miles.

DRAINAGE AREA:—

ELEVATION:—

BENCH MARKS:—Zero point of gage is 13.5 feet below top of hand rail above gage. Cross chiseled in concrete near corner of ledge about one foot above floor level, and on down-stream side at end of south wingwall. Elevation 11.68. No. 2 is head of spike driven horizontally in blaze near base of six inch cottonwood tree, 25 feet down-stream. Elevation 4.25 feet.

RECORDS AVAILABLE:—From May, 1916, to September 30, 1932, with the exception of the year 1920.

GAGE:—Vertical staff fastened to the second concrete pier from south end of bridge on down-stream side.

RECORDER:—Stevens Type A continuous recorder in standard wooden shelter, on the south bank east of bridge. Installed by the United States Geological Survey cooperating with the State of Nebraska. Records removed by United States Geological Survey hydrographer.

North Platte River at Minatare—Continued

HIGHEST GAGE READING FOR SEASON:—October 7, 1930, 2.12; August 3, 1932, 1.53.

LOWEST GAGE READING FOR SEASON:—May 27, 1931, 0.60; May 20, 1932, 0.76.

North Platte River at Bridgeport, Nebraska

LOCATION:—In Section 28, Township 20 North, Range 50 West, one-half mile north of Bridgeport, on concrete highway bridge, consisting of twenty-three spans of thirty foot clear water way.

DISTANCE FROM PATHFINDER:—293 miles.

DRAINAGE AREA:—24,800 square miles.

ELEVATION:—Approximately 3675 feet above mean sea level.

BENCH MARKS:—No. 1 is head of two spikes driven horizontally in cottonwood tree in blaze near base, 20 feet down-stream from gage. Established October 17, 1931. Elevation 9.02 feet. No. 2 is cross on the top of the southeast concrete abutment at the end of the hand rail. Elevation 15.62 above zero of gage.

RECORDS AVAILABLE:—From May, 1902, to 1906, and 1915 to September 30, 1932.

GAGE:—Consists of six one foot sections of enamel scale bolted to concrete on down stream side of south abutment.

OBSERVER:—Office Engineer during freezing weather.

RECORDER:—Stevens Type A 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.

HIGHEST GAGE READING FOR SEASON:—January 3, 1931, 7.42; March 7, 1932, 6.70.

LOWEST GAGE READING FOR SEASON:—May 27, 1931, 5.12; June 28, 1932, 5.38.

North Platte River at Lisco, Nebraska

LOCATION:—Highway bridge in Section 33, Township 18 North, Range 46 West, half a mile south of Lisco.

DISTANCE FROM PATHFINDER:—321 miles.

DRAINAGE AREA:—

ELEVATION:—

BENCH MARKS:—No. 1 is a cross chiseled in concrete near corner

North Platte River at Lisco—Continued

of bridge seat at down-stream side of south abutment. Elevation 8.68 feet. No. 2 is top of pier directly above staff gage. Elevation 8.84 feet above zero of gage.

RECORDS AVAILABLE:—From April 10, 1916, to October 31, 1917, and September 9, 1931, to September 30, 1932.

GAGE:—A vertical staff attached to south side of corrugated iron stilling well, which is located on the first pier from south end of bridge on down-stream side.

RECORDER:—Stevens Type A-30 continuous recorder, installed May 4, 1932, in corrugated iron shelter attached to down stream side of pier from south end of bridge. Installed by the United States Geological Survey cooperating with the State of Nebraska. Records are removed by a United States Geological Survey hydrographer.

HIGHEST GAGE READING FOR SEASON:—February 18, 1932, 3.77.

LOWEST GAGE READING FOR SEASON:—June 9, 1932, 1.16.

North Platte River at Oshkosh, Nebraska

LOCATION:—Steel truss bridge consisting of seven ninety-eight foot spans, on the west line of Section 2. Township 16 North, Range 44 West, about one mile south of Oshkosh.

DISTANCE FROM PATHFINDER:—348 miles.

DRAINAGE AREA:—

ELEVATION:—

BENCH MARKS:—The zero point of gage is 9.05 feet below top of concrete pier directly above the gage.

RECORDS AVAILABLE:—From April 7, 1916, to October 30, 1917, and from March 1, 1928, to September 30, 1932.

GAGE:—Enamel vertical staff graduated from zero to 6.7 feet, attached to a 2"x6" timber, fastened to down stream side of first pier from the north end of bridge.

OBSERVER:—Donald Meier, Oshkosh, Nebraska.

HIGHEST GAGE READING FOR SEASON: -- November 23, 1930, 3.20; April 23, 1932, 2.15.

LOWEST GAGE READING FOR SEASON:—July 21, 1931, 1.12; June 9, 1932, 1.28.

North Platte River at North Platte, Nebraska

LOCATION:—Concrete highway bridge consisting of 14 spans, one-half mile north of the City of North Platte, in Section 28, Township 14 North, Range 30 West, about four and one-half miles above junction with the South Platte River.

DISTANCE FROM PATHFINDER:—422 miles.

DRAINAGE AREA:—28,500 square miles.

ELEVATION:—Approximately 2800 feet above mean sea level.

BENCH MARKS:—Top of nose of pier on west side of bridge 360 feet from south end of bridge. Elevation 11.47 feet.

RECORDS AVAILABLE:—February 25, 1895, to September 30, 1932, excepting the year 1910.

GAGE:—Four and one-half foot vertical staff gage fastened to the first pier from the south end of the bridge on the down-stream side.

OBSERVER:—A. W. Shilling, North Platte, Nebraska.

RECORDER:—Stevens Type A continuous recorder, located on down-stream end of first pier from south end. Records removed by State hydrographer.

HIGHEST GAGE READING FOR SEASON:—April 3, 1931, 4.44; February 25, 1932, 4.78.

LOWEST GAGE READING FOR SEASON:—July 1, 1931, 2.17; May 25, 1932, 2.51.

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 floor periods. During floods the four channels become one channel.

DRAINAGE AREA:—20,600 square miles.

ELEVATION:—

BENCH MARKS:—

RECORDS AVAILABLE:—April, 1902, to November 14, 1906; May 12, 1908, to September 30, 1914; January 1, 1923, to September 30, 1932.

GAGES:—All channels are provided with chain gages on the down-stream side of the bridge. Channels one and two are provided with

South Platte River at Julesburg—Continued

staff gages. Channel number one has a vertical staff, and channel number two a sloping staff.

OBSERVER:—Archie Joe Luxa, Julesburg, Colorado.

RECORDERS:—Nebraska maintains a Steven Type A continuous automatic recorder in channel number one, and Colorado maintains a Bristol automatic recorder in channel number two. Records removed by State hydrographer.

South Platte River at North Platte, Nebraska

LOCATION:—Concrete bridge consisting of 10 spans, 50 feet each, in Section 9, Township 13 North, Range 30 West, about four miles above its junction with the North Platte River.

DRAINAGE AREA:—

ELEVATION:—Approximately 2800 feet above mean sea level.

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.

RECORDS AVAILABLE:—From June 1, 1914, to September 30, 1932.

GAGE:—Enamel scale graduated from zero to 6.7 feet, fastened to down-stream end of first pier from south end of bridge.

HIGHEST GAGE READING FOR SEASON:—January 27, 1931, 3.02.

LOWEST GAGE READING FOR SEASON:—September 4, 1931, 0.06.

Platte River at Overton, Nebraska

LOCATION:—Concrete highway bridge, consisting of 25 spans, 35.5 feet center to center, four miles south of Overton, on north and south center line through Section 12, Township 8 North, Range 20 West.

DISTANCE FROM PATHFINDER:—490 miles.

DRAINAGE AREA:—

ELEVATION:—Approximately 2320 feet above mean sea level.

BENCH MARKS:—No. 1 is top of concrete wheel guard on up-stream side at north end of bridge, elevation 12.00 feet.

RECORDS AVAILABLE.—June 1918, to September 30, 1932, with the exception of the year 1924.

GAGE:—Gage rod is fastened to a 4"x6"x4' staff, wired to first pier of bridge from north end on down-stream side. The elevation of zero is 88.00 feet. The 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

Platte River at Overton—Continued

100.00 feet. Second enamel gage graduated from zero to 6.70 is attached to down-stream end of first pier from south end of highway bridge.

OBSERVER:—E. D. Long, Overton, Nebraska.

RECORDER:—Stevens Type A continuous recorder on south bank of stream, 40 feet down-stream from bridge. The record is referred to gage rod attached to first pier from north end of bridge. Records removed by State hydrographer.

HIGHEST GAGE READING FOR SEASON:—April 4, 1931, 4.80; February 24, 1932, 5.30.

LOWEST GAGE READING FOR SEASON:—September 16, 1931, 0.70; October 5, 1931, 0.70.

Platte River at Duncan, Nebraska

LOCATION:—About one and a half miles due south of Duncan on highway, in Section 12, Township 16 North, Range 2 West, on concrete bridge consisting of 18 spans, fifty feet between piers.

DISTANCE FROM PATHFINDER:—632 miles.

DRAINAGE AREA:—61,600 square miles.

ELEVATION:—

BENCH MARKS:—No. 1 is on top of old engine valve set flush with top of first pier from left end near up-stream point. Elevation 12.80 feet above zero of rod.

RECORDS AVAILABLE:—From October, 1928, to September 30, 1932.

GAGE:—One 10.10 foot porcelain gage rod, fastened to a 4"x6" timber bolted to first concrete pier south of north abutment on down-stream side.

HIGHEST GAGE READING FOR SEASON:—January 30, 1931, 4.42; February 27, 1932, 5.35.

LOWEST GAGE READING FOR SEASON:—September 11, 1931, 0.62; July 21-22, 1932, 0.40.

REMARKS:—This station is maintained in cooperation with the United States Geological Survey.

Platte River at Ashland, Nebraska

LOCATION:—In Section 29, Township 13 North, Range 10 East, at highway bridge three miles northeast of Ashland. Bridge consists of six steel spans.

DISTANCE FROM PATHFINDER:—719 miles.

Platte River at Ashland—Continued

DRAINAGE AREA:—83,800 square miles.

ELEVATION:—Approximately 1100 feet above mean sea level.

BENCH MARKS:—No. 1 is two spikes driven into a 24 inch cotton-wood tree located just back of levee on right bank. The tree is the one nearest to bridge on down-stream side. Sea level elevation of bench Mark No. 1 is 1028.37 feet. Zero of gage rod is 1020.10 feet.

RECORDS AVAILABLE:—Station established by the United States Geological Survey August 20, 1928 Records available from August, 1928, to September 30, 1932.

GAGE:—A box chain gage bolted to a 4"x6" timber ten feet in length. Fastened to down-stream edge of bridge floor in the second span from the right bank of river. An enamel scale graduated from zero to 8.5 feet is fastened to the top of the 4"x6" timber.

HIGHEST GAGE READING FOR SEASON:—October 14, 1930, 4.60; February 28, 1932, 6.70.

LOWEST GAGE READING FOR SEASON:—September 12, 1931, 1.19; July 19, 1932, 0.73.

REMARKS:—New highway bridge constructed in 1931 east of the C. B. & Q. Railroad bridge in Sections 29 and 32, Township 13 North, Range 10 East. The old bridge is in the process of removal, which will necessitate the selection of a new gaging station the coming year. (1933).

**ACTUAL DISCHARGE MEASUREMENTS AT REGULAR GAGING
STATIONS ON THE NORTH PLATTE, SOUTH
PLATTE, AND PLATTE RIVERS**

Season Ending September 30, 1931

**DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
TORRINGTON, WYOMING**

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-22-30	C. E. Franklin	535	2.11	.78	1093.0
11- 7-30	do	504	2.04	.60	1019.7
11-24-30	do	438	1.64	.52	718.0
12- 6-30	do	484	1.57	.....	766.9
1-14-31	A. E. Johnston	445	1.68	.50	748.0
2-19-31	do	339	1.64	.40	655.0
2-27-31	A. W. Hall	345	1.81	.55	626.0
3-13-31	do	359	1.68	.47	602.0
4- 2-31	do	363	1.87	.60	680.0
4- 9-31	do	397	1.86	.68	742.0
4-30-31	do	187	2.20	.31	411.0
5-13-31	do	147	1.83	.25	269.0
5-26-31	do	513	2.56	.92	1312.0
6- 4-31	do	767	2.85	1.48	2183.0
6-18-31	do	736	2.35	1.20	1729.0
6-30-31	do	705	2.69	1.23	1893.0
7-10-31	do	648	2.58	1.18	1671.0
7-24-31	do	563	2.68	1.08	1502.0
8-15-31	F. F. LeFever	676	2.00	1.02	1380.0
8-21-31	A. W. Hall	488	2.40	.95	1219.0
8-27-31	A. E. Johnston	579	1.95	.85	1132.0
9- 2-31	F. F. LeFever	398	2.28	.75	909.0
9- 9-31	A. W. Hall	367	2.06	.63	755.0
9-16-31	F. F. LeFever	244	2.76	.59	675.0
9-23-31	do	203	2.70	.46	547.0

**DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
INTERSTATE STATION—HENRY, NEBRASKA
(Nebraska Measurements)**

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 1-30	C. E. Franklin	484	1.94	1.70	961.5
10-22-30	do	538	2.21	1.84	1191.8
11- 7-30	do	524	1.89	1.62	968.4
11-24-30	do	370	1.77	1.59	654.0
3-13-31	A. W. Hall	296	1.92	1.11	570.0
4- 9-31	do	349	1.77	1.46	616.0
4-30-31	do	251	1.74	1.20	438.0
5-13-31	do	215	1.68	1.18	372.0
8-26-31	A. E. Johnston	462	1.74	1.60	802.0
9- 9-31	A. W. Hall	388	1.90	1.59	736.0
9-23-31	F. F. LeFever	223	2.08	1.32	464.0
9-30-31	A. W. Hall	365	1.79	1.43	546.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
INTERSTATE STATION—WYOMING-NEBRASKA LINE
(Wyoming and U. S. G. S. Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
11- 6-30	P. V. Hodges	579	1.75	1.66	1010.0
1- 6-31	Jenkins and Hanks	336	1.70	1.31	572.0
1-23-31	L. F. Hanks	365	1.56	1.36	571.0
2- 7-31	R. E. Cabell	336	1.92	1.45	647.0
2-18-31	do	357	1.78	1.42	627.0
3-14-31	U. S. G. S.	317	1.76	1.44	560.0
3-24-31	do	339	1.68	1.36	569.0
4-13-31	F. M. Roush	302	1.97	1.45	597.0
4-23-31	H. P. Eisenhuth	290	1.83	1.26	529.0
5- 7-31	D. S. Jenkins	226	1.85	1.22	419.0
5-14-31	Floyd M. Roush	200	1.78	1.25	356.0
5-25-31	do	565	1.57	1.71	886.0
5-21-31	Hodges and Bailey	450	1.92	1.70	863.0
6- 3-31	Floyd M. Roush	848	2.33	2.33	1980.0
6- 9-31	J. H. Bailey	964	2.14	2.24	2080.0
6-17-31	F. M. Roush	.....	.....	2.24	1675.0
6-18-31	do	734	2.16	2.16	1585.0
6-20-31	H. P. Eisenhuth	775	2.11	2.20	1640.0
6-25-31	Bailey and Roush	778	2.16	2.21	1680.0
7- 1-31	F. M. Roush	.....	.....	2.09	1550.0
7-11-31	do	.....	.....	2.02	1520.0
7-22-31	J. H. Bailey	583	2.40	1.95	1300.0
7-26-31	F. M. Roush	.....	.....	1.98	1180.0
7-29-31	do	.....	.....	1.90	1105.0
8- 3-31	do	636	2.00	1.99	1270.0
8- 3-31	R. E. Cabell	528	2.46	1.90	1300.0
8- 8-31	F. M. Roush	.....	.....	2.28	1845.0
8-17-31	do	.....	.....	1.82	1240.0
8-22-31	do	.....	.....	1.76	1040.0
8-29-31	do	.....	.....	1.57	825.0
9- 5-31	do	.....	.....	1.62	780.0
9- 6-31	D. S. Jenkins	440	1.89	1.69	835.0
9-10-31	F. M. Roush	.....	.....	1.53	675.0
9-15-31	do	.....	.....	1.37	540.0
9-20-31	J. H. Bailey	281	1.80	1.37	506.0
9-26-31	F. M. Roush	272	2.14	1.42	582.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER—
MAIN CHANNEL

South of Tri-State Waste					
Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
5-13-31	A. W. Hall	130	1.53	1.58	199.0
5-23-31	do	132	1.37	1.41	180.0
7- 9-31	do	111	1.42	1.28	157.0
7-13-31	do	81	1.49	1.10	121.0
7-17-31	do	87	1.28	1.02	109.0
7-24-31	do	84	1.35	1.12	114.0
8- 6-31	Hall and LeFever	156	1.59	1.48	248.0
8-21-31	A. W. Hall	109	1.12	1.23	123.0
8-25-31	do	54	1.13	1.02	61.0
8-26-31	A. E. Johnston	55	1.16	.94	64.0
9- 1-31	F. F. LeFever	44	1.10	.93	60.3
9-10-31	A. W. Hall	39	1.49	.88	59.0
9-24-31	F. F. LeFever	43	1.38	.84	59.0
9-30-31	A. W. Hall	47	1.45	.83	60.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER--
RAMSHORN CHANNEL

South of Tri-State Waste

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7- 9-31	A. W. Hall	88	1.70	.....	149.0
7-13-31	do	30	1.41	.....	43.0
7-17-31	do	8	1.06	1.04	9.0
7-24-31	do	18	1.37	1.24	24.0
8- 6-31	Hall and LeFever	89	2.38	2.50	213.0
8-17-31	F. F. LeFever	36	2.26	1.63	83.0
8-21-31	A. W. Hall	24	1.56	1.26	37.0
8-26-31	A. E. Johnston	20	1.14	1.10	23.0
9- 1-31	F. F. LeFever	5	1.39	.78	7.0
9-10-31	A. W. Hall	5	1.07	.80	6.0
9-24-31	F. F. LeFever	5	1.12	.74	5.0
9-24-31	A. W. Hall	12	1.53	.93	18.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
MITCHELL NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 2-30	C. E. Frankliln	880	2.12	1.68	1864.0
10-20-30	do	761	2.32	1.62	1768.0
11- 7-30	do	697	2.13	.....	1489.0
11-24-30	do	606	2.21	1.32	1341.0
12- 5-30	A. E. Johnston	602	2.54	1.40	1524.0
1-13-31	do	539	1.97	1.30	1060.0
2-18-31	do	517	2.05	1.22	1061.0
3-12-31	A. W. Hall	475	1.94	1.23	923.0
4- 2-31	do	608	2.22	1.27	1348.0
4- 9-31	do	500	2.06	1.23	1032.0
4-29-31	do	393	1.91	1.00	751.0
5-12-31	do	363	1.72	.91	623.0
5-22-31	do	195	1.56	.78	305.0
5-25-31	do	180	1.39	.70	250.0
6- 5-31	do	405	1.91	1.04	772.0
6-17-31	do	294	1.48	.85	436.0
6-26-31	do	247	1.42	.84	351.0
7- 9-31	do	267	1.49	.83	400.0
7-17-31	do	196	1.32	.75	260.0
7-24-31	do	203	1.44	.75	292.0
8- 7-31	Hall and LeFever	408	1.75	1.01	714.0
8-15-31	F. F. LeFever	245	1.50	.78	368.0
8-22-31	A. W. Hall	169	1.49	.70	253.0
8-27-31	A. E. Johnston	153	1.44	.60	221.0
9- 1-31	F. F. LeFever	151	1.47	.64	221.0
9-10-31	A. W. Hall	143	1.49	.63	213.0
9-17-31	F. F. LeFever	129	1.51	.60	195.0
9-25-31	do	137	1.57	.61	215.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
MINATARE NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 5-30	C. E. Franklin	1122	2.52	1.86	2837.0
10-20-30	do	1038	2.24	1.54	2327.0
11- 5-30	do	903	2.28	1.43	2001.0
11-18-30	do	875	2.06	1.40	1801.0
12- 4-30	A. E. Johnston	808	2.21	1.50	1789.0
1-12-31	do	773	1.92	1.35	1486.0
2-17-31	do	687	2.03	1.24	1393.0
3-11-31	A. W. Hall	626	2.02	1.25	1268.0
3-21-31	C. E. Franklin	612	1.92	1.25	1172.0
4- 9-31	A. W. Hall	632	2.03	1.30	1286.0
4-29-31	do	536	1.89	1.15	1017.0
5-12-31	do	439	1.75	1.10	768.0
5-27-31	do	173	1.35	.70	234.0
6- 6-31	do	469	2.01	1.18	944.0
6-17-31	do	455	1.67	1.00	760.0
6-26-31	do	382	1.64	.89	626.0
7-10-31	do	349	1.47	.85	515.0
7-23-31	do	.....	.....	.85	427.0
8- 8-31	Hall and LeFever	414	1.55	1.11	712.0
8-18-31	F. F. LeFever	277	1.30	.94	441.0
8-22-31	A. E. Johnston	287	1.46	.85	420.0
8-28-31	F. F. LeFever	203	1.35	.83	273.0
9- 4-31	do	267	1.47	.93	393.0
9-10-31	do	271	1.40	.87	379.0
9-17-31	do	249	1.47	.85	362.0
9-29-31	A. W. Hall	351	1.54	.96	541.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
BRIDGEPORT, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 6-30	C. E. Franklin	1527	2.77	6.45	4235.0
10-23-30	do	1171	2.49	6.08	2918.0
11- 8-30	do	988	2.46	6.08	2425.0
11-25-30	do	1012	2.29	6.10	2335.0
1-27-31	Hall and Shaffer	1160	1.82	6.27	2104.0
2-10-31	A. W. Hall	813	2.09	5.89	1097.0
2-16-31	A. E. Johnston	805	2.10	5.85	1688.0
3-10-31	A. W. Hall	844	2.02	5.90	1703.0
3-21-31	do	700	2.01	5.84	1423.0
4- 7-31	do	811	2.00	5.89	1683.0
4-28-31	do	692	1.98	5.70	1371.0
5-11-31	do	656	2.00	5.67	1310.0
5-20-31	do	498	1.85	5.50	922.0
5-25-31	do	391	1.65	5.28	643.0
5-30-31	do	311	1.53	5.17	476.0
6- 8-31	do	675	1.71	5.65	1157.0
6-15-31	do	656	1.68	5.58	1101.0
6-25-31	do	445	1.62	5.35	719.0
6-30-31	do	362	1.57	5.23	568.0
7-11-31	A. E. Johnston	427	1.52	5.35	650.0
7-18-31	do	288	1.45	5.23	418.0
8- 2-31	F. B. Shaffer	357	1.51	5.22	551.0
8- 8-31	A. E. Johnston	493	1.62	5.38	789.0
8-17-31	A. W. Hall	569	1.39	5.14	791.0
8-22-31	A. E. Johnston	416	1.52	5.30	633.0
8-25-31	do	417	1.44	5.30	599.0
8-28-31	F. F. LeFever	312	1.46	5.30	453.0
8-29-31	A. E. Johnston	292	1.58	5.31	462.0
8-29-31	F. B. Shaffer	344	1.40	5.30	480.0
9- 5-31	F. F. LeFever	444	1.60	5.46	709.0
9-12-31	do	400	1.59	5.40	636.0
9-18-31	do	412	1.65	5.49	732.0
9-22-31	A. E. Johnston	490	1.59	5.52	785.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
LISCO, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
9- 9-31	F. F. LeFever	421	1.70	1.51	724.0
9-19-31	do	512	1.64	1.60	839.0
9-26-31	do	518	1.88	1.65	1030.0

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
OSHKOSH, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-29-30	A. E. Johnston	1172	2.62	2.08	3072.0
11- 7-30	do	1124	2.52	2.00	2822.7
12- 2-30	do	1166	2.54	2.58	2958.0
1- 9-31	do	1125	2.69	2.35	2584.0
2-13-31	do	829	2.15	1.78	1783.0
4- 3-31	do	1337	2.34	2.25	3126.0
4-16-31	A. W. Hall	724	2.09	1.70	1535.0
5-10-31	A. E. Johnston	682	1.78	1.60	1214.0
5-30-31	do	340	1.60	1.38	543.0
6-12-31	do	664	1.88	1.69	1247.0
6-22-31	A. W. Hall	245	1.43	1.20	351.0
6-27-31	A. E. Johnston	278	1.58	1.30	439.0
7-10-31	do	430	1.50	1.45	646.0
7-20-31	do	217	1.47	1.15	362.0
7-21-31	do	199	1.33	1.13	263.0
7-27-31	do	280	1.54	1.23	433.0
8- 5-31	do	336	1.35	1.32	454.0
8-11-31	do	587	1.70	1.60	984.0
8-20-31	do	407	1.48	1.46	602.0
8-31-31	do	323	1.49	1.34	481.0
9- 5-31	do	456	1.60	1.56	730.0
9-21-31	do	554	1.87	1.61	1039.0
9-28-31	do	557	1.68	1.71	938.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
LEWELLEN, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6-23-31	A. W. Hall	205	1.26	1.99	259.0
6-29-31	A. E. Johnston	218	1.50	2.10	329.0
7- 9-31	do	483	1.60	2.31	775.0
7-19-31	do	226	1.50	2.00	340.0
7-27-31	do	279	1.33	2.11	370.0
8- 5-31	do	348	1.29	2.15	448.0
8-11-31	do	548	1.62	2.48	890.0
8-19-31	do	374	1.20	2.22	451.0
8-31-31	do	275	1.44	2.15	395.0
9- 4-31	do	453	1.40	2.38	635.0
9-19-31	do	472	1.66	2.45	781.0
9-30-31	do	552	1.73	2.47	953.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
SUTHERLAND, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6- 2-31	A. E. Johnston	48	1.61	1.85	76.8
6-25-31	do	90	1.52	1.95	137.0
6-29-31	do	-----	-----	1.25	5.0
6-30-31	do	4	1.18	1.34	5.2
7- 8-31	do	169	1.41	2.10	239.0
7-18-31	do	7	.85	1.70	6.0
7-29-31	do	-----	-----	1.40	3.0
8- 4-31	do	46	1.04	1.98	48.0
8-13-31	do	320	1.38	2.40	443.0
8-18-31	do	252	1.37	2.30	345.0
8-31-31	do	51	.68	1.85	35.0
9- 3-31	do	113	1.17	2.10	132.0
9-14-31	do	189	1.31	2.22	249.0
9-18-31	do	213	1.40	2.30	298.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
NORTH PLATTE, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 4-30	A. E. Johnston	1768	2.92	4.30	5176.5
10-20-30	do	1458	2.66	3.70	3720.0
10-25-30	do	1401	2.53	3.70	3553.0
11-10-30	do	1326	2.30	3.65	3052.0
11-20-30	do	1256	2.56	3.93	3220.0
12-10-30	do	1198	2.60	3.68	3115.0
1- 7-31	do	1017	2.69	3.70	2735.0
2-11-31	do	992	2.72	3.50	2704.0
4- 1-31	do	812	2.43	3.33	1975.0
4-17-31	A. W. Hall	841	2.39	3.25	2005.0
5-13-31	A. E. Johnston	763	2.33	3.15	1777.0
6- 4-31	do	112	1.88	2.22	210.2
6- 6-31	do	402	1.99	2.95	800.0
6-11-31	do	524	2.08	3.08	1099.0
6-24-31	do	176	1.90	2.40	336.0
6-29-31	do	82	1.45	2.10	120.0
7- 1-31	do	95	1.51	2.25	144.0
7- 7-31	do	429	1.77	2.85	763.0
7-14-31	do	194	1.78	2.46	346.0
7-17-31	do	127	1.31	2.30	166.0
7-18-31	do	120	1.28	2.28	154.0
7-29-31	do	62	1.15	2.25	71.0
8- 4-31	do	172	1.46	2.50	251.0
8-14-31	do	309	1.69	2.85	524.0
8-17-31	do	353	1.86	2.90	658.0
8-18-31	do	329	1.72	2.80	568.0
9- 1-31	do	124	1.58	2.52	196.0
9- 3-31	do	149	1.53	2.52	228.0
9-16-31	A. W. Hall	309	1.66	2.85	513.0
9-17-31	A. E. Johnston	348	1.83	2.88	637.0
9-17-31	do	332	1.65	2.88	546.0

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER
NORTH PLATTE, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 4-30	A. E. Johnston	220	1.96	2.30	430.3
10-20-30	do	250	1.79	2.40	449.0
10-25-30	do	277	2.05	2.30	567.0
11-10-30	do	219	1.69	2.35	420.0
11-29-30	do	239	2.26	2.70	512.0
12-10-30	do	400	2.19	2.42	377.0
1- 6-31	do	353	2.04	2.68	719.0
2-11-31	do	316	1.96	2.30	619.0
4- 1-31	do	348	1.96	2.54	680.0
4-17-31	A. W. Hall	229	1.76	2.13	404.0
5-13-31	A. E. Johnston	45	1.34	1.80	61.0
6- 4-31	do	.....	.....	.92	.0
6- 6-31	do	.....	.....	1.50	.0
6- 9-31	do	2	1.36	1.75	34.0
6-11-31	do	85	1.67	2.05	141.0
6-24-31	do	.....	.....	1.05	.0
7- 1-31	do	.....	.....	.86	.0
7- 7-31	do	.....	.....	.97	.0
7-14-31	do	.....	.....	.88	.0
7-17-31	do	.....	.....	.60	.0
8- 4-31	do	.....	.....	.20	.0
8-17-31	do	.....	.....	.12	.0
9-16-31	A. W. Hall	8	.97	1.62	8.0
9-17-31	A. E. Johnston	.....	.....	1.40	3.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER
OGALLALA, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 3-30	A. E. Johnston	120	1.95	1.65	234.0
10-28-30	do	262	2.26	2.20	593.0
11- 8-30	do	249	2.18	2.20	542.0
12- 1-30	do	421	2.55	2.85	1075.0
1- 8-31	do	160	2.34	3.20	374.0
2-13-31	do	258	2.46	2.30	635.0
4- 2-31	do	590	3.32	3.25	1952.0
5-14-31	do	60	1.38	1.35	83.0
6- 2-31	do	26	1.31	1.24	34.3
6-10-31	do	38	1.28	1.25	49.0
6-26-31	do	10	.89	.95	9.0
7- 9-31	do	14	1.62	1.10	23.0
7-19-31	do	3	1.00	.86	3.0
7-29-31	do	.....	.....	.81	3.0
8- 5-31	do	3	.77	.90	2.4
8-12-31	do	6	1.07	.90	6.3
8-19-31	do	5	.68	.86	3.4
9- 4-31	do	2	.50	.85	.8
9-19-31	do	3	1.06	.85	4.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER—
CHANNEL NO. 1
JULESBURG, COLORADO
(Nebraska Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 2-30	A. E. Johnston	35	1.73	2.30	61.2
10-13-30	C. E. Franklin	67	2.08	1.70	140.0
10-28-30	do	76	2.07	1.73	157.5
11-11-30	do	70	2.07	1.80	145.5
11-30-30	do	100	1.53	1.80	153.0
1-21-31	A. E. Johnston	57	1.92	2.73	108.0
3- 6-31	C. E. Franklin	128	2.75	2.40	346.0
3-25-31	do	63	2.11	1.82	134.0
4-16-31	do	59	1.86	1.75	110.0
5- 6-31	do	18	1.12	1.16	26.0
5-24-31	do	6	1.10	.86	6.0
6-18-31	do	6	1.09	.95	7.0
7-17-31	do	4	.73	.84	3.0
7-26-31	do	2	.54	.75	1.0
8-22-31	do	3	.63	.71	1.6
9- 9-31	do	3	.72	.74	2.0
9-25-31	do	6	1.08	.94	7.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER—
CHANNEL NO. 1
JULESBURG, COLORADO
(Colorado Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
9-17-30	C. E. McGraw	.....	.....	1.03	27.0
10-22-30	do	.....	.....	1.80	129.0
11-24-30	do	.....	.....	.....	10.9
12-17-30	J. E. Whitten	.....	.....	2.75	132.0
1- 6-31	U. S. G. S.	.....	.....	1.82	111.0
1-20-31	C. E. McGraw	.....	.....	.....	59.9
1-21-31	A. E. Johnston	.....	.....	2.73	169.0
2- 3-31	U. S. G. S.	.....	.....	1.94	142.0
2-17-31	C. E. McGraw	.....	.....	1.90	146.8
3- 4-31	U. S. G. S.	.....	.....	2.19	218.0
3- 6-31	C. E. Franklin	.....	.....	2.40	346.0
3-19-31	J. E. Whitten	.....	.....	2.08	199.0
3-25-31	C. E. Franklin	.....	.....	1.83	134.0
4-16-31	do	.....	.....	1.75	110.0
4-19-31	C. E. McGraw	.....	.....	1.37	64.8
5- 6-31	C. E. Franklin	.....	.....	1.16	26.0
5-24-31	do	.....	.....	.86	6.0
5-24-31	C. E. McGraw	.....	.....	.86	6.8
6-18-31	C. E. Franklin	.....	.....	.95	6.9
6-25-31	J. E. Whitten	.....	.....	.88	6.2
7-17-31	C. E. Franklin	.....	.....	.84	2.7
7-23-31	C. E. McGraw	.....	.....	.77	2.0
7-26-31	C. E. Franklin	.....	.....	.75	1.0
8-19-31	J. E. Whitten	.....	.....	.75	2.3
8-22-31	C. E. Franklin	.....	.....	.71	1.6
9- 9-31	do	.....	.....	.74	2.3
9-25-31	do	.....	.....	.94	6.8
9-25-31	C. E. McGraw	.....	.....	.95	7.6

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER—

CHANNEL NO. 2
JULESBURG, COLORADO
(Nebraska Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 2-30	A. E. Johnston	64	2.12	1.85	136.0
10-13-30	C. E. Franklin	187	2.03	2.18	380.0
10-28-30	do	195	2.22	—	432.0
11-11-30	do	139	2.29	—	318.0
11-30-30	do	214	2.36	2.82	577.0
1-21-31	A. E. Johnston	168	2.10	2.25	353.0
3- 6-31	C. E. Franklin	208	2.37	2.54	493.0
3-25-31	do	57	1.91	1.48	110.0
4-16-31	do	106	2.30	1.84	245.0
5- 6-31	do	35	1.89	1.36	67.0
5-24-31	do	15	1.45	1.05	22.0
6-18-31	do	17	1.47	1.05	25.0
7-17-31	do	11	1.51	1.00	17.0
7-26-31	do	11	1.36	.99	15.0
8-22-31	do	10	1.30	1.00	13.0
9- 9-31	do	11	1.44	1.01	16.0
9-25-31	do	15	1.67	1.18	24.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER—

CHANNEL NO. 2
JULESBURG, COLORADO
(Colorado Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
9-17-30	C. E. McGraw	.....	.....	1.22	96.0
10-22-30	do	.....	.....	2.16	311.0
11-24-30	do	.....	.....	1.88	174.0
12-17-30	J. E. Whitten	.....	.....	2.29	429.0
1- 6-31	U. S. G. S.	.....	.....	2.04	270.0
1-20-31	C. E. McGraw	.....	.....	1.74	187.4
1-21-31	A. E. Johnston	.....	.....	2.25	353.0
2- 3-31	U. S. G. S.	.....	.....	2.09	275.0
2-17-31	C. E. McGraw	.....	.....	1.98	263.5
3- 4-31	U. S. G. S.	.....	.....	2.25	361.0
3- 6-31	C. E. Franklin	.....	.....	2.54	493.0
3-19-31	J. E. Whitten	.....	.....	2.04	292.0
3-25-31	C. E. Franklin	.....	.....	1.48	110.0
4-16-31	do	.....	.....	1.84	245.0
4-19-31	C. E. McGraw	.....	.....	1.51	127.5
5- 6-31	C. E. Franklin	.....	.....	1.36	67.0
5-24-31	do	.....	.....	1.05	22.0
5-24-31	C. E. McGraw	.....	.....	1.05	21.5
6-18-31	C. E. Franklin	.....	.....	1.05	24.8
6-25-31	J. E. Whitten	.....	.....	1.02	24.0
7-17-31	C. E. Franklin	.....	.....	1.00	16.9
7-23-31	C. E. McGraw	.....	.....	1.02	16.9
7-26-31	C. E. Franklin	.....	.....	.99	15.4
8-19-31	J. E. Whitten	.....	.....	1.05	15.8
8-22-31	C. E. Franklin	.....	.....	1.00	12.6
9- 9-31	do	.....	.....	1.44	16.1
9-25-31	do	.....	.....	1.18	24.3
9-25-31	C. E. McGraw	.....	.....	1.19	28.2

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER—
CHANNEL NO. 3
JULESBURG, COLORADO
(Nebraska Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 2-30	A. E. Johnston	.....	.....	2.45	0.0
10-13-30	C. E. Franklin	.....	.....	2.60	.2
10-28-30	do	.....	.....	.....	.4
11-11-30	do	.....	.....	2.60	.3
11-30-30	do	.....	.....	3.20	17.0
1-21-31	A. E. Johnston	.....	.....	2.70	.0
3- 6-31	C. E. Franklin	.....	.....	2.90	1.5
3-25-31	do	.....	.....	2.60	.1
4-16-31	do	.....	.....	2.60	.1
5- 6-31	do	.....	.....	2.50	.1
5-24-31	do	.....	.....	2.40	.0
6-18-31	do	.....	.....	2.20	.0
7-17-31	do	.....	.....	.....	.0
7-26-31	do	.....	.....	1.90	.0
8-22-31	do	.....	.....	.....	.0
9- 9-31	do	.....	.....	.....	.0
9-25-31	do	.....	.....	.....	.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER—
CHANNEL NO. 3
JULESBURG, COLORADO
(Colorado Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
9-17-30	C. E. McGraw	.....	.....	.....	0.0
10-22-30	do	.....	.....	.....	.0
11-24-30	do	.....	.....	.....	.2
12-17-30	J. E. Whitten	.....	.....	2.75	2.0
1- 6-31	U. S. G. S.	.....	.....	.....	.3
1-20-31	C. E. McGraw	.....	.....	.....	.1
1-21-31	A. F. Johnston	.....	.....	2.70	.0
2- 3-31	U. S. G. S.	.....	.....	.....	1.0
2-17-31	C. E. McGraw	.....	.....	.....	.1
3- 4-31	U. S. G. S.	.....	.....	.....	.5
3- 6-31	C. E. Franklin	.....	.....	2.90	1.5
3-19-31	J. E. Whitten	.....	.....	2.62	.1
3-25-31	C. E. Franklin	.....	.....	.....	.1
4-16-31	do	.....	.....	2.60	.1
4-19-31	C. E. McGraw	.....	.....	.....	.0
5- 6-31	C. E. Franklin	.....	.....	2.50	.1
5-24-31	do	.....	.....	2.40	.0
5-24-31	C. E. McGraw	.....	.....	.....	.0
6-18-31	C. E. Franklin	.....	.....	2.20	.0
6-25-31	J. E. Whitten	.....	.....	.....	.0
7-17-31	C. E. Franklin	.....	.....	2.00	.0
7-23-31	C. E. McGraw	.....	.....	.....	.0
7-26-31	C. E. Franklin	.....	.....	1.90	.0
8-10-31	J. E. Whitten	.....	.....	.....	.0
8-22-31	C. E. Franklin	.....	.....	.....	.0
9- 9-31	do	.....	.....	.....	.0
9-25-31	do	.....	.....	.....	.0
9-25-31	C. E. McGraw	.....	.....	.....	.0

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER--
CHANNEL NO. 4JULESBURG, COLORADO
(Nebraska Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 2-30	A. E. Johnston	1	0.57	3.05	0.4
10-13-30	C. E. Franklin	.....	.....	3.00	.7
10-28-30	do	.....	.....	3.10	.4
11-30-30	do	.....	.....	3.20	2.0
1-21-31	A. E. Johnston	1	.91	.45	1.0
3- 6-31	C. E. Franklin	.....	.....	.90	.5
3-21-31	do	.....	.....	.80	.4
4-16-31	do	.....	.....	.70	.3
5- 6-31	do	.....	.....	.70	.5
5-24-31	do	.....	.....	.70	.5
6-18-31	do	.....	.....	.68	.2
7-17-31	do	.....	.....	.70	.0
7-26-31	do	.....	.....	.60	.0
8-22-31	do	.....	.....	.....	.0
9- 9-31	do	.....	.....	.....	.0
9-25-31	do	.....	.....	.....	.1

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER--
CHANNEL NO. 4JULESBURG, COLORADO
(Colorado Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
9-17-30	C. E. McGraw	.....	.....	2.94	0.1
10-22-30	do	.....	.....	3.00	.8
11-24-30	do	.....	.....	.....	1.5
12-17-30	J. E. Whitten	.....	.....	.50	3.0
1- 6-31	U. S. G. S.	.....	.....	.....	.7
1-20-31	C. E. McGraw	.....	.....	.40	.8
1-21-31	A. E. Johnston	.....	.....	.45	1.0
2- 3-31	U. S. G. S.	.....	.....	.....	1.5
2-17-31	C. E. McGraw	.....	.....	.75	.8
3- 4-31	U. S. G. S.	.....	.....	.74	.7
3- 6-31	C. E. Franklin	.....	.....	.90	.5
3-19-31	J. E. Whitten	.....	.....	.80	.9
3-25-31	C. E. Franklin	.....	.....	.....	.4
4-16-31	do	.....	.....	.70	.3
4-19-31	C. E. McGraw	.....	.....	.72	.5
5- 6-31	C. E. Franklin	.....	.....	.....	.5
5-24-31	do	.....	.....	.70	.5
5-24-31	C. E. McGraw	.....	.....	.70	.1
6-18-31	C. E. Franklin	.....	.....	.68	.2
6-25-31	J. E. Whitten	.....	.....	.....	.2
7-17-31	C. E. Franklin	.....	.....	.70	.0
7-23-31	C. E. McGraw	.....	.....	.75	.0
7-26-31	C. E. Franklin	.....	.....	.60	.0
8-19-31	J. E. Whitten	.....	.....	.....	.0
8-22-31	C. E. Franklin	.....	.....	.....	.0
9- 9-31	do	.....	.....	.....	.0
9-25-31	do	.....	.....	.....	.1
9-25-31	C. E. McGraw	.....	.....	.53	.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER—
BELOW GOTHENBURG CANAL
BRADY ISLAND, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7- 1-31	A. E. Johnston	45	1.84	.....	83.0
7-14-31	do	261	1.13	.....	299.0
7-17-31	do	46	2.32	.....	107.9
7-31-31	do	19	.86	.....	16.3
8- 3-31	do	30	1.45	.....	43.3
8-14-31	do	180	1.49	1.81	268.0
8-15-31	do	229	1.59	2.00	364.0
8-17-31	do	259	1.68	2.12	436.0
9- 1-31	do	100	1.36	1.58	136.0
9-16-31	do	282	1.66	2.05	168.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER—
NORTH CHANNEL
SOUTH OF GOTHENBURG, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6-23-31	A. E. Johnston	150	1.65	1.35	247.0
7- 1-31	do	30	1.59	.64	48.0
7- 3-31	do	60	1.82	1.00	109.0
7- 7-31	do	111	1.92	1.22	213.0
7-14-31	do	146	1.98	1.50	289.0
7-15-31	do	132	1.94	1.42	256.0
7-16-31	do	84	1.63	1.05	137.0
7-17-31	do	66	1.57	1.00	104.0
7-31-31	do	7	.83	.....	6.0
8- 3-31	do	.....	.19	.....	4.0
8-14-31	do	107	1.77	1.20	189.0
8-15-31	do	139	1.98	1.35	275.0
8-17-31	do	149	2.15	1.50	321.0
9- 1-31	do	38	1.76	.80	67.0
9-16-31	do	152	1.93	1.50	294.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER—SOUTH CHANNEL
SOUTH OF GOTHENBURG, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6-23-31	A. E. Johnston	36	1.27	0.65	46.0
7- 1-31	do	.....	.....	.....	.0
7- 3-31	do	.....	.....	.....	.0
7- 7-31	do	94	1.23	.90	116.0
7-14-31	do	96	1.68	.65	27.0
7-15-31	do	22	1.35	.59	29.0
7-16-31	do	.....	.....	.....	.0
7-17-31	do	.....	.....	.....	.0
8-17-31	do	17	1.34	.65	23.0
9- 1-31	do	.....	.....	.....	.0
9-16-31	do	56	1.17	1.50	66.0

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF PLATTE RIVER
COZAD, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7- 3-31	A. E. Johnston	23	1.49	—	34.0
7-13-31	do	—	—	—	2.0
7-14-31	do	—	—	—	2.0
7-15-31	do	—	—	—	3.0
7-16-31	do	—	—	—	2.0
7-31-31	do	—	—	—	2.0
8-14-31	do	—	—	—	2.0
8-17-31	do	—	—	—	2.0
9-16-31	do	—	—	—	5.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER
OVERTON, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 7-30	A. E. Johnston	2104	2.59	4.05	5473.0
10-22-30	do	1588	2.50	3.75	4000.0
11-13-30	do	1521	2.56	3.65	3900.0
11-26-30	do	579	2.21	3.00	1280.0
12-11-30	do	1878	2.62	4.00	4914.0
1- 5-31	do	1116	2.40	3.65	2670.0
2- 9-31	do	1633	2.65	3.90	4333.0
3-25-31	do	1537	2.26	3.56	3480.0
4-17-31	A. W. Hall	1122	2.36	3.40	2563.0
5-11-31	A. E. Johnston	1202	2.21	3.52	2652.0
6- 3-31	Johnston and Wyant	29	1.29	2.05	37.1
6- 6-31	A. E. Johnston	123	1.31	2.45	161.0
6-23-31	do	46	1.31	2.23	60.0
7- 2-31	do	—	—	1.57	.0
7- 3-31	do	—	—	1.60	.0
7- 6-31	do	—	—	1.83	3.0
7-12-31	do	—	—	1.70	.0
7-13-31	do	—	—	1.65	.0
7-15-31	do	—	—	1.48	.0
7-31-31	do	—	—	1.47	.0
8- 3-31	do	—	—	1.20	.0
8-15-31	do	—	—	1.10	.0
9- 2-31	do	—	—	.90	.0
9-13-31	do	—	—	.73	.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER
SOUTH OF ELM CREEK, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6- 3-31	Johnston and Wyant	69	1.33	—	91.2
7- 3-31	A. E. Johnston	—	—	—	.0
7- 6-31	do	7	1.19	—	9.0
7-12-31	do	5	.80	1.50	4.0
7-13-21	do	5	.88	1.50	5.0
7-31-31	do	—	—	—	.0
8- 3-31	do	—	—	—	.0
8-15-21	do	—	—	1.20	.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER
DUNCAN, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-11-30	A. E. Johnston	2013	2.70	3.32	5420.0
11-18-30	do	1488	2.46	3.00	3655.0
12-16-30	do	1669	2.65	3.10	4422.0
1-31-31	do	3178	3.13	4.47	9940.0
3- 7-31	do	745	1.48	2.35	1717.0
3-19-31	do	1513	2.31	2.97	3518.0
5- 6-31	do	1795	2.55	3.10	4585.0
6- 7-31	do	184	1.44	1.50	268.0
7- 3-31	do	4	.80	1.03	3.0
7- 6-31	do	-----	-----	1.05	5.0
8- 1-31	do	-----	-----	.70	3.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER
DUNCAN, NEBRASKA

(U. S. G. S. Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-18-30	R. E. Cabell	2380	-----	3.46	6470.0
11- 8-30	D. S. Jenkins	1340	-----	2.78	2970.0
1-12-31	H. P. Eisenhuth	1410	-----	3.14	2820.0
2- 9-31	L. F. Hanks	1770	-----	2.90	3830.0
3-11-31	H. P. Eisenhuth	2100	-----	3.60	6410.0
3-28-31	do	847	-----	2.26	1020.0
4-11-31	R. E. Cabell	1869	-----	3.12	4500.0
4-20-31	do	1160	-----	2.53	2570.0
5-11-31	H. P. Eisenhuth	1620	-----	3.08	3820.0
5-22-31	do	568	-----	2.20	989.0
6- 4-31	do	62	-----	1.13	63.0
6-15-31	do	110	-----	1.52	138.0
● 7- 9-31	Cabell and Follansbee	9	-----	1.04	12.0
7-20-31	R. E. Cabell	4	-----	.90	5.6
7-29-31	do	-----	-----	.80	.4
8-14-31	L. F. Hanks	2	-----	.74	2.7
8-21-31	do	-----	-----	-----	2.5
8-28-31	do	1	-----	.75	.6
9- 9-31	do	-----	-----	-----	.1

DISCHARGE MEASUREMENTS OF PLATTE RIVER
ASHLAND, NEBRASKA

(Nebraska Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-14-30	A. E. Johnston	2796	4.86	4.60	23311.0
11-20-30	do	3251	2.58	3.40	8410.0
1- 2-31	do	1763	2.87	2.56	5060.0
1-29-31	do	3402	3.43	3.68	11693.0
3-13-31	do	2726	3.22	3.22	8790.0
4-29-31	do	3848	2.65	2.80	7546.0

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF PLATTE RIVER
ASHLAND, NEBRASKA

(U. S. G. S. Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-10-30	R. E. Cabell	3070	2.74	3.16	9410.0
10-20-30	do	3500	2.76	3.12	9670.0
1-23-31	H. P. Eisenhuth	1120	1.54	2.00	1730.0
2-11-31	L. F. Hanks	2550	3.08	2.86	7880.0
3-12-31	H. P. Eisenhuth	2640	2.55	2.92	6760.0
3-29-31	U. S. G. S.	2920	2.39	2.33	4820.0
4-14-31	R. E. Cabell	2550	2.69	2.78	6880.0
5-13-31	H. P. Eisenhuth	2910	2.52	3.11	7340.0
5-23-31	do	1890	2.02	2.20	3820.0
6- 6-31	do	1650	2.00	2.01	3300.0
6-16-31	do	1640	1.71	1.96	2800.0
7-10-31	Cabell and Follansbee	1470	1.08	1.88	2580.0
7-21-31	R. E. Cabell	1430	1.05	1.65	2130.0
7-31-31	do	866	1.43	1.34	1240.0
8-24-31	L. F. Hanks	892	-----	1.51	1580.0
9- 4-31	do	1290	-----	1.74	1890.0

**ACTUAL DISCHARGE MEASUREMENTS AT REGULAR GAGING
STATIONS ON THE NORTH PLATTE, SOUTH
PLATTE, AND PLATTE RIVERS**

Season Ending September 30, 1932

**DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
TORRINGTON, WYOMING**

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 8-31	F. F. LeFever	186	2.86	0.48	532.0
10-20-31	do	132	2.60	.33	332.0
11- 5-31	do	134	2.59	.36	347.0
1- 6-32	do	126	3.01	.33	380.0
1-27-32	do	118	3.06	.64	453.0
2-10-32	A. E. Johnston	163	3.00	.34	490.0
2-23-32	F. F. LeFever	143	3.08	.38	441.0
3- 9-32	A. E. Johnston	8	2.53	.50	226.0
3-17-32	F. F. LeFever	162	3.10	.41	502.0
4- 6-32	A. E. Johnston	198	3.19	.52	632.0
4-23-32	do	105	2.57	.28	270.0
5- 7-32	F. F. LeFever	114	3.35	.41	483.0
5-23-32	do	410	2.56	.88	1050.0
6- 8-32	A. W. Hall	733	2.70	1.24	1980.0
6-15-32	F. F. LeFever	820	2.74	1.40	2250.0
6-24-32	do	763	2.66	1.30	2040.0
7- 1-32	do	888	2.92	1.58	2590.0
7-12-32	do	867	2.66	1.37	2310.0
7-20-32	do	706	3.06	1.40	2160.0
7-29-32	do	658	2.77	1.17	1820.0
8-10-32	do	537	2.78	1.07	1630.0
8-15-32	do	579	2.75	1.10	1500.0
8-25-32	do	593	2.60	.95	1540.0
8-31-32	do	559	2.72	1.02	1520.0
9- 8-32	do	527	2.54	.90	1340.0
9-20-32	do	392	2.18	.66	856.0
9-30-32	do	416	2.24	.75	935.0

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
INTERSTATE STATION--HENRY, NEBRASKA

(Wyoming-Nebraska Line)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 3-31	F. M. Roush	254	2.08	1.40	530.0
10- 8-31	F. F. LeFever	260	2.12	1.44	560.0
10-20-31	do	202	2.04	1.24	412.0
10-31-31	do	214	2.04	1.20	437.0
11- 5-31	F. M. Roush	207	2.08	1.26	431.0
12- 4-31	do	231	2.14	1.34	495.0
1- 5-32	J. H. Bailey	232	2.13	1.30	494.0
1- 7-32	F. F. LeFever	208	2.14	1.32	445.0
1-25-32	F. M. Roush	254	1.97	1.40	500.0
2- 8-32	L. F. Hanks	322	1.71	1.46	552.0
2-19-32	F. M. Roush	235	2.17	1.47	510.0
2-23-32	F. F. LeFever	233	2.01	1.40	469.0
3-17-32	do	243	1.96	1.36	476.0
*4-16-32	F. M. Roush	163	1.15	0.96	326.0
4-23-32	A. E. Johnston	182	1.94	1.03	354.0
5- 4-32	S. C. Moore	145	1.98	.84	288.0
5- 7-32	F. M. Roush	222	2.22	1.19	493.0
5-20-32	do	355	2.04	1.49	722.0
5-25-32	do	567	2.10	1.85	1190.0
5-30-32	do	763	2.33	2.20	1780.0
6- 8-32	do	744	2.25	2.20	1670.0
6-10-32	do	841	2.21	2.25	1860.0
6-22-32	do	827	2.20	2.27	1820.0
6-27-32	do	807	2.22	2.24	1790.0
7- 5-32	do	1100	2.50	2.73	2760.0
7-12-32	do	940	2.30	2.29	2160.0
8-26-32	do	784	2.28	2.14	1790.0
8- 6-32	do	734	2.20	2.06	1610.0
8-10-32	do	674	2.26	1.87	1520.0
8-16-32	do	664	2.30	1.81	1530.0
8-22-32	do	637	2.23	1.71	1420.0
9- 2-32	do	642	2.32	1.71	1490.0
9-10-32	do	510	2.32	1.55	1270.0
9-15-32	do	460	2.30	1.41	1060.0
9-23-32	do	390	2.22	1.23	866.0
9-29-32	do	385	2.08	1.22	800.0

*Note: Gage moved to north bank of the river, Henry Nebraska,
April 16, 1932.

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER--
MAIN CHANNEL
SOUTH OF TRI-STATE WASTE

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6- 9-32	F. F. LeFever	231	1.77	1.70	409.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER--
RAMSHORN CHANNEL
SOUTH OF TRI-STATE WASTE

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6- 9-32	F. F. LeFever	45	1.73	2.06	78.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
MITCHELL, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 1-31	A. W. Hall	139	1.45	0.63	202.0
10- 9-31	F. F. LeFever	420	1.86	1.12	782.0
10-22-31	do	404	1.92	1.12	776.0
11- 5-31	do	389	1.83	1.06	714.0
12- 8-31	A. E. Johnston	534	2.04	1.30	1094.0
1- 7-32	F. F. LeFever	356	1.91	1.23	679.0
1-27-32	do	397	1.80	1.27	715.0
2-10-32	A. E. Johnston	442	2.05	1.30	908.0
2-24-32	F. F. LeFever	303	2.00	1.17	789.0
3-18-32	do	387	1.97	1.10	765.0
4- 7-32	A. E. Johnston	179	2.03	1.10	981.0
4-25-32	do	362	1.86	1.00	675.0
5- 6-32	F. F. LeFever	536	2.07	1.35	1110.0
5-18-32	do	216	1.46	.75	315.0
5-24-32	do	216	1.42	.71	308.0
6- 3-32	do	408	1.76	1.12	824.0
6- 9-32	do	296	1.72	.86	514.0
6-16-32	do	670	2.20	1.55	1470.0
6-24-32	do	396	1.85	1.08	735.0
7- 2-32	do	511	2.01	1.30	1040.0
7-13-32	do	440	2.01	1.14	886.0
7-22-32	do	409	2.01	1.10	826.0
7-30-32	do	396	2.00	1.05	791.0
8- 3-32	do	773	2.54	1.77	1960.0
8-10-32	do	254	1.78	.83	455.0
8-17-32	do	452	1.00	.85	452.0
8-26-32	do	289	1.76	.82	510.0
9- 8-32	do	204	1.58	.68	323.0
9-21-32	do	201	1.68	.72	339.0
9-30-32	do	396	2.01	1.13	800.0

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
MINATARE, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-12-31	F. F. LeFever	688	2.00	1.44	1330.0
10-23-31	do	597	1.86	1.34	1110.0
11- 4-31	do	539	1.91	1.28	1030.0
12- 9-31	A. E. Johnston	966	1.67	1.75	1515.0
1- 8-32	F. F. LeFever	553	1.82	1.78	1010.0
1-28-32	do	507	1.85	1.60	929.0
2-11-32	A. E. Johnston	544	2.22	1.58	1201.0
2-25-32	F. F. LeFever	465	2.17	1.29	1010.0
3-19-32	do	465	2.05	1.18	957.0
4- 5-32	A. E. Johnston	463	2.10	1.20	972.0
4-22-32	do	419	1.73	1.00	727.0
5-10-32	F. F. LeFever	555	1.69	1.12	939.0
5-19-32	do	314	1.38	.80	430.0
5-25-32	do	346	1.48	.88	512.0
6- 4-32	do	426	1.55	1.04	661.0
6-10-32	do	340	1.45	.90	494.0
6-17-32	do	625	2.04	1.18	1270.0
6-27-32	do	423	1.69	.94	715.0
7- 6-32	do	725	2.04	1.42	4480.0
7-11-32	do	614	1.83	1.26	1180.0
7-23-32	do	508	1.73	1.16	882.0
8- 3-32	do	870	2.40	1.74	2100.0
8-11-32	do	343	1.55	.92	533.0
8-18-32	do	318	1.57	.90	500.0
9- 1-32	do	491	1.77	1.06	871.0
9- 9-32	do	335	1.68	.90	564.0
9-23-32	do	303	1.62	.92	636.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
BRIDGEPORT, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 2-31	F. F. LeFever	536	1.84	5.60	986.0
10-12-31	A. W. Hall	861	1.88	5.91	1620.0
10-24-31	do	822	1.98	5.83	1547.0
11- 2-31	F. F. LeFever	670	2.04	5.78	1370.0
1- 9-32	do	731	1.96	6.00	1440.0
2- 1-32	do	620	1.08	6.19	670.0
2- 8-32	Johnston and LeFever	836	1.78	6.60	1490.0
2-26-32	F. F. LeFever	668	2.05	5.85	1370.0
3-22-32	do	658	2.02	5.78	1330.0
4-16-32	A. W. Hall	580	1.69	5.59	980.0
5-11-32	F. F. LeFever	595	1.73	5.61	1030.0
5-20-32	do	456	1.52	5.53	697.9
5-27-32	do	418	1.65	5.45	685.0
6- 7-32	do	458	1.53	5.54	703.0
6- 8-32	do	385	1.46	5.42	564.0
6-18-32	do	792	1.89	5.90	1500.0
6-28-32	do	492	1.64	5.39	809.0
7- 7-32	do	714	1.85	5.76	1320.0
7-16-32	do	752	1.87	5.83	1410.0
7-24-32	F. B. Shaffer	660	1.86	5.73	1224.0
8- 4-32	F. F. LeFever	1010	2.16	6.13	2180.0
8-12-32	do	511	2.13	5.42	647.0
8-22-32	do	493	1.80	5.60	891.0
9- 2-32	do	633	1.80	5.70	1140.0
9-14-32	do	538	1.88	5.62	1010.0
9-24-32	do	571	1.90	5.68	1089.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
LISCO, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 1-31	F. F. LeFever	486	1.94	1.60	893.0
10-11-31	do	863	1.35	2.00	1900.0
10-27-31	do	760	2.02	1.81	1540.0
11- 6-31	do	756	1.95	1.78	1480.0
1-11-32	do	957	1.92	3.02	1840.0
1-27-32	A. E. Johnston	1108	1.52	3.12	1682.0
3-10-32	F. F. LeFever	612	1.25	2.01	903.0
3-21-32	A. E. Johnston	830	1.99	1.70	1654.0
4- 2-32	F. F. LeFever	624	1.86	1.60	1160.0
4- 8-32	A. E. Johnston	697	2.08	1.80	1459.0
1-20-32	do	507	2.00	1.55	1020.0
5- 4-32	F. F. LeFever	579	1.90	1.56	1100.0
5-10-32	A. E. Johnston	630	2.10	1.70	1347.0
5-23-32	do	570	1.93	1.60	1101.0
5-31-32	F. F. LeFever	601	1.74	1.67	1050.0
6- 7-32	Johnston and Follansbee	462	1.53	1.34	710.0
6-11-32	F. F. LeFever	285	1.58	1.19	451.0
6-20-32	do	814	2.06	1.90	1680.0
6-28-32	do	522	1.73	1.44	906.0
7- 8-32	do	638	1.88	1.65	1200.0
7-18-32	do	677	1.98	1.73	1340.0
7-27-32	do	563	2.00	1.59	1130.0
8- 5-32	do	863	2.24	1.99	1930.0
8-12-32	do	294	1.71	1.28	504.0
8-22-32	do	449	1.70	1.42	764.0
9- 3-32	do	567	1.95	1.60	1110.0
9-14-32	do	512	1.81	1.53	928.0
9-26-32	do	666	2.02	1.76	1350.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
OSHKOSH, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-12-31	A. E. Johnston	399	2.08	2.02	1868.0
10-22-31	do	787	1.85	1.90	1623.0
11- 3-31	do	770	2.21	1.82	1700.0
1-12-32	do	1296	2.06	3.12	2673.0
1-26-32	do	946	1.68	2.95	1495.0
2-23-32	do	1256	2.09	3.00	2623.0
3-10-32	do	955	2.74	1.90	2062.0
4- 9-32	do	796	2.48	1.80	1798.0
4-20-32	do	517	2.52	1.60	1039.0
5- 9-32	do	781	2.10	1.90	1641.0
5-21-32	do	478	1.81	1.42	870.0
5-24-32	do	572	1.74	1.58	996.0
6- 6-32	do	424	1.97	1.50	935.0
6- 7-32	Johnston and Follansbee	472	1.67	1.44	793.0
6-24-32	A. E. Johnston	764	2.00	1.84	1538.0
7- 6-32	do	622	1.93	1.60	1202.0
7-14-32	do	538	1.80	1.50	973.0
7-26-32	do	656	1.85	1.64	1215.0
8- 5-32	do	757	2.01	1.88	1540.0
8-16-32	do	528	1.78	1.58	941.0
8-26-32	do	481	1.76	1.50	849.0
9-12-32	do	518	1.73	1.54	900.0
9-23-32	do	506	1.83	1.60	930.1

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
LEWELLEN, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-10-31	A. E. Johnston	919	2.13	2.85	1956.0
10-23-31	do	896	2.11	2.65	1890.0
11- 2-31	do	941	2.38	2.80	2238.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
SUTHERLAND, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6- 9-32	A. E. Johnston	179	1.39	2.04	249.0
6-27-32	do	603	1.98	2.50	1196.0
7- 8-32	do	311	1.61	2.20	504.0
7-14-32	do	178	1.52	2.10	271.0
7-18-32	do	314	1.61	2.20	506.0
7-25-32	do	439	1.66	2.40	730.0
8- 8-32	do	635	1.65	2.70	1056.9
8-15-32	do	476	1.72	2.42	822.0
8-29-32	do	452	1.53	2.42	693.0
9- 9-32	do	443	1.53	2.53	701.0
9-24-32	do	422	1.76	2.50	743.0

DISCHARGE MEASUREMENTS OF NORTH PLATTE RIVER
NORTH PLATTE, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft
10- 3-31	A. E. Johnston	510	2.00	3.16	1084.0
10- 8-31	do	610	2.10	3.30	1283.0
10-26-31	do	860	2.10	3.55	1807.0
10-30-31	do	882	2.18	3.46	1925.0
11-28-31	do	1116	1.97	3.85	2193.0
12-18-31	do	732	2.76	3.80	2020.0
1- 6-32	do	731	2.50	3.50	1827.0
1-22-32	do	1067	1.89	4.00	2020.0
2-19-32	do	1087	2.00	3.92	2179.0
3-17-32	do	1064	2.84	4.12	4746.0
4-12-32	do	765	2.32	3.20	1772.0
4-16-32	do	671	2.33	3.18	1578.0
5-13-32	do	783	2.12	3.30	1656.0
5-19-32	do	441	1.95	2.88	862.0
5-27-32	do	484	2.04	3.05	990.0
6- 2-32	do	516	1.88	3.04	974.0
6-13-32	do	514	1.97	3.08	1070.0
6-28-32	do	723	2.04	3.20	1473.0
7- 2-32	do	417	1.87	2.84	781.0
7- 9-32	do	530	1.95	3.04	1032.0
7-13-32	do	338	1.70	2.78	574.0
7-19-32	do	349	1.78	2.82	623.0
7-25-32	do	490	1.90	3.05	934.0
8- 9-32	do	624	2.22	3.30	1381.0
8-15-32	do	685	2.12	3.32	1457.0
8-30-32	do	534	1.98	3.10	1060.2
9- 8-32	do	597	1.93	3.14	1150.0
9-26-32	do	723	2.25	3.35	1620.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER
NORTH PLATTE, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 3-31	A. E. Johnston	-----	-----	1.60	10.0
10- 8-31	do	-----	-----	-----	7.0
10-26-31	do	-----	-----	.68	.0
10-30-31	do	-----	-----	.55	.0
11-28-31	do	-----	-----	.20	.0
12-18-31	do	67	1.22	2.15	82.0
1- 6-32	do	66	1.00	2.30	66.0
1-23-32	do	336	1.41	2.68	474.0
2-20-32	do	229	1.01	2.90	232.0
3-17-32	do	393	2.16	3.42	851.0
4-12-32	do	44	1.16	1.70	51.0
4-16-32	do	-----	-----	1.54	5.0
5-13-32	do	75	2.60	1.95	111.0
5-19-32	do	28	.78	1.80	22.0
5-27-32	do	-----	-----	1.10	.0
6- 2-32	do	8	.88	1.60	7.0
6-13-32	do	27	1.44	1.74	39.1
6-28-32	do	16	1.00	1.62	16.0
7- 9-32	do	-----	-----	1.34	4.0
7-13-32	do	-----	-----	-----	.0
8- 9-32	do	-----	-----	-----	.0
8-30-32	do	-----	-----	.86	2.0
9- 8-32	do	69	1.43	1.24	9.9
9-26-32	do	-----	-----	.65	3.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER
OGALLALA, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 1-31	A. E. Johnston	4	1.10	0.90	4.1
10-10-31	do	6	1.27	1.04	8.0
10-24-31	do	10	1.21	1.15	13.0
11- 2-31	do	20	1.17	1.25	23.1
11-30-31	do	174	2.02	2.15	352.0
1- 8-32	do	171	2.00	2.15	344.0
1-25-32	do	210	2.23	2.35	469.0
2-22-32	do	390	2.10	3.22	824.0
3- 7-32	do	85	1.70	1.51	145.0
3-18-32	do	287	2.53	2.38	728.0
4- 4-32	do	59	1.80	1.38	106.0
4-11-32	do	29	1.69	1.12	49.0
4-19-32	do	22	1.72	1.00	38.0
5- 9-32	do	97	1.89	1.70	183.0
5-11-32	do	86	1.71	1.55	147.0
5-20-32	do	29	2.00	1.18	58.0
5-25-32	do	17	1.70	1.00	29.0
6- 4-32	do	11	1.64	.92	18.0
6- 9-32	Johnston and Follansbee	30	.41	.86	12.3
6-27-22	A. E. Johnston	20	1.80	1.04	36.0
7- 7-32	do	12	1.25	.94	15.0
7-18-32	do	6	.94	.78	5.0
8- 8-32	do	-----	-----	.74	3.5
8-17-32	do	23	1.76	1.09	39.7
8-27-32	do	15	1.59	.96	23.8
9-10-32	do	6	.82	.78	4.5
9-24-32	do	4	.95	.72	3.8

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER--
CHANNEL NO. 1
JULESBURG, COLORADO
(Nebraska Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft
11-17-31	A. E. Johnston	15	1.49	1.05	22.0
1-13-32	do	103	2.26	3.10	231.0
2-12-32	do	70	2.08	3.00	146.0
3- 5-32	do	18	1.85	2.15	33.0
4- 1-32	do	25	1.78	2.25	46.0
5- 6-32	do	21	1.91	2.20	45.8
5-19-32	A. W. Hall	4	.59	1.12	2.8
5-24-32	do	.....	.....	1.27	.5
6-13-32	do	2	.83	1.20	2.0
7-15-32	do	.....	.....	.....	.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER--
CHANNEL NO. 1
JULESBURG, COLORADO
(Colorado Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-21-31	J. E. Whitten	.....	.....	1.08	19.3
11-24-31	C. E. McGraw	.....	.....	1.12	26.8
12-16-31	J. E. Whitten	.....	.....	1.58	56.3
1-19-32	C. E. McGraw	.....	.....	3.15	123.7
2-18-32	J. E. Whitten	.....	.....	2.97	83.3
3-23-32	C. E. McGraw	.....	.....	1.40	59.3
4- 2-32	J. E. Whitten	.....	.....	1.00	23.3
4- 1-32	A. E. Johnston	.....	.....	.....	46.0
4-19-32	J. E. Whitten	.....	.....	.....	.5
5-17-32	C. E. McGraw	.....	.....	.....	3.1
6-29-32	do	.....	.....	.....	.0
7-21-32	do	.....	.....	.....	.0
8-17-32	J. E. Whitten	.....	.....	.....	.0
9-21-32	C. E. McGraw	.....	.....	.....	.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER--
CHANNEL NO. 2
JULESBURG, COLORADO
(Nebraska Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
11-17-31	A. E. Johnston	32	1.77	1.15	56.0
1-13-32	do	201	2.46	2.85	495.0
2-12-32	do	152	2.51	2.66	387.0
3- 5-32	do	67	2.11	1.80	113.0
4- 1-32	do	63	2.00	1.95	127.6
5- 6-32	do	63	2.10	1.95	133.0
5-19-32	A. W. Hall	33	1.43	1.39	47.5
5-24-32	do	17	1.64	1.21	27.9
6-13-32	do	32	1.75	1.40	56.0
6-21-32	do	25	1.64	1.28	41.0
7- 9-32	do	19	1.45	1.16	27.4
7-15-32	do	16	1.50	1.12	23.4
8- 4-32	do	19	1.67	1.13	30.8
8-11-32	do	14	1.61	1.08	23.0
9-13-32	do	15	1.66	1.10	25.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER—
CHANNEL NO. 2
JULESBURG, COLORADO

(Colorado Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-21-31	J. E. Whitten	.....	.....	1.30	45.0
11-24-31	C. E. McGraw	.....	.....	1.44	68.4
12-16-31	J. E. Whitten	.....	.....	1.44	107.7
1-19-32	C. E. McGraw	.....	.....	2.12	290.1
2-18-32	J. E. Whitten	.....	.....	2.29	320.0
2-23-32	C. E. McGraw	.....	.....	1.83	176.6
4- 1-32	A. E. Johnston	.....	.....	.....	127.6
4- 2-32	J. E. Whitten	.....	.....	1.52	95.7
4-19-32	J. E. Whitten	.....	.....	1.03	34.8
5-17-32	C. E. McGraw	.....	.....	1.15	53.0
6-29-32	do	.....	.....	.97	36.4
7-21-32	do	.....	.....	.97	20.4
8-17-32	J. E. Whitten	.....	.....	1.05	46.3
9-21-32	C. E. McGraw	.....	.....	1.22	27.2
10-26-32	J. E. Whitten	.....	.....	1.50	50.5

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER—
CHANNEL NO. 3
JULESBURG, COLORADO

(Nebraska Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
11-17-31	A. E. Johnston	.....	.....	.....	.0
1-13-32	do	7	1.53	.....	11.0
2-12-32	do	3	.85	.....	2.2
2- 5-32	do	3	1.44	.....	4.6
4- 1-32	do	.....	.....	1.50	.0
5- 6-32	do	.....	.....	1.50	.0
5-19-32	A. W. Hall	.....	.....	.....	.0
5-24-32	do	.....	.....	.....	.0
7-15-32	do	.....	.....	1.15	.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER—
CHANNEL NO. 3
JULESBURG, COLORADO

(Colorado Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-21-31	J. E. Whitten	.....	.....	.....	0.0
11-24-31	C. E. McGraw	.....	.....	.....	.0
12-16-31	J. E. Whitten	.....	.....	.....	.0
1-19-32	C. E. McGraw	.....	.....	.....	.0
2-18-32	J. E. Whitten	.....	.....	.....	.3
2-23-32	C. E. McGraw	.....	.....	.....	.0
4- 2-32	J. E. Whitten	.....	.....	1.50	.0
4-19-32	do	.....	.....	1.35	.0
5-17-32	C. E. McGraw	.....	.....	.....	.0
6-29-32	do	.....	.....	1.35	.0
7-21-32	do	.....	.....	.....	.0
8-17-32	J. E. Whitten	.....	.....	.....	.0
9-21-32	C. E. McGraw	.....	.....	.....	.0

REPORT OF SECRETARY

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER--
CHANNEL NO. 4
JULESBURG, COLORADO

(Nebraska Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
11-17-31	A. E. Johnston	-----	-----	-----	2.0
2-12-32	do	1	.90	-----	.9
3- 5-32	do	1	1.43	-----	2.0
4- 1-32	do	.0	.75	1.43	.2
5- 6-32	do	1	1.10	1.34	.8
5-19-32	A. W. Hall	-----	-----	-----	.0
5-24-32	do	-----	-----	-----	.0
7-14-32	do	-----	-----	-----	.0

DISCHARGE MEASUREMENTS OF SOUTH PLATTE RIVER--
CHANNEL NO. 4
JULESBURG, COLORADO

(Colorado Measurements)

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10-21-31	J. E. Whitten	-----	-----	-----	0.0
11-24-31	C. E. McGraw	-----	-----	-----	.0
12-16-31	J. E. Whitten	-----	-----	-----	.1
1-19-32	C. E. McGraw	-----	-----	-----	1.0
2-18-32	J. E. Whitten	-----	-----	-----	.3
3-23-32	C. E. McGraw	-----	-----	-----	.0
4- 2-32	J. E. Whitten	-----	-----	1.43	.3
4- 1-32	A. E. Johnston	-----	-----	-----	.2
4-19-32	J. E. Whitten	-----	-----	1.65	.3
5-17-32	C. E. McGraw	-----	-----	-----	.0
6-20-32	do	-----	-----	1.25	.0
7-21-32	do	-----	-----	-----	.0
8-17-32	J. E. Whitten	-----	-----	1.30	.1
9-1-32	C. E. McGraw	-----	-----	-----	.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER
BRADY ISLAND, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
5-18-32	Johnston and McNamara	---	---	1.30	1036.2

DISCHARGE MEASUREMENTS OF PLATTE RIVER--NORTH CHANNEL
SOUTH OF GOTHENBURG, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7-21-32	A. E. Johnston	179	2.14	1.75	333.6
7-23-32	do	208	2.24	1.97	467.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER—SOUTH CHANNEL
COZAD, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6-29-32	A. E. Johnston	354	1.49	1.70	517.0
7- 2-32	do	122	1.06	1.30	170.0
7-11-32	do	.....	.....	.60	.0
7-13-32	do	.....	.....	.....	.0
7-20-31	do	.....	.....	.38	.0
7-21-32	do	.....	.....	.38	.0
7-22-32	do	.....	.....	.55	.0
8-10-32	do	28	1.25	1.05	36.2
8-13-32	do	4	.91	.75	4.0
8-31-32	do	.....	.....	1.05	22.6
9- 7-32	do	33	1.16	1.12	39.2
9-27-32	do	53	1.18	1.28	62.0
9-30-32	do	146	1.24	1.43	182.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER—NORTH CHANNEL
COZAD, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
6-29-32	A. E. Johnston	211	1.96	1.45	415.0
7- 2-32	do	63	1.75	1.05	110.0
7-11-32	do	3	1.00	.50	3.0
7-13-32	do	3	.65	.50	2.0
7-20-32	do	2	1.00	.50	2.0
7-21-32	do	.....	.....	.58	8.0
7-22-32	do	.....	.....	.50	5.0
8-10-32	do	162	1.61	1.40	262.0
8-13-32	do	8	.87	.55	7.5
8-31-32	do	.....	.....	.62	10.0
9- 7-32	do	100	1.63	1.08	163.0
9-27-32	do	252	1.67	1.60	420.0
9-30-32	do	274	2.14	1.65	586.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER
OVERTON, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 6-31	A. E. Johnston	.....	.....	0.85	0.0
10-28-31	do	824	2.16	3.24	1779.0
11-27-31	do	519	1.82	3.35	944.0
1- 5-32	do	656	2.20	3.55	1446.0
2-16-32	do	1360	1.48	4.72	2020.0
3-15-32	do	671	1.90	3.60	1271.0
4-14-32	do	854	2.06	3.40	1762.0
5-14-32	do	814	1.87	3.34	1519.0
5-16-32	do	574	1.77	3.14	1017.0
5-28-32	do	222	1.55	2.80	344.0
5-31-32	do	716	1.81	3.32	1296.0
6-10-32	Johnston and Follansbee	281	1.43	2.80	402.0
6-30-32	A. E. Johnston	508	1.80	3.15	919.0
7-12-32	do	.....	.....	.....	.0
7-22-32	do	.....	.....	1.52	.0
8-11-32	do	105	1.25	2.52	132.0
9- 1-32	do	.....	.....	1.36	.0
9- 6-32	do	.....	.....	1.25	.0
9-28-32	do	281	1.38	2.86	387.5
9-29-32	do	442	1.62	3.05	716.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER
SOUTH OF ELM CREEK, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
7-12-32	A. E. Johnston	12	1.00	1.50	12.0
7-21-32	do	.....	.....	.....	.0
8-11-32	do	47	1.10	1.80	52.0
9- 1-32	do	.....	.....	.....	.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER
DUNCAN, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 4-31	H. P. Eisenhuth	7	1.16	0.88	8.6
10-22-31	do	7	1.16	1.13	8.7
11- 3-31	do	405	1.54	1.96	624.0
11-16-31	do	574	1.60	2.09	922.0
11-26-31	do	291	1.38	1.70	396.0
12- 1-31	do	398	1.50	2.07	595.0
12- 4-31	do	438	1.12	2.06	493.9
1-12-32	Boyer and Hanks	877	1.02	3.20	891.0
2- 1-32	M. C. Boyer	754	1.72	3.80	1300.0
2-18-32	do	1430	2.20	4.25	3160.9
3-19-32	Hanks and Moore	1460	2.58	2.72	3760.0
3-31-32	S. C. Moore	1020	2.48	2.42	2540.9
4- 7-32	do	829	2.02	2.22	1670.0
4-20-32	do	779	2.06	2.23	1640.0
5-21-32	L. F. Hanks	280	1.75	1.59	487.0
5-27-32	do	399	1.42	1.82	566.0
6- 7-32	do	1650	2.40	3.14	3970.0
6-21-32	do	1080	2.16	2.64	2330.0
7- 9-32	do	407	1.41	1.63	574.0
7-16-32	do	55	3.81	.50	21.2
8- 9-32	M. C. Boyer	60	1.31	.74	79.0
8-18-32	do	33	.91	.64	30.2
9-10-32	H. P. Eisenhuth	26	.65	.66	17.0
9-17-32	do	12	1.11	.58	14.0

DISCHARGE MEASUREMENTS OF PLATTE RIVER
ASHLAND, NEBRASKA

Date	Hydrographer	Area	Velocity	Gage	Sec. Ft.
10- 2-31	H. P. Eisenhuth	1320	1.69	1.93	2240.0
10-20-31	do	1310	1.82	2.00	2440.0
11- 2-31	do	1480	1.73	2.13	2570.0
11-12-31	do	1940	2.02	2.53	3940.0
11-25-31	do	2270	2.20	2.54	5010.0
11-30-31	do	1630	1.86	2.19	3030.0
12- 3-31	do	1930	2.20	2.44	4260.0
1-16-32	Boyer and Hanks	1900	1.10	3.50	2100.0
2- 5-32	M. C. Boyer	1750	1.90	3.70	3330.0
2-22-32	do	3010	2.23	4.50	6720.0
2-11-32	Moore and Hanks	2350	.55	3.33	1300.0
3-22-32	do	3790	2.77	3.06	10500.0
4- 1-32	S. C. Moore	2900	2.46	2.41	7180.0
4- 9-32	do	2500	2.02	1.89	5070.0
4-21-32	do	2380	2.46	2.20	5850.0
5-22-32	L. F. Hanks	1390	2.26	1.83	3130.0
5-28-32	do	2750	3.02	3.23	8300.0
6-13-32	do	3900	3.20	3.79	12500.0
6-21-32	do	2850	2.49	2.53	7110.0
7- 7-32	do	2340	2.53	2.41	5910.0
7-18-32	do	806	2.53	.78	2040.0
8-11-32	M. C. Moyer	1600	2.16	1.91	3460.0
8-19-32	do	1310	2.34	1.93	3070.0
9-12-32	H. P. Eisenhuth	1350	2.02	1.56	2730.0
9-19-32	do	1970	2.21	1.33	2370.0

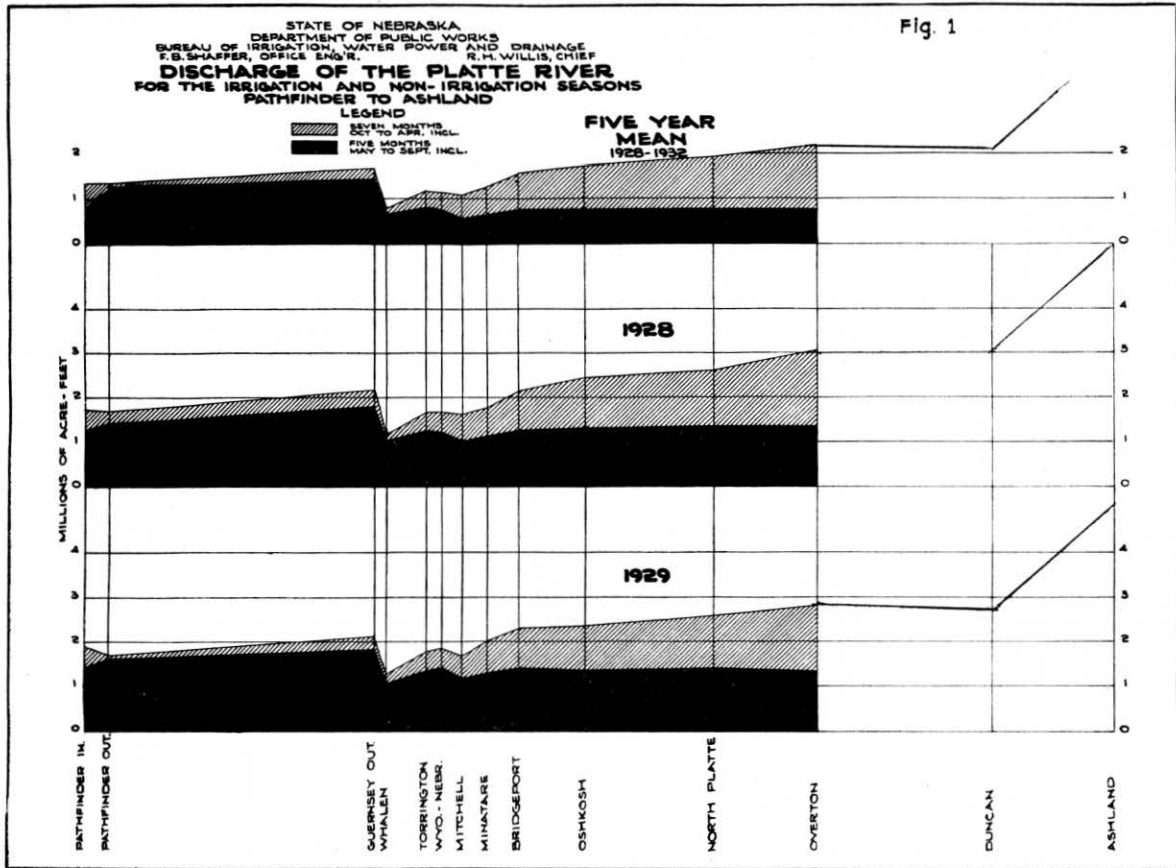
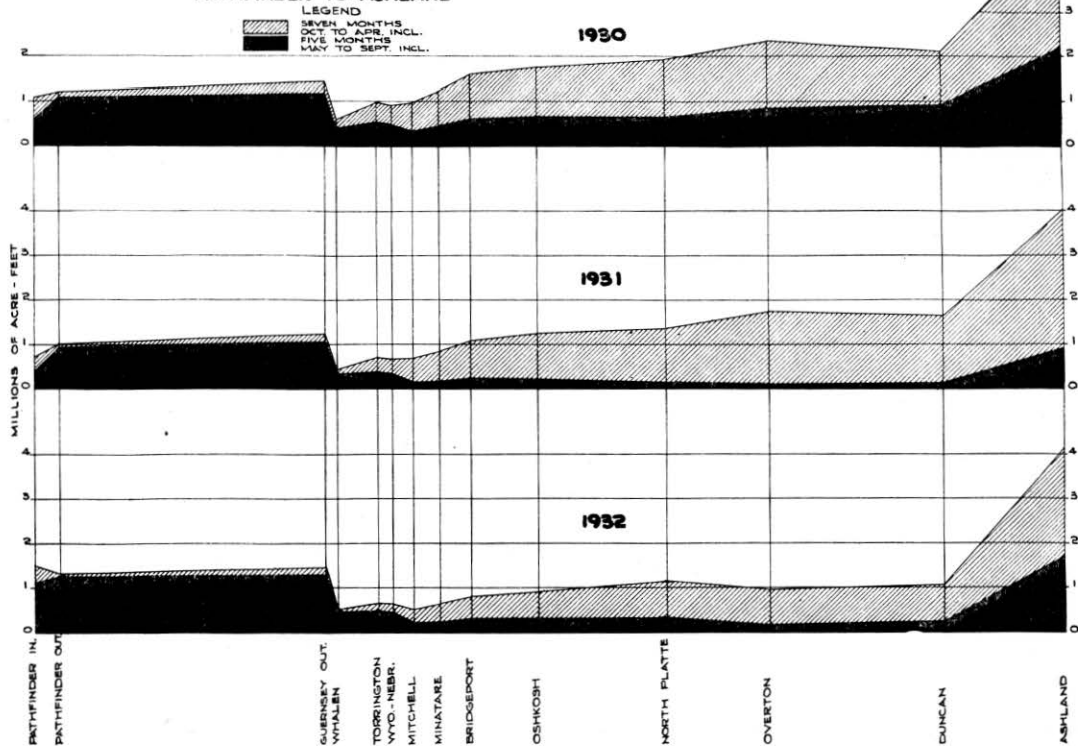


Fig. 1

STATE OF NEBRASKA
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF IRRIGATION, WATER POWER AND DRAINAGE
 F. S. SHAFER, OFFICE ENGINEER R. H. WILLIS, CHIEF
DISCHARGE OF THE PLATTE RIVER
 FOR THE IRRIGATION AND NON-IRRIGATION SEASONS
 PATHFINDER TO ASHLAND

Fig. 2



PATHFINDER STORAGE RESERVOIR

Daily Contents in Acre Feet
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	334200	386990	406480	426880	430550	460580	499260	615780	620000	472780	190450	11260
2	335140	387460	407680	427080	440080	461570	501740	619440	622000	463220	184470	8860
3	336730	388530	408880	427290	440610	462560	502240	623860	615920	453260	178850	6920
4	339030	389380	419080	427510	441140	463550	506990	629010	61640	43260	172160	4740
5	341700	390460	412280	427710	441670	464540	509750	633610	608130	432910	185340	2600
6	344820	390830	412480	427920	442200	465540	512530	637660	607160	421750	158170	1030
7	347840	391690	413680	428120	442840	466310	515330	641100	605230	410780	151140	310
8	350810	392180	414880	428330	443470	467090	518110	645460	604540	399870	143610	130
9	353780	392750	415080	428540	444120	467870	520970	648570	603430	389200	135320	130
10	355940	393340	416280	428750	444760	468640	523820	652250	602650	378300	127070	0
11	358020	393920	417290	428960	445610	469640	528290	653930	601230	367210	118920	0
12	360110	394500	418100	429160	446470	470650	532790	659910	600960	356930	110870	0
13	362210	395400	418600	429790	447330	471660	537290	662150	600540	346690	102940	0
14	364030	395660	419110	430410	448080	473000	541840	664980	609200	336460	95040	0
15	365850	396150	419610	431040	448840	474350	541550	667980	598900	326530	87570	0
16	367670	396640	420240	431660	449590	475690	553970	671240	597260	314830	81220	0
17	369590	397130	420630	432180	450350	476940	561120	675380	594520	304770	74000	0
18	371160	397620	421110	432700	451100	478400	567150	679440	590840	295140	67290	0
19	372810	398110	421650	433120	451860	479760	573090	681800	585420	285150	60940	0
20	374380	398600	422050	433540	452620	481120	579080	684110	579210	275860	54650	0
21	375690	399090	422560	433960	453480	482940	584470	684110	573220	266590	49020	0
22	376990	399770	423070	434380	454350	484760	588520	682410	565310	258180	43480	0
23	378300	400460	423580	434800	455220	486590	592600	67970	55670	250520	38660	0
24	379620	401140	424100	435300	456090	488420	596110	673110	546030	243270	34240	0
25	381560	401830	424610	435850	456960	490260	599450	668880	535300	236070	30270	680
26	383500	402520	425120	436380	457840	491190	602190	664080	525240	228640	26610	520
27	382440	403210	425430	436900	458710	492120	604810	659330	514350	221520	22980	480
28	383380	403900	425740	437430	459590	493280	607580	653420	504050	21510	19840	200
29	384330	404600	426050	437960	460470	494450	610360	647250	491770	206900	17020	0
30	385280	405290	426360	438490	461360	495620	613110	641110	481910	200460	14910	0
31	386230	406070	426670	439020	462250	496790	615860	635180	472000	197200	12930	0

Record furnished by United States Bureau of Reclamation.

DISCHARGE IN SECOND FEET, NORTH PLATTE RIVER INTO
PATHFINDER DAM

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	510	680	690	290	320	550	1300	3290	1210	570	180	180
2	780	690	690	290	320	550	1300	1890	2090	1000	940	210
3	980	690	680	280	320	550	1310	2280	3060	760	1080	330
4	1450	690	680	290	310	550	1140	2650	3430	820	630	210
5	1490	690	690	280	320	550	1140	2370	4900	570	530	200
6	1670	690	690	280	320	550	1450	2090	4680	500	430	200
7	1700	690	690	280	370	410	1430	2100	4080	460	450	200
8	1660	590	690	290	370	440	1460	1730	4720	430	300	200
9	1700	590	480	280	370	440	1460	1820	4530	410	280	230
10	1250	600	180	280	370	440	1480	1310	4370	350	260	220
11	1110	590	180	280	170	550	2290	1910	4750	320	250	220
12	1170	590	190	280	180	560	2310	1620	4380	290	240	208
13	1150	590	330	380	480	560	2310	1730	4210	240	230	202
14	1010	590	330	380	430	730	2330	1610	4030	230	210	193
15	930	550	330	390	430	730	2920	1710	4690	220	190	174
16	1000	550	330	380	430	730	3280	1970	3700	215	185	165
17	1010	550	430	310	440	730	3640	2640	3160	210	200	162
18	930	340	330	310	430	730	3080	3040	2690	210	200	160
19	920	330	330	260	430	740	3040	3290	2410	200	200	160
20	880	335	380	260	430	730	3060	3580	2090	200	190	173
21	870	330	430	260	480	970	2760	3060	2020	150	250	184
22	950	430	430	260	490	970	2080	3070	1470	110	270	197
23	960	420	430	260	490	970	2100	1880	1370	100	260	220
24	960	430	430	320	490	970	2110	1870	920	105	240	273
25	770	435	420	310	490	980	1420	1840	1110	100	230	805
26	770	430	420	320	490	520	1430	2090	970	100	220	468
27	770	435	340	310	490	520	1360	2090	730	100	210	672
28	770	435	350	320	490	630	1450	3390	500	95	245	582
29	780	440	340	320	.....	610	1450	3450	520	160	230	489
30	780	435	340	310	.....	610	1450	3730	860	750	205	571
31	780	.....	350	320	.....	610	.....	3400	.....	2380	190	.....
Mean	1047	530	161	303	420	654	1998	2391	2870	419	326	273
Max.	1700	690	690	390	490	980	3640	3730	4900	2380	1080	805
Min.	510	230	330	260	310	440	1300	1380	500	95	185	160
A. F.	6100	11700	8350	18610	22310	40270	118910	147020	170640	23780	20060	16770

Total Acre Feet 705,705.

Record furnished by the United States Bureau of Reclamation.

DISCHARGE IN SECOND FEET, NORTH PLATTE RIVER, OUTFLOW OF PATHFINDER RESERVOIR

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	530	300	86	187	50	50	50	50	6450	5110	3970	940
2	370	300	86	187	50	50	50	50	6100	5700	3920	1170
3	270	300	77	177	50	50	50	50	6040	5660	3870	1230
4	250	300	77	177	50	50	50	50	5980	5730	3950	1130
5	120	300	86	177	50	50	50	50	3970	5690	3910	970
6	80	300	86	177	50	50	50	50	5130	5700	4010	660
7	90	300	86	177	50	50	10	50	4970	5680	3940	410
8	90	300	86	177	50	50	10	50	4970	5710	4020	285
9	90	300	75	177	46	50	10	50	4970	5680	4350	235
10	95	300	75	177	46	50	10	50	4970	5640	4350	220
11	95	300	75	177	46	50	40	50	5070	5700	4250	220
12	95	300	75	177	46	50	10	55	4450	5200	4160	208
13	95	300	75	66	46	50	40	55	4350	5180	4060	202
14	95	300	75	66	50	50	10	55	4350	5150	3910	193
15	15	300	75	66	50	50	40	55	4350	5200	3800	174
16	80	300	75	66	50	50	40	55	4350	5180	3700	165
17	90	300	75	50	50	50	40	500	4350	4670	3570	162
18	90	95	75	50	50	50	10	1020	4340	4730	3430	160
19	90	86	75	50	50	50	10	1810	4900	4690	3280	160
20	90	86	174	50	50	50	10	2350	5070	4630	3110	173
21	210	86	174	50	50	50	10	2970	5070	4690	2940	184
22	300	86	174	50	50	50	10	3820	5070	3810	2730	197
23	300	72	174	50	50	50	40	3970	5540	3650	2530	220
24	300	86	170	50	50	50	40	4000	6140	3610	2340	273
25	300	80	161	50	50	50	40	4000	6150	3880	2150	162
26	300	86	161	50	50	50	10	4380	6120	3540	1970	549
27	300	86	187	50	50	50	40	5300	6090	3500	1800	692
28	300	86	187	50	50	50	50	6310	6060	3430	1640	678
29	300	86	187	50	.....	50	50	6500	6090	4000	1420	635
30	300	86	187	50	.....	50	50	6180	5740	4000	1200	570
31	300	.....	187	50	.....	50	.....	6450	.....	4000	1040	.....
Mean	195	207	117	102	49	50	43	1960	5320	4810	3200	451
Max.	530	300	187	187	50	50	50	6500	6450	5730	4350	1230
Min.	15	72	75	50	46	50	40	50	4350	3430	1040	160
A. F.	12000	12300	7190	6270	2740	3070	2560	121000	317000	296000	197000	26800
Total Acre Feet	1,000,000.											

GUERNSEY STORAGE RESERVOIR

Daily Contents in Acre Feet

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	37880	39630	42191	40870	45260	49500	46880	56800	37940	42150	19870	28260
2	37890	39040	42210	41110	45620	49710	47130	56120	39780	42570	51040	25320
3	38020	40390	42280	41330	45700	49750	47800	55310	41620	42840	57570	23610
4	38240	40620	42270	41530	45750	49710	48470	51940	43060	42970	57750	23400
5	38170	40800	42280	41920	45850	49630	48760	55150	43440	43450	56950	22930
6	37680	40980	42100	41990	45980	49520	49320	55400	44880	43710	55160	21970
7	37650	41080	41820	42190	46110	49400	49550	55760	50220	44430	53740	21430
8	37500	41200	41880	42410	46170	49090	49820	56200	50320	44800	52100	21590
9	37140	41180	41690	42560	46470	49050	50160	56700	49980	45790	50540	21560
10	37060	41310	41620	42800	46470	48920	50730	56870	49280	46740	50180	21160
11	36840	41250	41510	42950	46570	48990	51320	56780	49140	47800	49650	20520
12	36750	41270	41450	43230	46640	49160	51940	56540	50420	48740	49540	19480
13	36680	41250	41490	43268	46740	49140	52700	55930	52000	49690	49160	19360
14	37170	41540	41440	43320	46820	49010	53410	55090	51840	50180	48990	19520
15	37450	41620	41580	43450	46900	48900	54040	53880	51100	50640	48820	19600
16	37500	41740	41580	43550	47220	49050	54970	52000	49870	51200	46880	19710
17	37820	41860	41520	43580	47360	48880	55950	49320	48700	51800	50750	19880
18	37940	41820	41210	43620	47530	48720	56910	45640	47040	52240	51720	19970
19	38140	41950	41080	43940	47720	48660	57770	44670	44950	52300	51280	20430
20	38350	42230	40720	43880	47990	48490	58820	37170	42450	53430	50890	20940
21	38210	42320	40560	43060	48340	48510	59970	32180	40670	53780	50580	21270
22	38350	42190	40580	43960	48530	48430	60620	28890	39420	56540	50160	21460
23	38420	42190	40251	41110	48880	48470	60980	27540	38160	57710	49510	21730
24	38540	42040	40190	41110	49030	48320	61000	27420	36730	58140	48640	21920
25	38670	41710	40210	41100	49140	48050	60880	27920	36940	57330	47510	22240
26	38550	41400	40440	44280	49280	47700	60490	29080	37190	55950	46170	22110
27	38780	41670	40440	44450	49410	47320	59900	26350	38170	54610	44280	22630
28	38900	41690	40540	44590	49540	47090	59560	26090	39300	53200	41970	23230
29	39070	41840	40760	44700	.....	46980	59070	27360	40300	51220	38340	23780
30	39180	41930	40800	44840	.....	46940	57990	39080	41160	49610	36210	24550
31	39350	.....	40780	45030	.....	46800	.....	35330	.....	48620	32100	.....

Record furnished by the United States Bureau of Reclamation.

NORTH PLATTE RIVER INTO GUERNSEY RESERVOIR
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1615	596	471	368	396	298	374	665	6650	5957	5232	1463
2	1407	601	450	351	391	291	182	797	6672	5623	6726	1465
3	1438	630	450	396	358	355	694	822	6737	5587	6382	1343
4	1642	606	450	402	365	346	661	1013	6591	5592	4629	1672
5	1633	576	415	393	373	316	520	1346	6134	5590	4155	1372
6	1145	566	330	380	378	251	522	1326	6393	5391	4069	1306
7	1281	583	360	391	400	229	483	1362	8392	5601	4041	1261
8	1165	599	360	412	359	183	602	1477	5728	5380	4037	1261
9	1014	563	335	388	316	195	573	1117	5118	5605	4034	1079
10	822	560	358	386	310	211	682	1115	5215	5541	4251	836
11	712	537	320	371	336	364	657	1295	5277	5552	4146	646
12	698	560	350	351	341	398	658	1219	5785	5470	4255	562
13	626	571	390	364	321	390	668	1053	5793	5197	4180	579
14	727	561	364	343	300	370	818	967	1895	5199	4144	565
15	616	551	369	356	330	305	728	882	4601	5096	4044	482
16	525	540	380	395	326	316	971	797	4386	5065	4020	516
17	516	535	350	321	371	314	997	895	4384	5096	5114	464
18	552	553	256	349	366	308	1064	790	4357	4998	4579	457
19	501	560	292	356	386	310	930	838	4316	4611	3948	492
20	481	518	169	293	411	259	971	755	4198	5065	3611	497
21	446	400	286	295	452	322	1046	588	4539	4651	3469	411
22	485	335	280	255	425	316	931	1542	4784	4657	3341	425
23	135	319	246	345	362	305	949	2535	4841	4528	3188	406
24	506	334	346	270	361	302	805	3190	4825	4193	3047	402
25	455	261	372	265	351	288	778	3859	5088	3841	2864	462
26	490	249	363	260	382	314	716	3907	6016	3758	2707	415
27	498	440	326	381	382	49	648	3774	5852	3794	2446	417
28	582	421	394	361	395	180	733	4560	5910	3672	2269	563
29	590	435	389	340	.....	205	666	5702	5940	3623	2065	619
30	550	480	409	330	.....	216	720	6719	3957	3790	1839	753
31	570	.....	361	360	.....	302	.....	8038	.....	4163	1517	.....
Mean	807	501	355	349	368	285	735	2114	5537	4902	3818	773
Max.	1642	606	471	412	452	398	1064	8038	8392	5957	6726	1465
Min.	435	249	169	255	300	49	374	588	1198	2623	1517	402
A. F.	49615	29820	21800	21480	20440	17520	43730	130010	329470	301410	234740	16000

Total Acre Feet 1,216,065.

Record furnished by the United States Bureau of Reclamation.

NORTH PLATTE RIVER OUTFLOW OF GUERNSEY RESERVOIR
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1360	455	340	323	280	318	331	1220	5630	5460	6000	3160
2	1390	450	410	215	210	185	356	1190	5740	5140	4620	2950
3	1370	373	410	301	318	345	356	1180	5810	5140	4660	2200
4	1530	490	430	301	310	356	323	1200	5860	5440	4540	1780
5	1670	485	410	190	323	356	373	1240	5940	5350	4560	1640
6	1690	475	420	350	312	306	240	1200	5670	5260	4820	1790
7	1300	533	500	290	334	290	367	1180	5780	5190	4910	1530
8	1240	539	330	301	329	340	460	1210	5680	5190	4860	1180
9	1200	573	430	312	195	215	406	1210	5590	5110	4820	1080
10	862	496	393	265	340	306	395	1330	5570	5060	4430	1050
11	823	567	375	296	285	329	361	1310	5350	5020	4110	1070
12	743	550	380	210	306	312	345	1310	5040	5000	4310	985
13	661	480	370	345	270	400	285	1360	5000	5020	4370	640
14	180	516	389	312	260	136	460	1390	4970	4950	4230	484
15	475	511	299	290	290	361	412	1490	4970	4860	4130	442
16	500	480	380	345	165	240	502	1740	5110	4730	4090	460
17	355	475	380	306	301	400	502	2250	4970	4750	4070	378
18	490	573	412	329	280	389	580	2640	5190	4780	4090	412
19	400	495	357	195	290	340	406	2840	5370	4580	4170	260
20	378	377	350	323	275	345	442	3020	5460	4500	3810	240
21	516	355	367	255	275	312	466	3100	5110	4180	3620	215
22	415	400	270	255	329	356	694	3200	5110	3270	3550	329
23	400	385	412	270	185	285	767	3220	5180	3940	3500	270
24	395	361	376	270	285	378	795	3250	5550	3980	3560	306
25	440	430	362	270	296	424	838	3610	5140	4250	3430	301
26	550	400	247	170	312	490	913	3830	5140	4150	3380	329
27	382	405	326	296	301	240	945	4500	5460	4450	3400	308
28	522	310	344	296	345	296	905	4840	5370	4350	3430	260
29	505	360	278	280	.....	260	913	5090	5140	4670	3390	367
30	495	435	389	260	.....	230	1310	5350	5520	4600	3420	340
31	185	.....	371	265	.....	373	.....	5399	.....	4640	3590	.....
Mean	775	458	373	280	287	320	548	2180	5440	4780	4090	900
Max.	1690	573	500	350	345	490	1310	5390	5940	5460	4910	3400
Min.	355	310	247	170	165	185	240	1180	4970	3270	3580	240
A. F.	47700	27300	22900	17200	15900	20200	32600	152000	324000	294000	251000	53600

Total Acre Feet 1,310,000.

NORTH PLATTE RIVER PASSING WHALEN, WYOMING
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	241	344	225	143	179	222	280	96	2120	1840	1380	518
2	258	273	206	132	155	191	290	40	2220	1860	1430	439
3	231	322	250	143	222	291	290	17	2250	1870	1420	375
4	416	464	222	159	248	272	260	30	2310	1930	1400	281
5	1310	436	224	175	222	287	305	32	2350	1880	1460	231
6	1290	515	321	230	208	221	180	33	2130	1820	1780	407
7	1040	557	368	184	237	259	302	31	2190	1810	1840	481
8	793	525	239	205	204	277	356	43	2170	1780	1860	153
9	831	484	227	198	204	187	341	42	2140	1800	1860	83
10	556	455	205	179	231	249	304	104	2140	1790	1480	65
11	508	636	197	182	210	218	289	65	2060	1730	1470	82
12	333	505	228	178	191	380	265	50	1800	1670	1340	97
13	310	518	232	220	154	337	206	48	1850	1690	1380	132
14	209	504	178	184	165	285	360	65	1870	1640	1200	97
15	134	520	188	180	176	405	203	144	1810	1560	1120	104
16	149	260	218	210	162	310	51	216	1850	1430	1060	172
17	120	392	216	187	212	298	60	532	1610	1430	1040	115
18	257	586	238	177	200	220	104	823	1780	1440	1070	145
19	209	342	161	135	189	273	107	939	1930	1310	1220	30
20	223	199	175	169	180	235	88	988	2030	1330	1070	30
21	283	287	154	148	189	225	103	941	1970	1350	769	30
22	211	280	180	149	189	244	83	946	1900	1170	712	30
23	188	249	228	168	162	255	95	928	1890	1320	673	30
24	312	387	173	174	191	365	102	907	1920	1470	669	30
25	474	350	153	154	195	400	65	1080	1810	1590	652	30
26	388	305	95	167	213	232	49	1100	1780	1540	611	30
27	380	214	182	194	197	143	86	1490	1800	1370	603	30
28	378	201	166	162	212	183	61	1660	1730	1250	541	30
29	399	226	180	182	.....	172	103	1780	1790	1180	507	45
30	373	216	222	172	.....	289	156	1920	1890	1380	525	61
31	323	.....	225	175	.....	263	.....	1830	.....	1340	652	.....
Mean	423	385	211	171	196	265	184	610	1970	1580	1120	146
Max.	1310	586	368	230	248	405	356	1920	2350	1930	1860	518
Min.	120	199	95	132	154	143	51	17	1610	1170	507	30
A. F.	26000	22900	13000	10500	10900	16300	10900	37500	117000	97200	68900	8690
Total	Acres Feet 410,000.											

NORTH PLATTE RIVER AT TORRINGTON, WYOMING
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1075	950	800	625	575	600	675	128	2,220	1,880	1,820	356
2	1050	950	900	612	564	592	655	355	2360	1860	1340	920
3	1100	900	900	625	612	575	688	386	2320	2060	1360	826
4	1300	900	800	638	612	638	662	376	2180	2200	1360	826
5	2175	900	800	650	612	688	612	386	2450	2000	1380	812
6	2200	975	750	728	588	588	529	376	2170	1980	1860	968
7	1800	975	975	688	600	575	564	346	2100	2000	1760	984
8	1525	975	750	714	675	588	650	317	2470	1980	2160	856
9	1525	1025	800	700	552	588	552	317	2490	1880	2140	742
10	1350	900	775	638	575	600	552	317	2510	1710	2060	712
11	1525	975	775	564	575	600	575	308	2510	1760	1860	675
12	1475	1025	775	564	625	600	552	298	1980	1760	1600	675
13	1325	1025	950	625	588	600	540	279	2120	1720	1680	675
14	1200	1025	800	625	552	600	518	317	2140	1640	1680	688
15	1200	1025	775	600	564	600	650	336	1920	1600	1340	662
16	1200	1025	775	625	552	620	518	326	1900	1520	1300	688
17	1050	1025	775	600	552	638	518	336	1820	1190	1720	714
18	1050	1250	750	600	552	600	355	700	1780	1190	1290	675
19	1050	1150	775	552	506	588	346	984	1820	1520	1320	650
20	1025	1050	750	575	552	625	355	1080	1840	1660	1600	588
21	950	975	750	575	575	612	376	1050	1880	1680	1200	518
22	950	975	750	552	564	600	439	1070	1900	1580	1120	529
23	1000	975	750	552	600	590	439	1240	2020	1660	1130	552
24	1900	9 5	750	575	600	575	150	1270	1880	1490	1050	575
25	1025	975	725	575	588	575	460	1250	1880	1490	1100	575
26	1150	975	700	575	625	575	450	1300	1900	1320	1020	564
27	1050	900	700	564	638	575	498	1340	1820	1250	1080	564
28	1050	750	700	588	588	575	397	1980	1760	1130	1020	662
29	1025	750	700	625	.....	565	418	3000	1760	1240	968	552
30	1025	900	700	625	.....	555	418	1940	1880	1360	952	575
31	1025	.....	700	600	.....	540	.....	1920	.....	1240	936	.....
Mean	1240	972	777	611	584	594	511	836	2080	1650	1410	699
Max.	2200	1250	975	728	675	688	688	3090	2510	2200	2160	984
Min.	950	750	700	552	506	540	346	279	1760	1130	936	518
A. F.	76200	57800	47800	37600	32400	36500	30400	51400	124000	101000	86700	41600
Total	Acres Feet 723,400.											

NORTH PLATTE RIVER AT WYOMING-NEBRASKA LINE
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1100	1040	858	665	627	562	618	469	1770	1510	1240	770
2	1110	1030	833	636	618	580	656	445	1960	1560	1250	803
3	1250	1010	858	586	608	580	646	421	1980	1560	1270	858
4	1480	964	869	580	646	627	608	405	1960	1560	1320	825
5	1960	976	880	553	656	646	589	383	2020	1650	1430	792
6	2250	1060	858	553	676	636	580	398	1940	1590	1650	803
7	2230	1010	892	636	696	627	589	429	1980	1560	1730	916
8	2020	1060	904	676	665	636	627	437	2090	1540	1790	869
9	2020	1110	836	696	646	627	636	421	2050	1580	1790	728
10	1940	1110	858	560	608	598	636	413	2000	1580	1650	676
11	1750	1130	836	520	627	570	627	398	2090	1540	1520	627
12	1780	1170	825	530	627	580	618	398	1690	1480	1440	598
13	1580	1140	825	560	598	562	618	390	1630	1480	1350	598
14	1520	1060	814	540	598	553	627	361	1650	1460	1280	562
15	1410	1060	781	500	598	553	749	361	1670	1350	1200	544
16	1320	1040	738	520	598	598	738	361	1690	1270	1220	544
17	1280	964	750	530	589	582	665	398	1690	1160	1250	570
18	1190	1010	738	540	618	598	646	528	1610	1080	1170	562
19	1200	1130	760	540	618	598	570	676	1630	1130	1190	528
20	1200	1080	792	560	589	570	536	811	1610	1320	1190	510
21	1160	1000	718	598	608	553	491	858	1590	1340	1080	494
22	1270	964	676	562	608	536	485	836	1610	1350	1000	469
23	1160	1000	696	544	618	553	528	836	1650	1320	976	477
24	1270	940	696	562	589	544	580	847	1690	1270	940	528
25	1240	976	728	562	589	598	570	880	1670	1250	880	536
26	1250	964	728	570	589	598	570	916	1650	1160	858	562
27	1250	964	707	570	570	354	528	1030	1630	1130	836	570
28	1130	964	728	618	553	686	494	1200	1520	1110	803	580
29	1140	904	707	656	.....	858	469	1340	1480	1160	814	570
30	1080	869	656	665	.....	836	461	1460	1540	1220	781	570
31	1060	.....	696	656	.....	580	.....	1540	.....	1220	760	.....
Mean	1440	1020	782	582	615	599	592	666	1760	1370	1210	635
Max.	2250	1170	904	696	696	858	749	1540	2090	1650	1790	916
Min.	1060	869	656	500	553	354	461	361	1480	1080	760	469
A. F.	88500	60700	48100	35800	34200	36800	35200	41000	105000	84200	74400	37800
Total Acre Feet	681,700.											

NORTH PLATTE RIVER AT MITCHELL, NEBRASKA
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2000	1625	1550	1370	1050	912	1280	951	420	345	355	225
2	2000	1550	1475	1270	1130	854	1350	932	645	345	325	225
3	2250	1625	1475	1230	1110	912	1460	932	725	370	345	225
4	2300	1550	1550	1210	1090	951	1320	1010	740	485	345	220
5	2325	1550	1475	1170	1090	932	1210	1110	780	580	420	220
6	2750	1625	1475	1110	1090	932	1130	1170	873	550	485	220
7	2750	1625	1350	1190	1110	873	1090	1070	834	500	705	240
8	2600	1625	1400	1130	1110	815	1110	893	971	500	893	265
9	2400	1625	1350	1070	1130	854	1090	780	971	460	990	225
10	2250	1625	1400	1050	1010	854	1070	834	912	435	1050	215
11	2100	1550	1400	1070	990	815	1050	760	1190	395	893	215
12	2250	1625	1400	1050	990	815	990	665	873	345	795	215
13	2100	1625	1475	1010	1010	815	912	595	685	310	595	210
14	1925	1550	1400	1010	1030	834	795	550	705	295	460	215
15	1850	1625	1350	1050	1030	873	893	485	610	275	395	215
16	1775	1550	1350	1130	1010	912	990	485	565	260	465	210
17	1775	1500	1400	1210	990	854	932	410	460	265	515	210
18	1750	1590	1350	1170	1030	873	912	355	370	265	395	215
19	1775	1625	1400	1210	1050	893	854	355	355	260	335	225
20	1775	1625	1400	1070	1030	893	893	410	355	260	320	235
21	1775	1550	1350	1090	1010	893	834	380	410	310	295	225
22	1700	1500	1100	990	1010	912	854	335	420	335	265	225
23	1700	1550	1400	971	990	951	932	335	435	320	220	235
24	1700	1350	1350	990	932	893	990	345	515	310	210	235
25	1700	1500	1350	990	834	912	971	265	435	310	215	220
26	1700	1625	1400	1010	834	700	932	255	395	305	220	210
27	1700	1550	1350	971	912	485	912	305	355	320	220	210
28	1625	1550	1350	971	951	700	932	310	335	295	215	210
29	1625	1550	1300	990	.....	800	873	310	335	305	210	200
30	1625	1550	1300	1030	.....	975	854	285	335	345	205	215
31	1625	.....	1400	1010	.....	1056	.....	305	.....	355	200	.....
Mean	1970	1570	1400	1090	1020	862	1010	585	601	355	438	221
Max.	2750	1625	1550	1370	1130	1050	1460	1170	1190	580	1050	265
Min.	1625	1350	1300	971	834	485	795	255	335	260	200	200
A. F.	121000	93400	86100	67000	56800	53000	60100	36000	35800	21800	26900	13200
Total Acre Feet	671,000.											

