

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

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1921 - 1922

# **Fourteenth Biennial Report**

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OF THE

## **Department of Public Works**

TO THE

**Governor of Nebraska**



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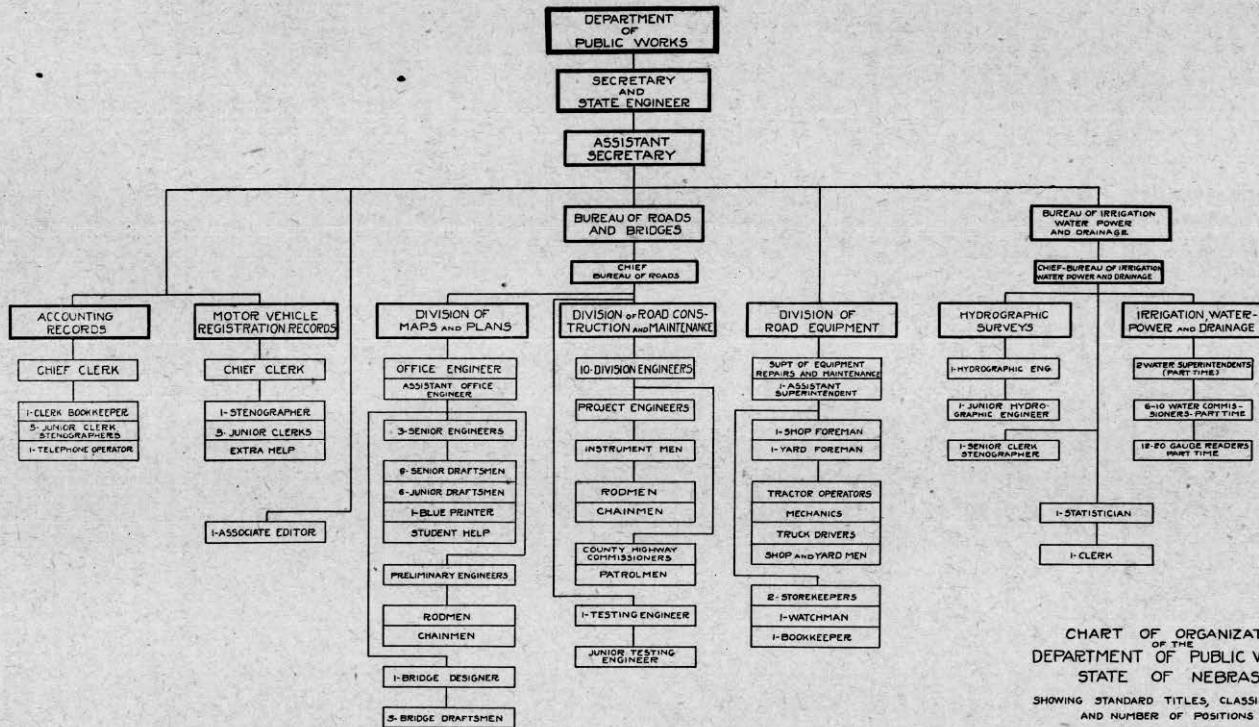


To His Excellency,  
SAMUEL R. McKELVIE,  
Governor of Nebraska.

Sir:

I have the honor to transmit herewith the Fourteenth Biennial Report of the Department of Public Works, for the two fiscal years ending November 30, 1922.

Respectfully submitted,  
GEO. E. JOHNSON,  
Secretary.



**LIST OF OFFICERS AND EMPLOYEES****Bureau of Irrigation, Water Power and Drainage**

George E. Johnson.....	Secretary
Robert H. Willis.....	Chief of Bureau
John D. Heywood.....	Water Superintendent, Division No. 2
T. C. Palmer.....	Hydrographer, Division No. 1
H. R. Kurth.....	Draftsman
K. I. Ward.....	Chief Clerk
F. M. Porter.....	Stenographer

**Water Commissioners**

O. M. Finley.....	Water Division No. 1
W. F. Chaloupka.....	Water Division No. 1
R. J. Lorenzen.....	Water Division No. 1
O. H. Eyerly.....	Water Division No. 1
D. D. Price.....	Water Division No. 1
C. E. Strong.....	Water Division No. 1
Clayton Radcliffe .....	Water Division No. 1
A. W. Hall.....	Water Division No. 1
Ralph B. Schnurr.....	Water Division No. 2
Fred Hood .....	Water Division No. 2
Bertran Lawrence .....	Water Division No. 2
John Cook .....	Water Division No. 2

**Observers**

L. G. Flannery.....	Ft. Laramie, Wyo.
V. Q. Corder.....	Morrill, Nebr.
C. G. Waldo.....	Mitchell, Nebr.
J. E. Hood.....	Melbeta, Nebr.
Glen Halstons .....	Broadwater, Nebr.
James Pratt .....	Elmar, Nebr.
A. W. Shilling, Jr.....	North Platte, Nebr.
Ray V. Duryea.....	Lexington, Nebr.
Nils Brunzell .....	Overton, Nebr.
Earl T. Smith.....	Central City, Nebr.

## **WATER DIVISIONS AND WATER DISTRICTS**

### **Laws of 1919: Water Divisions—**

"The State of Nebraska is hereby divided into two water divisions, denominated Water Division No. 1 and Water Division No. 2, respectively." (1919 Sec. 10, P. 833.)

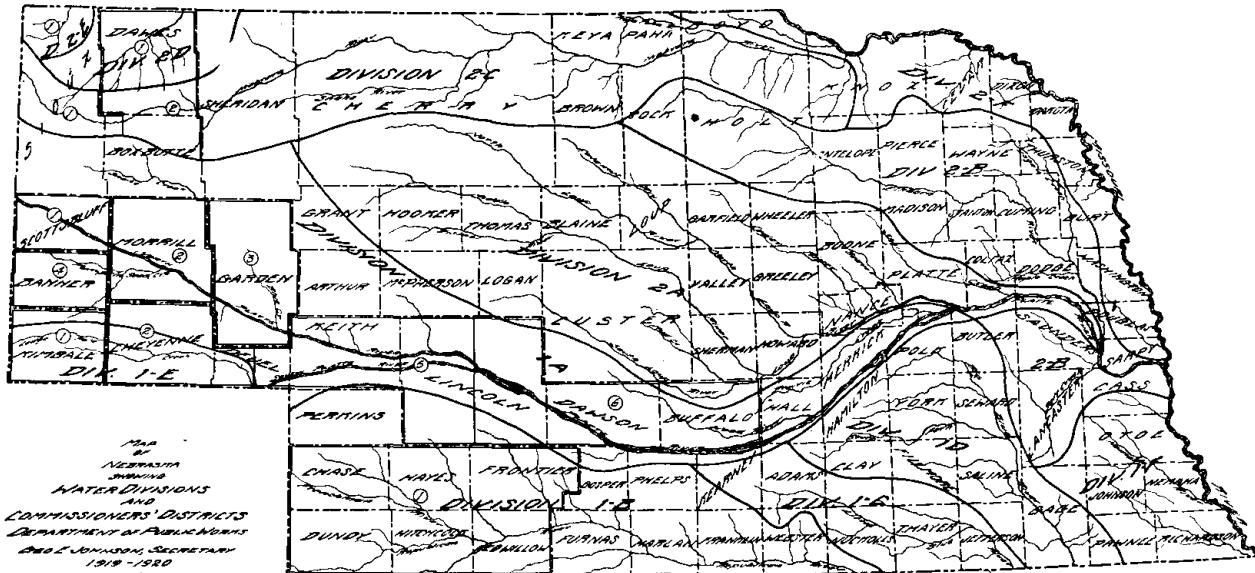
### **Laws of 1919: Boundaries of Division No. 1—**

"Water Division No. 1 shall consist of all the lands of 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. (1919 Sec. 11, P. 833.)

### **Laws of 1919: 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 all other lands of the state not included in any other water division." (1919, Sec. 12, P. 833.)

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



*MAP  
OF  
NEBRASKA  
DIVISIONS  
WATER DIVISIONS  
AND  
COMMISSIONERS' DISTRICTS*  
*DEPARTMENT OF PUBLIC WORKS*  
*GEORGE L. JOHNSON, SECRETARY*  
*1919-1930*

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

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Bridgeport, Nebraska, November 30, 1922.

Geo. E. Johnson, Secretary,  
Department of Public Works,  
Lincoln, Nebraska.

Dear Sir:

The report of the Bureau of Irrigation, Power and Drainage pretends to cover all matters of importance coming before it during the past biennium and is herewith respectfully submitted.

**Public Water**

The bureau has considered all waters available for irrigation and power as public water and applications for a permit to divert it for any beneficial use have been received. Such applications to appropriate the public waters of the State have been given careful consideration before making final disposition.

The experience acquired in the past few years has developed the necessity of classifying applications for a permit to appropriate public waters under four heads. Under the first head an appropriation of public water may be granted for direct irrigation from the flow of a running stream to cover land that, previous to filing the application, had no appropriation. Under the second head a permit may be granted for an appropriation for storage of public water in a reservoir to be used on land that previously had no appropriation. Under the third head, a storage permit of public water may be allowed, to supplement an appropriation from the direct flow of a stream which is insufficient to supply the lands thereunder. The fourth head provides for a permit to take water from any stream to cover lands with an adequate appropriation as a matter of convenience to the appropriator, which is termed "optional diversion." This permit does not give an additional supply of water. It is a permit to divert from some other source as a matter of convenience to the project. The amount so diverted is deducted from the original source and carries the same date of priority as the original appropriation.

Applications for a permit to divert flood waters from a dry stream or waterway for direct irrigation should be disallowed. The term "flood waters" as used here, means floods of few hours duration from heavy rains or cloud bursts.

When more than one application of this kind is granted on the same

stream, the Department cannot protect the prior appropriator.

It is not good policy from the standpoint of irrigation interests of Nebraska to grant permits to appropriate public waters without there being a reasonable degree of certainty that there is an adequate and dependable supply; hence this Bureau has endeavored to use great care in passing on all applications.

#### Developing Projects

After an appropriation has been allowed it is necessary to build control works and canals to carry water to the lands to be irrigated. On small projects this work is done without further consideration of the Department. On larger projects it is necessary to create some sort of an organization to carry on the development and operation of the project. Funds will be needed to construct and complete an irrigation system for controlling and conveying the water to the lands. The formation of an irrigation district has become the most popular plan. Copy of petition, maps, etc., must be filed with the Department of Public Works for examination and approval. It is not the practice of the Department to place the stamp of approval on such organizations as a matter of form; on the contrary, a careful examination is made of the proposed formation so that no lands or areas are taken into the district unless covered with an appropriation. Also that no lands are included that have already been included in some other district.

#### Bonding the District

The bonding of the lands in an irrigation district is the usual method of raising funds to cover the construction costs. It has been the policy of the Department to scrutinize this phase of irrigation development with the greatest care and judgment.

The Department is now in a position to know the flow of every stream in the State; it has soil test records; it is capable of passing on the feasibility of irrigation enterprises. The Department has not approved any project during the last biennium that was not sound, worthy and a safe investment for bond buyers. One application to appropriate water was disallowed for the reason that, in the judgment of the Department, the supply was not dependable and the investment was unsafe. An appeal was taken to the Supreme Court. The Court ordered the Department to grant the application.

#### Drainage

Laws governing drainage under irrigation should differ from drainage in the rain belt.

Nearly all of the drainage problems under irrigation are disposed of satisfactorily by irrigation projects as a part of the system.

#### Hydrography

The demands for measuring all the streams of the State and for

frequent measurements have greatly increased. The Department has had in its employ, two hydrographers whose duties are to measure all streams and canals during the irrigation season and one only during the winter months.

The number of gagings are as follows:

Year	Streams	Canals
1921.....	1038	733
1922.....	1878	461

A total of 4,150 gagings were made during the biennium.

#### Water Administration

The season of 1921 presented no serious problems in the administration of the distribution of water to the various projects diverting water from the Platte Rivers. The flow of the Platte River was never less than 1,000 second feet during the irrigation season. The season of 1922 was lacking in rainfall, varying from four inches to six inches below normal. The flow of the Platte River dropped to 50 second feet at Overton on the 25th of June, and was entirely dry August 28th. Study should be made of the discharge table in another part of this report, of the Platte and North Platte Rivers at Overton and North Platte respectively, throughout the season of 1922. With 950 second feet flow past North Platte from the 20th to the 26th of June only 50 second feet appeared in the river at Overton. The latter part of August the flow at North Platte had dropped to 275 second feet, and was dry after August 28 at Overton until September 13. Complaints from projects East of North Platte came in during the last few days in August. Usually very little water is required after the first of September. However, the condition from August 28 to September 15 was abnormal. The temperature was running from 90 to 100 degrees in the vicinity of North Platte, Gothenburg and Kearney, with a rain deficiency. The Dawson County project had purchased storage water from the Pathfinder, the delivery of which expired about September 12th.

During this period the Department tried to maintain a flow of 187 second feet under the Cozad bridge, assuming this amount would satisfy the Kearney appropriation, dating September 10, 1882. Conditions justified the closing of projects after September 6 whose dates of priority were later than October 18, 1888. Orders were sent out to the Water Commissioners to close. All canals remained closed, except the Enterprise Canal, until the 15th of September, on which date orders were given to permit all projects to take water. The Enterprise Irrigation District procured a restraining order from the District Court, on September 12, restraining the Department from interfering with the diversion of water by the project. The District put up a \$300 bond, the amount required by the court. This District was to be the first opened after senior projects were supplied. A telegram was sent, without knowledge of the restraining order, to the Water Commissioner on the 13th giving the project permission to take water. This method of procuring water

in a critical period, with a restraining order or injunction, does not seem just to the senior appropriator.

Every scheme that could be devised, was applied to the Mitchell Irrigation District to close or regulate during times of scarcity and all of them failed. There were several senior appropriators without water while this project was taking water. A compact was entered into August 12, 1921, between Wyoming and Nebraska Irrigation Departments for the purpose of regulating the Mitchell project on the assumption that it should be regulated as an inter-state project. This may be the solution when a thorough understanding has been finally reached between the Departments. However, the plan did not operate as well as expected during the September period of scarcity. The State of Wyoming has issued certificates of appropriation to all the lands within the Mitchell Irrigation District, although not an acre of it is in Wyoming. This action does not appear to mean anything to Wyoming and probably there will be no occasion for regulation so far as appropriations are concerned in Wyoming.

#### Abandoned Appropriations

A few hearings were held during the last biennium, on projects which have ceased, for more than three years, to use their appropriations. Some of the hearings resulted in partial cancellation and others in entire cancellation. One project on the Republican River is making an appeal. The outcome of this appeal will not be known until after this report is in print.

#### Summary

The following is a general summary of matters coming before the Department during the past two years:

Permits issued to appropriate waters of the State for irrigation, power and storage.....	63
Applications pending.....	36
Applications dismissed.....	16
Applications cancelled.....	29
Claims filed.....	5
Claims adjudicated.....	3
Claims cancelled.....	4
Hearings held.....	12
Proof of appropriations issued.....	2
Irrigation districts organized.....	2
Drainage districts organized.....	12
Maps filed.....	91
Permits to relocate.....	6
Deeds recorded.....	20
Irrigation and power projects investigated.....	340
Fees received:	
Applications, Dam plans, Proof of appropriation, Deeds, Reports, Petitions, copying records.....	\$932.56

**Recommendations**

Hydrographic work should be carried on with not less than one senior and two junior hydrographers. The senior hydrographer should be thoroughly experienced in field work and should be capable of doing all the office work necessary to compile the results.

The salary of Water Commissioners should be placed back to five dollars per day and expenses.

Respectfully submitted,

ROBERT H. WILLIS,

**REPORT OF WATER SUPERINTENDENT, DIVISION NO. 2**

Crawford, Nebraska, November 30, 1922

George E. Johnson, Secretary,  
Department of Public Works,  
Lincoln, Nebraska.

Dear Sir:

I have the honor of submitting a brief report of the work done in Water Division No. 2, together with a summary of the conditions of irrigation projects as found by me in the spring of 1921.

From the beginning of this term, very little effort was required to determine the fact that the laws governing irrigation were not being observed by the water users. It seemed sufficient to know that water applied to the lands in any manner was conducive to good crops and worth the effort and risk of taking. The rights of appropriators appeared to be a matter to be determined between themselves, a condition often resulting in an unfair division of the water and much loss in crop production. The filing of acreage reports was not generally understood as being at all necessary after a water right had been granted.

Up to this time the use of the rating flume, gage heights and automatic gage height recorders were unknown in this district, notwithstanding the fact that very profitable irrigation had been carried on since the early settlement of the northwestern counties, where the major portion of the 400 recognized irrigation projects of this district are located. This number is exclusive of the 151 report on the abandoned list of the 1920 report.

The majority of these projects are very small, and have been operated along the line of least expense, with just sufficient equipment to carry the water to the desired point. With these facts in mind it was readily seen that a hasty departure from this common practice to a strict compliance of the law, would have a strong tendency to place the officer of the department in bad standing with the water user before the real intent of his mission could be made known, that such prejudice would prevent early results and make harder the task of explaining the intent of the law and its usefulness to the project owners. To avoid this condition a more moderate change has been the object of this office in an effort to bring about such desired results.

During the past two seasons a personal visit has been made to all the live projects in Sioux, Dawes and Sheridan counties and those in the western part of Cherry county. Wherever possible an interview was had with the owners, which invariably resulted in voluntary promises to make annual acreage reports and any other correction necessary in keeping good title to projects. For the most part it would appear that these pledges have been made good and the interest taken in irrigation con-

tinues to grow, a fact clearly shown by the department records in the number of corrections of diversion points, re-surveys and maps, new surveys with maps, filing of deeds and new applications.

The most important step taken was that of the organization of the Whitney Irrigation District, October 4th, 1921. This is a pipe line and reservoir proposition, and the principal water supply will be from the winter flow of the White river. The engineer's estimate of the total cost of this project is \$390,870.00 and the acreage is given at 9,739. Work has advanced to the sale of the bonds. The natural advantages of this project have exacted favorable endorsement of several competent engineers. Two smaller districts are being considered and will doubtless become matters of record if the Whitney project meets with the success it is worthy of.

The White River Irrigation Association was organized in the spring of 1921. From the membership of this Association 30 delegates were sent to the State Irrigation Association meeting at Bridgeport, Nebraska, December 7, 8 and 9, 1921. This was a move in the right direction that has shown its beneficial results in this community.

The first automatic gage height recorder to be installed in this district was installed last fall, by T. F. Golden, under Application No. 8, on Cottonwood creek, and the first up to date cement rating flume was constructed this spring by Swinbank and Rabin, Docket 478, White River. These, together with several wood rating flumes, two new dams and two new road crossings complete the better improvements.

The office work is accounted for in the distribution of as many copies of irrigation laws as were available answering all communications and preparing and forwarding to the department, separate reports on approximately 100 projects.

The field work for the most part has been very pleasant, having had but two cases of trouble of distribution of water for irrigation, however, several complaints have been made as to the rights of stock water, a matter not to be determined by the Department of Public Works but purely an action of law. The two complaints over the distribution of water for irrigation were disposed of without rancor. This leaves but one case of unsettled trouble between water users, and this is a case not to be determined by this office.

What ever measure of good has come through this office to the water users of this district during the past two seasons is largely due the able support of R. H. Willis, Chief of Bureau of Irrigation, the kindly co-operation of the water users and the friendly assistance of the Crawford Chamber of Commerce.

Respectfully submitted,

JOHN D. HEYWOOD,

**REPORT OF WATER COMMISSIONER, DISTRICT NO. 2,  
DIVISION NO. 1-A**

Bridgeport, Nebraska, November 30, 1922

George E. Johnson, Secretary,  
Department of Public Works,  
Lincoln, Nebraska.

Dear Sir:

The following is a report on the condition of the canals, flow of water, and water distribution in that part of Water Division No. 1-A which lies within Morrill County, Nebraska, as observed by me during the seasons of 1921 and 1922. During the season of 1921 water distribution in my district was carried out with a minimum amount of difficulty as to quantity of water, application and wasting. The large canals as usual were able to carry and distribute water without difficulty whereas the smaller privately owned canals had their usual troubles due principally to insufficient diversion works and insufficient care of canals as to cleaning in the spring and later to the cleaning out of the weeds growing in them. Brush and manure dams are used on most of these smaller canals and while these are sufficient to divert the necessary amount of water in times of plenty, they are practically worthless when the supply is limited. A large amount of water seeps through them and escapes and when the need is the greatest, the irrigators find that it is necessary to clear away large deposits of silt from in front of the intake in order to get water into the canal. Highways were again flooded more or less by careless water users. Whenever complaints were filed steps were immediately taken to remedy these conditions.

The season of 1922 was entirely the reverse of the preceding one. The usual April flood was far below normal and the ordinary heavy June flood did not appear at all. These facts at once forecasted a shortage of water for the entire North Platte Valley. A gradual dropping of the water in the river began almost immediately after the April flood and this gradual falling off continued throughout the season. No rains of any consequence fell during the summer and the result was an unusual shortage of water in the entire District, and I might add, in the entire North Platte Valley. All canals in the District struggled along until July 24th when orders were issued to close all canals that had neglected to send in their annual acreage reports. Storage rights excepted. On August 2nd, a temporary relief was afforded but on August 25th, a duplicate order of the one issued on the 24th. of July was sent out. Immediately following this order another one dated Sept. 4th, was issued stating that all canals having a date of priority later than March 1st, 1892 were to be closed. Two days later September 6th, this order was superceded by another one which closed all canals having a priority date later than October 18,

1888. This order continued in effect until September 15th. At the present time the river is steadily rising. During the period of scarcity all storage rights of such canals as had purchased them were respected wherever they had complied with the laws as to acreage reports, rating flumes and automatic recording gages. This past season has pointed out to the water users just how important it is to comply with the present irrigation laws of the State of Nebraska. As a result, it is hoped that in the future the difficulties of water administration will be greatly lessened. Flooding of highways and even of fields of crops was another difficulty encountered and this was the more surprising since the season itself was one of such a shortage of water. It can hardly be said that this was brought about by the careless use of water but rather it was due to the lack of proper drainage facilities. The extensive irrigation systems of the valley pour a vast amount of water over the lands and much of this water is slowly finding its way back to the river. In many places it comes to the surface of the ground and at once begins to collect in small streams which increase in quantity as they near the river. The natural drains are insufficient to carry these waters and consequently they flood highways as well as cultivated fields. Blame for this condition can hardly be put on to any one irrigation system much less on to any particular person but rather on to all the water users of the district combined for not organizing proper drainage districts and in that way providing drainage canals which will easily collect all these waters and quickly carry them away.

In conclusion will say that the water users in my district were very patient and co-operated with the Water Commissioner in every respect relative to his duties as Commissioner. Quite a few new automatic recording gages were installed and diversion dams and rating flumes were repaired. A general desire to comply with the Irrigation Laws of the State was in evidence.

Respectfully submitted,

W. F. CHALOUPKA,

REPORT OF WATER COMMISSIONER, DISTRICT NO. 1,  
DIVISION NO. 1-A

Scottsbluff, Nebraska, November 30, 1922

George E. Johnson, Secretary,  
Department of Public Works,  
Lincoln, Nebraska.

Dear Sir:

The following is a brief report on the general conditions prevailing in District No. 1 of Division No. 1-A, during the seasons of 1921 and 1922:

This district comprises the watershed of the North Platte River within the limits of Scotts Bluff County.

The season of 1921 was uneventful. The spring floods caused some little damage to headgates. The season passed without any shortage of water, and there were no complaints from water users, except one from a user under the Castle Rock Canal. This complaint was over the manner of delivery.

The 1922 season was marked by having a serious shortage of water in the last part of July, and again during the last of August and the first of September. All canals in the districts were closed to their river appropriations in July, as shown by their acreage reports. This also was done in the latter part of August; but in early September, all canals except the Tri-State, Winters Creek, and Minatare, the three oldest appropriators were closed, allowing them to receive only such Pathfinder storage water as they had purchased. The only canals to seriously suffer from this were the Enterprise and the Castle Rock. Most of the others had storage water, and the others were not badly in need of water during this period. The Mitchell Canal was technically affected, only, by issuance of the orders, as no actual regulation of the canal was accomplished. The Enterprise was affected for a few days only as the water was then turned back into the canal and kept there by means of an injunction granted by the Court. The hearing has not yet been had on this suit, which, when decided, will settle some very large questions on irrigation matters in the State.

Practically all the canals in this district are in good condition, the larger canals being the best in this respect.

All but six, most of which are the small ditches, have installed rating flumes and automatic recording devices. Some of the recorders however, are not of sufficiently good construction, and do not give good service

Respectfully submitted,

O. M. FINLEY,

**REPORT OF WATER COMMISSIONER, DISTRICT NO. 6****DIVISION NO. 1-A**

Hershey Nebraska, November 30, 1922

George E. Johnson, Secretary,  
Department of Public Works,  
Lincoln, Nebraska.

Dear Sir:

Following is a report of general conditions of water Division No. 1-A, comprising the water shed from the West line of Keith County, east through Lincoln County to the City of North Platte, Nebraska, from the first day of August, 1921, when I was appointed Water Commissioner.

There was no shortage of water during the year of 1921, and I was not called on, as there was no time when all canals did not have sufficient water for irrigation and power. However there was some trouble experienced in keeping some of the canals in shape for distribution of waters of the North Platte and South Platte Rivers.

Conditions during the year 1922 were quite the reverse in regard to the water supply. There was sufficient water for all needs during the early part of the irrigation season but from August 15th, until the close of the irrigation season, water was very low in the Platte River. There was practically no rain at all in this part of the district from July first, and the long and extremely hot spell caused evaporation to become so great, the Platte River from about Brady Island east, became entirely dry.

I was called upon to close all ditches in my territory which priority rights dated later than October 1888. This, of course, caused a great deal of dissatisfaction with the farmers coming at this extremely hot and dry time, just when late water was needed for beets. This condition did not exist for a very long period and the headgates were again ordered opened. One phase during the period of shortage of water, I think' is that a great many of the water users do not understand just how much water they are entitled to. When water is plentiful they usually use more water than they are entitled to, then when, from any cause their supply of water is cut down they are apt to think they are being treated unfairly. There has been considerable wasting of water on the highways and in low places.

The Water Commissioner is not put on the job until a shortage of water exists and many times water is wasted. In a great many instances, farmers using the water out of a lateral, have no method of measuring the amount of water they are taking. They have no system of regulating the use of water, no ditch riders employed, generally, causing a lot of grief among themselves. I think if it is necessary to have a Water Commissioner at all, it is necessary for him to be on the job during the irrigation season.

Respectfully submitted,

O. H. EYERLY,

**REPORT OF WATER COMMISSIONER, DISTRICT NO. 1,  
DIVISION NO. 1-B**

Culbertson, Nebraska, November 30, 1922

George E. Johnson, Secretary,  
Department of Public Works,  
Lincoln, Nebraska.

Dear Sir:

During the year of 1922 there was more rain in the west end of this district than in the central and eastern parts, therefore, the water users in the western part did not do much irrigating—some did not irrigate at all. It has not rained in this district since the first of July, and all of the appropriators were eager to apply the water in the fall. It is impossible on the Republican River to shut off one ditch to give to another if the distance down stream is very great, the water goes into the sand and no one gets it. Measurements which were taken on October 23rd from Cambridge to McCook showed a trifle over seventy feet and when it reached Arapahoe it measured three and four-ninths feet. All the dams on the Republican in this state are dirt and wash out easily and most of the ditches have trouble with sand washing in and filling the upper end for quite a distance. There is one ditch on the Republican that has a prior right over several other ditches and it is hard for them to come to the conclusion that they should make their dam tight and not waste water. We have no water that we can afford to waste.

The Frenchman is a good stream. It increases going down stream as it springy all along. After the water is taken out for one ditch it picks up rapidly for the next one. The majority of people here are very much interested in the reservoir to be built west of Enders, as soon as the bonds are disposed. The capacity of this reservoir is to be twelve thousand acre feet with a dam thirty-five feet high. I have not had to shut off water but very little to favor early appropriations this season. The head gate of Kilpatrick's dam across the Frenchman washed out in June and they did not repair it until October 15th. I find some of the users do not take kindly to the idea of reading the gage-heights and automatic recorders, I think they will see where it is necessary and get in line next season.

The pumping plants on Driftwood Creek did not have water much of the time only in the early part of the season.

Respectfully submitted,

C. E. STRONG,

### SUBSOIL IRRIGATION

The Central Nebraska Water Supplemental Association has filed an application in this office for a permit to appropriate the waters of the Platte River to be used for subsoil irrigation. This project, known as the Tri-County Project, will embrace approximately one million acres in Gosper, Phelps, Kearney and Adams Counties.

It is contended that the additional moisture needed may be stored in the soil at any time of the year when the water is not being diverted for irrigation canals, or when the ground is not frozen; and that the application of this water, which has previously gone to waste, either in the fall or in the spring, will result in bountiful harvests the following season.

The proposition, as we observe it now, consists of a proposal to take water out of the Platte River near Lexington and at some other points east and distribute the flood and unused waters over the above counties. This will in no way interfere with any irrigation projects that now exist.

This method of flood irrigation has been used at Lexington for several years and has been found so effective that with the average season a good crop of small grain and corn can be produced without the normal rainfall. In that this practice has been in effect for over fourteen years on eight thousand acres of land and has proven satisfactorily—it is past the experimental stage.

Not only does this plan of irrigation increase the crops but it aids very materially in conserving the fertility of the soil. In dry areas, soil fertility decreases very rapidly, and it is estimated that this decrease, in the territory under consideration, amounted to perhaps fifty per cent during the past twenty years. The absence of moisture that is needed in bringing about a proper decay of dry vegetable matter robs the soil of humus, and as a result of this, the other elements of fertility that do exist are not available. If this condition should continue it will mean that the time is not far distant to summer fallow all the land in these semi-arid districts, and this will mean, ultimately, that a crop can be produced only every other year.

The work is under the supervision of F. F. Smith, Federal Engineer, and it is hoped that the survey will be completed by January 1st, 1923. The Department of Agriculture will also make a report on the storage capacity of the soil.

On the following pages are several cuts showing the results of subsoil irrigation near Lexington, Nebraska.



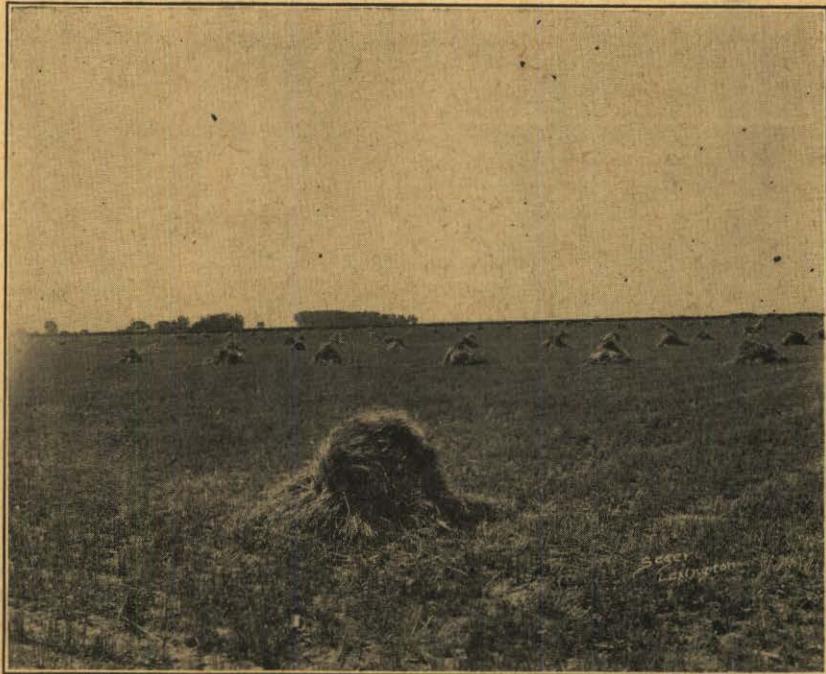
Showing relative value of irrigation. The field on right received one application of water during June, 1922. The total cost was \$1.75. Close-ups of the two fields appear on the following two pages.



Corn field showing relative size of stalks. This ground received only rain fall moisture, yielding from three to five bushels of nubbins per acre.



Field of corn which is located across the road from the corn which is shown on the left side. This field received only one application of water to supplement rainfall and the yield of corn was from seventy to seventy-five bushels per acre.



Wheat field located a few miles from Lexington. This ground received the same amount of rain as the land shown on the opposite page. The yield of wheat per acre was nine bushels.



This land is located across the road from the wheat field as shown on the opposite page. Water was stored in the sub-soil in the fall of 1921. No water applied during 1922. The yield of wheat per acre was  $37\frac{1}{2}$  bushels.

## DRAINAGE IN NEBRASKA

The Drainage Law passed in 1913, was amended by the Legislature of 1919, to read as follows:

All plans for proposed Drainage Districts shall be approved by the Department of Public Works before any contract is let or work begun. The department shall have authority to order any change in said plans, and require the Drainage District to conform thereto, and at all times during the construction have the right to inspect said work and make recommendations pertaining to the same. Upon request of any party in interest, the department may prepare and furnish at cost plans and specifications for any proposed drainage work. (Art. 5, Div. 2, Sec. 29, P. 414).

The following gives the names of the districts, together with other data:

## DRAINAGE DISTRICTS

COUNTY	NAME OF DISTRICT	Date of Approval of Plans
Burt-Washington.....	Burt-Washington Co. Drainage District.....	August 2, 1915
Burt-Washington.....	Peterson Bend Protection District.....	Retards—Sept. 2, 1921
Butler.....	Yanike Drainage District.....	
Butler.....	Drainage District No. 1.....	August 5, 1918
Butler.....	Drainage District No. 2.....	July 26, 1917
Cherry.....	Gay Lake Drainage District.....	September 1, 1922
Colfax.....	Platte Valley Drainage District.....	December 28, 1920
Dakota.....	Drainage District No. 2.....	April 18, 1914
Dakota.....	Hornar Drainage District.....	January 10, 1919
Dakota.....	Dakota City Drainage District.....	April 3, 1922
Dixon-Wayne-Thurston.....	Wakefield Drainage District.....	January 18, 1917
Dixon-Cedar.....	Brooke Bottom Drainage District.....	Retards—Sept. 11, 1922
Douglas.....	East Omaha Drainage District.....	October 5, 1921
Douglas-Sarpy.....	Elkhorn Valley Drainage District.....	June 24, 1919
Frontier.....	Drainage District No. 1.....	March 31, 1915
Lincoln.....	Lincoln County Drainage District.....	March 23, 1922
Merrick.....	Drainage District No. 1.....	February 17, 1916
Merrick.....	Drainage District No. 2.....	May 10, 1921
Morrill.....	Minatare Drainage District.....	
Morrill.....	Gering Drainage District.....	June 2, 1920
Nemaha.....	Drainage District No. 3.....	July 6, 1916
Nuckolls.....	Drainage District No. 1.....	
Otoe-Johnson.....	Drainage District No. 1.....	October 31, 1914
Platte.....	Holdrege Drainage District.....	
Richardson.....	Drainage District No. 1.....	
Richardson.....	Drainage District No. 3.....	December 24, 1921
Richardson.....	Drainage District No. 4.....	April 18, 1916
Richardson.....	Drainage District No. 5.....	May 8, 1920
Richardson.....	Barada Drainage District.....	Retards—June 6, 1921
Sarpy.....	Little Papillion Drainage District.....	March 2, 1920
Sarpy.....	Western Sarpy Drainage District.....	November 15, 1917
Sarpy.....	Bellevue Drainage District.....	August 14, 1921
Sarpy.....	Chalco-Portal Drainage District.....	March 15, 1922
Scotts Bluff.....	Scotts Bluff Drainage District.....	February 21, 1918
Stanton.....	Humbug Drainage District.....	March 15, 1921
Thurston.....	Pender Drainage District.....	February 21, 1918

THE FOLLOWING IS A LIST OF LANDS IRRIGATED IN 1922 BY  
 COUNTIES TAKEN FROM ACREAGE REPORTS

COUNTY	ACRES
Box Butte .....	479
Dawes .....	6,664
Sioux .....	32,932
Banner .....	878
Cheyenne .....	2,268
Deuel .....	2,527
Garden .....	23,049
Kimball .....	4,566
Morrill .....	89,253
Scotts Bluff .....	163,362
Dawson .....	29,151
Dundy .....	2,993
Hayes .....	215
Hitchcock .....	9,615
Lincoln .....	27,355
Keith .....	31,928
Red Willow .....	3,178
Buffalo .....	6,475
Cherry .....	775
Keya Paha .....	10
Valley .....	23
Custer .....	443
Thomas .....	35
Platte .....	37
Chase .....	4,120
Adams .....	36
Saline .....	27
Total.....	442,394

• OPERATION AND MAINTENANCE COST UNDER DISTRICT SYSTEM  
1921-1922

Name of District	Year	No. Acres	Valuation	O. M.	Int.	Bond	Amount Raised	Bonded In-debt edness
Alliance.....	1921	6,370	\$ 176,950.00	75 Mills	.....	18 Mills	\$ 15,925.50	\$ 88,000.00
Alliance.....	1922	6,369	161,700.00	55 Mills	20 Mills	5 Mills	12,453.20	88,000.00
Alfalfa.....	1922	4,140	414,004.00	5 Mills	6 Mills	12 Mills	10,746.11	35,185.21
Birdwood.....	1922	5,507	55,074.10	10 Mills	14 Mills	40 Mills	3,524.74	11,000.00
Blue Creek.....	1922	2,970	29,706.00	75 Mills	.....	.....	2,227.95	.....
Bridgeport.....	1921	14,241	306,996.10	75 Mills	15 Mills	.....	28,194.65	.....
Bridgeport.....	1922	14,241	308,012.70	75 Mills	15 Mills	.....	27,721.14	75,000.00
Brown Creek.....	1921	6,332	258,681.70	17 Mills	.....	.....	4,397.53	.....
Brown Creek.....	1922	6,332	258,681.70	77 Mills	.....	.....	19,918.44	.....
Castle Rock.....	1921	6,047	140,135.00	68 Mills	22 Mills	.....	12,612.15	.....
Castle Rock.....	1922	6,080	137,285.00	11 Mills	.....	29 Mills	5,491.40	45,000.00
Central.....	1921	2,299	48,600.45	160 Mills	.....	.....	7,776.05	.....
Chimney Rock.....	1921	5,593	186,051.00	80 Mills	.....	20 Mills	18,605.10	88,000.00
Chimney Rock.....	1922	5,593	186,051.00	80 Mills	20 Mills	.....	18,605.11	.....
Enterprise.....	1921	7,184	127,678.80	50 Mills	.....	15 Mills	14,054.62	60,000.00
Farmers								
Scottsbluff.....	1921	35,598	1,541,183.58	100 Mills	30 Mills	.....	200,353.86	2,703,000.00
Morrill.....	1921	26,821	1,150,981.43	100 Mills	30 Mills	.....	149,627.58	.....
Scottsbluff.....	1922	35,598	1,079,068.00	.....	.....	.....	.....	.....
Morrill.....	1922	26,821	.....	60 Mills	40 Mills	.....	107,906.80	.....
Frenchman Valley.....	1922	10,000	1,357,488.60	.077 Mills	.085 Mills	.027 Mills	37,560.00	150,000.00
Gering.....	1921	14,408	253,676.00	215 Mills	25 Mills	60 Mills	76,102.80	217,000.00
Gering & Ft. Laramie (U. S. R. S.).....	1922	57,000	.....	.....	.....	.....	.....	5,250,000.00
Kimball.....	1921	6,800	340,000.00	\$ 0.80 per Acre	\$ 1.85 per Acre	\$ 2.35 per Acre	\$ 4,000.00	737,500.00

**OPERATION AND MAINTENANCE COST UNDER DISTRICT SYSTEM  
1921-1922**

Name of District	Year	No. Acres	Valuation	O. M.	Int.	Bond	Amount Raised	Bonded In-debtedness
Kimball.....	1922	6,820.00	341,000.00	18 Mills	-----	42 Mills	34,100.00	237,500.00
Lisco—Morrill.....	1922	739.00	10,963.00	150 Mills	-----	-----	1,644.45	-----
Garden.....	1922	2,852.00	40,780.00	7 Mills	-----	-----	2,856.30	-----
Lyons.....	1922	2,442.90	122,145.00	8 Mills	-----	10 Mills	2,198.61	15,000.00
Nine Mile								
Scottsbluff.....	1921	3,877.00	131,870.00	60 Mills	7 Mills	8 Mills	9,230.90	18,000.00
Morrill.....	1922	2,202.00	165,177.00	-----	-----	-----	11,468.53	-----
Scottsbluff.....	1922	3,877.00	150,558.00	54 Mills	6 Mills	6 Mills	8,991.68	-----
Morrill.....	-----	2,202.00	-----	54 Mills	-----	-----	-----	-----
*Northport.....	1921	15,000.00	193,902.00	10 Mills and \$2.67 per A. toll	-----	-----	7,548.68	1,050,000.00
*Northport.....	1922	16,000.00	209,967.05	12 Mills and \$1.70 per A. toll	-----	-----	10,468.80	-----
North River.....	1922	6,053.21	302,660.50	5 Mills	-----	30 Mills	10,593.13	140,000.00
Platte Valley.....	1922	12,800.00	-----	-----	-----	-----	-----	-----
Oshkosh.....	1922	2,889.00	168,288.00	3 Mills	-----	9 Mills	2,019.45	28,000.00
Ramshorn.....	1921	2,242.00	-----	60c per Acre	-----	-----	1,845.40	-----
Ramshorn.....	1922	2,539.90	-----	40c per Acre	-----	-----	-----	53,495.50
Shortline								
Scottsbluff.....	1921	430.00	65,930.00	58 Mills	-----	4 Mills	4,069.66	15,500.00
Morrill.....	1921	1,955.00	127,465.00	-----	-----	-----	7,901.83	-----
Steamboat.....	1922	580.00	58,000.00	4.9 Mills	-----	15.1 Mills	-----	12,000.00
Suburban.....	1922	8,000.00	85,795.00	80 Mills	-----	-----	2,578.85	-----
Western.....	1922	14,311.73	143,117.80	25 Mills	-----	-----	3,677.93	-----

\*Toll divided on 2,001 acres in 1921 and 4,676 acres in 1922.

**CLAIMS AND APPLICATIONS GRANTED, PENDING AND ABANDONED**

The following tables give a complete list of all claims and applications for water granted by the Department of Public Works and which have never been cancelled; also claims and applications pending. Following each division will show table of abandoned claims and applications which our records show are subject to cancellation.

In these tables, the claims and applications have been arranged in each water division by stream in alphabetical order, and the appropriations on each stream are arranged according to priority on that stream. Those having docket numbers are claims made covering rights acquired under the law prior to April 4, 1895, and those having application numbers are applications for permits to appropriate water made under the law of 1895.

Appropriations marked "O. D." designate other than the original diversion and carry the priority date of the original appropriation.

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

31

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet Granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Akers Draw (No. Platte).....	Enterprise Irr. District	Scottsbluff.....	Nelson Canal.....	O. D.	10.00	13	23	57	Scotts Bluff....	March	28	1899	920	1290
Atkins Drain (No. Platte)....	Atkins, A. W.....	Bridgeport....	Atkins Canal.....	O. D.	2.80	15	19	49	Morrill.....	Dec.	19	1899	828	1450
Ash Creek.....	Gilliard, George.....	Lewellen.....	Gilliard Canal.....	Irrig.	1.43	3	16	42	Garden.....	Dec.	31	1899	812	.....
Beaver Creek.....	C., B. & Q. R. R.....	Lincoln.....	C., B. & Q. Water Sup. Steam		1.00	8	12	14	Buffalo.....	July	26	1919	.....	1550
Birdwood Creek....	Bird Wood Irr. Dist.....	No. Platte.....	Birdwood Canal.....	Irrig.	100.00	35	15	33	Lincoln.....	Oct.	21	1893	646	.....
Birdwood Creek....	Northouse, Ed. ....	Sutherland.....	West Birdwood Canal....	Irrig.	8 57	22	15	33	Lincoln.....	Jan.	16	1894	652	.....
Birdwood Creek....	Saxson, Bert.....	Sutherland.....	Beaucamp Canal.....	Irrig.	3.00	15	15	33	Lincoln.....	Sept.	19	1894	677	.....
Birdwood Creek....	Lower Platte Irrig. Ass'n	Lexington.....	Birdwood Reservoir.....	Stor.		10	15	33	Lincoln.....	Jan.	12	1922	.....	1634*
Blue Creek.....	Union Irr. & W. P. Co.	Lewellen.....	Union Canal.....	Irrig.	20.00	18	16	42	Garden.....	May	16	1890	763	.....
Blue Creek.....	Iowa Irr. & Imp. Co. ....	Lewellen.....	Hooper Canal.....	Irrig.	12.86	6	16	42	Garden.....	Sept.	7	1893	781	.....
Blue Creek.....	Blue Creek Irr. Dist. ....	Lewellen.....	Blue Creek Canal.....	Irrig.	39.00	33	17	42	Garden.....	Dec.	27	1893	785	.....
Blue Creek.....	Meeker Ditch Co. ....	Lewellen.....	Graf Canal.....	Irrig.	33.00	19	16	42	Garden.....	April	2	1894	788	.....
Blue Creek.....	Winterer, Jacob H. ....	Lewellen.....	Blue Creek Canal.....	Irrig.	3.79	21	17	42	Garden.....	Sept.	27	1894	795	.....
Blue Creek.....	Paisley Irr. Dist. ....	Lewellen.....	West Side Canal.....	Irrig.	17.00	28	17	42	Garden.....	Nov.	20	1894	800	.....
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
Bronco Lake.....	Irwin, H. C. ....	Kimball.....	Bronco Lake Canal.....	Irrig.	11.42	6	24	48	Box Butte.....	May	20	1919	.....	1541
Brown's Creek.....	Haxby, George H. ....	Bridgeport....	Haxberry Canal.....	Irrig.	.43	19	20	48	Morrill.....	July	17	1903	.....	717
Buffalo Creek.....	Savins, Richard T. ....	Lexington.....	Savins Canal.....	Irrig.	2.28	22	10	21	Dawson.....	Aug.	18	1917	.....	1495

\* Denotes application not approved.

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

32

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second foot granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Buffalo Creek	Doughty, Wm. T. & R. H.	Lexington	Doughty Canal	Irrig.	.90	21	10	21	Dawson	Mar.	24	1922	.....	1648
Buffalo Creek, W.	Jenson, Anton	Cozad	Jensen's Canal	Irrig.	1.14	23	11	23	Dawson	Oct.	6	1919	.....	1558
Camp Creek	Wehn, J. W.	Alliance	Camp Creek Canal	Irrig.	1.43	13	18	49	Morrill	Mar.	16	1892	866	.....
Carter Creek	Gardner, William E.	Gering	Carter Canal	Irrig.	.....	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	Radcliffe, Mack	Sidney	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	.....	1897
Cedar Creek	Bandaret, Frank	Paxton	Cedar Creek Canal	Irrig.	1.57	17	14	35	Keith	Jan.	3	1911	.....	1051
Clear Creek	Hooper, D. C.	Lewellen	Clear Creek Canal	Irrig.	2.86	32	16	41	Keith	July	1	1888	748	.....
Clear Creek	Bairn, John	Lewellen	Barber Canal	Irrig.	1.14	29	16	41	Keith	Jan.	1	1891	756	.....
Clear Creek	Clear Creek Irr. Co.	Lewellen	Barber Canal	Irrig.	14.57	29	16	41	Keith	May	30	1893	754	.....
Clear Creek	Bairn, John	Lewellen	Barber Canal	Irrig.	1.14	29	16	41	Keith	June	1	1893	745	.....
Clear Creek	Clark, Wesley, and Bairn, John	Lewellen	William's Canal	Irrig.	1.00	28	16	41	Keith	May	18	1894	747	.....
Clear Creek	Barber, Frank H.	No. Platte	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
Cold Water Creek	Lisco Irr. Dist.	Lisco	Cold Water Canal	Irrig.	4.29	26	18	46	Deuel	Sept.	28	1894	796	.....
Coon Creek	Winterer, William H.	Keystone	Coon Creek Canal	Irrig.	.71	34	15	37	Keith	July	3	1895	.....	69
Coon Creek	Winterer, William H.	Keystone	Coon Creek Canal	Irrig.	1.42	34	15	37	Keith	Sept.	16	1911	.....	1225

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

33

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Crescent Lake.....	Lake Water Carrying Co.	Lewellen.....	Crescent Lake Project.....	Supple	.....	21	20	44	Garden.....	Jan.	30	1920	.....	1575
(Blue Creek).....	Lake Water Carrying Co.	Lewellen.....	Union Canal.....	Irrig.	20.00	18	16	42	Garden.....	May	16	1890	763	1575
(Blue Creek).....	Lake Water Carrying Co.	Lewellen.....	Hooper Canal.....	Irrig.	12.86	6	16	42	Garden.....	Sept.	7	1893	781	1575
(Blue Creek).....	Lake Water Carrying Co.	Lewellen.....	Blue Creek Canal.....	Irrig.	39.00	33	17	42	Garden.....	Dec.	27	1893	785	1575
(Blue Creek).....	Lake Water Carrying Co.	Lewellen.....	Graf Canal.....	Irrig.	33.00	19	16	42	Garden.....	Apr.	2	1894	788	1575
(Blue Creek).....	Lake Water Carrying Co.	Lewellen.....	Blue Creek Canal.....	Irrig.	3.79	21	17	42	Garden.....	Sept.	27	1894	795	1575
(Blue Creek).....	Lake Water Carrying Co.	Lewellen.....	West Side Canal.....	Irrig.	17.00	28	17	42	Garden.....	Nov.	20	1894	800	1575
(Blue Creek).....	Lake Water Carrying Co.	Lewellen.....	Paisley Canal.....	Irrig.	1.00	28	17	42	Garden.....	July	14	1899,	.....	515
(Blue Creek).....	Lake Water Carrying Co.	Lewellen.....	Blue Creek Canal.....	Irrig.	.42	33	17	42	Garden.....	Jan.	4	1912	.....	(1575)
Deep Cold Creek...	Finn, J. L. ....	Dalton.....	Finn Bros. Canal.....	Irrig.	.50	28	18	49	Morrill.....	July	1	1890	836	.....
Dugout Cr. Lower	Hagerty, M. H. ....	Bridgeport....	Cooper Canal.....	Irrig.	.86	4	19	48	Morrill.....	Aug.	15	1892	872	.....
Dugout Cr. Lower	Mulloy, Francis C. ....	Broadwater....	Mulloy Canal.....	Irrig.	1.00	27	27	48	Morrill.....	July	18	1907	.....	865
Dugout Cr. Lower	Hagerty, M. H. ....	Bridgeport....	Hagerty Canal.....	Storage	34 AF	4	19	48	Morrill.....	Oct.	26	1912	.....	1238
Dugout Cr. Lower	Hagerty, M. H. ....	Bridgeport....	Klondyke Reservoir.....	Irrig.	1.00	4	19	48	Morrill.....	July	11	1919	.....	1547
Golden Creek.....	Theis, M. J. ....	Ogallala.....	Theis Canal.....	Irrig.	2.71	25	15	39	Keith.....	Sept.	17	1895	.....	160
Greenwood-Creek..	Keenan, Mary K. ....	Fond Du Lac, Wisconsin....	Trinnier Canal.....	Irrig.	6.29	28	18	50	Morrill.....	April	6	1891	849	.....
Greenwood-Creek..	Keenan, Mary K. ....	Fond Du Lac, Wisconsin....	Nelson Canal.....	Irrig.	3.00	33	18	50	Morrill.....	April	1	1892	845	.....
Greenwood-Creek..	Shannon Bros. ....	Bridgeport....	Capron Canal.....	Irrig.	2.00	15	18	50	Morrill.....	Jan.	1	1893	890	.....
Greenwood-Creek..	Meglemre, O. E. ....	Bridgeport....	Moellemre Canal.....	Irrig.	.59	10	18	50	Morrill.....	May	6	1896	.....	294

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

34

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Greenwood Creek	Meglomre, C. E.	Bridgeport	Meglomre Canal	Irrig.	1.14	10	18	50	Morrill	Mar.	11	1907	.....	858
Greenwood Creek	Trott, James S.	Bridgeport	Trott Canal	Irrig.	.....	10	18	50	Morrill	Dec.	14	1910	.....	1045*
Greenwood Creek	Keenan, Mary K.	Fond Du Lac, Wisconsin	Trinnier Canal	Irrig.	1.65	28	18	50	Morrill	Aug.	18	1919	.....	1551
Horse Creek	Mihan, John, Est.	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, Est.	Morrill	State Line Canal	Irrig.	2.00	33	23	58	Scotts Bluff	Apr.	21	1910	.....	994
Horse Creek	Casteel-Husted	Morrill	Jackson Extension	Irrig.	1.00	27	23	58	Scotts Bluff	May	19	1910	.....	1000
Hoth Draw (No. Platte River)	O'Holloran, James	Bayard	O'Holloran Canal	O. D.	1.00	28	21	52	Morrill	Sept.	16	1887	918	1473
Hoth Draw	Great Western Sugar Co.	Scottsbluff	Pump Line Bayard Fac	Mfg.	15.00	34	21	52	Morrill	Oct.	4	1920	.....	1593*
Huntington Spgs.	Cord, Fred	Hull	Cord Canal	Irrig.	1.43	9	20	58	Scotts Bluff	Dec.	23	1904	.....	778
Indian Creek	Mann, John H.	Bridgeport	Wastewater Canal	O. D.	2.30	30	21	50	Morrill	Sept.	19	1904	.....	{ 768
Kiowa Creek	Currie, Edw. A.	Mitchell	Currie Canal	Irrig.	9.14	13	21	57	Scotts Bluff	Mar.	23	1892	938	1455
Lawrence Fork	Simms and Postal	Bridgeport	Laing Canal	Irrig.	.50	28	18	52	Morrill	Dec.	31	1886	825	.....
Lawrence Fork	Lindburg, Fred R.	Bridgeport	E. S. Crigler Canal	Irrig.	.57	1	18	52	Morrill	Sept.	11	1891	861	.....
Lawrence Fork	Neihus, J. W.	Redington	Spring Branch Canal	Irrig.	1.00	11	18	52	Morrill	Oct.	23	1891	862	.....
Lawrence Fork	Neihus, J. W.	Redington	Redington Canal	Irrig.	.50	11	18	52	Morrill	May	1	1893	893	.....
Lawrence Fork	Neihus, J. W.	Redington	Spring Branch Ext.	Irrig.	.57	1	18	52	Morrill	Oct.	13	1898	.....	476
Lawrence Fork	Lindburg, Fred	Bridgeport	Crigler Ext	Irrig.	1.43	1	18	52	Morrill	Nov.	25	1898	.....	486

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

35

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Lawrence Fork....	Neihus, Dora.....	Redington.....	Neihus Canal.....	Irrig.	.86	11	18	52	Morrill.....	Mar.	23	1900	.....	550
Lawrence Fork....	Neihus, J. W. ....	Redington.....	Harper Canal.....	Irrig.	1.43	11	18	52	Morrill.....	May	27	1902	.....	669
Lawrence Fork....	Harper - Neihus.....	Redington.....	Harper Canal No. 2.....	Irrig.	2.00	1	18	52	Morrill.....	June	16	1902	.....	674
Lawrence Fork....	Simms and Postal.....	Bridgeport.....	Randall Canal.....	Irrig.	2.57	21	18	52	Morrill.....	May	15	1911	.....	1100
Lawrence Fork....	King, Wm. O. ....	Kearney.....	Kings Canal.....	Irrig.	4.00	15	18	52	Morrill.....	Dec.	8	1915	.....	1440
Lawrence Fork....	King, Wm. O. ....	Kearney.....	Kings Canal.....	Irrig.	1.00	15	18	52	Morrill.....	July	3	1920	.....	1587
Lonergan Creek....	Soehl, Herman A. ....	Lemoyne.....	Soehl Canal.....	Irrig.	2.00	17	15	39	Keith.....	May	10	1889	697a	.....
Lonergan Creek....	Jacobs, Lee.....	Lemoyne.....	E. Lonergan Canal.....	Irrig.	9.14	17	15	39	Keith.....	May	25	1889	699	.....
Lonergan Creek....	Soehl, Herman A. ....	Lemoyne.....	Soehl Canal.....	Irrig.	.86	17	15	39	Keith.....	April	27	1893	697b	.....
Lonergan Creek....	Harris, F. H. ....	Lemoyne.....	Haney Canal.....	Irrig.	1.14	17	15	39	Keith.....	July	1	1893	719	.....
Mathews Creek....	Mathews, Benjamin G. ....	Keystone.....	Mathews Canal.....	Irrig.	1.14	28	15	37	Keith.....	April	1	1893	750	.....
Nine Mile Draw (North Platte)	Nine Mile Irr. Dist. ....	Bayard.....	Nine Mile Canal.....	O. D.	79.00	10	21	53	Morrill.....	Dec.	6	1893	925	1431
No. Platte River....	Platt Valley Irr. Dist. ....	Hershey.....	North Platte Canal.....	Irrig.	300.00	13	14	34	Lincoln.....	May	31	1884	635	.....
No. Platte River....	Farmers Irrigation Dist. ....	Scottsbluff.....	Farmers Canal.....	Irrig.	1142.86	3	23	58	Scotts Bluff....	Sept.	16	1887	918	.....
(No. Platte River) (Hoth Draw).....	Farmers Irrigation Dist. ....	Scottsbluff.....	Ramshorn Canal.....	Irrig.	3.07	13	23	58	Scotts Bluff....	Sept.	16	1887	918	..... R
No. Platte River....	O'Holloran, James.....	Bayard.....	O'Holloran Canal.....	O. D.	.....	3	23	58	Scotts Bluff....	Sept.	16	1887	918	1473
No. Platte River....	Minatare Mutual Canal and Irr. Co. ....	Minatare.....	Minatare Canal.....	Irrig.	249.43	32	22	54	Scotts Bluff....	Jan.	14	1888	919	.....
No. Platte River....	Winter Creek Irr. Co. ....	Scottsbluff.....	Winter Creek Canal.....	Irrig.	124.29	17	22	55	Scotts Bluff....	Oct.	18	1888	952	.....
(Winter Creek)....	Winter Creek Irr. Co. ....	Scottsbluff.....	Winter Creek Canal.....	O. D.	.....	19	22	54	Scotts Bluff....	Oct.	18	1888	952	1446
No. Platte River....	Enterprise Irr. Dist. ....	Scottsbluff.....	Enterprise Canal.....	Irrig.	173.71	27	23	57	Scotts Bluff....	Mar.	28	1889	920	.....
(Akers Draw)....	Enterprise Irr. Dist. ....	Scottsbluff.....	Nelson Canal.....	O. D.	.....	13	23	57	Scotts Bluff....	Mar.	28	1889	920	1290

"R" Denotes relocation.

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

36

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
No. Platte River	Castle Rock Irr. Dist.	McGrew	Castle Rock Canal	Irrig.	82.57	4	21	54	Scotts Bluff	Apr.	18	1889	921	
No. Platte River	Logan Irr. Co.	Bridgeport	Logan Canal	Irrig.	5.71	19	20	50	Morrill	Oct.	17	1889	821	
No. Platte River	Bridgeport Irr. Dist.	Bridgeport	Belmont Canal	Irrig.	270.00	18	20	51	Morrill	Dec.	19	1889	828	
(Atkins Drain)	Atkins, A. W.	Bridgeport	Atkins Canal	O. D.	.....	15	19	49	Morrill	Dec.	19	1889	828	1450
No. Platte River	Central Irrigation Dist.	Gering	Central Canal	Irrig.	36.00	27	22	55	Scotts Bluff	June	23	1890	926	
No. Platte River	Meyers, T. A. et. al.	Ogallala	Myers-Phelps Canal	Irrig.	7.14	34	15	39	Keith	Sept.	11	1890	709	
No. Platte River	Sheridan, J. Wake, Est.	Paxton	Sheridan-Wilson Canal	Irrig.	10.00	20	14	35	Keith	Oct.	9	1890	710	
No. Platte River	Chimney Rock Irr. Dist.	Chimney Rock	Chimney Rock Canal	Irrig.	60.00	1	20	53	Morrill	Dec.	3	1890	844	
No. Platte River	Chimney Rock Irr. Dist.	Chimney Rock	Chimney Rock Canal	Irrig.	.....	1	20	53	Morrill	Dec.	3	1890	1031	
No. Platte River	Empire Canal Co.	Bridgeport	Empire Canal	Irrig.	28.57	18	20	51	Morrill	June	25	1891	858	
No. Platte River	Jurgens, Otto (Adm. Est. of D. Kah)	Minatare	Kah Ditch	Irrig.	4.57	11	21	54	Scotts Bluff	Nov.	1	1891	944	
No. Platte River	Brown Creek Irr. Dist.	Bridgeport	Brown's Creek Canal	Irrig.	188.71	20	20	50	Morrill	Jan.	20	1892	857	
No. Platte River	Brown Creek Irr. Dist.	Bridgeport	Browns Creek Canal	Irrig.	.....	20	20	50	Morrill	Jan.	20	1892	1033	
No. Platte River	Alliance Irrigation Dist.	Bridgeport	Alliance Canal	Irrig.	86.00	5	20	52	Morrill	Dec.	26	1892	874	
No. Platte River	Alliance Irrigation Dist.	Bridgeport	Alliance Can. & W. P.	Irrig.	.....	5	20	52	Morrill	Dec.	26	1892	1035	
(Red Willow)	Alliance Irrigation Dist.	Bridgeport	Alliance Canal	O. D.	.....	6	20	51	Morrill	Dec.	26	1892	874	1429
No. Platte River	Ramshorn Irr. Dist.	Morrill	Ramshorn Canal	Irrig.	45.71	13	23	58	Scotts Bluff	Mar.	20	1893	945	
(Sheep Creek)	Ramshorn Irr. Dist.	Morrill	Ramshorn Canal	O. D.	.....	21	23	57	Scotts Bluff	Mar.	20	1893	945	1465
No. Platte River	Short Line Irr. Dist.	Bayard	Short Line Canal	Irrig.	65.57	25	21	53	Scotts Bluff	May	1	1893	946	
No. Platte River	Lisco Irrigation District	Lisco	Lisco Canal	Irrig.	32.86	14	18	47	Morrill	July	1	1893	856	
No. Platte River	Nine Mile Irr. District.	Bayard	Nine Mile Canal	Irrig.	100.00	18	21	53	Scotts Bluff	Dec.	6	1893	925	
(Nine Mile Draw)	Nine Mile Irr. District.	Bayard	Nine Mile Canal	O. D.	.....	10	21	53	Morrill	Dec.	6	1893	925	1431

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.	
No. Platte River....	Cody Land & Cattle Co.	North Platte....	Cody-Dillon Canal.....	Irrig.	127.00	9	14	31	Lincoln.....	Dec.	29	1893	649
No. Platte River....	Keith-Lincoln Co. Irr. D.	Sutherland....	Keith-Lincoln Canal.....	Irrig.	95.00	18	14	36	Keith.....	Feb.	2	1894	722
No. Platte River....	Paxton-Hershey Wat. Co.	Hershey.....	Paxton-Hershey Canal.....	Irrig.	130.00	18	14	33	Lincoln.....	Feb.	12	1894	653
No. Platte River....	Lisco Irrigation District	Lisco.....	Lisco Canal.....	Irrig.	4.00	14	18	47	Morrill.....	Mar.	27	1894	787
No. Platte River....	North River Irr. District*	Oshkosh.....	North River Canal.....	Irrig.	16.00	14	18	47	Morrill.....	Mar.	27	1894	787
No. Platte River....	Suburban Irr. District....	North Platte....	Suburban Canal.....	Irrig.	124.00	12	14	33	Lincoln.....	May	22	1894	662
No. Platte River....	Roberts, C. F. ....	Oshkosh.....	Midland Canal.....	Irrig.	12.00	2	16	44	Garden.....	June	9	1894	789
No. Platte River....	Countryman, Charles ....	Lewellen.....	Overland Canal.....	Irrig.	20.00	1	16	44	Garden.....	Aug.	14	1894	791
No. Platte River....	Hannah Irrig. Co. ....	Lisco.....	Hannah Canal.....	Irrig.	5.71	29	18	47	Morrill.....	Sept.	24	1894	886
No. Platte River....	Oshkosh Irrigation Dist.	Oshkosh.....	Oshkosh Canal.....	Irrig.	40.00	33	17	44	Garden.....	Oct.	5	1894	797
(No. Platte River)	No. River Irr. District....	Oshkosh.....	Oshkosh Canal.....	Irrig.	2.29	33	17	47	Garen.....	Feb.	24	1896	.....
No. Platte River....	Beerline Canal Co. ....	Broadwater....	Beerline Canal.....	Irrig.	30.00	24	19	49	Morrill.....	Oct.	13	1894	887
No. Platte River....	Spohn, William.....	Oshkosh.....	Spohn Canal.....	Irrig.	13.14	13	17	45	Garden.....	Dec.	6	1894	801
No. Platte River....	Rush Creek Irr. Can. Co.	Lisco.....	Rush Creek Canal.....	Irrig.	9.64	2	17	46	Garden.....	Dec.	11	1894	802
No. Platte River....	Lyons Irrigation Dist....	Oshkosh.....	Lyons Canal.....	Irrig.	42.14	30	17	44	Garden.....	Dec.	22	1894	803
No. Platte River....	Orr, George B. et al. ....	Lewellen.....	Orr-Vance Canal.....	Irrig.	2.93	29	16	42	Garden.....	Dec.	24	1894	811
No. Platte River....	Western Land & Cattle Co., c/o W. R. Taylor	Omaha.....	Signal Bluff Canal.....	Irrig.	30.13	16	16	42	Garden.....	Jan.	16	1895	807
No. Platte River....	Jacobs, Lee.....	Ogallala.....	Hay Land Canal.....	Irrig.	5.71	29	15	39	Keish.....	Jan.	19	1895	732
No. Platte River....	Theis, Perry J. ....	Ogallala.....	Fernstrom - Nissen.....	Irrig.	4.00	25	15	39	Keish.....	Mar.	23	1895	737
No. Platte River....	Alfalfa Irrigation Dist....	Ogallala.....	Alfalfa Canal.....	Irrig.	100.00	1	15	42	Keish.....	Mar.	25	1895	738
No. Platte River....	Bushnell, H. J. and E. L.	Oshkosh.....	Bushnell Canal.....	Irrig.	7.14	12	16	44	Garden.....	Mar.	27	1895	809
No. Platte River....	Steamboat Irr. Dist. ....	Melbeta.....	Steamboat Canal.....	Irrig.	6.20	4	21	54	Scotts Bluff....	Oct.	27	1895	.....
No. Platte River....	North River Irr. Dist....	Oshkosh.....	North River Canal.....	Irrig.	64.71	14	18	47	Morrill.....	Feb.	24	1896	.....
(No. Platte River)	No. River Irr. District....	Oshkosh.....	Oshkosh Canal.....	Irrig.	2.29	33	17	44	Garden.....	Feb.	24	1896	.....
No. Platte River....	Lisco Irrigation District	Lisco.....	North River Canal.....	Irrig.	9.00	14	18	47	Morrill.....	Feb.	24	1896	243 }
													243 R

"R" Denotes relocation.

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
No. Platte River...	Remick Duer Co. ....	Broadwater....	Lamore Canal.....	Irrig.	20.00	34	19	48	Morrill.....	July	18	1896	.....	327
No. Platte River...	Steamboat Irr. Dist. ....	Gering.....	Steamboat Canal.....	Irrig.	.71	4	21	54	Scotts Bluff....	July	22	1896	.....	350
No. Platte River...	Gering Irrigation Dist. ....	Gering.....	Gering Canal.....	Irrig.	208.62	4	23	58	Scotts Bluff....	Mar.	15	1897	.....	365
No. Platte River...	Schermerhorn, A. D. ....	Omaha.....	Schermerhorn Canal.....	Irrig.	29.71	16	20	51	Morrill.....	Oct.	25	1897	.....	418
No. Platte River...	Secretary of Interior, U. S. R. S. ....	Mitchell.....	Interstate Canal.....	Irrig.	.....	19	29	83	Wyoming.....	Sept.	19	1904	.....	768
No. Platte River...	Liebhardt Bros. ....	Denver.....	Empire Extension.....	Irrig.	1.00	18	20	51	Morrill.....	July	20	1907	.....	866
No. Platte River...	Lisco Irrigation District	Lisco.....	Lisco Canal.....	Irrig.	3.00	14	18	47	Garden.....	Apr.	6	1910	.....	991
No. Platte River...	French, John E. ....	Henry.....	French Canal.....	Irrig.	11.00	9	23	60	Wyoming.....	Dec.	21	1911	.....	1149
No. Platte River...	Dobson, W. A. ....	Carrolton, Mo.	Dobson Lateral.....	Irrig.	1.14	5	20	52	Morrill.....	Feb.	28	1912	.....	1181
No. Platte River...	Stone, Myron K. ....	Lisco.....	Stone Canal.....	Irrig.	1.00	28	18	46	Morrill.....	Jan.	19	1915	.....	1401
No. Platte River...	French, John E. ....	Henry.....	French Canal.....	Irrig.	3.14	9	23	60	Wyoming.....	Sept.	11	1915	.....	1433
No. Platte River...	Dobson, W. A. ....	Carrolton, Mo.	Dobson Lateral.....	Irrig.	.25	5	20	52	Morrill.....	Nov.	3	1915	.....	1436
No. Platte River...	Liebhardt Bros. ....	Denver, Colo	Liebhardt Lateral.....	Irrig.	2.90	6	20	52	Morrill.....	Mar.	1	1916	.....	1448
No. Platte River...	Intermountain Railway Light and Power Co.	Colo. Springs.....	Gering Hydro-Elec. Pl.	Power	250.00	10	23	60	Scotts Bluff....	April	15	1916	.....	1452
(Indian Creek)....	Mann, John H. ....	Bridgeport....	Wastewater Canal.....	O. D.	.....	30	21	50	Morrill.....	Sept.	19	1904	.....	{ 1455 768
No. Platte River...	U. P. Railway Co. ....	Omaha.....	Locomotive Water Sup..	Power	1.00	29	14	30	Keith.....	Jan.	19	1917	.....	1472
No. Platte River...	U. P. Railway Co. ....	Omaha.....	Frazier Lake.....	Ice	4.00	35	14	30	Lincoln.....	Sept.	6	1907	.....	868
No. Platte River...	French, John E. ....	Henry.....	French Canal Extension	Irrig.	.60	9	23	60	Wyoming.....	Mar.	20	1920	.....	1581
No. Platte River...	Lower Platte Irr. Ass'n.	Lexington.....	South Canal.....	Irrig.	.....	18	14	36	Keith.....	Jan.	12	1922	.....	1633-A*
No. Platte River...	Lower Platte Irr. Ass'n. Greek, Trib.	Lexington.....	Sutherland Reservoir	Stor.	.....	13	34	33	Keith.....	Jan.	12	1922	.....	1635*
No. Platte, Bar- row Pit Trib....	Gatch, Charles.....	Melbeta.....	Gatch Canal.....	Irrig.	.93	25	21	54	Scotts Bluff....	Aug.	21	1912	.....	1220
No. Platte, Bar- row Pit Trib....	Taylor, A. O. ....	Minatare.....	Barrow Pit Canal.....	Irrig.	.29	19	21	52	Scotts Bluff....	Apr.	23	1904	.....	751

\* Denotes application not approved.

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D		
Otter Creek.....	Fairchild, Louis F. ....	Lemoyne.....	Cascade Canal.....	Irrig.	3.30	4	15	40	Keith.....	Apr.	1	1891	1032
Otter Creek.....	Nissen, Pete & Co. ....	Belmar.....	Otter Canal.....	Irrig.	11.00	5	15	40	Keith.....	May	24	1912	.....
Otter Creek.....	Peterson, E. J. ....	Lemoyne.....	Holcomb Canal.....	Irrig.	15.49	5	15	40	Keith.....	Nov.	6	1912	1
Otter Creek.....	Peterson, E. J. ....	Lemoyne.....	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	.....
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 Ext. No. 1..	Irrig.	.57	12	22	58	Scotts Bluff....	Nov.	29	1907	881
Pawnee Creek.....	Kent-Burke Company....	Omaha.....	Kent-Burke Canal.....	Irrig.	8.00	13	13	28	Lincoln.....	Oct.	18	1890	636
Pawnee Creek.....	Kent-Burke Company....	Omaha.....	Kent-Burke Canal.....	Irrig.	.....	18	13	27	Lincoln.....	Nov.	16	1922	1694
Platte River.....	Central Power Co. ....	Grand Island..	Kearney Canal.....	Irrig.	22.00	3	8	16	Buffalo.....	Sept.	10	1882	1023
Platte River.....	Gothenburg L. & P. Co.	Gothenburg....	Gothenburg Canal.....	Power	140.00	.....	.....	.....	.....	.....	.....	.....	.....
Platte River.....	Gothenburg L. & P. Co.	Gothenburg....	Gothenburg Canal.....	Power	200.00	29	12	26	Lincoln.....	July	5	1890	645a
Platte River.....	Dawson County Irr. Co.	Lexington....	Dawson Canal.....	Irrig.	1142.86	18	10	23	Dawson.....	June	26	1894	622
Platte River.....	Gothenburg L. & P. Co.	Gothenburg....	Gothenburg Canal.....	Irrig.	240.00	29	12	26	Lincoln.....	Sept.	22	1894	645b
Platte River.....	Six Mile Ditch Co. ....	Gothenburg....	Six Mile Canal.....	Irrig.	40.00	11	11	26	Lincoln.....	Oct.	22	1894	680
Platte River.....	Co. ....	Gothenburg....	Gothenburg S. Canal....	Irrig.	357.14	30	12	26	Lincoln.....	Oct.	26	1894	681
Platte River.....	Cozad Irrigation Co. ....	Cozad.....	Cozad Canal.....	Irrig.	614.29	15	11	25	Dawson.....	Dec.	28	1894	626
Platte River.....	So. Side Irrigation Co. ....	Cozad.....	Orchard-Alfalfa Canal....	Irrig.	300.00	9	10	24	Dawson.....	Jan.	23	1895	627
Platte River.....	Appleford, Henry .....	Maxwell....	Appleford Canal.....	Irrig.	2.86	15	13	29	Lincoln.....	Mar.	28	1895	690
Platte River.....	Central Power Co. ....	Grand Island..	Central Power Plant....	Power	485.00	3	8	18	Buffalo.....	Feb.	12	1920	1577
Platte River.....	Central Power Co. ....	Grand Island..	Central Pwr. Co. St. Pl.	Steam	925.00	29	11	8	Merrick.....	Aug.	12	1920	1588
Platte River.....	Steele, Charles.....	Elm Creek.....	Cottonwood Canal.....	Irrig.	5.33	7	8	18	Phelps.....	Dec.	15	1921	1629

† Denotes part of appropriation cancelled.

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Platte River.....	Lower Platte Irrig. Ass'n	Lexington.....	North Canal.....	Irrig.	.....	8	13	29	Lincoln.....	Jan.	12	1922	.....	1633*
			Rotan Reservoir.....	Stor.	.....	14	12	24	Lincoln.....	Jan.	12	1922	.....	1636*
Platte River.....	Lower Platte Irrig. Ass'n	Lexington	Buffalo Reservoir.....	Stor.	.....	5	11	22						
Platte River.....	Central Nebraska Supplemental Water Ass'n	Hastings.....	Elm Creek Reservoir.....	Stor.	.....	1	9	19						
Platte River.....			Dry Fork Reservoir.....	Stor.	.....	5	11	20						
Plum Creek.....	Eggers, Thomas.....	Lewellen.....	Tri-County Project.....	Irrig.	.....					Nov.	29	1922	.....	1696*
Pumpkinseed.....	Zingg, Henry N. ....	Platte Center..	Plum Creek Reservoir....	Irrig.	1.14	23	16	42	Garden.....	Jan.	12	1914	.....	1344
Pumpkinseed.....			Heard's Canal, Nos. 1 and 2.....	Irrig.	1.29	14	19	54	Banner.....	June	1	1887	916	.....
Pumpkinseed.....	Olson, Albert H. ....	Harrisburg....	Logan Canal.....	Irrig.	4.00	7	19	55	Banner.....	July	16	1890	902	.....
Pumpkinseed.....	Court House Rk. Irr. Co.	Bridgeport....	Court House R. Canal.....	Irrig.	30.50	30	19	50	Morrill.....	Oct.	8	1890	840	.....
Pumpkinseed.....	Court House Rk. Irr. Co.	Bridgeport....	Court House R. Canal.....	Irrig.	.....	30	19	50	Morrill.....	Oct.	8	1890	1028	.....
Pumpkinseed.....	Mutual Ditch Co. ....	Redington....	Mutual Canal.....	Irrig.	8.57	38	19	52	Morrill.....	Nov.	1	1890	843	.....
Pumpkinseed.....	Sweet, C. A. ....	Omaha.....	Meredith - Ammer.....	Irrig.	18.86	28	19	50	Morrill.....	Feb.	20	1893	876	.....
Pumpkinseed.....	Finn-Trott .....	Bridgeport....	Last Chance Canal.....	Irrig.	8.00	27	19	50	Morrill.....	Apr.	12	1894	983	.....
Pumpkinseed.....	Loy, Mrs. E. P. ....	Bridgeport....	Round House Rock.....	Irrig.	3.00	28	19	51	Morrill.....	May	29	1894	884	.....
Pumpkinseed.....	Quinn, T. E. ....	Bridgeporf....	Bird Cage Canal.....	Irrig.	1.00	20	19	51	Morrill.....	June	1	1895	892	.....
Pumpkinseed.....	Cluck, Millard .....	Harrisburg....	Peters Ditch.....	Irrig.	2.57	34	20	56	Banner.....	July	1	1902	913	.....
Pumpkinseed.....	Airedale Ranch and Cattle Co. ....	Scottsbluff....	Airedale Canal No. 1....	Irrig.	5.52	2	19	55	Banner.....	Jan.	24	1903	.....	698
Pumpkinseed.....	Airedale Ranch and Cattle Co. ....	Scottsbluff....	Airedale Canal No. 2....	Irrig.	3.22	1	19	55	Banner.....	Jan.	24	1903	.....	699
Pumpkinseed.....	Simon, Lincoln G. ....	Sidney.....	Res. Nos. 1, 2 and 3....	Irrig.	1.31	7	19	55	Banner.....	June	24	1903	.....	711
Pumpkinseed.....	Swanger, R. ....	Bridgeport....	Swanger Canal.....	Irrig.	.43	29	19	50	Cheyenne.....	Feb.	28	1909	851	.....
Pumpkinseed.....	Airedale Ranch and Cattle Co. ....	Scottsbluff....	Airedale Canal No. 2....	Irrig.	1.57	1	19	55	Dawes.....	Oct.	26	1911	.....	1133

\* Denotes application not approved.

