BUREAU OF WATER RESOURCES
GOV. N. CARTER, DIRECTOR

WATER APPROPRIATIONS
CAREY ACT DEVELOPMENT

STATE OF IDAHO

C. C. MOORE, GOVERNOR

DEPARTMENT OF RECLAMATION

W. G. SWENDSEN, COMMISSIONER

BOISE

May 18, 1925

Honorable C. C. Moore
Governor of Idaho
Boise, Idaho

My dear Sir:

There is transmitted herewith the annual report of G. Clyde Baldwin, Deputy Commissioner of Reclamation and Watermaster for District 36, Snake River, for the year 1924.

Distribution of irrigation water during that year was most intricate due to the unusual shortage of supply. Notwithstanding this condition, distribution was handled in a most efficient manner and although it was necessary to give more time and take care of more details in the way of observation of deliveries, yet the work was carried on at a cost not materially exceeding that of previous years.

This report contains a vast amount of invaluable data, and I am firmly convinced that the amount of time given to the gathering thereof and to the distribution of the available supply to those to whom it is awarded by decree, is fully justified in the light of results obtained. In addition to parallel information corresponding to previous annual reports, new tabulations are contained herein which cover special features likely to be of considerable value in the future.

The work of Mr. Baldwin is especially commendable and the appreciation which is justly due him is herein expressed.

Respectfully yours,

W. G. Swendsen

Commissioner of Reclamation

OF WATER RESOURCES
S. CARTER, DIRECTOR

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BOISE

Idaho Falls, Idaho
May 14, 1925.

Mr. W. G. Swendsen,
Commissioner of Reclamation,
Boise, Idaho.

Dear Sir:

There is submitted herewith the technical report covering all regular water distribution and hydrometric operations in Water District No. 36 for the irrigation season of 1924.

U. S. Geological Survey methods have been used throughout as a standard for the collection and compilation of hydrometric data. Most of the latter which are included have been recomputed since the close of the irrigation season, and in this, as well as in other respects, the report is similar to and consistent with reports for the five preceding years.

Only incidental reference has been made herein to the work of Thomas R. Newell and to that of the Special Committee of Five, for the reason that specific reports are available covering each of these investigations.

The so-called Normal Flow Fund was continued as a means of financing that portion of the work eventually paid for under the annual Water Master Bill. This fund was maintained during 1924 through the advance of money by the Water Users Protector Association of the North Fork of Snake River and Tributaries, the Farmers Protective Irrigation Association, the Upper Snake River Union of Water Users, the Twin Falls Canal Co. and the North Side Canal Co. Ltd.

Special acknowledgments are due to the North Fork Reservoir Co., the Snake River Valley Irrigation District and the Aberdeen-Springfield Canal Co. for gage readings and to Mr. D. G. Martin, the Utah Power & Light Co., the Upper Snake River Union of Water Users, the U. S. Bureau of Reclamation, the Twin Falls Canal Co., the North Side Canal Co. Ltd., Mr. James Young and the U. S. Indian Irrigation Service for gage readings, results of current meter measurements and other data which were furnished without charge.

The cooperation and assistance so freely given throughout the season by the members of the Water Users Committee of Nine of District No. 36, both as an advisory committee and also as individuals, was very much appreciated.

Much credit should be given to the hydrographers, deputy water masters and other members of the regular organization for the conscientious manner in which their duties were performed and for the willing assistance and hearty cooperation which they so freely rendered.

For valued assistance in the preparation of this report acknowledgment is accorded to C. A. McClelland, to L. L. Bryan and to Mrs. Bessie M. Rees.

Respectfully yours,

F. Clyde Baldwin

Deputy.