NORTH PLATTE RIVER AT MINATARE, NEBRASKA

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2500	2200	1700	1500	1280	1200	1880	1130	256	344	507	423
2	2500	2050	1700	1500	1280	1280	1610	1130	410	370	450	426
3	2900	2050	1850	1600	1280	1280	1520	933	630	450	450	436
4	3000	1900	1900	1110	1320	1280	1110	1130	630	568	450	410
5	3000	1850	1900	1370	1320	1340	1110	1130	630	630	450	397
6	3300	1850	1900	1370	1370	1320	1110	1340	661	681	476	384
7	3650	1850	1850	1320	1110	1280	1300	1190	895	661	538	476
8	3500	1850	1700	1320	1110	1280	1300	1070	1190	630	630	491
9	3300	2050	1700	1370	1370	1230	1190	952	1230	568	876	538
10	3200	2100	1550	1370	1370	1300	1190	933	1230	568	990	423
11	2900	2050	1450	1480	1410	1340	1190	914	1280	507	876	397
12	2900	2050	1500	1400	1370	1280	1090	783	1160	507	698	397
13	2650	1950	1550	1460	1280	1320	1260	806	1110	476	599	384
14	2500	1900	1500	1450	1370	1170	1190	895	1110	423	522	397
15	2450	1900	1420	1450	1370	1190	990	661	800	397	463	300
16	2250	1850	1420	1500	1430	1280	1210	630	952	397	436	300
17	2100	1850	1420	1530	1340	1320	914	630	766	397	584	344
18	2100	1900	1300	1560	1390	1280	1110	553	766	397	522	397
19	2050	1950	1300	1600	1390	1280	914	630	507	370	436	397
20	2200	1900	1420	1620	1300	1151	914	509	468	370	357	450
21	2050	1850	1420	1620	1230	1110	914	553	397	423	300	491
22	2100	1850	1500	1620	1370	1110	914	344	410	423	322	463
23	1900	1750	1550	1610	1410	1150	1130	280	410	423	322	463
24	1900	1700	1700	1580	1300	1110	1130	322	410	450	311	522
25	1850	1700	1550	1540	1340	1150	1130	344	423	423	311	553
26	2050	1700	1700	1470	1370	900	1130	388	617	450	267	538
27	2100	1850	1700	1410	1370	780	929	112	581	176	267	538
28	1950	1750	1550	1360	1370	900	933	231	450	507	289	522
29	1700	1750	1500	1320	.....	950	1630	231	136	450	289	538
30	2100	1750	1500	1230	.....	1050	1030	278	344	476	289	538
31	2100	.....	1550	1190	.....	1400	.....	256	.....	476	357	.....
Mean	2480	1890	1590	1460	1350	1200	1180	685	716	474	472	445
Max.	3650	2200	1900	1620	1430	1400	1880	1340	1460	681	990	553
Min.	1700	1700	1300	1190	1230	780	914	112	256	344	267	300
A. F.	152000	112000	97800	89800	75000	73800	70200	42100	42600	29100	29000	26500
Total Acre Feet	839,900.											

NORTH PLATTE RIVER AT BRIDGEPORT, NEBRASKA

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3350	2800	2200	1950	2000	1630	2600	1380	504	668	578	552
2	3700	2800	2200	1950	2000	1630	2420	1600	493	565	552	628
3	3950	2800	2200	1950	2000	1600	2060	1320	515	528	590	696
4	4350	2800	2200	1950	1820	1600	1790	1420	651	628	651	696
5	4350	2600	2100	1950	1690	1600	1790	1500	940	668	615	724
6	4150	2600	2100	1800	1650	1540	1820	1710	1040	828	602	696
7	4600	2600	1900	1800	1670	1480	1840	1760	1130	780	640	724
8	4600	2600	1700	1800	1500	1440	1790	1560	1150	780	724	766
9	4150	2600	1700	1800	1420	1420	1630	1440	1240	696	1190	780
10	3900	2600	1700	1800	1500	1480	1500	1360	1240	668	1230	752
11	3700	2600	1700	1900	1630	1480	1500	1360	1320	640	1240	654
12	3700	2600	2300	1900	1650	1460	1500	1360	1420	628	1260	640
13	3700	2300	2300	1900	1540	1460	1500	1260	1460	615	1060	640
14	3700	2000	2300	1900	1460	1440	1520	1240	1280	565	908	640
15	3700	2000	2000	1900	1520	1440	1420	1240	1130	493	812	668
16	3350	2000	1700	2000	1580	1420	1320	1170	958	460	724	682
17	3150	1900	2000	2000	1580	1400	1320	1030	876	427	724	640
18	3150	1900	2000	2000	1580	1400	1320	940	780	427	738	696
19	3150	1750	1600	2000	1580	1380	1280	940	682	396	738	812
20	3150	1900	1600	2000	1630	1380	1300	940	603	405	682	844
21	3150	2350	1600	2100	1670	1360	1260	1060	565	449	668	796
22	3000	2350	1600	2100	1670	1360	1240	940	812	471	640	780
23	2800	2350	1700	2100	1670	1440	1440	796	752	416	654	860
24	2800	2350	1900	2100	1630	1340	1760	710	724	416	578	958
25	2600	2350	1900	2100	1650	1340	1790	628	780	438	552	992
26	2600	2350	1800	2050	1600	1190	1790	528	780	471	578	1030
27	2600	2350	1800	2050	1580	1010	1790	438	752	482	493	1030
28	2800	2200	1800	2050	1630	1010	1360	471	628	493	493	876
29	2800	2200	1800	2050	.....	1040	1260	460	528	460	482	876
30	2800	2200	1800	2050	.....	1040	1280	482	552	515	582	892
31	2800	.....	1800	2050	.....	1040	.....	449	.....	515	552	.....
Mean	3430	2360	1900	1970	1650	1380	1610	1080	876	548	724	767
Max.	4600	2800	2300	2100	2000	1630	2600	1760	1460	828	1260	1030
Min.	2600	1750	1600	1800	1420	1010	1240	438	493	396	482	552
A. F.	211000	140000	117000	121000	91600	84800	95800	66100	52100	33700	44500	45600
Total Acre Feet	1,100,000.											

REPORT OF SECRETARY

NORTH PLATTE RIVER AT OSHKOSH, NEBRASKA
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3100	2750	2350	2400	3090	2020	1800	1480	155	510	465	515
2	3200	2450	2350	2400	3000	1880	1800	1600	115	580	455	715
3	3100	2750	2350	2400	3000	1740	1850	2020	115	580	480	760
4	1100	2450	2350	2400	2650	1740	1700	1740	425	725	405	740
5	1300	2900	2900	2400	2480	2620	1680	1410	610	725	425	715
6	3900	2750	2850	2400	2300	2020	1880	1680	775	580	415	700
7	3700	2450	2800	2400	2300	2020	1740	1680	785	640	435	700
8	1100	2750	2750	2400	2160	2300	1740	1820	705	610	415	700
9	3900	2750	2700	2100	2020	3090	1740	1620	815	700	570	685
10	3400	2450	2700	2100	1740	2650	1600	1510	1040	655	915	865
11	3700	2600	2700	2300	1880	2020	1600	1400	2040	465	970	570
12	3900	2450	2650	2500	1880	1880	1600	1400	1260	465	1190	580
13	3550	2450	2600	2300	1880	1880	1600	1400	1260	480	1190	580
14	3700	2450	2550	2300	1880	1740	1600	1100	1180	435	925	570
15	3400	2750	2500	2300	1880	1740	1600	1100	1100	465	900	670
16	3400	2750	2150	2400	2150	1740	1600	1170	1080	405	715	685
17	3200	2450	2150	2100	2150	1740	1600	1000	865	405	625	775
18	3650	2750	2400	2400	2150	1880	1350	830	685	360	520	925
19	2750	2750	2400	2400	2020	1880	1480	815	610	335	530	1020
20	2750	2750	2350	2400	1880	1740	1480	795	465	345	580	970
21	2750	3700	2350	2550	2150	1740	1350	775	360	253	520	1020
22	2750	1800	2300	2550	2150	1600	1240	915	350	290	490	970
23	2750	5200	2300	2550	2150	1480	1480	925	350	345	530	900
24	2750	1100	2250	2550	2150	1480	2020	860	350	390	670	1100
25	2750	3700	2250	2550	2300	1740	1880	795	445	315	595	1060
26	2750	3300	2200	2700	2150	1880	1740	745	390	300	570	1020
27	2750	3300	2200	2700	2020	1880	1740	760	415	435	445	970
28	2750	3300	2200	2700	2020	1850	1600	670	445	390	435	925
29	2750	3000	2200	2700	2020	1850	1740	655	490	390	465	925
30	2750	3000	2200	2700	2020	1850	1600	555	390	390	455	740
31	2750	.....	2200	2700	.....	1800	.....	505	.....	390	455	.....
Mean	3290	3090	2520	2470	2200	1900	1650	1180	705	461	607	803
Max.	1100	5200	2950	.....	3090	3000	2020	2020	2040	725	1190	1100
Min.	2750	2600	2200	.....	1740	1480	1240	505	350	253	405	515
A. F.	202000	184000	155000	152000	122000	117000	98200	72600	42000	28500	37300	47800
Total Acre Feet	1,260,000.											

NORTH PLATTE RIVER AT LEWELLEN, NEBRASKA
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	350	485	465
2	355	490	575
3	370	485	640
4	590	485	020
5	510	455	590
6	475	415	540
7	525	465	560
8	620	370	580
9	655	430	560
10	640	700	490
11	500	725	500
12	440	915	500
13	465	1040	490
14	375	700	465
15	350	540	540
16	345	500	510
17	350	455	805
18	355	430	670
19	340	465	805
20	360	465	805
21	345	410	670
22	360	395	670
23	370	410	640
24	365	475	1120
25	360	455	1120
26	365	455	1090
27	370	380	1040
28	380	385	1010
29	305	380	1040
30	400	400	832
31	440	400	.....
Mean	425	503	694
Max.	655	1040	1120
Min.	340	370	465
A. F.	36083	30883	11300
N. R.	No Record.											

NORTH PLATTE RIVER AT SUTHERLAND, NEBRASKA

Year Ending September 30, 1931

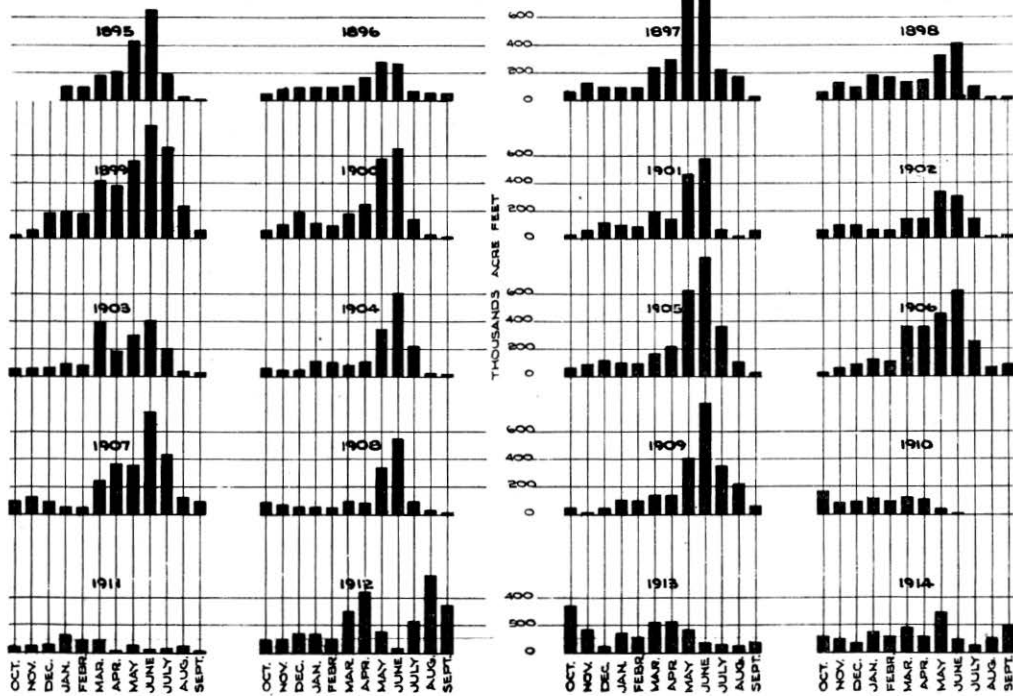
Date	Oct. N.R.	Nov. N.R.	Dec. N.R.	Jan. N.R.	Feb. N.R.	Mar. N.R.	Apr. N.R.	May N.R.	June N.R.	July	Aug.	Sept.
1										5	5	48
2										220	64	68
3										96	56	170
4										200	42	245
5										310	11	320
6										515	5	445
7										330	350	340
8										235	530	340
9										235	270	445
10										300	150	380
11										230	85	290
12										210	265	245
13										190	355	290
14										120	445	310
15										36	445	270
16										24	470	265
17										14	420	300
18										5	370	300
19										5	180	320
20										3	170	430
21										2	165	540
22										5	490	580
23										2	320	625
24										0	230	695
25										0	130	720
26										0	96	735
27										0	96	760
28										0	96	780
29										2	60	800
30										0	80	785
31										0	52	.....
Mean										106	210	427
Max.										515	530	800
Min.										1	5	48
A. F.										6534	12900	25430
N. R.	No Record.											

NORTH PLATTE RIVER AT NORTH PLATTE, NEBRASKA

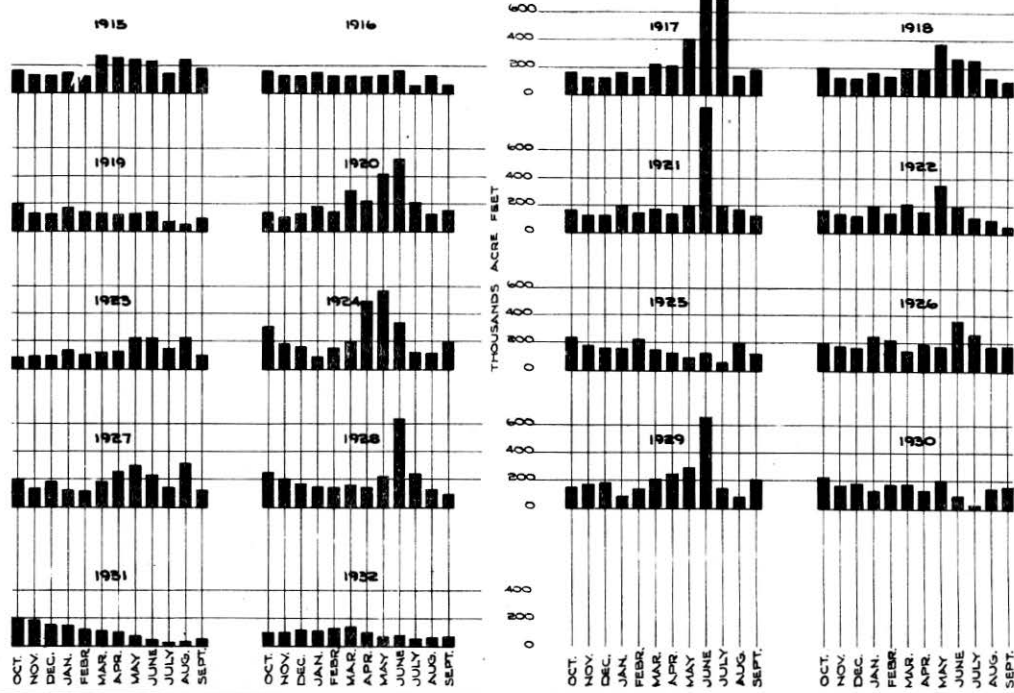
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3450	3100	3700	1970	3920	2390	1970	2660	390	105	95	195
2	3300	3100	3900	2100	3730	2520	3010	2520	359	210	195	210
3	4100	3300	3700	2250	3720	2390	6150	2100	280	305	160	230
4	5800	3100	3700	2390	3550	2390	4980	2100	280	360	230	300
5	5300	3000	3700	2390	3380	1850	2850	2530	620	425	180	395
6	5100	3300	3900	2530	3370	1190	2250	2390	670	470	180	440
7	4550	3300	3900	2660	2850	1720	2100	2100	570	470	235	440
8	4550	3300	3550	2660	2850	2250	1970	2100	570	470	335	465
9	4100	2850	3550	2660	2850	2530	2100	2390	730	470	345	465
10	4550	2850	3250	2520	2530	3370	2100	2100	890	465	305	460
11	5350	3100	3250	2530	2660	4330	2100	1970	1150	465	230	460
12	5350	3100	3100	2100	2660	3920	2100	1730	1310	460	210	460
13	4550	3100	3100	1970	2660	2850	2100	1720	1480	450	305	460
14	4100	3100	3250	1590	2520	2390	2100	1590	1720	365	465	475
15	4100	3050	3000	1590	2390	2250	1850	1480	1340	255	570	520
16	4100	2850	2600	1980	2390	2100	1980	1210	1070	190	620	475
17	4100	2750	3000	1850	2530	2100	1970	1150	1000	160	620	520
18	3700	2600	3250	1850	2390	2100	1980	1000	860	130	570	620
19	3100	2850	2850	1720	2250	2390	1970	1000	790	125	470	670
20	3100	1500	2100	2100	2250	2530	1980	930	790	130	380	670
21	3100	1100	1900	2390	2250	2520	1850	860	670	130	335	790
22	2300	1800	2050	2850	2850	2250	1720	790	620	110	300	790
23	3300	3100	2100	2660	3200	2100	1730	730	395	195	285	790
24	3300	4050	2250	2660	2850	2250	2100	730	350	90	350	925
25	3100	3900	2150	3010	2520	2100	2390	790	350	85	390	925
26	3300	3900	2600	3010	2390	2100	2850	730	315	85	270	1000
27	3300	4250	2750	3280	2530	2100	2850	620	250	85	240	1070
28	3300	4050	3000	3720	2520	2250	2320	460	210	80	225	1000
29	3300	3900	3000	3730	.....	2100	2530	440	165	75	220	1000
30	3900	3700	2750	3920	.....	2100	2660	410	130	80	210	1000
31	3300	.....	2750	3930	.....	1850	.....	405	.....	85	200	.....
Mean	3935	3145	3040	2510	2800	2360	2430	1410	675	240	310	610
Max.	5800	4250	3900	3930	3930	4325	6150	2660	1720	470	620	1070
Min.	3000	1400	1900	1590	2250	1155	1720	405	130	75	95	195
A. F.	241987	187143	186945	156942	155824	145290	144419	86867	40295	14856	19171	36200
Total Acre Feet	1,415,040.											

STATE OF NEBRASKA
DEPARTMENT OF PUBLIC WORKS
BUREAU OF IRRIGATION, WATER POWER & DRAINAGE
R.H. WILLIS, CHIEF
DISCHARGE OF NORTH PLATTE RIVER
AT
NORTH PLATTE
WATER YEARS 1895-1914.



STATE OF NEBRASKA
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF IRRIGATION, WATER POWER & DRAINAGE
 R. H. WILLIS, CHIEF
DISCHARGE OF NORTH PLATTE RIVER
 AT
NORTH PLATTE
 WATER YEARS 1915-1932



SOUTH PLATTE RIVER AT NORTH PLATTE, NEBRASKA

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	1100	1650	1020	700	675	675	325	0	0	0	0
2	100	1100	1900	885	675	780	780	230	0	0	0	0
3	250	750	1350	780	675	595	1020	176	0	0	0	0
4	850	550	1350	675	510	595	1600	207	0	0	0	0
5	650	650	1500	675	510	495	1150	170	31	0	0	0
6	650	550	1100	675	510	485	1150	140	0	0	0	0
7	650	550	1350	595	595	475	1150	115	21	0	0	0
8	650	550	800	510	595	465	1150	132	43	0	0	0
9	650	650	1000	595	595	460	1020	120	120	0	0	0
10	650	425	750	595	510	450	1020	75	55	0	0	0
11	1000	425	750	595	595	445	780	63	124	0	0	0
12	1100	425	750	600	510	435	675	63	110	0	0	0
13	850	350	750	625	595	430	480	63	50	0	0	0
14	850	350	925	625	445	425	455	63	31	0	0	2
15	850	375	750	625	510	420	405	43	28	0	0	5
16	850	500	750	625	510	415	420	31	15	0	0	5
17	850	500	750	625	480	410	355	9	5	0	0	0
18	850	500	900	625	420	405	430	2	2	0	0	0
19	850	500	900	650	495	405	345	0	0	0	0	0
20	850	590	1150	650	510	495	380	0	0	0	0	0
21	850	400	900	650	430	395	285	0	0	0	0	0
22	850	350	900	650	675	395	222	0	0	0	0	0
23	850	350	1025	650	780	380	275	0	0	0	0	0
24	850	350	1025	675	675	325	115	0	0	0	0	0
25	850	850	1350	675	675	310	355	0	0	0	0	0
26	850	850	1025	675	675	350	345	0	0	0	0	0
27	850	650	1300	675	780	360	365	0	0	0	0	0
28	850	1100	1150	675	780	380	335	0	0	0	0	0
29	1100	1150	1150	700	.....	400	420	0	0	0	0	0
30	1100	1650	1300	700	.....	405	325	0	0	0	0	0
31	1100	.....	1350	700	.....	780	.....	0	.....	0	0	.....
Mean	780	610	1100	665	590	460	650	65	22	0	0	0
Max.	1100	1650	1900	1020	780	780	1600	325	124	0	0	5
Min.	75	350	750	510	420	325	222	0	0	0	0	0
A. F.	47951	38083	67241	41009	32559	28104	38702	4020	1283	0	0	24
Total Acre Feet	299,276.											

SOUTH PLATTE RIVER AT OGALLALA, NEBRASKA

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N R	N R	N R	N R	N R	N R	N R	1900	195	38	10	13
2	1900	165	35	12	1
3	1900	149	37	8	1
4	1900	120	36	35	1
5	1900	95	47	35	0
6	1700	105	48	32	1
7	1670	65	47	2	16
8	1620	89	41	2	32
9	1390	85	45	18	31
10	1170	115	46	25	30
11	1000	110	50	22	10
12	770	95	46	23	6
13	620	85	42	22	5
14	475	87	43	17	6
15	310	79	39	12	6
16	315	81	37	6	6
17	325	75	37	1	5
18	270	77	37	4	4
19	225	61	37	4	4
20	200	59	35	3	4
21	180	63	37	3	4
22	155	71	32	3	4
23	170	50	32	3	1
24	199	48	25	3	2
25	200	47	29	2	2
26	225	45	12	1	2
27	260	44	10	3	4
28	300	45	6	3	4
29	235	43	6	3	4
30	170	38	6	3	4
31	36	.....	2	4
Mean	416	81	31	10	8
Max.	1900	195	50	35	46
Min.	170	38	6	1	0
A. F.	16959	4967	2025	615	196
N. R.	No Record.											

PLATTE RIVER AT GOTHENBURG, NEBRASKA
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.			
1										30	25	64
2										60	28	110
3										110	31	125
4										110	36	0
5										132	72	0
6										110	108	265
7										213	100	221
8										225	144	240
9										235	96	280
10										215	155	305
11										255	144	280
12										265	122	280
13										275	144	255
14										320	190	305
15										285	275	355
16										117	290	390
17										105	330	420
18										96	355	445
19										81	340	350
20										87	215	370
21										59	215	370
22										50	215	255
23										42	175	175
24										30	255	330
25										22	340	420
26										25	255	500
27										30	175	395
28										33	185	170
29										33	110	440
30										28	125	420
31										22	190	
Mean										123	175	294
Max.										320	330	500
Min.										22	25	0
A. F.										7605	10770	17524
N. R.	No Record.											

SOUTH PLATTE RIVER AT JULESBURG, COLORADO
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	157	404	689	468	439	532	1573	169	46	60	29	28
2	174	400	611	463	427	537	1882	152	42	60	32	28
3	190	396	623	445	412	553	1702	123	36	55	23	23
4	281	396	650	445	398	571	1576	111	39	82	24	21
5	446	403	627	412	391	669	1528	102	69	75	20	23
6	449	403	656	412	405	778	1156	96	68	60	23	20
7	428	405	618	423	420	820	1379	80	59	57	28	18
8	391	407	596	405	428	860	1170	71	43	48	32	19
9	400	407	608	395	406	902	900	104	53	40	28	20
10	451	399	603	364	406	976	738	79	51	38	25	17
11	501	401	588	350	451	1052	638	80	59	33	28	15
12	490	399	573	325	437	967	535	72	55	31	28	19
13	461	386	568	310	447	840	492	69	50	30	25	17
14	436	380	554	251	445	768	419	62	45	29	23	14
15	445	387	554	211	441	549	356	57	39	35	24	21
16	461	382	560	255	421	542	335	55	38	30	20	23
17	449	365	552	291	427	524	266	63	37	27	20	21
18	443	372	522	299	411	498	231	51	36	27	23	20
19	411	370	503	281	386	498	191	50	35	24	24	36
20	408	222	472	264	318	509	169	50	41	26	21	27
21	416	152	471	323	355	427	158	46	40	25	23	26
22	420	132	449	300	460	444	151	45	46	25	28	38
23	420	121	471	444	526	409	182	42	38	23	25	37
24	419	216	492	494	554	365	254	34	37	22	25	44
25	440	486	471	490	565	248	305	34	39	24	24	43
26	435	579	430	459	546	202	399	45	43	22	24	41
27	411	651	438	464	537	180	292	43	44	23	24	36
28	407	675	422	477	513	238	227	45	31	25	24	32
29	207	711	442	460	.....	276	194	47	27	24	24	43
30	399	687	468	445	.....	382	176	47	37	23	23	47
31	397	.....	496	453	.....	568	.....	47	.....	22	22	.....
Mean	401	403	541	386	443	568	660	70	41	36	24	27
Max.	591	711	689	494	565	1052	1882	169	69	82	32	47
Min.	157	121	422	211	318	180	154	34	27	22	20	14
A. F.	24600	24000	33300	23700	24600	34900	39300	4280	2620	2230	1520	1640

Total Acre Feet 216,690.
Record furnished by State of Colorado.

REPORT OF SECRETARY

PLATTE RIVER AT OVERTON, NEBRASKA

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2800	3800	4800	3280	5170	4410	3690	2900	140	0	0	0
2	3100	3900	4100	2900	4910	4110	4910	2900	95	0	0	0
3	4300	3700	4500	2900	4650	4110	5970	2900	35	0	0	0
4	4500	3700	4800	2900	4180	4170	6500	2900	25	0	0	0
5	5500	3700	4800	2900	4170	3910	7500	2900	70	0	0	0
6	6350	3500	5300	2720	4180	3190	6550	2720	135	0	0	0
7	5300	3700	5000	3280	3700	3190	5180	2720	180	0	0	0
8	5000	3700	5000	3280	3700	3190	4110	3090	200	0	0	0
9	5000	3700	5000	3490	4170	3190	3700	2900	200	0	0	0
10	1500	3500	4800	3190	3910	4110	3700	2720	200	0	0	0
11	4800	3700	3700	3190	3910	5980	3700	2510	315	0	0	0
12	9700	3700	4300	2900	3910	6550	3300	2510	510	0	0	0
13	8300	3700	4100	2570	3700	6550	2900	2370	920	0	0	0
14	6200	3650	4100	2150	3190	5700	2900	2200	1090	0	0	0
15	5600	3650	3900	2570	3190	4410	2510	1900	1260	0	0	0
16	5100	3800	3700	2900	3700	3910	2510	1620	1260	0	0	0
17	4900	3900	3500	3090	3700	3910	2510	1500	1260	0	0	0
18	4700	3670	3100	3280	3700	3910	2370	1380	630	0	0	0
19	4500	4300	3300	3190	3700	3910	2370	1260	470	0	0	0
20	4300	5500	3700	3280	3700	3910	2370	1260	330	0	0	0
21	4100	3800	3300	2900	3700	4170	2510	1140	185	0	0	0
22	4100	2200	3000	2720	4650	4180	2370	1030	40	0	0	0
23	4300	1800	2800	2900	5180	4650	2370	920	60	0	0	0
24	3900	1000	2500	3700	5440	3910	2510	820	40	0	0	0
25	3700	1300	2600	4110	5440	3700	2510	720	15	0	0	0
26	3900	1100	3000	4410	4910	4170	2720	630	0	0	0	0
27	3700	1500	3000	4650	4910	5700	2720	510	0	0	0	0
28	3900	1500	3000	4910	4650	4180	3090	470	0	0	0	0
29	3900	1570	3000	5170	.....	3510	3090	400	0	0	0	0
30	3500	1500	3500	5700	.....	2900	3090	330	0	0	0	0
31	3500	.....	3700	5700	.....	2510	.....	230	.....	.....	.....	.....
Mean	4800	3130	3840	3500	4250	4250	3600	1750	320	0	0	0
Max.	9700	5300	5300	5700	5440	6550	8500	3090	1260	0	0	0
Min.	2800	1000	2500	2370	3190	2510	2370	230	0	0	0	0
A. F.	293657	196652	235838	214116	235461	261604	214136	108002	19230	0	0	0
Total Acre Feet	1,768,686.											

PLATTE RIVER AT DUNCAN, NEBRASKA

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1360	3980	1450	2650	8100	3870	2210	3730	250	18	0	1
2	1480	2910	1430	2530	6600	4200	2410	3850	202	11	0	1
3	1970	2780	2600	2910	5200	3290	2560	3180	141	11	0	1
4	2010	3260	3800	2900	5240	3790	3910	2700	76	24	0	1
5	3590	3220	1800	2900	5030	3189	6790	3350	219	11	1	1
6	4790	3260	5200	2900	4330	2100	7460	4130	221	12	1	1
7	4110	3010	5140	2900	4200	1850	10800	3440	211	10	1	1
8	4600	2910	5340	2900	4200	1850	7300	2720	192	10	2	0
9	4980	3040	5950	2900	3870	1850	5810	2760	131	10	1	0
10	4500	3010	6000	2900	3700	2290	5190	3680	83	9	2	1
11	4810	3010	5810	2850	3520	5290	4600	3680	91	12	3	0
12	4160	3040	5080	2820	3220	5140	4200	2460	90	12	3	0
13	3990	3330	4330	2000	3500	5030	3670	2020	152	11	3	0
14	8900	3370	3900	1800	4240	4070	3290	1750	170	8	3	0
15	9800	3140	3600	1500	3110	5560	2880	1540	139	4	3	2
16	7940	3830	3300	1200	3220	4500	2750	1520	102	8	3	2
17	7170	3870	3100	1200	3290	4200	2720	1420	148	6	3	1
18	6360	3750	2950	1200	3520	3670	2720	1420	310	6	3	2
19	5100	3750	2800	1200	3560	3290	2750	1160	295	4	3	2
20	1610	5670	2650	1200	3520	3280	2620	1050	325	3	3	2
21	1280	7380	2600	1800	3480	3180	2650	1050	1420	5	2	2
22	4070	7510	2550	1800	3370	3370	2810	990	816	1	2	2
23	3890	3590	2500	1800	4070	3590	2780	862	523	4	1	2
24	3560	3080	2530	3000	4460	3400	2980	678	243	2	2	2
25	3140	2350	3940	4000	4690	3670	3150	678	130	2	1	3
26	3370	2000	3040	5000	4790	3590	3290	578	83	1	1	90
27	3370	1800	2980	6000	4790	2470	3440	470	50	1	0	56
28	3200	1600	2800	6500	4280	1020	3140	362	28	0	0	24
29	3290	1600	2700	7000	.....	950	3520	388	20	0	0	14
30	3080	1500	2600	7300	.....	1100	3630	348	18	2	0	14
31	3290	.....	2530	7500	.....	1820	.....	318	.....	6	1	.....
Mean	4380	3330	3520	3130	4270	3250	3050	1860	231	7	3	7
Max.	9800	7510	6000	7500	8100	5560	10800	4130	1420	24	1	90
Min.	1360	1500	1430	1200	3220	950	2210	318	18	0	0	0
A. F.	269000	198006	216000	192000	237000	200000	235000	114000	13700	449	92	452
Total Acre Feet	1,680,000.											

PLATTE RIVER AT ASHLAND, NEBRASKA

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3650	6800	4130	580	10600	8800	3430	6530	2860	2050	1290	2240
2	3620	6750	3990	6280	12500	8200	7390	6750	2790	2390	1490	2200
3	3890	6140	3300	6420	10900	7630	9810	7130	2600	2170	1500	2090
4	3920	6370	5620	6700	10800	7130	8530	6890	2390	1910	1430	2010
5	4560	6120	7780	6520	10500	7280	8710	8250	3130	1730	1520	1850
6	5620	6330	7990	7090	9940	7040	10300	8610	3390	2170	1490	1850
7	8520	6170	7580	7090	9500	6140	19100	9030	3390	2390	1700	1980
8	8300	6370	8120	7090	9090	4380	14300	8250	3170	2550	1820	2050
9	7910	6120	8800	7090	8640	4300	12200	7780	3680	2350	2140	2070
10	8360	5960	9150	7090	8580	4990	10900	7780	3510	2170	2480	2030
11	7990	5880	8520	4230	8250	5830	9750	8250	3210	2110	2180	1920
12	8200	5660	8360	4230	7780	6280	8520	8740	5250	2160	1830	1830
13	8250	5790	8040	4230	7180	8300	7780	7180	4390	2050	1830	1830
14	18300	6210	7910	4230	7280	8090	6390	6100	3510	1980	1780	1890
15	14100	6330	8200	4230	7900	8580	6560	5530	3050	1930	1620	1920
16	13900	8090	7680	2210	7480	7780	6010	5200	3010	1960	1620	1890
17	12000	8300	7580	2210	7130	8360	3920	5040	2830	1940	1680	1890
18	12400	8150	5830	2210	6990	8250	5830	4870	2740	1910	1730	2260
19	11700	8740	5700	2210	7230	7850	5960	4950	2740	1940	1730	2620
20	9440	11600	5360	2210	7630	7680	6890	4380	2740	1930	1830	3130
21	8520	11300	5300	3590	7590	7780	6610	4200	3800	2070	1820	3380
22	8040	11800	5100	4090	7480	7630	6170	4230	5560	1850	1800	2410
23	7480	12200	4720	4800	7280	8420	6330	3960	10200	1660	1620	2120
24	7280	8360	4870	7730	7130	7430	6590	4060	7600	1600	1680	2300
25	7130	6910	4990	10000	7890	7580	6850	3620	9080	1560	1650	2700
26	6890	7280	5200	10300	9090	7940	6990	3070	2880	1550	1830	3460
27	6660	5070	6000	11100	9570	8150	7480	2890	2710	1190	1940	4740
28	7840	3860	6100	11000	8970	7780	7330	3300	2580	1420	1830	3020
29	6660	3400	6600	15160	-----	4560	7090	3300	2370	1370	1730	2320
30	6660	4060	6750	12800	-----	5360	6700	2770	2140	1330	1660	2240
31	6610	-----	6470	13860	-----	3200	-----	2650	-----	1270	1620	-----
Mean	8140	7300	6350	6510	8620	7070	7830	5960	3700	1910	1740	2340
Max.	18300	11800	9750	13800	12500	8800	14300	9030	10200	2550	2480	4740
Min.	3620	3400	-----	2210	6990	3220	3430	2650	2140	1270	1790	1830
A. F.	501000	431000	40300	400000	479000	435000	460000	318000	226000	117000	107000	139000
Total Acre Feet	2,043,960.											

PATHFINDER STORAGE RESERVOIR

Daily Contents in Acre Feet

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar	Apr.	May	June	July	Aug.	Sept.
1	0	0	21180	38500	56380	75170	119600	358840	741930	830110	594710	348990
2	0	0	21820	39100	56890	76360	122410	365210	746400	830830	585040	346680
3	0	480	22540	39650	57400	77510	129000	371640	749760	829750	579590	332200
4	0	1530	23380	40200	57920	78610	136680	377710	751560	828490	574930	323540
5	0	2440	24320	40760	58440	79720	145550	384330	752730	825430	570430	315260
6	0	3370	24960	41330	58970	80800	154850	392020	754570	821840	565020	307080
7	0	4360	25500	41900	59500	81830	162910	403290	757920	817370	559120	298490
8	0	5430	26000	42470	60030	82840	169240	411280	762470	811470	553790	289540
9	0	6640	26690	43070	60550	83830	174720	424460	763840	804740	548740	282820
10	0	7950	27280	43660	61090	84780	179680	431970	768230	797200	543270	275750
11	0	9530	27820	44240	61630	85690	184500	445860	770440	790220	537180	267730
12	0	11080	28340	44830	62180	86560	187980	457700	771800	782090	529630	260010
13	200	12200	28860	45420	62720	87700	190700	471150	772480	773510	522060	252310
14	120	13160	29370	46020	63260	88870	196630	487340	775220	764670	514060	245210
15	0	14050	29880	46620	64000	90040	202400	504390	777790	756410	505590	238330
16	0	14970	30400	47250	64660	91210	210810	523430	779170	748230	496080	231800
17	0	15850	30880	47860	65320	92380	223690	542630	782090	739290	487000	225100
18	0	16310	31290	48480	65980	93560	237350	560430	786400	730120	477530	218620
19	0	16710	31690	49100	66640	94800	250200	577210	791090	720870	468320	212130
20	0	17060	32090	49710	67300	96040	261030	594020	794750	711570	459130	205340
21	0	17390	32510	50330	67950	97450	272170	610860	798600	709210	449970	199480
22	0	17720	32900	50970	68590	99050	281810	629150	801920	698800	441620	192310
23	0	18050	33520	51600	69240	100900	292550	649800	804580	689720	431190	185660
24	40	18380	34090	52190	69880	102900	305500	669990	807920	673230	421690	179240
25	310	18740	34530	52850	70530	105300	316440	686970	811650	661130	412380	173180
26	200	19100	35100	53170	71190	107880	324590	701100	815400	657630	403990	167100
27	80	19480	35650	53710	71850	109730	331580	719910	819520	643790	393660	162340
28	0	19870	36200	54250	72830	111620	338840	739000	823990	631950	384930	157420
29	0	20260	36740	54790	73990	113520	345310	759790	828670	620300	374520	152850
30	0	20650	37250	55330	-----	115440	352500	781690	828670	613080	365850	158700
31	-----	-----	37920	55870	-----	117380	-----	783800	-----	603640	357380	-----

REPORT OF SECRETARY

**DISCHARGE IN SECOND FEET, NORTH PLATTE RIVER
INTO PATHFINDER RESERVOIR**
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	512	490	312	328	292	602	1119	3260	6390	6060	1420	330
2	467	485	359	338	292	600	1415	3210	6990	6630	1020	390
3	436	389	399	312	292	579	3323	420	6590	5740	860	290
4	404	510	459	312	297	555	3872	3060	6690	5680	1350	120
5	364	515	510	317	297	590	4472	3340	6070	4730	1420	310
6	336	513	328	322	302	575	4689	3880	6380	4460	980	420
7	312	513	336	322	302	549	4064	3680	7160	4030	680	190
8	376	583	333	322	302	539	3191	3540	7700	3270	930	100
9	396	653	338	337	297	529	2763	5130	7080	2820	1050	220
10	406	703	332	333	307	509	2501	3260	7520	2460	890	210
11	419	839	307	328	307	489	2130	5530	7630	2640	510	160
12	526	824	297	333	312	469	1755	6070	6980	2090	640	50
13	698	698	297	333	307	605	2662	7070	6650	1880	730	70
14	589	528	292	337	358	620	2299	8140	7760	1750	660	100
15	532	491	292	343	358	620	2951	8680	7710	2010	420	110
16	575	509	297	348	368	620	1191	9640	7090	2240	480	260
17	571	489	297	343	368	620	6191	9760	7780	1960	790	160
18	552	277	237	318	368	615	6887	9090	8360	1850	570	280
19	526	217	237	318	368	635	6178	8559	8960	1760	640	250
20	498	221	237	313	368	635	5911	8610	8210	1740	600	160
21	489	210	292	348	363	721	5163	9080	7690	1720	530	310
22	512	210	282	358	358	816	4800	10500	7340	1680	470	220
23	539	210	292	353	363	935	5389	11110	7060	1350	390	210
24	591	210	287	392	358	1056	6600	12060	7420	1650	420	290
25	782	227	304	297	363	1166	5470	11920	7590	1820	510	410
26	590	227	311	297	368	1303	4109	11310	7570	1560	390	380
27	555	237	312	307	368	931	3521	9900	7770	1390	350	420
28	544	242	312	307	329	955	3559	9170	7370	1070	440	250
29	561	242	327	307	620	960	3363	8190	7340	1220	370	160
30	518	241	321	307	.....	970	3625	6890	6930	1370	280	530
31	516	.....	324	307	.....	980	.....	6770	.....	1240	340	.....
Mean	508	421	316	327	350	721	3951	7143	7312	2652	684	255
Max.	762	839	510	348	620	1303	6887	12060	8660	6960	1420	530
Min.	336	210	237	297	292	169	1119	3069	6360	1070	280	50
A. F.	31240	25260	19445	20100	20130	44330	235120	455790	435100	463100	12930	15190
Total Acre Feet	1,506,835.											

**DISCHARGE IN SECOND FEET, NORTH PLATTE RIVER, OUTFLOW
OF PATHFINDER RESERVOIR**
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	512	490	40	35	35	7	0	0	4610	6000	5800	4300
2	467	485	36	35	35	0	0	0	4610	6030	5760	4480
3	436	147	36	35	35	0	0	0	5980	6920	3480	4460
4	404	10	36	35	35	0	0	0	5330	6910	3500	4430
5	364	85	36	35	35	30	0	0	5310	6910	3500	4110
6	336	13	36	35	35	30	0	0	5310	6910	3500	4480
7	312	13	36	35	35	30	0	0	5320	6910	3490	4460
8	376	13	36	35	35	30	0	0	5310	6910	3490	4540
9	396	13	36	35	35	30	0	0	5740	6910	3480	3510
10	406	13	35	35	35	30	0	0	5720	6910	3480	3950
11	449	13	35	35	35	30	0	0	6450	6900	3470	3930
12	526	13	35	35	35	30	0	0	6170	5990	1450	3900
13	597	13	35	35	35	30	0	0	6210	5980	4560	3890
14	620	13	35	35	35	30	0	0	6260	5970	4570	3630
15	593	13	35	35	35	30	0	0	6270	5960	4560	3520
16	575	15	35	35	35	30	0	0	6560	6230	5160	3500
17	571	15	35	35	35	30	0	0	6110	6280	5200	3480
18	552	15	35	35	35	20	0	0	6070	6260	5190	3470
19	526	15	35	35	35	10	0	0	6170	6240	5150	3450
20	498	15	35	35	35	10	0	70	6190	6230	5110	3520
21	489	15	35	35	35	10	0	530	5900	6220	5120	3510
22	512	15	35	35	35	10	0	940	5490	6200	5080	3490
23	539	15	35	35	35	2	0	960	5700	6280	5050	3530
24	571	15	35	35	35	2	0	2080	5500	6270	5030	3500
25	625	15	35	35	35	2	0	3200	5500	6240	5060	3450
26	645	15	35	35	35	2	0	3780	5500	6210	5030	3420
27	616	15	35	35	35	2	0	4250	5510	6180	5000	2790
28	584	15	35	35	35	2	0	4180	5520	6250	5160	1700
29	561	45	35	35	35	2	0	4170	5530	6260	5170	720
30	548	45	35	35	.....	2	0	4170	5500	6230	4580	500
31	516	.....	35	35	.....	2	.....	4560	.....	5920	4530	.....
Mean	508	77	35	35	35	15	0	1061	5650	6113	4562	3549
Max.	620	490	40	35	35	30	0	4560	6270	6280	5800	4500
Min.	336	10	35	35	35	0	0	0	4640	5920	3470	500
A. F.	31240	4610	2177	2150	2010	940	0	65240	336220	375910	280490	210660
Total Acre Feet	1,311,647.											

GUERNEY STORAGE RESERVOIR

Daily Contents in Acre Feet

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25530	38240	30180	29590	28840	36660	44220	50400	38660	51640	47070	54290
2	26650	38120	30220	29740	28730	37740	45120	50220	38870	50360	49550	54150
3	27670	37770	30290	29820	28730	38640	45090	49730	39250	49520	53840	54020
4	28720	37310	30340	30000	28690	38960	45350	49420	39530	47930	57620	53860
5	29560	36820	30190	30080	28760	38780	45520	50040	40440	46360	59030	53670
6	30210	36320	30100	30050	28870	38780	45900	52160	41690	45190	59340	53470
7	31010	35530	30080	30100	28960	38800	46280	54860	42190	44620	59190	53250
8	31840	34180	30000	30080	29120	38600	46960	56410	41950	43910	59520	53050
9	32620	33390	29930	30140	29200	38510	47400	60060	41360	43230	59520	52870
10	33500	33160	29880	30210	29350	38490	47590	62650	39940	42430	59490	52830
11	34180	32890	29820	30270	29510	38550	47680	63920	39450	41650	59110	51480
12	34970	32730	29640	30320	29820	38600	47150	65680	38220	41160	57920	50660
13	35280	32610	29680	30340	30050	38780	46880	67310	38830	40100	56930	50080
14	34890	32470	29600	30160	30320	38910	46280	68800	39120	38920	54840	49830
15	34860	32290	29360	30050	30480	39090	45500	69210	39650	38350	53900	49630
16	35140	32150	29170	30000	30430	39390	44710	69280	40300	37910	52830	49570
17	35110	31980	29040	29910	30720	39800	44180	69650	41860	37720	52240	49140
18	35190	31930	28830	29800	30900	40210	43980	69390	43360	37610	52140	49320
19	35530	31880	28730	29850	30980	40610	41150	68270	45200	37720	52580	49150
20	35280	31950	28680	29690	31140	41750	41200	66590	47320	37720	52480	48970
21	35110	31680	28580	29620	31312	42320	41280	63520	49710	37980	52420	48620
22	35090	31180	28510	29600	31570	42780	41130	60770	52020	38350	52300	48090
23	34940	30800	28550	29540	31740	43100	41130	57200	53760	38780	52180	47850
24	34600	30400	28530	29510	32000	43530	41520	53170	54170	39280	52040	47910
25	34800	30350	28610	29480	32360	43900	41670	48660	51920	40120	51760	48260
26	34680	30210	28800	29400	32800	44130	41750	44900	50550	40900	51540	48900
27	35320	30030	29050	29260	33730	44280	42120	40650	51890	41730	52500	50160
28	35920	30000	29050	29180	34500	44470	42070	39180	51120	42500	53210	51520
29	36920	30020	29200	29070	35480	44660	42630	39140	52840	43400	53860	53150
30	37450	30110	29130	28960	.....	44570	50080	39030	52770	44530	54020	54180
31	37860	.....	29660	28790	.....	44800	.....	38850	.....	45750	54390	.....

NORTH PLATTE RIVER INTO GUERNEY RESERVOIR

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	817	796	240	261	220	853	286	1172	4387	5480	5999	4721
2	806	676	255	256	171	798	323	1056	4533	5431	5981	4519
3	799	675	260	266	242	691	270	1026	4657	5679	5403	4489
4	804	673	245	291	165	367	301	1126	4607	5820	5416	4451
5	693	665	190	210	235	135	318	1451	4817	5831	4113	4436
6	662	661	215	243	256	211	138	2088	5118	5793	3576	4431
7	669	515	225	225	240	216	505	2308	5115	5767	3532	4421
8	658	376	230	232	251	141	606	2405	5111	5733	3507	4409
9	613	354	225	236	230	213	591	2289	5157	5744	3492	4419
10	729	338	250	267	287	248	609	2038	5109	5725	3495	4400
11	578	253	205	236	281	246	506	2004	5501	5735	3546	3830
12	593	326	210	262	317	257	553	1964	5532	5855	3370	4031
13	652	315	255	268	327	322	485	1993	5957	5776	3462	3961
14	558	317	210	244	362	226	483	2063	5848	5740	3791	3964
15	595	303	202	209	287	301	498	2070	5816	5688	4435	3929
16	700	297	189	217	228	368	511	2027	5830	5678	4462	3800
17	773	326	175	196	309	433	664	2168	5810	5754	4729	3572
18	734	293	149	186	367	465	822	1961	5688	5819	5007	3539
19	744	287	190	222	272	504	1060	1605	5824	5956	5002	3497
20	683	285	205	183	433	715	1012	1533	5679	5925	4997	3455
21	775	99	180	207	146	477	1027	1282	5803	5996	5017	3461
22	763	82	205	232	290	458	927	1556	5741	5886	4986	3447
23	747	109	260	223	302	425	995	1394	5511	5867	4987	3479
24	656	110	200	253	326	464	1518	1316	5154	5877	4961	3522
25	945	175	265	227	361	434	1692	1596	5251	5925	4929	3561
26	785	125	260	251	412	358	1547	1786	5376	5993	4962	3546
27	825	134	316	225	675	371	1343	2645	5100	5968	5388	3593
28	738	205	185	234	610	271	1113	3747	5532	5866	5211	3360
29	888	230	315	247	664	360	1277	4512	5784	5908	5146	3216
30	787	236	346	236	.....	257	1222	4498	5511	5976	5036	2684
31	787	.....	326	216	.....	271	.....	4463	.....	5997	5004	.....
Mean	755	311	232	834	322	385	796	2098	5374	5809	4612	3875
Max.	945	796	346	291	675	853	1692	4512	5957	5997	5999	4724
Min.	358	82	149	183	165	135	270	1026	4387	5431	3370	2684
A. F.	41920	20310	14244	14400	18500	23690	47350	129030	319780	357280	288590	230610
Total Acre Feet	1,503,654.											

NORTH PLATTE RIVER OUTFLOW OF GUERNSEY RESERVOIR
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	323	604	220	296	195	258	226	1411	4488	6650	5384	4771
2	301	736	235	180	226	253	222	1147	4422	6076	4731	4620
3	285	852	225	226	242	237	255	1273	4466	6102	3240	4554
4	275	905	220	200	185	206	170	1282	4466	6622	3510	4532
5	270	852	265	170	200	226	232	1138	4358	6622	3402	4532
6	334	913	260	258	200	211	302	1019	4488	6232	3420	4532
7	265	913	235	200	185	206	258	947	4863	6266	3456	4532
8	240	905	270	242	170	242	264	1003	5262	6076	3492	4510
9	250	905	260	206	190	258	369	1069	5154	6102	3492	4510
10	285	454	275	532	211	258	513	1635	5525	6128	3510	4510
11	235	394	235	206	185	216	551	1661	5950	6128	3733	4510
12	195	406	301	237	206	232	669	1077	5950	6102	3970	4444
13	496	406	235	258	211	232	772	1156	5650	6310	4274	4253
14	754	418	250	335	226	160	786	1282	5550	6336	4532	4090
15	610	394	323	264	206	211	891	1909	5700	5975	4909	4030
16	574	367	285	242	253	216	939	1992	5502	5900	5001	3830
17	622	412	240	226	253	226	931	1980	5024	5850	5047	3638
18	694	318	255	211	216	258	923	2092	4932	5376	4886	3600
19	724	312	240	242	232	226	923	2170	4886	5900	4932	3582
20	809	250	230	264	216	307	987	2380	4620	5925	5047	3546
21	845	235	230	242	195	190	987	2830	4598	5775	5047	3638
22	788	334	240	242	160	226	1003	2942	4576	5700	5047	3714
23	823	301	240	253	216	264	995	3104	4664	5650	5047	3600
24	827	312	210	269	195	247	1019	3348	4796	5625	5035	3492
25	845	200	210	242	180	247	1011	3870	5024	5502	5070	3384
26	845	180	180	291	190	242	1063	4090	5310	5600	5023	3223
27	502	240	190	296	206	296	995	4370	5526	5550	4955	2953
28	436	220	185	274	222	175	995	4188	5375	5178	4886	2768
29	384	220	240	302	170	264	995	4532	5925	5454	4818	2394
30	520	175	230	291	-----	302	995	4551	6050	5406	4955	1832
31	580	-----	210	302	-----	155	-----	4554	-----	5382	4818	-----
Mean.	514	471	239	243	205	234	707	2281	5110	5924	4472	3867
Max.	815	913	323	335	232	307	1019	4554	6050	6622	5334	4774
Min.	195	175	180	170	160	155	170	1011	4358	5382	3240	1832
A. F.	31610	28030	14722	15270	11810	14370	42070	140260	305830	364250	274950	230160
Total Acre Feet	1,473,352.											

NORTH PLATTE RIVER PASSING WHALEN, WYOMING
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	38	30	35	137	30	95	91	44	1881	2579	1751	1430
2	30	30	78	20	60	94	52	44	1828	2587	2241	1356
3	30	30	58	75	72	76	97	44	1819	2597	1526	1312
4	30	30	65	42	24	58	40	44	1808	3117	1744	1278
5	30	30	61	20	58	70	90	44	1642	3112	1506	1281
6	30	30	81	115	71	50	150	44	1741	2659	1543	1273
7	30	30	73	46	54	69	39	41	1909	2637	1466	1273
8	30	30	85	95	59	96	45	52	2122	2490	1423	1266
9	30	30	72	49	69	111	59	52	2175	2513	1434	1252
10	30	30	84	120	120	72	64	51	2545	2519	1437	1243
11	30	30	63	70	84	50	64	51	2688	2517	1566	1254
12	30	30	98	75	105	72	64	64	2672	2480	1559	1229
13	30	30	74	139	77	75	64	88	2309	2671	1606	1067
14	168	30	67	194	99	36	64	187	2219	2714	1579	940
15	30	30	105	92	82	51	64	759	2353	2343	1663	865
16	30	30	102	75	88	95	63	854	2234	2311	1628	686
17	30	30	70	68	114	182	45	642	1917	2266	1627	525
18	30	30	76	59	53	180	36	705	2016	2305	1408	459
19	30	30	75	86	82	146	35	595	2080	2329	1421	451
20	30	75	62	120	63	225	81	725	1915	2313	1536	475
21	30	65	57	80	54	63	37	975	1974	2158	1524	584
22	30	99	70	88	45	142	41	1007	1939	2068	1510	685
23	35	178	60	105	62	185	31	1074	2010	2033	1510	701
24	30	101	48	108	42	187	40	1191	2002	1983	1519	667
25	30	153	57	92	42	165	41	1574	2031	1880	1529	662
26	30	48	49	129	43	173	40	1590	2118	2002	1506	634
27	199	58	46	131	72	211	40	1823	2145	1939	1478	583
28	71	49	51	110	77	71	40	1905	2551	1878	1443	460
29	30	60	70	141	34	177	40	1948	2511	1832	1330	415
30	30	49	65	107	-----	120	40	1937	2626	1808	1482	428
31	30	-----	37	137	-----	14	-----	1930	-----	1801	1399	-----
Mean	41	50	68	94	67	110	57	712	2127	2337	1555	891
Max.	199	178	105	194	114	225	150	1948	2688	3117	2244	1430
Min.	30	30	35	20	24	14	31	44	1642	1901	1330	415
A. F.	2560	2900	4152	5500	3840	6770	3370	43810	126590	143690	95600	53034
Total Acre Feet	492,192.											

NORTH PLATTE RIVER AT TORRINGTON, WYOMING
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	556	330	110	100	300	110	189	323	2020	2590	1740	1540
2	556	330	410	400	300	410	180	323	2000	2670	2470	1470
3	658	330	410	400	300	410	480	269	1920	2770	2180	1470
3	658	330	110	400	300	410	180	287	1860	3070	1870	1420
5	532	350	410	400	300	410	180	383	1740	2970	1800	1410
6	5-8	300	400	380	450	250	630	438	1780	2610	1760	1380
7	556	300	400	380	450	250	520	460	1800	2190	1740	1360
8	556	300	400	380	450	250	520	460	1940	2370	1730	1330
9	556	300	400	380	450	230	520	419	1980	2310	1710	1330
10	532	300	400	380	490	250	520	419	2120	2280	1640	1330
11	556	280	330	310	410	320	330	416	2370	2300	1730	1340
12	532	280	330	310	410	320	330	416	2180	2320	1670	1360
13	416	280	330	310	410	320	330	405	2350	2170	1660	1310
14	416	280	330	310	410	320	330	405	2250	2510	1620	1230
15	460	280	330	310	410	320	330	556	2280	2320	1590	1120
16	196	300	360	390	420	330	310	791	2220	2280	1590	1100
17	405	300	360	390	420	500	310	822	1960	2200	1600	1060
18	405	300	360	390	420	330	310	791	1940	2140	1540	945
19	383	300	360	390	420	330	310	752	2030	2110	1550	872
20	361	300	360	390	420	330	305	780	1940	2140	1590	816
21	383	310	380	400	420	400	323	766	1920	2110	1600	816
22	383	310	380	400	420	100	296	970	1960	2010	1600	872
23	311	310	380	400	440	400	296	1020	2010	2030	1550	945
24	323	310	380	400	420	400	372	1190	2090	1980	1590	945
25	323	310	380	400	420	400	383	1120	2130	1910	1570	990
26	372	310	360	420	430	470	383	1570	2160	1920	1520	975
27	394	310	360	420	430	470	323	1680	2200	1890	1540	975
28	380	310	360	420	430	470	359	1700	2110	1850	1500	886
29	372	310	360	420	430	470	383	1700	2190	1800	1490	858
30	350	310	360	420	430	470	361	1920	2610	1780	1520	900
31	350	.....	360	420	.....	470	.....	1960	.....	1760	1540	.....
Mean	460	310	370	390	410	370	399	835	2100	2260	1670	1150
Max.	658	.....	.....	.....	.....	.....	383	1960	2610	3070	2470	1540
Min.	323	.....	.....	.....	.....	.....	296	269	1740	1760	1490	816
A. F.	28200	18190	22936	23700	23370	22850	23360	51300	125000	139000	103000	68400
Total Acre Feet	649,400.											

NORTH PLATTE RIVER AT WYOMING-NEBRASKA LINE
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	514	440	445	450	260	469	413	350	1840	2210	1670	1500
2	519	429	461	460	350	461	429	344	1770	2280	2080	1450
3	510	427	461	465	350	469	445	318	1740	2320	2160	1400
4	510	424	477	470	300	445	589	284	1670	2600	1720	1360
5	502	421	475	494	370	409	627	154	1550	2680	1670	1310
6	519	415	470	461	400	380	562	611	1500	2550	1600	1290
7	570	410	470	445	450	340	536	518	1520	2430	1500	1310
8	589	405	475	437	500	280	536	496	1650	2300	1460	1280
9	553	398	480	453	536	250	589	474	1720	2250	1500	1280
10	519	361	470	485	536	250	177	468	1910	2160	1500	1290
11	528	383	460	400	519	280	421	427	2100	2140	1620	1310
12	528	383	390	350	502	320	429	427	2100	2120	1580	1340
13	502	319	360	238	519	369	368	420	2100	2250	1570	1290
14	460	332	310	400	267	410	300	427	1960	2380	1520	1210
15	485	376	350	110	376	461	286	474	2040	2160	1530	1060
16	485	361	380	420	437	477	318	734	2080	2170	1520	1000
17	453	354	410	430	453	485	329	790	1840	2170	1480	974
18	421	347	420	450	469	485	314	750	1790	2230	1410	820
19	413	405	430	450	437	464	350	722	1980	2230	1330	740
20	413	405	435	440	445	461	339	988	1890	2240	1360	722
21	390	405	435	435	437	469	318	1010	1870	2120	1400	640
22	398	405	431	435	461	437	324	1030	1820	2030	1410	740
23	413	350	440	437	461	437	329	1060	1750	2010	1400	852
24	383	320	446	470	461	413	384	1090	1680	1960	1410	876
25	383	300	410	502	469	413	408	1210	1670	1890	1520	988
26	469	320	360	469	502	398	408	1430	1750	1840	1530	912
27	415	310	370	461	485	398	372	1550	1870	1820	1550	960
28	477	360	400	470	461	429	355	1650	2100	1770	1570	852
29	485	380	420	462	461	445	408	1680	2120	1750	1480	810
30	502	390	410	492	.....	445	396	1800	2210	1750	1480	830
31	461	.....	415	405	.....	445	.....	1860	.....	1740	1550	.....
Mean	479	379	427	440	437	469	413	835	1860	2150	1550	1080
Max.	589	440	480	502	536	485	627	1800	2240	2680	2160	1500
Min.	383	300	310	238	260	250	286	284	1500	1740	1330	640
A. F.	29500	22600	26500	27100	25100	25100	24600	51300	111000	132000	95300	64300
Total Acre Feet	634,000.											

REPORT OF SECRETARY

NORTH PLATTE RIVER AT MITCHELL, NEBRASKA
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	201	760	800	630	550	760	711	518	1070	1030	936	635
2	181	618	800	618	550	686	550	458	952	1030	1480	620
3	185	667	800	667	550	667	582	458	796	1030	1910	522
4	185	722	800	686	550	778	630	358	686	1130	1060	444
5	197	741	800	667	550	686	874	420	611	1390	815	384
6	358	741	850	630	1000	618	1090	1030	470	1110	680	352
7	566	722	900	614	1000	600	990	932	458	1210	578	336
8	741	704	932	614	1000	600	971	778	518	1080	494	323
9	778	618	912	534	1000	600	1050	796	680	1030	444	320
10	741	614	854	630	908	600	912	722	725	984	444	328
11	667	598	834	598	815	650	760	704	1030	1020	456	344
12	778	598	815	630	778	650	686	534	1270	984	536	384
13	874	598	815	650	778	650	667	432	1270	920	480	396
14	834	598	741	650	778	650	598	328	1080	1140	456	396
15	815	630	722	650	778	650	566	302	952	1180	456	384
16	722	648	686	700	778	700	534	311	1320	1080	456	352
17	741	618	741	700	778	815	534	320	1110	984	468	352
18	815	618	741	700	778	760	518	311	1030	968	468	360
19	796	704	741	700	796	778	518	311	1100	1000	444	352
20	796	778	741	700	815	834	502	315	1270	968	384	352
21	834	650	704	700	796	874	486	1110	1240	936	352	344
22	760	650	704	700	815	874	486	502	1160	815	352	328
23	778	650	741	700	815	834	550	470	1030	740	352	320
24	741	650	741	700	778	815	704	311	830	830	384	336
25	704	650	741	700	796	815	667	302	695	815	578	420
26	722	800	704	715	815	815	598	382	504	770	522	494
27	614	800	704	715	815	796	534	470	508	740	550	468
28	704	800	686	715	778	796	550	741	665	695	620	420
29	874	800	667	715	722	834	630	874	830	785	665	480
30	874	800	722	600	.....	760	598	952	905	785	635	890
31	796	.....	686	500	.....	778	.....	1110	.....	890	680	.....
Mean.	657	689	769	660	781	734	669	566	894	980	618	415
Max.	874	800	932	715	1000	874	1090	1110	1320	1410	1040	896
Min.	181	598	667	500	550	600	486	302	458	695	352	320
A. F.	40400	41000	47300	40600	44900	45100	39800	34800	53200	60300	38000	24700
Total Acre Feet	510,000.											

NORTH PLATTE RIVER AT MINATARE, NEBRASKA
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	538	1030	1000	860	660	1150	910	895	1150	850	836	890
2	538	1030	1000	860	660	1150	910	914	1130	980	1130	766
3	819	1030	1000	860	660	1150	750	914	1060	1040	1890	647
4	599	1030	1000	860	660	1150	820	857	800	1250	1500	663
5	599	1030	1000	860	660	1150	979	857	698	1490	944	664
6	615	1060	1120	960	1150	710	1040	1210	664	1390	818	647
7	1030	1060	1120	990	1150	710	1260	1170	555	1450	715	600
8	1320	1060	1120	1010	1150	710	1160	876	495	1240	664	555
9	1280	1060	1360	990	1150	710	1140	876	480	1090	630	555
10	1340	1060	1120	960	1150	710	1220	962	480	1110	615	615
11	1230	1040	1020	690	1200	780	1080	890	647	940	570	698
12	1280	1040	1020	690	1000	780	932	854	1020	990	600	732
13	1230	1040	1020	690	850	780	857	715	1130	944	664	715
14	1230	1040	1020	690	850	780	617	698	1150	1110	615	681
15	1150	1040	1020	690	850	780	599	617	944	1310	570	664
16	1230	1020	940	780	820	1010	630	570	1250	1250	525	630
17	1230	1020	940	780	820	1010	615	570	1410	1350	540	615
18	1230	1020	940	780	820	1010	681	540	1270	1250	540	600
19	1150	1020	940	780	820	957	664	454	1230	1210	570	630
20	1070	1020	940	780	820	1010	698	376	1370	1150	540	585
21	1070	780	940	790	900	1000	732	698	1370	1069	495	555
22	1130	780	940	790	900	1000	732	600	1290	980	480	540
23	1190	780	940	790	900	1000	1450	570	1210	908	467	630
24	1130	780	940	790	900	1000	1280	540	1020	999	467	630
25	1110	780	940	790	1010	1000	1110	695	818	1020	732	733
26	1090	900	930	760	1080	980	900	445	908	962	783	854
27	1130	900	930	840	1080	980	974	402	732	836	854	836
28	1010	900	930	929	1080	980	1030	540	766	681	890	890
29	1050	900	930	840	1080	980	900	749	848	818	999	982
30	1090	900	930	760	.....	980	974	890	840	872	926	1090
31	1130	.....	930	760	.....	980	.....	1130	.....	926	944	.....
Mean.	1060	970	995	820	925	910	916	735	957	1080	759	696
Max.	1340	.....	.....	.....	.....	.....	1280	1210	1410	1490	1890	1090
Min.	538	.....	.....	.....	.....	.....	599	376	480	681	467	540
A. F.	65200	57820	61200	50320	53220	57670	54500	45200	56900	66400	46700	41400
Total Acre Feet	656,480.											

NORTH PLATTE RIVER AT BRIDGEPORT, NEBRASKA
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	923	1500	1000	1200	670	1500	1160	1060	1100	1230	1270	1180
2	980	1500	1300	1200	750	1500	1160	1060	1200	1230	1270	1160
3	980	1470	1300	1200	900	1610	1080	1020	1010	1270	1500	1080
4	980	1450	1300	1200	950	1730	1060	960	960	1400	1980	1080
5	980	1430	1300	1200	1050	1610	1060	960	819	1560	1610	1140
6	960	1430	1150	1200	1200	900	1080	1020	812	1430	1060	1040
7	1100	1430	1150	1200	1350	900	1160	1520	722	1270	960	942
8	1730	1430	1150	1200	1490	900	1160	1470	568	1200	812	904
9	1730	1430	1150	1140	1490	900	1160	1250	552	1040	775	849
10	1710	1430	1150	1500	1350	900	1160	1140	520	886	705	758
11	1560	1470	1350	1000	1100	950	1160	1020	520	812	688	830
12	1520	1500	1350	1000	1100	950	1140	960	688	775	722	923
13	1610	1500	1350	1000	1100	950	1120	960	868	812	1120	1020
14	1610	1470	1350	1000	1100	950	1040	960	1000	849	1100	960
15	1610	1450	1350	1000	1100	950	980	886	960	1000	923	960
16	1660	1430	1250	1000	1150	1000	960	740	1000	1580	830	960
17	1660	1430	1250	1000	1150	1500	868	670	1380	1310	830	960
18	1710	1360	1250	1000	1150	1270	1040	688	1610	1380	775	980
19	1590	1310	1250	1000	1150	1160	1060	812	1750	1310	791	1000
20	1470	1310	1250	1000	1150	1160	1060	923	1800	1230	791	980
21	1520	950	1250	1000	1200	1060	1060	1180	1850	1100	791	960
22	1520	950	1250	1000	1200	1270	1060	1060	1900	960	886	980
23	1520	950	1250	1000	1200	1160	1380	868	1900	923	849	1040
24	1520	950	1250	1000	1200	1160	1730	791	1180	1100	794	1060
25	1520	950	1250	1000	1380	1160	1540	812	1060	1060	794	1070
26	1520	1150	1250	1000	1380	1160	1310	645	980	1000	1080	1380
27	1470	1150	1250	1000	1380	1160	1160	618	886	960	1140	1400
28	1360	1150	1250	1000	1380	1160	1230	830	794	960	1130	1450
29	1430	1150	1250	1000	1380	1160	1200	1120	980	1100	1450	1450
30	1540	1150	1250	1000	1160	1060	1250	1160	1180	1180	1380	1450
31	1540	1250	1000	1160	1160	1160	1360	1100	1230	1250	1040	1070
Mean	1440	1310	1310	1080	1180	1160	1150	987	1100	1120	1040	1070
Max.	1730	1500	1450	1500	1490	1730	1730	1520	1900	1430	1980	1450
Min.	923	950	1250	1000	670	900	868	618	520	775	688	758
A. F.	88500	78000	80600	66400	67900	71300	68100	60700	65300	68900	64000	63700
Total Acre Feet	813,900.											

NORTH PLATTE RIVER AT LISCO, NEBRASKA
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	822	1660	1600	1100	800	1800	1160	1270	1230	871	1400	1180
2	904	1590	1600	1100	800	1800	1120	1180	1340	970	1320	1160
3	1020	1590	1600	1100	800	1800	970	1140	1180	1110	1300	1120
4	1070	1450	1600	1100	800	1800	1110	1070	987	1110	1380	1110
5	1110	1470	1800	1100	800	1800	1070	1110	805	1060	1780	1080
6	1060	1550	1700	1500	1500	750	1180	1090	725	1040	1360	1080
7	1060	1550	1700	1500	1500	750	1250	1160	741	1310	871	1020
8	1140	1550	1700	1500	1500	750	1360	1780	552	1190	725	937
9	1700	1600	1700	1500	1500	750	1150	1620	403	1060	645	888
10	1820	1510	1700	1500	1500	750	1340	1270	161	904	552	805
11	1800	1590	1500	1810	1170	900	1360	1250	490	757	568	789
12	1800	1620	1500	1100	1170	900	1230	1000	677	805	645	904
13	1900	1530	1500	1100	1170	900	1140	970	725	904	1000	954
14	1900	1590	1500	1100	1170	900	1040	888	1000	937	1090	970
15	1820	1470	1500	1100	1170	900	1060	888	1060	954	954	987
16	1740	1510	1350	1100	1300	1300	1090	822	1140	1380	789	1000
17	1590	1530	1350	1100	1300	1850	937	709	1230	1420	709	987
18	1610	1470	1350	1100	1300	1800	1020	661	1600	1340	661	970
19	1780	1500	1350	1100	1300	1760	987	838	1920	1320	970	1060
20	1820	1550	1350	1100	1300	1640	970	838	1740	1270	854	1060
21	1700	950	1350	1050	1300	1640	970	789	1700	1120	773	1020
22	1640	950	1350	1050	1300	1700	757	920	1700	1140	773	937
23	1780	950	1350	1050	1300	1360	1170	1060	1620	1160	805	954
24	1600	950	1350	1050	1300	1120	1820	838	1150	1530	677	1000
25	1600	950	1350	1050	1300	1380	2000	805	1190	1270	693	1140
26	1510	1100	1350	1030	1700	1320	1740	630	1020	1180	789	1360
27	1470	1100	1350	1030	1700	1280	1250	536	937	1140	1120	1400
28	1530	1400	1350	1030	1700	1320	1280	614	970	1090	1270	1380
29	1430	1400	1350	1030	1700	1240	1470	773	822	1000	1430	1300
30	1430	1400	1350	1030	1160	1160	1320	987	838	1270	1360	1340
31	1590	1350	1030	1040	1040	1040	1040	1040	1380	1230	1040	1040
Mean	1510	1420	1470	1170	1280	1340	1230	989	1080	1130	984	1060
Max.	1900	1660	1700	1840	1700	1850	2000	1780	1920	1530	1780	1400
Min.	822	950	1350	1030	800	750	757	536	403	757	552	789
A. F.	92800	84500	90400	71900	73600	80600	73200	60800	61300	69500	60500	63100
Total Acre Feet	885,000.											

REPORT OF SECRETARY

NORTH PLATTE RIVER AT OSHKOSH, NEBRASKA
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	820	1690	1610	1100	815	1830	1010	1220	1100	944	1240	1150
2	820	1610	1610	1100	815	1830	1570	1180	1360	960	1260	1180
3	928	1700	1610	1100	815	1830	1570	1110	1260	1080	1150	1150
4	1040	1460	1610	1100	815	1830	1570	1040	1110	1130	1130	1060
5	1040	1490	1610	1100	815	1830	1570	1040	976	1340	1480	1080
6	944	1580	1700	1510	1530	770	1550	1060	835	1220	1740	1060
7	1020	1580	1700	1510	1530	770	1590	1110	760	1260	1180	1010
8	1110	1570	1700	1510	1530	770	1810	1680	639	1310	912	912
9	1550	1610	1700	1510	1530	770	1740	1590	578	1200	820	835
10	1810	1510	1700	1510	1530	770	1740	1310	805	1110	691	865
11	1810	1400	1500	1800	1180	1050	1810	1200	626	896	600	896
12	1810	1630	1500	2000	1180	1050	1790	1170	691	790	613	865
13	1810	1600	1500	1110	1180	1050	1590	1060	600	820	944	912
14	1810	1610	1500	1110	1180	1050	1480	1080	835	960	1010	928
15	1700	1500	1500	1110	1180	1050	1300	928	960	850	976	912
16	1740	1520	1370	1120	1320	1350	1220	992	992	1180	912	928
17	1630	1540	1370	1120	1320	1870	1150	912	1240	1460	790	976
18	1630	1480	1370	1120	1320	1900	1090	820	1220	1380	745	912
19	1680	1500	1370	1120	1320	2060	1150	912	1980	1389	992	865
20	1630	1550	1370	1120	1320	1690	1060	976	1810	1300	912	928
21	1630	1000	1360	1060	1400	1680	1060	850	1720	1170	928	820
22	1630	1000	1360	1060	1600	1740	1080	1300	1610	1130	912	835
23	1630	1000	1360	1060	2000	1860	2320	976	1790	1170	960	928
24	1680	1000	1380	1060	1900	1460	2300	775	1630	1680	835	992
25	1570	1000	1360	1200	1880	1420	2120	1220	1320	1320	760	1060
26	1550	1420	1360	1500	1760	1360	1790	775	1040	1180	850	1170
27	1550	1420	1360	1200	1760	1630	1420	691	992	1130	976	1240
28	1550	1420	1360	1040	1760	1630	1570	760	1170	1020	1240	1240
29	1440	1420	1360	1040	1760	1630	1460	820	976	1090	1360	1180
30	1440	1420	1360	1040	.....	1630	1260	960	835	1130	1380	1220
31	1700	.....	1360	1040	.....	1630	.....	992	.....	1260	1320	.....
Mean	1470	1440	1180	1230	1380	1440	1510	1050	1120	1160	1020	1090
Max.	1810	1700	.....	.....	.....	.....	2220	1680	1980	1680	1740	1240
Min.	820	.....	.....	.....	.....	.....	1060	691	578	790	600	820
A. F.	90400	85700	91000	75600	79400	88500	91600	64800	66600	71300	62700	59500
Total	Acre Feet 927,000.											

NORTH PLATTE RIVER AT SUTHERLAND, NEBRASKA
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	810	715	840	890
2	810	510	880	920
3	810	140	920	740
4	810	570	745	555
5	920	555	570	560
6	690	535	635	610
7	455	585	700	670
8	305	470	1040	708
9	455	685	710	700
10	220	655	510	590
11	260	525	275	615
12	920	320	530	610
13	980	210	780	590
14	810	235	810	540
15	525	285	810	555
16	910	455	900	570
17	1040	115	960	610
18	1400	540	850	710
19	2520	770	740	720
20	2160	1000	670	725
21	2415	980	615	760
22	2070	960	600	800
23	1825	790	590	780
24	1650	625	565	760
25	1650	725	540	980
26	1625	1000	680	1200
27	1275	770	820	1290
28	1160	540	750	1375
29	980	620	685	1400
30	980	700	770	1425
31	770	860	.....
Mean	1115	612	723	801
Max.	2520	1000	1040	1425
Min.	220	210	275	540
A. F.	66447	37637	44430	47683

NORTH PLATTE RIVER AT NORTH PLATTE, NEBRASKA
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1060	1730	1910	2370	1600	3200	1680	2030	1390	868	1200	1200
2	1040	1810	1910	2240	1600	3200	1530	1910	980	855	995	1270
3	1090	1950	1910	1680	1600	3200	1510	1730	1110	816	995	1210
4	1110	2040	1910	1160	1600	3200	1530	1650	1040	732	965	1140
5	1070	2010	1910	1650	1600	3200	1560	1560	1090	767	995	1200
6	1140	2040	2100	1830	2200	1500	1560	1160	1020	767	894	1160
7	1210	2040	2100	1800	2200	1500	1530	1370	829	790	920	1140
8	1230	2010	2100	1800	2200	1500	1510	1340	744	881	1180	1110
9	1230	2010	2100	1700	2200	1500	1600	1290	675	1040	1330	1070
10	1270	1980	2100	1850	2200	1500	1980	1260	602	965	950	1040
11	1360	1920	1800	1800	1750	1650	1970	1740	881	950	686	1020
12	1950	1870	1800	1900	1750	1750	1810	1650	1110	816	542	1060
13	2140	1900	1800	1650	1750	1810	1760	1650	1120	612	744	1010
14	1920	1980	1800	1760	1750	1950	1650	1320	995	522	1140	1010
15	1980	1980	1800	1500	1750	2740	1600	900	881	432	1330	965
16	1980	1980	1870	1900	1900	4190	1550	850	790	560	1060	980
17	1920	1900	1945	1900	1950	4660	1600	850	1200	644	965	1060
18	1700	1870	2020	1900	2050	4770	1880	860	1460	612	995	1090
19	1700	1870	1945	1900	2180	5370	1550	868	2660	675	881	1140
20	1600	1950	1870	1900	2300	3360	1220	767	2700	980	778	1140
21	1630	1480	1810	2100	2700	2200	1110	664	2270	816	698	1210
22	1680	675	1810	2020	2700	1780	1240	602	2270	1090	721	1210
23	1680	504	1810	1950	2700	1510	1370	591	1950	1230	767	1160
24	1730	950	1810	1900	2700	1510	1560	450	1730	1020	698	1110
25	1630	1120	1810	1850	2700	1510	2530	416	1700	935	612	1140
26	1870	1250	1840	1800	3500	1560	3120	705	1780	907	633	1510
27	1840	1140	1840	1800	3500	1510	3000	995	1610	1010	920	1530
28	1720	2010	1840	1800	3500	1460	2880	667	1110	907	1180	1510
29	1730	1950	1840	1800	3500	1510	2400	895	1230	756	1110	1560
30	1780	1800	1840	1800	.....	1510	2040	1020	965	829	1070	1580
31	1760	.....	1840	1800	.....	1560	.....	1740	.....	1330	1180	.....
Mean	1570	1730	1896	1840	2260	2380	1790	1160	1340	843	940	1180
Max.	2140	2040	2020	.....	.....	.....	3120	2030	2700	1330	1330	1580
Min.	1040	504	1810	.....	.....	.....	1110	416	602	432	542	965
A. F.	96500	103000	116610	113000	130000	146000	107000	71300	79700	51800	57800	70200
Total Acre Feet	1,640,900.											

SOUTH PLATTE RIVER AT NORTH PLATTE, NEBRASKA
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	0	50	240	500	300	300	200	23	0	2	2
2	2	0	150	240	500	300	300	200	7	0	2	2
3	10	0	350	240	500	300	300	200	3	14	2	3
4	5	0	350	240	500	300	300	200	0	12	0	5
5	5	0	350	240	500	300	300	200	0	8	0	7
6	5	0	320	66	450	180	100	150	0	2	0	10
7	5	0	320	80	450	180	100	150	0	2	0	6
8	5	0	320	500	450	180	100	150	0	2	0	10
9	5	0	320	500	450	180	100	150	0	4	0	2
10	4	0	320	500	450	180	100	150	0	2	0	2
11	4	0	250	800	440	250	50	120	15	0	0	2
12	8	0	250	800	440	250	51	120	24	0	0	2
13	5	0	250	800	440	400	40	111	35	0	0	2
14	2	0	250	800	440	500	30	140	35	0	0	2
15	0	0	250	800	440	500	20	80	18	0	0	3
16	0	0	200	600	250	700	5	60	11	0	0	3
17	0	0	100	600	250	851	5	40	21	0	0	3
18	0	5	82	600	250	800	200	22	27	0	0	2
19	0	10	80	600	250	800	200	20	146	0	0	2
20	0	20	80	600	232	500	200	20	80	0	0	2
21	0	25	150	500	250	250	200	20	111	0	0	2
22	0	15	150	500	400	250	400	20	63	0	0	2
23	0	10	150	474	400	250	400	10	39	2	0	3
24	0	5	150	400	400	250	400	10	27	2	0	3
25	0	0	150	400	400	250	400	5	26	2	0	3
26	0	0	250	400	600	180	400	5	26	2	0	3
27	0	0	250	400	600	180	400	0	26	2	0	3
28	0	0	250	400	600	180	400	4	15	0	0	3
29	0	0	250	400	600	180	400	8	5	2	0	3
30	0	0	250	400	.....	180	400	23	2	2	2	3
31	0	.....	250	400	.....	180	.....	39	.....	8	2	.....
Mean	2	3	222	468	429	332	220	83	26	2	0	3
Max.	10	25	.....	.....	.....	.....	.....	200	146	14	2	10
Min.	0	0	.....	.....	.....	.....	.....	0	0	0	0	2
A. F.	137	179	13670	28900	24659	20392	13093	5131	1557	139	20	198
Total Acre Feet	107,975.											

SOUTH PLATTE RIVER AT OGALLALA, NEBRASKA

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	25	320	130	500	280	100	210	16	28	16	17
2	6	23	320	130	500	280	100	210	50	24	10	17
3	9	25	320	130	500	280	100	210	18	25	5	17
4	8	25	320	130	500	280	106	210	16	22	3	16
5	8	25	320	130	500	286	100	210	14	19	2	15
6	7	21	260	200	480	200	50	180	13	18	2	14
7	8	24	260	300	480	115	50	180	14	15	2	10
8	8	24	260	314	480	150	50	180	13	15	3	5
9	8	24	260	180	480	150	50	183	12	13	2	5
10	8	21	260	480	480	150	50	165	10	5	1	5
11	8	26	240	720	440	240	49	147	22	5	0	3
12	12	26	240	720	440	240	50	130	60	5	18	2
13	11	26	240	720	440	240	50	130	29	5	37	1
14	13	26	240	720	440	240	50	130	25	5	58	0
15	14	26	240	720	440	240	50	130	24	5	80	0
16	14	27	210	450	380	100	40	80	22	5	60	2
17	15	27	210	450	380	400	40	80	48	5	40	3
18	13	27	210	450	380	728	40	80	27	5	32	4
19	11	27	210	450	380	700	38	80	490	4	24	3
20	16	27	210	450	380	700	40	58	101	3	22	2
21	15	33	370	490	500	240	150	40	70	3	20	2
22	15	33	370	390	821	240	150	10	56	3	14	2
23	16	33	370	490	800	240	150	10	49	4	8	2
24	14	33	370	490	800	240	150	40	43	4	7	3
25	16	33	370	469	800	240	150	29	41	7	6	4
26	16	120	260	470	390	150	220	30	39	11	24	5
27	26	120	260	470	390	150	220	30	37	7	21	5
28	18	120	260	470	390	150	220	22	37	3	23	4
29	33	235	260	470	390	150	220	25	37	4	22	1
30	26	352	260	470	.....	150	220	25	32	5	20	3
31	26	.....	260	470	.....	150	.....	.....	.....	40	18	.....
Mean	14	51	276	437	493	272	102	107	49	10	19	6
Max.	33	352	.....	.....	.....	.....	.....	.....	190	40	80	17
Min.	5	23	.....	.....	.....	.....	.....	.....	10	3	0	0
A. F.	815	3213	10979	26882	28332	16707	6056	6597	2006	640	1196	347
Total Acre Feet	110,700.											

SOUTH PLATTE RIVER, Channels 1 to 4, incl., JULESBURG, COLORADO

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51	61	308	97	595	344	184	269	40	35	28	25
2	53	57	300	105	500	311	131	208	40	27	28	20
3	55	57	276	117	500	282	84	173	31	27	28	21
4	51	57	257	148	490	250	77	173	29	27	28	20
5	48	57	270	213	490	225	63	176	37	27	23	20
6	48	55	270	316	480	220	59	175	28	27	24	18
7	49	56	269	355	474	218	52	175	28	27	24	18
8	48	51	266	609	475	207	46	174	28	27	22	18
9	46	52	243	661	481	205	57	144	28	27	20	17
10	49	59	275	718	486	200	57	113	28	27	20	17
11	49	63	300	801	497	201	57	98	60	27	18	17
12	55	61	308	903	502	209	56	79	61	20	22	17
13	58	63	231	715	448	218	56	67	60	20	116	17
14	62	69	178	581	416	255	45	76	48	20	92	17
15	61	73	163	469	336	310	44	73	48	20	64	16
16	62	66	153	457	304	370	43	61	36	20	53	16
17	60	69	163	430	315	407	42	61	36	27	48	20
18	66	69	186	400	385	440	44	53	27	27	39	20
19	64	66	248	420	410	431	44	53	47	20	36	19
20	64	68	342	496	480	363	40	52	37	20	32	20
21	61	69	372	564	509	303	41	42	36	20	28	19
22	63	72	396	527	290	290	42	41	35	20	26	26
23	63	74	396	546	527	239	71	31	35	27	24	27
24	63	87	351	455	471	176	352	31	35	45	22	27
25	61	105	345	370	450	151	276	31	27	27	21	29
26	62	171	337	340	438	138	255	50	35	27	26	31
27	90	296	302	455	402	108	211	50	27	20	30	29
28	109	322	291	520	382	91	222	49	35	20	36	29
29	96	335	283	526	357	101	222	49	35	27	33	29
30	88	330	245	520	.....	196	221	60	35	27	27	23
31	63	.....	107	518	.....	216	.....	49	.....	35	27	.....
Mean.	62	103	271	464	450	248	106	93	37	26	34	21
Max.	109	335	396	903	527	440	352	209	61	45	116	31
Min.	46	51	153	97	304	91	40	31	27	20	18	16
A. F.	3790	6130	16700	28500	25900	15200	6310	5710	2210	1570	2120	1270
Total Acre Feet	115,410.											

DEPARTMENT OF PUBLIC WORKS

PLATTE RIVER AT COZAD, NEBRASKA
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1										693	455	122
2										268	381	154
3										928	340	187
4										1103	100	203
5										163	108	230
6										208	116	210
7										96	118	191
8										53	120	173
9										18	217	156
10										8	314	149
11										8	178	143
12										16	42	159
13										9	12	175
14										7	19	177
15										9	88	178
16										7	158	153
17										5	107	129
18										7	56	163
19										7	11	198
20										5	26	198
21										16	18	198
22										5	11	228
23										11	8	258
24										13	6	267
25										11	8	276
26										11	19	351
27										8	9	426
28										9	8	648
29										10	60	870
30										170	112	768
31										329	33	
Mean										146	112	258
Max.										1103	581	870
Min.										5	6	122
A. F.										9013	6900	15358
*No Record.												

PLATTE RIVER AT OVERTON, NEBRASKA
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	1580	2010	1620	1770	4990	1670	2970	1310	733	500	0
2	0	1680	2460	2010	1770	4050	1700	2600	2610	404	296	0
3	0	1820	2800	1320	1730	3180	1790	2450	1920	285	223	0
4	0	1520	2700	1460	1730	2230	1760	2370	1640	241	195	0
5	0	1680	2500	1450	1700	1730	1730	2160	1230	274	153	0
6	0	1680	2200	910	2000	1640	1700	2050	1010	252	128	0
7	0	1820	2200	910	2000	1600	1700	1920	802	174	114	0
8	0	1650	2200	910	2000	1500	1610	1790	626	167	118	0
9	0	1810	2200	1360	2000	1130	1500	1670	484	136	181	0
10	0	1350	2200	2900	2000	710	1790	1610	388	24	142	2
11	0	1710	2550	3200	2100	500	1790	1500	340	6	125	6
12	0	1820	1810	3200	2410	468	1830	1410	436	0	125	6
13	250	1740	1690	3200	2360	800	1830	1440	468	0	122	5
14	484	1680	2010	3360	2100	1000	1700	1560	420	0	108	8
15	1010	1620	1890	1890	2010	1270	1560	1310	372	0	72	60
16	1190	1650	2010	1460	2020	2500	1470	1010	436	0	84	60
17	1120	2020	2010	1190	2100	4250	1360	871	1310	0	90	72
18	986	1990	2460	2500	2050	5750	1280	710	1160	0	60	48
19	1160	2270	2460	3180	2010	5400	1260	584	1230	0	63	24
20	1210	2830	2460	2850	1930	5500	1210	452	1360	0	26	60
21	1030	1900	2460	2180	1810	5190	1260	356	2190	0	2	84
22	1140	964	2950	1970	2460	5090	1280	285	2160	0	2	101
23	1120	1270	2950	1890	2800	3400	1210	230	1670	5	0	118
24	1160	1520	2700	1810	2830	2680	1310	188	1610	770	0	146
25	986	850	2950	1730	2850	2410	1560	188	1530	223	0	290
26	1100	760	2000	1110	3060	2190	2020	285	1470	146	0	452
27	1140	944	2000	1620	3200	2120	3860	296	1290	94	0	452
28	1600	1890	2000	2010	4800	1990	3060	271	1180	42	0	388
29	2050	1930	2000	1890	4440	1860	3910	271	1060	18	0	902
30	1650	1810	2000	1810		1890	3580	285	917	63	0	818
31	1650		2000	1810		1730		1010		356	0	
Mean	711	1570	2280	1960	2350	2600	1880	1160	1150	143	95	135
Max.	2050	2830	2950	3360	4800	5750	3960	2970	2640	779	500	848
Min.	0	760	1690	910	1770	468	1210	188	340	0	0	0
A. F.	43700	99400	140000	121000	135000	160000	112000	71300	68100	8790	5810	8030
Total Acre Feet 973,400.												

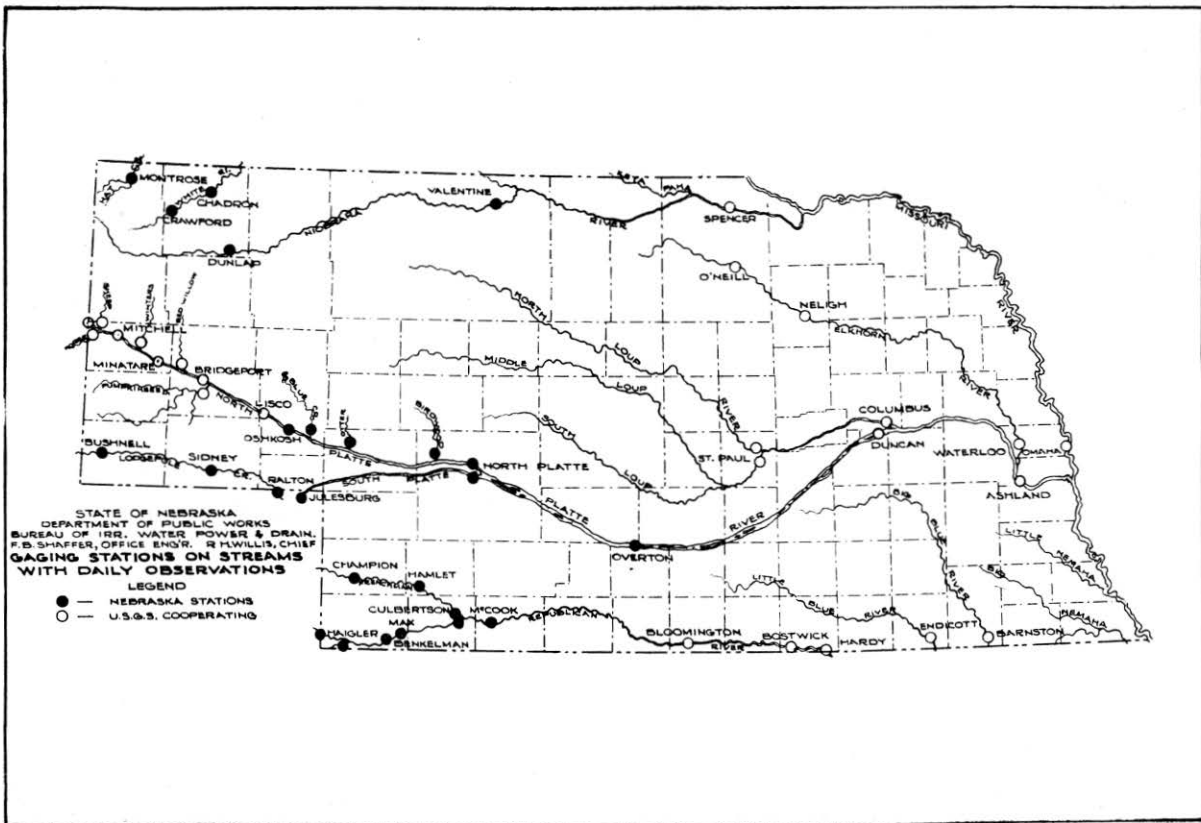
REPORT OF SECRETARY

PLATTE RIVER AT DUNCAN, NEBRASKA
 Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	34	375	570	1500	1300	6250	2200	3630	653	850	620	11
2	23	510	610	1500	1400	7300	2090	3120	814	754	321	10
3	9	631	510	1500	1400	6440	2070	3110	1130	751	184	10
4	8	664	493	1500	1400	5820	1850	2620	5550	751	142	10
5	6	686	600	1500	1400	5500	1940	2120	4930	730	152	9
6	6	661	530	900	2000	4200	1800	2070	5280	1290	478	7
7	5	612	650	900	2000	3450	1610	1750	4030	1190	152	7
8	6	612	1210	900	2000	2100	1600	1600	2780	790	130	7
9	6	620	1390	900	2000	1500	1600	1310	1890	550	87	7
10	5	612	1430	900	2000	750	1110	1210	2910	730	64	11
11	5	631	1410	850	2550	1000	1390	1170	2390	281	42	27
12	6	838	1510	891	2550	1100	1190	1150	1990	136	273	84
13	6	906	1550	890	2550	1200	1750	1070	1990	79	120	52
14	6	906	1370	890	2550	1500	1550	962	1940	32	47	29
15	6	934	1390	890	2550	1800	1110	990	1570	19	38	11
16	6	906	1110	850	2840	2100	1570	1070	1330	21	19	7
17	6	838	1430	850	3000	2530	1470	1020	1330	21	21	8
18	6	826	1390	850	3160	3000	1110	1120	1290	21	21	9
19	6	802	1610	850	3350	5910	1570	920	1680	66	21	8
20	6	931	1750	850	3600	9250	1660	664	2150	27	21	9
21	5	1220	1970	910	5000	7470	1770	460	2310	9	21	49
22	8	1410	2120	910	5000	7390	1510	375	2250	9	21	284
23	8	1260	2070	910	5000	6720	1150	308	2070	21	19	146
24	8	1000	2150	910	5000	6870	1570	302	2070	10	13	61
25	8	720	1940	910	7950	5230	1910	311	2200	9	15	34
26	8	412	2120	1080	12600	3180	1620	620	1850	9	14	29
27	8	570	2170	1080	25800	3240	1750	530	1660	10	89	21
28	8	664	2280	1080	24300	3070	1940	452	1620	9	32	17
29	8	612	2310	1080	15500	2910	2040	321	1330	9	38	16
30	69	600	2310	1080	.....	2750	3750	790	1750	9	20	14
31	328	.....	2100	1080	.....	2500	.....	653	.....	9	11	.....
Mean	21	769	1510	1020	5230	4010	1760	1230	2210	297	105	37
Max.	328	1110	2310	.....	25800	9250	3750	3630	5550	1290	620	284
Min.	5	375	530	.....	1300	750	1390	302	653	9	13	7
A. F.	1260	45800	92800	62700	301000	247000	10500	75600	132000	18300	6160	2010
Total Acre Feet	1,090,000.											

PLATTE RIVER AT ASHLAND, NEBRASKA
 Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2460	2480	3750	9370	3500	34400	7270	4740	18600	3420	2050	2510
2	2300	2510	4390	8050	3500	20700	6610	9050	18400	2620	8200	2280
3	.....	2110	2460	4240	5420	3500	28100	5720	7760	26400	2300	8890
4	2090	2590	3920	3970	3500	23400	5540	7550	78100	2240	6350	2070
5	2120	2670	3970	4340	3330	16000	6480	7270	16200	2430	3340	2050
6	2120	2890	3580	4590	4000	10000	6180	6670	13100	2960	3710	1990
7	2160	2960	3160	3380	4000	4000	6030	20100	13000	2890	10800	1900
8	1990	2960	3580	2960	4000	3300	5180	6030	10800	2990	7980	1780
9	2110	3130	4340	2200	4000	2150	4960	9290	13200	3580	6670	1800
10	2430	2020	5720	2600	4000	1090	5120	7550	31100	2510	6800	1920
11	2510	2920	7340	2300	4800	1300	5300	6740	17100	2090	5540	2200
12	2320	3840	8500	2300	4800	1760	5900	6220	8420	2620	15000	2730
13	2670	3710	8120	2300	4800	3300	5420	5540	11400	2240	14800	3200
14	2540	3380	4910	2300	4800	5200	4340	4540	12300	2070	11700	3500
15	2800	3920	3200	2300	4800	8500	4100	4440	12300	1890	14600	5130
16	2990	3420	2730	2100	5000	10000	4200	3920	7000	1890	6940	4060
17	2620	3240	2300	2300	5000	13500	4440	4490	7550	1920	5080	3020
18	2460	3160	2430	2200	5000	16000	4240	4240	17600	1990	3970	2480
19	2500	3310	2990	2200	5000	17800	4690	4440	9960	1900	3160	2410
20	2430	3670	4540	2200	5000	13500	5120	4590	9130	1960	2700	2260
21	2390	4590	6030	2300	6000	16600	5300	3630	8050	1960	2480	2390
22	2390	6030	7070	2300	8000	11200	4740	3020	11600	1960	2350	4100
23	2350	8280	8120	2300	10000	10900	4960	2670	7900	2260	3060	4290
24	2320	9880	9290	2300	12000	11000	4290	2540	6670	1920	2460	4150
25	2300	4540	7980	2300	15000	11500	4440	2280	7830	4690	2160	3920
26	2320	3060	7830	3000	17300	10500	7410	2830	7070	2800	2070	3200
27	2560	2430	7410	3000	21400	9450	7270	4310	8350	1960	2090	3060
28	2320	2430	7690	3000	37100	8970	6220	7550	12000	1730	2460	2920
29	2410	2620	8050	3000	42500	8050	5420	4390	7410	1570	2480	2920
30	2410	3130	8200	3000	.....	8280	4740	2560	6030	1510	3060	3340
31	2560	.....	9540	3000	.....	7410	.....	2830	.....	2010	3200	.....
Mean	2400	3640	5650	3190	8020	11600	5120	5010	12500	2650	5680	2860
Max.	2990	9880	9540	9370	42500	34400	7410	20100	31100	4690	15000	5130
Min.	1990	2430	2360	2100	3330	1090	4100	2280	6030	1510	2050	1780
A. F.	148000	217000	347000	196000	513000	713000	323000	345000	744000	144000	349000	170000
Total Acre Feet	4,210,000.											



REPORT OF SECRETARY

WATER ANALYSIS OF DIVERSIONS, IN SECOND FEET, FOR THE
NORTHPORT IRRIGATION DISTRICT

July 1 to September 30, 1932

The Northport project diverting from the North Platte river east of the state line and through the Farmers Irrigation District's headgate and canal.

Date	JULY			AUGUST			SEPTEMBER		
	Natural	Storage	Total	Natural	Storage	Total	Natural	Storage	Total
1	230	0	230	226	89	315	238	92	330
2	230	0	230	179	136	315	242	88	330
3	230	0	230	133	182	315	246	84	330
4	230	0	230	178	137	315	248	82	330
5	230	0	230	223	92	315	251	79	330
6	230	0	230	221	94	315	255	75	330
7	231	84	315	218	97	315	254	76	330
8	230	85	315	217	113	330	255	75	330
9	232	83	315	230	100	330	254	76	330
10	231	84	315	212	118	330	251	79	330
11	230	85	315	207	123	330	252	78	330
12	205	110	315	208	122	330	257	73	330
13	230	115	345	209	121	330	261	69	330
14	209	136	345	199	131	330	264	66	330
15	325	20	345	196	134	330	262	68	330
16	208	137	345	204	126	330	261	69	330
17	208	137	345	210	120	330	271	59	330
18	204	141	345	213	117	330	270	60	330
19	204	141	345	220	110	330	270	60	330
20	211	134	345	217	113	330	274	56	330
21	209	136	345	215	115	330	280	50	330
22	219	126	345	211	116	330	282	48	330
23	222	123	345	214	116	330	284	46	330
24	222	123	345	221	106	330	286	44	330
25	217	128	345	234	96	330	286	44	330
26	211	131	345	240	90	330	291	39	330
27	216	129	345	249	81	330	289	41	330
28	222	123	345	239	91	330	288	42	330
29	217	128	345	229	101	330	179	0	179
30	198	147	345	203	127	330	71	0	71
31	191	149	340	200	130	330	-----	-----	-----
A. F.	13650	5828	19478	13053	7030	20083	15217	3606	18823
Total Storage	16,464 A. F.								

DIVERSIONS FROM RETURN FLOW IN ACRE FEET BETWEEN
STATE LINE AND BRIDGEPORT, NEBRASKA

1931

	May	June	July	Aug.	Sept.	Oct.	Total
Tri-State Canal from Sheep Creek.....	2243	4659	5189	5788	6252	1012	25143
Akers Draw	375	615	748	738	751	119	3349
Dry Spotted Tail	0	0	0	2071	1767	190	4028
Wet Spotted Tail	313	545	859	1555	1519	278	5069
Tub Springs	0	0	904	2098	1847	194	5043
Moffat Drain	0	0	0	208	410	59	677
Alliance Drain	0	0	0	988	1309	208	2505
Enterprise Canal from							
Stewarts Drain	18	44	10	0	18	0	90
Morrill Drain	0	101	137	181	178	0	600
Dry Spotted Tail	65	460	1670	0	0	0	2195
Wet Spotted Tail	381	512	692	658	496	0	2739
Tub Springs	399	1035	2535	1440	815	0	6224
Winters Creek Canal from							
Winters Creek	0	1964	2150	3312	1652	0	9078
Alliance Canal from Bayard							
Sugar Factory Drain.....	0	1357	896	839	200	0	3292
Red Willow	0	2364	2672	3088	2844	0	10968
Total.....	3794	13656	18462	22967	20061	2060	81000

VISIBLE RETURN FLOW BETWEEN WYOMING-NEBRASKA STATE LINE AND BRIDGEPORT

For the Year Ending September 30, 1930

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
Bayard S. F. Drain.....	3045	2440	2460	2459	2166	2081	2083	2650	2826	3382	3890	4463	33945
Camp Clark Seep.....	676	357	373	246	278	307	123	91	178	246	333	369	3577
Cleveland Drain.....	0	0	0	0	0	0	178	289	297	244	184	268	1460
Upper Dugout.....	N.R.	N.R.	N.R.	61	55	61	178	280	119	103	537	1250	2614
Fairfield Seep.....	123	397	329	123	278	369	258	615	178	184	351	297	3502
Fanning Seep.....	492	476	528	492	222	184	297	132	176	412	861	952	5821
Gering Drain.....	2172	2063	2634	2029	1277	1357	1279	1388	1904	2801	4667	2737	26308
Horse Creek.....	6456	5256	6129	5534	9108	6052	1468	5231	3689	6274	14747	19141	89085
Indian Creek.....	1537	991	575	553	555	387	337	124	297	1041	1013	2350	10060
Lane Drain.....	246	218	246	123	115	123	119	250	116	282	246	179	2563
Melbeta Seep.....	676	416	369	303	178	276	208	288	238	63	353	178	3546
Morrill Drain.....	123	178	60	60	159	30	36	60	0	0	0	416	1122
Mitchell Spillway.....	2029	1725	1045	1045	1222	1411	416	0	0	0	0	0	8896
Red Willow Drain.....	5595	4383	4550	3013	2913	2676	1765	8529	5891	246	8672	4998	53261
Scottsbluff Drain.....	1351	1071	1079	1353	938	460	357	738	833	1045	1230	1250	11705
Sheep Creek.....	7194	7061	5589	1980	4943	4869	4344	4707	4696	123	1229	1101	47836
Snell-Nine Mile.....	11484	8826	7968	7379	6553	6462	5534	6413	7021	11139	15051	16001	109831
Stewarts Drain.....	31	60	154	123	111	60	48	30	0	30	60	149	856
Spotted Tail (Dry).....	4120	2826	2243	2705	2388	1722	1428	1951	2199	4889	4427	5554	36755
Spotted Tail (Wet).....	1168	952	1121	1045	722	799	625	589	738	863	1428	1279	11329
Tub Springs.....	5472	4106	3731	3136	2767	2029	1607	2644	2678	3680	5472	7141	44472
Toohey Drain.....	246	357	278	307	170	123	119	246	119	184	184	357	2690
Toohey Spillway.....	1844	1487	1142	1414	1000	922	920	0	0	0	0	4740	13469
Winters Creek.....	5657	5177	3767	4673	1975	3223	2082	1775	327	2350	4491	7200	42698
Wild Horse.....	3005	1934	2717	2521	2277	1837	1517	2450	1983	1291	5755	5534	30521
Total.....	64742	52757	49087	45677	42400	37523	27327	42073	31403	40881	73181	89904	597955

VISIBLE RETURN FLOW BETWEEN WYOMING-NEBRASKA STATE LINE AND BRIDGEPORT

For the Year Ending September 30, 1931

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
Bald Drain	140	130	150	338	305	283	238	922	405	307	184	143	3545
Bayard S. F. Drain.....	4685	4374	3320	2640	2060	2100	2080	2160	2530	2610	3770	4230	36850
Camp Clark Seep.....	303	297	369	203	111	92	89	61	131	118	228	315	2347
Cleveland Drain	369	268	184	123	111	123	137	240	315	271	344	286	2771
DeGrew Drain	150	200	250	492	389	412	280	246	131	148	172	208	3078
Upper Dugout	540	654	393	246	222	160	131	86	286	350	486	655	4209
Fairfield Seep	363	149	246	326	189	129	89	221	363	357	350	321	3103
Fanning Seep	652	476	615	492	305	283	238	209	292	357	412	440	4771
Gering Drain	1601	2350	2410	2300	2270	1630	1460	2800	4360	3190	2910	1890	29171
Horse Creek	10332	6773	7022	5110	3250	4020	3920	6580	7860	6080	5280	3740	69967
Indian Creek	1349	595	676	510	361	449	298	252	964	806	916	1180	8356
Lane Drain	307	149	492	246	83	123	60	62	179	307	369	327	2704
Melbeta Seep	325	476	553	467	361	357	208	92	143	178	43	119	3321
Morrill Drain	244	149	123	123	103	80	30	0	0	0	0	0	852
Mitchell Spillway	0	892	922	0	0	830	470	3120	131	0	0	0	6365
Red Willow Drain.....	3469	4481	4215	3650	2870	1960	1730	2380	940	1790	1880	3360	32725
Scottsbluff Drain	1321	1091	984	898	705	590	553	535	964	1200	1450	1650	11941
Sheep Creek	7855	7339	5940	5530	5000	4920	4760	1970	417	203	215	143	44292
Snell-Nine Mile Drain.....	15124	11345	9289	8240	6390	6130	6190	5470	8930	11300	11900	11200	111808
Stewarts Drain	123	119	61	61	57	103	129	0	0	0	0	0	653
Spotted Tail (Dry).....	5038	3054	3035	3240	2320	1910	1710	1370	2840	2550	2390	1810	31267
Spotted Tail (Wet).....	1250	1130	861	1010	855	928	881	511	815	603	769	1070	10713
Springs Creek	300	150	200	250	222	250	238	250	298	307	307	357	3129
Tub Springs	5074	3590	3382	2870	2220	1880	1860	1080	3190	1060	590	1380	28176
Toohey Drain	496	327	246	197	133	160	137	111	196	301	295	381	2980
Toohey Spillway	1648	1696	1168	1170	850	996	815	455	0	0	0	0	8798
Winters Creek	6821	4701	4550	4000	3630	2600	2530	2780	2220	2970	3410	5750	45962
Wild Horse	5500	3273	3259	2930	2200	1630	1390	1590	2560	3330	3360	4330	35352
Total.....	75679	60228	51915	47662	37572	35128	32651	35883	41460	40723	42030	45285	549216

VISIBLE RETURN FLOW BETWEEN WHALEN AND THE WYOMING-NEBRASKA STATE LINE

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
Arnold Drain								437	238	590	695	857	.....
Cherry Creek								830	1760	2020	2230	1650	.....
Katzer Drain							146	676	1610	1880	1700	1140	.....
Pullen Drain	No Record												

VISIBLE RETURN FLOW BETWEEN BRIDGEPORT AND NORTH PLATTE

Pumpkinseed 50%r	2210	1490	1690	1950	1875	1665	1575	1215	232	520	860	1075	16357
Silvernail Drain	833	1010	922	646	528	406	327	332	631	652	676	655	7678
Plum Creek	534	446	461	461	367	369	369	307	256	295	271	339	4525
Cedar Creek 50%	946	714	1110	1140	918	972	1070	824	292	271	430	1130	9815
Oshkosh Drain	283	179	154	105	167	191	417	246	315	123	277	238	2695
Lewellen Drain	184	179	184	184	139	98	208	123	89	61	80	89	1618
Keith & Lincoln Co.	277	238	387	166	139	160	357	215	208	154	123	131	2555
Lincoln County Dr. No. 1	6350	5000	4600	4360	3600	4170	3960	4190	6880	9320	6320	6120	61930
Lincoln County Dr. No. 2	676	494	338	370	333	370	417	430	422	370	326	422	4968
Totals	12403	9750	9846	9382	8124	8401	8700	7882	9325	8766	9363	10199	112141

SUMMARY

Whalen to State Line	Incomplete record												
State Line to Bridgeport	60228	51915	47662	37572	35128	32544	35883	41460	4023	42030	45285	549216	
Bridgeport to North Platte	12403	9750	9846	9382	8124	8401	8700	7882	9325	8766	9363	10199	112141
Grand Total	88082	6978	64761	57044	45696	43529	41351	42765	50785	49489	51393	55484	661357

VISIBLE RETURN FLOW BETWEEN WYOMING-NEBRASKA STATE LINE AND BRIDGEPORT

Year Ending September 30, 1932

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
Bald Drain	91	60	61	61	85	113	159	313	589	616	855	1 ⁰⁰	4428
Bayard S. F. Drain.....	3870	3090	3070	2580	2150	2140	1930	2360	1710	2240	4000	5370	34510
Camp Clark Seep.....	305	179	184	123	174	123	60	83	119	260	381	764	2755
Cleveland Drain	153	89	113	133	97	71	60	123	446	276	214	297	2070
Degraw Drain	532	417	357	285	371	409	238	184	178	216	339	476	4002
Upper Dugout	751	426	315	224	155	113	89	119	700	649	575	796	4945
Fairfield Seep	214	119	121	61	133	226	40	32	129	163	115	248	1601
Fanning Seep	246	238	307	307	240	270	157	204	301	155	278	377	3080
Gering Drain	2560	1770	1660	1410	1330	1510	1469	1760	4360	4400	4090	4580	30890
Horse Creek	2530	2560	2400	1680	3850	1910	1510	3280	10200	6640	7750	8510	52820
Indian Creek	764	506	430	369	287	297	278	391	686	964	1101	1725	7798
Lane Drain	184	119	123	101	87	61	79	83	119	309	430	357	2052
Melbeta Drain	307	179	214	153	173	204	149	230	20	0	61	298	1885
Morrill Drain	Measured in Toohey Spillway												
Mitchell Spillway	1408	744	212	61	0	0	377	179	139	0	0	0	3120
Red Willow and Wild Horse.....	7051	5504	5068	4433	3750	3830	3480	6760	4570	5980	6210	6900	62636
Scottsbluff Drain	1379	932	861	756	517	605	684	438	645	1309	1388	1726	11270
Scottsbluff Dr. No. 2.....	0	0	0	0	0	0	238	300	375	736	768	714	3331
Sheep Creek	5710	5310	5130	4710	4250	4580	4380	3010	119	338	972	339	38848
Nine Mile Drain	10600	8750	7870	6260	5190	5760	5330	5330	8450	10900	13500	13800	102240
Stewarts Drain	Measured in Toohey Spillway												
Spotted Tail (Dry).....	2301	2321	2218	2539	2101	2043	1686	1686	2850	2650	2386	2936	27717
Spotted Tail (Wet).....	1055	1012	960	801	845	885	1012	817	1020	1103	1222	1057	11789
Spring Creek	615	535	615	615	575	645	595	617	526	555	615	625	7253
Tub Springs	3779	2777	2658	2087	1841	1964	1993	1845	2019	1025	1067	2353	25338
Toohey Drain	246	179	184	111	115	123	119	93	119	216	246	238	1989
Toohey Spillway	1210	1309	1230	1075	950	922	803	357	0	0	0	159	8415
Winters Creek	4910	3690	3630	3430	3010	3180	3040	2770	1120	3330	2740	5340	41220
Total.....	52804	42875	39991	34365	32606	31984	28946	33624	41739	41130	52333	61307	497705

VISIBLE RETURN FLOW BETWEEN WHALEN AND THE WYOMING-NEBRASKA STATE LINE

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
Arnold Drain	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	334	325	153	279	575	1666
Cherry Creek	-----	-----	-----	-----	-----	-----	-----	708	2300	3000	3400	3290	12698
Katzer Drain	-----	-----	-----	-----	-----	-----	-----	1310	1165	1980	2450	2400	9305
Pullen Drain	-----	-----	-----	-----	-----	-----	-----	62	60	62	65	120	369
Total.....	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	2414	3850	5195	6194	6385	24038

VISIBLE RETURN FLOW BETWEEN BRIDGEPORT AND NORTH PLATTE

Cedar Creek 50%	1234	320	357	390	382	380	362	183	210	230	295	279	4622
Keith-Lincoln Co. Drain.....	184	178	184	172	172	184	149	93	119	174	123	119	1851
Lewellen Drain	194	119	101	75	75	61	60	91	60	81	71	79	1057
Lincoln Co. Drain No. 1.....	5117	3669	3340	3223	2975	2767	2529	3848	6246	6169	6482	6123	52788
Lincoln Co. Drain No. 2.....	307	297	307	307	287	317	268	329	565	551	543	496	4574
Oshkosh Drain.....	355	179	153	123	208	329	387	359	432	161	442	450	3578
Plum Creek Drain.....	246	248	369	401	309	276	238	246	179	184	184	218	3098
Pumpkinseed Cr. 50%.....	965	1130	1230	1045	920	1745	1215	950	1135	830	595	387	12147
Silvernail Drain	738	595	615	615	520	563	417	442	583	946	704	774	7512
Total.....	9330	6735	6656	6351	5848	6622	5625	6541	9529	9326	9439	9225	91227

SUMMARY

Whalen to State Line.....	Incomplete record												
State Line to Bridgeport.....	52804	42875	39891	34365	32606	31984	29946	33624	41739	44130	52333	61307	497705
Bridgeport to North Platte..	9330	6735	6656	6351	5848	6622	5625	6541	9529	9326	9439	9225	91227
Total.....	62134	49610	46647	40716	38454	38606	35571	40165	51268	50456	61772	70532	588932

REPORT OF SECRETARY

DAILY EVAPORATION IN INCHES
BRIDGEPORT, NEBRASKA
1931

Date	May	June	July	August	September	October
1	.081	.365	.141	.273	.249	.159
2	.142	.261	.349	.323	.231	.091
3	.265	.260	.365	.266	.260	.141
4	.074	.283	.352	.271	.280	.139
5	.025	.096	.245	.288	.201	.155
6	.088	.248	.407	.207	.150	.167
7	.206	.189	.219	.327	.202	.010
8	.285	.274	.323	.255	.202	.101
9	.257	.347	.330	.452	.265	.062
10	.244	.268	.362	.221	.457	.217
11	.239	.303	.293	.330	.299	.074
12	.185	.242	.376	.329	.340	.044
13	.210	.232	.335	.385	.134	.151
14	.246	.326	.466	.320	.253	.073
15	.383	.391	.437	.345	.233	.124
16	.214	.407	.335	.173	.161	.079
17	.423	.306	.457	.226	.127	.091
18	.343	.355	.418	.255	.136	.110
19	.292	.340	.384	.284	.148	.076
20	.197	.312	.225	.277	.223	.103
21	.157	.305	.297	.250	.241	.059
22	.217	.295	.307	.337	.141	.084
23	.327	.307	.300	.229	.100	.190
24	.280	.387	.421	.323	.171	.075
25	.474	.384	.361	.215	.233	.130
26	.399	.272	.296	.253	.113	.171
27	.357	.331	.301	.342	.126	.142
28	.122	.479	.415	.260	.164	.150
29	.127	.443	.346	.239	.199	.148
30	.201	.213	.372	.241	.187	.060
31	.269	.....	.351	.170	.....	.003
Total	7.329	9.221	10.625	8.669	6.217	3.365
Mean	.236	.307	.342	.279	.207	.108
Max.	.474	.479	.466	.452	.457	.217
Min.	.025	.096	.111	.170	.100	.003

DAILY EVAPORATION IN INCHES
BRIDGEPORT STATION
1932

	Apr.	May	June	July	Aug.	Sept.	Oct.
1	.249	.098	.210	.322	.332	.228	.123
2	.211	.222	.273	.209	.290	.246	.239
3	.223	.297	.302	.360	.222	.245	.054
4	.240	.170	.296	.326	.243	.194	.081
5	.191	.170	.316	.298	.252	.216	.083
6	.129	.023	.310	.332	.302	.233	.157
7	.110	.132	.336	.297	.255	.218	.110
8	.161	.209	.276	.423	.267	.300	.037
9	.089	.334	.206	.352	.166	.303	.039
10	.104	.260	.158	.388	.425	.124	.060
11	.207	.300	.146	.393	.295	.153	.072
12	.218	.238	.292	.260	.257	.201	.122
13	.256	.392	.276	.226	.391	.220	.171
14	.381	.311	.193	.384	.215	.250	.198
15	.337	.261	.369	.143	.309	.185	.165
16	.280	.170	.367	.242	.258	.162	.327
17	.180	.200	.282	.472	.213	.114	.082
18	.288	.309	.190	.291	.317	.370	.006
19	.184	.282	.173	.279	.189	.229	.003
20	.163	.296	.216	.255	.306	.192	.030
21	.305	.244	.231	.274	.197	.246	.033
22	.400	.535	.310	.298	.242	.204	.002
23	.239	.360	.337	.208	.197	.231	.095
24	.150	.303	.256	.228	.281	.132	.109
25	.090	.115	.186	.277	.266	.075	.076
26	.061	.161	.331	.287	.166	.079	.059
27	.116	.068	.228	.286	.073	.111	.098
28	.013	.000	.174	.286	.133	.108	.118
29	.190	.048	.326	.092	.367	.137	.084
30	.173	.197	.305	.062	.357	.147	.054
31	.....	.278	.....	.172	.178	.....	.043
Mean	.198	.225	.262	.281	.257	.195	.092
Max.	.400	.535	.369	.472	.425	.370	.327
Min.	.013	.000	.146	.062	.073	.075	.002

Standard Class "A" Pan.