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Pumpkinseed.....	Airedale Ranch and Cattle Co. ....	Scottsbluff.....	Airedale Canal No. 1....	Irrig.	.51	2	19	55	Banner.....	Sept.	4	1914	.....	1380
Pumpkinseed.....	Airedale Ranch and Cattle Co. ....	Scottsbluff.....	Airedale Canal No. 1....	Irrig.	10.00	3	19	55	Banner.....	June	23	1915	.....	1458
Pumpkinseed.....	Green, Thomas L. ....	Scottsbluff.....	Airedale Canal No. 8....	Irrig.	4.41	2	19	55	Banner.....	Mar.	15	1918	.....	1508
Pumpkinseed.....	Quinn, T. E. ....	Bridgeport.....	Quinn Canal.....	Irrig.	.02	20	19	51	Morrill.....	Oct.	15	1919	.....	1561
Red Willow.....	Dobson, W. A. ....	Carrolton, Mo.	Dobson Lateral.....	Irrig.	2.00	12	20	51	Morrill.....	Feb.	28	1912	.....	1432
Red Willow.....	Alliance Irrigation Dist.	Bridgeport.....	Alliance Canal.....	O. D.	60.00	6	20	51	Morrill.....	Dec.	26	1892	874	1429
Sand Creek.....	Smith Bros. ....	Lemoyne.....	Smith Canal.....	Irrig.	7.00	10	15	40	Keith.....	May	20	1889	698	.....
Sand Creek.....	Dudley, W. H. ....	Lemoyne.....	Patrick Canal.....	Irrig.	2.43	3	15	40	Keith.....	May	31	1891	725	.....
Sand Creek.....	Nissen, Peter.....	Lemoyne.....	Nissen Canal.....	Irrig.	3.07	10	15	40	Keith.....	Mar.	18	1901	.....	606
Sand Creek.....	Maddox, P. P. and (Gravel Creek).....	Sillassen, S. J. ....	North Platte.....	Irrig.	15.70	9	14	36	Keith.....	Jan.	3	1910	.....	974
Seep from Lake...	Huffman, M. J. ....	Gering.....	Huffman Canal.....	Irrig.	6.43	26	21	54	Scotts Bluff....	Mar.	19	1909	.....	937
Schuetz Springs...	Schuetz, Louis.....	Bridgeport.....	Schuetz Canal.....	Irrig.	.21	28	18	50	Morrill.....	May	10	1892	.....	881
Sheep Creek.....	Sheep Lateral Co. ....	Morrill.....	Sheep Creek Lateral.....	Irrig.	5.00	8	23	57	Scotts Bluff....	Feb.	26	1912	.....	1176
Sheep Creek (No. Platte)....	Ramshorn Irrigation Dist.	Morrill.....	Ramshorn Canal.....	O. D.	13.00	21	23	57	Scotts Bluff....	Mar.	20	1893	945	1465
Sheep Creek.....	Sheep Cr. Lateral Co. ....	Morrill.....	Sheep Creek Lateral.....	Irrig.	.92	8	23	57	Scotts Bluff....	Jan.	12	1915	.....	1398
Sheep Creek Draw, Trib. to.....	Sheep Cr. Lateral Co. ....	Morrill.....	Sheep Creek Lateral.....	Irrig.	.28	17	23	57	Scotts Bluff....	Feb.	20	1915	.....	1403
Skunk Creek.....	Knight, H. H. ....	Keystone.....	Miller Canal.....	Irrig.	2.29	1	14	37	Keith.....	Apr.	11	1895	740	.....

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.	
						Headgate				Month	D	Yr.			
						S	T	R	County						
Snake Creek.....	Kilpatrick Bros. ....	Beatrice.....	Oasis Canal.....	Irrig.	54.86	6	24	51	Box Butte.....	June	6	1894	567	.....	
Snake Creek.....	Kilpatrick Bros. ....	Beatrice.....	Kilpatrick Res. No. 1....	Stor.	65000	1	24	52	Box Butte.....	June	7	1911	.....	1104	
				Ac. Ft.											
Snake Creek.....	Kilpatrick Bros. ....	Beatrice.....	Kilpatrick Res. No. 2....	Irrig.	200.00	6	24	51	Box Butte.....	Jan.	25	1912	.....	1159	
So. Platte River....	Hollingsworth, A. ....	Ogallala.....	Hollingsworth Canal....	Irrig.	30.00	12	13	39	Keith.....	June	5	1894	723	.....	
So. Platte River....	Stebbins, Lucien .....	North Platte.....	Stebbins Canal.....	Irrig.	30.00	32	14	32	Lincoln.....	Dec.	17	1894	683	.....	
So. Platte River....	Miller & Kimball Co. ....	Big Springs.....	Miller-Warren Canal..	Irrig.	53.86	7	12	42	Deuel.....	Jan.	5	1895	805	.....	
So. Platte River....	Ryans, J. T. ....	Brule.....	Home Canal.....	Irrig.	3.14	30	13	40	Keith.....	Mar.	2	1895	736	.....	
So. Platte River....	Myer, Henry.....	Brule.....	Myer Canal.....	Irrig.	1.46	22	13	40	Keith.....	Apr.	14	1896	.....	283	
So. Platte River....	Western Irrigation Dist	Big Springs.....	Western Canal.....	Irrig.	180.29	14	12	43	Deuel.....	June	14	1897	.....	393	
So. Platte River....	Brown, C. M. ....	Kearney.....	Tail Race Canal.....	Irrig.	1.28	3	8	16	Buffalo.....	Jan.	16	1917	.....	1471	
So. Platte River....	Beal, Orvill .....	Brule.....	Beal's Power Plant....	Power	17.60	21	13	40	Keith.....	Sept.	20	1921	.....	1619	
So. Platte River....	Beal, Orvill .....	Brule.....	Beal's Canal.....	Irrig.	5.00	21	13	40	Keith.....	Sept.	20	1921	.....	1620	
So. Platte River....	Goodall, Robt., et al....	Ogallala.....		Stor.						Dec.	17	1921	.....	1630*	
Spotted Tail, Dry.....	Severns, Viola .....	Gering.....	Roberts Canal.....	Irrig.	2.00	10	23	56	Scotts Bluff....	Nov.	6	1912	.....	1241	
Spotted Tail, Dry.....	Great Western Sugar Co.	Scottsbluff.....	Mitchell Factory.....	Dom.	15.00	21	23	56	Scotts Bluff....	Mar.	24	1920	.....	1582	
Spotted Tail, Wet.....	Wallace, Wm. E. ....	Mitchell.....	Stewart Reservoir.....	Irrig.	1.43	2	23	56	Scotts Bluff....	Mar.	2	1904	.....	743	
Spotted Tail, Wet.....	Wallace, Wm. E. ....	Mitchell.....	Brown's Canal.....	Irrig.	2.28	2	23	56	Scotts Bluff....	Mar.	17	1911	.....	1072	
Spring Branch.....	Brogan Bros. ....	Keystone.....	Brogan Bros. Canal....	Irrig.	.57	35	15	37	Keith.....	Sept.	24	1897	.....	416	
Spring Creek.....	Peterson, E. J. ....	Lemoyne.....	Spring Creek Canal....	Irrig.	.57	12	15	40	Keith.....	June	18	1894	724	.....	
Spring Creek.....	Freiday, Florian F. ....	Lexington.....	Freiday Canal.....	Irrig.	1.00	20	9	20	Dawson.....	Nov.	25	1910	.....	1040	
Spring Creek.....	Cooney, Frank C. ....	Overton.....	Cooney Canal.....	Irrig.	.....	27	9	20	Dawson.....	May	16	1922	.....	1665	
Spring Creek, Lit. ....	Keystone Irrig. Co. ....	Keystone.....	Lit. Spring Canal.....	Irrig.	.....	57	29	15	37	Keith.....	Apr.	1	1903	.....	659
Spring Creek, Lit. ....	Beatty, Wallace D. ....	Scottsbluff.....	Shramek Canal.....	Irrig.	1.50	22	22	55	Scotts Bluff....	June	9	1913	.....	1295	
Spring Creek, Lit. ....	McClenahan, E. ....	Scottsbluff.....	Shramek's Ext.....	Irrig.	.57	22	22	55	Scotts Bluff....	July	30	1917	.....	1492	

\* Denotes application not approved.

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Spring Creek, Lit.	Nelson, Martin.....	Scottsbluff.....	Ext. of Shramek's Canal	Irrig.	.14	22	22	55	Scotts Bluff.....	June	3	1918	.....	1515
White Horse Cr.	Lamplough, Harry.....	North Platte.....	Lamplough's Lake.....	Irrig.	2.86	8	14	30	Lincoln.....	Dec.	31	1883	.....	658
White Horse Cr.	Bratt, John.....	North Platte.....	John Bratt Canal.....	Irrig.	6.00	9	14	30	Lincoln.....	Aug.	25	1913	.....	1316
White Tail Creek.	McCarthy, J. M.....	Keystone.....	McCarthy Canal.....	Irrig.	1.00	36	15	38	Keith.....	July	15	1890	749	.....
White Tail Creek.	Keystone Irrigation Co.....	Keystone.....	Halloway-Phelps Canal.....	Irrig.	4.00	36	15	38	Keith.....	June	1	1892	717	.....
White Tail Creek.	Keystone Irrigation Co.....	Keystone.....	Foster-Keystone Canal.....	Irrig.	18.36	26	15	38	Keith.....	Oct.	30	1894	730	.....
White Tail Creek.	Noble, Bert A.....	Keystone.....	Reed Canal.....	Irrig.	.57	15	15	38	Keith.....	May	15	1895	751	.....
White Tail Creek.	Keystone Irrigation Co.....	Keystone.....	Keystone Canal.....	Irrig.	51.71	26	15	38	Keith.....	Apr.	26	1902	.....	662b
White Tail Creek.	Keystone Irrigation Co.....	Keystone.....	Keystone Canal.....	Irrig.	4.30	26	15	38	Keith.....	Nov.	30	1906	.....	843
White Tail Creek.	Keystone Irrigation Co.....	Keystone.....	W. Keystone Canal.....	Irrig.	1.75	26	15	38	Keith.....	May	27	1910	.....	1001
White Tail Creek.	Keystone Irrigation Co.....	Keystone.....	Keystone Canal.....	Irrig.	9.86	27	15	38	Keith.....	May	27	1910	.....	1003
White Tail Creek.	Noble, Bert A.....	Keystone.....	White Tail P. & M. Co.....	Power	50.00	22	15	38	Keith.....	Mar.	29	1922	.....	1653
White Tail Creek.	Coyner, Silas C.....	Keystone.....	Packard Canal.....	Irrig.	.....	26	15	38	Keith.....	May	28	1922	.....	1670
Wht. Tail, Spring Or., Trib. to.....	Keystone Irrigation Co.....	Keystone.....	Spring Creek Canal.....	Irrig.	1.57	19	15	37	Keith.....	June	21	1890	704	.....
Wht. Tail, Springs Trib. to.....	Keystone Irrigation Co.....	Keystone.....	Spring Canal No. 1.....	Irrig.	1.13	19	15	37	Keith.....	May	27	1910	.....	1002
White Tail Trib. to Spring Creek	Young, Thos. H.....	Mitchell.....	Spring Creek Reservoir.....	Ice	160.00	27	23	56	Scotts Bluff.....	Feb.	6	1922	.....	1642
Wind Springs.....	Lamcomer, Geo. & Chas.	Gering.....	Wind Springs Canal.....	Irrig.	1.43	12	24	55	Sioux.....	Mar.	1	1892	954	.....
Winters Creek.....	Bouton, Charles A. ....	Gering.....	Bouton's Canal.....	Irrig.	1.00	3	22	54	Scotts Bluff.....	Aug.	17	1889	923	.....
Winter Creek (No. Platte).....	Winter Creek Irr. Co....	Scottsbluff.....	Winter Creek Canal.....	O. D.	70.00	19	22	54	Scotts Bluff.....	Oct.	18	1888	952	1446
Winter Creek.....	Great Western Sugar Co.	Scottsbluff.....	Main Water Supply Scottsbluff Factory.....	Mfg.	15.00	19	22	54	Scotts Bluff.....	Oct.	4	1920	.....	1592

\* Denotes application not approved.

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Wood River.....	Ashburn, J. N. ....	Gibbon.....	Ashburn Canal.....	Power	40.00	13	9	14	Buffalo.....	Nov.	1	1873	993	.....
Wood River.....	Shelton Mill and G. Co. ....	Shelton.....	Shelton Canal.....	Power	40.00	1	9	13	Buffalo.....	Oct.	16	1873	994	.....
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.....	Jacobson, C. A. ....	Riverdale.....	Jacobson's 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.....	Quail, T. J. ....	Miller.....	Wood River Canal.....	Irrig.	2.29	14	11	18	Buffalo.....	May	1	1913	.....	1286
Wood River.....	Jacobson, C. A. ....	Riverdale.....	Jacobson's Canal.....	Stor.	9000AF	31	10	10	Buffalo.....	Feb.	3	1920	.....	1576
Wood River.....	Haug's, James. ....	Shelton.....	Haug's Project.....	Irrig.	.64	7	9	13	Buffalo.....	Sept.	7	1920	.....	1590
Wood River.....	Peterson, C. ....	Shelton.....	Peterson Pump, Plt.....	Irrig.	1.07	10	9	13	Buffalo.....	July	11	1921	.....	1611
Wood River.....	Nutter, M. D. ....	Shelton.....	Nutter Pumping Plt.....	Irrig.	2.28	8	9	13	Buffalo.....	Aug.	29	1921	.....	1616
Wood River.....	Rodgers, J. H. ....	Gibbon.....	Rodger's Canal.....	Irrig.	.30	14	9	14	Buffalo.....	Feb.	4	1922	.....	1641
Wood River.....	Nebr. Conference Ass'n of the Seven Day Ad- ventists .....	Shelton.....	Shelton Academy Proj. ....	Irrig.	2.28	31	10	12	Hall.....	Feb.	16	1922	.....	1643
Wood River.....	Haug's, James. ....	Shelton.....	Haug's Canal No. 2.....	Irrig.	.92	9	9	13	Buffalo.....	Feb.	28	1922	.....	1644
Wood River.....	Hallen, Hjalmar. ....	Kearney.....	Hallen's Reservoir.....	Stor.	2.00AF	5	9	16	Buffalo.....	Apr.	4	1922	.....	1654
Wood River.....	Hallen, Hjalmar. ....	Kearney.....	Hallen's Dam.....	Irrig.	.....	5	9	16	Buffalo.....	Apr.	17	1922	.....	1656
Wood River.....	Hallen, Hjalmar. ....	Kearney.....	Hallen's Power Plant. ....	Power	.....	5	9	16	Buffalo.....	Apr.	17	1922	.....	1657
Wood River.....	Durtschi, Rudolph. ....	Kearney.....	Durtschi Pump, Plant. ....	Irrig.	1.11	18	10	11	Hall.....	May	22	1922	.....	1668
Wood River.....	Swift, Robt. D. ....	Alda.....	Swift's Pumping Plant. ....	Irrig.	.....	18	10	10	Hall.....	June	12	1922	.....	1671
Wood River.....	Barney, R. M. ....	Kearney.....	Barney's Pumping Plant. ....	Irrig.	.....	9	16	11	Buffalo.....	June	22	1922	.....	1672
Wood River.....	Howe, Lloyd M. ....	Wood River.....	Howe's Pumping Plant. ....	Irrig.	.....	17	10	11	Hall.....	July	14	1922	.....	1679
Wood River.....	McGuire, M. J. ....	Wood River.....	McGuire's Pump, Plant. ....	Irrig.	.....	22	10	12	Hall.....	July	29	1922	.....	1684
Wood River.....	Wilson, C. C. ....	Omaha.....	Wilson's Pumping Plant. ....	Irrig.	.....	14	9	15	Buffalo.....	Nov.	15	1922	.....	1693

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 1-A.

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Ash Creek.....	Vance, Rocoe .....	Irrig.	1.14	27	16	42	Garden .....	765	.....
Ash Creek.....	McCormick, C. ....	Irrig.	.....	16	16	42	Garden .....	1011	.....
Blue Creek.....	Slesser, David .....	Power	62.60	4	18	43	Garden .....	.....	1009
Buckhorn Spring.....	Maddox, P. P. ....	Irrig.	2.28	8	14	36	Keith .....	.....	918
Buffalo Creek .....	Absalom, Henry .....	Irrig.	.07	23	11	23	Dawson .....	.....	570
Fremont Creek .....	Eq. Farm & S. Imp. Co. ....	Irrig.	9.29	15	13	30	Lincoln .....	686	.....
Greenwood Creek .....	Keenan, Mrs. Mary K. ....	Irrig.	4.00	15	18	50	Morrill .....	830	.....
Greenwood Creek .....	Dean, H. T. ....	Irrig.	8.86	10	18	50	Morrill .....	.....	844
Horse Creek .....	Marsh & Braziel.....	Irrig.	13.00	4	22	60	Wyoming .....	.....	1126
Horse and Owl Creek.....	Pizer, H. J. ....	Irrig.	.86	34	23	58	Scotts Bluff.....	.....	742
Kiowa Creek .....	Kellums, J. H. ....	Irrig.	2.43	11	22	58	Scotts Bluff.....	.....	641
Kiowa Creek .....	Lowry, Ellis .....	Irrig.	.52	31	22	57	Scotts Bluff.....	.....	746
Kiowa Creek .....	Kellums, J. H. ....	Irrig.	.57	1	22	58	Scotts Bluff.....	.....	880
Lawrence Fork .....	Gilman & Crigler.....	Irrig.	.57	36	19	52	Morrill .....	820	.....
Middle Creek .....	Bartling, Henry .....	Irrig.	.29	28	18	51	Morrill .....	870	.....
Middle Creek .....	Bartling, Henry .....	Irrig.	.29	28	18	51	Morrill .....	891	.....

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 1-A—(Continued).

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
North Platte River.....	Bridgeport Irr. Dist.....	Irrig.	115.71	18	20	51	Morrill .....	.....	902
North Platte River.....	Hale, Will A.....	Irrig.	11.43	21	22	55	Scotts Bluff.....	941	.....
North Platte River.....	Clark, Henry T.....	Irrig.	9.43	22	20	51	Morrill .....	875	.....
North Platte River.....	So. Side I. & L. Co.....	Irrig.	270.00	14	14	34	Lincoln .....	667	.....
North Platte River.....	Keith, Morrill C.....	Irrig.	71.00	36	14	30	Lincoln .....	657	.....
North Platte River.....	Maycock, Joseph .....	Irrig.	5.71	10	23	58	Scotts Bluff.....	950	.....
North Platte River.....	Smith, Agustus .....	Irrig.	20.00	36	14	30	Lincoln .....	676	.....
North Platte River.....	Williams, E. C. et al.....	Irrig.	26.57	35	16	42	Garden .....	804	.....
North Platte River.....	Gyger, J. C.....	Irrig.	10.86	10	16	44	Garden .....	806	.....
North Platte River.....	Dikeman, S. F.....	Irrig.	30.00	9	14	32	Lincoln .....	684	.....
North Platte River.....	Hubbard, E.....	Irrig.	65.70	20	14	30	Lincoln .....	691	.....
North Platte River.....	Johnson, E. A.....	Irrig.	.....	10	12	27	Lincoln .....	654	.....
North Platte River.....	Frank, Wm.....	Irrig.	600.00	3	23	58	Scotts Bluff.....	.....	660
North Platte River.....	McCaffree, F. S.....	Power	500.00	3	23	58	Scotts Bluff.....	.....	1499
North Platte River.....	Spanagole, Mark, Adm.....	Irrig.	3.43	1	19	50	Morrill .....	.....	353
Pawnee Creek .....	Murphy, E. D.....	Irrig.	8.57	29	13	27	Lincoln .....	669	.....
Pawnee Creek .....	Plumer, Wm. H.....	Irrig.	10.00	19	13	27	Lincoln .....	672	.....
Platte River .....	Farmer D. & C. Co.....	Irrig.	280.00	17	13	29	Lincoln .....	666	.....
Platte River .....	Farmers Irrig. Co.....	Irrig.	114.00	25	10	23	Dawson .....	621	.....
Platte River .....	Fowles, Russell H.....	Irrig.	27.14	29	13	28	Lincoln .....	673	.....
Platte River .....	Appleford, Henry .....	Irrig.	10.00	15	13	29	Lincoln .....	.....	674
Platte River .....	Sides, Leroy .....	Irrig.	20.00	13	8	14	Kearney .....	629	.....
Platte River .....	Platte River Irr. Co.....	Irrig.	400.00	13	9	22	Dawson .....	624	.....
Platte River .....	Farmers Mut. Irr. Co.....	Irrig.	180.00	12	8	16	Buffalo .....	{	235 628

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 1-A—(Continued).

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Platte River .....	McCullough, John .....	Irrig.	30.00	35	13	28	Lincoln .....	679	.....
Platte River .....	Booker, H. C. ....	Irrig.	100.00	16	11	25	Dawson .....	625	.....
Platte River .....	Lincoln-Dawson Co. Irr. Dist. ....	Irrig.	642.86	9	13	29	Lincoln .....	687	.....
Pumpkinseed .....	Wright, John S. ....	Irrig.	2.00	5	19	54	Banner .....	904	.....
Pumpkinseed .....	Hampton, R. R. & W. D. ....	Irrig.	1.29	25	20	57	Banner .....	906	.....
Pumpkinseed .....	Kelley, Wm. J. ....	Irrig.	1.43	5	19	54	Banner .....	915	.....
Pumpkinseed .....	Wright, John S. ....	Irrig.	2.86	5	19	54	Banner .....	905	.....
Pumpkinseed .....	Waitman, P. P. ....	Irrig.	2.86	25	19	53	Banner .....	847	.....
Pumpkinseed .....	Endered, Chas. O. ....	Irrig.	1.00	21	19	53	Banner .....	903	.....
Pumpkinseed .....	Reddish, Fred .....	Irrig.	1.43	25	19	51	Morrill .....	888	.....
Pumpkinseed .....	Coulter, Warren .....	Irrig.	.36	24	19	51	Morrill .....	889	.....
Pumpkinseed .....	Wisner, S. R. et al. ....	Irrig.	.....	23	19	53	Banner .....	917	.....
Pumpkinseed .....	Beatty, D. E. ....	Irrig.	.84	8	19	55	Banner .....	.....	836
Pumpkinseed .....	Belden, Jno. ....	Irrig.	.43	29	19	50	Morrill .....	.....	851
Pumpkinseed .....	Johnson, Theodore .....	Irrig.	2.29	2	19	55	Banner .....	819	.....
Pumpkinseed .....	Pierson, A. H. ....	Irrig.	1.71	31	20	56	Banner .....	.....	888
Pumpkinseed .....	Beatty, Daisy E. ....	Irrig.	.19	5	19	55	Banner .....	.....	1004
Pumpkinseed .....	Seeley, W. J. ....	Irrig.	.57	28	19	52	Morrill .....	.....	1052
Pumpkinseed .....	Trinner, Mrs. Daisy. ....	Irrig.	1.57	26	19	51	Morrill .....	842	.....
Pumpkinseed .....	Boyd, P. D. ....	Irrig.	.50	23	19	52	Morrill .....	885	.....
Pumpkinseed .....	Trinner, Mrs. Daisy. ....	Irrig.	.71	26	19	51	Morrill .....	842	.....
Sheep Creek .....	Nicholas, Yorick .....	Irrig.	1.00	10	24	58	Scotts Bluff .....	.....	745
Sheep Creek .....	Covert, Pitt .....	Irrig.	3.57	36	27	58	Sioux .....	.....	859
Sheep Creek .....	West Fork Ditch Co. ....	Irrig.	5.14	1	26	58	Sioux .....	.....	871
Sheep Creek .....	Cunningham, H. B. ....	Irrig.	.87	11	25	58	Sioux .....	.....	875
Sheep Creek .....	Speese, R. L. ....	Irrig.	1.79	25	26	58	Sioux .....	.....	876

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 1-A—(Concluded).

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Sheep Creek .....	Speese, R. L.....	Irrig.	1.29	25	26	58	Sioux .....	.....	877
Sheep Creek .....	Speese, R. L.....	Irrig.	2.86	36	27	58	Sioux .....	.....	885
Sheep Creek .....	Cunningham, H. B.....	Irrig.	2.50	2	25	58	Sioux .....	.....	890
Sheep Creek .....	Hovey, Ethel L.....	Irrig.	.27	19	26	57	Sioux .....	.....	873
Skunk Creek .....	Maddox, P. P.....	Irrig.	5.00	6	14	36	Keith .....	.....	968
South Platte .....	Eaton, John .....	Irrig.	20.00	25	13	41	Keith .....	755	.....
South Platte .....	Searle, E. M.....	Irrig.	2.86	17	13	39	Keith .....	744	.....
South Platte .....	Shireman, W. H.....	Irrig.	1.43	17	13	39	Keith .....	733	.....
South Platte .....	Kimball, W. Et Al.....	Irrig.	8.93	35	13	42	Deuel .....	810	.....
Spotted Tail Creek.....	Stewart, M. G.....	Irrig.	1.00	10	23	56	Scotts Bluff .....	.....	449
Spotted Tail Creek.....	Whitehead, Jas. T.....	Power	10.00	26	24	56	Sioux .....	.....	1215
Spring Creek, Little.....	Gilchrist, M. B.....	Irrig.	.14	22	22	55	Scotts Bluff .....	.....	1310
Springs and Slough.....	Cundall, Harry .....	Irrig.	.71	19	20	51	Morrill .....	.....	1148
Stream .....	Newberry, H.....	Irrig.	1.14	22	14	32	Lincoln .....	688	.....
Willow Creek .....	Everett, R. L.....	Irrig.	.57	16	19	56	Banner .....	.....	650
Willow Creek .....	Everett, R. L.....	Irrig.	.86	16	19	56	Banner .....	.....	651
White Tail Creek.....	McGinley, Geo.....	Irrig.	1.42	36	15	38	Keith .....	.....	420
White Tail Creek.....	Leonard Bros.....	Irrig.	2.00	22	15	38	Keith .....	727	.....
Wind Springs .....	Smith, Jas. S.....	Irrig.	2.86	12	24	55	Sioux .....	.....	986

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

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
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
Crooked Creek.....	Kaley, C. H. ....	Red Cloud.....	Fish Pond.....	Fish	1.00	1	1	11	Webster.....	May	7	1902	.....	665
Crooked Creek.....	Slawson, E. R. ....	Red Cloud.....	Slawson Ice Pond.....	Stor.	.75	1	1	11	Webster.....	Aug.	8	1912	.....	1213
Crystal Springs....	Newbold, W. G.....	Riverton.....	Crystal Springs Canal...	Irrig.	.28	10	2	13	Franklin.....	Aug.	17	1921	.....	1615
Driftwood Creek...	Schmitz, Mrs. J. A. ....	McCook.....	Schmitz Irr. Works.....	Irrig.	1.50	12	2	30	Red Willow....	May	3	1913	.....	1287
Driftwood Creek...	Hesterworth, John T. ....	McCook.....	Hesterworth Irr. Works..	Irrig.	1.00	14	2	30	Red Willow....	Nov.	17	1913	.....	1332
Driftwood Creek...	Wasson, Monroe A. ....	McCook.....	Sylvan Dell Canal.....	Irrig.	2.80	1	2	30	Red Willow....	Dec.	6	1913	.....	1340
Elk Creek.....	Murray, Esther.....	Arapahoe.....	Murray Irr. Works.....	Irrig.	2.85	11	4	23	Furnas.....	Aug.	13	1913	.....	1315
Frenchman R.....	Athey, H. E. ....	Waunetta.....	Wauneta Mills.....	Power	35.00	11	5	36	Chase.....	July	31	1886	178	.....
Frenchman R.....	Esf. of M. H. Yaw....	Champion.....	Champion Mills.....	Power	28.30	21	6	39	Chase.....	Dec.	31	1887	179	.....
Frenchman R.....	Sheridan, R. B. ....	McCook.....	Aberdeen Canal.....	Irrig.	2.00	3	5	38	Chase.....	July	1	1888	50a	.....
Frenchman R.....	McGillen, W. J. ....	Imperial.....	Harlem Canal.....	Irrig.	2.00	1	5	38	Chase.....	July	1	1888	56	.....
Frenchman R. and Stinking Water Creek.....	Frenchman Valley Irr. District .....	Culbertson.....	Culbertson Canal.....	Irrig.	215.00	31	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.....	Sheridan, R. B. ....	McCook.....	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	.....
Canyon No. 10..	Wacker, George.....	Culbertson.....	Wacker Canal.....	O. D.	.70	17	3	31	Hitchcock.....	Dec.	19	1893	10	1523
Canyon No. 10..	Farmers Canal Co. ....	Culbertson.....	Farmers Canal.....	O. D.	2.21	17	3	31	Hitchcock.....	Dec.	19	1893	10	1573
Frenchman R.....	Riverside Irr. Co.....	Culbertson.....	Riverside Canal.....	Irrig.	12.00	33	4	32	Hitchcock.....	July	28	1894	18	.....

\* Docket 47—24.00 S. F. Amount affirmed by Supreme Court.

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Bocket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Frenchman R.....	Dissmore, George A.....	Des Moines, I.	Frenchman Valley Canal	Irrig.	10.00	32	5	33	Hayes.....	Aug.	23	1894	38	.....
Frenchman R.....	Groesback, Rose.....	Omaha.....	Gould Canal.....	Irrig.	2.00	1	5	38	Chase.....	Oct.	9	1894	67	.....
Frenchman R.....	Sheridan, R. B. ....	McCook.....	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.....	N. Gurnsey Canal.....	Irrig.	5.00	3	5	37	Chase.....	Jan.	14	1895	74	.....
Frenchman R.....	Woods, John and Francis	Wauneta.....	S. Gurnsey 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.....	No. Side Canal.....	Irrig.	.79	21	6	39	Chase.....	Feb.	25	1896	.....	246
Frenchman R.....	Shallenberger, George.....	Elwood.....	Shallenberger Canal.....	Irrig.	1.77	25	6	39	Chase.....	Dec.	21	1897	.....	423
Frenchman R.....	Inman Irrigation 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 Canal.....	Irrig.	4.20	35	5	34	Hayes.....	April	30	1903	.....	705
Frenchman River.....	Follett - Krotter.....	Palisade.....	Follett-Krotter Canal.....	Irrig.	2.57	35	5	34	Hayes.....	Aug.	11	1903	.....	720
Frenchman River.....	Krotter, F. C. ....	Palisade.....	Follett-Krotter Canal.....	Irrig.	10.46	35	5	34	Hayes.....	Jan.	15	1910	.....	975
Frenchman River.....	Krotter, F. C. ....	Palisade.....	Krotter Power Plant.....	Power	55.00	35	5	34	Hayes.....	Aug.	17	1910	.....	1021
Frenchman River.....	Krotter, F. C. ....	Palisade.....	Krotter Power Plt. No. 3	Irrig.	2.42	35	5	34	Hayes.....	Dec.	15	1910	.....	1047
Frenchman River.....	Hoke, J. A. ....	Champion.....	Hoke's Pwr. & P. Plant	Irrig.	2.28	21	6	39	Chase.....	May	1	1911	.....	1094
Frenchman River.....	Kilpatrick Bros. ....	Beatrice.....	Kilpatrick Res. No. 1....	Stor.	1000.00	23	6	40	Chase.....	June	22	1911	.....	1108
				A. F.										
Frenchman River.....	Sheridan, R. B. ....	McCook.....	Ext. of Aberdeen Canal..	Irrig.	1.57	2	5	38	Chase.....	July	29	1911	.....	1117
Frenchman River.....	Theobald & Athey.....	Wauneta.....	Wauneta Power Plant....	Power	75.00	11	5	36	Chase.....	Nov.	16	1911	.....	1136
Frenchman River.....	Arteburn, E. E. ....	Lincoln.....	Arteburn Storage Res....	St.-Irr.	160.00	11	6	41	Chase.....	Nov.	28	1911	.....	1142
Frenchman River.....	Bishop, Stephen S. ....	Lincoln.....	Inman Storage Reervoir	Stor.	125.00	17	6	40	Chase.....	Dec.	8	1911	.....	1145
Frenchman River.....	Dougherty, Geo. ....	Wauneta.....	Oliver Bros. Power Plt.	Power	50.00	7	5	35	Hayes.....	April	28	1913	.....	1284
Frenchman River.....	Dougherty, Geo. ....	Wauneta.....	Oliver's Canal.....	Irrig.	3.20	7	5	35	Hayes.....	April	28	1913	.....	1285
Frenchman River.....	Krotter, F. C. ....	Palisade.....	Krotter Power Plant.....	Power	65.00	35	5	34	Hayes.....	Dec.	2	1913	.....	1339

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second test granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Frenchman River..	Village of Imperial.....	Imperial.....	Imperial Power Plant.....	Power	55.00	25	6	39	Chase.....	Feb.	7	1917	.....	1474
Frenchman River..	Shallenberger, O. P. ....	Imperial.....	Lake Imperial.....	Irrig.	4.57	25	6	39	Chase.....	May	14	1917	.....	1487
Frenchman River..	Frenchman Valley Irr. District .....	Culbertson.....	Harvey Reservoir.....	Stor. Ac. Ft.	15000	3	5	38	Chase.....	June	8	1921	.....	1607
Frenchman River..	Knottwell & Newton.....	Imperial.....	Hamlet Roller Mills.....	Power	96.00	24	5	35	Hayes.....	Mar.	20	1922	.....	1646
Frenchman R.....	Riverside Ditch Co.....	Culbertson.....	Riverside Canal.....	Irrig.	.....	33	4	32	Hitchcock.....	July	3	1922	.....	1674*
Horse Creek.....	Nesbit, J. M. et al.....	Parks.....	Horse Creek Canal.....	Irrig.	1.86	23	1	39	Dundy.....	Aug.	31	1885	159, 173	.....
Indian Creek.....	Thompson & Van Sickle	Benkleman.....	Thompson-Van Sickl...	Irrig.	.93	8	2	37	Dundy.....	June	20	1895	.....	237
Indian Creek.....	Stonberg, Sanford.....	Max.....	Stoneberg Canal.....	Irrig.	1.00	2	2	37	Dundy.....	March	13	1911	.....	1070
Kilpatrick Res. No. 1.....	Kilpatrick Bros. Co.....	Beatrice.....	Kilpatrick Res.....	Irrig.	17.00	30	6	39	Chase.....	Jan.	25	1912	.....	1160
Medicine Creek....	Cambridge Milling Co....	Cambridge.....	Cambridge Canal.....	Power	68.00	29	4	25	Furnas.....	Dec.	31	1878	92, 93	.....
Medicine Creek....	Crete Mills.....	Curtis.....	Curtis Lake.....	Power	.....	32	8	28	Frontier.....				364	.....
Medicine Creek....	Maywood Milling Co. ....	Maywood.....	Maywood Mills.....	Power	11.88	16	8	29	Frontier.....	May	4	1907	.....	858
Red Willow Cr....	Masters, Charles.....	Indianaia.....	Master's Canal.....	Irrig.	1.14	6	3	28	Red Willow....	July	29	1912	.....	1212
Republican R.....	Arapahoe Fleur Mills.....	Arapahoe.....	Arapahoe Star Mill.....	Power	196.00	27	4	23	Furnas.....	July	24	1879	1029	.....
Republican R.....	Pioneer Irrigation Co. ....	Haigler.....	Haigler Canal.....	Irrig.	77.00	2	1	43	Dundy.....	April	4	1890	1025	.....
Republican R.....	Dundy County Irr. Co.	Benkleman.....	Dundy County Canal.....	Irrig.	45.00	24	1	39	Dundy.....	Nov.	22	1890	118	.....
Republican R.....	McCook I. & W. P. Co.	McCook.....	Meeker Canal.....	Irrig.	143.00	15	3	31	Hitchcock.....	Dec.	22	1890	4-9, 8-7	.....
Republican R.....	Anderson, Anders.....	Benkleman.....	Anderson Canal.....	Irrig.	2.00	1	1	37	Dundy.....	Jan.	26	1894	151	.....
Republican R.....	Ballard, Henry L. ....	Oxford.....	Ballard Canal.....	Irrig.	8.00	8	3	21	Furnas.....	June	9	1894	91	.....

## CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-B--(Concluded).

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.		
						S	T	R	County	Month	D	Yr.			
Republican R.....	Walsh, Patrick.....	McCook.....	Walsh Canal.....	Irrig.	11.00	35	3	30	Red Willow.....	Jan.	31	1900	.....	537	
Republican R.....	Hamilton, Henry L., et al	McCook.....	Harmon Canal.....	Ice	10.00	32	3	29	Red Willow.....	Jan.	22	1900	.....	535	
Republican R.....	Hurst, J. C. et al.....	Trenton.....	H. D. Canal.....	Irrig.	7.00	28	2	35	Hitchcock.....	March	2	1911	.....	1068	
Republican R.....	Anderson, C. et al.....	Benkelman.....	Cottonwood Canal.....	Irrig.	3.35	6	1	36	Dundy.....	Feb.	19	1912	.....	1172	
Republican R.....	Pringle, George N. ....	Parks.....	Parks Canal.....	Irrig.	16.00	20	1	39	Dundy.....	June	18	1912	.....	1202	
Republican R.....	Kirtland, E. S. ....	Orleans.....	Orleans Mill Co. ....	Power	.....	27	2	19	Harlan.....				1043	.....	
Republican R.....	Bartlett, William C. ....	Alma.....	Lake Disappointment.....	Stor.	5.00	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	1924	.....	1627	
Republican R.....	Anderson, Anders.....	Max.....	Anders Canal.....	Irrig.	3.47	1	1	37	Dundy.....	Apr.	20	1922	.....	1658*	
Republican R.....	North Fork.....	Pringle, George N. ....	Parks.....	Parks Canal.....	Irrig.	2.00	20	1	39	Dundy.....	Dec.	31	1915	.....	1444
Republican R.....	North Fork.....	Pringle, George N. ....	Parks.....	Parks Ditch Extension....	Irrig.	1.14	20	1	39	Dundy.....	Sept.	5	1919	.....	1555
Republican R.....	North Fork.....	Crews, L. E. ....	Haiglor.....	Crews Canal No. 2....	Irrig.	.....	20	1	41	Dundy.....	Mar.	28	1922	.....	1651
Republican R.....	South Fork.....	Southern Nebr. Pwr. Co.	Superior.....	Guthrie Canal.....	Power	400.00	34	1	7	Nuckolls.....	Sept.	1	1877	1036	.....
Republican R.....	South Fork.....	McDonald, J. A. ....	Benkelman.....	McDonald Canal.....	Irrig.	.79	36	1	38	Dundy.....	Nov.	13	1901	.....	644
Rock Creek.....	Phelan, J. R. et al.....	Parks.....	Phelan Canal.....	Irrig.	4.29	17	1	39	Dundy.....	Dec.	31	1883	138	.....	
Rock Creek.....	Pringle, Geo. N. ....	Parks.....	Parks Extension.....	Supple	.....	17	1	39	Dundy.....	June	29	1921	.....	1609	
Sappa Creek.....	Zulauf, George W. ....	Stamford.....	Sfamford Mills.....	Power	.....	21	2	20	Harlan.....				997		

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Spring Creek.....	Carlton, J. C. ....	Benkleman....	Benkleman Canal.....	Irrig.	1.29	19	1	37	Dundy.....	Dec.	31	1896	.....	373
Stinking Wtr. Cr.	Kilpatrick Bros. ....	Beatrice.....	Chase Canal.....	Irrig.	2.86	10	7	38	Chase.....	March	10	1894	57	.....
Stinking Wtr. Cr.	Crandall & Taylor.....	Imperial.....	McLean Canal.....	Irrig.	2.50	28	7	37	Chase.....	Sept.	24	1894	65	.....
Stinking Wtr. Cr.	Kilpatrick Bros. ....	Beatrice.....	Chase Canal No. 7.....	Irrig.	4.57	36	7	37	Chase.....	Dec.	21	1894	72, 175	.....
Stinking Wtr. Cr.	Kilpatrick Bros. ....	Beatrice.....	Chase Canal No. 6.....	Irrig.	2.00	13	7	38	Chase.....	Jan.	28	1895	76	.....
Stinking Wtr. Cr.	Kilpatrick Bros. ....	Beatrice.....	Chase Canal No. 5.....	Irrig.	1.50	14	7	38	Chase.....	Jan.	29	1895	77	.....
Stinking Wtr. Cr.	Kilpatrick Bros. ....	Beatrice.....	Chase Canal No. 3.....	Irrig.	1.71	14	7	38	Chase.....	Jan.	29	1895	78	.....
Stinking Wtr. Cr.	Kilpatrick Bros. ....	Beatrice.....	Chase Canal No. 4.....	Irrig.	.91	14	7	38	Chase.....	June	27	1895	58	.....
Stinking Wtr. Cr.	Kilpatrick Bros. ....	Beatrice.....	Chase Canal No. 1.....	Irrig.	.70	4	7	38	Chase.....	June	27	1895	57	.....
Stinking Wtr. Cr.	Krotter, F. C. ....	Palisade.....	Krotter Power Plant.....	Irrig.	3.00	35	5	34	Hayes.....	Dec.	15	1910	1046	.....
Stinking Wtr. Cr.	Krotter, F. C. ....	Palisade.....	Krotter Reservoir.....	Stor.	20000.00	15	5	34	Hayes.....	Apr.	28	1922	1663	.....
									Ac. Ft.					

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 1-B.

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Arickaree River .....	Jenkins, Chas. T.....	Irrig.	171.00	15	1	42	Colorado .....	.....	979
Center Creek .....	Gregory, A. B. & P. C.....	Irrig.	4.00	1	1	15	Franklin .....	182	.....
Frenchman River .....	Daschosisfsky, G. ....	Power	30.00	18	6	40	Chase .....	1013	.....
Frenchman River .....	Hagerman, Wm. ....	Irrig.	.86	19	5	34	Hayes .....	.....	935
Frenchman River.....	Fuller, C. B.....	Irrig.	25.00	4	5	36	Chase .....	62	.....
Horse Creek, Springs, Trib. to.....	Pringle, Esther L.....	Irrig.	.57	11	1	39	Dundy .....	.....	364
Horse Creek, Springs, Trib. to.....	Pringle, Geo. N.....	Irrig.	1.57	14	1	39	Dundy .....	.....	824
Indian Creek .....	Foster, Chas. ....	Irrig.	1.42	23	2	36	Dundy .....	.....	268
Indian Creek .....	Chamberlain, J. C. ....	Irrig.	1.86	23	1	39	Dundy .....	.....	240
Medicine Creek .....	Sanders, John L.....	Irrig.	1.43	27	7	27	Frontier .....	83	.....
Mauer Springs .....	C. B. & Q. R. R. Co.....	Irrig.	1.48	23	2	11	Chase .....	.....	1143
Red Willow Creek.....	Moore, Wm. H.....	Power	.....	16	3	28	Red Willow.....	181	.....
Red Willow Creek.....	Holland, L. J.....	Irrig.	35.00	16	3	28	Red Willow.....	95	.....
Red Willow Creek.....	Helm, John F.....	Irrig.	2.00	17	3	28	Red Willow.....	111	.....
Red Willow Creek.....	Clark, A. R.....	Irrig.	14.29	31	4	28	Red Willow.....	.....	781
Red Willow Creek.....	Helm, John T.....	Irrig.	10.00	8	3	28	Red Willow.....	.....	1042
Red Willow Lake.....	Cooper, Jas.....	Irrig.	2.00	36	9	33	Lincoln .....	647	.....
Republican River .....	Carson, A.....	Irrig.	1.43	27	3	30	Red Willow.....	103	.....
Republican River .....	Brown, W. A.....	Irrig.	11.00	11	1	42	Dundy .....	115	.....
Republican River .....	Trites, W. H.....	Irrig.	7.00	20	3	31	Hitchcock .....	8	.....

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 1-B--(Concluded).

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE			Doc. No.	App. No.
				S	T	R		
Republican River .....	Trenton Farmers' Irrigation Ass'n.....	Irrig.	32.00	10	2	34	Hitchcock .....	5 .....
Republican River .....	Carson, A. ....	Irrig.	18.00	27	3	30	Red Willow.....	102 .....
Republican River .....	Neighbors, E. G. ....	Irrig.	2.86	24	1	39	Dundy .....	133 .....
Republican River .....	Cambridge-Arapahoe Irr. & Imp. Co. ....	Irrig.	170.00	28	4	25	Furnas .....	89 .....
Republican River .....	Republican River Irr. Company.....	Irrig.	30.00	29	1	38	Dundy .....	{ 147 .....
							Dundy .....	148 .....
Republican River .....	Larned, W. H., Et Al.....	Irrig.	3.00	22	1	40	Dundy .....	150 .....
Republican River .....	Marr, Lorenzo .....	Irrig.	4.29	16	3	31	Hitchcock .....	11 .....
Republican River .....	Thomas, A. J. ....	Irrig.	2.00	24	1	40	Dundy .....	154 .....
Republican River .....	Wilcox, F. S. ....	Irrig.	4.50	32	3	29	Red Willow.....	109 .....
Republican River .....	Allen, E. M., Et Al.....	Irrig.	14.00	2	3	26	Red Willow.....	110 .....
Republican River .....	Spooner, J. A. ....	Irrig.	1.00	25	1	40	Dundy .....	413 .....
Republican River .....	Rogers, W. N. ....	Irrig.	38.00	26	3	29	Red Willow.....	1049 .....
Republican River .....	McConnell Bros. ....	Irrig.	180.00	10	2	34	Hitchcock .....	1055 .....
Republican River .....	Cappell, Geo. ....	Irrig.	1.57	19	3	30	Red Willow.....	1093 .....
Republican River .....	Rogers, W. M. ....	Irrig.	7.00	25	3	29	Red Willow.....	1129 .....
Republican River .....	Rupert Ditch Co. ....	Irrig.	20.00	32	3	32	Red Willow.....	1192 .....
Republican River, S. F. ....	Karr, J. W. ....	Irrig.	2.00	20	1	37	Dundy .....	155 .....
Republican River, S. F. ....	Riverside Ditch Co. ....	Irrig.	13.00	29	1	37	Dundy .....	156 .....
Republican River, S. F. ....	Bailey, W. J. ....	Irrig.	64.00	6	3	21	Furnas .....	1321 .....
Rock Creek .....	Owens, J. S. ....	Irrig.	.36	31	2	39	Dundy .....	265 .....
Rock Creek .....	Campbell, R. R. ....	Irrig.	.33	13	2	40	Dundy .....	526 .....
Rock Creek .....	Benkleman Light Association.....	Power	20.00	8	1	39	Dundy .....	1245 .....
Turkey Creek .....	Wilt & Polly.....	Power	.....	4	1	16	Franklin .....	183 .....

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

57

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Little Blue River..	Myer Hydro-Elec. P. Co.	Oak.....	Oak Mill Race.....	Power	.....	16	3	5	Nuckolls.....	.....	.....	.....	991	.....
Little Blue River..	Myer Hydro-Elec. P. Co.	Oak.....	Myer Hydro P. Plant.....	Power	150.00	16	3	5	Nuckolls.....	July	27	1916	.....	1467
Little Blue River..	Larkin, M. E. .....	Hastings.....	Crystal Lake.....	Stor.	1.50	27	6	10	Adams.....	Aug.	17	1912	.....	1219
Little Blue River..	Larkin, M. E. .....	Hastings.....	Crystal Lake.....	Irrig.	.....	27	6	10	Adams.....	Nov.	9	1918	.....	1526
Little Blue River..	Bozarth - Carter.....	Hebron.....	Hebron Power Plant.....	Power	216.00	9	2	2W	Thayer.....	March	31	1919	.....	1538
Little Blue River..	Campbell, J. T. .....	Hebron.....	Blue Valley Power Co..	Power	200.00	5	2	1	Thayer.....	May	28	1919	.....	1542
Little Blue River..	Larkins, M. E. .....	Hastings.....	Larkins & Son Canal.....	Power	1.50	27	6	10	Adams.....	Nov.	20	1920	.....	1594
Little Blue River..	Kasselbaum, Wm. .....	Hebron.....	Hebron Plant No. 3.....	Power	200.00	23	3	4	Thayer.....	Jan.	19	1922	.....	1640
Little Blue River..	Hulbert, Chas. .....	Fairbury.....	Hulbert Canal.....	Irrig.	.....	22	2	2E	Thayer.....	Aug.	7	1922	.....	1685

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 1-C.

STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Little Blue River.....	Lyon, Geo. Jr.....	Power	150.00	29	4	6	Nuckolls .....	.....	1410
Little Blue River.....	Lyon, Geo. Jr.....	Irrig.	4.00	18	4	6	Nuckolls .....	.....	1411

## CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION 1-D.

58

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate					Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.			
Bear Creek.....	Public Lds. and Bldgs.	Lincoln.....	Water Works.....	Irrig.	1.00	36	4	6	E Gage.....	May	20	1898	.....	455	
Beaver Creek.....	Wright, G. D. ....	York.....		Power	40.00	7	10	2	W York.....	Nov.	1	1878	963	.....	
Blue River, Big....	Nebr. Corn Mills.....	Lincoln.....	Milford Mills.....	Power	300.00	2	9	3	Seward.....			1866	1044	.....	
Blue River, Big....	Zwonechekt & Askamit..	Wilber.....	Mill & Elec. Plant.....	Power	200.00	19	5	5	Saline.....	{ Jan.	1	1875	1046	.....	
Blue River, Big....	Black Bros. Flour Mills..	Beatrice.....	Black Bros. Plant No. 2 (Blue Springs).....	Power	.....	17	2	7	E Gage.....				1047	.....	
Blue River, Big....	Black Bros. Flour Mills..	Beatrice.....	Black Bros. Plant, (Beatrice) .....	Power	.....	33	4	6	E Gage.....				1048*	.....	
Blue River, Big....	Holmesville M. & P. Co.	Holmesville....	Holmesville Power Co....	Power	500.00	29	3	7	Gage.....	April		1882	1021	.....	
Blue River, Big....	Holmesville M. & P. Co.	Holmesville....	Holmesville Power Co....	Power	Rs.Dam	29	3	7	E Gage.....	May	3	1911	1021	1095	
Blue River, Big....	Boyes, Burdette.....	Seward.....	Blue River Power Station No. 1.....	Power	200.00	19	9	4	E Seward.....	July	8	1910	.....	1006	
Blue River, Big....	Jacobs, E. ....	Staplehurst....	Jacobs Power Plant.....	Power	41.00	26	12	2	E Seward.....	Nov.	13	1911	.....	1135	
Blue River, Big....	Blue River P. Co. ....	Seward.....	Big Blue Plant No. 2....	Power	100.00	32	9	3	E Seward.....	Jan.	3	1912	.....	1153	
Blue River, Big....	Blue River P. Co. ....	Seward.....	Big Blue Plant No. 2....	Power	.....	32	9	3	E Seward.....	Jan.	3	1912	.....	1520	
Blue River, Big....	Beatrice Power Co. ....	Barnston.....	Barnston Power Plant....	Power	500.00	13	1	7	E Gage.....	Feb.	18	1913	.....	1262	
Blue River, Big....	Beatrice Power Co. ....	Barnston.....	Barnston Power Plant....	Power	Rs.Dam	13	1	7	E Gage.....	May	27	1920	.....	1585	
Blue River, Big....	Blue River Pw. Co. ....	Seward.....	Blue River Plant No. 3..	Power	100.00	5	8	4	Saline.....	March	13	1913	.....	1265	
Blue River, Big....	Blue River Pw. Co. ....	Seward.....	Blue River Plant No. 3..	Power	Rs.Dam	5	8	4	Saline.....	Aug.	21	1918	.....	1521	
Blue River, Big....	Blue River Power Co. ....	Seward.....	Blue River Plant No. 3..	Power	Rs.Dam	5	8	4	Saline.....	Dec.	20	1920	.....	1599	
Blue River, Big....	Mares, Marketta.....	Wilber.....	Mares Canal.....	Irrig.	2.28	2	6	4	Saline.....	Aug.	12	1913	.....	1314	
Blue River, Big....	C. B. & Q. R. R. Co.	Lincoln.....	C. B. & Q. Pipe Line	Irrig.	.50	2	9	3	Seward.....	April	30	1914	.....	1366	
Blue River, Big....	C. B. & Q. R. R. Co.	Lincoln.....	Pipe Line at Wymore....	Irrig.	.50	21	2	7	E Gage.....	Dec.	24	1914	.....	1394	

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Blue River, Big....	C., B. & Q. R. R. Co.	Lincoln.....	Pipe Line at Seward.....	Irrig.	.50	21	11	3	Soward.....	Dec.	14	1914	.....	1395
Blue River, Big....	Blue River Power Co.	Seward.....	Hydro-Electric Pwr. Plt.	Power	100.00	32	9	4	Seward.....	Aug.	14	1916	.....	1463
Blue River, Big....	Babson, H. B.	Chicago.....	Shestak Power Plant....	Power	200.00	35	7	4	E Saline.....	Feb.	6	1918	.....	1506
Blue River, Big....	Steinmeyer, J. H.	Beatrice.....		Power	.....	13	1	7	E Gage.....	Feb.	24	1919	.....	1584*
Blue River, Big....	Babson, Henry B.	Chicago, Ill....	Wilber Power Plant.....	Power	200.00	12	5	4	E Saline.....	Dec.	17	1920	.....	1597
Blue River, Big....	Babson, Henry B.	Chicago, Ill....	Dewitt Power Plant.....	Power	200.00	3	4	5	E Gage.....	Dec.	17	1920	.....	1598
Blue River, Big....	Babson, Henry B.	Chicago, Ill....	Hoag Power Plant.....	Power	.....	24	4	5	E Gage.....	July	3	1922	.....	1673*
Blue River, Big....	Black Bros. Flour Mills..	Beatrice.....	Black Bros. Plant No. 3	Power	.....	2	3	6	E Gage.....	Oct.	7	1922	.....	1690*
Blue River, Big....	Black Bros. Flour Mills..	Beatrice.....	Black Bros. Plant No. 2	Power	.....	17	2	7	E Gage.....	Nov.	7	1922	.....	1692*
Blue River, Big, W. Fork.....	Babson, Henry B.	Chicago, Ill....	Bow Span Plant.....	Power	100.00	26	9	2	E Seward.....	Dec.	17	1920	.....	1595
Blue River, Big, W. Fork.....	Babson, Henry B.	Chicago, Ill....	Big Bend Plant.....	Power	100.00	11	8	3	E Seward.....	Dec.	17	1920	.....	1596
Blue River, Big, W. Fork.....	Village of Beaver Cross- ing .....	Beaver Crossing.....	Municipal Light Plant....	Power	125.00	2	9	1	E Seward.....	Mar.	27	1922	.....	1650
Blue River and School Creek....	Garbe, Frank.....	Grafton.....	Blue Park Dam.....	Power	66.00	1	8	4	Fillmore.....	Aug.	7	1917	.....	1494

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 1-D.

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
Blue River, Big.....	Blue River Power Co.....	Power	100.00	11	8	3E	Seward .....	.....	1476
Turkey Creek .....	Lane, J. K.....	Power	.....	4	7	3E	Saline .....	990	.....
Turkey Creek .....	Lane, J. K.....	Irrig.	.09	4	7	3E	Saline .....	.....	81
Turkey Creek .....	Lane, J. K.....	Irrig.	.....	....	....	....	Saline .....	.....	84

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Lodge Pole.....	Hasse, Chas. & Gieselking, Herman.....	Altamont, Ill.	Bay State Canal.....	Irrig.	1.50	29	15	55	Kimball.....	Dec.	31	1876	347	.....
Lodge Pole.....	Johnson, Charles W. ....	Potter.....	Adams-Tobbins Canal.....	Irrig.	1.14	35	14	50	Cheyenne.....	Oct.	1	1878	638	.....
Lodge Pole.....	Gunderson, A. ....	Potter.....	Gunderson Canal.....	Irrig.	1.43	1	14	52	Cheyenne.....	June	1	1879	305	.....
Lodge Pole.....	Callahan, Charles .....	Burlington, Wash.....	Runge Canal No. 1.....	Irrig.	1.71	20	14	50	Cheyenne.....	April	15	1880	339	.....
Lodge Pole.....	Callahan, Charles .....	Burlington, Wash.....	Runge Canal No. 2.....	Irrig.	.50	20	14	50	Cheyenne.....	April	15	1882	338	.....
Lodge Pole.....	Connelly, John .....	Sidney.....	Anderson Canal No. 1....	Irrig.	2.50	8	14	51	Cheyenne.....	June	30	1882	373	.....
Lodge Pole.....	Lodge Pole Land Co., care F. B. Knapp.....	Fremont.....	Circle Arrow Canal.....	Irrig.	3.71	29	15	55	Kimball.....	July	1	1882	346	.....
Lodge Pole.....	Fuller, H. R. ....	Sidney.....	Urbach Canal.....	Irrig.	.86	15	14	51	Cheyenne.....	Sept.	1	1882	308	.....
Lodge Pole.....	Buckner, George R. ....	Sidney.....	Hale Canal No. 3.....	Irrig.	.57	36	14	49	Cheyenne.....	April	30	1883	320	.....
Lodge Pole.....	Buckner, George R. ....	Sidney.....	Hale Canal No. 4.....	Irrig.	.71	36	14	49	Cheyenne.....	April	30	1883	321	.....
Lodge Pole.....	Buckner, George R. ....	Sidney.....	Hale Canal No. 5.....	Irrig.	.57	36	14	49	Cheyenne.....	April	30	1883	322	.....
Lodge Pole.....	Buckner, George R. ....	Sidney.....	Lower Whitney Canal.....	Irrig.	.29	31	14	48	Cheyenne.....	May	1	1883	317	.....
Lodge Pole.....	Booth, Firth, Est. of.....	Sunol.....	Booth's Canal.....	Irrig.	4.29	29	14	47	Cheyenne.....	May	31	1883	309, 310	.....
Lodge Pole.....	McAuliffe, F. ....	Chappell.....	McAuliffe Canal.....	Irrig.	2.29	21	13	45	Deuel.....	Dec.	31	1884	814	.....
Lodge Pole.....	Webster, Wm. ....	Riverside, Cal.	Kinney Canal No. 2.....	Irrig.	2.71	33	15	56	Kimball.....	Dec.	31	1884	348	.....
Lodge Pole.....	Libby, H. H. ....	Lodge Pole.....	Libby Canal.....	Irrig.	2.00	36	14	47	Cheyenne.....	Dec.	31	1884	312	.....
Lodge Pole.....	Dickinson, F. ....	Lodge Pole.....	Dickinson Canal.....	Irrig.	1.14	26	14	47	Cheyenne.....	Jan.	1	1885	969	.....
Lodge Pole.....	Ruttner Bros. ....	Sidney.....	Howard Canal.....	Irrig.	.86	31	14	47	Cheyenne.....	April	10	1885	336	.....
Lodge Pole.....	Kreuger, R. and F. W. ....	Sidney.....	Kreuger Canal No. 3.....	Irrig.	1.14	32	14	48	Cheyenne.....	May	1	1885	323	.....
Lodge Pole.....	Wolfe H. D. ....	Chappell.....	Wolf Canal.....	Irrig.	1.00	18	13	45	Deuel.....	Dec.	31	1885	813	.....
Lodge Pole.....	Lodge Pole Land Co., care F. B. Knapp.....	Fremont.....	McIntosh Canal.....	Irrig.	3.31	29	15	55	Kimball.....	April	16	1886	351	.....
Lodge Pole.....	Kreuger, R. and F. W. ....	Sidney.....	Kreuger Canal No. 2.....	Irrig.	2.29	32	14	48	Cheyenne.....	Oct.	10	1886	324	.....

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Lodge Pole.....	Swartzlander, W. E. ....	Sidney.....	Borquist Canal.....	Irrig. ....	1.29	34	14	49	Cheyenne.....	April	30	1887	301	.....
Lodge Pole.....	Swartzlander, W. E. ....	Sidney.....	Borquist Canal.....	Irrig. ....	.71	34	14	49	Cheyenne.....	April	30	1887	300	.....
Lodge Pole.....	Buckner, George R. ....	Sidney.....	Upper Whitney Canal.....	Irrig. ....	2.29	36	14	49	Cheyenne.....	May	1	1887	316	.....
Lodge Pole.....	Dickinson, M. C. ....	Sidney.....	McLaughlin Canal.....	Irrig. ....	1.00	25	14	48	Cheyenne.....	May	1	1887	966	.....
Lodge Pole.....	Buckner, George R. ....	Sidney.....	Hale Canal No. 1.....	Irrig. ....	1.14	36	14	49	Cheyenne.....	July	1	1887	318	.....
Lodge Pole.....	Mitchell, J. ....	Sidney.....	Mitchell Canal.....	Irrig. ....	.86	8	14	51	Cheyenne.....	Sept.	1	1887	304	.....
Lodge Pole.....	Craig, John.....	Lodge Pole.....	Tobin Canal.....	Irrig. ....	2.29	28	14	47	Cheyenne.....	July	31	1888	330	.....
Lodge Pole.....	Keedrick, Mrs. Jessie....	Sidney.....	Bordwell Canal.....	Irrig. ....	1.43	35	14	49	Cheyenne.....	Aug.	1	1888	303	.....
Lodge Pole.....	Wearin, William H. ....	Carrolton, Mo. ....	Premier Canal.....	Irrig. ....	2.43	3	14	58	Kimball.....	April	11	1889	340	.....
Lodge Pole.....	Wearin, William H. ....	Carrolton, Mo. ....	Smced Canal.....	Irrig. ....	1.43	8	14	58	Kimball.....	April	12	1889	341	.....
Lodge Pole.....	Keedrick, Mrs. Jessie....	Sidney.....	Bordwell Canal.....	Irrig. ....	.86	35	14	49	Cheyenne.....	April	27	1889	302	.....
Lodge Pole.....	Eubank, John.....	Kimball.....	Polly Canal.....	Irrig. ....	.79	30	15	55	Kimball.....	May	6	1889	342	.....
Lodge Pole.....	Wearin, William H. ....	Carrolton, Mo. ....	Independent Canal.....	Irrig. ....	3.14	7	14	58	Kimball.....	May	6	1889	343	.....
Lodge Pole.....	Atkins, D. K. ....	Kimball.....	Atkins Canal.....	Irrig. ....	.43	30	15	55	Kimball.....	May	6	1889	344	.....
Lodge Pole.....	Webster, William.....	Riverside, Cal. ....	Kinney Canal.....	Irrig. ....	2.00	31	15	56	Kimball.....	May	14	1889	345	.....
Lodge Pole.....	Young, W. T. ....	Kimball.....	Young Canal.....	Irrig. ....	.50	33	15	57	Kimball.....	May	28	1889	349	.....
Lodge Pole.....	Lehmkuhl, John.....	Kimball.....	Ruttner Canal.....	Irrig. ....	1.14	36	15	57	Kimball.....	June	4	1889	350	.....
Lodge Pole.....	Oberfelder, R. S. ....	Sidney.....	Oberfelder Canal.....	Irrig. ....	.43	31	14	46	Cheyenne.....	June	10	1889	333	.....
Lodge Pole.....	Buckner, G. R. ....	Sidney.....	Hale Canal No. 2.....	Irrig. ....	.43	36	14	49	Cheyenne.....	June	26	1889	319	.....
Lodge Pole.....	Carfer, J. G. ....	Lodgepole.....	Bullock Canal.....	Irrig. ....	9.14	8	13	46	Deuel.....	June	25	1889	296	.....
Lodge Pole.....	Persinger, A. B. ....	Lodgepole.....	Persinger Canal.....	Irrig. ....	4.57	33	14	46	Deuel.....	June	25	1889	297	.....
Lodge Pole.....	Kreuger, R. and F. W. ....	Sidney.....	Kreuger Canal No. 1....	Irrig. ....	3.00	29	14	48	Cheyenne.....	June	26	1889	325	.....
Lodge Pole.....	Lodge Pole Land Co., care F. B. Knapp.....	Fremont.....	Brady Canal.....	Irrig. ....	.71	29	15	55	Kimball.....	Aug.	16	1889	352	.....

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.			
Lodge Pole.....	Gross, Mary E. ....	Pine Bluff, Wyoming....	Hoover Canal.....	Irrig.	1.43	12	14	59	Kimball.....	Sept.	4	1889	353	.....	
Lodge Pole.....	Bentley, B. M. ....	Sidney.....	Ickes Canal.....	Irrig.	2.50	28	14	50	Cheyenne.....	March	25	1891	329	.....	
Lodge Pole.....	Johnson, Charles W. ....	Potter.....	Adams Canal.....	Irrig.	1.43	3	14	52	Cheyenne.....	July	1	1891	371	.....	
Lodge Pole.....	Atkins, D. K., et al.....	Kimball.....	Hurley-Lily and Polly...	Irrig.	2.57	26	15	56	Kimball.....	Oct.	1	1891	354	.....	
Lodge Pole.....	Thorstensen, Nels.....	Potter.....	Christensen's Canal.....	Irrig.	.57	7	14	51	Cheyenne.....	April	15	1893	366	.....	
Lodge Pole.....	Thorstensen, Nels.....	Sidney.....	Christensen's Canal No. 1	Irrig.	.43	7	14	51	Cheyenne.....	April	15	1893	367	.....	
Lodge Pole.....	Van Aelstyn, Herman....	Sidney.....	Trognitz Canal.....	Irrig.	1.00	36	14	50	Cheyenne.....	June	1	1893	365	.....	
Lodge Pole.....	Oberfelder, R. S. ....	Sidney.....	Oberfelder Canal.....	Irrig.	2.00	31	14	46	Cheyenne.....	Dec.	30	1893	306	.....	
Lodge Pole.....	Kreuger, Richard.....	Sidney.....	Richard Kreuger Canal.	Irrig.	1.00	29	14	48	Cheyenne.....	May	1	1894	968	.....	
Lodge Pole.....	Anderson, Charles.....	Sidney.....	Anderson Canal No. 2.....	Irrig.	.57	10	14	51	Cheyenne.....	June	1	1894	372	.....	
Lodge Pole.....	Lyngholm, N. P. ....	Sidney.....	Lyngholm Canal.....	Irrig.	.36	14	14	51	Cheyenne.....	Nov.	1	1894	337	.....	
Lodge Pole.....	Dickinson, F. ....	Lodgepole.....	Dickinson's Canal.....	Irrig.	2.29	33	14	47	Cheyenne.....	May	10	1896	967	.....	
Lodge Pole.....	Persinger, A. B. ....	Lodgepole.....	Bullock's Canal.....	Irrig.	.57	4	13	46	Deuel.....	Feb.	16	1898	.....	437	
Lodge Pole.....	Girem, T. A. ....	Kimball.....	Maltese Cross Canal.....	Irrig.	.21	36	15	57	Kimball.....	May	16	1898	.....	454	
Lodge Pole.....	Wearin, Wm. H. ....	Carrolton, Mo.	Bushnell Canal.....	Irrig.	3.00	2	14	58	Kimball.....	April	15	1899	.....	504	
Lodge Pole.....	Wiegand, Henry G. ....	Chappell.....	Wiegand Canal.....	Irrig.	2.00	17	13	45	Deuel.....	May	31	1900	.....	563	
Lodge Pole.....	Brown, J. H. ....	Chappell.....	Neuman Can. Nos. 1, 2	Irrig.	1.89	36	13	45	Deuel.....	June	12	1900	.....	565	
Lodge Pole.....	McHatton, James W. ....	Chappell.....	Wertz Bros. Canal.....	Irrig.	2.86	12	13	46	Deuel.....	Feb.	14	1901	.....	600	
Lodge Pole.....	Neuman, A. G. ....	Chappell.....	Neuman Canal.....	Irrig.	1.29	26	13	45	Deuel.....	April	17	1901	.....	611	
Lodge Pole.....	Johnson, J. C. ....	Chappell.....	Johnson Canal.....	Irrig.	2.14	23	13	45	Deuel.....	April	17	1901	.....	612	
Lodge Pole.....	Lodge Pole Land Co., care F. B. Knapp.....	Fremont.....	Bennett Reservoir.....	Stor.	700.00	29	15	55	Kimball.....	March	13	1902	.....	657	
Lodge Pole.....	Lodge Pole Land Co....	Fremont.....	Reservoir Canal.....	Irrig.	A. F.	1.87	29	15	55	Kimball.....	Oct.	2	1902	.....	691
Lodge Pole.....	Forsling, C. A. ....	Kimball.....	Forsling Canal.....	Irrig.	1.83	33	15	56	Kimball.....	July	25	1903	.....	718	
Lodge Pole.....	Gieselking, Herman....	Altamont, Ill.	Bickel Canal.....	Irrig.	.93	30	15	58	Kimball.....	Aug.	3	1903	.....	719	
Lodge Pole.....	Thortensen, Finley.....	Sidney.....	Pomeroy Canal No. 1	Irrig.	.57	15	14	51	Cheyenne.....	Aug.	20	1903	.....	723	

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.		
						S	T	R	County	Month	D	Yr.				
Lodge Pole.....	Atkins, D. K. ....	Kimball.....	Faden Canal.....	Irrig. ....	.14	30	15	55	Kimball.....	Sept.	9	1903	.....	724		
Lodge Pole.....	Geddes, E. W. ....	Kimball.....	Owasco Canal.....	Irrig. ....	22.28	29	15	55	Kimball.....	Sept.	12	1903	.....	725		
Lodge Pole.....	Lodge Pole Land Co. care F. B. Knapp.....	Fremont.....	Owasco Canal.....	Irrig. ....	1.75	29	15	55	Kimball.....	Dec.	15	1903	.....	734		
Lodge Pole.....	Forsling, Alfred.....	Kimball.....	Forsling Canal.....	Irrig. ....	.86	34	15	57	Kimball.....	Dec.	6	1905	.....	806		
Lodge Pole.....	Soderquist, Peter.....	Chappell.....	Smith's Canal.....	Irrig. ....	3.57	12	12	45	Deuel.....	Aug.	18	1906	.....	850		
Lodge Pole.....	Soderquist, Peter.....	Chappell.....	Ralton Irr. System.....	Irrig. ....	19.14	36	13	45	Deuel.....	Jan.	4	1907	.....	847		
Lodge Pole.....	Forsling, Clarence.....	Kimball.....	Yoder Extension.....	Irrig. ....	2.71	36	15	57	Kimball.....	April	9	1907	.....	857		
Lodge Pole.....	Walker, I. S. ....	Kimball.....	Walker Canal.....	Irrig. ....	1.71	31	15	56	Kimball.....	Sept.	16	1907	.....	869		
Lodge Pole.....	Gross, Wm. & Chas. ....	Pine Bluff, Wyoming.....	Tracy Canal.....	Irrig. ....	.50	12	14	59	Kimball.....	Sept.	21	1907	.....	870		
Lodge Pole.....	Kimball Irr. District.....	Kimball.....	Kimball Storage.....	Irrig. ....	20,000	36	15	57	Kimball.....	April	15	1908	.....	897		
Lodge Pole.....	Lehmkuhl, John.....	Kimball.....	New Ruttner Canal.....	Irrig. ....	.51	36	15	57	Kimball.....	Sept.	16	1903	.....	727		
Lodge Pole.....	Kinty, J. F. ....	Lodgepole.....	Wilds' Canal.....	Irrig. ....	1.71	11	13	46	Deuel.....	June	2	1908	.....	904		
Lodge Pole.....	Ruttner, Carl.....	Sidney.....	Ruttner Canal.....	Irrig. ....	.50	30	14	47	Cheyenne.....	June	25	1908	.....	906		
Lodge Pole.....	Lodge Pole Land Co. care F. B. Khapp.....	Fremont.....	Bennett Canal No. 3....	Irrig. ....	1.00	29	15	54	Kimball.....	Feb.	17	1909	.....	934		
Lodge Pole.....	Maginnis, P. ....	Kimball.....	Maginnis Ice Pond.....	Stor. ....	3.00	26	15	56	Kimball.....	Sept.	19	1911	.....	1127		
Lodge Pole.....	Brown, Cyrus D., et al. ....	Chappell.....	Soderquist Canal.....	Irrig. ....	2.00	36	12	45	Deuel.....	Oct.	22	1912	.....	1237		
Lodge Pole.....	Heming, Howard C. ....	Chappell.....	Wiegand Canal No. 3....	Irrig. ....	1.28	16	13	45	Deuel.....	Sept.	10	1913	.....	1322		
Lodge Pole.....	Heming, Howard C. ....	Chappell.....	Wiegand Canal No. 2....	Irrig. ....	.42	16	13	45	Deuel.....	Sept.	10	1913	.....	1323		
Lodge Pole.....	Neuman, A. G. ....	Chappell.....	Neuman Canal.....	Irrig. ....	6.00	26	13	45	Deuel.....	Jan.	5	1916	.....	1445		
Lodge Pole.....	Brown, Cyrus D., et al. ....	Chappell.....	Soderquist Canal.....	Irrig. ....	2.33	36	13	45	Deuel.....	June	29	1915	.....	1420		
Lodge Pole.....	Bentley, Bertha M. ....	Sidney.....	Bentley Canal.....	Res. ....	1.00	34	14	50	Cheyenne.....	Feb.	14	1917	.....	1478		
Lodge Pole.....	Sudman, Mrs. Minnie....	Chappell.....	Sudman Canal.....	Irrig. ....	.78	22	13	45	Deuel.....	April	5	1917	.....	1483		
Lodge Pole.....	Bogle, J. W. ....	Bushnell.....	Young Canal.....	Irrig. ....	.57	33	15	57	Kimball.....	June	20	1919	.....	1544		

## CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 1-E (Concluded).

65

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Lodge Pole.....	Ruttner Bros. ....	Sidney.....	Ruttner Canal.....	Irrig.	.20	32	14	47	Cheyenne.....	Mar.	7	1922	.....	1645
Lodge Pole.....	Stuht, Fred W.....	Sidney.....	Stuht Canal.....	Irrig.	.....	32	14	49	Cheyenne.....	Nov.	22	1922	.....	1659
Lodgepole .....	McIntosh, J. L. and Martin, Paul L.....	Sidney.....	Martin Pumping Plant..	Irrig.	.....	35	14	50	Cheyenne.....	Nov.	22	1922	.....	1694
Lodge Pole, Spring Creek, Trib. to.....	Oberfelder, R. S. ....	Sidney.....	Oberfelder Canal.....	Irrig.	2.29	31	14	46	Cheyenne.....	May	29	1889	307	.....
Lodge Pole, Springs, Trib. to.....	Chambers, Charles P....	Sidney.....	Private Canal.....	Irrig.	.04	14	13	51	Cheyenne.....	March	19	1895	335	.....
Lodge Pole, Spring Branch Trib. to.....	Libby, H. H. ....	Lodgepole.....	Spring Branch Canal.....	Irrig.	.29	36	14	47	Cheyenne.....	July	1	1901	.....	623

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 1-E.

66

STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Lodgepole .....	Johnson, Chas. W.....	Irrig.	1.43	10	14	52	Kimball .....	370	.....
Lodgepole .....	Johnson, Chas. W.....	Irrig.	.50	10	14	52	Kimball .....	369	.....
Lodgepole .....	Nasland, J. A.....	Irrig.	.90	1	12	45	Deuel .....	.....	661
Lodgepole .....	Wood, Andrew J.....	Irrig.	.57	27	15	54	Kimball .....	.....	683
Lodgepole .....	Wood, Andrew J.....	Irrig.	.57	26	15	54	Kimball .....	.....	684
Lodgepole .....	Forsling, Alf. ....	Irrig.	1.50	34	15	57	Kimball .....	.....	703
Lodgepole .....	Soderquist, Peter .....	Irrig.	12.40	36	13	45	Deuel .....	.....	882
Flood from Hill.....	Fifield, C. M.....	Irrig.	.57	22	15	56	Kimball .....	.....	1091

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

67

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D			
Weeping Water.....	Gilmore, Charles.....	Weeping Wtr..	Gilmore Canal.....	Ice	8.00	2	10	11	Cass.....	Aug.	5	1909	.....	955
Nemaha River.....	C., B. & Q. R. R. Co.....	Lincoln.....	C., B. & Q. Water Supply	Irrig.	.....	33	3	12	Pawnee.....	Aug.	8	1922	.....	1687

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

68

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
										Month	D	Yr.		
						S	T	R	County					
Beaver Creek.....	Albion Light & P. Co....	Albion.....	Albion Power Plant.....	Power	67.00	26	20	6	Boone.....	Oct.	3	1901	.....	639
Beaver Creek.....	Nebr. Gas & Electric Co. Omaha.....	St. Edward Power Plant.....	Power	134.00	27	19	5	Boone.....	Feb.	11	1911	.....	1058	
Beaver Creek.....	The Ravenna Mfg. Co. Ravenna.....	The Ravenna Mills.....	Power	.....	8	12	14	Buffalo.....					1037	
Beaver Creek.....	Albion Light & P. Co. Albion.....	Albion Power Plant.....	Power	70.00	26	20	6	Boone.....	Feb.	20	1917	.....	1480	
Cedar River.....	Nebr. Gas & Electric Co. Omaha.....	Fullerton Power Plant.....	Power	200.00	12	16	6	Nance.....	Sept.	9	1901	.....	636	
Cedar River.....	Erickson Lake Co. Lincoln.....	Erickson Power Plant.....	Power	175.00	25	21	12	Wheeler.....	May	24	1915	.....	1415	
Cedar River.....	(Supple. A 636) Nebr. Gas & Electric Co. Omaha.....	Nobr. Hydro-Elec. Generating System at Fullerton .....	Power	250.00	12	16	6	Nance.....	Aug.	8	1922	.....	1686	
Cow Creek.....	Price, Ralph B. ....	Lewanna.....	Homestead Canal.....	Irrig.	2.29	7	26	27	Cherry.....	July	14	1894	194	.....
Dane Creek.....	Koupal, Frank Ord.....	Koupal Canal.....	Irrig.	.14	20	19	14	Valley.....	July	5	1912	.....	1207	
Goose Creek.....	Giles, R. P. et al. Elsmere.....	Giles Canal.....	Irrig.	10.00	2	25	25	Cherry.....	June	1	1895	187	.....	
Looking Glass Cr. ....	Girrard, E. A. and F. H. Monroe.....	Monroe Canal.....	Irrig.	2.86	1	17	3	Platte.....	June	12	1894	289	.....	
Loup River.....	C., B. & Q. R. R. Co. Lincoln.....	Pipe Line at Ravenna.....	Irrig.	.50	9	12	14	Buffalo.....	Dec.	24	1914	.....	1893	
Loup River, No.....	Loup Valley L. & P. Co. North Loup.....	North Loup Power Plant.....	Power	1000.00	35	19	13	Valley.....	Nov.	29	1922	.....	1697	
Loup River, M. B. ....	Lundy, James W. ....	Sargent.....	Lundy M. & P. Plant.....	Power	400.00	4	19	19	Custer.....	Aug.	1	1886	1024	.....
Loup River, M. B. ....	Lundy, James W. ....	Sargent.....	Lundy M. & P. Plant.....	Power	.....	4	19	19	Custer.....	Aug.	1	1886	.....	1224
Loup R., M. B. ....	Conger, James W. ....	Loup City.....	Sherman County Canal.....	Power	125.00	26	17	16	Valley.....	Fall of		1888	229a	.....
Loup R., M. B. ....	Conger, James W. ....	Loup City.....	Sherman County Canal.....	Irrig.	244.00	26	17	16	Valley.....	Aug.	13	1894	229b	.....
Loup R., M. B. ....	Rieck, Emil Dunning.....	Jewett Canal.....	Irrig.	4.29	30	22	24	Blaine.....	Aug.	12	1895	.....	113	
Loup R., M. B. ....	Webster Irr. & Can. Co. Comstock.....	Webster Canal.....	Irrig.	1.71	20	19	17	Custer.....	March	5	1898	.....	442	
Loup R., M. B. ....	Longwood Irr. Can. Co. Comstock.....	Longwood Canal.....	Irrig.	12.93	20	19	17	Custer.....	Feb.	21	1912	.....	1175	
Loup R., M. B. ....	U. S. of America Halsey.....	Nursery Canal.....	Irrig.	1.00	3	22	26	Thomas.....	Sept.	16	1912	.....	1226	
Loup R., M. B. ....	Holmes, Eddy Nemo.....	Loup Valley Canal.....	Irrig.	.85	36	20	21	Custer.....	May	31	1913	.....	1294	

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

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Source	Name of Claimant	Post-Office	Carrier	•	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.
							S	T	R	County	Month	D	Yr.	
Loup R., M. B. ....	Lundy, James W. ....	Sargent.....	Lundy's Lake Canal.....	Irrig.	28.31	4 19 19	Custer.....			June	27	1913	.....	1300
Loup R., M. B. ....	Lundy, James W. ....	Sargent.....	Lundy's Lake.....	Stor.	8.00	2 19 19	Custer.....			July	19	1913	.....	1306
Loup R., M. B. ....	Lundy, James W. ....	Sargent.....	Lundy's Lake.....	Irrig.	6.34	4 19 19	Custer.....			July	19	1913	.....	1307
Loup R., M. B. ....	Austin Irrigation Co. ....	Loup City.....	Austin Canal.....	Irrig.	50.00	32 13 14	Sherman.....			Nov.	6	1913	.....	1330
Loup R., M. B. ....	Central Power Co. ....	Grand Island.....	Central Power Co. ....	Power	1000.00	10 13 12	Hall.....			July	14	1914	.....	1373
Loup R., M. B. ....	C., B. & Q. R. R. Co. ....	Lincoln.....	Pipe Line at Seneca.....	Irrig.	.50	18 24 30	Thomas.....			Dec.	28	1914	.....	1396
Loup R., S. B. ....	Callaway Mill Co. ....	Callaway.....	Callaway Mill.....	Power	.....	2 15 23	Custer.....						988	.....
Loup R., S. B. ....	Central Power Co. ....	Grand Island.....	Grand Island Elec. Co. ....	Power	840.00	35 13 12	Howard.....			Jan.	18	1915	.....	1400
Loup R., S. B. ....	Brittan, Fred.....	Arnold.....	Brittan Electric Co. ....	Power	131.00	25 17 25	Custer.....			July	19	1916	.....	1460
Loup R., S. B. ....	Brittan, Fred.....	Arnold.....	Hydro-Elec. Plant No. 2	Power	62.50	31 17 24	Custer.....			Aug.	20	1919	.....	1553
Loup-Platte and Tributaries.....	Nebraska Water Power District .....	Omaha.....	Nebraska Water Power Dist. Plts. Nos. 1, 2, 3	Power	4950.00	7 17 1E 3 17 3E 36 18 7E	Platte..... Colfax..... Dodge.....	)		July	16	1919	.....	1548†
Muddy Creek.....	Penn, Charles.....	Broken Bow....	Penn's Canal.....	Irrig.	.50	33 17 20	Custer.....			Aug.	14	1894	215	.....
Muddy Creek.....	Mason City Roller Mill and Light Plant.....	Mason City....	Mason City Mill and Light Plant.....	Power	.....	.....	Custer.....						1042*	.....
Mira Creek.....	McClellan, M. E. ....	North Loup....	Mira Reservoir.....	Stor.	1.14	26 18 13	Valley.....			March	8	1912	.....	1182
Mira Reservoir....	McClellan, M. E. ....	North Loup....	McClellan 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.....			April	18	1916	.....	1453
Oak Creek.....	Hatt, Hans N. ....	Dannebrog.....	Oak Creek Plant No. 1	Irrig.	2.28	2 13 11	Howard.....			Jan.	18	1919	.....	1530

† Denotes district's petition approved.