WATER DISTRIBUTION AND HYDROMETRIC WORK

In District No. 36

1924

by G. Clyde Baldwin

CONTENTS

	Page
Introduction	1
Personnel	7
Descriptive Outline of 1924 Distribution	8
Water Supply	13
Storage versus Flood Water Diversions	14
Domestic Water	15
Municipal Water Rights	16
Temporary Transfers	16
Exchange of Normal Flow for Storage	16
Litigation	18
Canal Deliveries	20
River Data	21
Segregation of Flow	23
Jackson Lake and Lake Walcott Storage Deliveries	24
Twin Lakes Storage Deliveries	32
River Losses and Gains	32
Normal Flow Comparison	38
Ground Water	41
Water Distribution and Hydrometric Work in the Henrys Fork-Fall River-Teton Area	43
Henrys Lake Storage Deliveries	48
Distribution in Swan Valley	51
Distribution on Sand Creek, Fremont County	52
Climatological Data	52
Evaporation	55
New Construction and Repairs	56
Expenditures	56
Recommendations	62
Water Rights	62

PLATES

		Following Page
Plate I	- Map showing principal streams and gaging stations in District No. 36 ----------	8
Plate II	- Hydrographs for Jackson Lake during the period Nov. 15, 1914 to April 15, 1925 ----------	13
Plate III	- Daily discharge of canals diverting from Snake River, May 1924 ----------	20
Plate IV	- Daily discharge of canals diverting from Snake River, June 1924 ----------	20
Plate V	- Daily discharge of canals diverting from Snake River, July 1924 ----------	20
Plate VI	- Daily discharge of canals diverting from Snake River, August 1924 ----------	20
Plate VII	- Daily discharge of canals diverting from Snake River, September 1924 ----------	20
Plates VIII IX and X	- Daily summary of data at and between Snake River gaging stations from Jackson Lake to Milner, Idaho, May to September 1924 ----------	21
Plate XI	- Hydrographs of total and normal flow of Snake River at Moran, Wyoming and Heise, Idaho gaging stations ------	23
Plate XII	- Hydrographs illustrating net losses and gains between the Heise and Lorenzo gaging stations ----------	25
Plates XIII and XIV	- Jackson Lake and Lake Walcott storage deliveries --------	28
Plate XV	- Hydrographs illustrating the net losses and gains between the Heise and Blackfoot Bridge gaging stations --	32
Plate XVI	- Hydrographs illustrating the net gain between the Blackfoot Bridge and Neeley gaging stations ----------	35
Plate XVII	- Hydrographs illustrating the net losses and gains between the Neeley and Milner gaging stations ----------	37
Plate XVIII	- Monthly summary of normal flow conditions for the irrigation seasons 1919, 1920, 1921, 1922, 1923 and 1924 ----------	38

PLATES (continued)

		Following Page
Plate XIX	- Daily discharges of canals diverting from Henrys Fork and Tributaries, May 1924	44
Plate XX	- Daily discharges of canals diverting from Henrys Fork and Tributaries, June 1924	44
Plate XXI	- Daily discharges of canals diverting from Henrys Fork and Tributaries, July 1924	44
Plate XXII	- Daily discharges of canals diverting from Henrys Fork and Tributaries, August 1924	44
Plate XXIII	- Daily discharges of canals diverting from Henrys Fork and Tributaries, September 1924	44
Plates XXIV and XXV	- Daily summary of data at and between gaging stations on Henrys Fork and Tributaries from Henrys Lake to Rexburg	45
Plate XXVI	- Hydrographs for Henrys Lake and showing total and normal flow at the Lake, Warm River and Ashton gaging stations	47
Plate XXVII	- Henrys Lake Storage Deliveries	49
Plate XXVIII	- Hydrographs illustrating the net gain between the Squirrel and Chester gaging stations on Fall River	50
Plate XXIX	- Hydrographs illustrating the net losses and gains between the Ashton and Rexburg gaging stations on Henrys Fork	51
Plates XXX and XXXI	- Daily precipitation diagrams for Upper Snake River area	54
Plate XXXII	- Monthly summary of evaporation data for five stations in Idaho and Wyoming, June to September 1924	55
Plate XXXIII	- Decrees and priority of water rights, Henrys Fork and Fall River, Idaho	63
Plate XXXIV	- Decrees and priority of water rights, Teton River, Idaho	63
Plate XXXV	- Decrees and priority of water rights, Snake River, Idaho	63

PLATES (continued)