**CLIMATOLOGICAL DATA
PRECIPITATION IN INCHES**

Water Year

BRIDGEPORT STATION

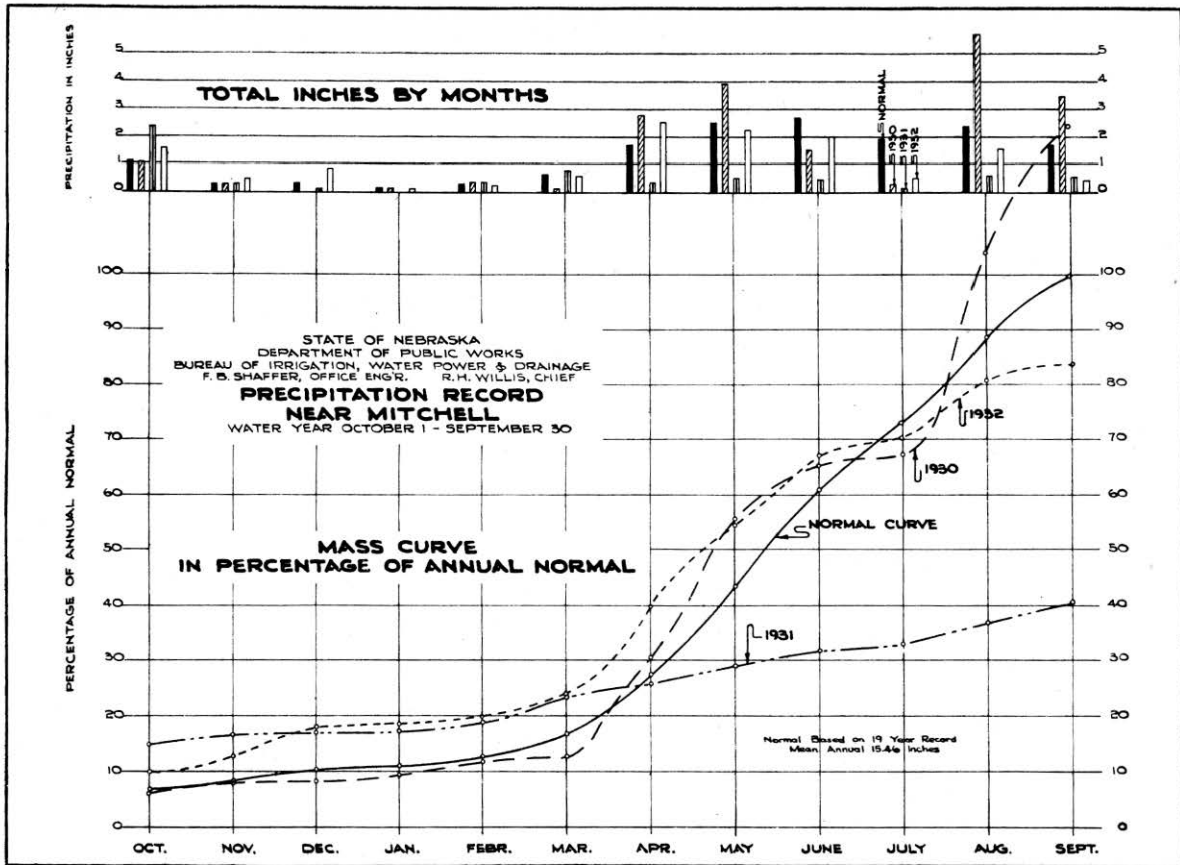
Month	*Normal		1931		1932	
	Monthly	Accumulative	Monthly	Accumulative	Monthly	Accumulative
October	1.09	1.09	2.15	2.15	0.98	0.98
November	0.46	1.55	0.92	3.07	0.31	1.29
December	0.63	2.18	0.05	3.12	0.46	1.75
January	0.40	2.58	0.00	3.12	0.60	2.35
February	0.48	3.06	0.64	3.76	0.20	2.55
March	0.83	3.89	0.90	4.66	0.21	2.76
April	2.17	6.06	0.74	5.40	2.71	5.47
May	2.85	8.91	1.85	7.25	0.95	6.12
June	2.46	11.37	1.06	8.31	3.00	9.42
July	2.06	13.43	0.95	9.26	2.14	11.56
August	1.78	15.21	1.72	10.98	1.46	13.02
September	1.37	16.58	1.09	12.07	0.39	13.41

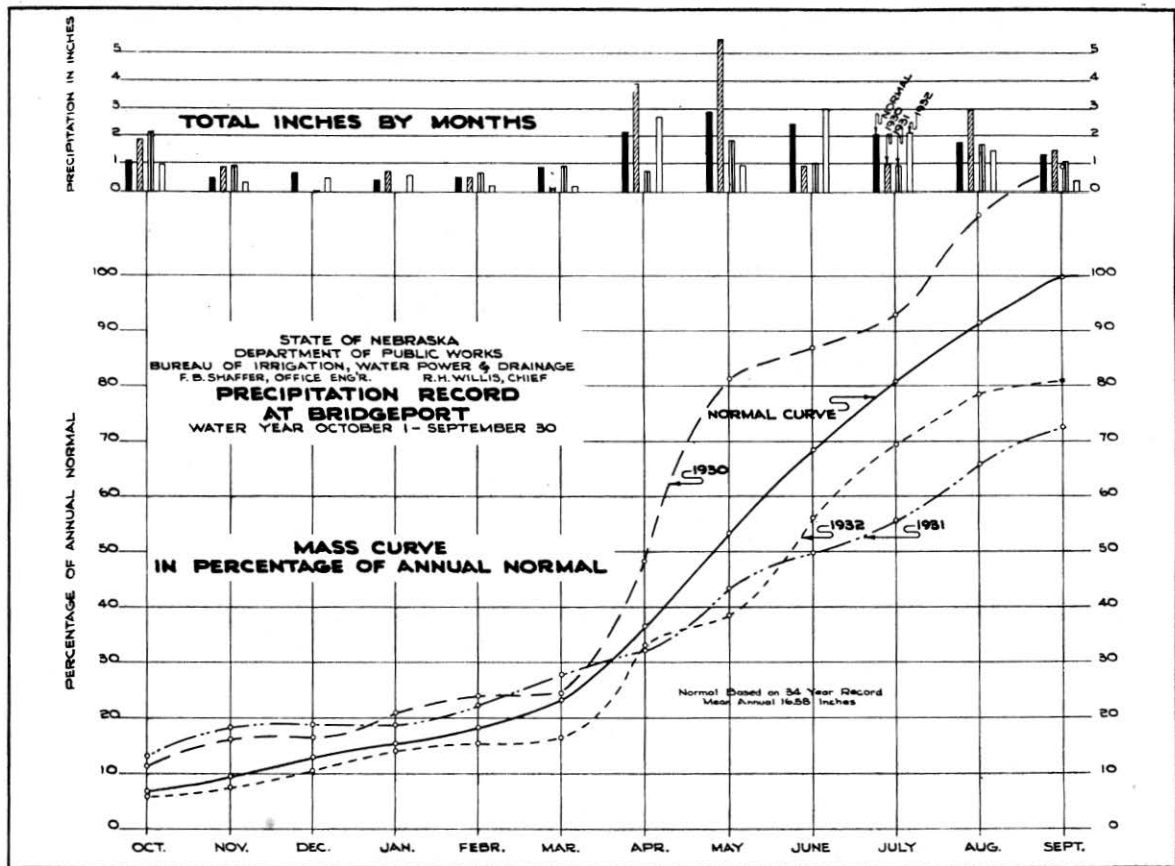
*Normal based on 34 year record.

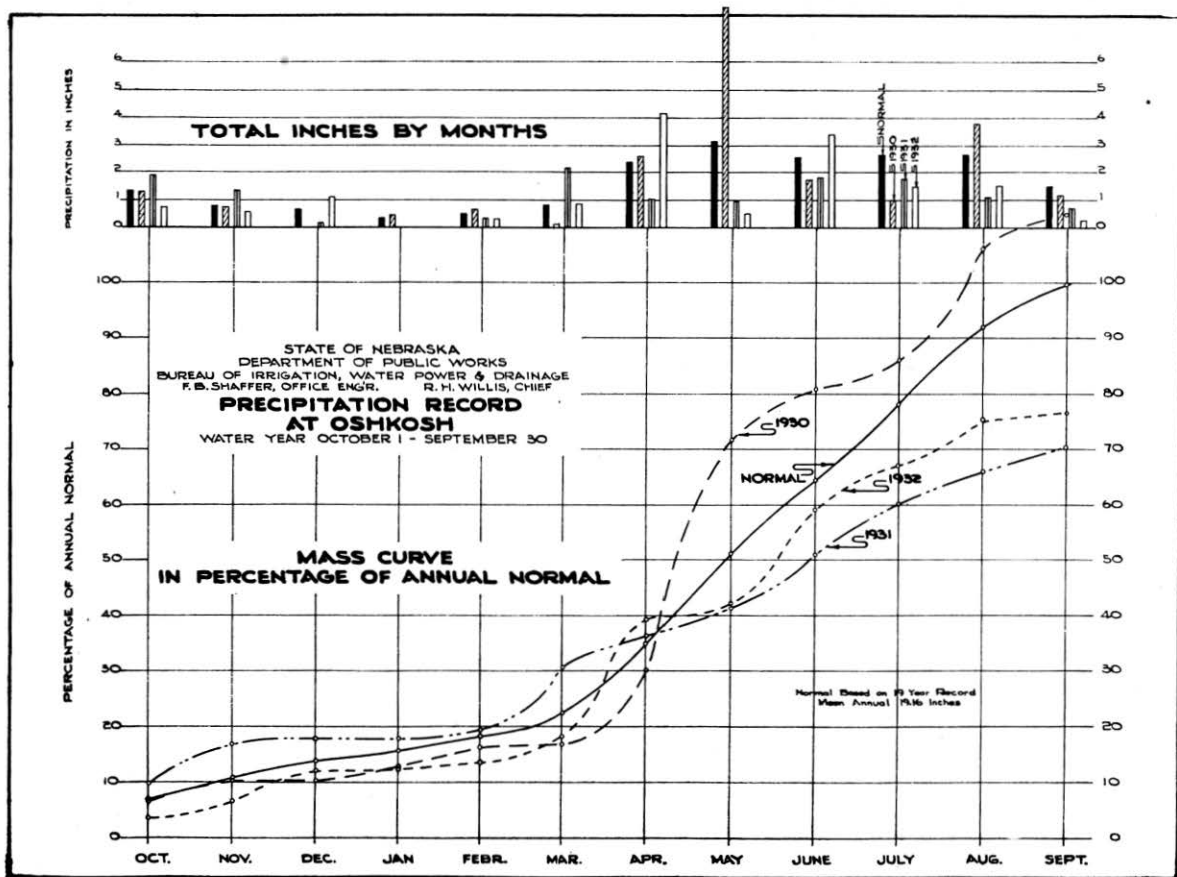
NORTH PLATTE STATION

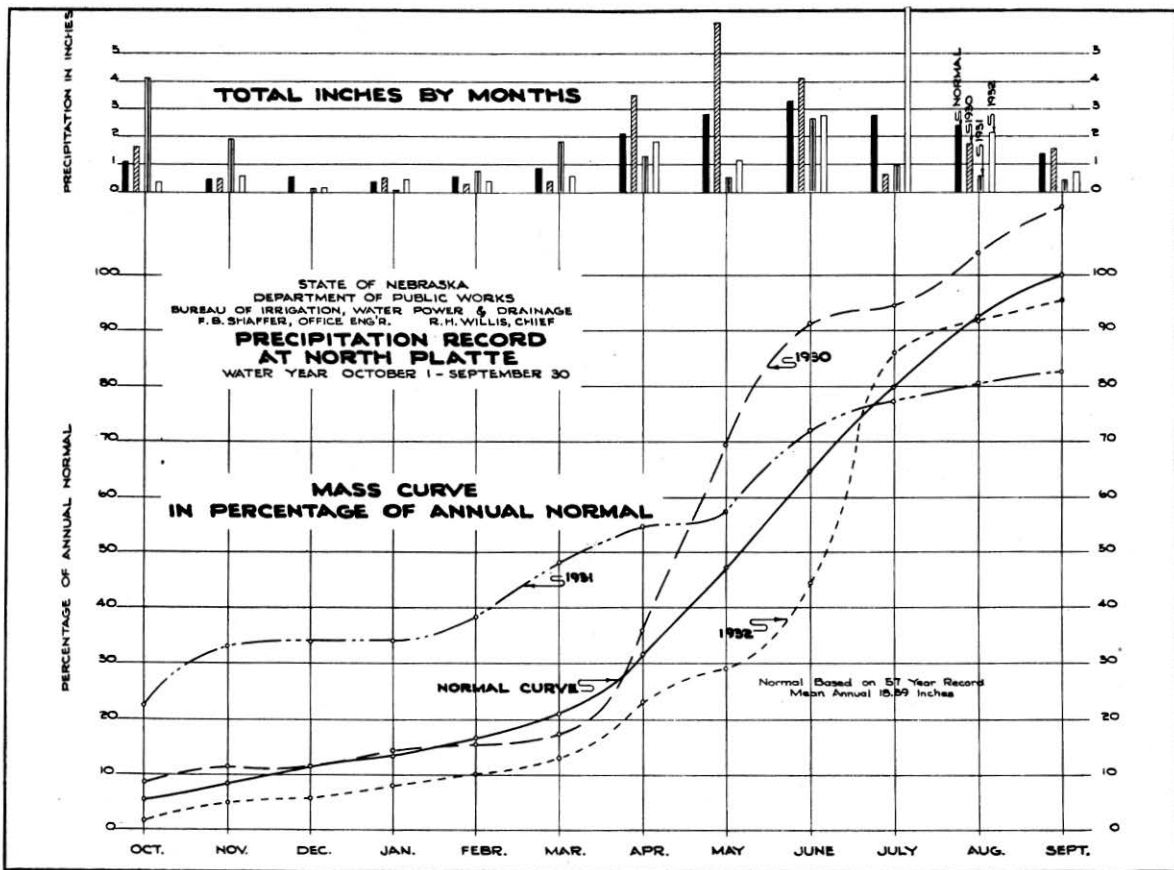
Month	*Normal		1931		1932	
	Monthly	Accumulative	Monthly	Accumulative	Monthly	Accumulative
October	1.07	1.07	4.15	4.15	0.34	0.34
November	0.47	1.54	1.93	6.08	0.59	0.93
December	0.53	2.07	0.17	6.25	0.15	1.08
January	0.39	2.46	0.03	6.28	0.41	1.49
February	0.53	2.99	0.76	7.04	0.39	1.38
March	0.86	3.85	1.81	8.85	0.54	2.42
April	2.06	5.91	1.25	10.10	1.80	4.22
May	2.78	8.69	0.47	10.57	1.11	5.33
June	3.22	11.91	2.65	13.22	2.75	8.08
July	2.74	14.65	0.97	14.19	6.69	14.77
August	2.39	17.04	0.58	14.77	2.10	16.87
September	1.35	18.39	0.41	15.18	0.71	17.58

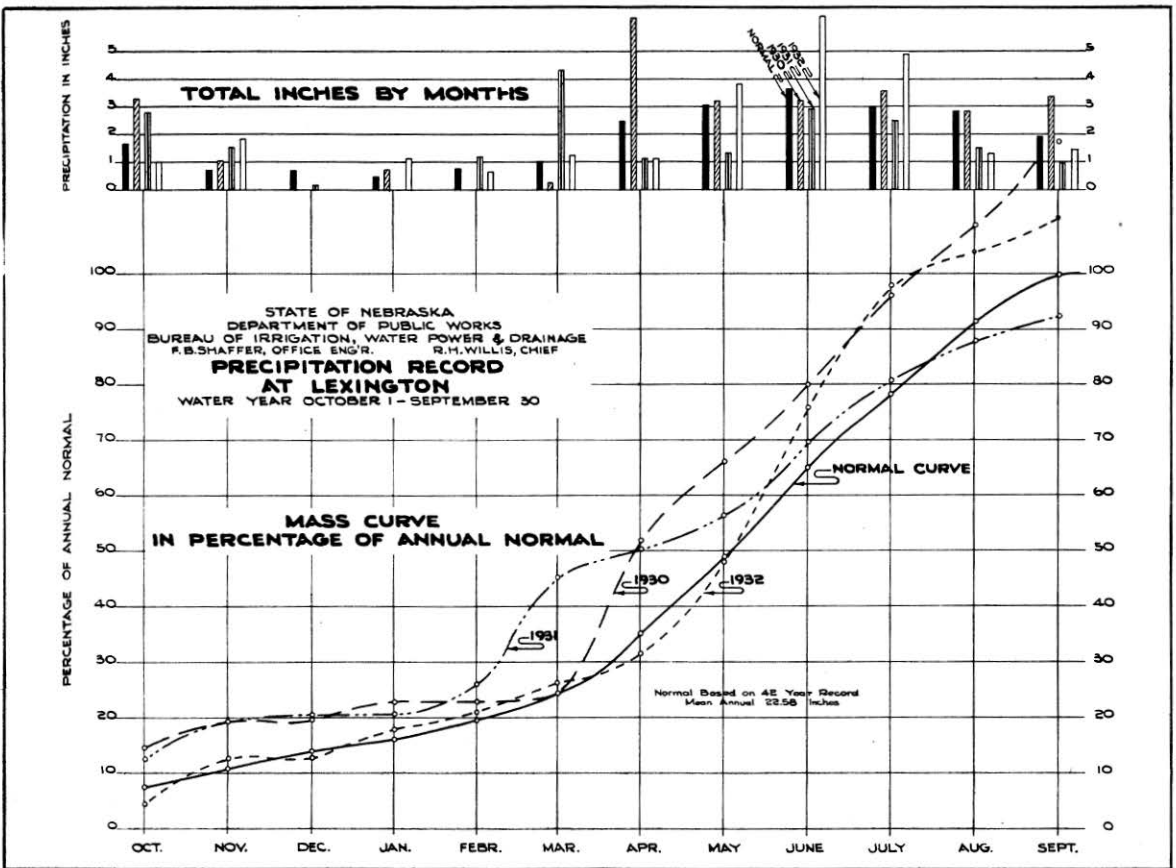
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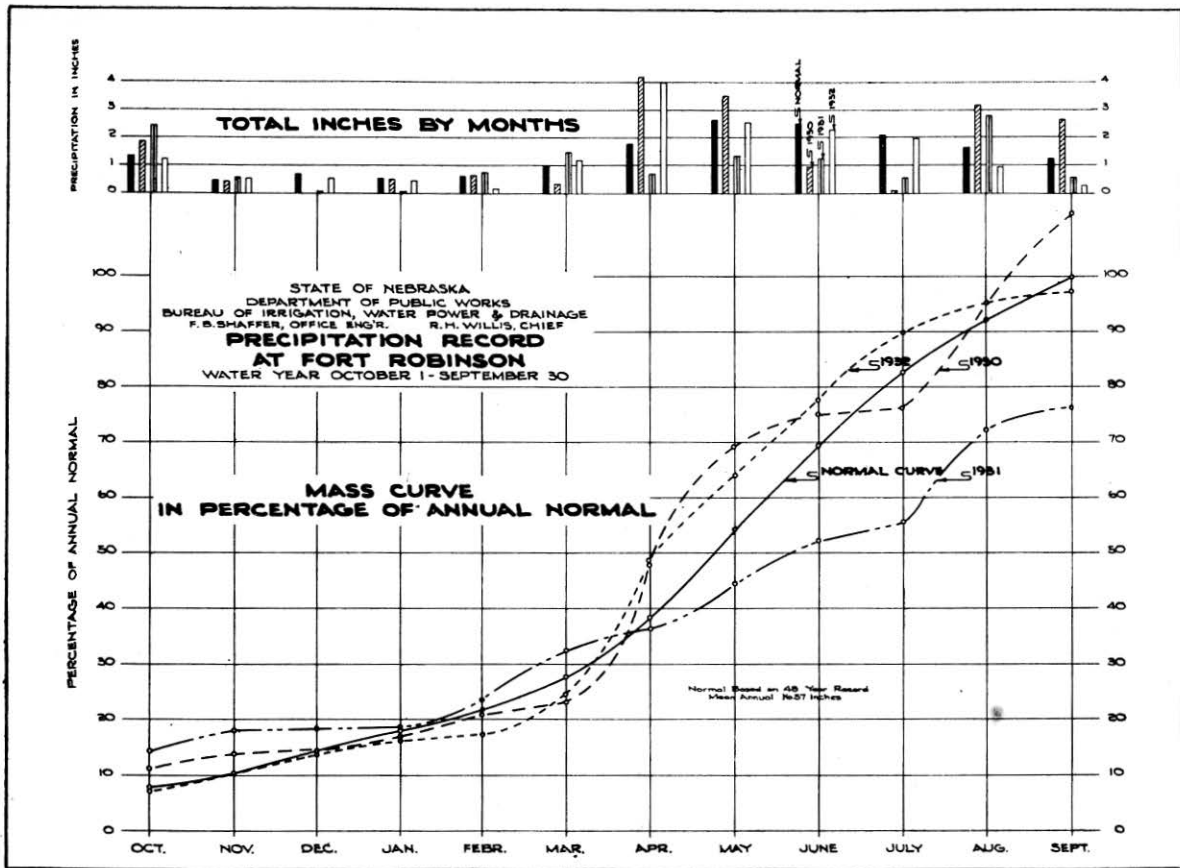


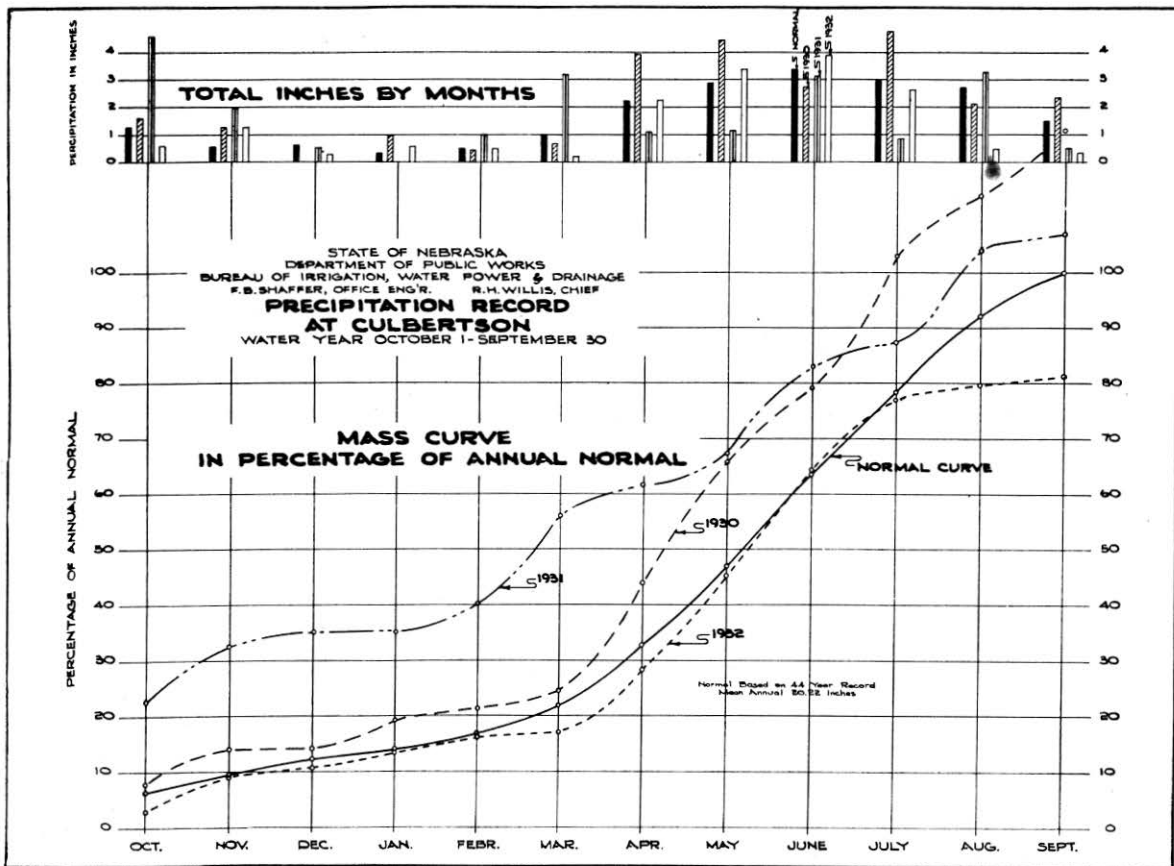












MISCELLANEOUS MEASUREMENTS OF STREAMS

Year Ending September 30, 1931

AKERS DRAW

Above Tri-State Canal—Sec. 12-23-57W

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
5-14	A. W. Hall	17.3	7-25	A. W. Hall	12.0
5-23	do	8.8	8-25	F. F. LeFever	13.3
6- 5	do	11.7	9-10	A. W. Hall	14.0
6-18	do	7.0			

ANTELOPE CREEK

Main Street of Gordon

2-27	A. E. Johnston	1.7	6-17	A. E. Johnston	0.1
4-16	do	1.4	9- 8	do	.0

ALLIANCE DRAIN

Above Tri-State Canal—Sec. 18-22-53 W.

8-11	A. W. Hall	18.3	8-26	A. E. Johnston	23.4
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ARICKAREE RIVER

Haigler—Sec. 28-1-41 W.

10-16	C. E. Franklin	16.1	4-27	C. E. Franklin	34.0
11- 1	do	8.0	5-17	do	17.9
11-15	do	10.3	6- 6	do	39.3
12- 6	do	28.0	7-10	do	.0
1-23	A. W. Johnston	18.7	7-30	do	.0
3-18	C. E. Franklin	20.0	8-27	do	.0
4-10	do	33.0			

ARNOLD DRAIN

Torrington, Wyoming—Sec. 12-24-61 W.

12- 6	A. E. Johnston	8.9	9- 9	A. W. Hall	12.9
1-14	do	10.0	9-23	F. F. LeFever	15.1
2-19	do	13.7			

ASH CREEK

Whitney—Sec. 7-32-50 W.

11- 1	A. E. Johnston	4.3	5-22	A. E. Johnston	3.0
1-16	do	6.5	6-20	do	.8
2-26	do	9.2	9-11	do	.0
4-13	do	7.0			

ASH CREEK (EAST)

Sec. 32-35-50 W.

5-22	Johnston and Rasmussen	4.0	9-11	A. E. Johnston	0.1
6-20	A. E. Johnston	1.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

ASH CREEK (WEST)
Mouth—Sec. 24-32-51 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
4-13	A. E. Johnston	2.1	5-22	Johnston and Rasmussen	2.0

ASH CREEK
Lester—Sec. 3-1-10

3-17	A. E. Johnston	19.0			
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BALD DRAIN
Sec. 32-23-56 W.

3-12	A. W. Hall	5.3	6-26	A. W. Hall	6.0
3-25	do	4.0	8-7	do	4.3
5-14	do	18.4	8-24	F. F. LeFever	2.0
5-27	do	16.1	9-10	A. W. Hall	6.9
6-5	do	6.2	9-24	F. F. LeFever	2.0

BAYARD SUGAR FACTORY DRAIN
Sec. 34-21-52 W.

10-5	C. E. Franklin	85.6	4-8	A. W. Hall	33.0
10-24	do	61.7	5-2	do	49.0
11-4	do	70.0	5-15	do	35.0
11-19	do	77.0	6-6	do	45.1
12-4	A. E. Johnston	54.0	6-16	do	46.0
1-12	do	43.0	8-11	do	74.0
2-17	do	35.8	8-24	do	51.0
3-11	A. W. Hal	35.1	9-10	F. F. LeFever	54.0
3-25	do	32.7			

BAZILLE CREEK
Bazille Mills—Sec. 4-29-5 W.

12-18	A. E. Johnston	23.0	5-2	A. E. Johnston	17.8
2-2	do	31.4	8-15	L. F. Hanks	8.0
3-10	do	31.0	8-28	do	1.2

BAZILLE CREEK
Niobrara—Sec. 21-32-5 W.

5-2	A. E. Johnston	48.7			
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BEAR CREEK
Beatrice—Sec. 36-4-6 E.

11-22	A. E. Johnston	6.7	3-14	A. E. Johnston	3.9
1-28	do	1.7	4-28	do	4.4

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

BEAR CREEK
Ell—Sec. 25-34-36 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
2-27	A. E. Johnston	43.0	9-10	A. E. Johnston	4.3
4-16	do	40.0	9-23	do	6.9

BEAUTY CREEK
Franklin—Sec. 31-2-14 W.

10-16	A. E. Johnston	0.5	5- 8	C. E. Franklin	0.2
11-24	do	1.0	5-30	do	.1
1-27	do	.3	6-20	do	.2
3-17	do	.8	7-13	do	.1
4- 2	C. E. Franklin	.7	8-10	do	1.0
4-21	do	.2	9-17	do	.0

BEAVER CREEK
Beaver City—Sec. 22-2-23 W.

10-17	A. E. Johnston	273.0
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BEAVER CREEK
Hollinger—Sec. 10-2-21 W.

10-17	A. E. Johnston	300.0
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BEAVER CREEK
Grandrapids—Sec. 8-33-15 W.

4-21	A. E. Johnston	7.0
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BEAVER CREEK
Chadron—Sec. 34-35-47 W.

4- 14	A. E. Johnston	3.0	5-25	A. E. Johnston	2.4
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BEAVER CREEK
Albion—Sec. 15-20-6 W.

2- 3	A. E. Johnston	88.5	8-15	L. F. Hanks	36.0
3 5	do	91.0	8-20	do	30.0
4-23	do	79.0	9-11	do	27.0

BEAVER CREEK
Lebanon—Sec. 17-1-26. W

10-17	A. E. Johnston	94.0
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MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

BEAVER CREEK
Orleans—Sec. 19-2-19 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-15	C. E. Franklin	1043.0	11-14	C. E. Franklin	69.0
10-17	A. E. Johnston	14.3	12- 5	do	74.0
10-31	C. E. Franklin	84.0			

BIRDWOOD CREEK
O'Fallons—Sec. 2-14-33 W.

10- 3	A. E. Johnston	267.7	6-25	A. E. Johnston	165.0
11- 8	do	194.0	7- 8	do	150.0
12- 1	do	210.0	7-18	do	122.0
1 7	do	184.0	7-29	do	117.0
2-12	do	200.0	8- 4	do	128.0
4- 1	do	228.0	8-13	do	129.0
5-14	do	153.0	8-18	do	133.0
6- 2	do	171.6	9- 3	do	141.0
6- 9	do	173.0	9-18	do	139.0

BIRDWOOD CREEK
Sec. 10-15-33 W.

1- 7 A. E. Johnston 178.0

BIRDWOOD CREEK (EAST)
Sec. 34-17-33 W.

11- 8 A. E. Johnston 5.1 1- 7 A. E. Johnston 69.0

BIRDWOOD CREEK (WEST)
Sec. 12-16-34 W.

1- 7 A. E. Johnston 65.0

BLUE CREEK
Lewellen—Sec. 30-16-42 W.

10-28	A. E. Johnston	113.0	7- 5	J. V. Ruzicka	55.4
11- 7	do	128.0	7- 9	A. E. Johnston	86.3
12- 2	do	123.0	7-19	do	8.0
1- 9	do	106.0	7-27	do	34.4
2-13	do	122.0	7-28	do	27.4
4- 2	do	176.0	8- 5	do	9.0
5-15	do	69.0	8-11	do	35.0
6- 1	do	2.4	8-20	do	5.0
6-12	do	101.0	9- 5	do	12.1
6-23	A. W. Hall	4.0	9-19	do	51.0
6-26	A. E. Johnston	1.0	9-30	do	60.0

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

BLUE CREEK
Sec. 33-17-42 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
7-21	A. W. Hall	46.0			

BLUE RIVER
Beatrice—Sec. 4-3-6 E.

11-15	A. E. Johnston	163.0	3-16	C. E. Franklin	323.5
11-22	do	1052.0	4-28	A. E. Johnston	318.7
1-28	do	295.0	8-25	L. F. Hanks	147.0
3-14	do	281.8			

BLUE RIVER (BIG)
Seward—Sec. 28-11-3 E.

1- 3	A. E. Johnston	78.0	9- 5	L. F. Hanks	59.5
8-25	L. F. Hanks	2.0			

BLUE RIVER (LITTLE)
Fairbury—Sec. 15-2-2 E.

10-15	A. E. Johnston	135.0	1-28	A. E. Johnston	203.0
11-24	do	304.0			

BLUE RIVER (LITTLE)
Hebron—Sec. 6-2-2 W.

10-16	A. E. Johnston	169.0	5-31	C. E. Franklin	135.0
11-24	do	353.0	6-29	do	115.0
1-27	do	125.0	7-11	do	100.0
3-16	do	113.0	8-11	do	1165.0
4- 4	C. E. Franklin	137.0	8-26	L. F. Hanks	117.0
4-22	do	130.0	9- 8	do	104.0
4-27	A. E. Johnston	191.0	9-17	C. E. Franklin	91.0
5- 9	C. E. Franklin	207.0			

BLUE RIVER (LITTLE)
Endicott—Sec. 3-3-1

3-14	A. E. Johnston	170.2	4-27	A. E. Johnston	27.8
3-14	C. E. Franklin	176.6			

BLUE RIVER (BIG)
Barneston—Sec. 13 & 21-1-7 E.

4- 7	C. E. Franklin	318.0	7-15	C. E. Franklin	640.0
4-23	do	260.0	8-11	do	684.0
5-10	do	730.0	8-25	L. F. Hanks	236.0
6- 1	do	765.0	9- 7	do	251.0
6-30	do	332.0	9-18	C. E. Franklin	29.0

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

BLUE RIVER (LITTLE)
Kiowa—Sec. 20-3-4 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
3-14	C. E. Franklin	105.0			

BOGUS CREEK
St. Edward—Sec. 12-18-5 W.

4-23	A. E. Johnston	8.0			
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BORDEAUX CREEK (BIG)
Chadron—Sec. 14-33-48 W.

10- 3	A. E. Johnston	3.5	6-21	A. E. Johnston	3.4
1-17	do	7.1	7-24	do	1.6
2-27	do	6.6	8- 7	do	1.9
4-15	do	5.0	9-11	do	1.0
5-26	do	5.0	9-25	do	1.3

BORDEAUX CREEK (LITTLE)
Sec. 13-33-48 W.

11- 3	A. E. Johnston	5.5	6-21	A. E. Johnston	0.5
1-17	do	4.0	7-24	do	.1
2-27	do	5.0	8- 7	do	.2
4-15	do	5.5	9-11	do	.1
5-26	do	4.0	9-25	do	.0

BORDEAUX CREEK
Below Thomas Channel—Sec. 34-34-48 W.

11- 3	A. E. Johnston	9.6	7-24	A. E. Johnston	1.7
4-14	do	9.1	8- 7	do	6.1
5-25	do	7.9	9-11	do	.8
6-21	do	5.5	9-25	do	1.9

BOW CREEK
Wynot—Sec. 11-32-2 E.

3-11	A. E. Johnston	54.4	5- 1	A. E. Johnston	40.8
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BOW CREEK
Wynot—Sec. 11-31-2 E.

3-11	A. E. Johnston	25.2			
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BROWN CREEK
Arlington—Sec. 18-17-10 E.

3-12	A. E. Johnston	11.0	4-30	A. E. Johnston	2.4
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MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

BUFFALO CREEK
Elm Creek—Sec. 33-9-18 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 7	A. E. Johnston	154.4	6-26	A. E. Johnston	12.0
10-22	do	59.0	7- 6	do	17.0
11-13	do	19.7	7- 3	do	10.2
11-26	do	19.3	7-12	do	8.0
12-11	do	20.4	7-13	do	10.0
1- 5	do	8.5	7-15	do	9.0
2- 9	do	9.3	7-16	do	9.0
3-25	do	12.5	7-31	do	2.0
5-11	do	31.0	8- 3	do	1.0
6- 3	Johnston and Wyant	30.4	8-15	do	1.0
6- 8	A. E. Johnston	99.0	9-15	do	31.0
6-23	do	106.0	9-16	do	37.3

BUFFALO CREEK
Jenkins Ranch—Sec. 20-1-40 W.

10-16	C. E. Franklin	12.0	5-17	C. E. Franklin	11.5
11- 1	do	12.7	6- 6	do	16.1
11-15	do	11.0	6-27	do	11.1
12- 6	do	14.0	7-10	do	7.1
1-23	A. E. Johnston	14.2	7-30	do	4.0
3-18	C. E. Franklin	10.2	8-27	do	10.0
4-10	do	13.0	9-26	do	11.4
4-27	do	16.0			

BULL DRAIN
Maxwell—Sec. 19-13-28 W.

5-12	A. E. Johnston	4.6	7-14	A. E. Johnston	2.0
6- 4	do	1.5	7-17	do	1.9
6-24	do	2.0	7-31	do	2.2
7- 1	do	3.0	8-11	do	1.8
7- 7	do	2.2	9- 1	do	1.8

BURTON CREEK
Burton—Sec. 19-34-19 W.

3- 3	A. E. Johnston	9.0	4-20	A. E. Johnston	5.0
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CACHE CREEK
Ewing—Sec. 22-26-9 W.

12-18	A. E. Johnston	9.5	3- 4	A. E. Johnston	14.0
2- 2	do	16.4	4-22	do	15.4

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

CALAMUS RIVER
Taylor—Sec. 22-23-18 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 9	A. E. Johnston	226.0	5- 7	A. E. Johnston	231.0
11-15	do	261.0	8-17	L. F. Hanks	172.0
12-13	do	245.0	8-31	do	198.0
2- 5	do	263.0	9-12	do	183.0
3-21	do	240.0			

CALLOWAY SPRING
Grandrapids—Sec. 2-33-15 W.

4-21	A. E. Johnston	0.8
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CAMP CLARK SEEP
North Line—Sec. 9-20-51 W.

10- 6	A. E. Johnston	6.1	4- 8	A. W. Hall	2.0
10-24	do	3.4	5- 2	do	1.3
11- 4	do	5.0	5-15	do	.9
11-17	do	5.2	6- 8	do	.9
12- 4	do	5.7	6-16	do	3.0
1-12	do	2.6	7-16	do	2.0
2-17	do	2.4	8-24	A. E. Johnston	4.4
3-11	A. W. Hall	2.1	9-12	F. F. LeFever	5.0
3-24	do	1.3			

CEDAR BRANCH CREEK
Nevens—Sec. 17-14-35 W.

10- 3	A. E. Johnston	1.8	6-25	A. E. Johnston	2.0
10-27	do	2.5	7- 8	do	1.8
11- 8	do	2.1	7-18	do	2.7
12- 1	do	3.5	7-29	do	2.0
1- 8	do	2.0	8- 4	do	2.3
2-12	do	3.0	8-13	do	2.0
4- 1	do	3.0	8-18	do	1.3
5-14	do	1.7	9- 3	do	1.9
6- 2	do	2.8	9-18	do	2.3
6- 9	do	3.0			

CEDAR RIVER
Fullerton—Sec. 11-16-6 W.

11-18	A. E. Johnston	232.0	4-23	A. E. Johnston	208.0
12- 6	do	294.0	8-14	L. F. Hanks	122.0
2- 3	do	302.0	8-28	do	128.0
3- 5	do	301.0	9-14	do	112.0
3-19	do	296.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

CEDAR CREEK
Sec. 11-18-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 6	A. E. Johnston	12.0	6-24	A. E. Johnston	4.0
12- 3	do	18.0	7-10	do	6.2
1-10	do	19.0	7-20	do	4.1
2-14	do	16.1	8-10	do	9.2
4- 3	do	18.3	8-21	do	6.0
5-18	do	18.5	9- 6	do	20.5
5-30	do	4.5	9-19	F. F. LeFever	24.3
6-13	do	5.0	9-21	A. E. Johnston	22.4
6-22	A. W. Hall	13.1	9-29	do	30.2
6-22	J. V. Ruzicka	14.2			

CENTER CREEK
Franklin—Sec. 1-1-15 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-17	A. E. Johnston	3.1	5- 8	C. E. Franklin	3.0
11-25	do	4.0	5-29	do	4.6
1-27	do	1.9	6-28	do	.0
3-17	do	5.9	7-13	do	.8
4- 2	C. E. Franklin	5.0	9-16	do	.0
4-21	do	8.0	9-29	do	.3

CHADRON CREEK NO. 1
½ Mile Above City Reservoir—Sec. 19-32-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 3	A. E. Johnston	3.8	6-21	A. E. Johnston	3.1
1-17	do	5.0	7-24	do	2.3
2-26	do	5.0	8- 7	do	2.3
4-14	do	5.0	9-11	do	.9
5-25	do	4.3	9-26	do	1.3

CHADRON CREEK NO. 2
100 ft. Below City Reservoir—Sec. 18-32-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 3	A. E. Johnston	0.5	6-21	A. E. Johnston	0.0
1-17	do	.6	7-24	do	.0
2-26	do	1.5	8- 7	do	.1
4-14	do	.5	9-11	do	1.0
5-25	do	.0	9-26	do	.2

CHADRON CREEK NO. 3
Station 36 of Pipe Line—Sec. 12-32-49 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 3	A. E. Johnston	1.0	6-21	A. E. Johnston	0.0
1-17	do	.9	7-24	do	.0
2-26	do	2.2	8- 7	do	.0
4-14	do	.4	9-11	do	.0
5-25	do	.0	9-26	do	.0

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

CHADRON CREEK NO. 4
Chadron-Crawford Highway—Sec. 22-33-49 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 3	A. E. Johnston	1.0	6-20	A. E. Johnston	1.7
1-16	do	1.7	7-24	do	.0
2-26	do	6.2	9-11	do	.0
4-14	do	2.0	9-26	do	.0
5-25	do	2.0			

CLEAR CREEK

Sec. 5-15-41 W.

10-28	A. E. Johnston	9.7	6-26	A. E. Johnston	0.0
11- 7	do	13.1	7- 9	do	2.2
12- 2	do	10.3	7-19	do	2.0
1- 9	do	12.2	7-28	do	6.0
2-13	do	17.4	8- 5	do	.0
4- 2	do	15.6	8-12	do	.0
5-15	do	13.7	8-19	do	.0
6- 1	do	.0	9- 4	do	5.1
6-11	do	5.2	9-10	do	8.0
6-22	A. W. Hall	.0			

CLEAR CREEK

Litchfield—Sec. 26-14-16 W.

10- 8	A. E. Johnston	7.9	5- 9	A. E. Johnston	10.6
11-14	do	6.0	8-19	L. E. Hanks	.6
12-12	do	6.8	9- 2	Hanks and Follansbee	.3
2- 7	do	6.0	9-10	L. F. Hanks	.2
3-24	do	9.9			

CLEAR CREEK (UPPER)

Ashland—Sec. 35-13-9 E.

10-14	A. E. Johnston	5.3	4-29	A. E. Johnston	14.4
11-20	do	12.8	8-24	L. F. Hanks	4.0
1-29	do	16.2	9- 4	do	3.2
3-13	do	13.9			

CLEAR WATER CREEK

Clear Water—Sec. 6-25-7 W.

12-18	A. E. Johnston	54.5	3- 4	A. E. Johnston	57.5
2- 2	do	51.3	4-22	do	47.9

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

CLEVELAND DRAIN
Sec. 6-20-52 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 6	C. E. Franklin	6.3	5- 2	A. W. Hall	7.0
12- 4	A. E. Johnston	3.3	6-17	do	7.0
1-12	do	1.6	7- 8	do	4.0
2-17	do	1.5	8-12	Hall and LeFever	7.0
3-11	A. W. Hall	2.9	8-24	A. E. Johnston	4.0
3-25	do	1.1	9-11	F. F. LeFever	4.0
4- 8	do	2.9			

COLD WATER CREEK
Sec. 34-18-46 W.

10-29	A. E. Johnston	5.1	6-27	A. E. Johnston	0.0
11- 6	do	4.0	7-10	do	.1
12- 3	do	4.9	7-20	do	.1
1-10	do	2.0	8-10	do	.0
2-14	do	1.0	8-21	do	.0
4- 3	do	2.0	9- 6	do	.0
5-16	do	2.1	9-21	do	.1
5-30	do	.0	9-29	do	.0
6-12	do	1.2			

CONGO CREEK
Sec. 34-23-53 W.

2-20	A. E. Johnston	2.0			
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COTTONWOOD CREEK (LITTLE)
Below Bloomington Power House—Sec. 6-1-15 W.

10-17	A. E. Johnston	2.2	5-29	C. E. Franklin	1.4
11-25	do	5.2	6-28	do	.1
1-27	do	5.0	7-13	do	.3
3-17	do	5.5	8-10	do	.8
4- 2	C. E. Franklin	4.1	9-16	do	.2
4-21	do	2.0	9-29	do	.3
5- 8	do	1.7			

COTTONWOOD CREEK (BIG)
Dunlap—Sec. 27-29 -48 W.

11- 3	A. E. Johnston	0.6	6-21	A. E. Johnston	0.2
1-17	do	1.6	7-21	do	.0
2-25	do	2.3	7-24	do	.0
4- 8	do	2.4	8- 6	do	2.2
5-19	do	.9	9-13	do	.0
5-27	do	2.0	9-26	do	.3
6-15	do	.8			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

COTTONWOOD CREEK (BIG)
Riverton—Sec. 36-2-16 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
4-21	C. E. Franklin	5.0	7-13	C. E. Franklin	3.5
5- 8	do	3.6	8-10	do	2.4
5-29	do	2.2	9-16	do	1.2
6-28	do	1.3	9-29	do	1.1

COTTONWOOD CREEK (LITTLE)
South of Whitney Pipe Line Outlet—Sec. 8-32-51 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 1	A. E. Johnston	2.3	5-23	Johnston and Rasmussen	0.0
1-16	do	3.0	6-20	A. E. Johnston	2.5
2-26	do	9.8	7-22	do	.2
4-13	do	1.2	9-11	do	.8
5-22	Johnston and Rasmussen	.5	9-26	do	1.3

COTTONWOOD CREEK (LITTLE)
Sec. 8-32-52 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 1	A. E. Johnston	2.0	7-22	Johnston and Rasmussen	0.0
4-10	do	.2	9-12	A. E. Johnston	.0
6-19	do	.0			

COTTONWOOD CREEK
Calloway—Sec. 12-15-23 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 8	A. E. Johnston	1.8	2- 5	A. E. Johnston	2.0
11-14	do	1.5	3-23	do	1.9
12-12	do	1.8			

CROOKED CREEK
Burton—Sec. 19-34-19 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
3- 3	A. E. Johnston	1.2	4-20	A. E. Johnston	2.0

CROOKED CREEK
Red Cloud—Sec. 1-1-11 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
4- 2	C. E. Franklin	2.3	7-13	C. E. Franklin	0.5
4-21	do	1.0	8-10	do	3.3
5- 8	do	36.0	9-17	do	.0
5-30	do	.4	9-29	do	.0
6-29	do	.0			

DANE CREEK
Ord—Sec. 21-19-14 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
12-15	A. E. Johnston	0.7	3-20	A. E. Johnston	1.3
2- 4	do	.8			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

DAWSON COUNTY DRAIN
Strever Creek—Sec. 14-9-21 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
1- 5	A. E. Johnston	21.1	7-12	do	7.4
1- 5	do	13.5	7-13	do	10.7
5-11	do	27.3	7-15	do	13.0
6-23	do	17.3	7-16	do	9.4
7- 3	do	9.0	8-15	do	4.2
7- 6	do	10.1			

DAWSON COUNTY DRAIN NO. 2
South of Darr

7-13	A. E. Johnston	5.7	8- 3	A. E. Johnston	1.5
7-15	do	6.0	8-15	do	2.0
7-16	do	6.3	9- 2	do	3.0
7-31	do	2.3			

DEAD HORSE CREEK
Sec. 32-33-49 W.

11- 1	A. E. Johnston	3.9	5-25	A. E. Johnston	2.4
2-26	do	6.0	6-20	do	1.0
4-13	do	.7	9-11	do	.1

DeGRAW DRAIN
Sec. 24-20-51 W.

3-10	A. W. Hall	8.7	6- 8	A. W. Hall	2.2
3-25	do	5.6	7- 8	do	2.3
4- 8	do	4.8	8-24	A. E. Johnston	5.0
5- 2	do	12.0	9-12	F. F. LeFever	3.0

DEER CREEK
Holbrook—Sec. 21-4-24 W.

1-26 A. E. Johnston

0.5

DISMAL RIVER
Dunning—Sec. 4-21-24 W.

10- 9	A. E. Johnston	345.0	2- 6	A. E. Johnston	476.0
11-15	do	372.0	3-23	do	444.0
12-13	do	433.0	5- 8	do	603.0

DRIFTWOOD CREEK
McCook—Sec. 1-2-30 W.

1-24 A. E. Johnston 3.0

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

DRY CREEK
Merriman—Sec. 20-34-37 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
2-27	A. E. Johnston	13.0	9- 8	A. E. Johnston	0.0
4-16	do	9.4	9-23	do	1.2

DUGOUT CREEK (LOWER)
Below Cooper Canal—Sec. 4-19-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 6	A. E. Johnston	3.4	5-18	A. E. Johnston	1.6
12- 3	do	4.0	5-30	do	.8
1-10	do	4.3	6-13	do	.7
2-14	do	2.2	8-10	do	.7
4- 3	do	2.6			

DUGOUT CREEK (UPPER)
Sec. 21-20-50 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 6	C. E. Franklin	15.9	4- 7	A. W. Hall	1.9
11- 4	do	9.7	5- 2	do	1.8
11-17	do	4.7	5-11	do	.5
1-19	A. E. Johnston	4.3	5-27	A. E. Johnston	1.1
2-16	do	3.7	6-12	A. W. Hall	16.5
3-10	A. W. Hall	2.5	8-12	Hall and LeFever	7.0
3-24	do	2.2	9-12	F. F. LeFever	10.0
4- 6	A. E. Johnston	2.8			

EAGLE CREEK
Sec. 24-32-12 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
3- 4	A. E. Johnston	50.1	7-22	A. E. Johnston	39.0

ELKHORN RIVER
Neligh—Sec. 20-25-6 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
12-19	A. E. Johnston	247.0	4-22	A. E. Johnston	283.0
1-31	do	180.0	8-15	L. F. Hanks	51.1
2- 3	do	290.0	8-29	do	51.0
3- 5	do	267.0	9-11	do	33.0

ELKHORN RIVER
O'Neill—Sec. 31-29-11 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
3- 4	A. E. Johnston	90.0	8-29	L. F. Hanks	14.0
4-22	do	67.0	9-11	do	12.0
8-17	L. F. Hanks	16.0			

ELKHORN RIVER
Ewing—Sec. 34-27-9 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
12-18	A. E. Johnston	134.0	3- 4	A. E. Johnston	95.0
2- 2	do	119.0	4-22	do	95.0

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

ELKHORN RIVER (SOUTH BRANCH)

Ewing—Sec. 3-26-9 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
12-18	A. E. Johnston	84.0	3- 4	A. E. Johnston	55.0
2- 2	do	50.0	4-22	do	49.0

ELKHORN RIVER

Norfolk—Sec. 33 and 34-24-1 W.

Date	Hydrographer	Discharge	Date	Hydrographer	Discharge
12-17	A. E. Johnston	451.0	3- 9	A. E. Johnston	456.0
1-31	do	480.0	5- 4	do	314.0

ELKHORN RIVER (NORTH BRANCH)

Norfolk—Sec. 22-24-1 W.

Date	Hydrographer	Discharge	Date	Hydrographer	Discharge
12-17	A. E. Johnston	118.0	3- 9	A. E. Johnston	98.3
1-31	do	114.0	5- 4	do	145.0

ELKHORN RIVER

Waterloo—Sec. 3-15-10 E.

Date	Hydrographer	Discharge	Date	Hydrographer	Discharge
10-13	A. E. Johnston	529.0	1-30	A. E. Johnston	642.0
11-19	do	811.0	3-12	do	705.0
12-20	do	706.0	4-30	do	691.3

ELM CREEK

Elm Creek—Sec. 33-9-13 W.

Date	Hydrographer	Discharge	Date	Hydrographer	Discharge
10- 7	A. E. Johnston	0.0	6-29	C. E. Franklin	1.0
11-13	do	.0	7- 6	A. E. Johnston	2.0
11-26	do	.0	7-12	do	.1
12-11	do	.0	7-13	do	.0
2- 9	do	.0	7-15	do	.0
3-25	do	.0	7-16	do	.0
5-11	do	.9	7-31	do	.0
6- 3	Johnston and Wyant	.0	8-15	do	.2
6- 8	A. E. Johnston	12.0	9-15	do	10.3
6-23	do	18.0	9-16	do	19.1

ELM CREEK

Sec. 34-2-10 W.

Date	Hydrographer	Discharge	Date	Hydrographer	Discharge
10-16	A. E. Johnston	11.8	5-30	C. E. Franklin	0.0
11-24	do	21.0	7-13	do	0
1-27	do	19.7	8-10	do	1.0
4- 2	do	22.0	9-17	do	.0
4-21	do	.6	9-29	do	2.0
5- 8	do	136.0			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

FAIRFIELD SEEP
Sec. 18-21-53 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 4	C. E. Franklin	8.7	4- 8	A. W. Hall	1.3
10-18	do	2.9	5- 1	do	3.1
11- 5	do	3.1	5-12	do	2.0
11-18	do	2.3	6- 6	do	7.4
12- 4	A. E. Johnston	3.6	6-17	do	5.0
1-13	do	6.3	7-24	do	5.0
2-17	do	3.0	8-11	do	7.0
3-11	A. W. Hall	3.1	8-28	A. E. Johnston	5.3
3-21	C. E. Franklin	1.4			

FANNING SEEP

 $\frac{1}{2}$ Mile North Mitchell Bridge—Sec. 28 and 27-23-56 W.

10- 2	C. E. Franklin	7.2	5-12	A. W. Hall	3.0
10-22	do	13.9	5-27	do	2.9
11- 6	do	8.3	6-26	do	6.0
11-23	do	8.0	7- 9	do	4.7
12- 5	A. E. Johnston	9.6	8- 7	Hall and LeFever	7.6
2-18	do	5.0	8-25	F. F. LeFever	6.1
3-12	A. W. Hall	4.6	8-27	A. W. Johnston	4.8
3-25	do	4.4	9-10	A. W. Hall	8.9
5- 1	do	5.4			

FARMERS CREEK

Riverton—Sec. 5-1-12 W.

10-16	A. E. Johnston	0.8	5-30	C. E. Franklin	0.7
10-23	do	5.6	6-29	do	.0
1-27	do	2.0	7-13	do	.1
3-17	do	3.9	8-10	do	19.0
4-21	C. E. Franklin	2.1	9-29	do	.0
5- 8	do	7.2			

FLAG CREEK

Orleans—Sec. 19-2-19 W.

4-21	C. E. Franklin	1.5	6-28	C. E. Franklin	0.9
5- 8	do	1.8	8-10	do	.8
5-29	do	7.5	9-16	do	.4
7-13	do	1.1	9-29	do	1.2

FREMONT SLOUGH

North Platte—Sec. 16-13-30 W.

11-10	A. E. Johnston	5.8	6-24	A. E. Johnston	2.0
11-29	do	9.3	7- 1	do	.4
12-10	do	22.8	7- 7	do	1.0
1- 6	do	7.5	7-17	do	.4
2-11	do	12.0	8- 4	do	.4
3-30	do	16.9	8-14	do	.4
5-13	do	6.5	8-17	do	.5
6- 4	do	1.6	9-17	do	.3

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

FRENCHMAN RIVER

Above Maranville Reservoir—Sec. 10-6-41 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-13	C. E. Franklin	7.0	5- 6	C. E. Franklin	3.6
10-29	do	4.0	5-26	do	4.8
11-12	do	4.8	6-19	do	2.0
12- 2	do	4.5	7- 9	do	2.4
1-22	A. E. Johnston	4.0	7-27	do	2.1
3- 7	C. E. Franklin	6.7	7-31	do	3.5
4-11	do	3.2	8-23	do	4.6
4-17	do	3.3	9-10	do	2.3

FRENCHMAN RIVER

Below Maranville Reservoir—Sec. 10-6-41 W.

10-13	C. E. Franklin	7.1	5-26	C. E. Franklin	0.9
10-29	do	6.4	6-19	do	.2
11-12	do	5.4	7- 9	do	3.4
12- 2	do	4.8	7-27	do	.2
1-22	A. E. Johnston	6.1	7-28	do	3.1
3- 7	C. E. Franklin	4.8	7-29	do	3.3
4-11	do	1.7	7-31	do	8.3
4-17	do	4.8	8-23	do	1.5
5- 6	do	4.2	9-10	do	.9

FRENCHMAN RIVER

Above Inman Canal—Sec. 17-6-40 W.

1-22	A. E. Johnston	13.0
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FRENCHMAN RIVER

Below Inman Canal—Sec. 17-6-40 W.

10-29	C. E. Franklin	24.0	5-26	C. E. Franklin	15.7
11-12	do	18.0	6-19	do	13.9
12- 2	do	26.0	7- 9	do	9.8
1-22	A. E. Johnston	31.0	7-27	do	12.9
3- 7	C. E. Franklin	24.7	7-29	do	11.4
4-11	do	19.1	8-23	do	3.7
4-17	do	12.0	9-10	do	3.6
5- 6	do	18.8			

FRENCHMAN RIVER

Above Champion Lake

3- 7	C. E. Franklin	31.8	6-19	C. E. Franklin	20.0
4-11	do	29.0	7- 9	do	14.8
4-17	do	27.5	7-27	do	18.4
5- 6	do	26.1	8-23	do	7.8
5-26	do	64.2	9-10	do	8.5

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

FRENCHMAN RIVER
Below Champion Lake Dam—Sec. 23-6-40 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-13	C. E. Franklin	24.0	5-6	C. E. Franklin	13.4
10-29	do	35.0	5-26	do	70.7
11-12	do	18.0	6-19	do	20.5
1-22	A. E. Johnston	35.0	7-9	do	4.7
3-7	C. E. Franklin	38.6	7-27	do	21.0
4-11	do	10.0	8-23	do	2.5
4-17	do	6.9	9-10	do	2.6

FRENCHMAN RIVER
Above Champion Mill Dam—Sec. 20-6-39 W.

8-25	C. E. Franklin	27.5	9-10	C. E. Franklin	22.0
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FRENCHMAN RIVER
Champion—Sec. 21-6-39 W.

10-13	C. E. Franklin	83.0	5-6	C. E. Franklin	47.9
10-29	do	43.1	5-26	do	221.0
11-12	do	51.4	6-19	do	59.0
12-3	do	49.0	7-9	do	21.0
1-22	A. E. Johnston	62.0	7-27	do	49.0
3-7	C. E. Franklin	38.7	8-23	do	7.3
4-11	do	6.1	9-10	do	50.7
4-17	do	46.8			

FRENCHMAN RIVER
South of Imperial—Sec. 30-6-38 W.

10-29	C. E. Franklin	59.0	5-6	C. E. Franklin	49.0
11-12	do	55.0	5-26	do	229.0
1-22	A. E. Johnston	115.0	6-19	do	69.3
3-8	C. E. Franklin	89.8	7-27	do	8.7
4-11	do	55.7	8-23	do	62.2
4-17	do	16.4	9-10	do	41.4

FRENCHMAN RIVER
Wauneta—Sec. 11-5-36 W.

10-14	C. E. Franklin	130.0	12-3	C. E. Franklin	159.0
10-29	do	89.0	1-22	A. E. Johnston	106.0
11-12	do	101.0	3-8	C. E. Franklin	148.0

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

FRENCHMAN RIVER
Palisade—Sec. 32-5-33 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-14	C. E. Franklin	159.0	4-17	C. E. Franklin	131.0
10-29	do	133.0	5- 6	do	106.0
11-12	do	159.0	6-19	do	70.0
12- 3	do	195.0	7-27	do	3.8
1-22	A. E. Johnston	198.0	8-23	do	13.2
3- 8	C. E. Franklin	210.0	9-10	do	3.8
4- 9	do	260.0	9-27	do	26.0

FRENCHMAN RIVER
Culbertson—Sec. 16-3-31 W.

10-14	C. E. Franklin	168.0	5-28	C. E. Franklin	41.0
10-30	do	130.0	6-28	do	27.7
11-13	do	184.0	7-10	do	56.1
12- 3	do	172.0	7-27	do	.0
1-23	A. E. Johnston	229.0	8- 7	do	137.0
3- 8	C. E. Franklin	160.3	8-26	do	52.5
4- 8	do	188.7	9-11	do	22.1
4-18	do	88.5	9-27	do	52.6
5- 7	do	125.0			

GEBAUER DRAIN
Sec. 28-20-50 W.

11- 6	A. E. Johnston	0.4	4- 6	A. E. Johnston	0.0
12- 3	do	.1	5- 2	A. W. Hall	.3
1-10	do	.1	5-30	A. E. Johnston	.5
2-14	do	.4	6-13	do	.1
3-10	A. W. Hall	.0	8-10	do	.1
3-24	do	.3	9-22	do	.3

GERING DRAIN
Sec. 6-21-54 W.

10- 3	C. E. Franklin	41.0	5- 1	A. W. Hall	20.7
10-18	do	57.1	5-14	do	64.2
11- 6	do	34.6	6- 5	do	77.4
11-22	do	44.0	6-17	do	73.0
12- 5	A. E. Johnston	42.3	7-23	do	42.0
1-15	do	36.0	8- 8	Hall and LeFever	54.1
2-17	do	44.3	9- 2	F. F. LeFever	33.0
3-11	A. W. Hall	21.5	9- 8	A. W. Hall	31.0
3-21	C. E. Franklin	31.2	9-22	F. F. LeFever	30.1
4- 8	A. W. Hall	23.3	9-28	A. W. Hall	36.2

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

GERING WASTE
Henry—Sec. 3-23-58 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
5-13	A. W. Hall	132.0	7- 1	A. W. Hall	103.4
5-23	do	157.0	7- 9	do	98.1
5-26	do	96.8	7-10	do	55.2
6-18	do	67.1	8-21	do	15.8

GORDON CREEK
Valentine—Sec. 30-33-28 W.

2-28	A. E. Johnston	55.9	9- 9	A. E. Johnston	10.0
4-17	do	30.8	9-24	do	10.3

GOTHENBURG POWER WASTE
Gothenburg—West 16th St.

10- 7	A. E. Johnston	170.0	7- 3	A. E. Johnston	139.2
10-21	do	190.4	7- 7	do	170.1
10-24	do	190.0	7-14	do	193.0
11-12	do	192.0	7-15	do	194.0
11-28	do	81.0	7-16	do	125.0
12-11	do	90.5	7-17	do	95.1
1- 6	do	49.4	7-31	do	34.1
2-10	do	194.1	8- 3	do	27.3
3-26	do	197.2	8-14	do	169.0
5-12	do	187.0	8-15	do	178.1
6- 8	do	178.0	8-17	do	193.0
6-24	do	181.0	9- 1	do	86.1
7- 1	do	48.2	9-16	do	210.7

GOVERNMENT SPRING
Below Ft. Robinson Pumping Plant

10-31	A. E. Johnston	0.4	5-25	A. E. Johnston	0.1
1-16	do	.4	6-19	do	.1
2-26	do	.7	7-22	do	1.2
4-10	do	.4	9-13	do	.4

GRACIE CREEK
Sec. 31-23-17 W.

10- 9	A. E. Johnston	14.6	2- 5	A. E. Johnston	9.0
11-15	do	14.6	3-21	do	13.3
12-13	do	12.1			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

GRAVEL CREEK

Sec. 9-14-36 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 3	A. E. Johnston	0.2	6- 1	A. E. Johnston	2.5
10-27	do	2.5	7-18	do	2.1
11- 8	do	1.7	8-12	do	2.1
1- 8	do	2.5	8-19	do	1.3
2-12	do	1.6	9- 4	do	2.0
5-15	do	1.6			

GREENWOOD CREEK

Mouth—Sec. 20-19-50 W.

10- 7	C. E. Franklin	0.4	6- 1	A. W. Hall	0.0
11- 8	do	1.5	6-11	do	.0
3-10	A. W. Hall	.0	6-16	do	.0
4- 7	do	.0	7- 3	do	.0
4-28	do	.0	8-25	A. E. Johnston	.0
5-11	do	.0			

HAINES BRANCH

Sec. 3-9-6 E.

10-15	A. E. Johnston	1.3	1-29	A. E. Johnston	4.4
11-21	do	18.2	3-14	do	3.1
1- 3	do	.9	4-28	do	3.5

HAT CREEK

Montrose—Sec. 18-34-51 W.

4- 9	A. E. Johnston	14.0	6-16	Johnston and Rasmussen	2.5
5-21	Johnston and Rasmussen	3.0	7-22	do	.0

HAT CREEK

Above Coffee Canal—Sec. 35-33-56 W.

11- 1	A. E. Johnston	3.4	6-16	A. E. Johnston	2.5
4- 9	do	5.0	7-22	Johnston and Rasmussen	.5
5-21	Johnston and Rasmussen	6.0			

HAT CREEK

Ardmore, South Dakota—Sec. 32-11S-54 W.

4- 9	A. E. Johnston	20.7	7-22	Johnston and Rasmussen	0.0
5-21	Johnston and Rasmussen	.6			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

HORSE CREEK
Morrill—Sec. 25-23-58 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 2	C. E. Franklin	307.0	5-13	A. W. Hall	88.0
10-21	do	143.0	5-26	do	88.0
11- 7	do	100.0	6-18	do	115.0
11-23	do	90.0	7-10	do	90.0
12- 5	do	130.0	8- 6	do	90.0
1-13	A. E. Johnston	78.0	8-24	F. F. LeFever	78.0
2-18	do	49.0	8-27	A. E. Johnston	83.0
3-12	A. W. Hall	81.0	9-10	A. W. Hall	75.0
4- 2	do	194.0	9-24	F. F. LeFever	56.0
4-10	do	65.0			

HORSE CREEK
Pringle's Ranch—Sec. 23-1-39 W.

10-16	C. E. Franklin	1.9	6- 6	C. E. Franklin	1.5
11- 1	do	1.6	6-27	do	.0
11-15	do	1.0	7-10	do	1.7
1-23	A. E. Johnston	2.0	7-30	do	.0
3-17	C. E. Franklin	1.5	8-23	do	.0
4-10	do	1.4	9-12	do	.0
4-27	do	1.4	9-26	do	1.0
5-17	do	.7			

INDIAN CREEK
Max—Sec. 23-2-36 W.

10-16	C. E. Franklin	5.8	5-16	C. E. Franklin	4.2
11- 1	do	4.7	6-3	do	1.9
11-15	do	4.1	7-10	do	2.0
12- 6	do	5.5	7-30	do	1.7
3-17	do	4.3	8-29	do	1.3
4- 9	do	7.6	9-12	do	.7
4-26	do	8.0	9-26	do	.0

INDIAN CREEK
Northport Wye—Sec. 19-20-50 W.

10- 6	C. E. Franklin	17.6	5- 2	A. W. Hall	6.5
11- 4	do	15.0	5-15	do	3.7
11-17	do	11.9	5-27	A. E. Johnston	2.8
12- 4	A. E. Johnston	11.0	6- 8	A. W. Hall	4.8
1-19	do	8.5	6-16	do	11.0
2-16	do	6.1	7- 8	do	10.0
3-10	A. W. Hall	4.0	7-16	do	11.3
3-24	do	8.7	8-12	Hall and LeFever	16.0
4- 6	A. E. Johnston	11.1	8-24	A. E. Johnston	24.4
4- 7	A. W. Hall	4.0	9-12	F. F. LeFever	14.1

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

INDIAN CREEK
Sec. 33-2-11 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
4-21	C. E. Franklin	0.7	7-13	C. E. Franklin	0.2
5- 8	do	7.5	8-10	do	5.5
5-30	do	.2	9-17	do	.0
6-29	do	.0	9-29	do	.0

INDIAN CREEK
Sec. 28-4-6 E.

3- 5	A. E. Johnston	0.4	9-15	A. E. Johnston	14.0
4-28	do	.5			

INDIAN CREEK
Sec. 4-32-50 W.

5-22	Johnston and Rasmussen	0.1			
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IOWA CREEK
Ponca—Sec. 22-30-6 E.

5- 1	A. E. Johnston	27.2			
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JIM CREEK
Sec. 18-33-57 W.

4-11	Johnston and Rasmussen	0.7	5-21	Johnston and Rasmussen	0.2
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JIM CREEK
Sec. 18-33-58 W.

6-10	C. E. Franklin	0.1	6-17	Johnston and Rasmussen	0.5
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JIM CREEK
Above Dout Reservoir No. 1

6-16	Johnston and Rasmussen		6-18	Johnston and Rasmussen	0.4
	Est.	0.01	6-20	do	1.0

JIM CREEK
Below Caladonia Dam

6-16	Johnston and Rasmussen				
	Est.	0.1			

JIM CREEK
Below Dout Reservoir No. 2

6-18	Johnston and Rasmussen	1.0			
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REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

JIM CREEK

Below Outlet Reservoir No. 1

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
6-18	Johnston and Rasmussen	0.4			

JIM CREEK

Headgate High Line Canal

6-16	Johnston and Rasmussen	0.4	6-20	Johnston and Rasmussen	1.0
6-18	do	1.0			

KEITH-LINCOLN COUNTY DRAIN

Sarben—Sec. 23-14-35 W.

10- 3	A. E. Johnston	4.8	6- 3	A. E. Johnston	3.0
10-27	do	3.8	6- 9	do	4.2
11- 8	do	2.8	6-25	do	3.1
12- 1	do	9.4	7- 8	do	3.0
1- 8	do	3.1	7-18	do	2.5
2-12	do	2.5	7-20	do	2.5
4- 1	do	10.0	9-18	do	2.3
5-14	do	35			

KEYA PAHA RIVER

Brockburg—Sec. 9-31-17 W.

3- 3	A. E. Johnston	113.0	4-20	A. E. Johnston	169.0
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LANE DRAIN

Sec. 30-23-57 W.

10- 2	C. E. Franklin	5.0	4-10	A. W. Hall	0.7
10-21	do	4.9	5-13	do	.5
11- 7	do	2.6	5-26	do	1.6
11-23	do	2.2	8- 6	Hall and LeFever	8.0
12- 5	A. E. Johnston	8.1	8-24	F. F. LeFever	4.4
1-13	do	3.0	8-27	A. E. Johnston	6.0
2-18	do	1.4	9-10	A. W. Hall	5.0
3-12	A. W. Hall	2.4	9-24	F. F. LeFever	6.0

LARABEE CREEK

Sec. 6-34-44 W.

4-15	A. E. Johnston	6.0	9-10	A. E. Johnston	1.1
5-26	do	5.0			

LEANDER CREEK

Merriman—Sec. 33-34-37 W.

9- 6	A. E. Johnston	1.1	9- 8	A. E. Johnston	0.0
2-27	do	13.5	9-23	do	.0
4-16	do	5.8			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

LEWELLEN DRAIN
Lewellen—Sec. 28-16-42 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 7	A. E. Johnston	2.8	6-26	A. E. Johnston	1.2
12- 2	do	2.9	7- 9	do	1.2
1- 9	do	3.0	7-19	do	1.1
2-13	do	2.4	7-27	do	1.0
4- 2	do	6.1	8-11	do	1.4
5-15	do	1.8	8-19	do	1.0
6- 1	do	1.5	9- 4	do	1.1
6-12	do	2.1	9-19	do	3.2
6-23	A. W. Hall	1.0	9-30	do	2.0

LINCOLN COUNTY DRAIN NO. 1
North Platte—Sec. 30-14-30 W.

10- 6	A. E. Johnston	110.2	6-25	A. E. Johnston	104.0
10-27	do	96.9	7- 1	do	96.2
11-12	do	84.0	7- 8	do	105.3
12- 1	do	69.1	7-11	do	115.1
12-10	do	79.8	7-17	do	105.0
1- 8	do	71.0	7-18	do	110.0
2-12	do	66.3	7-29	do	86.1
3-30	do	69.9	8- 4	do	105.5
4- 1	do	67.3	8-13	do	109.8
5-14	do	59.1	8-18	do	104.4
6- 6	do	115.4	9- 3	do	87.7
6- 9	do	119.0	9-17	do	99.2
6-10	do	137.0			

LINCOLN COUNTY DRAIN NO. 2
Sec. 12-14-33 W.

10-27	A. E. Johnston	10.5	6-25	A. E. Johnston	7.6
11- 8	do	9.2	7- 8	do	7.2
12- 1	do	5.2	7-18	do	6.0
1- 8	do	6.0	7-29	do	5.5
2-12	do	5.9	8-13	do	5.8
5-14	do	7.2	9- 3	do	8.0
6- 2	do	7.0	9-18	do	5.5
6- 9	do	5.9			

LODGEPOLE CREEK
Wyoming-Nebraska Line—Sec. 11-14-59 W.

10- 9	C. E. Franklin	12.0	5- 1	C. E. Franklin	14.6
10-26	do	10.5	5-20	do	12.6
11-10	do	16.0	6-13	do	10.4
11-28	do	14.4	7-23	do	3.1
1-20	A. E. Johnston	12.5	8-16	do	3.6
3- 3	C. E. Franklin	13.0	9- 1	do	3.6
3-24	do	12.3	9-24	do	4.8
4-15	do	10.4			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

LODGEPOLE CREEK
Bushnell—Sec. 31-15-57 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
3- 3	C. E. Franklin	21.0	6-13	C. E. Franklin	12.5
3-24	do	17.5	7-23	do	5.6
4-15	do	13.9	8-16	do	9.2
5- 1	do	20.0	9- 1	do	8.8
5-20	do	16.0	9-24	do	9.5

LODGEPOLE CREEK
Above Kimball Reservoir—Sec. 33-15-57 W.

10- 8	C. E. Franklin	32.0	5- 1	C. E. Franklin	24.8
10-26	do	25.0	5-20	do	21.0
11-10	do	24.7	6-13	do	13.6
11-28	do	23.5	7-21	do	5.1
1-20	A. E. Johnston	17.0	7-23	do	7.6
3- 3	C. E. Franklin	24.6	8-16	do	10.2
3-24	do	23.4	9- 1	do	10.4
4-15	do	20.3	9-24	do	14.0

LODGEPOLE CREEK
Below Kimball Reservoir—Sec. 36-15-57 W.

10- 9	C. E. Franklin	3.4	4-14	C. E. Franklin	13.4
10-26	do	3.4	5- 1	do	19.2
11-10	do	4.0	5-20	do	7.6

LODGEPOLE CREEK
Kimball—Sec. 29-15-55 W.

10- 8	C. E. Franklin	13.5	5- 1	C. E. Franklin	24.6
10-26	do	10.8	5-20	do	20.3
11-10	do	10.0	6-13	do	7.5
11-28	do	20.0	7-21	do	5.3
1-19	A. E. Johnston	20.0	8-16	do	5.3
3- 2	C. E. Franklin	20.0	9- 1	do	4.3
3-23	do	27.0	9- 2	do	5.8
4-14	do	21.8	9-23	do	6.0

LODGEPOLE CREEK
Below Kimball Reservoir—Sec. 36-15-57 W.

11-28	C. E. Franklin	5.3	7-23	C. E. Franklin	4.7
1-20	A. E. Johnston	3.5	8-16	do	2.6
3- 2	C. E. Franklin	10.4	9- 1	do	1.7
3-24	do	9.8	9-23	do	.7
6-13	do	5.5			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

LOGEPOLE CREEK
Dix—Sec. 26-15-51 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 9	C. E. Franklin	0.0	5- 2	C. E. Franklin	20.5
11-10	do	.0	5-21	do	7.0
11-28	do	5.4	6-15	do	.0
1-20	A. E. Johnston	.0	7-23	do	.0
3- 3	C. E. Franklin	10.2	9- 3	do	.0
3-24	do	13.6	9-24	do	.0
4-15	do	16.2			

LOGEPOLE CREEK
Sidney—Sec. 31-14-49 W.

10- 9	C. E. Franklin	3.2	4-14	C. E. Franklin	4.1
10-27	do	3.5	5- 4	do	3.4
11-10	do	3.4	5-22	do	2.3
11-29	do	4.4	6-16	do	.6
1-20	A. E. Johnston	1.6	8-20	do	.5
3- 4	C. E. Franklin	4.7	9-25	do	1.0
3-24	do	4.0			

LOGEPOLE CREEK
West of Lodgepole—Sec. 30-14-46 W.

10-12	C. E. Franklin	7.6	5- 5	C. E. Franklin	3.6
10-27	do	18.1	5-23	do	.2
11-10	do	17.5	6-17	do	2.9
11-29	do	12.0	7-25	do	.3
1-21	A. E. Johnston	6.1	8-21	do	.0
3- 4	C. E. Franklin	19.0	9- 8	do	.6
3-24	do	10.6	9-25	do	.2
4-15	do	15.5			

LOGEPOLE CREEK
Below Krueger's Lake

6-17	C. E. Franklin	0.3	8-20	C. E. Franklin	0.3
7-25	do	.1	9- 8	do	.0
8-16	do	2.6	9-25	do	2.5

LOGEPOLE CREEK
Chappell—Sec. 21-13-45 W.

10-12	C. E. Franklin	7.1	5- 5	C. E. Franklin	17.2
10-27	do	7.6	5-23	do	2.0
11-10	do	14.0	6-17	do	1.7
11-29	do	12.0	7-18	do	.3
1-21	A. E. Johnston	21.6	8-21	do	.5
3- 4	C. E. Franklin	17.1	9- 8	do	.3
3-24	do	17.7	9-25	do	.2
4-15	do	22.9			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

LODGEPOLE CREEK

Below McLaughlin Canal—Sec. 25-14-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
5- 22	C. E. Franklin	0.0	8-20	C. E. Franklin	0.0

LODGEPOLE CREEK

Ralton—Sec. 12-12-45 W.

10-12	C. E. Franklin	13.0	5- 5	C. E. Franklin	23.0
10-27	do	15.6	5-24	do	.3
11-10	do	16.2	6-18	do	.2
11-29	do	18.0	7-17	do	.1
1-21	A. E. Johnston	15.0	8-21	do	.2
3- 4	C. E. Franklin	17.7	9- 8	do	2.0
3-24	do	29.0	9-25	do	.2
4-15	do	28.7			

LOGAN CREEK

Sec. 35-22-8 E.

3-12	A. E. Johnston	92.3	4-30	A. E. Johnston	55.5
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LONERGAN CREEK

Sec. 19-15-39 W.

10-28	A. E. Johnston	8.2	6-26	A. E. Johnston	1.0
11- 7	do	5.5	7- 9	do	1.0
12- 2	do	10.8	7-19	do	2.4
1- 9	do	9.0	7-28	do	2.0
2-13	do	8.7	8-12	do	6.1
4- 2	do	15.9	8-19	do	3.2
5-15	do	.0	9- 4	do	4.5
6- 1	do	1.0	9-19	do	5.1
6-11	do	5.0			

LOST CREEK

Sec. 1-16-44 W.

10-28	A. E. Johnston	3.6	6-27	A. E. Johnston	6.3
11- 7	do	3.1	7- 9	do	2.2
12- 2	do	2.6	7-20	do	1.3
1- 9	do	2.0	7-27	do	1.5
2-13	do	5.8	8-11	do	4.0
4- 2	do	13.4	8-20	do	20.3
5-16	do	3.9	9- 5	do	1.0
5-31	do	3.6	9-21	do	6.3
6-12	do	9.1	9-28	do	15.3
6-22	A. W. Hall	2.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

LOUP RIVER (MIDDLE)
Dunning

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 9	A. E. Johnston	500.0	5-18	A. E. Johnston	619.0
11-15	do	518.0	8-18	L. F. Hanks	327.0
12-13	do	504.0	9- 1	do	375.0
2- 5	do	527.0	9-12	do	328.0
3-23	do	602.0			

LOUP RIVER (MIDDLE)
Sargent—Sec. 11-19-18 W.

10- 9	A. E. Johnston	1021.0	3-23	A. E. Johnston	1316.0
11-15	do	1119.0	5- 8	do	1160.0
12-13	do	1221.0	8-18	L. F. Hanks	708.0
2- 5	do	1099.0	9- 1	do	772.0
			9-12	do	654.0

LOUP RIVER (MIDDLE)
South of St. Paul—Sec. 10-14-10 W.

2- 4	A. E. Johnston	1577.0	3-20	A. E. Johnston	1308.0
3- 6	do	1083.0	4-24	do	1622.0

LOUP RIVER (NORTH)
Taylor—Sec. 22-21-18 W.

10- 9	A. E. Johnston	697.0	5- 7	A. E. Johnston	561.0
11-15	do	596.0	8-17	L. F. Hanks	363.0
12-13	do	710.0	8-31	do	410.0
2- 5	do	745.0	9-12	do	366.0
3-21	do	891.0			

LOUP RIVER (NORTH)
Burwell—Sec. 15-21-16 W.

10-10	A. E. Johnston	901.0	2- 4	A. E. Johnston	1252.0
11-17	do	1003.0	3-20	do	1097.0
12-15	do	1109.0			

LOUP RIVER (NORTH)
North of St. Paul—Sec. 14-15-10 W.

10-10	A. E. Johnston	1095.0	3- 5	A. E. Johnston	1240.0
11-17	do	1151.0	3-20	do	1204.0
12-15	do	1375.0	4-24	do	1176.0
2- 3	do	1438.0			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

LOUP RIVER (SOUTH)
Calloway

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 8	A. E. Johnston	76.0	2- 6	A. E. Johnston	130.0
11-14	do	83.0	3-23	do	128.0
12-12	do	122.0			

LOUP RIVER (SOUTH)
Pleasanton--Sec. 36-12-15 W.

10- 8	A. E. Johnston	218.0	2- 7	A. E. Johnston	245.0
11-14	do	201.0	3-24	do	273.0
12-12	do	245.0	5- 9	do	289.0

LOUP RIVER
Columbus

10-13	A. E. Johnston	15759.0	3-19	A. E. Johnston	2769.0
11-18	do	3133.0	5- 4	do	2884.0
12-17	do	3371.0	6- 7	do	3165.0
1-30	do	8072.0	8- 1	do	1439.0
3- 7	do	2329.0	9-10	do	1490.0

LOUSE CREEK
Sec. 12-32-10 W.

12-18	A. E. Johnston	12.2	3- 4	A. E. Johnston	9.6
2- 2	do	11.0	1-21	do	8.3

LOVELY CREEK
East of Franklin--Sec. 35-2-14 W.

10-16	A. E. Johnston	1.7	5-30	C. E. Franklin	.2
11-24	do	1.2	6-29	do	.2
1-27	do	2.0	7-13	do	.1
3-17	do	.7	8-10	do	.1
4- 2	C. E. Franklin	2.9	9-17	do	.0
4-21	do	1.0	9-29	do	.0
5- 8	do	.4			

McCOY DRAIN
Sec. 37-16-42 W.

6-22	A. W. Hall	2.0			
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MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

McGUIRES SLOUGH

Sec. 21-6-40 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-13	C. E. Franklin	3.1	5- 6	C. E. Franklin	3.0
10-29	do	2.9	5-25	do	14.4
11-12	do	3.0	6-19	do	3.2
12- 2	do	3.0	7- 9	do	2.4
1-22	A. E. Johnston	3.2	7-27	do	2.1
4-11	C. E. Franklin	3.0	8-23	do	2.3
4-17	do	2.9	9-10	do	2.1

MAPLE CREEK

Fremont—Sec. 10-18-8 E.

3-12	A. E. Johnston	27.3	4-30	A. E. Johnston	8.6
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MEDICINE CREEK

Cambridge—Sec. 18-1-25 W.

10-15	C. E. Franklin	107.6	4-20	C. E. Franklin	59.8
10-31	do	40.7	5- 7	do	105.0
11-14	do	80.4	5-29	do	37.4
12- 5	do	75.6	7-13	do	28.6
1-26	A. E. Johnston	85.3	8- 9	do	53.1
3-12	C. E. Franklin	86.8	9-16	do	13.3
4- 1	do	178.0	9-28	do	22.2

MEDICINE CREEK

Maywood—Sec. 16-8-29 W.

10-18	A. E. Johnston	25.2	3-10	C. E. Franklin	30.0
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MELBETA DRAIN

Melbeta—Sec. 24-21-54 W.

10- 3	C. E. Franklin	8.2	3-21	C. E. Franklin	4.7
10-18	do	3.9	4- 8	A. W. Hall	4.5
11- 5	do	6.4	5- 1	do	3.2
11-18	do	10.0	5-15	do	.6
12- 4	do	8.7	6- 6	do	2.7
1-12	A. E. Johnston	7.6	6-17	do	1.0
2-17	do	5.5	8-11	do	.0
3-11	A. W. Hall	7.9			

MINNECHUDUZA CREEK

Valentine—Sec. 28-34-27 W.

3- 2	A. E. Johnston	70.1	9- 9	A. E. Johnston	4.0
4-18	do	47.0	2-24	do	7.3

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

MIRA CREEK

North Loup—Sec. 26-18-13 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-10	A. E. Johnston	1.7	2-1	A. E. Johnston	1.9
11-17	do	3.5	3-20	do	3.4
12-15	do	3.7			

MITCHELL SPILLWAY

Tri-State Canal—Sec. 35-23-56 W.

10-21	C. E. Franklin	0.0	4-10	A. W. Hall	7.0
11- 6	do	.0	5- 1	do	9.2
11-23	do	.0	5-27	do	.0
12- 5	A. E. Johnston	.0	6- 5	do	.0
1-11	do	.0	8-27	A. E. Johnston	.0
2-18	do	.0	9-11	A. W. Hall	.0
3-13	A. W. Hall	14.9			

MORRILL DRAIN

South Line—Sec. 13-23-57 W.

10- 2	C. E. Franklin	4.7	4-30	A. W. Hall	0.0
10-21	do	3.3	5-14	do	.0
11- 7	do	1.8	5-27	do	.0
11-23	do	2.6	6- 5	do	.0
12- 5	A. E. Johnston	2.1	6-18	do	3.0
1-13	do	1.8	7-10	do	.0
2-18	do	2.3	8-25	F. F. LeFever	3.0
3-12	A. W. Hall	.6	8-27	A. E. Johnston	6.1
4-10	do	.4	9-10	A. W. Hall	3.2

MONROE CREEK

Below Big Monroe Canal—Sec. 33-33-56 W.

5-21	Johnston and Rasmussen	0.0	7-22	Johnston and Rasmussen	.2
6-16	do	.0			

MUDDY CREEK

Arapahoe—Sec. 16-4-23 W.

10-15	C. E. Franklin	5.1	4-20	C. E. Franklin	2.5
10-31	do	1.8	5- 7	do	4.1
11-14	do	3.3	5-29	do	3.3
12- 5	do	1.0	6-28	do	6.2
1-26	A. E. Johnston	4.0	7-13	C. E. Franklin	3.6
3-12	C. E. Franklin	3.6	8- 9	do	13.0
4- 1	do	5.0	9-16	do	.3
			9-28	do	1.3

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

MUDDY CREEK
Berwyn—Sec. 16-16-19 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 8	A. E. Johnston	2.0	3-24	A. E. Johnston	5.5
11-14	do	3.8	5- 9	do	8.5
12-12	do	4.7	8-19	L. F. Hanks	2.1
2- 7	do	4.4	9- 2	Hanks and Follansbee	2.0

MUDDY CREEK
Mason City—Sec. 31-15-17 W.

10- 8	A. E. Johnston	17.7	3-24	A. E. Johnston	22.2
11-14	do	30.7	5- 9	do	38.2
12-12	do	21.6	8-19	L. F. Hanks	13.1
2- 7	do	21.1	9- 2	Hanks and Follansbee	5.0

MUDDY CREEK
Hazard—Sec. 29-13-15 W.

10- 8	A. E. Johnston	28.3	5- 9	A. E. Johnston	53.0
11-14	do	37.2	8-19	L. F. Hanks	10.1
12-12	do	39.6	9- 2	Hanks and Follansbee	15.2
2- 7	do	37.0	9-13	L. F. Hanks	9.0
3-24	do	45.4			

NEMAHA RIVER (BIG)
Tecumseh—Sec. 20-5-11 E.

11-22	A. E. Johnston	39.9	1-28	A. E. Johnston	24.6
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NIOBRARA RIVER
Crane Bridge South of Eli—Sec. 8-33-35 W.

2-27	A. E. Johnston	403.0	9-10	A. E. Johnston	214.0
4-16	do	412.0			

NIOBRARA RIVER
Below Dam at Valentine—Sec. 28-31-27 W.

3- 2	A. E. Johnston	1097.0	9- 9	A. E. Johnston	627.0
4-18	do	1040.0	9-24	do	928.0
4-20	do	913.0	9-25	do	846.0

NIOBRARA RIVER
U. S. G. S. Station at Valentine

9- 9	A. E. Johnston	617.2	9-24	A. E. Johnston	824.9
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MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

NIOBRARA RIVER
Marsland—Sec. 5-28-51 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 1	A. E. Johnston	41.0	5-20	Johnston and Rasmussen	26.3
10-30	do	53.2	6-18	A. E. Johnston	3.6
1-15	do	37.3	7-21	do	2.6
2-25	do	59.9	9-13	do	11.2
4- 8	do	75.1	9-26	do	6.1

NIOBRARA RIVER
Dunlap—Sec. 27-29-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 3	A. E. Johnston	73.0	6-21	A. E. Johnston	3.3
1-17	do	66.8	7-21	do	3.8
2-25	do	84.1	7-24	do	5.6
4- 8	do	111.1	8- 5	do	35.2
5-19	do	56.2	9-13	do	19.5
5-28	do	45.4	9-26	do	7.9
6-15	do	17.9			

NIOBRARA RIVER
Harrison—Sec. 9-29-56 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-31	A. E. Johnston	20.7	6-17	Johnston and Rasmussen	8.2
4- 8	do	36.4	7-23	do	5.6
5-20	Johnston and Rasmussen	12.8			

NIOBRARA RIVER
U. S. G. S. Station South of Gordon

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
9- 8	A. E. Johnston	94.6	9-23	A. E. Johnston	33.3

NIOBRARA RIVER
Agate—Sec. 7-28-55 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 1	A. E. Johnston	17.4	6-18	A. E. Johnston	7.3
4- 8	do	32.8	7-23	Johnston and Rasmussen	5.8
5-20	Johnston and Rasmussen	14.7			

NIOBRARA RIVER
Below Whistle Creek—Sec. 7-28-53 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 1	A. E. Johnston	24.0	6-18	Johnston and Rasmussen	7.4
4- 8	Johnston and Rasmussen	44.4	7-23	do	6.6
5-20	do	13.0			

NIOBRARA RIVER
Wyoming State Line—Sec. 20-31-58 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-31	A. E. Johnston	10.2	6-17	Johnston and Rasmussen	5.4
4- 9	do	21.0	7-23	do	2.9
5-20	Johnston and Rasmussen	7.5			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

NIOBRARA RIVER
Lynch—Sec. 2-32-10 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
12- 8	A. E. Johnston	1780.0	3- 4	A. E. Johnston	1481.0
2- 2	do	3282.0	4-21	do	2165.0

NINE MILE DRAIN
Sec. 25-21-53 W.

10- 5	C. E. Franklin	270.0	5-15	A. W. Hall	84.0
11- 5	do	216.0	6- 6	do	136.0
11-19	do	186.0	6-17	do	153.0
12- 5	A. E. Johnston	165.0	8-11	do	204.0
1-12	do	138.0	8-18	F. F. LeFever	177.0
2-17	do	112.0	8-24	A. E. Johnston	213.0
3-25	A. W. Hall	97.0	9- 5	F. F. LeFever	196.0
4- 8	do	131.0	9-10	do	180.0
5- 1	do	87.0			

OAK CREEK
Capital Beach—Sec. 16-10-6 E.

11-21	A. E. Johnston	73.0	8-24	L. F. Hanks	5.1
1- 3	do	8.0	9- 5	do	3.5
4-28	do	8.5			

OMAHA CREEK
Sec. 14-26-8 E.

3-12	A. E. Johnston	12.9	4-30	A. E. Johnston	10.5
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OTTER CREEK
Sec. 9-15-40 W.

10-28	A. E. Johnston	29.0	6-25	A. E. Johnston	23.0
11- 7	do	34.1	7- 9	do	28.0
12- 2	do	33.2	7-19	do	26.2
1- 9	do	27.0	7-28	do	23.4
2-13	do	29.3	8- 5	do	4.0
4- 2	do	29.3	8-12	do	17.0
5-15	do	21.0	8-19	do	15.4
6- 1	do	6.4	9- 4	do	30.2
6-11	do	25.9	9-19	do	24.4

PAPILLION CREEK (LITTLE)
Sec. 35-15-13 E.

10-14	A. E. Johnston	3.3	3-13	A. E. Johnston	14.5
11-20	do	71.6	4-29	do	3.7
12-20	do	6.7	8-22	L. F. Hanks	3.1
1-29	do	11.4	9- 3	do	4.0

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

PAWNEE CREEK

Sec. 4-12-27 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 6	A. E. Johnston	9.4	6-21	A. E. Johnston	6.0
10-21	do	11.8	7- 1	do	2.0
10-24	do	10.3	7- 7	do	3.0
11-12	do	14.1	7-14	do	4.0
11-28	do	27.0	7-17	do	3.5
12-11	do	21.8	7-31	do	1.0
1- 6	do	15.6	8-14	do	4.0
2-10	do	15.2	9- 1	do	5.2

PEPPER CREEK

Alliance-Chadron Highway—Sec. 35-30-48 W.

11- 3	A. E. Johnston	0.8	7-24	A. E. Johnston	.0
5-27	do	1.0	8- 6	do	.4
6-21	do	.2			

PINE CREEK

Colclessor Mill—Sec. 33-30-44 W.

4-15	A. E. Johnston	38.0	9-23	A. E. Johnston	18.8
5-26	do	24.0			

PINE CREEK

Below Mill at Long Pine—Sec. 33-30-44 W.

2-27	A. E. Johnston	34.4	9- 8	A. E. Johnston	18.3
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PLUM CREEK

Sec. 14-32-22 W.

3- 3	A. E. Johnston	130.0	4-20	A. E. Johnston	133.0
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PLUM CREEK

U. P. R. R. Bridge—Sec. 10-19-49 W.

11- 6	A. E. Johnston	7.8	5-30	A. E. Johnston	4.9
12- 3	do	6.7	6-13	do	4.2
1-10	do	8.5	6-23	A. W. Hall	3.0
2-14	do	6.5	7-22	do	3.1
3-10	A. W. Hall	6.9	8-10	A. W. Johnston	6.1
3-24	do	5.5	8-21	do	6.4
4- 6	A. W. Johnston	7.7	9- 9	F. F. LeFever	5.0
5- 2	A. W. Hall	4.7	9-22	A. E. Johnston	7.0
5-18	A. W. Johnston	5.1	9-28	do	5.5

PONCA CREEK

Lynch—Sec. 14-33-10 W.

3- 4	A. E. Johnston	25.3	4-21	A. E. Johnston	17.5
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MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

PRAIRIE CREEK

Silver Creek—Sec. 21-16-3 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-11	A. E. Johnston	9.7	5- 6	A. E. Johnston	39.2
11-18	do	7.8	6- 7	do	19.0
12-16	do	14.0	7- 6	do	12.1
3- 7	do	8.0	8- 1	do	.0
3-19	do	19.2			

PUMPKINSEED CREEK

Sec. 12-19-50 W.

10- 7	C. E. Franklin	83.0	6-11	A. W. Hall	7.0
11- 6	A. E. Johnston	61.2	6-16	do	3.0
11- 8	C. E. Franklin	36.4	6-22	do	16.0
11-25	do	40.0	7- 3	do	22.2
2-16	A. E. Johnston	72.7	7-10	A. E. Johnston	8.4
3-10	A. W. Hall	57.3	7-14	A. W. Hall	7.3
4- 1	do	52.3	7-20	A. E. Johnston	9.0
4- 7	do	55.0	8-25	do	22.1
4-28	do	49.8	9- 5	A. W. Hall	20.1
5-11	do	52.1			

PUMPKINSEED CREEK

5 Mi. South of Bridgeport—Sec. 28-19-50 W.

3-10	A. W. Hall	48.6	6- 11	A. W. Hall	6.0
4- 7	do	41.6	6-13	A. E. Johnston	6.2
4-28	do	66.7	8-16	A. W. Hall	11.0
5-11	do	42.1	9- 5	do	7.1
6- 1	do	3.6			

PUMPKINSEED CREEK

Gering-Kimball Highway—Sec. 4-19-55 W.

10- 8	C. E. Franklin	10.1	5- 1	C. E. Franklin	14.1
10-26	do	8.8	5-20	do	9.2
11-10	do	13.7	6-13	do	8.2
11-28	do	17.7	7-20	do	1.1
1-19	A. W. Johnston	17.0	7-21	do	1.2
3- 2	C. E. Franklin	13.2	8-30	do	1.1
3-23	do	9.4	9-23	do	2.3
4-14	do	10.6			

RED BIRD CREEK

Sec. 11-32-10 W.

12-18	A. E. Johnston	34.0	3- 4	A. E. Johnston	29.1
2- 2	do	53.2	4-21	do	30.8

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

RED WILLOW CREEK
Red Willow—Sec. 17-3-28 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-24	C. E. Franklin	50.2	4-20	C. E. Franklin	31.2
11- 4	do	81.4	5- 7	do	29.2
11-19	do	68.5	5-29	do	16.9
12- 4	A. E. Johnston	76.1	6-28	do	14.7
1-26	do	39.1	7-13	do	20.8
3-12	C. E. Franklin	37.3	8- 9	do	57.9
4- 1	do	45.6	9-16	do	7.4
			9-28	do	5.4

RED WILLOW CREEK
Sec. 6-20-51 W.

10-15	C. E. Franklin	108.0	4- 7	A. W. Hall	34.7
10-17	A. E. Johnston	69.5	5- 2	do	44.1
10-31	C. E. Franklin	50.4	5-15	do	27.5
11-14	do	46.7	6- 8	do	18.6
12- 5	do	23.0	6-16	do	1.4
1-12	A. E. Johnston	54.5	7- 1	do	4.7
2-17	do	50.8	8-12	Hall and LeFever	17.4
3-11	A. W. Hall	42.7	8-24	A. E. Johnston	21.6
3-24	do	29.8	9- 4	A. W. Hall	43.6
			9-12	F. F. LeFever	38.0

REPUBLICAN RIVER
Colorado-Nebraska Line—Sec. 10-1-42 W.

10-16	C. E. Franklin	87.0	5-17	C. E. Franklin	28.9
11- 1	do	76.3	6- 6	do	34.7
11-15	do	71.0	6-27	do	5.8
12- 6	do	93.1	7-10	do	7.2
1-23	A. E. Johnston	76.4	7-30	do	4.6
3-18	C. E. Franklin	77.5	8-27	do	7.5
4- 10	do	80.3	9-26	do	30.8
4-27	do	65.9			

REPUBLICAN RIVER
Sanborn—Sec. 11-1-42 W.

11-15	C. E. Franklin	58.5	5-17	C. E. Franklin	23.0
12- 5	do	37.8	6- 6	do	35.7
1-23	A. E. Johnston	103.8	6-27	do	7.4
3-18	C. E. Franklin	69.7	7-10	do	8.8
4-10	do	70.8	7-30	do	4.0
4-27	do	68.9	8-27	do	7.7

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

REPUBLICAN RIVER (NORTH BRANCH)

Benkleman—Sec. 19-1-37 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-16	C. E. Franklin	167.0	5-16	C. E. Franklin	78.0
11- 1	do	171.0	6- 5	do	150.0
11-15	do	108.0	6-27	do	16.9
12- 6	do	112.0	7-10	do	5.0
1-24	A. E. Johnston	179.0	7-30	do	.0
3-17	C. E. Franklin	139.0	8-27	do	.0
4-10	do	197.0	9-12	do	2.0
4-26	do	178.0	9-26	do	23.0

REPUBLICAN RIVER (SOUTH BRANCH)

Benkleman—Sec. 19-1-37 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-16	C. E. Franklin	59.3	5-16	C. E. Franklin	51.2
11- 1	do	44.1	6- 5	do	667.0
11-15	do	43.4	6-27	do	11.1
12- 6	do	66.0	7-10	do	.6
1-24	A. E. Johnston	94.9	7-30	do	.2
3-17	C. E. Franklin	68.7	8-27	do	12.6
4-10	do	65.8	9-12	do	.2
4-27	do	80.4	9-26	do	1.2

REPUBLICAN RIVER

Max

6- 5	C. E. Franklin	800.0
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REPUBLICAN RIVER

Culbertson—Sec. 16 and 17-3-31 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-14	C. E. Franklin	215.0	5- 7	C. E. Franklin	160.0
10-30	do	99.0	5-28	do	43.5
11-13	do	126.0	6-28	do	4.5
12- 3	do	259.0	7-11	do	7.5
1-23	A. E. Johnston	272.0	8- 7	do	46.0
3- 8	C. E. Franklin	222.0	8-26	do	3.0
4- 8	do	225.6	9-11	do	.7
4-18	do	159.0	9-27	do	.0

REPUBLICAN RIVER

McCook—Sec. 31-3-29 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-14	C. E. Franklin	578.0	5- 7	C. E. Franklin	390.0
10-18	A. E. Johnston	565.0	5-28	do	78.5
10-30	C. E. Franklin	318.0	6-28	do	6.4
11-13	do	327.0	7- 8	do	91.6
12- 3	do	673.0	8- 7	do	312.0
1-24	A. E. Johnston	655.0	8-26	do	20.3
3- 9	C. E. Franklin	364.0	9-11	do	.0
4- 1	do	396.0	9-27	do	21.6
4-20	do	299.0			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

REPUBLICAN RIVER
Oxford

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-17	A. E. Johnston	943.0	1-26	A. E. Johnston	639.0

REPUBLICAN RIVER
Bostwick

4- 4	C. E. Franklin	833.0	7-14	C. E. Franklin	176.0
4-22	do	945.0	8-10	do	1432.0
5- 8	do	1976.0	9- 8	L. F. Hanks	61.0
5-30	do	501.0	9-17	C. E. Franklin	37.0
6-29	do	370.0			

REPUBLICAN RIVER
Superior—Sec. 36-1-7 W.

10-16	A. E. Johnston	4227.0	3-13	A. E. Johnston	671.0
11-24	do	1780.0	3-16	do	299.0
1-27	do	730.0			

ROCK CREEK
Parks—Sec. 21-1-39 W.

10-16	C. E. Franklin	15.0	5-17	C. E. Franklin	16.7
11- 1	do	18.1	6- 6	do	17.2
11-15	do	12.7	6-27	do	10.5
12- 6	do	15.0	7-10	do	10.1
1-23	A. E. Johnston	19.9	7-30	do	11.8
3-18	C. E. Franklin	17.6	8-27	do	9.8
4-10	do	13.4	9-26	do	11.1
4-27	do	16.3			

ROCK CREEK
Springview—Sec. 12-32-32 W.

3- 3	A. E. Johnston	4.8	4-20	A. E. Johnston	3.4
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RUSH CREEK
Sec. 17-17-45 W.

10-29	A. E. Johnston	0.9	5-16	A. E. Johnston	0.5
11- 6	do	1.3	5-30	do	.3
12- 3	do	5.5	6-27	do	.0
2-14	do	3.1	9-28	do	.0

**SAND HILL LAKES
GAGE HEIGHT RECORDS SHOWING RISE AND FALL OF
WATER SURFACE**

Year Ending September 30, 1931

CARNINE LAKE

Carnine Ranch—Sec. 2-22-50 W.

Date	Hydrographer	Gage Height	Date	Hydrographer	Gage Height
2-24	L. D. Carnine	15.20	7- 3	L. D. Carnine	14.86
3- 4	do	15.40	7-16	do	14.54
3-18	do	15.48	7-21	A. E. Johnston	14.40
4- 6	do	15.86	8- 1	L. D. Carnine	14.06
4-16	do	15.80	8- 6	A. E. Johnston	13.92
5- 2	do	15.82	8-15	L. D. Carnine	13.92
5-16	do	15.80	9- 1	do	13.52
5-19	A. E. Johnston	15.80	9- 7	A. E. Johnston	13.40
5- 1	L. D. Carnine	15.40	9-17	L. D. Carnine	13.20
6-15	A. E. Johnston	15.38	9-27	A. E. Johnston	13.25
6-16	L. D. Carnine	15.30			

LAKE ELI

Eli—Sec. 7-34-35 W.

Date	Hydrographer	Gage Height	Date	Hydrographer	Gage Height
2-27	A. E. Johnston	10.75	9-10	A. E. Johnston	9.80
4-16	do	10.75	9-23	do	10.75

EAST VALLEY LAKE

Sec. 20-22-46 W.

Date	Hydrographer	Gage Height	Date	Hydrographer	Gage Height
4-11	Mrs. A. E. Gentle	3887.75	7-25	Mrs. A. E. Gentle	3886.74
4-25	do	3887.68	7-30	A. W. Hall	3886.42
5- 9	do	3887.86	8-15	do	3886.20
5-23	do	3887.68	8-29	do	3886.10
6- 6	do	3887.48	9-12	do	3885.64
6-20	do	3886.76	9-26	do	3885.18
7- 4	do	3886.90			

REPORT OF SECRETARY

SAND HILL LAKES—Concluded
 Year Ending September 30, 1931

HACKBERRY LAKE

Simon—Sec. 29-31-28 W.

Date	Hydrographer	Gage Height	Date	Hydrographer	Gage Height
3- 1	A. E. Johnston	5.46	7- 1	R. O. Burton	5.06
3-15	R. O. Burton	5.55	7-15	do	4.92
4- 1	do	5.65	8- 1	do	4.66
4-16	do	5.66	8-15	do	4.48
5- 1	do	5.48	9- 1	do	4.28
5-15	do	5.44	9-15	do	4.08
6- 1	do	5.25	10- 1	do	4.00
6-15	do	5.24			

THOMPSON LAKE

Lakeside—Sec. 9-24-44 W.

Date	Hydrographer	Gage Height	Date	Hydrographer	Gage Height
2-24	Leonard Denbo	5.10	5-15	Leonard Denbo	2.25
3- 1	do	5.10	6- 1	do	4.92
3-15	do	5.15	6-15	do	4.80
4- 1	do	5.20	7- 1	do	4.50
4-15	do	5.22	7-14	do	4.32
5- 1	do	5.24			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

SALT CREEK
Ashland—Sec. 1-12-9 E.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
1-29	A. E. Johnston	53.8	1-29	A. E. Johnston	66.9
3-13	do	68.3			

SALT CREEK
Below C. B. & Q. Dam—Sec. 2-9-6 E.

10-15	A. E. Johnston	3.0	1-29	A. E. Johnston	10.1
11-21	do	250.0	3-14	do	12.7
1- 3	do	3.0	4-28	do	15.3

SAND CREEK
Below Bendix Canal—Sec. 35-33-53 W.

5-23	Johnston and Rasmussen	0.5	6-19	A. E. Johnston	0.0
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SAND CREEK
Station—Sec. 10-15-40 W.

10-28	A. E. Johnston	3.5	6-26	A. E. Johnston	3.0
11- 7	do	4.7	7- 9	do	3.5
12- 2	do	7.8	7-19	do	.0
1- 9	do	4.9	7-28	do	.0
2-13	do	3.6	8-12	do	3.4
4- 2	do	3.7	8-19	do	1.6
5-15	do	1.2	9- 4	do	4.0
6- 1	do	2.7	9-19	do	3.9
6-11	do	2.3			

SAND CREEK
Franklin—Sec. 33-2-14 W.