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

70

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Platte-Loup and Tributaries.....	Nebraska Water Power District.....	Omaha.....	Nebraska Water Power Dist. Pts. Nos. 1, 2, 3	Power	4950.00	7	17	1E	Platte.....					
						3	17	3E	Colfax.....					
						36	18	7E	Dodge.....					
Sand Creek.....	Steger, Phillip.....	Callaway.....	Troyer's Pumping Plant	Irrig.	.24	10	15	23	Custer.....	Feb.	21	1916	.....	1447
Shell Creek.....	Schmitt, P. ....	Columbus.....	Schmitt's Canal.....	Irrig.	3.00	19	18	1	Platte.....	Dec.	17	1894	292a	.....
Shell Creek.....	Schmitt, P. ....	Columbus.....	Schmitt's Canal.....	Power	30.50	19	18	1	Platte.....	Dec.	17	1894	292b	.....
Shell Creek.....	Gottberg, Max.....	Columbus.....	Gottburg's Canal.....	Irrig.	1.00	24	18	1	Platte.....	June	6	1895	.....	2
Spring Branch....	Milldale F. & L. S. Improvement Co. ....	Council Bluff.....	Haskill Canal.....	Irrig.	7.00	31	17	24	Custer.....	Feb.	27	1914	.....	1357
Victoria Creek.....	Dailey-Gilligan & Co	Anselmo.....	Victoria Irrigation Plt.	Irrig.	2.29	1	19	21	Custer.....	March	17	1894	210, 212	.....
Victoria Creek.....	Victoria Ditch Assn. ....	Gates.....	Victoria Canal.....	Irrig.	4.29	1	19	21	Custer.....	July	17	1894	213	.....
Victoria Creek.....	Bishop, E. N. ....	Gates.....	Laughran & Bell Canal..	Irrig.	15.70	1	19	21	Custer.....	April	2	1912	.....	1189

\* Denotes district's petition approved.

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-A.

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Beaver Creek .....	Thornton, W. B.....	Irrig.	3.57	22	20	6	Boone .....	287	.....
Beaver Creek .....	Long, Wm. M.....	Irrig.	.14	14	17	4	Nance .....	.....	277
Goose Creek .....	Erickson, P. C.....	Irrig.	8.00	18	25	24	Brown ....	209	.....
Goose Creek .....	Crook, F.....	Irrig.	8.00	33	25	24	Brown .....	.....	345
Gracie Creek .....	Shoemaker, A. E.....	Irrig.	.29	29	23	17	Loup .....	.....	397
Lillian Creek .....	Lundy, Jas. W.....	Irrig.	5.00	1	19	20	Custer .....	.....	1233
Loup River .....	Nebraska Cen. I. Co.....	P. & I.	2700.00	27	17	4	Nance .....	.....	709
Loup River .....	Boggs, Chas. T.....	Power	2000.00	28	17	1	Platte .....	.....	1187
Loup River, N. B.....	North Loup Irr. & Improvement Co.....	Irrig.	143.00	27	19	14	Valley .....	227	.....
Loup River, N. B.....	Lee, J. R.....	Irrig.	40.00	25	27	29	Cherry .....	228	.....
Loup River, N. B.....	Burwell Irr. Co.....	Irrig.	110.00	27	21	17	Loup .....	232	.....
Loup River, N. B.....	Newton Irr. Dist.....	Irrig.	115.14	35	23	21	Blaine .....	188	.....
Loup River, N. B.....	Erickson, P. C.....	Irrig.	51.43	27	23	22	Blaine .....	189	.....
Loup River, M. B.....	Mid. Loup Valley Irr. Canal.....	Irrig.	560.29	15	21	22	Blaine .....	205	.....
Loup River, M. B.....	Douglas Grove Irrigation Dist.....	Irrig.	88.57	15	19	18	Custer .....	202	.....
Loup River, M. B.....	Thedford I. & P. Co.....	Irrig.	43.00	4	23	29	Thomas .....	214	.....
Loup River, M. B.....	Purdum, J. W.....	Irrig.	2.86	31	24	29	Thomas .....	198	.....
Loup River, M. B.....	Lillian, P. D.....	Irrig.	140.00	30	21	21	Blaine .....	199	.....
Loup River, M. B.....							Blaine .....	204	.....
Loup River, M. B.....							Blaine .....	216	.....

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-A—(Concluded).

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Loup River, M. B.....	Harris, L. H.....	Irrig.	5.71	16	22	25	Blaine .....	.....	248
Loup River, M. B.....	Muhlbach, Fred .....	Power	124.00	6	24	32	Hooker .....	.....	1185
Loup River, M. B.....	St. Paul Elec. Co.....	Power	2000.00	3	14	10	Howard .....	.....	1216
Loup River, M. B.....	Tillson, W. Z.....	Irrig.	15.57	29	12	15	Buffalo .....	236	.....
Loup River, S. B.....	Boblitz, E. J.....	Irrig.	.50	10	14	21	Custer .....	219-A	.....
Loup River, S. B.....	Boblitz, E. J.....	Power	20.00	10	14	21	Custer .....	219-B	.....
Loup River, S. B.....	Brown, A. D.....	Irrig.	.86	31	17	24	Custer .....	.....	363
Loup River, S. B.....	Hartzell, B. F.....	Irrig.	.37	27	18	26	Logan .....	.....	390
Muddy Creek .....	Benson, Wm. C.....	Power	.....	33	14	16	Sherman .....	999	.....
Platte River .....	Fremont C. & P. Co.....	I. & P.	2500.00	30	17	4	Butler .....	.....	40
Platte River .....	City of Omaha.....	Power	2000.00	30	17	4	Butler .....	.....	894
Spring Creek .....	Hendrix, H. J.....	Irrig.	1.33	2	17	3	Platte .....	290	.....
Victoria Creek .....	Laughran, T., Et Al.....	Irrig.	4.00	3	19	21	Custer .....	217	.....

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

73

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Battle Creek.....	Scheerger, George.....	Battle Creek....	Battle Creek Mills.....	Power	10.67	36	24	3	Madison.....	Nov.	12	1898	.....	484
Battle Creek.....	Scheerger, George.....	Battle Creek....	Battle Creek Mills.....	Power	20.00	36	24	3	Madison.....	Apr.	20	1906	.....	818
Clear Creek.....	Lyons Drainage District	Lyons.....	Main Ditch No. 1.....	Drain.	.....	14	23	8	Burt.....	March	9	1911	.....	1069
Elkhorn River.....	Skrdla, Joseph .....	Atkinson.....	Atkinson Mill.....	Power	38.50	30	30	14	Holt.....	Nov.	1	1883	271	.....
Elkhorn River.....	Norfolk Cereal and Flr. Mills (C. S. Bridge)	Norfolk.....	Norfolk Flour Mill.....	Power	100.00	23	24	1	Madison.....	March	1	1870	996	.....
Elkhorn, S. B.....	Rotheutner, Albert.....	Ewing.....	Flouring Mill.....	Power	33.00	3	26	9	Holt.....	Aug.	21	1898	.....	464
Middle Creek....	Malone, Robert.....	Lincoln.....	Malone Ice Plant.....	Ice	10.00	30	10	6	Lancaster.....	Dec.	26	1907	.....	883
Oak Creek.....	Central Realty and I. Co.	Lincoln.....	Capitol Beach.....	Stor.	50.00	16	10	6	Lancaster.....	June	5	1918	.....	1516
Silver Creek.....	Armour & Co. .....	So. Omaha.....	Armour & Co. Reservoir	Ice	10.00	7	13	9	Saunders.....	Oct.	18	1897	.....	415
Union and Taylor Creek....	Breechler & Neely.....	Madison.....	Union Valley Mills.....	Power	.....	32	22	1	Madison.....	.....	.....	998*	.....	.....

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-B.

74

STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Elkhorn River .....	Elkhorn Irr. Co.....	Irrig.	131.43	22	29	13	Holt .....	{ 259	.....
Elkhorn River .....	Davis, Jos. ....	Irrig.	1.43	31	29	11	Holt .....	263	.....
Elkhorn River .....	Carlton, Thomas .....	Irrig.	1.00	32	29	11	Holt .....	260	.....
Elkhorn River .....	Carlton, Thomas .....	Irrig.	5.00	30	29	11	Holt .....	261	.....
Elkhorn River .....	Cain, N. E., Et. Al.....	Irrig.	5.00	32	20	11	Holt .....	262	.....
Elkhorn River .....	Ross, Chas. P.....	Power	500.00	14	15	10	Douglas .....	283	.....
Elkhorn River .....	Neligh, W. T. S.....	Power	400.00	18	22	6	Cuming .....	971	.....
Oak Creek .....	Eiche, Herman .....	Irrig.	.71	17	10	6	Lancaster .....	1250	489
Platte River .....	Ross, Chas. P.....	Power	2500.00	6	14	10	Douglas .....	.....	970
Platte River .....	Parmlee & Rawls.....	Power	2000.00	32	13	13	Cass .....	.....	1879
Ryans Lake .....	Elk River Drainage District.....	Drain	.....	4	17	9	Dodge .....	.....	966
Springs .....	Newton Land Co.....	Irrig.	.07	13	14	13	Sarpy .....	.....	29
Stevens Creek .....	Moore, R. E.....	Irrig.	1.00	2	10	7	Lancaster .....	.....	1335

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

75

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Ashburn Creek	Zilmer, W. H.	Valentine	Ashburn Canal	Irrig.	.43	27	34	26	Cherry	June	17	1905	.....	676
Bear Creek	Skinner, Thomas	Springview	Skinner Ditch	Irrig.	.22	15	32	21	Keya Paha	June	20	1888	609	.....
Bear Creek	Belsky, Ed.	Eli	Belsky Hereford Canal	Irrig.	11.78	25	34	36	Cherry	May	3	1922	.....	1664
Beeman Creek	Barnard, C. O.	Springview	Barnard Canal	Irrig.	.43	21	32	20	Keya Paha	June	1	1892	603	.....
Beeman Creek	Beeman, J. D.	Springview	Beeman Canal	Irrig.	1.00	23	32	20	Keya Paha	May	20	1892	620	.....
Beeman Creek	Rickman, A. L.	Springview	Beeman & Rickman Canal	Irrig.	.29	23	32	20	Keya Paha	July	25	1895	613	.....
Box Butte Creek	Sandoz, William	Moomaw	Billy's Canal	Irrig.	.21	29	29	45	Sheridan	Jan.	13	1900	.....	533
Brush Creek, E. B	McCarthy, M. H. et al.	O'Neil	McCarthy Canal No. 1	Irrig.	.50	24	32	14	Holt	July	1	1894	264	.....
Brush Creek, W. B	McCarthy, M. H. et al.	O'Neil	McCarthy Canal No. 2	Irrig.	.63	26	32	14	Holt	Aug.	15	1894	266	.....
Cedar Creek	McNamee, K. M.	Wood Lake	Cedar Creek Canal	Irrig.	.43	4	30	21	Cherry	Sept.	28	1910	.....	1027
Cottonwood Creek	Lichte, Hugo	Dunlap	Dunlap Canal	Irrig.	.50	22	29	48	Dawes	May	9	1896	.....	336
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	.....
Fairfield Creek	Kuhre, William M.	Johnstown	Kuhre's Pond	Power	25.00	31	33	23	Brown	Sept.	1	1893	612a	.....
Fairfield Creek	Kuhre, William M.	Johnstown	Kuhre's Canal	Irrig.	.14	31	33	23	Brown	April	1	1894	612b	.....

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Horse Shoe Lake..	Horse Shoe Lake Drainage District.....	Irwin.....	Horse Shoe Lake.....	Drain.....		13	34	40	Cherry.....	June	27	1916		1461
Huggins Creek.....	Soper, H. K. .....	Enterprise.....	Soper Canal.....	Irrig. ....	.14	21	35	20	Keya Paha.....	Nov.	6	1894	592	.....
Lewis Spring.....	Lewis, Ralph.....	Enterprise.....	Lewis Canal.....	Irrig. ....	.14	29	35	19	Keya Paha.....	Aug.	30	1895		139
Long Pine Creek..	Kyner, S. H. .....	Long Pine.....	Long Pine Power Plant	Power .....	48.00	30	30	20	Brown.....	April	2	1909		941
Middle E. Branch	Allen, M. M. .....	Norden.....	Allen Canal.....	Irrig. ....	.50	29	33	23	Keya Paha.....	June	1	1891	616	.....
Minnechaduza.....	S. F. Gillman Mill Co.	Neligh.....	Pierce Milling Co. ....	Power .....	35.00	30	34	27	Cherry.....	Sept.	12	1896		359
Niobrara River....	The Coffee Cattle Co. ....	Chadron.....	Earnest Canal No. 1.....	Irrig. ....	2.86	9	29	56	Sioux.....	May	1	1885	514a	.....
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, Nellie B. ....	Marsland.....	Pioneer Canal.....	Irrig. ....	7.14	36	29	51	Dawes.....	Aug.	1	1887	442a	.....
Niobrara River....	McLaughlin, A. H. ....	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....	The Coffee Cattle Co. ....	Chadron.....	Earnest Canal No. 2.....	Irrig. ....	2.14	9	29	56	Sioux.....	May	15	1891	514b	.....
Niobrara River....	Cook, J. H. .....	Agate.....	Cook Canal No. 1-2.....	Irrig. ....	3.54	1	28	56	Sioux.....	May	31	1891	980	.....
Niobrara River....	Elliott Bros. .....	Van Tassel,.....												
Niobrara River....	Buffington, Clyde Craw- ford & Coleman, W. H.	Wyoming.....	Bigelow-Seymour Canal.....	Irrig. ....	2.40	19	31	57	Sioux.....	June	8	1891	510	.....
Niobrara River....	Furman, Nellie B. ....	Marsland.....	Harris-Neece Canal.....	Irrig. ....	8.57	3	28	55	Sioux.....	July	1	1892	517	.....
Niobrara River....	Taylor, George L. .....	Marsland.....	Pioneer Canal.....	Power .....	10.00	31	29	50	Dawes.....	Aug.	1	1893	442b	.....
Niobrara River....	Furman, H. G. .....	Marsland.....	Enterprise Canal.....	Irrig. ....	5.71	27	29	50	Dawes.....	Jan.	27	1894	461	.....
Niobrara River....	Warneke, Henry.....	Harrison.....	Furman Canal.....	Irrig. ....	3.64	29	29	50	Dawes.....	Feb.	2	1894	462	.....
Niobrara River....			Johnson Canal.....	Irrig. ....	2.86	36	31	57	Sioux.....	May	1	1894	511	.....

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
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...	Iodence, W. M.....	Dunlap.....	Lichte Canal.....	Irrig.	1.43	27	29	48	Dawes.....	Jan.	24	1895	479	....
Niobrara River...	Warneke, H.....	Harrison.....	Warneke's Canal.....	Irrig.	1.57	27	31	57	Sioux.....	Feb.	13	1895	505	....
Niobrara River...	Cook, J. H.....	Agate.....	McGinley-Stover Upper Canal.....	Irrig.	2.86	23	29	56	Sioux.....	Feb.	25	1895	521	....
Niobrara River...	Harris, Octave.....	Marsland.....	LaBelle Canal.....	Irrig.	2.00	6	28	54	Sioux.....	March	12	1895	518	....
Niobrara River...	Furman, H. G.....	Marsland.....	Snow Canal.....	Irrig.	2.86	35	29	51	Dawes.....	March	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.	2.00	33	30	56	Sioux.....	June	8	1895	....	4
Niobrara River...	Bourett, John S.....	Harrison.....	Bourett So. Canal.....	Irrig.	1.43	29	30	56	Sioux.....	June	10	1895	....	5
Niobrara River...	Hughes, John, Estate of...	Marsland.....	Hughes Canal.....	Irrig.	1.00	1	28	52	Box Butte.....	June	26	1895	....	53
Niobrara River...	Harris, Octave.....	Marsland.....	LaBelle Canal.....	Irrig.	3.14	6	28	54	Sioux.....	July	3	1895	....	60
Niobrara River...	Bennett, Sadie C.....	Omaha.....	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.....	Mettlem Canal.....	Irrig.	10.00	4	28	54	Sioux.....	April	27	1896	....	292
Niobrara River...	Neeland, Sarah J.....	Hemingford...	McManus-Neeland Canal...	Irrig.	1.93	29	29	49	Dawes.....	April	9	1898	....	448
Niobrara River...	Bourett, J. F.....	Harrison.....	Bourett Canal.....	Irrig.	1.00	29	30	56	Sioux.....	March	5	1900	....	542
Niobrara River...	Bourett, J. S.....	Harrison.....	J. S. Bourett Canal.....	Irrig.	1.71	19	30	56	Sioux.....	March	17	1900	....	546
Niobrara River...	Montague, James.....	Dunlap.....	Montague-Lichte Canal.....	Irrig.	.43	27	29	48	Dawes.....	Sept.	27	1900	....	575
Niobrara River...	Fendrich, G. A.....	Dunlap.....	Fendrich Canal.....	Irrig.	.29	32	29	48	Dawes.....	June	1	1901	....	616
Niobrara River...	Fendrich, G. A.....	Harrison.....	Fendrich Canal.....	Irrig.	.27	32	29	48	Dawes.....	June	1	1900	....	617
Niobrara River...	Cornell, C. M.....	Valentine.....	Valentine Power Plant.....	Power	1600.00	27	24	34	Cherry.....	Jan.	29	1902	....	652
Niobrara River and Pepper Cr.	Taylor, D. T.....	Hay Springs...	Taylor Canal.....	Irrig.	4.57	28	29	47	Dawes.....	Aug.	8	1904	....	766
Niobrara River...	Kay, John L.....	Marsland.....	Kay Canal.....	Irrig.	2.00	6	28	53	Dawes.....	May	12	1905	....	791

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Niobrara River....	Kirk, E. L.....	Sioux City.....	Nebraska Power Co.....	Power	900.00	34	32	7	Knox.....	Sept.	24	1909	.....	961
Niobrara River....	McCormack, George W.....	Harrison.....	Beiser Canal.....	Irrig.	.75	4	29	56	Sioux.....	Jan.	23	1911	.....	1056
Niobrara River....	McCormack, George W.....	Harrison.....	Ext. of Bourrett Canal.....	Irrig.	1.21	33	30	56	Sioux.....	Jan.	23	1911	.....	1057
Niobrara River....	Idencie, W. M.....	Dunlap.....	Lichte Canal.....	Irrig.	3.00	27	29	48	Dawes.....	April	7	1911	.....	1086
Niobrara River....	Montague, James.....	Dunlap.....	Lichte Canal.....	Irrig.	.71	27	29	48	Dawes.....	April	19	1911	.....	1088
Niobrara River....	Hopkins, Thomas L.....	Hemingford.....	Potmesil Bros. Canal.....	Irrig.	.28	25	29	48	Sioux.....	Jan.	2	1912	.....	1152
Niobrara River....	Bourrett, John.....	Harrison.....	J. Bourrett Ext. No. 1.....	Irrig.	.11	29	30	56	Sioux.....	March	25	1912	.....	1188
Niobrara River....	Bourrett, John.....	Harrison.....	J. Bourrett Ext. No. 2.....	Irrig.	.21	32	30	56	Sioux.....	July	19	1912	.....	1209
Niobrara River....	Davidson, F. B. & C. T.....	Hemingford.....	Mettlen Canal.....	Irrig.	5.00	4	28	54	Sioux.....	Dec.	18	1912	.....	1248
Niobrara River....	Davidson, F. B. & C. T.....	Hemingford.....	Bennett Canal.....	Irrig.	4.00	1	28	54	Sioux.....	Dec.	18	1912	.....	1249
Niobrara River....	Fox, Jim.....	Marsland.....	George Hitshew's 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.....	March	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's Canal.....	Irrig.	.21	12	28	54	Dawes.....	April	27	1922	.....	1662
Pine Creek.....	Colclessner, Henry.....	Colclessner.....	Pine Creek Mill.....	Power	32.00	33	30	44	Sheridan.....	June	5	1893	415	.....
Plum Creek.....	Wilbert, R.....	Ainsworth.....	Wilbert Canal.....	Irrig.	.48	35	32	28	Brown.....	May	5	1896	.....	329
Plum Creek.....	Ainsworth, L. & P. Co.....	Ainsworth.....	Plum Creek Plant.....	Power	150.00	29	32	22	Brown.....	May	15	1909	.....	947
Rickman Creek.....	Byington, Lola.....	Riverview.....	Byington Canal.....	Irrig.	1.00	22	32	20	Keya Paha.....	May	19	1891	582	.....
Rock Creek.....	Dugger Bros.....	Bassett.....	Dugger Canal.....	Irrig.	4.57	33	32	18	Rock.....	April	24	1919	.....	1539
Rock Spring Cr.....	Chase, Albert B.....	Ainsworth.....	Moore's Canal.....	Irrig.	1.43	12	32	22	Keya Paha.....	June	30	1887	593	.....
Spring Creek.....	Kuskie, A. K.....	Sparks.....	Garden Canal.....	Irrig.	.86	27	34	25	Cherry.....	March	30	1900	.....	555
Wyman Creek.....	McCully, R. A.....	Carns.....	McCully Canal.....	Irrig.	.80	19	32	19	Keya Paha.....	June	10	1891	604	.....

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-C.

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Abitz Creek .....	Fullerton, J. B.....	Irrig.	.36	18	30	13	Holt .....	.....	278
Antelope Creek .....	Julian, R. R., Et Al.....	Irrig.	.36	21	32	40	Cherry .....	.....	798
Bear Creek .....	Cedarburg, P. ....	Irrig.	.02	3	32	21	Keya Paha.....	.....	479
Big Sandy Creek.....	Pickler, W. S.....	Irrig.	1.14	12	33	14	Holt .....	.....	667
Big Sandy Creek.....	Johnson, C. A.....	Power	35.00	12	33	14	Holt .....	.....	685
Blackbird Creek .....	Mullen, A. F.....	Irrig.	1.00	20	31	11	Holt .....	267	.....
Bluebird Creek .....	Murphy, P. ....	Irrig.	1.00	26	30	11	Holt .....	273	.....
Boardman Creek .....	Robert-Fowles .....	Irrig.	6.86	6	29	33	Cherry .....	973	.....
Boardman Creek .....	Bachelor, J. H.....	Irrig.	28.57	33	30	32	Cherry .....	.....	1155
Brush Creek .....	Nebr. Townsite Co.....	Power	15.00	28	33	13	Holt .....	.....	474
Burton Creek .....	Mutz, Otto .....	Irrig.	.57	19	34	19	Keya Paha.....	608b	.....
Burton Creek .....	Mutz, Otto .....	Irrig.	.35	2	33	20	Keya Paha.....	.....	142
Canyon .....	Reese, B. F., and Thomas, A. G.....	Irrig.	14.29	36	30	54	Sioux .....	.....	863
Cottonwood Creek .....	Bender Bros. ....	Irrig.	.71	17	29	48	Dawes .....	481	.....
Cottonwood Creek .....	Tendrich & Lichte.....	Irrig.	.64	22	29	48	Dawes .....	.....	336
Crooked Creek .....	Mutz, Otto .....	Power	3.00	19	34	19	Keya Paha.....	608A	.....
Crooked Creek .....	Mutz, Otto .....	Irrig.	1.00	19	34	19	Keya Paha.....	608b	.....

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-C—(Continued).

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Cub Creek .....	Karr, John, and Tissue, E. H.....	Irrig.	.10	28	33	22	Keya Paha.....	589	.....
Eagle Creek .....	Bokhof, Wm. ....	Irrig.	2.86	6	30	13	Holt .....	275	.....
Eagle Creek .....	Robinson, J. A. ....	Irrig.	2.29	1	30	14	Holt .....	280	.....
Eagle Creek, S. B. ....	Becker, Samuel .....	Irrig.	1.14	8	30	13	Holt .....	274	.....
Holt Creek .....	Schoettger, F. J. ....	Irrig.	.14	32	35	20	Keya Paha.....	595	.....
Holt Creek, S. B. ....	Akers, J. W. ....	Irrig.	.14	1	34	21	Keya Paha.....	611	.....
Horse Head Creek.....	Bruce, A. ....	Irrig.	.17	16	33	24	Keya Paha.....	.....	149
Jewett Creek .....	Serek, Theo. A. ....	Irrig.	.71	5	32	21	Keya Paha.....	590	.....
Keya Paha River.....	Yocum, J. C. ....	Irrig.	1.14	23	34	15	Boyd .....	573	.....
Keya Paha River.....	Bruce, Andrew .....	Power	100.00	24	34	16	Boyd .....	.....	729
Kibby Creek .....	Green, Martha J. ....	Irrig.	.01	28	34	16	Boyd .....	.....	747
Middle, E. B. ....	McGuire, M. W. ....	Irrig.	.71	32	33	23	Keya Paha.....	606	.....
Middle, E. B. ....	Allen, M. N. ....	Irrig.	1.00	29	33	23	Keya Paha.....	.....	753
Minnechaduza .....	City of Valentine.....	Power	40.00	29	34	27	Cherry .....	.....	1279
Newman Creek .....	Newman, Philo .....	Irrig.	.21	17	33	24	Keya Paha.....	617	.....
Niobrara River .....	Bruce, A. ....	Power	60.00	16	33	24	Keya Paha.....	610	.....
Niobrara River .....	Roll Mill Co. ....	Power	35.00	5	28	51	Box Butte.....	970	.....

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-C—(Continued).

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Niobrara River .....	Green, Frank J.....	Irrig.	.57	25	29	50	Dawes .....	459	.....
Niobrara River .....	Fienken, Chas. ....	Irrig.	1.00	12	33	16	Boyd .....	575	.....
Niobrara River .....	Wilson, J. A. ....	Irrig.	5.71	18	32	21	Keya Paha.....	591	.....
Niobrara River .....	Est. of John Hughes.....	Irrig.		1	28	52	Box Butte.....	987	.....
Niobrara River .....	Bond & Tissot.....	Irrig.	1.16	19	29	46	Sheridan .....		82
Niobrara River .....	Armstrong, T. S. ....	Power	150.00	9	33	13	Boyd .....		452
Niobrara River .....	Hunter, Jas. A. ....	Irrig.	5.14	25	29	50	Dawes .....		469
Niobrara River .....	Pafmesil Bros. ....	Irrig.	6.00	26	29	48	Dawes .....		757
Niobrara River .....	Kirk, E. L. ....	Power	700.00	34	32	7	Knox .....		1019
Niobrara River .....	Dierix, Camille .....	Irrig.	1.53	19	30	43	Sheridan .....		1087
Niobrara River .....	Wells, Harry E. ....	Irrig.	1.64	32	32	40	Sheridan .....		1193
Niobrara River .....	Buhman, Herman P. ....	Power	900.00	1-6	32	10	Boyd .....		1243
Niobrara River .....	Tendrich, B. ....	Irrig.	.30	26	29	48	Dawes .....		607
Plum Creek .....	Plum Creek Irr. Co. ....	Irrig.	26.00	4	29	24	Brown .....	405	.....
Pole Creek .....	Julian, A. R., Et Al. ....	Irrig.	.57	28	32	40	Cherry .....		799
Rock Creek .....	Eastlick, B. J. ....	Irrig.	.35	29	32	18	Rock .....	395	.....
Rock Creek .....	Wile, H. ....	Irrig.	.86	9	31	18	Rock .....	397	.....
Rock Springs .....	Van Koten, J. ....	Irrig.	.07	25	33	22	Keya Paha.....	619	.....
Shobe Branch .....	Lamb, A. J. ....	Irrig.	.14	30	33	11	Holt .....		322
Snake River .....	Jackson, W. S. ....	Power	180.00	9	31	30	Cherry .....		1852
Springs .....	Bakewell, Geo. C. ....	Irrig.	.85	26	33	24	Brown .....		1067

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-C—(Concluded).

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Stream—no name .....	Grant, C. G.....	Irrig.	.14	4	31	20	Rock .....	400	.....
Stream—no name .....	Conger, C. K.....	Irrig.	.11	5	33	24	Keya Paha.....	.....	158
Snider Creek .....	Pickler, W. S.....	Irrig.	.01	31	33	19	Keya Paha.....	607	.....
Spotted Tail Creek.....	Rhodes, J. G.....	Irrig.	.25	4	34	17	Keya Paha.....	601	.....
Turkey Creek .....	LaRue, Chas.....	Irrig.	.43	35	33	23	Keya Paha.....	.....	539
Turkey Creek .....	LaRue, Chas.....	Irrig.	2.00	35	33	23	Keya Paha.....	.....	754
Verdigris Creek .....	Drayton, Jno. T.....	Irrig.	2.86	8	28	8	Antelope .....	248	.....
Wyman Creek .....	Koenig, Joe .....	Irrig.	.14	17	32	19	Keya Paha.....	587	.....
Young Creek .....	Lamb, A. J.....	Irrig.	.29	32	33	11	Holt .....	.....	311

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Ash Creek.....	Connell, W. D.....	Whitney.....	Connell Canal.....	Irrig.	.63	6	32	50	Dawes.....	June	17	1898	.....	459
Ash Creek.....	Cripps, Fred W.....	Whitney.....	Cripps Canal No. 2.....	Irrig.	1.00	13	32	51	Dawes.....	Jan.	10	1899	.....	491
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 Creek, E. B.....	Tomlin, H. B.....	Whitney.....	Ox Yoke Canal.....	Irrig.	2.86	31	32	50	Dawes.....	May	31	1880	447	.....
Ash Creek, E. B.....	Aird, Ada L.....	Crawford.....	Barron Canal.....	Irrig.	1.14	32	32	50	Dawes.....	July	1	1888	438	.....
Ash Creek, E. B.....	Ivins, Orville R.....	Crawford.....	Sheldon Canal.....	Irrig.	1.43	30	32	50	Dawes.....	Jan.	26	1899	.....	493
Ash Creek, E. B.....	Vetter, Andrew.....	Crawford.....	Todd Canal.....	Irrig.	.38	5	31	50	Dawes.....	Sept.	12	1899	.....	520
Ash Creek, E. B.....	Stumph, Nellie.....	Whitney.....	Stumph Canal.....	Irrig.	.....	31	32	50	Dawes.....	.....	.....	1023 1/2*	.....	.....
Ash Creek, W. B.....	Vetter, Andrew.....	Crawford.....	Mace Canal.....	Irrig.	1.00	2	31	51	Dawes.....	July	31	1884	428	.....
Ash Creek, W. B.....	Wall, C. W.....	Whitney.....	W. Ash Creek Canal.....	Irrig.	1.62	36	32	51	Dawes.....	July	4	1893	452	.....
Ash Creek, W. B.....	Ivins, Orville R.....	Crawford.....	Woodward Canal.....	Irrig.	.14	25	32	51	Dawes.....	Feb.	3	1898	.....	434
Ash Creek, W. B.....	Broadhurst, Nathan.....	Crawford.....	Broadhurst Reservoir.....	Stor.	5.00	35	32	51	Dawes.....	Nov.	17	1913	.....	1333
Beaver Creek.....	Braddock, William.....	Chadron.....	Braddock Canal.....	Irrig.	.36	18	34	46	Sheridan.....	April	15	1895	423	.....
Beaver Creek.....	Braddock, William.....	Chadron.....	Wm. Lockler Canal.....	Irrig.	.....	34	35	47	Dawes.....	.....	.....	1017*	.....	.....
Beaver Creek.....	U. R. L. & Cattle Co.....	Chadron.....	Cilek Canal.....	Irrig.	.36	4	33	46	Sheridan.....	June	19	1889	.....	513
Beaver Creek.....	Cavins, J. A.....	Chadron.....	Rickman Canal.....	Irrig.	1.00	9	33	46	Sheridan.....	July	2	1902	.....	681
Bordeaux Creek.....	Naylor, W. W.....	Chadron.....	Richards Canal.....	Irrig.	.14	36	33	48	Dawes.....	Sept.	10	1890	430	.....
Bordeaux Creek.....	Naylor, W. W.....	Chadron.....	Richards Canal.....	Irrig.	.36	36	33	48	Dawes.....	Sept.	7	1892	446	.....
Bordeaux Creek.....	Naylor, Charles.....	Chadron.....	Mann's Canal.....	Irrig.	.23	25	33	48	Dawes.....	Dec.	31	1892	975	.....
Bordeaux Creek.....	County of Dawes.....	Chadron.....	County Canal.....	Irrig.	.14	23	33	48	Dawes.....	July	31	1893	983	.....
Bordeaux Creek.....	Kebbard, K. M.....	Chadron.....	Bacon Canal.....	Irrig.	.21	21	34	48	Dawes.....	July	1	1894	445	.....

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Bordeaux Creek...	O'Donnell, John.....	Chadron.....	O'Donnell Canal.....	Irrig.	.14	9	34	48	Dawes.....	Jan.	17	1898	....	432
Bordeaux Creek...	Martens, Wm.....	Chadron.....	Martens Canal.....	Irrig.	.57	28	34	48	Dawes.....	Sept.	22	1902	....	690
Bordeaux Creek...	Martens, Wm.....	Chadron.....	Martens Canal.....	Irrig.	1.14	21	34	48	Dawes.....	Jan.	14	1907	....	848
Bordeaux Creek...	Naylor, W. W.....	Chadron.....	Naylor Canal.....	Irrig.	.42	36	33	48	Dawes.....	July	22	1918	....	1519
Bordeaux Lit.....	Schmidt, Elwin.....	Chadron.....	Hartzell Canal.....	Irrig.	.57	13	33	48	Dawes.....	June	1	1893	448	....
Bordeaux Lit.....	Butler, J. A.....	Chadron.....	Butler Canal.....	Irrig.	.11	33	33	47	Dawes.....	June	1	1894	443	....
Bull Creek.....	Johnson, W. S.....	Glen.....	Johnson Canal No. 1.....	Irrig.	.29	7	30	53	Sioux.....	March	13	1895	519	....
Butte Cr. Trunk..	Chaulk, John J.....	Chadron.....	Chaulk Canal.....	Irrig.	3.00	25	38	50	Dawes.....	March	13	1915	....	1406
Chadron Creek....	City of Chadron.....	Chadron.....	Chadron Water Works....	W. S.	1.00	18	32	48	Dawes.....	Dec.	31	1888	1022	....
Chadron Creek....	Gorr, James.....	Chadron.....	Gallup's Canal.....	Irrig.	.08	15	33	49	Dawes.....	Dec.	20	1890	426	....
Chadron Creek....	City of Chadron.....	Chadron.....	Water Works Extension...	Stor.	.....	.....	.....	.....	Dawes.....	April	8	1920	....	1583*
Cottonwood Cr....	Rasmussen, J. J. & C. M.	Crawford.....	Rasmussen Canal.....	Irrig.	2.29	10	33	52	Dawes.....	March	8	1898	....	444
Cottonwood Cr....	Rasmussen, J. J. & C. M.	Crawford.....	Rasmussen Canal.....	Irrig.	18.00	10	33	52	Dawes.....	Dec.	26	1899	....	528
Cottonwood, Lit...	Golden, T. F.....	Crawford.....	Thos, Stuart Canal.....	Irrig.	.36	8	32	52	Dawes.....	Dec.	21	1890	425	....
Cottonwood, Lit...	Priee, J. A. B. and 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...	Dunn, J. G.....	Crawford.....	Dunn's Canal.....	Irrig.	1.43	9	32	52	Dawes.....	Jan.	14	1902	....	649

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Cottonwood, Lit....	Erickson, John R. ....	Crawford.....	Stuart-Maple Canal.....	Irrig.	.29	3	32	52	Dawes.....	March	10	1902	.....	656
Cottonwood, Lit....	Kusel, William T. ....	Chadron.....	Kusel-Speain Canal.....	Irrig.	.71	8	32	51	Dawes.....	June	30	1902	.....	677
Cottonwood, Lit....	Lawrence, Thomas E....	Crawford.....	Brahurst Canal.....	Irrig.	3.02	7	32	51	Dawes.....	Feb.	25	1913	.....	1264
Cottonwood, Lit....	Dodd & McDowell.....	Crawford.....	Dodd-McDowell Canal....	Stor.	10.00	13	32	53	Sioux.....	April	15	1913	.....	1276
Dodd-McDowell....	(Res. A. 1276) Dodd, Calvin H.....	Crawford.....	Dodd Reservoir.....	Irrig.	.....	17	32	52	Dawes.....	Jan.	5	1920	.....	1571
Dead Horse Cr....	Woodruff, F. B. & E. F.	Chadron.....	Flag Butte Canal.....	Irrig.	.03	32	32	49	Dawes.....	April	10	1891	427	.....
Dead Horse Cr....	Goff, G. L. ....	Chadron.....	Goff Canal.....	Irrig.	.....	4	31	49	Dawes.....	June	10	1895	.....	7
Dead Horse Cr....	Geiser, B. A. ....	Chadron.....	Geiser Canal.....	Irrig.	.15	17	32	49	Dawes.....	March	18	1902	.....	658
Dead Horse Cr....	White, Charles et al ...	Chadron.....	White's Canal.....	Irrig.	1.20	32	33	49	Dawes.....	April	6	1904	.....	749
Deadman Creek....	Glendy, Thos. J. ....	Crawford.....	Porter-Rasmussen Canal..	Irrig.	1.43	1	30	53	Sioux.....	May	29	1900	.....	562
Deep Creek.....	Barnum, W. E.....	Glen.....	Deep Creek Canal.....	Irrig.	.06	9	30	53	Sioux.....	May	1	1887	525	.....
Deep Creek.....	McMaster, William A. ....	Glen.....	Green Canal.....	Irrig.	.20	9	30	53	Sioux.....	Oct.	5	1895	.....	203
Dry Run.....	Campbell, F. J. ....	Chadron.....	Campbell Canal.....	Irrig.	1.00	35	34	49	Dawes.....	Nov.	9	1908	.....	919
Dry Run.....	Guse, William.....	Crawford.....	Wm. Guse Reservoir.....	Stor.	20.00	35	34	52	Dawes.....	Jan.	13	1914	.....	1345
Dry Run.....	Harrison & Weston.....	Whitney.....	Harsh-Weston Canal.....	Irrig.	3.00	31	34	51	Dawes.....	March	11	1914	.....	1361
Dry Canon.....	Betson, William A. ....	Crawford.....	Betson Canal.....	Irrig.	1.00	33	32	51	Dawes.....	March	22	1917	.....	1481
Dry Draw.....	Glaze, William A. ....	Chadron.....	Heath Reservoir.....	Irrig.	1.00	12	32	53	Sioux.....	Feb.	7	1917	.....	1475
Heath Res.....	(Heath, W. E., Agent)	Chadron.....	Heath Canal.....	Irrig.	.74	12	32	53	Sioux.....	July	25	1921	.....	1612
English Creek....	McDowell, E. C. ....	Crawford.....	McDowell Storage Sys....	Irrig.	.87	12	31	52	Dawes.....	Oct.	24	1904	.....	772

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Flood Water.....	Arner, Jessie B. ....	Crawford.....	Arner Ditch.....	Irrig.	.14	27	33	53	Sioux.....	May	6	1913	.....	1289
Hooker-Creek.....	Hansen, Svend A.....	Aurora.....	Alcorn Canal.....	Irrig.	1.21	31	32	51	Dawes.....	Nov.	17	1905	.....	803
Hooker Creek.....	Bauerbach, Lena.....	Crawford.....	Bauerbach Canal.....	Irrig.	1.00	7	31	51	Dawes.....	Dec.	31	1889	492	.....
Hooker Creek.....	Souther, Mabel G. ....	Lincoln.....	Souther Lake.....	F. & I.	1.42	30	32	51	Dawes.....	Sept.	24	1908	.....	915
Indian Creek.....	Renfro, O. S. ....	Chadron.....	Seegrist Canal.....	Irrig.	.08	3	31	50	Dawes.....	Nov.	1	1893	489	.....
Indian Creek.....	Renfro, O. S. ....	Chadron.....	Flood Canal.....	Irrig.	.07	33	32	50	Dawes.....	Feb.	13	1894	460	.....
Indian Creek.....	Boyer, F. ....	Whitney.....	Boyer Canal.....	Irrig.	.86	28	32	50	Dawes.....	April	30	1900	.....	559
Indian Creek.....	Renfro, Oscar S. ....	Chadron.....	Seegrist Extension.....	Irrig.	6.64	3	31	50	Dawes.....	Nov.	29	1919	.....	1568
Indian Creek.....	Renfro, Oscar S. ....	Chadron.....	Renfro Reservoir.....	Stor.	480.00	3	31	50	Dawes.....	Nov.	29	1919	.....	1569
(Renfro Res.A.1565)					A. F.									
Indian Creek.....	Norman, Harry .....	Whitney.....	Norman Canal.....	Irrig.	1.92	16	32	50	Dawes.....	Aug.	3	1921	.....	1614
Kane Creek.....	McConnell, J. S. ....	Whitney.....	McConnell Reservoir.....	Irrig.	4.29	29	34	50	Dawes.....	Jan.	14	1909	.....	931
Kyle Creek.....	Sturgeon, Ralph.....	Crawford.....	Kyle Creek Canal.....	Irrig.	.57	3	30	54	Sioux.....	June	30	1882	522	.....
Lone Tree Creek....	Sides, Frank.....	Whitney.....	Sides Reservoir.....	Stor.	3.00	13	34	52	Dawes.....	Nov.	25	1914	.....	1392

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	Month	D	Yr.			
Madden Creek.....	Flannigan, T. F.....	Chadron.....	Dams .....	Irrig.	.57	26	35	49	Dawes.....	July	11	1904	.....	768
Madden Creek.....	Flannigan, O. R. ....	Chadron.....	Trier Canal.....	Irrig.	1.21	6	34	48	Dawes.....	Aug.	1	1906	.....	830
Madden Cr. and North Creek.....	Flannigan, O. R. ....	Chadron.....	Dams .....	Irrig.	.57	31	35	48	Dawes.....	Oct.	17	1904	.....	771
Rush Creek.....	Braddock, H. T. ....	Chadron.....	Braddock Canal.....	Irrig.	3.00	10	34	49	Dawes.....	May	4	1903	.....	706
Rush Creek.....	Braddock, H. T. ....	Chadron.....	Braddock Extension.....	Irrig.	1.57	11	34	49	Dawes.....	May	31	1906	.....	825
Sand Creek.....	Everson, Jas. T. & Arner, Lloyd C.....	Crawford.....	Bendix Extension.....	Irrig.	.83	35	32	53	Sioux.....	May	27	1922	.....	1669
Sand Creek, Trib. to Cottonwood....	Everson, Jas. T. & Arner, Lloyd C.....	Crawford.....	Bendix Canal.....	Irrig.	.57	35	33	53	Sioux.....	Nov.	19	1895	.....	189
Sand Creek, Tr. to Cottonwood...	Rasmussen, K. ....	Whitney.....	Rasmussen Canal.....	Irrig.	17.00	3	32	52	Dawes.....	Jan.	8	1906	.....	811
Saw Log, East....	Dunn, John T. ....	Crawford.....	Syndicate Canal.....	Irrig.	27.42	32	33	52	Dawes.....	April	2	1912	.....	1190
Porter, J. E. & Masters, C. E.....	Crawford.....	Van Treck Canal.....	Irrig.	.37	4	30	51	Dawes.....	May	8	1911	.....	1098	
Saxson Draw.....	Harris, C. S.....	Crawford.....	Harris Reservoir.....	Stor.	10.00	32	33	52	Dawes.....	Sept.	29	1922	.....	1689
				A.F.										
Spring Creek.....	Swinbank, Sam et al....	Crawford.....	Moszeter Canal.....	Irrig.	1.14	13	32	52	Dawes.....	May	3	1888	1014	.....
Spring Creek.....	Forbes, J. B. ....	Crawford.....	Forbes Canal No. 1.....	Irrig.	.57	20	32	52	Dawes.....	April	28	1902	.....	663
Spring Creek.....	Swinbank, Samuel.....	Crawford.....	Swinbank Reservoir.....	Stor.	2.00	13	32	52	Dawes.....	March	3	1914	.....	1358
Spring Creek, Trib. to Lit. Cottonwood.....	Pinney, B. G. ....	Crawford.....	Squaw Creek Canal.....	Irrig.	.86	13	32	52	Dawes.....	May	10	1894	466	.....

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Spring Creek, Trib. to Lit.														
Cottonwood.....	Lawrence, Thos. E.....	Crawford.....	Spring Creek Ditch No. 1	Irrig.	2.00	7	32	51	Dawes.....	Dec.	1	1894	473	.....
Spring Creek, Trib. to Dead Horse Cr.	Lawrence, Thos. E.....	Crawford.....	Spring Creek Ditch No. 1	Irrig.	5.00	13	32	52	Dawes.....	April	7	1905	.....	788
Squaw Creek.....	Buffington, Clyde.....	Crawford.....	Cooper Canal.....	Irrig.	2.29	36	32	52	Dawes.....	May	8	1896	.....	333
Squaw Creek.....	McDowell, E. C. (A. 1132)	Crawford.....	Squaw Creek Canal.....	Stor.	3.00	12	31	52	Dawes.....	Oct.	3	1911	.....	1132
McDowell Res.....	McDowell, E. C.....	Crawford.....	Squaw Creek Canal.....	Irrig.	.....	12	31	52	Dawes.....	Jan.	4	1922	.....	1631*
White Clay Creek.....	Tandy, A. M.....	Crawford.....	McFarland Canal.....	Irrig.	1.64	35	32	52	Dawes.....	May	18	1891	960	.....
White Clay Creek.....	Moss, J. H.....	Crawford.....	Hazelton Canal.....	Irrig.	1.14	13	31	52	Dawes.....	May	15	1894	475	.....
White Clay Creek.....	White River Irr. Co. ....	Crawford.....	White River Canal.....	Irrig.	8.71	35	32	52	Dawes.....	Dec.	31	1894	477	.....
White Clay Creek.....	Buffington, Clyde.....	Crawford.....	Cooper Canal.....	Irrig.	3.71	2	31	52	Dawes.....	June	22	1895	.....	42
White Clay Creek.....	Brockway, Maggie.....	Red Oak, Iowa	Brockway Canal.....	Irrig.	.71	36	31	52	Dawes.....	Feb.	27	1896	.....	256
White Clay Creek.....	Pine Ridge Indian Ag.	Pine Ridge, S.D	Pine Ridge Ditch.....	Irrig.	.....	35	45	.....	Sheridan.....	.....	.....	419*	.....	.....
White Clay Creek.....	Hunt, Joe E.....	Crawford.....	Rincker Canal.....	Irrig.	.57	11	31	52	Dawes.....	June	8	1901	.....	618
White Clay Creek.....	Moss, J. H.....	Crawford.....	Hutzel Canal.....	Irrig.	.57	13	31	52	Dawes.....	April	30	1903	.....	704
White Clay Creek.....	Townsend, Charles.....	White Clay.....	Townsend Canal.....	Irrig.	.80	25	25	35	Sheridan.....	Jan.	21	1911	.....	1054
White Clay Creek.....	Hunt, Joe E.....	Crawford.....	Handschugel Lake.....	Stor.	1.30	11	31	52	Dawes.....	Dec.	17	1915	.....	1441
White Clay Cr., East Branch.....	Stewart, H. E.....	Crawford.....	Little Saw Log.....	Irrig.	.71	12	30	52	Dawes.....	Jan.	23	1907	.....	849
White Clay and Squaw Creek.....	White River Irr. Co. ....	Crawford.....	White River Canal.....	Irrig.	8.00	36	32	52	Dawes.....	March	3	1902	.....	655

## CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-D--(Concluded).

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
White River.....	Hall, LeRoy.....	Crawford.....	Halls Ditch No. 1-2.....	Irrig.	24.83	34	32	52	Dawes.....	Sept.	10	1885	478a	.....
White River.....	Pinney, B. G., et al.....	Crawford.....	Harris-Cooper Canal.....	Irrig.	16.78	26	32	52	Dawes.....	March	9	1894	464	.....
White River.....	Pinney, B. G., et al.....	Crawford.....	Harris-Cooper Canal.....	Irrig.	1.57	26	32	52	Dawes.....	June	15	1894	464	.....
White River.....	Pinney, B. G., et al.....	Crawford.....	Harris-Cooper Canal.....	Irrig.	.28	26	32	52	Dawes.....	Oct.	31	1894	464	.....
White River.....	Est. of Charles Rasher	Crawford.....	Rasher Canal.....	Irrig.	1.14	19	32	51	Dawes.....	June	20	1894	467	.....
White River..... (White Clay Cr.)	White River Irr. Co. ....	Crawford.....	White River Canal.....	Irrig.	8.71	35	32	52	Dawes.....	Dec.	31	1894	477	.....
White River.....	Hall, LeRoy.....	Crawford.....	Halls Canal.....	Power	26.40	34	32	52	Dawes.....	Jan.	10	1895	478b	.....
White River.....	C. B. & Q. R. R. Co.	Lincoln.....	C. B. & Q. Line at Crawford.....	Irrig.	.80	3	31	52	Dawes.....	Sept.	14	1889	1030	.....
White River.....	Coffee, C. F.....	Chadron.....	Lewis Canal.....	Irrig.	.14	27	31	55	Sioux.....	May	19	1896	340	.....
White River.....	Schwabe, Lena.....	Chadron.....	Schwabe Canal.....	Irrig.	1.14	25	34	49	Dawes.....	June	24	1897	394	.....
White River.....	Grant, Cecil.....	Crawford.....	Wilkinson Canal.....	Irrig.	.71	24	32	52	Dawes.....	Nov.	18	1897	421	.....
White River.....	Forbes, Jeanette et al....	Crawford.....	Rasher Canal.....	Irrig.	.50	19	32	51	Dawes.....	May	23	1898	456	.....
White River.....	Zurn, Adam.....	Crawford.....	Zurn - Schmeizleh.....	Irrig.	1.00	19	32	51	Dawes.....	Oct.	13	1898	475	.....
White River.....	Rasher, Frank.....	Crawford.....	Rasher Canal.....	Irrig.	1.43	19	32	51	Dawes.....	Jan.	16	1900	534	.....
White River.....	Village of Crawford.....	Crawford.....	Crawford Pump Station	Power	18.00	3	31	52	Dawes.....	March	30	1903	702*	.....
White River.....	Hebbert, Minnie L. and Hebbert, Scott D. ....	Chadron.....	Hebbert Canal.....	Irrig.	.29	34	33	50	Dawes.....	May	11	1903	707	.....
White River.....	Nance & Simon Irr. Co.	Whitney.....	Simmons - Harris.....	Irrig.	1.00	16	32	51	Dawes.....	Oct.	26	1903	730	.....
White River.....	Peterson, Charles R. ....	Crawford.....	Ext. to C. Rasher.....	Irrig.	1.29	20	32	51	Dawes.....	Feb.	5	1904	740	.....
White River.....	White River Irr. Co. ....	Crawford.....	White River—S. Br. ....	Irrig.	1.43	25	32	52	Dawes.....	March	11	1909	936	.....
White River.....	Jenson, J. L. ....	Whitney.....	Jenson Irrigation Plant.	Irrig.	1.14	26	33	50	Dawes.....	June	27	1900	1110	.....
White River.....	Pinney & Dension .....	Crawford.....	Pinney & Dension Ies. I. & S. No. 1-2-3.....	Irrig.	20.00	26	32	52	Dawes.....	Aug.	10	1911	1122	.....
White River.....	Forbes, William T. ....	Crawford.....	Forbes Extension.....	Irrig.	.85	19	32	51	Dawes.....	Sept.	26	1911	1128	.....
White River.....	Hebbert, Minnie L. et al	Chadron.....	Hebbert Canal.....	Irrig.	.71	34	33	50	Dawes.....	March	10	1914	1360	.....

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D		
White River.....	Whitney Irr. District.....	Crawford.....	Whitney Res. & Pipe Line	Stor.	1000.00 Ac. Ft.	26	32	52	Dawes.....	Apr.	28	1921	..... 1603
White River.....	Norman, Wm. ....	Whitney.....	Norman Irrig. Project....	Irrig.	3.60	24	32	52	Dawes.....	May	2	1921	..... 1604
White River.....	Rasmussen, John .....	Crawford.....	Whitney Irr. Project.....	Irrig.	25.00	26	32	52	Dawes.....	Nov.	7	1921	..... 1625
White River.....	Simons, Ranor.....	Whitney.....	Raynor Simons Canal.....	Irrig.	..... 4	32	51	.....	Dawes.....	Nov.	18	1921	..... 1626
White River.....	Norman, Wm. ....	Whitney.....	Norman Canal.....	Irrig.	.41	26	32	52	Dawes.....	Apr.	26	1922	..... 1660
White River.....	Lawrence, Geo. E.....	Whitney.....	Lawrence Reservoir.....	Stor.	..... 26	32	52	.....	Dawes.....	Aug.	25	1922	..... 1688*
White River, Canyons, Tr. to	Jones, C. W. ....	Crawford.....	Jones Canal.....	Irrig.	..... 29	9	31	51	Dawes.....	May	20	1907	..... 860

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-D.

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Ash Creek .....	Compton, W. L.....	Irrig.	.03	12	32	51	Dawes .....	455	.....
Beaver Creek .....	Braddock, J. F.....	Irrig.	.04	1	34	47	Dawes .....	974	.....
Beaver Creek .....	Braddock, J. F.....	Irrig.	.63	1	34	47	Dawes .....	.....	463
Bordeaux Creek .....	Lockett, T. E.....	Irrig.	.07	11	32	48	Dawes .....	.....	494
Bordeaux Creek .....	Bryant, S. A.....	Irrig.	.29	14	33	48	Dawes .....	484	.....
Bordeaux Creek .....	Hall, O. W.....	Irrig.	.07	15	33	48	Dawes .....	437	.....
Bordeaux Creek .....	Nelson, P. B.....	Irrig.	.14	14	33	48	Dawes .....	.....	494
Bordeaux Creek .....	Roberts, R. O.....	Irrig.	.14	2	32	48	Dawes .....	450	.....
Bordeaux Creek .....	Morrissey, M.....	Irrig.	.08	15	33	48	Dawes .....	491	.....
Bordeaux Creek .....	Nelson, P. B.....	Irrig.	.36	14	33	48	Dawes .....	.....	478
Bordeaux Creek .....	Naylor, Chas.....	Irrig.	4.00	36	33	48	Dawes .....	.....	584
Bordeax Creek, Little .....	Frady, C. H.....	Irrig.	.14	30	33	47	Dawes .....	1009	.....
Bordeax Creek, Little .....	Collins, Jacob.....	Irrig.	.31	14	32	48	Dawes .....	.....	780
Bordeax Creek, Little .....	Good, J. W.....	Irrig.	7.00	29	33	48	Dawes .....	.....	783
Cedar Canyon .....	Pelren, J. E.....	Irrig.	.43	16	33	53	Sioux .....	.....	380
Charcoal Creek .....	Weber, M. J.....	Irrig.	.11	33	31	53	Sioux .....	982	.....
Ravine, Trib. to Cottonwood.....	Carlson, A. A.....	Irrig.	.71	21	33	52	Dawes .....	.....	409
Cottonwood, Little .....	Simmons, Raner .....	Irrig.	1.14	9	32	51	Dawes .....	.....	521
Cottonwood, Little .....	Kusel, Wm. T.....	Irrig.	1.14	9	32	51	Dawes .....	.....	183
Cottonwood, Ravine Trib. to.....	Carlson, A. A.....	Irrig.	.71	21	33	52	Dawes .....	.....	409
Dead Horse Creek.....	Kemery, John .....	Irrig.	.01	32	32	49	Dawes .....	493	.....
Dead Horse Creek.....	Goff, L. L.....	Irrig.	17	9	31	49	Dawes .....	457	.....

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-D—(Continued).

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STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Dead Horse Creek.....	Spracklen, John .....	Irrig.	.01	32	32	49	Dawes .....	488	.....
Deadman Creek .....	Phillips, W. S.....	Irrig.	.14	18	30	52	Dawes .....	.....	547
Deadman Creek .....	Phillips, W. S.....	Irrig.	.21	19	30	52	Dawes .....	.....	884
Deadman Creek .....	Phillips, W. S.....	Irrig.	.14	18	30	52	Dawes .....	.....	564
Dry Draw .....	Earnest, Geo. A.....	Irrig.	3.71	22	35	49	Dawes .....	.....	1061
Flood Water .....	Lenehan, Delia .....	Stor.	4.00	25	34	52	Dawes .....	.....	1278
Indian Creek .....	Honnold Bros. ....	Irrig.	.07	3	31	50	Dawes .....	.....	1199
Indian Creek, Trib.....	Kaiser, Omar A.....	Irrig.	.57	28	32	50	Dawes .....	.....	540
Lone Tree Creek.....	Sides, Frank .....	Stor.	3.00	13	34	52	Dawes .....	.....	1392
Lone Tree Creek, S. F.....	Thomas, J. C.....	Irrig.	1.00	28	34	51	Dawes .....	.....	789
Sand Creek, Trib. to Cottonwood.....	Carlson & Rasmussen.....	Irrig.	30.00	32	33	52	Dawes .....	.....	767
Sand Creek, Trib. to Cottonwood.....	Arner, J. & H.....	Irrig.	2.57	26	33	53	Sioux .....	.....	779
Saw Log, East.....	Stephenson, Chas. ....	Irrig.	1.14	25	31	52	Dawes .....	.....	852
Saw Log, East.....	Baker, A. D.....	Irrig.	.29	5	30	51	Dawes .....	.....	884
Saw Log, East.....	Stuart, H. E.....	Irrig.	.71	12	30	52	Dawes .....	.....	849
Sheridan Creek .....	Getchell, G. C.....	Irrig.	.07	27	34	45	Sheridan .....	418	.....

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-D--(Concluded).

93

STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Soldier Creek .....	Reif, Emma .....	Irrig.	.14	5	30	51	Sioux .....	546	.....
Spring Branch, Trib to White River .....	Tucker, J. S. ....	Irrig.	.17	34	31	54	Sioux .....	557	.....
Spring Creek, Trib. to Lst. Cott'w'd .....	Goff, T. L. ....	Irrig.	.14	30	32	49	Dawes .....	441	.....
Trunk Butte Creek.....	Smock, M. ....	Irrig.	.07	26	32	50	Dawes .....	465	.....
White Clay Creek.....	Brooks, J. M. ....	Irrig.	.42	36	35	45	Sheridan .....	.....	1120
White River .....	Lambert, Ray .....	Irrig.	.14	32	31	53	Sioux .....	561	.....
White River .....	Cutler, Jennie R. ....	Irrig.	.21	1	30	54	Sioux .....	562	.....
White River .....	Est. of N. Welling.....	Irrig.	.57	17	32	51	Dawes .....	469	.....
White River .....	Carpenter & Co. ....	Irrig.	2.86	1	32	51	Dawes .....	487	.....
White River .....	City of Crawford.....	City		32	32	52	Dawes .....	1026	.....
White River .....	Meecham, S. R. ....	Irrig.	2.86	17	32	51	Dawes .....	.....	500
White River .....	Mason, J. F. ....	Irrig.	.14	32	31	53	Sioux .....	.....	387
White River .....	Bartlett, A. M. ....	Irrig.	.71	18	34	48	Dawes .....	.....	391
White River .....	Shaefer, Geo., Et Al. ....	Irrig.	3.00	2	32	51	Dawes .....	.....	525
White River .....	Carlson, John .....	Irrig.	1.43	6	32	50	Dawes .....	.....	588
White River .....	Schwabe, August .....	Irrig.	.57	24	34	49	Dawes .....	.....	758
White River .....	Schwabe, August .....	Power	5.00	24	34	49	Dawes .....	.....	759
White River .....	Wright Bros. ....	Irrig.	4.00	16	32	51	Dawes .....	.....	775
White River .....	Schwabe, Aug. ....	Irrig.	.29	24	34	49	Dawes .....	.....	815
White River .....	Roby, I. M. ....	Irrig.	.38	3	31	52	Dawes .....	.....	838
White River .....	Stephenson, Ira J. ....	Power	15.00	34	31	53	Sioux .....	.....	854
White River .....	Schwabe, August .....	Irrig.	3.43	31	34	48	Dawes .....	.....	908
White River, Canyons Trib. to.....	Martens, Wm. ....	Irrig.	.29	14	34	48	Dawes .....	.....	696

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

94

Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	Month	D	Yr.			
Antelope Creek.....	Gayhart, M. J. ....	Montrose.....	Gayhart Canal.....	Irrig.	2.43	16	34	55	Sioux.....	June	18	1904	.....	760
Antelope Creek.....	Turner, Sarah A., Est....	Harrison.....	Turner Reservoir.....	Stor.	.....	26	34	56	Sioux.....	July	3	1922	.....	1675*
Antelope Creek, Turner R. A1675	Turner, Sarah A., Est....	Harrison.....	Turner Canal No. 2.....	Suppl.	.....	26	34	56	Sioux.....	July	3	1922	.....	1676
Antelope Creek, Turner R. A1675	Turner, Sarah A., Est....	Harrison.....	Turner Canal.....	Irrig.	.....	26	34	57	Sioux.....	July	3	1922	.....	1677*
Antelope Creek North Branch....	Story, O. W. ....	Story.....	Story Canal.....	Irrig.	2.00	8	34	56	Sioux.....	Nov.	11	1895	.....	168
Antelope, Dry.....	Schnurr, Albert.....	Harrison.....	Grammercy Dam.....	Stor.	10.00	13	34	57	Sioux.....	Sept.	24	1920	.....	1591
Antelope Creek, No. Branch Dry Draw, Trib. to....	Story, O. W. ....	Story.....	Oscar Story Canal No. 3..	Irrig.	.....	13	34	57	Sioux.....	May	5	1921	.....	1601*
Antelope Creek, South Branch....	Turner, Geo. H., Est....	Harrison.....	Turner Canal.....	Irrig.	.86	26	34	57	Sioux.....	Oct.	31	1894	537	.....
Antelope Creek, South Branch....	Dryer, F. W. ....	Harrison.....	Ellis Canal.....	Irrig.	.29	9	33	57	Sioux.....	May	17	1896	.....	338
Boggy Creek.....	Readinger, H. Y. ....	Harrison.....	Wickersham Canal.....	Irrig.	3.00	31	33	54	Sioux.....	Feb.	28	1903	.....	701
Boggy Creek.....	Bannonn, J. S. ....	Harrison.....	Bannon's Canal.....	Irrig.	.06	7	32	54	Sioux.....	July	1	1886	560	.....
Boggy Cr., N. B....	Hill, Albert S. ....	Harrison.....	Hill Canal.....	Irrig.	.86	11	32	55	Sioux.....	Jan.	20	1908	.....	886
Cedar Creek.....	Knori, Samuel.....	Harrison.....	Schelt's Creek Canal.....	Irrig.	.57	35	33	56	Sioux.....	May	15	1885	507	.....
Cedar Creek.....	Valdez, M. ....	Harrison.....	Valdez Canal.....	Irrig.	.50	10	32	56	Sioux.....	April	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	.....

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Dry Creek.....	Story, Oscar W. ....	Story.....	Story Canal.....	Irrig. ....	5.71	9	34	56	Sioux.....	March	26	1918	.....	1509
Dry Gulch.....	Child, L. M. ....	Story.....	Child's Canal.....	Irrig. ....	.57	28	34	56	Sioux.....	Aug.	14	1914	.....	1376
Dry Gulch.....	Story, Geo. L. ....	Story.....	Story Canal No. 3.....	Irrig. ....	.....	19	34	56	Sioux.....	Mar.	28	1922	.....	1652
Hat Creek.....	Thayer, John A. ....	Harrison.....	W. Hat Creek Canal.....	Irrig. ....	.43	16	32	55	Sioux.....	June	1	1880	553a	.....
Hat Creek.....	Coffee, Charles S. ....	Harrison.....	C. F. Coffee Canal.....	Irrig. ....	4.29	26	33	55	Sioux.....	Sept.	1	1881	512	.....
Hat Creek.....	Thayer, John A. ....	Harrison.....	W. H. Creek Canal.....	Irrig. ....	.57	16	32	55	Sioux.....	May	31	1886	553	.....
Hat Creek.....	Coffee, J. T. et al. ....	Harrison.....	Miller Canal.....	Irrig. ....	.37	23	33	55	Sioux.....	May	19	1896	.....	341
Hat Creek.....	Haas, Peter.....	Harrison.....	Hans Canal.....	Irrig. ....	.08	2	33	55	Sioux.....	May	8	1899	.....	510
Hat Creek.....	Coffee, John T. ....	Harrison.....	Coffee Flood Water Dam	Irrig. ....	6.00	14	33	55	Sioux.....	Oct.	22	1912	.....	1236
Hat Cr., Canyon Trib. to.....	Konrath, James.....	Montrose.....	Konrath Canal.....	Irrig. ....	1.43	17	34	54	Sioux.....	Dec.	28	1905	.....	808
Indian Creek, Draw Trib. to....	Meier, Aug. ....	Ardmore, S. D. ....	Meier Dam.....	Irrig. ....	2.00	24	35	55	Sioux.....	Nov.	5	1900	.....	585
Jim Creek.....	Dout, L. ....	Harrison.....	Dout Bros Canal.....	Irrig. ....	.86	7	33	56	Sioux.....	May	15	1889	981	.....
Jim Creek.....	Priddy, Edward .....	Harrison.....	Woodruff So. Canal.....	Irrig. ....	.34	14	33	57	Sioux.....	May	1	1890	536	.....
Jim Creek.....	Snider, Al .....	Harrison.....	Jim Creek Canal.....	Irrig. ....	.43	8	33	56	Sioux.....	Dec.	15	1890	502	.....
Jim Creek.....	Slattery, William.....	Harrison.....	Slattery Canal.....	Irrig. ....	.29	13	33	57	Sioux.....	May	31	1891	543	.....
Jim Creek.....	Coffee, John T. ....	Harrison.....	Hunter Canal.....	Irrig. ....	.03	26	33	54	Sioux.....	May	12	1898	.....	451
Jim Creek.....	Slattery, William .....	Harrison.....	Caladonia Dam.....	Stor. ....	.....	13	33	57	Sioux.....	July	20	1922	.....	1680*
Jim Creek..... (Caladonia Dam A1680)	Slattery, William .....	Harrison.....	Caladonia Canal.....	Irrig. ....	.....	13	33	57	Sioux.....	July	20	1922	.....	1681*
Jim Creek.....	Slattery, William .....	Harrison.....	High Line Canal.....	Irrig. ....	.....	13	33	57	Sioux.....	July	20	1922	.....	1682*

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Jim Creek..... (Caladonia Dam, A1680)	Slattery, William.....	Harrison.....	Caladonia Canal.....	Supple.....	..... 13 13 57	Sioux.....	July	20	1922	542	.....	1682*		
Jim Creek, E. Fk.	Wassenberger, J. ....	Montrose.....	Wassenberger Canal....	Irrig. ....	2.29 29 34 54	Sioux.....	Oct.	13	1900	.....	.....	581		
Lickett Creek.....	Coffee, S. B. ....	Chadron.....	Lickett Canal.....	Irrig. ....	..... 27 33 54	Sioux.....	.....	.....	.....	1005*	.....	.....		
Lickett Creek.....	Coffee, S. B. Est.....	Chadron.....	Lickett Canal.....	Irrig. ....	1.43 27 33 54	Sioux.....	March	21	1900	.....	.....	549		
Long Branch.....	O'Connell, Dennis.....	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.....	Holz, Ferdinand.....	Harrison.....	Noreisch Canal.....	Irrig. ....	.04 33 33 56	Sioux.....	July	19	1895	.....	.....	83		
Monroe Creek.....	Jordan, C. ....	Montrose.....	Neil Jordan Canal.....	Irrig. ....	2.20 13 33 56	Sioux.....	Nov.	12	1906	.....	.....	841		
Monroe Creek.....	Jordan, C. ....	Montrose.....	Cornelius Jordan Canal.	Irrig. ....	2.00 18 33 56	Sioux.....	July	30	1914	.....	.....	1375		
Monroe Creek.....	Jordan, Richard.....	Harrison.....	Wooden Shoe Canal .....	Stor. ....	5.00 22 33 56	Sioux.....	Aug.	24	1914	.....	.....	1377		
Monroe Creek.....	Jordan, Cornelius.....	Harrison.....	Neal Jordan Extension to A. 841.....	Irrig. ....	4.00 13 33 56	Sioux.....	Jan.	14	1915	.....	.....	1399		
Monroe Creek (Res. under A. 1399).....	Jordan, Cornelius.....	Harrison.....	Kite Canal.....	Irrig. ....	2.20 13 33 56	Sioux.....	Jan.	14	1915	.....	.....	1469		
Monroe Creek (Res. under A. 1399).....	Jordan, Cornelius.....	Harrison.....	Supple. to Cornelius Jordan Ditch, A. 1375	Stor. ....	1.40 13 33 56	Sioux.....	Jan.	14	1915	.....	.....	1470		
Prairie Dog Cr.....	Knori, Samuel.....	Harrison.....	Schilt's Prairie Dog Canal	Irrig. ....	1.14 35 33 56	Sioux.....	May	31	1886	508	.....	.....		
Sou Belly Creek....	Shaefer, Nick.....	Harrison.....	Old Sou Belly Canal....	Irrig. ....	3.00 7 32 55	Sioux.....	June	1	1887	533	.....	.....		

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D		
Sou Belly Creek....	Parson, Con. Adm. ....	Van Tassel, Wyoming....	Montgomery Canal.....	Irrig.	1.00	21	33	55	Sioux.....	Dec.	1	1890	559
Sou Belly Creek....	Zimmerman, Irvin S. ....	Harrison.....	Zimmerman Canal.....	Irrig.	.71	34	33	55	Sioux.....	Jan.	11	1900	.....
Sou Belly Creek....	Jordan, S. ....	Harrison.....	Jordan Canal.....	Irrig.	.14	21	33	55	Sioux.....	May	26	1902	668
Sou Belly Creek, Spring Creek Tributary to....	Hall, W. S. and F. M. ....	Harrison.....	Hall's Spring Cr. Canal	Irrig.	.57	6	32	55	Sioux.....	March	26	1889	550
Sou Belly Creek, Spring Creek Tributary to....	Shaefer, Nick.....	Harrison.....	Spring Creek Canal.....	Irrig.	.29	7	32	55	Sioux.....	June	1	1893	532
Squaw Creek.....	Dunn, Thos. ....	Harrison.....	Dunn's Canal.....	Irrig.	.36	15	33	57	Sioux.....	June	1	1890	552
Squaw Creek.....	Thomas, Sam.....	Harrison.....	Hamlin's Canal.....	Irrig.	.01	10	33	57	Sioux.....	April	1	1891	555
Squaw Creek.....	Dunn, Thomas.....	Harrison.....	Thos. Dunn Reservoir.....	Irrig.	.57	10	33	57	Sioux.....	Aug.	5	1895	.....
Squaw Creek.....	Dunn, P. D. ....	Harrison.....	Dunn's 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	.....
Warbonnett Cr....	Anderson, John A. ....	Harrison.....	Warbonnett Canal.....	Irrig.	3.63	21	33	56	Sioux.....	July	31	1880	548
Warbonnett Cr....	Anderson, J. A. ....	Harrison.....	Warbonnett Canal No. 2	Irrig.	1.43	20	33	56	Sioux.....	March	11	1908	.....
Warbonnett Cr., Tributary.....	Anderson, J. A. ....	Harrison.....	No. Branch Warbonnett Creek Canal.....	Irrig.	.71	30	33	56	Sioux.....	May	31	1889	539a
Warbonnett Cr., Tributary.....	Anderson, J. A. ....	Harrison.....	No. Branch Warbonnett Creek Canal.....	Irrig.	.29	30	33	56	Sioux.....	Dec.	31	1891	539b
Warbonnett Cr., Tributary.....	Zerbst, Carl F. ....	Harrison.....	Zerbst Canal No. 1.....	Irrig.	.03	26	33	57	Sioux.....	March	6	1915	.....
Warbonnett Cr., Tributary.....	Zerbst, Carl F. ....	Harrison.....	Zerbst Canal No. 2.....	Irrig.	.17	25	33	57	Sioux.....	March	6	1915	1404

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

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
So. Warbonnet, Spring Branch Tributary to.....	Anderson, John A. ....	Harrison.....	Garton Canal.....	Irrig.	1.43	31	33	56	Sioux.....	Oct.	16	1893	503	.....
No. Warbonnet, Sprinh Branch Tributary to.....	Anderson, John A. ....	Harrison.....	Kays Canal.....	Irrig.	.14	26	33	57	Sioux.....	May	1	1887	958	.....
Warbonnett Cr., Spring Br. Tr..	Priddy, Edward .....	Harrison.....	Nolan Canal No. 1.....	Irrig.	.01	23	33	57	Sioux.....	March	15	1887	957	.....
Warbonnett Cr., Spring Br. Tr..	Priddy, Edward .....	Harrison.....	Nolan Canal No. 2.....	Irrig.	.29	23	33	57	Sioux.....	May	1	1888	959	.....
Whitehead Creek..	Harrison, R. ....	Harrison.....	Harison Canal.....	Irrig.	.06	18	33	54	Sioux.....	May	30	1888	547	.....

## ABANDONED CLAIMS AND APPLICATIONS IN DIVISION NO. 2-E.

99

STREAM	NAME OF APPLICANT	Use to which Applied	Sec. Feet Granted	LOCATION OF HEADGATE				Doc. No.	App. No.
				S	T	R	County		
Boggy Creek .....	Holly, Thos. ....	Irrig.	.11	30	33	54	Sioux .....	956	.....
Boggy Creek .....	Readinger, H. T. ....	Irrig.	.28	31	33	54	Sioux .....	526	.....
Boggy Creek, Little Branch.....	Marten, Wm. ....	Irrig.	.36	18	32	54	Sioux .....	.....	342
Hat Creek .....	Lyon, E. B. ....	Irrig.	.57	3	32	55	Sioux .....	.....	594
Hat Creek .....	Lyon, E. B. ....	Irrig.	.57	3	32	55	Sioux .....	.....	834
Hat Creek .....	Zerbe, Harry T. ....	Stor.	2.00	35	33	55	Sioux .....	.....	1407
Jim Creek, Trib.....	Coffee, S. B. ....	Irrig.	.22	22	33	54	Sioux .....	984	.....
Little Red Creek.....	Zerbst, P. ....	Irrig.	.14	25	33	56	Sioux .....	551	.....
Monroe Creek .....	Knorl, Samuel ....	Irrig.	.50	27	33	56	Sioux .....	509	.....
Sou Belly Creek.....	Jordan, Sarah ....	Irrig.	.43	21	33	55	Sioux .....	556	.....
Sou Belly Creek.....	Nutto, F. ....	Irrig.	.43	24	32	56	Sioux .....	.....	404
Sou Belly Creek.....	Jordan, Sarah ....	Irrig.	.50	21	33	55	Sioux .....	.....	424
Sou Belly Creek.....	Carroll, M. J. ....	Irrig.	.14	7	32	55	Sioux .....	.....	516
Sou Belly Creek.....	O'Connell, M. J. ....	Irrig.	10.00	9	33	55	Sioux .....	.....	1288
Sou Belly Creek.....	Barnes, Paul T. ....	Stor.	10.00	19	32	55	Sioux .....	.....	1268
South Warbonnet, Spring Br. Trib. to.....	Biehl, Chas. ....	Irrig.	.23	32	33	56	Sioux .....	538	.....