		Following Page
Plate XIX	- Daily discharges of canals diverting from Henrys Fork and Tributaries, May 1924 ----------	44
Plate XX	- Daily discharges of canals diverting from Henrys Fork and Tributaries, June 1924 ----------	44
Plate XXI	- Daily discharges of canals diverting from Henrys Fork and Tributaries, July 1924 ----------	44
Plate XXII	- Daily discharges of canals diverting from Henrys Fork and Tributaries, August 1924 ----------	44
Plate XXIII	- Daily discharges of canals diverting from Henrys Fork and Tributaries, September 1924 ----------	44
Plates XXIV and XXV	- Daily summary of data at and between gaging stations on Henrys Fork and Tributaries from Henrys Lake to Rexburg ----------	45
Plate XXVI	- Hydrographs for Henrys Lake and showing total and normal flow at the Lake, Warm River and Ashton gaging stations ----------	47
Plate XXVII	- Henrys Lake Storage Deliveries ----------	49
Plate XXVIII	- Hydrographs illustrating the net gain between the Squirrel and Chester gaging stations on Fall River -----	50
Plate XXIX	- Hydrographs illustrating the net losses and gains between the Ashton and Rexburg gaging stations on Henrys Fork ----------	51
Plates XXX and XXXI	- Daily precipitation diagrams for Upper Snake River area	54
Plate XXXII	- Monthly summary of evaporation data for five stations in Idaho and Wyoming, June to September 1924 ----------	55
Plate XXXIII	- Decrees and priority of water rights, Henrys Fork and Fall River, Idaho ----------	63
Plate XXXIV	- Decrees and priority of water rights, Teton River, Idaho ----------	63
Plate XXXV	- Decrees and priority of water rights, Snake River, Idaho ----------	63

INTRODUCTION

The final report of Consulting Engineer R. I. Meeker with reference to District No. 36 water distribution problems was received by the Water Users Committee of Nine on February 22, 1924 and the conclusions and recommendations contained therein were read in person by Mr. Meeker at the general meeting held in Idaho Falls on March 3. In order to afford additional time for consideration, the latter meeting was adjourned until March 31, 1924 when it was expected that the report would be discussed in greater detail and that definite action would be taken with respect to the acceptance or rejection of its several findings. It was soon apparent, however, that the Committee of Nine could not agree upon any unanimous recommendation concerning this report and since all early season information indicated that 1924 would be a season of deficient water supply the efforts of this committee were directed toward the drafting of a compromise plan or operation schedule for immediate use.

The following program was finally agreed upon and presented at the March 31 meeting as the unanimous report of the Committee of Nine:

"Your committee have to recommend that for the year 1924 water administration of Snake River, Water District No. 36, be had as follows:

I.

Transmission losses for stored water from Jackson to Heise be charged with a transmission loss of 2.5%, and in order to cover lag in transmission of stored water from Moran to Heise stored water shall be released during July and August for natural or direct-flow users in an amount, at such times and under such conditions as the Committee of Nine shall hereafter determine and decide.

II.

That from Heise to Lorenzo bridge a minimum 3% channel transmission loss be charged stored water and when it shall be shown by the "two day mean method" that there is an additional loss in excess of said 3% the natural water users must be credited with the additional amount. It being understood

that a measuring station will be established at or near Lorenzo.

III.

That from Lorenzo to Woodville a loss of 0.5% evaporation loss be charged stored water.

IV.

That from Woodville to Blackfoot a loss of 0% be charged stored water.

V.

The committee recommend that it continue its investigation, being unable at this time to report fully on all matters before them.

VI.

That, to encourage the economical use of water for the year 1924, any canal company shall be permitted to use any available space in the Jackson Lake Reservoir after the beginning of the delivery of stored water, for the storage of such portion of the water then in their respective canals as they may be subsequently entitled, with the right of withdrawal of same from said reservoir as they may desire during said year 1924, under such rules as shall be determined by the Committee of Nine."

After much argument and discussion together with the voting down of counter proposals, which combined to exhaust the time available in both the forenoon and afternoon sessions of the March 31st meeting, the program advanced by the committee was finally unanimously adopted by the water users and the Meeker report was not presented for any further action. Authority was also unanimously accorded the Committee of Nine to incur such expenditures as were in their judgment necessary.