4-21	C. E. Franklin	0.7	7-13	C. E. Franklin	0.2
5- 8	do	1.7	8-10	do	.1
5-30	do	.2	9-17	do	.0
6-29	do	.2	9-29	do	.0

SANDY CREEK (BIG)
Powell—Sec. 22-3-1 E.

10-15	A. E. Johnston	29.3	4-27	A. E. Johnston	44.7
3-16	do	29.9			

SANDY CREEK (BIG)
Sec. 12-33-14 W.

4-21	A. E. Johnston	38.5			
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MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

SANDY CREEK (LITTLE)

Sec. 7-33-13 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
4-21	A. E. Johnston	6.1			

SAPPA CREEK

Orleans—Sec. 19-2-19

3-12	C. E. Franklin	55.3	6-28	C. E. Franklin	38.6
4- 2	do	70.0	7-13	do	23.0
5-20	do	80.7	8-10	do	274.0
5- 7	do	66.0	9-16	do	1.2
5-29	do	233.0	9-28	do	2.1

SARBEN SLOUGH

Sarben—Sec. 20-11-35 W.

11- 1	A. E. Johnston	1.6	6- 9	A. E. Johnston	2.9
11- 8	do	1.3	6-25	do	1.0
1- 8	do	2.4	7- 8	do	2.1
2-12	do	5.0	7-18	do	2.2
4- 1	do	8.5	7-29	do	.2
5-14	do	2.8	8-13	do	1.4
6- 2	do	1.8	9- 3	do	1.8

SCHLAGEL CREEK

Valentine—Sec. 24-33-28 W.

3- 2	A. E. Johnston	14.8	9- 9	A. E. Johnston	13.6
4-18	do	18.0	9-24	do	14.9

SCOTTSBLUFF DRAIN

Scottsbluff—Sec. 25-22-54 W.

10- 3	C. E. Franklin	22.2	3-25	A. W. Hall	8.1
10-18	do	20.6	4- 8	do	10.7
11- 6	do	17.8	5-14	do	5.9
11-22	do	19.0	6- 6	do	24.1
12- 6	A. E. Johnston	16.2	6-18	do	13.0
1-15	do	15.4	8- 8	Hall and LeFever	22.1
2-19	do	12.5	8-28	A. E. Johnston	26.0
3-13	A. W. Hall	10.2	9-22	F. F. LeFever	32.0

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

SHEEP CREEK

Morrill—Sec. 21-23-57 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 2	C. E. Franklin	120.0	5-13	A. W. Hall	30.4
10-21	do	135.3	5-27	do	1.2
11- 7	do	126.8	6- 5	do	6.3
11-23	do	116.0	6-18	do	11.0
12- 6	A. E. Johnston	108.9	6-26	do	2.0
1-14	do	85.0	8- 6	Hall and LeFever	2.7
2-19	do	90.9	8-24	F. F. LeFever	1.0
3-12	A. W. Hall	77.2	8-27	A. E. Johnston	3.7
4- 2	do	84.1	9-10	A. W. Hall	3.3
4-30	do	80.8	9-21	F. F. LeFever	6.0

SHELL CREEK

Schuyler—Sec. 12-17-3 E.

10-13	A. E. Johnston	23.5	12-20	A. E. Johnston	27.5
11-19	do	23.9	1-30	do	50.7

SILVER CREEK

Silver Creek—Sec. 6-15-3 W.

10-11	A. E. Johnston	1.1	5- 6	A. E. Johnston	14.4
11-18	do	3.8	6- 7	do	2.9
12-16	do	2.7	7- 6	do	2.9
3- 7	do	2.5	8- 1	do	.7
3-19	do	7.3	9- 9	L. F. Hanks	.3

SILVERNAIL DRAIN

Northport—Sec. 6-19-49 W.

11- 6	A. E. Johnston	16.5	6-13	A. E. Johnston	14.0
12- 3	do	15.3	6-23	do	11.0
1-10	do	10.8	7-22	A. W. Hall	8.7
2-14	do	10.2	8-10	A. E. Johnston	10.5
3-10	A. W. Hall	7.3	8-21	do	10.1
3-24	do	5.2	9- 9	F. F. LeFever	11.0
4- 6	A. E. Johnston	5.3	9-12	A. W. Hall	11.8
5- 2	A. W. Hall	5.4	9-22	A. E. Johnston	16.2
5-18	A. E. Johnston	5.2	9-28	do	11.0
5-30	do	9.1			

SKUNK CREEK

Keystone—Sec. 1-14-37 W.

10- 3	A. E. Johnston	2.7	6- 1	A. E. Johnston	2.8
10-27	do	2.2	7-18	do	.4
11- 8	do	3.3	8-12	do	1.5
1- 8	do	3.5	8-19	do	2.5
2-12	do	4.1	9- 4	do	1.6
5-15	do	4.1			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

SNAKE RIVER

Above Falls—Sec. 9-31-30 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
2-28	A. E. Johnston	311.0	9-9	A. E. Johnston	248.0
4-17	do	260.0	9-24	do	248.0

SNAKE CREEK

Alliance-Bridgeport Highway—Sec. 8-24-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11-4	A. E. Johnston	0.0	7-21	A. E. Johnston	0.0
2-24	do	21.1	8-6	do	.0
4-6	do	70.0	9-7	do	.0
5-19	do	17.2	9-27	do	.0
5-27	do	1.2			

SNAKE CREEK

Below Kilpatrick Reservoir—Sec. 6-24-51 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-1	A. E. Johnston	0.6	1-15	A. E. Johnston	2.7
10-30	do	0.7			

SOLDIER CREEK

Sec. 19-31-52 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-31	A. E. Johnston	7.1	5-25	A. E. Johnston	2.8
1-16	do	3.9	6-19	do	1.8
2-26	do	7.6	7-22	do	.4
4-10	do	8.0	9-12	do	.5

SOU BELLY CREEK

Sec. 33-33-55 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11-1	A. E. Johnston	3.1	6-16	Johnston and Rasmussen	1.4
4-9	do	4.3	7-22	do	.9
5-21	Johnston and Rasmussen	4.0			

SPOTTED TAIL (DRY)

Corner—Sec. 28-23-56 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-2	C. E. Franklin	67.8	5-27	A. W. Hall	23.7
10-21	do	95.3	6-5	do	25.6
11-6	do	85.5	6-18	do	31.0
11-23	do	33.5	7-9	do	21.4
12-5	A. E. Johnston	53.7	7-25	do	47.2
1-13	do	57.2	8-5	do	32.0
2-18	do	39.2	8-25	F. F. LeFever	35.0
3-12	A. W. Hall	32.9	8-27	A. E. Johnston	38.3
4-10	do	24.0	9-2	F. F. LeFever	34.0
4-30	do	46.0	9-10	A. W. Hall	30.2
5-12	do	22.0	9-24	F. F. LeFever	23.0
5-23	do	12.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

SPOTTED TAIL (WET) & KRONBERG SEEP
Sec. 1-22-56 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 2	C. E. Franklin	16.2	1-10	A. W. Hall	14.0
10-21	do	26.2	5- 1	do	16.4
11- 6	do	16.0	5-14	do	7.8
11-23	do	22.0	6- 5	do	11.9
12- 5	A. E. Johnston	14.0	6-18	do	16.0
1-13	do	16.9	7- 8	do	10.3
2-18	do	14.8	8- 7	Hall and LeFever	9.4
3-13	A. W. Hall	15.5	8-25	F. F. LeFever	13.0
3-25	do	12.1	8-27	A. E. Johnston	18.0

SPRING CREEK
Henry—Sec. 10-23-58 W.

9-23 F. F. LeFever 9.0

SPRING CREEK
Sec. 9-34-18 W.

3- 3 A. E. Johnston 12.0 4-20 A. E. Johnston 13.0

SPRING CREEK
Tributary to Little Cottonwood—Sec. 13-32-51 W.

11- 1	A. E. Johnston	0.9	6-19	A. E. Johnston	1.4
1-16	do	1.3	7-22	do	.0
2-26	do	2.1	9-11	do	.0
4-11	do	1.6	9-26	do	2.2
5-22	Johnston and Rasmussen	.0			

SQUAW CREEK
Above McDowell's Reservoir—Sec. 12-31-52 W.

11- 1	A. E. Johnston	0.9	5-23	Johnston and Rasmussen	1.0
1-16	do	.9	6-19	do	.3
2-25	do	2.1	9-12	A. E. Johnston	.0
4-13	do	1.3			

SQUAW CREEK
Below McDowell's Reservoir—Sec. 1-31-52 W.

11- 1	A. E. Johnston	3.2	5-24	Johnston and Rasmussen	0.3
1-16	do	1.3	6-19	A. E. Johnston	.5
2-25	do	2.0	9-12	do	.1
4-13	do	.1			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

SQUAW CREEK

Below Shepherd Canal—Sec. 36-34-57 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
6-16	Johnston and Rasmussen	0.0	6-17	A. E. Johnston	0.1
6-17	do	.2			

STEWART'S DRAIN

Morrill—Sec. 13-23-57 W.

10- 2	C. E. Franklin	2.0	4-30	A. W. Hall	0.6
10-21	do	1.7	5-14	do	.4
11- 7	do	1.5	5-27	do	.5
11-23	do	2.3	6- 5	do	1.3
12- 5	A. E. Johnston	1.3	6-18	do	.4
1-13	do	.9	7-10	do	.0
2-18	do	.5	8-27	A. E. Johnston	.5
3-12	A. W. Hall	2.1	9-10	A. W. Hall	.3
4-10	do	2.6			

STINKING WATER CREEK

Palisade—Sec. 25-5-34 W.

10-14	C. E. Franklin	63.1	5- 6	C. E. Franklin	55.2
10-29	do	48.2	5-27	do	21.2
11-12	do	33.2	6-19	do	36.8
12- 3	do	37.0	7-27	do	14.3
1-22	A. E. Johnston	61.2	8-23	do	34.2
3- 8	C. E. Franklin	46.2	9-10	do	21.6
4- 9	do	90.2	9-29	do	20.6
4-17	do	42.0			

STREVER CREEK

Into Elm Creek Canal—Sec. 1-8-20 W.

10- 7	A. E. Johnston	56.0	7- 2	A. E. Johnston	15.0
10-22	do	36.4	7- 3	do	12.8
11-13	do	27.7	7- 6	do	28.7
11-26	do	32.3	7-12	do	13.3
12-11	do	35.6	7-13	do	14.3
1- 5	do	37.8	7-15	do	12.0
2- 9	do	27.3	7-16	do	14.3
3-25	do	28.7	7-31	do	.4
5-11	do	51.3	8- 3	do	.5
6- 3	do	30.7	8-15	do	2.4
6- 6	do	50.0	9- 2	do	3.3
6- 8	do	47.9	9-15	do	.4
6-23	do	45.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

STREVER CREEK

Below Dawson County Drain—Sec. 13 and 14-9-21 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 7	A. E. Johnston	58.1	7-13	A. E. Johnston	13.4
11-13	do	29.3	7-15	do	14.5
11-26	do	33.2	7-16	do	14.8
12-11	do	37.0	7-31	do	3.0
6-23	do	43.0	8- 3	do	3.0
7- 3	do	16.3	8-15	do	4.0
7- 6	do	21.1	9- 2	do	7.6
7-12	do	12.4	9-15	do	3.4

STREVER CREEK

Above Dawson County Drain—Secs. 13 and 14-9-21 W.

10- 7	A. E. Johnston	32.1	3-25	A. E. Johnston	7.5
10-22	do	40.0	5-11	do	5.6
1- 5	do	6.4	6- 8	do	11.0
2- 9	do	8.5	9-15	do	.0

THOMPSON CREEK (BIG)

Riverton—Sec. 2-1-13 W.

10-16	A. E. Johnston	18.3	5-30	C. E. Franklin	13.1
11-24	do	24.0	6-29	do	8.7
1-27	do	24.7	7-13	do	14.5
3-17	do	27.2	8-10	do	33.6
4- 2	C. E. Franklin	26.5	9-17	do	9.5
1-21	do	21.5	9-29	do	9.5
5- 8	do	27.9			

TIMBER CREEK (BIG)

Fullerton Highway—Sec. 25-17-7 W.

4-10	C. E. Franklin	2.1	7-10	C. E. Franklin	0.5
4-26	do	.9	7-30	do	.6
5-16	do	1.3	8-27	do	.6
6- 5	do	.8	9-12	do	.5
6-27	do	.7	9-26	do	.8

TOOHEY DRAIN

Mitchell—Sec. 20-23-56 W.

10- 2	C. E. Franklin	6.5	5-14	A. W. Hall	1.7
10-21	do	9.8	5-27	do	1.2
11- 6	do	4.2	6- 5	do	4.0
11-23	do	7.2	6-18	do	2.0
12- 5	A. E. Johnston	4.2	7-10	do	2.0
1-13	do	3.2	8- 7	Hall and LeFever	3.4
2-18	do	2.4	8-25	F. F. LeFever	5.0
3-12	A. W. Hall	2.9	8-27	A. E. Johnston	4.6
4-10	do	1.5	9-10	A. W. Hall	6.9
4-30	do	3.9	9-24	F. F. LeFever	9.0

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

TOOHEY SPILLWAY

From Tri-State Canal—Sec. 19-23-56 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 2	C. E. Franklin	33.0	1-30	A. W. Hall	12.5
10-21	do	21.2	5-14	do	.0
11- 7	do	25.0	5-27	do	.0
11-23	do	32.2	6- 5	do	.0
12- 5	A. E. Johnston	19.4	6-18	do	.0
1-13	do	20.8	7- 9	do	.0
2-18	do	13.7	8-27	A. E. Johnston	.0
3-12	A. W. Hall	11.6	9-10	A. W. Hall	.0
4-10	do	14.3			

TRUNK BUTTE CREEK

Chadron—Sec. 25-33-50 W.

11- 1	A. E. Johnston	0.9	5-24	A. E. Johnston	1.0
2-26	do	1.5	6-20	do	.2
4-13	do	1.1	9-11	do	.0

TUB SPRINGS

Sec. 8-22-55 W.

10- 2	C. E. Franklin	97.7	3-25	A. W. Hall	26.8
10-18	do	68.0	4-10	do	34.0
11- 6	do	61.6	5- 1	do	16.2
11-22	do	59.0	5-14	do	21.9
12- 5	A. E. Johnston	54.8	8-25	F. F. LeFever	13.0
1-13	do	46.2	8-27	A. E. Johnston	13.0
2-18	do	38.9	9-11	A. W. Hall	12.0
3-13	A. W. Hall	32.8			

TUB SPRINGS

Above Enterprise Canal—Sec. 33-23-55 W.

5- 1	A. W. Hall	22.0	7-17	A. W. Hall	25.0
5-14	do	28.0	7-25	do	26.0
5-23	do	38.0	8- 7	Hall and LeFever	35.0
6- 5	do	46.0	8-25	F. F. LeFever	34.0
6-18	do	45.0	9-11	A. W. Hall	38.0
6-26	do	67.0	9-22	F. F. LeFever	35.0
7- 1	do	68.0			

TUB SPRINGS

Below Enterprise Canal—Sec. 32-23-55 W.

5-23	A. W. Hall	13.0	7-25	A. W. Hall	5.0
6- 5	do	67.0	8- 7	Hall and LeFever	7.0
6-18	do	10.0	8-25	F. F. LeFever	9.0
6-26	do	43.0	8-27	A. E. Johnston	73.0
7- 1	do	20.0	9-11	A. W. Hall	11.0
7-17	do	9.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

TURKEY CREEK
Naponee—Sec. 4-1-16 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-17	A. E. Johnston	27.1	5-29	C. E. Franklin	15.8
11-25	do	23.7	6- 28	do	9.4
1-26	do	21.8	7-13	do	9.8
3-17	do	18.4	8-10	do	6.1
4- 2	do	13.6	9-16	do	3.2
4-21	do	12.9	9-29	do	6.9
5- 8	C. E. Franklin	13.5			

TURKEY CREEK
West of Oxford—Sec. 31-4-21 W.

1-26	A. E. Johnston	7.0			
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TURTLE CREEK
Elyra—Sec. 36-20-15 W.

10-10	A. E. Johnston	1.1	2- 4	A. E. Johnston	2.2
11-17	do	.9	3-20	do	5.2
12-15	do	2.8			

UNION CREEK
Below Mill at Madison—Sec. 5-21-1 W.

12-17	A. E. Johnston	26.4	3- 9	A. E. Johnston	59.1
1-31	do	20.3	5- 4	do	49.9

VERDIGREE CREEK
St. Verdigrée—Sec. 9-30-6 W.

12-18	A. E. Johnston	104.0	3-10	A. E. Johnston	133.0
2- 2	do	132.0	5- 2	do	110.0

VICTORIA CREEK
Anselmo—Sec. 1-19-21 W.

10- 9	A. E. Johnston	10.1	2- 6	A. E. Johnston	11.6
11- 5	do	11.5	3-23	do	11.1
12-13	do	10.1	5- 8	do	28.5

WAHOO CREEK
Ashland—Sec. 35-13-9 E.

10-14	A. E. Johnston	63.0	3-13	A. E. Johnston	70.2
11-20	do	259.0	4-29	do	31.0
1- 2	do	27.7	9- 4	L. F. Hanks	43.0
1-29	do	31.6			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

WARBONNET CREEK
Above Warbonnet Canal—Sec 20-33-56 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
4-11	Johnston and Rasmussen	3.9	6-16	Johnston and Rasmussen	2.7
5-21	do	4.0	7-22	do	.1

WHISTLE CREEK
Sec. 12-28-54 W.

10- 1	Johnston and Rasmussen	0.5	6-18	A. E. Johnston	.0
4- 8	A. E. Johnston	4.3	7-23	Johnston and Rasmussen	.0
5-20	Johnston and Rasmussen	.0			

WHITE CLAY CREEK
Crawford—Sec. 2-31-52 W.

11- 1	A. E. Johnston	5.2	5-25	Johnston and Rasmussen	9.0
1-16	do	5.2	6-19	do	2.3
2-25	do	7.8	9-12	A. E. Johnston	.8
4-13	do	5.0			

WHITE CLAY CREEK
Rushville—Sec. 6-34-44 W.

4-15	A. E. Johnston	5.0	9-10	A. E. Johnston	1.0
5-26	do	7.0			

WHITEMANS FORK
Sec. 22-6-39 W.

1-22	A. E. Johnston	1.9			
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WHITE HORSE CREEK
Gannett—Sec. 5-13-29 W.

10- 6	A. E. Johnston	21.8	6-24	A. E. Johnston	8.0
10-21	do	20.9	7- 1	do	4.0
10-24	do	28.2	7- 7	do	7.1
11-12	do	24.6	7-14	do	6.0
11-28	do	43.7	7-17	do	4.4
12-11	do	32.1	7-31	do	1.5
1- 6	do	20.5	8- 3	do	1.3
2-10	do	30.8	8-14	do	2.6
3-30	do	17.8	9- 1	do	2.2
5-12	do	19.3	9-17	do	4.4
6- 4	do	9.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

WHITE RIVER
Crawford—Sec. 10-31-52 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-31	A. E. Johnston	25.1	6-19	A. E. Johnston	23.1
1-16	do	33.0	7-22	do	12.5
2-25	do	32.0	9-12	do	10.2
4-10	do	29.6	9-26	do	14.3
5-25	do	24.0			

WHITE RIVER
6 Mi. West of Chadron—Sec. 18-33-49 W.

11- 3	A. E. Johnston	25.0	6-20	A. E. Johnston	5.5
1-16	do	16.9	7-24	do	.7
2-26	do	48.0	9-11	do	.5
4-14	do	40.6	9-26	do	13.2
5-25	do	25.0			

WHITE RIVER
Above Whitney Diversion—Sec. 26-32-52 W.

11- 1	A. E. Johnston	20.0	6-18	A. E. Johnston	12.4
1-16	do	35.0	7-22	do	1.6
2-26	do	36.0	9-12	do	2.8
4-13	do	41.0	9-26	do	10.5
5-23	Johnston and Rasmussen	10.0			

WHITE RIVER
Below Whitney Diversion Dam—Sec. 26-32-52 W.

11- 1	A. E. Johnston	22.0	5-23	Johnston and Rasmussen	2.8
1-16	do	.0	6-19	A. E. Johnston	4.9
2-26	do	1.7	9-12	do	1.0
4-13	do	28.1			

WHITE TAIL CREEK
Keystone—Sec. 36-15-38 W.

10- 3	A. E. Johnston	32.7	6-25	A. E. Johnston	19.0
10-27	do	39.4	6-30	do	14.0
11- 8	do	40.5	7- 8	do	29.4
12- 2	do	41.0	7-18	do	33.4
1- 8	do	37.9	8- 4	do	19.8
2-12	do	34.5	8-12	do	16.5
5-15	do	35.1	8-19	do	18.6
6- 1	do	21.6	9- 4	do	27.9
6- 9	do	23.5	9-18	do	34.4

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1931

WILD HORSE DRAIN
Bayard—Sec. 12-20-52 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-24	C. E. Franklin	57.8	5- 2	A. W. Hall	37.4
11- 4	do	61.0	5-15	do	19.1
11-19	do	49.0	6- 8	do	29.2
12- 5	do	53.0	6-16	do	38.0
1-12	A. E. Johnston	47.8	7-16	do	55.3
2-17	do	39.2	8-12	Hall and LeFever	54.3
3-11	A. W. Hall	27.4	8-24	A. E. Johnston	69.2
3-24	do	25.2	9- 4	A. W. Hall	75.6
4- 7	do	22.6	9-11	F. F. LeFever	70.0

WILLOW CREEK
Lester—Sec. 36-3-10 W.

4-21	C. E. Franklin	0.8	5-30	C. E. Franklin	0.0
5- 8	do	125.0			

WILLOW CREEK
Sarben—Sec. 15-14-35 W.

10-27	A. E. Johnston	0.0	6-25	A. E. Johnston	1.0
11- 8	do	1.4	7- 8	do	2.4
12- 1	do	2.0	7-18	do	.9
1- 8	do	1.9	7-29	do	1.5
2-12	do	1.0	8- 4	do	1.2
4- 1	do	2.2	8-13	do	1.4
5-14	do	1.3	8-18	do	.9
6- 2	do	1.1	9- 3	do	.9
6- 9	do	1.2	9-18	do	1.5

WINTERS CREEK
Scottsbluff, South Line—Sec. 19-22-54 W.

10- 3	C. E. Franklin	129.0	5-14	A. W. Hall	48.3
10-18	do	94.3	6- 5	do	41.0
11- 6	do	84.2	6- 6	do	31.0
11-22	do	74.3	7- 1	do	34.6
12- 6	A. E. Johnston	73.9	7- 7	do	86.4
1-15	do	61.1	8- 8	Hall and LeFever	54.7
2-19	do	72.2	8-28	A. E. Johnston	49.8
3-13	A. W. Hall	39.2	9- 2	F. F. LeFever	102.0
3-25	do	38.5	9- 8	A. W. Hall	71.6
4- 8	do	40.9	9-17	F. F. LeFever	99.7
5- 1	do	49.9			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Concluded

Year Ending September 30, 1931

WINTERS CREEK
North Line—Sec. 19-22-54 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
6- 6	A. W. Hall	74.9	8-28	A. E. Johnston	127.0
6-26	do	120.0	9- 2	F. F. LeFever	123.0
7- 1	do	84.0	9- 8	A. W. Hall	128.0
8- 8	Hall and LeFever	114.0	9-17	F. F. LeFever	116.0

WOOD RIVER
Grand Island—Sec. 13-11-9 W.

10-11	A. E. Johnston	52.0	4-24	A. E. Johnston	49.0
12-16	do	27.0	5- 7	do	61.0
3- 7	do	17.0	6- 7	do	29.0

WOOD RIVER
Kearney—Sec. 12-9-16 W.

10- 8	A. E. Johnston	37.6	2- 7	A. E. Johnston	5.8
11-14	do	49.8	3-24	do	6.5
12-12	do	6.5	5- 9	do	15.9

WOOD RIVER
Wood River

8-1	A. E. Johnston	0.0
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REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS

Year Ending September 30, 1932

ANTELOPE CREEK
Main Street of Gordon

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-17	A. E. Johnston	0.5	4-27	A. E. Johnston	1.1
11- 5	do	.5	6-15	do	.5
12-10	do	.0	8-19	do	.4
2-26	do	2.3	9-11	do	.1
3-23	do	4.4			

ARICKAREE RIVER
Haigler—Sec. 28-1-41 W.

10-13	C. E. Franklin	2.2	6-20	A. W. Hall	23.8
10-15	do	618.0	7-14	do	.3
11-19	A. E. Johnston	18.1	8- 9	do	19.4
1-15	do	27.1			

ASH CREEK
South of Whitney—Sec. 7-32-50 W.

10-19	A. E. Johnston	1.1	6-20	A. E. Johnston	3.2
11- 7	do	2.5	8- 1	do	.3
3- 1	do	8.1	8-22	do	.3
3-28	do	5.7	9-19	do	.0
5- 2	do	7.0			

ASH CREEK (EAST)
Above Barron's Canal—Sec. 32-32-50 W.

10-19	A. E. Johnston	0.9	8-22	A. E. Johnston	0.7
11- 7	do	1.3	9-19	do	.4
8- 1	do	.9			

BALD SEEP
Sec. 32-23-56 W.

10- 1	A. W. Hall	1.6	6-21	F. F. LeFever	25.0
1-27	F. F. LeFever	.7	7- 5	do	10.3
2-24	do	1.9	7-13	do	4.0
3-18	do	2.2	7-22	do	7.0
5- 9	do	2.2	8-17	do	6.8
5-24	do	12.1	9- 8	do	25.6
6- 3	do	5.0	9-21	do	23.7
6-16	do	11.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

BAYARD SUGAR FACTORY DRAIN
Below Alliance Canal—Sec. 4-20-52

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
1-29	F. F. LeFever	37.3	6- 6	F. F. LeFever	6.6
2- 8	A. E. Johnston	36.6	6-21	Follansbee and LeFever	55.5
2-25	F. F. LeFever	36.1	6-29	F. F. LeFever	17.8
3-10	A. E. Johnston	35.9	7-20	do	30.4
3-19	F. F. LeFever	35.2	7-28	do	35.1
4- 5	A. E. Johnston	34.0	8-19	do	71.5
4-22	do	25.7	9- 3	do	82.9
5-11	F. F. LeFever	27.6	9-27	do	92.5
5-27	do	55.2			

BAYARD SUGAR FACTORY DRAIN
Sec. 34-21-52 W.

10-13	F. F. LeFever	67.0	12- 7	A. E. Johnston	53.2
10-26	do	52.7	1- 9	F. F. LeFever	42.7
11- 3	do	52.0			

BAZILLE CREEK
Bazille Mills—Sec. 4-29-5 W.

10-10	H. P. Eisenhuth	23.0			
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BAZILLE CREEK
Niobrara—Sec. 21-32-5 W.

10- 9	H. P. Eisenhuth	23.4	3-14	Moore and Hanks	60.0
10-10	do	24.9	4- 3	S. C. Moore	67.0
10-27	do	27.4	5-23	L. F. Hanks	27.5
11- 7	do	33.6	6- 9	do	135.0
11-19	do	32.9	7-14	L. F. Hanks	24.9
1- 9	Boyer and Hanks	32.3	8-13	M. C. Boyer	127.0
2- 9	M. C. Boyer	29.0			

BEAR CREEK
South of Eli—Sec. 25-34-36 W.

10-15	A. E. Johnston	8.7	4-27	A. E. Johnston	76.0
11- 6	do	9.0	6-15	do	8.3
12-10	do	12.5	7-28	do	5.9
1-29	do	21.4	8-19	do	1.6
2-26	do	36.5	9-14	do	7.3
3-23	do	63.7			

BEAR CREEK
Below Dry Creek Junction

7-29	A. E. Johnston	3.0			
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MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

BEAUTEY CREEK

1 Mi. East of Franklin—Sec. 31-2-14 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-14	C. E. Franklin	0.3	1-19	A. E. Johnston	0.4
11-24	A. E. Johnston	1.1			

BEAVER CREEK

3 Mi. West of Beaver City—T. 2, R. 23 W.

1-27	M. C. Boyer	3.2	6-17	L. F. Hanks	60.0
2-26	do	39.8	7-21	do	1.0
3-25	Moore and Hanks	8.4	8-22	M. C. Boyer	.2
4-15	S. C. Moore	6.4	9-25	H. R. Elsenhuth	.4
6- 1	L. F. Hanks	223.0			

BEAVER CREEK

2½ Mi. South of Hollinger—T. 2, R. 22 W.

1-26	M. C. Boyer	1.0	6-17	L. F. Hanks	366.0
2-26	do	16.3	7-21	do	.3
3-25	Moore and Hanks	12.9	8-22	M. C. Boyer	.0
4-15	S. C. Moore	10.0	9-24	H. P. Elsenhuth	.0
6- 1	L. F. Hanks	226.0			

BEAVER CREEK

Lebanon—T. 1, R. 26 W.

1-27	M. C. Boyer	0.9	6-20	do	31.9
2-26	do	14.2	7-21	do	1.3
3-25	Moore and Hanks	4.0	8-22	M. C. Boyer	2.9
4-15	S. C. Moore	4.1	9-25	H. P. Elsenhuth	.0
6- 1	L. F. Hanks	41.1			

BEAVER CREEK

Below Braddock Canal—Sec. 18-34-46 W.

6-18	A. E. Johnston	2.7	8-20	A. E. Johnston	0.6
7-30	do	1.4	9-17	do	.3

BEAVER CREEK

North of Albion—Sec. 15-20-6 W.

10-13	H. P. Elsenhuth	66.0	4- 2	S. C. Moore	74.0
10-28	do	46.0	5-23	L. F. Hanks	39.8
11- 9	do	52.0	6- 8	do	191.0
11-20	do	67.0	7- 9	do	42.1
1-11	U. S. G. S.	67.0	8-10	M. C. Boyer	44.4
2- 6	M. C. Boyer	52.0	9-17	H. P. Elsenhuth	40.1
3-12	Hanks and Moore	59.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued
Year Ending September 30, 1932

BIRDWOOD CREEK
Sec. 2-14-33 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 2	A. E. Johnston	158.0	5-12	A. E. Johnston	153.0
10- 9	do	151.0	5-19	do	152.0
10-24	do	169.0	5-26	do	296.0
10-31	do	159.0	6- 3	do	124.0
11-30	do	187.0	6- 9	Johnston and Follansbee	112.0
12-17	do	204.7	6-27	A. E. Johnston	125.0
1- 7	do	166.0	7- 8	do	121.2
1-25	do	158.0	7-18	do	151.7
2-22	do	177.0	8- 8	do	141.0
3-18	do	193.3	8-29	do	144.4
4-11	do	179.0	9- 9	do	138.5
4-18	do	190.0	9-24	do	154.6

BIRDWOOD CREEK (EAST)
Sec. 34-17-33 W.

10-24	A. E. Johnston	10.2
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BLUE CREEK
North Line of Sec. 30-16-42 W.

10-10	A. E. Johnston	74.0	5-24	A. E. Johnston	10.7
10-23	do	79.0	6- 4	do	3.0
11- 2	do	88.0	6- 8	Johnston and Follansbee	2.7
12- 1	do	141.0	6-25	A. E. Johnston	71.9
12-16	do	136.7	7- 6	do	3.0
1-12	do	107.0	7-16	do	1.4
1-26	do	128.0	8- 6	do	.8
2-23	do	121.0	8-13	do	251.8
3-19	do	115.7	8-17	J. V. Ruzicka	51.5
4- 9	do	124.6	8-26	A. E. Johnston	8.6
4-19	do	103.4	9-10	do	28.3
5-10	do	104.0	9-23	do	21.2
5-20	do	59.4			

BIG BLUE RIVER
At Seward—Sec. 28-11-3 E.

10-21	H. P. Eisenhuth	2.4	3-23	Hanks and Moore	86.0
11- 2	do	38.2	4-11	S. C. Moore	52.0
11-12	do	36.0	5-27	L. F. Hanks	35.4
1-21	M. C. Boyer	45.0	6-14	do	43.5
2-23	do	63.0	7-18	do	95.0

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

BIG BLUE RIVER
Barnston—Sec. 13 and 24-1-7 E.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 2	C. E. Franklin	551.0	5-29	L. F. Hanks	0.0
10-15	do	260.0	6-15	do	2630.0
10-16	H. P. Eisenhuth	662.0	7-19	do	1551.0
10-30	do	247.0	8-20	M. C. Boyer	638.0
11-11	do	213.0	9-21	H. P. Eisenhuth	582.0
11-24	do	7080.0			

LITTLE BLUE RIVER
Endicott—North Line of Sec. 3-3-1 W.

10-17	H. P. Eisenhuth	154.0	3-23	Moore and Hanks	261.0
10-30	do	104.0	4-12	S. C. Moore	155.0
11-11	do	128.0	5-19	L. F. Hanks	168.0
11-23	do	2120.0	6-15	do	466.0
11-24	do	2530.0	7-19	do	144.0
1-22	M. C. Boyer	176.0	8-20	M. C. Boyer	205.0
2-24	do	660.0	9-22	H. P. Eisenhuth	157.0

LITTLE BLUE RIVER
Hebron—Sec. 6-2-2 W.

10- 2	C. E. Franklin	204.0	2-25	M. C. Boyer	347.0
10-15	H. P. Eisenhuth	124.0	3-24	Moore and Hanks	160.0
10-29	do	98.0	4-13	S. C. Moore	146.0
11-10	do	95.0	5-31	L. F. Hanks	132.0
11-21	do	103.0	6-15	do	212.0
1-23	M. C. Boyer	95.8	7-20	do	142.0

LITTLE BLUE RIVER
Near Deshler—Sec. 20-3-4 W.

1-23	M. C. Boyer	74.0	6-16	S. C. Moore	140.0
2-25	do	218.0	7-20	do	49.0
3-24	Moore and Hanks	106.0	8-22	M. C. Boyer	54.0
4-13	S. C. Moore	80.5	9-22	H. P. Eisenhuth	78.5
5-31	do	82.0			

BOGGY CREEK

Below Wickersham Diversion Dam—Sec. 31-33-54 W.

5- 3	A. E. Johnston	2.0	8- 2	A. E. Johnston	0.0
6-22	do	.0			

BORDEAUX CREEK

Below Thomas Canal—Sec. 34-34-48 W.

10-17	A. E. Johnston	2.1	7-30	A. E. Johnston	3.4
3-26	do	9.2	8-20	do	.6
4-30	do	11.1	9-17	do	1.7
6-18	do	7.3			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

BIG BORDEAUX CREEK

Sec. 14-33-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-17	A. E. Johnston	2.2	4-30	A. E. Johnston	6.0
11- 6	do	3.8	6-18	do	3.8
12-12	do	2.9	7-30	do	3.2
2- 2	do	4.8	8-20	do	2.0
3- 1	do	5.9	9-17	do	1.7
3-26	do	4.7			

BORDEAUX CREEK (LITTLE)

Station at Hartzell—Sec. 13-33-18 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-17	A. E. Johnston	0.3	4-30	A. E. Johnston	6.8
11- 6	do	.2	6-18	do	1.0
12-12	do	3.8	7-30	do	.4
2- 2	do	3.2	8-20	do	.8
3- 1	do	5.3	9-17	do	1.0
3-26	do	3.8			

BROWNS CREEK

Riley—Sec. 13-19-49 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
7- 8	F. F. LeFever	4.0	7-27	F. F. LeFever	0.3
7-18	do	1.5			

BUFFALO CREEK

South of Elm Creek—Sec. 33-9-18 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 6	A. E. Johnston	52.2	6-11	A. E. Johnston	98.6
10-28	do	39.2	6-30	do	51.1
11-27	do	64.8	7-12	do	30.7
12-19	do	10.0	7-21	do	1.4
1-20	do	7.1	7-22	do	4.2
2-16	do	12.6	8-11	do	114.0
3-14	do	6.7	9- 1	do	84.7
4-14	do	6.9	9- 6	do	69.0
5-16	do	26.2	9-28	do	68.1

BUFFALO CREEK

Mouth—Sec. 20-1-40 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-13	C. E. Franklin	9.1	5-21	A. W. Hall	3.8
11-19	A. E. Johnston	10.2	6-20	do	4.8
1-15	do	13.3	8- 9	do	2.1

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

BULL DRAIN
Maxwell—Sec. 19-13-28 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 5	A. E. Johnston	1.6	4-13	A. E. Johnston	4.0
10-27	do	2.5	5-17	do	2.6
11-27	do	3.6	6- 1	do	7.6
12-19	do	3.9	6-29	do	2.8
1- 6	do	3.5	7-11	do	2.9
1-21	do	3.0	7-20	do	1.6
2-18	do	3.1	8-10	do	2.4
2-21	do	3.9	8-31	do	1.2
3-16	do	5.5	9-27	do	1.8

CALAMUS RIVER
Near Harrop—Sec. 22-23-18 W.

10- 8	H. R. Eisenhuth	206.0	3-15	Hanks and Moore	318.0
10-26	do	203.0	4- 4	S. C. Moore	215.0
11- 6	do	204.0	5-24	L. F. Hanks	197.0
11-18	do	221.0	6-10	do	240.0
1- 9	Boyer and Hanks	198.0	7-13	do	209.0
2-10	M. C. Boyer	246.0	8-15	M. C. Boyer	181.0

CAMP CLARK SEEP
North Line—Sec. 9-20-51 W.

10- 3	A. W. Hall	6.2	1- 5	A. E. Johnston	0.8
11- 3	F. F. LeFever	3.4	4-22	do	1.4
12- 7	A. E. Johnston	3.1	6-21	Follansbee and LeFever	2.0
1-30	F. F. LeFever	2.0	7-28	F. F. LeFever	5.9
2- 8	A. E. Johnston	4.3	8-20	do	6.1
2-25	F. F. LeFever	1.7	9-12	do	9.5
3-19	do	1.5			

CEDAR BRANCH CREEK
Nevens—Sec. 17-14-35 W.

10- 2	A. E. Johnston	1.1	5-12	A. E. Johnston	3.7
10- 9	do	2.5	5-19	do	1.8
10-24	do	2.1	5-26	do	1.8
10-31	do	1.6	6- 3	do	2.3
11-30	do	2.6	6- 9	do	1.8
12-17	do	2.1	6-27	do	1.6
1- 7	do	3.2	7- 8	do	2.3
1-25	do	2.7	7-18	do	1.3
2-22	do	2.1	8- 8	do	1.1
3-18	do	2.9	8-29	do	2.3
4-11	do	1.8	9-24	do	2.5
4-18	do	3.7			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

CEDAR CREEK
Broadwater—Sec. 11-18-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-12	A. E. Johnston	22.0	5- 4	F. F. LeFever	3.2
10-22	do	21.4	5-12	do	5.6
10-27	F. F. LeFever	13.0	5-23	A. E. Johnston	3.3
11- 3	A. E. Johnston	12.8	5-31	F. F. LeFever	15.5
11- 6	F. F. LeFever	9.5	6- 6	A. E. Johnston	10.6
11-10	A. E. Johnston	14.4	6- 8	F. F. LeFever	3.0
12- 2	do	12.1	6-20	do	3.0
12-16	do	17.3	6-30	do	3.0
1- 9	do	10.7	7- 8	do	3.0
1-27	do	13.5	7-18	do	7.6
2-24	F. F. LeFever	18.1	7-27	do	22.7
2-26	F. F. LeFever	12.7	8-12	do	3.6
3-21	A. E. Johnston	12.8	8-22	do	5.0
4- 8	do	13.4	9-26	do	9.0
4-21	do	11.9			

CEDAR CREEK
Fullerton—Sec. 11-16-6 W.

10-13	H. P. Eisenhuth	225.0	3-30	S. C. Moore	236.0
10-28	do	158.0	4-19	do	209.0
11- 9	do	190.0	5-20	L. F. Hanks	164.0
11-20	do	243.0	6- 6	do	219.0
1-14	Boyer and Hanks	142.0	7- 9	do	190.0
2- 6	M. C. Boyer	176.0	8-10	M. C. Boyer	233.0
3-10	Moore and Hanks	183.0			

CENTER CREEK
Franklin—Sec. 1-1-15 W.

10-14	C. E. Franklin	1.3	1-18	A. E. Johnston	6.3
11-23	A. E. Johnston	6.0			

CHADRON CREEK NO. 1
½ Mi. Above City Reservoir—Sec. 19-32-48 W.

10-11	A. E. Johnston	1.9	5- 2	A. E. Johnston	3.2
11- 7	do	2.3	6-18	do	2.8
12-15	do	4.6	7-30	do	2.0
2- 3	do	3.8	8-22	do	1.0
3- 1	do	4.4	9-17	do	.9
3-28	do	3.4			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

CHADRON CREEK NO. 2

100 Ft. Below City Reservoir—Sec. 18-32-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-14	A. E. Johnston	0.2	5- 2	A. E. Johnston	1.2
11- 7	do	.4	6-18	do	.5
12-15	do	.5	7-30	do	.3
2- 3	do	.8	8-22	do	.8
3- 2	do	.4	9-17	do	.5
3-28	do	.7			

CHADRON CREEK NO. 3

Station 38 of Pipe Line—Sec. 12-32-49 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-14	A. E. Johnston	0.0	5- 2	A. E. Johnston	3.6
11- 7	do	.2	6-18	do	.6
12-15	do	.8	7-30	do	.1
2- 3	do	.7	8-22	do	.0
3- 1	do	.7	9-17	do	.0
3-28	do	1.3			

CHADRON CREEK NO. 4

Chadron-Crawford Highway—Sec. 22-33-49 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-19	A. E. Johnston	0.0	5- 2	A. E. Johnston	4.6
11- 7	do	.0	6-18	do	2.2
12-14	do	.5	8- 1	do	.0
2- 2	do	2.0	8-22	do	.0
3- 1	do	3.1	9-19	do	.0
3-28	do	3.0			

CLEAR CREEK

Lewellen—Sec. 32-16-41 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 1	A. E. Johnston	10.2	5-20	A. E. Johnston	11.8
10-10	do	10.0	5-24	do	2.4
10-23	do	7.0	6- 4	do	1.3
11- 2	do	13.5	6- 8	Johnston and Follansbee	6.9
12- 1	do	14.0	6-25	A. E. Johnston	9.5
12-16	do	14.7	7- 7	do	.0
1- 8	do	12.5	7-16	do	.1
1-26	do	14.6	8- 6	do	.0
2-23	do	10.3	8-17	J. V. Ruzicka	9.7
3-19	do	8.5	8-27	A. E. Johnston	11.6
4- 0	do	7.6	9-10	do	9.2
4-19	do	12.8	9-23	do	6.3
5-11	do	11.6			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

CLEAR CREEK (UPPER)

Ashland—Sec. 35-13-9 E.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-20	H. P. Eisenhuth	4.6	4-9	S. C. Moore	9.9
11-2	do	3.4	5-28	L. F. Hanks	7.6
11-12	do	11.1	7-7	do	7.3
1-16	M. C. Boyer	15.9	8-12	M. C. Boyer	174.0
2-22	do	52.6	9-20	H. P. Eisenhuth	5.3
3-22	Hanks and Moore	16.3			

CLEVELAND DRAIN

Bayard—Sec. 6-20-52 W.

11-3	F. F. LeFever	1.0	5-26	F. F. LeFever	2.0
12-7	A. E. Johnston	2.5	6-6	do	10.4
2-25	F. F. LeFever	1.5	6-21	Follansbee and LeFever	8.0
4-5	A. E. Johnston	1.3	6-29	F. F. LeFever	5.0
4-22	do	.9	8-19	do	3.4
5-10	F. F. LeFever	2.0	9-12	do	6.2

COLD WATER CREEK

Lisco—Sec. 34-18-46 W.

10-12	A. E. Johnston	0.1	5-10	A. E. Johnston	1.1
10-22	do	.2	5-21	do	.1
11-3	do	.5	6-6	do	.1
12-2	do	1.0	6-24	do	.3
12-16	do	1.0	7-5	do	.0
1-9	do	2.5	7-15	do	.0
1-27	do	2.6	8-5	do	.5
2-24	do	1.4	8-25	do	.3
3-21	do	1.5	9-22	do	.2
4-8	do	1.0			

BIG COTTONWOOD CREEK

½ Mi. North of Dunlap—Sec. 27-29-48 W.

10-14	A. E. Johnston	0.0	5-31	L. F. Hanks	3.1
11-9	do	.6	6-23	A. E. Johnston	.5
3-2	do	5.0	8-4	do	.1
3-29	do	1.8	8-24	do	.1
5-4	do	2.3	9-21	do	.1

BIG COTTONWOOD CREEK

Whitney—Sec. 22-33-50 W.

3-28	A. E. Johnston	7.4	8-1	A. E. Johnston	0.2
5-2	do	1.8	8-22	do	.5
6-20	do	2.1	9-19	do	.0

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

BIG COTTONWOOD CREEK

Bloomington—Sec. 36-2-16 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
1-26	M. C. Boyer	4.6	6-16	L. F. Hanks	3.4
2-26	do	6.2	7-20	do	2.2
3-25	Moore and Hanks	4.0	8-22	M. C. Boyer	3.5
4-14	S. C. Moore	4.1	9-24	H. P. Eisenhuth	3.1
5-31	L. F. Hanks	3.2			

LITTLE COTTONWOOD CREEK

Bloomington—Sec. 6-1-15 W.

10-13	C. E. Franklin	0.8	1-18	A. E. Johnston	5.6
11-23	A. E. Johnston	5.3			

LITTLE COTTONWOOD CREEK

South of Whitney Pipe Line Outlet—Sec. 8-32-51 W.

10-19	A. E. Johnston	2.4	5- 2	A. E. Johnston	2.7
11- 7	do	1.5	6-20	do	1.6
12-14	do	1.8	8- 1	do	1.1
3- 1	do	8.1	8-22	do	1.2
3-28	do	10.3	9-19	do	1.1

LITTLE COTTONWOOD CREEK

Below Stuart Bros. Canal—Sec. 18-32-52 W.

10-19	A. E. Johnston	0.6	8- 1	A. E. Johnston	0.0
11- 7	do	.9	8-22	do	.0
5- 2	do	.1	9-19	do	.0
6-20	do	.5			

CROOKED CREEK

Red Cloud—Sec. 1-1-11 W.

10-14	C. E. Franklin	0.1			
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DAWSON COUNTY DRAIN NO. 2

Darr

10- 5	A. E. Johnston	6.1	5-14	A. E. Johnston	6.3
10-28	do	6.1	5-31	do	8.2
11-27	do	6.7	6-11	do	7.7
12-19	do	5.2	6-30	do	5.5
1- 5	do	7.3	7-12	do	5.7
1-20	do	5.8	7-21	do	6.9
2-17	do	6.7	8-11	do	11.7
3-14	do	5.9	9- 1	do	8.9
4-13	do	4.9	9-28	do	5.6

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

DEAD HORSE CREEK

Sec. 32-33-49 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-19	A. E. Johnston	1.0	8- 1	A. E. Johnston	0.2
11- 7	do	.5	8-22	do	.2
5- 2	do	8.4	9-19	do	.7
6-20	do	2.8			

DEER CREEK

Holbrook—Sec. 21-4-24 W.

1-28	M. C. Boyer	0.2	6-18	L. F. Hanks	37.4
2-17	do	3.2	7-21	do	.0
3-26	Moore and Hanks	.4	8-23	M. C. Boyer	.0
4-15	S. C. Moore	.2	9-25	H. P. Eisenhuth	.1
6- 2	L. F. Hanks	781.0			

DEGRAW DRAIN

Below Schermerhorn Canal—Sec. 24-20-51 W.

10- 3	A. W. Hall	9.4	4-22	A. E. Johnston	3.4
11- 3	F. F. LeFever	6.0	6- 1	F. F. LeFever	3.1
1-30	do	4.0	6-21	Follansbee and LeFever	3.0
2-25	do	9.3	7-19	F. F. LeFever	3.6
4- 5	A. E. Johnston	5.3			

DISMAL RIVER

Dunning—Sec. 4-21-24 W.

10- 7	H. P. Eisenhuth	372.0	4- 5	S. C. Moore	346.0
10-24	do	319.0	5-25	L. F. Hanks	333.0
11- 5	do	330.0	6-10	do	332.0
11-18	do	363.0	7-13	do	317.0
1- 8	Hanks and Boyer	363.0	8-16	M. C. Boyer	359.0
2-11	M. C. Boyer	429.0	9-15	H. P. Eisenhuth	329.0
3-16	Hanks and Moore	407.0			

DRIFTWOOD CREEK

South of McCook—Sec. 1-2-30 W.

7-12	A. W. Hall	0.0	8- 8	A. W. Hall	0.0
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DRY CREEK

Merriman—Sec. 20-34-37 W.

10-15	A. E. Johnston	1.5	4-27	A. E. Johnston	32.1
11- 6	do	3.1	6-15	do	2.3
12-10	do	5.0	7-27	do	2.6
1-29	do	3.7	8-17	do	6.0
2-26	do	43.1	9-14	do	.4
3-23	do	34.5			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

DUGOUT CREEK (LOWER)
Below Cooper Canal—Sec. 4-10-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11-10	A. E. Johnston	1.5	3-21	A. E. Johnston	1.5
12- 2	do	1.7	4- 8	do	2.6
1-27	do	1.8	4-21	do	1.4
2-24	do	2.9	7- 5	do	.6

DUGOUT CREEK (UPPER)
Sec. 21-20-50 W.

11- 3	F. F. LeFever	7.5	6-21	Follansbee and LeFever	26.0
12- 9	A. E. Johnston	5.6	6-29	F. F. LeFever	3.0
1-30	F. F. LeFever	3.0	7-19	do	20.8
2-26	do	2.6	7-28	do	7.1
4- 4	A. E. Johnston	1.3	8-20	do	7.3
4-26	do	2.5	9- 3	do	8.9
6- 1	F. F. LeFever	30.5	9-15	do	14.4

ELKHORN RIVER
Neligh—Sec. 20-25-6 W.

10-12	H. P. Eisenhuth	111.0	4- 3	S. C. Moore	300.0
10-27	do	111.0	5-23	L. F. Hanks	121.0
11- 9	do	126.0	6- 8	do	247.0
11-19	do	133.0	7-15	do	104.0
1-11	Boyer and Hanks	144.0	8-13	M. C. Moyer	176.0
2- 8	M. C. Boyer	134.0	9-13	H. P. Eisenhuth	118.0
3-13	Moore and Hanks	179.0			

ELKHORN RIVER
O'Neill—Sec. 31-20-11 W.

10- 9	H. P. Eisenhuth	27.2	4- 4	S. C. Moore	70.0
10-27	do	27.7	5-23	L. F. Hanks	38.1
11- 7	do	31.0	6- 9	do	96.0
11-19	do	31.8	7-14	do	34.2
1- 9	Hanks and Boyer	34.6	8-15	M. C. Boyer	50.0
2- 9	M. C. Boyer	28.4	9-13	H. P. Eisenhuth	29.3
3-15	Moore and Hanks	38.4			

ELKHORN RIVER
Waterloo—Sec. 3-15-10 E.

10-20	H. P. Eisenhuth	384.0	4- 8	S. C. Moore	1020.0
10-31	do	348.0	5-22	L. F. Hanks	775.0
11-13	do	425.0	6-12	Hanks and Eisenhuth	6670.0
11-28	do	663.0	7- 8	L. F. Hanks	1530.0
1-15	Hanks and Boyer	630.0	8-12	M. C. Boyer	5100.0
2- 20	M. C. Boyer	656.0	9-11	H. P. Eisenhuth	493.0
3-19	Moore and Hanks	2020.0	9-19	do	451.0

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

ELM CREEK

Elm Creek—Sec. 33-9-18 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 6	A. E. Johnston	1.2	7-21	A. E. Johnston	31.1
10-28	do	1.2	7-22	do	16.0
4-14	do	.0	8-11	do	5.7
5-16	do	9.2	9- 1	do	16.8
6-11	do	81.1	9- 6	do	9.2
7-12	do	.4	9-28	do	6.5

ELM CREEK

Lester—Sec. 34-2-10 W.

11-24	A. E. Johnston	25.2	1-19	A. E. Johnston	25.5
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FAIRFIELD SEEP

Sec. 18-21-53 W.

11- 3	F. F. LeFever	1.7	4- 5	A. E. Johnston	1.2
12- 7	A. E. Johnston	3.0	4-22	do	.3
1-28	F. F. LeFever	.7	6- 6	F. F. LeFever	1.5
2-25	do	2.6	7- 6	do	3.0
3-10	A. E. Johnston	9.5	8-18	do	1.5
3-19	F. F. LeFever	3.5	9-12	do	1.1

FANNING SEEP

Mitchell—Sec. 27-23-56 W.

10- 1	A. W. Hall	4.2	4-25	A. E. Johnston	2.6
12- 8	A. E. Johnston	5.3	5- 9	F. F. LeFever	3.7
1-27	F. F. LeFever	5.6	5-24	do	3.0
2-10	A. E. Johnston	4.5	6- 3	do	4.0
2-24	F. F. LeFever	2.5	6-16	do	10.0
3- 9	A. E. Johnston	5.7	7- 5	do	2.0
3-18	F. F. LeFever	3.7	8-17	do	4.8
4- 7	A. E. Johnston	2.5	9-30	do	6.7

FARMERS CREEK

Riverton—Sec. 5-1-12 W.

10-14	C. E. Franklin	0.4	4-14	S. C. Moore	2.0
11-24	A. E. Johnston	2.8	5-31	L. F. Hanks	1.0
1-19	do	2.1	6-16	do	1.4
1-25	M. C. Boyer	1.7	7-20	do	.0
2-25	do	15.6	8-22	M. C. Boyer	.2
3-24	Moore and Hanks	5.4	9-23	H. P. Eisenhuth	.2

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

FLAG CREEK
Orleans—Sec. 19-2-19 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-14	C. E. Franklin	0.7	6- 1	L. F. Hanks	1.2
1-26	M. C. Boyer	1.4	6-16	do	.6
2-26	do	4.5	7-20	do	.3
3-25	Moore and Hanks	1.6	8-22	M. C. Boyer	1.0
4-14	S. C. Moore	1.7	9-24	H. P. Eisenhuth	.6

FREMONT SLOUGH
North Platte—Sec. 16-13-30 W.

10- 3	A. E. Johnston	1.0	5-13	A. E. Johnston	2.9
10- 8	do	.5	5-18	do	3.2
10-26	do	2.1	6- 2	do	1.5
10-30	do	1.5	6-28	do	.6
11-28	do	1.4	7- 9	do	.7
12-18	do	1.3	7-19	do	.9
1-23	do	2.0	8- 9	do	.9
2-18	do	2.0	8-30	do	.5
3-17	do	5.3	9- 8	do	.4
4-12	do	1.9	9-26	do	.6
4-16	do	2.2			

FRENCHMAN RIVER
Champion—Sec. 21-6-39 W.

10- 5	C. E. Franklin	48.2	5- 7	A. E. Johnston	56.7
11-18	A. E. Johnston	54.9	7-28	L. F. Hanks	36.6
1-13	do	95.9			

FRENCHMAN RIVER
Champion Mill Dam—Sec. 20-6-39 W.

10- 5	C. E. Franklin	37.0	8- 6	A. W. Hall	22.6
5- 7	A. E. Johnston	34.9	8-11	do	23.4
6-17	A. W. Hall	34.2	9-13	do	33.6
7- 9	do	18.7			

FRENCHMAN RIVER
Above Champion Lake—Sec. 22-6-40 W.

10- 5	C. E. Franklin	18.9	6-17	A. W. Hall	13.0
1-13	A. E. Johnston	33.3	7- 9	do	12.0
5- 7	do	20.2	8- 5	do	26.7
5-19	A. W. Hall	10.2	8-11	do	23.0
5-24	do	10.4	9-13	do	17.1

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

FRENCHMAN RIVER

Below Champion Lake—Sec. 23-6-40 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 5	C. E. Franklin	21.4	5- 7	A. E. Johnston	14.6
11-18	A. E. Johnston	23.2	5-19	A. W. Hall	5.8
1-13	do	28.7	5-24	do	2.3

FRENCHMAN RIVER

West of Culbertson—Sec. 16-3-31 W.

11-20	A. E. Johnston	146.0	7-13	A. W. Hall	33.9
1-14	do	170.0	8-10	do	49.5
5-20	A. W. Hall	36.0	9-14	do	15.7
6-19	do	277.8			

FRENCHMAN RIVER

Below Culbertson Canal—Sec. 31-5-33 W.

9-14	A. W. Hall	9.0			
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FRENCHMAN RIVER

South of Imperial—Sec. 30-6-38 W.

11-18	A. E. Johnston	37.1	7- 9	A. W. Hall	52.3
1-13	do	73.0	7-10	do	20.0
5-24	A. W. Hall	67.7	8- 6	do	54.6
6-18	do	61.2			

FRENCHMAN RIVER

Champion—Sec. 19-6-39 W.

(Measurements Made by U. S. G. S.)

7-28	L. F. Hanks	36.6	8-11	A. W. Hall	13.9
8- 5	A. W. Hall	17.0	9-13	do	26.4

FRENCHMAN RIVER

Above Inman Canal—Sec. 17-6-40 W.

6-17	A. W. Hall	10.4	9-13	A. W. Hall	12.5
7- 9	do	8.8			

FRENCHMAN RIVER

Below Inman Canal—Sec. 17-6-40 W.

10- 5	C. E. Franklin	12.8	6-17	A. W. Hall	4.1
11-18	A. E. Johnston	20.3	7- 9	do	6.8
1-13	do	25.3	8- 5	do	7.4
5- 7	do	11.7	8-11	do	1.1
5-24	A. W. Hall	10.1	9-13	do	8.7

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

FRENCHMAN RIVER

Above Maranville Reservoir—Sec. 10-6-41 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 5	C. E. Franklin	2.8	6-17	A. W. Hall	3.6
11-18	A. E. Johnston	4.2	7- 9	do	3.1
1-13	do	2.2	8- 5	do	4.9
5- 7	do	4.3	9-13	do	3.7

FRENCHMAN RIVER

Below Maranville Reservoir—Sec. 11-6-41 W.

10- 5	C. E. Franklin	0.3	6-17	A. W. Hall	0.8
11-18	A. E. Johnston	3.1	7- 9	do	.3
1-13	do	3.5	8- 5	do	4.0
5- 7	do	.1	8-11	do	2.2
5-24	A. W. Hall	7.3	9-13	do	4.3

FRENCHMAN RIVER

East of Palisade—Sec. 31-5-32 W.

11-19	A. E. Johnston	45.2	8- 8	A. W. Hall	71.8
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FRENCHMAN RIVER

Wauneta—Sec 11-5-36 W.

11-18	A. E. Johnston	77.0	8-10	A. W. Hall	73.5
1-14	do	150.6			

FRENCHMAN RIVER

Hamlet—Sec. 19-5-34 W.

11- 6	J. H. Baily	86.0	4-11	L. F. Hanks	93.0
11-13	A. E. Johnston	91.0	4-19	do	96.0
1- 5	Hanks and Boyer	115.0	5-23	A. W. Hall	74.0
1-14	A. E. Johnston	155.0	6-18	do	121.0
1-20	M. C. Boyer	118.0	7-11	do	66.0
2-29	do	136.0	8- 7	do	118.0
3- 8	Moore and Hanks	95.0	8-10	do	72.0
3-22	S. C. Moore	96.0	9-14	do	78.0

GEBAUER DRAIN

Sec. 28-20-50 W.

10-21	A. E. Johnston	0.2	3-21	A. E. Johnston	0.0
11-10	do	.2	4- 4	do	.7
1-28	do	1.1	4-21	do	.2
2-25	do	.9	5-23	do	.1

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

GERING DRAIN

Sec. 6-21-54 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-12	F. F. LeFever	50.4	5-25	F. F. LeFever	18.8
10-23	do	32.8	6- 3	do	52.1
11- 4	do	29.5	6-17	do	91.0
12- 7	A. E. Johnston	29.3	6-25	do	72.9
1-28	F. F. LeFever	22.4	7- 6	do	43.6
2-10	A. E. Johnston	30.3	7-14	do	58.8
2-25	F. F. LeFever	24.3	7-22	do	60.4
3-10	A. E. Johnston	23.8	8- 2	do	81.7
3-18	F. F. LeFever	23.6	8-17	do	51.3
4- 6	A. E. Johnston	22.6	9- 1	do	72.9
4-26	do	24.3	9- 9	do	77.8
5- 9	F. F. LeFever	22.9	9-21	do	64.5

GORDON CREEK

At Mouth—Sec. 30-33-28 W.

10-16	A. E. Johnston	10.3	4-28	A. E. Johnston	33.1
11- 5	do	12.2	6-16	do	12.3
12-12	do	30.5	7-28	do	6.9
1-30	do	13.6	8-18	do	6.6
2-27	do	14.8	9-15	do	8.3
3-23	do	69.1			

GOVERNMENT SPRING

Below Ft. Robinson Pumping Plant—4 Ft. Weir

10-20	A. E. Johnston	0.2	5- 4	A. E. Johnston	0.4
11- 7	do	.2	6-21	do	.4
12-14	do	.8	8- 2	do	.8
2- 2	do	.4	8-23	do	.4
3- 1	do	.4	9-20	do	.4
3-28	do	.4			

GRAVEL CREEK

Maddox Dam, 3 Ft. Weir—Sec. 9-14-36 W.

10-31	A. E. Johnston	3.0	5-20	A. E. Johnston	2.6
11-30	do	3.0	5-25	do	2.6
12-17	do	3.0	6- 3	do	2.1
1-25	do	2.6	6-25	do	2.6
2-22	do	2.1	7- 7	do	2.9
3-18	do	3.1	8- 6	do	2.5
4-11	do	2.7	8-27	do	3.0
5-11	do	3.1	9-24	do	2.6

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

GREENWOOD CREEK

South Line—Mouth Sec. 28-19-50 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
4- 8	A. E. Johnston	0.0	6-22	F. F. LeFever	0.2
4-21	do	.0	7-25	do	2.9
6- 1	F. F. LeFever	.5	8-13	do	39.4

GREENWOOD CREEK

Sec. 3-18-50 W.

11-10	A. E. Johnston	8.7	4- 8	A. E. Johnston	3.9
2-24	do	12.6	4-21	do	5.3

HAT CREEK

Montrose—Sec. 18-34-51 W.

5- 3	A. E. Johnston	7.9	6-22	A. E. Johnston	4.6
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HAT CREEK

Above Diversion Coffee Canal—Sec. 35-33-56 W.

5- 3	A. E. Johnston	5.6	8- 2	A. E. Johnston	2.1
6-22	do	2.9			

HAT CREEK

Ardmore, South Dakota—Sec. 32-11-54 W.

5- 3	A. E. Johnston	16.6	6-22	A. E. Johnston	13.7
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HORSE CREEK

Lyman—Sec. 25-23-58 W.

10- 1	A. W. Hall	43.0	5-23	F. F. LeFever	23.3
10-21	F. F. LeFever	50.0	6- 2	do	95.0
11- 5	do	30.5	6- 9	do	52.0
12- 8	A. E. Johnston	66.7	6-23	do	305.0
1- 6	F. F. LeFever	12.6	7- 2	do	78.0
1-26	do	39.3	7-12	do	85.0
2- 9	A. E. Johnston	65.0	7-21	do	96.0
2-24	F. F. LeFever	51.0	7-30	do	151.0
3- 9	A. E. Johnston	39.5	8-16	do	102.0
3-18	F. F. LeFever	35.4	8-26	do	109.3
4- 6	A. E. Johnston	24.2	9- 7	do	98.1
4-25	do	37.8	9-20	do	166.9
5- 7	F. F. LeFever	97.2	9-30	do	176.0

HORSE CREEK

Pringle's Ranch—Sec. 23-1-39 W.

10-13	C. E. Franklin	1.1	5-21	A. W. Hall	0.9
11-19	A. E. Johnston	2.1	7-14	do	.9
1-15	do	3.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

INDIAN CREEK

Northport Wye—Sec. 19-20-50 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 3	A. W. Hall	22.3	6-21	Follansbee and LeFever	19.0
11- 3	F. F. LeFever	9.2	6-29	F. F. LeFever	6.0
12- 9	A. E. Johnston	7.3	7-19	do	15.8
1-30	F. F. LeFever	5.9	7-28	do	12.5
2-26	do	5.3	8-20	do	12.6
4- 4	A. E. Johnston	4.4	9- 3	do	24.7
4-26	do	5.9	9-15	do	28.0
6- 1	F. F. LeFever	6.8			

INDIAN CREEK

Max—Sec. 23-2-36 W.

11-20	A. E. Johnston	3.3	7-14	A. W. Hall	1.1
6-20	A. W. Hall	4.2	8- 9	do	.0

INDIAN CREEK

Red Cloud—Sec. 33-2-11 W.

10-14	C. E. Franklin	0.2	5-31	L. F. Hanks	0.4
1-25	M. C. Boyer	.3	6-16	do	.2
2-25	do	20.4	7-20	do	.0
3-25	Moore and Hanks	6.4	8-22	M. C. Boyer	.0
4-14	S. C. Moore	1.2	9-23	H. P. Eisenhuth	.0

JIM CREEK

Below Slattery Canal—Sec. 13-33-57 W.

5- 3	A. E. Johnston	0.5	8- 2	A. E. Johnston	.1
6-22	do	.4			

JIM CREEK

Above Highline Canal—Sec. 13-33-57 W.

5- 3	A. E. Johnston	0.7	8- 2	A. E. Johnston	0.3
6-22	do	.4			

KEITH LINCOLN COUNTY DRAIN

Sarben—Sec. 23-14-35 W.

10- 2	A. E. Johnston	3.0	5-19	A. E. Johnston	2.3
10- 9	do	2.9	6- 3	do	3.8
10-24	do	3.0	6- 9	do	1.7
10-31	do	.0	6-27	do	1.2
11-30	do	3.7	7- 8	do	3.3
1- 7	do	4.1	7-18	do	2.6
1-25	do	2.4	8- 8	do	1.8
2-22	do	3.2	8-29	do	1.5
3-18	do	4.2	9-24	do	2.1
5-12	do	1.3			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

LANE DRAIN
Lyman—Sec. 30-23-57 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 1	A. W. Hall	3.3	5- 7	F. F. LeFever	1.0
12- 8	A. E. Johnston	2.2	6- 2	do	2.4
1-26	F. F. LeFever	1.0	6-23	do	2.0
2-24	do	1.5	7-30	do	6.8
3-18	do	1.0	9- 7	do	7.4
4- 6	A. E. Johnston	1.5			

LARABEE CREEK

Junction with White Clay Creek—Sec. 6-34-44 W.

4-30	A. E. Johnston	5.5	8-19	A. E. Johnston	1.7
6-14	do	4.5	9-16	do	2.4
7-20	do	2.3			

LEANDER CREEK

South of Merriman—Sec. 33-34-37 W.

10-15	A. E. Johnston	0.0	4-27	A. E. Johnston	5.3
11- 6	do	.0	6-15	do	.0
12-10	do	.0	7-27	do	.0
2-26	do	9.0	8-17	do	.0
3-23	do	12.9	9-11	do	.0

LEWELLEN DRAIN

South of Lewellen—Sec. 28-16-42 W.

10-10	A. E. Johnston	3.0	5-20	A. E. Johnston	1.2
10-23	do	3.0	5-24	do	1.4
11- 2	do	2.3	6- 4	do	1.0
12- 1	do	2.2	6- 8	do	.9
12-16	do	1.5	6-25	do	.9
1- 8	do	1.6	7- 6	do	1.3
1-26	do	.9	7-16	do	1.9
2-23	do	2.2	7-27	J. V. Ruzicka	.6
3-19	do	1.2	8- 6	A. E. Johnston	1.1
4- 9	do	.8	8-27	do	1.4
4-19	do	1.3	9-10	do	1.1
5-10	do	1.6	9-23	do	1.7

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

LINCOLN COUNTY DRAIN NO. 1

1 Mi. West of North Platte—Sec. 30-14-30 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 3	A. E. Johnston	83.0	5-12	A. E. Johnston	53.6
10- 8	do	85.2	5-19	do	72.7
10-28	do	88.0	5-26	do	88.6
10-30	do	6.8	6- 2	do	106.2
11-28	do	54.7	6-13	do	113.0
12-17	do	53.5	6-28	do	103.2
1- 7	do	56.2	7- 9	do	101.3
1-22	do	50.3	7-19	do	92.6
2-20	do	56.6	8- 9	do	104.2
3-18	do	44.8	8-30	do	112.1
4-12	do	44.9	9- 9	do	117.6
4-16	do	42.3	9-26	do	98.3

LINCOLN COUNTY DRAIN NO. 2

Sec. 12-14-33 W.

10- 2	A. E. Johnston	5.2	5-12	A. E. Johnston	4.9
10- 9	do	5.3	5-19	do	5.2
10-24	do	5.1	5-26	do	6.5
10-31	do	5.6	6- 3	do	8.4
11-30	do	5.5	6- 9	do	8.1
12-17	do	4.8	6-27	do	8.4
1- 7	do	5.8	7- 8	do	6.4
1-25	do	3.8	7-18	do	8.9
2-22	do	4.7	8- 8	do	8.3
3-18	do	5.9	8-29	do	9.1
4-11	do	3.7	9-24	do	6.9
4-18	do	4.9			

LOGEPOLE CREEK

Wyoming-Nebraska Line—Sec. 11-14-59 W.

10- 9	C. E. Franklin	7.4	6- 2	A. W. Hall	5.2
11-16	A. E. Johnston	9.4	7- 7	Hall and Hanna	1.6
2- 5	do	9.9	7-26	A. W. Hall	2.8
3- 4	do	14.4	8-19	do	2.2
3-31	do	8.2	9-10	do	3.7
5- 5	do	7.9			

LOGEPOLE CREEK

Bushnell—Sec. 31-15-57 W.

10- 9	C. E. Franklin	13.4	3- 4	A. E. Johnston	21.5
11-16	A. E. Johnston	17.4	3-31	do	21.5
2- 5	do	15.9	5- 5	do	18.9

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

LODGEPOLE CREEK

Above Kimball Reservoir—Sec. 33-15-57 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11-16	A. E. Johnston	17.0	6- 2	A. W. Hall	15.4
2- 5	do	16.8	7- 7	Hall and Hanna	11.7
3- 4	do	23.4	7-26	A. W. Hall	10.9
3-31	do	20.5	8-19	do	10.3
5- 5	do	18.3	9-10	do	10.8

LODGEPOLE CREEK

Below Kimball Reservoir—Sec. 36-15-57 W.

11-16	A. E. Johnston	2.7	6- 3	A. W. Hall	4.5
2- 5	do	4.3	7- 7	Hall and Hanna	3.9
3- 4	do	6.7	7-26	A. W. Hall	5.4
3-31	do	4.1	8-19	do	3.9
5- 5	do	5.0	9-10	do	3.0

LODGEPOLE CREEK

Below Hurley-Lilly-Polly Canal—East Line Sec. 26-15-56 W.

6- 3	A. W. Hall	6.9
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LODGEPOLE CREEK

Below Atkins-Polly Canal—Center Sec. 30-15-55 W.

6- 3	A. W. Hall	8.6
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LODGEPOLE CREEK

North of Kimball—Sec. 29-15-55 W.

10- 9	C. E. Franklin	11.0	3-30	A. E. Johnston	3.7
11-16	A. E. Johnston	10.6	6- 2	A. W. Hall	.4
2- 5	do	7.9	7-26	do	5.5
3- 4	do	16.6	8-19	do	9.3

LODGEPOLE CREEK

Above Bennett Reservoir—Sec. 28-15-55 W.

5- 5	A. E. Johnston	7.7	7-26	A. W. Hall	0.9
6- 3	Hall and Hanna	.9	8-19	do	1.9
7- 6	A. W. Hal	.5	9-10	do	.9

LODGEPOLE CREEK

North of Dix—Sec. 26-15-54 W.

10- 9	C. E. Franklin	0.0	3-31	A. E. Johnston	1.9
11-16	A. E. Johnston	.0	5- 5	do	.0
2- 6	do	.0	6- 4	A. W. Hall	.0
3- 5	do	.0	9-10	do	.0

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

LODGEPOLE CREEK

South of Sidney—Sec. 32-14-49 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11-17	A. E. Johnston	0.1	5-25	A. W. Hall	0.6
2- 6	do	.2	6- 4	do	.6
3- 5	do	.2	6-13	do	.8
3-22	do	.5	7-25	do	2.8
3-31	do	.8	8- 3	do	2.5
5- 6	do	1.2	9-12	do	4.0
5-18	A. W. Hall	.6			

LODGEPOLE CREEK

Above Kreuger Canal—Center Sec. 31-14-48 W.

6-10	A. W. Hall	2.8	8-12	A. W. Hall	6.7
6-24	Hall and Willis	2.8	8-18	do	5.9
7- 8	A. W. Hall	2.4	9-12	do	10.6
8- 3	do	6.2			

LODGEPOLE CREEK

Below Kreuger Lake—Sec. 29-14-48 W.

3-22	A. E. Johnston	4.7	7- 8	A. W. Hall	0.0
3-31	do	3.6	7-24	do	.0
5- 6	do	1.0	8- 3	do	2.0
5-18	do	.0	8-12	do	1.7
5-25	do	.0	8-18	do	.1
6- 9	do	.0	9-12	do	10.8
6-24	Hall and Willis	.4			

LODGEPOLE CREEK

Below McLaughlin Dam—Sec. 36-14-48 W.

3-22	A. E. Johnston	0.0	6-24	A. W. Hall	0.0
3-31	do	.0	7- 8	do	.0
5- 6	do	.0	7-23	do	.0
5-18	A. W. Hall	.0	8- 3	do	.0
5-25	do	.0	8-12	do	.0
6- 9	do	.0			

LODGEPOLE CREEK

Below Bluhm Dam—Sec. 36-14-48 W.

5- 6	A. E. Johnston	0.0	7-27	A. W. Hall	0.0
6- 9	A. W. Hall	.0	8- 3	do	.2
6-10	Hall and Gardner	.0	8-12	do	.0
6-24	Hall and Willis	.0	8-18	do	.0
7- 8	A. W. Hall	.0	9-12	do	2.8

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

LODGEPOLE CREEK

Above Bluhm Dam—Sec. 35-14-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
5-18	Hall and Follansbee	0.6	8-12	A. W. Hall	0.3
5-25	A. W. Hall	.4	8-18	do	1.1
8- 3	do	1.4	9-12	do	4.9
8- 5	R. H. Willis	1.5			

LODGEPOLE CREEK

Above LaGrange Dam—Sec. 27-14-48 W.

3-22	A. E. Johnston	5.2	8- 3	A. W. Hall	1.8
5- 6	do	5.0	8-12	do	2.0
5-18	A. W. Hall	1.1	9-12	do	7.2
5-25	do	.3			

LODGEPOLE CREEK

Rock Pile—Northeast Corner Sec. 33-14-48 W.

3-22	A. E. Johnston	5.9	5- 6	A. E. Johnston	5.0
3-31	do	2.5	8-18	A. W. Hall	4.2

LODGEPOLE CREEK

Below LaGrange Dam—Sec. 27-14-48 W.

3-31	A. E. Johnston	0.3	7-27	A. W. Hall	1.5
5- 6	do	2.0	8- 3	do	2.4
5-18	Hall and Follansbee	.8	8-12	do	1.8
5-25	A. W. Hall	.8	8-18	do	2.7
6- 9	do	.8	9-12	do	7.3
6-21	do	.4			

LODGEPOLE CREEK

West of Lodgepole—Sec. 30-14-46 W.

10-10	C. E. Franklin	0.3	6-21	A. W. Hall	0.9
2-12	A. E. Johnston	4.8	7- 8	Hall and Gardner	.0
3- 5	do	18.7	8- 3	A. W. Hall	.0
4- 1	do	.1	8-12	do	.0
5- 6	do	7.3	9-12	do	.0
5-25	A. W. Hall	.9			

LODGEPOLE CREEK

Chappell—Sec. 21-13-45 W.

10-10	C. E. Franklin	0.5	5- 6	A. E. Johnston	9.9
11-17	A. E. Johnston	.7	5-25	A. W. Hall	1.3
2-12	do	2.2	8- 3	do	.7
3- 5	do	10.7	8-12	do	.0
4- 1	do	5.7	9-12	do	.1

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

LODGEPOLE CREEK

Interstate Station—Sec. 12-12-45 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-10	C. E. Franklin	0.0	5-25	A. W. Hall	2.6
11-17	A. E. Johnston	.3	6-13	do	.9
2-12	do	3.2	8-3	do	1.5
3-5	do	7.4	8-12	do	1.0
4-1	do	.8	9-12	do	1.9
5-6	do	13.8			

LONERGAN CREEK

Sec. 19-15-39 W.

10-1	A. E. Johnston	3.0	5-20	A. E. Johnston	4.6
10-10	do	4.2	5-25	do	4.5
10-23	do	6.1	6-4	do	3.6
11-2	do	3.6	6-8	do	.7
12-1	do	7.3	6-25	do	5.5
12-16	do	5.7	7-7	do	2.0
1-8	do	12.8	7-16	do	1.8
1-26	do	8.9	8-6	do	1.5
2-23	do	13.6	8-15	J. V. Ruzicka	1.1
3-19	do	9.2	8-27	A. E. Johnston	7.6
4-9	do	5.4	9-10	do	7.5
4-19	do	6.5	9-23	do	3.7
5-11	do	5.4			

LOST CREEK

Sec. 1-16-44 W.

10-12	A. E. Johnston	7.3	6-4	A. E. Johnston	6.4
10-23	do	4.3	6-8	Johnston and Follansbee	9.6
11-3	do	2.7	6-25	A. E. Johnston	3.9
12-1	do	3.1	7-6	do	3.6
12-16	do	2.1	7-15	do	2.4
2-23	do	5.0	8-5	do	3.1
3-19	do	6.7	8-10	J. V. Ruzicka	7.2
4-9	do	5.9	8-16	do	2.0
4-19	do	7.0	8-26	A. E. Johnston	9.7
5-9	do	6.9	9-10	do	5.6
5-21	do	3.3	9-23	do	9.4
5-24	do	7.2			

MIDDLE LOUP RIVER

Sargent—Sec. 1-19-20 W.

10-8	H. P. Eisenhuth	870.0	4-5	S. C. Moore	836.0
10-25	do	883.0	5-25	L. F. Hanks	917.0
11-5	do	848.0	6-10	do	801.0
11-18	do	928.0	7-13	do	607.0
1-8	Boyer and Hanks	867.0	8-16	M. C. Boyer	717.0
2-19	M. C. Boyer	1140.0	9-15	H. P. Eisenhuth	818.0
3-16	Moore and Hanks	4230.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued
Year Ending September 30, 1932

MIDDLE LOUP RIVER
St. Paul—Sec. 10-14-10

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-6	H. P. Eisenhuth	1120.0	3-29	S. C. Moore	1400.0
10-23	do	1200.0	4-6	do	1020.0
11-4	do	1020.0	4-16	do	1240.0
11-17	do	1180.0	5-20	L. F. Hanks	842.0
11-27	do	742.0	5-26	do	1650.0
12-2	do	1180.0	6-4	do	1940.0
12-5	do	916.0	6-20	do	2800.0
1-6	Boyer and Hanks	868.0	7-11	do	1030.0
1-20	M. C. Boyer	820.0	7-15	do	748.0
1-30	do	1100.0	8-9	M. C. Boyer	1200.0
2-12	do	1040.0	8-17	do	1050.0
3-17	Moore and Hanks	3890.0	9-9	H. P. Eisenhuth	880.0
3-17	do	18000.0	9-16	do	973.0

NORTH LOUP RIVER
Taylor—Sec. 22-21-18 W.

10-8	H. P. Eisenhuth	512.0	4-4	S. C. Moore	404.0
10-26	do	500.0	5-21	L. F. Hanks	397.0
11-6	do	510.0	6-10	do	429.0
11-18	do	549.0	7-13	do	341.0
1-8	Hanks and Boyer	482.0	8-15	M. C. Boyer	367.0
2-10	M. C. Boyer	749.0	9-14	H. P. Eisenhuth	421.0
3-15	Moore and Hanks	661.0			

NORTH LOUP RIVER
St. Paul—Sec. 14-15-10 W.

10-5	H. P. Eisenhuth	797.0	3-29	S. C. Moore	1010.0
10-23	do	838.0	4-6	do	868.0
11-4	do	787.0	4-18	do	916.0
11-17	do	880.0	5-20	L. F. Hanks	642.0
11-27	do	694.0	5-26	do	2010.0
12-2	do	938.0	6-4	do	1160.0
12-5	do	1010.0	6-20	do	1780.0
1-7	Boyer and Hanks	913.0	7-15	do	604.0
1-20	M. C. Boyer	827.0	8-9	M. C. Boyer	1200.0
1-30	do	471.0	8-17	do	756.0
3-15	Moore and Hanks	1750.0	9-9	H. P. Eisenhuth	668.0
3-17	do	8010.0	9-16	do	743.0
3-17	do	9700.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

LOUP RIVER

Genoa—Sec. 25-17-4 W.

(Measurements Made by U. S. G. S.)

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 5	H. P. Elsenhuth	1710.0	2-19	M. C. Boyer	1910.0
10-22	do	1850.0	3-10	Hanks and Moore	490.0
11- 4	do	2120.0	3-18	do	8910.0
11-16	do	2160.0	3-30	S. C. Moore	2890.0
11-26	do	1070.0	4- 7	do	2360.0
12- 1	do	2610.0	4-19	do	2370.0
12- 4	do	2210.0	5-21	L. F. Hanks	1670.0
1-12	Boyer and Hanks	1450.0	5-26	do	4070.0
1-19	M. C. Boyer	838.0	6- 6	do	2150.0
2- 3	do	1320.0	6-20	do	6560.0

LOUP RIVER

Columbus—Sec. 25-17-1 W.

(Measurements Made by U. S. G. S.)

10- 4	H. P. Eisenhuth	1690.0	5-28	L. F. Hanks	6050.0
10-21	do	2240.0	6- 7	do	3070.0
11- 3	do	1850.0	7- 8	do	1970.0
11-14	do	2110.0	7-16	do	1440.0
1-13	U. S. G. S.	1890.0	8-11	M. C. Boyer	2090.0
3-12	Hanks and Moore	736.0	8-17	do	1690.0
3-18	do	10300.0	9-10	H. P. Elsenhuth	1850.0
5-21	L. F. Hanks	1880.0	9-17	do	2050.0

LOVELY CREEK

East of Franklin—Sec. 35-2-14 W.

10-14	C. E. Franklin	0.2	1-19	A. E. Johnston	2.5
11-24	A. E. Johnston	2.5			

McGUIRES SLOUGH

Mouth—Sec. 21-6-40 W.

10- 5	C. E. Franklin	2.7	1-13	A. E. Johnston	4.0
11-18	A. E. Johnston	2.2	5- 7	do	2.9

MEDICINE CREEK

Cambridge—Sec. 18-4-25 W.

10-14	C. E. Franklin	11.2	4-15	S. C. Moore	53.5
11-23	A. E. Johnston	55.9	6- 2	L. F. Hanks	1040.0
1-18	do	66.3	6-17	do	534.0
1-28	M. C. Boyer	42.1	7-21	do	26.4
2-27	do	67.0	8-23	M. C. Boyer	19.9
3-26	Moore and Hanks	56.8	9-25	H. P. Elsenhuth	35.2

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

MELBETA DRAIN

½ Mi. West Melbeta Bridge—Sec. 24-21-54 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 3	F. F. LeFever	3.0	5-10	F. F. LeFever	1.7
12- 7	A. E. Johnston	4.2	5-25	do	8.0
1-28	F. F. LeFever	2.4	6- 6	do	.3
2-11	A. E. Johnston	2.6	7- 6	do	.0
2-25	F. F. LeFever	3.5	7-26	do	.0
3-10	A. E. Johnston	4.3	8- 3	do	.8
4- 5	do	2.8	8-18	do	.7
4-22	do	1.6	9-12	do	5.8

MINNECHUDUZA CREEK

Valentine—Sec. 28-34-27 W.

10-17	A. E. Johnston	9.8	4-29	A. E. Johnston	92.5
11- 6	do	16.1	6-17	do	38.7
12-12	do	13.6	7-29	do	10.6
1-31	do	22.0	8-18	do	36.3
2-29	do	48.3	9-16	do	6.8
3-25	do	34.2			

MITCHELL SPILLWAY

From Tri-State Canal—Sec. 35-23-56 W.

10- 9	F. F. LeFever	24.4	3-18	F. F. LeFever	0.0
10-22	do	23.0	4- 6	A. E. Johnston	5.5
12- 8	A. E. Johnston	4.0	4-25	do	8.4
1- 8	F. F. LeFever	.5	5- 9	F. F. LeFever	5.5
1-27	do	.7	6- 3	do	.3
2-24	do	.3	6-16	do	68.0

MONROE CREEK

Below Big Monroe Canal—Sec. 33-33-56 W.

5- 3	A. E. Johnston	0.6	8- 2	A. E. Johnston	0.1
6-22	do	1.3			

MORRILL DRAIN

Morrill—Sec. 13-23-57 W.

12- 8	A. E. Johnston	0.0	6-15	F. F. LeFever	0.5
4-25	do	1.2	7-12	do	1.6
5-23	F. F. LeFever	.5	8-16	do	3.6
6- 2	do	.3	9- 8	do	4.5

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

MUDDY CREEK
Arapahoe—Sec. 16-4-23 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-14	C. E. Franklin	1.6	4-15	S. C. Moore	5.2
11-23	A. E. Johnston	4.1	6- 2	L. F. Hanks	1880.0
1-18	do	15.6	6-18	do	75.0
1-27	M. C. Boyer	2.3	7-21	do	41.5
2-27	do	13.9	8-23	M. C. Boyer	1.0
3-26	Hanks and Moore	4.9	9-25	H. P. Eisenhuth	1.0

MUDDY CREEK
Hazard—Sec. 29-13-15 W.

10- 7	H. P. Eisenhuth	13.0	4-16	S. C. Moore	28.8
10-24	do	17.5	5-25	L. F. Hanks	14.4
11- 5	do	16.3	6-11	do	100.0
11-17	do	22.2	7-12	do	26.1
1- 7	Boyer and Hanks	28.7	8-16	M. C. Boyer	42.1
2-11	M. C. Boyer	175.0	9-15	H. P. Eisenhuth	29.7
3-16	Moore and Hanks	37.6			

NINE MILE DRAIN
S. W. Corner Sec. 24-21-53 W.

1-20	F. F. LeFever	94.7	6-21	Follansbee and LeFever	161.0
2-11	A. E. Johnston	102.0	6-27	F. F. LeFever	152.0
2-25	F. F. LeFever	94.6	7- 9	do	150.0
3-10	A. E. Johnston	119.3	7-16	do	173.0
3-19	F. F. LeFever	93.2	7-26	do	172.8
4- 5	A. E. Johnston	88.3	8- 5	do	202.8
4-22	do	82.0	8-19	do	232.0
5-11	F. F. LeFever	84.7	9- 3	do	230.0
5-26	do	91.1	9-13	do	221.0
6- 6	do	120.0	9-27	do	237.0

NINE MILE DRAIN
Sec. 25-21-53 W.

10-13	F. F. LeFever	177.0	11- 3	F. F. LeFever	144.0
10-13	do	178.0	12- 7	A. E. Johnston	143.0
10-26	do	160.0	1- 8	F. F. LeFever	110.6

NIOBRARA RIVER
Wyoming-State Line—Sec. 20-31-58 W.

6-21	A. E. Johnston	6.5	8-23	A. E. Johnston	3.8
8- 3	Johnston and Rasmussen	3.9	9-20	do	3.2

NIOBRARA RIVER
South of Harrison—Sec. 9-29-56 W.

6-21	A. E. Johnston	6.4	8-23	A. E. Johnston	3.9
8- 3	Rasmussen and Johnston	5.8	9-20	do	6.2

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

NIOBRARA RIVER
Agate—Sec. 7-28-55 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
6-23	A. E. Johnston	16.8	8-24	A. E. Johnston	8.3
8- 3	Rasmussen and Johnston	10.5	9-21	do	13.4

NIOBRARA RIVER
Below Mouth of Whistle Creek—Sec. 7-28-53 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
6-23	A. E. Johnston	17.9	8-24	A. E. Johnston	4.9
8- 3	Johnston and Rasmussen	4.9	9-21	do	6.4

NIOBRARA RIVER
South of Marsland—Sec. 5-28-51 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-20	A. E. Johnston	9.9	6-23	A. E. Johnston	27.5
11- 9	do	4.7	8- 4	do	9.7
3- 2	do	61.0	8-24	do	4.7
3-29	do	50.8	9-21	do	8.4
5- 4	do	53.2			

NIOBRARA RIVER
Dunlap—Sec. 27-29-48 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-14	A. E. Johnston	16.5	3-29	A. E. Johnston	83.2
10-20	do	20.0	5- 4	do	52.0
11- 9	do	18.7	6-23	do	23.6
12-15	do	60.9	8- 4	do	32.1
2- 3	do	34.3	8-24	do	13.4
3- 2	do	90.0	9-21	do	13.8

NIOBRARA RIVER
U. S. G. S. Station—South of Gordon

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-15	A. E. Johnston	114.0	4-29	A. E. Johnston	254.0
11- 5	do	141.9	6-15	do	98.1
12-10	do	136.0	7-27	do	126.0
2- 1	do	126.0	8-17	do	91.2
2-26	do	310.0	9-11	do	104.0
3-25	A. E. Johnston	304.0			

NIOBRARA RIVER
Below Dam at Valentine—Sec. 28-34-27 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-16	A. E. Johnston	800.0	4-29	A. E. Johnston	1268.7
11- 6	do	904.0	6-17	do	902.6
12-12	do	909.0	7-29	do	820.8
1-31	do	426.0	8-18	do	823.8
2-29	do	1240.0	9-16	do	741.6
3-25	do	1281.0			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

NIOBRARA RIVER
U. S. G. S. Station—Valentine

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-16	A. E. Johnston	758.5	4-28	A. E. Johnston	1240.0
11- 5	do	781.7	6-16	do	823.0
12-11	do	780.0	7-28	do	705.0
1-30	do	446.0	8-18	do	717.0
2-27	do	1247.0	9-15	do	691.0
3-24	do	1090.0			

OAK CREEK
Lincoln—Sec. 16-10-6 E.

10-21	H. P. Eisenhuth	4.8	4-11	S. C. Moore	21.5
11- 2	do	3.1	5-27	L. F. Hanks	26.3
11-12	do	5.4	6-11	do	53.0
1-21	M. C. Boyer	10.1	7-18	do	7.1
2-23	do	45.1	8-19	M. C. Boyer	11.8
3-22	Moore and Hanks	27.0	9-20	H. P. Eisenhuth	4.4

OTTER CREEK
Sec. 9-15-40 W.

10- 1	A. E. Johnston	11.0	5-20	A. E. Johnston	21.5
10-10	do	24.4	5-25	do	20.9
10-23	do	25.0	6- 4	do	19.8
11- 2	do	25.0	6- 8	Johnston and Follansbee	1.9
12- 1	do	28.0	6-25	A. E. Johnston	19.5
12-16	do	17.2	7- 7	do	3.9
1- 8	do	29.3	7-16	do	19.6
1-26	do	23.2	7-30	J. V. Ruzicka	6.6
2-23	do	25.3	8- 6	A. E. Johnston	6.8
3-19	do	27.9	8-19	J. F. Ruzicka	24.7
4- 9	do	23.1	8-27	A. E. Johnston	27.8
4-19	do	22.6	9-10	do	24.1
5-11	do	26.0	9-23	do	24.9

LITTLE PAPILLION CREEK
Omaha—Sec. 35-15-13 E.

10-19	H. P. Eisenhuth	3.4	5-22	L. F. Hanks	7.3
10-31	do	3.4	6-12	do	16.9
11-13	do	4.5	7- 8	do	8.1
1-15	Boyer and Hanks	10.6	8-12	M. C. Boyer	6020.0
2-20	M. C. Boyer	19.9	8-12	do	7100.0
3-19	Hanks and Moore	19.8	9-19	H. P. Eisenhuth	7.7
4-11	S. C. Moore	10.0			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

PAWNEE CREEK
West Line—Sec. 4-12-27 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 5	A. E. Johnston	7.0	6- 1	A. E. Johnston	15.7
10-27	do	6.5	6-11	do	24.5
11-27	do	9.6	6-29	do	8.0
1- 6	do	10.3	7-11	do	9.1
1-21	do	7.0	7-20	do	6.0
2-18	do	8.3	8-10	do	7.3
3-16	do	8.9	8-31	do	4.3
4-13	do	11.9	9-27	do	5.8
5-17	do	2.2			

PINE CREEK
Colclessor Mill—Sec. 33-30-44 W.

10-15	A. E. Johnston	20.7	4-30	A. E. Johnston	23.5
11- 4	do	26.4	6-14	do	20.9
12-10	do	23.9	7-27	do	21.7
1-29	do	24.6	8-17	do	19.6
2-25	do	28.4	9-13	do	17.9
3-26	do	37.8			

PLUM CREEK
U. P. R. R. Bridge—Sec. 10-19-49 W.

10-21	A. E. Johnston	5.2	4-21	A. E. Johnston	3.7
11- 6	F. F. LeFever	4.0	5-23	do	4.0
11-10	A. E. Johnston	4.3	5-31	F. F. LeFever	3.1
12- 2	do	6.5	6- 8	do	3.0
1-28	do	8.8	6-22	do	3.0
2-25	do	4.7	6-30	do	3.9
2-26	F. F. LeFever	3.8	7- 8	do	3.3
3-21	A. E. Johnston	4.7	8-22	do	3.0
4- 4	do	4.2	9-14	do	4.1

PLUM CREEK
Mouth—North Line of Sec. 14-32-22 W.

1-11	A. E. Johnston	5.6
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PUMPKINSEED CREEK
Gering-Kimball Highway—Sec. 4-19-55 W.

10- 8	C. E. Franklin	4.8	3-30	A. E. Johnston	12.1
2- 5	A. E. Johnston	4.6	7-18	A. W. Hall	.5
3- 4	do	10.1			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

PUMPKINSEED CREEK

5 Mi. South of Bridgeport—Sec. 28-19-50 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11-10	A. E. Johnston	21.3	6- 1	F. F. LeFever	7.7
2- 6	do	21.7	6-22	do	14.0
2-24	do	46.2	7- 7	do	6.7
4- 8	do	26.2	7-25	do	6.4
4-21	do	31.9	8-13	do	7.4
5-16	Hail and LeFever	8.3	9- 6	do	7.2

PUMPKINSEED CREEK

Mouth—Sec. 12-19-50 W.

10-11	F. F. LeFever	27.2	4-21	A. E. Johnston	34.8
10-22	A. E. Johnston	26.1	5- 4	F. F. LeFever	46.1
10-27	F. F. LeFever	31.4	6- 1	do	27.4
11- 3	A. E. Johnston	40.0	6- 6	A. E. Johnston	20.2
11- 6	F. F. LeFever	21.3	6- 8	F. F. LeFever	16.6
11-10	A. E. Johnston	37.4	6-20	do	60.1
12-16	do	41.7	6-30	do	34.1
1- 9	do	33.6	7- 9	do	15.8
1-27	do	33.0	7-18	do	42.4
2- 6	do	33.6	7-25	do	33.4
2-24	do	5.6	8- 1	do	44.7
2-26	F. F. LeFever	50.2	8-13	do	18.2
3-21	A. E. Johnston	63.0	9- 6	do	13.2
4- 2	F. F. LeFever	50.2	9-15	do	13.4
4- 8	A. E. Johnston	30.4	9-26	do	14.0

RED WILLOW CREEK

Red Willow—Sec. 17-3-28 W.

10-11	C. E. Franklin	8.0	1-18	A. E. Johnston	51.2
11-23	A. E. Johnston	36.9			

RED WILLOW CREEK

Below Wild Horse Drain—Southwest Corner of Sec. 7-20-51 W.

1-30	F. F. LeFever	67.6	6- 6	F. F. LeFever	37.0
2- 8	A. E. Johnston	72.0	6-21	Follansbee and LeFever	146.0
2-25	F. F. LeFever	62.2	6-29	F. F. LeFever	49.5
3-10	A. E. Johnston	76.7	7-19	do	68.1
3-19	F. F. LeFever	64.0	7-28	do	68.8
4- 5	A. E. Johnston	59.3	8- 5	do	84.0
4-22	do	53.4	8-20	do	92.3
5-11	F. F. LeFever	48.9	9- 3	do	103.0
5-19	do	256.0	9-12	do	114.0
5-27	do	76.6	9-27	do	150.0

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

RED WILLOW CREEK

To River—Southwest Corner Sec. 6-20-51 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 3	A. W. Hall	72.7	6- 6	F. F. LeFever	6.6
10-13	F. F. LeFever	64.7	6-21	Follansbee and LeFever	96.3
10-26	do	57.4	6-29	F. F. LeFever	3.1
11- 3	do	50.1	7-19	do	10.2
12- 7	A. E. Johnston	52.4	8-20	do	33.0
1- 9	F. F. LeFever	42.7	9-12	do	30.4
1-30	do	39.1	9-27	do	64.8

REPUBLICAN RIVER

Colorado-Nebraska Line—Sec. 9-1-42 W.

10-13	C. E. Franklin	11.9	6-20	A. W. Hall	51.9
11-19	A. E. Johnston	59.3	7-15	do	5.0
1-15	do	80.6	8- 9	do	30.9
5-21	A. W. Hall	8.6			

REPUBLICAN RIVER

Sanborn—Sec. 11-1-42 W.

11-19	A. E. Johnston	55.1			
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REPUBLICAN RIVER (NORTH BRANCH)

Benkleman—Sec. 19-1-37 W.

11-20	A. E. Johnston	108.0	6-20	A. W. Hall	171.1
1-15	do	139.0	7-11	do	3.8
5-21	A. W. Hall	28.7	8- 9	do	64.8

REPUBLICAN RIVER (SOUTH BRANCH)

South of Benkleman—Sec. 19-1-37 W.

10-13	C. E. Franklin	12.7	6-20	A. W. Hall	160.0
11-20	A. E. Johnston	38.0	7-11	do	8.7
1-15	do	94.0	8- 9	do	51.1
5-21	A. W. Hall	20.7			

REPUBLICAN RIVER

Max—Sec. 32-2-36 W.

11- 1	J. H. Baily	93.0	4-16	L. F. Hanks	69.0
11-19	A. E. Johnston	151.0	6-20	A. W. Hall	441.0
1-15	do	200.0	7-14	do	5.1

REPUBLICAN RIVER

Culbertson—Between Secs. 16 and 17-3-31 W.

11-20	A. E. Johnston	178.0	7-13	A. W. Hall	2.6
1-14	do	198.0	8-10	do	113.5
5-20	A. W. Hall	48.2	9-15	do	6.3
6-19	do	1800.7			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

REPUBLICAN RIVER
McCook—Sec. 31-3-29 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11-21	A. E. Johnston	340.0	6-19	A. W. Hall	4520.0
1-16	do	340.0	7-12	do	.3
5-20	A. W. Hall	59.6	8- 8	do	175.0

REPUBLICAN RIVER
Holbrook—Sec. 22-14-24 W.

1-28	M. C. Boyer	280.0	6-18	L. F. Hanks	1300.0
2-27	do	599.0	7-21	do	2.8
3-26	Hanks and Moore	468.0	8-23	M. C. Boyer	27.8
4-15	S. C. Moore	308.0	9-25	H. P. Eisenhuth	24.8
6- 2	L. F. Hanks	1300.0			

REPUBLICAN RIVER
Oxford—Sec. 31-4-21 W.

1-27	M. C. Boyer	262.0	6-17	L. F. Hanks	1030.0
2-27	do	786.0	7-21	do	33.4
3-25	Moore and Hanks	475.0	8-23	M. C. Boyer	55.0
4-14	S. C. Moore	361.0	9-24	H. P. Eisenhuth	3.6
6- 1	L. F. Hanks	1140.0			

REPUBLICAN RIVER
Bloomington—Sec. 8-1-15 W.

11- 5	J. H. Baily	150.0	4-14	S. C. Moore	462.0
11-23	A. E. Johnston	316.0	5-31	L. F. Hanks	1550.0
1-18	do	279.0	6-16	do	923.0
1-26	M. C. Boyer	408.0	7-20	do	71.0
2-26	do	2100.0	8-22	M. C. Boyer	116.0
3-25	Moore and Hanks	685.0	9-24	H. P. Eisenhuth	45.5

REPUBLICAN RIVER
Bostwick—Sec. 23-1-8 W.

10- 3	C. E. Franklin	115.0	11-24	A. E. Johnston	311.0
10-15	H. P. Eisenhuth	81.0	1-25	M. C. Boyer	381.0
10-29	do	88.0	2-25	do	21900.0
11-10	do	185.0	3-24	Moore and Hanks	674.0
11-21	do	432.0	4-13	S. C. Moore	513.0

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

REPUBLICAN RIVER
Superior—Sec. 36-1-7 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
2-25	M. C. Boyer	21900.0			

REPUBLICAN RIVER
Hardy—Sec. 6-1-5 W.

5-19	L. F. Hanks	394.0	7-20	L. F. Hanks	124.0
5-31	do	531.0	8-22	M. C. Boyer	110.0
6-16	do	1190.0	9-23	H. P. Eisenhuth	110.0

ROCK CREEK
Parks—Sec. 21-1-39 W.

11-19	A. E. Johnston	12.3	6-20	A. W. Hall	18.4
1-15	do	18.3	7-14	do	10.2
5-21	A. W. Hall	13.4	8-9	do	10.8

RUSH CREEK
 $\frac{1}{4}$ Mi. Above Mouth—Sec. 17-17-45 W.

4-20	A. E. Johnston	0.9	5-21	A. E. Johnston	0.0
5-10	do	1.7	6-6	do	.0

SAND HILL LAKES
GAGE HEIGHT RECORDS SHOWING RISE AND FALL OF
WATER SURFACE

CARNINE LAKE
 Carnine Ranch—Sec. 2-22-50 W.

Date	Hydrographer	Gage Height	Date	Hydrographer	Gage Height
11- 4	A. E. Johnston	11.9	3-29	A. E. Johnston	13.2
12- 9	do	12.9	5- 4	do	13.3
2-25	do	13.0	6-14	do	12.8

LAKE ELI
 Eli—Sec. 12-34-36 W.

Date	Hydrographer	Gage Height	Date	Hydrographer	Gage Height
10-15	A. E. Johnston	9.1	4-27	A. E. Johnston	10.1
11- 6	do	9.1	6-15	do	9.9
12-10	do	9.3	7-28	do	9.7
1-29	do	9.9	8-19	do	9.5
2-26	do	9.7	9-14	do	9.1
3-23	do	9.9			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

SAND CREEK
Sec. 33-2-14 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-13	C. E. Franklin	0.3			

SAND CREEK
Station—Sec. 10-15-10 W.

10- 1	A. E. Johnston	3.6	5-20	A. E. Johnston	3.5
10-10	do	4.4	5-25	do	3.6
10-23	do	6.4	6- 4	do	3.4
11- 2	do	3.7	6- 8	Johnston and Follansbee	.0
12- 1	do	2.8	6-25	A. E. Johnston	.7
12-16	do	6.0	7- 7	do	3.5
1- 8	do	4.7	7-16	do	2.8
1-26	do	7.4	8- 6	do	4.7
2-23	do	4.9	8-15	J. V. Ruzicka	3.7
3-19	do	6.5	8-27	A. E. Johnston	4.6
4- 9	do	2.4	9-10	do	5.2
4-19	do	4.8	9-23	do	5.1
5-11	do	5.5			

SAPPA CREEK
Orleans—Sec. 19-2-19 W

10-14	C. E. Franklin	1.8			
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SARBEN SLOUGH
Sec. 20-14-35 W.

10- 2	A. E. Johnston	1.5	5-26	A. E. Johnston	2.3
10-24	do	3.1	6- 3	do	2.6
10-31	do	2.2	6- 9	do	1.4
11-30	do	3.7	6-27	do	2.1
12-17	do	2.8	7- 8	do	1.9
1- 7	do	5.0	7-18	do	1.3
1-25	do	1.7	7-30	J. V. Ruzicka	1.4
2-22	do	4.0	8- 8	A. E. Johnston	1.3
3-18	do	4.8	8-13	J. V. Ruzicka	1.3
4-11	do	3.9	8-19	do	1.6
4-18	do	4.9	8-29	A. E. Johnston	2.5
5-12	do	1.8	9-24	do	2.1
5-19	do	2.5			

SCHLAGEL CREEK
Sec. 24-33-28 W.

10-16	A. E. Johnston	11.5	4-28	A. E. Johnston	25.6
11- 5	do	17.7	6-16	do	14.3
12-11	do	15.7	7-28	do	9.9
1-31	do	17.4	8-18	do	10.8
2-27	do	29.8	9-15	do	7.5
3-24	do	43.1			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

SCOTTSSLUFF DRAIN NO. 1
Sec. 25-22-54 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 4	F. F. LeFever	17.1	4-26	A. E. Johnston	11.7
12- 7	A. E. Johnston	13.9	5- 9	F. F. LeFever	7.9
1- 8	F. F. LeFever	13.8	5-25	do	6.0
1-28	do	10.9	6- 3	do	10.5
2-10	A. E. Johnston	9.9	6-25	do	10.0
2-24	F. F. LeFever	9.2	7-14	do	23.7
3-10	A. E. Johnston	11.4	8- 3	do	18.6
3-18	F. F. LeFever	10.0	9- 3	do	27.8
4- 7	A. E. Johnston	12.3	9-21	do	29.8

SCOTTSSLUFF DRAIN NO. 2
Sec. 34-22-54 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
4-26	A. E. Johnston	7.4	7-26	F. F. LeFever	11.2
5-25	F. F. LeFever	3.7	8-18	do	13.2
6-25	do	11.0	9- 9	do	11.7
7-14	do	13.0	9-20	do	12.4

SHEEP CREEK
Sec. 21-23-57 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 9	F. F. LeFever	104.0	4-25	A. E. Johnston	74.0
10-21	do	118.0	5- 6	F. F. LeFever	161.0
11- 5	do	91.1	5-24	do	2.8
12- 8	A. E. Johnston	81.1	6- 2	do	2.0
1- 6	F. F. LeFever	80.4	6-11	do	1.8
1-26	do	72.5	7- 2	do	2.7
2-10	A. E. Johnston	97.6	7-30	do	4.1
2-24	F. F. LeFever	74.2	8- 3	do	133.0
3- 9	A. E. Johnston	76.8	8-16	do	3.2
3-18	F. F. LeFever	73.6	9-30	do	113.0
4- 7	A. E. Johnston	72.5			

SILVERNAIL DRAIN
Sec. 6-19-49 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-21	A. E. Johnston	12.4	5-23	A. E. Johnston	7.3
11- 6	F. F. LeFever	10.0	5-31	F. F. LeFever	7.9
11-10	A. E. Johnston	9.7	6- 8	do	7.0
12- 2	do	11.3	6-22	do	33.0
1-11	do	9.8	6-30	do	9.7
1-28	do	13.3	7- 8	do	8.0
2-25	do	7.5	7-18	do	21.8
2-26	F. F. LeFever	7.0	7-27	do	13.1
3-21	A. E. Johnston	10.1	8-22	do	13.0
4- 4	do	7.9	9-14	do	13.1
4-21	do	6.2			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

SKUNK CREEK

Sec. 1-14-37 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-31	A. E. Johnston	3.7	5-20	A. E. Johnston	2.6
11-30	do	4.3	5-25	do	.3
12-17	do	3.1	6- 3	do	1.3
1-25	do	1.9	6-25	do	2.8
2-22	do	4.0	7- 7	do	2.2
3-18	do	4.6	8- 6	do	1.7
4-11	do	3.2	8-27	do	2.1
5-11	do	2.6	9-24	do	2.4

SNAKE CREEK

Allance-Bridgeport Highway—Sec. 8-24-48 W.

10-14	A. E. Johnston	0.0	3-29	A. E. Johnston	0.0
11- 4	do	.0	4-26	do	.0
12- 9	do	.0	5- 4	do	5.1
2-25	do	.0	6-14	do	.0

SNAKE CREEK

Above Falls—Sec. 9-31-30 W.

10-16	A. E. Johnston	246.0	4-28	A. E. Johnston	373.6
11- 5	do	277.0	6-16	do	319.4
12-12	do	305.0	7-28	do	240.0
1-30	do	255.0	8-18	do	284.0
2-27	do	356.0	9-15	do	259.3
3-24	do	323.4			

SOLDIER CREEK

Sec. 19-31-52 W.

10-20	A. E. Johnston	3.3	5- 4	A. E. Johnston	1.7
11- 7	do	4.1	6-21	do	2.2
12-14	do	4.0	8- 2	do	.4
2- 2	do	1.4	8-23	do	.0
3- 1	do	2.5	9-20	do	.0
3-28	do	3.7			

SOU BELLY CREEK

Station—Sec. 33-33-56 W.

5- 3	A. E. Johnston	4.4	8- 2	A. E. Johnston	0.4
6-22	do	2.0	8-24	do	.5

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

SPOTTED TAIL (DRY)

Northwest Corner—Sec. 28-23-56 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 1	A. W. Hall	29.6	5-23	F. F. LeFever	24.2
10- 9	F. F. LeFever	65.2	6- 3	do	48.0
10-22	do	33.2	6-16	do	62.0
11- 5	do	39.0	6-24	do	44.0
12- 8	A. E. Johnston	35.3	7- 5	do	25.1
1- 7	F. F. LeFever	41.6	7-12	do	33.7
1-26	do	43.4	7-22	do	45.0
2- 9	A. E. Johnston	37.0	8- 2	do	29.8
2-24	F. F. LeFever	36.2	8-15	do	25.4
3- 8	A. E. Johnston	46.7	8-31	do	47.2
3-18	F. F. LeFever	31.4	9- 8	do	39.8
4- 7	A. E. Johnston	30.4	9-20	do	44.9
4-25	do	27.1	9-30	do	145.8
5- 9	F. F. LeFever	31.7			

SPOTTED TAIL (WET) & KRONBERG SEEP
Sec. 1-22-56 W.

10- 2	A. W. Hall	18.0	5- 9	F. F. LeFever	14.1
10- 9	F. F. LeFever	17.0	5-23	do	11.6
12- 8	A. E. Johnston	17.6	6- 3	do	14.7
1- 8	F. F. LeFever	12.1	6-24	do	16.0
1-27	do	13.6	7- 5	do	17.6
2- 9	A. E. Johnston	16.9	7-13	do	19.5
2-24	F. F. LeFever	14.3	7-22	do	16.0
3- 9	A. E. Johnston	18.6	8- 2	do	18.5
3-18	F. F. LeFever	13.7	8-15	do	17.3
4- 6	A. E. Johnston	16.3	9-21	do	18.3
4-25	do	17.5			

SPRING CREEK

Wyoming-Nebraska Line—Sec. 4-23-58 W.

1-27	F. F. LeFever	9.0	6-15	F. F. LeFever	8.2
2-23	do	9.5	7- 2	do	7.6
3-17	do	10.9	8-16	do	10.7
5-25	do	11.2	9- 8	do	10.5
6- 2	do	10.6	9-30	do	11.3

SPRING CREEK, TRIBUTARY TO SOU BELLY CREEK

Below D-532—Sec. 7-32-55

6-22	A. E. Johnston	0.7	8- 2	A. E. Johnston	0.0
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REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

SPRING CREEK, TRIBUTARY TO LITTLE COTTONWOOD
Sec. 13-32-52 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
11- 7	A. E. Johnston	2.0	8- 1	A. E. Johnston	0.1
3- 1	do	2.5	8-22	do	1.3
5- 2	do	1.6	9-19	do	.4
6-20	do	.6			

SQUAW CREEK

Above McDowell's Reservoir—Sec. 12-31-52 W.

10-19	A. E. Johnston	0.0	6-20	A. E. Johnston	1.7
11- 7	do	.0	8- 1	do	.0
3- 1	do	.8	8-22	do	.0
3-29	do	.6	9-19	do	.0
5- 4	do	.7			

SQUAW CREEK

Below Shepherd Canal—Sec. 36-34-57 W.

5-30	A. E. Johnston	2.3	8- 2	A. E. Johnston	0.3
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SQUAW CREEK

Below McDowell's Reservoir—Sec. 1-31-52 W.

10-19	A. E. Johnston	0.3	6-20	A. E. Johnston	0.2
11- 7	do	.5	8- 1	do	.6
3- 1	do	.1	8-22	do	.0
3-29	do	.1	9-19	do	.0
5- 4	do	.7			

STEWART'S DRAIN

Sec. 13-23-57 W.

12- 8	A. E. Johnston	1.2	4-25	A. E. Johnston	0.2
2- 9	do	3.1	6- 2	F. F. LeFever	.1
2-10	do	2.0	6-15	do	.0
3- 9	do	1.8	8-16	do	2.6
4- 7	do	.2	9- 8	do	2.0

STINKING WATER CREEK

Pallsade—Sec. 25-5-34 W.

11-19	A. E. Johnston	43.0	6-18	A. W. Hall	31.2
1-14	do	72.3	8- 8	do	26.1
5-23	A. W. Hall	25.9	9-14	do	20.9

STREVER CREEK

South of Overton—Sec. 1-8-20 W.

10- 6	A. E. Johnston	29.2	5-16	A. E. Johnston	25.7
10-28	do	32.6	6-11	do	51.4

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

STREVER CREEK

Below Junction—Sec. 13 and 14-9-21 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 6	A. E. Johnston	22.7	5-16	A. E. Johnston	21.5
10-28	do	26.8	6-11	do	35.6
11-27	do	15.6	6-30	do	33.6
12-19	do	11.7	7-12	do	23.6
1- 5	do	13.3	7-22	do	22.8
1-20	do	10.2	8-11	do	30.1
2-17	do	15.5	9- 1	do	18.4
3-14	do	17.7	9-28	do	53.5
4-14	do	16.6			

THOMPSON CREEK (BIG)

Riverton—Sec. 2-1-13 W.