## CLAIMS AND APPLICATIONS BY STREAMS IN DIVISION NO. 2-F.

100

Source	Name of Claimant	Post Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Bazile Creek.....	Jirous, Frank.....	Creighton.....	Creighton Mill Race.....	Power	..... 21 29	5	Knox.....						1002*	.....
Bazile Creek.....	Moss, O. H. and Buckler, Fred.....	Battle Creek.....	Creighton Mill.....	Power	30.00 21 29	5	Knox.....	Sept.	24	1908			914	

## APPLICATIONS APPROVED FROM NOVEMBER 30, 1920 TO NOVEMBER 30, 1922.

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	No. App.	
						S	T	R	County	Month	D	Yr.		
Hoth Drain.....	Great Western Sugar Co.	Scotts Bluff.....		Mfg.	15.00	34	21	52	Morrill.....	Oct.	4	1920	.....	1593
Little Blue River.....	Larkins, M. E.....	Hastings.....	Larkins & Son Canal.....	Power	1.50	27	6	10	Adams.....	Nov.	20	1920	.....	1594
Big Blue, West Fork.....	Babson, Henry B.....	Chicago, Ill.....	Bow Span Plant.....	Power	100.00	26	9	2	E Seward.....	Dec.	17	1920	.....	1595
Big Blue, West Fork.....	Babson, Henry B.....	Chicago, Ill.....	Big Bend Plant.....	Power	100.00	17	8	3	E Seward.....	Dec.	17	1920	.....	1596
Big Blue River.....	Babson, Henry B.....	Chicago, Ill.....	Weller Power Plant.....	Power	200.00	12	5	4	E Saline.....	Dec.	17	1920	.....	1597
Big Blue River.....	Blue River Power Co.....	Seward.....	Station No. 3.....	Power	Rs. Dim.	5	8	4	E Saline.....	Dec.	28	1920	.....	1599
Medicine Creek.....	Johnston, Stephen E.....	Wellfleet.....	Wellfleet Mills.....	Power	20.00	16	9	30	Lincoln.....	Apr.	12	1921	.....	1602
White River.....	Whitney Irr. District.....	Crawford.....	Whitney Reservoir.....	Stor.	10000	26	32	52	Dawes.....	Apr.	28	1921	.....	1603
White River.....	Norman, Wm.....	Whitney.....	Norman's Canal.....	Irrig.	3.60	24	32	52	Dawes.....	May	2	1921	.....	1604
Niobrara River.....	Sturgeon, Elmer E.....	Hay Springs.....	Hay Springs Canal.....	Irrig.	.....	26	29	48	Dawes.....	May	9	1921	.....	1605
Niobrara River.....	Sturgeon, Elmer E.....	Hay Springs.....	Hay Springs Reservoir.....	Stor.	45000	28	29	49	Dawes.....	May	27	1921	.....	1606
Frenchman River.....	Frenchman Valley Irr. District.....	Culbertson.....	Harvey Reservoir.....	Stor.	15000	3	5	28	Chase.....	June	8	1921	.....	1607
Cedar River.....	Howard, O. O.....	Ericson.....	Northwestern Plant No. 1	Power	200.00	15	21	12	Wheeler.....	June	28	1921	.....	1608
Rock Creek.....	Pringle, Geo. N.....	Parks.....	Park's Extension.....	Supple	.....	17	1	39	Dundy.....	June	29	1921	.....	1609
Big Bordeaux.....	Bartlett, A. M. & Taylor, F. L.....	Chadron.....	Bartlett's Canal.....	Irrig.	.....	11	33	48	Dawes.....	July	5	1921	.....	1610
Wood River.....	Peterson, C.....	Shelton.....	Peterson's Pumping Plant	Irrig.	1.07	10	9	13	Buffalo.....	July	11	1921	.....	1611
Heath Reservoir (A. 1475)	Heath, W. E.....	Crawford.....	Heath's Canal.....	Irrig.	.74	12	32	53	Sioux.....	July	25	1921	.....	1612
Indian Creek.....	Norman, Harry.....	Whitney.....	Norman's Canal.....	Irrig.	1.92	16	32	50	Dawes.....	Aug.	3	1921	.....	1614
Crystal Spring.....	Creek Ditch.....	Riverton.....	Crystal Springs Canal....	Irrig.	.28	10	2	13	Franklin.....	Aug.	17	1921	.....	1615

## APPLICATIONS APPROVED FROM NOVEMBER 30, 1920, TO NOVEMBER 30, 1922.

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate			Date of Priority			Docket No.	App. No.	
						S	T	R	County	Month	D	Yr.		
Wood River.....	Nutter, M. D.....	Shelton.....	Nutter Pumping Plant.....	Irrig.	2.28	8	9	13	Buffalo.....	Aug.	29	1921	.....	1616
Bear Creek.....	Belsky, Ed. ....	Eli.....	Belsky Hereford Canal.....	Irrig.	.....	25	34	36	Cherry.....	Sept.	8	1921	.....	1617
Republican River.....	Ham, Roy O.....	Benkelman.....	Ham's Canal.....	Irrig.	3.47	9	1	37	Dundy.....	Sept.	14	1921	.....	1618
So. Platte River.....	Beal, Orville .....	Brule.....	Beal's Power Plant.....	Power	17.60	21	13	40	Keith.....	Sept.	20	1921	.....	1619
So. Platte River.....	Beal, Orville .....	Brule.....	Beal's Canal.....	Irrig.	5.00	21	13	40	Keith.....	Sept.	20	1921	.....	1620
White Tail Creek.....	Noble, Bert A.....	Keystone.....	White Tail P. & M. Co. ....	Power	25.00	22	15	38	Keith.....	Sept.	21	1921	.....	1621
Whitsel's Dry Draw.....	Whitsel, A. E.....	Chadron.....	Whitsel's Ice Pond.....	Ice	24.00	33	34	47	Dawes.....	Oct.	27	1921	.....	1622
Niobrara River.....	Davison, Fred B.....	Marsland.....	Davison's Canal.....	Irrig.	.....	12	28	54	Sioux.....	Oct.	27	1921	.....	1623
Little Blue.....	Ellison, Wm. H.....	Hobron.....	Ellison's Pumping Plant.....	Irrig.	.....	8	2	2	W Thayer.....	Nov.	4	1921	.....	1624
White River.....	Rasmussen, John J.....	Crawford.....	Whitney Irr. Dist.....	Supple	25.00	26	32	52	Dawes.....	Nov.	7	1921	.....	1625
Republican River.....	Campbell, W. E.....	Trenton.....	Campbell Canal.....	Irrig.	9.27	9	2	34	Dundy.....	Nov.	26	1921	.....	1627
Warm Slough Springs.....	Walter, Jacob J.....	Gibbon.....	Warm Slough Canal.....	Irrig.	1.28	31	9	13	Buffalo.....	Dec.	2	1921	.....	1628
Platte River.....	Steele, Chas. ....	Elm Creek.....	Cottonwood Canal.....	Irrig.	5.33	7	8	18	Phelps.....	Dec.	15	1921	.....	1629
Medicine Creek.....	Johnston, Stephen E.....	Wellfleet.....	Wellfleet Flour Mill.....	Power	20.00	16	9	30	Lincoln.....	Jan.	4	1922	.....	1632
Little Blue.....	Kassabaum, Wm. ....	Hebron.....	Hebron Plant No. 3.....	Power	200.00	23	3	4	Thayer.....	Jan.	19	1922	.....	1640
Wood River.....	Rogers, J. H.....	Gibbon.....	Wood River Canal.....	Irrig.	.....	14	9	14	Buffalo.....	Feb.	4	1922	.....	1641
Spring Creek, Dry Spotted Tail	Young, Thos. H.....	Mitchell.....	Spring Creek Reservoir.....	Ice	160.00	27	23	56	Scotts Bluff.....	Feb.	6	1922	.....	1642
Wood River.....	Nebr. Conference Ass'n of the Seventh Day Adventists .....	.....	.....	Ac. Ft.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wood River.....	Haug, Jas. ....	Shelton.....	Shelton Academy Project.....	Irrig.	2.28	31	10	12	Hall.....	Feb.	16	1922	.....	1643
Lodgepole Creek.....	Ruttner, Karl .....	Shelton.....	Haug's Project No. 2.....	Irrig.	.....	9	9	13	Buffalo.....	Feb.	28	1922	.....	1644
Frenchman River.....	Knotwell & Newton.....	Sidney.....	Ruttner Bros. Canal.....	Irrig.	.20	32	14	47	Cheyenne.....	Mar.	7	1922	.....	1645
Little Cottonwood.....	Gardner, C. D.....	Bloomington.....	Hamlet Roller Mills.....	Power	96.00	24	5	35	Hayes.....	Mar.	20	1922	.....	1646
			Gardner's Canal.....	Irrig.	1.14	6	1	15	Franklin.....	Mar.	20	1922	.....	1647

## APPLICATIONS APPROVED FROM NOVEMBER 30, 1920 TO NOVEMBER 30, 1922.

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Source	Name of Claimant	Post-Office	Carrier	Use to which applied	Second feet granted	Location of Headgate				Date of Priority			Docket No.	App. No.
						S	T	R	County	Month	D	Yr.		
Buffalo Creek.....	Doughty, R. H. & Wm. T.	Lexington.....	Doughty Canal.....	Irrig.	.....	21	10	21	Dawson.....	Mar.	24	1922	.....	1648
Big Blue River, West Fork.....	Village of Beaver Cross- ing .....	Beaver Cross- ing.....	Municipal Light Plant....	Power	125.00	2	9	1	E Seward.....	Mar.	27	1922	.....	1650
Republican River, North Fork.....	Crews, L. E.....	Haigler.....	Crews Canal No. 2.....	Irrig.	.....	20	1	41	Dundy.....	Mar.	28	1922	.....	1651
White Tail Creek.....	Noble, Bert A.....	Keystone.....	White Tail P. & M. Co. ....	Power	50.00	22	15	38	Keith.....	Mar.	29	1922	.....	1653
Wood River.....	Hallen, Hjalmar T.....	Kearney.....	Hallen's Reservoir.....	Stor.	10.00	5	9	16	Buffalo.....	Apr.	4	1922	.....	1654
Pawnee Creek.....	Kent-Burke Co. ....	Omaha.....	Kent-Burke Canal.....	Irrig.	.....	18	13	27	Lincoln.....	Apr.	7	1922	.....	1655
Wood River.....	Hallen, Hjalmar T.....	Kearney.....	Hallen's Dam.....	Irrig.	.....	5	9	16	Buffalo.....	Apr.	17	1922	.....	1656
Lodgepole Creek.....	Stuht, Fred W.....	Sidney.....	Stuht Canal.....	Irrig.	.....	32	14	49	Cheyenne.....	Apr.	26	1912	.....	1659
White River.....	Norman, Wm. ....	Whitney.....	Norman Canal.....	Irrig.	.....	26	32	52	Dawes.....	Apr.	26	1922	.....	1660
Little Cottonwood.....	Bradshaw, Geo. T.....	Bloomington.....	Home Irr. Canal.....	Irrig.	.23	6	1	15	Franklin.....	Apr.	27	1922	.....	1661
Niobrara River.....	Davison, Fred.....	Marsland.....	Davison Canal.....	Irrig.	.....	12	28	54	Dawes.....	Apr.	27	1922	.....	1662
Stinking Water Creek.....	Krotter, F. C.....	Palisade.....	Krotter Reservoir.....	Stor.	2000.00	15	5	34	Hayes.....	Apr.	28	1922	.....	1663
Bear Creek.....	Belsky, Ed. ....	Eli.....	Belsky Herford Canal.....	Irrig.	11.78	25	34	36	Ac. Ft.					
Spring Creek.....	Cooney, Frank C.....	Overton.....	Cooney Canal.....	Irrig.	.....	27	9	20	Cherry.....	May	3	1922	.....	1664
Wood River.....	Durttschi, Rudolph .....	Wood River.....	Durttschi Pumping Plant.....	Irrig.	.....	18	10	11	Dawson.....	May	16	1922	.....	1665
Sand Creek.....	Everson & Arner.....	Crawford.....	Bendix Extension.....	Irrig.	.....	35	33	53	Hall.....	May	22	1922	.....	1668
Wood River.....	Swift, Robt. D.....	Alda.....	Swift Pumping Plant....	Irrig.	.....	18	10	10	Hall.....	June	12	1922	.....	1669
Little Blue River.....	Hulbert, Chas. M.....	Fairbury.....	Hulbert Canal.....	Irrig.	.....	22	2	22	Jefferson.....	Aug.	7	1922	.....	1671
Cedar River.....	Nebr. Gas & Electric Co.	Omaha.....	Nebr. Hydro-Elec. Gen- rating System, Fullerton .....	Power	250.00	12	16	6	Nance.....	Aug.	8	1922	.....	1686

## APPLICATIONS AND DOCKETS CANCELLED NOVEMBER 30, 1920, TO NOVEMBER 30, 1922

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STREAM	NAME OF APPLICANT	LOCATION OF HEADGATE			Doc. No.	App. No.
		S.	T.	R.		
Republican River.....	Groesbeck, M. H. et al.....	16	1	37	Dundy .....	153
Republican River.....	Delaware Hickman Ditch Company.....	17	1	37	Dundy .....	157
Chadron Creek.....	Wilson, W. W.....	12	32	49	Dawes .....	454
Chadron Creek.....	Record, A. A.....	1	32	49	Dawes .....	468
Pawnee Creek.....	Kent-Burke Co.....	13	13	28	Lincoln .....	636*
Pawnee Creek.....	Plumer, W. H.....	19	13	27	Lincoln .....	672*
North Platte River.....	Myers, F. A. et al.....	34	15	39	Keith .....	709
White Tail Creek.....	Keystone Irrigation Co.....	36	15	38	Keith .....	730*
White Tail Creek.....	Keystone Irrigation Co.....	26	15	38	Keith .....	662-B*
Republican River.....	Campbell Ditch Co.....	9	2	34	Hitchcock .....	828
White Tail Creek.....	Keystone Irrigation Co.....	26	15	38	Keith .....	1003*
Beaver Lake.....	Mark, H. A.....	16	20	44	Garden .....	1018
Republican River.....	Republican River Power Company.....	15	1	9	Webster .....	1221
Big Blue River.....	Johnson, Jas. F.....	19	4	6E	Gage .....	1416
Big Blue River.....	Johnson, Jas. F.....	1	5	4E	Gage .....	1417
Big Blue River.....	Johnson, Jas. F.....	3	4	5E	Gage .....	1422
Winter Creek, trib. to No. Platte....	Shields & Barbour.....	8	22	54	Scottsbluff .....	1468
Stinking Water Creek.....	Krotter, F. C.....	25	5	34	Hitchcock .....	1484
Stinking Water Creek.....	Krotter, F. C.....	25	5	34	Hitchcock .....	1485
Frenchman River.....	Frenchman Valley Irrigation District.....	3	5	38	Chase .....	1562
White River and Floods.....	Wilson, C. L.....	1	32	51	Dawes .....	1567
Frenchman River.....	Krotter, F. C.....	23	5	35	Hitchcock .....	1574
Dry Spotted Tail.....	Gardner & Ewing.....	27	21	56	Scotts Bluff.....	1578
Carter Creek.....	Gardner, Wm. E. & Ewing, E. E.....	27	21	56	Scotts Bluff.....	1579
Owl Creek.....	Martindale, Ora.....	18	21	56	Scotts Bluff.....	1584
North Platte River.....	City of North Platte.....	29	14	30	Lincoln .....	1586
Platte River.....	Steere, Chas.....	7	8	18	Phelps .....	1589
Medicine Creek.....	Johnston, Stephen E.....	16	9	30	Lincoln .....	1602
Niobrara River.....	Sturgeon, Elmer.....	26	29	48	Dawes .....	1605
Niobrara River and Floods.....	Sturgeon, Elmer.....	28	29	49	Dawes .....	1606

\*Denotes part of appropriation cancelled.

## DEPARTMENT OF PUBLIC WORKS

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## APPLICATIONS AND DOCKETS CANCELLED NOVEMBER 30, 1920, TO NOVEMBER 20, 1922—(Continued)

STREAM	NAME OF APPLICANT	LOCATION OF HEADGATE			Doc. No.	App. No.
		S.	T.	R.		
Bordeaux, Big.....	Bartlett & Taylor.....	11	33	58	Dawes .....	1610
Bear Creek.....	Belsky, Ed.....	25	34	36	Cherry .....	1617
White Tail Creek.....	Nobel, Bert A.....	22	15	38	Keith .....	1621
Whitsell Dry Draw.....	Whitsell, A. E.....	33	34	47	Dawes .....	1622
Little Blue.....	Ellison, Wm. H.....	8	2	2W	Thayer .....	1624
Warm Slough Springs.....	Walter, Jacob J.....	31	9	13	Buffalo .....	1628
Medicine Creek.....	Johnston, Stephen E.....	16	9	30	Lincoln .....	1632
Pawnee Creek.....	Kent & Burke Co.....	18	13	27	Lincoln .....	1655

## APPLICATIONS DISALLOWED FROM NOVEMBER 30, 1920, TO NOVEMBER 30, 1922

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STREAM	NAME OF APPLICANT	LOCATION OF HEADGATE				Doc. No.	App. No.
		S.	T.	R.	County		
Winter Creek (Springs and Seeps) ..	Shumway, G. L.....	8	22	54	Scotts Bluff.....	1050	
Big Blue River.....	Steinmeyer, Geo. W.....	12	4	5	Gage .....	1261	
Big Blue River.....	Johnson, Jas. F.....	8	4	5E	Gage .....	1422	
Big Blue River.....	Johnson, Jas. F.....	13	1	7E	Gage .....	1423	
Little Blue.....	Lyon, Geo., Jr.....	29	4	6	Nuckolls .....	1462	
Jess Lake.....	Stearns, F. E.....	26	26	44	Scotts Bluff .....	1502	
Wilkinson Lake.....	Naylor, Chas.....	16	26	45	Dawes .....	1504	
Big Alkali Lake.....	Beale, Harry A.....	2	31	28	Cherry .....	1507	
Short 'L' Lake.....	Piper & Lovejoy.....	25	28	27	Cherry .....	1512	
Platte River.....	Carey, Wm. L.....	4	14	10	Douglas .....	1528	
Winter Creek .....	Barbour, Wm. L.....	8	22	54	Scotts Bluff .....	1536	
Platte River .....	Woods Bros.....	4	14	10	Douglas .....	1549	
Wild Horse Draw.....	Carter, Frank E.....	34	21	52	Morrill .....	1572	
Platte River .....	Bignell, E.....	32	13	13E	Sarpy .....	1600	
Dry Draw.....	Card, Lee.....	31	33	48	Dawes .....	1613	
Dry Draw.....	Barnes, Paul T.....	31	32	56	Sioux .....	1649	
Indian Creek (A. 1568).....	Renfro, Oscar.....	3	31	50	Dawes .....	1678	

## RELOCATIONS

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Approp. No. Which Has Carrying Right	Stream	Claimant	Carrier	Amount	Old Location	S.	T.	R.	New Location	S.	T.	R.	Approp. No. Which Covers the Land
A-1452	No. Platte River	Inter-Mt. Ry. Light & Power Co.....	Gering Hydro Elec. Canal.....	250.00	SE $\frac{1}{4}$ of SE $\frac{1}{4}$ SW $\frac{1}{4}$	4	23	58	SE $\frac{1}{4}$ of NW $\frac{1}{4}$	10	23	60	A-1452
A-1597	Big Blue River..	Henry B. Babson.....	Wilber Power Plant..	200.00		1	5	4	SW $\frac{1}{4}$	12	5	4	1597
A- 243	No. Platte River	No. River Irr. Dist...	No. River Canal.....	76.00	NW $\frac{1}{4}$ of SE $\frac{1}{4}$	14	18	47	SW $\frac{1}{4}$ of NE $\frac{1}{4}$	14	18	47	A-243
A- 243	No. Platte River	No. River Irr. Dist...	No. River Canal.....	16.00		6	17	45	SW $\frac{1}{4}$ of NE $\frac{1}{4}$	14	18	47	D-787
D- 787	No. Platte River	Lisco Irr. District....	No. River Canal.....	5.37	Lot 5	6	17	45	SW $\frac{1}{4}$ of NE $\frac{1}{4}$	14	18	47	D-787
D- 945	No. Platte River	Farmers Irr. Dist....	Ramshorn Canal.....	3.07	NW $\frac{1}{4}$ of NE $\frac{1}{4}$	10	23	58	SE $\frac{1}{4}$ of SE $\frac{1}{4}$	18	23	58	D-918
D- 797	No. Platte River	No. River Irr. Dist...	Oshkosh Canal .....	2.29	NW $\frac{1}{4}$ of SE $\frac{1}{4}$	14	18	48	NE $\frac{1}{4}$ of NE $\frac{1}{4}$	33	17	44	A-243

# **Nebraska Hydrographic Report**

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**1921-1922**

## PATHFINDER INFLOW, IN SECOND FEET, FOR YEAR 1921

Day	January	February	March	April	May	June
1	480	520	1,670	1,200	1,480	13,220
2	410	440	1,790	840	1,850	12,940
3	410	360	1,790	760	1,850	13,610
4	410	440	1,680	850	2,900	13,530
5	410	440	2,150	1,320	8,810	13,690
6	490	520	3,100	1,230	3,870	12,940
7	650	530	2,850	1,420	5,260	14,190
8	650	690	2,090	1,610	5,280	15,360
9	570	690	2,020	1,710	5,340	16,080
10	410	610	1,420	1,580	5,310	16,990
11	330	440	1,520	1,350	5,690	17,590
12	300	450	1,080	1,630	4,950	17,080
13	280	450	990	970	4,040	16,540
14	360	610	1,960	1,640	4,550	17,080
15	430	690	920	1,500	4,580	16,590
16	440	450	1,830	1,490	4,580	16,700
17	440	530	1,240	1,490	6,340	17,070
18	760	700	1,790	1,420	6,630	17,450
19	520	580	1,070	1,600	6,840	15,750
20	280	700	1,790	1,870	7,920	18,870
21	280	530	2,320	1,420	6,600	11,270
22	440	530	2,530	1,300	7,770	9,440
23	280	530	2,360	1,950	7,230	7,360
24	440	530	1,910	1,970	6,920	7,430
25	520	620	1,720	2,210	8,170	5,930
26	520	700	1,640	2,250	10,430	6,830
27	610	1,200	1,280	1,990	11,760	6,400
28	600	1,290	1,450	2,260	9,470	6,070
29	440	.....	1,080	2,040	11,500	6,280
30	610	.....	820	2,070	9,940	5,190
31	610	.....	1,200	.....	12,160	.....
Total	14,880	16,770	53,060	46,890	194,470	380,470
Mean	464	599	1,711	1,563	6,273	12,682
Acre Feet	28,523	33,263	105,244	93,006	385,731	754,662
Maximum	650	1,290	3,100	2,250	12,160	17,590
Minimum	280	360	820	760	1,480	5,190

## PATHFINDER INFLOW, IN SECOND FEET, FOR YEAR 1921

Day	July	August	September	October	November	December
1	4,940	1,800	1,200	150	410	540
2	4,600	1,940	560	710	470	540
3	3,720	2,520	110	480	500	610
4	3,100	2,250	270	370	530	540
5	3,390	2,050	550	350	530	480
6	3,160	1,660	500	320	610	400
7	3,310	1,400	760	320	590	550
8	3,560	1,520	680	330	840	490
9	2,860	1,410	390	530	720	510
10	2,310	1,130	710	650	780	510
11	2,540	1,050	680	690	780	510
12	2,420	1,270	690	670	790	450
13	1,900	1,600	150	750	660	460
14	1,920	2,800	230	620	600	460
15	2,450	2,040	200	710	470	430
16	1,940	1,040	140	480	340	430
17	2,590	640	660	400	310	440
18	2,610	1,460	850	440	270	370
19	2,220	1,100	1,000	420	280	370
20	2,600	1,220	1,080	610	470	370
21	3,380	1,310	730	730	410	510
22	2,580	1,190	850	600	340	570
23	2,450	1,050	590	290	350	550
24	2,440	1,150	270	260	410	580
25	2,670	920	330	200	410	440
26	2,880	620	210	180	480	440
27	2,800	780	220	310	480	440
28	1,750	700	140	300	480	460
29	1,520	680	230	310	410	580
30	2,300	1,390	230	300	410	580
31	1,750	1,440	.....	380	.....	580
Total	84,610	48,130	15,210	13,860	15,130	15,190
Mean Acre Feet	2,729 167,824	1,391 85,548	507 30,169	447 27,491	504 30,010	490 30,129
Maximum	4,940	2,520	1,200	750	840	610
Minimum	1,520	620	110	150	270	400

## PATHFINDER OUTFLOW, IN SECOND FEET, FOR YEAR 1921

Day	January	February	March	April	May	June
1	15	120	120	100	2,215	1,840
2	15	120	120	20	2,215	4,270
3	15	120	120	20	2,215	6,720
4	15	120	120	20	2,215	8,790
5	15	120	120	20	2,215	10,220
6	15	120	120	20	2,215	11,260
7	15	120	120	20	2,215	12,160
8	15	120	120	20	2,215	13,040
9	15	120	120	20	2,230	13,970
10	15	120	120	20	2,230	14,950
11	15	120	125	20	2,230	15,620
12	140	120	125	20	2,230	16,040
13	120	120	125	20	2,240	16,360
14	120	120	125	20	2,240	16,610
15	120	120	135	3,030	2,240	16,700
16	120	120	165	3,200	2,240	16,700
17	120	120	100	3,200	2,240	16,730
18	120	120	100	1,280	2,240	16,760
19	120	120	100	1,975	2,240	16,620
20	120	120	100	2,215	2,250	16,030
21	120	120	100	2,215	2,250	14,780
22	120	120	100	2,215	2,260	13,150
23	120	120	100	2,830	2,260	10,720
24	120	120	100	3,185	2,260	10,130
25	120	120	100	3,185	2,260	9,040
26	120	120	100	3,185	2,270	8,150
27	120	120	100	2,920	2,270	7,530
28	120	120	100	3,185	2,270	7,060
29	120	.....	100	2,920	2,185	6,600
30	120	.....	100	2,570	2,185	6,170
31	120	.....	100	.....	2,005	.....
Total	2,585	3,360	3,500	43,670	69,045	354,720
Mean	83	120	113	1,455	2,227	11,824
Acre Feet	5,127	6,665	6,942	86,619	136,950	703,587
Maximum	140	120	165	3,200	2,270	16,760
Minimum	15	120	100	20	2,005	1,840

## PATHFINDER OUTFLOW, IN SECOND FEET, FOR YEAR 1921

Day	July	August	September	October	November	December
1	5,740	5,470	3,880	1,820	20	20
2	6,040	5,470	3,940	1,820	20	20
3	5,860	5,450	3,230	1,820	20	20
4	5,790	5,480	3,820	1,820	20	20
5	6,020	5,410	3,960	1,820	20	20
6	5,740	5,400	3,950	1,820	20	20
7	5,820	4,720	3,940	1,820	20	20
8	5,780	4,480	3,940	1,810	20	100
9	5,890	4,480	2,980	1,810	20	115
10	5,290	4,440	2,890	1,810	20	115
11	5,470	4,290	2,890	1,810	20	115
12	5,540	4,110	2,890	1,810	20	115
13	5,540	4,430	2,650	1,810	20	130
14	5,490	4,540	2,890	1,810	20	130
15	5,450	5,270	2,890	1,810	20	100
16	5,410	3,290	2,880	1,810	20	100
17	5,420	4,090	2,870	1,810	20	110
18	5,460	4,130	2,870	1,580	20	105
19	5,450	4,180	2,870	1,810	20	105
20	5,430	4,130	2,870	340	20	105
21	5,430	4,130	2,870	20	20	105
22	5,480	4,120	2,870	20	20	105
23	5,450	4,080	2,870	20	20	105
24	5,470	3,910	2,870	20	20	105
25	5,470	3,940	2,870	20	20	105
26	5,460	3,690	2,870	20	20	105
27	5,450	3,410	2,870	20	20	105
28	5,460	3,550	2,870	20	20	105
29	5,470	3,490	20	20	20	105
30	5,470	3,850	1,560	20	20	105
31	5,470	3,890	-----	20	----	105
Total	172,610	134,570	89,090	34,790	600	2,740
Mean	5,568	4,341	2,969	1,122	20	88
Acre Feet.	342,871	266,919	176,710	69,005	1,190	5,435
Maximum	6,040	5,470	3,940	1,820	20	130
Minimum	5,410	3,850	20	20	20	20

## PATHFINDER STORAGE, IN ACRE FEET, FOR YEAR 1921

Day	January	February	March	April	May	June
1	692,300	716,130	744,920	842,040	848,130	1,107,050
2	693,080	716,770	748,240	843,670	841,860	1,128,870
3	693,860	717,270	751,560	845,130	840,770	1,137,530
4	694,690	717,890	754,560	846,780	841,680	1,146,470
5	695,420	718,580	758,580	849,360	843,490	1,153,130
6	696,360	719,330	764,480	851,750	846,230	1,156,230
7	697,610	720,140	769,890	854,530	851,750	1,159,900
8	698,890	721,260	773,800	857,680	858,430	1,164,590
9	699,960	722,390	777,560	861,030	864,770	1,169,280
10	700,750	723,360	780,130	864,020	871,360	1,172,750
11	701,380	724,000	782,890	866,650	877,990	1,175,980
12	701,690	724,650	784,780	869,850	882,950	1,177,230
13	702,000	725,300	786,500	871,730	886,210	1,178,970
14	702,480	726,270	790,140	874,950	890,440	1,179,220
15	703,100	727,400	791,700	871,920	894,690	1,179,220
16	703,730	728,050	795,000	868,530	899,150	1,179,220
17	704,370	728,860	797,250	865,150	907,170	1,179,220
18	705,630	730,000	800,600	865,330	916,240	1,179,970
19	706,420	730,980	802,520	864,580	924,790	1,178,470
20	706,740	732,120	805,860	868,460	935,840	1,174,240
21	707,050	732,940	810,270	861,590	943,950	1,166,810
22	707,680	733,750	815,080	859,540	954,180	1,158,920
23	708,480	734,570	819,550	857,310	963,470	1,151,580
24	709,270	735,380	823,130	854,900	972,850	1,145,740
25	710,230	736,360	826,350	853,600	984,620	1,140,180
26	711,180	737,510	829,410	851,750	1,000,380	1,136,810
27	711,820	739,640	831,750	849,910	1,018,770	1,133,920
28	712,450	741,950	834,430	848,070	1,032,600	1,131,280
29	713,410	.....	836,250	846,050	1,050,860	1,129,130
30	714,370	.....	837,690	844,770	1,065,710	1,126,260
31	715,380	.....	839,870	.....	1,085,380	.....

## PATHFINDER STORAGE, IN ACRE FEET, FOR YEAR 1921

	July	August	September	October	November	December
1	1,123,870	921,994	729,186	573,750	529,920	558,390
2	1,120,070	915,840	722,070	571,290	530,670	559,560
3	1,115,090	909,718	715,490	568,400	531,420	560,990
4	1,108,930	902,755	708,950	565,810	532,290	562,030
5	1,103,530	895,270	701,690	562,170	533,170	562,950
6	1,097,710	887,166	694,480	558,910	534,160	563,740
7	1,091,960	880,081	687,650	555,660	535,180	564,790
8	1,086,960	874,000	680,880	552,550	536,660	565,570
9	1,080,170	867,212	675,530	549,720	538,050	566,360
10	1,073,890	860,100	670,990	547,170	539,560	567,150
11	1,066,380	853,230	666,330	544,760	541,070	567,940
12	1,059,620	847,150	661,700	542,340	542,600	568,600
13	1,051,980	840,950	656,370	540,060	543,870	569,260
14	1,044,155	837,690	650,770	537,540	545,010	569,920
15	1,037,702	831,210	645,200	534,910	545,900	570,580
16	1,030,170	825,810	639,540	532,040	546,530	571,240
17	1,023,580	818,650	634,760	528,920	547,300	571,900
18	1,017,460	812,760	630,440	526,420	548,060	572,430
19	1,010,500	806,040	626,570	523,420	548,570	572,960
20	1,004,240	799,895	622,570	523,790	549,460	574,140
21	999,310	793,780	618,020	524,930	550,230	574,940
22	992,900	787,540	613,550	525,680	550,870	575,870
23	986,320	780,990	608,550	526,050	551,520	576,980
24	979,140	775,168	602,950	526,300	552,290	577,870
25	973,054	768,700	597,390	526,790	553,060	578,540
26	967,220	762,110	591,790	527,040	553,970	579,210
27	960,990	756,400	586,090	527,410	554,880	579,880
28	953,150	750,730	580,280	527,790	555,790	580,690
29	944,360	744,760	580,280	528,160	556,570	581,640
30	937,254	740,300	577,380	528,660	557,350	582,580
31	929,192	735,050	-----	529,290	-----	583,530

## PATHFINDER INFLOW, IN SECOND FEET, FOR SEASON 1922

Day	Acre feet	February	March	April	May
1	720	380	390	1,220	3,630
2	720	380	410	1,260	3,420
3	780	380	400	1,190	3,670
4	800	380	410	1,060	3,550
5	800	390	370	1,350	3,590
6	800	390	390	1,930	3,760
7	800	380	390	2,190	3,600
8	650	390	390	1,930	3,560
9	590	380	390	2,480	4,480
10	520	380	390	2,990	4,870
11	450	380	390	3,110	5,080
12	380	390	390	3,050	5,140
13	240	390	410	3,180	5,250
14	250	380	420	2,090	4,880
15	240	390	540	1,430	3,870
16	240	380	610	1,230	3,800
17	240	390	1,190	1,420	3,690
18	240	380	1,410	1,370	3,710
19	250	390	1,720	1,580	3,490
20	240	390	1,940	1,210	3,750
21	250	380	1,940	950	5,370
22	240	390	1,940	780	6,510
23	240	390	1,940	1,220	7,910
24	310	390	1,950	1,640	8,010
25	380	390	1,960	2,870	7,380
26	380	380	2,280	2,750	7,370
27	380	390	2,670	3,040	7,930
28	380	380	2,020	3,400	8,780
29	380	-----	1,630	3,380	10,340
30	380	-----	1,380	3,400	8,900
31	380	-----	1,180	-----	8,860
Total	18,650	10,780	33,790	60,050	168,150
Mean	440	385	1,090	2,001	5,424
Acre Feet	27,074	21,382	67,022	119,109	333,525
Maximum	800	390	2,670	3,400	10,340
Minimum	240	380	370	780	3,420

## PATHFINDER INFLOW, IN SECOND FEET, FOR SEASON 1922

Day	June	July	August	September
1	10,880	2,190	840	270
2	8,250	2,280	1,020	270
3	7,230	2,330	700	210
4	6,996	2,270	670	230
5	6,520	1,430	630	230
6	6,360	1,900	410	320
7	6,800	1,990	440	350
8	6,740	1,900	470	240
9	7,370	1,300	500	220
10	7,960	840	570	220
11	8,860	1,350	510	120
12	8,560	880	390	130
13	8,500	780	410	110
14	8,050	990	390	100
15	8,080	1,290	340	100
16	7,310	1,190	310	140
17	6,990	560	300	140
18	6,770	620	330	150
19	6,090	1,270	320	140
20	6,090	1,080	420	140
21	6,000	730	400	140
22	5,570	520	430	120
23	5,170	400	410	130
24	4,680	330	410	130
25	4,720	280	410	130
26	4,360	300	330	110
27	3,880	420	360	140
28	3,290	710	350	130
29	3,320	760	260	100
30	2,710	550	240	100
31	-----	640	290	-----
Total	193,100	34,080	13,860	5,060
Mean	6,437	1,099	447	168
Acre Feet.	388,018	67,597	27,491	10,036
Maximum	10,880	2,830	1,020	350
Minimum	2,710	280	240	100

## PATHFINDER OUTFLOW, IN SECOND FEET, FOR SEASON 1922

Day	January	February	March	April	May
1	105	105	105	20	1,080
2	105	105	105	20	1,790
3	105	105	105	20	900
4	105	105	105	20	1,080
5	105	105	105	20	1,960
6	105	105	105	20	3,650
7	105	105	105	20	4,055
8	105	105	105	20	4,055
9	105	105	105	20	4,055
10	105	105	105	20	4,055
11	105	105	105	20	4,055
12	105	105	105	20	4,055
13	105	105	105	20	4,090
14	105	105	105	20	4,090
15	105	105	105	20	4,090
16	105	105	105	20	4,090
17	105	105	105	20	4,090
18	105	105	105	20	4,070
19	105	105	110	20	4,150
20	105	105	110	20	3,230
21	105	105	110	20	3,420
22	105	105	110	20	4,110
23	105	105	110	20	3,500
24	105	105	20	20	6,360
25	105	105	20	20	7,480
26	105	105	20	10	7,480
27	105	105	20	5	7,480
28	105	105	20	0	7,200
29	105	.....	20	0	7,480
30	105	.....	20	720	5,110
31	105	.....	20	.....	5,130
Total	3,225	2,940	2,600	1,235	131,440
Mean	105	105	84	41	4,240
Acre Feet	6,456	5,831	5,157	2,450	260,711
Maximum	105	105	110	720	7,480
Minimum	105	105	20	0	900

## PATHFINDER OUTFLOW, IN SECOND FEET, FOR SEASON 1922

Day	June	July	August	September
1 .....	5,150	6,000	4,405	3,400
2 .....	5,150	6,000	4,595	3,400
3 .....	4,010	5,500	4,800	3,070
4 .....	4,010	5,500	4,445	2,980
5 .....	4,010	5,500	4,300	2,980
6 .....	4,010	5,515	4,510	2,970
7 .....	4,010	5,500	4,150	3,400
8 .....	4,030	5,160	4,165	3,255
9 .....	4,030	5,030	4,185	3,095
10 .....	4,040	5,015	4,215	3,260
11 .....	4,055	5,005	4,265	3,305
12 .....	4,055	4,880	4,110	3,280
13 .....	4,085	4,400	3,855	3,150
14 .....	5,170	4,285	3,840	3,120
15 .....	5,170	4,510	3,825	2,250
16 .....	5,170	4,805	3,825	1,200
17 .....	5,310	4,700	3,810	3,530
18 .....	5,550	4,070	3,780	2,905
19 .....	5,515	4,140	3,780	2,890
20 .....	5,515	4,770	3,750	2,880
21 .....	5,515	4,600	3,810	2,870
22 .....	5,515	4,455	3,795	2,795
23 .....	6,080	4,200	3,825	2,460
24 .....	6,000	4,120	3,810	2,095
25 .....	6,000	4,075	3,795	2,095
26 .....	5,990	4,030	3,780	2,085
27 .....	6,040	4,055	3,765	2,075
28 .....	6,060	4,165	3,750	2,075
29 .....	6,020	4,485	3,670	2,065
30 .....	6,000	4,540	3,370	1,370
31 .....	.....	4,300	3,345	.....
Total .....	151,265	147,310	123,325	82,810
Mean .....	5,042	4,752	3,978	2,740
Acre Feet .....	300,084	292,189	244,615	163,261
Maximum .....	6,080	6,000	4,800	3,400
Minimum .....	4,010	4,030	3,345	1,200

## PATHFINDER STORAGE, IN ACRE FEET, FOR YEAR 1922

Day	January	February	March	April	May
1 .....	584,740	604,950	620,540	683,650	807,440
2 .....	585,960	605,500	621,140	687,340	810,270
3 .....	587,300	606,050	621,730	689,670	815,250
4 .....	588,930	606,600	622,330	691,740	819,730
5 .....	590,290	607,160	622,860	694,480	822,410
6 .....	591,650	607,720	623,430	698,860	822,050
7 .....	593,010	608,270	624,000	703,890	820,800
8 .....	594,100	608,830	624,570	707,680	819,540
9 .....	595,060	609,380	625,140	712,450	820,620
10 .....	595,890	609,940	625,720	719,010	821,880
11 .....	596,570	610,490	626,290	725,130	826,710
12 .....	597,120	611,050	626,860	731,140	828,870
13 .....	597,390	611,610	626,570	737,680	831,030
14 .....	597,670	612,160	628,290	741,780	832,470
15 .....	597,940	612,720	629,150	744,590	831,930
16 .....	598,210	613,270	630,150	747,240	831,210
17 .....	598,490	613,830	632,310	750,230	830,130
18 .....	598,760	614,380	634,900	753,070	829,050
19 .....	599,040	614,490	638,090	756,060	827,250
20 .....	599,310	615,500	641,720	758,410	827,970
21 .....	599,590	616,050	645,350	760,260	831,210
22 .....	599,860	616,610	649,010	761,770	836,790
23 .....	600,130	617,170	652,690	764,140	845,130
24 .....	600,540	617,730	656,520	767,350	848,070
25 .....	601,090	618,300	660,370	772,100	847,330
26 .....	601,640	618,850	664,880	778,070	846,600
27 .....	602,190	619,410	670,090	784,090	846,970
28 .....	602,740	619,960	674,160	790,830	849,170
29 .....	603,290	.....	677,360	797,148	854,520
30 .....	603,740	.....	679,960	802,870	861,780
31 .....	604,400	.....	682,260	.....	868,910

## PATHFINDER STORAGE, IN ACRE FEET, FOR YEAR 1922

Day	June	July	August	September
1	879,510	925,900	685,800	458,270
2	885,440	918,020	678,280	451,640
3	891,400	911,100	689,930	445,610
4	896,820	904,030	662,150	430,870
5	901,290	895,460	654,300	434,170
6	905,400	887,710	645,640	428,540
7	909,520	880,400	637,830	422,050
8	914,450	873,250	630,010	415,680
9	920,400	865,150	622,280	409,670
10	927,330	856,370	614,530	403,410
11	936,240	848,900	606,750	396,280
12	944,560	840,770	598,900	390,450
13	952,740	833,010	591,520	381,050
14	958,130	825,810	584,610	377,740
15	960,060	818,630	577,470	373,180
16	967,010	810,630	570,050	370,880
17	969,920	801,820	562,630	368,930
18	971,800	794,480	555,530	358,290
19	972,220	788,060	548,440	352,700
20	972,640	780,310	541,460	347,120
21	972,850	772,100	534,290	341,530
22	972,010	763,970	527,170	336,020
23	969,290	755,730	520,210	331,110
24	965,970	747,570	513,140	327,020
25	962,850	739,810	505,910	322,960
26	959,920	731,960	499,020	318,870
27	953,970	724,160	492,000	314,530
28	947,830	717,250	484,880	310,740
29	941,710	709,590	477,810	306,680
30	934,430	701,220	471,320	304,020
31	-----	693,390	464,870	-----

**DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT WHALEN, WYOMING, FOR YEAR 1921**

Day	January	February	March	April	May	June
1	200	267	414	302	2,510	2,604
2	209	287	378	311	2,468	2,227
3	209	285	378	229	2,080	7,159
4	209	247	373	287	1,938	4,806
5	219	247	378	277	1,938	6,695
6	173	215	378	358	1,826	6,049
7	181	176	373	612	2,210	9,629
8	182	176	373	512	2,257	11,390
9	191	205	373	333	2,575	11,712
10	173	367	378	340	2,438	12,056
11	173	255	373	183	2,333	12,620
12	155	254	348	260	2,211	13,094
13	155	307	325	260	2,096	13,385
14	146	802	325	158	1,994	13,887
15	165	678	325	198	1,900	13,961
16	164	984	321	133	1,900	14,721
17	173	835	245	143	1,883	17,431
18	164	424	335	1,231	1,909	15,567
19	167	312	315	2,639	2,040	15,256
20	191	410	314	2,171	2,082	15,968
21	199	298	377	1,259	1,969	16,025
22	199	240	378	1,354	1,810	14,242
23	295	432	378	2,014	1,773	12,374
24	280	470	378	1,604	4,946	10,255
25	292	710	373	2,067	2,724	8,856
26	293	691	369	2,718	3,048	7,863
27	250	691	391	2,729	3,092	6,855
28	285	587	344	2,740	2,544	6,207
29	285	.....	344	2,601	2,591	5,666
30	257	.....	425	2,719	2,496	5,220
31	257	.....	425	.....	2,564	.....
Total	6,491	11,797	11,164	32,742	72,145	313,776
Mean	209	421	360	1,091	2,327	10,459
Acre Feet	12,875	23,399	22,144	64,944	143,099	622,374
Maximum	295	984	425	2,740	4,946	17,431
Minimum	146	176	314	183	1,773	2,227

**DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT WHALEN, WYOMING, FOR YEAR 1921**

Day	July	August	September	October	November	December
1	4,827	3,523	1,220	1,756	583	125
2	4,009	3,633	1,619	867	515	184
3	5,873	3,752	1,626	581	608	100
4	4,128	3,743	1,696	921	471	68
5	3,626	3,578	1,290	926	420	100
6	3,746	3,427	1,393	871	426	125
7	4,068	3,427	1,626	914	408	177
8	3,555	3,471	1,673	889	398	100
9	3,908	2,882	1,719	940	391	205
10	3,537	2,477	1,735	940	124	327
11	3,707	2,501	1,194	920	154	183
12	3,313	2,455	1,055	920	145	264
13	3,391	2,375	1,027	950	141	295
14	3,289	2,113	1,027	970	112	286
15	3,512	2,313	835	907	150	305
16	3,408	3,232	970	935	114	50
17	3,558	2,988	1,153	940	136	50
18	3,426	1,450	1,000	990	50	47
19	3,453	2,054	1,041	990	50	65
20	3,935	2,046	1,076	940	50	50
21	3,724	2,058	1,182	750	50	75
22	3,324	2,045	1,810	841	50	90
23	3,304	2,088	1,437	810	90	94
24	3,600	2,070	1,487	190	120	94
25	3,418	2,088	1,480	225	148	94
26	3,644	1,703	1,475	380	256	138
27	3,512	1,842	1,507	327	257	111
28	3,857	1,818	1,540	331	143	145
29	3,897	1,592	1,950	350	75	145
30	3,365	1,565	1,920	280	75	155
31	3,877	1,708	-----	255	-----	155
Total	114,282	77,954	41,268	28,306	6,560	4,352
Mean Acre Feet	3,685 226,678	2,514 154,621	1,875 81,845	752 46,227	218 13,011	140 8,632
Maximum	4,827	3,752	1,950	1,756	533	327
Minimum	3,289	1,450	835	190	50	47

DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT WHALEN, WYOMING, FOR SEASON 1922

Day	January	February	March	April	May
1	200	102	141	157	109
2	200	102	142	149	109
3	200	102	166	124	119
4	220	102	163	124	303
5	181	92	178	124	941
6	151	92	147	136	508
7	155	84	158	119	506
8	155	94	187	110	1,997
9	145	103	211	155	3,172
10	155	108	247	161	3,220
11	155	927	240	186	5,277
12	196	504	287	239	4,936
13	196	318	248	261	4,556
14	167	227	342	227	5,260
15	189	267	383	205	5,589
16	170	258	427	187	5,558
17	138	301	481	221	5,884
18	111	231	417	275	6,686
19	93	211	913	214	7,110
20	103	240	727	205	7,460
21	103	240	611	205	7,174
22	103	251	505	184	6,657
23	103	171	370	208	6,100
24	103	175	275	208	5,503
25	103	211	301	126	4,749
26	103	231	211	175	7,335
27	102	190	220	186	7,073
28	102	165	203	148	6,801
29	102	-----	207	116	6,897
30	102	-----	208	114	6,890
31	102	-----	172	-----	6,293
Total	4,498	6,399	9,488	5,252	140,802
Mean	142	228	306	175	4,512
Ave Feet	8,743	12,692	18,810	10,417	273,280
Maximum	220	927	913	275	7,460
Minimum	93	84	141	110	103

DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT WHALEN, WYOMING, FOR SEASON 1922

Day	June	July	August	September
1	5,374	3,111	2,460	1,393
2	5,271	3,217	2,276	1,353
3	5,018	3,450	2,032	1,324
4	4,878	3,481	2,311	1,409
5	4,039	2,922	2,449	1,198
6	3,612	3,022	2,445	1,046
7	3,179	3,063	2,001	1,016
8	3,141	3,020	2,128	919
9	2,970	2,920	1,825	1,062
10	2,854	2,619	1,870	1,156
11	2,769	2,705	2,010	1,040
12	2,405	2,602	1,838	1,041
13	2,416	2,503	1,865	1,770
14	2,183	2,278	1,780	1,147
15	2,315	1,934	1,680	1,113
16	2,842	1,753	1,840	1,076
17	2,814	1,924	1,746	1,053
18	2,953	2,347	1,735	252
19	3,003	2,181	1,719	727
20	3,127	1,675	1,627	1,314
21	3,127	1,476	1,719	1,275
22	2,997	1,941	1,700	1,286
23	2,804	1,968	1,812	1,290
24	2,626	2,649	1,798	1,287
25	3,295	2,840	1,827	1,207
26	3,346	1,825	1,849	986
27	3,056	1,762	1,886	827
28	3,215	1,839	1,883	799
29	4,867	2,101	1,838	829
30	3,228	2,465	1,854	978
31	.....	2,726	1,686	.....
Total	99,730	73,930	60,149	33,173
Mean	3,324	2,449	1,940	1,105
Acre Feet	197,832	150,607	110,305	65,797
Maximum	5,374	3,484	2,632	1,770
Minimum	2,180	1,476	1,680	252

**LARAMIE RIVER AT FORT LARAMIE, WYOMING, 1922**

**LOCATION**—Steel highway bridge south old Fort Laramie. One and a half miles above mouth.

**GAGE**—Eight foot staff, fastened to end of center pier on north side upstream from bridge.

**OBSERVER**—L. G. Flannery.

**DISTANCE FROM WHALEN, WYOMING**—Eight and a half miles.

**DISCHARGE MEASUREMENTS, OF LARAMIE RIVER AT LARAMIE,  
WYOMING, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
5- 2	T. C. Palmer.....	127.2	2.25	2.20	286
5- 8	T. C. Palmer.....	125.2	2.20	2.15	280
5-23	T. C. Palmer.....	209.1	2.66	2.90	556
6- 2	T. C. Palmer.....	231.6	2.59	3.05	601
6-13	T. C. Palmer.....	73.2	1.75	1.90	128
7-19	T. C. Palmer.....	28.4	1.13	1.30	32
8-22	T. C. Palmer.....	17.0	1.34	1.35	22

**DAILY DISCHARGE, IN SECOND FEET, OF LARAMIE RIVER AT  
FORT LARAMIE, WYOMING, FOR YEAR 1922**

Day	May	June	July	August	September
1	.....	570	63	82	10
2	.....	660	63	74	10
3	.....	590	190	74	10
4	.....	515	74	74	10
5	.....	460	63	68	10
6	240	420	63	63	10
7	260	390	63	68	15
8	280	350	50	50	15
9	260	385	50	50	10
10	280	280	50	42	15
11	420	240	50	42	15
12	495	210	50	42	15
13	370	210	40	34	15
14	370	140	34	34	22
15	480	105	30	42	30
16	515	120	22	42	30
17	515	140	30	34	34
18	570	140	30	34	42
19	770	120	30	34	42
20	695	140	30	34	34
21	695	120	30	34	30
22	640	105	30	34	30
23	570	90	30	42	34
24	515	90	34	34	30
25	460	75	42	30	34
26	425	50	34	30	42
27	370	50	30	15	42
28	390	50	30	10	42
29	530	50	30	10	42
30	550	90	90	10	42
31	510	....	90	10	....
Total	12,159	6,905	1,545	1,280	720
Mean	467	280	49	41	24
Acre Feet	24,207	13,696	3,064	2,539	1,428
Maximum	770	660	190	82	42
Minimum	240	50	22	10	10

**NORTH PLATTE RIVER AT MORRILL, NEBRASKA—1921-1922**

**LOCATION**—About two miles south of Morrill.

**GAGE**—One wooden staff, five feet in length, fastened to first pier from north end and on down stream side of concrete bridge. Eighteen-inch bolts set in concrete, holding the staff in a perpendicular position. Concrete bridge consists of twelve fifty-foot spans.

**BENCH MARK**—Top of handrail over north pier is 14.26 above zero on gage. More bench marks will be established later.

**OBSERVERS**—Wm. Abel, 1921. Virgil Q. Corder, 1922.

**CHANNEL**—The river channel is narrowed to 600 feet and widened above and below the bridge to about 1,500 or 2,000 feet.

**ACCURACY**—Because of the collapsible dam of the Enterprise Irrigation Ditch the relation between the gage heights and daily discharge is not reliable..

**RECORDS AVAILABLE**—Seasons 1917, 1919, 1920, 1921 and 1922.

**ELEVATIONS**—39.80 distance from Pathfinder Reservoir 298 miles.

**DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER AT  
MORRILL, NEBRASKA, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
4-12	T. C. Palmer.....	400.90	1.00	1.25	817.60
4-18	T. C. Palmer.....	335.20	2.00	1.05	669.50
4-19	T. C. Palmer.....	296.00	1.88	1.00	559.70
4-19	T. C. Palmer.....	380.20	2.22	1.22	844.20
4-20	T. C. Palmer.....	716.60	2.53	2.05	1887.40
4-20	T. C. Palmer.....	974.10	2.55	2.15	2486.90
5-12	T. C. Palmer.....	757.00	2.38	1.90	1802.10
6- 7	Palmer-Atkins .....	2668.30	3.96	3.97	10573.80
8-10	T. C. Palmer.....	924.05	2.47	2.85	2290.57
8-19	T. C. Palmer.....	476.30	1.96	2.30	935.80
8-30	T. C. Palmer.....	383.10	2.18	2.10	834.00
9-27	T. C. Palmer.....	628.60	2.49	1.70	1563.30
10- 6	T. C. Palmer.....	642.30	2.67	2.15	1718.80
10-27	T. C. Palmer.....	486.20	2.70	1.65	1310.80
11- 9	T. C. Palmer.....	550.30	2.36	1.55	1296.60
11-30	T. C. Palmer.....	402.70	2.89	1.45	961.60

**DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER AT  
MORRILL, NEBRASKA, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-21	T. C. Palmer.....	653.0	2.07	1.70	1359
4- 6	T. C. Palmer.....	406.5	1.97	1.30	800
5- 3	T. C. Palmer.....	415.8	1.91	1.30	798
5- 9	T. C. Palmer.....	772.6	2.05	1.97	1590
5-18	T. C. Palmer.....	1774.5	4.00	4.00	7098
5-24	T. C. Palmer.....	1501.9	3.72	3.45	5591
6- 3	T. C. Palmer.....	1876.7	3.71	3.30	5107
6- 7	T. C. Palmer.....	1043.6	2.91	2.60	3144
6-13	T. C. Palmer.....	664.6	2.24	1.65	1488
7-13	T. C. Palmer.....	657.9	2.31	2.00	1519
7-20	T. C. Palmer.....	474.3	1.64	1.55	778
8-14	A. E. Johnston.....	389.5	1.74	1.77	680
8-23	T. C. Palmer.....	407.1	1.53	1.60	626
8-31	T. C. Palmer.....	566.1	1.94	2.00	1102
9-12	Finley-Palmer .....	145.5	1.29	1.18	188
9-18	T. C. Palmer.....	275.8	1.83	1.35	367
9-27	T. C. Palmer.....	249.2	1.54	1.25	384

DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT MORRILL, NEBRASKA, FOR YEAR 1921

Day	April	May	June	August	Sept.	October	Nov.
1	.....	2,300	2,600	3,400	1,100	2,800	1,300
2	.....	1,850	3,700	3,600	1,150	2,300	1,150
3	.....	2,200	3,550	3,600	1,200	2,100	1,150
4	.....	1,700	5,200	3,800	1,200	1,800	1,250
5	.....	1,500	5,200	3,800	1,200	1,500	1,250
6	.....	1,500	7,300	3,600	1,300	1,700	1,250
7	.....	1,700	10,100	3,400	1,300	1,700	1,250
8	.....	1,700	11,800	3,400	1,450	1,800	1,150
9	.....	1,700	15,200	3,000	1,600	1,600	1,150
10	.....	2,200	16,400	2,800	1,800	1,600	1,150
11	.....	2,200	16,900	1,900	1,900	2,000	1,150
12	.....	2,000	17,500	1,750	1,900	2,000	1,150
13	.....	1,850	18,100	1,600	1,800	2,000	1,150
14	.....	1,700	18,700	1,400	1,800	2,000	1,250
15	.....	1,600	19,000	1,200	1,900	2,000	1,150
16	.....	750	19,800	1,300	1,900	1,800	1,150
17	.....	700	1,500	25,000	1,800	2,000	1,250
18	.....	600	1,500	23,300	2,200	1,900	1,400
19	.....	700	1,600	21,000	1,200	1,900	1,600
20	.....	2,100	1,600	21,000	2,550	2,000	1,150
21	.....	2,100	1,850	21,600	1,400	2,100	1,800
22	.....	1,350	1,850	21,800	1,150	2,100	1,700
23	.....	1,500	1,600	19,000	1,150	2,100	1,700
24	.....	1,700	1,500	16,700	1,050	2,100	1,700
25	.....	1,700	7,500	12,600	1,000	2,200	1,800
26	.....	1,700	3,700	11,000	1,000	2,350	1,200
27	.....	2,450	3,400	7,200	1,050	2,500	1,250
28	.....	2,450	3,400	5,300	1,050	2,750	1,250
29	.....	2,600	2,450	3,800	950	2,750	1,300
30	.....	3,400	2,450	3,200	950	3,000	1,300
31	.....	.....	2,700	.....	1,050	.....	1,300
Total	.....	25,800	67,800	403,550	63,100	56,250	53,400
Mean	.....	1,720	2,187	13,452	2,035	1,875	1,721
Acre Feet	.....	51,174	134,481	800,441	125,159	111,572	105,919
Maximum	.....	3,400	7,500	25,000	3,800	3,000	2,800
Minimum	.....	600	1,500	2,600	950	1,100	1,200

Note—No record for July.

**DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT MORRILL, NEBRASKA, FOR YEAR 1922**

Day	April	May	June	July	August	September
1	950	800	5,800	2,700	2,100	490
2	950	800	5,650	2,500	2,100	410
3	800	800	5,400	2,500	2,000	390
4	800	850	4,800	2,200	2,200	390
5	750	900	4,800	2,700	2,000	290
6	800	1,100	5,100	2,700	2,000	195
7	750	1,200	4,500	2,200	1,900	220
8	750	1,200	2,800	2,100	1,800	195
9	800	2,000	2,600	2,000	1,700	195
10	850	3,200	2,100	1,900	1,200	195
11	900	4,200	2,200	1,700	1,000	195
12	1,100	6,100	1,750	1,500	1,000	190
13	1,100	5,500	1,500	1,500	800	190
14	1,200	5,500	1,400	1,800	700	185
15	1,000	6,500	1,300	1,300	600	229
16	950	6,900	1,200	1,300	600	273
17	900	7,200	1,550	900	500	317
18	850	7,100	1,900	750	500	360
19	900	7,900	1,700	750	500	305
20	900	8,500	2,100	750	500	250
21	850	8,600	2,250	750	500	195
22	800	7,500	2,100	650	500	195
23	850	6,500	2,100	700	500	195
24	850	5,600	2,000	700	390	290
25	850	5,000	2,100	1,850	390	310
26	850	5,200	2,100	1,350	400	310
27	850	6,650	2,400	1,200	490	390
28	900	6,600	2,200	1,500	490	195
29	900	6,600	2,200	1,500	490	100
30	900	6,600	1,900	2,100	490	100
31	.....	6,600	.....	2,100	1,100	.....
Total	26,600	149,700	81,500	49,150	31,440	7,744
Mean Acre Feet	887 52,761	4,829 296,944	2,716 161,663	1,585 97,493	1,014 62,364	258 15,361
Maximum	1,200	8,600	5,800	2,700	2,200	490
Minimum	750	800	1,200	650	390	100

**NORTH PLATTE RIVER AT MITCHELL, NEBRASKA—1921, 1922**

**LOCATION**—At highway bridge one mile south of town in Section 27, Township 23 North, Range 56 West.

**RECORD AVAILABLE**—From the 2nd of June, 1901, to July 10, 1913, seasons 1916 to 1922.

**DRAINAGE AREA**—24,400 square miles.

**GAGE**—Five-foot wooden staff, fastened to a pile about fifteen feet east of south end of the concrete bridge. The concrete bridge consists of twelve fifty-foot spans.

**BENCH MARKS**—The datum of the present gage bears no relation to former datums. Bench marks will be established later.

**CHANNEL**—Channel narrows to 600 feet at the gaging station, and widens from 1,500 to 2,000 feet above and below the station.

**ACCURACY**—Accurate measurements are difficult during high water periods.

**OBSERVER**—C. G. Waldo.

**ELEVATION**—3,945 feet.

**DISTANCE FROM PATHFINDER RESERVOIR**—304 miles.

**DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER AT  
MITCHELL, NEBRASKA, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3- 8	T. C. Palmer.....	582.10	2.14	1.45	1248.70
3-24	T. C. Palmer.....	472.60	2.18	1.05	1004.10
4-12	T. C. Palmer.....	419.80	2.01	0.90	842.90
4-20	T. C. Palmer.....	724.90	2.29	1.75	1658.20
4-29	T. C. Palmer.....	1046.20	2.35	2.15	2461.60
5-11	T. C. Palmer.....	743.50	2.40	1.85	1788.50
6- 7	Palmer-Atkins .....	2219.00	3.37	3.90	7475.30
6- 8	Palmer-Atkins .....	2652.60	3.55	4.25	9403.70
6-21	T. C. Palmer.....	7578.90	3.05	5.78	22962.90
7- 6	T. C. Palmer.....	983.60	3.30	1.30	3251.60
7-11	John K. Rohrer.....	.....	.....	1.00	2570.00
7-22	A. H. Atkins.....	943.40	3.08	1.42	2908.00
8- 9	T. C. Palmer.....	932.50	2.94	1.30	2739.80
8-19	T. C. Palmer.....	473.00	2.47	.80	1173.60
8-30	T. C. Palmer.....	405.60	2.06	0.30	833.00
9-27	T. C. Palmer.....	647.10	2.52	0.70	1629.70
10- 6	T. C. Palmer.....	654.40	2.51	0.82	1642.80
10-27	T. C. Palmer.....	601.20	2.24	0.65	1346.60
11- 9	T. C. Palmer.....	494.30	2.30	0.45	1137.80
11-30	T. C. Palmer.....	403.90	2.26	0.35	912.40

**DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER AT  
MITCHELL, NEBRASKA, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-22	T. C. Palmer.....	623.8	2.23	0.75	1394
4- 7	T. C. Palmer.....	380.8	2.08	0.52	772
5- 3	T. C. Palmer.....	445.9	1.86	0.50	831
5-10	T. C. Palmer.....	979.1	2.95	1.90	2891
5-18	T. C. Palmer.....	1875.2	3.67	3.25	6889
5-24	T. C. Palmer.....	1710.4	2.94	2.75	5034
6- 3	T. C. Palmer.....	1540.0	3.41	2.75	5246
6- 7	T. C. Palmer.....	995.9	3.14	2.21	3124
6-14	T. C. Palmer.....	597.8	2.68	1.50	1606
7-14	T. C. Palmer.....	569.0	2.45	1.50	1394
7-21	T. C. Palmer.....	269.7	1.99	0.80	537
8-14	A. E. Johnston.....	389.0	1.80	1.15	703
8-24	T. C. Palmer.....	230.6	1.91	0.70	441
8-31	T. C. Palmer.....	536.2	2.32	1.10	1245
9-13	Palmer-Easterday .....	169.0	1.59	0.39	269
9-18	T. C. Palmer.....	284.0	1.79	0.60	509
9-27	T. C. Palmer.....	2258.4	1.88	0.63	485

DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
 AT MITCHELL, NEBRASKA, FOR YEAR 1921

Day	April	May	June	July	August	Sept.	Oct.	Nov.
1	900	2,300	3,000	2,600	3,500	700	1,900	1,100
2	900	2,200	3,000	2,600	3,800	600	1,500	1,100
3	850	2,200	3,200	2,700	4,200	650	1,350	1,100
4	800	1,700	4,500	2,700	3,800	700	1,350	1,050
5	850	1,700	5,100	2,800	3,800	650	1,350	1,050
6	900	1,650	5,900	2,900	3,300	650	1,350	1,050
7	800	1,650	7,500	2,900	3,000	800	1,350	1,050
8	900	1,650	8,800	2,800	2,850	850	1,500	1,050
9	900	1,600	12,200	2,600	2,800	900	1,500	1,100
10	900	1,700	13,700	2,400	2,050	1,000	1,500	1,050
11	850	1,850	14,300	2,400	1,800	900	1,400	1,000
12	850	1,700	14,800	2,700	1,800	850	1,500	1,000
13	850	1,600	14,800	2,600	1,750	850	1,500	1,000
14	800	1,350	15,400	2,500	1,650	850	1,500	1,000
15	900	1,300	16,800	2,400	1,500	800	1,500	900
16	900	1,250	17,000	2,350	1,350	800	1,400	900
17	850	1,450	23,600	2,350	2,600	700	1,350	900
18	900	1,600	23,200	2,350	2,050	850	1,400	900
19	900	1,600	21,800	2,350	1,500	1,000	1,350	900
20	1,600	1,600	20,500	3,600	1,150	1,000	1,500	900
21	1,950	1,600	19,500	2,500	1,050	800	1,400	900
22	1,200	1,600	17,500	3,000	1,100	1,000	1,400	900
23	1,200	1,600	15,700	2,600	1,150	1,050	1,400	900
24	1,350	1,450	13,900	2,600	1,050	1,100	1,350	900
25	1,500	5,400	12,100	2,600	1,050	1,150	1,200	900
26	1,600	3,900	10,300	3,300	1,050	1,200	1,200	900
27	2,100	4,200	9,400	3,100	1,050	1,350	1,250	900
28	2,350	3,700	7,500	3,100	1,000	1,700	1,250	900
29	2,450	3,000	5,500	2,900	1,000	1,500	1,250	900
30	2,350	2,600	4,900	3,100	850	1,900	1,200	900
31	.....	2,200	.....	3,200	700	.....	1,100	.....
Total	36,150	64,900	365,400	84,600	61,300	28,850	43,050	29,100
Mean	1,205	2,093	12,180	2,729	1,977	961	1,388	970
Acre Feet	71,703	128,729	724,770	167,804	121,589	57,224	85,390	57,720
Maximum	2,450	5,400	23,600	3,300	4,200	1,900	1,900	1,100
Minimum	800	1,250	3,000	2,350	700	600	1,100	900

DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
 AT MITCHELL, NEBRASKA, FOR YEAR 1922

Day	April	May	June	July	August	September
1	950	900	6,300	2,000	1,600	525
2	900	900	5,300	2,150	1,600	450
3	900	800	5,200	2,100	1,650	400
4	850	800	4,800	2,250	1,700	350
5	800	800	4,500	2,400	1,500	300
6	800	900	3,200	1,900	1,450	300
7	800	950	2,900	1,800	1,350	350
8	900	1,000	2,700	1,600	1,250	300
9	850	1,200	2,400	1,600	1,250	290
10	850	2,700	2,200	1,600	1,200	270
11	900	3,100	1,900	1,600	1,100	260
12	950	5,600	1,700	1,450	1,050	250
13	950	5,700	1,650	1,400	950	255
14	950	5,700	1,600	1,350	820	210
15	950	5,800	1,500	1,200	700	250
16	900	6,300	1,200	900	650	260
17	900	6,700	1,400	620	600	280
18	900	6,850	1,500	510	550	300
19	900	7,350	1,700	600	550	260
20	900	8,000	1,700	510	550	270
21	850	8,000	1,800	450	550	260
22	850	7,500	1,800	300	400	300
23	850	7,000	1,850	475	400	300
24	850	6,000	1,800	650	400	300
25	850	4,500	1,850	1,100	300	300
26	950	4,200	1,900	1,050	350	350
27	1,000	6,700	1,900	1,200	400	350
28	950	6,700	1,950	1,250	425	300
29	900	6,700	2,000	1,200	410	260
30	900	6,000	2,100	1,500	400	300
31	.....	6,300	.....	1,500	700	.....
Total	26,750	141,550	74,300	40,215	26,805	9,140
Mean	891	4,566	2,476	1,297	864	304
Acre Feet	53,061	280,778	147,381	79,766	53,168	18,129
Maximum	1,000	8,000	6,300	2,400	1,700	525
Minimum	800	800	1,200	300	300	210

**NORTH PLATTE RIVER AT MELBETA-MINATARE, NEBRASKA**  
**1921-1922**

**LOCATION**—On highway bridge between Melbeta and Minatare.  
**GAGE**—Vertical staff fastened to first concrete pier of bridge on south end on down stream side.

**BENCH MARK**—No bench mark data is at hand concerning this gage. However, it will be referred to bench marks and information concerning its location and datum will be on file in the Department of Public Works.

**OBSERVERS**—Earnest Zehner, 1921. J. E. Hood, 1922.

**GENERAL**—The conditions at this station are fair. The gagings at this station were interrupted by the loss of four spans during the June flood of 1920, however, gage heights were reported without a break during the seasons 1921 and 1922.

**ELEVATION**—3,820 feet.

**DISTANCE FROM PATHFINDER RESERVOIR**—322 miles.

**DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER AT  
 MELBETA, NEBRASKA, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-23	T. C. Palmer.....	503.60	2.30	1.05	1158.20
4- 7	T. C. Palmer.....	415.00	2.49	0.95	1035.70
4-11	T. C. Palmer.....	497.30	2.04	1.02	1012.50
4-20	T. C. Palmer.....	512.80	2.96	1.32	1517.90
4-28	T. C. Palmer.....	879.90	2.97	1.50	2618.30
5-18	T. C. Palmer.....	683.80	2.65	1.20	1813.30
5-28	T. C. Palmer.....	1103.90	2.93	1.60	3240.10
6- 3	T. C. Palmer.....	1127.10	3.27	1.70	3688.50
6- 6	Palmer-Atkins .....	1859.30	3.92	2.40	7289.70
6- 9	Palmer-Atkins .....	2480.20	4.96	3.10	12299.80

DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER AT  
MELBETA, NEBRASKA, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-23	T. C. Palmer.....	269.6	2.09	1.00	1614
4- 7	T. C. Palmer.....	614.0	2.20	0.95	1326
5- 5	T. C. Palmer.....	567.6	1.66	0.90	947
5-20	T. C. Palmer.....	2680.5	3.81	2.70	10212
5-25	T. C. Palmer.....	2232.2	3.80	2.05	6705
5-29	T. C. Palmer.....	2623.6	3.33	2.35	8745
6- 8	T. C. Palmer.....	1433.8	3.04	1.40	4364
6-15	T. C. Palmer.....	674.0	2.71	0.85	1803
7- 3	T. C. Palmer.....	1113.0	2.62	1.30	2938
7-15	T. C. Palmer.....	796.7	2.11	1.05	1686
7-22	T. C. Palmer.....	305.3	1.80	0.65	550
7-25	T. C. Palmer.....	619.2	1.91	0.85	1186
8- 2	A. E. Johnson.....	1161.8	2.56	1.35	2985
8-25	T. C. Palmer.....	333.3	1.64	0.55	548
8-30	McPherren-Palmer .....	414.3	1.58	0.60	637
9-14	Palmer-Easterday .....	151.0	2.77	0.48	418
9-16	T. C. Palmer.....	402.4	1.69	0.55	682
9-19	T. C. Palmer.....	359.9	1.84	0.55	662
9-28	T. C. Palmer.....	470.7	1.59	0.70	752

**DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT MELBETA, NEBRASKA, FOR YEAR 1922**

Day	April	May	June	July	August	September
1	1,200	1,400	8,000	2,000	2,900	1,300
3	1,200	1,000	7,800	2,500	2,900	900
5	1,200	1,500	7,800	3,000	2,700	680
7	1,200	1,000	7,700	2,700	2,500	450
9	1,200	1,300	6,700	2,700	2,700	350
11	1,200	1,000	5,700	2,400	2,900	450
13	1,300	1,400	5,500	2,000	2,700	450
15	1,300	1,300	5,000	1,900	2,100	550
17	1,300	1,300	3,500	1,900	1,900	550
19	1,300	2,600	2,700	1,700	1,900	550
21	1,300	4,600	2,500	1,700	1,400	620
23	1,300	4,150	2,200	1,500	1,300	550
25	1,300	5,500	2,100	1,700	1,300	550
27	1,200	4,900	2,000	1,700	1,000	450
29	1,200	6,500	1,800	1,500	900	450
31	1,200	6,700	1,500	1,500	800	450
1	1,100	6,900	1,100	1,300	800	450
3	1,100	7,200	1,500	1,000	800	450
5	1,100	7,700	1,600	800	700	620
7	1,100	7,700	2,400	800	700	550
9	1,100	8,000	2,600	800	620	550
11	1,200	8,000	2,800	700	550	620
13	1,300	9,000	2,400	600	620	620
15	1,350	8,500	1,800	700	620	700
17	1,350	7,200	1,600	1,050	550	700
19	2,300	7,700	1,200	1,900	450	800
21	2,300	8,200	1,800	3,000	450	900
23	1,800	8,000	1,950	3,000	620	900
25	1,400	8,500	2,400	2,900	620	800
27	1,400	8,000	1,900	2,500	620	800
29	.....	8,000	.....	2,700	700	.....
Total	39,800	164,750	99,550	56,150	40,020	18,760
Mean	1,327	5,315	3,318	1,811	1,290	625
Acre Feet	78,943	326,782	197,457	111,373	79,379	37,210
Maximum	2,300	9,000	8,000	3,000	2,900	300
Minimum	1,100	1,000	1,100	600	450	350

**NORTH PLATTE RIVER AT BRIDGEPORT, NEBRASKA, 1921-1922**

**OBSERVER**—Automatic Recorder.

**LOCATION**—One-half mile north of town on the public road in Section 28, Township 20 North, Range 50 West.

**GAGE**—Painted rod fastened in a concrete well on down-stream side at north end of concrete bridge.

**BENCH MARKS**—No. 1, a six-inch by six-inch stone marked U. S. & G. S. located in the northeast quarter of Section 32, Township 20 North, Range 50 West of the 6th P. M., 30 feet east of east gate of stock yards and 300 feet northwest of northwest corner of public school building. Elevation, 9.94 feet. No. 2, the regular aluminum U. S. G. B. M. cap set in a 28-inch stone, top of which is filled with concrete to form a truncated pyramid, located about fifty feet south and a little east of the northeast corner of lot four, block two, Riverside Addition to Bridgeport. Elevation, 11.32 feet. The concrete well constructed in second concrete pier of wagon bridge from the north end. The gage rod fastened on the inside of the well, zero of which is 15.18 feet below the top of the northwest corner of iron frame of door. Stevens' Long Distance Water Recorder has been in operation at this station since June, 1917.

**CHANNEL**—The river channel narrows to 700 feet at the gage section, and widens to 3,000 feet one-half mile below.

**ACCURACY**—It is difficult to obtain satisfactory results at this station during flood periods because of the narrowed section and the shifting conditions of the sandy bed.

**OBSERVER**—Automatic.

**ELEVATION**—3,675 feet.

**DISTANCE FROM PATHFINDER RESERVOIR**—341 miles.

DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER  
AT BRIDGEPORT, NEBRASKA, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3- 4	T. C. Palmer.....	1005.80	1.70	5.95	1711.10
3-25	T. C. Palmer.....	887.60	1.62	5.93	1437.00
4- 8	T. C. Palmer.....	643.00	1.64	5.88	1051.00
4-21	T. C. Palmer.....	947.90	1.81	6.18	1719.80
4-22	T. C. Palmer.....	1107.90	1.84	6.30	2040.47
5- 9	T. C. Palmer.....	1065.60	1.98	6.22	2106.00
5-23	T. C. Palmer.....	1129.90	1.93	6.30	2188.50
5-26	T. C. Palmer.....	2500.00	2.66	7.47	6668.70
6- 4	T. C. Palmer.....	1775.00	2.34	6.75	4155.90
6-10	Palmer-Atkins .....	4246.10	3.25	8.17	13807.40
6-15	A. H. Atkins.....	4323.40	3.18	8.45	13757.50
6-17	A. H. Atkins.....	4531.40	3.69	8.87	16737.80
6-19	Palmer-Atkins .....	5286.70	4.06	8.90	21453.10
6-29	T. C. Palmer.....	2465.70	2.52	6.75	6217.40
7- 1	A. H. Atkins.....	1852.90	2.85	6.50	5278.70
7-11	John K. Rohrer.....	.....	.....	5.75	2410.00
7-20	A. H. Atkins.....	1242.40	2.31	6.02	2879.40
8- 6	A. H. Atkins.....	1526.70	2.46	6.40	3762.90
8-13	T. C. Palmer.....	785.15	2.13	5.70	1678.80
9- 2	T. C. Palmer.....	789.30	1.69	5.60	1384.60
9-15	T. C. Palmer.....	858.90	1.88	5.70	1611.80
9-23	T. C. Palmer.....	1016.60	2.09	5.90	2113.10
10- 3	T. C. Palmer.....	1332.10	2.03	6.15	2708.00
10-24	T. C. Palmer.....	1202.10	1.82	5.90	2191.50
11-25	T. C. Palmer.....	902.60	1.79	5.70	1619.90

DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER  
AT BRIDGEPORT, NEBRASKA, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-20	T. C. Palmer.....	797.2	1.71	5.90	1367
4- 4	Palmer-Johnston .....	591.3	1.85	5.85	1092
5-29	T. C. Palmer.....	877.9	1.71	5.95	1503
5-13	A. E. Johnston.....	1765.6	2.84	6.90	5028
5-15	T. C. Palmer.....	1913.9	2.50	6.90	4793
5-19	T. C. Palmer.....	2526.4	2.66	7.35	6716
5-26	T. C. Palmer.....	1994.3	2.40	6.90	4799
6- 9	T. C. Palmer.....	1333.3	2.48	6.37	3244
6-16	T. C. Palmer.....	781.2	1.94	5.65	1515
6-22	T. C. Palmer.....	837.1	1.94	5.80	1626
7-18	A. E. Johnston.....	866.0	1.31	5.80	1132
7-18	T. C. Palmer.....	711.3	1.67	5.80	1187
7-26	T. C. Palmer.....	800.2	1.96	5.75	1574
8-15	A. H. Atkins.....	730.7	1.91	5.70	1402
8-21	A. E. Johnston.....	445.3	1.51	5.45	676
8-21	A. E. Johnston.....	480.5	1.59	5.45	765
9- 4	T. C. Palmer.....	459.7	1.51	5.40	696
9-13	A. E. Johnston.....	653.5	1.67	5.48	1093
9-15	Palmer-Easterday .....	536.4	1.58	5.40	487
9-25	T. C. Palmer.....	509.7	1.50	5.50	903
10- 1	A. E. Johnston.....	506.4	1.95	5.50	987

DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT BRIDGEPORT, NEBRASKA, FOR YEAR 1921

Day	March	April	May	June	July	August	Sept.	Oct.	Nov.
1	.....	1,350	2,400	4,800	5,200	3,200	1,700	2,200	1,800
2	.....	1,350	2,400	3,100	4,400	4,100	1,700	2,850	1,700
3	1,600	1,350	2,400	3,700	4,400	4,100	1,500	2,850	1,700
4	1,500	1,350	2,300	3,400	5,200	4,000	1,500	2,400	1,600
5	1,500	1,350	2,100	5,600	5,200	4,000	1,500	2,400	1,700
6	1,500	1,350	2,000	5,200	3,900	3,600	1,500	2,400	1,700
7	1,500	1,350	1,800	6,100	3,100	3,200	1,500	2,400	1,700
8	1,500	1,350	1,800	8,900	2,900	3,100	1,500	2,400	1,700
9	1,500	1,350	1,900	10,600	2,700	2,800	1,500	2,400	1,700
10	1,500	1,350	1,900	14,000	2,200	2,500	1,500	2,400	1,700
11	1,500	1,350	1,900	17,400	2,300	1,700	1,600	2,200	1,700
12	1,500	1,350	1,900	16,900	2,200	2,000	1,700	2,200	1,700
13	1,500	1,350	1,900	17,400	2,100	1,600	1,800	2,200	1,700
14	1,500	1,350	1,800	15,600	2,100	1,450	1,950	2,200	1,700
15	1,500	1,350	1,700	15,600	2,100	1,900	1,800	2,200	1,700
16	1,500	1,350	1,600	16,900	2,100	1,600	1,700	2,200	1,700
18	1,500	1,400	1,700	16,400	2,300	1,400	1,800	2,400	1,700
19	1,500	1,400	1,900	23,000	2,200	1,600	1,800	2,400	1,700
20	1,400	1,400	2,000	18,700	2,300	1,600	2,000	2,400	1,700
21	1,350	1,800	2,000	18,100	2,400	1,400	2,000	2,400	1,700
22	1,350	2,100	2,000	18,700	2,500	1,400	1,800	2,400	1,700
23	1,350	1,800	2,100	19,100	2,900	1,400	1,800	2,400	1,600
24	1,350	1,900	2,600	17,200	3,000	1,400	1,950	2,200	1,600
25	1,400	2,000	2,600	15,100	3,200	1,400	1,800	2,200	1,600
26	1,400	2,100	6,600	15,100	3,200	1,600	1,800	2,200	1,600
27	1,400	2,100	3,900	15,100	3,200	1,600	1,800	2,000	1,600
28	1,400	2,200	3,200	15,100	3,200	1,600	1,700	2,000	1,600
29	1,400	2,300	2,900	7,000	3,300	1,600	1,700	2,000	1,600
30	1,350	2,400	2,800	6,200	2,800	1,800	1,700	2,000	1,600
31	1,350	.....	2,400	.....	2,800	1,700	.....	1,800	.....
Total	42,100	47,900	72,300	386,400	93,700	67,750	51,300	71,000	50,200
Mean	1,358	1,596	2,332	12,880	3,022	2,185	1,710	2,290	1,673
Acre Feet	83,505	95,010	143,407	766,424	185,853	134,382	101,753	140,828	99,572
Maximum	1,600	2,400	6,600	23,000	5,200	4,100	2,000	2,850	1,800
Minimum	1,350	1,350	1,600	3,100	2,100	1,400	1,500	1,800	1,600

**DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT BRIDGEPORT, NEBRASKA, FOR YEAR 1922**

Day	April	May	June	July	August	September
1	1,150	1,000	6,400	1,850	2,600	800
2	1,150	1,000	6,600	1,700	2,600	1,000
3	1,150	900	6,300	1,700	2,600	800
4	1,150	900	6,100	2,250	2,600	800
5	1,150	900	5,900	2,150	2,600	750
6	1,000	900	5,400	2,250	2,600	750
7	1,150	900	4,800	2,400	2,600	750
8	1,150	1,000	4,600	2,250	2,400	500
9	1,150	1,000	3,200	2,400	2,250	750
10	1,150	1,000	3,100	2,400	2,000	800
11	1,000	1,500	2,900	2,400	1,850	800
12	1,000	1,700	2,900	2,400	1,700	900
13	1,150	4,300	2,150	2,400	1,300	800
14	1,150	4,800	1,700	2,400	1,300	800
15	1,350	4,800	1,300	2,400	1,300	750
16	1,350	5,000	1,200	2,300	1,450	750
17	1,350	5,500	1,000	2,250	1,300	800
18	1,500	6,300	800	1,700	1,150	800
19	1,500	6,700	900	1,450	1,000	900
20	1,500	7,000	1,100	1,250	800	900
21	1,350	7,400	1,300	1,150	750	900
22	1,350	7,600	1,500	1,000	750	800
23	1,350	7,500	1,500	750	600	900
24	1,150	6,100	1,500	600	600	800
25	1,150	5,900	1,500	600	500	900
26	1,150	5,400	1,500	1,000	500	900
27	1,900	5,000	1,500	1,450	430	900
28	2,100	5,700	1,700	2,400	430	1,000
29	2,100	6,600	1,850	2,400	430	1,000
30	1,150	6,800	1,850	2,600	600	800
31	.....	6,800	.....	2,600	600	.....
Total	38,950	127,900	84,050	58,850	42,890	24,700
Mean	1,298	4,126	2,801	1,898	1,383	823
Acre Feet	77,257	253,690	166,713	116,729	85,072	48,992
Maximum	2,100	7,600	6,600	2,600	2,600	1,000
Minimum	1,000	900	800	600	430	500

**NORTH PLATTE RIVER AT BROADWATER, NEBRASKA, 1921-1922**

**LOCATION**—At highway bridge about three-quarters of a mile south of Broadwater.

**GAGE**—Wooden staff nailed to a pile in the abutment on the up-stream side of the bridge at the north end.

**BENCH MARKS**—On nail driven in base of second telephone pole north of river on east side of highway. Elevation, 100.34 feet. Top of bolt driven in ground one foot west of above described telephone pole. Elevation, 100.00. Elevation of zero of gage is 9357.