At the earlier meeting on March 3, 1924 G. Clyde Baldwin was re-elected to the position of Water Master of District No. 36 and the Committee of Nine was continued in its advisory capacity.

Subsequent to the adjournment of the general meeting on March 31 the Committee of Nine considered the annual water master budget and approved same in the amount of $13166.10 as the estimated cost of all regular work properly chargeable against normal flow water users.

Other important matters considered and the action taken are outlined in the following quotations from the minutes of this meeting.

"Moved by R. E. Shepherd and duly seconded that all regular district expenditures be divided between stored and normal flow water users on a 40% - 60% basis, respectively, in the same manner followed during 1923. Carried.

Moved by R. E. Shepherd and duly seconded that money be requested advanced to the Normal Flow Fund as required and up to the limit of the budget just approved, in the same manner and in the same relative proportions as in 1923. Carried.

Moved by J. T. Fisher and seconded by R. P. Hansen that Mr. Baldwin renew his bond as Treasurer of the Normal Flow Fund and submit same to the Chairman of the committee. Carried.

Moved by F. A. Banks and seconded by R. P. Hansen that the committee recommend the appointment of G. Clyde Baldwin both as Deputy and Special Deputy Commissioner of Reclamation for Water District No. 36 and that the secretary be directed to advise the Commissioner of Reclamation concerning this action. Unanimously carried.

Moved by R. E. Shepherd and seconded by W. C. Sollenberger that Engineers Cotton, Crandall and Baldwin be designated as a committee to go over the river and submit at the next meeting of the committee a plan for investigations and special work to be undertaken during 1924. Carried.

The following resolution was then unanimously adopted:

WHEREAS, the supply of snow accumulated in the mountains of the Snake River drainage is now understood to be considerably below normal and in consequence a shortage of water available for irrigation is to be later expected, and

WHEREAS, much of the Upper Snake River Valley is known to be underlaid with gravel which, if properly saturated with water, makes an excellent natural storage reservoir,

We, the Committee of Nine of Water District No. 36 recommend to the water users of this section that they begin running water in their canals at the earliest possible date, make the earliest use of same on their lands consistent with good crop practice and in particular run water continuously into all swales and on waste land to the end that the ground water level may be rapidly raised and the utmost possible benefit accrue from this source during any later drouth period."

The next meeting of the Committee of Nine of Water District No. 36 was held at Twin Falls, Idaho on May 14, 1924 and portions of the minutes of the four sessions on that date, are also quoted as follows:

10:00 A.M. Session.

"Watermaster G. Clyde Baldwin stated that the total cost of the R. I. Meeker investigation amounted to $5492.96. Mr. Baldwin reported that the two new gaging stations recently authorized had been installed, one at Lorenzo and one below the last diversion in the immediate vicinity of Blackfoot, at a total cost of approximately $2300.00. Mr. Baldwin further reported that canals diverting from the South Fork or Snake River proper, were just beginning to draw large heads of water, although canals diverting from the North Fork had been using water quite extensively for some time.

Mr. Shepherd complained of the damming off of Portneuf River and other channels in the American Falls bottom and further to the ponding of water at American Falls attributable to the installation of flash-boards on the dam of the Idaho Power Company, it being the contention that these things all tended to change natural conditions and interfere to a greater or less extent with the normal flow of Snake River. He futher objected to the continued pumping of water by Milner Low Lift Irrigation District, especially in view of the fact that this canal has the youngest right of any of those in the vicinity of the Milner Dam."

2:00 P.M. Session.

"Mr. Neeley, District Manager of the Idaho Power Company was present and stated that the flash-boards installed by his company at American Falls were placed during the month of February and it was his understanding that all storage impounded thereby had been secured before the beginning of any irrigation demand. General discussion of this matter followed and it appeared from the explanation given that no serious damage had resulted from the Power Company's operations."

5:00 P.M. Session.

"The written report of the subcommittee, consisting of Messrs. Baldwin, Cotton and Crandall, which had been previously forwarded to individual committee members, was read.