10-14	C. E. Franklin	9.6	1-19	A. E. Johnston	19.7
11-24	A. E. Johnston	22.5			

TIMBER CREEK

Belgrade

10-13	H. P. Eisenhuth	3.0	3-30	S. C. Moore	5.7
10-13	C. E. Franklin	.8	4-19	do	6.6
10-28	H. P. Eisenhuth	1.3	5-20	L. F. Hanks	3.3
11- 9	do	2.6	6- 6	do	5.6
11-20	do	8.0	7- 9	do	3.9
1-11	Hanks and Boyer	1.6	8-10	M. C. Boyer	14.8
2- 6	M. C. Boyer	1.6	9-16	H. P. Eisenhuth	2.1
3-10	Moore and Hanks	2.9			

TOOHEY DRAIN

Sec. 20-23-56 W.

11- 5	F. F. LeFever	3.2	5-23	F. F. LeFever	1.5
12- 8	A. E. Johnston	3.4	6- 2	do	3.0
1-26	F. F. LeFever	1.5	6-15	do	1.6
2- 9	A. E. Johnston	3.5	6-24	do	2.0
2-21	F. F. LeFever	1.9	7-12	do	3.6
3- 8	A. E. Johnston	2.3	8-16	do	3.9
3-18	F. F. LeFever	1.7	9- 8	do	4.2
4- 7	A. E. Johnston	1.8	9-30	do	4.2
4-25	do	2.3			

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

TOOHEY SPILLWAY

From Tri-State Canal—Sec. 10-23-56 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 1	A. W. Hall	0.0	3- 8	A. E. Johnston	15.1
10- 9	F. F. LeFever	26.0	3-18	F. F. LeFever	14.7
11- 5	do	22.0	4- 7	A. E. Johnston	12.9
12- 8	A. E. Johnston	17.9	4-25	do	13.4
1- 7	F. F. LeFever	17.7	5- 7	F. F. LeFever	12.2
1-26	do	16.8	6- 2	do	.0
2- 9	A. E. Johnston	18.0	9-30	do	88.4
2-24	F. F. LeFever	15.7			

TRUNK BUTTE CREEK

Station—Sec. 25-33-50 W.

10-19	A. E. Johnston	0.0	8- 1	A. E. Johnston	0.0
11- 7	do	.0	8-22	do	.0
5- 2	do	2.0	9-19	do	.0
6-20	do	1.3			

TUB SPRINGS

To River—Sec. 8-22-55 W.

10- 9	F. F. LeFever	68.0	2-24	F. F. LeFever	31.6
10-22	do	56.0	3-10	A. E. Johnston	37.2
11- 4	do	47.2	3-18	F. F. LeFever	31.2
12- 8	A. E. Johnston	45.4	4- 6	A. E. Johnston	33.5
1- 8	F. F. LeFever	34.8	4-25	do	36.8
1-27	do	32.0	5- 9	F. F. LeFever	30.4
2- 9	A. E. Johnston	32.5			

TUB SPRINGS

Above Enterprise Canal—Sec. 33-23-55 W.

10- 2	A. W. Hall	36.3	7-13	F. F. LeFever	31.3
5-18	F. F. LeFever	27.8	7-22	do	33.0
5-23	do	27.5	8- 2	do	31.5
6- 3	do	35.8	8-15	do	33.5
6-16	do	48.8	8-31	do	33.6
6-25	do	56.0	9- 9	do	39.9
7- 5	do	26.9	9-21	do	37.1

TUB SPRINGS

Below Enterprise Canal—Sec. 32-23-55 W.

10- 2	A. W. Hall	32.0	7-13	F. F. LeFever	12.1
5-18	F. F. LeFever	35.2	7-22	do	12.0
5-23	do	12.2	8- 2	do	17.7
6- 3	do	21.0	8-15	do	31.7
6-16	do	68.0	8-31	do	36.7
6-25	do	9.0	9- 9	do	16.0
7- 5	do	12.1	9-21	do	21.8

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

TURKEY CREEK

Naponee—Sec. 4-1-16 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-14	C. E. Franklin	4.3	1-18	A. E. Johnston	19.1
11-23	A. E. Johnston	9.3			

TURKEY CREEK

Oxford—Sec. 31-4-21 W.

1-26	M. C. Boyer	3.9	6-17	L. F. Hanks	717.0
2-27	do	6.5	7-21	do	2.8
3-25	Hanks and Moore	3.0	8-23	M. C. Boyer	.8
4-15	S. C. Moore	3.1	9-24	H. P. Eisenhuth	.6
6- 1	L. F. Hanks	2.5			

UPPER CLEAR CREEK

Ashland

10-20	H. P. Eisenhuth	4.6	4- 9	S. C. Moore	9.9
11- 2	do	3.4	5-20	L. F. Hanks	7.3
11-12	do	11.1	6-13	do	172.0
1-16	Boyer and Hanks	15.9	7- 7	do	7.4
2-22	M. C. Boyer	53.0	8-12	M. C. Boyer	174.0
3-22	Moore and Hanks	16.3	9-20	H. P. Eisenhuth	5.3

WAHOO CREEK

Ashland—Sec. 35-13-9 E.

10-20	H. P. Eisenhuth	21.8	3-22	Moore and Hanks	65.0
11- 2	do	16.9	4- 9	S. C. Moore	49.2
11-12	do	25.0	5-28	L. F. Hanks	50.6
1-16	Boyer and Hanks	65.0	6-13	do	513.0
2-22	M. C. Boyer	69.0	7- 7	do	38.0

WARBONNET CREEK

Above Warbonnet Canal—Sec. 20-33-56 W.

5- 3	A. E. Johnston	5.6	8- 2	A. E. Johnston	1.6
6-22	do	2.2			

WHISTLE CREEK

Mouth—Sec. 12-28-54 W.

6-23	A. E. Johnston	0.3	8-24	A. E. Johnston	0.0
8- 3	Rasmussen and Johnston	.0	9-21	do	.0

REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

WHITE CLAY CREEK
Crawford—Sec. 2-31-52 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-17	A. E. Johnston	1.9	3-29	A. E. Johnston	4.0
10-19	do	2.2	5- 4	do	2.1
11- 7	do	2.5	6-20	do	3.0
12-11	do	5.5	8- 1	do	1.1
2- 2	do	3.1	8-22	do	.8
3- 1	do	3.4	9-19	do	.9

WHITE CLAY CREEK
North of Rushville—Sec. 6-34-44 W.

4-30	A. E. Johnston	5.8	8-19	A. E. Johnston	1.9
6-14	do	4.4	9-16	do	1.8
7-29	do	2.1			

WHITE HORSE CREEK
Gannett—Sec. 5-13-29 W.

10- 3	A. E. Johnston	7.6	4-16	A. E. Johnston	19.0
10- 8	do	4.7	5-13	do	16.3
10-26	do	10.3	5-17	do	10.8
10-30	do	9.7	6- 1	do	9.0
11-28	do	12.2	6-28	do	7.5
12-18	do	16.7	7- 9	do	9.3
1- 6	do	13.7	7-19	do	4.3
1-21	do	11.3	8- 9	do	12.8
2-18	do	17.4	8-30	do	6.1
3-16	do	39.9	9- 8	do	5.5
4-12	do	19.2	9-26	do	6.6

WHITE RIVER
Above Whitney Diversion—Sec. 26-32-52 W.

10-19	A. E. Johnston	4.9	5- 2	A. E. Johnston	36.1
11- 7	do	18.5	6-20	do	17.6
12-14	do	15.7	8- 1	do	5.6
2- 2	do	34.1	8-22	do	13.9
3- 1	do	38.9	9-19	do	7.2
3-28	do	32.9			

WHITE RIVER
Below Whitney Diversion—Sec. 26-32-52 W.

10-19	A. E. Johnston	8.1	5- 2	A. E. Johnston	0.0
11- 7	do	.1	6-20	do	.0
12-14	do	.0	8- 1	do	.0
2- 2	do	.0	8-22	do	1.5
3- 1	do	13.8	9-19	do	5.9
3-28	do	14.4			

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

WHITE RIVER
Military Road—Sec. 10-31-52 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-20	A. E. Johnston	16.0	5- 4	do	28.4
11- 7	do	22.7	6-21	do	21.3
12-14	do	14.7	8- 2	do	12.3
2- 2	do	29.0	8-23	do	13.3
3- 1	do	28.8	9-20	do	13.7
3-28	do	27.5			

WHITE RIVER
6 Mi. West of Chadron—Sec. 18-33-49 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-19	A. E. Johnston	9.8	5- 2	A. E. Johnston	31.3
11- 7	do	2.7	6-20	do	13.0
12-14	do	15.2	8- 1	do	3.5
2- 3	do	11.6	8-22	do	.8
3- 1	do	40.0	9-19	do	4.1
3-28	do	38.3			

WHITE TAIL CREEK
Sec. 36-15-38 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 1	A. E. Johnston	14.7	5-11	A. E. Johnston	31.1
10- 9	do	21.3	5-20	do	20.5
10-24	do	23.9	5-25	do	20.4
10-31	do	33.7	6- 3	do	18.3
11-30	do	33.0	6- 8	do	17.4
12-17	do	27.8	6-25	do	32.0
1- 7	do	35.8	7- 7	do	25.5
1-25	do	36.6	7-16	do	25.8
2-22	do	35.2	8- 6	do	26.2
3-18	do	36.3	8-19	J. V. Ruzicka	25.9
4-11	do	38.1	8-27	A. E. Johnston	35.7
4-18	do	44.2	9-24	do	27.0

WILD HORSE DRAIN
Between Secs. 1 and 12-20-52 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10-13	F. F. LeFever	54.0	11- 3	F. F. LeFever	42.0
10-26	do	51.0	12- 7	A. E. Johnston	38.4

MISCELLANEOUS MEASUREMENTS OF STREAMS—Continued

Year Ending September 30, 1932

WILLOW CREEK

North of Sarben—Sec. 15-14-35 W.

Date	Hydrographer	Discharge Sec. Ft.	Date	Hydrographer	Discharge Sec. Ft.
10- 2	A. E. Johnston	1.8	5-12	A. E. Johnston	1.7
10- 9	do	1.4	5-19	do	1.1
10-24	do	1.1	5-26	do	1.7
10-31	do	1.6	6- 3	do	1.4
11-30	do	1.6	6- 9	do	1.4
12-17	do	1.6	6-27	do	1.2
1- 7	do	1.6	7- 8	do	1.4
1-25	do	1.2	7-18	do	1.1
2-22	do	1.5	8- 8	do	1.2
3-18	do	1.5	8-29	do	1.6
4-11	do	.8	9-24	do	1.2
4-18	do	2.1			

WINTERS CREEK (TO RIVER)

East of Scottsbluff Sugar Factory—Sec. 19-22-54 W.

10-23	F. F. LeFever	67.6	5-25	F. F. LeFever	24.4
11- 4	do	62.9	6- 4	do	27.0
12- 7	A. E. Johnston	62.8	6-17	do	5.5
1- 8	F. F. LeFever	55.6	6-25	do	19.1
1-27	do	56.7	7- 6	do	10.0
2-10	A. E. Johnston	71.2	7-13	do	83.1
2-24	F. F. LeFever	51.9	7-26	do	101.6
3-10	A. E. Johnston	56.9	8- 3	do	35.0
3-18	F. F. LeFever	49.2	8-17	do	79.9
4- 7	A. E. Johnston	49.3	9- 1	do	78.8
4-26	do	53.9	9- 9	do	109.0
5- 9	F. F. LeFever	46.9	9-21	do	118.0

DEPARTMENT OF PUBLIC WORKS

ARICKAREE RIVER AT HAIGLER—Section 28-1-41

		Year Ending September 30, 1931										
Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	8	28	28	17	24	80	33	15	4	1	2
2	16	8	28	28	17	24	125	33	15	4	1	2
3	16	8	28	28	17	24	89	28	18	4	1	2
4	16	8	28	28	17	24	62	24	15	4	1	2
5	16	8	28	28	17	24	57	24	62	4	1	2
6	16	8	28	28	17	24	52	24	38	4	1	2
7	16	8	28	28	17	24	43	24	28	6	1	2
8	16	8	28	28	17	24	38	24	24	4	1	2
9	16	8	28	28	17	24	38	21	24	2	2	2
10	16	8	28	28	17	24	33	21	24	2	6	1
11	16	10	28	22	17	24	33	21	24	2	6	0
12	16	10	28	22	17	24	28	21	24	2	3	0
13	16	10	28	22	17	24	28	21	43	2	2	0
14	16	10	28	22	17	24	24	21	38	1	2	0
15	16	10	28	22	17	24	24	21	21	1	2	0
16	16	10	28	22	24	24	24	18	24	1	2	1
17	16	10	28	22	24	24	24	18	18	1	2	0
18	16	10	28	22	24	24	24	18	15	1	2	4
19	16	10	28	22	24	24	24	18	13	1	2	4
20	16	10	28	22	24	33	24	15	15	2	2	9
21	16	10	28	17	24	28	24	13	15	6	2	9
22	16	16	23	17	24	24	24	21	18	4	2	9
23	16	10	28	17	24	21	33	24	13	3	2	9
24	16	10	28	17	24	21	38	24	9	2	2	9
25	16	10	28	17	24	24	38	21	9	1	2	9
26	16	10	28	17	24	33	38	21	7	1	2	9
27	16	10	28	17	24	52	38	18	6	1	2	9
28	16	10	28	17	24	52	38	18	4	1	2	9
29	16	10	28	17	....	52	38	18	3	0	2	7
30	16	10	28	17	....	52	33	21	3	0	2	7
31	16	....	28	17	....	52	....	24	....	0	2	....
Mean	*16	*9	*28	*22	*20	*29	40	22	17	2	2	4
Max.	16	10	28	28	24	52	125	33	62	6	6	9
Min.	16	8	28	17	17	21	24	15	3	0	1	0
A. F.	984	555	1722	1362	1125	1785	2412	1341	1160	141	125	244
Total Acre Feet	12,956.											

*Estimated.

BALD DRAIN—Section 32-23-56

		Year Ending September 30, 1931										
Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.0	6.0	6.0	5.0	6.0	5.0	4.0	4.0	6.0	5.0	4.0	3.0
2	7.0	6.0	6.0	5.0	6.0	5.0	4.0	4.0	6.0	5.0	4.0	3.0
3	7.0	6.0	6.0	5.0	6.0	5.0	4.0	4.0	6.0	5.0	4.0	3.0
4	7.0	6.0	6.0	5.0	6.0	5.0	4.0	4.0	6.0	5.0	4.0	3.0
5	7.0	6.0	6.0	5.0	6.0	5.0	4.0	4.0	6.0	5.0	4.0	3.0
6	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	16.0	5.0	4.0	3.0
7	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	15.0	5.0	4.0	3.0
8	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	10.0	5.0	4.0	3.0
9	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	7.0	5.0	4.0	3.0
10	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	7.0	5.0	4.0	6.5
11	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	6.0	5.0	4.0	3.0
12	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	6.0	5.0	4.0	3.0
13	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	6.0	5.0	4.0	2.0
14	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	6.0	5.0	4.0	2.0
15	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	6.0	5.0	4.0	2.0
16	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	6.0	5.0	2.0	2.0
17	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	6.0	5.0	2.0	2.0
18	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	6.0	5.0	2.0	2.0
19	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	6.0	5.0	2.0	2.0
20	7.0	6.0	6.0	5.0	6.0	5.0	4.0	18.0	6.0	5.0	2.0	2.0
21	7.0	6.0	6.0	5.0	6.0	5.0	4.0	16.0	6.0	5.0	2.0	2.0
22	7.0	6.0	6.0	5.0	6.0	5.0	4.0	16.0	6.0	5.0	2.0	2.0
23	7.0	6.0	6.0	5.0	6.0	5.0	4.0	16.0	6.0	5.0	2.0	2.0
24	7.0	6.0	6.0	5.0	6.0	5.0	4.0	16.0	6.0	5.0	2.0	2.0
25	7.0	6.0	6.0	5.0	6.0	5.0	4.0	16.0	6.0	5.0	2.0	2.0
26	7.0	6.0	6.0	5.0	6.0	5.0	4.0	16.0	6.0	5.0	2.0	2.0
27	7.0	6.0	6.0	5.0	6.0	5.0	4.0	16.0	6.0	5.0	2.0	2.0
28	7.0	6.0	6.0	5.0	6.0	5.0	4.0	16.0	6.0	5.0	2.0	2.0
29	7.0	6.0	6.0	5.0	6.0	....	4.0	16.0	6.0	5.0	2.0	2.0
30	7.0	6.0	6.0	5.0	6.0	....	4.0	16.0	6.0	5.0	2.0	2.0
31	7.0	....	6.0	6.0	....	4.0	....	16.0	....	5.0	3.0	....
Mean	7.0	6.0	6.0	5.5	5.5	4.6	4.0	15.0	7.0	5.0	3.0	2.0
Max.	7.0	6.0	6.0	6.0	6.0	5.0	4.0	18.0	16.0	5.0	4.0	3.0
Min.	7.0	6.0	6.0	5.0	5.0	4.0	4.0	4.0	6.0	5.0	2.0	2.0
A. F.	430.0	357.0	369.0	338.0	305.0	283.0	238.0	922.0	405.0	307.0	184.0	148.0
Total Acre Feet	4,281.											

REPORT OF SECRETARY

BAYARD SUGAR FACTORY DRAIN—Section 34-21-52

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	84	70	54	44	38	35	35	45	45	44	40	74
2	84	70	54	44	38	35	35	49	45	53	40	55
3	84	70	54	44	38	35	35	45	45	42	42	62
4	84	70	54	44	38	35	35	45	45	42	42	70
5	84	70	54	44	38	35	35	45	45	41	42	68
6	84	70	54	44	38	35	35	45	45	38	47	66
7	84	70	54	44	38	35	35	45	45	44	55	63
8	84	70	54	44	38	35	33	45	45	48	50	66
9	84	70	54	44	38	35	35	45	45	44	72	65
10	84	70	54	44	38	35	35	45	43	46	65	60
11	84	70	54	44	38	35	32	35	46	42	71	60
12	84	70	54	43	38	35	32	35	44	46	66	64
13	84	70	54	44	38	35	32	35	42	48	62	59
14	84	70	54	44	38	35	32	35	40	40	59	66
15	84	70	54	44	38	35	32	35	42	46	68	66
16	84	77	54	42	36	34	32	35	41	41	59	76
17	84	77	54	42	36	34	32	35	40	37	66	74
18	84	77	54	42	36	34	32	35	40	41	64	76
19	84	77	54	42	36	34	32	35	36	38	66	78
20	84	77	54	42	36	34	32	35	34	41	65	78
21	62	77	54	42	36	34	38	40	40	46	66	74
22	62	77	54	42	36	34	38	40	45	41	67	71
23	62	77	54	42	36	33	38	40	38	35	80	72
24	62	77	54	42	36	34	38	40	40	41	65	80
25	62	77	54	42	36	34	38	40	42	46	66	88
26	62	77	54	42	36	32	38	40	46	42	72	86
27	62	77	54	42	36	32	38	40	43	41	66	82
28	62	77	54	42	36	32	38	40	46	41	65	82
29	62	77	54	42	....	32	38	40	44	41	67	80
30	62	77	54	42	....	32	38	40	42	42	72	68
31	62	....	54	42	....	32	38	40	....	41	73	....
Mean	76	73	54	43	37.1	34.1	35.0	40.0	42.6	42.5	61.3	71.1
Max.	84	77	54	....	....	....	....	....	....	53	80	88
Min.	62	70	54	....	....	....	....	....	34	35	40	55
A. F.	4685	4374	3320	2640	2060	2100	2080	2460	2530	2610	3770	4230
Total Acre Feet	36,860.											

BIRDWOOD CREEK AT HERSHEY—Section 2-14-33

Date	Year Ending September 30, 1931											
	*Oct.	*Nov.	*Dec.	*Jan.	*Feb.	*Mar.	*Apr.	May	June	July	Aug.	Sept.
1	170	191	190	184	190	200	228	160	167	202	151	131
2	200	194	190	184	190	200	228	160	168	176	144	131
3	268	194	190	184	190	200	228	160	163	151	134	143
4	200	194	190	184	190	200	228	160	165	183	126	140
5	180	194	190	184	190	200	228	160	240	161	118	132
6	170	194	190	184	190	200	228	160	193	148	125	131
7	170	194	190	184	190	200	228	160	159	146	122	129
8	170	194	190	184	190	200	228	160	161	151	149	125
9	170	194	190	184	190	200	228	160	167	151	148	135
10	170	194	190	184	190	200	228	160	170	154	140	132
11	200	194	190	184	200	200	180	160	189	148	138	129
12	850	194	190	184	200	200	180	160	178	129	144	128
13	600	194	190	184	200	200	180	160	181	126	131	131
14	300	194	190	184	200	200	180	153	174	126	131	125
15	170	194	190	184	200	200	180	159	170	124	128	124
16	170	194	190	184	200	200	180	163	170	137	126	138
17	170	194	190	184	200	200	180	154	164	120	135	137
18	170	194	190	184	200	200	180	159	164	119	129	137
19	170	194	190	184	200	200	180	157	167	137	129	143
20	170	194	190	184	200	200	180	156	196	137	128	143
21	180	194	190	184	200	200	160	156	175	129	125	141
22	180	194	190	184	200	200	160	156	176	112	138	140
23	180	194	190	184	200	200	160	157	174	129	151	140
24	180	194	190	184	200	200	160	161	172	112	148	148
25	180	194	190	184	200	200	160	174	163	118	141	161
26	180	194	190	194	200	200	160	161	163	115	143	148
27	180	194	190	184	200	200	160	159	161	118	137	148
28	180	194	190	184	200	200	160	161	161	117	140	148
29	180	194	190	184	....	200	160	176	157	118	141	148
30	180	194	190	184	....	200	160	165	151	117	141	153
31	180	....	190	184	....	200	....	167	....	125	134	....
Mean	219	194	190	184	196	200	189	160	171	136	136	137
Max.	850	194	190	184	200	200	228	176	240	202	151	161
Min.	170	194	190	184	190	200	160	153	151	112	118	124
A. F.	13520	11510	11680	11310	10910	12300	11270	9866	10233	8402	8360	8210
Total Acre Feet	127,601.											

*Estimated.

DEPARTMENT OF PUBLIC WORKS

BLUE CREEK AT LEWELLEN—Section 30-16-42

Date	Year Ending September 30, 1931											
	*Oct.	*Nov.	*Dec.	*Jan.	*Feb.	*Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	128	123	106	122	122	176	120	2	13	81	1
2	100	128	123	106	122	122	176	120	1	16	80	2
3	150	128	123	106	122	122	160	120	1	18	70	8
4	200	128	123	106	122	122	150	114	1	37	46	9
5	150	128	123	106	122	122	140	92	2	55	8	10
6	120	128	123	106	122	122	130	106	38	60	17	10
7	100	128	123	106	122	122	122	106	31	64	102	11
8	100	128	123	106	122	122	122	104	15	50	32	9
9	100	128	123	106	122	122	122	104	10	83	54	9
10	100	128	123	106	122	122	122	94	16	83	49	9
11	100	128	123	106	122	140	122	98	58	74	23	23
12	100	128	123	106	122	140	122	100	98	77	9	33
13	100	128	123	106	122	140	117	100	65	71	9	42
14	100	128	123	106	122	140	117	98	47	35	7	53
15	100	128	123	106	122	140	117	70	39	8	6	51
16	113	130	123	106	122	140	117	64	27	4	3	29
17	113	130	123	106	122	140	120	60	15	4	3	27
18	113	130	123	106	122	140	120	48	16	3	6	21
19	113	130	123	106	122	140	120	51	10	7	6	49
20	113	130	123	106	122	140	116	35	8	42	4	30
21	113	130	123	106	122	160	112	44	6	4	3	22
22	113	130	123	106	122	160	118	46	7	35	3	18
23	113	130	123	106	122	160	122	22	3	42	2	19
24	113	130	123	106	122	160	126	18	2	33	1	56
25	113	130	123	106	122	160	132	2	4	24	1	44
26	113	130	123	106	122	160	133	2	2	31	1	54
27	113	130	123	106	122	160	122	1	2	34	1	67
28	113	130	123	106	122	160	118	1	2	25	1	67
29	113	130	123	106	....	160	118	1	2	22	1	67
30	113	130	123	106	....	160	120	1	1	68	1	62
31	113	....	123	106	....	160	....	2	....	68	1	....
Mean	114	129	123	106	122	141	127	63	17	38	20	30
Max.	200	130	123	106	122	160	176	120	98	83	102	67
Min.	100	128	123	106	122	122	112	1	1	3	1	1
A. F.	6998	7676	7563	6518	6775	8688	7595	3856	1053	2360	1251	1819

Total Acre Feet 62,152.

*Estimated.

BLUE RIVER (LITTLE) AT ENDICOTT (U. S. G. S. Meas.)—Section 5-1-3 E.

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	105	113	148	116	134	130	161	156	310	139	121	107
2	105	113	142	136	136	133	152	148	237	189	166	103
3	103	116	147	133	136	132	156	138	199	193	321	106
4	105	116	142	144	133	134	150	155	173	186	615	106
5	114	116	140	133	133	133	153	1200	205	197	224	110
6	123	116	139	130	134	136	152	1050	188	201	179	109
7	119	116	146	138	132	116	155	910	877	189	156	99
8	116	114	144	134	134	142	144	510	1460	179	152	95
9	121	116	134	132	136	148	163	388	1330	158	211	94
10	155	116	140	132	130	139	152	330	692	148	179	91
11	140	113	134	127	128	142	142	338	474	136	358	91
12	121	114	133	126	127	139	139	294	408	197	940	91
13	128	120	134	102	130	142	139	249	400	186	584	87
14	116	116	133	16	124	133	132	220	380	158	360	86
15	120	114	138	70	127	134	138	211	397	139	252	91
16	120	121	133	120	126	133	136	197	552	124	191	87
17	120	123	128	120	127	132	134	193	564	128	161	87
18	119	121	136	120	128	130	133	189	402	121	153	86
19	119	161	132	120	128	128	139	188	338	113	177	84
20	113	552	120	120	127	133	153	177	284	117	160	86
21	112	664	107	138	123	134	153	173	249	207	158	85
22	109	318	110	147	136	136	153	170	405	276	155	90
23	114	217	121	152	140	138	142	168	257	163	139	91
24	114	264	130	147	130	132	150	161	193	133	127	130
25	116	209	142	152	132	130	165	160	170	130	128	914
26	112	173	139	161	133	130	195	156	161	121	130	439
27	116	155	138	148	133	133	191	153	152	120	133	289
28	114	153	136	140	127	105	170	433	148	110	134	203
29	113	153	132	138	....	136	160	1730	140	102	133	166
30	113	148	121	136	....	133	153	1480	136	96	119	155
31	114	....	123	128	....	152	....	555	....	98	116	....
Mean	117	175	133	128	131	134	152	406	396	453	230	149
Max.	155	664	148	161	140	152	195	1730	1460	276	940	914
Min.	103	113	107	16	123	105	132	138	136	96	116	84
A. F.	7190	10400	8180	7870	7280	8240	9040	25000	23600	9140	14100	8870

Total Acre Feet 139,000.

REPORT OF SECRETARY

BUFFALO CREEK—Section 20-1-40

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	13	14	14	12	11	13	14	16	9	4	10
2	12	13	14	14	12	11	13	14	16	9	4	10
3	12	13	14	14	12	11	13	14	16	9	4	10
4	12	13	14	14	12	11	13	14	16	9	4	10
5	12	13	14	14	12	11	13	14	16	9	4	10
6	12	13	14	14	12	11	13	14	16	7	4	10
7	12	13	14	14	12	11	13	14	16	7	4	10
8	12	13	14	14	12	11	13	14	16	7	4	10
9	12	13	14	14	12	11	13	14	16	7	4	10
10	12	13	14	14	12	11	13	14	16	7	4	10
11	12	11	14	14	12	11	13	12	13	7	8	10
12	12	11	14	14	12	11	13	12	13	7	8	10
13	12	11	14	14	12	11	13	12	13	7	8	10
14	12	11	14	14	12	11	13	12	13	7	8	10
15	12	11	14	14	12	11	13	12	13	7	8	10
16	12	11	14	14	12	10	16	12	13	6	8	11
17	12	11	14	14	12	10	16	12	13	6	8	11
18	12	11	14	14	12	10	16	12	13	6	8	11
19	12	11	14	14	12	10	16	12	13	6	8	11
20	12	11	14	14	12	10	16	12	13	6	8	11
21	12	14	14	14	12	10	16	14	11	6	10	11
22	12	14	14	14	12	10	16	14	11	6	10	11
23	12	14	14	14	12	10	16	14	11	6	10	11
24	12	14	14	14	12	10	16	14	11	6	10	11
25	12	14	14	14	12	10	16	14	11	6	10	11
26	12	14	14	14	12	10	16	14	11	4	10	11
27	12	14	14	14	12	10	16	14	11	4	10	11
28	12	14	14	14	12	10	16	14	11	4	10	11
29	12	14	14	14	....	10	16	14	11	4	10	11
30	12	14	14	14	....	10	16	14	11	4	10	11
31	12	....	14	14	....	10	....	14	....	4	10	....
Mean	12	13	14	14	12	10	14	13	13	6	7	10
Max.	12	14	14	14	12	11	16	14	16	9	10	11
Min.	12	11	14	14	12	10	13	12	11	4	4	10
A. F.	738	754	861	861	666	645	863	821	793	395	456	416
Total Acre Feet	8,269.											

CAMP CLARK SEEP—Section 9-20-51

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	6	6	4	2	2	2	1	1	2	3	5
2	6	6	6	4	2	2	2	1	1	2	3	5
3	6	6	6	4	2	2	2	1	1	2	3	5
4	6	6	6	4	2	2	2	1	1	2	3	5
5	6	6	6	4	2	2	2	1	1	2	3	5
6	6	6	6	4	2	2	2	1	1	2	3	5
7	6	6	6	4	2	2	2	1	1	2	3	5
8	6	6	6	4	2	2	2	1	1	2	3	5
9	6	6	6	4	2	2	2	1	1	2	3	5
10	6	6	6	4	2	2	2	1	1	2	4	5
11	6	6	6	3	2	2	2	1	2	2	4	5
12	6	6	6	3	2	2	2	1	2	2	4	5
13	6	6	6	3	2	2	2	1	2	2	4	5
14	6	6	6	3	2	2	2	1	2	2	4	5
15	6	6	6	3	2	2	2	1	2	2	4	5
16	6	6	6	3	2	1	1	1	3	2	4	5
17	6	6	6	3	2	1	1	1	3	2	4	5
18	6	6	6	3	2	1	1	1	3	2	4	5
19	6	6	6	3	2	1	1	1	3	2	4	5
20	6	6	6	3	2	1	1	1	3	3	4	6
21	3	5	6	3	2	1	1	1	3	3	4	6
22	3	5	6	3	2	1	1	1	3	3	4	6
23	3	5	6	3	2	1	1	1	3	3	4	6
24	3	5	6	3	2	1	1	1	3	3	4	6
25	3	5	6	3	2	1	1	1	3	3	4	6
26	3	5	6	3	2	1	1	1	3	3	4	6
27	3	5	6	3	2	1	1	1	3	3	4	6
28	3	5	6	3	2	1	1	1	3	3	4	6
29	3	5	6	3	....	1	1	1	3	3	4	6
30	3	5	6	3	....	1	1	1	3	3	4	6
31	3	....	6	3	....	1	....	1	....	2	4	5
Mean	5	5	6	4	2	2	2	1	3	3	4	6
Max.	6	6	6	4	2	2	2	1	3	2	3	5
Min.	3	5	6	3	2	1	1	1	1	2	3	5
A. F.	303	297	369	203	111	92	89	61	131	148	228	315
Total Acre Feet	2,347.											

CEDAR CREEK—Section 11-18-48

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19	12	19	19	17	16	18	18	5	3	4	14
2	19	12	18	19	17	16	18	18	5	3	5	14
3	19	12	18	19	17	16	18	18	5	3	5	18
4	19	12	18	18	17	16	18	18	5	4	5	11
5	19	12	18	19	17	16	18	18	5	5	5	6
6	19	12	18	19	17	16	18	19	*3	6	5	22
7	19	12	18	19	17	16	18	18	4	6	5	21
8	19	12	18	19	17	16	18	18	4	5	6	21
9	19	12	18	19	17	16	18	18	2	4	7	21
10	19	12	18	19	17	16	18	18	1	6	9	16
11	19	12	18	19	17	16	18	18	10	5	8	12
12	19	12	18	19	17	16	18	19	4	5	6	12
13	19	12	18	19	17	16	18	18	5	5	5	14
14	19	12	18	19	16	16	18	18	4	5	9	16
15	19	12	18	19	17	16	18	18	4	4	5	18
16	12	12	18	18	16	16	18	18	4	5	5	20
17	12	12	18	18	16	16	18	18	4	4	5	15
18	12	12	18	18	16	16	18	18	4	5	8	16
19	12	12	18	18	16	16	18	18	4	4	5	24
20	12	12	18	18	16	16	18	18	4	4	5	19
21	12	12	18	18	16	16	18	5	9	5	6	22
22	12	12	18	18	16	16	18	5	14	5	6	24
23	12	12	18	18	16	16	18	5	14	4	5	18
24	12	12	18	18	16	16	18	5	4	4	5	23
25	12	12	18	18	16	16	18	6	4	4	6	30
26	12	12	18	18	16	15	18	5	4	4	5	27
27	12	12	18	18	16	15	18	5	3	4	5	29
28	12	12	18	18	16	15	18	5	3	4	18	24
29	12	12	18	18	16	15	18	5	3	4	14	30
30	12	12	18	18	16	15	18	5	3	4	14	13
31	12	...	18	18	...	15	...	5	...	4	14	...
Mean	15	12	18	18	16	16	18	13	5	4	7	19
Max.	19	12	18	19	17	16	18	18	14	6	18	30
Min.	12	12	18	18	16	15	18	5	1	3	4	6
A. F.	946	714	1110	1140	916	972	1070	824	292	271	430	1130

Total Acre Feet 9,815.

*Estimated.

CLEAR CREEK—Section 5-15-41

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	13	10	12	12	15	15	14	0	1	3	5
2	13	13	10	12	12	15	15	14	1	2	3	7
3	13	13	10	12	12	15	15	14	1	2	2	6
4	13	13	10	12	12	15	15	14	2	2	1	5
5	13	13	10	12	12	15	15	14	3	2	0	7
6	13	13	10	12	12	12	15	14	*4	2	0	7
7	13	13	10	12	12	12	15	14	4	2	0	8
8	13	13	10	12	12	12	15	14	*4	2	0	9
9	13	13	10	12	12	12	15	14	2	2	0	9
10	13	13	10	12	12	12	15	14	4	2	0	9
11	10	13	10	10	15	15	15	14	5	4	0	9
12	10	13	10	10	15	15	15	14	5	4	0	9
13	10	13	10	10	15	15	15	14	6	3	0	9
14	10	13	10	10	15	15	15	14	4	2	0	8
15	10	13	10	10	15	15	15	14	3	2	0	7
16	10	10	10	10	15	15	14	10	2	2	0	7
17	10	10	10	10	15	15	14	10	1	2	0	7
18	10	10	10	10	15	15	14	10	1	2	0	8
19	10	10	10	10	15	15	14	10	1	2	0	8
20	10	10	10	10	15	15	14	10	1	2	0	8
21	10	10	10	12	15	15	14	10	0	2	0	9
22	10	10	10	12	15	15	14	10	0	2	0	11
23	10	10	10	12	15	15	14	10	0	2	1	12
24	10	10	10	12	15	15	14	10	1	3	2	11
25	10	10	10	12	15	15	14	10	0	4	3	11
26	10	10	10	12	15	10	14	10	0	5	4	10
27	10	10	10	12	15	10	14	10	0	5	4	10
28	10	10	10	12	15	10	14	10	0	6	5	10
29	10	10	10	12	...	10	14	10	0	5	5	10
30	10	10	10	12	...	10	14	10	0	5	5	10
31	10	...	10	12	...	10	...	10	...	4	5	...
Mean	11	12	10	11	14	13	14	12	2	3	1	8
Max.	13	13	10	12	17	15	15	14	5	6	5	12
Min.	10	10	10	10	12	10	14	10	0	1	0	5
A. F.	674	694	615	701	772	830	833	732	113	172	86	506

Total Acre Feet 6,728.

*Estimated.

REPORT OF SECRETARY

CLEVELAND DRAIN—Section 6-20-52

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	5	3	2	2	2	3	6	2	7	5	6
2	6	5	3	2	2	2	3	7	2	7	7	6
3	6	5	3	2	2	2	3	5	2	6	6	6
4	6	5	3	2	2	2	3	5	2	6	5	6
5	6	5	3	2	2	2	3	5	2	5	5	6
6	6	5	3	2	2	2	3	5	2	5	5	6
7	6	5	3	2	2	2	3	5	2	5	6	6
8	6	5	3	2	2	2	3	4	2	4	6	6
9	6	5	3	2	2	2	3	4	3	4	6	6
10	6	5	3	2	2	2	3	4	5	5	6	5
11	6	5	3	2	2	2	3	4	6	5	7	4
12	6	5	3	2	2	2	3	4	6	5	7	4
13	6	5	3	2	2	2	3	4	7	4	7	4
14	6	5	3	2	2	2	3	4	7	3	6	4
15	6	5	3	2	2	2	3	4	7	3	6	4
16	6	4	3	2	2	2	3	4	7	3	6	4
17	6	4	3	2	2	2	3	4	7	4	6	4
18	6	4	3	2	2	2	3	4	7	4	5	5
19	6	4	3	2	2	2	2	4	7	4	5	6
20	6	4	3	2	2	2	2	4	7	3	6	6
21	6	4	3	2	2	2	2	3	7	3	5	5
22	6	4	3	2	2	2	2	3	6	3	6	4
23	6	4	3	2	2	2	2	3	6	3	5	4
24	6	4	3	2	2	2	2	3	6	4	4	4
25	6	4	3	2	2	1	2	3	6	4	6	4
26	6	4	3	2	2	1	2	3	7	4	8	4
27	6	4	3	2	2	1	2	3	7	4	4	4
28	6	4	3	2	2	1	2	3	7	4	4	4
29	6	4	3	2	...	1	2	3	7	4	5	4
30	6	4	3	2	...	1	2	3	7	4	5	4
31	6	...	3	2	...	1	...	3	...	5	5	...
Mean	6	4	3	2	2	2	4	7	5.3	4	5	5
Max.	6	5	3	2	2	3	7	7	7	8	8	6
Min.	6	4	3	2	2	1	2	3	2	3	4	4
A. F.	369	268	184	123	111	123	137	240	315	271	344	286
Total Acre Feet	2,771.											

COLD WATER CREEK—Section 34-18-46

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.0
2	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.0
3	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.0
4	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.0
5	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.0
6	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
7	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
8	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
9	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
10	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
11	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
12	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
13	3.0	4.0	5.0	5.0	5.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
14	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
15	3.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
16	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	1.0	0.1	0.1	0.0
17	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	1.0	0.1	0.1	0.0
18	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	1.0	0.1	0.1	0.0
19	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	1.0	0.1	0.1	0.0
20	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	0.0	0.1	0.1	0.0
21	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	0.0	0.1	0.1	0.0
22	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	0.0	0.1	0.1	0.0
23	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	0.0	0.1	0.1	0.0
24	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	0.0	0.1	0.1	0.0
25	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	0.0	0.1	0.1	0.0
26	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	0.0	0.1	0.1	0.0
27	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	0.0	0.1	0.1	0.0
28	5.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	0.0	0.1	0.1	0.0
29	5.0	4.0	5.0	5.0	...	4.0	3.0	0.0	0.0	0.1	0.1	0.0
30	5.0	4.0	5.0	5.0	...	4.0	3.0	0.0	0.0	0.1	0.1	0.0
31	5.0	...	5.0	5.0	...	4.0	...	0.0	0.0	0.1	0.1	...
Mean	4.0	4.0	5.0	5.0	4.0	4.0	3.0	1.0	1.0	0.1	0.1	0.0
Max.	5.0	4.0	5.0	5.0	4.0	4.0	3.0	3.0	1.0	0.1	0.1	0.1
Min.	3.0	4.0	5.0	5.0	4.0	4.0	3.0	0.0	0.0	0.1	0.1	0.0
A. F.	238.0	238.0	307.0	307.0	222.0	246.0	179.0	92.0	42.0	6.0	6.0	0.0
Total Acre Feet	1,883.											

DAWSON COUNTY DRAIN—Section 13 and 14-9-21
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	21	24	22	....	....	....	....	15	9	4	....
2	25	21	24	22	....	....	....	....	15	9	4	....
3	25	21	24	22	....	....	....	....	15	9	4	....
4	25	21	24	22	....	....	....	....	15	9	4	....
5	25	21	24	22	....	....	....	....	15	9	4	....
6	25	21	24	22	....	....	....	....	15	10	4	....
7	25	21	24	22	....	....	....	....	15	10	4	....
8	25	21	24	22	....	....	....	....	15	10	4	....
9	25	21	24	22	....	....	....	....	15	10	4	....
10	25	21	24	22	....	....	....	....	15	10	4	....
11	25	21	24	22	....	....	....	....	15	7	4	....
12	25	21	24	22	....	....	....	....	15	7	4	....
13	25	21	24	22	....	....	....	....	15	11	4	....
14	25	21	24	22	....	....	....	....	15	12	4	....
15	25	21	24	22	....	....	....	....	15	13	4	....
16	15	25	24	22	....	....	....	....	17	9	4	....
17	15	25	24	22	....	....	....	....	17	9	4	....
18	15	25	24	22	....	....	....	....	17	9	4	....
19	15	25	24	22	....	....	....	....	17	9	4	....
20	15	25	24	22	....	....	....	....	17	9	4	....
21	15	25	24	22	....	....	....	....	17	9	4	....
22	15	25	24	22	....	....	....	....	17	9	4	....
23	15	25	24	22	....	....	....	....	17	9	4	....
24	15	25	24	22	....	....	....	....	17	9	4	....
25	15	25	24	22	....	....	....	....	17	9	4	....
26	15	25	24	22	....	....	....	....	9	9	4	....
27	15	25	24	22	....	....	....	....	9	9	4	....
28	15	25	24	22	....	....	....	....	9	9	4	....
29	15	25	24	22	....	....	....	....	9	9	4	....
30	15	25	24	22	....	....	....	....	9	9	4	....
31	15	....	24	22	....	....	....	....	....	9	4	....
Mean	20	23	24	22	*N.R.	*N.R.	*N.R.	*N.R.	14	9	4	*N.R.
Max.	25	25	24	22	....	....	....	....	17	13	4	....
Min.	15	21	24	22	....	....	....	....	9	9	4	....
A. F.	1220	1369	1476	1353	....	....	....	....	873	573	246	....
N.R.—No Record.												

DEGRAW DRAIN—Section 24-20-51
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	10	9	8	7	7	6	6	3	3	2	3
2	12	10	9	8	7	7	6	6	3	3	2	3
3	12	10	9	8	7	7	6	6	3	3	2	3
4	12	10	9	8	7	7	6	6	3	3	2	3
5	12	10	9	8	7	7	6	6	3	3	2	3
6	12	10	9	8	7	6	5	4	3	3	2	3
7	12	10	9	8	7	6	5	4	3	2	2	3
8	12	10	9	8	7	6	5	4	2	2	2	3
9	12	10	9	8	7	9	5	4	2	2	2	3
10	12	10	9	8	7	9	5	4	2	2	2	3
11	12	10	9	8	7	9	5	4	2	2	3	3
12	12	10	9	8	7	9	5	4	2	2	3	3
13	12	10	9	8	7	9	5	4	2	2	3	3
14	12	10	9	8	7	9	5	4	2	2	3	3
15	12	10	9	8	7	9	5	4	2	2	3	3
16	10	10	9	8	7	7	4	4	2	3	3	4
17	10	10	9	8	7	7	4	4	2	3	3	4
18	10	10	9	8	7	7	4	4	2	3	3	4
19	10	10	9	8	7	7	4	4	2	3	3	4
20	10	10	9	8	7	7	4	4	2	3	3	4
21	10	10	9	8	7	6	4	3	2	2	4	4
22	10	10	9	8	7	6	4	3	2	2	4	4
23	10	10	9	8	7	6	4	3	2	2	4	4
24	10	10	9	8	7	6	4	3	2	2	4	4
25	10	10	9	8	7	6	4	3	2	2	4	4
26	10	10	9	8	7	5	4	3	2	2	3	4
27	10	10	9	8	7	5	4	3	2	2	3	4
28	10	10	9	8	7	5	4	3	2	2	3	4
29	10	10	9	8	....	5	4	3	2	2	3	4
30	10	10	9	8	....	5	4	3	2	2	3	4
31	10	....	9	8	....	5	....	3	....	2	3	....
Mean	11	10	9	8	7	7	5	4	2	2	3	3
Max.	12	10	9	8	7	9	6	6	3	3	4	4
Min.	10	10	9	8	7	5	4	3	2	2	2	3
A. F.	676	595	553	492	389	412	280	246	131	148	172	208
Total Acre Feet 4,302.												

REPORT OF SECRETARY

DUGOUT CREEK (UPPER)—Section 21-20-50												
Year Ending September 30, 1931												
Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	10	5	4	4	4	3	2	3	5	7	11
2	25	10	5	4	4	4	3	2	3	5	7	8
3	25	10	5	4	4	4	3	2	3	6	7	8
4	25	10	5	4	4	4	3	2	3	6	7	9
5	25	10	5	4	4	4	3	2	3	5	6	10
6	16	8	5	4	4	2	3	1	4	5	7	9
7	15	8	5	4	4	2	2	1	4	5	21	9
8	15	8	5	4	4	2	2	1	4	4	7	9
9	15	8	5	4	4	2	2	1	4	5	8	9
10	15	8	5	4	4	2	2	1	4	5	5	9
11	15	6	5	4	4	3	2	1	4	5	7	9
12	15	6	5	4	4	3	2	1	16	5	7	10
13	15	6	5	4	4	3	2	1	10	5	7	9
14	15	6	5	4	4	3	2	1	8	5	7	10
15	15	6	5	4	4	3	2	1	6	5	7	9
16	13	5	4	4	4	3	2	1	4	5	8	11
17	13	5	4	4	4	3	2	1	4	5	8	11
18	13	5	4	4	4	3	2	1	4	6	8	12
19	13	5	4	4	4	3	2	1	4	5	8	13
20	13	5	4	4	4	3	2	1	4	7	7	13
21	13	5	4	4	4	2	2	1	4	14	7	13
22	13	5	4	4	4	2	2	1	3	7	7	13
23	13	5	4	4	4	2	2	1	5	6	9	12
24	13	5	4	4	4	2	2	1	4	6	8	13
25	13	5	4	4	4	2	2	1	4	6	8	13
26	12	5	4	4	4	2	2	2	3	6	8	14
27	12	5	4	4	4	2	2	1	4	5	8	14
28	12	5	4	4	4	2	2	2	4	6	9	14
29	12	5	4	4	....	2	2	2	4	6	9	13
30	12	5	4	4	....	2	2	2	5	6	8	13
31	12	....	4	....	....	2	2	2	....	6	9	....
Mean	15	-6	4	4	4	3	2	1	5	6	8	11
Max.	25	10	5	4	4	4	3	2	16	14	9	14
Min.	12	5	4	4	4	2	2	1	3	4	5	8
A. F.	947	387	277	246	222	160	131	86	286	350	486	655
Total Acre Feet	4,233.											

ELKHORN RIVER AT O'NEILL—Section 31-29-11												
Year Ending September 30, 1931												
Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	75	155	57	38	23	12	17
2	80	122	57	34	23	17	17
3	85	138	47	30	23	17	17
4	90	138	47	30	23	17	17
5	119	138	47	34	30	23	14
6	70	122	47	38	26	23	14
7	*31	....	....	....	70	107	47	38	23	23	14
8	N.R.	....	....	....	68	93	52	38	23	23	14
9	*27	....	....	....	68	93	57	30	23	23	14
10	N.R.	....	....	....	....	57	80	93	30	30	23	14
11	68	80	107	30	30	23	12
12	68	57	122	30	23	20	12
13	93	57	138	38	23	20	12
14	107	47	122	34	23	17	14
15	107	57	107	30	20	17	14
16	107	57	80	30	17	17	17
17	93	57	80	30	17	17	17
18	93	57	68	26	17	17	17
19	*32	....	....	....	68	57	68	26	17	17	20
20	80	68	57	30	17	17	20
21	N.R.	....	....	....	80	57	57	30	17	17	20
22	80	57	57	30	17	17	20
23	80	57	47	30	17	17	20
24	80	57	38	30	17	17	23
25	80	57	38	26	17	17	26
26	80	57	38	26	17	17	26
27	*28	....	....	....	93	57	38	26	17	17	26
28	N.R.	....	....	....	....	75	57	38	26	14	17	23
29	70	52	38	23	14	14	23
30	75	52	38	23	14	14	23
31	95	....	38	....	14	14	....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	82	78	63	31	20	18	18
Max.	119	155	138	38	30	23	26
Min.	57	47	38	23	14	12	12
A. F.	5070	4640	3900	1810	1240	1110	1070
Total Acre Feet	18,800.											
*Actual Measurements.												
N.R.—No Record.												

DEPARTMENT OF PUBLIC WORKS

527

ELKHORN RIVER AT NELIGH (U. S. G. S. Measurements)—Section 20-25-6

Year Ending September 30, 1931													
Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	330	180	94	54	22	30	
2	410	150	94	94	22	54	
3	455	125	80	80	22	54	
4	550	150	94	80	22	54	
5	290	500	180	94	94	22	42
6	330	455	180	108	94	22	30
7	330	455	180	108	80	16	22
8	330	410	180	108	80	22	22
9	*126	.....	.....	.....	.....	290	370	215	94	108	54	16
10	N.R.	.....	.....	.....	.....	290	330	290	94	108	66	16
11	290	330	410	94	94	66	16
12	*111	.....	.....	.....	.....	290	290	500	94	80	66	16
13	N.R.	.....	.....	.....	.....	.....	370	290	500	94	80	54	16
14	550	290	500	94	66	42	16
15	500	250	410	94	54	30	22
16	500	250	330	80	42	42	22
17	500	250	290	80	30	30	22
18	500	250	250	80	22	54	54
19	*133	.....	.....	.....	.....	455	250	215	80	22	42	80
20	N.R.	.....	.....	.....	.....	370	250	180	80	16	30	80
21	370	290	150	108	16	54	80
22	330	290	125	125	22	66	80
23	290	290	125	125	22	54	66
24	290	290	108	108	42	54	80
25	290	290	108	108	42	54	94
26	290	250	108	94	42	54	94
27	*111	.....	.....	.....	.....	200	250	108	94	42	54	94
28	N.R.	.....	.....	.....	.....	.....	150	250	108	80	30	42	94
29	175	250	108	66	30	30	80
30	250	250	108	54	22	30	80
31	280	.....	108	.....	22	30	.....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	337	322	215	93	55	41	51
Max.	550	500	500	125	108	66	94
Min.	150	250	108	54	16	16	16
A. F.	18000	192000	13200	5550	3390	2510	3030

Total Acre Feet 64,900.
 *Actual Measurements.
 N.R.—No Record.

ELKHORN RIVER AT WATERLOO (U. S. G. S. Meas.)—Section 10-15-10

Year Ending September 30, 1931												
Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	378	498	460	550	900	728	698	591	492	314	187	514
2	405	509	460	550	1000	705	780	585	482	318	235	257
3	410	509	460	550	1100	705	1010	566	460	299	198	382
4	401	509	460	550	1160	677	1220	560	445	295	187	209
5	415	503	460	550	1100	705	1200	684	537	315	214	174
6	435	509	850	550	1030	635	1100	923	566	335	189	169
7	445	492	1290	550	986	670	1060	968	445	364	184	156
8	455	509	1060	550	844	705	1040	852	610	373	217	147
9	455	531	750	550	780	691	1070	772	765	369	247	147
10	445	549	758	550	691	698	959	750	712	347	479	135
11	425	543	758	500	649	765	887	772	656	351	316	131
12	425	555	712	500	691	728	804	804	1920	339	277	124
13	430	526	788	500	758	750	758	836	1930	326	214	127
14	430	572	765	500	629	780	712	844	1020	330	189	129
15	440	572	728	500	604	780	677	860	656	330	184	133
16	560	591	712	481	670	750	705	923	549	311	174	131
17	742	585	698	500	720	735	758	950	471	326	176	129
18	1230	597	498	500	656	796	780	959	420	318	176	192
19	1060	622	430	500	635	860	758	896	387	460	179	253
20	968	923	420	500	656	896	780	804	373	330	176	482
21	720	2110	410	620	670	914	705	742	410	284	171	445
22	610	1500	460	620	670	887	705	698	977	274	174	360
23	560	1310	502	620	698	878	712	635	1430	260	169	728
24	537	1140	465	620	698	844	728	604	1450	235	195	503
25	520	977	502	620	677	796	712	578	788	238	192	1010
26	520	812	450	620	677	812	677	549	526	229	250	1540
27	520	735	450	620	712	836	656	514	435	217	192	1500
28	509	526	450	620	742	780	649	578	378	209	192	572
29	509	465	450	620	.....	758	635	616	337	203	176	392
30	487	440	450	620	.....	705	629	520	311	203	169	378
31	492	.....	450	620	.....	698	.....	509	.....	192	174	.....
Mean	546	707	599	558	779	763	819	724	700	300	208	385
Max.	1230	2110	1290	620	1160	914	1220	968	1930	460	479	1540
Min.	378	440	410	481	604	635	629	509	311	192	169	124
A. F.	33600	42100	36800	34300	43300	46900	48700	44500	41700	18400	12800	22900

Total Acre Feet 426,000.

REPORT OF SECRETARY

FAIRFIELD SEEP—Section 18-21-53
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	3	4	5	4	3	2	3	6	7	7	5
2	9	3	4	5	4	3	2	3	6	7	7	5
3	9	3	4	5	4	3	2	3	6	7	6	5
4	9	3	4	5	4	3	2	3	6	7	6	5
5	9	3	4	5	4	3	2	3	6	7	7	5
6	9	3	4	5	4	3	1	3	7	6	7	5
7	9	3	4	5	4	3	1	3	7	5	5	5
8	9	3	4	5	4	3	1	2	7	5	7	5
9	9	3	4	5	4	3	1	2	7	5	7	5
10	9	3	4	5	4	3	1	2	7	5	7	5
11	9	3	4	6	3	3	1	2	6	6	7	5
12	9	3	4	6	3	3	1	2	6	7	6	5
13	9	3	4	6	3	3	1	2	6	7	6	5
14	9	3	4	6	3	3	1	2	5	7	5	6
15	9	3	4	6	3	3	1	2	5	7	5	6
16	3	2	4	6	3	2	1	4	5	7	5	6
17	3	2	4	6	3	2	1	4	5	7	5	6
18	3	2	4	6	3	2	1	4	5	7	5	6
19	3	2	4	6	3	2	1	4	6	5	5	6
20	3	2	4	6	3	2	1	4	6	5	5	6
21	3	2	4	5	3	1	2	4	6	5	6	6
22	3	2	4	5	3	1	2	4	6	5	6	6
23	3	2	4	5	3	1	2	4	7	5	6	5
24	3	2	4	5	3	1	2	4	7	5	5	6
25	3	2	4	5	3	1	2	4	7	5	5	6
26	3	2	4	5	3	1	2	4	7	5	5	6
27	3	2	4	5	3	1	2	4	6	6	5	6
28	3	2	4	5	3	1	2	4	6	6	5	5
29	3	2	4	5	3	1	2	4	6	6	5	5
30	3	2	4	5	3	1	2	4	6	6	5	5
31	3	...	4	5	...	1	...	6	...	5	5	...
Mean	6	2	4	5	3	2	1	4	6	6	7	...
Max.	9	3	4	6	4	3	2	6	7	7	7	6
Min.	3	2	4	5	3	1	1	2	5	5	5	5
A. F.	363	149	246	326	189	129	89	221	363	357	350	321
Total Acre Feet	3,103.											

FANNING SEEP—Section 28-23-56
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	8	10	9	6	5	4	5	3	7	9	7
2	7	8	10	9	6	5	4	5	3	7	9	6
3	7	8	10	9	6	5	4	5	3	6	8	7
4	7	8	10	9	6	5	4	4	3	6	7	7
5	7	8	10	9	6	5	4	4	4	5	6	8
6	7	8	10	9	6	5	4	4	4	5	7	8
7	7	8	10	9	6	5	4	4	4	5	8	9
8	7	8	10	9	6	5	4	4	4	5	7	9
9	7	8	10	9	6	5	4	4	4	5	7	10
10	7	8	10	9	6	5	4	4	5	4	7	9
11	7	8	10	8	6	5	4	3	5	4	7	9
12	7	8	10	8	6	5	4	3	5	4	7	9
13	7	8	10	8	6	5	4	3	5	5	7	9
14	7	8	10	8	6	5	4	3	5	6	7	9
15	7	8	10	8	6	5	4	3	5	6	7	8
16	14	8	10	8	5	5	4	3	5	6	7	8
17	14	8	10	8	5	5	4	3	5	6	6	9
18	14	8	10	8	5	5	4	3	5	6	6	9
19	14	8	10	8	5	5	4	3	5	6	6	8
20	14	8	10	8	5	5	4	3	5	6	6	8
21	14	8	10	7	5	4	4	3	5	6	6	8
22	14	8	10	7	5	4	4	3	5	6	6	7
23	14	8	10	7	5	4	4	3	6	6	6	6
24	14	8	10	7	5	4	4	3	6	6	6	6
25	14	8	10	7	5	4	4	3	6	6	6	6
26	14	8	10	7	5	4	4	3	6	6	6	5
27	14	8	10	7	5	4	4	3	6	6	5	5
28	14	8	10	7	5	4	4	3	6	7	6	4
29	14	8	10	7	...	4	4	3	6	7	6	4
30	14	8	10	7	...	4	4	3	7	7	6	4
31	14	...	10	7	...	4	...	3	...	7	6	...
Mean	11	8	10	8	5	5	4	3	5	6	7	7
Max.	14	8	10	9	6	5	4	5	7	7	9	10
Min.	7	8	10	7	5	4	4	3	3	5	5	4
A. F.	652	476	615	492	305	283	238	209	292	357	412	440
Total Acre Feet	4771.											

FRENCHMAN RIVER AT HAMLET (U. S. G. S. Meas.)—Section 19-5-34

Year Ending September 30, 1931												
Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	73	89	85	113	127	120	168	102	93	58	64	79
2	80	87	90	111	120	121	166	103	94	72	74	72
3	85	83	85	109	113	118	159	100	91	67	77	79
4	90	89	80	113	116	123	150	98	98	110	73	79
5	91	98	85	111	120	124	149	96	101	95	75	79
6	95	85	100	109	124	121	141	98	100	86	73	83
7	100	85	115	115	122	122	140	100	98	89	137	87
8	100	89	114	113	120	120	139	103	96	87	99	76
9	92	85	113	114	119	120	136	103	97	86	927	71
10	88	84	114	114	118	114	129	99	92	75	183	76
11	92	86	117	115	116	119	124	95	100	68	132	72
12	106	92	114	114	118	117	114	92	100	76	123	77
13	101	90	115	100	118	119	113	94	96	75	119	73
14	104	88	115	95	115	117	106	98	100	73	110	63
15	99	92	115	90	117	114	104	95	105	55	99	77
16	95	87	116	90	117	115	100	92	99	76	92	67
17	97	86	110	100	117	113	99	91	100	63	95	80
18	95	85	110	117	121	112	99	96	93	73	96	89
19	93	98	110	110	118	111	87	91	94	67	83	79
20	86	70	109	109	114	111	95	87	91	60	83	86
21	92	49	109	113	116	108	89	91	88	73	87	83
22	95	62	115	113	122	106	83	86	88	67	118	75
23	92	68	103	110	127	118	97	80	84	72	92	66
24	89	82	110	114	121	113	99	89	81	75	101	79
25	89	80	105	116	119	116	100	79	83	70	95	77
26	92	80	104	117	120	123	105	135	81	70	87	81
27	88	80	100	114	120	100	115	133	71	67	75	82
28	90	80	108	118	120	80	110	103	87	67	82	86
29	88	80	109	122	....	90	109	102	64	60	91	86
30	91	80	103	124	....	100	108	99	64	75	86	83
31	91	....	106	124	....	124	....	97	....	59	87	....
Mean	92	83	106	111	119	114	118	98	90	73	123	78
Max.	106	98	117	124	127	124	168	135	105	110	927	89
Min.	73	49	80	90	113	80	83	79	64	55	64	63
A. F.	5670	4940	6520	6820	6610	7010	7020	6010	5370	4490	7560	4650
Total Acre Feet	72,700.											

FRENCHMAN RIVER ABOVE MARANVILLE RESERVOIR -- Section 10-6-41

Year Ending September 30, 1931												
Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	5	4	4	4	7	4	4	4	2	2	2
2	7	5	4	4	4	7	4	4	4	2	2	2
3	7	5	4	4	4	7	4	4	4	2	2	2
4	7	5	4	4	4	7	4	4	4	2	2	2
5	7	5	4	4	4	7	4	4	4	2	2	2
6	7	5	4	4	4	7	4	4	4	2	2	2
7	7	5	4	4	4	7	4	4	4	2	2	2
8	7	5	4	4	4	7	4	4	4	2	2	2
9	7	5	4	4	4	7	4	4	4	2	2	2
10	7	5	4	4	4	7	4	4	4	2	2	2
11	7	5	4	4	5	7	3	4	2	2	3	2
12	7	5	4	4	5	7	3	4	2	2	3	2
13	7	5	4	4	5	7	3	4	2	2	3	2
14	7	5	4	4	5	7	3	4	2	2	3	2
15	7	5	4	4	5	7	3	4	2	2	3	2
16	4	5	4	4	5	5	3	5	2	2	3	2
17	4	5	4	4	5	5	3	5	2	2	3	2
18	4	5	4	4	5	5	3	5	2	2	3	2
19	4	5	4	4	5	5	3	5	2	2	3	2
20	4	5	4	4	5	5	3	5	2	2	3	2
21	4	5	4	4	6	5	3	5	2	2	4	2
22	4	5	4	4	6	5	3	5	2	2	4	2
23	4	5	4	4	6	5	3	5	2	2	4	2
24	4	5	4	4	6	5	3	5	2	2	4	2
25	4	5	4	4	6	5	3	5	2	2	4	2
26	4	5	4	4	6	5	3	5	2	2	4	2
27	4	5	4	4	6	5	3	5	2	2	4	2
28	4	5	4	4	6	5	3	5	2	2	4	2
29	4	5	4	4	....	5	3	5	2	2	4	2
30	4	5	4	4	....	5	3	5	2	2	4	2
31	4	....	4	4	....	5	....	5	....	2	4	....
Mean	5	5	4	4	5	6	3	4	2	2	3	2
Max.	7	5	4	4	6	7	4	5	4	3	4	2
Min.	4	5	4	4	4	5	3	4	2	2	2	2
A. F.	335	297	246	246	274	367	204	278	159	123	186	119
Total Acre Feet	2,830.											

REPORT OF SECRETARY

FRENCHMAN RIVER BELOW MARANVILLE RESERVOIR—Section 11-6-41

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
2	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
3	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
4	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
5	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
6	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	3.0	1.0	1.0
7	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	3.0	1.0	1.0
8	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	3.0	1.0	1.0
8	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	3.0	1.0	1.0
9	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	3.0	1.0	1.0
10	2.0	5.0	5.0	5.0	6.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
11	7.0	5.0	5.0	5.0	5.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
12	7.0	5.0	5.0	5.0	5.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
13	7.0	5.0	5.0	5.0	5.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
14	7.0	5.0	5.0	5.0	5.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
15	7.0	5.0	5.0	5.0	5.0	5.0	2.0	4.0	1.0	2.0	1.0	1.0
16	7.0	5.0	5.0	6.0	5.0	3.0	5.0	2.0	0.2	2.0	1.0	1.0
17	7.0	5.0	5.0	6.0	5.0	3.0	5.0	2.0	0.2	2.0	1.0	1.0
18	7.0	5.0	5.0	6.0	5.0	3.0	5.0	2.0	0.2	2.0	1.0	1.0
19	7.0	5.0	5.0	6.0	5.0	3.0	5.0	2.0	0.2	2.0	1.0	1.0
20	7.0	5.0	5.0	6.0	5.0	3.0	5.0	2.0	0.2	2.0	1.0	1.0
21	7.0	5.0	5.0	6.0	5.0	3.0	5.0	2.0	0.2	0.2	1.0	1.0
22	7.0	5.0	5.0	6.0	5.0	3.0	5.0	2.0	0.2	0.2	1.0	1.0
23	7.0	5.0	5.0	6.0	5.0	3.0	5.0	2.0	0.2	0.2	1.0	1.0
24	7.0	5.0	5.0	6.0	5.0	3.0	5.0	2.0	0.2	0.2	1.0	1.0
25	7.0	5.0	5.0	6.0	5.0	3.0	5.0	2.0	0.2	0.2	1.0	1.0
26	7.0	5.0	5.0	6.0	5.0	3.0	4.0	1.0	0.2	0.2	1.0	1.0
27	7.0	5.0	5.0	6.0	5.0	3.0	4.0	1.0	0.2	0.2	1.0	1.0
28	7.0	5.0	5.0	6.0	5.0	3.0	4.0	1.0	0.2	3.0	1.0	1.0
29	7.0	5.0	5.0	6.0	....	3.0	4.0	1.0	0.2	3.0	1.0	1.0
30	7.0	5.0	5.0	6.0	....	3.0	4.0	1.0	0.2	3.0	1.0	1.0
31	7.0	....	5.0	6.0	....	3.0	....	1.0	....	8.0	1.0	....
Mean	5.0	5.0	5.0	5.0	5.0	4.0	3.0	3.0	0.6	2.0	1.0	1.0
Max.	7.0	5.0	5.0	6.0	6.0	5.0	5.0	4.0	1.0	8.0	1.0	1.0
Min.	2.0	5.0	5.0	5.0	5.0	3.0	2.0	1.0	0.2	0.2	1.0	1.0
A. F.	331.0	297.0	307.0	339.0	298.0	241.0	198.0	170.0	36.0	125.0	61.0	59.0
Total Acre Feet	2,465.											

FRENCHMAN RIVER BELOW INMAN CANAL—Section 17-6-40

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	18	26	26	N.R.	25	19	19	16	10	4	4
2	6	18	26	26	....	25	19	19	16	10	4	4
3	6	18	26	26	....	25	19	19	16	10	4	4
4	6	18	26	26	....	25	19	19	16	10	4	4
5	6	18	26	26	....	25	19	19	16	10	4	4
6	6	18	26	26	....	25	19	19	16	10	4	4
7	6	18	26	26	....	25	19	19	16	10	4	4
8	6	18	26	26	....	25	19	19	16	10	4	4
9	6	18	26	26	....	25	19	19	16	10	4	4
10	6	18	26	26	....	25	19	19	16	10	4	4
11	15	18	26	26	....	25	19	19	14	8	4	4
12	15	18	26	26	....	25	19	19	14	8	4	4
13	15	18	26	26	....	25	19	19	14	8	4	4
14	15	18	26	26	....	25	19	19	14	8	4	4
15	15	18	26	26	....	25	19	19	14	8	4	4
16	15	18	26	31	....	25	12	19	14	8	4	4
17	15	18	26	31	....	25	12	19	14	8	4	4
18	15	18	26	31	....	25	12	19	14	8	4	4
19	15	18	26	31	....	25	12	19	14	8	4	4
20	15	18	26	31	....	25	12	19	14	8	4	4
21	24	18	26	31	....	25	12	16	13	6	4	8
22	24	18	26	31	....	25	12	16	13	6	4	8
23	24	18	26	31	....	25	12	16	13	6	4	8
24	24	18	26	31	....	25	12	16	13	6	4	8
25	24	18	26	31	....	25	12	16	13	6	4	8
26	24	18	26	31	....	25	12	16	13	6	4	8
27	24	18	26	31	....	25	12	16	13	6	4	8
28	24	18	26	31	....	25	12	16	11	6	4	8
29	24	18	26	31	....	25	12	16	11	6	4	8
30	24	18	26	31	....	25	12	16	11	6	4	8
31	24	....	26	31	....	25	....	16	....	6	4	....
Mean	15	18	26	28	N.R.	25	15	18	14	8	4	5
Max.	24	18	26	31	....	25	19	19	16	10	4	8
Min.	6	18	26	26	....	25	12	16	11	6	4	4
A. F.	940	1071	1599	1757	....	1537	922	1103	841	488	246	317
Total Acre Feet	10,820.											
N.R.—No Record.												

FRENCHMAN RIVER ABOVE CHAMPION RESERVOIR—Section 22-6-40

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	28	21	25	.....	.....	32	29	26	40	15	18	8
2	28	24	25	.....	.....	32	29	26	40	15	18	8
3	28	24	25	.....	.....	32	29	26	40	15	18	8
4	28	24	25	.....	.....	32	29	26	40	15	18	8
5	28	24	25	.....	.....	32	29	26	40	15	18	8
6	28	24	25	.....	.....	32	29	26	30	15	18	8
7	28	24	25	.....	.....	32	29	26	30	15	18	8
8	28	24	25	.....	.....	32	29	26	30	15	18	8
9	28	24	25	.....	.....	32	29	26	30	15	18	8
10	28	24	25	.....	.....	32	29	26	30	15	18	8
11	28	24	25	.....	.....	32	29	26	30	15	9	8
12	28	24	25	.....	.....	32	29	26	30	15	9	8
13	28	24	25	.....	.....	32	29	26	30	15	9	8
14	28	24	25	.....	.....	32	29	26	30	15	9	8
15	28	24	25	.....	.....	32	29	26	30	15	9	8
16	32	24	25	.....	.....	32	27	26	20	18	9	8
17	32	24	25	.....	.....	32	27	26	20	18	9	8
18	32	24	25	.....	.....	32	27	26	20	18	9	8
19	32	24	25	.....	.....	32	27	26	20	18	9	8
20	32	24	25	.....	.....	32	27	26	20	18	9	8
21	32	24	25	.....	.....	32	27	26	20	18	8	8
22	32	24	25	.....	.....	32	27	26	20	18	8	8
23	32	24	25	.....	.....	32	27	26	20	18	8	8
24	32	24	25	.....	.....	32	27	26	20	18	8	8
25	32	24	25	.....	.....	32	27	26	20	18	8	8
26	32	24	25	.....	.....	32	27	64	20	18	8	8
27	32	24	25	.....	.....	32	27	64	20	18	8	8
28	32	24	25	.....	.....	32	27	64	20	18	8	8
29	32	24	25	.....	.....	32	27	64	20	18	8	8
30	32	24	25	.....	.....	32	27	64	20	18	8	8
31	32	.....	25	.....	.....	32	.....	64	.....	18	8	.....
Mean	30	24	25	*N.R.	*N.R.	32	28	.....	27	17	12	8
Max.	32	24	25	.....	.....	32	29	64	40	18	18	8
Min.	28	24	25	.....	.....	32	27	26	20	15	8	8
A. F.	1849	1428	1537	.....	.....	1967	1468	1924	1587	1017	710	476
Total Acre Feet 13,960.												
*N.R.—No Record.												

FRENCHMAN RIVER AT CULBERTSON (U. S. G. S. Meas.)—Section 17-3-31

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	168	150	184	130	150	160	172	142	52	22	47	47
2	168	150	184	130	150	160	188	142	52	22	47	47
3	168	150	184	130	150	160	204	142	52	22	47	47
4	168	150	184	130	150	160	204	142	32	32	47	37
5	168	150	184	130	150	160	204	142	63	52	47	47
6	168	150	184	130	150	160	220	128	42	68	47	47
7	168	150	184	130	150	160	204	128	42	58	297	37
8	168	150	184	130	150	160	204	128	52	68	119	37
9	168	150	184	130	150	160	180	128	42	80	264	37
10	168	150	184	130	150	160	164	128	42	68	420	37
11	168	184	150	130	150	142	156	128	32	69	297	27
12	168	184	150	130	150	156	142	128	52	47	232	27
13	168	184	150	130	150	156	135	114	63	47	172	27
14	168	184	150	130	150	156	135	114	86	37	145	27
15	168	184	150	130	150	156	114	114	74	27	132	27
16	131	184	150	130	160	156	107	114	74	42	119	27
17	131	184	150	130	160	156	107	114	74	42	119	27
18	131	184	150	130	160	142	86	114	74	42	106	27
19	131	184	150	130	160	142	86	114	63	42	93	37
20	131	184	150	130	160	156	93	114	52	42	81	37
21	131	184	150	160	142	93	114	52	47	64	27	27
22	131	184	130	175	160	142	114	114	52	47	52	27
23	131	184	130	229	160	142	114	86	42	47	64	37
24	131	184	130	200	160	142	121	86	42	47	87	37
25	131	184	130	175	160	142	121	74	32	47	75	58
26	131	184	130	150	160	120	128	74	32	47	64	58
27	131	184	130	150	160	100	128	63	32	47	52	58
28	131	184	130	150	160	90	149	52	32	47	52	58
29	131	184	130	150	.....	100	135	52	22	47	64	58
30	131	184	130	150	.....	125	149	63	22	47	64	47
31	131	.....	130	150	.....	150	.....	63	.....	47	64	.....
Mean	148	172	154	143	155	146	145	108	49	47	115	39
Max.	168	184	184	229	160	160	220	142	86	80	420	58
Min.	131	150	130	130	150	90	86	52	22	22	47	27
A. F.	9156	10274	9461	8785	8588	8951	8630	6640	2930	2870	7070	2330
Total Acre Feet 85,685.												

REPORT OF SECRETARY

GERING DRAIN AT GERING—Section 6-21-54

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40	35	42	38	42	31	31	23	71	47	48	32
2	40	35	42	38	42	29	30	26	71	48	44	34
3	40	35	42	38	42	30	26	24	38	47	48	36
4	40	35	42	38	42	28	31	23	40	48	48	34
5	40	35	42	38	42	27	26	29	75	87	47	32
6	48	35	42	38	42	25	26	28	49	62	50	30
7	48	35	42	38	42	21	25	24	71	47	53	34
8	48	35	42	38	42	26	24	28	108	48	52	31
9	48	35	42	38	42	18	26	54	54	59	54	32
10	48	35	42	38	42	20	23	29	79	47	54	34
11	48	40	40	36	44	20	24	28	63	47	51	29
12	48	40	40	36	44	22	26	26	114	49	52	26
13	48	40	40	36	44	21	26	72	109	75	51	26
14	48	40	40	36	44	22	26	85	59	57	48	33
15	48	40	40	36	44	24	25	101	130	50	47	28
16	55	40	40	36	44	25	26	74	111	49	51	28
17	55	40	40	36	44	27	25	49	71	49	52	24
18	55	40	40	36	42	28	21	92	71	49	52	24
19	55	40	40	36	41	32	20	83	63	49	52	24
20	55	40	40	36	40	29	19	76	74	49	52	36
21	48	44	40	38	42	31	18	49	71	49	55	24
22	48	44	40	38	40	32	20	29	72	56	51	30
23	48	44	40	38	36	31	20	22	66	47	49	30
24	48	44	40	38	37	30	18	33	72	50	49	35
25	48	44	40	38	36	29	27	24	68	50	47	51
26	28	44	40	38	35	25	26	24	69	49	41	34
27	48	44	40	38	34	25	26	29	72	44	34	36
28	48	44	40	38	33	25	26	27	74	48	37	37
29	48	44	40	38	....	28	25	31	68	52	30	36
30	48	44	40	38	....	27	27	48	46	52	40	35
31	48	....	40	38	....	32	....	71	....	46	30	....
Mean	48	40	41	37	41	26	25	46	73	52	47	32
Max.	55	44	42	38	44	32	31	101	130	87	55	51
Min.	40	35	40	36	33	18	18	22	38	44	30	24
A. F.	2940	2360	2500	2300	2270	1630	1460	2800	4360	3190	2910	1890
Total Acre Feet	19,200.											

GOTHENBURG POWER WASTE—Section 16-11-25

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	170	174	100	N.R.	N.R.	N.R.	N.R.	N.R.	162	36	25	76
2	170	154	118	....	....	....	....	....	162	64	28	130
3	170	164	136	....	....	....	....	....	162	144	31	122
4	170	164	108	....	....	....	....	....	162	140	36	76
5	146	164	113	....	....	....	....	....	100	152	72	104
6	164	164	145	*49	....	....	....	....	95	140	108	166
7	164	164	140	N.R.	....	....	....	....	88	172	100	166
8	164	164	140	....	....	....	....	....	190	166	144	166
9	170	164	170	....	....	....	....	....	177	126	96	156
10	170	174	126	....	*194	....	....	....	172	108	155	166
11	192	164	130	....	N.R.	....	....	....	177	120	162	172
12	164	164	126	....	....	....	....	*187	182	116	144	182
13	174	164	126	....	....	....	....	N.R.	177	140	122	166
14	164	136	126	....	....	....	....	....	167	190	144	162
15	178	174	126	....	....	....	....	....	172	172	172	177
16	170	160	100	....	....	....	....	....	177	130	156	172
17	174	164	100	....	....	....	....	....	177	118	156	166
18	174	164	100	....	....	....	....	....	177	96	162	177
19	160	170	100	....	....	....	....	....	172	84	162	177
20	164	122	100	....	....	....	....	....	172	87	130	176
21	170	92	90	....	....	....	....	....	167	50	100	182
22	170	108	80	....	....	....	....	....	172	50	42	177
23	170	130	80	....	....	....	....	....	177	42	68	136
24	174	154	80	....	....	....	....	....	156	30	162	146
25	174	150	80	....	....	....	....	....	126	22	162	148
26	178	145	50	....	....	*197	....	....	112	25	162	136
27	182	130	50	....	....	N.R.	....	....	126	30	166	129
28	160	136	50	....	....	....	....	....	126	33	138	130
29	170	120	50	....	....	....	....	....	80	33	130	122
30	164	92	50	....	....	....	....	....	34	28	162	124
31	164	....	50	....	....	....	....	....	....	22	134	....
Mean	165	139	101	N.R.	N.R.	N.R.	N.R.	....R.	149	93	120	149
Max.	192	174	145	....	....	....	....	....	190	190	172	182
Min.	146	92	50	....	....	....	....	....	34	22	25	76
A. F.	10409	8785	6208	....	....	....	....	....	8918	5685	7400	8896

*Actual Measurements.

N.R.—No Record.

DEPARTMENT OF PUBLIC WORKS

GRAVEL CREEK—Section 9-14-36
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	3	3	3	3	3	3	2	2	2
2	0	0	0	3	3	3	3	3	3	2	2	2
3	0	0	0	3	3	3	3	3	3	2	2	2
4	0	0	0	3	3	3	3	3	3	2	2	2
5	0	0	0	3	3	3	3	3	3	2	2	2
6	0	0	0	3	3	3	3	3	3	2	2	2
7	0	0	0	3	3	3	3	3	3	2	2	2
8	0	0	0	3	3	3	3	3	3	2	2	2
9	0	0	0	3	3	3	3	3	3	2	2	2
10	0	0	0	3	3	3	3	3	3	2	2	2
11	0	0	0	3	3	3	3	3	3	2	2	2
12	0	0	0	3	3	3	3	3	3	2	2	2
13	0	0	0	3	3	3	3	3	3	2	2	2
14	0	0	0	3	3	3	3	3	3	2	2	2
15	0	0	0	3	3	3	3	3	3	2	2	2
16	0	0	0	3	3	3	3	3	3	2	2	1
17	0	0	0	3	3	3	3	3	3	2	2	1
18	0	0	0	3	3	3	3	3	3	2	2	1
19	0	0	0	3	3	3	3	3	3	2	2	1
20	0	0	0	3	3	3	3	3	3	2	2	1
21	0	0	0	3	3	3	3	3	3	2	2	1
22	0	0	0	3	3	3	3	3	3	2	2	1
23	0	0	0	3	3	3	3	3	3	2	2	1
24	0	0	0	3	3	3	3	3	3	2	2	1
25	0	0	0	3	3	3	3	3	3	2	2	1
26	0	0	0	3	3	3	3	3	3	2	2	1
27	0	0	0	3	3	3	3	3	3	2	2	1
28	0	0	0	3	3	3	3	3	3	2	2	1
29	0	0	0	3	3	3	3	3	3	2	2	1
30	0	0	0	3	3	3	3	3	3	2	2	1
31	0	0	0	3	3	3	3	3	3	2	2	1
Mean	1	1	2	2	2	2	2	2	2	2	1	2
Max.	2	2	3	3	3	3	3	3	3	3	2	2
Min.	0	0	0	0	0	0	0	0	0	0	1	0
A. F.	63	119	154	154	111	123	119	123	131	123	92	119

Total Acre Feet 1,431.
Entire Record Estimated.

HORSE CREEK AT LYMAN—Section 25-23-58
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	250	100	125	100	65	81	130	146	130	88	92	96
2	250	100	125	100	65	81	190	55	88	103	92	88
3	250	100	125	100	65	76	144	75	72	90	98	82
4	250	100	125	100	65	70	90	215	66	106	86	77
5	250	100	125	100	65	60	117	190	82	120	89	77
6	200	100	125	100	65	50	111	198	150	120	92	86
7	200	100	125	100	65	50	94	163	253	108	92	86
8	200	100	125	100	65	60	80	124	284	95	86	80
9	200	100	125	100	65	66	73	198	223	104	98	75
10	200	100	125	100	65	100	66	186	198	92	93	96
11	200	90	110	75	50	88	62	57	223	104	99	74
12	200	90	110	75	50	87	52	107	163	111	87	63
13	200	90	110	75	50	76	47	82	253	104	87	63
14	200	90	110	75	50	76	47	122	198	104	87	59
15	200	90	110	75	50	81	43	91	122	95	82	55
16	150	90	110	75	50	82	43	61	132	101	88	55
17	150	90	110	75	50	77	43	47	78	95	82	46
18	150	90	110	75	49	72	42	113	116	95	82	46
19	150	90	110	75	41	72	42	103	117	89	82	46
20	150	90	110	75	40	72	41	103	103	99	77	47
21	150	100	110	75	44	44	34	79	90	102	78	30
22	150	100	110	75	40	40	40	103	87	106	78	47
23	150	100	110	75	64	40	48	90	87	106	78	47
24	150	100	110	75	60	40	18	67	81	93	78	61
25	150	100	110	75	69	40	44	62	84	96	79	56
26	125	100	110	75	73	40	40	88	101	90	81	56
27	125	100	110	75	77	30	36	100	95	96	82	47
28	125	100	110	75	84	20	33	77	98	90	81	47
29	125	100	110	75	....	50	33	88	86	89	87	43
30	125	100	110	75	....	100	66	72	100	88	81	39
31	125	....	110	75	....	107	....	77	....	88	90	....
Mean	177	97	115	83	58	65	66	107	132	99	86	63
Max.	250	100	125	100	87	107	190	215	284	120	99	96
Min.	125	90	110	75	40	30	33	47	66	88	77	39
A. F.	10900	5750	7070	5110	3250	4020	3920	6580	7860	6080	6280	3740

Total Acre Feet 69,560.

REPORT OF SECRETARY

HORSE CREEK NEAR PARKS—Section 23-1-39

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	2	2	2	2	2	1	1	2	1	0	0
2	2	2	2	2	2	2	1	1	2	1	0	0
3	2	2	2	2	2	2	1	1	2	1	0	0
4	2	2	2	2	2	2	1	1	2	1	0	0
5	2	2	2	2	2	2	1	1	2	1	0	0
6	2	2	2	2	2	2	1	1	2	1	0	0
7	2	2	2	2	2	2	1	1	2	1	0	0
8	2	2	2	2	2	2	1	1	2	1	0	0
9	2	2	2	2	2	2	1	1	2	1	0	0
10	2	2	2	2	2	2	1	1	2	1	0	0
11	2	1	2	2	2	2	1	1	2	1	0	0
12	2	1	2	2	2	2	1	1	2	1	0	0
13	2	1	2	2	2	2	1	1	2	1	0	0
14	2	1	2	2	2	2	1	1	2	1	0	0
15	2	1	2	2	2	2	1	1	2	1	0	0
16	2	1	2	2	2	2	1	1	2	0	0	0
17	2	1	2	2	2	2	1	1	2	0	0	0
18	2	1	2	2	2	2	1	1	2	0	0	0
19	2	1	2	2	2	2	1	1	2	0	0	0
20	2	1	2	2	2	2	1	1	2	0	0	0
21	2	1	2	2	2	2	1	1	2	0	0	0
22	2	1	2	2	2	2	1	1	2	0	0	0
23	2	1	2	2	2	2	1	1	2	0	0	0
24	2	1	2	2	2	2	1	1	2	0	0	0
25	2	1	2	2	2	2	1	1	2	0	0	0
26	2	2	2	2	2	2	1	1	2	0	0	1
27	2	2	2	2	2	2	1	1	2	0	0	1
28	2	2	2	2	2	2	1	1	2	0	0	1
29	2	2	2	2	...	2	1	1	2	0	0	1
30	2	2	2	2	...	2	1	1	2	0	0	1
31	2	...	2	2	...	2	1	1	...	0	0	...
Mean	2	2	2	2	2	2	1	1	2	0.5	0	0.1
Max.	2	2	2	2	2	2	1	1	2	1	0	1
Min.	2	1	2	2	2	2	1	1	2	0	0	0
A. F.	123	89	123	123	111	123	59	60	119	30	0	10
Total Acre Feet	970.											

INDIAN CREEK—Section 19-20-50

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	45	15	11	9	7	6	10	5	10	18	9	18
2	45	15	11	9	7	6	10	5	10	16	12	16
3	45	15	11	9	7	6	10	5	10	9	17	18
4	45	15	11	9	7	6	10	5	10	10	18	19
5	45	15	11	9	7	6	10	5	10	11	11	19
6	18	13	11	9	7	5	10	4	15	12	11	17
7	18	13	11	9	7	5	4	4	20	11	13	20
8	18	13	11	9	7	5	4	4	48	8	10	20
9	18	13	11	9	7	5	4	4	30	12	14	22
10	18	13	11	9	7	5	4	4	12	11	11	19
11	16	13	10	8	7	9	4	4	14	12	14	16
12	16	13	10	8	7	9	4	4	26	14	16	16
13	16	13	10	8	7	9	4	4	24	16	14	18
14	16	13	10	8	7	9	4	4	13	14	14	17
15	16	13	10	8	7	9	4	4	13	12	14	18
16	16	12	10	8	6	9	3	4	14	12	14	20
17	16	12	10	8	6	9	3	4	12	13	15	17
18	16	12	10	8	6	9	3	4	10	16	14	19
19	16	12	10	8	6	9	3	4	9	11	19	20
20	16	12	10	8	6	9	3	4	9	12	14	22
21	16	13	9	8	6	9	4	3	18	15	14	22
22	16	13	9	8	6	9	4	3	28	14	14	20
23	16	13	9	8	6	9	4	3	13	19	19	20
24	16	13	9	8	6	9	4	3	13	19	22	24
25	16	13	9	8	6	9	4	3	19	19	15	20
26	16	13	9	8	6	6	4	3	13	14	15	26
27	16	13	9	8	6	6	4	3	13	12	15	20
28	16	13	9	8	6	6	4	5	13	11	22	19
29	16	13	9	8	...	6	4	5	13	13	15	20
30	16	13	9	8	...	6	4	5	13	11	15	22
31	16	...	9	8	...	6	...	5	...	10	17	...
Mean	21	13	10	8	6	7	5	4	16	13	14	19
Max.	45	15	11	9	7	9	10	5	48	19	22	28
Min.	16	12	9	8	6	6	3	3	9	10	9	16
A. F.	1290	786	615	510	361	449	298	252	964	806	916	1180
Total Acre Feet	8,427.											

KEITH-LINCOLN COUNTY DRAIN—Section 22 and 23-14-35

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	3	9	3	3	3	10	4	3	3	2	2
2	5	3	9	3	3	3	10	4	3	3	2	2
3	5	3	9	3	3	3	10	4	3	3	2	2
4	5	3	9	3	3	3	10	4	3	3	2	2
5	5	3	9	3	3	3	10	4	3	3	2	2
6	5	3	9	3	3	3	8	4	4	3	2	2
7	5	3	9	3	3	3	8	4	4	3	2	2
8	5	3	9	3	3	3	8	4	4	3	2	2
9	5	3	9	3	3	3	8	4	4	3	2	2
10	5	3	9	3	3	3	8	4	4	3	2	2
11	5	3	6	2	3	3	6	4	4	3	2	2
12	5	3	6	2	3	3	6	4	4	3	2	2
13	5	3	6	2	3	3	6	4	4	3	2	2
14	5	3	6	2	3	3	6	4	4	3	2	2
15	5	3	6	2	3	3	6	4	4	3	2	2
16	4	3	9	2	2	3	4	3	4	2	2	2
17	4	3	6	2	2	3	4	3	4	2	2	2
18	4	3	6	2	2	3	4	3	4	2	2	2
19	4	3	6	2	2	3	4	3	4	2	2	2
20	4	3	6	2	2	3	4	3	4	2	2	2
21	4	5	4	3	2	3	4	3	3	2	2	2
22	4	5	4	3	2	3	4	3	3	2	2	2
23	4	5	4	3	2	3	4	3	3	2	2	2
24	4	5	4	3	2	3	4	3	3	2	2	2
25	4	5	4	3	2	3	4	3	3	2	2	3
26	4	7	4	3	2	2	4	3	3	2	2	3
27	4	7	4	3	2	2	4	3	3	2	2	3
28	4	7	4	3	2	2	4	3	3	2	2	3
29	4	7	4	3	...	2	4	3	3	2	2	3
30	4	7	4	3	...	2	4	3	3	2	2	...
31	4	...	4	3	...	2	...	3	...	2	2	...
Mean	4	...	6	3	2	3	6	4	4	2	2	2
Max.	5	7	9	3	3	3	10	4	4	3	2	3
Min.	4	3	6	2	2	2	4	3	3	2	2	2
A. F.	277	238	387	166	139	160	357	215	208	154	123	131
Total Acre Feet	2,555.											

LANE DRAIN—Section 30-23-57

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.0	3.0	8.0	8.0	1.5	2.0	1.0	0.5	3.0	5.0	8.0	5.0
2	5.0	3.0	8.0	8.0	1.5	2.0	1.0	0.5	3.0	5.0	8.0	5.0
3	5.0	3.0	8.0	8.0	1.5	2.0	1.0	0.5	3.0	5.0	8.0	5.0
4	5.0	3.0	8.0	8.0	1.5	2.0	1.0	0.5	3.0	5.0	8.0	5.0
5	5.0	3.0	8.0	8.0	1.5	2.0	1.0	0.5	3.0	5.0	8.0	5.0
6	5.0	3.0	8.0	8.0	1.5	2.0	1.0	0.5	3.0	5.0	8.0	5.0
7	5.0	3.0	8.0	5.0	1.5	2.0	1.0	0.5	3.0	5.0	8.0	5.0
8	5.0	3.0	8.0	5.0	1.5	2.0	1.0	0.5	3.0	5.0	8.0	5.0
9	5.0	3.0	8.0	5.0	1.5	2.0	1.0	0.5	3.0	5.0	8.0	5.0
10	5.0	3.0	8.0	5.0	1.5	2.0	1.0	0.5	3.0	5.0	8.0	5.0
11	5.0	3.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
12	5.0	3.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
13	5.0	3.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
14	5.0	3.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
15	5.0	3.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
16	5.0	2.0	8.0	3.0	1.5	2.0	1.0	1.6	3.0	5.0	4.0	6.0
17	5.0	2.0	8.0	3.0	1.5	2.0	1.0	1.6	3.0	5.0	4.0	6.0
18	5.0	2.0	8.0	3.0	1.5	2.0	1.0	1.6	3.0	5.0	4.0	6.0
19	5.0	2.0	8.0	3.0	1.5	2.0	1.0	1.6	3.0	5.0	4.0	6.0
20	5.0	2.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
21	5.0	2.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
22	5.0	2.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
23	5.0	2.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
24	5.0	2.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
25	5.0	2.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	6.0
26	5.0	2.0	8.0	3.0	1.5	2.0	1.0	1.6	3.0	5.0	6.0	6.0
27	5.0	2.0	8.0	3.0	1.5	2.0	1.0	1.6	3.0	5.0	6.0	6.0
28	5.0	2.0	8.0	3.0	1.5	2.0	1.0	1.6	3.0	5.0	6.0	6.0
29	5.0	2.0	8.0	3.0	...	2.0	1.0	1.6	3.0	5.0	6.0	6.0
30	5.0	2.0	8.0	3.0	...	2.0	1.0	1.6	3.0	5.0	6.0	6.0
31	5.0	...	8.0	3.0	...	2.0	...	1.6	...	6.0	6.0	...
Mean	5.0	3.0	8.0	4.0	1.5	2.0	1.0	1.0	3.0	5.0	6.0	5.0
Max.	5.0	3.0	8.0	8.0	1.5	2.0	1.0	1.6	3.0	5.0	8.0	6.0
Min.	5.0	2.0	8.0	3.0	1.5	2.0	1.0	0.5	3.0	5.0	4.0	5.0
A. F.	307.0	149.0	492.0	246.0	83.0	123.0	59.0	61.0	179.0	307.0	369.0	327.0
Total Acre Feet	2,704.											

REPORT OF SECRETARY

LEWELLEN DRAIN—Section 28-16-42

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	3	3	3	3	3	5	2	2	1	2	1
2	3	3	3	3	3	3	5	2	2	1	2	1
3	3	3	3	3	3	3	5	2	2	1	2	1
4	3	3	3	3	3	3	5	2	2	1	2	1
5	3	3	3	3	3	3	5	2	2	1	2	1
6	3	3	3	3	3	1	1	2	2	1	2	1
7	3	3	3	3	3	1	4	2	2	1	2	1
8	3	3	3	3	3	1	4	2	2	1	2	1
9	3	3	3	3	3	1	4	2	2	1	2	1
10	3	3	3	3	3	1	4	2	2	1	2	1
11	3	3	3	3	3	2	4	2	2	1	1	1
12	3	3	3	3	3	2	4	2	2	1	1	1
13	3	3	3	3	3	2	4	2	2	1	1	1
14	3	3	3	3	3	2	4	2	2	1	1	1
15	3	3	3	3	3	2	4	2	2	1	1	1
16	3	3	3	3	3	2	2	2	1	1	1	2
17	3	3	3	3	3	2	2	2	1	1	1	2
18	3	3	3	3	3	2	2	2	1	1	1	2
19	3	3	3	3	3	2	2	2	1	1	1	2
20	3	3	3	3	3	2	2	2	1	1	1	2
21	3	3	3	3	3	2	2	2	1	1	1	2
22	3	3	3	3	3	2	2	2	1	1	1	2
23	3	3	3	3	3	2	2	2	1	1	1	2
24	3	3	3	3	3	2	2	2	1	1	1	2
25	3	3	3	3	3	2	2	2	1	1	1	2
26	3	3	3	3	3	2	2	2	1	1	1	2
27	3	3	3	3	3	2	1	2	1	1	1	2
28	3	3	3	3	3	2	1	2	1	1	1	2
29	3	3	3	3	3	....	1	2	1	1	1	2
30	3	3	3	3	3	....	1	2	1	1	1	2
31	3	....	3	3	3	....	1	....	....	1	1	....
Mean.	3	3	3	3	3	2	2	4	2	1	1	1
Max	3	3	3	3	3	2	2	5	2	1	2	2
Min.	3	3	3	3	3	2	1	2	2	1	1	1
A. F.	181	179	184	184	139	98	208	123	89	61	80	89
Total Acre Feet	1,618.											

LINCOLN COUNTY DRAIN NO. 1—Section 30-11-30

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	110	84	70	71	66	66	59	60	103	96	99	113
2	110	84	70	71	66	66	66	60	102	94	103	97
3	110	84	70	71	66	66	74	60	97	92	103	87
4	110	84	70	71	66	66	74	60	98	106	105	91
5	110	84	70	71	66	66	79	59	111	116	104	105
6	110	84	80	71	66	66	75	58	115	106	115	105
7	110	84	80	71	66	66	77	58	116	105	116	101
8	110	81	80	71	66	66	73	58	115	105	122	104
9	110	84	80	71	66	66	69	58	119	104	111	109
10	110	84	80	71	66	66	69	58	137	113	107	109
11	110	81	80	71	66	66	69	56	132	116	107	112
12	110	84	80	71	66	66	68	55	123	117	109	109
13	110	84	80	71	66	66	68	55	127	118	109	109
14	110	84	80	71	66	66	65	59	126	115	105	111
15	110	84	80	71	66	66	65	61	124	117	105	115
16	97	84	80	71	66	70	61	78	124	106	107	114
17	97	84	80	71	66	70	64	76	122	105	105	99
18	97	84	80	71	66	70	61	69	122	110	104	110
19	97	84	80	71	66	70	64	66	124	107	103	104
20	97	84	80	71	66	70	64	73	128	101	95	103
21	97	84	70	71	66	70	64	66	134	106	91	101
22	97	84	70	71	66	70	62	66	132	105	89	97
23	97	84	70	71	66	70	61	66	121	105	91	97
24	97	84	70	71	66	70	67	68	114	99	95	99
25	97	84	70	71	66	70	62	74	104	96	95	105
26	97	84	70	71	66	70	61	78	107	89	93	98
27	97	84	70	71	66	70	61	82	98	87	93	101
28	97	84	70	71	66	70	62	87	99	86	97	98
29	97	84	70	71	....	70	62	91	96	86	97	92
30	97	84	70	71	....	70	61	94	97	89	103	89
31	97	....	70	71	....	61	....	104	....	91	107	....
Mean	*106	*84	*75	*71	*66	*67	66	68	115	103	103	103
Max.	110	84	80	71	66	70	70	101	137	118	122	115
Min.	97	81	70	71	66	64	59	55	96	86	89	87
A. F.	6351	4998	4602	4365	3665	4173	2965	4191	6883	6323	6317	6123
Total Acre Feet	61,960.											

*Estimated.

LINCOLN COUNTY DRAIN NO. 2—Section 12-14-33

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	9	5	6	6	6	7	7	7	7	6	5
2	12	9	5	6	6	6	7	7	7	7	6	7
3	12	9	5	6	6	6	7	7	7	7	5	8
4	12	9	5	6	6	6	7	7	7	7	5	7
5	12	9	5	6	6	6	7	7	7	7	6	8
6	12	9	5	6	6	6	7	7	7	6	6	8
7	12	9	5	6	6	6	7	7	7	6	6	9
8	12	9	5	6	6	6	7	7	7	6	6	9
9	12	9	5	6	6	6	7	7	7	6	6	9
10	12	9	5	6	6	6	7	7	7	6	5	9
11	12	9	5	6	6	6	7	7	7	6	6	8
12	12	9	5	6	6	6	7	7	7	6	5	9
13	12	9	5	6	6	6	7	7	7	6	6	9
14	12	9	5	6	6	6	7	7	7	6	4	8
15	12	9	5	6	6	6	7	7	7	6	5	8
16	10	9	6	6	6	6	7	7	8	6	6	8
17	10	9	6	6	6	6	7	7	8	6	6	6
18	10	9	6	6	6	6	7	7	8	6	6	6
19	10	9	6	6	6	6	7	7	8	6	5	8
20	10	9	6	6	6	6	7	7	8	6	5	8
21	10	7	6	6	6	6	7	7	8	6	6	7
22	10	7	6	6	6	6	7	7	8	6	6	6
23	10	7	6	6	6	6	7	7	8	6	5	5
24	10	7	6	6	6	6	7	7	8	6	5	5
25	10	7	6	6	6	6	7	7	8	6	4	5
26	10	7	6	6	6	6	7	7	8	6	4	5
27	10	7	6	6	6	6	7	7	8	5	3	6
28	10	7	6	6	6	6	7	7	8	5	3	6
29	10	7	6	6	6	6	7	7	8	6	5	6
30	10	7	6	6	6	6	7	7	7	6	5	6
31	10	....	6	6	6	6	....	7	....	6	6	....
Mean.	11	8	5	6	6	6	7	7	7	6	5	7
Max.	12	9	6	6	6	6	7	7	8	7	6	9
Min.	10	7	5	6	6	6	7	7	6	5	3	5
A. F.	676	494	338	370	333	370	417	430	422	370	326	422
Total Acre Feet	4,968.											

LODGEPOLE CREEK AT WYOMING-NEBRASKA LINE—Section 11-14-59

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	16	14	12	13	12	12	15	12	5	4	4
2	8	16	14	12	13	12	12	15	12	5	4	4
3	8	16	14	12	13	12	12	15	12	5	4	4
4	8	16	14	12	13	12	12	15	12	5	4	4
5	8	16	14	12	13	12	12	15	12	5	4	4
6	8	16	14	12	13	12	12	15	12	5	4	4
7	8	16	14	12	13	12	12	15	12	5	4	4
8	8	16	14	12	13	12	12	15	12	5	4	4
9	8	16	14	12	13	12	12	15	12	5	4	4
10	8	16	14	12	13	12	12	15	12	5	4	4
11	8	16	14	12	13	12	10	13	10	5	4	4
12	8	16	14	12	13	12	10	13	10	5	4	4
13	8	16	14	12	13	12	10	13	10	5	4	4
14	8	16	14	12	13	12	10	13	10	5	4	4
15	8	16	14	12	13	12	10	13	10	5	4	4
16	10	14	12	13	12	12	10	13	10	3	4	5
17	10	14	12	13	12	12	10	13	10	3	4	5
18	10	14	12	13	12	12	10	13	10	3	4	5
19	10	14	12	13	12	12	10	13	10	3	4	5
20	10	14	12	13	12	12	10	13	10	3	4	5
21	10	14	12	13	12	12	13	13	7	3	4	5
22	10	14	12	13	12	12	13	13	7	3	4	5
23	10	14	12	13	12	12	13	13	7	3	4	5
24	10	14	12	13	12	12	13	13	7	3	4	5
25	10	14	12	13	12	12	13	13	7	3	4	5
26	10	14	12	13	12	12	13	13	7	3	4	5
27	10	14	12	13	12	12	13	13	7	3	4	5
28	10	14	12	13	12	12	13	13	7	3	4	5
29	10	14	12	13	....	....	13	13	7	3	4	5
30	10	14	12	13	....	....	13	13	7	3	4	5
31	10	....	12	13	....	....	13	13	....	3	4	....
Mean	9	15	13	12	12	12	12	14	9	4	4	4
Max.	10	16	14	13	13	12	13	15	12	5	4	5
Min.	8	14	12	12	12	12	10	13	7	3	4	4
A. F.	555	893	797	770	696	738	694	839	575	244	246	278
Total Acre Feet	7,325.											

REPORT OF SECRETARY

LODGEPOLE CREEK AT BUSHNELL—Section 31-15-57

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	22	36	21	12	7	6	9
2	22	24	20	12	7	6	9
3	22	19	20	12	7	7	9
4	22	19	25	12	7	7	9
5	*16	22	19	21	11	6	7	9
6	N.R.	24	17	21	12	7	8	9
7	34	17	21	10	6	8	9
8	35	17	20	10	6	8	9
9	*13	.....	.....	.....	.....	32	16	18	10	6	8	9
10	N.R.	.....	.....	.....	.....	22	16	18	10	6	8	9
11	23	16	18	10	5	8	9
12	23	16	18	10	5	8	9
13	22	15	18	10	5	9	9
14	21	15	15	9	5	9	9
15	21	14	15	9	8	9	9
16	*17	.....	.....	.....	22	15	15	9	5	9	9
17	N.R.	.....	.....	.....	21	15	18	9	5	10	9
18	21	16	17	8	6	11	9
19	22	16	17	8	5	11	9
20	20	16	17	8	6	11	9
21	20	17	17	8	6	10	9
22	20	15	17	8	6	10	9
23	20	14	17	8	6	8	10
24	19	18	16	8	6	8	10
25	18	18	16	8	6	8	10
26	15	18	15	8	6	8	9
27	11	18	14	8	6	8	9
28	10	18	14	8	6	8	9
29	12	20	21	8	6	8	9
30	16	21	21	7	6	8	9
31	22	.....	12	.....	6	8	.....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	21	18	18	9	6	8	9
Max.	34	36	25	12	8	11	10
Min.	10	14	12	7	5	6	9
A. F.	1300	1050	1090	553	369	516	541

Total Acre Feet 5,240

*Actual Measurements.

N.R.—No Record.

LODGEPOLE CREEK ABOVE KIMBALL RESERVOIR—Section 33-15-57

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	32	25	23	17	17	25	20	25	17	10	8	10
2	32	25	23	17	17	25	20	25	17	10	8	10
3	32	25	23	17	17	25	20	25	17	10	8	10
4	32	25	23	17	17	25	20	25	17	10	8	10
5	32	25	23	17	17	25	20	25	17	10	8	10
6	32	25	23	17	17	25	20	25	17	10	8	10
7	32	25	23	17	17	25	20	25	17	10	8	10
8	32	25	23	17	17	25	20	25	17	10	8	10
9	32	25	23	17	17	25	20	25	17	10	8	10
10	32	25	23	17	17	25	20	25	17	10	8	10
11	32	25	23	17	17	25	20	25	14	9	10	10
12	32	25	23	17	19	25	20	25	14	9	10	10
13	32	25	23	17	19	25	20	25	14	9	10	10
14	32	25	23	17	19	25	20	25	14	9	10	10
15	32	25	23	17	19	25	20	25	14	9	10	10
16	25	23	17	17	19	23	20	21	14	9	10	14
17	25	23	17	17	19	23	20	21	14	9	10	14
18	25	23	17	17	19	23	20	21	14	9	10	14
19	25	23	17	17	19	23	20	21	14	9	10	14
20	25	23	17	17	22	23	20	21	14	5	10	14
21	25	23	17	17	22	23	20	21	14	7	10	14
22	25	23	17	17	22	23	20	21	14	8	10	14
23	25	23	17	17	22	23	20	21	14	8	10	14
24	25	23	17	17	22	23	20	21	14	8	10	14
25	25	23	17	17	22	23	20	21	14	8	10	14
26	25	23	17	17	22	23	20	21	14	8	10	14
27	25	23	17	17	22	23	20	21	14	8	10	14
28	25	23	17	17	22	23	20	21	14	8	10	14
29	25	23	17	17	.....	23	20	21	14	8	10	14
30	25	23	17	17	.....	23	20	21	14	8	10	14
31	.....	.....	17	17	.....	23	.....	21	.....	8	10	.....
Mean	32	24	20	17	19	24	20	20	15	9	9	12
Max.	32	25	23	17	22	25	20	25	17	10	10	14
Min.	25	23	17	17	17	23	20	21	14	5	8	10
A. F.	1745	1428	1224	1045	1063	1474	1190	1234	920	543	575	714

Total Acre Feet 13,155.

LODGEPOLE CREEK BELOW KIMBALL RESERVOIR—Section 36-15-57

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	4	3	3	3	10	10	19	6	5	4	2
2	3	4	3	3	3	10	10	19	6	5	4	2
3	3	4	3	3	3	10	10	19	6	5	4	2
4	3	4	3	3	3	10	10	19	6	5	4	2
5	3	4	3	3	3	10	10	19	6	5	4	2
6	3	4	3	3	3	10	10	19	6	5	4	2
7	3	4	3	3	3	10	10	19	6	5	4	2
8	3	4	3	3	3	10	10	19	6	5	4	2
9	3	4	3	3	3	10	10	19	6	5	4	2
10	3	4	3	3	3	10	10	19	6	5	4	2
11	3	4	3	3	5	10	13	10	6	5	3	2
12	3	4	3	3	2	10	13	10	6	5	3	2
13	3	4	3	3	5	10	13	10	6	5	3	2
14	3	4	3	3	5	10	13	10	6	5	3	2
15	3	4	3	3	5	10	13	10	6	5	3	2
16	3	5	3	3	5	10	13	8	5	5	3	2
17	3	5	3	3	5	10	13	8	5	5	3	2
18	3	5	3	3	5	10	13	8	5	5	3	2
19	3	5	3	3	5	10	13	8	5	5	3	2
20	3	5	3	3	5	10	13	8	5	5	3	2
21	3	5	3	3	7	10	13	8	5	5	3	2
22	3	5	3	3	7	10	13	8	5	5	3	2
23	3	5	3	3	7	10	13	8	5	5	3	2
24	3	5	3	3	7	10	13	8	5	5	3	2
25	3	5	3	3	7	10	13	8	5	5	3	2
26	3	5	3	3	7	10	13	8	5	5	3	2
27	3	5	3	3	7	10	13	8	5	5	3	2
28	3	5	3	3	7	10	13	8	5	5	3	2
29	3	5	3	3	....	10	13	8	5	5	3	2
30	3	5	3	3	....	10	13	8	5	5	3	2
31	3	....	3	3	....	10	....	8	5	5	3	2
Mean	3	....	3	3	6	10	12	13	....	5	5	3
Max.	3	5	3	3	7	10	13	19	6	5	4	2
Min.	3	4	3	3	3	10	10	8	5	5	4	2
A. F.	184	268	184	184	2422	615	740	730	337	307	192	89
Total Acre Feet	6,252.											

LODGEPOLE CREEK NORTH OF KIMBALL—Section 29-15-56

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	13	10	20	20	20	20	22	25	15	6	5	6
2	13	10	20	20	20	20	22	25	15	6	5	6
3	13	10	20	20	20	20	22	25	15	6	5	6
4	13	10	20	20	20	20	22	25	15	6	5	6
5	13	10	20	20	20	20	22	25	15	6	5	6
6	13	10	20	20	20	20	22	25	15	6	5	6
7	13	10	20	20	20	20	22	25	15	6	5	6
8	13	10	20	20	20	20	22	25	15	6	5	6
9	13	10	20	20	20	20	22	25	15	6	5	6
10	13	10	20	20	20	20	22	25	15	6	5	6
11	13	10	15	20	15	20	22	25	15	6	5	6
12	13	10	15	20	15	20	22	25	8	6	5	6
13	13	10	15	20	15	20	22	25	8	6	5	6
14	13	10	15	20	15	20	22	25	8	6	5	6
15	13	10	15	20	20	20	22	25	8	6	5	6
16	11	15	15	20	20	27	22	20	8	5	5	6
17	11	15	15	20	20	27	22	20	8	5	5	6
18	11	15	15	20	20	27	22	20	8	5	5	6
19	11	15	15	20	20	27	22	20	8	5	5	6
20	11	15	15	20	15	27	22	20	8	5	5	6
21	11	15	10	20	20	27	22	20	6	5	5	6
22	11	15	10	20	20	27	22	20	6	5	5	6
23	11	15	10	20	20	27	22	20	6	5	5	6
24	11	15	10	20	20	27	22	20	6	5	5	6
25	11	15	10	20	20	27	22	20	6	5	5	6
26	11	20	10	20	20	27	22	20	6	5	5	6
27	11	20	10	20	20	27	22	20	6	5	5	6
28	11	20	10	20	20	27	22	20	6	5	5	6
29	11	20	10	20	....	27	22	20	6	5	5	6
30	11	20	10	20	....	27	22	20	6	5	5	6
31	11	....	10	20	....	27	....	20	....	5	5	....
Mean	12	13	15	20	17	24	....	22	9	5	5	6
Max.	13	20	20	20	20	27	22	25	15	6	5	6
Min.	11	10	10	20	15	20	22	20	6	5	5	6
A. F.	736	793	912	1230	1011	1452	1353	1378	575	337	268	357
Total Acre Feet	10,402.											

REPORT OF SECRETARY

LODGEPOLE CREEK AT SIDNEY—(U. S. G. S. Meas.)—Section 31-14-49

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	5.0	4.0	3.0	4.0	2.0	1.0	0.6
2	5.0	5.0	3.0	5.0	2.0	0.6	0.6
3	5.0	10.0	3.0	1.0	2.0	2.0	0.5
4	5.0	4.0	4.0	1.0	2.0	0.9	0.5
5	6.0	5.0	3.0	0.3	2.0	2.0	0.5
6	N.R.	3.0	5.0	3.0	2.0	2.0	2.0	0.5
7	3.0	5.0	3.0	1.0	1.0	2.0	0.5
8	3.0	4.0	4.0	2.0	2.0	0.3	0.5
9	3.0	4.0	3.0	3.0	2.0	0.3	0.5
10	4.0	4.0	3.0	3.0	2.0	0.3	0.6
11	4.0	2.0	4.0	6.0	2.0	0.4	0.7
12	5.0	4.0	4.0	0.3	2.0	0.4	1.0
13	5.0	4.0	3.0	0.3	2.0	2.0	1.0
14	5.0	4.0	3.0	0.3	2.0	1.0	0.7
15	5.0	4.0	3.0	2.0	2.0	0.9	0.9
16	5.0	4.0	1.0	0.5	1.0	0.3	0.9
17	*0.0	.....	.....	.....	5.0	1.0	2.0	1.0	2.0	0.6	0.5
18	N.R.	.....	.....	.....	5.0	4.0	1.0	2.0	1.0	0.6	0.5
19	5.0	4.0	1.0	2.0	4.0	0.7	0.7
20	5.0	4.0	1.0	0.3	0.7	0.7	0.7
21	5.0	3.0	1.0	0.2	0.5	0.6	0.6
22	4.0	4.0	1.0	0.2	0.4	0.6	0.5
23	5.0	3.0	1.0	0.2	0.5	0.6	0.6
24	4.0	4.0	1.0	0.3	0.5	0.6	2.0
25	3.0	4.0	1.0	0.3	0.5	0.5	1.0
26	2.0	4.0	1.0	3.0	0.6	0.5	2.0
27	1.0	4.0	1.0	2.0	0.7	0.5	0.6
28	1.0	3.0	1.0	2.0	0.6	0.5	0.6
29	1.0	0.6	1.0	1.0	2.0	0.4	0.6
30	2.0	3.0	1.0	1.0	0.4	0.5	0.7
31	3.0	.....	3.0	.....	0.5	0.6	.....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	3.9	4.0	2.1	1.6	1.5	0.8	0.7
Max.	6.0	10.0	4.0	6.0	4.0	2.0	2.0
Min.	1.0	0.6	1.0	0.2	0.4	0.3	0.5
A. F.	242.0	239.0	135.0	93.0	89.0	49.0	44.0

N.R.—No Record.
*Actual Measurements.