**CHANNEL**—Straight for about one mile above and one mile below the gage section. The section has been narrowed somewhat by the construction of bridge approach of earth.

**ACCURACY**—Very satisfactory results are obtainable at this station, considering the shifting condition of the sandy bed.

**GENERAL**—The width of the section is 1,800 feet, making actual measurements fairly accurate.

**OBSERVERS**—Thomas Osborne, 1921. Glen Haistons, 1922.

**ELEVATION**—3,620 feet.

**DISTANCE FROM PATHFINDER RESERVOIR**—360 miles.

**DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER  
AT BROADWATER, NEBRASKA, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
4- 9	T. C. Palmer.....	757.5	1.87	2.32	1416
4-21	T. C. Palmer.....	892.9	1.73	2.38	1543
4-23	T. C. Palmer.....	1228.9	1.70	2.54	2089
5-24	T. C. Palmer.....	1938.1	2.04	2.82	3949
5-27	T. C. Palmer.....	2497.0	2.28	3.01	5701
6-11	Palmer-Atkins .....	5148.3	3.41	4.14	17522
6-16	A. H. Atkins.....	5770.8	3.51	4.39	20272
6-18	A. H. Atkins.....	5666.6	3.66	4.44	20751
7- 2	A. H. Atkins.....	2605.8	2.69	2.79	6738
7-13	John K. Rohrer.....	.....	2.69	2.52	3041
7-25	A. H. Atkins.....	1889.1	2.26	2.42	8135
8- 8	A. H. Atkins.....	1778.2	2.84	2.65	4155
8-15	T. C. Palmer.....	1329.7	1.54	2.32	2051
9- 8	T. C. Palmer.....	871.5	1.70	2.25	1483
9-16	T. C. Palmer.....	1163.0	1.66	2.35	1929
10- 4	T. C. Palmer.....	1504.7	1.93	2.50	2900

DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT BROADWATER, NEBRASKA, FOR YEAR 1921

Day	April	May	June	July	August	Sept.	Oct.	
1	.....	2,900	6,800	6,950	3,700	1,800	2,200	
2	.....	2,900	3,800	5,650	5,200	1,800	2,200	
3	.....	2,900	5,700	5,650	4,700	1,600	2,200	
4	.....	2,625	4,700	6,600	3,700	1,650	2,900	
5	.....	2,350	5,700	5,650	4,200	1,700	2,550	
6	.....	2,150	6,800	4,700	4,700	1,750	2,200	
7	.....	2,150	10,100	4,700	4,200	1,700	2,200	
8	.....	1,950	11,100	3,700	3,900	1,900	2,100	
9	.....	1,950	14,200	3,700	3,900	1,700	2,100	
10	.....	1,950	16,400	3,700	3,900	1,800	2,050	
11	.....	1,950	17,500	3,700	3,800	1,700	2,050	
12	.....	1,800	18,300	3,700	2,250	1,550	2,050	
13	.....	1,400	18,300	3,700	2,100	1,400	2,050	
14	.....	1,400	19,400	2,500	1,750	1,400	.....	
15	.....	1,000	18,000	2,250	1,800	1,450	.....	
16	.....	1,400	19,500	2,200	1,800	1,525	.....	
17	.....	1,200	21,500	2,250	1,800	1,525	.....	
18	.....	1,400	24,000	2,200	1,800	1,550	.....	
19	.....	1,400	2625	25,800	2,300	1,800	1,550	
20	.....	1,500	2,600	21,500	2,900	1,750	1,550	
21	.....	1,400	2,600	22,600	2,525	1,750	1,550	
22	.....	3,250	2,600	23,700	2,200	6,600	1,550	
23	.....	1,950	2,600	23,700	2,250	1,800	1,550	
24	.....	1,950	5,200	20,900	2,250	1,750	1,750	
25	.....	1,950	2,100	17,700	2,225	1,900	2,000	
26	.....	2,150	2,350	16,700	2,850	1,750	2,220	
27	.....	2,150	5,700	14,000	3,200	1,750	2,200	
28	.....	2,350	4,700	11,700	3,700	1,800	2,200	
29	.....	2,900	3,800	10,300	4,600	1,750	2,200	
30	.....	2,900	2,900	7,500	6,600	1,800	2,200	
31	.....	2,900	.....	3,700	1,800	.....	.....	
Total	.....	33,650	81,950	460,150	114,800	87,200	52,000	28,850
Mean	.....	1,869	2,643	15,338	3,703	2,813	1,733	2,219
Acre Feet	.....	66,745	162,458	912,708	227,705	172,961	103,142	57,224
Maximum	.....	2,900	5,200	25,800	6,950	6,600	2,200	2,900
Minimum	.....	1,000	1,600	3,800	2,200	1,750	1,400	2,050

DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER  
AT BROADWATER, NEBRASKA, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-24	T. C. Palmer.....	1251.3	1.61	2.35	2018
4- 4	Palmer-Johnston .....	821.3	1.62	2.32	1333
4-29	A. E. Johnston.....	1263.5	1.56	2.40	1981
5-12	A. E. Johnston.....	1778.2	2.22	2.70	3955
5-22	T. C. Palmer.....	3881.9	2.68	3.60	10895
5-27	A. E. Johnston.....	2926.8	2.38	3.00	6980
6-12	A. E. Johnston.....	1209.2	1.95	2.50	2355
6-28	A. E. Johnston.....	1102.2	1.82	2.30	2002
7-12	A. E. Johnston.....	1087.7	1.67	2.40	1824
7-31	A. E. Johnston.....	1381.0	1.45	2.50	2700
8-15	A. E. Johnston.....	364.2	2.59	2.20	945
9- 4	A. H. Atkins.....	565.7	1.88	2.00	1066
9-12	A. E. Johnston.....	878.4	1.48	2.10	1804
9-15	A. E. Johnston.....	615.1	1.45	2.10	897
9-22	A. E. Johnston.....	752.9	1.54	2.05	1164

DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT BROADWATER, NEBRASKA, FOR YEAR 1922

Day	April	May	June	July	August	September
1	1,500	1,900	8,900	1,500	2,600	600
2	1,500	1,500	8,900	1,900	2,950	550
3	1,500	1,100	6,800	2,200	3,300	600
4	1,500	1,400	6,100	2,050	2,600	600
5	1,500	1,400	6,100	1,900	2,600	600
6	1,800	1,100	6,100	1,900	2,600	600
7	2,300	1,700	5,400	1,900	2,600	600
8	1,800	1,900	4,000	1,500	2,600	600
9	1,500	1,700	4,000	1,700	1,950	600
10	1,500	1,500	3,800	1,700	1,500	600
11	1,400	850	2,950	1,700	1,500	600
12	1,400	4,000	2,600	1,900	1,500	600
13	1,900	6,100	1,900	1,700	1,500	600
14	1,850	6,100	1,500	1,500	1,500	600
15	1,500	6,100	1,100	1,500	1,100	600
16	1,500	6,100	850	1,500	1,100	600
17	1,500	8,200	620	1,500	1,100	600
18	1,500	8,200	900	1,500	1,100	600
19	1,400	8,200	1,200	1,100	1,100	600
20	1,500	9,800	1,500	1,100	1,000	600
21	1,500	9,600	1,500	1,100	900	500
22	1,500	10,300	1,500	1,100	800	500
23	1,500	9,600	1,300	850	700	750
24	1,500	9,000	1,300	850	600	750
25	1,500	8,000	1,300	850	450	750
26	1,900	6,800	1,300	1,500	350	800
27	2,600	6,100	1,300	1,900	400	800
28	2,600	8,200	1,700	2,600	400	800
29	1,900	9,000	1,500	2,950	450	800
30	1,900	8,200	1,500	2,950	500	800
31	.....	9,600	.....	2,600	600	.....
Total	50,250	172,750	88,920	52,500	44,050	19,200
Mean	1,675	5,572	2,964	1,693	1,420	640
Acre Feet	99,671	342,822	176,373	104,134	87,373	38,088
Maximum	2,600	10,300	8,900	2,950	3,300	800
Minimum	1,400	850	620	850	350	500

**NORTH PLATTE RIVER AT BELMAR, NEBRASKA, 1921-1922**

**LOCATION**—Highway bridge south of Belmar.

**GAGE**—Vertical staff nailed to the down-stream pile of the north abutment of bridge.

**OBSERVER**—James Pratt, 1921-1922.

**GENERAL**—The river at this section is narrowed to 2,190 feet. Fairly accurate measurements are obtainable here.

**ELEVATION**—3,230 feet.

**DISTANCE FROM PATHFINDER RESERVOIR**—410 miles.

**DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER  
AT BELMAR, NEBRASKA, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-31	T. C. Palmer.....	1064.4	1.70	1.10	1810
4-14	T. C. Palmer.....	890.8	1.54	1.05	1376
5- 4	T. C. Palmer.....	1805.0	1.87	1.35	3371
6-22	T. C. Palmer.....	6618.4	3.28	3.50	21686
6-29	A. H. Atkins.....	3815.2	2.76	2.25	10520
7- 6	A. H. Atkins.....	1533.8	2.25	1.40	3440
7-16	A. H. Atkins.....	1136.8	2.16	0.98	2459
7-14	John K. Rohrer.....	.....	.....	1.08	2403
7-27	A. H. Atkins.....	1431.2	2.18	1.12	3117
8- 5	A. H. Atkins.....	1861.2	2.37	1.50	4402.
8-11	A. H. Atkins.....	1501.7	2.21	1.32	3432
8-20	A. H. Atkins.....	1202.0	2.00	1.12	2410
8-30	A. H. Atkins.....	1223.1	2.00	1.00	2440
9-14	T. C. Palmer.....	1234.4	1.72	1.08	2126
10-14	T. C. Palmer.....	1470.1	1.81	1.12	2663
11-28	T. C. Palmer.....	1401.6	1.78	1.20	2492

**DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT BELMAR, NEBRASKA, FOR YEAR 1921**

Day	April	May	June	July	August	Sept.	Oct.	Nov.
1	1,450	3,100	5,700	7,900	3,550	1,900	2,550	2,000
2	1,450	3,100	8,800	2,800	3,300	1,850	2,550	2,000
3	1,450	2,800	6,600	4,500	4,500	1,650	2,550	2,000
4	1,450	3,100	7,400	4,350	4,500	1,625	2,700	2,000
5	8,800	2,600	6,150	4,200	4,500	1,600	2,700	2,000
6	2,600	2,600	8,800	4,050	4,500	1,650	2,700	2,000
7	4,600	2,300	8,400	3,900	4,100	1,700	2,575	2,000
8	6,600	2,000	9,650	3,200	3,900	1,750	2,575	2,000
9	1,800	2,000	11,000	2,750	3,550	1,700	2,600	2,000
10	1,800	2,075	13,100	2,350	3,900	1,950	2,600	2,000
11	1,450	2,075	14,900	2,100	3,550	1,950	2,575	2,000
12	1,450	2,075	15,750	1,950	3,300	1,950	2,600	2,000
13	1,650	2,075	16,600	1,950	3,300	2,100	2,600	2,000
14	1,800	2,600	18,000	4,400	3,000	2,100	2,000	2,000
15	1,650	2,300	18,350	1,950	2,750	2,100	2,000	2,000
16	1,650	2,300	19,200	1,900	2,550	2,350	2,000	2,000
17	1,800	1,800	19,200	1,850	2,550	2,350	2,000	2,000
18	1,800	2,300	20,500	1,500	2,550	2,100	2,000	2,000
19	1,800	2,300	20,500	1,500	2,400	2,550	2,000	2,000
20	1,650	2,875	22,600	1,900	2,400	2,350	1,950	2,000
21	1,450	2,600	21,800	1,950	2,400	2,550	2,000	2,000
22	1,300	2,300	22,200	2,300	2,400	2,100	2,000	2,000
23	1,650	2,300	21,800	2,550	2,750	1,950	2,000	2,100
24	2,000	2,300	21,000	3,550	2,550	1,950	2,000	2,100
25	2,300	3,550	19,650	3,300	2,350	2,350	2,000	2,100
26	2,600	5,200	18,000	3,000	2,550	2,550	2,700	2,100
27	2,800	5,700	14,900	2,750	2,400	2,550	2,600	2,200
28	2,800	7,900	13,100	2,750	2,400	2,550	2,575	2,400
29	2,875	4,850	11,000	3,550	2,400	2,550	2,575	2,200
30	2,875	4,850	9,200	3,200	1,950	2,550	2,100	2,300
31	.....	4,850	.....	3,200	1,950	.....	2,100	.....
Total	71,350	94,775	443,850	93,100	94,750	62,925	72,475	61,500
Mean	2,378	3,056	14,795	3,002	3,055	2,098	2,338	2,050
Acre Feet	141,522	187,987	880,376	184,664	187,937	124,812	143,754	121,985
Maximum	8,800	7,900	22,600	7,900	4,500	2,550	2,700	2,400
Minimum	1,300	1,800	5,700	1,500	1,950	1,600	1,950	2,000

**DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER  
AT BELMAR, NEBRASKA, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
4- 6	A. E. Johnston.....	1084.1	1.50	0.95	1554
4-19	A. E. Johnston.....	1291.1	1.59	1.10	2048
5- 2	A. E. Johnston.....	1413.2	1.72	1.40	2429
5-16	A. E. Johnston.....	2716.2	2.15	1.80	5856
6- 1	A. E. Johnston.....	2777.7	2.71	2.15	9491
6-10	A. E. Johnston.....	1932.8	1.97	1.40	3814
6-17	A. E. Johnston.....	782.8	1.63	0.75	1272
6-27	A. E. Johnston.....	969.5	1.59	1.10	1549
7- 2	A. E. Johnston.....	1172.8	1.73	1.10	2023
7-14	A. E. Johnston.....	1096.5	1.64	1.00	1806
7-21	A. E. Johnston.....	788.6	1.55	0.72	1072.
8- 5	A. E. Johnston.....	1588.5	1.94	1.25	3088
8-18	A. E. Johnston.....	837.1	1.53	0.83	1287
9- 1	Johnston-Eylerly .....	651.8	1.40	0.55	916
9-16	Johnston-Easterday .....	705.9	1.30	0.80	919
9-26	A. E. Johnston.....	703.2	1.50	0.83	1061

DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT BELMAR, NEBRASKA, FOR YEAR 1922

Day	April	May	June	July	August	September
1	1,800	2,200	9,500	1,800	2,200	900
2	1,800	1,800	9,000	1,800	2,400	1,000
3	1,500	1,500	10,500	2,300	2,800	1,100
4	1,300	1,050	9,000	3,300	3,000	1,200
5	1,100	1,000	7,500	3,050	2,500	1,000
6	1,100	900	6,700	2,050	2,050	1,000
7	1,050	1,150	6,400	2,300	2,000	750
8	1,100	1,050	6,000	2,550	2,050	700
9	1,000	900	5,200	2,050	2,050	850
10	900	1,150	3,100	1,950	1,900	1,000
11	1,500	1,150	2,300	2,050	1,950	1,100
12	1,500	2,200	2,200	1,950	1,700	1,100
13	1,300	3,300	2,100	1,800	1,300	1,200
14	1,650	5,750	1,800	1,800	1,200	1,200
15	1,300	6,200	1,450	1,600	1,100	1,200
16	1,300	6,200	1,200	1,600	950	1,200
17	1,250	6,700	1,100	1,600	1,000	1,200
18	1,500	7,100	950	1,600	1,100	1,200
19	1,550	7,700	950	1,450	950	1,100
20	1,200	8,100	850	1,200	1,000	1,100
21	1,500	11,000	850	1,050	850	1,100
22	1,200	11,500	1,100	1,000	1,100	1,200
23	1,050	12,000	1,100	950	750	950
24	900	9,900	6,700	1,500	650	1,100
25	1,050	9,900	1,450	1,450	650	1,200
26	1,800	8,100	1,450	1,200	550	1,250
27	2,700	6,700	1,950	1,200	650	1,200
28	3,400	8,100	1,950	1,200	650	1,200
29	2,700	8,100	1,950	2,050	600	1,200
30	2,000	9,900	1,950	2,500	600	1,200
31	-----	9,900	-----	2,700	780	-----
Total	44,500	172,200	108,250	56,600	43,130	32,700
Mean	1,483	5,554	3,608	1,825	1,391	1,090
Acre Feet	88,266	341,559	214,714	112,266	85,548	64,860
Maximum	3,400	12,000	10,500	3,300	3,000	1,250
Minimum	900	900	850	950	550	700

**NORTH PLATTE RIVER AT NORTH PLATTE, NEBRASKA, 1921-1922**

**LOCATION**—At highway bridge one-half mile north of North Platte in Section 28, Township 14 North, Range 30 West, four and one-half miles above the junction with the South Platte.

**RECORD AVAILABLE**—From 1895 to 1909, and 1911 to 1922 for open seasons.

**GAGE**—Vertical staff fastened to pile on south end of wagon bridge north of city on down-stream side. After September 5, 1922, a new staff was fastened to the first telephone pole in the river from the south bank on down-stream side, using same datum as for previous gage staffs.

**DATUM**—For 1916, .35 feet above previous gage.

**OBSERVER**—A. W. Shilling, Jr., 1921-1922.

**BENCH MARK**—No. 1: The top of the southwest corner of the east concrete abutment of the U. P. bridge. Elevation, 8.20 feet above zero of the gage of that section. No. 2: Two square wrought iron nails in the east side of a telephone pole on the west side of the road at the gage at the highway bridge. No. 3: Two nails in each side of a telephone pole on the west side of the road at the south end of the bridge one foot above the ground. Elevation, 7.55 feet above zero of the staff gage at the highway bridge.

**CHANNEL**—Straight for about 500 feet above and below the section at the highway bridge; very shifting.

**ACCURACY**—Only fair because of the shifting nature of the river bed.

**ELEVATION**—2,800 feet.

**DISTANCE FROM PATHFINDER RESERVOIR**—480 miles.

**DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER  
AT NORTH PLATTE, NEBRASKA, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
8- 4	T. C. Palmer.....	1557	2.48	4.10	3867
4- 1	T. C. Palmer.....	1130	2.00	3.50	2259
5- 6	T. C. Palmer.....	1356	2.15	3.85	2919
6-13	T. C. Palmer.....	3845	3.76	5.70	1448
6-15	T. C. Palmer.....	4691	4.09	6.10	19176
6-17	T. C. Palmer.....	5699	3.35	6.10	19080
6-24	A. H. Atkins.....	4945	4.65	6.20	23002
6-28	A. H. Atkins.....	3829	3.72	5.40	14248
7- 9	A. H. Atkins.....	1420	2.56	3.30	3634
7-14	A. H. Atkins.....	1007	2.49	2.78	2514
7-15	.....	.....	.....	6.00	2182
7-30	A. H. Atkins.....	1107	2.72	3.28	3018
8- 2	A. H. Atkins.....	1391	2.82	3.60	3928
8-13	A. H. Atkins.....	1260	2.59	3.50	3266
8-18	A. H. Atkins.....	909	1.28	3.20	2013
10-15	T. C. Palmer.....	1237	2.28	3.60	2756

**DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT NORTH PLATTE, NEBRASKA, FOR YEAR 1921**

Day	April	May	June	July	August	Sept.	Oct.	Nov.
1	2,250	3,150	3,650	6,850	4,600	1,950	2,550	2,450
2	2,100	3,500	3,850	6,200	4,150	2,050	2,650	2,550
3	2,100	3,500	7,400	4,800	3,450	2,050	2,750	2,550
4	2,100	2,650	7,400	4,400	4,800	1,800	2,900	2,550
5	1,900	3,500	6,400	4,400	4,300	1,650	3,050	2,450
6	2,100	3,050	4,800	3,800	4,300	1,650	3,050	2,550
7	2,250	2,900	8,850	4,400	4,100	1,700	2,750	2,550
8	2,250	2,900	8,850	3,900	3,800	1,750	2,550	2,550
9	2,250	2,250	10,400	3,650	3,800	1,650	2,350	2,550
10	2,100	2,450	14,300	3,200	3,450	1,750	2,450	2,550
11	1,900	2,250	14,800	2,800	3,200	1,800	2,550	2,550
12	2,100	2,450	17,300	2,800	2,900	1,800	2,550	2,550
13	1,900	2,650	18,300	2,700	2,700	1,800	2,550	2,450
14	2,000	2,650	18,600	2,600	3,200	1,900	2,550	2,550
15	2,000	2,650	22,700	2,500	3,800	2,050	2,650	2,550
16	2,250	2,800	21,200	2,400	2,700	2,050	2,750	2,550
17	2,250	2,900	22,700	2,500	2,050	2,200	2,750	2,550
18	2,250	2,900	21,200	3,050	1,800	2,200	2,650	2,550
19	2,150	3,150	21,200	2,850	1,775	2,200	2,650	2,050
20	2,100	3,150	24,100	2,500	1,650	2,300	2,550	Ice
21	2,250	3,050	21,200	2,400	1,650	2,300	2,550	Ice
22	2,100	3,150	21,200	2,400	1,650	2,300	2,550	Ice
23	2,000	2,900	22,700	2,450	1,900	2,200	2,650	Ice
24	1,900	2,900	23,200	2,500	1,800	2,200	2,650	Ice
25	3,150	3,500	23,200	2,700	1,700	2,200	2,650	Ice
26	2,900	3,850	20,250	2,850	1,750	2,300	3,050	Ice
27	2,450	3,850	17,600	3,050	2,100	2,350	3,200	Ice
28	2,900	4,800	15,300	2,850	2,100	2,350	2,750	Ice
29	2,900	7,400	12,200	2,850	2,100	2,550	2,550	Ice
30	3,150	7,400	9,500	2,900	2,100	2,550	2,550	Ice
31	-----	3,850	-----	3,100	2,050	-----	2,450	-----
Total	68,000	104,050	462,850	102,350	87,425	61,600	82,850	47,650
Mean	2,267	3,856	15,423	3,301	2,820	2,053	2,672	2,507
Acre Feet	134,878	206,383	918,062	203,011	173,407	122,184	164,333	94,514
Maximum	3,150	7,400	24,100	6,850	4,800	2,550	3,200	2,550
Minimum	1,900	2,250	3,650	2,400	1,650	1,650	2,350	2,050

DISCHARGE MEASUREMENTS, OF NORTH PLATTE RIVER  
AT NORTH PLATTE, NEBRASKA, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-15	T. C. Palmer.....	1688.1	2.52	4.00	4252
4- 8	A. E. Johnston.....	962.5	2.76	3.45	2551
4-20	A. E. Johnston.....	1022.5	1.95	3.50	1997
4-22	T. C. Palmer.....	906.9	2.01	3.50	1823
5- 4	A. E. Johnston.....	1151.2	2.48	3.65	2864
5-18	A. E. Johnston.....	2024.2	2.76	4.50	5594
5-25	A. E. Johnston.....	2984.3	3.48	5.00	10390
6- 3	A. E. Johnston.....	4600.8	1.99	4.80	9164
6- 8	A. E. Johnston.....	2002.0	2.99	4.30	5996
6-20	A. E. Johnston.....	550.4	1.76	2.50	972
6-26	A. E. Johnston.....	535.4	1.67	2.50	898
7- 5	A. E. Johnston.....	1147.5	2.72	3.60	2934
7-10	A. E. Johnston.....	1043.5	2.30	3.50	2406
7-24	A. E. Johnston.....	805.8	2.08	3.10	1676
7-28	A. E. Johnston.....	719.3	2.06	3.00	1484
8- 8	A. E. Johnston.....	833.1	3.03	3.50	2532
8-11	A. E. Johnston.....	1136.8	2.10	3.55	2395
8-29	A. E. Johnston.....	845.8	1.52	2.50	527
9- 5	Johnston-Eyerly .....	674.5	0.59	2.50	402
9- 9	A. E. Johnston.....	380.6	1.66	2.85	632
9-18	Johnston-Easterday .....	620.4	1.74	2.96	1080
9-26	A. E. Johnston.....	583.5	1.79	3.00	1046

DISCHARGE MEASUREMENTS, OF NORTH PLATTE,  
FOR YEAR 1922  
NORTH PLATTE RIVER AT HENRY, NEBRASKA

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9-11	Palmer-Easterday .....	554.4	1.93	.....	1075

DAILY DISCHARGE, IN SECOND FEET, OF NORTH PLATTE RIVER  
AT NORTH PLATTE, NEBRASKA, FOR YEAR 1922

Date	March	April	May	June	July	August	Sept.	Oct.
1	.....	2,400	3,700	8,600	2,900	2,750	275	1,250
2	.....	2,400	3,150	9,150	2,750	2,400	275	1,250
3	.....	2,400	3,150	9,150	1,900	2,400	450	1,250
4	.....	2,400	2,700	8,600	1,900	4,800	450	1,250
5	.....	2,400	2,400	8,600	2,750	4,250	450	1,250
6	.....	2,400	1,900	7,500	2,750	3,200	900	1,250
7	.....	2,100	1,700	5,900	1,900	2,750	900	1,250
8	.....	2,100	1,700	5,900	2,400	2,750	900	1,650
9	.....	2,100	1,700	5,300	2,150	2,400	750	1,650
10	.....	3,100	1,900	3,700	2,150	2,200	750	1,400
11	.....	2,400	1,900	3,150	2,750	2,150	750	1,400
12	.....	2,400	2,150	2,700	2,150	1,900	600	1,400
13	8,100	2,400	1,900	2,400	1,700	1,650	900	1,650
14	6,150	2,400	3,700	1,900	1,700	1,250	900	1,900
15	4,750	2,400	4,750	1,900	1,500	1,050	1,050	1,900
16	4,750	2,400	7,500	1,350	1,500	1,050	1,050	1,900
17	4,750	2,400	7,000	1,250	2,150	1,050	900	2,100
18	3,700	2,400	7,000	1,250	2,150	750	900	2,100
19	3,700	2,400	7,000	1,100	1,700	750	1,050	2,100
20	3,700	2,400	8,100	950	1,700	500	1,050	2,100
21	2,550	2,400	9,750	950	1,500	500	1,050	2,100
22	2,550	2,400	9,750	950	1,350	500	1,050	2,400
23	2,400	2,400	10,300	950	1,000	500	1,050	2,400
24	2,400	2,100	10,800	950	1,250	750	1,050	2,400
25	2,550	2,400	10,300	850	750	500	900	2,400
26	2,550	2,400	8,600	850	1,350	450	900	2,400
27	2,700	4,750	8,100	1,250	1,350	450	1,050	2,400
28	2,400	4,750	7,000	1,900	1,250	450	1,050	2,400
29	2,400	5,300	6,400	1,250	1,500	275	1,250	.....
30	2,400	4,250	8,600	1,250	2,900	275	1,250	.....
31	2,400	.....	9,750	.....	2,900	275	.....	.....
Total	66,900	79,950	175,770	101,050	59,650	46,925	25,850	50,900
Mean	8,521	2,665	5,670	3,883	1,924	1,513	861	1,817
Acre Feet	132,696	158,581	348,640	201,335	118,316	93,076	51,273	100,960
Maximum	8,100	5,300	10,800	9,150	2,900	4,800	1,250	2,400
Minimum	2,400	2,100	1,700	850	750	275	275	1,250

**SOUTH PLATTE RIVER AT NORTH PLATTE, NEBRASKA, 1921-1922**

**LOCATION**—Concrete river bridge consisting of fourteen spans, thirty-three feet each. Sections 4 and 9, Township 13, North, Range 30 West, about four miles above its junction with the North Platte.

**RECORDS AVAILABLE**—From June 1, 1914, to October, 1922.

**GAGE**—Painted staff nailed to wooden pile on south side of river about 150 feet west of south end of new state aid concrete bridge for 1921. One five-foot vertical staff fastened to piling up-stream side of bridge at north end, about ten feet from bridge. Set February 1, 1922.

**OBSERVER**—A. W. Shilling, Jr.

**BENCH MARKS**—Elevation of handrail, northeast corner of bridge 109-58. Elevation of zero of rod 93.48. Bench mark on spike in fifth telephone pole north from the pair of poles north side of river used to carry wires across river. Elevation 98.80.

**ACCURACY**—Affected by shifting sand.

**ELEVATION**—2,800 feet.

**DISCHARGE MEASUREMENTS, OF SOUTH PLATTE RIVER  
AT NORTH PLATTE, NEBRASKA, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3- 2	T. C. Palmer.....	257	1.80	2.35	462
4- 7	T. C. Palmer.....	224	1.82	2.40	407
5- 6	T. C. Palmer.....	302	1.86	2.40	561
6-13	T. C. Palmer.....	4714	4.35	5.40	20522
7-11	A. H. Atkins.....	264	2.27	0.95	599
7-14	A. H. Atkins.....	214	2.06	1.00	443
7-30	A. H. Atkins.....	51	1.34	1.28	68
8- 3	A. H. Atkins.....	114	2.10	1.60	240
8-13	A. H. Atkins.....	23	1.40	1.20	31
8-18	A. H. Atkins.....	25	1.57	1.50	38

**DISCHARGE MEASUREMENTS, OF SOUTH PLATTE RIVER  
AT NORTH PLATTE, NEBRASKA, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-15	T. C. Palmer.....	435.5	2.73	2.25	1187.
4-10	A. E. Johnston.....	122.8	1.84	1.35	225
4-21	A. E. Johnston.....	102.2	1.41	1.10	144
4-22	T. C. Palmer.....	77.4	1.11	1.10	85
5- 4	A. E. Johnston.....	368.2	2.23	2.00	823
5-18	A. E. Johnston.....	141.4	1.40	1.50	198
5-25	A. E. Johnston.....	84.4	1.22	1.40	103
6- 3	A. E. Johnston.....	109.7	1.61	1.15	177
6- 8	A. E. Johnston.....	66.7	1.05	1.20	70
6-20	A. E. Johnston.....	4.5	0.73	0.60	3
7- 5	A. E. Johnston.....	38.5	1.29	1.10	50
7-10	A. E. Johnston.....	8.5	1.18	0.80	10
7-24	A. E. Johnston.....	49.5	1.43	1.17	71
7-28	A. E. Johnston.....	4.9	0.95	0.80	4
8- 8	A. E. Johnston.....	2.8	1.37	0.90	31
8-11	A. E. Johnston.....	8.4	1.34	0.75	11
9-18	Johnston-Easterday .....	0.0	0.00	0.00	0

DAILY DISCHARGE, IN SECOND FEET, OF SOUTH PLATTE RIVER  
AT NORTH PLATTE, NEBRASKA, FOR YEAR 1921

Day	April	May	June	July	August	Sept.	Oct.	Nov.
1	450	350	300	8,000	370	40	290	650
2	450	350	300	7,200	300	40	400	650
3	400	450	280	6,300	230	35	450	620
4	300	450	275	5,800	180	20	480	620
5	250	600	275	4,500	150	15	400	620
6	400	400	275	4,000	70	15	400	590
7	350	500	275	3,500	70	20	400	620
8	300	350	400	8,000	50	35	400	620
9	250	350	600	2,400	50	35	370	620
10	375	300	650	1,600	50	40	350	620
11	350	275	3,800	600	50	70	370	620
12	300	300	5,500	560	40	50	400	620
13	300	300	22,000	500	30	50	400	620
14	300	300	21,000	450	40	40	430	620
15	350	600	20,000	450	450	50	430	570
16	400	350	20,000	450	300	50	400	540
17	300	500	18,400	450	200	50	480	540
18	300	500	17,600	420	150	50	430	620
19	300	500	16,800	390	175	100	430	570
20	350	400	16,000	360	90	70	430	570
21	350	375	15,200	330	70	150	480	570
21	350	300	14,400	300	70	175	430	570
23	350	275	13,600	270	70	150	430	570
24	400	275	12,800	240	175	100	500	570
25	450	275	12,000	210	150	70	500	Ice
26	350	375	11,200	180	150	60	620	Ice
27	350	300	10,400	140	70	50	620	Ice
28	350	275	9,600	100	70	50	620	Ice
29	450	275	8,800	90	50	40	620	Ice
30	350	280	8,000	70	40	50	620	Ice
31	.....	300	.....	70	40	.....	620	Ice
Total	10,425	11,130	280,230	52,420	4,000	1,770	14,100	14,400
Mean	381	359	9,341	1,691	129	59	455	600
Acre Feet	20,678	22,076	555,836	103,975	7,934	3,510	27,967	28,562
Maximum	450	600	22,000	8,000	450	175	620	650
Minimum	250	275	275	70	30	15	290	540

DAILY DISCHARGE, IN SECOND FEET, OF SOUTH PLATTE RIVER  
AT NORTH PLATTE, FOR SEASON 1922

Day	March	April	May	June	July	August	Sept.	Oct.
1	.....4	600	1,100	150	0	0	0	0
2	.....	600	1,100	200	0	0	0	0
3	.....	450	1,000	200	0	10	0	0
4	.....	450	850	200	0	50	0	0
5	.....	450	850	100	0	25	0	0
6	.....	450	700	100	0	15	0	0
7	.....	450	700	80	0	10	0	0
8	.....	300	600	80	0	15	0	0
9	.....	200	450	80	0	10	0	0
10	.....	200	450	40	0	10	0	0
11	.....	150	200	40	0	10	0	0
12	.....	150	300	40	0	0	0	0
13	2,600	100	450	25	15	0	0	0
14	1,800	90	300	25	10	0	0	0
15	1,100	80	300	40	0	0	0	0
16	1,100	40	300	40	0	0	0	0
17	1,100	40	200	30	25	0	0	0
18	1,000	40	200	20	25	0	0	0
19	900	40	200	5	25	0	0	0
20	800	40	150	3	25	0	0	0
21	700	40	200	3	15	0	0	0
22	650	40	200	1	15	0	0	0
23	510	30	200	0	40	0	0	0
24	510	40	150	0	40	0	0	0
25	600	40	150	0	40	0	0	0
26	600	40	100	0	15	0	0	0
27	450	700	200	0	10	0	0	0
28	800	700	100	0	10	0	0	0
29	600	650	100	0	10	0	0	0
30	600	700	100	0	10	0	0	0
31	600	0	100	0	10	0	0	0
Total	17,020	7,900	12,000	1,502	340	155	0	0
Mean	896	263	387	50	11	5	0	0
Acre Feet	33,769	15,672	23,804	2,982	677	310	0	0
Maximum	2,600	700	1,100	200	40	50	0	0
Minimum	450	30	100	0	0	0	0	0

**PLATTE RIVER AT LEXINGTON, NEBRASKA, 1921-1922**

**LOCATION**—Highway bridge two miles south of Lexington, Section 20, Township 9 North, Range 21 West.

**GAGE**—Vertical staff nailed to pile on revetment north end and upstream side of bridge.

**BENCH MARKS**—The datum used since 1922 bears no relation to the datum used in former years. July 23, 1921, established a B. M. on two 6d wire nails in top of old oak pile of old bridge. Said pile is east pile on west side of north embankment opposite telephone pole No. 126 on north side of river. Nail was bent in driving. Elevation of nails is 100.00 feet. Elevation of zero of rod is 89.58 feet. Elevation of top of west hand rail at station 0, 10 of hydrographer's gaging marks are 103.98 feet.

**OBSERVER**—Ray V. Duryea.

**CHANNEL**—Straight at gaging station, reduced by construction of a concrete bridge from a width of about 2,000 feet to a little over 800 feet.

**ELEVATION**—2,389 feet above sea level.

**RECORDS AVAILABLE**—April 2, 1902, to November 30, 1906; April 13, 1916, to September 30, 1916; May 18, 1917, to October 31, 1917; May 2, 1918, to September 30, 1918; April 16, 1919, to October 31, 1919; April 10, 1920, to October 31, 1920; April 1, 1921, to November 22, 1921; April 1, 1922, to September 30, 1922.

**DRAINAGE AREA**—53,300 square miles.

**WINTER FLOW**—Ice causes back water during freezing weather.

**DISTANCE FROM PATHFINDER RESERVOIR**—535 miles.

**DISCHARGE MEASUREMENTS, OF PLATTE RIVER AT LEXINGTON,  
NEBRASKA, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
4- 4	T. C. Palmer.....	908	2.21	4.30	2007
5- 6	T. C. Palmer.....	1437	2.45	4.65	3524
6-14	T. C. Palmer.....	6181	5.67	6.95	35056
6-25	A. H. Atkins.....	5893	4.91	6.51	28964
7-12	A. H. Atkins.....	1183	2.80	2.50	3181
7-15	John K. Rohrer.....	—	—	—	2178
8- 1	A. H. Atkins.....	725	2.60	2.48	1889
8-16	A. H. Atkins.....	1267	2.68	3.20	3400
10-17	T. C. Palmer.....	1255	2.28	3.30	2868

**DISCHARGE MEASUREMENTS, OF PLATTE RIVER AT LEXINGTON,  
NEBRASKA, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
4-12	A. E. Johnston.....	1063.5	1.50	3.73	1589
4-21	A. E. Johnston.....	886.1	2.00	3.60	1772
5- 6	A. E. Johnston.....	1138.7	2.09	3.67	2377
5-24	A. E. Johnston.....	2967.9	2.66	4.80	7897
6- 6	A. E. Johnston.....	2458.5	2.78	4.30	6887
6-22	A. E. Johnston.....	197.4	2.01	2.60	397
6-24	A. E. Johnston.....	118.3	2.11	2.25	239
7- 6	A. E. Johnston.....	587.3	1.88	3.20	1108
7-25	A. E. Johnston.....	444.8	1.83	3.00	817
7-27	A. E. Johnston.....	284.0	1.54	2.80	438
8- 9	A. E. Johnston.....	1135.5	1.61	3.50	1832
8-28	A. E. Johnston.....	20.0	1.42	2.05	28
9- 7	Johnston-Eyerly .....	0.0	0.00	1.85	0
9-19	Johnston-Easterday .....	394.4	1.44	3.10	569
9-28	A. E. Johnston.....	190.0	1.30	2.95	248

**DAILY DISCHARGE, IN SECOND FEET, OF PLATTE RIVER AT  
LEXINGTON, NEBRASKA, FOR YEAR 1921**

Day	April	May	June	July	August	Sept.	Oct.	Nov.
1	2,300	2,550	4,700	4,600	1,950	2,250	2,850	3,750
2	2,000	2,300	4,700	3,700	2,300	2,150	3,000	3,900
3	2,300	2,800	5,200	3,600	3,100	2,150	3,100	4,100
4	2,800	3,050	4,700	3,500	2,400	2,150	3,100	4,100
5	2,300	3,800	5,200	3,400	2,400	2,150	3,400	4,100
6	2,000	3,900	5,900	3,000	2,850	2,150	3,400	4,100
7	2,300	3,300	7,300	2,500	2,850	2,150	3,400	4,100
8	2,300	3,800	5,900	2,200	2,850	2,250	3,750	3,750
9	2,000	3,800	12,300	2,300	2,650	2,300	3,400	4,100
10	2,000	3,300	6,600	2,100	3,400	1,950	3,400	3,900
11	2,000	2,800	10,900	2,000	2,650	2,050	3,400	4,000
12	1,450	1,700	19,000	1,850	2,450	2,250	3,600	4,100
13	1,700	2,000	33,000	1,700	2,450	2,300	3,400	4,100
14	1,450	2,000	35,400	1,800	2,650	2,300	3,600	4,100
15	1,100	2,150	35,400	1,850	2,850	2,300	3,750	4,600
16	1,700	2,300	34,000	1,850	3,250	2,450	3,500	4,100
17	2,300	2,300	31,800	1,800	2,850	2,450	3,250	4,100
18	2,150	2,550	31,800	1,700	2,650	2,650	3,900	4,100
19	2,000	2,800	29,750	2,050	2,150	2,850	3,400	4,100
20	2,000	2,800	28,600	1,850	2,150	2,450	3,750	3,700
21	2,000	2,800	27,500	1,700	2,150	2,850	3,750	3,400
22	2,000	2,550	29,000	1,650	2,100	2,850	3,900	3,400
23	2,000	2,300	27,000	1,650	2,100	2,850	4,100	Ice
24	1,850	2,300	25,000	1,800	2,300	2,300	4,100	Ice
25	1,700	2,000	22,800	1,900	2,300	2,550	4,350	Ice
26	1,700	2,300	20,700	1,950	2,150	2,850	4,600	Ice
27	2,800	2,000	18,700	1,700	2,150	2,650	6,200	Ice
28	2,800	2,800	15,550	1,950	2,300	2,850	4,900	Ice
29	2,300	3,800	12,500	1,850	2,450	3,000	4,900	Ice
30	2,800	4,900	8,300	1,750	2,250	3,100	4,400	Ice
31	.....	5,900	.....	1,850	2,300	.....	4,100	Ice
Total	62,100	88,150	559,200	69,100	77,400	73,550	117,650	87,700
Mean	2,070	2,844	18,640	2,229	2,497	2,452	3,795	3,986
Acre Feet	123,175	174,845	1109,173	187,060	153,523	145,886	233,359	173,953
Maximum	2,800	5,900	35,400	4,600	3,400	3,100	6,200	4,600
Minimum	1,100	1,700	4,700	1,650	1,950	1,950	2,850	8,400

**DAILY DISCHARGE, IN SECOND FEET, OF PLATTE RIVER AT  
LEXINGTON, NEBRASKA, FOR YEAR 1922**

Day	April	May	June	July	August	September
1	2,600	5,300	8,700	1,000	1,000	00
2	2,200	5,800	7,800	1,000	1,400	00
3	2,400	5,800	7,800	1,000	1,850	00
4	2,400	4,400	6,200	1,850	2,200	00
5	2,600	3,550	7,000	1,800	1,850	00
6	3,000	2,600	6,200	1,200	3,000	00
7	2,600	2,200	7,000	1,850	3,000	10
8	2,600	1,850	6,200	1,850	2,200	00
9	2,750	1,850	4,400	1,400	1,850	00
10	2,850	2,200	3,600	1,200	1,800	00
11	8,000	2,600	2,600	1,400	1,500	05
12	2,400	1,400	2,600	1,850	1,350	05
13	2,600	1,850	1,850	1,600	1,000	05
14	2,600	1,850	2,200	1,600	1,200	10
15	2,600	1,850	1,400	1,200	850	50
16	2,100	3,550	1,400	1,000	600	310
17	1,600	7,000	1,100	1,200	550	310
18	2,200	7,000	800	1,200	300	390
19	1,850	7,000	680	1,400	250	450
20	2,200	7,800	550	1,600	200	450
21	2,200	8,700	480	1,000	150	390
22	2,200	9,550	350	800	375	310
23	1,850	10,400	120	1,200	400	290
24	1,600	10,400	100	800	350	200
25	2,200	9,550	80	800	650	200
26	1,850	8,700	680	800	150	210
27	3,000	7,800	480	680	100	290
28	5,300	6,900	550	680	50	350
29	6,200	6,100	600	800	30	290
30	6,200	4,400	600	1,000	25	310
31	.....	4,400	.....	680	25	.....
Total	81,750	163,350	84,020	36,940	30,255	4,835
Mean	2,725	5,269	2,800	1,191	975	161
Acre Feet	162,151	324,005	166,654	73,270	60,011	9,590
Maximum	6,200	10,400	8,700	1,850	3,000	450
Minimum	1,600	1,400	80	680	25	00

## PLATTE RIVER AT OVERTON, NEBRASKA, 1921-1922

LOCATION—Concrete highway bridge two miles south of Overton. Section 6, Township 10, Range 21 West.

GAGE—Vertical staff nailed to four-inch pile at north end of bridge on down-stream side about eight feet from bridge.

OBSERVER—Nils Brunzell.

CHANNEL—Straight at gaging station, reduced from natural width of about 2,000 feet to a little over 800 feet.

ELEVATION—2,320 feet.

BENCH MARK—Top of concrete wheel guard on left side of bridge on north side of river. Elevation, 100.00. Zero of gage elevation 88.03.

DISTANCE FROM PATHFINDER RESERVOIR—550 miles.

DISCHARGE MEASUREMENTS, OF PLATTE RIVER AT  
OVERTON, NEBRASKA, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
4- 2	T. C. Palmer.....	1095	2.22	2.00	2434
5- 7	T. C. Palmer.....	1492	2.54	2.50	3785
6-14	T. C. Palmer.....	7012	5.24	6.50	36724
6-27	A. H. Atkins.....	7075	8.91	5.60	27673
7-13	A. H. Atkins.....	1018	2.73	0.81	2782
8- 1	A. H. Atkins.....	783	2.55	1.65	1995
8-17	A. H. Atkins.....	1404	2.53	2.80	3552
10-18	T. C. Palmer.....	1274	2.32	2.40	2959

DISCHARGE MEASUREMENTS, OF PLATTE RIVER AT  
OVERTON, NEBRASKA, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-16	T. C. Palmer.....	2263.9	2.77	3.80	6285
4-13	A. E. Johnston.....	1186.0	1.66	2.65	2969
4-22	A. E. Johnston.....	1005.5	2.86	2.70	2364
5- 6	A. E. Johnston.....	1371.0	2.37	2.83	3255
5-23	A. E. Johnston.....	8030.5	3.07	4.00	9312
6- 6	A. E. Johnston.....	2231.0	3.06	3.60	6825
6-22	A. E. Johnston.....	186.4	1.67	1.50	312
6-24	A. E. Johnston.....	121.9	1.57	1.00	191
7- 6	A. E. Johnston.....	653.3	2.07	2.25	1356
7-25	A. E. Johnston.....	379.5	1.82	2.00	694
7-27	A. E. Johnston.....	229.1	1.69	1.75	888
8-10	A. E. Johnston.....	968.0	2.25	2.50	2186
8-28	A. E. Johnston.....	16.2	1.60	1.30	26
9-19	Johnston-Easterday .....	268.7	1.55	1.95	418
9-29	A. E. Johnston.....	118.4	1.53	1.85	181

**DAILY DISCHARGE, IN SECOND FEET, OF PLATTE RIVER AT  
OVERTON, NEBRASKA, FOR YEAR 1921**

Day	April	May	June	July	August	Sept.	Oct.	Nov.
1	2,450	2,900	4,150	4,000	2,100	2,200	2,600	3,600
2	2,450	2,650	3,400	3,500	2,300	2,000	2,600	3,600
3	2,900	2,650	3,400	3,100	3,200	2,000	2,500	3,600
4	2,900	3,150	3,250	2,700	2,900	2,000	3,000	3,600
5	2,900	3,400	7,000	2,300	2,700	2,000	3,000	3,500
6	2,800	3,700	4,650	1,800	3,500	2,000	3,200	3,600
7	2,450	3,700	4,650	1,500	3,300	2,300	3,300	3,800
8	2,100	3,300	4,300	1,400	3,200	2,300	3,500	3,600
9	2,100	2,900	7,800	1,500	2,900	2,300	3,100	4,000
10	2,250	2,650	5,700	1,450	3,800	2,300	3,000	3,500
11	2,450	2,800	9,500	1,400	3,300	2,300	2,700	3,400
12	1,925	2,450	23,900	1,250	2,700	2,300	2,700	3,300
13	2,300	2,450	30,700	1,150	3,000	2,300	3,200	3,600
14	2,100	2,450	36,700	1,000	2,950	2,400	3,000	4,000
15	2,200	2,750	32,500	1,100	2,900	2,400	3,000	4,000
16	2,300	3,150	32,500	1,100	3,800	2,400	3,000	3,700
17	2,400	2,900	32,000	1,100	3,500	2,700	2,900	3,500
18	2,650	5,300	32,000	1,050	3,000	3,000	3,000	3,300
19	2,300	3,150	31,000	1,100	2,700	3,200	3,000	3,300
20	2,100	2,900	29,900	1,100	2,400	2,700	3,200	3,300
21	1,875	2,650	28,500	1,000	1,900	2,700	3,300	3,300
22	2,100	2,650	29,900	1,000	1,400	3,200	3,000	.....
23	2,300	2,650	28,000	1,000	2,100	2,900	3,300	.....
24	2,100	2,650	25,000	1,300	2,400	2,600	3,000	.....
25	2,000	2,650	27,600	1,800	2,300	2,600	3,300	.....
26	2,300	2,450	23,000	1,900	2,400	2,400	4,500	.....
27	2,650	2,650	21,300	1,800	2,100	2,200	5,000	.....
28	2,650	3,150	16,500	2,100	2,200	2,700	4,500	.....
29	2,650	4,500	11,500	1,950	2,300	2,500	4,200	.....
30	3,150	6,000	6,700	1,900	2,400	2,900	4,200	.....
31	.....	7,000	.....	2,000	2,300	.....	4,200	.....
Total	71,800	100,300	557,000	52,350	83,050	73,800	102,000	75,100
Mean	2,393	3,235	18,566	1,689	2,708	2,460	3,400	3,576
Acre Feet	142,415	198,945	1104,809	103,836	166,515	146,382	202,317	148,960
Maximum	3,150	7,000	36,700	4,000	3,800	3,200	5,000	4,000
Minimum	1,875	2,450	3,250	1,000	1,400	2,000	2,500	3,300

**DAILY DISCHARGE, IN SECOND FEET, OF PLATTE RIVER AT  
OVERTON, NEBRASKA, FOR YEAR 1922**

Day	April	May	June	July	August	September
1	.....	5,800	8,600	800	800	00
2	.....	5,500	8,350	800	1,300	00
3	.....	5,500	7,350	800	1,700	00
4	.....	4,300	7,600	1,200	1,900	00
5	.....	4,300	7,850	1,600	2,400	00
6	.....	3,250	7,350	1,400	3,100	00
7	.....	3,000	6,300	1,700	3,800	00
8	.....	2,850	6,050	2,400	2,800	00
9	.....	2,850	5,800	1,900	2,400	00
10	.....	2,850	4,800	1,400	2,200	00
11	.....	4,300	4,400	1,700	1,800	00
12	.....	2,050	4,050	2,200	1,500	00
13	2,850	2,400	2,850	1,700	1,300	00
14	3,050	2,150	3,250	1,350	1,200	200
15	3,250	1,900	2,050	1,200	900	400
16	2,825	3,250	1,700	1,400	800	400
17	2,400	5,300	1,700	1,600	600	400
18	2,850	6,550	1,250	1,200	350	400
19	2,850	6,850	800	1,000	300	400
20	2,850	6,300	650	1,700	200	400
21	2,600	7,550	530	1,200	150	400
22	2,400	8,800	230	800	100	400
23	2,300	9,300	100	800	450	250
24	2,200	9,300	75	800	390	250
25	2,850	9,100	50	800	390	250
26	2,850	8,800	150	800	275	250
27	3,800	7,300	650	650	100	250
28	5,300	7,200	400	400	00	250
29	7,350	7,100	280	650	00	250
30	6,575	6,200	280	800	00	300
31	.....	5,300	.....	800	00	.....
Total	61,150	167,200	95,495	87,550	83,205	5,050
Mean Acre Feet	3,897 121,291	5,393 331,641	3,183 189,414	1,211 74,480	1,071 65,862	168 10,017
Maximum	7,350	9,300	8,600	2,400	3,800	400
Minimum	2,000	1,900	50	400	00	00

**PLATTE RIVER AT CENTRAL CITY, NEBRASKA, 1921-1922**

**LOCATION**—State aid bridge two miles south of court house. Bridge consists of sixteen concrete arch spans fifty feet in length.

**GAGE**—Perpendicular wooden staff eight feet in length fastened on first pier from north end of bridge, on down-stream side.

**BENCH MARK**—Spike driven in north side of power transmission line pole. Fifty feet north of north end of earth fill, east side of highway, approximately 1,500 feet north of north end of bridge. Spike at bottom of groove cut in pole above one foot above ground. Elevation 1,702.27 feet above mean sea level. Top of hand rail directly over gage staff is 1,709.57 feet above sea level. Zero on gage is 1,965.97 feet and is 13.6 feet below top of hand rail. Top of top bolt which fastens staff to pier is 1,699.97 feet above sea level, and is 9.6 feet below top of hand rail. Established by C. E. Benson, Deputy State Surveyor, February 2, 1922.

**OBSERVER**—Earl T. Smith.

**CHANNEL**—Channel has 800 feet opening at station and about 2,000 feet in width above and below the bridge.

**ELEVATION**—1,700 feet.

**DISCHARGE MEASUREMENTS OF PLATTE RIVER AT  
CENTRAL CITY, NEBRASKA, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
4-21	T. C. Palmer.....	984.7	1.97	1.80	1941
5-20	A. E. Johnston.....	2700.7	1.76	2.80	4921
6- 7	A. E. Johnston.....	3766.2	2.44	2.90	9203
6-23	A. E. Johnston.....	278.4	1.23	0.40	344
7- 7	A. E. Johnston.....	796.2	1.66	1.20	1327
7-26	A. E. Johnston.....	311.5	1.43	0.80	447
8-10	A. E. Johnston.....	662.5	2.24	1.95	1486
8-26	A. E. Johnston.....	11.6	1.06	0.45	12

**MISCELLANEOUS DISCHARGE MEASUREMENTS OF  
SOUTH PLATTE RIVER FOR 1921-1922**

**PLATTE RIVER AT MAXWELL,  
1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9- 6	Johnston-Eyerly .....	321.8	1.29	.....	415

**PLATTE RIVER AT BRADY ISLAND  
1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9- 6	Johnston-Eyerly .....	158.6	1.73	.....	279

**PLATTE RIVER AT GOTHENBURG,  
1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9- 6	Johnston-Eyerly .....	34.5	1.35	.....	46
9- 7	Johnston-Yerly .....	132.4	1.68	.80	223
9-10	Johnston-Willis .....	.....	1.01	.....	500

**PLATTE RIVER ABOVE GOTHENBURG CANAL SPILLWAY  
1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9- 6	A. E. Johnston.....	14.2	1.83	.....	11

**PLATTE RIVER AT GOTHENBURG CANAL SPILLWAY  
1922**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9- 6	Johnston-Eyerly .....	47.0	1.54	.....	72

MISCELLANEOUS DISCHARGE MEASUREMENTS OF  
PLATTE RIVER FOR 1921-1922—(Continued)

PLATTE RIVER AT COZAD,  
1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9- 7	Johnston-Eyerly .....	70.5	1.95	.....	138
9- 8	Johnston-Eyerly .....	144.5	1.64	.....	238

PLATTE RIVER AT DARR,  
1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9- 7	Johnston-Eyerly .....	0.0	0.00	.....	0
9- 8	Johnston-Eyerly .....	0.0	0.00	.....	0

PLATTE RIVER AT KEARNEY,  
1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9-19	Johnston-Easterday .....	0.0	0.00	.....	0

PLATTE RIVER BELOW KEARNEY CANAL SPILLWAY  
1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9-18	Johnston-Easterday .....	8.9	1.19	.....	10

PLATTE RIVER AT FREMONT  
1921

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
6-16	T. C. Palmer.....	5875	5.41	4.65	31767
6-17	T. C. Palmer.....	6562	5.16	4.95	33866

MISCELLANEOUS DISCHARGE MEASUREMENTS OF  
SOUTH PLATTE RIVER AT OVID, COLORADO, 1921-1922

SOUTH PLATTE RIVER AT OVID, COLO.  
1921

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
11-16	T. C. Palmer.....	220	2.28	.....	503

SOUTH PLATTE RIVER AT OVID, COLO.  
1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3- 4	T. C. Palmer.....	448.8	2.39	.....	1078
4-18	T. C. Palmer.....	38.0	1.18	.....	44
5-17	T. C. Palmer.....	87.6	1.39	0.30	52
6- 9	A. E. Johnston.....	24.4	1.18	.....	28
6-26	A. E. Johnston.....	19.1	1.03	.....	19
6-27	T. C. Palmer.....	17.2	1.09	0.05	18
7-10	T. C. Palmer.....	19.6	1.24	0.05	24
7-11	T. C. Palmer.....	24.9	0.98	0.50	24
7-29	A. E. Johnston.....	25.1	0.74	0.10	18
8- 7	A. E. Johnston.....	11.7	1.07	0.17	12
8-19	A. E. Johnston.....	12.6	0.84	0.10	10
8-31	Johnston-Everly .....	20.3	0.71	0.10	14
9-20	A. E. Johnston.....	8.8	1.06	0.08	9
9-30	A. E. Johnston.....	14.4	1.09	0.18	15

SOUTH PLATTE RIVER AT JULESBURG, COLO.  
1921

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
11-16	T. C. Palmer.....	239	2.27	.....	543

SOUTH PLATTE RIVER AT JULESBURG, COLO.  
1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
8-14	T. C. Palmer.....	446.6	2.18	1.80	952
4-18	T. C. Palmer.....	48.2	1.22	.....	57

MISCELLANEOUS DISCHARGE MEASUREMENTS OF  
PLATTE RIVER FOR 1921-1922

SOUTH PLATTE RIVER AT OGALLALA  
1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3-14	T. C. Palmer.....	543.6	2.25	1.20	1225
5- 9	T. C. Palmer.....	235.0	2.21	.....	521
5-17	A. E. Johnston.....	72.8	2.22	.....	161
5-26	A. E. Johnston.....	46.6	1.54	.....	72
6- 2	A. E. Johnston.....	59.7	1.85	.....	110
6- 9	A. E. Johnston.....	38.8	1.83	.....	71
6-19	A. E. Johnston.....	29.6	1.66	.....	49
6-26	A. E. Johnston.....	14.4	1.47	.....	21
7- 3	A. E. Johnston.....	29.2	1.53	.....	44
7-11	A. E. Johnston.....	27.9	1.77	.....	49
7-21	A. E. Johnston.....	24.0	1.70	.....	40
7-29	A. E. Johnston.....	42.9	1.73	.....	74
8- 7	A. E. Johnston.....	42.9	1.76	0.35	75
8-18	A. E. Johnston.....	13.9	1.35	0.00	18
8-31	Johnston-Everly .....	16.9	1.39	0.90	23
9-20	A. E. Johnston.....	11.7	1.35	0.90	15
9-26	A. E. Johnston.....	16.0	1.86	0.90	29
9-30	A. E. Johnston.....	16.9	1.76	0.90	29

SOUTH PLATTE RIVER AT ROSCOE  
1921

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
8- 2	A. H. Atkins.....	85	1.82	0.90	156
8- 4	A. H. Atkins.....	69	1.35	0.90	98
8-18	A. H. Atkins.....	59	1.79	0.80	95

SOUTH PLATTE RIVER AT PAXTON  
1921

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
8-27	A. H. Atkins.....	27	2.56	2.20	69

SOUTH PLATTE RIVER AT BIG SPRINGS  
1922

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
4- 5	T. C. Palmer.....	97	1.60	.....	155

**DISCHARGE MEASUREMENTS, OF BAYARD SUGAR FACTORY  
DRAIN, SOUTH LINE SEC. 34-21-52, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-11	T. C. Palmer.....	9.2	2.38	21.5
2- 2	T. C. Palmer.....	9.2	2.78	25.6
2-18	T. C. Palmer.....	11.5	2.66	30.6
2-24	T. C. Palmer.....	9.2	2.67	24.6
3- 7	T. C. Palmer.....	9.2	2.92	26.8
3-23	T. C. Palmer.....	8.1	2.58	20.4
4-11	T. C. Palmer.....	8.1	2.43	19.6
4-28	T. C. Palmer.....	8.1	1.99	16.0
5-10	T. C. Palmer.....	8.1	2.02	16.2
6- 6	Palmer-Atkins .....	10.8	3.08	31.8
6-20	T. C. Palmer.....	11.5	3.12	35.9
7- 5	T. C. Palmer.....	11.5	2.68	30.3
8- 8	T. C. Palmer.....	13.8	2.72	37.5
8-18	T. C. Palmer.....	13.8	3.05	42.2
8-29	T. C. Palmer.....	13.8	3.16	43.6
9-26	T. C. Palmer.....	17.3	2.85	49.3
10- 5	T. C. Palmer.....	13.8	3.14	43.3
10-26	T. C. Palmer.....	13.8	3.01	41.5
11- 7	T. C. Palmer.....	11.5	3.84	44.2
11-29	T. C. Palmer.....	11.5	3.00	34.3
12-19	T. C. Palmer.....	10.4	3.70	38.6

**ACTUAL DISCHARGE MEASUREMENTS, OF BAYARD SUGAR  
FACTORY DRAIN SOUTH LINE SEC. 54-21-52, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	10.40	2.45	25.40
2- 6	T. C. Palmer.....	10.40	2.45	25.40
3- 6	T. C. Palmer.....	8.80	2.75	24.20
3-23	T. C. Palmer.....	10.40	2.20	22.80
4- 5	T. C. Palmer.....	10.70	1.50	26.01
5- 5	T. C. Palmer.....	11.50	2.10	24.10
6- 5	T. C. Palmer.....	12.70	2.80	35.50
7-25	T. C. Palmer.....	13.80	3.18	44.00
9- 1	T. C. Palmer.....	16.10	2.53	40.80
9-14	Palmer-Easterday .....	18.30	3.15	42.00

**ACTUAL DISCHARGE MEASUREMENTS, OF CAMP CLARK SEEP  
AT NORTH LINE SEC. 9-20-51, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	2.87	1.30	3.72
2- 6	T. C. Palmer.....	2.72	1.23	3.32
3- 8	T. C. Palmer.....	2.80	1.08	3.00
3-23	T. C. Palmer.....	2.95	0.87	2.56
4- 7	T. C. Palmer.....	2.86	0.97	2.29
5- 6	T. C. Palmer.....	2.70	1.03	2.80
6-12	T. C. Palmer.....	3.80	1.71	6.50
9- 1	T. C. Palmer.....	6.90	2.01	13.90
9-14	Palmer-Easterday .....	6.20	1.24	13.90

**DISCHARGE MEASUREMENTS, OF BIRDWOOD CREEK, NORTH  
LINE SEC. 2-14-33, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
3- 1	T. C. Palmer.....	102.8	1.81	0.50	186.6
3-31	T. C. Palmer.....	97.2	1.97	.....	191.6
5- 4	T. C. Palmer.....	86.1	1.94	.....	167.0
6-23	A. H. Atkins.....	76.2	3.57	.....	272.2
7- 8	A. H. Atkins.....	82.2	3.80	.....	312.5
7-15	A. H. Atkins.....	88.0	2.06	1.00	171.0
7-28	A. H. Atkins.....	96.3	2.02	1.00	194.2
8- 3	A. H. Atkins.....	88.6	2.16	0.50	191.4
8-12	A. H. Atkins.....	79.5	2.26	0.30	179.9
7-14	John K. Rohrer.....	.....	.....	1.00	150.0
8-18	A. H. Atkins.....	77.1	2.07	0.30	160.8
10-10	T. C. Palmer.....	100.9	2.19	.....	220.8

DISCHARGE MEASUREMENTS, OF COTTONWOOD CREEK  
SECTION LINE 26 AND 27-29-48, CHADRON-ALLIANCE ROAD,  
FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-14	T. C. Palmer.....	7.3	0.80	5.9
4-26	T. C. Palmer.....	3.4	0.90	3.1
8-16	T. C. Palmer.....	1.0	0.50	.5
10-10	T. C. Palmer.....	1.9	0.60	1.1
11- 1	T. C. Palmer.....	1.8	0.57	1.0
12-12	T. C. Palmer.....	3.9	1.01	4.0

DISCHARGE MEASUREMENTS, OF LITTLE COTTONWOOD CREEK,  
20 FEET BELOW A-8, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
11- 3	Palmer-Heywood .....	1.2	1.00	1.2

DISCHARGE MEASUREMENTS OF BIRDWOOD CREEK AT  
SECTION 35-33-14N, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-13	A. E. Johnston.....	99.5	2.17	215.0
4-19	A. E. Johnston.....	91.2	1.84	167.8
5- 3	A. E. Johnston.....	75.4	2.20	165.7
5-26	A. E. Johnston.....	115.6	2.50	289.8
6- 8	A. E. Johnston.....	104.2	2.06	214.8
6-19	A. E. Johnston.....	84.0	2.10	176.5
6-26	A. E. Johnston.....	72.6	1.90	138.4
7- 3	A. E. Johnston.....	81.5	2.48	202.5
7-10	A. E. Johnston.....	83.3	2.11	176.5
7-22	A. E. Johnston.....	81.9	2.28	188.3
7-29	A. E. Johnston.....	106.6	2.31	246.5
8- 8	A. E. Johnston.....	149.6	1.67	250.8
8-12	A. E. Johnston.....	90.4	2.24	202.5
8-30	A. E. Johnston.....	79.4	2.19	174.6
9-20	Johnston-Easterday .....	88.0	2.19	182.1
9-30	A. E. Johnston.....	70.3	2.87	167.0

**ACTUAL DISCHARGE MEASUREMENTS OF BLUE CREEK AT  
BRIDGE SECTIONS 19 AND 30-16-42, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-18	T. C. Palmer.....	48.1	1.82	87.6
4- 6	A. E. Johnston.....	64.1	0.19	124.0
4-18	A. E. Johnston.....	42.2	2.26	90.3
5- 1	A. E. Johnston.....	51.5	2.04	105.1
5-15	A. E. Johnston.....	32.2	1.61	51.9
6- 1	A. E. Johnston.....	44.0	1.96	86.5
6-16	A. E. Johnston.....	6.5	1.26	8.2
6-27	A. E. Johnston.....	58.8	1.72	101.1
7- 1	A. E. Johnston.....	31.7	1.75	55.6
7-14	A. E. Johnston.....	17.2	1.23	21.2
7-20	A. E. Johnston.....	15.3	1.29	19.8
8- 4	A. E. Johnston.....	113.9	2.46	280.3
8-18	A. E. Johnston.....	2.7	0.55	1.5
9- 1	A. E. Johnston.....	1.4	0.78	1.1
9- 7	T. C. Palmer.....	24.1	1.34	32.4
9- 8	T. C. Palmer.....	37.6	3.17	119.3
9-16	Johnston-Easterday .....	28.7	1.88	54.1
9-26	A. E. Johnston.....	23.4	1.69	39.6

**DISCHARGE MEASUREMENTS, OF BLUE CREEK  
SECTIONS 19 AND 30-16-42, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
1- 5	T. C. Palmer.....	50.7	2.06	2.60	104.7
2-28	T. C. Palmer.....	47.0	2.35	2.50	110.3
3-30	T. C. Palmer.....	40.9	2.29	2.40	98.6
4-15	T. C. Palmer.....	41.2	2.25	2.30	92.8
5- 3	T. C. Palmer.....	35.5	1.91	2.00	67.7
6-21	A. H. Atkins.....	36.0	2.35	0.90	84.4
8- 5	A. H. Atkins.....	8.4	1.48	0.20	12.4
8-19	A. H. Atkins.....	11.8	1.26	0.30	14.9
8-30	A. H. Atkins.....	14.5	1.64	0.60	28.8
9-12	T. C. Palmer.....	22.0	1.15	1.70	25.4
10-13	T. C. Palmer.....	32.3	1.83	2.00	59.0
11-28	T. C. Palmer.....	41.7	2.22	2.40	90.1

**DISCHARGE MEASUREMENTS, OF BLUE CREEK  
ABOVE GRAF DITCH, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
7-13	John K. Rohrer.....	.....	.....	.....	13.0

**DISCHARGE MEASUREMENTS, OF BORDEAUX CREEK  
3 MILES EAST OF CHADRON, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9- 9	Palmer-Heywood .....	1.68	1.43	.....	2.41

**DISCHARGE MEASUREMENTS, OF BIG BEAVER CREEK  
 $\frac{1}{4}$  MILE WEST OF BEAVER SCHOOL HOUSE, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9- 9	Palmer-Heywood .....	0.30	1.00	.....	0.30

**DISCHARGE MEASUREMEUTS, OF CAMP CLARK SEEP  
NORTH LINE SECTION 9-20-51, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-11	T. C. Palmer.....	3.4	0.72	2.5
2- 1	T. C. Palmer.....	3.8	1.22	4.6
2-11	T. C. Palmer.....	3.5	1.17	4.1
2-24	T. C. Palmer.....	2.7	0.99	2.7
3- 7	T. C. Palmer.....	2.8	1.12	3.2
4-11	T. C. Palmer.....	2.4	1.03	2.4
4-28	T. C. Palmer.....	1.6	0.71	1.1
5-10	T. C. Palmer.....	3.1	0.95	2.9
6- 6	Palmer-Atkins .....	1.6	0.87	1.4
6-20	T. C. Palmer.....	1.9	1.13	2.1
7- 5	T. C. Palmer.....	1.8	1.86	3.4
8- 8	T. C. Palmer.....	7.1	2.57	18.2
8-29	T. C. Palmer.....	6.0	2.60	15.5
9-26	T. C. Palmer.....	5.9	2.64	15.4
10- 8	T. C. Palmer.....	5.8	2.21	12.8
10-26	T. C. Palmer.....	5.6	1.71	9.6
11- 7	T. C. Palmer.....	5.0	1.52	7.6
11-29	T. C. Palmer.....	3.7	2.32	8.7
12-17	T. C. Palmer.....	3.0	2.00	6.1
12-27	T. C. Palmer.....	3.8	1.53	5.8

**AT ALLIANCE CANAL SIPHON**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9-19	T. C. Palmer.....		4.8	3.12	14.9

**NEAR NORTH LINE SECTION 3-20-51**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9-19	T. C. Palmer.....		6.9	1.58	10.9

**NORTH LINE SECTION 35-21-51**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
9-19	T. C. Palmer.....		.3	1.00	.3

ACTUAL DISCHARGE MEASUREMENTS OF CEDAR CREEK AT  
WAGON BRIDGE ABOVE MOUTH, NE $\frac{1}{4}$  SEC. 11-18-48, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-12	T. C. Palmer.....	12.20	1.49	18.14
3- 4	T. C. Palmer.....	10.30	1.52	15.60
3-24	T. C. Palmer.....	11.40	1.00	11.60
4- 5	A. E. Johnston.....	25.70	0.63	16.20
4-18	A. E. Johnston.....	34.85	0.56	19.40
4-29	A. E. Johnston.....	35.35	0.44	15.70
5-10	A. E. Johnston.....	43.00	0.28	12.00
5-29	A. E. Johnston.....	26.40	0.22	5.90
6-13	A. E. Johnston.....	23.50	0.32	7.70
6-29	A. E. Johnston.....	14.90	0.23	3.50
7-17	A. E. Johnston.....	8.40	1.63	13.70
8- 1	A. E. Johnston.....	12.60	1.97	24.80
8-16	A. E. Johnston.....	10.80	1.76	19.10
9-15	Johnston-Easterday .....	8.80	1.47	13.00
9-23	A. E. Johnston.....	5.20	1.48	7.70

ACTUAL DISCHARGE MEASUREMENTS OF CLEAR CREEK, FIRST  
BRIDGE ABOVE MOUTH, SEC. 32-16-41, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4- 6	A. E. Johnston.....	4.27	1.80	7.67
4-19	A. E. Johnston.....	4.30	1.42	6.10
5- 2	A. E. Johnston.....	5.20	1.40	7.30
5-16	A. E. Johnston.....	6.50	1.32	8.60
6- 1	A. E. Johnston.....	9.70	1.18	11.50
6-17	A. E. Johnston.....	0.80	0.50	0.40
6-27	A. E. Johnston.....	8.50	0.94	8.00
8- 4	A. E. Johnston.....	8.00	2.43	7.30
8-18	A. E. Johnston.....	4.60	1.78	8.20
9- 1	A. E. Johnston.....	1.80	0.83	1.54
9-16	Johnston-Easterday .....	4.00	1.55	6.20
9-26	A. E. Johnston.....	3.80	1.84	6.10

**DISCHARGE MEASUREMENTS, OF CHADRON CREEK  
ABOVE CHADRON CITY RESERVOIR, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-14	T. C. Palmer.....	5.3	0.79	4.2
4-26	T. C. Palmer.....	2.1	1.91	4.1
8-16	T. C. Palmer.....	1.6	1.79	2.9
9-12	Heywood-Palmer .....	1.9	1.11	2.1
10-11	T. C. Palmer.....	3.0	0.87	2.6
11- 1	T. C. Palmer.....	2.6	0.77	1.9
12-13	T. C. Palmer.....	2.6	1.22	3.2

**DISCHARGE MEASUREMENTS, OF CHADRON CREEK  
WATERWORKS STATION 1, 200' ABOVE BEGINNING OF CHADRON  
CITY PIPE LINE, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-14	T. C. Palmer.....	2.4	1.20	2.9
4-26	T. C. Palmer.....	2.3	0.77	1.5
8-16	T. C. Palmer.....	1.9	0.84	1.6
9-12	Palmer-Heywood .....	1.7	0.83	1.4
10-11	T. C. Palmer.....	1.7	1.30	2.2
11- 1	T. C. Palmer.....	1.9	0.81	1.6
12-13	T. C. Palmer.....	1.7	1.39	2.4

**DISCHARGE MEASUREMENTS, OF CHADRON CREEK  
WATERWORKS STATION 36, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-14	T. C. Palmer.....	2.00	1.11	2.23
4-26	T. C. Palmer.....	0.92	1.60	1.50
8-16	T. C. Palmer.....	0.54	0.8:	0.45
9-12	Heywood-Palmer .....	0.55	1.10	0.60
10-11	T. C. Palmer.....	0.68	1.30	0.88
11- 1	T. C. Palmer.....	0.61	2.00	1.21
12-13	T. C. Palmer.....	0.65	1.68	1.09

**DISCHARGE MEASUREMENTS, OF CHADRON CREEK  
SOUTH LINE SECTION 15-33-49, GORR RANCH, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-16	Palmer-Heywood .....	4.84	0.89	3.86
4-27	T. C. Palmer.....	2.94	1.23	3.60
8-16	T. C. Palmer.....	1.82	0.68	1.15
9-12	T. C. Palmer.....	0.80	0.90	0.72
10-11	T. C. Palmer.....	1.07	0.84	0.89
11- 2	T. C. Palmer.....	1.24	1.07	1.32
12-18	T. C. Palmer.....	2.30	1.26	2.90

**DISCHARGE MEASUREMENTS, OF CHADRON CREEK  
ABOVE CITY RESERVOIR, FOR YEAR 1922**

SECTION 19-32-48

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-16	T. C. Palmer.....	2.27	2.11	4.78
2-11	T. C. Palmer.....	3.40	1.59	5.40
3-28	T. C. Palmer.....	3.58	0.99	3.50
8- 3	A. H. Atkins.....	2.10	1.33	2.80
8-23	J. D. Heywood.....	2.30	1.30	3.00

**ACTUAL DISCHARGE MEASUREMENTS, OF CHADRON CREEK  
BELOW CITY RESERVOIR, FOR YEAR 1922**

SECTION 19-32-48

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-16	T. C. Palmer.....	1.83	1.30	2.37
2-11	T. C. Palmer.....	3.00	1.47	4.40
3-28	T. C. Palmer.....	1.88	1.35	2.53
8- 3	A. H. Atkins.....	2.70	1.14	3.10
8-23	J. D. Heywood.....	2.30	0.70	1.70