Moved by W. O. Cotton, seconded by F. A. Miller, that the report of this subcommittee be adopted and the work already done in installing gaging stations in the vicinity of Lorenzo and of Blackfoot be approved. Carried.

Moved by W. O. Cotton, seconded by John E. Kolley, that the expense incurred in installing these two gaging stations be paid, 40 per cent by stored water users and 60 per cent by normal flow users. Carried.

Mr. Baldwin then read individual reports of Messrs. Cotton and Crandall in which additional investigation work was recommended and stated that he concurred with the recommendations of the other two members of the subcommittee with respect to work which should be undertaken in the immediate vicinity of Jackson Lake and on the river between the Idaho-Wyoming state line at Alpine, and the Heise gaging station. Mr. Cotton stated that while he favored the latter work he thought additional investigations should first be made between Jackson Lake and the head of Grand Canyon near Cheney, Wyo. and that if money was not to be available for investigating the entire river from Jackson Lake to Blackfoot, he thought investigations should be undertaken in order, beginning at Jackson Lake."

8:00 P.M. Session.

"Moved by R. E. Shepherd, seconded by W. C. Sollenberger, that W. O. Cotton, E. B. Darlington and G. Clyde Baldwin be appointed as a committee of three to plan and arrange for carrying on an investigation at Jackson Lake during the season of 1924. Carried.

Moved by F. A. Miller, seconded by W. O. Cotton, that the cost of all investigations made on Snake River and in the vicinity of Jackson Lake during the season of 1924 be prorated on a basis of 40 per cent payable by stored water users and 60 per cent payable by normal flow users. John E. Kelley, W. O. Cotton, F. A. Miller and W. C. Sollenberger voted "Yes." R. E. Shepherd, T. M. Baird and E. B. Darlington voted "No." Carried.

Discussion then followed with respect to whether or not investigations should be carried on along the river below Jackson Lake during 1924. In the face of prospective water shortage some opposition was expressed to undertaking further work because of the expenditures involved.

Moved by W. O. Cotton, seconded by John E. Kelley, that the committee approve the renewal of the 1923 contract between the State of Idaho and the U. S. Bureau of Reclamation, acting on behalf of the Jackson Lake Stored Water Users. Carried.

Moved by E. B. Darlington, seconded by R. E. Shepherd, that beginning with the first month after storage reservoirs reached their maximum capacity for the season, stored water expenditures be prorated between the respective reservoirs in proportion to maximum storage available for delivery during the 1924 season. Carried."

The subcommittee authorized to arrange for the 1924 investigation at Jackson Lake met at Idaho Falls on May 19 and employed Thomas R. Newell, a former Hydraulic Engineer in the U. S. Geological Survey, to conduct this work and prepare a report* thereon.

*Segregation of Water Resources, Jackson Lake and Jackson Lake Reservoir, 1924, by Thomas R. Newell.

Except for the modifications indicated in the preceding portion of this report the same general plan under which water distribution and hydrometric work were carried on during 1923 was again effective in 1924. Under this plan all work of both classes is handled from one office in Idaho Falls. The State of Idaho and the U. S. Geological Survey, through a cooperative agreement, provide funds for hydrometric work of a general interest character, the U. S. Indian Irrigation Service pays the actual cost of a small amount of specific work which is done for the benefit of their Fort Hall Project, while all water distribution and hydrometric work conducted primarily for distribution purposes are sustained through funds made available by normal flow and stored water users.

Beginning in 1923 the offices of Water Master and Special Deputy were consolidated, but aside from this the organization and division of work has changed but little since the Idaho Falls office was first established on a permanent basis in May, 1919. Nearly every year, however, changes in transmission loss schedules or other mutually agreed upon departures from previously used methods of delivery have affected to a greater or less extent the operation of the river and the final apportionment of the water. Previous reports of the Special Deputy State Commissioner of Reclamation* describe the changes of this character which have heretofore been made and should therefore be referred to for details not fully outlined herein.

In addition to the work of installing the new gaging stations at Lorenzo and near Blackfoot the usual amount of work of re-establishing stations temporarily discontinued for the winter and securing meter measurements for the fixation of current ratings was accomplished during April and May.