LODGEPOLE CREEK AT CHAPPELL—Section 21-13-45

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	14	12	8	20	17	18	17	2.0	1	0.5	0.3
2	7	14	12	8	20	17	18	17	2.0	1	0.5	0.3
3	7	14	12	8	20	17	18	17	2.0	1	0.5	0.3
4	7	14	12	8	20	17	18	17	2.0	1	0.5	0.3
5	7	14	12	8	20	17	18	17	2.0	1	0.5	0.3
6	7	14	12	8	20	17	18	17	2.0	1	0.5	0.3
7	7	14	12	8	20	17	18	17	2.0	1	0.5	0.3
8	7	14	12	8	20	17	18	17	2.0	1	0.5	0.3
9	7	14	12	8	20	17	18	17	2.0	1	0.5	0.3
10	7	14	12	8	20	17	18	17	2.0	1	0.5	0.3
11	7	14	8	10	15	17	23	10	2.0	1	0.5	0.3
12	7	14	8	10	15	17	23	10	2.0	1	0.5	0.3
13	7	14	8	10	15	17	23	10	2.0	1	0.5	0.3
14	7	14	8	10	15	17	23	10	2.0	1	0.5	0.3
15	7	14	8	10	15	17	23	10	2.0	1	0.5	0.3
16	8	12	8	10	15	18	23	5	2.0	1	0.5	0.2
17	8	12	8	10	15	18	23	5	2.0	1	0.5	0.2
18	8	12	8	10	15	18	23	5	0.3	1	0.5	0.2
19	8	12	8	10	15	18	23	5	0.3	1	0.5	0.2
20	8	12	6	22	17	18	20	2	0.3	1	0.5	0.2
21	8	12	6	22	17	18	20	2	0.3	1	0.5	0.2
22	8	12	6	22	17	18	20	2	0.3	1	0.5	0.2
23	8	12	6	22	17	18	20	2	0.3	1	0.5	0.2
24	8	12	6	22	17	18	20	2	0.3	1	0.5	0.2
25	8	12	6	22	17	18	20	2	1.0	1	0.5	0.2
26	8	12	6	22	17	18	20	2	1.0	1	0.5	0.2
27	8	12	6	22	17	18	20	2	1.0	1	0.5	0.2
28	8	12	6	22	.....	18	20	2	1.0	1	0.5	0.2
29	8	12	6	22	.....	18	20	2	1.0	1	0.5	0.2
30	8	12	6	22	.....	18	20	2	1.0	1	0.5	0.2
31	8	.....	6	22	.....	18	.....	2	.....	1	0.5	.....
Mean	7	13	9	14	17	17	20	8	1.0	1	0.5	0.2
Max.	8	14	12	22	20	18	23	17	2.0	1	0.5	0.2
Min.	7	12	6	8	15	17	18	2	0.3	1	0.5	0.2
A. F.	462	773	528	837	964	1077	1210	530	81.0	61	30.0	14.0

Total Acre Feet 6,570.

LOGEPOLE CREEK AT LOGEPOLE--Section 30-14-46

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	18	12	5	8	19	10	4.0	0.2	2.0	0.3	0.6
2	8	18	12	5	8	19	10	4.0	0.2	2.0	0.3	0.6
3	8	18	12	5	8	19	10	4.0	0.2	2.0	0.3	0.6
4	8	18	12	5	8	19	10	4.0	0.2	2.0	0.3	0.6
5	8	18	12	5	8	19	10	4.0	0.2	2.0	0.3	0.6
6	8	18	12	5	8	19	10	4.0	0.2	2.0	0.3	0.6
7	8	18	12	5	8	19	10	4.0	0.2	2.0	0.3	0.6
8	8	18	12	5	8	19	10	4.0	0.2	2.0	0.3	0.6
9	8	18	12	5	8	19	10	4.0	0.2	2.0	0.3	0.6
10	8	18	12	5	8	19	10	4.0	0.2	2.0	0.3	0.6
11	8	18	8	5	10	14	15	2.0	2.0	1.0	0.0	0.6
12	8	18	8	5	10	14	15	2.0	2.0	1.0	0.0	0.6
13	8	18	8	5	10	14	15	2.0	2.0	1.0	0.0	0.6
14	8	18	8	5	10	14	15	2.0	2.0	1.0	0.0	0.6
15	8	18	8	5	10	14	15	2.0	2.0	1.0	0.0	0.6
16	13	18	8	6	10	14	15	2.0	3.0	1.0	0.0	0.2
17	13	18	8	6	10	14	15	2.0	3.0	1.0	0.0	0.2
18	13	18	8	6	10	14	15	2.0	3.0	1.0	0.0	0.2
19	13	18	8	6	10	14	15	2.0	3.0	1.0	0.0	0.2
20	13	18	8	6	10	14	15	2.0	3.0	1.0	0.0	0.2
21	13	12	5	6	12	11	8	0.2	3.0	0.3	0.0	0.2
22	13	12	5	6	12	11	8	0.2	3.0	0.3	0.0	0.2
23	13	12	5	6	12	11	8	0.2	3.0	0.3	0.0	0.2
24	13	12	5	6	12	11	8	0.2	3.0	0.3	0.0	0.2
25	13	12	5	6	12	11	8	0.2	3.0	0.3	0.0	0.2
26	18	12	5	6	12	11	8	0.2	3.0	0.3	0.0	0.2
27	18	12	5	6	12	11	8	0.2	3.0	0.3	0.0	0.2
28	18	12	5	6	12	11	8	0.2	3.0	0.3	0.0	0.2
29	18	12	5	6	....	11	8	0.2	3.0	0.3	0.0	0.2
30	18	12	5	6	....	11	8	0.2	3.0	0.3	0.0	0.2
31	18	....	5	6	....	11	....	0.2	....	0.3	0.0	....
Mean	12	16	8	6	10	14	11	2.0	2.0	1.0	0.1	0.3
Max.	18	18	12	6	12	19	15	4.0	3.0	2.0	0.3	0.6
Min.	8	12	5	5	8	11	8	0.2	0.2	0.3	0.0	0.2
A. F.	710	952	506	339	547	895	654	123.0	113.0	65.0	6.0	24.0
Total Acre Feet 4,934..												

LOGEPOLE CREEK AT RALTON--Section 12-12-45

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	10	22	26	3	15	1	17
2	10	22	22	3	15	1	17
3	15	22	22	3	13	1	17
4	17	22	22	3	13	1	17
5	5	27	22	3	20	1	17
6	0	22	27	3	17	1	5
7	13	22	27	32	13	1	5
8	10	20	25	29	1	1	5
9	13	25	25	1	1	1	5
10	*0	....	....	....	....	34	25	20	1	1	1	5
11	N.R.	....	....	....	....	37	22	22	1	1	1	5
12	*3	29	22	20	1	1	1	5
13	N.R.	27	22	20	1	1	1	1
14	27	22	20	1	1	1	1
15	22	19	20	1	1	1	1
16	25	16	20	1	1	1	1
17	*0.3	....	....	....	25	16	15	1	1	1	1
18	N.R.	....	....	....	25	16	1	1	1	1	1
19	25	15	1	1	1	1	5
20	22	15	1	20	1	1	1
21	22	20	1	17	1	1	1
22	22	27	1	13	1	1	1
23	44	28	1	13	1	1	1
24	29	26	1	13	1	1	1
25	29	26	1	13	1	1	1
26	24	25	1	13	1	1	5
27	15	22	1	13	1	1	1
28	13	25	1	13	1	1	1
29	16	24	1	13	1	1	1
30	18	24	1	13	1	1	1
31	20	....	3	....	1	22	....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	21	22	13	8	4	2	5
Max.	44	28	27	32	20	22	17
Min.	0	15	1	1	1	1	1
A. F.	1270	1310	775	482	253	105	298
Total Acre Feet 4,500.												
N.R.—No Record.												
*Actual Measurements.												

REPORT OF SECRETARY

LONERGAN CREEK—Section 19-15-39

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	5	11	9	9	9	15	6	1	2	2	3
2	7	5	11	9	9	9	15	6	1	2	2	3
3	7	5	11	9	9	9	15	6	1	2	2	4
4	7	5	11	9	9	9	15	6	1	2	2	4
5	7	5	11	9	9	9	15	6	5	2	3	4
6	7	5	11	9	9	8	12	6	4	2	4	4
7	7	5	11	9	9	8	12	6	2	2	5	5
8	7	5	11	9	9	8	12	6	1	1	5	5
9	7	5	11	9	9	8	12	6	1	1	4	5
10	7	5	11	9	9	8	12	6	1	1	4	5
11	7	5	11	9	9	9	12	0	5	1	4	4
12	7	5	11	9	9	9	12	0	4	1	6	4
13	7	5	11	9	9	9	12	0	2	1	5	4
14	7	5	11	9	9	9	12	0	1	1	4	5
15	7	5	11	9	9	9	12	0	1	1	4	5
16	8	8	11	9	9	9	9	0	1	2	4	5
17	8	8	11	9	9	9	9	0	1	2	3	5
18	8	8	11	9	9	9	9	0	1	2	3	5
19	8	8	11	9	9	9	9	0	1	2	3	5
20	8	8	11	9	9	9	9	0	1	2	3	4
21	8	8	11	9	9	9	9	0	1	2	3	4
22	8	8	11	9	9	9	9	0	1	2	3	3
23	8	8	11	9	9	9	9	0	1	2	3	3
24	8	8	11	9	9	9	9	0	1	2	2	3
25	8	8	11	9	9	9	9	0	1	2	2	4
26	8	10	11	9	9	7	6	1	1	2	2	4
27	8	10	11	9	9	7	6	1	1	2	2	5
28	8	10	11	9	9	7	6	1	1	2	2	5
29	8	10	11	9	9	7	6	1	1	2	2	5
30	8	10	11	9	9	7	6	1	1	1	2	5
31	8	11	9	9	9	7	6	1	1	1	3	4
Mean	*7	*7	*11	*9	*9	*8	*10	*2	*1	2	3	4
Max.	8	10	11	9	9	9	15	6	5	2	6	5
Min.	7	5	11	9	9	7	6	0	1	1	2	3
A. F.	462	407	676	553	500	523	625	129	89	105	191	256
Total Acre Feet	4,516.											
*Estimated.												

LOST CREEK—Section 1-16-44

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	3	3	2	3	3	10	4	4	2	2	1
2	5	3	3	2	3	3	10	4	4	2	2	1
3	5	3	3	2	3	3	10	4	8	6	2	1
4	5	3	3	2	3	3	10	4	7	4	2	1
5	5	3	3	2	3	3	10	4	20	3	2	1
6	5	3	3	2	3	2	8	4	4	2	2	1
7	5	3	3	2	3	2	8	4	5	2	2	1
8	5	3	3	2	3	2	8	4	4	2	2	1
9	5	3	3	2	3	2	8	4	5	2	4	1
10	5	3	3	2	3	2	8	4	4	2	4	1
11	5	3	3	1	3	4	8	4	8	3	4	1
12	5	3	3	1	3	4	8	4	6	3	4	1
13	5	3	3	1	3	4	8	4	5	3	4	1
14	5	3	3	1	3	4	8	4	5	3	3	1
15	5	3	3	1	3	4	8	4	5	3	3	1
16	5	3	3	1	3	4	6	4	5	2	4	1
17	5	3	3	1	3	4	6	4	5	2	4	1
18	5	3	3	1	3	4	6	4	5	2	6	1
19	5	3	2	1	3	4	6	4	4	1	10	1
20	5	3	2	1	3	4	6	4	4	1	20	2
21	4	3	2	2	3	4	6	4	4	1	11	4
22	4	3	2	2	3	4	6	4	4	1	2	5
23	4	3	2	2	3	4	6	4	4	1	4	5
24	4	3	2	2	3	4	6	4	4	1	5	22
25	4	3	2	2	3	4	6	4	4	1	5	4
26	4	3	2	2	3	4	4	4	4	1	5	9
27	4	3	2	2	3	4	4	4	4	1	3	11
28	4	3	2	2	3	4	4	4	4	1	7	15
29	4	3	2	2	3	4	4	4	4	1	7	17
30	4	3	2	2	3	4	4	4	4	1	2	7
31	4	3	2	2	3	4	4	4	4	1	1	4
Mean	5	3	2	2	3	3	7	4	5	2	4	4
Max.	5	3	3	2	3	4	10	4	20	6	20	17
Min.	4	3	2	1	3	2	4	4	4	1	2	1
A. F.	283	179	154	105	167	191	417	246	315	123	277	238
Total Acre Feet	2,695.											

DEPARTMENT OF PUBLIC WORKS

LOUP RIVER (NORTH) AT ST. PAUL (U. S. G. S. Meas.)—Section 22-15-10

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	765	894	700	816	1610	1320	1270	829	772	601	520	676
2	778	842	900	894	1350	1320	1190	816	772	676	610	676
3	894	816	1150	855	1450	1290	1380	778	785	676	592	746
4	950	1090	1110	965	1410	1150	1060	855	785	955	632	746
5	950	1070	935	1010	1450	1320	920	995	955	955	746	772
6	1610	1150	950	907	1210	1380	1020	950	1000	850	746	746
7	1250	995	1150	935	1130	995	1040	965	925	824	772	698
8	1090	894	1040	950	1450	1290	1070	1070	910	850	772	632
9	1010	1010	1010	894	1560	1070	1320	1480	837	785	733	592
10	1010	1020	1110	1020	1450	980	1230	1380	824	746	772	592
11	778	1040	1040	950	1410	980	1060	1180	1000	733	772	574
12	2520	1130	950	894	1360	1230	1010	1040	880	798	709	556
13	1640	1040	920	290	1320	1320	881	970	970	798	654	583
14	1380	1010	920	159	1500	1500	894	970	970	746	632	601
15	1320	1170	900	126	1290	1130	980	925	837	676	610	643
16	1340	1270	910	144	1070	1070	1040	880	720	632	583	665
17	1170	1110	950	443	1320	1060	1010	865	610	720	601	698
18	950	1040	894	765	1230	1060	965	865	621	654	610	811
19	812	1320	868	1190	1380	1060	1020	865	592	643	592	811
20	868	2300	920	1110	1360	1150	1250	895	654	632	592	811
21	842	1150	907	1380	1500	1040	1150	865	1050	632	665	785
22	950	855	678	1360	1560	1040	1010	880	676	654	746	811
23	842	1130	752	1480	1610	1270	1090	785	654	665	880	811
24	894	881	855	1580	1700	1060	1070	798	698	654	1140	811
25	950	995	1020	1610	1810	1060	965	746	654	643	940	895
26	950	728	980	1580	1450	1060	965	746	574	632	798	865
27	980	881	894	1580	1780	1090	1020	750	565	610	676	837
28	950	790	950	1560	1670	800	842	759	583	592	643	811
29	1070	700	894	2330	....	1000	829	798	538	610	687	785
30	965	700	894	2180	....	1200	803	772	529	592	654	785
31	855	....	778	1712	....	1480	....	772	....	574	687	....
Mean	1080	1040	933	1090	1440	1150	1040	911	765	703	702	728
Max.	2520	2300	1150	2330	1810	1500	1380	1480	1050	955	1140	895
Min.	765	700	700	126	1070	800	803	746	529	574	520	556
A. F.	66400	61900	57400	67000	80000	70700	61900	56000	45500	43200	43200	43300
Total Acre Feet	696,000.											

LOUP RIVER (MIDDLE) AT ST. PAUL (U. S. G. S. Meas.)—Section 10-14-10

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1030	1100	1100	1300	1760	1860	2120	1320	850	550	730	595
2	1050	1250	1150	1300	1760	2020	1280	985	850	670	770	580
3	1140	1100	1200	1300	1760	1550	1500	916	916	770	870	670
4	1640	1350	1120	1300	1760	1730	1500	1470	893	985	962	730
5	2920	1280	1050	1300	1760	1470	1280	1800	1320	1150	1050	730
6	2250	1100	1300	1300	1410	1550	1280	1440	1730	1200	939	610
7	1610	1120	1350	1300	1520	1350	1440	1080	1050	893	985	690
8	1120	1120	1410	1300	1610	1520	1280	1280	1030	939	916	595
9	985	1180	1380	1300	1580	1580	1700	1050	1030	939	916	595
10	1350	1350	1220	1300	1550	1700	1280	1520	893	790	870	595
11	1120	1350	1220	1050	1580	1760	1300	1030	1030	790	730	610
12	4400	1410	1210	1050	1520	1410	1150	962	1120	850	640	610
13	6940	1410	1240	1050	1470	1670	870	1050	1380	850	690	625
14	2560	1610	1240	1050	1530	1640	640	1010	1150	790	610	625
15	2050	1550	1240	1050	1180	1520	1050	1150	1030	750	535	655
16	1640	1440	1180	1000	1220	1350	1300	985	1120	670	565	655
17	1760	1180	1180	1000	1350	1200	1010	985	850	750	595	790
18	1520	1030	1180	1000	1410	1350	962	962	690	690	625	870
19	1080	1180	1180	1000	1580	1580	1280	1010	690	625	670	1120
20	1150	3180	1180	1000	1500	1350	1520	1200	625	710	690	939
21	1080	2630	1180	1700	1520	1470	1200	1320	750	610	750	830
22	1220	916	1180	1700	1730	1280	1200	1200	790	565	850	893
23	870	850	1180	1700	1830	1220	1280	1100	655	670	1120	962
24	850	1030	1180	1700	1890	1100	1100	1280	710	670	830	962
25	1010	1150	1180	1700	1580	1320	962	985	710	670	770	1180
26	1150	1150	1240	2300	1890	1150	893	1050	640	595	750	985
27	1320	1100	1240	2300	1830	950	870	1010	625	750	730	1010
28	1300	1050	1240	2300	1890	830	1250	1100	550	670	710	850
29	1440	1050	1240	2300	....	1300	1120	939	625	690	670	870
30	1150	1100	1240	2300	....	1220	1050	939	535	670	640	893
31	1100	....	1240	2300	....	1830	....	1120	....	790	580	....
Mean	1680	1310	1220	1470	1610	1450	1220	1140	898	766	767	778
Max.	6940	3180	1440	2300	1890	2020	2120	1800	1730	1200	1120	1180
Min.	850	850	1050	1000	1180	830	640	916	535	550	535	580
A. F.	103000	78000	75000	90400	89400	89200	72600	70100	53400	47100	47200	46300
Total Acre Feet	862,000.											

REPORT OF SECRETARY

LOUP RIVER AT GENOA
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2240	2540	2450	2300	4010	3700	3080	2590	2000	1470	1450	1530
2	2320	2470	2450	2300	3750	3530	2920	2710	1850	1570	1380	1560
3	2540	2500	2450	2300	3530	3310	2830	2520	1870	1840	1470	1480
4	2410	2560	2450	2300	3410	3020	2840	2660	1700	2430	1500	1480
5	3590	2540	2450	2300	3130	3000	2520	3390	2040	3520	1470	1440
6	4400	2610	2550	2420	3150	2840	2640	2710	2240	2130	1630	1380
7	2730	2590	2550	2420	3160	2900	2790	3190	2210	2100	1630	1360
8	3190	2560	2550	2420	3190	2900	2700	3250	2230	2240	1590	1280
9	2280	2680	2550	2420	3330	3000	3330	2630	2030	2180	1660	1220
10	2450	2660	2550	2420	3190	3130	2790	3730	1920	1960	1620	1240
11	2230	2680	2400	2520	3210	3000	2620	3190	2090	1860	1690	1200
12	2120	2780	2400	2300	3290	2980	2450	2510	2240	1920	1760	1200
13	8920	2910	2400	1800	3180	3040	3360	2320	2240	1810	1610	1220
14	4590	3030	2400	1300	3160	3020	2440	2200	2360	1750	1630	1260
15	4930	3060	2400	1270	3210	3050	2560	2340	2130	1740	1530	1280
16	4400	3110	2300	1750	3020	3040	2640	2430	2150	1660	1450	1340
17	3800	3190	2300	1750	2990	-2890	2670	2380	1990	1720	1480	1410
18	3520	2810	2300	1750	2900	2770	2790	2340	1820	1870	1460	1760
19	2890	3190	2300	1750	3150	2680	2960	2200	1800	1620	1390	1860
20	2500	5800	2300	1750	3270	2770	3130	2210	1820	1680	1450	1300
21	2320	7560	2300	3100	3330	2740	3070	2540	8100	1550	1320	1660
22	2120	4160	2300	3100	3400	2590	2690	2210	7130	1570	1390	1670
23	2200	2810	2300	3100	3600	2530	2600	1780	2630	1580	1570	1690
24	2370	2860	2300	3100	3680	2550	2530	2200	2100	1570	1690	1570
25	2210	2430	2300	3100	3830	2500	2640	2150	1870	1570	1770	1880
26	2340	2250	2330	4100	3750	2160	2420	1970	1820	1460	1740	1750
27	2270	2150	2330	4200	3780	2300	2490	2200	1760	1440	1600	1680
28	2680	2100	2330	5500	3910	2130	2490	2100	1700	1410	1610	1690
29	2090	2000	2330	8000	.....	2000	2500	2200	1540	1370	1560	1640
30	2410	2350	2330	6140	.....	2800	2530	2120	1500	1380	1580	1740
31	2320	.....	2330	5820	.....	2660	.....	2040	.....	1370	1590	.....
Mean	3010	2960	2390	2930	3380	2830	2700	2490	2360	1790	1560	1520
Max.	8920	7560	.....	8000	4010	3700	3330	3730	8100	3520	1770	1880
Min.	2110	2000	.....	1270	2900	2000	2360	1780	1500	1370	1320	1200
A. F.	185000	176000	147000	180000	188000	174000	161000	153000	140000	110000	95900	90400
Total Acre Feet	1,800,000.											

LOUP RIVER AT COLUMBUS—(U. S. G. S. Measurements)
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	3800	3950	2540	1970	1540	1340	1750
2	3600	2900	2660	1860	1540	1340	1340
3	*1850	.....	.....	.....	3400	2900	2540	1750	1640	1440	1440
4	*1690	N.R.	.....	.....	.....	3100	2660	2780	1750	2420	1540	1540
5	N.R.	.....	.....	.....	.....	3000	2660	2900	1970	3540	1440	1540
6	2900	2660	3150	2190	2080	1640	1440
7	3100	2780	3150	2660	2080	1860	1340
8	3200	2900	3020	2660	2780	1640	1340
9	3280	3280	3020	1970	2190	1640	1160
10	3150	2780	3280	1970	2080	1640	1440
11	3020	2540	3280	2080	2080	1640	1340
12	3150	2120	2540	2190	1970	1640	1340
13	*1890	.....	2900	2300	2300	2190	1750	1640	1250
14	*2110	.....	N.R.	.....	2900	2420	2190	2190	1750	1640	1250
15	N.R.	.....	.....	.....	3020	2660	2300	2190	1750	1540	1340
16	2900	2660	2420	2190	1860	1540	1440
17	3020	2900	2420	1970	1750	1540	1440
18	2780	3020	2660	1750	1750	1440	1750
19	2780	2540	2420	1750	1640	1440	2190
20	2660	3020	2540	1750	1640	1340	2190
21	*2240	.....	.....	.....	.....	2780	3020	2300	3950	1750	1340	2080
22	N.R.	.....	.....	.....	.....	2540	2540	2300	4360	1540	1340	1640
23	2780	2420	2190	3680	1540	1540	1640
24	2420	2540	2080	2660	1540	1640	1640
25	2660	2660	2080	2080	1540	1750	2080
26	2300	2420	1970	1750	1440	1640	1750
27	2190	2660	1970	1750	1340	1640	1640
28	2300	2660	1970	1750	1540	1640	1750
29	1000	9540	2190	1640	1440	1540	1640
30	610	2540	2300	1540	1340	1540	1640
31	2660	.....	1970	.....	1160	1540	.....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	2770	2730	2500	2910	1810	1550	1580
Max.	3800	3950	3280	4760	3540	1860	2190
Min.	610	2300	1970	1540	1160	1340	1160
A. F.	170000	162000	154000	132000	111000	95300	94000

*Actual Measurements.
N.R.—No Record.

MEDICINE CREEK—Section 18-4-25

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	41	76	76	85	87	178	85	37	35	29	15
2	100	41	76	76	85	87	160	85	37	35	29	15
3	100	41	76	76	85	87	140	85	37	35	29	15
4	100	41	76	76	85	87	100	85	37	35	29	15
5	100	41	76	76	85	87	90	85	37	35	29	15
6	100	41	76	76	85	87	80	105	37	35	53	15
7	100	41	76	76	85	87	80	105	37	35	53	15
8	100	41	76	76	85	87	80	105	37	35	53	15
9	100	41	76	76	85	87	80	105	37	35	53	15
10	100	41	76	76	85	87	80	105	37	35	53	15
11	108	80	76	80	85	87	80	105	35	29	40	13
12	108	80	76	80	85	87	80	105	35	29	40	13
13	108	80	76	80	85	87	80	105	35	29	40	13
14	108	80	76	80	85	87	80	105	35	29	40	13
15	108	80	76	80	85	87	80	105	35	29	40	13
16	108	80	76	80	87	95	60	90	35	29	20	13
17	108	80	76	80	87	95	60	90	35	29	20	13
18	108	80	76	80	87	95	60	90	35	29	20	13
19	108	80	76	80	87	95	60	90	35	29	20	13
20	108	80	76	80	87	95	60	90	35	29	20	13
21	41	80	76	85	87	95	60	60	36	29	20	22
22	41	80	76	85	87	95	60	60	36	29	20	22
23	41	80	76	85	87	95	60	60	36	29	20	22
24	41	80	76	85	87	95	60	60	36	29	20	22
25	41	80	76	85	87	95	60	60	36	29	20	22
26	41	80	76	85	87	95	60	37	36	29	20	22
27	41	80	76	85	87	95	60	37	36	29	20	22
28	41	80	76	85	87	95	60	37	36	29	20	22
29	41	80	76	85	87	95	60	37	36	29	20	22
30	41	80	76	85	87	95	60	37	36	29	20	22
31	41	80	76	85	87	95	60	37	36	29	20	22
Mean		67	76	80	86	91	77	77	36	31	30	17
Max.	108	80	76	85	87	95	178	105	37	35	53	22
Min.	41	41	76	76	85	87	60	37	35	29	20	13
A. F.	5020	3987	4673	4949	4772	5603	4697	4694	2142	1902	1845	932
Total Acre Feet	45,280.											

MELBETA DRAIN—Section 24-21-54

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	6	9	8	7	7	5	3	2	4	5	1
2	8	6	9	8	7	7	5	3	2	4	5	1
3	8	6	9	8	7	7	5	3	2	2	6	1
4	8	6	9	8	7	7	5	3	2	4	3	1
5	8	6	9	8	7	7	5	3	2	6	0	1
6	8	6	9	8	7	7	5	2	3	1	0	1
7	8	6	9	8	7	7	5	2	2	4	0	3
8	8	6	9	8	7	7	5	2	1	2	0	4
9	8	6	9	8	7	7	5	2	0	4	0	3
10	8	6	9	8	7	7	5	2	0	2	0	1
11	4	6	9	8	6	8	4	1	0	1	0	3
12	4	6	9	8	6	8	4	1	5	2	0	3
13	4	6	9	8	6	8	4	1	6	2	0	3
14	4	6	9	8	6	8	4	1	5	2	0	2
15	4	6	9	8	6	8	4	1	1	2	0	3
16	4	10	9	8	6	5	3	1	1	3	0	3
17	4	10	9	8	6	5	3	1	1	2	0	2
18	4	10	9	8	6	5	3	1	0	2	0	3
19	4	10	9	8	6	5	3	1	0	2	0	3
20	4	10	9	8	6	5	3	1	0	3	0	4
21	4	10	9	7	6	4	2	1	0	2	0	3
22	4	10	9	7	6	4	2	1	4	3	0	3
23	4	10	9	7	6	4	2	1	8	2	0	3
24	4	10	9	7	6	4	2	1	8	3	0	3
25	4	10	9	7	6	4	2	1	6	2	0	0
26	4	10	9	7	7	4	2	1	5	3	0	1
27	4	10	9	7	7	4	2	1	0	3	0	0
28	4	10	9	7	7	4	2	1	0	3	0	0
29	4	10	9	7	7	4	2	1	5	3	0	0
30	4	10	9	7	7	4	2	1	2	5	1	0
31	4	10	9	7	7	4	2	1	2	6	1	0
Mean.	5	8	9	8	6	6	3	1	2	3	1	2
Max	8	10	9	8	7	8	5	3	8	4	6	4
Min.	4	6	9	7	6	4	2	1	0	1	0	0
A. F.	325	476	553	467	361	357	208	92	143	178	43	119
Total Acre Feet	3,322.											

REPORT OF SECRETARY

MITCHELL SPILLWAY—Section 35-23-56

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0	0	0	15	10	9	0	0	0	0
2	0	0	0	0	0	15	10	9	0	0	0	0
3	0	0	0	0	0	15	10	9	0	0	0	0
4	0	0	0	0	0	15	10	9	0	0	0	0
5	0	0	0	0	0	15	10	9	0	0	0	0
6	0	0	0	0	0	15	7	9	0	0	0	0
7	0	0	0	0	0	15	7	9	0	0	0	0
8	0	0	0	0	0	15	7	9	35	0	0	0
9	0	0	0	0	0	15	7	9	30	0	0	0
10	0	0	0	0	0	15	7	9	0	0	0	0
11	0	0	0	0	0	15	7	135	0	0	0	0
12	0	0	0	0	0	15	7	255	0	0	0	0
13	0	0	0	0	0	15	7	275	0	0	0	0
14	0	0	0	0	0	15	7	219	0	0	0	0
15	0	0	0	0	0	15	7	200	0	0	0	0
16	0	0	0	0	0	10	7	200	0	0	0	0
17	0	0	0	0	0	10	7	200	0	0	0	0
18	0	0	0	0	0	10	7	0	0	0	0	0
19	0	0	0	0	0	10	8	0	0	0	0	0
20	0	0	0	0	0	15	8	0	0	0	0	0
21	0	0	0	0	0	15	8	0	0	0	0	0
22	0	0	0	0	0	15	8	0	0	0	0	0
23	0	0	0	0	0	15	8	0	0	0	0	0
24	0	0	0	0	0	15	8	0	0	0	0	0
25	0	0	0	0	0	10	8	0	0	0	0	0
26	0	0	0	0	0	10	8	0	0	0	0	0
27	0	0	0	0	0	10	8	0	0	0	0	0
28	0	0	0	0	0	10	8	0	0	0	0	0
29	0	0	0	0	....	10	8	0	0	0	0	0
30	0	0	0	0	....	10	8	0	0	0	0	0
31	0	0	0	0	....	10	....	0	....	0	0	....
Mean	0	0	0	0	0	13	8	51	2	0	0	0
Max.	0	0	0	0	0	15	10	275	35	0	0	0
Min.	0	0	0	0	0	10	7	0	0	0	0	0
A. F.	0	0	0	0	0	830	470	3120	131	0	0	0

Total Acre Feet 4,551.

MORRILL DRAIN—Section 13-23-57

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	2	2	2	2	2	0.5	0	0	0	0	3
2	5	2	2	2	2	2	0.5	0	0	0	0	3
3	5	2	2	2	2	2	0.5	0	0	0	0	3
4	5	2	2	2	2	2	0.5	0	0	0	0	3
5	5	2	2	2	2	2	0.5	0	0	0	0	3
6	5	2	2	2	2	2	0.5	0	0	0	0	3
7	5	2	2	2	2	2	0.5	0	0	0	0	3
8	5	2	2	2	2	2	0.5	0	0	0	0	3
9	5	2	2	2	2	2	0.5	0	0	0	0	3
10	5	2	2	2	2	2	0.5	0	0	0	0	3
11	5	2	2	2	2	1	0.5	0	2	0	1	3
12	5	2	2	2	2	1	0.5	0	2	0	1	3
13	5	2	2	2	2	1	0.5	0	2	0	1	3
14	5	2	2	2	2	1	0.5	0	2	0	1	3
15	5	2	2	2	2	1	0.5	0	3	0	2	3
16	3	3	2	2	2	1	0.5	0	3	0	2	3
17	3	3	2	2	2	1	0.5	0	3	0	2	3
18	3	3	2	2	2	1	0.5	0	3	0	2	3
19	3	3	2	2	2	1	0.5	0	3	0	2	3
20	3	3	2	2	2	1	0.5	0	3	0	2	3
21	3	3	2	2	2	1	0.5	0	0	0	3	3
22	3	3	2	2	2	1	0.5	0	0	0	3	3
23	3	3	2	2	2	1	0.5	0	0	0	3	3
24	3	3	2	2	2	1	0.5	0	0	0	3	3
25	3	3	2	2	2	1	0.5	0	0	0	3	3
26	3	3	2	2	2	1	0.5	0	0	0	3	3
27	3	3	2	2	2	1	0.5	0	0	0	3	3
28	3	3	2	2	2	1	0.5	0	0	0	3	3
29	3	3	2	2	....	1	0.5	0	0	0	3	3
30	3	3	2	2	....	1	0.5	0	0	0	3	3
31	3	....	2	2	....	1	....	0	....	0	3	....
Mean	4	2	2	2	2	1	0.5	0	1	0	1	3
Max.	5	3	2	2	2	2	0.5	0	3	0	3	3
Min.	3	2	2	2	2	1	0.5	0	0	0	0	3
A. F.	244	149	123	123	103	80	30	0	50	0	94	178

Total Acre Feet 1,174.

DEPARTMENT OF PUBLIC WORKS

MUDDY CREEK AT ARAPAHOE—Section 16-4-23

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	3	1	4	4	4	5	4	2	6	8	2.0
2	5	3	1	4	4	4	5	4	2	6	8	2.0
3	5	3	1	4	4	4	5	4	2	6	8	2.0
4	5	3	1	4	4	4	5	4	2	6	8	2.0
5	5	3	1	4	4	4	5	4	2	6	8	2.0
6	5	3	1	4	4	4	5	4	1	6	13	1.0
7	5	3	1	4	4	4	5	4	1	6	13	1.0
8	5	3	1	4	4	4	5	4	1	6	13	1.0
9	5	3	1	4	4	4	5	4	1	6	13	1.0
10	5	3	1	4	4	4	5	4	1	6	13	1.0
11	5	3	1	4	4	4	5	4	1	6	13	1.0
12	5	3	1	4	4	4	5	4	1	6	13	1.0
13	5	3	1	4	4	4	5	4	1	6	13	1.0
14	5	3	1	4	4	4	5	4	1	6	13	1.0
15	5	3	1	4	4	4	5	4	1	6	13	1.0
16	2	3	1	5	4	4	5	3	4	4	4	0.3
17	2	3	1	4	4	4	5	3	4	4	4	0.3
18	2	3	1	4	4	4	5	3	4	4	4	0.3
19	2	3	1	4	4	4	5	3	4	4	4	0.3
20	2	3	1	4	4	4	5	3	4	4	4	0.3
21	2	3	1	4	4	4	5	3	4	4	4	0.3
22	2	3	1	4	4	4	5	3	4	4	4	0.3
23	2	3	1	4	4	4	5	3	4	4	4	0.3
24	2	3	1	4	4	4	5	3	4	4	4	0.3
25	2	3	1	4	4	4	5	3	4	4	4	0.3
26	2	3	1	4	4	4	5	3	6	4	2	1.3
27	2	3	1	4	4	4	5	3	6	4	2	1.3
28	2	3	1	4	4	4	5	3	6	4	2	1.3
29	2	3	1	4	4	4	5	3	6	4	2	1.3
30	2	3	1	4	4	4	5	3	6	4	2	1.3
31	2	3	1	4	4	4	5	3	6	4	2	1.3
Mean	4	3	1	4	4	4	5	3	3	6	13	2.0
Max.	5	3	1	4	4	4	5	4	6	6	13	2.0
Min.	2	3	1	4	4	4	5	3	1	4	2	0.3
A. F.	232	178	61	246	222	246	198	211	178	285	391	610
Total Acre Feet	2,512.											

NINE MILE DRAIN AT McCREW—Section 25-21-53

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	270	216	165	140	120	105	125	86	120	177	196	210
2	270	216	165	140	120	105	125	86	120	177	195	202
3	270	216	165	140	120	105	125	86	120	177	199	201
4	270	216	165	140	120	105	125	86	120	178	201	202
5	270	216	165	140	120	105	125	86	120	180	201	198
6	270	216	165	140	120	105	125	86	138	179	203	197
7	270	216	165	140	120	105	125	86	144	180	197	195
8	270	216	165	140	120	105	125	86	141	177	192	197
9	270	216	165	140	120	105	125	86	144	176	195	191
10	270	216	165	140	120	105	125	86	144	177	192	184
11	270	186	165	140	115	100	100	86	146	181	196	178
12	270	186	165	140	115	100	100	86	147	178	192	188
13	270	186	165	140	115	100	100	86	147	180	185	181
14	270	186	165	140	115	100	100	86	159	180	187	186
15	270	186	165	140	115	100	100	86	152	182	182	185
16	270	186	138	130	115	100	100	86	154	180	180	190
17	270	186	138	130	115	100	100	86	153	180	184	186
18	270	186	138	130	115	100	100	86	154	184	179	190
19	270	186	138	130	115	100	100	86	155	185	186	189
20	270	186	138	130	115	100	100	86	154	187	187	190
21	216	170	138	130	110	100	88	88	160	193	191	185
22	216	170	138	130	110	100	88	88	165	184	195	177
23	216	170	138	130	110	100	88	88	162	192	204	178
24	216	170	138	130	110	100	88	88	162	190	203	196
25	216	170	138	130	110	100	88	88	165	192	199	187
26	216	170	138	125	110	90	88	100	168	190	202	181
27	216	170	138	125	110	90	88	100	170	192	197	190
28	216	170	138	125	110	90	88	100	171	191	197	181
29	216	170	138	125	110	90	88	100	171	187	201	177
30	216	170	138	125	110	90	88	100	171	193	201	174
31	216	170	138	125	110	90	88	100	171	193	201	174
Mean	250	190	151	134	115	100	104	89	150	184	194	189
Max.	270	216	165	140	120	105	125	100	174	194	204	210
Min.	216	170	138	125	110	90	88	86	120	176	179	174
A. F.	15424	11345	9289	8240	6390	6120	6190	6170	8930	11300	11900	11200
Total Acre Feet	111,810.											

REPORT OF SECRETARY

NIOBRARA RIVER AT DUNLAP—Section 27-29-43												
Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	84	126	90	14	4	6	16
2	84	126	105	12	3	6	18
3	84	94	76	12	3	6	18
4	84	110	76	14	2	6	18
5	84	126	76	7	2	6	18
6	84	126	63	7	4	627	18
7	70	110	76	34	4	24	17
8	70	108	63	17	4	22	17
9	84	93	63	8	4	19	18
10	84	79	63	12	4	29	21
11	99	79	63	10	3	24	22
12	84	93	63	12	4	26	22
13	84	79	63	12	4	26	22
14	84	79	63	10	4	26	23
15	84	79	76	15	4	33	19
16	70	65	50	11	4	33	18
17	84	79	50	8	3	33	19
18	70	65	50	5	3	50	18
19	84	65	63	4	3	44	19
20	84	65	56	4	3	46	6
21	70	65	56	3	4	36	6
22	84	65	56	3	4	36	8
23	70	65	56	3	5	36	8
24	70	65	56	3	6	38	10
25	83	84	65	52	3	6	39
26	113	75	79	48	4	6	39
27	83	60	79	28	4	6	38
28	83	45	65	24	4	6	38
29	55	65	21	3	6	17
30	80	65	16	3	6	17
31	105	.....	13	.....	6	17
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	78	84	57	9	4	47	15
Max.	105	126	105	34	6	627	23
Min.	45	65	13	3	2	6	5
A. F.	4830	5000	3520	518	253	2860	869

Total Acre Feet 17,900.

N.R.—No Record.

*Actual Measurements.

NIOBRARA RIVER AT GORDON (U. S. G. S. Measurements)—Section 15-21-41												
Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	170	174	160	146	200	174	1000	170	102	66	66	68
2	178	167	160	150	200	163	354	163	91	77	66	82
3	262	167	160	153	200	186	268	197	86	73	69	64
4	210	167	160	153	200	194	233	188	89	100	66	75
5	219	174	160	153	200	186	268	210	126	102	63	75
6	198	170	170	156	180	206	298	149	118	93	526	75
7	186	174	170	170	170	174	194	179	100	77	163	71
8	186	174	170	170	160	219	194	175	82	84	112	78
9	202	170	170	167	156	178	178	179	84	84	115	75
10	198	174	170	136	153	190	182	129	124	80	86	73
11	219	170	155	130	156	219	186	118	175	73	69	69
12	238	170	155	120	170	198	146	132	166	86	71	68
13	198	167	155	100	160	182	143	121	118	69	75	71
14	170	160	143	90	163	202	143	152	95	66	69	71
15	202	163	150	80	198	186	190	166	89	66	71	78
16	198	156	150	85	219	206	186	159	82	63	71	78
17	167	170	136	90	202	206	182	135	86	63	142	86
18	170	178	136	100	202	194	170	121	80	63	132	95
19	198	160	156	110	194	202	174	107	84	93	75	149
20	160	178	131	130	194	206	150	124	73	107	86	146
21	153	160	124	140	163	202	156	121	77	95	80	91
22	160	165	126	150	170	194	163	132	77	78	75	82
23	170	165	139	160	174	198	178	132	77	71	139	82
24	174	165	146	170	160	210	198	132	73	64	100	135
25	170	165	143	180	178	202	170	126	73	61	91	118
26	170	160	124	200	163	180	156	135	71	64	86	115
27	202	160	124	210	228	150	153	139	73	61	77	100
28	170	160	128	220	186	100	146	132	71	61	75	95
29	167	160	139	220	.....	140	150	129	63	58	75	95
30	167	160	146	220	.....	200	153	129	61	58	68	91
31	170	.....	146	220	.....	600	.....	112	.....	61	63	.....
Mean	187	163	148	151	189	202	215	145	92.2	74.7	101	88.4
Max.	262	178	170	220	202	600	1000	210	175	107	526	143
Min.	153	78	124	80	153	100	143	107	61	58	63	64
A. F.	11500	9700	9100	9280	10100	12400	12800	8920	5490	4590	6210	5260

Total Acre Feet 105,000.

REPORT OF SECRETARY

OTTER CREEK AT LEMOYNE—Section 9-15-40

Date	Year Ending September 30, 1931											
	*Oct.	*Nov.	*Dec.	*Jan.	*Feb.	*Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	34	33	27	30	30	29	26	6	25	29	21
2	29	34	33	27	30	30	29	23	5	23	12	24
3	29	34	33	27	30	30	32	22	5	24	11	26
4	29	34	33	27	30	30	35	32	5	25	13	29
5	29	34	33	27	30	30	37	27	6	26	18	27
6	29	34	33	27	30	30	37	23	5	25	3	27
7	29	34	33	27	30	30	33	26	5	24	19	27
8	29	34	33	27	30	30	33	23	8	26	17	25
9	29	34	33	27	30	30	23	27	10	28	19	24
10	29	34	33	27	30	30	30	24	14	27	17	26
11	29	34	33	27	30	30	31	19	26	26	15	26
12	29	34	33	27	30	30	31	21	30	25	16	26
13	29	34	33	27	30	30	32	21	28	24	16	26
14	29	34	33	27	30	30	33	23	29	24	17	27
15	29	34	33	27	30	30	31	21	29	26	17	26
16	29	34	33	27	30	30	31	17	28	25	18	26
17	29	34	33	27	30	30	31	21	25	25	18	26
18	29	34	33	27	30	30	30	17	26	25	17	25
19	29	34	33	27	30	30	28	16	24	26	17	26
20	29	34	33	27	30	30	26	14	22	26	20	29
21	29	34	33	27	30	30	23	14	21	25	20	29
22	29	34	33	27	30	30	22	14	20	25	23	27
23	29	34	33	27	30	30	22	16	21	26	20	28
24	29	34	33	27	30	30	31	5	21	25	20	28
25	29	34	33	27	30	30	34	6	22	25	22	28
26	29	34	33	27	30	30	34	6	22	25	20	28
27	29	34	33	27	30	30	30	6	23	24	23	29
28	29	34	33	27	30	30	28	5	23	24	20	31
29	29	34	33	27	...	30	26	5	23	24	20	22
30	29	34	33	27	...	30	26	5	24	19	22	19
31	29	...	33	27	...	30	...	6	...	26	22	...
Mean	29	34	33	27	30	30	29	17	18	25	18	26
Max.	29	34	33	27	30	30	37	32	30	28	29	31
Min.	29	34	33	27	30	30	22	5	5	19	3	19
A. F.	1783	2023	2029	1607	1666	1845	1781	1055	1103	1533	1113	1563
Total Acre Feet	19,101.											

*Estimated.

PAWNEE CREEK—Section 4-12-27

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	14	22	16	15	*N.R.	*N.R.	*N.R.	*N.R.	2	4	5.0
2	9	14	22	16	15	...	...	...	...	2	4	4.0
3	9	14	22	16	15	...	...	...	...	2	4	1.0
4	9	14	22	16	15	...	...	...	...	2	4	1.0
5	9	14	22	16	15	...	...	...	...	2	4	1.0
6	9	14	22	15	15	...	...	...	...	2	4	1.0
7	9	14	22	16	15	...	...	...	...	3	4	1.0
8	9	14	22	16	15	...	...	...	...	3	4	1.0
9	9	14	22	16	15	...	...	...	...	3	4	1.0
10	9	14	22	16	15	...	...	...	...	3	4	1.0
11	9	14	22	16	15	...	...	...	...	4	4	0.5
12	9	14	22	16	15	...	...	...	...	4	4	0.5
13	9	14	22	16	15	...	...	...	...	4	4	0.5
14	9	14	22	16	15	...	...	...	...	4	4	0.5
15	9	14	22	16	15	...	...	...	...	4	4	0.5
16	12	14	22	15	15	...	...	...	...	3	5	0.5
17	12	14	22	15	15	...	...	...	...	3	5	0.5
18	12	14	22	15	15	...	...	...	...	3	5	0.5
19	12	14	22	15	15	...	...	...	...	2	5	0.5
20	12	14	22	15	15	...	...	...	...	2	5	0.5
21	12	27	22	15	15	...	...	...	...	2	5	2.0
22	12	27	22	15	15	...	...	...	...	2	5	2.0
23	12	27	22	15	15	...	...	...	...	2	5	2.0
24	10	27	22	15	15	...	...	...	...	2	5	6.0
25	10	27	22	15	15	...	...	...	...	2	5	6.0
26	10	27	22	15	15	...	...	...	...	1	5	6.0
27	10	27	22	15	15	...	...	...	...	1	5	6.0
28	10	27	22	15	15	...	...	...	...	1	5	6.0
29	10	27	22	15	...	...	...	...	...	1	5	6.0
30	10	27	22	15	...	...	...	...	...	1	5	...
31	10	...	22	15	...	...	...	...	...	1	5	...
Mean	10	18	22	15	15	*N.R.	*N.R.	*N.R.	*N.R.	2	4	2.0
Max.	12	27	22	16	15	...	...	...	...	4	5	6.0
Min.	9	14	22	15	15	...	...	...	...	1	4	0.5
A. F.	617	1091	1353	952	833	...	...	...	...	146	278	139.0

*No Record.

DEPARTMENT OF PUBLIC WORKS

PLUM CREEK—Section 10-19-49

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	8	7	8	7	6	8	5	5	6	3	4
2	10	8	7	8	7	6	8	5	4	6	3	4
3	10	8	7	8	7	6	8	5	4	6	3	5
4	10	8	7	8	7	6	8	5	4	6	3	5
5	10	8	7	8	7	6	8	5	4	6	3	5
6	10	8	7	8	7	6	7	5	4	6	3	5
7	10	8	7	8	7	6	7	5	4	7	3	5
8	10	8	7	8	7	6	7	5	4	7	4	6
9	10	8	7	8	7	6	7	5	4	7	5	5
10	10	8	7	8	7	6	7	5	6	7	6	6
11	10	8	7	8	6	7	6	5	6	6	5	6
12	10	8	7	8	6	7	6	5	5	6	5	6
13	10	8	7	8	6	7	6	5	4	6	5	6
14	10	8	7	8	6	7	6	5	4	6	4	6
15	10	8	7	8	6	7	6	5	5	5	4	6
16	9	7	8	7	6	6	6	5	5	5	4	6
17	9	7	8	7	6	6	6	5	5	5	5	6
18	9	7	8	7	6	6	6	5	5	5	5	6
19	9	7	8	7	6	6	6	5	5	4	6	6
20	9	7	8	7	6	6	6	5	5	4	6	6
21	9	7	8	7	7	6	5	5	4	3	6	6
22	9	7	8	7	7	6	5	5	3	3	6	7
23	9	7	8	7	7	6	5	5	3	3	5	7
24	9	7	8	7	7	6	5	5	3	3	5	7
25	9	7	8	7	7	6	5	5	3	3	4	7
26	9	7	8	7	7	5	5	5	3	3	4	6
27	9	7	8	7	7	5	5	5	4	3	4	6
28	9	7	8	7	7	5	5	5	4	3	4	5
29	9	7	8	7	....	5	5	....	5	3	4	5
30	9	7	8	7	....	5	5	....	5	3	4	5
31	9	....	8	7	....	5	....	5	....	3	4	....
Mean	9	7	7	7	7	6	6	5	4	5	4	6
Max.	10	8	8	8	7	7	7	5	6	7	6	7
Min.	9	7	7	7	6	5	5	5	3	3	3	4
A. F.	581	446	461	461	367	369	369	307	256	295	271	339
Total Acre Feet	4,525.											

PUMPKIN CREEK AT BRIDGEPORT—Section 12-19-50

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	85	50	55	60	70	58	52	52	1	23	38	45
2	85	50	55	60	70	59	58	55	1	36	28	45
3	85	50	55	60	70	56	59	50	1	19	20	45
4	85	50	55	60	70	57	59	51	1	14	17	46
5	85	50	55	60	70	58	57	51	1	15	13	32
6	85	50	55	60	70	59	57	52	14	15	10	19
7	85	50	55	60	70	62	55	54	14	8	41	19
8	85	50	55	60	70	55	54	54	14	8	34	19
9	85	50	55	60	70	55	51	51	18	9	54	26
10	85	50	55	60	70	58	51	51	18	9	62	26
11	70	50	55	65	70	59	51	53	3	9	34	24
12	70	50	55	65	70	63	52	54	1	10	54	24
13	70	50	55	65	70	62	52	54	1	10	54	39
14	70	50	55	65	70	59	52	54	14	8	43	39
15	70	50	55	65	70	59	52	15	14	8	43	39
16	70	50	55	65	73	59	51	15	2	12	22	40
17	70	50	55	65	70	59	51	15	1	14	17	39
18	70	50	55	65	67	58	52	15	1	14	15	42
19	70	50	55	65	64	57	51	54	4	9	14	45
20	70	50	55	65	64	55	51	54	4	9	18	42
21	70	50	55	65	65	55	51	54	4	10	17	42
22	70	50	55	65	65	54	51	52	14	10	17	42
23	70	50	55	65	66	51	52	36	13	14	18	35
24	70	50	55	65	59	51	52	36	6	14	18	38
25	70	50	55	65	60	51	52	36	6	28	20	39
26	55	50	55	65	62	40	52	36	7	28	18	39
27	55	50	55	65	62	35	52	36	7	28	18	39
28	55	50	55	65	66	35	52	16	14	30	18	42
29	55	50	55	65	....	45	52	15	14	29	15	34
30	55	50	55	65	....	45	52	1	22	38	28	34
31	55	....	55	65	....	48	....	1	....	38	47	....
Mean	*72	*50	*55	*63	*64	54	53	40	8	17	28	36
Max.	85	50	55	65	73	63	59	55	22	38	62	46
Min.	55	50	55	60	59	35	51	1	1	8	10	19
A. F.	4420	2980	3380	3900	3750	3330	3150	2430	464	1040	1720	2150
Total Acre Feet	16,000.											

*Estimated.

REPORT OF SECRETARY

RED WILLOW CREEK AT BAYARD—Section 7-20-51

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	125	70	75	65	55	36	37	37	65	6	1	37
2	125	70	75	65	55	36	44	47	5	8	68	52
3	125	70	75	65	55	36	37	31	50	5	68	37
4	125	70	75	65	55	36	42	31	11	21	60	40
5	125	70	75	65	55	39	35	34	49	31	90	40
6	125	70	75	65	55	35	35	31	109	21	98	31
7	125	70	75	65	55	35	35	29	49	80	8	37
8	125	70	75	65	55	35	35	26	21	65	8	37
9	125	70	75	65	55	34	31	26	11	65	2	31
10	125	70	75	65	55	34	29	20	11	43	39	47
11	100	70	70	55	55	46	29	20	14	43	18	34
12	100	70	70	55	55	35	29	20	13	26	22	47
13	100	70	70	55	55	35	26	20	10	6	22	47
14	100	70	70	55	55	35	26	18	5	6	39	62
15	100	70	70	55	55	35	26	16	8	4	18	47
16	100	70	70	55	55	34	26	15	1	4	21	46
17	100	70	70	55	51	33	26	15	2	1	21	39
18	100	70	70	55	48	33	26	15	2	1	17	68
19	100	70	70	55	46	36	26	68	2	2	21	90
20	100	70	70	55	44	36	22	68	2	1	18	83
21	75	70	65	58	49	33	19	197	2	1	22	60
22	75	70	65	58	49	33	22	214	3	2	33	66
23	75	70	65	58	44	33	28	95	3	1	37	44
24	75	70	65	58	44	30	31	14	3	105	20	52
25	75	70	65	58	46	36	31	10	2	83	31	74
26	75	70	65	58	46	10	26	8	2	105	23	100
27	75	70	65	58	47	12	23	6	4	89	22	111
28	75	70	65	58	53	14	22	2	2	6	24	80
29	75	70	65	58	....	16	23	1	5	3	24	80
30	75	70	65	58	....	22	23	1	8	66	24	72
31	75	....	65	58	....	37	....	65	....	1	29	....
Mean.	*99	*70	*70	*59	52	32	29	39	16	29	31	56
Max.	125	70	75	65	53	46	44	214	109	105	98	111
Min.	75	70	65	55	44	10	19	1	1	1	1	31
A. F.	6100	4170	4290	3650	2870	1960	1730	2380	940	1790	1880	3360
Total Acre Feet	35,100.											

*Estimated.

RED WILLOW CREEK—Section 17-3-28

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	47	23	40	40	37	45	30	30	15	58	15
2	14	47	23	40	40	37	45	30	30	15	58	15
3	14	47	23	40	40	37	45	30	30	15	58	15
3	14	47	23	40	40	37	45	30	30	15	58	15
5	14	47	23	40	40	37	45	30	30	15	58	15
6	14	47	23	40	40	37	45	30	30	15	58	15
7	14	47	23	40	40	37	45	30	30	15	58	15
8	14	47	23	40	40	37	45	30	30	15	58	15
9	14	47	23	40	40	37	45	30	30	15	58	15
10	14	47	23	40	40	37	45	30	30	15	58	15
11	14	47	23	40	40	37	45	30	20	21	40	7
12	50	47	23	40	40	37	45	30	20	21	40	7
13	100	47	23	40	40	37	45	30	20	21	40	7
14	150	47	23	40	40	37	45	30	20	21	40	7
15	108	47	23	40	40	37	45	30	20	21	40	7
16	90	47	23	40	37	40	31	29	20	21	40	7
17	70	47	23	40	37	40	31	29	20	21	40	7
18	70	47	23	40	37	40	31	29	20	21	40	7
19	70	150	23	40	37	40	31	29	20	21	40	7
20	70	100	23	40	37	40	31	29	20	21	40	7
21	70	70	40	40	37	40	31	29	15	30	20	5
22	70	47	40	40	37	40	31	29	15	30	20	5
23	70	47	40	40	37	40	31	29	15	30	20	5
24	70	47	40	40	37	40	31	29	15	30	20	5
25	70	47	40	40	37	40	31	29	15	30	20	5
26	50	30	40	40	37	45	31	29	15	30	20	5
27	50	30	40	40	37	45	31	29	15	30	20	5
28	50	30	40	40	37	45	31	29	15	30	20	5
29	50	30	40	40	....	45	31	29	15	30	20	5
30	50	30	40	40	....	45	31	29	15	30	20	5
31	50	....	40	40	....	45	....	29	....	30	20	....
Mean	51	50	29	40	38	40	34	28	21	22	39	9
Max.	108	150	40	40	40	45	45	30	30	30	58	15
Min.	14	30	23	40	37	37	31	29	15	15	20	5
A. F.	3138	2983	1785	2460	2085	2480	2260	1755	1289	1370	2380	535
Total Acre Feet	24,520.											

DEPARTMENT OF PUBLIC WORKS

553

REPUBLICAN (ARICKAREE) RIVER (U. S. G. S. Meas.) — Section 10-1-42

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	8	28	28	76	76	190	61	11	9	7	11
2	16	8	28	28	76	76	92	58	11	8	8	13
3	16	8	28	28	76	76	87	53	11	8	7	16
4	16	8	28	28	76	76	86	54	13	10	7	14
5	16	8	28	28	76	76	97	56	47	9	11	13
6	16	8	28	28	76	76	101	49	28	9	10	11
7	16	8	28	28	76	76	97	46	19	8	8	9
8	16	8	28	28	76	78	99	39	15	7	8	10
9	16	8	28	28	76	80	97	41	19	7	41	10
10	16	8	28	28	76	80	92	47	19	7	30	8
11	16	10	28	28	76	80	91	44	38	7	21	7
12	16	10	28	28	76	80	90	39	36	8	19	7
13	16	10	28	28	76	80	88	38	31	8	12	8
14	16	10	28	28	76	80	87	37	31	7	8	9
15	16	10	28	28	76	80	86	34	36	8	8	13
16	16	10	28	28	76	80	84	32	42	14	7	13
17	16	10	28	28	76	80	86	26	45	13	7	15
18	16	10	28	28	76	78	82	27	44	14	7	16
19	16	10	28	28	76	78	70	11	31	8	8	19
20	16	10	28	28	76	83	68	6	26	7	7	23
21	16	10	28	44	76	81	67	8	19	7	8	28
22	16	10	28	60	76	78	66	8	17	7	8	34
23	16	10	28	76	76	75	70	7	12	8	8	37
24	16	10	28	76	76	71	71	6	8	8	8	39
25	16	10	28	76	76	77	70	6	8	7	11	41
26	16	10	28	76	76	70	68	9	7	8	13	31
27	16	10	28	76	76	50	66	9	7	7	7	28
28	16	10	28	76	76	60	64	9	6	7	7	23
29	16	10	28	76	...	70	67	9	6	7	8	21
30	16	10	28	76	...	70	59	9	6	4	9	23
31	16	...	28	76	...	90	...	8	...	4	11	...
Mean	16	9	28	43	76	76	85	29	22	8	11	18
Max.	16	10	28	76	76	90	190	61	47	14	41	41
Min.	16	8	28	28	76	50	59	6	6	4	7	7
A. F.	984	555	1720	2676	4221	4683	5030	1760	1290	498	670	1090
Total Acre Feet	33,746.											

REPUBLICAN RIVER AT BENKELMAN—Section 19-1-37

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	171	75	50	120	150	39	80	34	4	0	4
2	50	150	75	50	120	150	65	80	30	4	0	4
3	70	150	75	50	120	150	65	80	30	4	0	4
4	70	130	75	50	120	150	65	72	30	4	0	4
5	150	130	75	50	120	150	65	72	432	4	0	4
6	100	108	112	50	120	150	65	58	97	2	0	4
7	80	108	100	50	120	150	65	58	88	2	0	4
8	80	108	80	50	120	150	65	65	51	2	0	0
9	80	108	60	50	120	150	65	72	51	2	400	0
10	100	108	50	50	120	150	65	65	45	2	486	0
11	150	108	40	70	150	130	65	65	51	2	97	0
12	250	108	40	70	150	120	51	65	58	2	88	0
13	200	108	40	70	150	100	51	65	58	2	72	0
14	175	108	40	70	150	90	45	65	51	0	30	0
15	175	108	40	70	150	80	45	65	45	0	26	0
16	167	100	50	70	150	68	45	65	45	0	22	0
17	167	100	50	70	150	68	34	65	34	0	9	0
18	167	100	50	70	150	68	39	58	22	2	9	9
19	167	100	50	70	150	68	39	51	22	0	9	9
20	167	100	50	70	150	83	51	51	22	0	9	4
21	167	80	66	95	150	83	51	51	18	0	9	4
22	167	80	66	95	150	83	58	51	18	0	103	4
23	167	80	66	95	150	92	58	51	15	0	37	4
24	167	80	66	95	150	83	80	45	15	0	28	0
25	167	80	66	95	150	76	88	39	15	0	24	0
26	130	75	66	95	150	76	94	45	15	0	21	0
27	130	75	66	95	150	60	94	39	12	0	14	0
28	130	75	66	95	150	50	94	39	12	0	9	0
29	130	75	66	95	...	40	85	39	9	0	9	0
30	130	75	66	95	...	40	77	39	9	0	6	0
31	130	...	66	95	...	39	...	39	...	0	6	0
Mean	136	102	63	72	134	100	62.3	57.9	47.8	1.2	49.1	2.1
Max.	250	171	112	95	150	150	94	80	432	4	486	9
Min.	50	75	66	50	120	39	34	39	9	0	0	0
A. F.	8390	6070	3874	4453	7438	6143	3710	3560	2840	74	3020	129
Total Acre Feet	49,700.											

REPORT OF SECRETARY

REPUBLICAN RIVER (NORTH BRANCH) BENKLEMAN—Section 19-1-37												
Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	59	43	66	66	100	100	150	150	60	10	0	0
2	59	43	66	66	100	100	150	140	60	10	0	0
3	59	43	66	66	100	100	150	120	60	10	0	0
4	49	43	66	66	100	100	150	100	60	10	0	0
5	59	43	66	66	100	100	150	90	300	10	0	0
6	59	43	66	66	100	100	198	79	200	6	0	0
7	59	43	66	66	100	100	198	79	150	6	0	0
8	59	43	66	66	100	100	198	79	100	6	0	0
9	59	43	66	66	100	100	198	79	80	6	0	0
10	59	43	66	66	100	100	198	79	80	6	0	0
11	59	43	66	66	120	100	198	79	70	6	0	3
12	59	43	66	66	120	100	198	79	70	6	0	3
13	59	43	66	66	120	100	198	79	70	6	0	3
14	59	43	66	66	120	100	198	79	70	6	0	3
15	59	43	66	66	120	100	198	79	70	6	0	3
16	59	43	66	66	120	139	198	79	60	6	0	23
17	59	43	66	66	120	139	198	79	60	6	0	23
18	59	43	66	66	120	139	198	75	60	6	0	23
19	59	43	66	66	120	139	198	75	60	6	0	23
20	59	43	66	66	120	139	198	79	60	6	0	23
21	59	43	66	66	140	150	179	60	60	0	0	23
22	59	43	66	66	140	150	179	60	60	0	0	23
23	59	43	66	100	140	150	179	60	60	0	0	23
24	59	43	66	179	140	150	179	60	60	0	0	23
25	59	43	66	150	140	150	179	60	60	0	0	23
26	59	43	66	100	140	150	179	60	60	0	0	23
27	59	43	66	70	140	150	179	60	60	0	0	23
28	59	43	66	70	140	150	179	60	50	0	0	23
29	59	43	66	70	....	150	179	60	40	0	0	23
30	59	43	66	70	....	150	179	60	30	0	0	23
31	59	....	66	70	....	150	....	60	....	0	0	....
Mean	59	43	66	75	128	124	183	85	78	5	0	12
Max.	59	43	66	179	140	150	198	150	300	10	0	23
Min.	59	43	66	66	100	100	150	60	30	0	0	0
A. F.	3628	2558	4058	4623	7140	7626	10930	5187	4640	289	0	714
Total Acre Feet	51,392.											

REPUBLICAN RIVER AT MAX—Section 32-2-36												
Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	168	130	140	200	266	686	196	78	0	0	0
2	100	163	130	140	220	290	509	190	70	0	0	0
3	163	163	130	140	250	306	498	186	57	2	0	0
4	238	172	130	140	255	322	266	176	29	5	0	0
5	358	172	130	110	260	306	290	168	552	4	0	0
6	226	158	160	160	265	172	314	151	306	2	0	0
7	186	158	180	160	266	145	290	163	196	1	0	0
8	186	172	196	170	250	196	274	158	136	0	0	0
9	181	202	214	170	266	208	232	150	114	0	0	0
10	163	181	176	180	266	314	232	150	114	0	446	0
11	340	172	176	181	274	314	226	140	226	0	196	0
12	406	172	172	208	282	306	214	150	176	0	127	0
13	298	181	136	181	282	266	202	158	552	0	91	0
14	250	181	109	150	266	266	226	151	244	0	57	0
15	232	172	109	130	282	258	220	132	196	0	31	0
16	214	181	100	100	282	250	202	122	158	0	16	0
17	238	172	100	100	298	244	190	145	114	0	11	0
18	202	172	100	100	282	258	190	140	104	0	7	41
19	196	190	100	100	232	274	190	136	100	0	3	14
20	190	87	100	100	238	298	196	136	100	0	1	8
21	190	33	110	120	266	298	172	136	100	0	0	6
22	190	100	110	120	358	282	172	140	78	0	74	6
23	202	78	110	120	368	274	190	118	74	0	49	14
24	190	110	110	120	314	250	232	114	78	0	33	17
25	196	110	110	120	322	244	250	91	57	0	15	29
26	190	110	120	180	314	266	274	70	41	0	15	17
27	186	110	120	180	290	200	250	57	25	0	3	21
28	181	110	120	180	290	120	226	53	10	0	1	16
29	181	110	120	180	....	180	226	57	4	0	0	16
30	172	110	120	180	....	300	238	109	1	0	0	15
31	181	....	120	180	....	360	....	96	....	0	0	....
Mean	211	146	131	147	276	250	262	134	136	1	38	7
Max.	406	202	214	208	368	360	686	196	552	5	446	41
Min.	100	33	109	100	200	120	172	53	1	0	0	0
A. F.	13000	8690	8060	9040	15300	15900	15600	8240	8090	31	2330	431
Total Acre Feet	105,000.											

REPUBLICAN RIVER AT CULBERTSON—Section 20-3-31

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	175	100	259	200	100	222	202	202	47	0	0	4
2	175	100	259	200	150	222	490	202	47	0	0	4
3	175	100	259	200	200	222	325	202	47	0	0	4
4	175	100	259	200	200	222	275	160	47	29	0	15
5	175	100	259	200	200	222	226	160	68	15	0	15
6	175	126	259	200	250	222	325	160	325	15	0	22
7	175	126	259	200	250	222	226	160	226	15	109	22
8	175	126	259	200	250	222	275	160	181	15	2	10
9	175	126	259	200	250	222	226	124	142	15	378	22
10	175	126	259	200	250	222	181	124	109	15	22	22
11	215	126	259	150	300	250	226	124	109	15	109	10
12	215	126	259	150	300	250	226	124	275	4	109	10
13	215	126	259	150	300	250	181	124	181	4	58	10
14	215	126	259	150	300	202	181	124	350	0	38	10
15	215	126	259	150	300	202	181	124	250	0	22	10
16	175	150	250	150	300	202	160	94	202	0	10	10
17	175	150	250	175	300	202	160	94	160	0	2	10
18	175	150	250	175	300	202	160	94	160	0	10	10
19	175	150	250	200	300	202	160	94	94	0	10	81
20	175	150	250	225	300	202	160	94	94	0	10	22
21	150	200	250	272	300	250	124	94	68	0	10	10
22	150	200	250	272	500	250	124	94	68	0	10	10
23	150	200	250	250	300	250	160	94	47	0	10	22
24	150	200	250	200	242	202	202	94	47	0	10	10
25	150	200	250	150	242	160	160	68	47	0	10	10
26	99	200	250	100	242	110	202	68	47	0	10	10
27	99	225	250	100	242	120	202	47	29	0	10	1
28	99	225	250	100	242	130	202	29	4	0	2	1
29	99	250	250	100	....	150	202	47	4	0	1	0
30	99	250	250	100	....	170	250	47	4	0	1	0
31	99	....	250	100	....	190	....	68	....	0	1	....
Mean	162	155	254	175	265	199	212	113	116	4.6	31.1	13.2
Max.	215	250	259	272	500	250	490	202	350	29	378	81
Min.	98	100	250	100	100	120	124	29	4	0	0	0
A. F.	100005	9243	15640	10748	14697	12685	12600	6950	6900	283	1910	786
Total Acre	Feet 102,450.											

REPUBLICAN RIVER AT McCOOK (U. S. G. S. Measurements)—Section 32-3-29

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	578	318	325	350	400	364	375	300	88	0	0	24
2	578	318	400	350	400	364	705	258	88	0	0	20
3	578	318	673	350	400	364	575	258	88	0	0	20
4	578	318	600	350	400	364	450	222	88	100	0	20
5	578	318	550	350	400	364	450	222	800	110	0	20
6	578	318	150	350	400	364	450	222	510	72	0	20
7	578	318	400	350	400	364	450	222	300	88	475	20
8	578	318	400	350	400	368	450	222	258	88	44	20
9	578	318	400	350	400	372	450	222	190	110	32	20
10	578	318	400	350	400	375	395	222	160	88	475	20
11	578	327	400	350	400	428	345	222	160	72	236	10
12	578	327	400	350	400	486	345	222	258	60	202	10
13	578	327	400	350	400	428	345	222	258	46	172	10
14	578	327	400	350	100	428	300	222	300	20	146	10
15	578	327	100	350	400	428	300	222	258	10	100	20
16	565	327	400	350	350	428	300	190	258	0	100	20
17	565	327	400	350	350	428	300	222	222	0	100	20
18	565	327	100	350	350	428	300	222	190	0	80	20
19	525	400	100	350	350	428	300	190	131	0	41	44
20	500	475	400	350	350	456	300	190	134	0	44	44
21	400	500	400	400	400	456	300	190	134	0	44	32
22	350	450	400	400	400	428	300	190	190	0	32	24
23	350	400	400	450	450	428	300	190	160	0	32	32
24	350	350	400	500	500	375	345	160	110	0	44	32
25	350	325	400	655	500	375	345	160	88	0	41	32
26	318	325	100	600	450	320	395	131	60	0	44	32
27	318	325	400	550	400	250	395	110	56	0	24	32
28	318	325	400	450	400	270	345	110	6	0	24	32
29	318	325	400	400	....	290	300	72	4	0	24	24
30	318	325	400	400	....	320	300	88	2	0	24	24
31	318	....	400	400	....	350	....	88	....	0	24	....
Mean	485	344	420	394	400	388	374	193	185	31	84	24
Max.	578	500	673	655	500	486	705	300	800	190	475	44
Min.	318	318	325	350	350	250	300	72	2	0	0	10
A. F.	29947	20470	25780	24210	22315	23590	22300	11900	11000	1890	5180	1400
Total Acre	Feet 199,980.											

REPORT OF SECRETARY

REPUBLICAN RIVER AT BLOOMINGTON—Section 8-1-15

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	212	602	785	525	713	841	737	926	451	158	38	82
2	210	590	755	530	779	797	755	906	516	516	40	77
3	248	590	737	530	867	779	919	912	373	191	40	75
4	287	596	731	555	952	785	1140	912	348	158	34	68
5	2740	596	725	560	803	803	1510	1440	332	373	27	54
6	1910	585	695	575	761	785	1300	965	3940	233	29	53
7	2290	585	701	585	731	749	1180	890	2020	271	31	47
8	1010	575	701	590	707	719	1110	768	1180	194	56	38
9	767	565	701	585	695	749	1070	824	837	208	726	32
10	607	565	701	596	701	725	1010	965	774	188	910	29
11	535	575	701	580	690	719	959	732	685	177	1780	27
12	2110	585	713	580	978	731	926	685	639	177	1170	23
13	9540	590	725	580	662	743	919	644	575	161	1580	19
14	7860	590	656	580	656	755	867	590	560	171	877	19
15	3400	560	651	580	658	767	828	585	550	118	883	19
16	2390	565	624	480	662	761	815	570	738	133	738	17
17	1940	560	585	480	568	749	791	550	656	124	474	19
18	1480	550	570	480	678	731	809	535	628	142	368	18
19	1250	707	570	480	668	737	822	526	565	130	274	22
20	1060	2470	565	480	668	749	966	511	506	155	244	208
21	959	3610	560	500	668	767	893	497	437	181	248	68
22	874	2200	550	500	725	867	828	487	389	102	356	184
23	803	1520	540	500	737	867	767	487	373	82	398	62
24	767	1330	535	500	761	841	809	478	1030	71	328	68
25	731	1130	540	500	779	785	809	478	442	64	205	99
26	684	919	510	630	809	791	822	460	328	56	145	320
27	662	791	495	630	822	779	867	433	267	56	164	230
28	651	731	490	630	848	612	880	433	226	53	132	136
29	634	695	495	630	....	515	874	702	205	47	102	66
30	618	651	505	630	....	550	912	639	174	41	99	121
31	607	....	515	630	....	585	....	565	....	40	102	....
Mean	1610	906	623	555	734	746	930	680	692	155	406	77
Max.	9540	3610	785	630	952	867	1510	1440	3940	516	1780	320
Min.	210	550	490	480	656	515	737	433	174	40	27	17
A. F.	99000	53900	38300	34100	40806	45900	55300	11800	41200	9530	25000	4560
Total Acre	Feet 489,000.											

REPUBLICAN RIVER AT BOSTWICK—Section 23-1-8

Date	Year Ending September 30, 1931												
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	890	716	328	97	143	
2	910	682	319	560	118	
3	*115	....	....	....	....	....	....	930	556	642	124	130	
4	N.R.	....	....	....	....	....	....	830	930	618	764	88	74
5	950	5470	556	296	78	84
6	1500	1840	1070	259	71	84
7	1340	1180	3970	480	71	71
8	1270	1140	2410	270	81	63
9	1210	1010	1760	283	594	66
10	*185	....	....	....	....	....	1150	787	1220	226	2640	49
11	1090	1250	1140	226	1620	56
12	1030	883	1360	206	1520	44
13	990	768	944	206	1450	44
14	950	699	944	197	1190	44
15	*81	....	....	....	....	....	....	970	699	768	170	990	44
16	N.R.	....	....	....	....	....	....	990	666	751	163	830	37
17	870	682	768	150	890	37
18	850	618	863	136	544	37
19	830	618	844	130	496	37
20	910	634	751	150	496	37
21	*432	....	....	....	....	....	950	666	716	156	309	34
22	N.R.	....	....	....	....	....	950	666	787	156	237	170
23	870	602	602	188	283	112
24	*674	....	890	634	863	136	560	118
25	*381	*21900	N.R.	....	930	634	863	124	391	136
26	N.R.	N.R.	....	....	910	618	602	106	363	435
27	870	587	587	97	226	170
28	890	618	484	93	197	124
29	890	556	418	84	206	270
30	N.R.	....	....	....	....	....	....	910	556	360	78	170	197
31	1030	....	71	150	....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	992	960	966	222	566	102
Max.	1500	5470	3970	764	2640	435
Min.	830	556	360	71	74	34
A. F.	53100	59000	57600	13600	34800	6070

*Actual Measurements.

N.R.—No Record.

DEPARTMENT OF PUBLIC WORKS

557

ROCK CREEK—Section 21-1-89
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	18	15	15	20	18	13	17	17	10	10	10
2	15	18	15	15	20	18	13	17	17	10	10	10
3	15	18	15	15	20	18	13	17	17	10	10	10
4	15	18	15	15	20	18	13	17	17	10	10	10
5	15	18	15	15	20	18	13	17	17	10	10	10
6	15	18	15	15	20	18	13	17	17	10	10	10
7	15	18	15	15	20	18	13	17	17	10	10	10
8	15	18	15	15	20	18	13	17	17	10	10	10
9	15	18	15	15	20	18	13	17	17	10	10	10
10	15	18	15	15	20	18	13	17	17	10	10	10
11	15	12	15	15	20	18	13	17	17	10	10	10
12	15	12	15	15	20	18	13	17	17	10	10	10
13	15	12	15	15	20	18	13	17	17	10	10	10
14	15	12	15	15	20	18	13	17	17	10	10	10
15	15	12	15	15	20	18	13	17	17	10	10	10
16	15	12	15	20	18	18	16	17	10	12	10	11
17	15	12	15	20	18	18	16	17	10	12	10	11
18	15	12	15	20	18	18	16	17	10	12	10	11
19	15	12	15	20	18	18	16	17	10	12	10	11
20	15	12	15	20	18	18	16	17	17	12	10	11
21	15	12	15	20	18	18	16	17	17	12	10	11
22	15	12	15	20	18	18	16	17	17	12	10	11
23	15	12	15	20	18	18	16	17	17	12	10	11
24	15	12	15	20	18	18	16	17	17	12	10	11
25	15	12	15	20	18	18	16	17	17	12	10	11
26	15	12	15	20	18	18	16	17	17	12	10	11
27	15	12	15	20	18	18	16	17	10	12	10	11
28	15	12	15	20	18	18	16	17	10	12	10	11
29	15	12	15	20	....	18	16	17	10	12	10	11
30	15	12	15	20	....	18	16	17	10	12	10	11
31	15	....	15	20	....	18	....	17	....	12	10	....
Mean	15	14	15	17	19	18	14	17	13	11	10	7
Max.	15	18	15	20	20	18	16	17	17	12	10	11
Min.	15	12	15	15	18	18	13	17	10	10	10	10
A. F.	922	833	922	1080	1060	1107	863	1045	803	678	615	....
Total Acre Feet	10,340.											

SAND CREEK—Section 10-15-40
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	5	8	5	4	4	4	2	3	1	3	0
2	3	5	8	5	4	4	4	2	3	1	2	0
3	3	5	8	5	4	4	4	2	3	6	1	2
4	3	5	8	5	4	4	4	2	3	5	1	4
5	3	5	8	5	4	4	4	2	3	4	2	3
6	3	5	8	5	4	3	4	2	2	3	4	3
7	3	5	8	5	4	3	4	2	2	3	8	3
8	3	5	8	5	4	3	4	2	2	3	6	3
9	3	5	8	5	4	3	4	2	2	3	4	3
10	3	5	8	5	4	3	4	2	2	2	3	4
11	3	5	8	5	4	4	3	1	2	2	3	4
12	3	5	8	5	4	4	3	1	2	1	3	4
13	3	5	8	5	4	4	3	1	2	1	2	4
14	3	5	8	5	4	4	3	1	2	0	2	4
15	3	5	8	5	4	4	3	1	2	0	2	4
16	3	5	5	5	4	4	3	1	2	0	2	4
17	3	5	5	5	4	4	3	1	2	0	2	4
18	3	5	5	5	4	4	3	1	2	0	2	4
19	3	5	5	5	4	4	3	1	2	0	2	4
20	3	5	5	5	4	4	3	1	2	0	2	5
21	3	5	5	5	4	4	2	1	3	0	2	5
22	3	5	5	5	4	4	2	1	3	0	1	6
23	3	5	5	5	4	4	2	1	3	0	1	6
24	3	5	5	5	4	4	2	1	3	0	0	7
25	3	5	5	5	4	4	2	1	3	0	0	7
26	3	5	5	5	4	4	3	2	1	3	0	7
27	3	5	5	5	4	4	3	2	1	2	0	7
28	3	5	5	5	4	4	3	2	1	1	0	7
29	3	5	5	5	4	....	3	2	1	0	0	7
30	3	5	5	5	4	....	3	2	1	1	0	7
31	3	....	5	4	....	3	....	1	....	0	0	....
Mean	3	5	6	5	4	4	3	1	2	1	2	5
Max.	3	5	8	5	4	4	4	2	3	6	8	7
Min.	3	5	5	4	4	3	2	1	2	0	0	0
A. F.	184	297	397	295	222	221	179	80	131	68	117	274
Total Acre Feet	2,465.											

REPORT OF SECRETARY

SCOTTSBLUFF DRAIN NO. 1—Section 25-22-54

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	18	16	15	13	11	11	7	20	12	21	27
2	22	18	16	15	13	11	11	7	20	13	22	28
3	22	18	16	15	13	11	11	7	20	14	23	28
4	22	18	16	15	13	11	11	7	20	15	24	29
5	22	18	16	15	13	11	11	7	20	16	24	29
6	22	18	16	15	13	11	11	7	24	17	23	28
7	22	18	16	15	13	11	11	7	26	19	22	26
8	22	18	16	15	13	11	11	7	25	20	22	24
9	22	18	16	15	13	11	11	7	28	21	22	22
10	22	18	16	15	13	11	11	7	20	21	23	22
11	22	18	16	15	13	10	9	6	19	22	24	23
12	22	18	16	15	13	10	9	6	19	22	24	23
13	22	18	16	15	13	10	9	6	18	22	24	25
14	22	18	16	15	13	10	9	6	17	22	24	27
15	22	18	16	15	13	10	9	6	16	22	24	29
16	21	19	16	15	13	9	9	6	15	21	24	30
17	21	19	16	15	13	9	9	6	14	21	24	30
18	21	19	16	15	13	9	9	6	13	20	24	31
19	21	19	16	15	13	9	9	6	12	20	24	31
20	21	19	16	15	13	9	9	6	11	20	24	31
21	21	19	16	14	12	9	8	10	11	21	23	31
22	21	19	16	14	12	9	8	10	11	21	23	32
23	21	19	16	14	12	9	8	10	11	20	23	32
24	21	19	16	14	12	9	8	10	11	19	23	32
25	21	19	16	14	12	9	8	10	11	18	24	32
26	21	19	16	14	12	8	8	15	11	19	24	32
27	21	19	16	14	12	8	8	15	10	20	25	29
28	21	19	16	14	12	8	8	15	10	21	26	26
29	21	19	16	14	....	8	8	15	11	22	23	23
30	21	19	16	14	....	8	8	15	11	22	25	20
31	21	....	16	14	....	9	....	15	....	22	26	....
Mean	21	18	16	15	13	10	9	9	16	20	24	28
Max.	22	19	16	15	13	11	11	15	28	22	26	32
Min.	21	18	16	14	12	8	8	7	10	12	21	20
A. F.	1320	1090	984	898	705	590	553	535	964	1200	1450	1650
Total Acre Feet	11,940.											

SHEEP CREEK AT MORRILL—Section 21-23-57

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	120	127	109	95	90	85	85	70	3	3	3	6
2	120	127	109	95	90	85	85	70	4	3	3	4
3	120	127	109	95	90	85	85	70	4	3	3	4
4	120	127	109	95	90	85	85	70	5	3	3	4
5	120	127	109	95	90	85	85	70	7	3	3	3
6	120	127	109	95	90	75	80	70	5	3	3	3
7	120	127	109	95	90	75	80	70	3	3	3	3
8	120	127	109	95	90	75	80	70	4	3	3	3
9	120	127	109	95	90	75	80	70	4	3	4	2
10	120	127	109	95	90	75	80	70	7	3	3	2
11	120	127	109	85	90	80	80	40	19	3	3	2
12	120	127	109	85	90	80	80	40	12	3	3	2
13	120	127	109	85	90	80	80	39	10	4	3	2
14	120	127	109	85	90	80	80	35	10	3	3	2
15	120	127	109	85	90	80	80	30	9	4	3	2
16	135	127	85	85	90	80	80	25	10	3	7	2
17	135	127	85	85	90	80	80	25	11	4	4	2
18	135	127	85	85	90	80	80	20	11	3	4	2
19	135	127	85	85	90	80	80	15	11	3	3	2
20	135	127	85	85	90	80	80	10	9	4	3	2
21	135	116	85	90	90	80	75	5	10	4	3	2
22	135	116	85	90	90	80	75	4	12	4	3	2
23	135	116	85	90	90	80	75	4	11	4	4	2
24	135	116	85	90	90	80	75	3	2	4	4	2
25	135	116	85	90	90	80	75	2	3	3	4	2
26	135	116	85	90	90	75	80	1	4	4	2	2
27	135	116	85	90	90	75	80	1	3	4	4	1
28	135	116	85	90	90	75	80	1	3	3	7	1
29	135	116	85	90	....	85	80	2	3	3	4	2
30	135	116	85	90	....	85	80	2	2	3	4	1
31	135	....	85	90	....	85	....	2	....	3	4	....
Mean	*128	*123	*96	*90	*90	*80	*80	32	7	3	3	2
Max.	135	127	109	95	90	85	85	70	19	4	7	6
Min.	120	116	85	90	90	75	75	1	2	3	3	1
A. F.	7855	7339	5940	5530	5000	4920	4760	1970	417	203	215	143
Total Acre Feet	44,298.											

*Estimated.

SILVERNAIL DRAIN—Section 6-19-49

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	17	15	11	10	8	6	5	5	19	10	11
2	15	17	15	11	10	8	6	5	5	18	10	10
3	15	17	15	11	10	8	6	5	5	16	9	9
4	15	17	15	11	10	8	6	5	5	16	9	8
5	15	17	15	11	10	8	6	5	12	16	10	8
6	15	17	15	11	10	8	6	5	9	16	11	8
7	15	17	15	11	10	8	6	5	16	16	12	8
8	15	17	15	11	10	8	6	5	18	13	15	8
9	15	17	15	11	10	8	6	5	9	10	18	9
10	15	17	15	11	10	8	6	5	15	7	20	10
11	15	17	15	11	10	7	6	5	14	7	22	11
12	15	17	15	11	10	7	6	5	14	7	17	11
13	15	17	15	11	10	7	6	5	14	7	13	11
14	15	17	15	11	10	7	6	5	13	7	11	10
15	15	17	15	11	10	7	6	5	12	8	11	10
16	15	17	15	10	9	7	5	5	12	9	10	11
17	15	17	15	10	9	7	5	5	10	10	10	11
18	15	17	15	10	9	7	5	5	8	10	9	12
19	15	17	15	10	9	7	5	5	6	11	9	12
20	15	17	15	10	9	7	5	5	6	11	8	12
21	15	17	15	10	9	5	5	5	6	11	7	12
22	15	17	15	10	9	5	5	5	7	9	7	12
23	15	17	15	10	9	5	5	5	7	9	7	13
24	15	17	15	10	9	5	5	5	7	7	7	15
25	15	17	15	10	9	5	5	5	8	7	7	16
26	15	17	15	10	9	5	5	5	7	9	8	15
27	15	17	15	10	9	5	5	5	7	12	8	10
28	15	17	15	10	9	5	5	5	7	15	8	11
29	15	17	15	10	....	5	5	5	7	18	8	11
30	15	17	15	10	....	5	5	5	7	20	9	11
31	15	....	15	10	....	5	....	7	....	10	11	....
Mean	15	17	15	10	9	7	5	5	11	11	11	11
Max.	15	17	15	11	10	8	6	7	18	19	22	16
Min.	15	17	15	10	9	5	5	5	5	7	7	8
A. F.	893	1010	922	646	528	406	327	332	632	652	676	655
Total Acre Feet	7,678.											

SKUNK CREEK—Section 1-14-37

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	3	2	3	4	*N.R.	*N.R.	4	3	0.4	1.5	1.5
2	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
3	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
4	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
5	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
6	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
7	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
8	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
9	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
10	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
11	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
12	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
13	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
14	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
15	3	3	2	3	4	....	....	4	3	0.4	1.5	1.5
16	2	3	2	3	4	....	....	4	3	0.4	2.5	1.5
17	2	3	2	3	4	....	....	4	3	0.4	2.5	1.5
18	2	3	2	3	4	....	....	4	3	0.4	2.5	1.5
19	2	3	2	3	4	....	....	4	3	0.4	2.5	1.5
20	2	3	2	3	4	....	....	4	3	0.4	2.5	1.5
21	2	3	2	3	4	....	....	4	3	1.0	2.5	1.5
22	2	3	2	3	4	....	....	4	3	1.0	2.5	1.5
23	2	3	2	3	4	....	....	4	3	1.0	2.5	1.5
24	2	3	2	3	4	....	....	4	3	1.0	2.5	1.5
25	2	3	2	3	4	....	....	4	3	1.0	2.5	1.5
26	2	3	2	3	4	....	....	4	3	1.0	2.5	1.5
27	2	3	2	3	4	....	....	4	3	1.0	2.5	1.5
28	2	3	2	3	4	....	....	4	3	1.0	2.5	1.5
29	2	3	2	3	....	....	....	4	3	1.0	2.5	1.5
30	2	3	2	3	....	....	....	4	3	1.0	2.5	1.5
31	2	....	2	3	....	....	....	4	....	1.0	2.0	....
Mean	2	3	2	3	4	*N.R.	*N.R.	4	3	0.6	2.0	1.5
Max.	3	3	2	3	4	....	....	4	3	1.0	2.5	1.5
Min.	2	3	2	3	4	....	....	4	3	0.4	1.5	1.5
A. F.	153	178	123	123	222	....	....	245	178	38.0	123.0	89.0
Total Acre Feet												
N.R.—No Record.												

REPORT OF SECRETARY

SPOTTED TAIL (DRY) CREEK—Section 28-23-56

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68	86	54	50	45	35	30	35	30	45	90	39
2	68	86	54	50	45	35	30	35	30	25	30	36
3	68	86	54	50	45	35	30	35	30	25	30	35
4	68	86	54	50	45	35	30	35	30	85	30	36
5	68	86	54	50	45	35	30	35	28	87	31	37
6	68	86	54	50	45	30	30	35	90	42	38	36
7	68	86	54	50	45	30	25	20	69	36	32	36
8	68	86	54	50	45	30	25	20	59	30	33	36
9	68	86	54	55	45	30	25	20	71	21	32	36
10	68	86	54	55	45	30	25	20	58	26	33	30
11	68	34	54	55	40	35	25	20	75	31	35	29
12	68	34	54	55	40	35	25	20	70	48	37	28
13	68	34	54	55	40	35	25	20	66	47	38	30
14	68	34	54	55	40	35	25	20	66	47	38	28
15	68	34	54	55	40	35	25	20	69	49	38	26
16	95	34	45	55	40	35	25	15	29	31	39	27
17	95	34	45	55	40	35	25	15	52	22	34	28
18	95	34	45	55	40	35	25	15	33	23	37	29
19	95	34	45	55	40	35	25	15	32	24	40	30
20	95	34	45	55	40	35	25	15	32	26	40	30
21	95	34	45	55	40	35	25	12	34	28	40	28
22	95	34	45	55	40	25	25	12	37	31	40	28
23	95	34	45	55	40	25	35	12	43	19	44	27
24	95	34	45	55	40	25	35	12	54	34	41	26
25	95	34	45	55	40	25	35	12	45	48	35	26
26	95	34	45	50	40	25	35	25	42	54	31	27
27	95	34	45	50	40	25	35	25	39	52	36	28
28	95	34	45	50	40	25	35	25	40	58	49	28
29	95	34	45	50	....	25	35	25	37	65	49	27
30	95	34	45	50	....	25	35	25	41	42	38	26
31	95	....	45	50	....	25	....	25	....	84	45	....
Mean	82	51	49	53	42	31	29	22	48	41	39	30
Max.	95	86	54	55	45	35	35	35	90	87	90	39
Min.	68	34	45	50	40	25	25	12	28	19	30	26
A. F.	5038	3054	3035	3240	2320	1910	1710	1370	2840	2550	2390	1810
Total Acre Feet	31,270.											

SPOTTED TAIL (WET)—KRONBERG SEEP—Section 1-22-56

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16	16	14	16	16	16	14	16	12	10	9	18
2	16	16	14	16	16	16	14	8	12	10	9	18
3	16	16	14	16	16	16	14	8	12	10	9	18
4	16	16	14	16	16	16	14	8	12	10	9	18
5	16	16	14	16	16	16	14	8	12	10	9	18
6	16	16	14	16	16	16	14	8	12	10	9	18
7	16	16	14	16	16	16	14	8	12	10	9	18
8	16	16	14	16	16	16	14	8	12	10	9	18
9	16	16	14	16	16	16	14	8	12	10	9	18
10	16	16	14	17	16	16	14	8	12	10	9	18
11	16	16	14	17	15	16	14	8	12	10	12	18
12	16	16	14	17	15	16	14	8	12	10	12	18
13	16	16	14	17	15	16	14	8	12	10	12	18
14	16	16	14	17	15	16	14	8	16	10	12	18
15	16	16	14	17	15	16	14	8	16	10	12	18
16	26	22	14	17	15	16	15	8	16	10	12	18
17	26	22	14	17	15	16	15	8	16	10	12	18
18	26	22	14	17	15	16	15	8	16	10	12	18
19	26	22	14	17	15	16	15	8	16	10	12	18
20	26	22	14	17	15	16	15	8	16	10	12	18
21	26	22	14	17	15	16	15	8	16	10	15	18
22	26	22	14	17	15	16	15	8	16	10	15	18
23	26	22	14	17	15	16	15	10	16	10	15	18
24	26	22	14	17	15	16	16	10	16	10	15	18
25	26	24	14	17	15	12	16	10	13	10	13	18
26	26	22	14	16	15	12	16	10	13	9	17	18
27	26	22	14	16	15	12	16	10	13	9	18	18
28	26	22	14	16	15	12	16	10	13	9	18	18
29	26	22	14	16	....	12	16	10	13	9	17	18
30	26	22	14	16	....	12	16	10	13	9	17	18
31	26	....	14	16	....	12	....	10	....	9	17	....
Mean	20	19	14	16	15	15	15	9	14	10	12	18
Max.	26	22	14	17	16	16	16	16	16	10	18	18
Min.	16	16	14	16	15	12	14	8	12	9	9	18
A. F.	1250	1130	861	1010	855	928	881	541	815	603	769	1070
Total Acre Feet	10,713.											

STEWARTS DRAIN—Section 13-23-57

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	2	1	1	1	1	3	0.4	1.3	0	0	0.5
2	2	2	1	1	1	1	3	0.4	1.3	0	0	0.5
3	2	2	1	1	1	1	3	0.4	1.3	0	0	0.5
4	2	2	1	1	1	1	3	0.4	1.3	0	0	0.5
5	2	2	1	1	1	1	3	0.4	1.3	0	0	0.5
6	2	2	1	1	1	1	3	0.4	1.3	0	0	0.3
7	2	2	1	1	1	1	3	0.4	1.3	0	0	0.3
8	2	2	1	1	1	1	3	0.4	1.3	0	0	0.3
9	2	2	1	1	1	1	3	0.4	1.3	0	0	0.3
10	2	2	1	1	1	1	3	0.4	1.3	0	0	0.3
11	2	2	1	1	1	2	2	0.4	1.0	0	0	0.3
12	2	2	1	1	1	2	2	0.4	1.0	0	0	0.3
13	2	2	1	1	1	2	2	0.4	1.0	0	0	0.3
14	2	2	1	1	1	2	2	0.4	1.0	0	0	0.3
15	2	2	1	1	1	2	2	0.4	1.0	0	0	0.3
16	2	2	1	1	1	2	2	0.4	0.4	0	0	0.3
17	2	2	1	1	1	2	2	0.4	0.4	0	0	0.3
18	2	2	1	1	1	2	2	0.4	0.4	0	0	0.3
19	2	2	1	1	1	2	2	0.4	0.4	0	0	0.3
20	2	2	1	1	1	2	2	0.4	0.4	0	0	0.3
21	2	2	1	1	1	2	1	0.5	0.2	0	0.5	0.3
22	2	2	1	1	1	2	1	0.5	0.2	0	0.5	0.3
23	2	2	1	1	1	2	1	0.5	0.2	0	0.5	0.3
24	2	2	1	1	1	2	1	0.5	0.2	0	0.5	0.3
25	2	2	1	1	1	2	1	0.5	0.2	0	0.5	0.3
26	2	2	1	1	1	2	1	0.5	0.2	0	0.5	0.3
27	2	2	1	1	1	2	1	0.5	0.2	0	0.5	0.3
28	2	2	1	1	1	2	1	0.5	0.2	0	0.5	0.3
29	2	1	1	1	....	2	1	0.5	0.2	0	0.5	0.3
30	2	2	1	1	....	2	1	0.5	0.2	0	0.5	0.3
31	2	....	1	1	....	2	....	0.5	....	0	0.5	....
Mean	2	2	1	1	1	2	2	0.4	0.7	0	0.1	0.3
Max.	2	2	1	1	1	2	3	0.5	1.3	0	0.5	0.5
Min.	2	2	1	1	1	1	1	0.4	0.2	0	0.0	0.3
A. F.	123	119	61	61	57	103	119	26.0	44.0	0	10.0	20.0
Total Acre Feet	713.											

STINKING WATER CREEK—Section 25-5-31

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	63	33	37	40	60	45	70	50	20	35	15	30
2	63	33	37	40	60	45	70	50	20	35	15	30
3	63	33	37	40	60	45	70	50	20	35	15	30
4	63	33	37	40	60	45	70	50	20	35	15	30
5	63	33	37	40	60	45	70	50	20	35	15	30
6	63	33	37	40	60	45	90	55	20	35	15	22
7	63	33	37	40	60	45	90	55	20	35	15	22
8	63	33	37	40	60	45	90	55	20	35	15	22
9	63	33	37	40	60	45	90	55	20	35	15	22
10	63	33	37	40	60	45	90	55	20	35	15	22
11	63	33	37	50	50	45	60	55	35	25	15	22
12	63	33	37	50	50	45	60	55	35	25	15	22
13	63	33	37	50	50	45	60	55	35	25	15	22
14	63	33	37	50	50	45	60	55	35	25	15	22
15	63	33	37	50	50	45	60	55	35	25	15	22
16	48	33	37	50	50	45	40	40	37	20	25	21
17	48	33	37	50	50	45	40	40	37	20	25	21
18	48	33	37	50	50	45	40	40	37	20	25	21
19	48	33	37	50	50	45	40	40	37	20	25	21
20	48	33	37	50	50	45	40	40	37	20	25	21
21	48	33	37	60	45	60	40	30	37	15	34	21
22	48	33	37	60	45	60	40	30	37	15	34	21
23	48	33	37	60	45	60	40	30	37	15	34	21
24	48	33	37	60	45	60	40	30	37	15	34	21
25	48	33	37	60	45	60	40	30	37	15	34	21
26	48	33	37	60	45	60	40	20	37	15	34	21
27	48	33	37	60	45	60	40	20	37	15	34	21
28	48	33	37	60	45	60	40	20	37	15	34	21
29	48	33	37	60	....	60	40	20	37	15	34	21
30	48	33	37	60	....	60	40	20	37	15	34	21
31	48	....	37	60	....	60	....	20	....	15	34	....
Mean	55	33	37	50	52	50	57	41	31	24	23	22
Max.	63	33	37	60	60	60	90	55	37	35	34	30
Min.	48	33	37	40	45	45	40	20	15	15	21	21
A. F.	3398	1964	1680	3095	2895	3035	3370	2520	1815	1470	1436	1360
Total Acre Feet	28,130.											

REPORT OF SECRETARY

TOOHEY DRAIN—Section 20-23-56

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	4	4	4	3	3	2	4	2	6	5	9
2	6	4	4	4	3	3	2	4	2	5	7	7
3	6	4	4	4	3	3	2	4	2	1	5	6
4	6	4	4	4	3	3	2	4	2	4	3	6
5	6	4	4	4	3	3	2	2	4	7	2	5
6	6	4	4	4	3	3	2	2	1	2	3	7
7	6	4	4	4	3	3	2	2	2	3	3	7
8	6	4	4	4	3	3	2	2	2	8	6	7
9	6	4	4	3	3	2	2	2	2	4	9	7
10	6	4	4	3	3	2	2	2	2	3	6	7
11	6	4	4	3	2	3	2	2	2	8	8	7
12	6	4	4	3	2	3	2	2	3	7	5	6
13	6	4	4	3	2	3	2	2	3	8	8	6
14	6	4	4	3	2	3	2	2	5	7	7	6
15	6	4	4	3	2	3	2	2	3	7	4	6
16	10	7	4	3	2	3	2	2	2	7	2	5
17	10	7	4	3	2	3	2	2	2	7	3	6
18	10	7	4	3	2	3	2	2	3	7	6	6
19	10	7	4	3	2	3	2	2	1	7	3	6
20	10	7	4	3	2	3	2	2	3	7	3	6
21	10	7	4	3	2	3	2	1	4	4	4	6
22	10	7	4	3	2	3	3	1	4	3	4	6
23	10	7	4	3	2	3	3	1	5	3	5	6
24	10	7	4	3	2	3	3	1	4	3	5	10
25	10	7	4	3	2	3	3	1	5	4	5	6
26	10	7	4	3	2	2	4	1	6	3	5	5
27	10	7	4	3	2	2	4	1	5	4	4	6
28	10	7	4	3	2	2	4	1	5	2	4	6
29	10	7	4	3	...	2	4	1	7	3	5	6
30	10	7	4	3	...	2	4	1	7	4	5	6
31	10	...	4	3	...	2	...	1	...	3	5	...
Mean	*8	*5	*4	*3	*2	*3	*2	2	3	5	5	6
Max.	10	7	4	4	3	3	4	4	7	8	8	10
Min.	6	4	4	3	2	2	2	1	1	1	2	5
A. F.	496	327	246	197	133	160	137	111	196	301	295	381

Total Acre Feet 2,980.

*Estimated.

TOOHEY SPILLWAY—Section 19-23-56

Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	25	19	20	16	16	14	13	0	0	0	0
2	33	25	19	20	16	16	14	13	0	0	0	0
3	33	25	19	20	16	16	14	13	0	0	0	0
4	33	25	19	20	16	16	14	13	0	0	0	0
5	33	25	19	20	16	16	14	13	0	0	0	0
6	33	25	19	20	16	14	14	13	0	0	0	0
7	33	25	19	20	16	14	14	13	0	0	0	0
8	33	25	19	20	16	14	14	13	0	0	0	0
9	33	25	19	20	16	14	14	13	0	0	0	0
10	33	25	19	20	16	14	14	13	0	0	0	0
11	33	25	19	20	14	18	14	100	0	0	0	0
12	33	25	19	20	14	18	14	0	0	0	0	0
13	33	25	19	20	14	18	14	0	0	0	0	0
14	33	25	19	20	14	18	14	0	0	0	0	0
15	33	25	19	20	14	18	14	0	0	0	0	0
16	21	32	19	18	14	18	14	0	0	0	0	0
17	21	32	19	18	14	18	14	0	0	0	0	0
18	21	32	19	18	14	18	14	0	0	0	0	0
19	21	32	19	18	14	18	14	0	0	0	0	0
20	21	32	19	18	14	18	14	0	0	0	0	0
21	21	32	19	18	16	18	13	0	0	0	0	0
22	21	32	19	18	16	18	13	0	0	0	0	0
23	21	32	19	18	16	18	13	0	0	0	0	0
24	21	32	19	18	16	18	13	0	0	0	0	0
25	21	32	19	18	16	18	13	0	0	0	0	0
26	21	32	19	18	16	14	13	0	0	0	0	0
27	21	32	19	18	16	14	13	0	0	0	0	0
28	21	32	19	18	16	14	13	0	0	0	0	0
29	21	32	19	18	...	14	13	0	0	0	0	0
30	21	32	19	18	...	14	13	0	0	0	0	0
31	21	...	19	18	...	14	...	0	0	0	0	0
Mean	*27	*28	*19	*19	*15	*16	*14	0	*0	0	0	0
Max.	33	32	19	20	16	18	14	100	0	0	0	0
Min.	21	25	19	18	14	14	13	0	0	0	0	0
A. F.	1648	1696	1168	11170	850	996	815	455	0	0	0	0

Total Acre Feet 8,806.

*Estimated.

TUB SPRINGS—Section 8-22-55
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	98	62	55	50	40	35	35	16	24	24	9	20
2	98	62	55	50	40	35	35	16	24	24	9	23
3	98	62	55	50	40	35	35	16	24	25	10	17
4	98	62	55	50	40	35	35	16	25	40	9	60
5	98	62	55	50	40	35	35	16	62	55	10	10
6	98	62	55	50	40	30	35	18	36	24	9	34
7	98	62	55	50	40	30	35	18	80	20	10	20
8	98	62	55	50	40	30	35	18	53	22	10	15
9	98	62	55	50	40	30	35	18	26	19	11	10
10	98	62	55	50	40	30	35	18	24	19	10	11
11	98	62	55	45	40	33	35	22	25	19	10	11
12	98	62	55	45	40	33	35	22	68	19	9	11
13	98	62	55	45	40	33	35	22	70	24	9	28
14	98	62	55	45	40	33	35	22	70	23	9	11
15	98	62	55	45	40	33	35	22	72	17	9	11
16	68	59	55	45	30	30	30	22	74	20	10	10
17	68	59	55	45	40	30	30	22	41	17	10	10
18	68	59	55	45	40	30	30	22	8	8	9	35
19	68	59	55	45	40	30	30	18	100	9	9	17
20	68	59	55	45	40	30	30	18	100	9	10	40
21	68	59	55	45	40	30	30	18	100	9	9	20
22	68	59	55	45	40	30	30	18	100	9	9	17
23	68	59	55	45	40	30	25	13	108	9	10	22
24	68	59	55	45	40	30	25	13	80	9	9	17
25	68	59	55	45	40	30	25	13	60	9	10	36
26	68	59	55	45	40	27	25	12	39	9	10	35
27	68	59	55	45	40	27	25	12	35	9	10	35
28	68	59	55	45	40	27	25	12	31	9	10	36
29	68	59	55	45	.....	27	25	12	31	9	10	38
30	68	59	55	45	.....	27	25	20	17	9	10	35
31	68	.....	55	45	.....	27	.....	26	.....	9	10	.....
Mean	82	62	55	46	40	31	*18	*18	54	17	10	23
Max.	98	62	55	50	40	35	35	22	108	55	10	40
Min.	68	59	55	45	40	27	25	12	17	9	9	10
A. F.	5070	3590	3380	2870	2220	1880	1860	1080	3190	1060	590	1380
Total Acre Feet 28,170.												
*Estimated.												

WHITE RIVER BELOW WHITNEY PIPE LINE—Section 26-32-52
Year Ending September 30, 1931

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	2	24	2	2	4	9	.....
2	*0	2	24	8	4	4	9	.....
3	N.R.	2	25	3	3	3	8	.....
4	3	24	2	3	3	8	.....
5	3	24	2	3	3	8	.....
6	6	24	23	9	3	9	.....
7	*0	.....	.....	.....	10	23	23	4	3	11	.....
8	N.R.	.....	.....	.....	3	23	23	4	3	6	.....
9	28	23	23	4	0	4	.....
10	5	23	23	3	0	4	.....
11	6	22	23	4	0	4	.....
12	6	22	23	3	0	4	.....
13	9	22	24	3	0	4	.....
14	5	23	24	3	0	4	.....
15	5	3	18	9	0	4	.....
16	4	2	18	6	0	8	.....
17	3	2	18	6	4	8	.....
18	6	2	18	4	3	2	.....
19	*8	.....	.....	.....	7	2	19	4	3	3	.....
20	N.R.	.....	.....	.....	.....	7	2	19	3	4	3	.....
21	8	2	19	2	4	3	.....
22	12	2	20	2	4	3	.....
23	12	2	12	2	4	9	.....
24	12	2	3	2	3	4	.....
25	12	2	2	2	3	2	.....
26	4	10	2	2	3	2	.....
27	4	7	2	2	3	3	.....
28	4	7	2	2	4	3	.....
29	10	2	2	6	4	.....
30	11	2	2	6	4	.....
31	15	.....	2	9	4	.....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	8	12	13	4	3	5	.....
Max.	28	25	24	9	9	11	.....
Min.	2	2	2	2	0	2	.....
A. F.	473	714	799	208	178	319	.....
N.R.—No Record.												
*Actual Measurements.												

REPORT OF SECRETARY

WHITE RIVER AT CRAWFORD—(U. S. G. S. Measurements)

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	*N.R.	*N.R.	*N.R.	*N.R.	*N.R.	31	30	28	25	18	14	12
2	32	31	39	24	18	14	12
3	32	30	30	24	18	13	12
4	32	31	31	23	18	12	12
5	33	33	34	25	18	12	11
6	30	31	32	26	18	13	9
7	50	31	32	24	18	15	9
8	23	30	31	23	18	13	9
9	51	30	31	21	16	15	9
10	33	30	31	23	16	15	9
11	33	30	28	26	16	15	9
12	32	30	30	24	16	12	9
13	36	30	30	24	16	11	9
14	32	29	28	23	15	13	9
15	28	29	28	79	15	14	9
16	33	30	29	27	27	14	93	11
17	N.R.	.....	30	29	27	27	14	93	11
18	30	29	28	22	13	20	11
19	30	29	28	21	13	16	11
20	30	29	28	20	15	16	11
21	28	29	28	20	14	16	11
22	32	29	27	20	13	16	11
23	31	30	27	20	12	34	12
24	30	30	26	20	12	18	14
25	32	30	30	26	20	12	11	14
26	32	30	28	27	20	12	11	14
27	31	20	28	33	20	12	11	14
28	31	22	28	31	20	12	11	14
29	24	28	31	18	12	11	14
30	27	28	32	18	12	11	14
31	27	.....	27	.....	12	11	.....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	31	30	30	24	15	19	11
Max.	51	33	39	79	18	93	14
Min.	20	28	26	18	12	11	9
A. F.	1900	1760	1810	1440	910	1190	666
Total Acre Feet	9,680.											

*No Record.

WHITE RIVER AT CHADRON—Section 18-33-49

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	0.7	17.0	4.0	6.0	4.0
2	32.0	17.0	2.0	2.0	2.0
3	20.0	20.0	5.0	6.0	4.0
4	12.0	23.0	9.0	6.0	2.0
5	4.0	23.0	6.0	4.0	1.0
6	14.0	26.0	2.0	9.0	1.0
7	11.0	12.0	0.7	14.0	1.0
8	17.0	9.0	2.0	12.0	1.0
9	26.0	9.0	0.7	6.0	1.0
10	23.0	12.0	2.0	2.0	0.0
11	23.0	42.0	0.7	4.0	0.0
12	26.0	41.0	0.7	2.0	0.0
13	26.0	23.0	0.7	0.7	0.0
14	41.0	23.0	17.0	0.7	0.4
15	41.0	23.0	14.0	0.4	0.7
16	36.0	17.0	41.0	0.4	35.0
17	*17.0	.....	.....	.....	23.0	12.0	20.0	0.4	N.R.
18	N.R.	.....	.....	.....	14.0	9.0	9.0	0.4	.....
19	20.0	6.0	12.0	0.4	.....
20	14.0	9.0	6.0	0.7	.....
21	9.0	9.0	6.0	0.7	.....
22	4.0	20.0	12.0	1.0	.....
23	4.0	23.0	6.0	2.0	.....
24	2.0	20.0	4.0	0.7	.....
25	2.0	23.0	0.7	0.7	.....
26	2.0	20.0	2.0	0.4	.....
27	0.7	17.0	6.0	0.4	.....
28	0.4	14.0	9.0	0.2	.....
29	0.4	14.0	6.0	0.0	.....
30	0.4	17.0	1.0	0.0	.....
31	14.0	.....	4.0	.....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	12.6	17.0	15.1	1.7	N.R.
Max.	41.0	32.0	12.0	9.0	.....
Min.	0.4	0.7	0.7	0.0	.....
A. F.	425.0	1050.0	898.0	103.0	.....

*Actual Measurements.

N.R.—No Record.

DEPARTMENT OF PUBLIC WORKS

565

WHITE HORSE CREEK—Section 5-13-29

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	22	25	32	21	31	18	18	19	9	4	1	2
2	22	25	32	21	31	18	18	19	9	4	1	2
3	22	25	32	21	31	18	18	19	9	4	1	2
4	22	25	32	21	31	18	18	19	9	4	1	2
5	22	25	32	21	31	18	18	19	9	4	2	2
6	22	25	32	21	31	18	18	19	9	7	2	2
7	22	25	32	21	31	18	18	19	9	7	2	2
8	22	25	32	21	31	18	18	19	9	7	2	2
9	22	25	32	21	31	18	18	19	9	7	2	2
10	22	25	32	21	31	18	18	19	9	7	2	2
11	21	25	32	20	25	18	18	19	9	4	2	2
12	21	25	32	20	25	18	18	19	9	4	4	2
13	21	25	32	20	25	18	18	19	9	5	4	2
14	21	25	32	20	25	18	18	19	9	6	3	2
15	21	25	32	20	25	18	18	19	9	4	3	2
16	21	35	32	20	25	18	19	10	8	4	3	4
17	21	35	32	20	25	18	19	10	8	4	3	4
18	21	35	32	20	25	18	19	10	8	4	3	4
19	21	35	32	20	25	18	19	10	8	4	3	4
20	21	35	32	20	25	18	19	10	8	4	3	4
21	21	35	32	25	20	18	19	10	8	4	3	5
22	21	35	32	25	20	18	19	10	8	3	3	5
23	21	35	32	25	20	18	19	10	8	3	3	5
24	28	35	32	25	20	18	19	10	8	3	3	5
25	28	35	32	25	20	18	19	10	8	2	3	5
26	28	44	32	25	20	18	19	9	6	2	4	6
27	28	44	32	25	20	18	19	9	6	2	4	6
28	28	44	32	25	20	18	19	9	6	2	4	6
29	28	44	32	25	...	18	19	9	6	1	2	6
30	28	44	32	25	...	18	19	9	6	1	2	6
31	28	...	32	25	...	18	...	9	...	1	2	...
Mean	*23	*31	*32	*22	*26	*18	*18	*14	*8	4	3	3
Max.	28	44	32	25	31	18	19	19	9	7	4	6
Min.	21	25	32	20	20	18	18	9	6	1	1	2
A. F.	1422	1874	1967	1360	1430	1105	1100	870	485	242	159	208
Total Acre Feet	12,220.											