ACTUAL DISCHARGE MEASUREMENTS, OF CHADRON CREEK  
BELOW CITY PIPE LINE STATION NO. 36, FOR YEAR 1922

## SECTION 18-32-49

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-16	T. C. Palmer.....	0.75	0.75	0.56
2-11	T. C. Palmer.....	1.80	1.20	2.10
3-28	T. C. Palmer.....	1.45	1.04	1.51

ACTUAL DISCHARGE MEASUREMENTS, OF CHADRON CREEK  
AT GORR RANCH, FOR YEAR 1922

## SECTION 15-33-49

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-17	T. C. Palmer.....	2.39	0.54	1.30
2-11	T. C. Palmer.....	5.00	0.84	4.20
3-28	T. C. Palmer.....	3.18	1.20	3.80
8- 3	A. H. Atkins.....	3.70	0.94	3.50

DISCHARGE MEASUREMENTS, OF CLEAR CREEK BRIDGE  
AT MOUTH, TOWNSHIP 18, RANGE 48, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 5	T. C. Palmer.....	9.1	1.76	16.0
2-14	T. C. Palmer.....	12.7	1.50	19.0
2-28	T. C. Palmer.....	15.4	1.12	17.2
3-30	T. C. Palmer.....	12.1	0.65	7.9
5-23	T. C. Palmer.....	6.0	0.64	3.8
8-19	W. F. Chaloupka.....	10.8	0.85	9.2
8-27	W. F. Chaloupka.....	13.1	0.71	9.4
9- 3	W. F. Chaloupka.....	12.9	0.76	9.8
10-13	T. C. Palmer.....	5.3	1.10	5.8

DISCHARGE MEASUREMENTS, OF CEDAR CREEK BRIDGE  
ABOVE MOUTH, SECTION 5-15-41, STATE HIGHWAY, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3- 1	T. C. Palmer.....	6.6	1.49	9.8
3-31	T. C. Palmer.....	5.2	2.31	12.1
4-14	T. C. Palmer.....	3.6	1.94	7.0
5- 4	T. C. Palmer.....	4.1	1.93	7.9
6-22	A. H. Atkins.....	5.0	1.64	8.2
7- 6	A. H. Atkins.....	1.9	3.40	6.6
8-20	A. H. Atkins.....	4.2	0.69	2.9
8-30	A. H. Atkins.....	3.0	0.97	2.9
9-14	T. C. Palmer.....	5.4	1.10	5.9
9-30	Palmer-Chaloupko .....	4.8	1.61	7.7
10-14	T. C. Palmer.....	5.1	1.55	7.9
11-28	T. C. Palmer.....	5.4	2.15	11.6

DISCHARGE MEASUREMENTS, OF COLD WATER CREEK,  
NE  $\frac{1}{4}$  SEC. 34 18-46, LISCO-OSHKOSH ROAD, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 5	T. C. Palmer.....	4.0	1.00	4.1
2-28	T. C. Palmer.....	2.9	1.69	4.9
3-31	T. C. Palmer.....	2.2	1.56	3.4
5- 3	T. C. Palmer.....	2.8	1.10	3.0
6-21	A. H. Atkins.....	12.6	0.83	10.4
7- 5	A. H. Atkins.....	2.4	0.85	2.0
7-20	A. H. Atkins.....	1.1	1.04	1.1
7-26	A. H. Atkins.....	2.0	1.37	2.7
8-10	A. H. Atkins.....	2.6	1.00	2.6
8-22	A. H. Atkins.....	2.8	1.21	3.3
9-13	T. C. Palmer.....	1.6	1.31	2.1
10-13	T. C. Palmer.....	1.8	1.20	2.1
11-28	T. C. Palmer.....	2.2	1.56	3.4

## REPORT OF SECRETARY

**ACTUAL DISCHARGE MEASUREMENTS, OF COLD WATER CREEK,  
AT SEC. 27, TWP. 18N, RANGE 46W, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4- 5	A. E. Johnston.....	3.80	1.24	4.70
4-18	A. E. Johnston.....	3.90	1.05	4.10
5- 1	A. E. Johnston.....	3.80	2.00	7.70
5-15	A. E. Johnston.....	2.90	0.96	2.80
5-31	A. E. Johnston.....	3.60	1.14	4.10
6-15	A. E. Johnston.....	1.80	0.88	1.60
6-30	A. E. Johnston.....	1.80	1.11	2.00
7-13	A. E. Johnston.....	1.80	1.33	2.40
7-19	A. E. Johnston.....	2.20	0.59	1.30
8- 3	A. E. Johnston.....	2.80	1.10	3.10
8-17	A. E. Johnston.....	2.10	1.43	3.00
9- 2	A. E. Johnston.....	2.40	1.83	4.40
9-15	A. E. Johnston-Easterday.....	1.40	1.43	2.00
9-25	A. E. Johnston.....	2.20	2.09	4.60

**ACTUAL DISCHARGE MEASUREMENTS, OF COTTONWOOD CREEK,  
AT DUNLAP, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-27	T. C. Palmer.....	3.95	0.85	3.36
8- 2	A. H. Atkins.....	1.50	0.93	1.40

**ACTUAL DISCHARGE MEASUREMENTS, OF LITTLE COTTONWOOD  
CREEK AT SW. CORNER SEC. 8-32-52, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-23	Heywood-Palmer .....	2.09	0.85	1.77
2-13	T. C. Palmer.....	3.10	0.81	2.50

**DISCHARGE MEASUREMENTS, OF FAIRFIELD SEEP,  
WEST LINE SEC. 18-22-53, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-11	T. C. Palmer.....	3.3	2.12	7.1
2- 3	T. C. Palmer.....	4.4	1.79	7.8
2-18	T. C. Palmer.....	6.4	1.80	11.6
3- 7	T. C. Palmer.....	4.0	1.37	5.5
4-11	T. C. Palmer.....	2.4	1.39	3.3
4-28	T. C. Palmer.....	4.2	1.22	5.1
5-10	T. C. Palmer.....	6.4	1.25	7.9
6-20	T. C. Palmer.....	5.6	2.13	11.8
7- 5	T. C. Palmer.....	6.9	2.12	14.7
8-18	T. C. Palmer.....	6.9	2.08	14.3
8-29	T. C. Palmer.....	4.4	1.85	8.1
9-26	T. C. Palmer.....	5.9	1.32	7.9
10- 5	T. C. Palmer.....	5.1	1.34	6.8
10-26	T. C. Palmer.....	3.6	1.85	6.7
11- 7	T. C. Palmer.....	3.8	1.84	7.1
11-29	T. C. Palmer.....	3.8	1.80	6.8
12-19	T. C. Palmer.....	3.6	2.03	7.3

**ACTUAL DISCHARGE MEASUREMENTS, OF FAIRFIELD SEEP,  
WEST LINE, SEC. 18-21-53, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	3.60	1.79	6.42
2- 6	T. C. Palmer.....	3.70	1.25	4.60
3- 6	T. C. Palmer.....	4.70	1.39	6.50
3-23	T. C. Palmer.....	2.82	1.97	5.57
4- 5	T. C. Palmer.....	3.62	1.70	6.60
5- 5	T. C. Palmer.....	3.60	2.00	7.20
5-25	T. C. Palmer.....	2.90	1.86	5.40
6- 8	T. C. Palmer.....	5.90	1.69	10.00
7-15	T. C. Palmer.....	4.90	1.91	9.40
7-22	T. C. Palmer.....	3.20	1.90	6.10
8-25	T. C. Palmer.....	3.60	1.86	6.70
9- 1	T. C. Palmer.....	3.60	1.80	6.50
9-14	Palmer-Easterday .....	7.00	1.30	9.10
9-28	T. C. Palmer.....	5.80	2.00	10.60

MISCELLANEOUS DISCHARGE MEASUREMENTS, OF FRENCHMAN  
RIVER, FOR YEAR 1921

BRIDGE 75 FEET BELOW MARANVILLE DAM

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-17	T. C. Palmer.....	7.0	0.85	5.9

ONE-HALF MILE ABOVE INMAN CANAL DAM

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-24	T. C. Palmer-Bailey.....	8.6	1.19	10.0

BRIDGE BELOW IMPERIAL POWER PLANT

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-25	T. C. Palmer-Bailey.....	32.7	1.78	58.0

ONE-HALF MILE ABOVE INMAN CANAL

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-17	T. C. Palmer.....	11.1	1.45	16.1

100 YARDS BELOW KILPATRICK DAM

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-24	T. C. Palmer-Bailey.....	7.2	0.94	6.7

MISCELLANEOUS DISCHARGE MEASUREMENTS OF FRENCHMAN  
RIVER, FOR YEAR 1921—(Continued)

BRIDGE AT WAUNETA

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-24	T. C. Palmer-Bailey.....	41.0	1.69	69.0

500 FEET BELOW CHAMPION DAM

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-17	T. C. Palmer.....	6.5	1.84	12.0

WAUNETA (N. W. CORNER TOWN)

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-17	T. C. Palmer.....	56.9	2.06	117.4

ONE-HALF MILE BELOW IMPERIAL POWER PLANT

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-20	T. C. Palmer-Bailey.....	29.3	1.53	45.0

AT CULBERTSON

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-19	T. C. Palmer-Bailey.....	56.2	1.52	85.4

**ACTUAL DISCHARGE MEASUREMENTS, OF FRENCHMAN RIVER  
AT VARIOUS LOCATIONS, FOR YEAR 1922  
ONE-FOURTH MILE ABOVE MARANVILLE DAM**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-26	T. C. Palmer.....	4.90	1.20	5.85

**BRIDGE BELOW MARANVILLE**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-26	T. C. Palmer.....	4.97	1.72	8.56
2-21	T. C. Palmer.....	5.60	1.83	10.20

**BRIDGE BELOW INMAN DAM**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
6-23	T. C. Palmer.....	1.70	1.11	1.90
6-23	T. C. Palmer.....	2.50	1.16	2.90
6-23	T. C. Palmer.....	8.30	1.27	4.20

**AT CULBERTSON, NEBRASKA**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
7- 9	T. C. Palmer.....	19.80	0.98	19.60
8- 2	T. C. Palmer.....	20.70	1.17	24.40
8-24	A. E. Johnston.....	92.60	1.39	128.90

**BELOW CULBERTSON BRIDGE**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
6-25	T. C. Palmer.....	11.00	1.13	12.50

ACTUAL DISCHARGE MEASUREMENTS, OF FRENCHMAN RIVER  
AT VARIOUS LOCATIONS, FOR YEAR 1922

BRIDGE ABOVE INMAN DITCH, WEST LINE SECTION 23-6-40

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-26	T. C. Palmer.....	11.30	1.34	15.14
2-21	T. C. Palmer.....	12.30	1.40	17.20
6-23	T. C. Palmer.....	6.50	1.29	8.40
7- 8	T. C. Palmer.....	7.10	1.12	8.00
8- 8	T. C. Palmer-Strong.....	7.90	1.35	10.70

150 FEET BELOW KILPATRICK DITCH HEAD--WEST LINE 23-6-40

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-26	T. C. Palmer.....	12.30	2.85	35.07
2-21	T. C. Palmer.....	15.80	2.56	40.40
6-24	T. C. Palmer.....	6.10	0.78	4.80

AT CHAMPION, NE $\frac{1}{4}$  SECTION 21-6-39

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-26	T. C. Palmer.....	48.30	1.34	58.24
2-21	T. C. Palmer.....	48.30	1.33	57.60
6-24	T. C. Palmer.....	38.10	1.08	41.30
7- 8	T. C. Palmer.....	46.00	1.23	56.70
8- 2	T. C. Palmer-Strong.....	38.30	1.18	39.50
8-23	A. E. Johnston-Strong.....	36.10	1.10	40.00

BELOW IMPERIAL POWER PLANT

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-26	T. C. Palmer.....	42.00	1.47	61.95
8-23	A. E. Johnston-Strong.....	61.70	2.10	129.90

MISCELLANEOUS DISCHARGE MEASUREMENTS OF FRENCHMAN  
RIVER AT VARIOUS LOCATIONS FOR YEAR 1922—(Continued)

ONE-QUARTER MILE ABOVE ABERDEEN HEADGATE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-26	T. C. Palmer.....	60.40	1.08	65.01
2-21	T. C. Palmer.....	45.90	1.89	86.60
6-24	T. C. Palmer.....	42.20	1.42	60.01
7-8	T. C. Palmer.....	42.20	1.43	60.40
8-2	T. C. Palmer-Strong.....	34.90	1.69	59.30

BRIDGE BELOW FRENCHMAN VALLEY HEADGATE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-27	T. C. Palmer.....	71.20	2.34	166.40
2-21	T. C. Palmer.....	76.30	2.25	171.80

THREE MILES SOUTH OF LAMAR, NEBRASKA

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-26	T. C. Palmer.....	1.39	0.85	1.18

BRIDGE ABOVE OLIVER PUMP PLANT (WAUNETA)

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-27	T. C. Palmer.....	52.60	1.98	101.50
2-21	T. C. Palmer.....	55.70	2.52	140.20
6-24	T. C. Palmer.....	44.20	1.49	66.20
7-8	T. C. Palmer.....	39.30	2.26	89.00
8-2	T. C. Palmer-Strong.....	47.90	1.87	89.70

ONE MILE ABOVE MARANVILLE RESERVOIR—WEST LINE SEC. 11-6-41

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-26	T. C. Palmer.....	3.20	1.22	3.89
2-21	T. C. Palmer.....	5.30	1.04	5.50

**DISCHARGE MEASUREMENTS, OF GREENWOOD CREEK AT  
MEGLEMRE DITCH HEADGATE, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-26	T. C. Palmer.....	4.5	1.50	6.7

**DISCHARGE MEASUREMENTS, OF HORSE CREEK, ONE MILE EAST  
OF STATE LINE ROAD, SECS. 34 AND 35, T. 23N, R. 58W,  
FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-13	T. C. Palmer.....	3.7	0.69	2.6
8-20	T. C. Palmer.....	4.4	1.23	5.4
8-31	T. C. Palmer.....	6.9	1.43	9.8
9-28	T. C. Palmer.....	3.9	2.16	8.4
10- 7	T. C. Palmer.....	6.6	1.14	7.5
10-27	T. C. Palmer.....	5.5	1.03	5.7
11- 9	T. C. Palmer.....	4.5	0.93	4.2
11-30	T. C. Palmer.....	3.8	0.64	2.4
12-19	T. C. Palmer.....	4.5	0.60	2.7

**DISCHARGE MEASUREMENTS, OF HORSE CREEK (TRIBUTARY TO  
REPUBLICAN RIVER), NE $\frac{1}{4}$  SEC. 23, T. 1N, R. 39W, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-18	T. C. Palmer-Bailey.....	1.22	1.02	1.23

**DISCHARGE MEASUREMENTS, OF KRONBERG SEEP,  
SECTION 6-22-55, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-12	T. C. Palmer.....	1.4	1.06	1.5
2- 2	T. C. Palmer.....	4.5	1.11	5.0
2-17	T. C. Palmer.....	2.2	1.18	2.6
3- 8	T. C. Palmer.....	1.4	1.18	1.6
3-24	T. C. Palmer.....	1.4	1.10	1.5
4-12	T. C. Palmer.....	1.1	1.04	1.1
4-29	T. C. Palmer.....	1.3	1.10	1.4
5-11	T. C. Palmer.....	1.0	0.98	1.0
6- 8	T. C. Palmer-A. H. Atkins.....	2.1	1.03	2.1
6-21	T. C. Palmer.....	2.3	1.11	2.5
7- 6	T. C. Palmer.....	2.1	1.23	2.5
8- 9	T. C. Palmer.....	4.5	.75	3.4
8-19	T. C. Palmer.....	3.2	1.11	3.6
8-30	T. C. Palmer.....	4.7	1.04	4.9
9-27	T. C. Palmer.....	2.5	1.12	2.8
10- 6	T. C. Palmer.....	4.7	0.85	4.0
10-27	T. C. Palmer.....	5.6	0.52	2.9
11- 8	T. C. Palmer.....	4.6	0.85	3.9
11-30	T. C. Palmer.....	5.4	0.54	2.9
12-19	T. C. Palmer.....	4.6	0.55	2.5

**DISCHARGE MEASUREMENTS, OF MORRILL DRAIN, EAST LINE  
SECTION 10-23-57, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-20	T. C. Palmer.....	2.8	1.68	4.8
8-31	T. C. Palmer.....	3.2	1.85	5.9
9-28	T. C. Palmer.....	2.4	1.80	4.3
10- 6	T. C. Palmer.....	2.4	0.85	2.1
10-27	T. C. Palmer.....	2.3	1.39	3.3
11- 8	T. C. Palmer.....	3.0	1.91	5.7
11-30	T. C. Palmer.....	1.8	1.80	2.3
12-19	T. C. Palmer.....	2.0	1.40	2.8

ACTUAL DISCHARGE MEASUREMENTS, OF KRONBERG SEEP, AT  
HIGHWAY IN SECTION 6-22-55, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	2.17	0.91	1.96
2- 7	T. C. Palmer.....	1.95	0.95	1.76
3- 7	T. C. Palmer.....	2.00	0.80	1.60
3-22	T. C. Palmer.....	1.60	1.07	1.70
4- 6	T. C. Palmer.....	2.04	1.12	2.28
5- 3	T. C. Palmer.....	1.40	1.14	1.60
5-10	T. C. Palmer.....	1.60	0.98	1.50
5-24	T. C. Palmer.....	1.70	1.11	1.90
6- 6	T. C. Palmer.....	1.80	1.17	2.10
6-14	T. C. Palmer.....	1.60	1.06	1.70
7-14	T. C. Palmer.....	2.50	1.32	3.30
7-21	T. C. Palmer.....	4.40	1.27	5.60
8-24	T. C. Palmer.....	4.00	1.22	4.90
8-31	T. C. Palmer.....	4.10	1.09	4.50
9-18	T. C. Palmer-Easterday.....	2.00	1.40	2.80
9-26	T. C. Palmer.....	4.50	1.13	5.10

ACTUAL DISCHARGE MEASUREMENTS OF LAWRENCE FORK AT  
VARIOUS PLACES, FOR YEAR 1922

HALF MILE EAST OF REDINGTON

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-14	T. C. Palmer.....	2.64	1.80	4.72
2-17	T. C. Palmer.....	4.20	2.12	8.80
3- 9	T. C. Palmer.....	5.70	2.00	11.40
4-13	T. C. Palmer.....	3.26	1.64	5.34
6-17	T. C. Palmer.....	0.20	0.50	0.10
7-31	A. H. Atkins.....	0.40	1.00	0.40

30 FEET BELOW KING DAM

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
6-29	A. H. Atkins-T. C. Palmer.....	3.60	1.19	4.30

ACTUAL DISCHARGE MEASUREMENTS OF LAWRENCE FORK AT  
VARIOUS PLACES FOR YEAR 1922—(Continued)

PASSING CRIGLER HEADGATE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
6-26	Chaloupka-A. H. Atkins.....	0.14	0.50	0.70
6-29	A. T. Atkins-T. C. Palmer.....	0.70	0.85	0.25
7-31	A. H. Atkins.....	2.60	1.76	4.60
8-19	A. H. Atkins.....	0.10	0.08	0.40

PASSING RANDALL HEADGATE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
6-17	T. C. Palmer.....	0.80	0.75	0.60
6-29	A. T. Atkins-T. C. Palmer.....	1.50	0.53	0.80
6-29	A. H. Atkins-T. C. Palmer.....	2.60	1.23	3.20
7-31	A. H. Atkins.....	2.00	3.00	6.00
8-25	A. H. Atkins.....	1.40	1.92	2.70

PASSING LAING HEADGATE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
7-31	A. H. Atkins.....	1.20	1.41	1.70

ACTUAL DISCHARGE MEASUREMENTS, OF LODGE POLE CREEK  
FOR YEAR 1922

SECTION 14-14-51

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-11	T. C. Palmer.....	5.50	1.00	5.50

SECTION 18-12-45, COLORADO AND NEBRASKA LINE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8- 7	A. E. Johnston.....	2.30	0.82	1.90
8-10	A. E. Johnston.....	1.40	0.64	0.90
8-31	A. E. Johnston-Eyerley.....	1.50	0.66	1.00

EAST LINE SECTION 10-14-52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-11	T. C. Palmer.....	3.50	1.50	5.20

WEST LINE SECTION 7-14-51

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-11	T. C. Palmer.....	3.90	1.49	5.80

NEAR EAST LINE SECTION 31-14-48

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-13	T. C. Palmer.....	6.80	1.11	7.51

NEAR EAST LINE SECTION 31-14-49

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-13	T. C. Palmer.....	5.00	1.24	6.20
5-17	T. C. Palmer.....	2.50	1.04	2.60

**ACTUAL DISCHARGE MEASUREMENTS, OF HORSE CREEK, AT  
 $\frac{1}{2}$  SECTION 35-23-58, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-10	T. C. Palmer.....	3.10	1.06	3.28
2- 7	T. C. Palmer.....	3.40	0.89	3.00
3- 7	T. C. Palmer.....	4.80	0.94	4.50
3-21	T. C. Palmer.....	5.70	1.40	7.92
4- 6	T. C. Palmer.....	3.15	0.83	2.65
5- 3	T. C. Palmer.....	5.00	1.12	5.60
5- 9	T. C. Palmer.....	4.50	0.91	4.20
5-24	T. C. Palmer.....	4.20	1.04	4.40
6-12	T. C. Palmer.....	7.10	2.19	15.60
7-13	T. C. Palmer.....	4.50	1.33	6.00
7-20	T. C. Palmer.....	2.50	1.24	3.10
8-23	T. C. Palmer.....	5.30	1.32	7.00

ACTUAL DISCHARGE MEASUREMENTS, OF LODGE POLE CREEK  
AT VARIOUS PLACES, FOR YEAR 1922

$\frac{1}{2}$  MILE NORTH,  $\frac{1}{4}$  MILE EAST OF OVID, COLORADO

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-28	T. C. Palmer.....	10.20	1.19	12.10
2-24	T. C. Palmer.....	10.20	1.14	11.60
3-14	T. C. Palmer.....	10.00	1.51	15.10
5-17	T. C. Palmer.....	6.30	1.28	8.10
6- 9	A. E. Johnston.....	5.60	0.61	3.40
6-26	A. E. Johnston.....	5.00	0.70	3.50
6-27	T. C. Palmer.....	4.10	1.41	5.80
7-10	T. C. Palmer.....	4.20	1.52	6.40
7-11	A. E. Johnston.....	5.00	0.52	3.10
7-29	A. E. Johnston.....	12.90	0.76	9.70
8- 7	A. E. Johnston.....	7.00	0.77	5.40
8-19	A. E. Johnston.....	1.80	1.22	2.20
8-31	A. E. Johnston-Eyerley.....	4.40	0.97	4.60
9-20	A. E. Johnston.....	2.00	1.70	3.40
9-30	A. E. Johnston.....	2.10	1.23	2.60

NEAR EAST LINE SECTION 22-13-45

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-14	T. C. Palmer.....	7.50	1.18	8.80

HOWARD DAM D-336, NE SECTION 31-14-47

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-13	T. C. Palmer.....	2.70	3.19	8.60

EAST LINE SECTION 30-15-55

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-11	T. C. Palmer.....	9.50	1.06	10.00
5-17	T. C. Palmer.....	4.20	1.09	4.60

ACTUAL DISCHARGE MEASUREMENTS OF LODGEPOLE CREEK AT  
VARIOUS PLACES FOR YEAR 1922—(Continued)

WEST LINE SECTION 29-15-54

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-11	T. C. Palmer.....	3.80	0.98	3.70

BRIDGE BELOW KIMBALL RESERVOIR

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-11	T. C. Palmer.....	3.90	1.16	4.50

WEST LINE SECTION 1-14-58

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-11	T. C. Palmer.....	22.30	0.70	15.60

AT KIMBALL RESERVOIR RATING FLUME

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-11	T. C. Palmer.....	6.00	2.45	14.70

ACTUAL DISCHARGE MEASUREMENTS, OF LONERGON CREEK AT  
ONE MILE WEST OF LEMOYNE, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4- 7	A. E. Johnston.....	6.92	1.10	7.80
4-19	A. E. Johnston.....	5.51	0.94	5.20
5- 2	A. E. Johnston.....	6.00	1.00	6.20
5-16	A. E. Johnston.....	3.30	0.63	2.10
6- 1	A. E. Johnston.....	7.80	1.17	9.20
7- 2	A. E. Johnston.....	6.90	0.93	6.40
7-21	A. E. Johnston.....	8.30	0.69	5.80
9- 1	Eyerley-A. E. Johnston.....	3.30	1.42	4.70
9-16	Easterday-A. E. Johnston.....	2.90	1.53	4.30

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## ACTUAL DISCHARGE MEASUREMENTS, OF MONROE CREEK AT SOUTH LINE SECTION 33-33 56, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-31	Heywood-T. C. Palmer.....	1.38	1.43	1.94

## ACTUAL DISCHARGE MEASUREMENTS, OF NIOBRARA RIVER AT VARIOUS PLACES, FOR YEAR 1922

## AT DUNLAP

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-16	T. C. Palmer.....	31.75	2.13	67.79
2-11	T. C. Palmer.....	33.10	1.84	60.90
3-27	T. C. Palmer.....	71.65	1.94	139.16
8- 4	A. H. Atkins.....	18.60	3.14	58.50

## AT MARSLAND

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-15	T. C. Palmer.....	22.50	1.77	39.80
4- 1	T. C. Palmer.....	37.40	1.67	62.17
8- 4	A. H. Atkins.....	30.20	1.83	55.50

## MOUTH WHISTLE CREEK—SECTION 12-28-54

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-10	Heywood .....	10.80	2.68	29.00
9-25	Heywood .....	6.20	1.82	11.30

**ACTUAL DISCHARGE MEASUREMENTS, OF LOWER DUGOUT  
CREEK AT VARIOUS PLACES, FOR YEAR 1922**

**SECTION 20-19-48—WASTE WATER—FROM BROWN'S CREEK CANAL**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-29	A. E. Johnston.....	18.00	0.55	9.90

**BELOW COOPER HEADGATE**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
7-18	A. H. Atkins.....	0.40	1.50	0.60
7-17	A. E. Johnston.....	1.50	0.67	1.00
8- 1	A. E. Johnston.....	1.20	0.58	0.70
8-16	A. E. Johnston.....	0.70	0.71	0.50

**ABOVE COOPER HEADGATE**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
6-29	A. E. Johnston.....	1.10	1.36	1.50

**WEST LINE SECTION 3-19-48**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-24	T. C. Palmer.....	1.45	1.37	1.98

**CENTER WEST HALF SECTION 3-19-48**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-24	T. C. Palmer.....	1.42	1.80	1.83

ACTUAL DISCHARGE MEASUREMENTS OF DEEP HOLES CREEK  
AT 80 RODS ABOVE MOUTH

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-13	T. C. Palmer.....	1.80	0.70	0.90

ACTUAL DISCHARGE MEASUREMENTS, OF GREENWOOD CREEK  
AT MOUTH, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4- 8	T. C. Palmer.....	1.00	0.71	0.71

MISCELLANEOUS DISCHARGE MEASUREMENTS, OF NIOBRARA  
RIVER, FOR YEAR 1922

## SECTIONS 5 AND 6-28-51—MARSLAND

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-21	T. C. Palmer.....	37.9	1.86	70.2
8- 8	T. C. Palmer-Heywood.....	18.2	1.12	20.3
12-14	T. C. Palmer.....	32.2	1.60	51.6

NORTH LINE OF NE $\frac{1}{4}$  SECTION 9-29-56

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 7	T. C. Palmer-Heywood.....	14.2	0.63	8.9

COFFEE RANCH SW $\frac{1}{4}$  OF SECTION 23-29-56

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 7	T. C. Palmer-Heywood.....	10.3	0.78	0.8

MISCELLANEOUS DISCHARGE MEASUREMENTS OF NIOBRARA  
RIVER FOR YEAR 1922—(Continued)

AGATE, NEBRASKA, SECTION 7-28-55—NW CORNER

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 7	T. C. Palmer-Heywood.....	11.2	1.15	12.8

HALF MILE BELOW HEADGATE OF HARRIS DITCH

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 7	T. C. Palmer-Heywood.....	8.1	1.47	11.9

FOX RANCH, EAST LINE SECTION 6-28-52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 8	Heywood-T. C. Palmer.....	17.20	1.14	19.5

PROPOSED HAY SPRINGS DAM

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 8	T. C. Palmer-Heywood.....	22.50	1.52	34.8

BRIDGE BELOW MOUTH OF WHISTLE CREEK

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 8	T. C. Palmer-Heywood.....	7.5	1.84	13.80

DIERIEX RANCH BRIDGE ON EAST LINE SECTION 19, T. 30N, R. 43W

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 9	T. C. Palmer-Heywood.....	41.9	1.54	64.7

MISCELLANEOUS DISCHARGE MEASUREMENTS OF NIOBRARA  
RIVER FOR YEAR 1922—(Continued)

BRIDGE BETWEEN SECTIONS 21 AND 28-32-40

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9-10	T. C. Palmer-Heywood.....	73.0	2.21	161.2

BRIDGE SOUTH OF MARS LAND

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
11- 4	T. C. Palmer.....	27.1	1.28	34.6

**DISCHARGE MEASUREMENTS, OF MELBETA DRAIN,  
SECTION 19-22-53, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2- 3	T. C. Palmer.....	1.9	1.22	2.3
2-17	T. C. Palmer.....	2.6	1.08	2.7
3- 7	T. C. Palmer.....	2.0	1.21	2.5
3-23	T. C. Palmer.....	2.4	1.44	3.4
4-11	T. C. Palmer.....	2.1	1.38	2.9
4-28	T. C. Palmer.....	1.1	1.60	1.8

**DISCHARGE MEASUREMENTS, OF NINE MILE DRAIN,  
SE. CORNER SEC. 16-22-53, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
1-11	T. C. Palmer.....	47.0	2.11	4.40	99.4
2- 2	T. C. Palmer.....	47.5	2.03	4.45	96.5
2-18	T. C. Palmer.....	46.1	2.21	4.40	101.9
3- 7	T. C. Palmer.....	46.6	2.17	4.45	101.1
3-23	T. C. Palmer.....	43.4	2.13	4.38	92.5
4-11	T. C. Palmer.....	40.7	2.25	4.35	91.8
4-28	T. C. Palmer.....	43.3	1.99	4.40	86.2
5-10	T. C. Palmer.....	46.9	2.30	4.55	107.9
5-28	T. C. Palmer.....	47.8	2.60	4.75	124.3
6- 6	T. C. Palmer-Atkins.....	48.2	2.58	4.85	124.4
6-20	T. C. Palmer.....	46.8	2.48	4.95	116.0
7- 5	T. C. Palmer.....	48.2	3.10	5.30	149.4
7-12	John K. Rohrer.....	.....	.....	.....	127.0
8- 8	T. C. Palmer.....	56.9	2.87	5.65	163.1
8-18	T. C. Palmer.....	56.4	3.10	5.70	175.2
8-29	T. C. Palmer.....	67.2	2.97	5.85	199.0
9-26	T. C. Palmer.....	62.4	2.66	5.55	165.9
10- 5	T. C. Palmer.....	59.4	2.88	5.45	167.9
10-26	T. C. Palmer.....	44.2	3.00	5.25	132.8
11- 7	T. C. Palmer.....	54.4	2.42	5.10	131.4
11-29	T. C. Palmer.....	44.3	2.50	4.95	110.6
12-19	T. C. Palmer.....	43.0	2.57	4.80	110.3

ACTUAL DISCHARGE MEASUREMENTS, OF NINE MILE DRAIN,  
SOUTHEAST CORNER SEC. 16-22-53, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	42.00	2.52	105.80
2- 6	T. C. Palmer.....	36.30	2.23	80.90
3- 6	T. C. Palmer.....	34.20	2.39	81.60
3-28	T. C. Palmer.....	37.90	1.97	74.70
4- 5	T. C. Palmer.....	41.25	1.54	63.72
5- 5	T. C. Palmer.....	36.80	1.85	68.30
5-25	T. C. Palmer.....	35.20	2.00	71.60
6- 8	T. C. Palmer.....	44.00	1.90	83.60
7-25	T. C. Palmer.....	76.70	2.78	213.90
8-25	T. C. Palmer.....	50.90	3.20	162.90
9- 1	T. C. Palmer.....	50.80	3.53	179.70
9-14	Easterday-T. C. Palmer.....	48.20	3.24	156.60
9-28	T. C. Palmer.....	54.90	2.91	160.00

ACTUAL DISCHARGE MEASUREMENTS, OF SCOTTSBLUFF DRAIN  
300' NO. C. B. & Q. TRACK IN SE $\frac{1}{4}$  SEC. 25-22-55, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	5.45	1.21	6.58
2- 6	T. C. Palmer.....	5.80	1.25	7.20
3- 6	T. C. Palmer.....	6.70	1.33	8.90
3-23	T. C. Palmer.....	8.60	0.96	8.50
4- 5	T. C. Palmer.....	7.03	1.43	10.04
5- 3	T. C. Palmer.....	7.20	1.15	8.30
5-25	T. C. Palmer.....	4.00	2.21	8.90
6- 7	T. C. Palmer.....	6.10	1.60	10.10
6-14	T. C. Palmer.....	7.00	1.61	11.30
7-14	T. C. Palmer.....	14.30	1.70	24.40
9- 1	T. C. Palmer.....	9.20	1.97	18.20
9-14	T. C. Palmer-Easterday.....	17.20	1.87	32.20
9-28	T. C. Palmer.....	11.00	1.94	21.40

**DISCHARGE MEASUREMENTS, OF OTTER CREEK BRIDGE AT  
MOUTH OF STATE HIGHWAY, SEC. 9-15-49, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
8- 1	T. C. Palmer.....	8.8	2.44	.....	21.4
8-31	T. C. Palmer.....	11.6	2.13	.....	24.6
5- 4	T. C. Palmer.....	13.6	1.89	.....	25.7
6-23	A. H. Atkins.....	2.3	1.46	.....	3.4
7- 7	A. H. Atkins.....	2.1	0.78	.....	1.6
7-15	A. H. Atkins.....	7.9	2.30	.....	18.2
7-27	A. H. Atkins.....	8.7	1.43	0.50	12.4
8- 4	A. H. Atkins.....	13.6	1.92	1.00	26.0
8-11	A. H. Atkins.....	11.8	1.13	1.00	23.3
8-19	A. H. Atkins.....	10.7	2.28	0.60	24.5
10-14	T. C. Palmer.....	12.0	1.89	.....	22.6

**DISCHARGE MEASUREMENTS, OF PEPPER CREEK, ALLIANCE  
CHADRON ROAD, NORTH LINE SEC. 27-30-48, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-14	T. C. Palmer.....	0.92	0.90	0.84
4-26	T. C. Palmer.....	0.90	0.84	0.75
8-16	T. C. Palmer.....	0.33	1.03	0.33
9-12	T. C. Palmer.....	0.60	0.68	0.40
10-10	T. C. Palmer.....	0.65	0.90	0.58
11- 1	T. C. Palmer.....	0.65	0.93	0.60
12-12	T. C. Palmer.....	0.70	1.12	0.78

**DISCHARGE MEASUREMENT, OF POLE CREEK (TRIBUTARY TO  
NIOBRARA RIVER), SEC. 28-32-40, FOR YEAR 1921**

100 YARDS ABOVE MOUTH OF CREEK

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9-10	T. C. Palmer-Heywood.....	.90	1.14	3.32

ACTUAL DISCHARGE MEASUREMENTS, OF OTTER CREEK, AT  
BRIDGE AT MOUTH SEC. 9-15-49, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-17	T. C. Palmer.....	15.10	2.40	36.20
4- 7	A. E. Johnston.....	10.45	2.20	22.10
4-19	A. E. Johnston.....	9.50	2.00	19.21
5- 2	A. E. Johnston.....	9.20	2.00	18.70
5-16	A. E. Johnston.....	12.40	2.37	29.20
6- 1	A. E. Johnston.....	15.90	0.89	14.20
6-17	A. E. Johnston.....	4.60	2.50	11.50
7- 2	A. E. Johnston.....	9.80	2.02	19.80
7-21	A. E. Johnston.....	10.20	2.12	21.70
9- 1	A. E. Johnston-Eyerley.....	9.10	1.73	15.80
9-16	A. E. Johnston-Easterday.....	10.50	2.24	23.60

ACTUAL DISCHARGE MEASUREMENTS, OF PEPPER CREEK, AT  
ALLIANCE-CHADRON HIGHWAY, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-27	T. C. Palmer.....	1.41	0.79	1.11

ACTUAL DISCHARGE MEASUREMENTS, OF PAWNEE CREEK, AT  
HIGHWAY BRIDGE, SEC. 4-12-27, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-16	T. C. Palmer.....	11.30	0.78	8.80
4-24	A. E. Johnston.....	14.78	0.79	11.80
5- 5	A. E. Johnston.....	6.50	0.80	5.20
5-19	A. E. Johnston.....	4.30	1.70	7.30
6- 5	A. E. Johnston.....	17.20	0.23	4.10
6-21	A. E. Johnston.....	19.10	0.38	7.30
6-24	A. E. Johnston.....	4.40	1.04	4.60
7- 5	A. E. Johnston.....	3.50	0.83	2.90
7- 8	A. E. Johnston.....	5.00	0.86	4.30
7-24	A. E. Johnston.....	4.00	0.85	3.40
7-27	A. E. Johnston.....	4.30	0.81	3.50
8- 9	A. E. Johnston.....	5.00	0.96	4.80
8-29	A. E. Johnston.....	6.30	0.38	2.40
9- 6	A. E. Johnston.....	3.60	0.86	3.10
9-19	A. E. Johnston-Eyerley.....	3.80	1.10	4.20
9-28	A. E. Johnston-Easterday.....	4.40	1.06	4.70
	A. E. Johnston.....	2.50	1.16	2.90

DISCHARGE MEASUREMENTS, OF PUMPKINSEED CREEK,  
BRIDGEPORT-BROADWATER ROAD, SECS. 12 AND 13-19-50,

FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 4	T. C. Palmer.....	30.5	1.79	54.5
1-14	T. C. Palmer.....	28.5	1.83	52.0
1-21	T. C. Palmer.....	29.7	1.97	58.4
2- 1	T. C. Palmer.....	31.3	1.82	57.0
2-10	T. C. Palmer.....	35.2	1.99	70.0
2-23	T. C. Palmer.....	33.3	1.66	55.2
3-11	T. C. Palmer.....	33.3	1.67	55.6
3-30	T. C. Palmer.....	31.5	1.61	50.8
5- 3	T. C. Palmer.....	27.5	0.94	25.8
5-24	T. C. Palmer.....	22.0	1.19	26.1
6- 1	T. C. Palmer.....	220.4	2.34	516.4
6- 1	T. C. Palmer.....	487.9	2.05	1000.0
6- 9	T. C. Palmer-Atkins.....	31.9	2.33	74.6
8-15	T. C. Palmer.....	12.2	1.47	18.1
7-13	John K. Rohrer.....	.....	.....	13.0
9- 3	T. C. Palmer.....	14.9	1.60	23.7
10-13	T. C. Palmer.....	15.5	1.66	25.7
12- 5	T. C. Palmer.....	23.5	1.86	43.8
12-27	T. C. Palmer.....	26.5	2.08	53.9

DISCHARGE MEASUREMENT, OF PINE CREEK, AT MILL ON  
SEC. 33-30-44, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 9	T. C. Palmer-Heywood.....	13.3	1.18	15.7

DISCHARGE MEASUREMENTS, OF PAWNEE CREEK, LINCOLN  
HIGHWAY BRIDGE, SEC. 4-12 27, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4- 2	T. C. Palmer.....	9.5	0.93	8.8
5- 6	T. C. Palmer.....	8.4	0.85	7.2
10-17	T. C. Palmer.....	8.6	0.75	6.4

ACTUAL DISCHARGE MEASUREMENTS OF PUMPKINSEED CREEK  
AT VARIOUS PLACES, FOR YEAR 1922

## WEST LINE SECTION 28-19-15

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4- 8	T. C. Palmer.....	29.70	1.70	50.55
7- 1	T. C. Palmer.....	4.90	1.46	7.20

## OPPOSITE ROUND HOUSE ROCK CANAL HEADGATE—SECTION 28-19-51

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-13	T. C. Palmer.....	23.90	1.65	39.40
7-27	A. H. Atkins.....	7.80	1.65	12.90
8-10	A. H. Atkins.....	9.80	1.56	15.80

## OPPOSITE HEAD OF MAXWELL DITCH HEADGATE—EAST LINE SEC. 28-19-52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-13	T. C. Palmer.....	18.80	1.27	23.80

## BRIDGE ABOVE MITCHELL CANAL—SECTION 33-18-52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-13	T. C. Palmer.....	19.20	1.43	27.40

## BELOW AIRSDALE RESERVOIR

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-13	T. C. Palmer.....	11.40	1.85	15.40

## BRIDGE BELOW OLESON DITCH HEADGATE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-14	T. C. Palmer.....	12.70	1.30	16.50

ACTUAL DISCHARGE MEASUREMENTS OF PUMPKINSEED CREEK  
AT VARIOUS PLACES FOR YEAR 1922—(Continued)

EAST LINE SECTION 34-42-56—(BRIDGE BELOW PETERS DITCH GATE)

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-14	T. C. Palmer.....	7.60	1.47	11.20

BROADWATER-BRIDGEPORT HIGHWAY—NORTH LINE SECTION 12-19-50

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 7	T. C. Palmer.....	22.20	2.19	48.64
1-12	T. C. Palmer.....	26.30	1.94	51.09
2-17	T. C. Palmer.....	31.50	1.95	61.20
3- 4	T. C. Palmer.....	32.20	2.04	65.80
4- 8	T. C. Palmer.....	28.70	1.66	47.77
4-18	A. E. Johnston.....	29.95	1.49	44.70
5- 1	A. E. Johnston.....	35.40	1.63	57.80
5-13	A. E. Johnston.....	43.00	1.97	85.10
5-19	T. C. Palmer.....	34.40	2.06	71.20
5-29	A. E. Johnston.....	24.20	1.82	31.90
6-12	A. E. Johnston.....	13.70	1.04	14.30
6-20	T. C. Palmer.....	6.50	1.40	9.10
6-28	A. E. Johnston.....	8.80	1.18	10.40
7-12	A. E. Johnston.....	15.30	1.79	27.50
7-17	A. E. Johnston.....	10.00	1.31	13.10
7-26	T. C. Palmer.....	20.00	1.47	29.50
7-31	A. E. Johnston.....	17.90	1.56	28.00
8-1 <sup>a</sup>	A. E. Johnston.....	7.80	1.24	9.70
8-17	A. H. Atkins.....	8.10	1.48	12.00
9-15	A. E. Johnston-Easterday.....	18.10	1.81	32.80
9-17	A. E. Johnston.....	15.50	1.61	25.00

DISCHARGE MEASUREMENTS, OF RED WILLOW CREEK,  
SE $\frac{1}{4}$  SEC. 1-20-52, GAGING STATION, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
1-11	T. C. Palmer.....	19.1	2.21	3.15	42.1
2- 1	T. C. Palmer.....	18.2	2.48	3.15	45.2
2-11	T. C. Palmer.....	18.4	2.57	3.15	47.1
2-24	T. C. Palmer.....	19.5	2.34	3.15	45.6
3- 7	T. C. Palmer.....	18.9	2.17	3.10	41.1
3-22	T. C. Palmer.....	17.3	3.12	3.10	38.3
4-11	T. C. Palmer.....	18.7	2.17	3.05	40.5
4-28	T. C. Palmer.....	22.1	2.46	3.25	5.42
5-10	T. C. Palmer.....	29.7	3.06	3.55	90.9
6- 6	T. C. Palmer-Atkins.....	28.5	3.75	2.75	106.9
6-20	T. C. Palmer.....	63.5	4.84	3.90	307.1
7- 5	T. C. Palmer.....	9.8	1.54	2.00	15.1
8- 8	T. C. Palmer.....	24.4	2.92	3.15	71.1
7-12	John K. Rohrer.....	.....	.....	.....	33.0
8-22	T. C. Palmer.....	16.3	3.32	2.65	56.3
8-29	T. C. Palmer.....	40.8	5.53	3.55	225.7
9-26	T. C. Palmer.....	47.2	3.70	3.55	174.2
10- 8	T. C. Palmer.....	22.9	2.30	3.00	52.6
10-28	T. C. Palmer.....	19.3	2.91	.....	56.2
11- 7	T. C. Palmer.....	19.9	2.57	.....	51.2
11-29	T. C. Palmer.....	21.7	2.51	.....	54.4
12-17	T. C. Palmer.....	25.5	2.34	.....	59.7
12-27	T. C. Palmer.....	22.3	2.03	.....	45.3

DISCHARGE MEASUREMENTS, OF ROCK CREEK BRIDGE EAST  
OF PARKS, NEBRASKA, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-18	T. C. Palmer-Bailey.....	12.1	1.26	15.2
8-26	T. C. Palmer-Bailey.....	8.4	1.27	10.6

MISCELLANEOUS DISCHARGE MEASUREMENTS, OF REPUBLICAN  
RIVER, FOR YEAR 1921

BRIDGE AT SANBORN, NEBRASKA

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-18	T. C. Palmer-Bailey.....	24.9	1.63	40.7
8-26	T. C. Palmer-Bailey.....	19.1	1.17	22.4

MISCELLANEOUS DISCHARGE MEASUREMENTS OF REPUBLICAN  
RIVER, FOR YEAR 1921—(Continued)

BENKELMAN, NEBRASKA

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-19	T. C. Palmer-Bailey.....	61.3	1.69	103.1
5-26	T. C. Palmer-Bailey.....	28.7	1.01	28.9

BENKELMAN, NEBRASKA, SOUTH REPUBLICAN RIVER

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-19	T. C. Palmer-Bailey.....	39.4	1.63	64.5
8-26	T. C. Palmer-Bailey.....	29.1	1.31	38.2

CULBERTSON, NEBRASKA

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-19	T. C. Palmer-Bailey.....	129.9	1.45	188.0
8-25	T. C. Palmer-Bailey.....	78.2	1.12	81.9

FIRST BRIDGE, EAST PRINGLE'S DITCH

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-26	T. C. Palmer-Bailey.....	31.6	0.97	30.7

BRIDGE ABOVE PARKS DITCH

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-26	T. C. Palmer-Bailey.....	28.5	1.08	30.8

MISCELLANEOUS DISCHARGE MEASUREMENTS, OF VARIOUS  
CREEKS, FOR YEAR 1921

SNAKE CREEK ABOVE ELMORE RESERVOIR

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
11- 4	T. C. Palmer.....	14.4	1.50	2.2

SPRING CREEK—SECTION 13, T. 32, R. 52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-16	Heywood-T. C. Palmer.....	3.00	0.39	1.18
9- 8	T. C. Palmer-Heywood.....	1.60	0.60	0.90
11- 2	T. C. Palmer.....	1.64	0.95	1.55

SOU BELLY CREEK SOUTH LINE SEC. 7-32-55—ABOVE OLD SOU BELLY DITCH

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-18	T. C. Palmer-Heywood.....	1.60	1.46	2.34

ACTUAL DISCHARGE MEASUREMENTS, OF REPUBLICAN RIVER  
AT VARIOUS PLACES, FOR YEAR 1922

SANBORN, WEST LINE SECTION 13-1-42

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-28	T. C. Palmer.....	24.90	2.28	56.90
7- 9	T. C. Palmer.....	17.90	0.97	17.50
8- 3	T. C. Palmer-Strong.....	23.50	1.43	33.80
8-24	A. E. Johnston-Strong.....	18.10	1.25	16.40

100 YARDS BELOW PARKS DITCH HEAD

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
6-25	T. C. Palmer.....	18.20	1.17	21.30

MISCELLANEOUS DISCHARGE MEASUREMENTS OF VARIOUS  
CREEKS, FOR YEAR 1921—(Continued)

NORTH FORK—BENKELMAN

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-22	T. C. Palmer.....	75.70	2.37	179.80
6-26	T. C. Palmer.....	12.60	1.18	14.90
7- 9	T. C. Palmer.....	19.00	1.27	24.30
8- 4	T. C. Palmer-Strong.....	56.60	1.24	70.60
8-25	A. E. Johnston-Strong.....	50.30	1.20	60.60

SOUTH FORK—BENKELMAN

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-22	T. C. Palmer.....	55.80	1.66	91.70
6-26	T. C. Palmer.....	8.60	0.91	7.90
7- 9	T. C. Palmer-Strong.....	39.00	1.35	52.90
8- 4	T. C. Palmer-Strong.....	29.00	1.17	34.06
8-25	A. E. Johnston-Strong.....	30.50	1.13	34.70

AT CULBERTSON

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-22	T. C. Palmer.....	325.60	1.87	609.90
6-25	T. C. Palmer.....	9.70	1.04	10.10
7- 9	T. C. Palmer.....	47.40	1.18	56.80
8- 2	T. C. Palmer.....	75.90	1.01	77.30
8-24	A. E. Johnston.....	148.40	1.59	236.50

100 YARDS BELOW MEEKER HEADGATE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
6-26	T. C. Palmer.....	7.50	1.09	8.20

ACTUAL DISCHARGE MEASUREMENTS, OF ROCK CREEK AT  
PARKS, NEBRASKA, NE $\frac{1}{4}$  SEC. 20-1-39, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-27	T. C. Palmer.....	8.25	1.81	14.90
2-23	T. C. Palmer.....	8.32	1.94	16.10
6-25	T. C. Palmer.....	9.90	1.33	13.20
7- 9	T. C. Palmer-Strong.....	12.00	1.18	14.20
8- 3	T. C. Palmer.....	10.50	1.49	15.70
8-24	A. E. Johnston.....	9.60	1.48	14.30

ACTUAL DISCHARGE MEASUREMENTS, OF RED WILLOW CREEK,  
SE. CORNER SEC. 1-20-50, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	23.85	2.22	52.90
2- 6	T. C. Palmer.....	19.20	2.18	41.90
3- 8	T. C. Palmer.....	18.30	2.66	48.60
3-23	T. C. Palmer.....	16.00	2.43	38.90
4- 7	T. C. Palmer.....	15.00	2.51	37.58
5- 6	T. C. Palmer.....	15.20	2.30	34.90
5-22	T. C. Palmer.....	40.30	3.39	137.00
6- 5	T. C. Palmer.....	48.10	2.78	133.50
6-12	T. C. Palmer.....	20.70	1.74	36.00
7-25	T. C. Palmer.....	32.30	3.03	97.90
9- 1	T. C. Palmer.....	21.00	2.09	43.90
9-14	T. C. Palmer-Easterday.....	28.90	2.51	72.60

ACTUAL DISCHARGE MEASUREMENTS, OF VARIOUS CREEKS,  
FOR YEAR 1922

SPRING CREEK—40 RODS—SEC. 28-23-56

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3- 7	T. C. Palmer.....	2.50	0.76	1.90
5-17	A. E. Johnston.....	3.80	3.68	1.40

STINKING WATER CREEK—BRIDGE  $\frac{1}{2}$  MILE ABOVE MOUTH

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
6-24	T. C. Palmer.....	18.20	0.89	16.20

**DISCHARGE MEASUREMENTS, SAND CREEK BRIDGE ABOVE  
MOUTH, SEC. 10-15-40, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8- 1	T. C. Palmer.....	2.5	1.92	4.7
8-31	T. C. Palmer.....	2.9	2.20	6.3
5- 4	T. C. Palmer.....	2.9	1.28	3.6
6-23	A. H. Atkins.....	5.1	1.23	6.3
7- 7	A. H. Atkins.....	1.4	4.00	5.8
7-27	A. H. Atkins.....	8.1	0.51	4.1
8- 4	A. H. Atkins.....	6.9	0.51	3.5
8-11	A. H. Atkins.....	6.9	0.50	4.1
8-19	A. H. Atkins.....	6.9	0.58	4.0
10-14	T. C. Palmer.....	1.4	1.22	1.7

**DISCHARGE MEASUREMENTS, SHEEP CREEK INTO TRI-STATE  
CANAL, BRIDGE ABOVE CANAL, SECS. 8 AND 17, T. 23, R. 57,**

FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-24	T. C. Palmer.....	18.6	3.39	63.1
4-13	T. C. Palmer.....	20.1	3.10	62.1
4-19	T. C. Palmer.....	19.5	3.00	58.4
4-30	T. C. Palmer.....	19.4	3.14	60.9
5-11	T. C. Palmer.....	20.9	3.21	67.1
6- 8	T. C. Palmer-Atkins.....	25.7	3.16	81.2
6-22	T. C. Palmer.....	19.6	2.52	49.4
7- 6	T. C. Palmer.....	21.0	2.25	47.2
8-20	T. C. Palmer.....	25.4	2.80	71.2
8-31	T. C. Palmer.....	26.8	2.93	78.5
9-28	T. C. Palmer.....	26.3	3.08	80.9

**DISCHARGE MEASUREMENTS, SCOTTSBLUFF DRAIN, SE $\frac{1}{4}$  25-22-55,  
NORTH OF B. & M. R. R. 300 FEET, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-11	T. C. Palmer.....	5.7	1.83	10.4
2- 3	T. C. Palmer.....	4.8	1.70	8.2
2-18	T. C. Palmer.....	5.5	1.78	9.8
3- 7	T. C. Palmer.....	5.8	1.94	11.2
4-11	T. C. Palmer.....	4.6	1.15	5.3
4-28	T. C. Palmer.....	5.0	1.40	7.0
5-10	T. C. Palmer.....	4.0	1.68	6.6
6- 9	T. C. Palmer-Atkins.....	8.9	0.94	8.7
6-20	T. C. Palmer.....	6.1	0.70	4.3
7- 6	T. C. Palmer.....	8.6	2.12	18.1
8- 8	T. C. Palmer.....	6.7	2.34	15.6
8-19	T. C. Palmer.....	7.3	3.07	22.4
8-29	T. C. Palmer.....	10.2	2.60	26.5
9-27	T. C. Palmer.....	7.2	2.40	17.2
10- 5	T. C. Palmer.....	6.8	2.20	14.9
10-26	T. C. Palmer.....	5.6	2.10	11.7
11- 7	T. C. Palmer.....	5.3	1.68	8.8
11-29	T. C. Palmer.....	5.2	1.82	9.5
12-19	T. C. Palmer.....	5.9	1.99	11.7

**DISCHARGE MEASUREMENTS, OF STEWART'S DRAIN,  
SOUTH SIDE  $\frac{1}{4}$  CORNER SEC. 13-23-57, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-12	T. C. Palmer.....	2.0	1.45	2.9
2- 2	T. C. Palmer.....	1.9	1.45	2.7
2-17	T. C. Palmer.....	2.6	1.16	3.1
3- 8	T. C. Palmer.....	1.7	1.07	1.8
3-24	T. C. Palmer.....	1.9	1.25	2.3
4-12	T. C. Palmer.....	1.1	1.95	2.2
4-29	T. C. Palmer.....	1.7	1.06	1.8
5-11	T. C. Palmer.....	1.8	0.74	1.3
6-22	T. C. Palmer.....	1.1	1.00	1.1
7- 6	T. C. Palmer.....	2.4	1.20	2.9
8- 8	T. C. Palmer.....	2.6	1.61	4.2
8-19	T. C. Palmer.....	1.8	1.21	2.2
8-30	T. C. Palmer.....	1.6	0.96	1.5
9-27	T. C. Palmer.....	2.1	1.05	2.2
10- 6	T. C. Palmer.....	2.5	0.90	2.3
10-27	T. C. Palmer.....	1.8	1.13	2.0
11- 8	T. C. Palmer.....	2.1	0.91	1.9
11-30	T. C. Palmer.....	1.5	0.87	1.3
12-19	T. C. Palmer.....	1.7	1.23	2.1

## REPORT OF SECRETARY

DISCHARGE MEASUREMENTS, OF SHEEP CREEK (TO RIVER)  
SECS. 20 AND 21-23 57, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-12	T. C. Palmer.....	31.7	1.72	54.2
2- 2	T. C. Palmer.....	31.2	2.06	64.5
2-17	T. C. Palmer.....	31.9	1.99	63.6
3- 8	T. C. Palmer.....	29.1	1.64	47.7
10- 7	T. C. Palmer.....	33.6	2.56	85.8
10-27	T. C. Palmer.....	33.4	2.95	98.5
11- 9	T. C. Palmer.....	31.9	2.78	88.5
11-30	T. C. Palmer.....	34.3	2.31	79.4
12-19	T. C. Palmer.....	32.5	2.42	78.6

MISCELLANEOUS DISCHARGE MEASUREMENTE, OF WHITE  
RIVER, FOR YEAR 1921

## WHITNEY—SECTION 1-32-51

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-16	Heywood-T. C. Palmer.....	24.4	1.99	48.5
9- 8	Heywood-T. C. Palmer.....	6.8	1.75	4.9
11- 2	T. C. Palmer.....	12.9	1.80	23.0
12-13	T. C. Palmer.....	17.4	2.29	39.8

## LINE BETWEEN SECTIONS 18 AND 19, T. 34N, R. 48W

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-15	Heywood-T. C. Palmer.....	58.8	1.24	73.0

## AT CRAWFORD

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
11- 4	T. C. Palmer.....	16.6	1.80	29.6

MISCELLANEOUS MEASUREMENTS OF WHITE RIVER  
FOR YEAR 1921—(Continued)

NORTHEAST CORNER SECTION 26-32-11

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
11- 2	T. C. Palmer.....	20.5	0.80	18.0

FORT ROBINSON BRIDGE (NW OF CRAWFORD  $\frac{1}{2}$  MILE)

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-19	T. C. Palmer.....	20.6	1.49	30.7
9- 8	T. C. Palmer.....	14.8	1.56	23.0
12-13	T. C. Palmer.....	20.3	2.00	40.6

3 MILES EAST OF ANDREWS—SECTION 26-31-55

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-18	T. C. Palmer-Heywood.....	6.5	1.06	6.9
9- 6	T. C. Palmer-Heywood.....	4.3	1.26	5.4

NORTHEAST CORNER SECTION 26-32-52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
12-13	T. C. Palmer.....	27.5	1.41	38.8

TWO MILES WEST OF GLEN—SECTION 34-31-54

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-17	T. C. Palmer-Heywood.....	5.6	2.67	14.9
9- 7	T. C. Palmer-Heywood.....	4.9	2.50	12.2

ANDREWS, 100 YARDS BELOW OLD BRIDGE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 7	T. C. Palmer-Heywood.....	1.4	2.00	2.8

## REPORT OF SECRETARY

MISCELLANEOUS MEASUREMENTS OF WHITE RIVER  
FOR YEAR 1921—(Continued)

## SIMMONS BRIDGE, 7 MILES WEST OF CHADRON

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 8	T. C. Palmer-Heywood.....	6.8	0.72	4.9
11- 2	T. C. Palmer.....	16.1	1.65	26.6
12-13	T. C. Palmer.....	21.0	1.93	40.5

MISCELLANEOUS DISCHARGE MEASUREMENTS, OF WHITE  
CLAY CREEK, FOR YEAR 1921

## SOUTH LINE SECTION 12-30-52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-21	T. C. Palmer-Heywood.....	0.77	0.84	0.64

## SECTION 36-31-52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-21	T. C. Palmer-Heywood.....	0.75	1.85	1.40

## SOUTHEAST CORNER SECTION 25-35-45

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 9	T. C. Palmer-Heywood.....	12.60	0.41	6.20

## SECTION 13-31-52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-21	T. C. Palmer-Heywood.....	3.10	2.27	7.05

MISCELLANEOUS MEASUREMENTS OF WHITE CLAY  
CREEK, FOR YEAR 1921--(Continued)

NORTH LINE SECTION 35-32-52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 8	T. C. Palmer-Heywood.....	1.00	0.90	0.90

SOUTH LINE SECTION 36-35-45

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 9	T. C. Palmer-Heywood.....	8.8	0.57	5.1

BRIDGE ABOVE MOUTH

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3- 1	T. C. Palmer.....	12.9	2.04	26.3
5- 4	T. C. Palmer.....	12.9	1.95	25.1
6-23	A. H. Atkins.....	11.9	2.16	25.8
7- 7	A. H. Atkins.....	4.9	1.13	5.5
7-15	A. H. Atkins.....	3.1	1.18	3.6
7-28	A. H. Atkins.....	7.5	1.41	10.5
8- 4	A. H. Atkins.....	15.5	1.72	26.7
8-12	A. H. Atkins.....	8.0	1.55	12.5
7-14	John K. Rohrer.....	.....	.....	3.0
8-19	A. H. Atkins.....	9.0	1.28	11.5
10-14	T. C. Palmer.....	10.9	1.92	21.0

WARBONNET CREEK BELOW ANDERSON DITCHES—SECTION 21-33-56

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-17	T. C. Palmer-Heywood.....	3.8	0.83	3.1

DISCHARGE MEASUREMENTS, OF SNELL DRAIN, EAST SIDE  
SECTION 14-22-53, FOR YEAR 1921

Date	Made by	Area of Section <sup>a</sup>	Mean Velocity	Discharge Sec. Ft.
1-11	T. C. Palmer.....	2.5	1.35	3.4
2- 2	T. C. Palmer.....	3.3	1.15	3.8
2-18	T. C. Palmer.....	4.4	1.12	4.5
3- 7	T. C. Palmer.....	4.4	0.98	4.3
3-23	T. C. Palmer.....	4.3	0.82	3.5
4-11	T. C. Palmer.....	1.9	1.10	2.0
4-28	T. C. Palmer.....	1.8	1.20	2.2
5-10	T. C. Palmer.....	2.7	1.66	4.5
5-28	T. C. Palmer.....	10.3	1.30	13.4
6- 6	T. C. Palmer-Atkins.....	4.2	1.24	5.2
6-20	T. C. Palmer.....	6.8	1.54	10.4
7- 5	T. C. Palmer.....	6.9	1.47	10.2
8- 8	T. C. Palmer.....	24.9	1.79	44.5
8-18	T. C. Palmer.....	14.1	.70	10.0
8-29	T. C. Palmer.....	17.1	.73	12.5
9-26	T. C. Palmer.....	18.3	.80	14.7
10- 5	T. C. Palmer.....	13.4	.84	11.3
10-26	T. C. Palmer.....	15.8	.83	12.6
11- 7	T. C. Palmer.....	6.1	2.32	14.2
11-29	T. C. Palmer.....	6.3	2.39	15.0
12-19	T. C. Palmer.....	4.4	2.08	8.9

ACTUAL DISCHARGE MEASUREMENTS, OF SNELL DRAIN FIRST  
BRIDGE ABOVE RIVER, SE. CORNER SEC. 23-21-53, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	6.37	2.02	12.88
2- 6	T. C. Palmer.....	8.40	2.30	19.20
3- 6	T. C. Palmer.....	7.40	1.55	11.50
3-20	T. C. Palmer.....	11.20	2.32	25.90
4- 5	T. C. Palmer.....	9.98	2.64	26.34
5- 6	T. C. Palmer.....	14.40	2.00	28.60
6- 8	T. C. Palmer.....	15.60	1.32	20.60
7-25	T. C. Palmer.....	32.80	1.10	36.30
8-25	T. C. Palmer.....	30.50	1.14	34.90
9- 1	T. C. Palmer.....	31.60	0.70	22.20
9-14	T. C. Palmer-Easterday.....	32.50	0.96	31.80
9-28	T. C. Palmer.....	32.10	1.30	42.00

ACTUAL DISCHARGE MEASUREMENTS, OF STEWART'S DRAIN.  
FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-10	T. C. Palmer.	1.80	0.62	1.10
2- 7	T. C. Palmer.	2.70	0.93	2.50
3- 7	T. C. Palmer.	2.20	1.14	2.50
3-21	T. C. Palmer.	1.95	0.92	1.81
4- 7	T. C. Palmer.	1.12	1.70	1.90
5- 9	T. C. Palmer.	1.70	1.00	1.70
5-24	T. C. Palmer.	1.40	1.07	1.50
6- 6	T. C. Palmer.	1.50	0.80	1.20
6-14	T. C. Palmer.	1.30	0.92	1.20
7-14	T. C. Palmer.	3.00	1.36	4.10
7-21	T. C. Palmer.	2.10	1.00	2.10
8-24	T. C. Palmer.	3.00	1.36	4.10
8-31	T. C. Palmer.	2.10	1.61	3.40
9-12	T. C. Palmer-Finley.	2.30	1.04	2.40
9-18	T. C. Palmer.	2.80	1.39	3.90
9-26	T. C. Palmer.	3.30	1.09	3.60

DISCHARGE MEASUREMENTS, TUB SPRINGS, FOR YEAR 1921  
NORTHEAST  $\frac{1}{4}$  SECTION 8-22-55

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-12	T. C. Palmer.	11.8	2.62	30.9
2- 2	T. C. Palmer.	12.6	3.01	37.8
2-17	T. C. Palmer.	13.9	2.66	37.1
3- 8	T. C. Palmer.	11.3	3.20	36.0
3-24	T. C. Palmer.	12.9	2.81	36.1
4-12	T. C. Palmer.	10.1	2.46	24.9
4-29	T. C. Palmer.	11.0	3.40	37.4
5-11	T. C. Palmer.	11.4	3.62	41.1
6- 8	T. C. Palmer-Atkins.	8.3	4.28	35.5
6-21	T. C. Palmer.	13.4	3.90	52.3
7- 6	T. C. Palmer.	12.7	3.45	43.7
	John K. Rohrer.	----	----	33.0
8- 9	T. C. Palmer.	8.9	2.34	9.3
8-19	T. C. Palmer.	2.1	1.87	4.0
8-30	T. C. Palmer.	6.9	2.70	18.6
9-27	T. C. Palmer.	10.5	2.74	28.7
10- 6	T. C. Palmer.	14.3	3.31	47.3
10-27	T. C. Palmer.	14.9	3.30	49.2
11- 8	T. C. Palmer.	12.1	4.18	50.8
11-30	T. C. Palmer.	12.2	3.26	39.8
12-19	T. C. Palmer.	10.7	3.40	36.1

DISCHARGE MEASUREMENTS, TUB SPRINGS, FOR 1921  
NORTHEAST QUARTER  $\frac{1}{4}$  SECTION 8-22-55

ABOVE TRI-STATE CANAL—SECTION 27-23-55

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-20	T. C. Palmer.....	8.2	2.30	18.8

ACTUAL DISCHARGE MEASUREMENTS, OF TUB SPRINGS, NEAR  
SOUTH LINE SEC. 5-22-55, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	9.85	3.49	34.33
2- 7	T. C. Palmer.....	14.80	3.07	45.40
3- 7	T. C. Palmer.....	13.80	2.62	36.10
3-22	T. C. Palmer.....	15.60	3.19	49.70
4- 6	T. C. Palmer.....	13.25	3.20	41.90
5- 3	T. C. Palmer.....	13.50	3.20	43.20
5-10	T. C. Palmer.....	14.30	2.65	37.90
6- 6	T. C. Palmer.....	8.90	1.85	5.20
6-14	T. C. Palmer.....	2.80	0.82	2.30
7-14	T. C. Palmer.....	11.70	2.46	28.80
7-21	T. C. Palmer.....	5.50	1.87	10.30
8-24	T. C. Palmer.....	7.10	1.74	12.40
8-31	T. C. Palmer.....	17.60	2.75	48.50
9-13	Easterday-T. C. Palmer.....	6.90	0.94	6.50
9-18	T. C. Palmer.....	10.10	0.78	7.90
9-26	T. C. Palmer.....	5.30	1.15	6.10

ACTUAL DISCHARGE MEASUREMENTS, OF WILD HORSE DRAIN,  
CENTER SOUTH LINE OF NE  $\frac{1}{4}$  OF SEC. 12-20-52, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	22.70	1.58	35.92
2- 6	T. C. Palmer.....	22.30	1.62	36.10
3- 8	T. C. Palmer.....	20.00	1.57	31.40
3-23	T. C. Palmer.....	18.90	1.64	31.10
4- 7	T. C. Palmer.....	18.75	1.77	34.18
5- 6	T. C. Palmer.....	20.30	1.52	30.90
6- 5	T. C. Palmer.....	25.10	1.94	48.60
6-12	T. C. Palmer.....	27.90	1.87	52.40
7-25	T. C. Palmer.....	95.20	3.75	357.10
9-14	Easterday-T. C. Palmer.....	29.20	2.26	66.00

**DISCHARGE MEASUREMENTS, TOOHEY DRAIN, WEST LINE  
SECTION 28-23-56, FOR YEAR 1921**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-12	T. C. Palmer.....	2.9	1.11	3.2
2- 2	T. C. Palmer.....	2.6	1.13	3.0
2-17	T. C. Palmer.....	3.0	0.93	2.8
3- 8	T. C. Palmer.....	2.5	1.16	2.9
3-24	T. C. Palmer.....	3.0	1.04	3.1
4-12	T. C. Palmer.....	3.1	0.84	2.6
4-29	T. C. Palmer.....	2.5	1.03	2.5
5-11	T. C. Palmer.....	2.5	1.18	2.9
6- 8	T. C. Palmer-Atkins.....	3.1	1.39	4.4
6-21	T. C. Palmer.....	2.7	0.81	2.2
7- 6	T. C. Palmer.....	2.8	1.04	2.9
8- 9	T. C. Palmer.....	3.1	1.28	3.9
8-19	T. C. Palmer.....	2.4	0.90	2.1
8-30	T. C. Palmer.....	2.9	1.53	4.4
9-27	T. C. Palmer.....	3.6	1.45	5.2
10- 6	T. C. Palmer.....	3.7	1.46	5.4
10-27	T. C. Palmer.....	2.9	1.14	3.3
11- 8	T. C. Palmer.....	3.2	1.10	3.5
11-30	T. C. Palmer.....	3.1	1.36	4.2
12-19	T. C. Palmer.....	3.1	1.01	3.1

**ACTUAL DISCHARGE MEASUREMENTS, OF TOOHEY DRAIN,  
CENTER WEST LINE SEC. 20-23-56, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-10	T. C. Palmer.....	2.65	0.94	2.47
2- 7	T. C. Palmer.....	3.07	0.92	2.80
3- 7	T. C. Palmer.....	2.30	1.48	3.40
3-22	T. C. Palmer.....	1.92	0.92	1.77
4- 6	T. C. Palmer.....	2.19	0.87	1.92
5- 3	T. C. Palmer.....	1.90	1.21	2.30
5- 9	T. C. Palmer.....	2.00	0.80	1.60
5-24	T. C. Palmer.....	1.80	1.16	2.10
6- 6	T. C. Palmer.....	3.00	1.03	3.10
6-14	T. C. Palmer.....	5.40	1.25	6.80
7-14	T. C. Palmer.....	4.70	1.08	5.10
7-21	T. C. Palmer.....	4.50	1.17	5.30
8-24	T. C. Palmer.....	3.50	1.11	3.90
8-31	T. C. Palmer.....	3.90	1.17	4.60
9-13	T. C. Palmer-Finley.....	3.70	1.56	5.80
9-18	T. C. Palmer.....	3.70	1.27	4.70
9-26	T. C. Palmer.....	3.70	1.32	4.90

**MISCELLANEOUS MEASUREMENTS OF DRAINS AND SEEPS  
FOR YEAR 1922**

**HOTH DRAIN**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4- 5	T. C. Palmer.....	6.43	2.18	13.99

**INDIAN CREEK DRAIN**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 1	T. C. Palmer.....	5.20	1.71	8.90

**ACTUAL DISCHARGE MEASUREMENTS, OF WHITE TAIL CREEK  
AT 2½ MILES WEST OF KEYSTONE, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-19	A. E. Johnston.....	11.50	2.20	25.40
5- 2	A. E. Johnston.....	11.00	2.15	23.60
5-17	A. E. Johnston.....	12.10	2.34	28.40
6- 1	A. E. Johnston.....	14.50	2.04	29.70
6-19	A. E. Johnston.....	7.00	1.56	10.90
7- 3	A. E. Johnston.....	11.00	1.89	20.80
7-22	A. E. Johnston.....	12.40	1.59	19.80
8-12	A. E. Johnston.....	10.70	1.59	17.10
8-19	A. E. Johnston.....	7.50	1.37	10.30
8-30	A. E. Johnston-Eyerley.....	5.60	1.12	6.30
9-16	A. E. Johnston-Easterday.....	10.90	2.44	26.70
9-26	A. E. Johnston.....	7.40	1.43	10.60

**ACTUAL DISCHARGE MEASUREMENTS, OF WHITE CLAY CREEK  
AT SOUTH LINE OF SEC. 2-31-52, FOR YEAR 1922**

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-23	Heywood-T. C. Palmer.....	2.92	1.68	4.91
2-14	Heywood-T. C. Palmer.....	6.00	0.95	5.70
3-30	T. C. Palmer.....	3.30	1.34	4.42
8- 2	A. H. Atkins.....	2.40	1.41	3.40
8-25	J. D. Heywood.....	1.70	1.35	2.30

ACTUAL DISCHARGE MEASUREMENTS, OF WHITE RIVER,  
FOR YEAR 1922

GLEN—SECTION 6-30-53

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-13	T. C. Palmer.....	5.90	3.02	17.80
AT NORTHEAST CORNER SECTION 26-32-52				
Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-17	T. C. Palmer-J. D. Heywood.....	23.90	1.48	35.30
3-29	T. C. Palmer.....	33.55	1.43	48.01
8- 2	A. H. Atkins.....	6.40	1.75	11.20
8-25	J. D. Heywood.....	10.10	1.92	19.40

ACTUAL DISCHARGE MEASUREMENTS, OF WINTERS CREEK,  
FOR YEAR 1922

AT EAST SUGAR BEET FACTORY

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	9.50	3.37	32.01
2- 6	T. C. Palmer.....	10.00	3.72	37.20
3- 6	T. C. Palmer.....	9.50	4.67	44.70
3-23	T. C. Palmer.....	10.50	3.40	36.09
4- 5	T. C. Palmer.....	10.50	3.65	38.25
5- 3	T. C. Palmer.....	10.00	3.46	34.60
5-25	T. C. Palmer.....	11.60	4.18	48.50
6- 7	T. C. Palmer.....	10.60	3.62	38.40
6-14	T. C. Palmer.....	11.60	4.23	49.10
7-14	T. C. Palmer.....	15.00	4.14	62.20
7-24	T. C. Palmer-Finley.....	6.00	1.78	10.70
8-25	T. C. Palmer.....	4.60	2.58	11.90
8-29	McPherren-T. C. Palmer.....	6.60	1.71	11.30
9- 1	T. C. Palmer.....	8.00	2.98	23.90
9-13	T. C. Palmer-Easterday.....	10.20	4.33	44.20
9-28	T. C. Palmer.....	7.60	5.41	95.30

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ACTUAL DISCHARGE MEASUREMENTS OF  
WINTER CREEK FOR 1922

## ABOVE WINTERS CREEK CANAL

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
7-24	T. C. Palmer-Finley.....	48.00	1.11	53.40
8-25	T. C. Palmer.....	44.50	2.09	93.40
8-29	McPherren-T. C. Palmer.....	48.10	1.87	90.00
9- 1	T. C. Palmer.....	44.10	2.06	91.20
9-13	T. C. Palmer-Easterday.....	49.00	2.09	102.60
9-19	T. C. Palmer.....	89.80	8.02	120.40

DISCHARGE MEASUREMENTS, WILD HORSE DRAIN, SOUTHWEST  
CORNER OF E½ OF NE¼ SEC. 12-20-52, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
1-11	T. C. Palmer.....	22.4	1.66	0.70	37.8
2-11	T. C. Palmer.....	21.2	1.70	0.65	36.1
2-24	T. C. Palmer.....	21.1	1.71	0.60	35.9
3- 7	T. C. Palmer.....	21.0	1.76	0.60	37.0
3-22	T. C. Palmer.....	20.6	1.58	0.50	32.5
4-11	T. C. Palmer.....	18.8	1.58	0.45	29.6
4-28	T. C. Palmer.....	19.5	1.56	0.45	30.3
5-10	T. C. Palmer.....	19.3	1.63	.....	31.6
6-20	T. C. Palmer.....	16.4	3.66	.....	60.1
7- 5	T. C. Palmer.....	19.9	1.83	.....	36.4
7-12	John K. Rohrer.....	.....	.....	.....	25.0
8- 8	T. C. Palmer.....	24.0	3.01	0.70	72.3
8-29	T. C. Palmer.....	31.5	2.52	1.20	79.4
9-26	T. C. Palmer.....	34.9	2.28	.....	79.5
10- 8	T. C. Palmer.....	29.9	2.00	.....	59.9
10-28	T. C. Palmer.....	24.8	2.11	.....	52.3
11- 7	T. C. Palmer.....	24.2	1.99	.....	48.0
11-29	T. C. Palmer.....	24.1	1.91	.....	46.0
12-17	T. C. Palmer.....	23.4	1.82	.....	42.6
12-27	T. C. Palmer.....	22.4	1.59	.....	35.5

DISCHARGE MEASUREMENTS, WINTERS CREEK, EAST OF  
SCOTTSBLUFF SUGAR FACTORY, SECTIONS 19 AND 30-22-54,  
FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Gage Height	Discharge Sec. Ft.
1-11	T. C. Palmer.....	10.5	4.08	1.45	42.3
2- 8	T. C. Palmer.....	10.5	4.45	1.45	46.7
2-18	T. C. Palmer.....	10.5	3.93	1.40	41.3
3- 7	T. C. Palmer.....	10.0	4.46	1.40	44.6
3-28	T. C. Palmer.....	10.0	3.77	1.45	37.8
4-11	T. C. Palmer.....	12.0	4.48	1.60	53.7
4-28	T. C. Palmer.....	11.0	4.79	1.55	52.7
5-10	T. C. Palmer.....	9.5	4.40	.....	41.9
6- 9	T. C. Palmer-Atkins.....	12.5	4.75	1.80	59.4
6-22	T. C. Palmer.....	20.4	2.32	.....	47.4
7- 6	T. C. Palmer.....	5.0	0.95	0.40	4.8
8- 8	T. C. Palmer.....	10.0	2.79	1.10	27.9
8-19	T. C. Palmer.....	10.0	4.26	.....	42.7
8-29	T. C. Palmer.....	12.5	0.47	.....	58.6
9-27	T. C. Palmer.....	16.5	5.73	.....	94.3
10- 5	T. C. Palmer.....	11.5	4.47	.....	51.3
10-26	T. C. Palmer.....	13.0	4.55	.....	59.2
11- 7	T. C. Palmer.....	12.5	4.26	.....	53.4
11-29	T. C. Palmer.....	11.0	4.35	.....	47.9
12-19	T. C. Palmer.....	11.5	4.27	.....	49.1

DISCHARGE MEASUREMENTS, WINTERS CREEK, ABOVE  
WINTERS CREEK CANAL, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
6-22	T. C. Palmer.....	20.4	2.32	47.4
7- 6	T. C. Palmer.....	36.4	2.10	76.4
7-12	J. K. Rohrer.....	.....	.....	57.0
8- 8	T. C. Palmer.....	38.4	1.96	75.4
8-19	T. C. Palmer.....	50.6	1.61	90.5
8-29	T. C. Palmer.....	41.8	2.57	107.6

ACTUAL DISCHARGE MEASUREMENTS, OF WOOD RIVER AT  
VARIOUS PLACES, FOR YEAR 1922

SECTION 5, T. 9N, R. 16W

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-22	A. E. Johnston.....	18.00	0.51	9.20
5-20	A. E. Johnston.....	62.10	1.26	15.30
6- 7	A. E. Johnston.....	27.60	1.39	38.40
6-23	A. E. Johnston.....	10.40	1.09	11.40.
7- 7	A. E. Johnston.....	65.10	1.87	122.30
7-26	A. E. Johnston.....	9.00	0.63	5.70
8-10	A. E. Johnston.....	7.50	0.76	5.70
8-26	A. E. Johnston.....	7.80	0.57	4.50

SECTION 18, T. 10, R. 10W

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
7-26	A. E. Johnston.....	4.40	0.77	3.40

E $\frac{1}{4}$  NW $\frac{1}{4}$  SECTION 13, T. 9, R. 16W

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
7-26	A. E. Johnston.....	5.90	0.45	2.70

ACTUAL DISCHARGE MEASUREMENTS, OF WHITE RIVER, AT  
VARIOUS PLACES, FOR YEAR 1922

NORTH LINE SECTION 17-34-48, NORTH OF CHADRON, NEBR.