* Water Distribution and Hydrometric Work In District No. 36, 1919; 1920; 1921; 1922 and 1923, by G. Clyde Baldwin.

Because of the threatened drought conditions river riders and deputy water masters were employed and began work on May 19 or about 13 days earlier than usual. Daily records were initiated at all regular canal stations at this time.

PERSONNEL

The personnel engaged in the work of distribution during the season of 1924 was as follows:

G. Clyde Baldwin	Deputy State Commissioner of Reclamation, Special Deputy in charge of Jackson Lake and Twin Lakes Stored Water Delivery and Water Master of District No. 36.
C. A. McClelland	Hydrographer, Deputy Water Master and Special Deputy in charge of Henrys Lake Stored Water Delivery.
L. L. Bryan	Hydrographer
Frank A. Backman	Hydrographer
Mans H. Coffin, Jr.	Hydrographer
Mrs. Bessie M. Rees	Clerk and office assistant, Idaho Falls office.
Mrs. Wilma Adams	" " " " St. Anthony "
T. W. Luetjen	Deputy Water Master, Upper Fall River division
Ernest Luetjen	" " " St. Anthony division
W. F. Dawson	" " " and Hydrographer, Teton River division
Ira Moore	" " " Heise division
Wm. Sauer	" " " Rigby division
Chas. McCurdy	" " " Idaho Falls division
Delbert Taylor	" " " Blackfoot division
Wm. Burton	" " " Swan Valley canals
Fred J. Anderson	" " " Minidoka Dam
W. N. McConnel	" " " and Hydrographer, Milner Dam
J. M. McGinn	" " " and Gate Tender, Henrys Lake Dam
Joseph Markham	Superintendent, Jackson Lake Dam
Frances Woodburn	Forwarding Agent, Ashton, Idaho

Harold Fuqua, Mrs. Irvin Siepert, Eva Davis, J. A. Clough, E. L. Jennings, A. J. Ayers, T. W. Luetjen, Ira Moore, Mrs. J. F. Johnson and A.M. Anderson, Gage Readers.

DESCRIPTIVE OUTLINE OF 1924 DISTRIBUTION

Beginning with 1919-1920 monthly surveys have since been made from December until April of each winter for the purpose of determining both the depth and water content of the snow on the ground at points selected to represent as nearly as practicable average conditions over the drainage area tributary to Jackson Lake Reservoir. The value of this work, which has been carried on by Joseph Markham under the direction of the Minidoka Project officials of the U. S. Bureau of Reclamation, was clearly demonstrated in 1924. February, March and April reports all showed deficiencies of increasing amount when compared with similar records for the preceding years and this information, coupled with the ordinary data obtainable from the U. S. Weather Bureau which was confirmatory in character, made it possible to warn the water users of the impending shortage very early in the season before any of the spring crops were planted.

Because of these warnings more than the customary amount of water was diverted by upper valley canals during the months of April and May and this resulted in raising the ground water level to an extent which was probably of material benefit later in the season in maintaining the return flow to the river. On the other hand these heavier upstream drafts tended to, temporarily at least, further reduce the supply available for diversion by lower valley canals until, beginning about April 21 and continuing throughout the balance of the season, it was inadequate to supply all demands. This situation, which does not usually exist until about July 1 or even later, would normally require immediate regulation of all diversions and be followed promptly by the cessation of storage at all reservoirs and the cutting off of younger record rights. Coming as it did, however, so early in the season