*Estimated.

WHITE TAIL CREEK—Section 26-15-38

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	33	41	41	38	35	35	35	35	21	45	37	34
2	33	41	41	38	35	35	35	35	22	41	29	33
3	33	41	41	38	35	35	35	35	22	39	13	24
4	33	41	41	38	35	35	35	35	22	38	15	32
5	33	41	41	38	35	35	35	35	22	36	15	33
6	33	41	41	38	35	35	35	35	23	32	15	32
7	33	41	41	38	35	35	35	35	23	33	19	20
8	33	41	41	38	35	35	35	35	23	29	19	29
9	33	41	41	38	35	35	35	35	23	36	24	32
10	33	41	41	38	35	35	35	35	23	20	19	32
11	33	41	41	38	35	35	35	35	20	19	15	29
12	33	41	41	38	35	35	35	35	20	19	14	32
13	33	41	41	38	35	35	35	35	20	21	13	29
14	33	41	41	38	35	35	35	35	20	29	14	29
15	33	41	41	38	35	35	35	35	20	37	13	36
16	39	41	41	38	35	35	35	35	15	34	13	33
17	39	41	41	38	35	35	35	35	15	34	15	36
18	39	41	41	38	35	35	35	35	15	30	16	36
19	39	41	41	38	35	35	35	35	15	33	21	36
20	39	41	41	38	35	35	35	35	15	30	25	34
21	39	41	41	36	35	35	35	35	15	28	27	29
22	39	41	41	36	35	35	35	35	15	27	24	32
23	39	41	41	36	35	35	35	35	15	29	33	33
24	39	41	41	36	35	35	35	35	11	27	27	48
25	39	41	41	36	35	35	35	35	19	23	29	32
26	39	41	41	36	35	35	35	35	15	29	23	36
27	39	41	41	36	35	35	35	35	11	27	24	19
28	39	41	41	36	35	35	35	35	11	32	24	13
29	39	41	41	36	...	35	35	35	19	27	27	17
30	39	41	41	36	...	35	35	35	15	24	25	17
31	39	...	41	36	...	35	...	35	...	19	29	...
Mean	*36	*41	*41	*37	*35	*35	*35	*35	*18	30	21	30
Max.	39	41	41	38	35	35	35	35	23	45	37	48
Min.	33	41	41	37	35	35	35	35	11	19	13	17
A. F.	2220	2440	2521	2290	1940	2150	2080	2150	1080	1840	1300	1810
Total Acre Feet	23,820.											

*Estimated.

REPORT OF SECRETARY

WILD HORSE DRAIN—Section 1-20-52

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	126	61	53	50	42	30	25	35	30	51	47	65
2	126	61	53	50	42	30	25	35	30	52	48	64
3	126	61	53	50	42	30	25	35	30	53	50	69
4	126	61	53	50	42	30	25	35	30	54	52	73
5	126	61	53	50	42	30	25	35	30	55	53	78
6	126	61	53	50	42	25	25	30	30	56	52	76
7	126	61	53	50	42	25	25	30	30	57	51	75
8	126	61	53	50	42	25	25	30	30	58	50	74
9	126	61	53	50	42	25	25	30	35	59	55	72
10	126	61	53	50	42	25	25	30	10	60	55	72
11	100	61	53	48	40	30	20	20	18	61	50	71
12	100	61	53	48	40	30	20	20	58	59	49	59
13	100	61	53	48	40	30	20	20	66	57	49	62
14	100	61	53	48	40	30	20	20	57	55	48	65
15	100	61	53	48	40	30	20	20	47	54	48	68
16	75	49	53	48	40	30	20	20	38	54	48	72
17	75	49	53	48	40	30	20	20	43	54	48	74
18	75	49	53	48	40	30	20	20	42	53	49	76
19	75	49	53	48	40	30	20	20	41	53	49	77
20	75	49	53	48	40	30	20	20	40	51	50	77
21	58	49	53	45	36	25	25	25	44	50	55	77
22	58	49	53	45	36	25	25	25	48	48	64	76
23	58	49	53	45	36	25	25	25	52	51	63	76
24	58	49	53	45	36	25	25	25	56	55	62	76
25	58	49	53	45	36	25	25	25	53	58	60	76
26	58	49	53	45	36	20	25	25	50	56	59	76
27	58	49	53	45	36	20	25	25	48	54	62	76
28	58	49	53	45	36	20	25	25	48	52	65	76
29	58	49	53	45	....	20	25	25	49	50	68	76
30	58	49	53	45	....	20	25	25	50	49	67	76
31	58	....	53	45	....	20	....	25	....	48	66	....
Mean	*89	*55	*53	*48	*40	*26	23	26	43	54	55	73
Max.	126	61	53	50	42	30	25	35	66	61	63	78
Min.	58	49	53	45	36	20	20	20	30	48	47	59
A. F.	5500	3273	3259	2930	2200	1630	1390	1590	2560	3330	3360	4330
Total Acre Feet	35,350.											

*Estimated.

WILLOW CREEK AT SARBEN—Section 15-14-35

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	1	2	2	1	1	2	2	1	1	1	1
2	1	1	2	2	1	1	2	2	1	1	1	1
3	1	1	2	2	1	1	2	2	1	1	1	1
4	1	1	2	2	1	1	2	2	1	1	1	1
5	1	1	2	2	1	1	2	2	1	1	1	1
6	1	1	2	2	1	1	2	1	1	2	1	1
7	1	1	2	2	1	1	2	1	1	2	1	1
8	1	1	2	2	1	1	2	1	1	2	1	1
9	1	1	2	2	1	1	2	1	1	2	1	1
10	1	1	2	2	1	1	2	1	1	2	1	1
11	1	1	2	2	1	1	1	1	1	1	1	1
12	1	1	2	2	1	1	1	1	1	1	1	1
13	1	1	2	2	1	1	1	1	1	1	1	1
14	1	1	2	2	1	1	1	1	1	1	1	1
15	1	1	2	2	1	1	1	1	1	1	1	1
16	0	1	1	2	1	1	1	1	1	0	1	1
17	0	1	1	2	1	1	1	1	1	0	1	1
18	0	1	1	2	1	1	1	1	1	0	1	1
19	0	1	1	2	1	1	1	1	1	0	1	1
20	0	1	1	2	1	1	1	1	1	0	1	1
21	0	1	1	1	1	1	1	1	1	0	1	1
22	0	1	1	1	1	1	1	1	1	0	1	1
23	0	1	1	1	1	1	1	1	1	0	1	1
24	0	1	1	1	1	1	1	1	1	0	1	1
25	0	1	1	1	1	1	1	1	1	0	1	1
26	0	1	1	1	1	1	1	1	1	0	1	1
27	0	1	1	1	1	1	1	1	1	0	1	1
28	0	1	1	1	1	1	1	1	1	0	1	1
29	0	1	1	1	....	1	1	1	1	0	1	1
30	0	1	1	1	....	1	1	1	1	0	1	1
31	0	....	1	1	....	1	....	1	....	0	1	....
Mean	1	1	1	2	1	1	1	1	1	0.6	1	1
Max.	1	1	2	2	1	1	2	2	1	2	1	1
Min.	0	1	1	1	1	1	1	1	1	0	1	1
A. F.	30	59	91	98	56	61	77	74	60	37	61	60
Total Acre Feet	764.											
Record	Estimated											

DEPARTMENT OF PUBLIC WORKS

WINTERS CREEK—Section 19-22-54

Date	Year Ending September 30, 1931											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	129	84	74	70	65	50	40	48	40	37	50	104
2	129	84	74	70	65	50	40	48	40	44	88	98
3	129	84	74	70	65	50	40	48	40	37	49	98
4	129	84	74	70	65	50	40	48	40	43	49	112
5	129	84	74	70	65	50	40	48	40	49	49	88
6	129	84	74	70	65	50	40	48	40	40	55	117
7	129	84	74	70	65	50	40	48	40	84	51	70
8	129	84	74	70	65	50	40	48	40	49	49	66
9	129	84	74	70	65	50	40	48	40	49	50	85
10	129	84	74	70	65	50	40	48	49	49	52	79
11	129	84	74	61	70	40	40	48	35	49	52	67
12	129	84	74	61	70	40	40	48	25	49	51	87
13	129	84	74	61	70	40	40	48	23	49	54	88
14	129	84	74	61	70	40	40	48	36	48	66	98
15	129	81	74	61	70	70	40	48	36	48	59	98
16	94	74	74	60	70	70	45	48	23	49	55	88
17	94	74	74	60	70	70	45	48	26	48	65	110
18	94	74	74	60	70	40	45	48	28	50	55	77
19	94	74	74	60	70	40	45	48	27	51	49	91
20	94	74	74	60	70	40	45	48	49	50	54	85
21	94	74	74	65	60	40	45	40	46	49	54	88
22	94	74	74	65	60	40	45	40	44	50	54	119
23	94	74	74	65	60	10	45	40	34	51	54	107
24	94	74	74	65	60	40	45	40	31	50	54	151
25	94	74	74	65	60	10	45	40	31	49	58	129
26	94	74	74	65	60	35	45	40	41	50	55	124
27	94	14	74	65	60	35	45	40	41	50	55	124
28	94	14	74	65	60	35	45	40	45	48	58	111
29	94	14	14	65	....	35	45	40	40	51	59	104
30	94	74	14	65	....	35	45	40	34	51	54	98
31	94	....	14	65	....	35	....	40	....	49	60	....
Mean	9110	79	74	65	65	42	42	45	33	49	55	98
Max.	129	84	74	70	70	50	45	48	49	84	88	151
Min.	94	74	14	60	60	35	40	40	23	37	49	66
A. F.	18720	4700	4550	4000	3630	2600	2530	2780	2200	3010	3410	5860
Total Acre Feet	57,990.											

REPORT OF SECRETARY

ARICKAREE RIVER AT HAIGLER—Section 28-1-41

Date	Year Ending September 30, 1932					Mar.	Apr.	May	June	July	Aug.	Sept.
	Oct.	Nov.	Dec.	Jan.	Feb.							
1	N.R.	N.R.	N.R.	N.R.	N.R.	30	15	41	12	13	39	21
2	30	15	37	6	11	675	21
3	28	15	28	16	6	128	15
4	30	15	28	49	8	56	14
5	26	15	28	34	15	42	13
6	28	15	26	26	6	28	8
7	26	15	32	26	6	28	8
8	24	15	28	24	4	27	6
9	22	15	24	18	4	22	3
10	18	15	22	21	2	21	3
11	20	15	22	52	3	17	3
12	28	15	22	34	2	14	3
13	2	.....	.....	.....	30	15	22	27	3	133	3
14	32	15	22	13	1	26	1
15	618	.....	27	.....	39	15	22	13	0.4	14	1
16	62	15	22	13	0.4	12	1
17	58	15	21	13	0.0	16	3
18	41	18	16	10	0.2	11	3
19	18	.....	.....	30	22	15	73	0.2	16	3
20	30	18	16	27	0.1	21	6
21	28	16	18	21	0	18	8
22	34	15	15	18	0.2	16	8
23	30	18	15	13	0.2	15	8
24	26	34	15	13	6	10	11
25	24	49	16	13	9	6	11
26	26	44	24	84	13	4	35
27	21	47	30	30	6	1200	17
28	18	51	34	33	5	21	9
29	16	44	34	30	206	21	6
30	15	44	30	18	81	21	3
31	15	.....	21	.....	44	21	.....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	29	23	24	26	15	87	9
Max.	62	51	41	84	206	1200	35
Min.	15	15	15	6	0	4	1
A. F.	1750	1310	1480	1550	910	5360	506
Total Acre Feet	12,900.											
N.R.—No Record.												

BALD DRAIN—Section 32-23-56

Date	Year Ending September 30, 1932					Mar.	Apr.	May	June	July	Aug.	Sept.
	Oct.	Nov.	Dec.	Jan.	Feb.							
1	2	1	1	1	1	2	2	3	5	3	35	12
2	2	1	1	1	1	2	2	3	5	4	31	15
3	2	1	1	1	1	2	2	3	5	7	29	17
4	2	1	1	1	1	2	2	3	5	10	27	19
5	2	1	1	1	1	2	2	3	5	10	25	22
6	2	1	1	1	1	1	2	2	8	8	23	25
7	2	1	1	1	1	1	2	2	8	4	21	28
8	2	1	1	1	1	1	2	2	8	5	19	30
9	2	1	1	1	1	1	2	2	8	4	17	30
10	2	1	1	1	1	1	2	2	8	4	15	30
11	2	1	1	1	1	1	2	2	10	3	13	31
12	2	1	1	1	1	2	2	2	10	4	11	31
13	2	1	1	1	1	2	2	2	10	7	9	30
14	2	1	1	1	1	2	2	2	10	7	8	28
15	2	1	1	1	1	2	2	2	10	7	8	26
16	1	1	1	1	1	2	2	2	10	9	8	24
17	1	1	1	1	1	2	2	2	10	8	7	24
18	1	1	1	1	1	2	2	2	10	10	8	24
19	1	1	1	1	1	2	2	2	15	8	9	24
20	1	1	1	1	1	2	2	2	15	5	9	24
21	1	1	1	1	1	2	2	4	10	15	6	10
22	1	1	1	1	1	2	2	4	10	20	8	10
23	1	1	1	1	1	2	2	4	10	20	8	10
23	1	1	1	1	1	2	2	4	10	25	8	10
25	1	1	1	1	1	2	2	4	10	16	12	9
26	1	1	1	1	1	2	2	4	8	8	17	9
27	1	1	1	1	1	2	2	4	8	6	21	9
28	1	1	1	1	1	2	2	4	8	6	26	8
29	1	1	1	1	1	2	2	4	8	3	25	8
30	1	1	1	1	1	.....	.....	8	3	24	8	23
31	1	.....	.....	.....	.....	.....	.....	8	.....	30	8	.....
Mean	1	1	1	1	1	2	3	5	10	10	14	24
Max.	2	1	1	1	1	2	4	10	25	30	35	31
Min.	1	1	1	1	1	1	2	2	5	3	7	12
A. F.	91	60	61	61	85	113	159	313	589	619	855	1422
Total Acre Feet	4,428.											

BAYARD SUGAR FACTORY DRAIN—Section 4-20-52

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	75	52	52	46	37	35	34	33	50	34	50	84
2	75	52	52	46	40	35	34	33	39	32	50	84
3	75	52	52	46	44	35	34	31	33	33	47	84
4	75	52	52	46	39	35	34	31	27	33	47	84
5	75	52	52	46	43	35	34	31	24	33	64	84
6	70	52	52	44	43	34	33	30	7	32	47	80
7	70	52	52	44	38	34	33	29	7	26	64	88
8	70	52	52	44	37	34	31	30	7	28	72	96
9	70	52	52	44	36	34	31	29	4	25	72	80
10	70	52	52	44	38	34	31	27	5	25	57	68
11	65	52	50	42	39	35	30	28	5	37	43	100
12	65	52	50	42	39	35	30	28	10	37	42	92
13	65	52	50	42	39	35	30	28	16	38	80	92
14	65	52	50	42	37	35	30	27	17	39	64	92
15	65	52	50	42	37	35	30	28	31	28	68	92
16	60	52	50	42	36	35	30	27	50	31	60	88
17	60	52	50	42	36	35	30	42	50	64	57	92
18	60	52	50	42	36	35	30	37	57	64	57	100
19	60	52	50	42	37	35	28	34	68	64	72	100
20	60	52	50	42	39	36	28	30	68	32	68	92
21	55	52	48	40	37	35	26	50	57	32	68	88
22	55	52	48	40	34	35	25	42	25	33	64	92
23	55	52	48	40	34	35	37	41	22	36	64	92
24	55	52	48	40	33	33	40	42	22	33	72	100
25	55	52	48	40	36	34	40	35	21	33	64	96
26	53	52	48	40	34	35	36	50	19	37	80	96
27	53	52	48	40	34	35	34	54	19	37	84	92
28	53	52	48	40	36	36	36	64	23	34	88	88
29	53	52	48	40	37	35	37	68	18	37	84	92
30	53	52	48	39	...	35	37	68	57	37	84	100
31	53	...	48	39	...	35	...	60	...	44	84	...
Mean	63	52	50	42	37	35	32	38	29	36	65	90
Max.	75	52	52	46	44	36	40	68	68	64	88	100
Min.	53	52	48	39	33	33	25	27	4	25	42	68
A. F.	3870	3090	3070	2500	2150	2140	1930	2360	1710	2240	4000	5370
Total Acre Feet	34,510.											

BAZILLE CREEK AT NIOBRARA

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	100	70	52	182	30	N.R.	N.R.
2	100	66	47	140	34	...	...
3	100	69	46	144	55	...	...
4	100	69	45	108	64	...	...
5	100	66	46	75	41	...	...
6	50	58	108	91	40	...	...
7	50	48	121	72	68	...	...
8	...	N.R.	...	...	...	50	53	72	118	42	...	...
9	...	23	...	...	32	29	50	48	58	118	35	...
10	...	25	...	N.R.	N.R.	50	52	52	297	N.R.	...	...
11	N.R.	...	...	...	...	50	47	52	279	...	...	...
12	50	50	48	158	...	...	...
13	50	52	44	417	...	127	...
14	60	53	41	237	25	N.R.	...
15	70	50	39	121	N.R.	...	...
16	110	51	40	98	...	...	...
17	110	52	40	91	...	...	...
18	110	52	41	78	...	...	...
19	33	...	...	110	57	45	72	...	...	...
20	110	58	37	65	...	...	...
21	66	52	31	58	...	...	...
22	64	47	33	58	...	...	...
23	68	55	29	53	...	...	...
24	89	58	32	53	...	...	...
25	164	53	69	88	...	...	...
26	119	53	582	50	...	...	...
27	...	27	...	...	...	89	53	116	42	...	...	...
28	N.R.	...	...	...	...	78	52	61	46	...	...	...
29	85	50	37	38	...	...	...
30	78	51	34	36	...	...	...
31	64	...	424	...	...	...	...
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	82	55	81	116	N.R.	N.R.	N.R.
Max.	164	70	582	417	...	...	...
Min.	50	47	29	36	...	...	...
A. F.	5050	3260	5010	6900	...	...	...

REPORT OF SECRETARY

BIRDWOOD CREEK AT HERSHEY—Section 2-14-33

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	157	170	185	175	150	180	195	160	131	112	160	131
2	157	170	185	175	150	180	181	160	125	115	141	141
3	144	170	185	175	150	180	178	160	120	141	141	141
4	157	170	185	175	150	180	188	160	120	118	134	174
5	144	170	185	175	150	180	188	154	120	107	138	178
6	128	170	185	165	170	180	181	154	112	120	144	181
7	128	170	185	165	170	180	178	147	105	115	131	178
8	128	170	185	165	170	180	184	151	110	115	131	184
9	128	170	185	165	170	180	181	147	112	128	134	157
10	154	170	185	165	170	180	181	154	170	115	144	170
11	154	175	185	165	170	180	174	154	259	123	141	181
12	151	175	185	165	170	180	178	150	195	118	138	199
13	160	170	185	165	170	180	174	147	134	115	280	174
14	154	175	185	165	170	180	170	150	134	112	195	178
15	154	175	185	165	170	189	164	147	141	110	147	170
16	154	175	205	165	170	219	164	160	134	141	141	164
17	147	175	205	165	170	192	174	150	192	141	141	151
18	151	175	205	165	170	203	207	150	160	150	138	147
19	141	175	205	165	170	199	203	138	275	107	141	157
20	154	175	205	165	170	219	192	118	199	115	141	144
21	154	175	200	160	180	195	195	128	157	98	123	167
22	151	175	200	160	180	178	192	138	138	105	123	164
23	151	175	200	160	180	178	227	118	131	141	105	164
24	151	175	200	160	180	161	227	112	138	164	91	157
25	154	175	200	160	180	192	199	125	128	170	98	157
26	160	185	190	150	180	181	167	251	134	154	110	192
27	154	185	190	150	180	203	164	181	141	138	219	184
28	170	185	190	150	180	199	191	151	134	110	164	174
29	181	185	190	150	180	195	191	157	131	107	160	178
30	192	185	190	150	....	203	199	154	110	128	128	178
31	178	....	190	150	....	211	....	157	....	184	141	....
Mean	154	175	192	163	170	188	186	151	116	126	141	167
Max.	192	185	205	175	180	219	227	251	275	184	280	199
Min.	128	170	185	150	150	164	164	112	105	98	91	131
A. F.	9470	10400	11800	10000	9780	11600	11100	9280	8690	7750	8850	9940
Total Acre Feet	118,660.											

BLUE CREEK AT LEWELLEN—Section 30-16-42 W.

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	90	141	120	110	110	122	116	22	58	2	8
2	71	88	140	120	110	105	122	122	16	53	1	16
3	74	90	140	120	110	110	122	116	4	50	1	23
4	74	90	140	120	110	110	122	116	5	38	1	25
5	70	90	140	120	110	100	122	122	6	19	1	27
6	74	100	135	110	120	100	122	116	5	3	1	28
7	74	100	135	110	120	100	122	110	3	1	5	26
8	74	100	135	110	120	100	128	110	2	3	4	28
9	74	100	135	110	120	100	122	116	1	5	1	28
10	74	100	135	110	120	100	122	110	11	5	1	28
11	79	110	135	110	120	110	122	105	94	2	1	31
12	74	110	135	107	120	110	122	105	146	1	1	32
13	74	110	135	110	120	110	122	94	116	1	208	30
14	74	110	135	110	126	120	110	84	89	1	116	29
15	71	110	135	110	120	130	105	84	64	1	74	26
16	74	120	137	120	120	140	100	79	74	3	60	24
17	81	120	135	120	120	122	94	74	128	7	49	23
18	79	129	135	120	120	116	160	74	122	8	40	21
19	79	120	135	120	120	116	100	62	128	8	36	22
20	74	120	135	120	120	122	94	62	128	6	35	20
21	74	110	135	125	120	116	79	57	105	2	29	18
22	79	110	135	125	120	116	89	48	100	3	17	20
23	79	110	135	125	121	116	236	30	94	8	13	25
24	74	110	135	125	120	116	295	8	94	7	8	30
25	74	110	135	125	120	116	153	8	84	4	5	31
26	74	120	130	128	115	116	128	24	74	2	13	33
27	74	120	130	120	115	116	122	26	79	1	81	36
28	74	120	130	120	115	116	110	49	89	7	81	35
29	74	120	130	120	115	122	131	61	84	4	60	39
30	84	120	130	120	....	116	116	61	70	5	17	39
31	84	120	130	120	....	116	....	52	....	2	23	....
Mean	76	108	135	118	118	113	125	78	68	10	33	27
Max.	84	120	141	128	121	140	295	122	146	58	208	39
Min.	70	88	130	107	110	100	79	8	1	1	1	8
A. F.	4640	6430	8300	7260	6790	6950	7500	4770	4050	621	2020	1590
Total Acre Feet	60,921.											

DEPARTMENT OF PUBLIC WORKS

BLUE (LITTLE) RIVER AT ENDICOTT—Section 3-3-31

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	188	114	199	155	130	851	188	158	161	128	124	215
2	207	120	188	148	110	682	181	150	821	113	142	144
3	211	119	188	136	150	558	175	155	2980	109	128	126
4	179	119	182	141	119	474	172	155	1490	168	305	120
5	155	120	173	145	110	422	170	145	1040	660	318	113
6	147	123	173	113	140	358	168	152	855	492	217	112
7	139	126	172	124	180	292	168	292	625	209	168	110
8	138	126	165	130	150	188	165	289	862	240	138	112
9	130	127	170	155	170	175	155	182	784	175	144	112
10	132	128	170	177	228	170	158	165	374	165	134	107
11	397	124	217	190	755	200	160	161	344	158	127	109
12	330	133	226	200	847	210	158	155	615	155	161	120
13	574	128	220	180	372	230	161	153	542	148	138	124
14	289	130	201	150	228	264	156	145	453	147	542	133
15	203	180	188	110	211	279	158	152	456	144	532	166
16	186	170	180	140	257	327	152	148	372	136	279	123
17	161	156	172	160	419	297	148	150	302	152	224	116
18	150	153	166	153	352	289	160	147	276	282	197	109
19	148	139	155	161	338	272	158	142	252	128	180	105
20	144	160	156	163	318	262	163	140	231	114	170	105
21	134	175	163	160	492	254	161	136	226	112	155	184
22	139	173	153	166	1010	237	153	138	215	112	155	195
23	132	1500	155	155	844	242	152	138	205	117	153	110
24	126	2190	147	148	674	257	161	140	197	139	144	105
25	120	628	150	152	1230	269	173	147	191	123	140	103
26	119	374	148	145	1760	262	177	197	358	116	147	105
27	120	297	148	147	1800	264	173	226	360	114	140	105
28	116	274	142	148	1570	247	165	205	231	110	132	103
29	113	245	147	139	1090	234	160	175	150	113	128	105
30	112	220	150	133	....	211	148	163	142	120	132	108
31	110	....	158	120	....	191	....	161	....	119	247	....
Mean	179	292	172	150	556	305	163	167	537	172	195	123
Max.	574	2190	226	200	1800	851	188	292	2980	660	542	215
Min.	110	114	112	110	110	170	148	136	142	109	124	103
A. F.	11000	17400	10600	9220	32000	18800	9700	10300	32000	10600	12000	7320
Total Acre Feet	181,000.											

BUFFALO CREEK—Section 33-9-18

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	44	55	8	10	10	7	20	30	47	53	85
2	50	44	55	8	10	10	7	20	300	62	72	85
3	50	44	55	8	10	10	7	20	300	59	109	85
4	50	44	55	8	10	10	7	40	200	81	147	85
5	50	44	55	8	10	10	7	30	100	99	138	86
6	52	48	40	8	11	9	7	20	65	103	130	69
7	52	48	40	8	11	9	7	20	79	69	135	59
8	52	48	40	8	11	9	7	20	88	71	140	56
9	52	48	40	8	11	9	7	40	87	75	154	52
10	52	48	40	8	11	9	7	30	103	51	168	55
11	48	52	25	7	12	8	7	25	108	33	114	58
12	48	52	25	7	12	8	7	25	113	31	101	58
13	48	52	25	7	12	8	7	25	142	36	115	53
14	48	52	25	7	12	8	7	25	171	40	129	72
15	48	52	25	7	12	8	7	25	105	20	90	87
16	45	56	10	7	13	8	7	26	91	14	52	88
17	45	56	10	7	13	8	7	25	165	11	80	90
18	45	56	10	7	13	8	15	25	100	9	108	86
19	45	56	10	7	13	8	15	25	114	3	96	82
20	45	56	10	7	13	8	15	25	114	2	84	85
21	42	60	9	8	12	8	15	25	200	1	75	88
22	42	60	9	8	12	8	15	25	99	4	66	73
23	42	60	9	8	12	8	30	25	65	2	54	58
24	42	60	9	8	12	8	30	25	46	4	42	60
25	42	60	9	8	12	8	25	25	71	5	37	63
26	39	65	9	9	11	8	25	25	66	9	32	60
27	39	65	9	9	11	8	40	25	61	13	40	57
28	39	65	9	9	11	8	30	30	61	13	48	68
29	39	65	9	9	11	8	20	30	52	14	38	69
30	39	65	9	9	....	8	20	30	44	24	28	69
31	39	....	9	9	....	8	....	30	....	34	56	....
Mean	46	54	24	8	12	9	14	26	111	33	88	71
Max.	52	65	55	9	13	10	30	40	300	103	168	90
Min.	39	44	9	7	10	8	7	20	30	1	28	52
A. F.	2814	3923	1485	484	662	522	821	1599	6625	2061	5417	4256
Total Acre Feet	29,969.											

REPORT OF SECRETARY

BULL CREEK—Section 19-13-28

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	3	4	4	3	4	5	3	8	3	2	1
2	2	3	4	4	3	4	5	3	8	10	2	1
3	2	3	4	4	3	4	5	3	8	10	2	1
4	2	3	4	4	3	4	5	3	8	8	2	1
5	2	3	4	4	3	4	5	3	8	8	2	1
6	2	3	4	4	3	5	4	3	7	5	2	1
7	2	3	4	4	3	5	4	3	7	5	2	1
8	2	3	4	4	3	5	4	3	7	5	2	1
9	2	3	4	4	3	5	4	3	7	5	2	1
10	2	3	4	4	3	5	4	3	7	5	2	1
11	2	4	4	3	3	6	4	3	6	3	2	1
12	2	4	4	3	3	6	4	3	6	3	2	1
13	2	4	4	3	3	6	4	3	6	3	2	1
14	2	4	4	3	3	6	4	3	6	3	2	1
15	2	4	4	3	3	6	4	3	6	3	2	1
16	3	4	4	3	3	6	4	3	5	2	2	2
17	3	4	4	3	3	6	4	3	5	2	2	2
18	3	4	4	3	3	6	4	3	5	2	2	2
19	3	4	4	3	3	6	4	3	5	2	2	2
20	3	4	4	3	4	6	4	3	5	2	2	2
21	3	4	4	3	4	6	4	3	4	2	2	2
22	3	4	4	3	4	6	4	3	4	2	1	2
23	3	4	4	3	4	6	4	3	4	2	1	2
24	3	4	4	3	4	6	4	3	4	2	1	2
25	3	4	4	3	4	6	4	3	4	2	1	2
26	3	4	4	3	4	5	4	5	3	2	1	2
27	3	4	4	3	4	5	4	5	3	2	1	2
28	3	4	4	3	4	5	4	5	3	2	1	2
29	3	4	4	3	4	5	4	5	3	2	1	2
30	3	4	4	3	....	5	4	5	3	2	1	2
31	3	....	4	3	....	5	....	5	....	2	1	....
Mean	3	4	4	3	3	5	4	4	5	4	2	1
Max.	3	4	4	4	4	6	5	5	8	10	2	2
Min.	2	3	4	3	3	4	4	3	3	2	1	2
A. F.	155	218	246	204	192	327	248	220	327	220	101	89
Total Acre Feet	2,547.											

CAMP CLARK SEEP—Section 9-20-51

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	3	3	2	3	2	1	1	2	3	6	8
2	6	3	3	2	3	2	1	1	2	3	6	8
3	6	3	3	2	3	2	1	1	2	3	6	8
4	6	3	3	2	3	2	1	1	2	3	6	8
5	6	3	3	2	3	2	1	1	2	3	6	8
6	6	3	3	2	4	2	1	1	2	3	6	9
7	6	3	3	2	4	2	1	1	2	3	6	9
8	6	3	3	2	4	2	1	1	2	3	6	9
9	6	3	3	2	4	2	1	1	2	3	6	9
10	6	3	3	2	4	2	1	1	2	3	6	9
11	5	3	3	2	4	2	1	1	2	4	6	10
12	5	3	3	2	4	2	1	1	2	4	6	10
13	5	3	3	2	4	2	1	1	2	4	6	10
14	5	3	3	2	4	2	1	1	2	4	6	10
16	5	3	3	2	4	2	1	1	2	4	6	10
16	5	3	3	2	3	2	1	1	2	4	6	10
17	5	3	3	2	3	2	1	1	2	4	6	10
18	5	3	3	2	3	2	1	1	2	4	6	10
19	5	3	3	2	3	2	1	1	2	4	6	10
20	5	3	3	2	3	2	1	1	2	4	6	10
21	4	3	3	2	2	2	1	2	2	5	6	10
22	4	3	3	2	2	2	1	2	2	5	6	10
23	4	3	3	2	2	2	1	2	2	5	6	10
24	4	3	3	2	2	2	1	2	2	5	6	10
25	4	3	3	2	2	2	1	2	2	5	6	10
26	4	3	3	2	2	2	1	2	2	6	7	10
27	4	3	3	2	2	2	1	2	2	6	7	10
28	4	3	3	2	2	2	1	2	2	6	7	10
29	4	3	3	2	2	2	1	2	2	6	7	10
30	4	3	3	2	....	2	1	2	2	6	7	10
31	4	....	3	2	....	2	....	2	....	6	7	....
Mean	5	3	3	2	2	2	1	1	2	4	6	9
Max.	6	3	3	2	4	2	1	2	2	6	7	10
Min.	4	3	3	2	2	2	1	1	2	3	6	8
A. F.	305	179	184	123	174	123	60	83	119	260	381	764
Total Acre Feet	2,755.											

CEDAR CREEK—Section 11-18-48

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	15	10	10	10	15	13	10	13	3	13	12
2	25	15	10	10	10	15	13	10	11	3	14	12
3	25	15	10	10	10	15	13	10	10	3	12	12
4	25	15	10	10	10	15	13	3	10	6	11	12
5	25	15	10	10	10	15	13	3	10	3	10	12
6	25	10	10	10	15	10	13	3	10	6	9	12
7	25	10	10	10	15	10	13	3	7	4	9	12
8	25	10	10	10	15	10	13	6	3	3	9	11
9	25	10	10	10	15	10	13	6	3	3	9	10
10	25	10	10	10	15	10	13	6	3	3	9	8
11	20	10	15	15	15	10	13	6	5	4	6	8
12	20	10	15	15	15	10	13	6	5	4	4	8
13	20	10	15	15	15	10	13	6	7	4	4	10
14	20	10	15	15	15	10	13	6	3	4	4	9
15	20	10	15	15	15	10	13	6	8	5	7	8
16	20	10	15	15	10	13	12	3	5	5	10	8
17	20	10	15	15	10	13	12	3	8	5	10	7
18	20	10	15	15	10	13	12	3	4	5	10	6
19	20	10	15	15	10	13	12	3	34	6	8	6
20	20	10	15	15	10	13	12	3	5	6	7	6
21	20	10	10	15	15	13	12	3	16	7	6	6
22	20	10	10	15	15	13	12	3	3	9	5	7
23	20	10	10	15	15	13	12	3	6	11	8	8
24	20	10	10	15	15	13	12	3	3	14	12	8
25	20	10	10	15	15	13	12	3	6	16	14	8
26	15	10	10	15	15	13	10	5	3	16	15	10
27	15	10	10	15	15	13	10	10	3	16	14	12
28	15	10	10	10	15	13	10	10	3	16	14	12
29	15	10	10	10	15	13	10	10	3	15	12	12
30	15	10	10	10	....	13	10	15	3	14	11	12
31	15	....	10	10	....	13	....	15	....	13	12	....
Mean	21	11	12	13	11	12	12	6	7	7	10	9
Max.	25	15	15	15	15	15	13	15	34	16	15	12
Min.	15	10	10	10	10	10	10	3	3	3	4	6
A. F.	1269	645	714	783	764	760	724	367	421	460	591	559
Acres	Feet 8,059.											

CEDAR BRANCH CREEK—Section 17-14-35

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	2	2	3	2	2	2	1	2	2	1	2
2	2	2	2	3	2	2	2	1	2	2	1	2
3	2	2	2	3	2	2	2	1	2	2	1	2
4	2	2	2	3	2	2	2	1	2	2	1	2
5	2	2	2	3	2	2	2	1	2	2	1	2
6	2	2	2	3	2	2	2	1	2	2	1	2
7	2	2	2	3	2	2	2	1	2	2	1	2
8	2	2	2	3	2	2	2	1	2	2	1	2
9	2	2	2	3	2	2	2	1	2	2	1	2
10	2	2	2	3	2	2	2	1	2	2	1	2
11	2	2	2	3	2	2	2	1	2	2	1	2
12	2	2	2	3	2	2	2	1	2	2	1	2
13	2	2	2	3	2	2	2	1	2	2	1	2
14	2	2	2	3	2	2	2	1	2	2	1	2
15	2	2	2	3	2	2	2	1	2	2	1	2
16	2	2	2	3	2	2	3	2	2	2	1	2
17	2	2	2	3	2	2	3	2	2	2	1	2
18	2	2	2	3	2	2	3	2	2	2	1	2
19	2	2	2	3	2	2	3	2	2	2	1	2
20	2	2	2	3	2	2	3	2	2	2	1	2
21	2	2	2	2	2	2	2	2	2	1	2	3
22	2	2	2	2	2	2	2	2	2	1	2	3
23	2	2	2	2	2	2	2	2	2	1	2	3
24	2	2	2	2	2	2	2	2	2	1	2	3
25	2	2	2	2	2	2	2	2	2	1	2	3
26	2	2	2	2	2	2	2	2	2	1	2	3
27	2	2	2	2	2	2	2	2	2	1	2	3
28	2	2	2	2	2	2	2	2	2	1	2	3
29	2	2	2	2	2	2	2	2	2	1	2	3
30	2	2	2	2	....	2	2	2	2	1	2	3
31	....	....	2	2	....	2	....	2	....	1	2	....
Mean	2	2	2	3	2	2	2	1	2	2	1	2
Max.	2	2	2	3	2	2	3	2	2	2	2	3
Min.	2	2	2	2	2	2	2	1	2	1	1	2
A. F.	123	119	123	163	115	133	129	93	119	101	83	139
Total	Acres Feet 1,440.											

REPORT OF SECRETARY

CLEAR CREEK—Section 32-16-41

Date	Year Ending September 30, 1932								June	July	Aug.	Sept.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May				
1	10	14	14	12	10	10	8	12	8	5	0	10
2	10	14	14	12	10	10	8	12	8	4	3	11
3	10	14	14	12	10	10	8	12	4	6	6	11
4	10	14	14	12	10	10	8	12	2	6	3	11
5	10	14	14	12	10	10	8	12	6	6	0	11
6	10	14	15	12	12	6	8	12	6	0	0	11
7	10	14	15	12	12	6	8	12	6	0	6	10
8	10	14	15	12	12	6	8	12	7	0	3	10
9	10	14	15	12	12	6	8	12	7	5	0	10
10	10	14	15	12	12	6	8	12	12	6	0	10
11	8	14	15	14	12	8	10	12	9	5	0	8
12	8	14	15	14	12	8	10	12	10	4	4	6
13	8	14	15	14	12	8	10	12	9	4	8	3
14	8	14	15	14	12	8	10	12	9	4	8	1
15	8	14	15	14	12	8	10	12	8	3	8	2
16	8	14	15	14	10	8	12	12	20	0	9	4
17	8	14	15	14	10	8	12	12	20	3	10	7
18	8	14	15	14	10	8	12	12	10	0	10	10
19	8	14	15	14	10	8	12	12	9	0	11	10
20	8	14	15	14	10	8	12	12	8	0	11	10
21	7	14	15	15	10	8	12	6	8	0	10	10
22	7	14	15	15	10	8	12	6	8	0	10	10
23	7	14	15	15	10	8	12	6	8	0	11	6
24	7	14	15	15	10	8	12	2	8	0	11	9
25	7	14	15	15	10	8	12	6	9	0	11	9
26	10	14	14	15	10	8	12	6	9	0	11	9
27	10	14	14	10	10	8	12	6	9	0	12	9
28	10	14	14	10	10	8	12	6	10	0	12	9
29	10	14	14	10	10	8	12	6	10	3	11	9
30	10	14	14	10	....	8	12	6	5	6	11	9
31	10	....	14	10	....	8	....	6	....	6	11	....
Mean	9	14	15	13	11	8	10	10	9	2	7	8
Max.	10	14	15	15	12	10	12	12	20	6	12	11
Min.	7	14	14	10	10	6	8	2	2	0	0	1
A. F.	545	833	900	793	615	492	615	599	520	151	438	506
Total Acre Feet	7,007.											

CLEVELAND DRAIN—Section 6-20-52

Date	Year Ending September 30, 1932								June	July	Aug.	Sept.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May				
1	3	1	2	2	2	1	1	1	8	5	4	5
2	3	1	2	2	2	1	1	1	8	5	4	5
3	3	1	2	2	2	1	1	1	8	5	4	5
4	3	1	2	2	2	1	1	1	8	5	4	5
5	3	1	2	2	2	1	1	1	8	5	4	5
6	3	1	3	2	2	1	1	1	8	5	4	5
7	3	1	3	2	2	1	1	1	8	5	4	5
8	3	1	3	2	2	1	1	1	8	5	4	5
9	3	1	3	2	2	1	1	1	8	5	4	5
10	3	1	3	2	2	1	1	1	8	5	4	5
11	3	1	2	2	1	1	1	1	8	5	4	5
12	3	1	2	2	1	1	1	1	8	5	4	5
13	3	1	2	2	1	1	1	1	8	5	4	5
14	3	1	2	2	1	1	1	1	8	5	4	5
15	3	1	2	2	1	1	1	1	8	5	4	5
16	2	2	2	2	1	2	1	2	8	4	3	5
17	2	2	2	2	1	2	1	2	8	4	3	5
18	2	2	2	2	1	2	1	2	8	4	3	5
19	2	2	2	2	1	2	1	2	8	4	3	5
20	2	2	2	2	1	2	1	2	8	4	3	5
21	2	2	2	2	2	1	1	2	8	4	3	5
22	2	2	2	2	2	1	1	2	8	4	3	5
23	2	2	2	2	2	1	1	2	8	4	3	5
24	2	2	2	2	2	1	1	2	8	4	3	5
25	2	2	2	2	2	1	1	2	8	4	3	5
26	2	2	2	2	2	1	1	2	5	4	3	5
27	2	2	2	2	2	1	1	2	5	4	3	5
28	2	2	2	2	2	1	1	2	5	4	3	5
29	2	2	2	2	2	1	1	2	5	4	3	5
30	2	2	2	2	....	1	1	2	5	4	3	5
31	2	....	2	2	....	1	....	5	....	4	3	....
Mean	2	1	2	2	2	1	1	2	7	4	3	5
Max.	3	2	3	3	3	2	1	2	8	5	4	5
Min.	2	1	2	2	1	1	1	2	5	4	3	5
A. F.	153	89	113	133	95	71	60	123	446	276	214	297
Total Acre Feet	2,070.											

DEPARTMENT OF PUBLIC WORKS

575

COLDWATER CREEK—Section 31-18-46

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.1	0.5	1	2	2	1	1	1.0	0.1	0	0.5	0.2
2	0.1	0.5	1	2	2	1	1	1.0	0.1	0	0.5	0.2
3	0.1	0.5	1	2	2	1	1	1.0	0.1	0	0.5	0.2
4	0.1	0.5	1	2	2	1	1	1.0	0.1	0	0.5	0.2
5	0.1	0.5	1	2	2	1	1	1.0	0.1	0	0.5	0.2
6	0.1	0.5	1	2	2	1	1	1.0	0.1	0	0.5	0.2
7	0.1	0.5	1	2	2	1	1	1.0	0.1	0	0.5	0.2
8	0.1	0.5	1	2	2	1	1	1.0	0.1	0	0.5	0.2
9	0.1	0.5	1	2	2	1	1	1.0	0.1	0	0.5	0.2
10	0.1	0.5	1	2	2	1	1	1.0	0.1	0	0.5	0.2
11	0.1	0.5	1	3	2	1	1	1.0	0.1	0	0.5	0.2
12	0.1	0.5	1	3	2	1	1	1.0	0.1	0	0.5	0.2
13	0.1	0.5	1	3	2	1	1	1.0	0.1	0	0.5	0.2
14	0.1	0.5	1	3	2	1	1	1.0	0.1	0	0.5	0.2
15	0.1	0.5	1	3	2	1	1	1.0	0.1	0	0.5	0.2
16	0.2	0.5	1	3	1	2	1	0.0	0.1	0	0.3	0.2
17	0.2	0.5	1	3	1	2	1	0.0	0.1	0	0.3	0.2
18	0.2	0.5	1	3	1	2	1	0.0	0.1	0	0.3	0.2
19	0.2	0.5	1	3	1	2	1	0.0	0.1	0	0.3	0.2
20	0.2	0.5	1	3	1	2	1	0.0	0.1	0	0.3	0.2
21	0.2	0.5	1	3	1	2	1	0.0	0.3	0	0.3	0.2
22	0.2	0.5	1	3	1	2	1	0.0	0.3	0	0.3	0.2
23	0.2	0.5	1	3	1	2	1	0.0	0.3	0	0.3	0.2
24	0.2	0.5	1	3	1	2	1	0.0	0.3	0	0.3	0.2
25	0.2	0.5	1	3	1	2	1	0.0	0.3	0	0.3	0.2
26	0.2	0.5	1	3	1	2	1	0.0	0.3	0	0.3	0.2
27	0.2	0.5	1	3	1	2	1	0.0	0.3	0	0.3	0.2
28	0.2	0.5	1	2	1	2	1	0.0	0.3	0	0.3	0.2
29	0.2	0.5	1	2	1	2	1	0.0	0.3	0	0.3	0.2
30	0.2	0.5	1	2	1	2	1	0.0	0.3	0	0.3	0.2
31	0.2	....	1	2	....	2	....	0.0	....	0	0.3	....
Mean	0.2	0.5	1	2	1	2	1	0.5	0.2	0	0.4	0.2
Max.	0.2	0.5	1	3	2	2	1	1.0	0.3	0	0.5	0.2
Min.	0.1	0.5	1	2	1	1	1	0.0	0.1	0	0.3	0.2
A. F.	0.9	30.0	61	157	87	93	59	30.0	10.0	0	24.0	12.0

Total Acre Feet 572.

DAWSON COUNTY DRAIN NO. 2—Section 25-10-23

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	6	7	7	7	6	5	6	8	6	8	9
2	6	6	7	7	7	6	5	6	8	10	8	9
3	6	6	7	7	7	6	5	6	8	10	8	9
4	6	6	7	7	7	6	5	6	8	10	8	9
5	6	6	7	7	7	6	5	6	8	10	8	9
6	6	6	6	7	7	6	5	6	8	7	12	9
7	6	6	6	7	7	6	5	6	8	7	12	9
8	6	6	6	7	7	6	5	6	8	7	12	9
9	6	6	6	7	7	6	5	6	8	7	12	9
10	6	6	6	7	7	6	5	6	8	7	12	9
11	6	6	6	6	7	6	5	6	8	6	12	8
12	6	6	6	6	7	6	5	6	8	6	12	8
13	6	6	6	6	7	6	5	6	8	6	12	8
14	6	6	6	6	7	6	5	6	8	6	12	8
15	6	6	6	6	7	6	5	6	8	6	12	8
16	6	6	5	6	7	6	5	6	8	7	12	7
17	6	6	5	6	7	6	5	6	8	7	12	7
18	6	6	5	6	7	6	5	6	8	7	12	7
19	6	6	5	6	7	6	5	6	8	7	12	7
20	6	8	5	6	7	6	5	6	8	7	12	7
21	6	8	5	6	7	6	5	6	8	7	11	6
22	6	8	5	6	7	6	5	6	8	7	11	6
23	6	8	5	6	7	6	8	6	8	7	11	6
24	6	8	5	6	7	6	8	6	8	7	11	6
25	6	8	5	6	7	6	8	6	8	7	11	6
26	6	7	6	6	7	6	8	6	8	10	6	6
27	6	7	6	6	7	6	8	6	8	10	6	6
28	6	7	6	6	7	6	8	6	8	10	6	6
29	6	7	6	6	7	6	8	6	8	10	6	6
30	6	7	6	6	....	6	8	8	6	8	10	6
31	6	....	6	6	....	6	....	8	....	8	10	....
Mean	6	7	6	6	7	6	6	8	7	11	11	7
Max.	6	8	7	7	7	6	8	8	10	12	9	9
Min.	6	6	5	6	7	6	5	6	6	8	6	6
A. F.	369	391	359	389	403	369	345	377	456	454	664	446

Total Acre Feet 5,022.

REPORT OF SECRETARY

DEGRAW DRAIN—Section 24-20-51

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	8	6	5	4	8	5	3	3	3	5	7
2	9	8	6	5	4	8	5	3	3	3	5	7
3	9	8	6	5	4	8	5	3	3	3	5	7
4	9	8	6	5	4	8	5	3	3	3	5	7
5	9	8	6	5	4	8	5	3	3	3	5	7
6	9	7	6	5	6	6	5	3	3	3	5	7
7	9	7	6	5	6	6	5	3	3	3	5	7
8	9	7	6	5	6	6	5	3	3	3	5	7
9	9	7	6	5	6	6	5	3	3	3	5	7
10	9	7	6	5	6	6	5	3	3	3	5	7
11	9	7	6	5	6	7	4	3	3	3	5	8
12	9	7	6	5	6	7	4	3	3	3	5	8
13	9	7	6	5	6	7	4	3	3	3	5	8
14	9	7	6	5	6	7	4	3	3	3	5	8
15	9	7	6	5	6	7	4	3	3	3	5	8
16	9	7	6	5	6	7	4	3	3	4	6	8
17	9	7	6	5	6	7	4	3	3	4	6	8
18	9	7	6	5	6	7	4	3	3	4	6	8
19	9	7	6	5	6	7	4	3	3	4	6	8
20	9	7	6	5	6	7	4	3	3	4	6	8
21	8	7	6	4	9	6	3	3	3	4	6	9
22	8	7	6	4	9	6	3	3	3	4	6	9
23	8	7	6	4	9	6	3	3	3	4	6	9
24	8	7	6	4	9	6	3	3	3	4	6	9
25	8	7	6	4	9	6	3	3	3	4	6	9
26	8	6	5	4	8	6	3	3	3	4	6	9
27	8	6	5	4	8	6	3	3	3	4	6	9
28	8	6	5	4	8	6	3	3	3	4	6	9
29	8	6	5	4	8	6	3	3	3	4	6	9
30	8	6	5	4	....	6	3	3	3	4	6	9
31	8	....	5	4	....	6	....	3	....	4	6	....
Mean	9	7	6	5	6	7	4	3	....	4	6	8
Max.	9	8	6	5	9	8	5	3	3	4	6	9
Min.	8	6	5	4	4	6	3	3	3	3	5	7
A. F.	532	417	357	285	371	409	238	184	178	216	339	476
Total Acre Feet	4,002.											

DUGOUT (UPPER) CREEK—Section 21-20-50

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	8	6	4	3	2	1	1	30	10	19	9
2	15	8	6	4	3	2	1	1	20	10	8	10
3	15	8	6	4	3	2	1	1	10	2	8	10
4	15	8	6	4	3	2	1	1	3	2	7	10
5	15	8	6	4	3	2	1	1	2	2	8	11
6	15	8	6	4	3	1	1	1	6	3	8	11
7	15	8	6	4	3	1	1	1	3	2	8	11
8	15	8	6	4	3	1	1	1	2	2	9	12
9	15	8	6	4	3	1	1	1	8	2	8	14
10	15	8	6	4	3	1	1	1	3	2	8	14
11	12	7	5	4	3	2	1	1	5	2	9	15
12	12	7	5	4	3	2	1	1	5	2	10	15
13	12	7	5	4	3	2	1	1	2	3	10	15
14	12	7	5	4	3	2	1	1	2	3	9	15
15	12	7	5	4	3	2	1	1	9	4	9	15
16	12	7	5	4	3	2	1	1	15	12	9	15
17	12	7	5	4	3	2	1	1	33	20	8	15
18	12	7	5	4	3	2	1	1	28	21	8	14
19	12	7	5	4	3	2	1	1	35	22	9	13
20	12	7	5	4	3	2	1	1	3	20	10	14
21	10	7	5	3	2	2	3	5	22	18	10	15
22	10	7	5	3	2	2	3	5	30	13	10	14
23	10	7	5	3	2	2	3	5	26	8	10	14
24	10	7	5	3	2	2	3	5	30	13	10	14
25	10	7	5	3	2	2	3	5	9	18	10	15
26	10	6	4	3	2	2	2	5	2	16	10	14
27	10	6	4	3	2	2	2	5	3	15	10	11
28	10	6	4	3	2	2	2	5	3	14	10	14
29	10	6	4	3	2	2	2	5	2	14	10	15
30	10	6	4	3	....	2	2	5	9	22	9	14
31	10	....	4	3	....	2	....	5	....	30	9	....
Mean	12	7	5	4	3	2	1	1	12	11	9	13
Max.	15	8	6	4	3	2	3	5	35	30	19	15
Min.	10	6	4	3	2	1	1	1	2	2	8	9
A. F.	754	426	315	224	155	113	89	119	700	649	575	796
Total Acre Feet	4,945.											

DEPARTMENT OF PUBLIC WORKS

ELKHORN RIVER AT NELIGH—Section 20-25-6 W.

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80	N.R.	N.R.	N.R.	N.R.	338	302	243	298	12	184	95
2	80	.....	.....	.....	.....	298	310	236	390	138	145	88
3	80	.....	.....	.....	.....	262	302	229	468	354	208	87
4	80	.....	.....	.....	.....	222	314	218	464	382	278	91
5	80	.....	.....	.....	.....	187	306	208	362	354	334	93
6	80	.....	.....	.....	.....	162	306	226	274	302	370	88
7	80	.....	.....	.....	.....	145	286	258	208	226	496	86
8	94	.....	.....	.....	134	110	274	262	243	180	410	83
9	94	126	.....	.....	.....	60	243	243	491	135	318	87
10	108	N.R.	.....	.....	.....	70	222	232	496	116	243	94
11	108	.....	.....	144	.....	70	222	229	665	101	215	91
12	108	.....	N.R.	.....	.....	120	236	243	580	87	240	101
13	138	.....	.....	.....	.....	179	243	243	595	83	201	101
14	150	.....	.....	.....	.....	200	232	236	565	90	148	98
15	125	.....	.....	.....	.....	250	229	198	496	101	140	97
16	125	.....	.....	.....	.....	300	226	198	460	113	138	93
17	116	.....	.....	.....	.....	350	218	187	510	118	125	93
18	108	.....	.....	.....	.....	424	222	177	550	122	115	90
19	101	133	.....	.....	.....	428	236	162	515	125	101	87
20	94	N.R.	.....	.....	.....	424	270	148	468	114	90	87
21	94	.....	.....	.....	.....	362	262	138	198	101	101	90
22	101	.....	.....	.....	.....	330	240	120	69	88	98	90
23	101	.....	.....	.....	.....	286	250	122	61	83	93	93
24	101	.....	.....	.....	.....	322	278	118	55	83	87	90
25	94	.....	.....	.....	.....	402	298	162	40	80	86	93
26	94	.....	.....	.....	.....	402	318	258	31	81	88	94
27	94	.....	.....	.....	.....	402	306	232	24	80	93	122
28	108	.....	.....	.....	.....	382	290	208	20	73	98	118
29	111	.....	.....	.....	.....	342	274	226	16	70	95	115
30	115	.....	.....	.....	.....	322	258	226	14	81	90	113
31	115	.....	.....	.....	.....	310	.....	266	.....	138	97	.....
Mean	102	*160	*160	*135	*180	273	266	208	322	136	178	95
Max.	150	.....	.....	.....	.....	428	318	266	665	382	496	122
Min.	80	.....	.....	.....	.....	60	218	118	14	70	86	83
A. F.	6270	9520	9840	8360	10400	16800	15800	12800	19200	8360	10900	5650
Total Acre Feet		134,000.										
		*Estimated.										

ELKHORN RIVER AT WATERLOO—Section 3-15-10 E.

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	322	343	520	1240	610	7470	1110	852	1190	788	247	498
2	277	330	520	1100	610	5400	1130	828	1890	597	292	465
3	274	351	531	1090	610	4320	1120	820	1870	526	420	455
4	274	351	543	896	610	3960	1120	820	2470	514	1120	450
5	264	351	537	914	610	3690	1110	1050	1770	1220	543	410
6	339	347	487	800	675	1800	1080	3050	1680	1190	455	387
7	396	351	482	800	675	1800	1060	10600	1750	812	482	392
8	392	351	537	800	675	1800	1060	5850	1480	1290	1600	378
9	677	369	591	800	675	1800	959	2390	1810	914	869	373
10	896	373	616	800	675	1800	914	2060	5520	622	887	415
11	503	382	780	700	680	2000	887	1680	3210	543	1150	476
12	396	492	941	700	680	2000	860	1420	6060	450	3450	537
13	410	425	728	700	680	2000	828	1350	3650	420	6780	604
14	401	435	560	700	680	2000	788	1260	3760	364	3190	941
15	378	460	610	631	680	2000	780	1180	2040	326	3670	860
16	364	487	498	625	670	3500	814	1120	1770	311	2500	656
17	369	471	531	625	670	6500	836	1030	2020	307	1740	592
18	369	450	564	625	670	3120	812	968	1870	292	1330	503
19	364	455	597	625	670	2020	772	896	1660	288	1120	465
20	373	503	629	625	656	1800	896	828	1340	274	950	430
21	351	597	684	630	700	1720	959	788	1200	274	820	735
22	335	742	780	630	700	1660	1220	758	1180	267	728	1100
23	320	1570	1050	670	700	1600	1230	698	1180	295	649	1090
24	339	2009	1030	630	700	1630	1130	698	1100	247	585	1250
25	326	1260	986	630	700	1650	1450	705	1870	229	537	691
26	330	812	878	600	1350	1740	1420	814	1660	235	511	610
27	330	622	820	600	2000	1650	1080	2700	2470	217	560	555
28	330	656	758	600	3100	1370	968	1970	2400	214	560	526
29	343	610	735	600	5820	1250	923	1560	1720	232	543	537
30	339	560	735	600	.....	1220	887	1550	1140	217	537	549
31	343	.....	1080	600	.....	1190	.....	1560	.....	223	566	.....
Mean	379	584	688	727	998	2500	1010	1770	2170	474	1250	598
Max.	896	2000	1080	1240	5820	7470	1450	10600	6060	1290	6780	1250
Min.	264	330	482	600	610	1190	772	698	1100	214	247	373
A. F.	23200	34800	42300	44700	57400	154000	60100	109000	129000	29100	76900	35600
Total Acre Feet		796,000.										

REPORT OF SECRETARY

ELM CREEK—Section 33-9-18
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	1	1	1	1	2	0	5	20	20	35	17
2	1	1	1	1	1	2	0	5	20	100	24	12
3	1	1	1	1	1	2	5	5	20	50	16	8
4	1	1	1	1	1	2	0	5	20	20	9	7
5	1	1	1	1	1	2	0	5	20	20	8	6
6	1	1	1	1	1	2	0	8	20	10	6	9
7	1	1	1	1	1	1	0	8	20	10	7	4
8	1	1	1	1	1	1	0	8	20	10	8	2
9	1	1	1	1	1	1	0	8	20	10	8	0
10	1	1	1	1	1	1	0	8	50	10	8	7
11	1	1	1	1	1	1	0	9	81	5	6	14
12	1	1	1	1	1	1	0	9	80	0	18	14
13	1	1	1	1	2	1	0	9	50	11	15	13
14	1	1	1	1	2	1	0	9	40	2	13	13
15	1	1	1	1	2	1	0	9	30	1	14	12
16	1	1	1	1	2	1	0	9	80	1	6	14
17	1	1	1	1	2	1	0	9	90	1	15	15
18	1	1	1	1	2	2	2	9	100	0	24	13
19	1	3	1	1	2	2	2	9	90	22	20	11
20	1	3	1	1	2	2	2	9	80	26	15	11
21	1	3	1	1	1	1	2	9	40	31	12	12
22	1	3	1	1	1	1	10	9	40	16	9	10
23	1	3	1	1	1	1	10	9	40	15	7	8
24	1	3	1	2	1	1	10	9	40	11	6	12
25	1	3	1	2	1	1	10	9	40	8	10	17
26	1	2	1	2	1	1	10	9	20	4	15	13
27	1	2	1	2	1	1	10	9	20	1	17	10
28	1	2	1	2	1	1	10	9	20	13	20	7
29	1	2	1	2	1	1	10	9	20	26	17	19
30	1	2	1	2	....	1	10	20	20	36	14	19
31	1	....	1	2	....	1	....	20	....	47	15	....
Mean	1	2	1	1	1	1	3	9	42	17	13	11
Max.	1	3	1	2	2	2	10	20	100	100	35	19
Min.	1	1	1	1	1	1	0	5	20	0	6	0
A. F.	61	97	61	77	73	79	194	547	2481	1065	827	652
Total Acre Feet	6,214.											

FAIRFIELD SEEP—Section 18-21-53
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	2	3	1	2	3	1	0	1	3	1	3
2	4	2	3	1	2	3	1	0	1	3	1	3
3	4	2	3	1	2	3	1	0	1	3	1	3
4	4	2	3	1	2	3	1	0	1	3	1	3
5	4	2	3	1	2	3	1	0	1	3	1	3
6	4	2	3	1	2	3	1	0	2	3	1	4
7	4	2	3	1	2	3	1	0	2	3	1	4
8	4	2	3	1	2	3	1	0	2	3	1	4
9	4	2	3	1	2	3	1	0	2	3	1	4
10	4	2	3	1	2	10	1	0	2	3	1	4
11	4	2	2	1	2	10	1	0	2	3	2	4
12	4	2	2	1	2	10	1	0	2	3	2	4
13	4	2	2	1	2	5	1	0	2	3	2	4
14	4	2	2	1	2	5	1	0	2	3	2	4
15	4	2	2	1	2	5	1	0	2	3	2	4
16	3	2	2	1	2	3	1	1	2	3	2	4
17	3	2	2	1	2	3	1	1	2	3	2	4
18	3	2	2	1	2	3	1	1	2	3	2	4
19	3	2	2	1	2	3	1	1	2	3	2	4
20	3	2	2	1	2	3	1	1	2	3	2	4
21	3	2	1	1	3	3	0	1	3	2	2	5
22	3	2	1	1	3	3	0	1	3	2	2	5
23	3	2	1	1	3	3	0	1	3	2	2	5
24	3	2	1	1	3	3	0	1	3	2	2	5
25	3	2	1	1	3	3	0	1	3	2	2	5
26	3	2	1	1	3	2	0	1	3	2	3	5
27	3	2	1	1	3	2	0	1	3	2	3	5
28	3	2	1	1	3	2	0	1	3	2	3	5
29	3	2	1	1	3	2	0	1	3	2	3	5
30	3	2	1	1	3	2	0	1	3	2	3	5
31	3	....	1	1	....	2	....	1	....	2	3	....
Mean	3	2	1	1	2	4	1	1	2	3	2	4
Max.	4	2	3	1	3	10	1	1	3	3	3	5
Min.	3	2	1	1	2	2	0	0	1	2	1	3
A. F.	214	119	121	61	133	226	40	32	129	163	115	248
Total Acre Feet	1,601.											

DEPARTMENT OF PUBLIC WORKS

579

FANNING SEEP—Section 27-23-56

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	4	5	5	5	6	3	3	4	2	4	6
2	4	4	5	5	5	6	3	3	4	2	4	6
3	4	4	5	5	5	6	3	3	4	2	4	6
4	4	4	5	5	5	6	3	3	4	2	4	6
5	4	4	5	5	5	6	3	3	4	2	4	6
6	4	4	5	5	5	6	3	3	4	2	4	6
7	4	4	5	5	4	5	3	4	4	2	4	6
8	4	4	5	5	4	5	3	4	4	2	4	6
9	4	4	5	5	4	6	3	4	4	2	4	6
10	4	4	5	5	4	6	3	4	4	2	4	6
11	4	4	5	5	4	6	2	4	4	2	4	6
12	4	4	5	5	4	6	2	4	4	2	4	6
13	4	4	5	5	4	6	2	4	4	2	4	6
14	4	4	5	5	4	4	2	4	4	2	4	6
15	4	4	5	5	4	4	2	4	4	2	4	6
16	4	4	5	5	4	4	2	3	10	3	5	6
17	4	4	5	5	4	4	2	3	8	3	5	6
18	4	4	5	5	4	4	2	3	8	3	5	6
19	4	4	5	5	4	4	2	3	8	3	5	6
20	4	4	5	5	4	4	2	3	8	3	5	6
21	4	4	5	5	4	3	3	3	6	3	5	7
22	4	4	5	5	4	3	3	3	6	3	5	7
23	4	4	5	5	4	3	3	3	6	3	5	7
24	4	4	5	5	4	3	3	3	6	3	5	7
25	4	4	5	5	4	3	3	3	6	3	5	7
26	4	4	5	5	4	3	3	3	4	3	5	7
27	4	4	5	5	4	3	3	3	4	3	5	7
28	4	4	5	5	4	3	3	3	4	3	5	7
29	4	4	5	5	4	3	3	3	4	3	5	7
30	4	4	5	5	....	3	3	3	4	3	5	7
31	4	....	5	5	....	3	....	3	....	3	5	....
Mean	4	4	5	5	4	4	3	3	5	3	5	6
Max.	4	4	5	5	5	6	3	4	10	3	5	7
Min.	4	4	5	5	4	3	2	3	4	2	4	6
A. F.	246	238	307	307	240	270	157	204	301	155	278	377
Total Acre Feet	3,080.											

FRENCHMAN RIVER AT HAMLET—Section 19-5-34

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	86	87	88	72	105	130	89	103	95	87	151	73
2	90	87	93	77	108	129	92	103	124	95	171	73
3	87	82	97	91	110	124	91	100	103	127	160	72
4	86	91	89	129	110	118	92	100	115	109	137	72
5	87	88	88	116	114	114	91	103	119	87	126	71
6	81	89	88	110	120	111	93	102	111	75	119	71
7	84	89	89	114	124	103	91	101	106	70	116	71
8	81	87	88	124	130	100	93	98	99	75	104	71
9	85	87	87	107	134	103	93	97	102	75	91	71
10	83	84	91	108	132	105	93	95	95	69	75	70
11	86	87	91	110	132	110	93	95	102	67	83	69
12	92	91	89	106	131	115	91	95	99	67	79	68
13	87	86	92	111	131	120	95	93	99	61	81	68
14	91	88	87	108	130	122	90	94	98	63	79	73
15	92	89	85	105	128	127	87	92	95	67	127	84
16	91	91	96	106	134	119	89	91	119	63	121	83
17	92	84	97	110	140	121	86	90	136	67	93	83
18	89	89	99	112	129	127	91	86	123	75	92	82
19	90	87	101	116	131	100	96	81	167	68	88	77
20	86	89	98	118	128	94	98	80	157	65	87	85
21	92	87	88	116	132	97	97	81	126	67	86	87
22	91	81	89	113	135	100	96	77	122	77	84	88
23	87	83	97	114	132	98	97	79	112	99	83	87
24	83	89	93	116	135	102	114	80	109	86	81	87
25	87	87	91	114	135	95	107	75	106	83	80	87
26	90	105	97	121	137	95	103	87	106	80	79	92
27	79	104	94	122	139	92	101	78	102	78	78	91
28	87	93	91	122	137	93	108	85	101	77	76	94
29	86	92	89	116	135	94	109	87	94	76	75	98
30	91	89	95	115	....	89	103	88	91	109	75	98
31	89	....	97	100	....	80	....	99	....	288	74	....
Mean	87	89	92	110	128	107	96	91	111	86	98	80
Max.	92	105	101	129	140	120	114	103	167	288	171	98
Min.	79	81	85	72	105	80	86	75	91	61	74	68
A. F.	5370	5280	5660	6760	7360	6580	5690	5580	6600	5260	6050	4750
Total Acre Feet	70,900.											

REPORT OF SECRETARY

FRENCHMAN RIVER AT CHAMPION—Section 19-6-39

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	40	28
2	36	28
3	30	28
4	25	28
5	17	29
6	22	30
7	20	28
8	20	25
9	19	27
10	20	27
11	20	28
12	18	29
13	27	30
14	28	25
15	27	25
16	25	23
17	25	23
18	25	23
19	30	30
20	28	27
21	24	26
22	25	26
23	22	24
24	19	23
25	19	26
26	20	36
27	32	32
28	38	32
29	58	29
30	77	32
31	58	28
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	25	28
Max.	40	36
Min.	17	23
A. F.	1550	1640

FRENCHMAN RIVER AT CULBERTSON—Section 16-3-31

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	48	.....	.....	.....	.....	200	140	160	110	64	333	16
2	48	.....	.....	.....	.....	200	140	160	135	45	186	12
3	48	.....	.....	.....	.....	205	140	160	124	43	144	10
4	48	.....	.....	.....	.....	218	160	140	123	46	135	10
5	48	.....	.....	.....	.....	205	160	140	164	56	102	16
6	61	.....	.....	.....	.....	205	160	140	140	44	81	14
7	61	.....	.....	.....	.....	205	171	140	130	48	75	13
8	61	.....	.....	.....	.....	205	160	140	128	43	65	10
9	61	.....	.....	.....	.....	190	160	140	126	26	57	9
10	61	.....	.....	.....	.....	190	171	115	126	21	44	9
11	104	.....	.....	.....	.....	200	182	107	126	20	40	14
12	58	.....	.....	.....	.....	200	182	99	126	20	48	14
13	58	.....	.....	.....	.....	210	160	91	113	33	38	17
14	58	.....	.....	*170	.....	220	160	91	110	28	37	16
15	58	.....	.....	.....	.....	231	160	75	92	28	37	15
16	58	.....	.....	.....	.....	244	150	75	78	33	40	16
17	58	.....	.....	.....	.....	218	115	68	133	32	77	16
18	58	.....	.....	.....	.....	231	150	48	120	32	48	17
19	58	.....	.....	.....	.....	231	150	48	393	30	40	16
20	58	*146	.....	.....	.....	218	131	42	226	26	36	17
21	56	.....	.....	.....	.....	205	107	36	198	35	31	21
22	56	.....	.....	.....	.....	205	107	33	144	77	28	21
23	60	.....	.....	.....	.....	205	99	33	144	28	26	22
24	60	.....	.....	.....	.....	205	115	33	144	34	25	23
25	56	.....	.....	.....	.....	205	123	34	126	42	24	26
26	60	.....	.....	.....	.....	205	107	36	120	39	21	34
27	133	.....	.....	.....	.....	182	115	35	130	37	21	34
28	133	.....	.....	.....	.....	182	182	39	116	37	23	39
29	133	.....	.....	.....	.....	182	171	53	91	46	23	39
30	133	.....	.....	.....	.....	193	171	71	75	57	19	39
31	133	.....	.....	.....	.....	182	.....	88	.....	276	17	.....
Mean	71	145	150	155	170	206	147	86	137	46	62	19
Max.	133	.....	.....	.....	.....	244	182	160	393	276	333	39
Min.	48	.....	.....	.....	.....	182	99	33	75	20	17	9
A. F.	4330	8630	9220	9530	9780	12700	8750	5290	8150	2830	3810	1140

Total Acre Feet 84,200.

*Estimated.

GERING DRAIN AT GERING—Section 6-21-54

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	61	30	28	24	22	23	23	22	56	48	96	76
2	67	30	28	24	22	25	23	23	48	48	82	76
3	58	30	28	24	22	24	24	23	50	58	82	67
4	34	30	28	24	22	23	23	24	43	56	70	56
5	43	30	28	24	22	25	23	22	48	58	79	79
6	36	30	28	24	22	25	23	22	48	46	64	70
7	56	30	28	24	21	24	23	20	58	56	61	70
8	56	30	28	24	26	23	23	24	38	56	64	86
9	53	30	28	24	26	25	28	23	40	56	79	76
10	53	30	28	24	27	24	24	22	46	50	58	82
11	43	30	28	24	22	24	24	23	43	61	61	86
12	50	30	28	24	22	25	24	20	53	89	61	89
13	48	30	28	24	22	23	24	20	61	64	64	86
14	46	30	28	24	22	29	25	20	67	64	64	79
15	46	30	28	24	23	29	22	27	67	61	64	73
16	43	30	26	22	22	23	22	21	96	64	58	76
17	36	30	26	22	22	24	22	20	110	110	58	82
18	36	30	26	22	23	24	22	20	110	82	58	70
19	36	30	26	22	23	23	22	20	141	82	64	70
20	34	30	26	22	22	26	22	20	141	89	58	76
21	33	30	28	22	25	28	22	20	125	79	64	64
22	33	30	26	22	24	24	21	20	73	70	58	64
23	34	30	26	22	24	24	38	50	89	70	70	70
24	32	30	26	22	24	24	29	33	157	89	67	76
25	36	30	26	22	24	23	29	18	110	96	61	82
26	31	28	26	22	24	24	25	20	53	96	61	64
27	31	28	26	22	24	24	26	28	61	89	61	70
28	32	28	26	22	24	24	28	48	50	70	67	110
29	32	28	26	22	24	24	28	53	61	86	70	89
30	31	28	26	22	....	24	24	58	56	82	67	96
31	31	....	26	22	....	24	....	103	....	96	70	....
Mean	42	30	27	23	23	25	25	29	73	72	67	77
Max.	67	30	28	24	27	29	38	103	157	110	96	110
Min.	31	28	26	22	21	23	21	18	38	46	58	56
A. F.	2560	1770	1660	1410	1330	1510	1460	1760	4360	4400	4090	4580
Total Acre Feet	30,890.											

GOTHENBURG POWER WASTE—West 16th Street, Gothenburg

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	122	210	150	174	119	110	119	150	152	113	136	123
2	122	210	150	174	119	110	119	150	133	83	128	128
3	122	210	150	174	119	110	119	150	142	100	135	134
4	122	210	150	174	119	110	119	150	154	100	133	128
5	122	210	150	174	119	110	119	150	136	126	145	140
6	122	196	158	162	116	110	122	170	155	136	145	146
7	123	196	158	162	116	110	122	171	157	118	122	133
8	123	196	158	162	116	110	122	140	141	104	157	157
9	123	196	158	162	116	110	122	171	139	175	162	154
10	123	196	158	162	116	110	122	154	139	106	166	154
11	145	184	166	150	113	110	125	171	139	118	137	171
12	145	184	166	150	113	110	125	154	142	137	160	180
13	145	184	166	150	113	110	125	167	149	160	156	184
14	145	184	166	150	113	110	126	180	151	136	154	71
15	145	184	166	150	113	110	127	150	152	115	141	225
16	167	170	175	138	110	110	133	180	149	103	151	202
17	167	170	175	138	110	110	133	171	123	131	167	180
18	167	170	175	138	110	110	133	162	171	128	149	171
19	167	170	175	138	110	110	133	162	157	141	118	162
20	167	170	175	138	110	110	133	162	167	103	146	180
21	189	156	175	126	110	113	139	180	146	100	128	156
22	189	156	175	126	110	113	139	134	137	128	142	154
23	189	156	175	126	110	113	139	162	135	136	154	161
24	189	156	175	126	110	113	139	180	104	91	157	162
25	189	156	175	126	110	113	139	162	178	67	154	171
26	210	142	175	122	110	116	145	95	157	83	146	184
27	210	142	175	122	110	116	145	175	61	86	140	186
28	210	142	175	122	110	116	145	162	140	82	141	158
29	210	142	175	122	110	116	145	180	142	74	128	164
30	210	142	175	122	....	116	145	180	139	78	109	171
31	210	....	175	122	....	116	....	180	....	96	86	....
Mean	161	176	167	145	113	112	131	161	142	108	141	159
Max.	210	210	175	175	119	116	145	180	178	160	166	225
Min.	122	142	150	122	110	110	119	95	61	67	86	71
A. F.	9896	10493	10255	8890	6506	6865	7771	9927	8503	6653	8713	9500
Total Acre Feet	103,972.											

REPORT OF SECRETARY

GRAVEL CREEK—Section 9-14-36

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	3	3	3	3	2	3	3	2	3	3	3
2	3	3	3	3	3	2	3	3	2	3	3	3
3	3	3	3	3	3	2	3	3	2	3	3	3
4	3	3	3	3	3	2	3	3	2	3	3	3
5	3	3	3	3	3	2	3	3	2	3	3	3
6	3	3	3	3	3	3	3	3	2	3	3	3
7	3	3	3	3	3	3	3	3	2	3	3	3
8	3	3	3	3	3	3	3	3	2	3	3	3
9	3	3	3	3	3	3	3	3	2	3	3	3
10	3	3	3	3	3	3	3	3	2	3	3	3
11	3	3	3	3	2	3	3	3	2	3	3	3
12	3	3	3	3	2	3	3	3	2	3	3	3
13	3	3	3	3	2	3	3	3	2	3	3	3
14	3	3	3	3	2	3	3	3	2	3	3	3
15	3	3	3	3	2	3	3	3	2	3	3	3
16	3	3	3	3	2	3	3	3	2	3	3	3
17	3	3	3	3	2	3	3	3	3	3	3	3
18	3	3	3	3	2	3	3	3	3	3	3	3
19	3	3	3	3	2	3	3	3	3	3	3	3
20	3	3	3	3	2	3	3	3	3	3	3	3
21	3	3	3	3	2	3	3	3	3	3	3	3
22	3	3	3	3	2	3	3	3	3	3	3	3
23	3	3	3	3	2	3	3	3	3	3	3	3
24	3	3	3	3	2	3	3	3	3	3	3	3
25	3	3	3	3	2	3	3	3	3	3	3	3
26	3	3	3	3	2	3	3	3	3	3	3	3
27	3	3	3	3	2	3	3	3	3	3	3	3
28	3	3	3	3	2	3	3	3	3	3	3	3
29	3	3	3	3	2	3	3	3	3	3	3	3
30	3	3	3	3	....	3	3	3	3	3	3	3
31	3	....	3	3	....	3	....	3	....	3	3	....
Mean	3	3	3	3	2	3	3	3	3	3	3	3
Max.	3	3	3	3	3	3	3	3	3	3	3	3
Min.	3	3	3	3	2	2	3	3	2	3	3	3
A. F.	184	179	184	184	135	174	179	184	149	184	184	179
Total Acre Feet	2,099.											

HORSE CREEK AT LYMAN—Section 25-28-58

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	50	N.R.	N.R.	15	40	25	21	22	74	67	256	117
2	38	....	....	15	40	21	23	23	89	78	232	134
3	50	....	....	15	42	25	22	21	45	81	182	112
4	50	....	....	15	31	26	22	19	40	67	137	108
5	50	*30	....	15	31	28	21	400	89	85	123	117
6	50	N.R.	....	13	55	28	24	64	78	81	119	104
7	56	....	....	20	58	19	22	97	40	74	97	97
8	50	....	*67	20	55	47	22	47	42	67	114	74
9	50	....	N.R.	20	108	47	32	29	50	61	114	110
10	50	....	....	20	172	45	27	25	52	67	102	102
11	41	....	....	25	114	45	23	21	50	78	89	151
12	47	....	....	25	132	40	23	18	64	74	102	114
13	41	....	....	25	119	18	22	17	85	93	123	156
14	35	....	....	25	52	40	19	16	74	93	102	106
15	35	....	....	25	67	19	19	16	128	97	119	137
16	35	....	....	30	47	61	19	16	366	33	97	156
17	35	....	....	30	66	45	19	16	436	146	119	151
18	35	....	....	30	64	34	19	16	490	172	119	151
19	35	....	....	30	66	32	19	15	454	119	119	123
20	35	....	....	30	70	39	18	350	508	110	119	166
21	47	....	....	35	66	33	18	25	508	95	119	156
22	41	....	....	35	83	33	18	31	366	112	102	151
23	35	....	....	35	76	20	67	22	326	125	89	182
24	35	....	....	35	55	28	52	26	185	154	97	182
25	35	....	....	35	68	26	33	40	114	134	102	70
26	35	....	....	39	54	25	28	26	87	123	106	238
27	35	....	....	38	46	25	29	29	70	137	119	210
28	35	....	....	40	34	23	26	45	85	110	137	232
29	26	....	....	35	30	23	26	29	55	151	156	204
30	35	....	....	35	....	23	26	35	67	161	151	166
31	47	....	....	40	....	22	....	97	....	300	146	....
Mean	41	43	39	27	67	31	25	53	171	108	126	143
Max.	56	....	....	40	172	61	67	400	508	300	256	238
Min.	26	....	....	13	30	18	18	15	40	33	89	70
A. F.	2530	2560	2400	1680	3850	1910	1510	3280	10200	6640	7750	8510
Total Acre Feet	52,800.											

*Estimated.

DEPARTMENT OF PUBLIC WORKS

INDIAN CREEK—Section 19-20-50

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	9	7	6	5	5	4	6	7	8	26	22
2	20	9	7	6	5	5	4	6	7	11	27	21
3	20	9	7	6	5	5	4	6	7	18	22	20
4	20	9	7	6	5	5	4	6	7	9	16	23
5	20	9	7	6	5	5	4	6	7	9	14	26
6	15	9	7	6	5	4	4	6	10	16	11	25
7	15	9	7	6	5	4	4	6	10	9	13	24
8	15	9	7	6	5	4	4	6	10	10	15	24
9	15	9	7	6	5	4	4	6	10	11	15	24
10	15	9	7	6	5	4	4	6	10	11	15	29
11	10	9	7	6	5	5	4	6	10	14	14	34
12	10	9	7	6	5	5	4	6	10	10	13	34
13	10	9	7	6	5	5	4	6	10	13	13	34
14	10	9	7	6	5	5	4	6	10	15	13	32
15	10	9	7	6	5	5	4	6	10	15	14	30
16	10	8	7	6	5	5	5	6	15	16	15	30
17	10	8	7	6	5	5	5	6	15	16	16	30
18	10	8	7	6	5	5	5	6	15	17	18	30
19	19	8	7	6	5	5	5	6	15	18	18	30
20	10	8	7	6	5	5	5	6	15	22	17	30
21	10	8	7	6	5	5	5	7	15	27	17	29
22	10	8	7	6	5	5	5	7	15	20	17	28
23	10	8	7	6	5	5	5	7	21	13	18	27
24	10	8	7	6	5	5	5	7	19	17	20	32
25	10	8	7	6	5	5	5	7	26	21	19	36
26	10	8	7	6	5	5	6	7	5	19	18	34
27	10	8	7	6	5	5	6	7	11	17	22	33
28	10	8	7	6	5	5	6	7	9	18	25	33
29	10	8	7	6	5	5	6	7	6	18	25	33
30	10	8	7	6	....	5	6	7	9	22	25	33
31	10	....	7	6	....	5	....	7	....	26	24	....
Mean	12	8	7	6	5	5	5	6	12	16	18	29
Max.	20	9	7	6	5	5	6	7	26	26	27	36
Min.	10	8	7	6	5	4	4	6	5	8	11	20
A. F.	764	506	430	369	287	297	278	391	686	964	1101	1725
Total Acre Feet	7,798.											

KEITH-LINCOLN COUNTY DRAIN—Section 23-14-35

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	3	3	3	3	3	3	1	4	2	2	2
2	3	3	3	3	3	3	3	1	4	2	2	2
3	3	3	3	3	3	3	3	1	4	2	2	2
4	3	3	3	3	3	3	3	1	4	2	2	2
5	3	3	3	3	3	3	3	1	4	2	2	2
6	3	3	3	4	3	3	3	1	2	3	2	2
7	3	3	3	4	3	2	3	1	2	3	2	2
8	3	3	3	4	3	2	3	1	2	3	2	2
9	3	3	3	4	3	2	3	1	2	3	2	2
10	3	3	3	4	3	2	3	1	2	3	2	2
11	3	3	3	3	3	3	3	1	2	3	2	2
12	3	3	3	3	3	3	3	1	2	3	2	2
13	3	3	3	3	3	3	3	1	2	3	2	2
14	3	3	3	3	3	3	3	1	2	3	2	2
15	3	3	3	3	3	3	3	1	2	3	2	2
16	3	3	3	3	3	4	2	2	2	3	2	2
17	3	3	3	3	3	3	2	2	2	3	2	2
18	3	3	3	3	3	4	2	2	2	3	2	2
19	3	3	3	3	3	4	2	2	2	3	2	2
20	3	3	3	3	3	4	2	2	2	3	2	2
21	3	3	3	3	2	3	3	2	1	3	2	2
22	3	3	3	2	3	3	2	2	1	3	2	2
23	3	3	3	2	3	3	2	2	1	3	2	2
24	3	3	3	2	3	3	2	2	1	3	2	2
25	3	3	3	2	3	3	2	2	1	3	2	2
26	3	3	3	2	3	3	2	2	1	3	2	2
27	3	3	3	2	3	3	2	2	1	3	2	2
28	3	3	3	2	3	3	2	2	1	3	2	2
29	3	3	3	2	3	3	2	2	1	3	2	2
30	3	3	3	2	....	3	2	2	1	3	2	2
31	3	....	3	2	....	3	....	2	....	3	2	....
Mean	3	3	3	3	3	3	3	2	2	3	2	2
Max.	3	3	3	4	3	4	3	2	4	3	2	2
Min.	3	3	3	2	3	2	2	1	1	2	2	2
A. F.	184	178	184	172	172	184	149	93	119	174	123	119
Total Acre Feet	1,851.											

DEPARTMENT OF PUBLIC WORKS

585

LINCOLN COUNTY DRAIN NO. 1—Section 30-14-30

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	83	70	55	55	50	50	45	40	103	100	115	122
2	83	70	55	55	50	50	45	40	105	100	112	124
3	83	70	55	55	50	50	45	40	107	108	109	122
4	83	70	55	55	50	50	45	40	109	107	105	121
5	83	70	55	55	50	50	45	40	113	99	101	120
6	85	70	55	55	50	40	45	40	109	102	103	119
7	85	70	55	55	50	40	45	40	105	99	105	120
8	85	70	55	55	50	40	45	40	103	94	104	120
9	85	70	55	55	50	40	45	40	103	100	103	118
10	85	70	55	55	50	40	45	40	99	105	104	117
11	85	60	54	55	50	45	45	50	107	105	105	116
12	85	60	54	55	50	45	45	50	111	100	104	115
13	85	60	54	55	50	45	45	50	111	102	102	113
14	85	60	54	55	50	45	45	50	111	102	302	111
15	85	60	54	55	50	45	45	50	107	97	103	109
16	85	60	54	50	55	45	40	70	105	97	104	107
17	85	60	54	50	55	45	40	70	99	95	106	106
18	85	60	54	50	55	45	40	70	102	92	104	106
19	85	60	54	50	55	45	40	70	113	96	102	102
20	85	60	54	50	55	45	40	70	103	99	100	99
21	85	55	54	50	55	45	40	80	105	98	99	98
22	85	55	54	50	55	45	40	80	105	97	101	97
23	85	55	54	50	55	45	40	80	110	100	103	98
24	85	55	54	50	55	45	40	80	103	102	100	99
25	85	55	54	50	55	45	40	80	99	102	97	98
26	85	55	54	50	50	45	40	90	100	102	102	97
27	85	55	54	50	50	45	40	90	102	102	107	94
28	80	55	54	50	50	45	40	90	102	102	112	91
29	75	55	54	50	50	45	40	90	95	100	117	90
30	70	55	54	50	....	45	40	90	103	99	118	89
31	70	....	54	50	....	45	....	90	....	107	119	....
Mean	83	62	54	52	52	45	42	63	105	100	105	108
Max.	85	70	55	55	55	50	45	90	113	108	119	124
Min.	70	55	54	50	50	40	40	40	95	92	97	89
A. F.	5117	3669	3340	3223	2975	2767	2529	3848	6246	6169	6482	6123
Total Acre Feet	52,788.											

LINCOLN COUNTY DRAIN NO. 2—Section 12-14-33

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	5	5	5	5	5	4	5	8	11	10	9
2	5	5	5	5	5	5	4	5	8	11	10	9
3	5	5	5	5	5	5	4	5	8	11	10	9
4	5	5	5	5	5	5	4	5	8	11	10	9
5	5	5	5	5	5	5	4	5	28	11	10	9
6	5	5	5	5	5	4	4	5	9	6	10	9
7	5	5	5	5	5	4	4	5	9	6	10	9
8	5	5	5	5	5	4	4	5	10	6	8	9
9	5	5	5	5	5	4	4	5	8	7	8	9
10	5	5	5	5	5	4	4	5	7	7	8	9
11	5	5	5	5	5	6	4	5	7	7	8	9
12	5	5	5	5	5	6	4	5	7	7	8	9
13	5	5	5	5	5	6	4	5	8	7	9	9
14	5	5	5	5	5	6	4	5	8	8	8	9
15	5	5	5	5	5	6	4	5	8	8	8	9
16	5	5	5	5	5	6	5	5	8	9	8	9
17	5	5	5	5	5	6	5	5	9	9	8	9
18	5	5	5	5	5	6	5	5	9	9	8	9
19	5	5	5	5	5	6	5	5	10	9	8	9
20	5	5	5	5	5	6	5	5	10	9	8	9
21	5	5	5	5	5	5	5	5	9	9	9	7
22	5	5	5	5	5	5	5	5	6	11	10	9
23	5	5	5	5	5	5	5	5	6	12	10	9
24	5	5	5	5	5	5	5	5	6	13	10	9
25	5	5	5	5	5	5	5	5	6	8	10	9
26	5	5	5	5	5	5	5	5	6	8	10	9
27	5	5	5	5	5	5	5	5	6	8	10	9
28	5	5	5	5	5	5	5	5	6	9	10	9
29	5	5	5	5	5	5	5	5	6	10	10	9
30	5	5	5	5	....	5	5	5	6	10	10	9
31	5	....	5	5	....	5	....	6	....	10	9	....
Mean	5	5	5	5	5	5	5	5	10	9	9	8
Max.	5	5	5	5	5	6	5	6	28	11	10	9
Min.	5	5	5	5	5	4	4	5	7	6	8	7
A. F.	307	297	307	307	287	317	268	329	565	551	543	496
Total Acre Feet	4,574.											

REPORT OF SECRETARY

LODGEPOLE CREEK—Section 33-15-57 W.

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	9	N.R.	N.R.	N.R.	N.R.	23	21	18	16	14	11	11
2	10	.....	.....	.....	.....	25	21	19	15	14	10	11
3	11	.....	.....	.....	.....	24	21	19	16	13	10	11
4	11	.....	.....	.....	.....	22	21	19	15	13	10	11
5	11	.....	.....	.....	*16	20	21	19	15	12	10	11
6	12	.....	.....	.....	.....	27	21	19	15	12	10	11
7	12	.....	.....	.....	.....	23	21	19	13	12	10	11
8	13	.....	.....	.....	.....	27	21	19	12	11	10	11
9	13	.....	.....	.....	.....	25	22	19	12	11	10	11
10	12	.....	.....	.....	.....	22	22	19	15	11	10	11
11	12	.....	.....	.....	.....	22	21	19	18	11	9	11
12	12	.....	.....	.....	.....	22	21	19	16	11	11	11
13	12	.....	.....	.....	.....	24	20	19	15	12	10	11
14	12	.....	.....	.....	.....	23	20	19	13	11	10	11
15	12	.....	.....	.....	.....	24	20	19	13	11	10	11
16	12	*17	.....	.....	.....	25	20	19	12	12	10	11
17	12	.....	.....	.....	.....	25	20	19	11	13	10	11
18	12	.....	.....	.....	.....	24	20	19	12	13	10	11
19	12	.....	.....	.....	.....	25	20	17	12	11	10	11
20	12	.....	.....	.....	.....	23	20	17	12	11	9	11
21	12	.....	.....	.....	.....	23	21	17	12	11	9	11
22	12	.....	.....	.....	.....	22	20	16	11	10	9	11
23	12	.....	.....	.....	.....	21	21	15	11	11	9	11
24	11	.....	.....	.....	.....	21	21	15	11	11	10	11
25	11	.....	.....	.....	.....	21	21	15	11	12	10	12
26	11	.....	.....	.....	.....	21	20	15	10	11	10	12
27	13	.....	.....	.....	.....	21	19	15	69	11	11	12
28	13	.....	.....	.....	.....	21	20	16	30	11	11	12
29	13	.....	.....	.....	.....	18	21	18	20	11	11	12
30	13	.....	.....	.....	.....	23	20	16	16	12	11	12
31	14	.....	.....	.....	.....	21	.....	16	.....	12	10	.....
Mean	12	16	15	14	18	23	.....	18	17	12	10	11
Max.	14	.....	.....	.....	.....	27	22	19	69	14	11	12
Min.	9	.....	.....	.....	.....	18	19	15	10	10	9	11
A. F.	732	952	922	861	1040	1100	1230	1090	1010	719	615	666
Total Acre Feet	11,200.											

*Estimated.

LONERGAN CREEK—Section 19-15-39

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3	4	7	10	10	10	5	5	5	6	4	6
2	3	4	7	10	10	10	5	5	5	6	3	6
3	3	4	7	10	10	10	5	5	5	6	2	6
4	3	4	7	10	10	10	5	5	5	6	1	5
5	3	4	7	10	10	10	5	5	5	6	1	6
6	4	4	7	10	10	8	5	5	5	6	1	6
7	4	4	7	10	10	8	5	5	5	2	1	6
8	4	4	7	10	10	8	5	5	1	2	1	6
9	4	4	7	10	10	8	5	5	1	2	1	6
10	4	4	7	10	10	8	5	5	1	2	1	7
11	4	4	6	10	10	10	5	5	1	2	2	6
12	4	4	6	10	10	10	5	5	1	2	1	6
13	4	4	6	10	10	10	5	5	1	2	1	6
14	4	4	6	10	10	10	5	5	1	2	1	6
15	4	4	6	10	10	10	5	5	1	2	1	6
16	5	4	6	9	8	10	6	5	1	2	1	7
17	5	4	6	9	8	10	6	5	1	3	1	8
18	5	4	6	9	8	10	6	5	1	3	2	8
19	5	4	6	9	8	10	6	5	1	4	3	8
20	5	4	6	9	8	10	6	5	1	4	3	4
21	6	4	8	9	12	8	6	4	1	4	3	4
22	6	4	8	9	12	8	6	4	1	4	4	4
23	6	4	8	9	12	8	6	4	1	5	5	4
24	6	4	8	9	12	8	6	4	1	5	6	4
25	6	4	8	9	12	8	6	4	6	5	6	4
26	5	5	8	9	12	8	6	4	6	4	7	4
27	5	5	8	9	12	8	6	4	6	4	7	5
28	5	5	8	9	12	8	6	4	6	4	7	5
29	5	5	8	9	12	8	6	4	6	4	6	5
30	5	5	8	9	.....	8	6	4	6	4	6	5
31	5	.....	8	9	.....	8	.....	4	.....	4	6	.....
Mean	5	4	7	9	10	9	6	5	3	4	3	6
Max.	6	5	8	10	12	10	6	5	6	6	7	8
Min.	3	4	6	9	8	8	5	4	1	2	1	4
A. F.	278	248	432	583	591	551	327	285	174	232	188	335
Total Acre Feet	4,224.											

LOST CREEK—Section 1-16-44

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	3	3	2	3	5	6	7	7	4	3	3
2	7	3	3	2	3	5	6	7	8	4	6	6
3	7	3	3	2	3	5	6	7	8	3	6	8
4	7	3	3	2	3	5	6	7	6	3	6	9
5	7	3	3	2	3	5	6	7	6	4	3	9
6	7	3	3	2	3	3	6	7	6	4	9	10
7	7	3	3	2	3	3	6	7	6	3	6	10
8	7	3	3	2	3	3	6	7	10	3	4	7
9	7	3	3	2	3	3	6	7	10	3	5	4
10	7	3	3	2	3	3	6	7	10	3	7	7
11	7	3	3	2	3	5	6	5	10	5	8	10
12	7	3	3	2	3	5	6	5	10	3	9	8
13	7	3	3	2	3	5	6	5	10	3	7	6
14	7	3	3	2	3	5	6	5	10	3	3	6
15	7	3	3	2	3	5	6	5	10	3	3	5
16	6	3	2	2	3	7	7	5	8	2	2	5
17	6	3	2	2	3	7	7	5	8	2	3	5
18	6	3	2	2	3	7	7	5	8	2	4	4
19	6	3	2	2	3	7	7	5	8	2	5	4
20	6	3	2	2	3	7	7	5	8	1	5	5
21	4	3	2	2	5	6	7	5	6	1	7	7
22	4	3	2	2	5	6	7	5	6	1	9	7
23	4	3	2	2	5	6	7	5	6	2	9	9
24	4	3	2	2	5	6	7	5	6	2	8	10
25	4	3	2	2	5	6	7	5	4	2	9	11
26	4	3	2	2	5	6	7	6	4	2	11	12
27	4	3	2	2	5	6	7	6	4	2	14	12
28	4	3	2	2	5	6	7	6	4	2	16	10
29	4	3	2	2	5	6	7	6	2	15	9	
30	4	3	2	2	....	6	7	6	5	2	13	9
31	4	....	2	2	....	6	....	6	....	3	8	....
Mean	6	3	2	2	4	5	6	6	7	3	7	8
Max.	7	3	3	2	5	7	7	7	10	5	16	12
Min.	4	3	2	2	3	3	6	5	4	1	2	3
A. F.	355	179	153	123	208	329	387	359	432	161	442	450
Total Acre Feet	3,578.											

LOUP (NORTH) RIVER at ST. PAUL—Section 22-15-10

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	782	771	980	716	625	1150	989	951	2000	725	879	674
2	802	750	938	636	625	1070	927	855	9500	716	855	678
3	782	771	950	613	625	1070	951	813	1960	1240	771	636
4	802	733	850	651	625	780	975	792	1210	1100	975	643
5	782	813	1010	600	625	350	891	771	951	963	1060	636
6	802	867	1200	650	775	255	867	915	879	927	792	628
7	824	855	1290	650	775	285	927	1020	1030	891	782	620
8	844	834	1360	650	775	200	855	975	8510	867	683	590
9	813	879	1390	650	775	190	813	855	5080	1440	1030	613
10	802	951	1220	650	775	180	834	750	1660	708	700	802
11	813	939	1370	700	950	250	927	733	1180	651	651	834
12	844	1030	1290	700	950	500	915	716	1550	651	760	903
13	903	975	1210	700	950	800	903	716	1300	651	700	834
14	1000	1030	963	700	950	1100	879	683	1210	620	725	813
15	951	915	867	700	1050	1300	879	683	1240	590	733	792
16	951	903	1100	725	1200	1750	891	733	1180	584	700	750
17	855	927	1180	725	1200	2840	903	683	1850	605	760	725
18	813	879	1360	725	1200	1660	975	658	1490	620	725	708
19	834	975	1480	725	1200	1950	1060	613	1750	643	636	691
20	834	1210	1720	827	1200	1040	1000	643	2020	651	834	708
21	834	1060	1550	750	1250	1180	975	636	1510	636	708	760
22	834	1090	1550	750	1250	951	1020	666	1770	1510	636	760
23	844	834	1660	750	1250	903	1090	643	1460	733	598	750
24	813	700	1410	750	1250	1060	1360	708	1340	683	605	760
25	844	636	1390	750	1250	1060	1320	824	1920	700	666	760
26	834	680	1290	650	1800	1000	1270	2040	951	691	633	760
27	771	694	1070	650	7840	1180	1000	1240	879	700	834	844
28	855	760	915	650	5000	1090	903	1220	855	683	802	879
29	855	980	834	650	2300	1030	927	1210	844	700	771	813
30	834	980	989	471	....	1090	951	1160	834	716	700	824
31	792	....	1150	490	....	1060	....	8860	....	951	700	....
Mean	837	881	1210	678	1420	956	973	1120	2000	792	757	738
Max.	1000	1210	1720	827	7840	2840	1360	8860	9500	1510	1060	903
Min.	771	636	834	471	625	180	813	613	334	584	598	590
A. F.	51500	52000	74400	41700	81700	58800	57900	68900	119000	48700	46500	43900
Total Acre Feet	745,000.											

REPORT OF SECRETARY

LOUP (MIDDLE) RIVER AT ST. PAUL—Section 10-14-10
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1020	930	1150	2500	900	1920	1100	1120	7830	1450	3080	870
2	1080	900	1180	1580	900	1450	1080	885	11300	1780	2060	915
3	1030	1070	1100	825	900	1210	1180	930	5550	1860	1270	810
4	1050	1050	1050	1150	900	1000	1240	1020	1940	2250	2860	754
5	1120	1050	916	850	900	850	1130	981	1980	855	2590	780
6	1100	915	1200	868	950	800	1030	998	1900	855	2500	767
7	1120	981	1200	810	950	750	1070	1120	1980	900	1920	825
8	1270	1020	1200	810	950	650	885	810	9430	810	1050	855
9	1360	885	1200	810	950	600	780	998	11400	810	1180	900
10	1320	1170	1200	810	950	550	981	1020	2250	1310	1340	1050
11	1380	1220	1540	810	1000	650	855	998	1380	998	1450	1200
12	1610	1180	1500	810	1010	750	754	917	2450	810	1500	1220
13	1560	1170	1500	810	1050	850	915	917	3080	702	1220	1170
14	1470	1170	1470	810	1050	1000	947	855	2170	702	1080	981
15	1450	1020	1100	810	1050	1400	1050	1030	1670	715	1220	981
16	1300	1030	1530	780	1250	2800	1100	1120	1180	715	1080	1020
17	1250	1120	1760	780	1250	8620	1170	1050	1650	741	1020	981
18	1200	1100	1800	780	1250	2930	1130	825	2150	825	1030	1030
19	1200	1130	1760	780	1250	1780	1030	810	3080	780	930	810
20	1210	1290	1760	820	1250	1380	1030	702	2570	741	1400	1120
21	1200	1310	1760	870	1500	1560	1150	870	1740	767	930	1120
22	1200	810	1650	870	1500	1780	1130	767	1320	2170	689	1080
23	1220	750	1720	870	1500	1800	1410	900	1100	1760	702	1200
24	1150	750	1760	870	1500	1270	1540	1030	1170	1580	676	1030
25	1020	750	2040	870	1500	1240	1840	1290	1130	1030	689	930
26	728	720	2000	950	1400	1310	1320	1610	1150	930	676	1130
27	780	742	1800	950	6120	1290	1170	1470	1490	1080	930	1310
28	1200	1100	1900	950	3650	1340	1080	1520	1410	1410	1050	1240
29	900	1100	2210	950	2470	1380	1180	1310	1650	981	947	1270
30	795	1100	2520	1100	....	1450	1130	1290	1630	900	915	1050
31	780	....	2500	1000	....	1320	....	14200	....	6550	915	....
Mean	1160	1020	1590	914	1440	1540	1110	1470	3000	1280	1320	1010
Max.	1610	1310	2520	2500	6120	8620	1840	14200	11400	6550	3080	1310
Min.	728	720	916	780	900	550	754	702	1100	702	676	754
A. F.	71800	60700	97800	58000	82800	94700	66000	90400	179000	78700	81200	60100
Total Acre Feet	1,020,000.											

LOUP RIVER AT GENOA—Section 25-17-4

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1710	1650	2660	2680	1320	5980	2450	1850	17400	N.R.	N.R.	N.R.
2	1790	1750	2370	2840	1320	3940	2150	1960	17200	....	....	....
3	1710	2000	2300	2970	1320	3030	2100	1930	11000	....	....	....
4	1710	2100	2280	2840	1320	2680	2180	1920	3520	....	....	....
5	1700	2060	2610	2470	1320	2450	2210	1900	3660	....	....	....
6	1750	1970	2660	1780	1600	2600	2180	1740	3490	....	....	....
7	1790	1930	2760	1600	1600	1800	2320	1760	2610	....	....	....
8	1790	1870	2860	1400	1600	1300	2300	1780	4310	....	....	....
9	1760	1880	3250	1400	1600	920	2040	1860	23500	....	....	....
10	1780	1870	3120	1400	1600	490	1960	1870	8020	....	....	....
11	1740	1990	2780	1300	1800	840	2210	1900	4010	....	....	....
12	1790	1810	2840	1450	1800	1200	2260	1870	4160	....	....	....
13	2280	2060	2890	1400	1800	1600	2230	1830	4200	....	....	....
14	2370	2120	2780	1400	1800	2000	2210	1820	3900	....	....	....
15	2340	2180	2320	1400	1800	2100	2120	1900	4090	....	....	....
16	2280	2160	2020	1200	1850	6800	2230	1790	7700	....	....	....
17	2260	2110	2130	1200	1850	12300	2230	1820	5740	....	....	....
18	2230	2020	2130	1200	1850	5630	2390	1810	3940	....	....	....
19	2160	1950	2520	828	1910	3190	2590	1640	6500	....	....	....
20	2030	1920	3350	1000	2100	2470	2510	1690	6100	....	....	....
21	1950	1860	3940	1300	2750	2020	2520	1640	3940	....	....	....
22	1990	1580	4400	1300	2750	2280	2760	1610	3460	....	....	....
23	1990	1480	3800	1300	2750	2520	2680	1650	3030	....	....	....
24	2040	1300	3730	1300	2750	2260	3030	2000	2540	....	....	....
25	2070	1080	4090	1300	2750	2130	3900	2360	2560	....	....	....
26	2030	1080	3700	1350	5500	2370	2710	4160	3700	....	....	....
27	1890	1490	3760	1350	20500	2540	2590	2280	3030	....	....	....
28	2000	1750	3420	1350	19700	2830	2300	2630	3320	....	....	....
29	2100	1920	3560	1350	8100	2780	2180	2970	2500	....	....	....
30	1950	2390	2940	1350	....	2780	2030	2730	2780	....	....	....
31	1800	....	2890	1350	....	3100	....	26100	....	....	....	....
Mean	1960	1860	3010	1560	3470	2940	2390	2840	5870	N.R.	N.R.	N.R.
Max.	2370	2410	4400	2970	20500	12300	3900	26400	23500	....	....	....
Min.	1700	1080	2020	....	....	490	1900	1640	2500	....	....	....
A. F.	121000	111000	185000	95900	200000	181000	142000	175000	349000	....	....	....
Total Acre Feet	1,560,000.											

MELBETA DRAIN—Section 24-21-54
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	3	4	3	3	3	3	2	1	0	1	2
2	5	3	4	3	3	3	3	2	1	0	1	2
3	5	3	4	3	3	3	3	2	1	0	1	2
4	5	3	4	3	3	3	3	2	1	0	1	2
5	5	3	4	3	3	3	3	2	1	0	1	2
6	5	3	4	3	3	2	3	2	1	0	1	4
7	5	3	4	3	3	2	3	2	1	0	1	4
8	5	3	4	3	3	2	3	2	1	0	1	4
9	5	3	4	3	3	2	3	2	1	0	1	4
10	5	3	4	3	3	2	3	2	1	0	1	4
11	5	3	4	3	3	4	3	2	0	0	1	6
12	5	3	4	3	3	4	3	2	0	0	1	6
13	5	3	4	3	3	4	3	2	0	0	1	6
14	5	3	4	3	3	4	3	2	0	0	1	6
15	5	3	4	3	3	4	3	2	0	0	1	6
16	5	3	3	2	3	4	2	4	0	0	1	6
17	5	3	3	2	3	4	2	4	0	0	1	6
18	5	3	3	2	3	4	2	4	0	0	1	6
19	5	3	3	2	3	4	2	4	0	0	1	6
20	5	3	3	2	3	4	2	4	0	0	1	6
21	5	3	3	2	3	4	2	6	0	0	1	6
22	5	3	3	2	3	4	2	6	0	0	1	6
23	5	3	3	2	3	4	2	6	0	0	1	6
24	5	3	3	2	3	4	2	6	0	0	1	6
25	5	3	3	2	3	4	2	6	0	0	1	6
26	5	3	3	2	3	3	2	6	0	0	1	6
27	5	3	3	2	3	3	2	6	0	0	1	6
28	5	3	3	2	3	3	2	6	0	0	1	6
29	5	3	3	2	3	3	2	6	0	0	1	6
30	5	3	3	2	....	3	2	6	0	0	1	6
31	5	....	3	2	....	3	....	6	....	0	1	....
Mean	5	3	3	2	3	3	2	4	0	0	1	5
Max.	5	3	4	3	3	4	3	6	1	0	1	6
Min.	5	3	3	2	3	2	2	2	0	0	1	2
A. F.	307	179	214	153	173	204	149	230	20	0	61	298
Total Acre Feet	1,988.											

MITCHELL SPILLWAY—Section 35-23-56
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	15	5	1	0	0	5	6	0	0	0	0
2	24	15	5	1	0	0	5	6	0	0	0	0
3	24	15	5	1	0	0	5	6	0	0	0	0
4	24	15	5	1	0	0	5	6	0	0	0	0
5	24	15	5	1	0	0	5	6	0	0	0	0
6	24	15	4	1	0	0	5	6	0	0	0	0
7	24	15	4	1	0	0	5	6	0	0	0	0
8	24	15	4	1	0	0	5	6	0	0	0	0
9	24	15	4	1	0	0	5	6	0	0	0	0
10	24	15	4	1	0	0	5	6	0	0	0	0
11	24	15	4	1	0	0	6	6	0	0	0	0
12	24	15	4	1	0	0	6	6	0	0	0	0
13	24	15	4	1	0	0	6	6	0	0	0	0
14	24	15	4	1	0	0	6	6	0	0	0	0
15	24	15	4	1	0	0	6	6	0	0	0	0
16	23	10	3	1	0	0	6	0	70	0	0	0
17	23	10	3	1	0	0	6	0	0	0	0	0
18	23	10	3	1	0	0	6	0	0	0	0	0
19	23	10	3	1	0	0	6	0	0	0	0	0
20	23	10	3	1	0	0	6	0	0	0	0	0
21	23	10	3	1	0	0	8	0	0	0	0	0
22	23	10	3	1	0	0	8	0	0	0	0	0
23	23	10	3	1	0	0	8	0	0	0	0	0
24	23	10	3	1	0	0	8	0	0	0	0	0
25	23	10	3	1	0	0	8	0	0	0	0	0
26	20	10	2	1	0	0	8	0	0	0	0	0
27	20	10	2	1	0	0	8	0	0	0	0	0
28	20	10	2	1	0	0	8	0	0	0	0	0
29	20	10	2	1	0	0	8	0	0	0	0	0
30	20	10	2	1	....	0	8	0	0	0	0	0
31	20	....	2	1	....	0	....	0	....	0	0	....
Mean	23	12	3	1	0	0	6	3	2	0	0	0
Max.	24	15	5	1	0	0	8	6	70	0	0	0
Min.	20	10	2	1	0	0	5	0	0	0	0	0
A. F.	1408	744	212	61	0	0	377	179	139	0	0	0
Total Acre Feet	3,120.											

REPORT OF SECRETARY

NINE MILE DRAIN AT MCGREW--Section 25-21-53

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	190	150	135	110	93	93	90	88	113	152	204	232
2	190	150	135	110	93	93	90	86	113	156	204	256
3	190	150	135	110	93	93	90	86	119	156	196	232
4	190	150	135	110	93	93	90	86	116	163	204	212
5	190	150	135	110	93	90	90	86	122	163	196	204
6	180	145	135	110	93	90	90	88	122	163	196	212
7	180	145	135	110	93	88	88	86	122	152	212	212
8	180	145	135	110	93	88	88	86	128	160	204	204
9	180	145	135	110	96	90	88	83	122	152	190	204
10	180	145	135	110	98	96	86	84	132	160	212	212
11	175	145	130	100	98	93	86	86	135	156	204	212
12	175	145	130	100	98	96	86	86	132	160	222	212
13	175	145	130	100	98	101	88	81	138	168	385	232
14	175	145	130	100	98	98	86	81	142	178	270	256
15	175	145	130	100	98	96	83	83	142	172	232	244
16	170	140	130	100	98	96	83	83	146	178	212	232
17	170	140	130	100	98	96	86	83	160	190	204	232
18	170	140	130	100	98	96	88	83	172	190	204	232
19	170	140	130	100	97	96	86	86	168	183	244	232
20	170	140	130	100	97	96	83	107	168	178	212	232
21	165	140	120	100	96	98	83	107	160	172	212	222
22	165	140	120	100	96	96	83	93	160	190	222	222
23	165	140	120	100	96	96	128	93	160	190	190	232
24	165	140	120	100	96	93	98	86	146	183	190	256
25	165	140	120	100	93	93	98	90	152	196	222	256
26	160	135	120	95	93	93	88	93	156	178	222	256
27	160	135	120	95	93	93	88	96	152	190	244	232
28	160	135	120	95	93	93	96	98	149	212	244	232
29	160	135	120	93	96	90	90	104	156	212	232	232
30	160	135	120	88	....	90	88	104	156	212	204	315
31	160	....	120	90	....	90	....	107	....	212	244	....
Mean	173	147	128	102	95	94	90	90	142	177	220	232
Max.	190	150	135	110	98	101	128	107	172	212	385	315
Min.	160	135	120	88	93	90	83	81	113	152	190	204
A. F.	10600	8750	7870	6260	5490	5760	5330	5530	8450	10900	13500	13800
Total Acre Feet	102,240.											

NIOBRARA RIVER AT DUNLAP--Section 27-29-48

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	N.R.	N.R.	N.R.	N.R.	101	80	54	34	23	17	22
2	18	....	....	....	....	89	79	53	32	19	22	19
3	18	....	....	....	....	85	80	52	32	22	21	19
4	13	....	....	....	....	80	79	51	31	20	25	23
5	12	....	....	....	....	75	75	202	21	17	26	23
6	7	....	....	....	....	71	73	419	20	17	26	22
7	12	....	....	....	....	60	67	137	17	15	22	22
8	12	....	....	....	....	48	67	52	14	17	22	20
9	12	19	....	....	....	41	69	50	27	17	22	19
10	11	....	....	....	....	40	67	47	16	16	22	18
11	11	....	....	....	....	45	67	43	15	17	20	22
12	20	....	....	....	....	57	67	46	15	16	19	21
13	10	....	....	....	....	53	65	45	13	28	20	19
14	15	....	....	....	....	79	67	47	13	17	19	16
15	14	....	....	....	....	83	62	42	13	17	20	18
16	16	....	....	....	....	87	61	45	17	20	19	17
17	16	....	....	....	....	89	58	45	17	20	18	18
18	10	....	....	....	....	107	59	45	16	18	17	18
19	20	....	....	....	....	95	49	44	16	19	14	6
20	20	....	....	....	....	103	30	43	18	19	14	5
21	22	....	....	....	....	95	28	44	22	19	12	5
22	22	....	....	....	....	95	24	42	33	20	12	1
23	30	....	....	....	....	95	52	40	21	22	12	2
24	30	....	....	....	....	91	81	38	21	17	12	2
25	29	....	....	....	....	90	84	37	19	16	24	2
26	29	....	....	....	....	87	81	36	51	17	27	2
27	29	....	....	....	....	86	83	37	50	34	23	2
28	29	....	....	....	....	85	83	38	35	22	26	2
29	28	....	....	....	....	83	56	36	31	19	24	2
30	29	....	....	....	....	82	59	36	21	17	26	2
31	29	....	....	....	....	79	....	36	....	17	24	....
Mean	19	25	25	20	10	79	65	65	24	19	20	13
Max.	30	....	....	....	....	107	81	419	51	31	27	23
Min.	7	....	....	....	....	40	21	36	13	15	12	1
A. F.	1190	1490	1540	1230	2300	4880	3880	3990	1400	1180	1240	774
Total Acre Feet	25,100.											
N.R.—No Record.												