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-28	T. C. Palmer.....	68.50	1.26	86.21

SIMMONS BRIDGE 6 MILES WEST OF CHADRON, NEBR.

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-28	T. C. Palmer.....	23.40	1.87	43.81
8- 3	A. H. Atkins.....	14.30	1.79	25.70

WHITNEY, NEBR.

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-28	T. C. Palmer.....	17.90	2.38	42.62
8- 3	A. H. Atkins.....	13.30	1.21	16.10
8- 5	A. H. Atkins.....	6.70	2.17	14.60
8-23	J. D. Heywood.....	10.50	1.73	18.20

NORTHEAST CORNER SECTION 34-32-52—CRAWFORD MILL BRIDGE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-23	J. D. Heywood-T. C. Palmer.....	12.30	1.94	23.85
2-13	T. C. Palmer.....	23.00	1.80	41.20
3-29	T. C. Palmer.....	25.10	1.84	46.09

½ MILE WEST OF CRAWFORD—FT. ROBINSON HIGHWAY

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8- 2	A. H. Atkins.....	1.10	1.95	21.70
8- 5	A. H. Atkins.....	12.70	2.05	26.10
8-25	J. D. Heywood.....	7.20	1.43	10.30

DISCHARGE MEASUREMENTS, DRY SPOTTED TAIL (UPPER)  
ABOVE SUGAR CO. HEAD BETWEEN SECTIONS 20 AND 21-23-56,

NORTH OF B. & M. RAILROAD, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-12	T. C. Palmer.....	11.9	1.73	20.5

DISCHARGE MEASUREMENTS, DRY SPOTTED TAIL (LOWER)  
SOUTHEAST CORNER SECTION 20-23-56, FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-12	T. C. Palmer.....	4.2	2.09	8.8
2- 2	T. C. Palmer.....	6.0	2.55	15.3
2-17	T. C. Palmer.....	6.6	2.69	17.8
3- 8	T. C. Palmer.....	6.6	3.40	22.3
3-24	T. C. Palmer.....	6.0	2.58	15.5
4-12	T. C. Palmer.....	4.8	2.93	14.0
4-29	T. C. Palmer.....	14.2	1.23	17.5
5-11	T. C. Palmer.....	26.9	1.13	30.3
6- 8	T. C. Palmer-A. H. Atkins.....	7.2	3.19	22.9
6-22	T. C. Palmer.....	11.1	1.00	22.0
7- 6	T. C. Palmer.....	11.2	2.17	24.2
8- 9	T. C. Palmer.....	12.5	3.19	39.7
8-19	T. C. Palmer.....	15.5	3.33	51.7
8-30	T. C. Palmer.....	17.1	2.15	36.6
9-27	T. C. Palmer.....	7.2	4.00	28.9
10- 6	T. C. Palmer.....	9.0	3.00	26.9
10-27	T. C. Palmer.....	7.8	3.12	24.3
11- 8	T. C. Palmer.....	7.2	3.33	23.9
11-30	T. C. Palmer.....	6.0	2.45	14.7
12-19	T. C. Palmer.....	7.2	3.29	23.7

ACTUAL DISCHARGE MEASUREMENTS, OF DRY SPOTTED TAIL  
CREEK (LOWER), SW. CORNER SECTION 28-23-56, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-10	T. C. Palmer.....	6.00	3.61	21.66
2- 7	T. C. Palmer.....	5.40	3.13	16.90
3- 7	T. C. Palmer.....	5.40	3.50	18.90
3-22	T. C. Palmer.....	5.40	3.70	20.22
4- 6	T. C. Palmer.....	6.00	3.45	20.68
5- 9	T. C. Palmer.....	6.80	3.19	21.70
5-24	T. C. Palmer.....	6.00	3.43	20.60
6- 6	T. C. Palmer.....	6.00	3.55	21.30
7-14	T. C. Palmer.....	3.20	3.00	9.60
7-21	T. C. Palmer.....	4.80	3.41	16.40
9-18	T. C. Palmer.....	16.30	3.25	53.10
9-27	T. C. Palmer.....	19.50	2.68	52.40

ACTUAL DISCHARGE MEASUREMENTS, OF WHITE HORSE CREEK,  
1 MILE WEST OF GAMETT, SEC. 5, T. 14, R. 29, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
4-21	A. E. Johnston.....	7.20	1.82	13.00
5- 5	A. E. Johnston.....	19.30	1.24	24.10
5-19	A. E. Johnston.....	8.10	1.00	8.10
6- 5	A. E. Johnston.....	13.60	1.53	20.80
6-24	A. E. Johnston.....	4.20	0.71	3.00
7- 5	A. E. Johnston.....	6.80	1.04	7.10
7- 8	A. E. Johnston.....	6.40	0.95	6.10
7-24	A. E. Johnston.....	8.20	1.08	8.90
7-28	A. E. Johnston.....	5.50	1.03	5.70
9-18	A. E. Johnston-Easterday.....	7.10	1.11	7.90

ACTUAL DISCHARGE MEASUREMENTS, OF WET SPOTTED TAIL CREEK (UPPER), ABOVE TRI-STATE CANAL, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	20.40	0.45	9.21
2- 6	T. C. Palmer.....	28.00	0.44	15.30
3- 7	T. C. Palmer.....	25.90	0.53	13.60
3-22	T. C. Palmer.....	7.80	1.33	10.30
*5- 3	T. C. Palmer.....	11.50	1.51	17.20
*5-24	T. C. Palmer.....	9.00	1.64	14.80
*6- 6	T. C. Palmer.....	7.20	1.13	8.10
*6-14	T. C. Palmer.....	7.60	1.01	7.70
*7-14	T. C. Palmer.....	9.70	1.35	13.10
*7-22	T. C. Palmer-Finley.....	9.30	1.51	14.10
*8-24	T. C. Palmer.....	14.80	1.89	28.10
*8-29	McPherren-T. C. Palmer.....	8.40	2.10	17.70
*9-13	T. C. Palmer-Easterday.....	14.10	2.43	34.40
*9-22	T. C. Palmer.....	9.70	1.58	15.40

\*Taken by Tri-State Canal.

ACTUAL DISCHARGE MEASUREMENTS, OF WET SPOTTED TAIL CREEK (LOWER), WEST LINE SEC. 26-23-56, FOR YEAR 1922

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1- 9	T. C. Palmer.....	7.47	1.49	11.14
2- 7	T. C. Palmer.....	7.27	1.45	10.50
3- 7	T. C. Palmer.....	5.90	1.55	9.10
3-22	T. C. Palmer.....	11.30	1.48	16.80
4- 6	T. C. Palmer.....	14.10	0.80	11.70
5- 3	T. C. Palmer.....	7.20	3.15	22.70
5-10	T. C. Palmer.....	6.60	0.89	5.90
5-24	T. C. Palmer.....	4.60	1.13	5.20
6- 6	T. C. Palmer.....	3.70	1.59	5.90
6-14	T. C. Palmer.....	3.70	0.86	3.20
7-14	T. C. Palmer.....	9.60	1.62	15.60
7-21	T. C. Palmer.....	6.60	0.92	6.10
8-24	T. C. Palmer.....	8.20	1.47	12.10
8-29	McPherren-T. C. Palmer.....	3.70	1.21	4.50
8-31	T. C. Palmer.....	5.40	0.92	5.00
9-13	Easterday-T. C. Palmer.....	1.80	3.00	5.40
9-26	T. C. Palmer.....	6.10	1.39	8.50

DISCHARGE MEASUREMENTS, WET SPOTTED TAIL CREEK  
(LOWER), BETWEEN SECS. 26 AND 27, T. 23N, R. 56W.,

FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-12	T. C. Palmer.....	4.0	1.40	4.4
2- 2	T. C. Palmer.....	5.3	1.08	5.7
2-17	T. C. Palmer.....	5.5	1.44	7.9
3- 8	T. C. Palmer.....	5.3	1.05	5.5
3-24	T. C. Palmer.....	4.8	1.16	5.5
4-12	T. C. Palmer.....	4.5	1.21	5.4
4-29	T. C. Palmer.....	5.4	1.35	7.2
5-11	T. C. Palmer.....	11.0	1.81	19.9
6- 8	T. C. Palmer-A. T. Atkins.....	2.7	1.06	2.9
6-21	T. C. Palmer.....	4.1	1.43	5.9
7- 6	T. C. Palmer.....	2.7	2.13	5.8
8- 9	T. C. Palmer.....	4.6	1.40	6.5
8-19	T. C. Palmer.....	4.2	1.56	6.7
8-30	T. C. Palmer.....	4.1	1.09	4.5
9-27	T. C. Palmer.....	2.6	1.06	2.8
10- 6	T. C. Palmer.....	2.9	0.82	2.4
10-27	T. C. Palmer.....	4.9	1.43	7.1
11- 9	T. C. Palmer.....	5.2	1.30	6.7
11-30	T. C. Palmer.....	4.8	1.46	7.0
12-19	T. C. Palmer.....	4.2	1.70	7.2

DISCHARGE MEASUREMENTS, WET SPOTTED TAIL CREEK  
(UPPER), ABOVE TRI-STATE CANAL, SECTIONS 3 AND 10-23-56,  
FOR YEAR 1921

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-12	T. C. Palmer.....	7.6	1.15	8.7
2- 2	T. C. Palmer.....	8.3	1.13	9.3
2-17	T. C. Palmer.....	7.1	1.63	11.5
4-13	T. C. Palmer.....	6.1	1.26	7.7
4-30	T. C. Palmer.....	3.8	1.26	4.8
5-12	T. C. Palmer.....	6.4	1.46	9.2
6- 8	T. C. Palmer-A. H. Atkins.....	7.6	1.11	8.4
6-22	T. C. Palmer.....	8.5	0.79	6.7
7- 7	T. C. Palmer.....	9-1	0.79	7.2
8- 9	T. C. Palmer.....	6.7	1.64	11.0
8-20	T. C. Palmer.....	8.3	2.23	18.5
8-31	T. C. Palmer.....	9.7	2.01	19.5
9-28	T. C. Palmer.....	9.7	1.77	17.2
11- 9	T. C. Palmer.....	33.3	0.65	21.6
11-30	T. C. Palmer.....	35.4	0.57	20.3
12-19	T. C. Palmer.....	28.4	0.57	16.2

MISCELLANEOUS DISCHARGE MEASUREMENTS, FOR YEAR 1921  
 DRY SPOTTED TAIL CREEK, SOUTHEAST CORNER SECTION 20-23-56

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8-19	T. C. Palmer.....	6.0	2.72	16.3
8-30	T. C. Palmer.....	4.8	3.10	14.9

## FAWCUS SPRINGS CREEK, SECTION 19-20-51

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-14	T. C. Palmer.....	3.6	0.43	1.5

## ARIKAREE CREEK BRIDGE, SECTION 28-1-41

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-18	T. C. Palmer-Bailey.....	26.8	0.85	22.9

## ASH CREEK, ABOVE CRIPPS DITCH

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-16	T. C. Palmer-J. D. Heywood.....	8.1	1.56	12.5

## NORTH LINE SECTION 13-32-51

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9- 8	T. C. Palmer-J. D. Heywood.....	1.8	0.98	1.7

## BRIDGE 60 RODS ABOVE MOUTH

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
11- 2	T. C. Palmer.....	4.8	0.63	3.00

MISCELLANEOUS DISCHARGE MEASUREMENTS  
FOR YEAR 1921--(Continued)

## EAST ASH CREEK, NORTH LINE SECTION 5-31-50

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-16	T. C. Palmer-J. D. Heywood.....	4.1	0.84	3.41

## WEST ASH CREEK, NORTH LINE SECTION 35-32-51

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-16	T. C. Palmer-J. D. Heywood.....	1.7	2.00	3.40

## NORTH LINE SECTION 11-31-51

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
11- 3	T. C. Palmer.....	2.1	0.95	2.00
12-14	T. C. Palmer.....	2.0	1.02	2.10

## ANTELOPE CREEK 80 RODS ABOVE MOUTH, SECTION 21-32-40

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
9-10	T. C. Palmer-J. D. Heywood.....	2.3	0.68	1.60

## BUFFALO CREEK BELOW PORTER HEADGATE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-18	T. C. Palmer-Bailey.....	9.1	1.75	16.00

## DEADMAN CREEK, SECTION 18-30-52—OLD PHILLIPS DAM

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-19	T. C. Palmer-J. D. Heywood.....	0.75	1.99	1.49

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## SECTION 18-30-52 AT OLD LINDERMAN DITCH

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-19	T. C. Palmer-J. D. Heywood.....	0.93	2.67	2.40

## DEEP CREEK AT MOUTH, SECTION 23-31-53

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-17	T. C. Palmer-J. D. Heywood.....	1.74	0.73	1.26

## MISCELLANEOUS DISCHARGE MEASUREMENTS, OF VARIOUS CREEKS, FOR YEAR 1922

## ASH CREEK, SOUTH LINE SECTION 11-31-50

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-14	J. D. Heywood-T. C. Palmer.....	2.70	0.93	2.50
8- 2	A. H. Atkins.....	1.40	1.42	2.00

## ASH CREEK (WEST) W. LINE SECTION 36-32-51

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-30	J. D. Heywood-T. C. Palmer.....	2.58	1.28	3.80
8- 2	A. H. Atkins.....	1.00	1.60	1.60

## ASH CREEK (EAST), CORR FARM

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-14	J. D. Heywood-T. C. Palmer.....	3.90	1.10	4.30

## ASH CREEK (EAST), SOUTH LINE SECTION 38-32-50

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-30	J. D. Heywood-T. C. Palmer.....	2.86	1.17	3.30

## MISCELLANEOUS MEASUREMENTS FOR 1922—(Continued)

## BUFFALO CREEK BELOW JENKINS HEADGATE—SEC. LINE 18-1-40

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-23	T. C. Palmer.....	5.70	1.83	10.40
6- 6	A. E. Johnston.....	25.70	0.69	17.80
8-24	A. E. Johnston.....	6.00	1.20	7.20
8-28	A. E. Johnston.....	6.40	0.90	5.80
9- 8	A. E. Johnston-Eyerley.....	0.00	0.00	0.00

BULL CREEK—SW $\frac{1}{4}$  SECTION 7-30-53

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-13	J. D. Heywood-T. C. Palmer.....	0.70	0.98	0.68

## BIG BORDEAUX CREEK—SECTION 23-33-48

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-28	T. C. Palmer.....	2.90	2.80	8.13
8- 3	A. H. Atkins.....	4.20	1.19	5.00

## SECTION 13-18-49

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
7-12	A. H. Atkins.....	0.60	0.54	1.10

HAT CREEK BELOW JUNCTION OF E. & W. HAT CHEEK,  
BRIDGE ON NW $\frac{1}{4}$  OF SECTION 10-32-55

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-31	J. D. Heywood-T. C. Palmer.....	1.93	2.33	4.49

## INDIAN CREEK—SECTION 3-31-50

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
8- 1	A. H. Atkins.....	0.30	1.33	0.40
9-22	T. C. Palmer.....	6.10	1.59	9.70

## MISCELLANEOUS DISCHARGE MEASUREMENTS, OF VARIOUS CREEKS, FOR YEAR 1922

## SOU BELLY CREEK

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-31	J. D. Heywood-T. C. Palmer.....	1.61	2.31	3.72

## SNAKE CREEK 5 MILES WEST, 1½ MILES SOUTH OF ALLIANCE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-30	T. C. Palmer.....	7.40	1.53	11.20

## SOLDIER CREEK AT FORT ROBINSON BRIDGE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-30	T. C. Palmer.....	2.98	1.37	4.08
8-25	J. D. Heywood.....	1.90	1.05	2.00

## SAND CREEK BRIDGE ABOVE MOUTH—SECTION 10-15-40

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-17	T. C. Palmer.....	2.60	1.20	3.10
4- 7	A. E. Johnston.....	2.28	2.00	3.34
5- 2	A. E. Johnston.....	4.90	0.71	3.50
5-16	A. E. Johnston.....	7.80	0.51	4.00
6- 1	A. E. Johnston.....	7.30	0.56	4.10
6-17	A. E. Johnston.....	8.30	0.57	4.70
7- 2	A. E. Johnston.....	6.80	0.51	3.50
7-21	A. E. Johnston.....	3.00	0.76	2.30
9- 1	A. E. Johnston-Eyerley.....	3.30	1.30	4.30
9-16	A. E. Johnston-Easterday.....	2.80	1.78	5.00

MISCELLANEOUS DISCHARGE MEASUREMENTS  
FOR 1922—(Continued)

(SAND) GRAVEL CREEK—SECTION 9, T. 14N, R. 36W

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-17	A. E. Johnston.....	3.00	1.46	4.40

SKUNK CREEK—SECTION 1, T. 14N, R. 37W

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
5-17	A. E. Johnston.....	2.20	0.95	2.10

SHEEP CREEK NEAR NORTHEAST CORNER SECTION 20-22-57

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-10	T. C. Palmer.....	29.40	2.33	68.40
2- 7	T. C. Palmer.....	36.70	2.01	73.80
3- 7	T. C. Palmer.....	27.80	2.00	55.40
3-21	T. C. Palmer.....	39.00	1.80	72.02
5- 3	T. C. Palmer.....	34.70	4.10	142.20
5- 9	T. C. Palmer.....	16.70	2.81	47.00

SQUAW CREEK, ABOVE McDOWELL RESERVOIR

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
1-23	J. D. Heywood-T. C. Palmer.....	0.48	0.39	0.19

SPRING CREEK, NORTHEAST CORNER SECTION 12-32-51

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-29	T. C. Palmer.....	1.64	0.85	1.39
6- 1	A. E. Johnston.....	4.80	0.98	4.70
8- 2	A. H. Atkins.....	0.90	1.11	1.00

MISCELLANEOUS DISCHARGE MEASUREMENTS, OF VARIOUS  
CREEKS, FOR YEAR 1922.

HAT CREEK, SOUTH LINE SECTION 23-33-55

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-18	T. C. Palmer.....	4.04	1.62	6.55

SECTION 3-32-55

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-18	T. C. Palmer.....	5.1	1.10	5.60

LAWRENCE FORK CREEK ON BRIDGEPORT-REDINGTON ROAD  
SECTIONS 25 AND 36-19-52

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
2-26	T. C. Palmer.....	3.8	2.46	9.36

LONERGON CREEK, BRIDGE ABOVE MOUTH SECTION 18-15-39

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3- 1	T. C. Palmer.....	4.2	0.82	3.4
3-31	T. C. Palmer.....	2.7	1.54	4.2
5- 4	T. C. Palmer.....	3.9	0.90	3.6
7- 7	A. H. Atkins.....	3.7	1.33	4.9
7-16	A. H. Atkins.....	2.8	0.61	1.7
7-27	A. H. Atkins.....	4.3	1.00	4.3
8- 4	A. H. Atkins.....	3.9	1.30	5.1
8-11	A. H. Atkins.....	5.4	1.44	7.7
7-14	John K. Rohrer.....	....	....	3.0
8-19	A. H. Atkins.....	5.4	1.42	7.6
10-14	T. C. Palmer.....	2.8	0.54	1.5

MONROE CREEK, SECTION 4-32-56, AT WAGON BRIDGE

Date	Made by	Area of Section	Mean Velocity	Discharge Sec. Ft.
3-17	T. C. Palmer-J. D. Heywood.....	1.9	1.33	2.6

**MONTHLY PRECIPITATION FOR IRRIGATION  
SEASON 1922—DIV. 1-A.**

Station	April	May	June	July	August	Sept.
Bridgeport .....	3.63	3.06	1.12	2.16	0.36	0.50
Gothenburg .....	2.00	2.07	1.82	3.11	4.29	0.87
Hillside .....	3.40	1.85	2.80	5.10	1.79	0.40
Kearney .....	2.39	3.64	3.67	3.19	1.41	1.18
Kimball .....	3.60	1.61	2.08	1.09	1.66	0.54
Lexington .....	3.25	2.35	0.55	3.54	3.39	0.73
North Platte .....	2.01	2.53	0.87	4.91	2.26	1.00
Sidney .....	3.80	1.61	0.68	2.25	1.61	0.09
Mitchell .....	3.52	3.03	0.47	2.09	0.57	0.09
Scottsbluff .....	4.26	3.54	1.90	2.70	0.41	0.13
Oshkosh .....	4.19	2.11	1.89	4.03	0.85	0.04

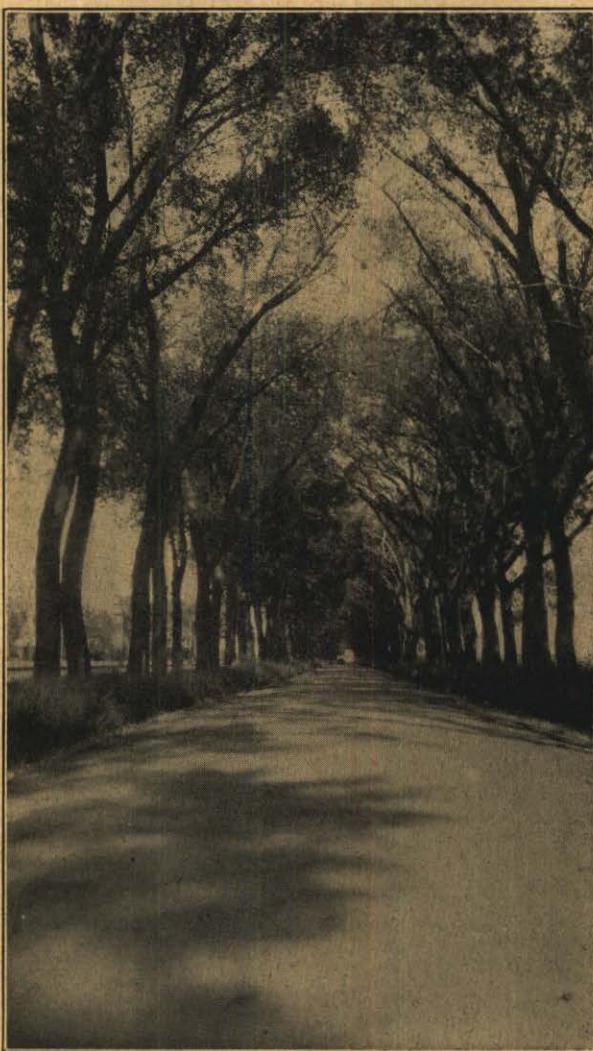
**MONTHLY PRECIPITATION FOR IRRIGATION  
SEASON 1922—DIV. 1-B.**

Station	April	May	June	July	August	Sept.
Alma .....	2.51	2.84	1.50	5.74	0.51	0.00
Beaver City .....	2.81	3.05	0.98	4.99	3.20	0.00
Culbertson .....	3.35	1.44	2.93	2.58	1.20	0.00
Guide Rock.....	4.08	3.70	2.02	4.91	0.71	0.86
Hayes Center.....	3.77	.....	1.72	4.46	5.87	0.22
Imperial .....	4.06	2.62	1.22	2.94	2.98	0.05
McCook .....	3.13	1.58	3.13	2.44	0.98	0.24
Red Cloud .....	3.13	3.72	0.91	2.70	0.32	0.97
Wauneta .....	2.95	1.75	1.49	2.75	2.36	0.08

**MONTHLY PRECIPITATION FOR IRRIGATION  
SEASON OF 1922—DIV. 2-C**

Station	April	May	June	July	August	Sept.
Gordon .....	5.00	1.56	1.84	4.82	2.80	0.11
Merriman .....	4.70	1.65	1.09	5.52	1.19	0.17
Nenzel .....	4.23	8.08	2.95	3.74	1.57	0.04
Valentine .....	2.30	2.67	4.08	3.89	0.42	0.11

**Report of**  
**The Bureau of Roads and Bridges**  
**CLERICAL DIVISION**  
**EQUIPMENT DIVISION**  
**DIVISION OF TESTS**  
**DIVISION OF MOTOR VEHICLE REGISTRATION**



Wooster Lane Near Silver Creek.

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**BUREAU OF ROADS AND BRIDGES**

George E. Johnson.....	Secretary
George K. Leonard.....	Assistant Secretary
Eugene H. Morey.....	Chief
R. O. Green.....	Division Engineer No. 1
M. F. Black.....	Division Engineer No. 2
C. E. Wright.....	Division Engineer No. 3
A. C. Tilley.....	Division Engineer No. 4
A. M. Gaddis.....	Division Engineer No. 5
M. C. Noble.....	Division Engineer No. 6
W. D. Kimmell.....	Division Engineer No. 7
A. T. Lobdell.....	Division Engineer No. 8
F. C. Rolls.....	Division Engineer No. 9
W. T. Hole.....	Division Engineer No. 10
M. B. Jones.....	Office Engineer
M. E. Burr.....	Chief Draftsman
A. W. Moffitt.....	Superintendent of Equipment
Clark E. Mickey.....	Testing Engineer

**Recommendations of Secretary.**

November 30, 1922

To His Excellency, Samuel R. McKelvie,  
Governor of the State of Nebraska,  
Sir:

I feel it my duty to make a few recommendations for the future based upon the experience of Nebraska and other states in the development of a Highway System.

The future policy in meeting Federal Aid appropriations for construction is the most important consideration before the people of Nebraska. There is at present available to Nebraska \$5,800,000.00 of Federal money for the construction of the State Highway System. Sixty per cent of this money must be spent on three-sevenths of our State Highway System on that portion which is known as the Primary System. The other forty per cent will be applied to the Secondary System, and money remaining after the completion of the Primary System will also be available for the Secondary System. The entire appropriation must be used in four years or it will be taken up by other states.

The question of meeting Federal Aid will come before the 1923 Legislature. Formerly the funds have been met from a general property tax, but the last Legislature passed a resolution against the continuance of Federal Aid as the property tax was too high. Since then, however, Congress appropriated more money by a vote of more than three-fourths majority. This means that other states will have Federal Aid if Nebraska does not, and our discontinuance of its use under such conditions would be an undue and unwarranted hardship upon the State.

In considering this we must remember the 250,000 motor vehicle owners in Nebraska. Poor roads mean to them the ruin and replacement of tires, increased consumption of gasoline and oil, and heavier depreciation. The vehicle owner has the choice between the tax for bad roads imposed by these destructive factors, and the tax for good roads requested for Federal Aid. Considering the number of cars that travel the State highways and the benefits derived from the improvements on the roads, it would be an economic investment if the vehicle owner was required to pay the entire expense.

In comparing the difficulties of highway transport five years ago with the facilities of today, any motor vehicle owner will conclude that his contribution toward highway improvement has decidedly been a paying investment. The painful and expensive experience of being pulled out of a bad stretch of road and the realization that if the road had been improved, this would have been prevented, is enough to convince any thoughtful motorist of the financial assets involved in a good road.

The Federal Highway Department has given figures which declare that forty per cent has been saved in the marketing of farm products since 1916. It would be decidedly understating the case to say that the road improvements since 1916 have resulted in a saving of two cents per mile in automotive operations in Nebraska. Since this is nearly twenty per cent less than the figures given by the Federal Government, it fur-

nishes a very conservative basis upon which to estimate the actual saving occurring from highway improvements.

#### **Cost and Saving in Operating Motor Vehicles in Nebraska**

Total number of motor vehicles in Nebraska, 250,000.

Average miles traveled per car, 6,000.

Total vehicle miles per year, 1,500,000,000.

Average operating expense per mile per vehicle, \$0.09.

Present annual operating cost, \$135,000,000.00.

Saving per mile, \$0.02.

Multiplying the \$0.02 saving by total number of miles, we find the annual saving by highway improvements to be \$30,000,000.00.

The above figures were derived from compiling costs submitted by 1200 dealers in Nebraska and can be checked easily when we know that the gas consumption for motor vehicles in the State for the past twelve months has been 125,000,000 gallons. Multiplying the number of gallons by the average number of miles per gallon, which is twelve, we will have 1,500,000,000 vehicle miles. This mileage checks with the reports received from the dealers. One will not have to investigate very far to learn that the average operating cost per mile counting depreciation, is nine cents.

After reviewing the above figures, it is easily seen that the motor vehicle owner can easily afford to pay all of the expense of meeting Federal Aid as well as to continue the maintenance work which has already been started. If this is done, we would be assured of another cent saved per mile, which would amount to another \$15,000,000 per year.

In view of these facts, I submit the following recommendations:

#### **RECOMMENDATION NO. 1**

I recommend that the Legislature devise some method to provide an increase on the Motor Vehicle Tax Levy which would amount to \$2,250,000.00 per year. This would be used to meet Federal Aid Construction and to maintain the entire State Highway System. This construction and maintenance should be entirely under the jurisdiction of the State Department of Public Works.

#### **RECOMMENDATION NO. 2**

In order to finance the construction of county roads and bridges, I recommend that a property tax, not exceeding the present one, be levied on motor vehicles in each county. I recommend that this money be left in the county to construct and maintain county roads and bridges.

#### **RECOMMENDATION NO. 3**

The appalling increase of automobile accidents on city streets, county, and state highways is becoming so marked that I feel that some check other than now employed must be applied. The present regulations and system of fines are not adequate to secure the necessary amount of protection. My investigations in this matter have convinced me that there is only one solution to the problem; that is to make the responsibility rest with more weight and more exactness upon the individual driver. I

recommend, therefore, that each individual must hold a permit before being allowed to drive a motor vehicle. I further recommend that it be made mandatory on the court to revoke this permit for different violations of the Motor Vehicle Laws and ordinances. A new permit should not be issued until after periods of one month or a year had elapsed, depending upon the seriousness of the offense. To provide sufficient funds to enforce the traffic laws, a fee of one dollar should be charged for each permit. This fee should be paid to the city treasurer if the permit is issued to a resident of the city, or to the county treasurer if the applicant resides outside the city.

#### RECOMMENDATION NO. 4

I recommend that the Road Laws be so amended that all roads outside of the State Highway System be placed solely under the jurisdiction of their respective county boards. This separation of the State and County highway organizations is advisable in the light of our own experiences as compared with those of other states where the systems have been separated. To secure the maximum amount of efficiency and economy, it is essential that each county board be clothed with authority to establish its own construction projects and maintenance patrol districts on all county roads, and that the State Highway System be constructed and maintained solely by State authority. This would eliminate friction and place the responsibility exactly where it belongs.

In most cases this would mean doing away with the local road overseer. The county board would plan a construction district of a size that one grading outfit could keep busy the entire season. Dragging and maintenance districts could be laid out in the same way, and each county commissioner and supervisor in counties less than fifty thousand population should be left free to supervise such work in his district. In counties of over fifty thousand population, the amount of money expended would justify the supervision of a county engineer at all times, and he should be elected by the people as at the present time.

Another reason why the State Highway should be considered a distinct and separate State enterprise is the fact that much of the traffic on State Highways is not confined to a single county, but is inter-county and inter-state. The traffic census taken at eighteen different stations on the State Highway near Auburn, Chester, Columbus, Dakota City, Fairmont, Grand Island, Hastings, Havelock, Kimball, McCook, Millard, Norfolk, North Platte, Scottsbluff, Spencer, Valley, Wymore, and York reveals the following situation: Out of a total of 88,958 vehicles passing these stations between the hours of 6 A. M. and 8 P. M., fifty per cent of the motor vehicles were from outside the counties and one-third of these were from outside the State. All but four per cent of the entire number were motor vehicles.

This is sufficient proof that the State Highway System should be considered as a State and inter-State problem rather than one of county administration. If we are going to charge the cost of road construction and

maintenance to the motor vehicle owner, we must place the responsibility for administration with the proper authorities and follow a plan which will be consistent with justice, and insure us a scientifically constructed and systematically maintained highway throughout every section of the State.

Respectfully submitted,

(Signed)

GEO. E. JOHNSON,

Secretary.

November 30, 1922

To George E. Johnson,  
Secretary of Department of Public Works,  
State of Nebraska, Lincoln,

Sir:

I have the honor to submit the following report covering the activities of the Bureau of Roads and Bridges during the past Biennium:

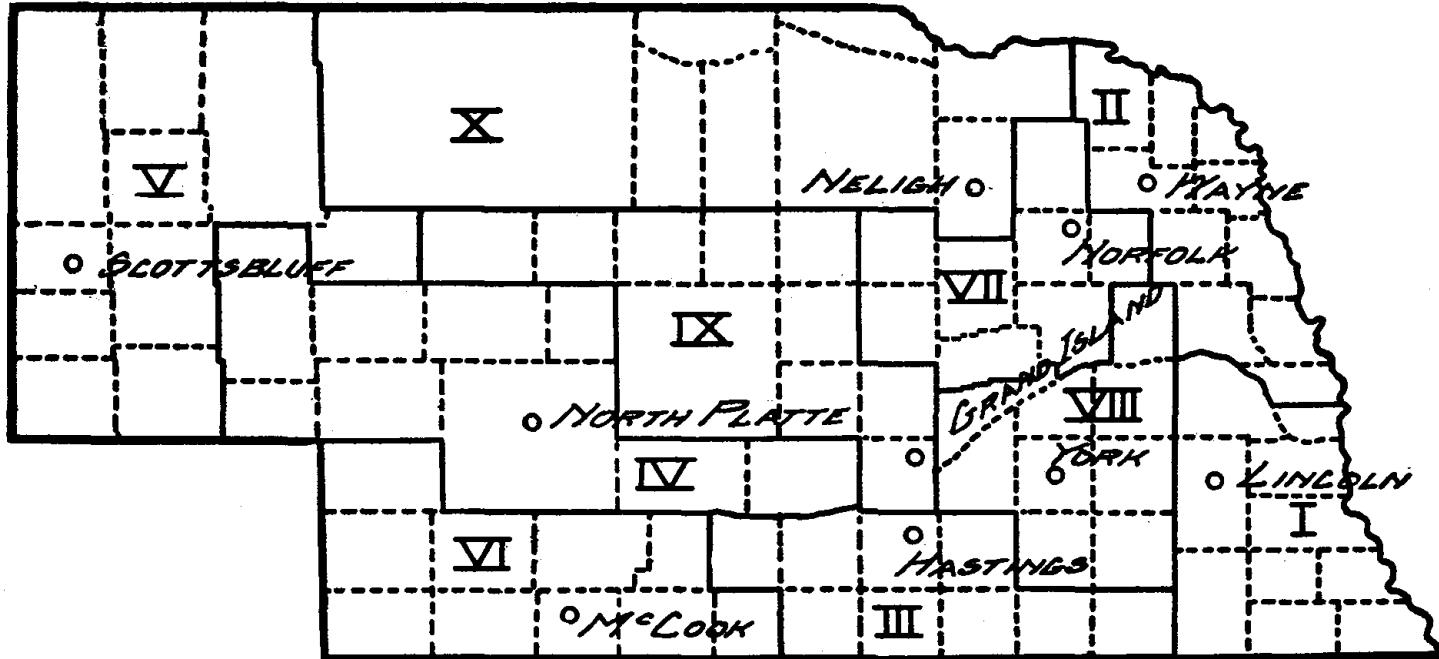
In order to do this, it has been necessary to limit the report to matters of prime importance. Types of work have been summarized under separate headings to produce a concise source of information.

During the last two years, a change was made in the number of Division Engineers. The five Divisions were changed to seven, each being supervised by one Division Engineer and his assistant. Later it was decided to increase the number of Divisions to ten. In so doing the Division was placed under one Division Engineer and the office of Assistant Division Engineer was abolished, thus eliminating the services of four men. This system has worked admirably, both from the standpoint of economy and efficiency, and I recommend its continuance.

Reports of the Division of Testing, Division of Maps and Plans, and Equipment Division are further included, in addition to other matters of importance connected with the Bureau of Roads and Bridges.

The Bureau has at all times endeavored to secure the utmost degree of co-operation with all county and local officials, as well as public service associations and community organizations.

Respectfully submitted,  
(Signed) EUGENE H. MOREY,  
Chief, Bureau of Roads and Bridges.



Map Showing Headquarters of the Division Engineers

**DUTIES OF THE DIVISION ENGINEERS**

There are ten Division Engineers working under the supervision of the Chief of the Bureau of Roads and Bridges. Each engineer has direct charge of the work in his respective Division. The duties of the Division Engineer are here given:

**Construction**

First—It is the duty of the Division Engineer to assist in the original location of all roads, and supervise the construction of same from the time the road is first surveyed until it is finally accepted by the Federal Government. Thus, he makes recommendations for all improvements effected during construction and maintenance of the projects under his supervision.

Second—The Division Engineer is responsible for the engineering parties that are required in the construction process. These parties consist of a project engineer, an instrument man, rodman and chainman. The project engineer is responsible to the Division Engineer for the work under his supervision.

Third—The approval of all plans, estimates, payrolls, correspondence and field parties on the projects within the counties of the division is under the jurisdiction of the Division Engineer.

Fourth—In the construction of drainage structures and paving the matter of testing the proper materials necessary is referred by the Division Engineer to the Testing Engineer.

Fifth—The matter of issuing permits for the erection of signs on the State System is cared for by the Division Engineer; also, the marking of the State Highways with the proper signs is arranged by him, and shipments made upon his recommendation to the County Highway Commissioner.

Sixth—Frequent inspections are made by the Division Engineer, oftentimes in company with the Federal District Engineers, at which time the progress of the work is noted and recommendations with regard to methods, alignment, grades, and drainage structures made.

**Maintenance**

Seventh—The Division Engineer acts in co-operation with the Highway Commissioner of each County with regard to the maintenance of all roads located on the State Highway System. Changes in the method and results of such maintenance matters are recommended by him.

Eighth—All claims arising from the maintenance of such roads, and presented by the counties, are taken care of and checked by the Division Engineer.

Ninth—Maps of sections patrolled, type of patrols, number of patrolmen and miles in each county are kept and checked, from the daily report forms sent in by the patrolmen. This data is used for cost keeping.

**THE DIVISION OF MAPS AND PLANS**

The first step in the establishment of a Federal and State Aid Road is the passage of a resolution by the County Commissioners giving a description of the road and requesting Federal Aid for its construction. This resolution is presented to the State Department, and after an investigation of the conditions, if found favorable, it is approved.

Upon approval by the State Department, a project statement is compiled and submitted to the United States Bureau of Public Roads. This statement contains a map showing the alignment of the proposed road, an estimation of the approximate cost, the source of funds available and all other data necessary to inform the Federal Bureau of the most important factors. Preliminary Survey is then made of the project by the State. The surveying party consists of three, project engineer, rodman, and chainman. This survey establishes the status of the road in respect to alignment, drainage, and all essential defects are determined. The notes taken by the engineer in the field are then reduced in the office by the draftsmen, and plotted in plan, profile, and cross sections.

The plan of the road denotes the location of trees, fences, driveways, houses, telephone poles, and entire alignment. It is in fact an exact chart of the road showing the position of every landmark and structure which is contingent. The profile of the road of course is plotted from the side and shows the elevation of the center line of the road throughout the entire length. Cross sections of the road are plotted wherever they have been taken by the engineer in the field; these are taken every hundred feet and at intervals between these hundred foot stations whenever the contour of the road changes abruptly enough to warrant it. Two draftsmen will complete about three miles of plotting in one day.

A tentative grade is then laid on the profile, that is the draftsmen in the office study the profile and establish a grade in which they visually balance the cuts and fills, making the road conform as nearly as possible to the correct standard. This theoretical grade is then sent to the Division Engineer, who in company with an Engineer from the Federal Office, makes a plan-in-hand inspection of the road. This inspection covers the whole project; recommendations are made for all surfacing, grades, and drainage structures. The plan-in-hand inspection notes are then sent into the office and the former plan is revised. Using the plan-in-hand inspection notes as a working basis, a balanced grade is laid over the tentative grade which was submitted in the beginning. The grade thus laid utilizes the dirt that has been obtained from hills and ditches in raising the low places and bringing the road to the desired width. Earth work quantities are computed from the cross sections and an estimate of the required yardage is made up. Drainage structures are provided for according to the plan-in-hand inspection and estimates are made plans and estimates ready for the new project.

These plans and estimates are then submitted to the Federal Government and after their approval, the State is at liberty to advertise for bids on construction. After completion of construction a final survey



The Division of Maps and Plans

is made of the road as built. This survey is made over the same stations as the preliminary; the notes are plotted over the preliminary cross sections and the actual yardage of excavation and embankment determined. These final plans are submitted to the Federal Bureau for approval; the completed project is inspected by Federal engineers and after the approval of the former and the acceptance of the latter final payment of Federal Aid funds is made for the work.

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#### EQUIPMENT DIVISION

On February 28th, 1918, Congress passed an amendment to the original Federal Aid Road Bill designated as Section Seven which provided for the transfer by the Secretary of War of all surplus war equipment materials and supplies not needed by the War Department, but suitable for use in the improvement of highways, to the highway departments of the several states, to be used on roads constructed entirely or in part with Federal Aid Funds; such distribution to be made upon a value basis, the same as provided for by the Federal Aid Road Act.

The Department, realizing the importance of such equipment in building and maintaining the roads, immediately gave definite instructions to the War Department for shipment of Nebraska's share, and at the same time organized an Equipment Division which should have direct control and supervision of such materials.

Nebraska's first allotment was received in June, 1919, and the Equipment Division organized at that time. The Superintendent of the Division, Mr. A. Moffitt, is in charge and with his assistants, supervises the entire work of the Division, which, because it includes so many different types of work may be divided for convenience into the following heads, viz:

- (1) Care of road equipment.
- (2) Establishment and equipment of gravel camps.
- (3) Organization and equipment of heavy gang maintenance crews.
- (4) State road construction.

#### Care of the Road Equipment

The Equipment Division's store room, garage, and general equipment yard is located at Sixth and South Street, Lincoln, Nebraska where all supplies are stored, issued, and shipped. The yard, covering eleven acres, is fenced and a spur of railroad track, used for loading, runs the full length of one side. A large "A"-frame derrick which facilitates greatly the loading of cars stands on this track.

Approximately fifteen man are employed to keep the equipment in repair and see that it is in first class condition before issuing it to the counties. The mechanics prepare the state trucks and other equipment for sale, while the yard men do the general work, such as loading, shipping, and gneral maintenance of the yard.

The store room in which all parts are kept is located in the garage building. Doors are locked except when storekeeper is shipping or receiving supplies. As equipment parts are received they are placed in bins or on shelves, with quantity, description, and location entered upon store record cards, which give detailed information concerning each article. A system of duplicate receiving and shipping tickets has been installed as a check upon all supplies on hand. Shipments are checked in on the receiving sheets, the duplicate being kept by the storekeeper and the original filed in the office. The shipping tickets show the consignee, quantity, and description of the article, and just how the shipment is made. The duplicate of this form is sent to the consignee, but the original is filed.

Before securing a piece of equipment, a requisition must be made to the storekeeper on a standard requisition form, the classes of requisition are: (1) The shop for repair and overhaul; (2) From the yard for gas and oil; (3) From the office for state or office use. After filing a requisition, the storekeeper changes the store record card to register the parts sent out and the balance remaining in stock. By this method a perpetual invoice is kept and may be had at all times from the store record cards.

During the last two years gasoline has been purchased in carload lots and delivered into the ten thousand gallon storage tank in the general equipment yard. Lubricating oil and transmission grease were also brought under a carload contract which assured a uniformly high grade oil for use in all state equipment.

The past two years have brought close co-operation between the counties and the Equipment Division in the matter of servicing trucks and tractors. Many of the counties have driven their trucks into the Equipment yard for a complete over-haul. Patrolmen in the various districts, after receiving telephonic assent from their Highway Commissioners, drive into Lincoln and get parts. Eighty-five counties have taken advantage of the service offered by the Equipment garage.

Much of the equipment received from the Government was in very poor condition, and it was necessary in most instances to overhaul, repair and provide new parts in order to properly prepare them in first class mechanical shape. Approximately ninety cars have been received from the Government. They have been used for engineering and state construction.

### Trucks

The trucks received from the Government were practically stripped of equipment, and it was necessary that they be re-equipped as completely as possible from the limited supply received with them. Some difficulty was encountered in over-hauling, since some of the manufacturers had discontinued the parts, and due to the slowness of delivery of those parts which could be had.

A total of four hundred seventy-five trucks have been received from the Government up to November first. Of this number three hundred twenty-six have been sold. The price of these trucks to the counties varies from \$350.00 to \$1200.00, depending upon the make of truck and type of body desired. The actual market value averages from \$3,500.00 to \$5000.00. Fifty of these trucks are in such shape that it will be impossible to repair them.

### Tractors

Tractors were received from the Government and after being over-hauled and properly equipped, were rented for use on Federal Aid roads.

It can be readily seen by the above summary that a large amount of equipment and machinery is handled through this Division. It has been the policy of those in charge to see that all equipment is put in first class condition before it is sent out, and during the winter months mechanics are kept busy repairing and overhauling the machinery which is stored at the garage during the season, so that work may begin as early as the season will permit. As has been stated before, some of the trucks have been sold to the counties, as well as various small equipment. When a piece of machinery is rented, a per diem rate is charged, and an agreement made whereby the contractor or the renter must keep the equipment in first class mechanical shape, and in addition be responsible for its proper return to the Department. Fifteen dollars per working day is charged for rented tractors; nine dollars for trucks, and three dollars for touring cars.

Each piece of machinery is stenciled with a State number, the serials starting anew for each different type of equipment. A daily time record is kept for each man, and the time spent in improving each separate piece of machinery is noted, all labor, costs, gas and oil being charged directly to the repaired car, truck or tractor.

### Bunk Houses

Forty-eight bunk houses were built by the Department. They are wooden, eight feet wide, seven feet high and twenty feet long. They are portable and are drawn on low wheeled wagon beds, and were sent to the various gravel and clay camps, also the convict labor camps maintained by the State Department. For complete equipment of a bunk house see itemized list at the end.

In conclusion it might be stated that the surplus War Equipment received from the Government has been of inestimable value to Nebraska in constructing and maintaining roads. Following is a complete list of all the equipment received from the Government, together with all equipment bought by the State for use on State Roads:

#### Trucks Received From the Government Since 1919

28	3	-Ton Garfords	3	2	-Ton Darts
12	3	-Ton Seldons	20	3	-Ton Packards
2	3½	-Ton Darts	7	2	-Ton Pierce Arrow
1	½-Ton	Republic	16	3½-Ton	Federal
1	¾-Ton	Republic	57	3	-Ton Velie
94	3	-Ton F. W. D.	177	2	-Ton Nash Quad
1	3	-Ton Peerless	3	1½-Ton	International
18	5	-Ton Federeal	1	5	-Ton Hurlburt
10	¾-Ton	G. M. C.	8	1	-Ton Velies
16	3	-Ton Liberty			

#### Miscellaneous Equipment Since 1919

50	20-Ton Holt Tractors
1	Novo Pump, 6 H. P. Engine.
1	Worthington Steam Pump, 3 inch.
16	3-H. P. Fairbanks-Morse Gas Engine Pumps.
2	9x10-inch 3-Drum Hoisting Engines
1	Road Grader
1	Austin Motor Roller
14	Steel frame Lee Trailers
6	Steam Locomotives and Tenders
3	5-Ton Derricks
1	15-Ton Locomotive Crane, Browning
1	10-Ton Osgood Locomotive Crane
1	Road Plow
2	Steam Hoist and Swinging Engines, 7x10 American
2	Steam Hoist and Swinging Engines, 9x10 American
1	93-H. P. Minneapolis Engine
1	25-H. P. Vertical Boiler
10	2-Wheel Wagon Carts
14	Steel Shelters
8	Hand Winches
9	36-Inch Gauge Flat Cars
5	100-Foot Steel Tapes
6	No. 2 Scoops
4	Levels
100	No. 2 Shovels
40	Portable Forges
3	450-Gallon Sprinkling Wagons.
3	480-Gallon Tanks, K. D.
26	165-Gallon Tanks, K. D.

1	Western Road Grader, No. 10
4	½-Yard Lakewood Clamshell Buckets
16	¾-Yard Orange Peel Buckets
8	Sprinkling Wagons
2	Worthington Steam Pumps, 8-inch
1	14-Inch Tractor Plow
2	Stone Forks
10	Wheelbarrows
13	Cleveland Motorcycles
134	Galvanized Folding Lanterns
28	Box Compasses
36	Hydraulic Jacks
6	Double Action Hand Pumps
1	36-Inch Gauge Platform
1	36-Inch Narrow Truck
3	¾-K. W. Delco Generator Set
3	32-H. P. Electric Motors
64	Hand Pumps
1	Austin Elevator Grader
8	Dump Wagons, complete
15	Bundles Hex Tool Steel
5	Concrete Buggies
75	Army Cooking Ranges
3	Folding Tables
234	Escort Wagons
100	Sets Double Harness with Cable Traces
218	Railroad Lanterns
5	Carbide Flare Lights
70	Entrenching Axes
1	Hydraulic Tire Setter
12	Tralimobiles
3	7-H. P. Gas Engines
12	Trailer hi speed
9	Motorcycles
1	Lot tires
44	10-Ton Tractors
2	5-Ton Tractors
12	Field Desks
6	Tents
1	Lot Tires
7	Cases Stodes and Dies
6	Levels
3	Transits
1900	Picks
6	Box Compasses
4	Lathes
2	Tool Grinders
20	Chain Blocks
300	Long handled shovels
1	Set babbittting fixtures

**Material and Supplies**

111 Wood Bows for Quad. tops  
2 Units Quad. Parts  
4 Cars T.N.T.  
7 Sets Stanley Hook Skid Chains  
6760 Angle Fence Posts  
800 No. 8 Detonators for T.N.T. Explosive  
12 Nash Frame Assembly  
51975 lbs. Black Powder  
1 Crate Nash Tops and Curtains  
1 Case F. W. D. Tops and Brackets  
2 Units Spare Ford Parts  
4900 Feet 2-inch W. I. Pipe  
20 40x6 Stanley Skid Chains  
125 Sets Spare Parts for Escort Wagons  
2 Lots Spare Parts for 20-ton Holt Tractor  
500 lbs. Carbide Cake  
14 Trench Shelters  
1 Car Black Barbed Wire  
1681 Sheets Metal Roofing  
88 Nash Springs  
9 Ford Delivery Bodies with Tops and Fenders  
2 Lots Studebaker Parts  
329 Stable Brooms  
1 Lot Solid Tires  
1 Lot Pneumatic Tires  
1 Lot Garford Parts  
2 Car Loads Quad. Parts  
2000 Feet 8-inch Steel Pipe  
8100 Feet Rope  
980 Feet Manila Rope  
3900 Sash Cords  
9 Kegs Finishing Nails  
1 Lot Velie Parts

**Equipment for Bunk Houses**

2 Double Bunks  
4 Mattresses  
8 Blankets  
4 Pillows  
4 Pillow Slips  
2 Granite Stew Pans  
8 Knives  
8 Forks  
8 Teaspoons  
4 Tablespoons  
2 Steel Skillets  
1 5-Gallon Kerosene Can  
1 Coffee Pot  
1 Water pail

1 Teakettle  
1 Wash Basin  
1 Oil Stove  
1 Oil Stove Oven  
2 Tin Cups  
2 Dippers  
1 Meat Saw  
1 Gasoline Lamp  
1 Bracket Kerosene Lamp  
1 Porcelain Platter  
8 Porcelain Plates  
3 Porcelain Table Dishes  
1 Porcelain Pitcher  
8 Porcelain Pie Plates  
8 Porcelain Cups and Saucers  
8 Porcelain Sauce Dishes  
10 Porcelain Soup Bowls  
1 Set Salt and Pepper Shakers

**Equipment Bought For Use On State Roads During 1919-1920**

50 Eagle Trailers  
10 Troy Trailers  
1 Adams Grader  
74 Austin Graders  
3 Byers Cranes  
1 Austin Drag Line  
48 Bunk Houses  
3 Bucket Loaders and Engines  
1 1-Yard Clamshell Bucket  
1 R. & L. Sand Pump and Engine  
1 Clamshell Crane and Bucket  
2 Road Rippers  
1 L. H. Sand Pump and Engine

**DIVISION OF TESTS**

The Testing Engineer, Mr. Clark E. Mickey, has charge of the analysis and tests of all the materials used in the construction of State and Federal Aid roads and bridges. This includes Portland cement, sand, sand-gravel, gravel, crushed rock, concrete, steel reinforcing bars, concrete and corrugated pipe tests, oils, asphalt, tars, and paving materials. In addition to analyzing and testing, recommendations are made as to the advisability of using such materials and inspections of the actual work in progress is made for the purpose of aiding the Project Engineer in securing the best possible results. Reports are made to the Chief of the Bureau of Roads and Bridges who in turn rejects or approves and reports the results to the Federal District Engineer's office. No materials are used that do not meet the requirements of the Standard Specifications of the Federal Government.

**Testing**

The principal object in view in the testing and analyzing of materials used, or proposed to be used in the construction of State and Federal Aid roads and bridges is for the purpose of determining their suitability for this use. The specifications for the materials to be used, and as far as possible the materials are tested to determine whether or not they meet with the specified requirements.

The methods used for conducting all of the tests and analysis of materials are as provided by the American Society for Testing Materials.

On account of the lack of a sufficient quantity of good commercial crushed rock to be used as concrete aggregate, it has been necessary to design a concrete made of sand-gravel aggregate. Nebraska has a large number of deposits of this material, which when of the right analysis, makes an excellent aggregate for concrete. A large number of tests have been made on the sand-gravel aggregate. This determines those particular characteristics which it must have in order to make the best concrete. These tests are being continued.

In parallel with the sand-gravel tests, two concrete cylinders six inches in diameter and twelve inches long are moulded in cyl-o-con paper moulds for each day's run of concrete pavement, concrete pavement base, concrete curb and gutter mixtures, and concrete bridges. Records are kept of the compressive strength of these concrete cylinders at the seven-day age and the twenty-eight day age. Together with these tests are recorded the complete physical test for the Portland cement and sand-gravel aggregate used in the mixture on the job from which the concrete cylinders are taken.

All of the laboratory testing and analyzing is made in the engineering laboratories at the University of Nebraska, except when certain projects have a large number of materials to be tested. In such cases a temporary laboratory is set up for that purpose near the work.

**NUMBER AND KINDS OF TESTS MADE ON FEDERAL AND STATE AID PROJECTS**

265

Project No.	NAME OF ROAD	COUNTY	Sand Gravel	Portland Cement	Concrete Cylinder	Asphalt Filler	Spelter Test	Steel Reinforced	Refined Tar	Surfacing Clay
1	Nebraska State Aid-Peru.....	Nemaha.....	1	1	1	1	1	1	1	1
14B	Whiting Bridge.....	Holt.....	2	10	1	1	1	1	1	1
34	Burwell-Devere.....	Garfield.....	4	1	1	1	1	1	1	1
42A	Sargent-Taylor .....	Loup.....	1	1	1	1	1	1	1	1
43A	Tecumseh-Crab Orchard.....	Johnson.....	1	3	1	1	1	1	1	1
49B	Oakland-South Sioux City.....	Dakota.....	1	3	1	1	1	1	1	1
49A	Homer-Dakota City.....	Dakota.....	2	1	1	1	1	1	1	1
49C	Rosalie-Homer .....	Thurston.....	2	1	4	1	1	1	1	1
49D	Oakland-South Sioux.....	Burt.....	1	1	1	1	1	1	1	1
55A	Seward County Line South.....	Saline.....	1	1	1	1	1	1	1	1
55B	Dorchester-Friend .....	Saline.....	2	1	1	1	1	1	1	1
70A	Stanton-Wisner .....	Wayne.....	10	5	1	1	1	2	1	1
70B	Stanton-Wisner .....	Stanton.....	3	1	1	1	1	1	1	1
76	Chadron-South .....	Dawes.....	10	1	1	1	1	1	1	1
79	Bridgeport-East and West.....	Morrill.....	4	1	1	1	1	1	1	1
83B	Neligh-South .....	Boone.....	1	2	1	1	1	2	1	1
86	Shelby-Platte River Bridge.....	Platte.....	5	5	1	1	1	1	1	1
88C	Oakland-Crowell .....	Cuming.....	2	1	1	1	1	1	1	1
91B	Florence-Blair .....	Washington.....	5	3	10	1	1	1	1	1
92	Litchfield-Hazard.....	Sheridan.....	1	2	1	1	1	1	1	1
95	Chase-Imperial .....	Chase.....	1	2	1	1	1	1	1	1
98	Crete-East .....	Saline.....	5	1	1	1	1	1	1	1
102A	Smiley Canyon-West.....	Sioux.....	11	4	1	1	1	1	1	1
102B	Smiley Canyon .....	Sioux.....	1	4	1	1	1	1	1	1
107B	Greenwood-Ashland .....	Saunders.....	2	10	2	1	1	1	1	1
107C	Ashland-Melia .....	Sarpy.....	11	9	1	1	1	1	1	1

## NUMBER AND KINDS OF TESTS MADE ON FEDERAL AND STATE AID PROJECTS—Continued

266

Project No.	Name of Road	County	Sand Gravel	Portland Cement	Concrete Cylinder	Asphalt Filler	Spelter Test	Steel Reinforced	Refined Tar	Surfacing Clay
108	Hay Springs	Sheridan	3	1	1	1	2	1	1	1
110A	Monowi-West	Knox	10	5	1	1	5	1	1	1
116A	Auburn-Tecumseh	Nemaha	1	1	1	1	1	1	1	1
117	Lutherville-Oshkosh	Garden	...	...	...	...	...	...	...	2
118	Hebron-East	Thayer	12	16	46	1	1	1	1	1
121	Grant-Elsie	Perkins	4	1	1	1	1	1	1	1
122A	Beatrice-Crab Orchard	Gage	4	1	1	1	1	1	1	1
125	Long Pine-Ainsworth	Brown	1	5	9	1	1	1	1	1
126A	Hayes Center-South	Hayes	1	1	1	1	1	1	1	1
130	Sidney-Gurley	Cheyenne	1	4	5	1	2	1	1	1
132	Atkinson-South	Holt	1	4	1	1	1	1	1	1
133A	Nebraska City-Lincoln	Holt	3	1	1	1	1	1	1	1
139E	Norfolk-Ewing	Holt	1	1	1	1	3	1	1	2
143	York-South	York	9	1	1	1	1	1	1	1
146	Ogallala-Lemoyne	Garden	5	1	1	1	1	1	1	8
153	Eagle-East	Cass	2	1	1	1	1	1	1	1
156A	Aurora-South	Merrick	15	3	1	1	1	1	1	1
156B	Aurora-North	Hamilton	1	1	1	1	1	1	1	1
158	Atkinson-O'Neill	Holt	1	1	1	1	1	1	1	11
164A	Hebron-Nelson	Thayer	1	1	1	1	1	1	1	1
164B	Hebron-Nelson	Nuckolls	2	1	1	1	2	1	1	1
168	Stuart-Bassett	Holt	5	1	1	1	1	1	1	1
169A	Grand Island-Hastings	Adams	4	5	29	1	1	1	1	1
170	North Platte-East	Lincoln	4	1	1	1	1	1	1	15
175	College View-Bennett	Lancaster	23	6	1	1	1	1	1	1
176	Curtis-Maywood	Frontier	6	1	1	1	3	1	1	1

## NUMBER OF KINDS OF TESTS MADE ON FEDERAL AND STATE AID PROJECTS—(Continued)

267

Project No.	NAME OF ROAD	COUNTY	Sand Grae	Portland Cement	Concrete Cylinded	Asphalt Filler	Speler Test	Steel Reinforced	Refined Tar	Surfacing Clay
177	Kearney-Simmonds	Buffalo.....	3	1	1	1	1	1	1	1
179	Papillion Bridge.....	Sarpy.....	1	6	1	1	1	1	1	1
180	Columbus-East .....	Platte.....	3	1	1	1	1	1	1	1
181	Ravenna-Sweetwater .....	Buffalo.....	10	1	1	1	1	1	1	1
182	Harvard-Eldorado .....	Clay.....	6	4	1	1	1	1	1	1
183	Gretna-Elkhorn .....	Douglas.....	8	4	1	1	1	1	1	1
184	Elwood-Stoekville .....	Gosper.....	14	3	1	1	1	1	1	1
185	Geneva-Milligan .....	Fillmore.....	4	4	1	1	1	1	1	1
186	Kimball-Bushnell .....	Kimball.....	9	4	1	1	1	1	1	1
187	Florence-Elk City.....	Douglas.....	1	1	1	1	1	1	1	1
188	Arnold-Merna .....	Custer.....	1	2	1	1	1	1	1	1
191	Haigler-West .....	Dundy.....	3	2	1	1	1	1	1	1
196	Minden-Newark .....	Saunders.....	2	1	1	1	1	1	1	1
	Ashland Bridge.....	Saunders.....		(Paint 3)						
No. of Projects—66			264	150	123	1	40	3	3	42

# STATUS OF FEDERAL AID PROJECTS.

PROJECT STATEMENT.			COMPLETE AND ACCEPTED BY UNITED STATES BUREAU OF ROADS.									
No.	NAME	LENGTH	FED. AID	STATE AID	TOTAL	ESTIMATE			PROJECT	FINAL COST.		
						FED. AID	STATE AID	OTHER		FED. AID	STATE AID	OTHER
1	Lancaster-Emerald	5.30	12047.50	17847.50	30000.00				Lancaster	54000.00	54000.00	
2	Bethel-Lake-Tulsa City	57.25	4120.10	4120.10	8240.20				Bethel	42086.88	42086.88	
	Kosciusko City									10256.24	10256.24	
3	Wells City	35.10	19234.00	19234.00	38468.00				Chester	10255.24	10255.24	
4	Waukon-Columbus	32.05	16383.25	16383.25	32766.50				Jefferson	10257.54	10257.54	
5	Superior-Harvard-Minden	94.00	43386.76	43386.76	86773.52				Madison	12354.14	12354.14	
6									Pierre	6471.20	6471.20	
7	Superior-Harvard-Minden	94.00	43386.76	43386.76	86773.52				Sioux City	12357.29	12357.29	
8										4041.68	4041.68	
9										3630.20	3630.20	
10	Rocky Flats-Ashland	19.00	22550.00	22550.00	45100.00					25614.08	25614.08	
11	Saint Paul-Twinwood	8.00	3550.00	3550.00	6700.00					35701.87	35701.87	
12	Stephens-Kingsdale	17.50	13601.50	13601.50	27203.00					30000.57	30000.57	
13										12386.16	12386.16	
14	Rimbell-Harrington	26.50	12787.50	12787.50	25575.00					3471.01	3471.01	
15										50846.47	50846.47	
16	Hawick-Nevary	10.00	20077.75	20077.75	40155.50					56844.92	56844.92	
17	West Lincolnfield	4.00	7320.00	7320.00	14640.00					15517.58	15517.58	
18	Alliance-Antioch	13.00	31208.60	31208.60	63187.20					57204.82	57204.82	
19										25183.05	25183.05	
20	Broken Bow-Ca Line	36.00	37950.00	37950.00	75900.00					18476.87	18476.87	
21	Dear-Dakota	34.20	29325.00	29325.00	56650.00					26555.75	26555.75	
22	Deer Park-Cheyney	23.71	27486.25	27486.25	54972.50					88056.34	88056.34	
23										36729.34	36729.34	
24										59275.79	59275.79	
25										19433.17	19433.17	
26	Harold-Imperial	16.90	25340.00	25340.00	50680.00					102386.36	102386.36	
27	Huron-Laramie	31.35	23025.00	23025.00	46050.00					16657.56	16657.56	
28										37039.54	37039.54	
29	Red City-Hollisburg	29.95	26075.00	26075.00	51750.00					30037.20	30037.20	
30	Conway City-Holbrook	19.42	27312.50	27312.50	55625.00					66666.35	66666.35	
31	Aldo-Petrolia	12.60	14250.00	14250.00	28500.00					74191.33	74191.33	
32	Red Cloud-Ayer	20.00	13601.00	13601.00	27202.00					37020.34	37020.34	
33										28131.34	28131.34	
34	Dayles Co-O.L.O.	1.89	7729.35	7729.35	15458.70					16258.21	16258.21	
35	Cochran-Snowflake	12.10	14740.00	14740.00	29480.00					26334.96	26334.96	
36	Huron-Bentonia	7.25	11740.00	11740.00	23480.00					32073.50	32073.50	
37	Mon-Dumas	13.60	20240.00	20240.00	40480.00					40547.01	40547.01	
38	Sargent-Taylor	10.20	26370.00	26370.00	52740.00					54388.07	54388.07	
39										82780.82	82780.82	
40	Central City-Boggs	19.60	23010.00	23010.00	46020.00					19734.42	19734.42	
41	Garnett-Alexander	24.20	36273.00	36273.00	72546.00					35947.01	35947.01	
42										34163.37	34163.37	
43	Schuyler-Petteys	16.55	13365.00	13365.00	26730.00					39296.17	39296.17	
44	Cushing-Grand Island	25.20	24930.00	24930.00	50860.00					77741.14	77741.14	
45	Pierce-South	12.65	14410.00	14410.00	28820.00					60693.18	60693.18	
46	Orton-Scottley	4.00	12567.89	12567.89	25135.78					64444.60	64444.60	
47	Westport-Greenwood	6.20	11291.34	11291.34	22582.68					74220.89	74220.89	
48										41465.56	41465.56	
49	Realty-Reedsport	20.00	28750.00	28750.00	57500.00					52878.17	52878.17	
50										67078.98	67078.98	
51	Garrett-Paxton	12.30	22396.00	22396.00	44792.00					52457.93	52457.93	
52	Garrison-Paxton									110223.35	110223.35	

# STATUS OF FEDERAL AID PROJECTS.

PROJECT STATEMENT					COMPLETE AND ACCEPTED BY UNITED STATES BUREAU OF ROADS.										
Nº	NAME	LENGTH	FED. AID	ST. AID	ESTIMATE-COST			PROJECT	FINAL COST			FED. AID	ST. AID	OTHER	
					FED. AID	ST. AID	OTHER		FED. AID	ST. AID	OTHER				
77	Hastings Ave	11.50	123,200.00	12,320.00	246,400.00			Adams	11.20	123,000.65	12,300.65		60,731.30	3,039.65	
78	Douglas Co. Center St.	13.00	165,000.00	16,500.00	220,000.00			Douglas	11.30	150,545.57	15,034.57		60,062.15	3,034.57	
81	Frankfort - Ames	5.34	98,965.00	9,896.50	127,930.15			Douglas	5.34	60,221.17	6,022.17		70,442.34	6,022.17	
84	Greeley-Central - -Perloch	13.20	213,400.00	21,340.00	246,800.00			Greely	6.60	152,729.33	15,289.33		47,651.72	2,389.33	
85	Burnell-Schole	13.00	171,400.00	17,140.00	210,800.00			A	4.00	100,200.79	10,020.79		42,180.79	2,010.79	
88	Caledon - Cornwall	6.20	26,742.00	2,674.20	32,494.00			Valley	13.30	191,200.82	19,120.82		46,664.72	2,110.82	
91	Platte - Blair	16.50	242,000.00	24,200.00	244,000.00			Curtis	3.73	21,315.36	2,131.36		42,260.22	2,131.36	
95	Crete - Imperial	24.30	200,000.00	20,000.00	220,000.00			Washington	8.04	127,771.97	12,771.97		52,463.72	2,771.97	
100	Leavenworth - O'Sullivan	2.90	12,200.00	1,220.00	18,000.00			Custer	3.25	20,084.72	2,0084.72		40,069.72	2,0084.72	
103	Colby - Brist Sealing	0.35	5,815.00	581.50	10,700.00			Douglas	10.70	55,771.72	5,577.72		71,471.64	3,577.72	
104	Great Bend - Larned	3.00	11,820.00	1,182.00	18,000.00			Scottsbluff	0.50	20,031.95	2,0031.95		40,063.95	2,0031.95	
105	Belleville - Salina	1.12	6,241.50	624.15	8,821.75			Hall	3.01	12,925.55	1,2925.55		11,721.10	1,2925.55	
107	Greatwood - Chey	32.00	205,500.00	20,550.00	217,000.00			Gage	1.15	20,000.00	2,000.00		32,661.00	2,000.00	
112	Colby - Great Plains	3.00	33,000.10	3,300.10	40,000.00			A	9.23	26,569.88	2,6569.88		43,577.77	2,6569.88	
121	Grant - Gove	11.25	104,761.60	10,476.16	125,975.76			Geary	1.79	10,000.00	1,000.00		37,004.10	1,000.00	
125	Falls City - South	0.05	10,000.00	1,000.00	20,000.00			Patterson	11.20	104,196.61	10,419.61		37,004.00	1,000.00	
125	Long Pine - Stanton	7.76	12,366.00	1,236.60	18,000.00			Elizabeth	1.00	10,000.00	1,000.00		37,004.00	1,000.00	
129	St. J. - Seward Co.	10.70	32,997.00	3,299.70	40,797.78			Brown	7.76	36,970.00	3,6970.00		39,474.07	3,6970.00	
130	Sherman - Colton	20.57	62,673.60	6,267.36	70,347.70			Seward	7.10	30,041.99	3,0041.99		68,033.99	3,0041.99	
134	Col. C. - Seward	17.20	30,882.70	3,088.27	38,777.50			Cheyenne	12.04	16,025.25	1,6025.25		72,021.85	1,6025.25	
135	Capital City - Imperial	3.03	3,300.00	330.00	4,300.00			Saline	3.73	16,204.05	1,6204.05		72,020.11	1,6204.05	
136	Peace - Plainview	2.50	3,303.02	330.30	4,660.00			Merrick	9.89	10,927.60	1,0927.60		61,855.10	1,0927.60	
143	Huron - Dodge	23.27	53,927.70	5,3927.70	60,735.50			A	2.11	16,537.25	1,6537.25		50,225.90	1,6537.25	
151	Hanford - Parsons	0.60	10,426.35	1,0426.35	14,840.50			Parmer	11.20	17,929.02	1,7929.02		35,650.04	1,7929.02	
173	Emporia - Beloit	100.00	70,500.00	7,050.00	80,500.00			Terk	0.60	19,177.34	1,9177.34		42,229.97	1,9177.34	
								Scrap	11.17	23,999.83	2,3999.83		16,799.66	2,3999.83	

PROJECT STATEMENT					COMPLETE AND NOT ACCEPTED BY UNITED STATES BUREAU OF ROADS.										
Nº	NAME	LENGTH	FED. AID	STATE AID	ESTIMATE-COST			PROJECT	FINAL COST			FED. AID	STATE AID	OTHER	
					FED. AID	STATE AID	OTHER		FED. AID	STATE AID	OTHER				
29	Ossipee - David City	37.67	10,980.92	963.80	93,016.83			Park	57.71			12,004.74	3,8023.72		
43	Reedsburg - Croft - Orchard	17.0	12,923.00	1,2923.00	25,850.00			Butler				4,000.00			
46	Bethany - N.C. Cook	17.2	26,410.00	2,6410.00	32,000.00			A	13.85	50,095.91	5,0095.91		100,191.82	5,0095.91	
49	Colfax - S. Seward City	18.5	5,390.00	539.00	10,000.00			Jordan	17.44	33,633.06	3,3633.06		107,310.12	3,3633.06	
66	Valentine - Sparks	24.7	13,927.50	1,3927.50	30,000.00			D	4.28	12,059.04	1,2059.04		15,798.09	1,2059.04	
72	Northland - Stanton	22.0	23,973.00	2,3973.00	45,500.00			Cherry	14.36	16,665.20	1,6665.20		23,250.41	1,6665.20	
83	Nobles - Abilene	3.3	9,360.00	936.00	12,000.00			Custer	10.45	3,501.72	3501.72		6,000.43	3,501.72	
97	Rock River - Lewiston	30.6	14,072.00	1,4072.00	20,000.00			Antelope	5.65	13,704.63	1,3704.63		5,940.97	1,3704.63	
118	Huron - Fairbury	24.5	43,672.50	4,3672.50	45,672.50			Perham	15.70	50,566.66	5,0566.66		104,313.33	5,0566.66	
175	College - New - Carroll	23.7	41,745.00	4,1745.00	83,000.00			Thayer	13.30	11,410.29	1,1410.29		9,220.50	1,1410.29	
107	3rd - 107-A							C	11.27	54,666.69	5,4666.69		104,933.39	5,4666.69	
166	Broadway - Croft - Orchard	33.9	54,356.50	5,4356.50	61,356.50			A	18.35	50,662.75	5,0662.75		54,187.79	5,0662.75	
153	Brook City - Lincoln	54.9	38,126.50	3,8126.50	48,233.00			B	9.24	31,248.52	3,1248.52		6,649.97	3,1248.52	
153	Logan - Murray	34.0	65010.00	65010.00	130,200.00			A	6.48	16,225.62	1,6225.62		32,451.75	1,6225.62	
171	Kearney - Simola	16.70	53,422.24	5,3422.24	105,844.48			B	11.00	32,722.15	3,2722.15		105,544.30	3,2722.15	

# STATUS OF FEDERAL AID PROJECTS.

PROJECT STATEMENT					PROJECTS UNDER CONSTRUCTION.												
PROJECT	NAME	LENGTH	FED AID	STATE AID	TOTAL	SECTION	COUNTRY	LINES	ESTIMATE COST			PROJECT	FINAL COST				
									FED AID	STATE AID	OTHER	TOTAL	AGREEMENT	FED AID	STATE AID	OTHER	TOTAL
112 See 2-B						A	Richardson		\$1308.14	\$1308.15		\$3016.29	\$3003.14				
14 Hartington-Haynes							Wayne										
7 See 7-A						C	Custer	36.30	66824.51	66824.51		131683.02	66824.51				
14 O'Neill-Belle	43.5				116457.00	A	Rockwell	83.65	743933.95	743933.95		743937.30	743933.95				
14 "						A	Ross	19.92	63627.93	63627.93		13255.86	63627.93				
10 Lincoln-Bearrice	37.0				70615.00	A	Holt	18.1	11002.87	11002.87		34013.72	11002.87				
20 Lincoln Highway						A	Lincoln	36.96	61684.89	61684.89		123363.70	61684.89				
33 Carter-Cheyenne	11.5	12207.25	12207.25		24414.50	C	Deuel										
34 Burnell-Casper	3.76	8071.25	8071.25		16142.50	A	Gardiner	5.98	30146.99	30146.99		70041.23	30146.99				
37 Rockwell-Laramie City	13.6	20281.50	20281.50		40563.00	A	Sparton	12.05	30302.56	30302.56		61013.39	30302.56				
39 Curtis-Stockville	28.5	24410.00	24410.00		48820.00	A	Converse	11.47	63469.58	63469.58		170819.04	63469.58				
42 See 45-D						A	Laramie	12.83	23963.10	23963.11		53330.21	23963.10				
55 Rochester-Friant	11.0	11285.00	11285.00		22570.00	C	Thurston	11.93	34587.43	34587.43		63026.87	34587.43				
" "						E	Oglala	1.91	3433.24	3433.24		14386.46	3433.24				
70 Stanton-Welder-Hayne	22.59	56007.60	56007.60		102915.20	A	Sioux	1.05	49202.06	49202.07		38041.13	49202.06				
" "						B	"	9.97	3405.14	3405.14		18010.20	3405.14				
71 Ormes-Franklin	24.3	92240.00	92240.00		184380.00	A	Siouxton	11.37	14653.51	14653.51		43307.01	14653.51				
76						B	Wyoing	11.22	30150.71	30150.71		60197.42	30150.71				
79						A	Pinedale	24.27	26927.52	26927.52		193855.04	26927.52				
83 See 83-A	34.2	98780.00	98780.00		196560.00	A	Converse	14.53	62933.07	62933.07		12470.15	62933.07				
86 Shoshone-Platte River	17.0	32367.50	32367.50		64735.00	A	Morrill	15.79	52657.51	52657.51		103207.62	52657.51				
" "						B	Boise	16.60	54159.30	54159.30		61976.61	54159.30				
87 Rockford-Stanton	12.1	15675.00	15675.00		31350.00	A	Park	15.32	97408.34	97408.35		24976.69	97408.30				
88 See 88-A						B	Stanton	8.64	14677.56	14677.56		20345.17	14677.56				
89 See 89-A						C	Custer	24.76	11065.50	11065.50		10815.00	11065.50				
92 Cheyenne-Pinedale	8.2	14224.69	14224.69		28449.78	A	Madison	1.91	20541.79	20541.79		18704.59	20541.79				
98 Gotee-Highland-Casper	33.3	95300.00				B	Buffalo	2.39	12744.65	12744.65		25000.50	12744.65				
" "						A	Converse	11.36	31710.61	31710.61		90237.22	31710.61				
" "						B	Sequoia	11.71	33170.88	33170.89		68743.37	33170.88				
" "						C	Converse	8.03	3354.46	3354.47		18708.97	3354.47				
102 Smiley-Campbell	11.73	72152.85	72152.85		144305.61	A	Sioux	8.38	55931.07	55931.07		11261.15	55931.07				
107 See 107-A						B	Sioux	3.05	2382.59	2382.59		14765.37	2382.59				
108 Neponset-Morrison	27.05	48433.30	48433.30		96866.61	A	Sioux	4.75	37018.27	37018.27		23684.56	37018.27				
110 Neponset-Sheridan	4.9	47467.34	47467.34		85334.68	A	Custer	4.20	135674.30	135674.31		71349.61	135674.30				
111 Lyon-Laramie	11.5	25300.00	25300.00		50300.00	A	Custer	6.19	23129.67	23129.67		46639.34	23129.67				
112 Hartley-Haynes	16.8	33473.00	33473.00		67050.00	A	Converse	16.69	13475.39	13475.40		16941.37	13475.39				
113 Carter-Tedford	6.7	47285.74	47285.74		9571.49	A	Wyoing	6.74	47285.74	47285.75		9571.49	47285.74				
115 Seward-Gilbert	4.23	11663.97	11663.98		23237.35	A	Johnson	4.25	11623.33	11623.33		23246.66	11623.33				
117 Laramie-Casper	7.8	5700.49	5700.49		1160.97	A	Sequoia	2.00	5126.61	5126.63		102753.26	5126.63				
118 Hartley-Barbury	26.5	18622.50	18622.50		37212.00	A	Johnson	9.91	33479.05	33479.06		76620.11	33479.05				
126 Cheyenne-Teton-Camp	11.71	21890.15	21890.16		43680.31	A	Nebraska	11.71	21890.15	21890.15		13680.31	21890.15				
130 See 130-A						A	Cheyenne	16.83	26550.12	26550.12		52040.74	26550.12				
132 Atherton-Snowy	7.7	39076 Project				A	Nebraska										

## *STATUS OF FEDERAL AID PROJECTS.*

### STATE AID BRIDGES

On November 1, 1922 there were on file, thirty-two Applications for State Aid in the construction of bridges over one hundred feet in length. Prior to the 1921 Legislative Session the minimum length of a bridge upon which State Aid could be given was 180 feet. It was changed to 100 feet so that more counties could avail themselves of this service.