MAP SHOWING PRINCIPAL STREAMS AND GAGING STATIONS

NO.	STATION
1	JACKSON LAKE AT MORAN WYO.
2	SNAKE RIVER NR. MORAN WYO.
3	SNAKE RIVER NR. HEISE, IDA.
4	GREAT FEEDER CANAL NR. RIRIE, IDA.
5	SNAKE RIVER AT LORENZO IDA.
6	SNAKE RIVER NR. SHELLEY IDA.
7	SNAKE RIVER NR. BLACKFOOT, IDAHO (BLACKFOOT BRIDGE)
8	SNAKE RIVER AT CLOUGHS RANCH (formerly listed as NR. BLACKFOOT)
9	SNAKE RIVER AT NEELEY IDA.
10	LAKE WALCOTT NR. MINIDOKA IDA.
11	SNAKE RIVER NR. MINIDOKA IDA.
12	NORTH SIDE MINIDOKA CANAL NR. MINIDOKA, IDA.
13	SOUTH SIDE MINIDOKA CANAL NR. MINIDOKA, IDA.
14	LAKE MILNER AT MILNER IDA.
15	NORTH SIDE TWIN FALLS CANAL AT MILNER IDA.
16	SOUTH SIDE TWIN FALLS CANAL AT MILNER IDA.
17	SNAKE RIVER AT MILNER IDAHO
18	HENRYS LAKE RESERVOIR NR. LAKE IDA.
19	HENRYS FORK NR. LAKE, IDA.
20	HENRYS FORK NR. ASHTON IDA.
21	HENRYS FORK AT ST ANTHONY IDA.
22	HENRYS FORK NR. REXBURG IDA.
23	FALL RIVER NR. SQUIRREL IDA.
24	FALL RIVER NR. CHESTER IDA.
25	TETON RIVER NR. ST ANTHONY IDA.
26	BLACKFOOT RIVER NR. BLACKFOOT IDA.

AUXILIARY STATIONS

A SNAKE RIVER AT SOUTH BOUNDARY YELLOWSTONE PARK
B HENRYS FORK AT WARM RIVER, IDA.
C WARM RIVER AT WARM RIVER, IDA.
D ROBINSON CREEK AT WARM RIVER IDA.
E PORT HEIF RIVER AT POCATELLO IDA.

CLARK
FREMONT
JEFFERSON
MADISON
TETON
YELLOWSTONE NATIONAL PARK
JACKSON LAKE RESERVOIR
HENRYS LAKE RESERVOIR
HENRYS FORK
ST ANTHONY
FALL RIVER
TETON RIVER
IDAHO FALLS
BONNEVILLE
SNAKE RIVER
BINGHAM
BLACKFOOT
BLACKFOOT RIVER
MILLER CREEK
GRAYS LAKE
GOODING
LINCOLN
BLAINE
JEROME
MINIDOKA
RUPERT
BURLEY
TWIN FALLS
SNAKE RIVER
SNAKE RIVER
AMERICAN FALLS
POCATELLO
PORT NEUF RIVER
BANNOCK
POWER
CARIBOU
BLACKFOOT RESERVOIR
CASSIA
IDAHO
WYOMING

and long before Jackson Lake Reservoir was even half filled, everyone hoped that the deficiency was only temporary and would soon be relieved by the increased flow which is to be expected in the flood water season.

Lower valley users realized, too, that while any demand for general regulation, with the subsequent order for opening the outlet gates at Jackson Lake which was almost sure to follow very quickly, might aid them temporarily, it would also mean less storage and consequent deficiency in supply during the latter part of the summer when their needs would be relatively much greater. Lake Walcott water was therefore utilized and normal flow draft curtailed in an attempt to make the best of a bad situation.

But increases in river flow did not materialize to the extent necessary to meet the continued growth in requirements and as the run-off prospects reported from the higher drainage areas were still rather discouraging in character, the water master finally took the initiative, started the entire distribution organization work on May 19 and began regulation with an order to cut all canal diversions down to their record rights effective May 22.

When the outlet gates of Jackson Lake Reservoir were shut down on September 27, 1923 the unused storage or holdover amounted to 142,730 acre-feet. These gates were kept closed until May 25, 1924 when they were again opened to allow the passage of normal flow. Actual draft upon storage began May 27 when the total available in the reservoir amounted to only a little over 480,000 acre-feet.

Requests were already on file from a number of upper valley canals, for the storage, in accordance with section VI of the 1924 program as agreed upon at the general water users meeting of March 31 (Page 2 of this report), of part or all of the normal flow to which they were then entitled. At

the same time Minidoka Project officials were very anxious to refill Lake Walcott and bring their power head back to normal. Canals were therefore shut off for exchange about as requested until by June 3 the amount so released exceeded 4800 second-feet.