DEPARTMENT OF PUBLIC WORKS

OTTER CREEK AT LEMOYNE—Section 9-15-40

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	25	28	29	23	27	23	25	18	22	8	30
2	18	25	28	29	23	27	22	25	20	22	8	30
3	17	25	28	29	23	25	24	27	21	22	8	28
4	16	25	28	29	23	28	24	27	15	20	8	28
5	17	25	28	29	23	13	25	29	9	15	8	28
6	17	25	28	29	23	15	11	28	12	5	9	29
7	17	25	28	29	23	15	18	26	4	9	11	29
8	18	25	28	29	23	15	22	27	2	10	9	28
9	22	25	28	29	23	15	22	26	2	10	6	25
10	24	25	28	29	23	15	23	29	9	10	8	25
11	16	25	28	29	23	20	23	26	11	10	12	23
12	25	25	28	29	23	20	25	26	13	12	11	25
13	25	25	28	29	23	25	20	27	10	9	26	25
14	25	25	28	29	23	25	22	27	8	17	25	24
15	25	25	28	29	23	25	20	21	12	22	27	24
16	26	17	28	29	23	25	21	21	13	22	24	24
17	26	17	28	29	23	25	19	22	15	22	26	27
18	29	17	28	29	23	30	23	20	16	27	25	27
19	29	17	28	29	23	30	22	20	20	27	24	25
20	30	17	28	29	23	30	22	20	22	28	25	22
21	30	17	28	29	23	29	25	23	23	25	26	23
22	28	17	28	29	23	27	15	28	25	23	25	24
23	28	17	28	29	26	28	29	12	20	22	22	25
24	26	17	28	29	26	27	30	23	21	25	22	26
25	26	17	28	23	26	23	30	23	20	20	20	26
26	26	17	28	23	26	25	30	18	20	8	20	26
27	23	17	28	23	26	23	30	19	25	6	25	26
28	24	17	28	23	26	24	30	19	28	6	25	26
29	22	17	28	23	26	20	30	20	30	6	26	26
30	21	17	28	23	....	22	30	22	25	6	26	26
31	22	....	28	23	....	20	....	17	....	6	29	....
Mean	23	21	28	28	24	23	24	23	16	16	19	26
Max.	30	25	28	29	26	30	30	29	30	28	29	30
Min.	14	17	28	23	23	13	11	12	2	5	6	23
A. F.	1412	1250	1722	1700	1365	1124	1408	1434	976	980	1139	1547
Total Acre Feet	16,357.											

PAWNEE CREEK—Section 4-12-27

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	7	10	10	8	10	9	10	16	8	9	7
2	7	7	10	10	8	10	9	10	20	8	8	7
3	7	7	10	10	8	10	9	10	20	20	7	7
4	7	7	10	10	8	10	9	10	3	18	7	7
5	7	7	10	5	8	10	9	10	2	16	6	7
6	7	7	10	10	8	9	9	8	16	15	7	7
7	7	7	10	10	8	9	9	8	16	14	8	7
8	7	7	10	10	8	9	9	8	16	14	8	8
9	7	7	10	10	8	9	12	8	16	16	7	8
10	7	7	10	10	8	9	12	8	25	14	7	8
11	7	7	10	9	8	9	12	6	25	9	6	8
12	7	7	10	9	8	9	12	6	24	8	6	9
13	7	7	10	9	8	9	12	6	20	8	6	9
14	7	7	10	9	8	9	12	6	18	7	6	9
15	7	7	10	9	8	9	12	6	17	7	6	8
16	7	7	10	8	8	9	12	2	16	8	6	8
17	7	7	10	8	8	9	12	2	22	7	6	8
18	7	7	10	8	8	9	12	2	18	7	6	8
19	7	10	10	8	8	9	12	2	21	6	6	9
20	7	10	10	8	8	9	12	2	20	6	6	10
21	7	10	10	7	8	9	12	4	15	6	6	9
22	7	10	10	7	8	9	20	4	10	6	6	8
23	7	10	10	7	8	9	20	4	10	6	6	8
24	7	10	10	7	8	9	20	4	8	7	5	6
25	7	10	10	7	8	9	20	4	7	7	5	5
26	7	10	10	10	8	9	20	6	10	6	5	5
27	7	10	10	10	8	9	20	6	8	6	6	6
28	7	10	10	10	8	9	20	6	7	6	4	5
29	7	10	10	10	8	9	10	6	8	6	4	5
30	7	10	10	10	....	9	10	16	8	7	4	5
31	7	....	10	10	....	9	....	16	....	8	4	....
Mean	7	8	10	9	8	9	13	7	15	9	6	7
Max.	7	10	10	10	8	10	20	16	25	20	9	10
Min.	7	7	10	7	8	9	9	2	2	6	4	5
A. F.	430	488	615	555	460	563	772	409	877	569	375	438
Total Acre Feet	6,551.											

REPORT OF SECRETARY

PLUM CREEK—Section 10-19-49
 Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	4	6	6	6	4	4	4	3	3	3	3
2	4	4	6	6	6	4	4	4	3	3	3	3
3	4	4	6	6	6	4	4	4	3	3	3	3
4	4	4	6	6	6	4	4	4	3	3	3	3
5	4	4	6	6	6	4	4	4	3	3	3	3
6	4	4	6	6	6	4	4	4	3	3	3	3
7	4	4	6	6	6	4	4	4	3	3	3	3
8	4	4	6	6	6	4	4	4	3	3	3	3
9	4	4	6	6	6	4	4	4	3	3	3	3
10	4	4	6	6	6	4	4	4	3	3	3	3
11	4	4	6	6	6	5	4	4	3	3	3	4
12	4	4	6	6	6	5	4	4	3	3	3	4
13	4	4	6	6	6	5	4	4	3	3	3	4
14	4	4	6	6	6	5	4	4	3	3	3	4
15	4	4	6	6	6	5	4	4	3	3	3	4
16	4	4	6	7	5	5	4	4	3	3	3	4
17	4	4	6	7	5	5	4	4	3	3	3	4
18	4	4	6	7	5	5	4	4	3	3	3	4
19	4	4	6	7	5	5	4	4	3	3	3	4
20	4	4	6	7	5	5	4	4	3	3	3	4
21	4	4	6	7	5	5	4	4	3	3	3	4
22	4	4	6	7	5	5	4	4	3	3	3	4
23	4	4	6	7	5	5	4	4	3	3	3	4
24	4	4	6	7	5	5	4	4	3	3	3	4
25	4	5	6	7	5	5	4	4	3	3	3	4
26	4	5	6	7	4	4	4	4	3	3	3	4
27	4	5	6	7	4	4	4	4	3	3	3	4
28	4	5	6	7	4	4	4	4	3	3	3	4
29	4	5	6	7	4	4	4	4	3	3	3	4
30	4	5	6	7	....	4	4	4	3	3	3	4
31	4	....	6	7	....	4	....	4	....	3	3	....
Mean	4	4	6	7	5	4	4	4	3	3	3	4
Max.	4	5	6	7	6	5	4	4	3	3	3	4
Min.	4	4	6	6	4	4	4	4	3	3	3	3
A. F.	246	248	369	401	309	276	238	246	179	184	184	218
Total Acre Feet	3,098.											

PUMPKIN CREEK AT BRIDGEPORT—Section 12-19-50
 Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	31	40	40	34	30	52	50	52	23	33	44	13
2	31	40	40	34	30	52	50	47	18	33	47	13
3	31	40	40	34	30	52	50	47	18	22	35	13
4	29	40	40	34	30	54	50	47	17	20	21	13
5	29	40	40	34	30	54	44	47	16	20	21	13
6	29	35	40	34	35	54	44	47	18	20	20	13
7	28	35	40	34	35	54	44	60	19	13	9	13
8	31	35	40	34	35	54	37	42	17	15	12	13
9	31	35	40	34	35	60	44	42	14	15	12	13
10	29	35	40	34	35	60	29	42	15	16	12	12
11	26	40	40	34	35	57	29	37	15	16	8	13
12	26	40	40	34	35	57	28	37	19	17	8	13
13	26	40	40	34	35	47	28	37	18	17	13	13
14	27	40	40	34	35	47	31	37	18	18	8	13
15	27	40	40	34	35	63	28	19	18	18	22	13
16	27	40	40	34	25	63	28	19	200	24	22	13
17	29	40	40	34	25	63	31	19	63	50	25	13
18	27	40	40	34	25	63	29	19	63	44	25	13
19	27	40	40	34	25	63	37	19	60	29	25	13
20	27	40	40	34	25	63	37	19	60	27	25	13
21	29	40	40	34	35	60	35	20	60	24	22	13
22	29	40	40	34	35	63	37	23	54	42	24	13
23	29	40	40	34	35	63	40	20	50	42	19	13
24	29	35	40	34	35	63	52	19	50	33	19	13
25	31	35	40	34	35	60	52	19	33	31	19	13
26	33	35	40	34	32	51	52	18	33	33	19	14
27	29	35	40	34	32	54	52	18	33	33	19	13
28	29	35	40	34	32	54	52	18	44	31	10	13
29	42	35	40	34	32	52	52	29	44	33	10	13
30	63	35	40	34	....	52	52	22	33	33	11	13
31	63	....	40	34	....	52	....	18	....	35	13	....
Mean	31	38	40	34	32	57	41	31	38	27	19	13
Max.	63	40	40	34	35	63	52	60	200	50	47	14
Min.	26	35	40	34	25	47	28	18	14	13	8	12
A. F.	1930	2960	2460	2090	1840	3490	2430	1900	2270	1660	1190	774
Total Acre Feet	24,300.											

DEPARTMENT OF PUBLIC WORKS

RED WILLOW CREEK AT BAYARD--Section 7-20-61

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	130	95	85	75	66	62	56	56	110	53	160	103
2	130	95	85	75	65	59	57	54	110	54	145	97
3	130	95	85	75	64	59	57	56	70	65	145	97
4	130	95	85	75	68	53	56	52	50	57	91	116
5	130	95	85	75	66	55	59	54	44	61	91	103
6	120	95	85	75	66	55	57	54	40	54	80	97
7	120	95	85	75	67	55	57	56	39	58	86	97
8	120	95	85	75	70	55	57	50	46	55	75	97
9	120	95	85	75	75	60	56	50	42	80	75	97
10	120	95	85	75	76	75	56	48	37	66	75	103
11	120	95	85	75	68	70	55	48	48	57	70	123
12	120	95	85	75	68	70	54	48	56	56	75	110
13	120	95	85	75	66	70	55	45	48	56	145	110
14	120	95	85	75	61	69	52	47	50	59	145	116
15	120	95	85	75	65	67	52	48	39	66	97	116
16	110	90	80	70	65	66	52	44	42	130	80	110
17	110	90	80	70	63	66	54	97	40	202	80	123
18	110	90	80	70	65	66	56	260	152	36	80	116
19	110	90	80	70	66	65	52	230	130	70	91	116
20	110	90	80	70	64	66	52	250	123	75	103	97
21	105	90	80	70	63	65	52	450	145	70	103	91
22	105	90	80	70	63	64	50	130	160	75	103	116
23	105	90	80	70	62	62	75	130	138	138	86	116
24	105	90	80	70	61	61	70	123	145	145	86	130
25	105	90	80	70	61	61	80	69	86	86	97	145
26	105	90	80	70	61	60	70	53	54	75	91	145
27	105	90	80	70	61	61	63	75	110	75	91	152
28	105	90	80	70	61	61	68	130	46	75	168	145
29	105	90	80	70	63	59	65	184	50	103	103	152
30	105	90	80	68	....	57	59	202	53	66	103	145
31	105	....	80	70	....	56	....	211	....	193	103	....
Mean	*115	*92	*82	*72	65	62	59	110	77	83	101	116
Max.	130	95	85	75	76	75	80	450	160	202	168	152
Min.	105	90	80	70	61	53	50	44	37	53	70	91
A. F.	7051	5504	5068	4453	3750	3830	3480	6760	4570	5080	6210	6900

Total Acre Feet 62,656.

Note:--Record for October-January based on measurements made on Wild

Horse Drain and Red Willow above junction.

*Estimated.

REPUBLICAN RIVER AT COLORADO-NEBRASKA LINE--Section 9-1-42

Date	Year Ending September 30, 1932												
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	12	36	N.R.	N.R.	....	110	94	78	24	8	105	78
2	13	37	....	....	....	110	94	76	18	8	99	43
3	14	37	....	....	....	110	91	73	9	8	88	39
4	16	37	....	....	....	113	86	62	22	8	65	39
5	14	39	....	....	....	110	83	36	52	8	36	32
6	14	37	....	....	....	110	78	32	36	7	52	22
7	19	37	....	....	....	116	88	36	20	5	47	20
8	22	41	....	....	....	100	60	37	22	5	36	17
9	22	39	....	....	....	90	69	39	20	7	34	16
10	24	39	....	....	....	90	74	41	12	7	29	16
11	24	43	....	....	....	100	81	39	13	7	25	21
12	22	43	....	....	....	100	83	27	19	5	25	20
13	16	47	....	....	....	110	83	20	21	5	255	20
14	8	54	....	....	....	120	81	16	16	6	192	22
15	9	56	*81	127	72	19	12	6	86	16
16	18	72	....	N.R.	....	118	43	17	12	6	43	17
17	22	72	....	....	....	127	37	14	10	5	39	21
18	36	69	....	....	....	121	41	9	74	6	52	37
19	39	59	....	....	....	113	16	10	94	7	36	39
20	50	56	....	....	....	107	10	9	60	6	32	36
21	56	60	....	....	....	105	10	9	32	6	47	22
22	47	60	....	....	....	105	9	8	29	198	39	18
23	45	60	....	....	....	105	11	8	17	14	39	27
24	39	60	....	....	....	105	34	8	16	74	25	36
25	39	60	....	....	....	99	78	10	16	20	0	32
26	37	60	....	....	....	99	67	10	16	12	0	116
27	36	60	....	....	....	99	60	18	16	10	107	88
28	36	60	....	....	....	99	116	29	17	9	74	78
29	36	60	....	....	....	96	107	56	11	20	65	65
30	43	60	....	....	....	88	69	83	10	348	47	47
31	47	....	....	....	....	94	....	47	....	264	41	....
Mean	28	52	75	80	85	106	64	32	25	36	60	37	
Max.	56	72	....	....	....	127	116	83	94	348	255	116
Min.	8	36	....	....	....	88	9	8	9	5	0	16
A. F.	1730	3080	4610	4920	4890	6520	3820	1940	1480	2190	3690	2180	

Total Acre Feet 41,000.

*Estimated.

N.R.--No Record.

REPORT OF SECRETARY

REPUBLICAN RIVER (SOUTH BRANCH) AT BENKELMAN												
Year Ending September 30, 1932												
Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6	N.R.	N.R.	N.R.	N.R.	52	52	42	90	N.R.	N.R.	N.R.
2	6	.....	.....	.....	.....	52	52	42	76	.....	.....	.....
3	6	.....	.....	.....	.....	52	42	42	76	.....	.....	.....
4	6	.....	.....	.....	.....	64	42	42	76	.....	.....	.....
5	6	.....	.....	.....	.....	61	42	42	155	.....	.....	.....
6	6	.....	.....	.....	.....	60	42	42	185	.....	.....	.....
7	6	.....	.....	.....	.....	51	42	42	173	.....	.....	.....
8	6	.....	.....	.....	.....	52	42	42	138	.....	.....	.....
9	6	.....	.....	.....	.....	54	42	42	110	.....	*51	.....
10	6	.....	.....	.....	.....	51	42	42	90	.....	N.R.	.....
11	6	.....	.....	.....	.....	58	42	42	95	.....	.....	.....
12	6	.....	.....	.....	.....	60	52	42	642	.....	.....	.....
13	7	.....	.....	.....	.....	62	52	42	690	.....	.....	.....
14	7	.....	.....	.....	.....	64	52	42	606	.....	*9	.....
15	7	.....	.....	.....	.....	70	42	42	548	N.R.	.....	.....
16	7	.....	.....	N.R.	.....	85	32	28	352	.....	.....	.....
17	7	.....	.....	.....	.....	76	32	24	207	.....	.....	.....
18	7	.....	.....	.....	.....	64	32	24	168	.....	.....	.....
19	7	.....	.....	.....	.....	61	32	21	168	.....	.....	.....
20	7	*38	.....	.....	.....	64	32	24	162	.....	.....	.....
21	7	N.R.	.....	.....	.....	64	32	21	140	.....	.....	.....
22	7	.....	.....	.....	.....	52	32	21	126	.....	.....	.....
23	7	.....	.....	.....	.....	52	32	17	124	.....	.....	.....
24	7	.....	.....	.....	.....	52	134	17	98	.....	.....	.....
25	7	.....	.....	.....	.....	52	250	64	98	.....	.....	.....
26	20	.....	.....	.....	.....	52	190	570	83	.....	.....	.....
27	20	.....	.....	.....	.....	52	134	278	80	.....	.....	.....
28	24	.....	.....	.....	.....	52	76	166	76	.....	.....	.....
29	28	.....	.....	.....	.....	52	64	141	64	.....	.....	.....
30	28	.....	.....	.....	.....	52	52	120	64	.....	.....	.....
31	28	.....	.....	.....	.....	52	.....	101	.....	.....	.....	.....
Mean	10	*50	*75	*90	*75	58	61	73	192	*13	*76	*10
Max.	28	.....	.....	.....	.....	85	250	570	690	.....	.....	.....
Min.	6	.....	.....	.....	.....	52	32	17	64	.....	.....	.....
A. F.	615	2980	4610	5530	4310	3590	3640	4510	11400	823	4700	5950

Total Acre Feet 52,600.

*Estimated.

N.R.—No Record.

REPUBLICAN RIVER AT MAX—Section 32-2-36													
Year Ending September 30, 1932													
Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	18	78	N.R.	N.R.	N.R.	190	142	206	216	74	1100	43	
2	20	74	.....	.....	.....	180	128	211	171	54	206	38
3	22	74	.....	.....	.....	171	132	200	161	61	580	32
4	23	82	.....	.....	.....	156	142	195	200	54	309	27
5	18	95	.....	.....	.....	100	137	180	345	50	180	24
6	27	100	.....	.....	.....	128	123	156	245	40	180	27
7	31	104	.....	.....	.....	100	109	171	264	35	176	30
8	32	104	.....	.....	.....	100	128	176	222	25	151	25
9	38	113	.....	.....	.....	100	137	166	161	21	128	23
10	38	118	.....	.....	.....	100	151	161	161	18	118	24
11	40	142	.....	.....	.....	110	146	151	195	15	87	25
12	50	142	.....	.....	.....	110	128	142	696	12	65	22
13	43	142	.....	.....	.....	110	104	123	430	8	104	23
14	54	161	.....	.....	.....	110	87	123	300	5	273	23
15	65	151	.....	.....	.....	118	91	123	336	5	171	20
16	59	142	.....	N.R.	.....	228	78	123	211	5	128	18
17	51	142	.....	.....	.....	195	74	128	151	5	104	20
18	54	137	.....	.....	.....	176	87	109	128	5	82	20
19	50	135	.....	.....	.....	166	87	74	421	4	70	19
20	54	140	.....	.....	.....	166	87	65	354	4	59	24
21	59	160	.....	.....	.....	176	78	61	244	4	52	32
22	59	160	.....	.....	.....	161	70	56	200	4	37	35
23	65	160	.....	.....	.....	166	87	50	161	4	27	37
24	61	160	.....	.....	.....	161	166	47	128	32	31	37
25	70	160	.....	.....	.....	166	318	61	402	23	25	40
26	70	180	.....	.....	.....	137	273	965	195	21	22	52
27	70	180	200	146	233	235	176	14	430	78
28	65	180	190	156	309	264	132	10	233	95
29	70	180	195	166	300	238	113	8	118	82
30	65	180	146	244	318	104	374	87	61
31	70	146	228	1430	59
Mean	49	136	*160	*180	150	146	146	181	244	78	174	35	
Max.	70	.....	.....	.....	.....	228	318	965	696	1430	1100	95
Min.	18	74	.....	.....	.....	100	70	47	104	4	22	18
A. F.	3000	8090	9840	11100	8630	8980	8690	11100	14500	4810	10700	2090	

Total Acre Feet 102,000.

*Estimated.

N. R.—No Record.

DEPARTMENT OF PUBLIC WORKS

595

REPUBLICAN RIVER AT CULBERTSON—Section 17-3-31

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	130	130	179	191	79	865	28
2	130	130	160	160	57	705	13
3	130	130	160	117	48	500	10
4	145	130	160	224	46	340	10
5	130	130	145	410	33	242	10
6	104	130	130	268	29	206	10
7	130	130	104	190	28	161	9
8	130	130	104	157	30	142	8
9	130	130	104	179	14	120	7
10	130	130	104	136	4	101	11
11	130	130	104	125	0	93	10
12	130	130	104	130	0	81	7
13	130	130	92	410	0	62	7
14	*198	.....	179	130	80	250	0	84	8
15	N.R.	.....	.....	250	104	80	190	0	168	9
16	250	130	80	198	0	142	6
17	250	104	80	112	0	98	13
18	224	92	69	145	0	77	13
19	198	117	49	650	0	62	13
20	*178	.....	.....	.....	178	104	14	275	0	57	14
21	N.R.	.....	.....	.....	178	104	58	226	0	50	16
22	145	80	47	158	0	42	16
23	160	80	33	134	0	23	18
24	160	160	32	109	0	18	20
25	160	480	58	91	0	18	28
26	160	295	295	88	0	18	30
27	145	198	250	128	0	11	34
28	130	224	245	122	0	234	46
29	130	198	160	96	0	136	70
30	130	198	240	86	0	73	70
31	130	.....	245	.....	2670	45	.....
Mean	60	165	170	190	160	156	150	122	193	98	160	19
Max.	250	480	295	650	2670	865	70
Min.	104	80	32	86	0	11	6
A. F.	3690	9820	10500	11700	9200	9590	8930	7500	11500	6030	9840	1120

Total Acre Feet 99,400.

N.R.—No Record.

*Estimated.

REPUBLICAN RIVER AT BLOOMINGTON—Section 8-1-15

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	81	116	170	210	270	989	546	735	1070	683	754	54
2	46	123	170	210	270	961	546	702	2330	612	905	54
3	46	128	170	210	270	926	528	664	2840	464	1490	46
4	45	144	170	210	270	849	528	592	2460	442	1400	52
5	18	152	170	210	270	780	540	540	1810	800	996	57
6	39	164	180	180	440	774	534	534	1680	638	856	57
7	36	171	180	180	440	794	186	528	1770	442	780	52
8	36	180	180	180	440	680	474	486	1460	1210	683	48
9	36	177	180	180	440	480	417	469	2930	522	780	48
10	36	174	180	180	440	320	469	452	1640	224	540	54
11	32	171	170	160	420	270	480	408	2090	198	447	2420
12	49	171	170	160	420	270	464	398	2270	155	1150	2910
13	48	190	170	160	420	370	464	386	2030	136	498	1750
14	70	299	170	160	420	540	452	344	1350	125	289	1010
15	106	257	170	160	420	644	452	313	1060	123	253	344
16	90	228	160	279	380	849	452	313	1050	102	177	184
17	79	220	160	279	380	842	442	289	982	90	150	138
18	68	220	160	279	380	982	436	275	1720	84	133	104
19	70	236	160	279	380	982	447	253	1730	84	141	81
20	63	299	160	279	380	849	420	228	2350	77	133	72
21	72	354	220	300	500	849	676	209	2530	66	138	62
22	73	370	220	300	1500	800	598	180	1800	168	123	55
23	75	354	220	300	2500	742	528	190	1330	308	100	52
24	77	266	220	300	6940	702	425	168	1120	224	96	51
25	84	194	220	300	3160	664	420	164	947	190	84	49
26	72	187	250	408	1980	657	386	177	933	187	81	54
27	77	170	250	280	1440	614	381	336	1330	190	77	51
28	81	170	250	280	1210	624	598	474	1330	108	77	49
29	84	170	250	280	1080	598	702	469	933	88	77	45
30	84	170	250	280	.....	598	664	898	754	130	75	44
31	96	.....	250	280	.....	579	.....	1530	.....	220	65	.....
Mean	65	208	194	240	961	697	500	441	1650	293	437	335
Max.	106	370	.....	.....	6940	989	702	1530	2930	1210	1490	2910
Min.	32	116	.....	.....	270	270	381	164	754	56	65	44
A. F.	3970	12400	11900	14800	55300	42900	29800	27100	98200	18000	26900	19900

Total Acre Feet 361,000.

REPORT OF SECRETARY

REPUBLICAN RIVER AT HARDY—Section 6-1-5

Date	Year Ending September 30, 1932												
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
1	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	666	730	680	54	
2	2150	730	329	54	
3	3410	570	931	38	
4	3420	570	1340	42	
5	3830	510	1370	36	
6	2660	360	1540	38	
7	2380	570	787	34	
8	1940	730	659	34	
9	1910	570	562	35	
10	2680	360	540	36	
11	2260	730	535	41	
12	3050	350	450	1800	
13	2260	220	475	3500	
14	2890	215	666	2200	
15	1630	200	475	800	
16	1160	190	350	700	
17	1010	170	255	450	
18	980	162	235	350	
19	364	1060	144	163	250
20	351	2300	126	148	150
21	338	1720	133	125	125
22	329	3300	131	110	120
23	303	2250	162	140	112
24	299	1720	316	145	112
25	287	1560	212	110	102
26	312	1670	295	100	99
27	308	1870	226	80	95
28	316	1500	193	70	102
29	364	1000	274	70	97
30	480	1100	325	60	90
31	540	470	150
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	353	2040	253	440	390
Max.	540	3830	730	1540	3500
Min.	287	666	126	60	31
A. F.	9100	121000	217000	27100	23200
Total Acre Feet	202,000.												
N.R.—No Record.													

SAND CREEK—Section 10-15-40

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	4	3	5	5	5	3	5	4	1	4	5
2	4	4	3	5	5	5	3	5	4	1	4	5
3	4	4	3	5	5	5	3	5	4	2	5	5
4	4	4	3	5	5	5	3	5	4	2	5	5
5	4	4	3	5	5	5	3	5	3	2	5	5
6	4	4	3	5	6	4	2	5	2	2	5	6
7	4	4	3	5	6	4	2	5	0	3	5	6
8	4	4	3	5	6	4	2	5	0	3	5	6
9	1	4	3	5	6	4	2	5	0	3	5	5
10	4	4	3	5	6	4	2	5	0	3	2	5
11	4	4	4	5	5	6	4	5	2	3	0	5
12	4	4	4	5	5	6	4	5	2	3	2	4
13	4	4	4	5	5	6	4	5	1	3	4	4
14	4	4	4	5	5	6	4	5	4	3	4	4
15	1	4	4	5	5	6	4	5	4	3	4	4
16	5	4	5	6	5	6	5	4	4	3	4	4
17	5	4	5	6	5	6	5	4	4	3	5	4
18	5	4	5	6	5	6	5	4	4	3	5	4
19	5	4	5	6	5	6	5	4	4	3	5	4
20	5	4	5	6	5	6	5	4	4	3	4	5
21	6	4	5	6	5	6	5	4	4	3	4	5
22	6	4	5	6	5	6	5	4	4	2	4	5
23	6	4	5	6	5	6	5	4	4	2	4	5
24	6	4	5	6	5	6	5	4	4	2	4	5
25	6	4	5	6	5	6	5	4	1	2	5	5
26	5	4	5	5	5	4	5	4	2	4	5	5
27	5	4	5	5	5	4	5	4	2	2	5	5
28	5	4	5	5	5	4	5	4	1	0	5	5
29	5	4	5	5	5	4	5	4	1	0	5	4
30	5	4	5	5	5	4	5	4	1	0	5	4
31	5	.....	5	5	.....	4	.....	4	.....	1	5	.....
Mean	5	4	4	5	5	5	4	4	3	2	4	5
Max.	6	4	5	6	6	6	5	5	4	4	5	6
Min.	5	4	3	5	5	4	2	4	0	0	0	4
A. F.	288	238	258	327	298	305	238	276	161	139	264	284
Total Acre Feet	3,076.											

DEPARTMENT OF PUBLIC WORKS

597

SARBEN SLOUGH—Section 20-14-35

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	2	3	3	3	4	4	3	2	3	1	4
2	2	2	3	3	3	4	4	3	2	3	1	4
3	2	2	3	3	3	4	4	3	2	3	1	4
4	2	2	3	3	3	4	4	3	2	3	1	4
5	2	2	3	3	3	4	4	3	2	3	1	4
6	2	2	3	3	3	4	4	2	2	3	1	4
7	2	2	3	3	3	3	4	2	2	3	1	4
8	2	2	3	3	3	3	4	2	2	3	1	4
9	2	2	3	3	3	3	4	2	2	2	1	4
10	2	2	3	3	3	3	4	2	2	2	1	4
11	2	2	2	3	3	4	4	2	2	2	1	4
12	2	2	2	3	3	3	4	2	2	2	1	4
13	2	2	2	3	3	4	4	2	2	2	1	4
14	2	2	2	3	3	4	4	2	2	2	1	4
15	2	2	2	3	3	4	4	2	2	2	1	4
16	2	2	2	3	3	2	5	5	2	2	1	4
17	2	2	2	3	3	2	5	5	2	2	1	4
18	2	2	2	3	3	2	5	5	2	1	2	2
19	2	2	2	3	3	2	5	5	2	1	2	2
20	2	2	2	3	3	2	5	5	2	2	2	2
21	3	3	2	3	2	4	4	4	2	2	1	2
22	3	3	2	3	2	4	4	4	2	2	1	2
23	3	3	2	3	2	4	4	4	2	2	1	2
24	3	3	2	3	2	4	4	4	2	2	1	2
25	3	3	2	3	2	4	4	4	2	2	1	2
26	2	3	3	2	4	4	3	2	2	1	4	3
27	2	3	3	2	4	4	3	2	2	1	4	3
28	2	3	3	2	4	4	3	2	2	1	4	2
29	2	3	3	2	4	4	3	2	2	1	4	2
30	2	3	3	2	4	4	3	2	2	1	4	2
31	2	3	3	2	4	4	3	2	2	1	4	2
Mean	2	2	3	3	3	4	4	2	2	2	2	3
Max.	3	3	3	4	4	5	5	3	2	3	4	4
Min.	2	2	2	2	2	3	3	2	2	1	1	2
A. F.	133	129	175	173	180	246	238	133	119	109	121	190
Total Acre Feet	1,946.											

SCOTTSBLUFF DRAIN NO. 1—Section 25-22-54

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	25	17	14	14	10	9	11	8	10	20	20	28
2	25	17	14	14	10	9	11	8	10	20	20	28
3	25	17	14	14	10	9	11	8	10	20	20	28
4	25	17	14	14	10	9	11	8	10	20	20	28
5	25	17	14	14	10	9	11	8	10	20	20	28
6	25	17	14	14	10	9	12	8	10	20	20	28
7	25	17	14	14	10	9	12	8	10	20	20	28
8	25	17	14	14	10	9	12	8	10	20	20	28
9	25	17	14	14	10	9	12	8	10	20	20	28
10	25	17	14	14	10	9	12	8	10	20	20	28
11	25	15	14	12	10	11	12	8	10	24	20	29
12	25	15	14	12	10	11	12	8	10	24	20	29
13	25	15	14	12	10	11	12	8	10	24	20	29
14	25	15	14	12	10	11	12	8	10	24	20	29
15	25	15	14	12	10	11	12	8	10	24	20	29
16	20	15	14	12	9	10	12	7	10	24	25	29
17	20	15	14	12	9	10	12	7	10	24	25	29
18	20	15	14	12	9	10	12	7	10	24	25	29
19	20	15	14	12	9	10	12	7	10	24	25	29
20	20	15	14	12	9	10	12	7	10	24	25	29
21	20	15	14	11	9	10	12	6	10	20	25	30
22	20	15	14	11	9	10	12	6	10	20	25	30
23	20	15	14	11	9	10	12	6	10	20	25	30
24	20	15	14	11	9	10	12	6	10	20	25	30
25	20	15	14	11	9	10	10	6	15	20	25	30
26	20	15	14	11	9	10	10	6	15	20	25	30
27	20	15	14	11	9	10	10	6	15	20	25	30
28	20	15	14	11	9	10	10	6	15	20	25	30
29	20	15	14	11	9	10	10	6	15	20	25	30
30	20	15	14	11	9	10	10	6	15	20	25	30
31	20	14	11	11	10	10	10	6	15	20	25	30
Mean	22	16	14	12	10	10	12	7	11	21	23	29
Max.	25	17	14	14	10	11	12	8	15	24	25	30
Min.	20	15	14	11	9	9	9	6	10	20	20	28
A. F.	1379	932	861	756	547	605	684	438	645	1309	1388	1726
Total Acre Feet	11,270.											

REPORT OF SECRETARY

SCOTTSBLUFF DRAIN NO. 2—Section 34-22-54

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.		2	5	8	12	12
2								2	5	8	12	12
3								2	5	8	12	12
4								2	5	8	12	12
5								2	5	8	12	12
6								2	5	8	12	12
7								2	5	8	12	12
8								2	5	8	12	12
9								2	5	8	12	12
10								2	5	8	12	12
11							4	5	10	13	13	12
12							4	5	10	13	13	12
13							4	5	10	13	13	12
14							4	5	10	13	13	12
15							4	5	10	13	13	12
16							4	4	10	13	13	12
17							4	4	10	13	13	12
18							4	4	10	13	13	12
19							4	4	10	13	13	12
20							4	4	10	13	13	12
21							6	4	11	11	13	12
22							6	4	11	11	13	12
23							6	4	11	11	13	12
24							6	4	11	11	13	12
25							6	4	11	11	13	12
26							6	6	11	11	12	12
27							6	6	11	11	12	12
28							6	6	11	11	12	12
29							6	6	11	11	12	12
30							6	6	11	11	12	12
31								6	.....	11	12	.....
Mean	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	1	5	10	12	12	11
Max.							6	6	11	13	13	12
Min.							2	4	8	11	12	12
A. F.							238	300	575	736	768	711
Total Acre Feet	3,331.											

SHEEP CREEK AT MORRILL.—Section 21-23-57

Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	90	85	80	69	75	69	72	2	2	5	4
2	4	90	85	80	72	75	69	69	2	3	200	4
3	4	90	85	80	69	75	69	69	2	3	120	4
4	4	90	85	80	72	75	69	69	2	3	60	4
5	4	90	85	80	75	75	69	96	2	4	5	4
6	105	90	85	80	75	75	72	144	2	4	4	4
7	105	90	85	80	81	72	69	96	2	4	4	4
8	105	90	85	80	75	72	72	81	2	5	4	4
9	105	90	85	80	84	75	90	75	2	5	4	4
10	105	90	85	80	84	75	72	72	2	5	4	4
11	110	90	85	78	69	72	72	69	2	6	3	4
12	110	90	85	78	72	75	84	69	2	5	3	3
13	110	90	85	78	72	75	72	66	2	8	3	3
14	110	90	85	78	72	78	69	63	2	7	4	3
15	110	90	85	78	72	75	72	69	2	7	4	3
16	115	90	82	78	72	78	69	66	2	7	4	3
17	115	90	82	78	72	75	69	63	2	6	4	3
18	115	90	82	78	69	75	72	63	1	6	4	3
19	115	90	82	75	72	75	72	35	2	6	4	3
20	115	90	82	75	72	81	69	54	1	6	4	3
21	115	90	82	75	75	78	69	36	2	6	5	4
22	115	90	82	75	75	75	69	2	2	6	4	5
23	115	90	82	75	75	75	90	2	2	6	2	4
24	115	90	82	75	75	72	84	2	2	6	4	3
25	115	90	82	75	75	72	75	2	2	6	5	4
26	105	85	82	72	75	75	69	2	2	6	4	4
27	105	85	82	72	75	75	75	3	2	7	4	4
28	105	85	82	75	75	72	84	4	2	7	4	6
29	105	85	82	72	75	72	78	3	3	7	4	6
30	105	85	82	69	.....	69	75	2	2	7	1	60
31	105	.....	82	67	.....	69	.....	2	.....	6	4	.....
Mean	93	89	84	77	74	75	74	49	2	6	16	6
Max.	115	91	85	80	84	81	90	144	3	8	200	60
Min.	4	85	82	67	69	69	69	2	1	2	2	3
A. F.	5710	5310	5130	4710	4250	4580	4380	3010	119	338	972	339
Total Acre Feet	38,848.											

SILVERNAIL DRAIN—Section 6-19-49

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12	10	10	10	10	8	8	7	8	15	12	12
2	12	10	10	10	10	8	8	7	8	10	12	12
3	12	10	10	10	10	8	8	7	8	12	11	12
4	12	10	10	10	10	8	8	7	8	15	10	12
5	12	10	10	10	10	8	8	7	8	15	10	12
6	12	10	10	10	10	8	8	7	8	24	11	12
7	12	10	10	10	10	8	8	7	8	19	11	12
8	12	10	10	10	10	8	8	7	7	9	11	12
9	12	10	10	10	10	8	8	7	7	9	11	12
10	12	10	10	10	10	8	8	7	7	9	11	12
11	12	10	10	10	9	10	8	7	7	9	11	12
12	12	10	10	10	9	10	8	7	7	10	11	12
13	12	10	10	10	9	10	8	7	7	11	11	12
14	12	10	10	10	9	10	8	7	7	11	11	13
15	12	10	10	10	9	10	8	7	7	11	11	13
16	12	10	10	10	9	10	6	7	7	17	11	13
17	12	10	10	10	9	10	6	7	7	23	11	13
18	12	10	10	10	9	10	6	7	7	25	11	14
19	12	10	10	10	9	10	6	7	7	27	12	16
20	12	10	10	10	9	10	6	7	7	26	12	15
21	12	10	10	10	8	10	6	7	7	25	12	14
22	12	10	10	10	8	10	6	7	31	22	12	14
23	12	10	10	10	8	10	6	7	31	20	12	14
24	12	10	10	10	8	10	6	7	16	16	11	14
25	12	10	10	10	8	10	6	7	12	12	12	15
26	12	10	10	10	8	9	6	8	11	12	13	14
27	12	10	10	10	8	9	6	8	11	13	12	13
28	12	10	10	10	8	9	6	8	7	13	12	13
29	12	10	10	10	8	9	6	8	10	13	12	13
30	12	10	10	10	...	9	6	8	11	12	13	13
31	12	...	10	10	...	9	...	8	...	12	12	...
Mean	12	10	10	10	9	9	7	7	10	15	11	13
Max.	12	10	10	10	10	10	8	8	31	27	13	16
Min.	12	10	10	10	8	8	6	7	7	9	10	12
A. F.	738	595	615	615	520	563	417	442	583	946	704	774
Total Acre Feet	7,512.											

SKUNK CREEK—Section 1-14-37

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	4	3	2	2	4	3	3	1	2	2	2
2	4	4	3	2	2	4	3	3	1	2	2	2
3	4	4	3	2	2	4	3	3	1	2	2	2
4	4	4	3	2	2	4	3	3	1	2	2	2
5	4	4	3	2	2	4	3	3	1	2	2	2
6	4	4	3	2	2	2	3	3	1	2	2	2
7	4	4	3	2	2	2	3	3	1	2	2	2
8	4	4	3	2	2	2	3	3	1	2	2	2
9	4	4	3	2	2	2	3	3	1	2	2	2
10	4	4	3	2	2	2	3	3	1	2	2	2
11	4	4	3	2	2	4	3	3	1	2	2	2
12	4	4	3	2	2	4	3	3	1	2	2	2
13	4	4	3	2	2	4	3	3	1	2	2	2
14	4	4	3	2	2	4	3	3	1	2	2	2
15	4	4	3	2	2	4	3	3	1	2	2	2
16	4	4	3	2	2	5	3	3	2	2	2	2
17	4	4	3	2	2	5	3	3	2	2	2	2
18	4	4	3	2	2	5	3	3	2	2	2	2
19	4	4	3	2	2	5	3	3	2	2	2	2
20	4	4	3	2	2	5	3	3	2	2	2	2
21	4	4	3	2	4	4	3	1	3	2	2	2
22	4	4	3	2	4	4	3	1	3	2	2	2
23	4	4	3	2	4	4	3	1	3	2	2	2
24	4	4	3	2	4	4	3	1	3	2	2	2
25	4	4	3	2	4	4	3	1	3	2	2	2
26	4	4	3	2	4	4	3	1	2	2	2	3
27	4	4	3	2	4	4	3	1	2	2	2	3
28	4	4	3	2	4	4	3	1	2	2	2	3
29	4	4	3	2	4	4	3	1	2	2	2	3
30	4	4	3	2	...	4	3	1	2	2	2	3
31	4	...	3	2	...	4	...	1	...	2	2	...
Mean	4	4	3	2	3	4	3	2	2	2	2	2
Max.	4	4	3	2	4	5	3	3	3	2	2	3
Min.	4	4	3	2	2	2	3	1	1	2	2	2
A. F.	246	238	179	123	151	236	179	141	99	123	123	129
Total Acre Feet	1,967.											

REPORT OF SECRETARY

SPOTTED TAIL (DRY) CREEK—Section 28-28-56

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	30	40	35	40	37	35	30	30	61	54	55	64
2	30	40	35	40	37	35	30	30	50	48	42	46
3	30	40	35	40	37	35	30	30	38	46	30	40
4	30	40	35	40	37	35	30	30	54	46	32	34
5	30	40	35	40	37	35	30	30	46	26	33	38
6	50	40	35	42	37	35	30	30	48	26	34	42
7	50	40	35	42	37	35	30	30	45	23	34	38
8	50	40	35	42	37	35	30	30	40	23	34	34
9	50	40	35	42	37	35	30	30	41	22	33	38
10	50	40	35	42	37	35	30	30	48	36	30	42
11	40	40	35	42	37	40	30	30	56	36	26	42
12	40	40	35	42	37	40	30	30	59	38	26	42
13	40	40	35	42	37	40	30	30	55	36	25	62
14	40	40	35	42	37	40	30	30	50	30	26	82
15	40	40	35	42	37	40	30	30	52	39	26	63
16	35	38	35	42	36	30	30	25	65	32	26	44
17	35	38	35	42	36	30	30	25	54	35	25	43
18	35	38	35	42	36	30	30	25	50	38	40	42
19	35	38	35	42	36	30	30	25	52	33	56	44
20	35	38	35	42	36	30	30	25	58	33	44	46
21	35	38	38	42	36	30	25	25	59	42	32	46
22	35	38	38	42	36	30	25	25	48	50	32	46
23	35	38	38	42	36	30	25	25	47	48	32	47
24	35	38	38	42	36	30	25	25	48	47	41	48
25	35	38	38	42	36	30	25	25	44	50	50	46
26	35	38	38	40	36	30	25	25	46	52	56	44
27	35	38	38	40	36	30	25	25	21	59	61	44
28	35	38	38	40	36	30	25	25	26	66	48	44
29	35	38	38	40	36	30	25	25	24	73	34	44
30	35	38	38	40	....	30	25	25	52	79	58	145
31	35	....	38	40	....	30	....	25	....	67	82	....
Mean	37	39	36	41	37	33	28	27	48	43	39	49
Max.	50	40	38	42	37	40	30	30	65	79	82	145
Min.	30	38	35	40	36	30	25	25	21	22	25	24
A. F.	2301	2321	2218	2539	2101	2043	1686	1686	2850	2650	2386	2936
Total Acre Feet	27,717.											

SPOTTED TAIL (WET)—KRONBERG SEEP—Section 1-22-56

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	18	17	17	12	14	14	16	16	15	17	18	18
2	18	17	17	12	14	14	16	16	15	19	19	18
3	18	17	17	12	14	14	16	16	15	20	19	19
4	18	17	17	12	14	14	16	16	15	19	19	19
5	18	17	17	12	14	14	16	16	15	17	20	19
6	17	17	17	12	16	10	16	14	16	17	20	19
7	17	17	17	12	16	10	16	14	16	18	20	18
8	17	17	17	12	16	10	16	14	16	19	21	18
9	17	17	17	12	16	18	16	14	16	18	22	18
10	17	17	17	12	16	18	16	14	16	19	22	19
11	17	17	16	13	16	16	17	14	17	19	21	19
12	17	17	16	13	16	16	17	14	17	19	21	19
13	17	17	16	13	16	16	17	14	17	21	21	19
14	17	17	16	13	16	16	17	14	18	18	19	19
15	17	17	16	13	16	16	17	14	17	20	17	17
16	17	17	16	13	14	14	17	12	19	19	17	16
17	17	17	16	13	14	14	17	12	19	18	18	16
18	17	17	16	13	14	14	17	12	19	17	18	17
19	17	17	16	13	14	14	17	12	19	17	18	16
20	17	17	16	13	14	14	17	12	20	17	19	16
21	17	17	14	14	14	14	18	12	21	16	19	18
22	17	17	14	14	14	14	18	12	20	17	19	19
23	17	17	14	14	14	14	18	12	17	17	20	18
24	17	17	14	14	14	14	18	12	16	17	22	17
25	17	17	14	14	14	14	18	12	16	17	25	17
26	17	17	14	14	14	15	18	12	17	17	24	17
27	17	17	14	14	14	15	18	12	17	17	23	17
28	17	17	14	14	14	15	18	12	18	17	21	17
29	17	17	14	14	14	15	18	12	18	17	20	17
30	17	17	14	14	....	15	18	12	17	18	18	17
31	17	....	14	14	....	15	....	12	....	18	16	....
Mean	17	17	16	13	15	14	17	13	17	18	20	18
Max.	18	17	17	14	16	18	18	16	21	21	25	19
Min.	17	17	14	12	14	10	16	12	15	16	16	16
A. F.	1055	1012	960	801	845	885	1012	817	1020	1103	1222	1057
Total Acre Feet	11,789.											

DEPARTMENT OF PUBLIC WORKS

601

SPRING CREEK—Section 4-23-58

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	10	10	10	10	10	11	10	10	11	8	10	10
2	10	10	10	10	10	11	10	10	11	8	10	10
3	10	10	10	10	10	11	10	10	11	8	10	10
4	10	10	10	10	10	11	10	10	11	8	10	10
5	10	10	10	10	10	11	10	10	11	8	10	10
6	10	10	10	10	10	10	10	10	10	8	10	10
7	10	10	10	10	10	10	10	10	10	8	10	10
8	10	10	10	10	10	10	10	10	10	8	10	10
9	10	10	10	10	10	10	10	10	10	8	10	10
10	10	10	10	10	10	10	10	10	10	8	10	10
11	10	10	10	10	10	11	10	10	8	9	11	10
12	10	10	10	10	10	11	10	10	8	9	11	10
13	10	10	10	10	10	11	10	10	8	9	11	10
14	10	10	10	10	10	11	10	10	8	9	11	10
15	10	10	10	10	10	11	10	10	8	9	11	10
16	10	10	10	10	10	11	10	11	8	9	11	11
17	10	10	10	10	10	11	10	11	8	9	11	11
18	10	10	10	10	10	11	10	11	8	9	11	11
19	10	10	10	10	10	11	10	11	8	9	11	11
20	10	10	10	10	10	11	10	11	8	9	11	11
21	10	10	10	10	10	10	10	11	8	10	11	11
22	10	10	10	10	10	10	10	11	8	10	11	11
23	10	10	10	10	10	10	10	11	8	10	11	11
24	10	10	10	10	10	10	10	11	8	10	11	11
25	10	10	10	10	10	10	10	11	8	10	11	11
26	10	10	10	10	10	10	10	11	8	10	10	11
27	10	10	10	10	10	10	10	11	8	10	10	11
28	10	10	10	10	10	10	10	11	8	10	10	11
29	10	10	10	10	10	10	10	11	8	10	10	11
30	10	10	10	10	10	10	10	11	8	10	10	11
31	10	....	10	10	....	10	....	11	....	10	10	....
Mean	10	10	10	10	10	10	10	11	9	9	10	10
Max.	10	10	10	10	10	11	10	11	11	10	11	11
Min.	10	10	10	10	10	10	10	10	8	8	10	10
A. F.	615	595	615	615	575	645	595	647	526	555	645	625
Total Acre Feet	7,253.											

STREVER CREEK—Section 1-8-20

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	29	32	23	16	18	64	18	25	50	35	80	35
2	28	32	23	15	18	26	18	25	150	38	56	38
3	29	32	23	15	18	26	18	25	150	50	60	42
4	29	32	23	15	18	26	18	25	100	52	64	46
5	29	32	23	15	18	26	18	25	59	43	64	51
6	29	29	26	14	18	24	16	25	46	42	65	54
7	29	29	26	14	18	24	16	25	48	35	63	48
8	29	29	26	14	18	24	16	25	43	44	62	45
9	29	29	26	14	18	24	16	25	40	37	44	52
10	29	29	26	14	18	24	16	25	41	43	53	43
11	30	26	31	13	18	22	15	26	51	30	41	62
12	30	26	31	13	18	22	15	26	48	25	36	64
13	30	26	31	13	29	22	15	26	49	26	31	67
14	30	26	31	13	29	22	15	26	48	19	26	65
15	30	26	31	13	29	22	15	26	44	18	26	64
16	30	23	36	12	29	22	15	26	43	13	25	61
17	30	23	36	12	29	22	20	26	88	11	32	59
18	30	23	36	12	29	22	20	26	65	17	39	59
19	30	23	36	12	29	22	20	26	106	18	42	60
20	30	23	36	12	29	22	20	26	120	18	45	53
21	31	21	29	15	28	21	20	20	89	19	41	46
22	31	21	29	15	28	21	20	20	68	6	38	47
23	31	21	29	15	28	21	25	20	56	34	28	49
24	31	21	29	15	28	21	25	20	53	17	18	45
25	31	21	29	15	28	21	25	20	48	1	18	41
26	32	21	22	18	27	20	25	20	48	26	19	50
27	32	19	22	18	27	20	30	20	43	51	22	59
28	32	19	22	18	27	20	30	20	38	42	26	64
29	32	19	22	18	27	20	30	20	36	34	28	65
30	32	19	22	18	....	20	30	50	32	69	30	65
31	32	....	22	18	....	20	....	50	....	104	32	....
Mean	30	25	28	15	24	22	20	26	63	33	40	53
Max.	32	32	36	18	29	26	30	50	150	104	80	67
Min.	29	19	22	12	18	20	15	20	32	1	18	35
A. F.	1858	1491	1700	898	1380	1378	1190	1567	3769	2017	2487	3172
Total Acre Feet	22,907.											

REPORT OF SECRETARY

TOOHEY DRAIN—Section 20-23-56

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	3	3	2	1	2	2	1	2	3	4	4
2	4	3	3	2	1	2	2	1	2	3	4	4
3	4	3	3	2	1	2	2	1	2	3	4	4
4	4	3	3	2	1	2	2	1	2	3	4	4
5	4	3	3	2	1	2	2	1	2	3	4	4
6	4	3	3	2	1	2	2	1	2	3	4	4
7	4	3	3	2	1	2	2	1	2	3	4	4
8	4	3	3	2	1	2	2	1	2	3	4	4
9	4	3	3	2	1	2	2	1	2	3	4	4
10	4	3	3	2	1	2	2	1	2	3	4	4
11	4	3	3	2	1	2	2	1	2	3	4	4
12	4	3	3	2	1	2	2	1	2	3	4	4
13	4	3	3	2	1	2	2	1	2	3	4	4
14	4	3	3	2	1	2	2	1	2	3	4	4
15	4	3	3	2	1	2	2	1	2	3	4	4
16	4	3	3	2	1	2	2	1	2	3	4	4
17	4	3	3	2	1	2	2	1	2	3	4	4
18	4	3	3	2	1	2	2	1	2	3	4	4
19	4	3	3	2	1	2	2	1	2	3	4	4
20	4	3	3	2	1	2	2	1	2	3	4	4
21	4	3	3	2	1	2	2	1	2	3	4	4
22	4	3	3	2	1	2	2	1	2	3	4	4
23	4	3	3	2	1	2	2	1	2	3	4	4
24	4	3	3	2	1	2	2	1	2	3	4	4
25	4	3	3	2	1	2	2	1	2	3	4	4
26	4	3	3	1	2	2	2	2	2	4	4	4
27	4	3	3	1	2	2	2	2	2	4	4	4
28	4	3	3	1	2	2	2	2	2	4	4	4
29	4	3	3	1	2	2	2	2	2	4	4	4
30	4	3	3	1	....	2	2	2	2	4	4	4
31	4	....	3	1	....	2	....	2	....	4	4	....
Mean	4	3	3	2	2	2	2	2	2	4	4	4
Max.	4	3	3	2	3	2	2	2	2	4	4	4
Min.	4	3	3	1	1	2	2	1	2	3	4	4
A. F.	246	179	184	111	115	123	119	93	119	216	246	238
Total Acre Feet	1,989.											

TOOHEY SPILLWAY—Section 19-23-56

Date	Year Ending September 30, 1932											
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	22	20	18	17	15	14	12	0	0	0	0
2	0	22	20	18	17	15	14	12	0	0	0	0
3	0	22	20	18	17	15	14	12	0	0	0	0
4	0	22	20	18	17	15	14	12	0	0	0	0
5	0	22	20	18	17	15	14	12	0	0	0	0
6	26	22	20	18	17	15	14	12	0	0	0	0
7	26	22	20	18	17	15	14	12	0	0	0	0
8	26	22	20	18	17	15	14	12	0	0	0	0
9	26	22	20	18	17	15	14	12	0	0	0	0
10	26	22	20	18	17	15	14	12	0	0	0	0
11	26	22	20	18	17	15	14	12	0	0	0	0
12	26	22	20	18	17	15	14	12	0	0	0	0
13	26	22	20	18	17	15	14	12	0	0	0	0
14	26	22	20	18	17	15	14	12	0	0	0	0
15	26	22	20	18	17	15	14	12	0	0	0	0
16	24	22	20	17	16	15	13	0	0	0	0	0
17	24	22	20	17	16	15	13	0	0	0	0	0
18	24	22	20	17	16	15	13	0	0	0	0	0
19	24	22	20	17	16	15	13	0	0	0	0	0
20	24	22	20	17	16	15	13	0	0	0	0	0
21	24	22	20	17	16	15	13	0	0	0	0	0
22	24	22	20	17	16	15	13	0	0	0	0	0
23	24	22	20	17	16	15	13	0	0	0	0	0
24	24	22	20	17	16	15	13	0	0	0	0	0
25	24	22	20	17	16	15	13	0	0	0	0	0
26	22	22	20	17	16	15	13	0	0	0	0	0
27	22	22	20	17	16	15	13	0	0	0	0	0
28	22	22	20	17	16	15	13	0	0	0	0	0
29	22	22	20	17	16	15	13	0	0	0	0	0
30	22	22	20	17	....	15	13	0	0	0	0	80
31	22	....	20	17	....	15	....	0	....	0	0	....
Mean	20	22	20	17	17	15	14	6	0	0	0	3
Max.	26	22	20	18	17	15	14	12	0	0	0	80
Min.	22	22	20	17	16	15	13	0	0	0	0	0
A. F.	1210	1309	1230	1075	950	900	803	257	0	0	0	159
Total Acre Feet	8,015.											

TUB SPRINGS—Section 8-22-55*—Section 32-23-55**
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	70	50	45	35	32	32	30	30	12	9	31	32
2	70	50	45	35	32	32	30	30	16	15	18	21
3	70	50	45	35	32	32	30	30	21	41	11	37
4	70	50	45	35	32	32	30	30	25	39	11	53
5	70	50	45	35	32	32	30	30	22	18	11	55
6	70	50	45	35	32	30	33	30	20	9	11	58
7	70	50	45	35	32	30	33	30	20	10	11	37
8	70	50	45	35	32	30	33	30	17	10	12	17
9	70	50	45	35	32	30	33	30	14	10	12	16
10	70	50	45	35	32	30	31	30	13	11	11	19
11	60	45	45	35	32	40	33	30	17	12	11	34
12	60	45	45	35	32	40	33	30	96	7	10	50
13	60	45	45	35	32	40	33	30	54	8	10	41
14	60	45	45	35	32	40	33	30	27	15	21	33
15	60	45	45	35	32	40	33	30	25	14	32	29
16	60	45	45	35	32	30	35	30	72	20	21	26
17	60	45	45	35	32	30	35	30	31	28	11	33
18	60	45	45	35	32	30	35	30	40	39	11	41
19	60	45	45	35	32	30	35	30	85	30	11	26
20	60	45	45	35	32	30	35	30	122	21	12	11
21	55	45	40	32	32	30	35	30	116	16	12	22
22	55	45	40	32	32	30	35	30	78	11	12	17
23	55	45	40	32	32	30	35	30	10	11	12	23
24	55	45	40	32	32	30	35	30	12	11	14	29
25	55	45	40	32	32	30	35	30	8	12	14	34
26	55	45	40	32	32	30	35	30	6	12	16	40
27	55	45	40	32	32	30	35	30	8	12	16	52
28	55	45	40	32	32	30	35	30	11	13	24	64
29	55	45	40	32	32	30	35	30	12	15	43	83
30	55	45	40	32	....	30	35	30	23	15	43	103
31	55	....	40	32	....	30	....	30	....	23	43	....
Mean	61	47	43	34	32	32	34	30	34	17	17	38
Max.	70	50	45	35	32	40	35	30	122	41	43	103
Mln.	55	45	40	32	32	30	30	30	6	7	10	11
A. F.	3779	2777	2658	2087	1841	1964	1993	1845	2049	1025	1067	2253

Total Acre Feet 25,338.
*October 1-May 31, Sec. 8-22-55.
**June 1-September 30, Sec. 32-23-55.

WHITE RIVER AT CRAWFORD—Section 10-31-52
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	N.R.	N.R.	N.R.	N.R.	34	26	73	27	20	17	14
2	14	....	....	....	....	32	26	36	26	20	15	14
3	14	....	....	....	N.R.	26	26	35	26	28	14	13
4	14	....	....	....	....	26	26	32	25	20	14	13
5	14	....	....	....	....	22	26	31	29	19	13	13
6	14	....	....	....	....	22	26	146	29	18	13	14
7	14	23	....	....	....	22	25	45	24	18	13	14
8	14	....	....	....	....	20	24	38	24	17	11	14
9	14	....	....	....	....	20	24	38	29	17	11	14
10	14	....	....	....	....	18	27	37	32	17	11	14
11	18	....	....	....	....	18	26	35	24	16	11	14
12	18	....	....	....	....	18	26	34	24	14	10	14
13	17	....	....	....	....	22	24	32	24	34	10	13
14	15	....	15	....	....	24	24	32	19	22	137	12
15	15	....	....	....	....	26	22	34	19	16	24	12
16	15	....	....	....	....	28	22	33	24	15	20	12
17	15	....	....	....	....	28	22	32	24	15	17	12
18	15	....	....	....	....	28	22	30	22	14	16	12
19	15	....	....	....	....	27	22	27	37	14	15	13
20	15	....	....	....	....	26	22	24	48	13	15	13
21	17	....	....	....	....	26	22	24	37	13	17	14
22	17	....	....	....	....	27	22	24	35	13	17	15
23	17	....	....	....	....	26	26	24	34	13	15	15
24	17	....	....	....	....	26	58	24	24	13	15	16
25	17	....	....	....	....	26	116	24	24	13	15	19
26	17	....	....	....	....	26	111	24	39	11	16	19
27	17	....	....	....	....	26	106	25	36	11	17	18
28	17	....	....	....	....	26	113	27	24	11	17	18
29	17	....	....	....	....	26	111	27	23	15	17	17
30	18	....	....	....	....	26	91	27	22	17	15	17
31	18	....	....	....	....	26	....	28	....	19	15	....
Mean	16	20	20	20	30	25	42	36	28	17	19	14
Max.	18	....	....	....	....	34	116	146	48	34	137	19
Mln.	14	....	....	....	....	18	22	24	19	11	10	12
A. F.	965	1190	1230	1230	1730	1540	2510	2180	1650	1020	1160	857

Total Acre Feet 17,300.

REPORT OF SECRETARY

WHITE RIVER AT CHADRON—Section 18-33-49
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	N.R.	N.R.	N.R.	N.R.	40	20	33	13	6.0	0.6	6
2	0.4	.....	.....	.....	.....	38	23	25	12	9.0	1.0	5
3	0.8	.....	.....	.....	12	38	20	24	9	4.0	0.6	4
4	0.8	.....	.....	.....	.....	38	16	24	11	7.0	0.1	1
5	2.0	.....	.....	.....	.....	38	15	81	12	5.0	0.4	1
6	2.0	.....	.....	.....	.....	30	12	200	11	3.0	0.0	0
7	6.0	3	.....	.....	.....	30	10	103	16	2.0	0.0	0
8	9.0	.....	.....	.....	.....	30	10	81	38	0.9	0.0	0
9	6.0	.....	.....	.....	.....	30	11	55	21	2.0	2.0	0
10	11.0	.....	.....	.....	.....	30	10	38	22	3.0	2.0	5
11	11.0	.....	.....	.....	.....	32	9	25	17	4.0	1.0	4
12	6.0	.....	.....	.....	.....	32	9	24	17	4.0	0.8	4
13	9.0	.....	.....	.....	.....	32	7	17	14	7.0	0.1	4
14	11.0	.....	15	.....	.....	32	10	23	13	50.0	131.0	6
15	9.0	.....	.....	.....	.....	32	10	20	16	31.0	135.0	9
16	6.0	.....	.....	.....	.....	36	6	17	17	5.0	16.0	6
17	9.0	.....	.....	.....	.....	36	5	20	38	2.0	10.0	7
18	9.0	.....	.....	.....	.....	36	10	15	22	0.6	5.0	7
19	6.0	.....	.....	.....	.....	36	9	15	13	0.8	4.0	5
20	9.0	.....	.....	.....	.....	36	7	17	13	0.6	3.0	4
21	16.0	.....	.....	.....	.....	34	7	12	11	3.0	2.0	4
22	61.0	.....	.....	.....	.....	34	5	12	7	3.0	0.4	5
23	26.0	.....	.....	.....	.....	34	75	14	7	6.0	2.0	3
24	6.0	.....	.....	.....	.....	34	300	11	9	8.0	1.0	5
25	1.0	.....	.....	.....	.....	34	200	11	6	6.0	7.0	4
26	0.7	.....	.....	.....	.....	30	111	15	7	4.0	40.0	5
27	0.7	.....	.....	.....	.....	30	70	20	13	0.6	12.0	3
28	6.0	.....	.....	.....	.....	30	39	16	6	0.1	10.0	5
29	4.0	.....	.....	.....	.....	33	41	20	2	0.6	6.0	4
30	2.0	.....	.....	.....	.....	35	35	20	4	0.8	7.0	3
31	0.7	.....	.....	.....	.....	27	.....	15	.....	0.8	6.0	.....
Mean	8.1	15	25	25	35	34	47	33	14	5.8	13.1	4
Max.	61.0	.....	.....	.....	.....	40	300	200	38	50.0	135.0	9
Min.	0.4	.....	.....	.....	.....	27	5	11	2	0.1	0.0	0
A. F.	500.0	893	1540	1540	2010	2060	2800	2030	827	357.0	806.0	238

N. R.—No Record.

WHITE HORSE CREEK—Section 5-13-29
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8	10	13	15	13	20	20	20	8	7	17	7
2	8	10	13	15	13	20	20	20	8	7	14	6
3	8	10	13	15	13	20	20	20	7	65	12	6
4	8	10	13	15	13	20	20	20	6	23	11	6
5	8	10	13	15	13	20	20	20	7	14	10	6
6	5	10	14	14	14	25	19	18	6	11	12	5
7	5	10	14	14	14	25	19	18	7	9	15	5
8	5	10	14	14	14	25	19	18	7	8	14	6
9	5	10	14	14	14	25	19	18	6	9	13	6
10	5	10	14	14	14	25	19	18	6	8	13	5
11	7	11	15	13	15	30	19	16	10	7	12	7
12	7	11	15	13	15	30	19	16	10	6	12	8
13	7	11	15	13	15	30	19	16	10	6	12	8
14	7	11	15	13	15	30	19	16	9	5	12	7
15	7	11	15	13	15	30	19	16	8	4	12	7
16	8	11	17	12	17	40	19	11	8	5	11	6
17	8	11	17	12	17	40	19	11	10	5	10	6
18	8	11	17	12	17	40	19	11	9	5	9	7
19	8	11	17	12	17	40	19	11	22	4	8	7
20	8	11	17	12	17	40	19	11	17	7	8	6
21	9	12	17	11	18	30	30	10	14	7	8	6
22	9	12	17	11	18	30	30	10	11	6	8	6
23	9	12	17	11	18	30	30	10	10	8	7	6
24	9	12	17	11	18	30	30	10	9	11	7	6
25	9	12	17	11	18	30	30	10	8	9	6	6
26	10	12	16	12	19	25	35	9	9	8	6	7
27	10	12	16	12	19	25	35	9	9	8	7	7
28	10	12	16	12	19	25	35	9	8	7	7	7
29	10	12	16	12	19	25	35	9	9	8	6	7
30	10	12	16	12	.....	25	35	9	9	9	6	7
31	10	.....	16	12	.....	25	.....	9	.....	13	8	.....
Mean	8	11	15	13	16	24	14	14	9	10	10	6
Max.	10	12	17	15	19	40	35	20	22	65	17	8
Min.	5	10	13	11	13	20	19	9	6	4	6	5
A. F.	485	654	944	787	914	1735	1408	851	547	611	621	369

Total Acre Feet 9,928.

DEPARTMENT OF PUBLIC WORKS

605

WHITE TAIL CREEK—Section 36-15-38
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	35	30	30	35	35	35	35	34	30	26	29
2	15	35	30	30	35	35	35	35	26	29	27	29
3	15	35	30	30	35	35	35	35	19	31	27	28
4	15	35	30	30	36	35	35	25	23	30	25	26
5	15	35	30	30	35	35	35	35	20	28	23	27
6	20	35	30	35	35	30	40	30	18	28	24	28
7	20	35	30	35	35	30	40	30	18	26	26	28
8	20	35	30	35	35	30	40	30	18	25	26	29
9	20	35	30	35	35	30	40	30	18	28	26	28
10	20	35	30	35	35	30	40	30	20	28	25	26
11	20	35	30	35	35	35	40	30	23	29	24	28
12	20	35	30	35	35	35	40	30	23	29	26	30
13	20	35	30	35	35	35	40	30	20	30	27	29
14	20	35	30	35	35	35	40	30	19	29	26	28
15	20	35	30	35	35	35	40	30	20	23	25	28
16	25	33	28	35	35	35	45	20	20	30	26	28
17	25	33	28	35	35	35	45	20	20	24	27	29
18	25	33	28	35	35	35	45	20	20	24	26	29
19	25	33	28	35	35	35	45	20	28	25	26	29
20	25	33	28	35	35	35	45	20	35	26	24	29
21	25	33	28	35	35	35	40	20	32	26	23	28
22	25	33	28	35	35	35	40	20	33	27	24	26
23	25	33	28	35	35	35	40	20	34	26	25	26
24	25	33	28	35	35	35	40	20	34	26	25	26
25	25	33	28	35	35	35	40	20	33	24	25	27
26	35	33	28	35	35	35	40	20	32	23	30	27
27	35	33	28	35	35	35	40	20	32	25	35	26
29	35	33	28	35	35	35	40	20	33	27	41	26
29	35	33	28	35	35	35	40	20	31	26	47	26
30	35	33	28	35	....	35	40	20	33	26	38	27
31	35	....	28	35	....	35	....	20	....	26	29	....
Mean	24	34	29	34	35	34	40	26	26	27	28	28
Max.	35	35	30	35	35	35	45	35	35	31	47	30
Min.	15	33	28	30	35	30	35	20	18	23	23	26
A. F.	1458	2023	1781	2103	2013	2103	2380	1577	1525	1654	1694	1646
Total Acre Feet	21,957.											

WILLOW CREEK AT SARBEN—Section 15-14-35
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	1	1	2	1	1	1	2	1	1	1	1
2	2	1	1	2	1	1	1	2	1	1	1	1
3	2	1	1	2	1	1	1	2	1	1	1	1
4	2	1	1	2	1	1	1	2	1	1	1	1
5	2	1	1	2	1	1	1	2	1	1	1	1
6	2	1	1	2	1	1	1	2	1	1	1	1
7	2	1	1	2	1	1	1	2	1	1	1	1
8	2	1	1	2	1	1	1	2	1	1	1	1
9	2	1	1	2	1	1	1	2	1	1	1	1
10	2	1	1	2	1	1	1	2	1	1	1	1
11	1	1	1	1	1	2	1	2	1	1	1	1
12	1	1	1	1	1	2	1	2	1	1	1	1
13	1	1	1	1	1	2	1	2	1	1	1	1
14	1	1	1	1	1	2	1	2	1	1	1	1
15	1	1	1	1	1	2	1	2	1	1	1	1
16	1	1	2	1	1	2	2	1	1	1	1	1
17	1	1	2	1	1	2	2	1	1	1	1	1
18	1	1	2	1	1	2	2	1	1	1	1	1
19	1	1	2	1	1	2	2	1	1	1	1	1
20	1	1	2	1	1	2	2	1	1	1	1	1
21	1	1	1	1	2	1	2	1	1	1	2	2
22	1	1	1	1	2	1	2	1	1	1	2	1
23	1	1	1	1	2	1	2	1	1	1	2	1
24	1	1	1	1	2	1	2	1	1	1	2	1
25	1	1	1	1	2	1	2	1	1	1	2	1
26	1	2	2	1	2	1	2	1	1	1	2	1
27	1	2	2	1	2	1	2	1	1	1	2	1
28	1	2	2	1	2	1	2	1	1	1	2	1
29	1	2	2	1	2	1	2	1	1	1	2	1
30	1	2	2	1	....	1	2	1	1	1	2	1
31	1	....	2	1	....	1	....	2	....	1	2	....
Mean	1	1	1	1	1	1	2	1	1	1	1	1
Max.	2	2	2	2	2	2	2	2	1	1	2	1
Min.	1	1	1	1	1	1	1	1	1	1	1	1
A. F.	81	69	83	81	75	81	89	91	60	61	83	61
Total Acre Feet	915.											

REPORT OF SECRETARY

WINTERS CREEK—Section 19-22-54
Year Ending September 30, 1932

Date	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	95	63	60	56	55	53	52	52	19	24	109	87
2	95	63	60	56	55	53	52	52	20	9	101	106
3	95	63	60	56	55	52	52	51	20	14	28	116
4	95	63	60	56	55	55	52	48	25	17	29	123
5	95	63	60	56	55	54	54	48	30	15	22	92
6	90	63	60	56	55	53	54	58	31	15	23	77
7	90	63	63	56	53	54	52	55	18	25	26	50
9	90	63	60	56	53	53	54	53	17	44	30	74
9	90	63	60	56	53	53	54	48	7	52	65	73
10	90	63	60	56	42	55	54	48	7	41	44	97
11	90	62	60	56	50	53	53	47	9	44	66	77
12	90	62	60	56	50	52	53	46	6	48	33	56
13	90	62	60	56	50	53	53	46	23	71	49	48
14	80	62	60	56	50	52	52	46	21	91	36	84
15	80	62	60	56	52	52	44	77	11	84	63	85
16	80	62	58	56	53	51	44	66	18	45	61	97
17	80	62	58	56	53	50	44	74	6	61	69	79
18	80	62	58	56	53	49	42	71	11	65	44	78
19	80	62	58	56	53	48	42	52	18	105	46	95
20	80	62	58	56	53	49	42	5	32	97	39	87
21	70	61	58	56	53	49	48	75	32	88	75	135
22	70	61	58	56	53	49	50	52	32	32	80	122
23	68	61	58	56	53	49	52	30	32	48	90	74
24	70	61	58	56	53	51	62	25	29	52	71	87
25	70	61	58	56	52	51	58	25	19	52	67	69
26	65	61	58	56	52	51	56	23	14	83	63	93
27	65	61	58	57	52	51	53	14	15	85	87	91
28	65	61	58	55	52	52	52	13	26	46	106	105
29	65	61	58	55	52	52	52	52	11	53	116	124
30	65	61	58	53	....	52	51	23	8	60	75	129
31	65	....	58	55	....	51	....	21	....	111	71	....
Mean	80	62	59	56	52	52	51	45	19	54	61	90
Max.	95	63	63	57	55	55	62	77	32	111	116	135
Min.	65	61	58	53	42	48	42	5	6	9	22	48
A. F.	4940	3690	3630	3430	3010	3180	3040	2770	1120	3330	3740	6340
Total Acre Feet	41,200.											

INDEX

PART I—BUREAU OF ROADS AND BRIDGES

	Page
Accounts and Records, Division of	
Appropriations for biennium.....	107
Functions of	107
Apportionment ratios, table of county.....	20
Appropriations	
For Department for biennium.....	107
Federal Aid	17
Auto registration—see Motor Vehicle Registration, Division of	
Bridges	
Borings, log of test.....	89
Description of several	
At Ashland over the Platte.....	75
At Columbus over the Loup.....	77
At Columbus over the Platte.....	76
At McCook over the Republican.....	76
At Valentine over the Niobrara.....	77
Grade separations effected.....	77
Tables of data regarding.....	73, 74
Trend in design and construction of.....	74
Bridge checks for counties.....	79
Construction	
Costs—see contract unit prices.	
Drought relief	29, 34, 38
Emergency, special provisions in contracts regarding labor, etc...	36
Federal emergency relief.....	36
In the eight districts.....	26, 27, 29 34
Contractors to whom contracts were awarded, list of.....	22
Contracts awarded, tables of estimated cost of work	
November 1, 1930 to December 31, 1930.....	126
January 1, 1931 to December 31, 1931.....	128
January 1, 1932 to November 30, 1932.....	140
Contract unit prices	
For 1917-26	153
For 1927-28	155
For 1929-30	156
For 1931	158
For 1932	160
For bridges, 1925-30	163
For bridges, 1931	164
For bridges, 1932	165

	Page
Costs—see expenditures	
Districts	
Map showing limits of.....	V
Reports of the eight.....	26
Drought relief—see construction	
Dust prevention	57
Employees	
Number of regular.....	9, 10
Reduction of number on maintenance.....	50
Executives, list of and length of service.....	8
Equipment, inventory of—see maintenance	
Expenditures	
From Federal, State and other funds.....	16
For right of way.....	124
Maintenance	59, 61
Federal Aid—see appropriations	
Gasoline tax, table of receipts by years.....	18
Highway mileage, report of.....	14
Highway system, maps of	
Federal Aid	13
Statutory	12
Work completed or under contract December 1, 1932.....	11
Highways	
Concrete surfaced	
Acceptance of	45, 46
Cracking; use of contraction and expansion joints.....	48
Dimensions of slab	46
Functions of engineering forces.....	44
Mileage of	44
Strength of cores cut from slab.....	49
Time for opening to traffic.....	46
Use of reinforcement in.....	48
Use of sand gravel and of fine-coarse aggregates in.....	47
Oiled surface	
Principal projects constructed.....	42
Procedure in construction	41
Table of mileage contracted and constructed.....	15
Law enforcement, highway.....	65
Liability and compensation, claims paid.....	109
License—see motor vehicle operators license	
Magnet, road	58
Maintenance, Division of	
Costs	59
Equipment, inventory of	52
Expenditures by districts	61
Facts not generally known.....	67

	Page
Materials and supplies, purchase of.....	65
Mechanical department	50
Organization of	50
Signs	57
Snow removal	53
Supplies, method of purchase of.....	65
Traffic flow, map of.....	60
Maps and Plans, Division of	
Functions	69
Preparation of plans for emergency construction.....	69
Procedure in preparation of plans.....	70
Motor Vehicle Registration, Division of	
Annual report for 1930.....	172
Annual report for 1931.....	176
Laws governing	166, 171
Table showing total fees received by years.....	17
Table showing increase and decrease in number.....	166
Motor vehicle operators license.....	168
Organization chart. of Department.....	IV
Pavement—see highways	
Plans—see Maps and Plans, Division of	
Prices—see contract unit	
Research	47, 49, 116
Right of way	
Acquisition of	122
Records	123
Roads—see highways	
Signs	57
Snow fall, table of.....	54
Snow removal and protection.....	26, 27, 31, 53
Specifications, changes in.....	38
State institutions and parks, roads connecting with highways.....	150
Tests	
Division of	
Chart showing growth.....	119
Functions	111
Growth	113
Needs of laboratory.....	113
New equipment	114
Organization	110
Materials	114
Monthly and yearly distribution, chart showing.....	119
Reports	112
Sampling of materials	112
Tabular summary of.....	120
Viaducts and underpasses.....	77

**PART II—BUREAU OF IRRIGATION, WATER POWER
AND DRAINAGE**

	Page
Applications:	
Appropriations for Biennium.....	107
Appropriations of Water or Applications.....	195-292
Approved	284
Canceled	291
Dismissed	293
Acreage:	
Area Irrigated by Counties.....	296
Claims and Applications Granted and Pending:	
Water Division No. 1-A	195
Water Division No. 1-B	220
Water Division No. 1-C	232
Water Division No. 1-D	234
Water Division No. 1-E	238
Water Division No. 1-F	244
Water Division No. 2-A	245
Water Division No. 2-B	253
Water Division No. 2-C	256
Water Division No. 2-D	266
Water Division No. 2-E	276
Water Division No. 2-F	283
Canals: See Hydrographic Report Index	
Charts:	
Map of Nebraska—Water Divisions and Districts.....	193
Gaging Stations	399
Discharge of North Platte River at North Platte—1895-1930.....	332-383
Platte River Basin Requirements—July-August.....	202-A
Platte River Discharge—Five Year Mean—1928-1932.....	372-373
Precipitation Record near Mitchell.....	408
at Bridgeport	409
at Oshkosh	410
at North Platte	411
at Lexington	412
at Fort Robinson	413
at Culbertson	414
Commissioners, Water	182
Court Opinions	311
Districts:	
Drainage	298
Water Commissioners—Map	193
Water Divisions	192
Executives—Employees	182
Evaporation:	
Bridgeport	406
(See Precipitation)	

	Page
Fees	189
Gaging Stations:	
Description	333
Map	399
Graphs: See Charts	
Headgate:	
Relocation	294
Land:	
Area Irrigated by Counties.....	296
Maps:	
See Charts	
Money:	
Fees deposited with State Treasurer.....	189
Observers	182
Officers—Employees	182
Opinions:	
City of Fairbury v. Fairbury Mill and Elevator Company.....	311
Frenchman Valley Irrigation District v. Inman Ditch Co.....	316
Emil H. Bluhm, et al, v. Earl C. La Grange.....	319
Slattery v. Dout	320
Livanis v. Northport Irrigation District.....	322
Livanis v. Northport Irrigation District.....	324
Platte River Basin:	
Platte River Discharge—Five Year Mean—1928-1932.....	373
Requirements—July-August	202-A
Water Diverted in Acre Feet Wyoming-Nebraska State Line- Overton	297
Precipitation:	
At Bridgeport	407
At North Platte	407
(See Evaporation)	
Relocation:	
Headgate	294
Reports:	
Chief of Bureau	184
District Engineer, U. S. Geological Survey.....	300
Summary:	
Statistics	188
Water diverted Platte River Basin—State Line to Overton.....	297
Also see Chart.....	202-A
Water:	
Commissioners	182, 192
Districts	193
Water diverted in Acre Feet Wyoming-Nebraska State Line- Overton	297

HYDROGRAPHIC REPORT

	Page
Hydrographic Report	
Creeks, Drains, Rivers and Seeps.....	331
A	
Akers Draw:	
Discharge Measurements—1931	415
Antelope Creek:	
Discharge Measurements—1931	415
Discharge Measurements—1932	470
Alliance Drain:	
Discharge Measurements—1931	415
Arnold Drain:	
Discharge Measurements—1931	415
Ash Creek:	
Discharge Measurements—1931	415-416
Discharge Measurements—1932	470
Ash Creek, East:	
Discharge Measurements—1931	415
Ash Creek, West:	
Discharge Measurements—1931	416
B	
Bald Drain:	
Discharge Measurements—1931	416
Daily Discharge—1931	519
Daily Discharge—1932	568
Bald Seep:	
Discharge Measurements—1932	470
Bayard Sugar Factory Drain:	
Discharge Measurements—1931	416
Discharge Measurements—1932	471
Daily Discharge—1931	520
Daily Discharge—1932	569
Bazille Creek:	
Discharge Measurements—1931	416
Discharge Measurements—1932	471
Daily Discharge—1932	569
Bear Creek:	
Discharge Measurements—1931	416-417
Discharge Measurements—1932	471
Beauty Creek:	
Discharge Measurements—1931	417
Discharge Measurements—1932	472

	Page
Beaver Creek:	
Discharge Measurements—1931	417-418
Discharge Measurements—1932	472
Birdwood Creek:	
Discharge Measurements—1931	418
Discharge Measurements—1932	473
Daily Discharge—1931	520
Daily Discharge—1932	570
Blue Creek:	
Discharge Measurements—1931	419
Discharge Measurements—1932	473
Daily Discharge—1931	521
Daily Discharge—1932	570
Bogus Creek:	
Discharge Measurements—1931	420
Boggy Creek:	
Discharge Measurements—1932	474
Bordeaux Creek:	
Discharge Measurements—1931	420
Discharge Measurements—1932	474-475
Bow Creek:	
Discharge Measurements—1931	420
Brown Creek:	
Discharge Measurements—1931	420
Discharge Measurements—1932	475
Buffalo Creek:	
Discharge Measurements—1931	421
Discharge Measurements—1932	475
Daily Discharge—1931	522
Daily Discharge—1932	571
Bull Drain:	
Discharge Measurements—1931	421
Discharge Measurements—1932	476
Bull Creek:	
Daily Discharge—1932	572
Burton Creek:	
Discharge Measurements—1931	421
C	
Cache Creek:	
Discharge Measurements—1931	421
Calloway Spring:	
Discharge Measurements—1931	422

	Page
Camp Clark Seep:	
Discharge Measurements—1931	422
Discharge Measurements—1932	476
Daily Discharge—1931	522
Daily Discharge—1932	572
Cedar Branch Creek:	
Discharge Measurements—1931	422
Discharge Measurements—1932	476
Daily Discharge—1932	573
Cedar Creek:	
Discharge Measurements—1931	423
Discharge Measurements—1932	477
Daily Discharge—1931	523
Daily Discharge—1932	573
Center Creek:	
Discharge Measurements—1931	423
Discharge Measurements—1932	477
Chadron Creek:	
Discharge Measurements—1931	423-424
Discharge Measurements—1932	477-478
Clear Creek:	
Discharge Measurements—1931	424
Discharge Measurements—1932	478-479, 515
Daily Discharge—1931	523
Daily Discharge—1932	574
Cleveland Drain:	
Discharge Measurements—1931	425
Discharge Measurements—1932	479
Daily Discharge—1931	524
Daily Discharge—1932	574
Cold Water Creek:	
Discharge Measurements—1931	425
Discharge Measurements—1932	479
Daily Discharge—1931	524
Daily Discharge—1932	575
Congo Creek:	
Discharge Measurements—1931	425
Cottonwood Creek:	
Discharge Measurements—1931	425-426
Discharge Measurements—1932	479-480
Crooked Creek:	
Discharge Measurements—1931	426
Discharge Measurements—1932	480

D

	Page
Dane Creek:	
Discharge Measurements—1931	426
Dawson County Drain:	
Discharge Measurements—1931	427
Discharge Measurements—1932	480
Daily Discharge—1931	525
Daily Discharge—1932	575
Dead Horse Creek:	
Discharge Measurements—1931	427
Discharge Measurements—1932	481
Deer Creek:	
Discharge Measurements—1931	427
Discharge Measurements—1932	481
DeGraw Drain:	
Discharge Measurements—1931	427
Discharge Measurements—1932	481
Daily Discharge—1931	525
Daily Discharge—1932	576
Driftwood Creek:	
Discharge Measurements—1931	427
Discharge Measurements—1932	481
Dry Creek:	
Discharge Measurements—1931	428
Discharge Measurements—1932	481
Dugout Creek:	
Discharge Measurements—1931	428
Discharge Measurements—1932	482
Daily Discharge—1931	526
Daily Discharge—1932	576

E

Eagle Creek:	
Discharge Measurements—1931	428
Elm Creek:	
Discharge Measurements—1931	429
Discharge Measurements—1932	483
Daily Discharge—1932	578

F

Fairfield Seep:	
Discharge Measurements—1931	430
Discharge Measurements—1932	483
Daily Discharge—1931	528
Daily Discharge—1932	578

	Page
Fanning Seep:	
Discharge Measurements—1931	430
Discharge Measurements—1932	483
Daily Discharge—1931	528
Daily Discharge—1932	579
Farmers Creek:	
Discharge Measurements—1931	430
Discharge Measurements—1932	483
Flag Creek:	
Discharge Measurements—1931	430
Discharge Measurements—1932	484
Fremont Slough:	
Discharge Measurements—1931	430
Discharge Measurements—1932	484
G	
Guernsey Reservoir: See Rivers	
Ge Bauer Drain:	
Discharge Measurements—1931	433
Discharge Measurements—1932	486
Gering Drain:	
Discharge Measurements—1931	433
Discharge Measurements—1932	487
Daily Discharge—1931	532
Daily Discharge—1932	581
Gering Waste:	
Discharge Measurements—1931	434
Gordon Creek:	
Discharge Measurements—1931	434
Discharge Measurements—1932	487
Gothenburg Power Waste:	
Discharge Measurements—1931	434
Daily Discharge—1931	532
Daily Discharge—1932	581
Government Spring:	
Discharge Measurements—1931	434
Discharge Measurements—1932	487
Gracie Creek:	
Discharge Measurements—1931	434
Gravel Creek:	
Discharge Measurements—1931	435
Discharge Measurements—1932	487
Daily Discharge—1931	533
Daily Discharge—1932	582
Greenwood Creek:	
Discharge Measurements—1931	435
Discharge Measurements—1932	488

H

	Page
Haines Branch:	
Discharge Measurements—1931	435
Hat Creek:	
Discharge Measurements—1931	435
Discharge Measurements—1932	488
Horse Creek:	
Discharge Measurements—1931	436
Discharge Measurements—1932	488
Daily Discharge—1931	533-534
Daily Discharge—1932	582

I

Indian Creek:	
Discharge Measurements—1931	436-437
Discharge Measurements—1932	489
Daily Discharge—1931	534
Daily Discharge—1932	583
Iowa Creek:	
Discharge Measurements—1931	437

J

Jim Creek:	
Discharge Measurements—1931	437-438
Discharge Measurements—1932	489

K

Keith-Lincoln County Drain:	
Discharge Measurements—1931	438
Discharge Measurements—1932	489
Daily Discharge—1931	535
Daily Discharge—1932	583
Kronberg Seep—Spotted Tail, Wet:	
Discharge Measurements—1931	461
Discharge Measurements—1932	511
Daily Discharge—1931	560
Daily Discharge—1932	600

L

Lakes, Carnine:	
Gage Height—Rise and Fall of Water Surface—1931.....	455
Gage Height—Rise and Fall of Water Surface—1932.....	507
East Valley:	
Gage Height—Rise and Fall of Water Surface—1931.....	455

	Page
Eli:	
Gage Height—Rise and Fall of Water Surface—1931.....	455
Gage Height—Rise and Fall of Water Surface—1932.....	507
Hackberry:	
Gage Height—Rise and Fall of Water Surface—1931.....	456
Thompson:	
Gage Height—Rise and Fall of Water Surface—1931.....	456
Lane Drain:	
Discharge Measurements—1931	438
Discharge Measurements—1932	490
Daily Discharge—1931	535
Daily Discharge—1932	584
Larabee Creek:	
Discharge Measurements—1931	438
Discharge Measurements—1932	490
Leander Creek:	
Discharge Measurements—1931	438
Discharge Measurements—1932	490
Lewellen Drain:	
Discharge Measurements—1931	439
Discharge Measurements—1932	490
Daily Discharge—1931	536
Daily Discharge—1932	584
Lincoln County Drain:	
Discharge Measurements—1931	439
Discharge Measurements—1932	491
Daily Discharge—1931	536-537
Daily Discharge—1932	585
Lodge Pole Creek:	
Discharge Measurements—1931	439-442
Discharge Measurements—1932	491-495
Daily Discharge—1931	537-541
Daily Discharge—1932	586
Logan Creek:	
Discharge Measurements—1931	442
Lonergan Creek:	
Discharge Measurements—1931	442
Discharge Measurements—1932	495
Daily Discharge—1931	542
Daily Discharge—1932	586
Lost Creek:	
Discharge Measurements—1931	442
Discharge Measurements—1932	495
Daily Discharge—1931	542
Daily Discharge—1932	587

	Page
Louse Creek:	
Discharge Measurements—1931	444
Lovely Creek:	
Discharge Measurements—1931	444
Discharge Measurements—1932	497
M	
McCoy Drain:	
Discharge Measurements—1931	444
McGuire Slough:	
Discharge Measurements—1931	445
Discharge Measurements—1932	497
Maple Creek:	
Discharge Measurements—1931	445
Medicine Creek:	
Discharge Measurements—1931	445
Discharge Measurements—1932	497
Daily Discharge—1931	545
Melbeta Drain:	
Discharge Measurements—1931	445
Discharge Measurements—1932	498
Daily Discharge—1931	545
Daily Discharge—1932	589
Minnehaduzza Creek:	
Discharge Measurements—1931	445
Discharge Measurements—1932	498
Mira Creek:	
Discharge Measurements—1931	446
Mitchell Spillway:	
Discharge Measurements—1931	446
Discharge Measurements—1932	498
Daily Discharge—1931	546
Daily Discharge—1932	589
Morrill Drain:	
Discharge Measurements—1931	446
Discharge Measurements—1932	498
Daily Discharge—1931	546
Monroe Creek:	
Discharge Measurements—1931	446
Discharge Measurements—1932	498
Muddy Creek:	
Discharge Measurements—1931	446 447
Discharge Measurements—1932	499
Daily Discharge—1931	547

REPORT OF SECRETARY

N

	Page
Nine Mile Drain:	
Discharge Measurements—1931	449
Discharge Measurements—1932	499
Daily Discharge—1931	547
Daily Discharge—1932	590

O

Oak Creek:	
Discharge Measurements—1931	449
Discharge Measurements—1932	501
Omaha Creek:	
Discharge Measurements—1931	449
Otter Creek:	
Discharge Measurements—1931	449
Discharge Measurements—1932	501
Daily Discharge—1931	550
Daily Discharge—1932	591

P

Pathfinder Reservoir: See Rivers	
Papillion Creek:	
Discharge Measurements—1931	449
Discharge Measurements—1932	501
Pawnee Creek:	
Discharge Measurements—1931	450
Discharge Measurements—1932	502
Daily Discharge—1931	550
Daily Discharge—1932	591
Pepper Creek:	
Discharge Measurements—1931	450
Pine Creek:	
Discharge Measurements—1931	450
Discharge Measurements—1932	502
Plum Creek:	
Discharge Measurements—1931	450
Discharge Measurements—1932	502
Daily Discharge—1931	551
Daily Discharge—1932	592
Ponca Creek:	
Discharge Measurements—1931	450
Prairie Creek:	
Discharge Measurements—1931	451

	Page
Pumpkinseed Creek:	
Discharge Measurements—1931	451
Discharge Measurements—1932	502-503
Daily Discharge—1931	551
Daily Discharge—1932	592
R	
Rivers: See Rivers	
Red Bird Creek:	
Discharge Measurements—1931	451
Red Willow Creek:	
Discharge Measurements—1931	452
Discharge Measurements—1932	503-504
Daily Discharge—1931	552
Daily Discharge—1932	593
Rock Creek:	
Discharge Measurements—1931	454
Discharge Measurements—1932	506
Daily Discharge—1931	557
Rush Creek:	
Discharge Measurements—1931	454
Discharge Measurements—1932	506
S	
Sand Hill Lakes:	
Gage Height—Rise and Fall of Water Surface—1931.....	455-456
Gage Height—Rise and Fall of Water Surface—1932.....	507
Salt Creek:	
Discharge Measurements—1931	457
Sand Creek:	
Discharge Measurements—1931	457
Discharge Measurements—1932	508
Daily Discharge—1931	557
Daily Discharge—1932	596
Sandy Creek:	
Discharge Measurements—1931	457-458
Sappa Creek:	
Discharge Measurements—1931	458
Discharge Measurements—1932	508
Sarben Slough:	
Discharge Measurements—1931	458
Discharge Measurements—1932	508
Daily Discharge—1932	597

	Page
Schlagel Creek:	
Discharge Measurements—1931	458
Discharge Measurements—1932	508
Scottsbluff Drain	
Discharge Measurements—1931	458
Discharge Measurements—1932	509
Daily Discharge—1931	558
Daily Discharge—1932	597 598
Sheep Creek:	
Discharge Measurements—1931	459
Discharge Measurements—1932	509
Daily Discharge—1931	558
Daily Discharge—1932	598
Shell Creek:	
Discharge Measurements—1931	459
Silver Creek:	
Discharge Measurements—1931	459
Silvernail Drain:	
Discharge Measurements—1931	459
Discharge Measurements—1932	509
Daily Discharge—1931	559
Daily Discharge—1932	599
Skunk Creek:	
Discharge Measurements—1931	459
Discharge Measurements—1932	510
Daily Discharge—1931	559
Daily Discharge—1932	599
Snake Creek:	
Discharge Measurements—1931	460
Discharge Measurements—1932	510
Soldier Creek:	
Discharge Measurements—1931	460
Discharge Measurements—1932	510
Sou Belly Creek:	
Discharge Measurements—1931	460
Discharge Measurements—1932	510
Spotted Tail, Dry:	
Discharge Measurements—1931	460
Discharge Measurements—1932	511
Daily Discharge—1931	560
Daily Discharge—1932	600
Spotted Tail, Wet—Kronberg Seep:	
Discharge Measurements—1931	461
Discharge Measurements—1932	511
Daily Discharge—1931	560
Daily Discharge—1932	600

Page

Spring Creek:	
Discharge Measurements—1931	461
Discharge Measurements—1932	511-512
Daily Discharge—1932	601
Squaw Creek:	
Discharge Measurements—1931	461-462
Discharge Measurements—1932	512
Stewarts Drain:	
Discharge Measurements—1931	462
Discharge Measurements—1932	512
Daily Discharge—1931	561
Stinking Water Creek:	
Discharge Measurements—1931	462
Discharge Measurements—1932	512
Daily Discharge—1931	561
Strever Creek:	
Discharge Measurements—1931	462-463
Discharge Measurements—1932	512-513
Daily Discharge—1932	601

T

Thompson Creek:	
Discharge Measurements—1931	463
Discharge Measurements—1932	513
Timber Creek:	
Discharge Measurements—1931	463
Discharge Measurements—1932	513
Toohey Drain:	
Discharge Measurements—1931	463
Discharge Measurements—1932	513
Daily Discharge Measurements—1931	562
Daily Discharge Measurements—1932	602
Toohey Spillway:	
Discharge Measurements—1931	464
Discharge Measurements—1932	514
Daily Discharge—1931	562
Daily Discharge—1932	602
Trunk Butte Creek:	
Discharge Measurements—1931	464
Discharge Measurements—1932	514
Tub Springs:	
Discharge Measurements—1931	464
Discharge Measurements—1932	514
Daily Discharge—1931	563
Daily Discharge—1932	603

U

	Page
Turkey Creek:	
Discharge Measurements—1931	465
Discharge Measurements—1932	515
Turtle Creek:	
Discharge Measurements—1931	465
Union Creek:	
Discharge Measurements—1931	465

V

Verdigree Creek:	
Discharge Measurements—1931	465
Victoria Creek:	
Discharge Measurements—1931	465

W

Wahoo Creek:	
Discharge Measurements—1931	465
Discharge Measurements—1932	515
Warbonnett Creek:	
Discharge Measurements—1931	466
Discharge Measurements—1932	515
Whistle Creek:	
Discharge Measurements—1931	466
Discharge Measurements—1932	515
White Clay Creek:	
Discharge Measurements—1931	466
Discharge Measurements—1932	516
Whitmans Fork:	
Discharge Measurements—1931	466
White Horse Creek:	
Discharge Measurements—1931	466
Discharge Measurements—1932	516
Daily Discharge—1931	565
Daily Discharge—1932	604
White Tail Creek:	
Discharge Measurements—1931	467
Discharge Measurements—1932	517
Daily Discharge—1931	565
Daily Discharge—1932	605
Wild Horse Drain:	
Discharge Measurements—1931	468
Discharge Measurements—1932	517
Daily Discharge—1931	566

	Page
Willow Creek:	
Discharge Measurements—1931	468
Discharge Measurements—1932	518
Daily Discharge—1931	566
Daily Discharge—1932	605
Winter Creek:	
Discharge Measurements—1931	468 469
Discharge Measurements—1932	518
Daily Discharge—1931	567
Daily Discharge—1932	606

RIVERS

A

Arickaree River at Sanborn (See Republican River).....	452
Arickaree River, Section 28 1-41, at Haigler:	
Discharge Measurements—1931	415
Discharge Measurements—1932	470
Daily Discharge—1931	519
Daily Discharge—1932	568

B

Blue River (Big) at Barneston:	
Discharge Measurements—1931	419
Discharge Measurements—1932	474
Blue River (Big) at Beatrice:	
Discharge Measurements—1931	419
Blue River (Big) at Seward:	
Discharge Measurements—1931	419
Discharge Measurements—1932	473
Blue River (Little) at Endicott:	
Discharge Measurements—1931	419
Discharge Measurements—1932	474
Daily Discharge—1931	521
Daily Discharge—1932	571
Blue River (Little) at Fairbury:	
Discharge Measurements—1931	419
Blue River (Little) at Hebron:	
Discharge Measurements—1931	419
Discharge Measurements—1932	474
Blue River (Little) at Kiowa:	
Discharge Measurements—1931	420

	Page
Blue River (Little), Section 20-3-4, at Deshler:	
Discharge Measurements—1932	474
Charts: See Graphs	
Calamus River at Taylor:	
Discharge Measurements—1931	422
Calamus River, Section 22-23-18, at Harrop:	
Discharge Measurements—1932	476
Cedar River at Fullerton:	
Discharge Measurements—1931	422

D

Dismal River at Dunning:	
Discharge Measurements—1931	427
Discharge Measurements—1932	481

E

Elkhorn River at Neligh:	
Discharge Measurements—1931	428
Discharge Measurements—1932	482
Daily Discharge—1931	527
Daily Discharge—1932	577
Elkhorn River at O'Neill:	
Discharge Measurements—1931	428
Discharge Measurements—1932	482
Daily Discharge—1931	526
Elkhorn River at Ewing:	
Discharge Measurements—1931	428
Elkhorn River (South Branch) at Ewing:	
Discharge Measurements—1931	429
Elkhorn River at Waterloo:	
Discharge Measurements—1931	429
Discharge Measurements—1932	482
Daily Discharge—1931	527*
Daily Discharge—1932	577
Elkhorn River at Norfolk:	
Discharge Measurements—1931	429
Elkhorn River (North Branch) at Norfolk:	
Discharge Measurements—1931	429

F

Frenchman River, Section 10-6-41, above Maranville Reservoir:	
Discharge Measurements—1931	431
Discharge Measurements—1932	486
Daily Discharge—1931	529

	Page
Frenchman River, Section 10-6-41, below Maranville Reservoir:	
Discharge Measurements—1931	431
Daily Discharge—1931	530
Frenchman River, Section 11-6-41, below Maranville Reservoir:	
Discharge Measurements—1932	486
Frenchman River, Section 17-6-40, above Inman Canal:	
Discharge Measurements—1931	431
Discharge Measurements—1932	485
Frenchman River, Section 17-6-40, below Inman Canal:	
Discharge Measurements—1931	431
Discharge Measurements—1932	485
Daily Discharge—1931	530
Frenchman River above Champion Lake:	
Discharge Measurements—1931	431
Discharge Measurements—1932	484
Frenchman River, Section 22-6-40, above Champion Reservoir:	
Daily Discharge—1931	531
Frenchman River, Section 23-6-40, below Champion Lake Dam:	
Discharge Measurements—1931	432
Discharge Measurements—1932	485
Frenchman River, Section 20-6-39, above Champion Mill Dam:	
Discharge Measurements—1931	432
Discharge Measurements—1932	484
Frenchman River, Section 21-6-39, at Champion:	
Discharge Measurements—1931	432
Discharge Measurements—1932	484
Frenchman River, Section 19-6-39, at Champion:	
Discharge Measurements—1932	485
Daily Discharge—1932	580
Frenchman River, Section 30-6-38, South of Imperial:	
Discharge Measurements—1931	432
Discharge Measurements—1932	485
Frenchman River, Section 19-5-34, at Hamlet:	
Discharge Measurements—1932	486
Daily Discharge—1931	529
Daily Discharge—1932	579
Frenchman River, Section 11-5-36, at Wauneta:	
Discharge Measurements—1931	432
Discharge Measurements—1932	486
Frenchman River, Section 32-5-33, at Palisade	
Discharge Measurements—1931	433
Frenchman River, Section 31-5-32, at Palisade:	
Discharge Measurements—1932	486
Frenchman River, Section 16-3-31, at Culbertson:	
Discharge Measurements—1931	433
Discharge Measurements—1932	485
Daily Discharge—1932	580

	Page
Frenchman River, Section 17-3-31, at Culbertson:	
Daily Discharge—1931	531
Frenchman River, Section 31-5-33, below Culbertson Canal:	
Discharge Measurements—1932	485

G

Gaging Stations:

Map of Nebraska	399
Pathfinder Reservoir	333
Guernsey, Wyoming Reservoir	333
North Platte at Whalen, Wyoming	333
at Torrington, Wyoming	334
at Henry	335
at Mitchell	335
at Minatare	336
at Bridgeport	337
at Lisco	337
at Oshkosh	338
at North Platte	339
South Platte at Julesburg, Colorado	339
at North Platte	340
Platte River a Overton	340
at Duncan	341
at Ashland	341

Graphs:

Platte River, Discharge of, Pathfinder to Ashland.....	372
North Platte River at North Platte—1895-1932	382-383
Platte River Basin Projects—requirements.....	202-A
Gaging Stations	399
Precipitation Record at Mitchell	408
at Bridgeport	409
at Oshkosh	410
at North Platte	411
at Lexington	412
at Fort Robinson	413
at Culbertson	414

Guernsey Reservoir:

Station Description	333
Storage—1931	375
Storage—1932	389
Inflow—1931	376
Inflow—1932	389
Outflow—1931	376
Outflow—1932	390

K

Keya Paha River, Section 9-34-17, at Brocksburg:

Discharge Measurements—1931	438
-----------------------------------	-----

L

	Page
Loup River at Genoa:	
Discharge Measurements—1932	497
Daily Discharge—1931	544
Daily Discharge—1932	588
Loup River at Columbus:	
Discharge Measurements—1931	444
Discharge Measurements—1932	497
Daily Discharge—1931	544
Loup River (Middle) at Dunning:	
Discharge Measurements—1931	443
Loup River (Middle), Section 11-19-18, at Sargent:	
Discharge Measurements—1931	443
Loup River (Middle), Section 1-19-20, at Sargent:	
Discharge Measurements—1932	495
Loup River (Middle), Section 10-14-10, at St. Paul:	
Discharge Measurements—1931	443
Discharge Measurements—1932	496
Daily Discharge—1931	543
Daily Discharge—1932	588
Loup River (North), Section 22-21-18, at Taylor:	
Discharge Measurements—1931	443
Discharge Measurements—1932	496
Loup River (North), Section 15-21-16, at Burwell:	
Discharge Measurements—1931	443
Loup River (North), Section 14-15 10, at St. Paul:	
Discharge Measurements—1931	443
Discharge Measurements—1932	496
Daily Discharge—1931	543
Daily Discharge—1932	587
Loup River (South) at Callaway:	
Discharge Measurements—1931	444
Loup River (South), Section 36-12-15, at Pleasanton:	
Discharge Measurements—1931	444

N

Nemaha River (Big), Section 20-5 11E, at Tecumseh:	
Discharge Measurements—1931	447
Niobrara River, Section 20-31-58, Wyoming State Line:	
Discharge Measurements—1931	448
Discharge Measurements—1932	499
Niobrara River, Section 9-29 56, at Harrison:	
Discharge Measurements—1931	448
Discharge Measurements—1932	499

	Page
Niobrara River, Section 7-28-55, at Agate:	
Discharge Measurements—1931	448
Discharge Measurements—1932	500
Niobrara River, Section 7-28 53, below Whistle Creek:	
Discharge Measurements—1931	448
Discharge Measurements—1932	500
Niobrara River, Section 5-28-51, at Marsland:	
Discharge Measurements—1931	448
Discharge Measurements—1932	500
Niobrara River, Section 27-29-48, at Dunlap:	
Discharge Measurements—1931	448
Discharge Measurements—1932	500
Daily Discharge—1931	548
Daily Discharge—1932	590
Niobrara River, U. S. G. S. Gaging Station South of Gordon:	
Discharge Measurements 1931	448
Discharge Measurements—1932	500
Daily Discharge—1931	548
Niobrara River, Section 8-33 35, at Eli:	
Discharge Measurements—1931	447
Niobrara River, Section 28-34-27, below Dam at Valentine:	
Discharge Measurements—1931	447
Discharge Measurements—1932	500
Niobrara River, U. S. G. S. Gaging Station at Valentine:	
Discharge Measurements—1931	447
Discharge Measurements—1932	500-501
Daily Discharge—1931	549
Niobrara River at Spencer:	
Daily Discharge—1931	549
Niobrara River, Section 2-32-10, at Lynch:	
Discharge Measurements—1931	449
North Platte River:	
Map—Projects Requirements for July and August.....	202-A
Diversions from return flow in acre feet between State Line and Bridgeport	400
Diversions in second feet for Northport Irrigation District..	400
Return flow, diversions between State Line and Bridgeport	400
Visible return flow between Wyoming-Nebraska State Line and Bridgeport	401
North Platte River—Pathfinder Reservoir:	
Station Description	333
Storage—1931	374
Storage—1932	387
Inflow—1931	374

	Page
Inflow—1932	388
Outflow—1931	375
Outflow—1932	388
North Platte River—Guernsey Reservoir:	
Station Description	333
Storage—1931	375
Storage—1932	389
Inflow—1931	376
Inflow—1932	389
Outflow—1931	376
Outflow—1932	390
North Platte River at Whalen, Wyoming:	
Station Description	333
Daily Discharge—1931	377
Daily Discharge—1932	390
North Platte River at Torrington:	
Station Description	334
Discharge Measurements—1931	343
Discharge Measurements—1932	359
Daily Discharge—1931	377
Daily Discharge—1932	391
North Platte River—Interstate Station at Henry, Nebraska:	
Station Description	335
Discharge Measurements—1931	343-344
Discharge Measurements—1932	360
Daily Discharge—1931	378
Daily Discharge—1932	391
North Platte River at Mitchell:	
Station Description	335
Discharge Measurements—1931	345
Discharge Measurements—1932	361
Daily Discharge—1931	378
Daily Discharge—1932	392
North Platte River—Main Channel South of Tri-State Waste:	
Discharge Measurements—1931	344
Discharge Measurements—1932	360
North Platte River—Ramshorn Channel South of Tri State Waste:	
Discharge Measurements—1931	345
Discharge Measurements—1932	360
North Platte River at Minatare:	
Station Description	336
Discharge Measurements—1931	346
Discharge Measurements—1932	362
Daily Discharge—1931	379
Daily Discharge—1932	392

	Page
North Platte River at Bridgeport:	
Station Description	337
Discharge Measurements—1931	347
Discharge Measurements—1932	362
Daily Discharge—1931	379
Daily Discharge—1932	393
North Platte River at Lisco:	
Station Description	337
Discharge Measurements—1931	347
Discharge Measurements—1932	363
Daily Discharge—1932	393
North Platte River at Oshkosh:	
Station Description	338
Discharge Measurements—1931	348
Discharge Measurements—1932	363
Daily Discharge—1931	380
Daily Discharge—1932	394
North Platte River at Lewellen:	
Discharge Measurements—1931	348
Discharge Measurements—1932	364
Daily Discharge—1931	380
North Platte River at Sutherland:	
Discharge Measurements—1931	349
Discharge Measurements—1932	364
Daily Discharge—1931	381
Daily Discharge—1932	394
North Platte River at North Platte:	
Station Description	339
Discharge Measurements—1931	349
Discharge Measurements—1932	364
Daily Discharge—1931	381
Daily Discharge—1932	395
(See South Platte River at North Platte)	

P

Pathfinder Reservoir:	
Station Description	333
Storage—1931	374
Storage—1932	387
Inflow—1931	374
Inflow—1932	388
Outflow—1931	375
Outflow—1932	388

	Page
Platte River at Brady Island below Gothenburg Canal:	
Discharge Measurements—1931	355
Discharge Measurements—1932	368
Platte River (North Channel) South of Gothenburg:	
Discharge Measurements—1931	355
Discharge Measurements—1932	368
Platte River (South Channel) South of Gothenburg:	
Discharge Measurements—1931	355
Platte River at Gothenburg:	
Daily Discharge—1931	385
Platte River at Cozad:	
Discharge Measurements—1931	356
Platte River (South Channel) at Cozad:	
Discharge Measurements—1932	369
Platte River (North Channel) at Cozad:	
Discharge Measurements—1932	370
Daily Discharge—1932	397
Platte River at Overton:	
Station Description	340
Discharge Measurements—1931	356
Discharge Measurements—1932	369
Daily Discharge—1931	386
Daily Discharge—1932	397
Platte River South of Elm Creek:	
Discharge Measurements—1931	356
Discharge Measurements—1932	369
Platte River at Duncan:	
Station Description	341
Discharge Measurements—1931	357
Discharge Measurements—1932	370
Daily Discharge—1931	386
Daily Discharge—1932	398
Platte River at Ashland:	
Station Description	341
Discharge Measurements—1931	357-358
Discharge Measurements—1932	371
Daily Discharge—1931	387
Daily Discharge—1932	398

R

Return Flow, diversions between Wyoming-Nebraska State	
Line and Bridgeport	400
Republican River, Section 10-1-42, Colorado-Nebraska State Line:	
Discharge Measurements—1931	452
Daily Discharge—1931	553

	Page
Republican River, Section 9-1-42, Colorado-Nebraska State Line:	
Discharge Measurements—1932	504
Daily Discharge—1932	593
Republican River, Section 11-1-42, at Sanborn: (See	
Arickaree River)	
Discharge Measurements—1931	452
Discharge Measurements—1932	504
Republican River, Section 19-1-37, at Benkelman:	
Daily Discharge—1931	553
Republican River (North Branch), Section 19-1-37, at Benkelman:	
Discharge Measurements—1931	453
Discharge Measurements—1932	504
Daily Discharge—1931	554
Republican River (South Branch), Section 19-1-37, at Benkelman:	
Discharge Measurements—1931	453
Discharge Measurements—1932	504
Republican River (South Branch), at Benkelman:	
Daily Discharge—1932	594
Republican River at Max:	
Discharge Measurements—1931	453
Discharge Measurements—1932	504
Daily Discharge—1931	554
Daily Discharge—1932	594
Republican River at Culbertson:	
Discharge Measurements—1931	453
Discharge Measurements—1932	504
Daily Discharge—1931	555
Daily Discharge—1932	595
Republican River at McCook:	
Discharge Measurements—1931	453
Discharge Measurements—1932	505
Daily Discharge—1931	555
Republican River, Section 22-4-24, at Holbrook:	
Discharge Measurements—1932	505
Republican River, Section 31-4-21, at Oxford:	
Discharge Measurements—1931	454
Discharge Measurements—1932	505
Republican River, Section 8-1-15, at Bloomington:	
Discharge Measurements—1932	505
Daily Discharge—1931	556
Daily Discharge—1932	595
Republican River, Section 23-1-8, at Bostwick:	
Discharge Measurements—1931	454
Discharge Measurements—1932	505
Daily Discharge—1931	556

	Page
Republican River at Superior:	
Discharge Measurements—1931	454
Discharge Measurements—1932	506
Republican River at Hardy:	
Discharge Measurements—1932	506
Daily Discharge—1932	596

S

Snake River, Section 9-31-30, above Falls:	
Discharge Measurements—1931	460
South Platte River at Julesburg, Colorado:	
Station Description	339
Discharge Measurements—1931	351-354
Discharge Measurements—1932	366-368
Daily Discharge—1931	385
Daily Discharge—1932	396
South Platte River at North Platte:	
Station Description	340
Discharge Measurements—1931	350
Discharge Measurements—1932	365
Daily Discharge—1931	384
Daily Discharge—1932	395
South Platte River at Ogalalla:	
Discharge Measurements—1931	350
Discharge Measurements—1932	365
Daily Discharge—1931	384
Daily Discharge—1932	396

V

Visible Return Flow:	
Wyoming Nebraska State Line—Bridgeport—	
1930-1932	401-404

W

Water:	
Analysis of Diversion—Northport Irrigation District.....	400
Evaporation	406
Precipitation	407
Return Flow in Acre Feet Between State Line and	
Bridgeport	400
White River, Section 10-31-52, Military Road:	
Discharge Measurements—1932	517

	Page
White River at Crawford:	
Discharge Measurements—1931	564
Discharge Measurements—1932	603
White River at Chadron:	
Discharge Measurements—1931	467
Discharge Measurements—1932	517
White River, Section 26-32-52, above Whitney Diversion:	
Discharge Measurements—1931	467
Discharge Measurements—1932	516
White River, Section 26-32-52, below Whitney Diversion:	
Discharge Measurements—1931	467
Discharge Measurements—1932	516
Daily Discharge—1932	563
Wood River at Grand Island:	
Discharge Measurements—1931	469
Wood River at Kearney:	
Discharge Measurements—1931	469
Wood River at Wood River:	
Discharge Measurements—1931	469