### STATE AID BRIDGE APPLICATIONS ON FILE IN THE ORDER OF FILING

Name of Bridge	Date Filed	River	County
Name of Bridge	Date Filed	River	County
North Fourteenth.....	January 10, 1912.....	Salt Creek.....	Lancaster
Prairie Island.....	March 7, 1913.....	Platte River.....	Merrick
Valley.....	March 19, 1913.....	Elkhorn River.....	Douglas
Willow Island.....	February 11, 1914.....	Platte River.....	Dawson
Yutan.....	December 31, 1914.....	Platte River.....	Douglas-Saunders
Cozad.....	May 10, 1915.....	Platte River.....	Dawson
Ewing.....	July 2, 1915.....	Elkhorn River.....	Holt
Trenton.....	December 21, 1915.....	Republican River.....	Hitchcock
Greeley.....	January 20, 1916.....	North Loup River.....	Greeley
McLain.....	March 28, 1916.....	Niobrara River.....	Brown
Silver Creek.....	July 6, 1916.....	Platte River.....	Polk-Merrick
Oshkosh.....	July 22, 1916.....	North Platte River....	Garden
Lewellen.....	July 22, 1916.....	North Platte River....	Garden
Brady.....	April 14, 1917.....	Platte River.....	Lincoln
Plattsmouth.....	August 6, 1917.....	Platte River.....	Cass
Burwell.....	June 25, 1918.....	Loup River.....	Garfield
Columbus.....	September 26, 1918.....	Loup River.....	Platte
Duncan.....	November 21, 1918.....	Platte River.....	Platte-Polk
Stanton.....	May 8, 1919.....	Elkhorn River.....	Stanton
Clarks.....	November 20, 1919.....	Platte River.....	Polk
Sargent.....	January 23, 1920.....	Middle Loup River....	Custer
McCook.....	February 4, 1920.....	Republican River.....	Red Willow
Lisco.....	April 15, 1920.....	North Platte River....	Garden
Tilden.....	May 28, 1920.....	Elkhorn River.....	Madison
Elm Creek.....	November 20, 1920.....	Platte River.....	Buffalo
Wisner.....	April 18, 1921.....	Elkhorn River.....	Cuming
Fishville.....	April 28, 1921.....	Niobrara River.....	Knox
Haugen.....	May 18, 1921.....	Niobrara River.....	Rock-Kepa Paha
Havelock.....	May 31, 1921.....	Salt Creek.....	Lancaster
Napes.....	June 6, 1921.....	Keya Paha River.....	Boyd
Little Blue River.....	June 16, 1921.....	Little Blue River.....	Jefferson
Broadwater.....	October 4, 1921.....	North Platte River....	Morrill

The 1921 Session of the Legislature appropriated \$350,000 for State Aid Bridges, but the appropriation was reduced to \$200,000 by the Special Session

## EXPENDITURES TO NOVEMBER 1, 1922

Bridge	County	Nature of Work	Amount
Monroe.....	Platte.....	Repairs.....	\$ 1,983.73
Schuyler.....	Colfax.....	Repairs.....	2,550.55
Superior.....	Nuckolls.....	Repairs.....	3,772.82
Red Bird.....	Boyd.....	Repairs.....	39.50
Parshall.....	Boyd.....	Repairs.....	138.77
Osgood.....	Lincoln.....	Repairs.....	33,866.65
Platte.....	East No. Platte.....	Repairs.....	2,370.13
South Platte.....	Lincoln.....	Repairs.....	8,815.52
South Platte.....	So. Sutherland.....	Repairs.....	455.68
Birdwood.....	Lincoln.....	Repairs.....	448.17
Shelton.....	Buffalo.....	Construction.....	59,498.92
Verdigre.....	Knox.....	Construction.....	8,406.06
Central City.....	Hamilton-Merrick.....	Construction.....	47,141.84
Central City.....	Hamilton-Merrick.....	Engineering.....	1,719.36
Yutan.....	Douglas-Saunders.....	Engineering.....	787.94
Lisco.....	Garden.....	Engineering.....	213.63
Oshkosh.....	Garden.....	Engineering.....	226.90
Lewellen.....	Garden.....	Engineering.....	32.92
Silver Creek.....	Polk-Merrick.....	Engineering.....	313.64
Office Engineering and Drafting on State Aid Bridge Plans.....			1,220.00
			\$178,002.73
Balance.....			26,997.27

State Aid Bridges contracted for in 1919 and finished in 1920, 1921 and 1922.

Bridges	Contract Let	County	Total Cost	State's Share
Central City.....	Sept. 17, 1919.....	Hamilton-Merrick.....	\$146,282.48	\$73,116.24
Grand Island.....	Sept. 17, 1919.....	Hall-Hamilton.....	148,481.48	71,740.74
Morrill.....	Sept. 16, 1919.....	Scotts Bluff.....	83,412.43	8,443.99
Henry.....	Sept. 16, 1919.....	Scotts Bluff.....	83,726.82	7,789.68
Minatare.....	Sept. 16, 1919.....	Scotts Bluff.....	76,339.46	7,759.40
Shelton.....	Oct. 23, 1919.....	Buffalo.....	122,463.80	61,281.90

The Meadville Bridge, the contract for which was let on December 16, 1919, was not built on account of an injunction being brought against the Counties involved.

Plans were made and contracts ready to let on the Silver Creek, Oshkosh, Lisco, Ewing, Yutan and Brady State Aid Bridges but the action of the Special Session forced the postponement of the work.

No contracts for new work have been let during the present biennium.

## UNPAID REPAIR CLAIMS ON FILE

Bridge	County	State Share
Havens.....	Polk.....	\$1130.65
Havens.....	Merrick.....	1753.87

**STATE AID PAVING**

The Appropriation for State Aid in Paving to State Institutions was \$100,000. The expenditures have been as follows:

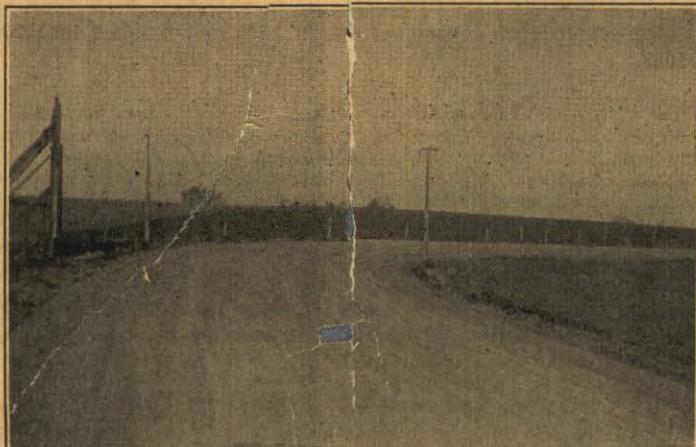
Wayne Normal .....	\$23000.00
Chadron Normal.....	20000.00
Lincoln Insane Hospital.....	57000.00

The following applications are on file:

State School for the Deaf, Omaha.

University of Nebraska Experimental Station, North Platte.

A balance of \$3,800.35 plus interest still remains to be paid on the paving at Lincoln.



**The Last Word in Maintenance.**

## MAINTENANCE 1921

COUNTY	Salary for Patrolmen	Gas, Oil and Grease	Repairs for trucks and other Equipment	Material and repairs Bridges
Adams.....	\$ 7,279.64	\$ 2,553.53	\$ 1,731.84	\$ 186.85
Antelope.....	4,928.90	1,573.85	1,265.05	215.93
Arthur.....	1,635.35	.....	12.10	.....
Banner.....	783.37	726.90	419.12	1.40
Blaine.....	.....	88.79	81.56	.....
Boone.....	3,922.57	2,180.41	1,368.82	.....
Box Butte.....	2,669.58	991.70	724.33	16.25
Boyd.....	3,547.21	702.23	599.30	265.07
Brown.....	1,720.00	540.92	434.34	8.95
Buffalo.....	7,876.25	3,707.48	968.77	357.57
Burt.....	11,139.47	2,420.51	1,995.84	.....
Butler.....	7,482.00	3,356.88	2,374.77	.....
Cass.....	11,917.32	3,396.08	3,739.64	189.55
Cedar.....	7,853.65	2,594.03	2,575.38	1,545.54
Chase.....	2,221.41	2,112.75	681.49	.....
Cherry.....	2,545.33	262.31	195.19	.....
Cheyenne.....	4,710.69	2,881.59	2,044.06	29.10
Clay.....	6,381.48	1,427.37	1,581.42	18.93
Colfax.....	5,896.25	2,244.80	3,841.98	1,606.62
Cuming.....	7,708.14	4,301.70	2,615.61	334.65
Custer.....	11,600.00	5,943.65	3,501.13	138.49
Dakota.....	2,843.12	1,555.41	901.46	.....
Dawes.....	2,330.90	802.90	281.57	39.55
Dawson.....	4,780.00	3,084.47	1,730.91	107.25
Deuel.....	3,287.00	1,180.98	585.34	301.65
Dixon.....	5,890.40	1,830.14	1,672.27	432.90
Dodge.....	10,298.67	3,714.49	4,242.05	336.95
Douglas.....	18,739.13	3,234.08	1,715.68	57.30
Dundy.....	260.11	515.23	.....	.....
Fillmore.....	10,613.02	1,961.98	1,114.01	7.25
Franklin.....	3,467.32	1,403.02	907.26	54.10
Frontier.....	1,440.95	738.61	652.66	418.12
Furnas.....	4,858.57	2,924.29	827.37	.....
Gage.....	14,811.84	4,999.21	1,917.88	28.00
Garden.....	2,489.00	640.17	422.88	4.40
Garfield.....	924.50	327.45	405.73	15.00
Gosper.....	2,112.45	907.28	383.34	.....
Grant.....	1,640.00	.....	.....	.....
Hall.....	7,668.60	3,456.37	1,320.72	.....
Hamilton.....	13,029.03	552.26	739.19	104.00
Greeley.....	268.30	1,016.42	759.08	.....
Harlan.....	4,194.23	1,666.62	498.68	7.72
Hayes.....	1,171.60	1,088.43	644.31	10.00
Hitchcock.....	2,517.42	1,406.28	331.93	.....
Holt.....	3,833.50	2,273.12	2,085.21	.....
Hooker.....	.....	180.74	.....	.....

## REPORT OF SECRETARY

## MAINTENANCE 1921—Continued

COUNTY	Salary for Patrolmen	Gas, Oil and Grease	Repairs for trucks and other Equipment	Material and repairs Bridges
Howard.....	2,523.70	1,300.00	950.18	.....
Jefferson.....	7,524.50	2,199.33	400.38	.....
Johnson.....	6,761.25	626.58	398.19	125.50
Kearney.....	8,106.02	1,483.01	653.16	.....
Keith.....	2,922.40	2,020.44	697.91	25.00
Keya Paha.....	1,418.77	568.41	103.89	.....
Kimball.....	2,773.59	1,517.70	1,752.74	9.85
Knox.....	8,694.32	868.67	1,138.68	505.95
Lancaster.....	25,101.43	9,550.58	4,867.04	775.04
Lincoln.....	5,100.00	1,729.89	1,307.82	10.00
Logan.....	1,535.00	466.12	129.82	.....
Loup.....	75.20	55.97	4.93	.....
Madison.....	10,314.62	6,440.94	2,457.64	273.44
McPherson.....	335.70	9.80	41.50	.....
Merrick.....	5,169.25	2,564.59	1,088.93	.....
Morrill.....	3,925.00	1,901.24	1,046.35	127.80
Nance.....	2,969.00	1,989.73	1,429.76	208.80
Nemaha.....	10,482.00	1,881.30	783.02	883.84
Nuckolls.....	5,624.76	1,242.49	1,162.16	1,261.16
Otoe.....	13,485.00	5,865.52	3,853.61	.....
Pawnee.....	7,570.00	1,558.34	1,237.18	.....
Perkins.....	1,758.00	413.33	75.25	.....
Phelps.....	5,548.64	1,047.07	773.24	1,150.85
Pierce.....	6,273.00	1,990.17	2,062.32	731.33
Platte.....	4,100.00	2,966.93	1,934.17	750.87
Polk.....	11,183.15	2,206.68	1,085.89	48.34
Red Willow.....	5,096.00	2,206.59	2,087.21	35.75
Richardson.....	9,686.77	323.29	650.92	174.61
Rock.....	949.25	17.20	67.30	.....
Saline.....	10,143.24	2,360.25	3,439.39	137.59
Sarpy.....	1,522.50	2,607.51	987.67	31.05
Saunders.....	10,063.00	3,564.08	2,858.80	839.82
Scotts Bluff.....	4,554.14	2,832.00	1,785.08	203.79
Seward.....	10,665.58	8,604.87	2,921.17	1,078.26
Sheridan.....	3,791.21	1,869.54	641.79	34.56
Sherman.....	255.00	386.75	327.22	25.50
Sioux.....	180.60	125.58	350.87	3.09
Stanton.....	8,938.61	1,654.00	1,503.53	119.65
Thayer.....	9,600.50	10.58	229.51	.60
Thomas.....				.....
Thurston.....	5,222.00	1,076.35	679.15	518.73
Valley.....	3,114.32	1,287.27	1,066.76	199.87
Washington.....	6,560.00	2,755.70	3,659.57	1,880.72
Wayne.....	8,658.00	3,045.38	807.31	174.78
Webster.....	4,580.00	1,418.77	1,083.15	106.32
Wheeler.....	157.07	73.82	94.66	5.12
York.....	10,824.62	2,774.07	1,386.86	174.19

## MAINTENANCE 1921—Continued

COUNTY	Material and repairs Culverts	Purchased Tools and Equipment	Extra Labor	Extra Team Hire
Adams.....	\$ 325.99	\$ 1,624.18	\$ 467.70	\$ 1,690.25
Antelope.....	268.97	3,028.75	875.48	1,029.91
Arthur.....	.....	4.75	19.50	61.00
Banner.....	33.45	862.50	617.50	200.40
Blaine.....	.....	87.72	222.00	1,614.05
Boone.....	.....	1,525.00	544.08	.....
Box Butte.....	7.70	90.85	596.30	1,286.80
Boyd.....	138.39	118.13	1,192.20	.....
Brown.....	40.15	16.55	10.50	746.75
Buffalo.....	101.05	5,600.65	2,526.93	.....
Burt.....	146.51	5,037.32	678.82	482.06
Butler.....	345.46	818.01	133.40	910.05
Cass.....	407.17	3,894.60	508.84	1,146.87
Cedar.....	210.84	2,741.21	1,300.22	692.65
Chase.....	.....	101.00	449.40	21.50
Cherry.....	.....	12.10	587.00	.....
Cheyenne.....	.....	216.10	520.94	361.00
Clay.....	44.95	226.27	244.45	252.34
Colfax.....	7.15	1,914.55	918.82	1,605.88
Cuming.....	163.20	3,537.44	492.82	351.00
Custer.....	93.47	1,157.76	227.29	465.89
Dakota.....	.....	4,191.79	528.90	3.00
Dawes.....	.....	225.00	178.50	1,666.00
Dawson.....	350.15	1,115.12	929.25	692.85
Deuel.....	152.40	1,103.80	218.00	192.30
Dixon.....	61.20	4,036.99	1,417.96	263.15
Dodge.....	370.91	491.83	2,675.68	725.07
Douglas.....	778.49	3,841.17	3,515.97	1,603.87
Dundy.....	1.50	.....	49.00	155.29
Fillmore.....	163.89	805.92	753.90	33.09
Franklin.....	.....	118.94	1,058.27	589.09
Frontier.....	55.50	3,131.53	1,366.80	1,052.25
Furnas.....	731.52	888.27	547.87	790.70
Gage.....	.....	4,180.78	1,149.15	376.05
Garden.....	.....	750.35	149.35	1,035.67
Garfield.....	70.35	35.34	210.00	82.30
Gosper.....	45.03	317.01	384.71	.....
Grant.....	6.25	61.20	.....	.....
Hall.....	30.00	9.60	827.05	658.35
Hamilton.....	79.65	1,092.18	366.25	28.33
Greeley.....	61.50	65.10	3,243.03	905.38
Harlan.....	.....	1,585.14	242.60	632.12
Hayes.....	53.50	14.70	1,848.85	466.50
Hitchcock.....	.....	1,078.00	1,278.73	1,548.85
Holt.....	.....	1,873.06	1,021.20	2,336.46
Hooker.....	26.05	.....	728.01	1,089.00

## REPORT OF SECRETARY

## MAINTENANCE 1921—Continued

COUNTY	Material and repairs Culverts	Purchased Tools and Equipment	Extra Labor	Extra Team Hire
Howard.....		2,668.40		3.15
Jefferson.....		723.19	43.60	63.55
Johnson.....	76.40	2,668.96	279.97	261.75
Kearney.....	627.76	1,741.70	410.56	
Keith.....	110.25	1,714.35	350.87	761.65
Keya Paha.....		12.50	982.85	891.21
Kimball.....	14.65	887.76	461.29	501.68
Knox.....		32.71	2,458.85	747.45
Lancaster.....		1,157.14	3,684.54	678.84
Lincoln.....	23.50	350.09	469.90	549.90
Logan.....		10.00	24.00	21.00
Loup.....				
Madison.....	1,034.46	7,913.11	2,168.70	3,701.94
McPherson.....	28.14	204.55	138.30	150.40
Merrick.....		104.46	3,012.40	393.50
Morrill.....	91.25	223.67	230.60	1,638.90
Nance.....	68.05	141.12	2,752.20	147.75
Nemaha.....	280.98	1,716.08	197.95	
Nuckolls.....	6.75	1,286.53	777.60	1,188.15
Otoe.....	44.88	8,017.77	416.85	98.70
Pawnee.....	3.15	3,600.00	126.40	
Perkins.....		733.85	160.05	106.15
Phelps.....	10.50	261.60	41.25	286.67
Pierce.....	32.00	5,670.80	160.55	513.80
Platte.....	127.75	1,474.21	6,089.01	14.40
Polk.....	119.35	86.02	133.60	46.55
Red Willow.....	30.00	262.97	284.23	377.75
Richardson.....	86.07	897.05	1,321.00	
Rock.....		303.55	1,045.65	1,339.95
Saline.....		4,369.93	327.60	1,012.05
Sarpy.....	8.18	55.15	3,183.15	342.20
Saunders.....	256.12	945.02	954.81	424.45
Scotts Bluff.....	289.32	103.46	2,181.16	1,944.81
Seward.....	270.95	3,420.76	562.03	668.69
Thayer.....	4.02	368.25	1,084.40	2,440.90
Thomas.....	526.65	126.01	491.95	756.95
Sioux.....		166.50	24.00	48.75
Stanton.....		229.55	1,405.29	838.02
Sheridan.....	11.20	21.13	138.85	92.50
Sherman.....			802.97	
Thurston.....		2,484.26	1,342.55	560.50
Valley.....	118.79	272.08	45.70	95.55
Washington.....	37.80	894.88	2,610.05	1,033.35
Wayne.....	67.46	3,184.69	477.84	659.80
Webster.....	8.35	2,321.09	31.00	90.95
Wheeler.....		2,791.00	299.19	223.74
York.....	86.00	2,864.97	94.15	64.25

## MAINTENANCE 1921—Continued

COUNTY	Expense Storage Rental and Highway Com- missioners	Material Checks	Ditch tenance	Construction and Heavy Gang Main-
Adams.....	\$ 1,170.58	\$ 633.98	.....	\$ 7,894.10
Antelope.....	1,353.27	209.54	.....	1,420.41
Arthur.....	.....	105.00	.....	.....
Banner.....	32.66	22.15	.....	.....
Blaine.....	.....	258.00	.....	.....
Boone.....	97.64	16.85	.....	14,419.68
Box Butte.....	36.61	.....	.....	.....
Boyd.....	18.30	23.49	.....	.....
Brown.....	16.10	20.00	.....	55.90
Buffalo.....	483.85	446.41	.....	18,918.22
Burt.....	600.58	34.46	.....	84.86
Butler.....	745.31	251.95	.....	6,874.33
Cass.....	309.89	47.98	.....	5,399.57
Cedar.....	663.80	424.35	.....	8,141.41
Chase.....	21.35	334.00	.....	3,342.65
Cherry.....	15.95	.....	.....	.....
Cheyenne.....	343.05	189.65	.....	7,206.18
Clay.....	1,594.03	16.35	.....	8,670.75
Colfax.....	257.77	158.70	.....	1,957.60
Cuming.....	115.24	149.60	.....	17,238.68
Custer.....	92.83	.....	.....	8,537.85
Dakota.....	457.96	.....	.....	.....
Dawes.....	142.18	3.40	.....	2,338.36
Dawson.....	411.20	.....	.....	8,048.93
Deuel.....	106.27	.....	.....	57.84
Dixon.....	885.57	.....	.....	2,950.87
Dodge.....	792.61	92.25	.....	18,876.87
Douglas.....	1,410.65	2,312.31	\$ 2,011.50	389,373.69
Dundy.....	24.48	.....	.....	165.60
Fillmore.....	595.24	330.95	.....	306.50
Franklin.....	210.34	.....	.....	1,919.50
Frontier.....	124.74	160.28	.....	4,062.65
Furnas.....	1,584.28	10.00	.....	3,352.41
Gage.....	630.38	211.27	.....	509.25
Garden.....	357.87	24.00	.....	.....
Garfield.....	4.20	.75	.....	.....
Gosper.....	816.80	86.10	.....	2,271.71
Grant.....	15.25	178.75	.....	.....
Hall.....	196.20	146.73	.....	15,286.26
Hamilton.....	419.14	25.85	.....	8,654.23
Greeley.....	5.26	.....	.....	.....
Harlan.....	905.39	16.25	.....	520.50
Hayes.....	24.00	27.00	.....	1,620.70
Hitchcock.....	.....	.....	.....	2,267.90
Holt.....	258.73	20.00	.....	4,092.61
Hooker.....	160.30	552.37	.....	.....

## MAINTENANCE 1921—Continued

COUNTY	Expense Storage Rental and Highway Com- missioners	Material Checks	Ditch tenance	Construction and Heavy Gang Main-
Howard.....	173.87	.....	.....	10,812.26
Jefferson.....	146.16	5.50	.....	95.20
Johnson.....	677.15	79.68	.....	2,226.87
Kearney.....	143.80	.....	.....	506.52
Keith.....	212.25	153.00	.....	848.79
Keya Paha.....	163.30	.....	.....	945.35
Kimball.....	436.36	.....	.....	.....
Knox.....	172.69	846.20	.....	16,986.84
Lancaster.....	2,102.90	568.22	285.00	21,691.97
Lincoln.....	50.67	120.30	.....	7,188.71
Logan.....	.....	.....	.....	.....
Loup.....	.....	.....	.....	.....
Madison.....	915.22	56.12	.....	2,485.87
McPherson.....	39.80	.....	.....	.....
Merrick.....	34.00	15.00	.....	8,653.69
Morrill.....	16.64	44.30	.....	83.05
Nance.....	216.15	6.75	.....	1,453.81
Nemaha.....	346.35	81.37	.....	3,020.70
Nuckolls.....	965.16	.....	.....	1,539.08
Otoe.....	1,049.73	25.05	.....	175.20
Pawnee.....	131.78	6.75	.....	.....
Perkins.....	305.20	.....	.....	10,438.67
Phelps.....	148.92	.....	.....	9,835.50
Pierce.....	49.09	55.19	.....	410.92
Platte.....	228.25	.....	.....	10,261.69
Polk.....	176.88	100.50	.....	356.56
Red Willow.....	269.51	4.58	.....	.....
Richardson.....	232.75	22.00	.....	4,818.87
Rock.....	157.00	.....	.....	389.82
Saline.....	296.13	4.55	.....	3,255.78
Sarpy.....	698.52	70.25	.....	116.92
Saunders.....	483.34	106.77	.....	12,092.17
Scotts Bluff.....	82.41	38.50	.....	8,576.95
Seward.....	112.79	18.20	.....	8,550.21
Sheridan.....	149.35	78.85	.....	1,208.34
Sherman.....	202.54	98.70	.....	2,480.94
Sioux.....	22.82	.....	.....	.....
Stanton.....	533.60	81.51	.....	7,105.25
Thayer.....	642.16	.....	.....	.....
Thomas.....	.....	54.00	.....	.....
Thurston.....	30.50	.....	.....	3,517.25
Valley.....	791.27	238.52	.....	2,452.12
Washington.....	1,087.39	95.55	.....	.....
Wayne.....	141.96	120.98	.....	12,889.55
Webster.....	479.93	15.45	.....	5,997.92
Wheeler.....	60.74	262.75	.....	.....
York.....	1,940.94	221.93	.....	.....

## MAINTENANCE 1921—Continued

COUNTY	License Plates and Containers	Patrol Stations	Depreciation Based on Bud- gets for 1922	Grand Total
Adams.....	\$ 851.55	.....	.....	\$ 26,409.69
Antelope.....	710.25	.....	.....	16,880.31
Arthur.....	49.86	.....	.....	1,887.56
Banner.....	.....	.....	.....	3,699.45
Blaine.....	.....	.....	.....	2,352.12
Boone.....	726.12	.....	1,000.00	25,801.12
Box Butte.....	265.18	.....	700.00	7,384.80
Boyd.....	.....	198.20	.....	6,797.52
Brown.....	.....	.....	400.00	4,010.16
Buffalo.....	819.80	.....	.....	41,806.98
Burt.....	756.14	.....	2,800.00	26,176.56
Butler.....	666.93	428.92	1,400.00	25,283.01
Cass.....	668.10	.....	.....	31,615.11
Cedar.....	876.85	.....	2,400.00	32,019.93
Chase.....	280.31	.....	.....	9,565.86
Cherry.....	319.70	.....	2,000.00	5,937.58
Cheyenne.....	.....	.....	1,000.00	19,452.36
Clay.....	541.33	2,717.73	.....	23,717.40
Colfax.....	.....	.....	.....	20,404.07
Cuming.....	632.87	.....	.....	37,640.98
Custer.....	.....	220.13	.....	31,977.99
Dakota.....	305.25	526.20	.....	11,313.09
Dawes.....	.....	.....	400.00	8,408.36
Dawson.....	218.75	.....	.....	21,463.88
Deuel.....	184.40	.....	.....	7,369.48
Dixon.....	489.48	.....	.....	19,930.43
Dodge.....	268.00	.....	4,000.00	46,885.38
Douglas.....	.....	19,854.70	.....	448,443.04
Dundy.....	.....	.....	.....	1,171.16
Fillmore.....	707.90	.....	600.00	17,993.65
Franklin.....	515.33	.....	.....	10,238.17
Frontier.....	457.11	.....	.....	13,661.15
Furnas.....	.....	.....	.....	16,510.23
Gage.....	.....	.....	.....	28,308.71
Garden.....	.....	.....	.....	5,873.69
Garfield.....	.....	.....	250.00	2,275.62
Gosper.....	298.65	.....	240.00	7,858.08
Grant.....	.....	.....	.....	1,901.45
Hall.....	.....	2,209.91	1,000.00	32,759.79
Hamilton.....	552.90	.....	300.00	25,942.51
Greeley.....	.....	.....	.....	6,324.07
Harlan.....	.....	.....	500.00	10,764.25
Hayes.....	219.62	.....	.....	7,189.21
Hitchcock.....	.....	.....	.....	10,419.11
Holt.....	480.50	.....	.....	18,224.39
Hooker.....	.....	.....	.....	2,736.47

## MAINTENANCE 1921—Continued

COUNTY	License Plates and Containers	Patrol Stations	Depreciation Based on Bud- gets for 1922	Grand Total
Howard.....				18,481.56
Jefferson.....	514.90		1,200.00	12,916.81
Johnson.....				14,177.30
Kearney.....	26.09			8,648.62
Keith.....	312.73			10,129.64
Keya Paha.....	129.60			5,215.88
Kimball.....	226.30		350.00	8,931.42
Knox.....	755.54			88,207.90
Lancaster.....		51,399.79		121,762.49
Lincoln.....				16,900.78
Logan.....				2,185.94
Loup.....				186.10
Madison.....			2,000.00	39,712.06
McPherson.....		45.85		994.04
Merrick.....	439.75		900.00	22,375.57
Morrill.....			800.00	10,128.80
Nance.....	408.43		1,500.00	13,291.55
Nemaha.....	428.18			20,101.77
Nuckolls.....	442.13		500.00	15,995.92
Otoe.....	740.70	682.66	1,950.00	35,905.67
Pawnee.....	361.88	20.00		14,615.48
Perkins.....				13,990.50
Phelps.....	674.03			19,778.27
Pierce.....				17,949.17
Platte.....	802.20		2,000.00	30,744.48
Polk.....	546.75			16,090.22
Red Willow.....	425.03			11,079.62
Richardson.....	633.52			18,846.85
Rock.....	149.22			4,418.94
Saline.....	602.62	356.30	987.98	27,243.41
Sarpy.....	445.48			10,068.58
Saunders.....		4,770.46		37,858.84
Scotts Bluff.....	601.62		750.00	18,398.24
Seward.....	870.22		2,000.00	34,743.73
Sheridan.....	343.89		600.00	12,615.10
Sherman.....		353.90		6,082.11
Sioux.....			175.00	1,097.21
Stanton.....			500.00	17,908.65
Thayer.....			2,000.00	12,746.98
Thomas.....				356.97
Thurston.....	478.90			15,905.19
Valley.....	125.00			9,797.25
Washington.....	62.50		8,000.00	28,677.01
Wayne.....	528.22		2,000.00	32,705.42
Webster.....	438.18			16,916.11
Wheeler.....				3,968.09
York.....	862.47		1,600.00	22,894.45

## MAINTENANCE 1922

COUNTY	Patrolman Salary	Gas, oil and Grease	Repairs Truck	Repairs Tractor
Adams.....	\$ 5,259.80	\$ 2,416.57	\$ 806.07	\$ 980.47
Antelope.....	7,709.83	3,049.64	149.99	1,158.56
		Feed 1,481.21		
Arthur.....	1,040.00	-----	-----	-----
Banner.....	629.54	840.51	231.84	-----
Blaine.....	-----	-----	12.50	-----
Boone.....	5,774.07	2,118.83	1,177.54	149.13
Box Butte.....	2,352.07	983.45	64.00	-----
Boyd.....	-----	3.30	3.00	-----
Brown.....	3,407.81	895.19	1,197.86	-----
Buffalo.....	6,793.80	3,328.08	1,132.51	51.95
Burt.....	9,134.72	2,301.01	22.36	1,488.98
Butler.....	5,960.00	2,784.89	2,240.11	100.00
Cass.....	10,164.37	3,434.36	3,223.69	-----
Cedar.....	5,082.96	4,255.26	1,432.23	1,377.06
Chase.....	2,731.10	1,986.78	117.55	423.68
Cherry.....	1,845.85	1,427.72	958.81	16.20
Cheyenne.....	5,894.56	4,401.24	2,630.66	101.58
Clay.....	5,685.60	1,497.36	209.73	566.27
Colfax.....	3,638.00	2,288.40	1,314.30	71.88
Cuming.....	8,969.17	3,195.15	824.87	968.68
Custer.....	7,444.00	5,513.91	4,462.97	46.83
Dakota.....	2,100.66	1,321.11	487.43	11.07
Dawes.....	2,024.17	1,017.01	893.45	111.30
Dawson.....	4,664.42	3,474.99	2,114.99	16.51
Deuel.....	1,548.10	581.54	307.34	-----
Dixon.....	4,132.66	1,286.93	1,592.69	-----
Dodge.....	10,721.25	4,423.59	5,481.00	30.06
Douglas.....	12,270.84	2,095.39	6.90	-----
Dundy.....	764.80	1,756.22	102.75	117.10
Fillmore.....	9,639.24	1,665.70	878.47	11.40
Franklin.....	3,682.00	1,411.91	510.78	28.18
Frontier.....	924.40	1,255.96	33.05	412.38
Furnas.....	3,324.45	2,825.77	477.52	660.21
Gage.....	9,133.50	3,507.41	3,255.07	-----
Garden.....	4,299.25	290.24	318.32	-----
Garfield.....	785.05	58.30	73.36	-----
Gosper.....	1,885.00	458.86	456.32	362.47
Grant.....	848.25	-----	-----	-----
Greeley.....	1,060.60	2,622.63	900.99	596.20
Hall.....	4,910.40	3,781.67	1,014.44	554.33
Hamilton.....	14,581.56	361.54	66.98	-----
Harlan.....	4,436.91	1,699.66	-----	145.59
Hayes.....	1,141.15	1,267.70	160.13	430.64
Hitchcock.....	2,047.25	1,641.80	-----	717.55
Holt.....	2,181.14	1,875.06	822.48	801.18
Hooker.....	96.50	197.00	.50	-----

## MAINTENANCE 1922—Continued

COUNTY	Salary Patrolman	Gas, oil and Grease	Repairs Truck	Repairs Tractor
Howard.....	2,274.20	2,715.05	2,357.29	1,192.62
Jefferson.....	5,351.10	2,647.07	799.01	8.50
Johnson.....	4,870.08	52.53	231.56	219.34
Kearney.....	3,887.24	2,487.79	540.50	158.11
Keith.....	3,284.07	768.86	1,284.22	.....
Keya Paha.....	949.86	332.32	148.28	41.55
Kimball.....	1,199.09	1,378.53	1,242.31	14.00
Knox.....	6,238.35	3,945.73	839.42	.....
Lancaster.....	16,740.46	6,389.58	1,942.76	.....
Lincoln.....	6,188.00	3,233.96	1,884.60	.....
Logan.....	847.50	506.58	137.80	.....
Loup.....	.....	262.85	459.20	.....
Madison.....	8,596.56	6,037.75	3,873.52	2,193.31
McPherson.....	434.65	521.74	27.95	.....
Merrick.....	3,760.90	2,346.98	1,202.51	64.04
Morrill.....	4,173.16	1,469.46	936.31	7.60
Nance.....	4,861.23	1,003.39	819.06	20.35
Nemaha.....	5,063.21	1,387.05	612.53	283.61
Nuckolls.....	3,084.30	1,190.02	216.04	7.02
Otoe.....	6,405.00	3,892.74	4,871.24	89.74
Pawnee.....	5,488.54	1,109.09	2,320.09	.....
Perkins.....	3,200.94	474.07	62.10	328.50
Phelps.....	4,497.41	1,115.46	133.76	103.40
Pierce.....	4,181.30	2,565.57	2,307.35	845.10
Platte.....	3,390.00	5,058.87	980.77	857.51
Polk.....	8,678.00	1,887.69	783.24	.....
Red Willow.....	3,869.20	2,014.48	1,118.19	418.87
Richardson.....	8,987.47	533.65	243.00	.....
Rock.....	1,117.50	.....	88.22	.....
Saline.....	8,728.00	2,772.67	1,457.07	17.27
Sarpy.....	3,097.50	3,788.83	1,493.85	288.86
Saunders.....	6,289.01	2,594.13	921.62	7.29
Scotts Bluff.....	4,105.29	2,730.97	2,511.34	58.45
Seward.....	9,549.80	4,084.07	1,629.79	.....
Sheridan.....	2,515.00	952.98	512.62	36.54
Sherman.....	1,008.63	692.78	478.61	593.75
Sioux.....	1,408.50	439.86	818.39	.....
Stanton.....	3,047.63	1,552.51	1,944.10	.....
Thayer.....	9,081.50	61.51	346.30	.....
Thomas.....	50.00	169.97	161.39	.....
Thurston.....	4,351.85	1,989.54	465.99	622.90
Valley.....	2,040.00	1,172.23	1,046.37	.....
Washington.....	4,029.00	1,955.29	1,343.16	186.73
Wayne.....	7,667.85	3,144.65	1,129.23	.....
Webster.....	3,589.89	1,447.22	401.32	377.85
Wheeler.....	90.45	15.93	.....	10.18
York.....	6,438.75	2,053.66	1,353.61	22.30

## MAINTENANCE 1922—Continued

COUNTY	Repairs Other Equipment	Purchase Tools and Equipment	Material Repairs Culverts	Material and repairs Bridges
Adams.....	\$ 432.04	\$ 274.29	\$ 461.95	\$ 266.91
Antelope.....	768.73	3,835.05	886.25	399.78
Arthur.....				
Banner.....	57.15	4.10	247.68	.....
Blaine.....	298.22	588.25	.....	.....
Boone.....	265.24	2,240.00	4,312.80	20.45
Box Butte.....	180.66	186.80	.....	.....
Boyd.....	65.13	.....	.....	.....
Brown.....	135.69	178.80	52.86	.....
Buffalo.....	594.31	340.70	1,634.08	1,975.28
Burt.....	179.92	3,881.86	441.73	1,601.01
Butler.....	273.90	5,182.40	37.20	1,939.45
Cass.....	450.99	558.92	339.84	.....
Cedar.....	454.58	1,917.10	1,475.76	20,543.82
Chase.....	257.01	679.45	4.00	.....
Cherry.....	74.23	3,312.52	.....	.....
Cheyenne.....	511.80	1,463.61	.....	.....
Clay.....	450.80	2,669.70	28.63	77.15
Colfax.....	373.46	410.67	473.22	.....
Cuming.....	515.64	336.27	1,308.75	279.48
Custer.....	326.26	1,565.49	40.45	150.50
Dakota.....	162.09	1,458.40	.....	2,201.49
Dawes.....	187.34	1,097.85	244.00	121.82
Dawson.....	516.10	1,403.03	188.15	2.15
Deuel.....	68.70	94.55	399.58	.....
Dixon.....	86.10	79.46	692.82	509.67
Dodge.....	480.46	3,947.05	718.08	496.46
Douglas.....	383.68	6.76	1,521.97	6,818.82
Dundy.....	650.18	69.60	511.84	151.53
Fillmore.....	250.55	184.67	20.50	.80
Franklin.....	404.75	1,269.60	900.50	28.10
Frontier.....	247.54	122.72	866.24	684.59
Furnas.....	822.54	2,206.41	978.02	39.25
Gage.....	405.84	193.32	5.72	16.40
Garden.....	192.12	398.31	6.75	.....
Garfield.....	32.75	35.00	.....	.....
Gosper.....	173.39	761.75	670.00	.....
Grant.....	.....	.....	.....	.....
Hall.....	379.58	829.04	982.79	.....
Hamilton.....	1,801.28	205.28	.....	.....
Greeley.....	492.35	740.58	186.85	26.88
Harlan.....	27.91	5,907.59	252.40	484.85
Hayes.....	81.65	794.10	274.86	.....
Hitchcock.....	40.25	2,800.00	.....	20.00
Holt.....	407.93	297.26	24.72	.....
Hooker.....	.....	.....	.....	.....

## MAINTENANCE 1922—Continued

COUNTY	Repairs Other Equipment	Purchase Tools and Equipment	Material Repairs Culverts	Material and repairs Bridges
Howard.....	194.77	4,278.75	224.30	.....
Jefferson.....	138.57	383.55	4.60	49.75
Johnson.....	129.13	224.45	4.25	16.26
Kearney.....	96.23	229.98	207.80	.....
Keith.....	201.45	298.85	941.57	8.70
Keya Paha.....	69.75	43.81	.....	17.10
Kimball.....	41.80	198.35	91.60	.....
Knox.....	178.07	4.77	.....	10.10
Lancaster.....	668.80	5,880.65	7.92	406.36
Lincoln.....	488.86	114.67	124.40	5.00
Logan.....	82.12	30.90	.....	.....
Loup.....	24.85	.....	.....	.....
Madison.....	282.48	4,008.79	1,707.88	312.62
McPherson.....	19.80	171.24	66.00	.....
Merrick.....	103.21	72.40	8.85	35.88
Morrill.....	105.14	322.04	75.35	63.35
Nance.....	200.45	2,194.47	69.55	98.15
Nemaha.....	108.85	106.75	.....	.....
Nuckolls.....	159.87	24.55	.....	495.19
Otoe.....	715.91	566.67	.....	.....
Pawnee.....	75.26	439.78	.....	18.90
Perkins.....	31.45	561.00	.....	.....
Phelps.....	157.66	4,687.05	437.36	59.48
Pierce.....	510.80	1,072.89	2,201.99	9.20
Platte.....	647.08	1,408.28	3,282.11	138.05
Polk.....	402.99	3,859.60	40.75	33.27
Red Willow.....	85.73	1,647.04	458.48	.....
Richardson.....	186.44	1,871.06	451.39	542.62
Rock.....	179.75	81.86	.....	.....
Saline.....	197.41	1,180.00	.....	45.00
Sarpy.....	207.49	723.45	521.93	402.51
Saunders.....	595.99	1,609.55	173.16	242.75
Scotts Bluff.....	388.03	130.21	90.85	40.20
Seward.....	781.56	742.62	754.75	218.80
Sheridan.....	73.35	52.85	11.00	5.05
Sherman.....	65.00	40.50	2,599.82	79.25
Sioux.....	101.20	270.85	.....	.....
Stanton.....	293.82	2,350.90	8,743.48	12.95
Thayer.....	153.11	5.43	43.63	526.88
Thomas.....	38.54	.....	.....	80.20
Thurston.....	64.68	4,593.64	247.41	870.25
Valley.....	61.43	220.80	.....	.....
Washington.....	309.64	1,877.20	3,737.41	1,888.64
Wayne.....	251.19	2,994.54	866.88	140.57
Webster.....	267.71	1,753.15	636.69	67.00
Wheeler.....	168.99	753.00	.....	8.25
York.....	152.28	1,680.56	16.84	10.05

## MAINTENANCE 1922—Continued

COUNTY	Material and repairs Guard Rail	Extra Labor	Extra Team Hire	Misc. Expense
Adams.....	\$ 3.95	\$ 125.20	\$ 232.50	\$ 1,864.00
Antelope.....		5,284.82	102.25	288.68
Arthur.....		23.00	16.00	
Banner.....	74.99	421.30	40.75	86.50
Blaine.....		2,189.15		529.42
Boone.....		1,154.96	788.11	89.85
Box Butte.....		440.70	612.06	244.14
Boyd.....		2,931.11		173.78
Brown.....		204.25	163.15	137.18
Buffalo.....	75.85	1,686.54		639.56
Burt.....	49.10	141.66	424.56	194.18
Butler.....	11.20		548.10	1,296.63
Cass.....	98.76	642.95	1,000.73	147.00
Cedar.....	2.60	3,550.25	668.65	1,036.07
Chase.....		548.47	191.90	
Cherry.....		733.60	89.00	35.15
Cheyenne.....	164.77	2,424.40	178.65	648.87
Clay.....	408.44	129.39	88.34	698.83
Colfax.....		288.25	197.15	749.33
Cuming.....	191.63	261.78	230.80	87.09
Custer.....		248.45	50.15	742.92
Dakota.....		504.20	302.00	1,199.63
Dawes.....		1,047.78	866.95	278.80
Dawson.....		721.76	1,248.85	199.67
Deuel.....	14.70	287.30	236.35	221.59
Dixon.....		450.85	12.00	1,274.38
Dodge.....	200.76	2,044.80	362.80	1,288.35
Douglas.....	7,060.56	3,466.90	1,388.35	1,512.92
Dundy.....		654.10	141.64	26.05
Fillmore.....		164.80	12.80	1,330.75
Franklin.....		30.50	55.00	27.95
Frontier.....	105.65	979.79	595.40	185.50
Furnas.....		1,818.55	604.85	
Gage.....	170.21	1,032.48	25.95	727.46
Garden.....		157.90	143.60	95.55
Garfield.....		1,203.27		108.81
Gosper.....		414.45	93.90	210.66
Grant.....		41.00	123.10	13.35
Greeley.....		2,416.24	1,488.25	125.25
Hall.....	8.40	1,018.25	407.45	128.88
Hamilton.....		147.96	4.00	401.62
Harlan.....	4.80	109.24	322.04	
Hayes.....		274.70	1,568.50	438.35
Hitchcock.....		185.95	293.60	
Holt.....		1,758.15	3,722.60	444.20
Hooker.....		346.97	174.00	1.50

## REPORT OF SECRETARY

## MAINTENANCE 1922—Continued

COUNTY	Material and repairs Guard Rail	Extra Labor	Extra Team Hire	Misc. Expense
Howard.....		248.15	1,976.35	4.50
Jefferson.....	82.12	575.75	277.35	706.00
Johnson.....		302.30	44.95	.....
Kearney.....		60.15	16.50	74.36
Keith.....		708.65	248.75	45.00
Keya Paha.....		1,117.94	.....	8.00
Kimball.....	74.20	1,261.89	12.00	137.20
Knox.....	.30	2,489.64	1,384.73	130.80
Lancaster.....		177.01	8.00	2,001.95
Lincoln.....	13.95	178.75	225.50	193.02
Logan.....		431.90	28.40	58.37
Loup.....		851.81	.....	1.00
Madison.....	713.10	293.55	2,689.05	521.59
McPherson.....		299.58	296.50	110.10
Merrick.....		907.37	448.53	262.10
Morrill.....	5.60	165.20	711.60	551.33
Nance.....		1,897.55	.....	618.26
Nemaha.....	20.42	451.48	117.00	679.00
Nuckolls.....	9.66	82.83	645.60	.95
Otoe.....	8.16	414.05	11.55	644.25
Pawnee.....		146.75	105.80	513.13
Perkins.....		165.75	.....	6.00
Phelps.....		135.30	404.22	210.75
Pierce.....	77.00	1,947.20	162.80	24.89
Platte.....		5,412.99	.....	607.52
Polk.....		105.32	122.48	225.78
Red Willow.....	3.50	214.95	883.25	426.15
Richardson.....	5.50	1,409.14	276.57	702.68
Rock.....		862.95	240.80	199.48
Saline.....	62.99	85.75	183.80	565.89
Sarpy.....	21.60	3,602.47	31.20	1,809.05
Saunders.....	21.20	756.62	220.06	854.00
Scotts Bluff.....	109.00	596.40	979.25	416.28
Seward.....	1,828.00	275.70	.....	315.25
Sheridan.....	250.95	447.50	1,047.35	64.60
Sherman.....	581.20	2,299.07	1,574.85	201.02
Sioux.....			190.40	77.60
Stanton.....		1,683.46	284.50	610.80
Thayer.....	3.80	258.90	.....	12.13
Thomas.....		146.50	2,996.14	298.16
Thurston.....		898.90	45.50	107.27
Valley.....		818.05	22.00	397.97
Washington.....	7.50	1,445.81	2,633.62	1,040.13
Wayne.....	215.19	44.90	1,781.85	929.68
Webster.....	184.25	276.50	110.80	470.88
Wheeler.....	183.00	346.25	394.81	141.67
York.....		4.10	127.90	2,258.04

## MAINTENANCE 1922—Continued

COUNTY	Material for Patrols	License Plates	Patrol Station Maintenance
Adams.....		\$ 166.40	.....
Antelope.....	\$ 244.60	124.74	.....
Arthur.....	41.00	.....	.....
Banner.....		.....	.....
Blaine.....	195.25	.....	.....
Boone.....		2.84	.....
Box Butte.....		180.48	.....
Boyd.....	57.80	194.39	.....
Brown.....	136.25	260.14	.....
Buffalo.....	106.90	59.68	.....
Burt.....		122.32	.....
Butler.....	18.55	3.36	\$ 2,550.21
Cass.....			1,527.50
Cedar.....	505.77	97.96	.....
Chase.....		4.68	.....
Cherry.....	180.00	2.22	.....
Cheyenne.....		3.80	.....
Clay.....		216.88	515.73
Colfax.....	22.05	444.85	84.18
Cuming.....	323.10	41.46	500.90
Custer.....		1,535.13	18,170.36
Dakota.....	11.25	98.97	.....
Dawes.....		.....	.....
Dawson.....	905.85	277.08	.....
Deuel.....		9.96	.....
Dixon.....		1.59	.....
Dodge.....	100.70	67.14	.....
Douglas.....	5,052.10	1,831.25	34,029.18
Dundy.....		37.00	.....
Fillmore.....	5.40	2.54	74.17
Franklin.....		4.77	43.15
Frontier.....		8.09	.....
Furnas.....	6.00	629.15	.....
Gage.....		.....	1,557.89
Garden.....	36.00	85.50	.....
Garfield.....	42.62	.....	.....
Gosper.....		.32	560.85
Grant.....	66.50	.....	.....
Greeley.....		94.23	.....
Hall.....		172.36	8,200.72
Hamilton.....		191.16	.....
Harlan.....		441.22	.....
Hayes.....		25.65	.....
Hitchcock.....		.....	.....
Holt.....	277.41	65.52	.....
Hooker.....	198.00	.....	.....

## REPORT OF SECRETARY

## MAINTENANCE 1922—Continued

COUNTY	Material for Patrols	License Plates	Patrol Station Maintenance
Howard.....	188.68	472.66	.....
Jefferson.....	28.75	418.76	.....
Johnson.....		.16	.....
Kearney.....		97.84	.....
Keith.....		6.98	.....
Keya Paha.....	68.15		.....
Kimball.....		45.88	.....
Knox.....		254.80	.....
Lancaster.....		1,858.72	4,512.48
Lincoln.....		1.75	183.06
Logan.....		34.20	.....
Loup.....			.....
Madison.....	142.00	896.50	.....
McPherson.....		.16	.....
Merrick.....			.....
Morrill.....		848.68	300.00
Nance.....		88.36	.....
Nemaha.....		500.81	.....
Nuckolls.....		81.17	.....
Otoe.....			2,401.88
Pawnee.....		151.78	.....
Perkins.....		91.75	.....
Phelps.....		149.89	.....
Pierce.....		546.51	.....
Platte.....			575.00
Polk.....		98.22	.....
Red Willow.....	64.15	24.83	.....
Richardson.....		4.14	.....
Rock.....	373.00		.....
Saline.....		221.75	.....
Sarpy.....		40.08	.....
Saunders.....	575.80		58.87
Scotts Bluff.....	45.00	98.28	.....
Seward.....		821.05	.....
Sheridan.....	1,223.95	112.31	.....
Sherman.....	102.88	121.18	.....
Sioux.....		6.25	.....
Stanton.....	48.80	107.87	.....
Thayer.....		6.65	.....
Thomas.....	452.56	.16	.....
Thurston.....	104.40	36.74	.....
Valley.....	111.60	3.34	.....
Washington.....		16.60	.....
Wayne.....		98.11	.....
Webster.....		70.18	404.44
Wheeler.....	92.00	102.22	.....
York.....			8,194.78

## MAINTENANCE 1922—Continued

COUNTY	1921 Claims Paid in 1922	Work on roads adjacent to State Highway and roads handled sepa- rately from potral main- tenance	Grand Total
Adams.....	.....	\$ 437.49	\$ 13,727.64
Antelope.....	.....	3,693.40	29,121.88
Arthur.....	.....	.....	1,120.00
Banner.....	.....	295.18	2,929.49
Blaine.....	.....	116.10	3,928.89
Boone.....	.....	475.80	18,569.12
Box Butte.....	.....	3,181.39	8,275.75
Boyd.....	\$7,869.97	200.00	11,498.43
Brown.....	.....	1,346.72	8,115.90
Buffalo.....	.....	12,875.41	31,194.55
Burt.....	.....	2,499.54	22,432.98
Butler.....	.....	5,146.29	28,042.29
Cass.....	.....	.....	21,589.11
Cedar.....	.....	.....	42,400.07
Chase.....	.....	1,738.58	8,683.15
Cherry.....	.....	1,734.88	10,410.18
Cheyenne.....	.....	101.24	18,524.68
Clay.....	.....	296.00	13,527.85
Colfax.....	.....	6,834.87	17,190.56
Cuming.....	540.00	6,515.72	25,080.44
Custer.....	.....	13,465.79	48,763.21
Dakota.....	.....	.....	9,858.20
Dawes.....	.....	3,251.77	11,087.24
Dawson.....	.....	3,445.62	19,179.17
Deuel.....	.....	5,864.30	9,184.01
Dixon.....	.....	6,440.16	16,559.21
Dodge.....	.....	23,145.51	53,508.01
Douglas.....	.....	110,056.55	187,497.17
Dundy.....	.....	3,435.09	8,417.90
Fillmore.....	.....	2,110.17	16,851.46
Franklin.....	.....	6,031.80	14,423.94
Frontier.....	.....	3,875.18	10,291.49
Furnas.....	.....	7,777.34	22,169.56
Gage.....	137.50	.....	20,168.75
Garden.....	.....	.....	6,028.54
Garfield.....	.....	.....	2,289.16
Gosper.....	.....	606.95	6,604.92
Grant.....	.....	.....	1,092.20
Greeley.....	.....	2,634.25	14,180.06
Hall.....	.....	15,552.41	37,755.32
Hamilton.....	.....	5,079.51	22,280.94
Harlan.....	.....	2,082.99	15,915.19
Hayes.....	.....	303.90	6,761.83
Hitchcock.....	.....	.....	7,745.90
Holt.....	.....	4,425.79	16,603.44
Hooper.....	.....	.....	1,014.47

## MAINTENANCE 1922—Continued

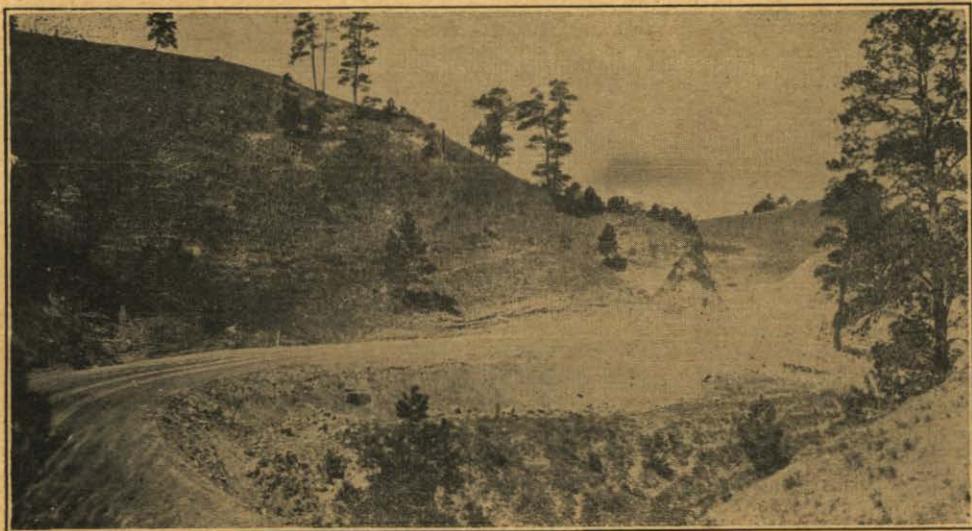
COUNTY	1921 Claims Paid in 1922	Work on roads adjacent to State Highway and roads handled sepa- rately from potral main- tenance	Grand Total
Howard.....			16,072.07
Jefferson.....	38.00		11,458.88
Johnson.....	139.92		6,284.98
Kearney.....	623.11		8,479.56
Keith.....	1,068.56		8,815.11
Keya Paha.....			2,796.76
Kimball.....	711.75		6,407.55
Knox.....	3,651.26		19,077.97
Lancaster.....	6,960.26		47,550.76
Lincoln.....	8,276.83		21,111.85
Logan.....	781.75		2,939.52
Loup.....			1,599.30
Madison.....	9,732.02		41,950.72
McPherson.....			1,947.22
Merrick.....	6,279.84		15,492.11
Morrill.....	2,266.89		11,496.16
Nance.....			11,865.82
Nemaha.....			9,380.71
Nuckolls.....			5,947.20
Otoe.....			20,021.14
Pawnee.....			10,369.10
Perkins.....	879.92		5,801.48
Phelps.....	3,728.97		15,820.21
Pierce.....	11,638.72		28,040.82
Platte.....	11,094.51		33,447.69
Polk.....	2,983.98		18,721.32
Red Willow.....	1,153.30		12,327.12
Richardson.....	570.00	617.64	15,901.29
Rock.....			3,098.56
Saline.....		8,007.21	23,474.81
Sarpy.....		142.00	15,670.77
Saunders.....			14,869.05
Scotts Bluff.....	14,968.45		27,217.95
Seward.....	9,921.25		29,912.14
Sheridan.....	745.26		8,051.31
Sherman.....	7,134.48		17,572.92
Sioux.....	920.10		4,232.65
Stanton.....			15,679.82
Thayer.....		99.48	10,549.27
Thomas.....			4,343.62
Thurston.....		2,900.24	16,799.31
Valley.....			5,388.79
Washington.....	129.85		20,560.08
Wayne.....	6,034.88		25,248.97
Webster.....	4,610.59		14,668.42
Wheeler.....			2,241.75
York.....	51.17	5,670.28	23,034.32

### The Smiley Canyon Road

The completion of the Smiley Canyon Road has given to Nebraska its most remarkable and interesting highway. Beginning at the Fort Robinson Military Reservation, this road extends westward eight miles toward Harrison and meets a three mile strip of road which connects it with a well graded highway that leads across the Nebraska line, passes through Lusk, Wyoming, and heads northwest toward Yellowstone Park. This establishes a connecting link between the city of Crawford which is accessible by three different Nebraska highways and the road which passes through Lusk from Cheyenne to Yellowstone.

The construction of this highway involved the combination of many engineering feats, some of which are rather out of the ordinary in Nebraska road building. Smiley Canyon from which the road derives its name is two miles long and is spanned within this length by three large bridges. The drainage problem was one of the most difficult to solve, and it was found necessary to install many small culverts in addition to the bridges in order to handle the water which came pouring into the canyon through numerous draws which empty into it. At first many residents of this district were rather skeptical as to the ability of the road to withstand the rain. However several large rains have fallen and have been taken care of so satisfactorily that all anxiety as to drainage will soon be dispelled. In building the road through the canyon 65,000 yards were removed, 20,000 yards of which were solid rock. Approximately fifteen tons of T.N.T. were used in blasting on this excavation. The two miles of canyon constituted the roughest and most difficult part of the work. The best average grade it was possible to lay through the canyon was seven per cent. Viewed solely from the standpoint of work done, the Smiley Canyon Road is a real accomplishment.

But not only as something unique in Nebraska road building is the completion of this new project of value. In everyday utility the Smiley Canyon Road probably means more to the people in its immediate vicinity than any other road under construction in the State. Formerly the only roads between Crawford and Harrison were two miserable trails of the poorest sort which followed White River and Soldier Creek. During rainy seasons bridges were taken out, the roads were washed, and traffic was well-nigh impossible. It will no longer be necessary for the people of this neighborhood to postpone their business or pleasure trips because of a slight rain, nor to wait to see some one who has passed between the



The Most Picturesque Drive in Nebraska

two towns in order to ascertain the condition of the roads. If the road is properly maintained as no doubt it will be, traffic will be as continuous on this portion of the highway as on any other road in Nebraska. Thus the road will be of untold benefit to these two towns and the people who are tributary to them.

Another aspect to be considered is the effect that this road will have upon the tourist traffic which yearly passes through Nebraska on its way to Yellowstone Park. The opening of this highway does not simply mean another avenue to the mountains—it means an opening for the first time by accessible highway to one of the most beautiful and scenic sections of Nebraska. The country surrounding Smiley Canyon is exceedingly rough, almost mountainous. The road is flanked with high, overhanging bluffs, the tops of which are dotted with small pine trees. Great stretches of steep and roughly rolling hills are seen on every side. Indeed, the road between Fort Robinson and Harrison is perhaps the most picturesque drive in Nebraska. Another point of interest near this highway is the little town of Agate, twenty-one miles south of Harrison where a great fossil bed is located. Here Dr. Harold Cook has made an archaeological survey and established one of the most famous museums of fossiliferous deposits in the country. This museum can be reached in one hour's drive from the Smiley Canyon Road. Another place of interest is the military reservation at Fort Robinson already mentioned.

These points of attraction together with the beautiful scenery alone furnish sufficient inducement to tourists, but a second inducement is the fact that by deviating from the South Platte Highway at Bridgeport north to Alliance and by leaving the Potash Highway at Alliance to go north to Crawford, a more direct route to Yellowstone Park is offered to the inhabitants of central, eastern, and northern Nebraska. A third highway which terminates at Crawford, though less traveled than the others, is the Blue Pole Road which extends along the northern edge of the State. Tourists may travel the Smiley Canyon road one way, either coming or going, and thus take advantage of the scenery. When everything is considered, there are many notable factors which combine to make this road a valuable and permanent asset to Nebraska. To the citizens of our own State who annually view the beauties of other states without taking much thought to the one in which they live, we might paraphrase a well-known slogan, "See Nebraska First."



Scene in Nebraska Pine Ridge Country

## THE PROPOSED STATE PARK SYSTEM

### An Interview With Governor Samuel R. McKelvie

The 1921 Legislature passed an act creating a State Park Board subsidiary to the Department of Public Works. The Board is appointed by the Governor and serves without compensation. The members of the Board are Dr. Harold Gifford of Omaha, Dr. Harold Cook of Agate, Mr. G. D. Butterfield of Norfolk, Mr. W. A. Harrison of York, Mr. A. J. Weaver of Falls City, and Mr. J. F. Cordeal of McCook. Governor McKelvie and Secretary Johnson are ex-officio Chairman and Secretary respectively of the Board. This Board has supervision of all State lands used for parks, parkways, forest reserves, and boulevards; it is also empowered to accept as a gift or to purchase when funds are appropriated for that purpose any tract of land which it deems suitable and desirable for a park-site.

The creation of the Park Board led to an investigation by its members of Nebraska's possibilities for the establishment of State Parks. The Board visited and inspected prospective sites at Broken Bow, Crawford, Agate, Harrison, Chadron, and Valentine.

Northeast of Broken Bow at New Helena it is proposed to present the State with a well-wooded tract of land upon which is located a mineral spring. Here is the log-cabin where the first court ever held in Custer County sat. Facilities for boating, bathing, and fishing could be

### View of Arbor Lodge From the Southwest

easily and cheaply provided by the construction of a dam. This place is already something of a resort as it is the scene of many local picnics and is sought by many of the people of Custer County for short summer outings.

South of Crawford on government land are the buttes and canons of Nebraska's pine ridge country. The topography of the land is mountainous in its construction and presents an ideal camping ground to tourists who are traveling to Yellowstone Park over the newly constructed Smiley Canyon Road. One point of interest is the Fort Robinson Military Reservation; the place is of historical interest also for here it was that the famous Indian Chief Red Cloud had his haunts and led his warriors in many thrilling encounters.

The little inland town of Agate deserves more than passing notice. It is situated about equidistantly from Crawford and Harrison and can be reached by an hour's deviation from the Smiley Canyon Road. One of the two largest fossil beds in the world has been discovered here,



View of Arbor Lodge from Southwest



Under the Trees East of the Mansion at Arbor Lodge

and the place is yearly the rendezvous of many scientists who come to study its unusual and interesting deposits. As it is watered by the Niobrara River and yearly sought by hundreds of tourists, it would be a splendid park-site. The towering bluffs and steep canons combine to make it a place of extraordinary natural beauty while the archaeological phenomena distinguish it as an asset to scientific research.

Senator J. W. Good of Chadron is the father of a legislative act which designated a certain school section eight miles south of Chadron on the State Highway as a State Park. This site is ideally fitted for a park as the hills and valleys are well wooded with native pine trees. There are also several natural springs. Senator Good with local aid has been able to establish a road over the hills and through the valleys, thus making a considerable portion of the park accessible by automobile.

One of the most natural park-sites in Nebraska is located just outside of Valentine on the Minnochaduza River. This is a beautiful little stream which courses through a bountifully wooded and roughly rolling country. On each side of the State Fisheries there, the City owns a considerable tract of land and it is proposed to incorporate all of it into a State Park. With small expense a dam could be thrown across the river so that the pleasure-seeker would be able to enjoy all the privileges of a watering place.

The finest proffer which met the consideration of the State Park Board is no doubt that of Arbor Lodge, the home of the founder of Arbor Day, J. Sterling Morton at Nebraska City. It consists of a fifty-two roomed mansion and seventy-two acres of finely maintained park. The house is furnished from top to bottom and all of the furniture which is of an historical nature will be left just as it is. The stage-coach of 1867 **Omaha Council Boy Scouts of America at Camp Gifford, Fontenelle Forest** in which Mr. Morton came to Nebraska City is also in evidence. Then there is the beautiful Italian Garden, the Pine Grove north of the Lodge, and the Arboretum which contains nearly every known tree in existence. In Morton Circle there is a splendid statue of the Father of Arbor Day and it seems almost a duty that the State of Nebraska maintain this park as a monument to the man who did so much to transform Nebraska from a treeless prairie to a plain of verdant beauty. The Legislature must decide whether or not we are to accept and maintain this beautiful park which is of such historical interest to Nebraskans and of so much value to nature lovers. The park is already well developed and its acquisition will be a boon to pleasure-seekers and students of nature everywhere.

The Park Board also visited Fontenelle Forest at Childe Point on the Missouri River in Sarpy County. This is the most luxuriant and mag-



Looking West Through Formal Gardens at Arbor Lodge

nificent forest in Nebraska. It covers from 1700 to 1800 acres of land which have been maintained by an association of wealthy Omahans and by private individuals. There are many other fine park-sites in various parts of the State, indeed the hills, valleys, and forests of Nebraska abound in natural beauty, scientific interest, and historical lore.

No park-sites are considered that are not to be given to the State outright as the act which created the Park Board provided no money for the purchase of parks. But no parks will need to be purchased as long as we have prospects of such splendid gifts. Parks in Nebraska are just in their infancy; their development lies mostly in the future. The parks will be developed to the extent that they are capable of being utilized and this extent depends upon the automotive facilities of the roads. As fast as these parks are made accessible by reliable highways, their development will be a matter of natural sequence. Our problem today is largely one of road construction.



Scene at Camp Gifford, Fontenelle Forest

**CALRICAL DIVISION OF ACCOUNTING RECORDS****B. L. Schultz, Chief Clerk**

The Chief Clerk of this Division has general supervision of payrolls, expense vouchers, and requisitions of the Bureau of Roads and Bridges, the Bureau of Irrigation, Water Power and Drainage, and the Equipment Division; the checking of bids and contracts on roads and bridges and making necessary copies of same; estimates to contractors on construction work on roads and state aid bridges; bookkeeping of the Equipment Division; cost data on maintenance work done by the counties on the state highway system throughout the State; and all filing and stenographic work.

**Pay Rolls**

Monthly payrolls are made up from daily report sheets signed by these working in the Lincoln office; from daily report cards of the preliminary engineers and their helpers; from monthly reports of the Project Engineers and their helpers; and from weekly reports of the Division Engineers.

**Expense Vouchers**

These vouchers are carefully checked by this Division, and entered for payment through the proper channels. This is quite an item during the construction season.

**Warrants**

All warrants covering payrolls and expense vouchers for men in the field are sent out by this Division.

**Requisitions**

All requisitions for both Bureaus are made by this Division, checked, and sent to the Purchasing Agent of the Department of Finance. The Purchase orders and vouchers as made up by the Purchasing Agent covering these requisitions are checked and forwarded by this Division for payment when the equipment and supplies as requisitioned are received. When this Department acts as contractor and does construction work, all requisitions from the different state construction camps, go through this Division for checking.

**Project Statements**

All copies of project statements to the Government are made by this Division, four copies being made up on each project statement; also all the necessary copies of preliminary estimates and all information and details necessary which must be forwarded to the government on each particular project before it is approved; and the final signing of the project agreements with the Government.

**Contracts**

At the time of letting contracts, all tabulation of bids are checked by this Division, also the contracts. Four copies of each tabulation of bids, and ten copies of each contract are made.

**Estimates on Construction Work**

Estimates on construction work are sent in by the project engineers each month. These estimates are checked very carefully and vouchers made to contractors covering same. On some of these estimates as many as eight vouchers have to be made up each time. Federal vouchers are made up each month from these estimates and forwarded to the Government for reimbursement for its share of the estimates.

**Correspondence**

All stenographic work, including correspondence and filing, with reference to road and bridge work is taken care of by this Division.

**Bookkeeping-Equipment Division**

A double entry system of bookkeeping is kept by this Division for the Equipment Division.

**Cost Data on County Maintenance**

Cost data of maintenance done by the counties on the State Highway System throughout the entire state, is kept by this Division. This data is kept separately for each patrol in the different counties.

**DIVISION OF MOTOR VEHICLE REGISTRATION****Mrs. M. G. Tracy, Chief Clerk**

The Division of Motor Vehicle Registration maintains a complete record of all automobile license fees paid in the State. Two duplicate registration cards for each registrant are received from the county treasurers. Each card contains the name, address, receipt number, make of car, weight, engine number, and fee received. These cards are checked and if correct, they are returned to the county officials for correction. All records are filed so that they are accessible for immediate use providing information is requested.

**The New Lens Law**

Nebraska's first lens law was passed by the legislature in 1917. It provided that no vehicle of any kind having a lighting device of over State, unless the device was so designated that no portion of the beam reflected light rose more than forty-two inches above the level surface on which the vehicle stood, when measured seventy-five feet or more ahead of the lenses. Spot lights were allowed if the rays were directed on the ground at a distance not to exceed thirty feet in front of the vehicle.

The law was not rigidly enforced, and accidents due to glaring headlights continued. The increased number of automobiles and the vast mileage of good roads has caused more and more people to take their cars to the country at night. In the summer months, people living in the hot cities literally swarm in their automobiles to the country in the evening to get relief from the oppressive heat.

The problem of lighting the public highways has become more serious each year. It would cost an enormous sum to adequately light them so that headlights would not be needed as the chief source of illumination. To light the highways as city streets are lighted is out of the question. Each automobile, therefore, must carry its own lighting plant.

At the 1921 session of the Legislature, George A. Williams of Fillmore County, introduced a new lens law known as House Roll No. 64, which became effective on July 23, 1921. The law provides that the State Department of Public Works shall approve each make of lens which is offered for sale in the State. It makes it unlawful for anyone to use, sell, or offer for sale, or to ship into the state any lens which has not been approved. The possession of unlawful lenses either in motor vehicles or in stock is considered as *prima facie* evidence of intent to violate the law. It also makes it unlawful for anyone to drive upon the public highways of the State between the hours from one hour after sunset, to one hour before sunrise, any motor vehicle which is not equipped with lawful lenses. The Department of Public Works is further authorized to make additional rules and regulations governing motor headlights and spot lights which are not inconsistent with existing State laws. The object of this law is two-fold:

- 1: There must be plenty of driving light. A car driving thirty miles per hour which is the average rate of speed in the open country, will cover 200 feet in about four and one-half seconds. The driving light, therefore, must be strong enough to sufficiently illuminate objects at least 200 feet ahead of the car to be seen instantly by the driver.
- 2: The light must be so controlled that the glare will not seriously interfere with the safe controlling of an approaching car.

It is not the object of the law to require or recommend the use of dimmers. It is desirable to have as much light as possible and at the same time eliminate glare.

There are four chief causes of glare:

- 1: Contrast
- 2: Too intensive a source
- 3: Out-of-focus rays
- 4: Unreflected rays

Contrast, the difference in the illuminous intensity of an object and its surroundings is a maximum on dark country roads, and will remain so until the roads are artificially illuminated, which cannot soon be expected. One can look into a pair of lighted automobile lights in broad daylight without suffering a great amount of discomfort. Objects to the right or left and even behind the lights can be seen in detail. This is because the difference between the brightness of the headlight and that of its surroundings is not excessive, i. e. the contrast is small. If one should look into the same pair of headlights on a dark country road, the retina of the eye becomes partially paralyzed and the observer becomes blind to surrounding objects on both sides of the lamp. In other words, interference with vision depends to a large extent upon the contrast between light's source, that is the automobile headlamps, and the surroundings or background.

Every make of lens or headlamp device is designed for a bulb of proper intensity which must be located at the proper point in the reflector. If the bulb is of a greater or less intensity, or if it is not in the correct focus, the correct results cannot be obtained from the lens. With the best lenses, out-of-focus rays may reach the eye in extremely high intensity just as the main beam of light would if the reflector were tilted upward.

Unreflected rays are of so small an intensity as to be of little moment. It is true that considerable light in front of the car comes directly from the bulbs without reflection. This unreflected light is spread out through a wide angle so that its brilliancy is insignificant in comparison with a concentrated beam from the reflector.

The Department of Public Works, before deciding upon the specifications under which lenses must be tested, decided to obtain all the information possible on the subject from those who were best fitted to give it. Accordingly, a meeting was called which was attended by representatives of automobile and accessory dealers and distributors, lens manufacturers, glass factories, police departments, automobile clubs and illuminating engineers. After hearing a general discussion covering the entire subject of automobile headlighting, the Department decided to adopt the recommendations of the Automobile Headlight Committee of the Illuminating Engineering Society, made on June, 1920. Those recommendations were made after extensive tests had been carried out, and have as a basis, a minimum candle power of reflected light which will provide adequate and safe illumination and a maximum allowable glare.

The Department has published a pamphlet describing in detail the methods of focusing and adjusting headlights. It will be sent to anyone free of charge.

The Department of Public Works has approved to October 12, 1922, the following lenses and devices:

No.	Name	Focus	Tilt	Vacuum	Maximum Candiepower	Nitrogen
1	Raydex	No. 2	1 1-3' in 100'	15	21	
2	Osgood	No. 2	1' in 100'	15	21	
3	Macbeth	No. 1	None	24	24	
4	Liberty	No. 1	None	24	24	
5	Patterson	No. 1	None	21	24	
6	McKee	No. 2	None	22	24	
7	Shaler	No. 2	None	23	24	
8	Violet Ray	No. 1	None	21	22	
9	National	No. 1	None	19	24	
10	Bausch & Lamb	No. 1	1' in 100'	18	22	
11	Primolite "B"	No. 1	1' in 100'	16	21	
12	Ford Green Visor Headlamp	No. 3	1' in 100'	24	—	
13	Sun Ray	No. 1	None	21	24	
14	Glareless	No. 1	3' in 100'	—	21	
15	Lega-lite	No. 1	None	22	24	
16	Holophone	No. 1	None	24	24	
17	Dillon No. E	No. 1	None	24	24	
18	Cona phone Clear No. F	No. 1	None	21	24	
19	Benzer	No. 1	None	24	24	
20	North Star	No. 1	3' in 100'	15	21	
21	Right Lens	No. 4	None	19	23	
22	Parab-O-Lite Form "A"	No. 1	2' in 100'	17	22	
23	Nash Standard Sanded	No. 2	None	18	21	
24	Hed-Lite Glare Deflector	No. 2	3' in 100'	24	24	
25	Thomas Green Visor	No. 2	None	24	24	
26	Sunlight "D"	No. 1	1' in 100'	—	21	
27	Onlee	No. 2	3' in 100'	19	21	
28	Clamert "A"	No. 1	None	15	21	
29	Riley Ray Headlamp	No. 2	2' in 100'	24	24	
30	Saferlite	No. 2	1' in 100'	15	21	
31	Norling No-Glare Reflector	No. 1	4' in 100'	15	21	
32	Alvo Four Range Light	No. 4	5' in 100'	16	24	
33	Type "B" Clear Conaphore	No. 1	1' in 100'	21	24	
34	Gibson New Glareless	No. 1	1' in 100'	—	21	
35	Ford Type "H" Lens	No. 1	4' in 100'	21	21	
36	H-G Lens	No. 2	2' in 100'	16	24	
37	Green Moon Lens	No. 1	None	—	21	
38	Flat-Lite "B" Reflector		5' in 100'	—	21	
39	Dodge Brothers Lens No. 8	No. 1	4' in 100'	—	21	
40	Cor-Co-Lite Type "A" Reflector		3 2-3' in 100'	—	21	
41	Monogram Lens	No. 1	4' in 100'	15	21	
42	Brown Reflector		None	22	24	
43	Guide Ray Lens	No. 1	None	—	21	

All of the above lenses, for their usefulness, depend upon optical principals. None of them are lawful unless the bulb is properly focused and the headlight as a whole is given the proper tilt. A camera, telescope or reading glass to be of any use, must be focused.

The following regulations have been issued by the Department of Public Works and police officials have been asked to see that they are enforced.

1. Two white lights are required on the front and one red light on the rear of every automobile used at night.

2. Spot lights may be used provided they project their light directly on the ground and at a distance not exceeding 30 feet in front of the car.
3. Diffusing lenses will not be approved by the Department and their use is prohibited. It is impossible with a lens of this type to control the light so that with a sufficient driving light, there will be no glare. Examples of diffusing lenses are: Warner, More-Light and Perfection.
4. Gas or oil lamps need not be equipped with approved lenses.
5. Electrical headlights using a bulb of more than 4 candle power must be equipped with an approved lens. No bulb shall be over 24 candle power.
6. Plain glass lenses will not be permitted, even though they are in a headlight which may be tilted by means of a lever controlled from the driver's seat.
7. Home made devices will be prohibited. While these devices to a certain extent eliminate glare, the driving light as a rule is reduced below the required minimum. Under the law, the Department of Public Works is required to approve every lens used; and if home made lenses were submitted for approval by everyone making them, the fee for the examination of the lens would be prohibitive for those desiring to use them.
8. The Standard Ford Green Vistor headlamp has been scientifically designed and is machine made, and in the test has passed all of the requirements.
9. Frosted bulbs are prohibited. With a lawful lens, they are not necessary.

The results obtained after one year of operation under the new law have been satisfactory. Practically every car in the state has lawful lenses. Drivers seem to have more regard for others than they formerly had, and while accidents still occur due to glaring headlights, they are less frequent. Before many years have passed every state will have a similar law and then the real benefits will become apparent.

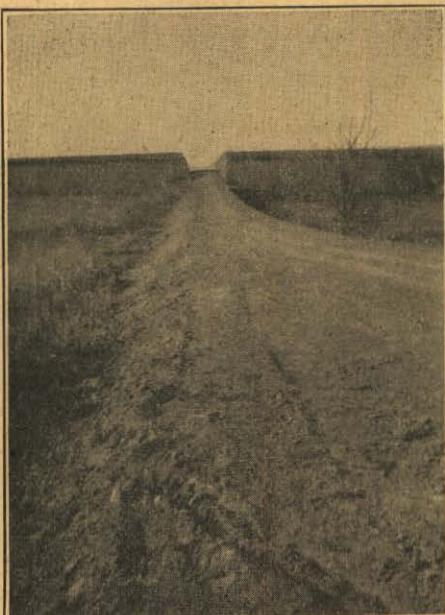
**MONTHLY BULLETIN****Ralph G. Brooks, Associate Editor**

The Nebraska Monthly Report is a thirty-two page good roads magazine, published by the Department of Public Works, and edited by the Secretary with the assistance of an Associate Editor.

The report contains each month a statement of the expenditures of all Federal and State Aid Road Funds. There is also a statistical statement showing the correct status of every project in Nebraska at the close of each month. In addition to these reports, there is the monthly statement showing the automobile registration and the fees received. A report is published each month of all automobile accidents occurring on State Highways, giving as near as possible the nature, kind of road, cause and results of the accident.

All road matters pertaining to Nebraska are discussed, including special articles on different projects. Pictures secured from the Division Engineers are published together with the articles. Interviews with men intimately connected with Good Roads are given prominence. The aim of the Bulletin is to give to the people a clear and concise understanding of the activities of the Department, as well as a complete knowledge of construction, maintenance, and financial expenditures.

The Nebraska Monthly Report is sent free of charge to the various Highway Departments, to the State Officials, to County Commissioners, County Clerks, to State Senators and Representatives, to prominent citizens, and to whoever manifests an interest in road activities. Approximately 4,000 magazines are sent out each month.



Project No. 187, Florence-Elk City



Like a Ball Room Floor—Project No. 133-C, Eagle—East and West

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