Under these conditions Lake Walcott rose rapidly and even though the storage being drawn from Jackson Lake was reduced in amount, it became apparent that the former would soon be full. Therefore, if waste of water was to be avoided, either the amount released for exchange must be suddenly and materially cut down or else more water must be held back at Jackson Lake. The latter course seemed to promise a more economic use of water generally, hence, after hastily communicating with most of the members of the Committee of Nine and securing their approval by telephone, reductions were ordered at Moran of such magnitude that for most of the next two weeks normal flow was actually being stored there, although at the same time stored water or its equivalent in released normal flow was still being extensively used by lower valley canals. In other words, while the latter were continuing to reduce their available storage upper valley canals were, during this period, accumulating temporary storage at a more rapid rate.

The total amount impounded at Jackson Lake reached its maximum for the season of 486,930 acre-feet on June 20, following which date continuous depletion was noted throughout the balance of the season.

In addition to the beginning of regulation on May 22, a few of the younger permit and license rights were ordered cut on that date and all other rights of this latter class were cut on or before May 26.'

Thereafter decreed rights were regulated in accordance with the following schedule:

June	2	Cut off rights having a priority date subsequent to	Mar. 26, 1903
"	3	" " " " " " " "	Oct. 11, 1900
"	6	Reinstated rights having a priority date earlier than	Mar. 26, 1903
"	7	" " " " " " " "	Aug. 31, 1903
"	8	" " " " " " " "	Oct. 7, 1905
"	11	Cut off rights having a priority date subsequent to	Mar. 26, 1903
"	12	" " " " " " " "	Oct. 11, 1900
"	17	Reinstated rights having a priority date earlier than	Mar. 26, 1903
"	22	Cut off rights having a priority date subsequent to	Oct. 11, 1900
"	24	" " " " " " " "	July 9, 1896
"	25	" " " " " " " "	Mar. 22, 1895
"	26	" " " " " " " "	Feb. 6, 1895
July	2	" " " " " " " "	Aug. 18, 1894
"	3	" " " " " " " "	June 1, 1892
"	4	" " " " " " " "	Dec. 13, 1891
"	6	" " " " " " " "	May 31, 1891
"	8	Reinstated rights having a priority date earlier than	June 1, 1892
"	9	" " " " " " " "	Jan. 9, 1895
"	10	" " " " " " " "	Feb. 6, 1895
"	12	Cut off rights having a priority date subsequent to	Aug. 18, 1894
"	14	" " " " " " " "	Apr. 28, 1892
"	15	" " " " " " " "	Jan. 24, 1891
"	16	" " " " " " " "	July 12, 1890
"	17	" " " " " " " "	June 1, 1890
"	18	" " " " " " " "	July 10, 1889
"	22	Reinstated rights having a priority date earlier than	July 10, 1889
"	23	" " " " " " " "	July 12, 1890
"	31	Cut off rights having a priority date subsequent to	June 10, 1890
Aug.	1	" " " " " " " "	July 10, 1889
"	3	" " " " " " " "	May 11, 1889
"	5	" " " " " " " "	Apr. 15, 1889-
"	9	Reinstated rights having a priority date earlier than	Apr. 15, 1889
"	12	" " " " " " " "	May 1, 1889
"	15	" " " " " " " "	May 11, 1889
"	29	Cut off rights having a priority date subsequent to	May 1, 1889
"	31	" " " " " " " "	Apr. 15, 1889-
Sept.	4	Reinstated rights having a priority date earlier than	Apr. 15, 1889-
"	5	" " " " " " " "	May 11, 1889
"	8	" " " " " " " "	June 3, 1889
"	9	" " " " " " " "	Mar. 2, 1890
"	10	" " " " " " " "	June 10, 1890
"	15	Cut off rights having a priority date subsequent to	Mar. 1, 1890
"	16	" " " " " " " "	July 10, 1889
"	20	" " " " " " " "	May 11, 1889
"	25	Reinstated rights having a priority date earlier than	July 10, 1889
"	26	" " " " " " " "	June 10, 1890
"	27	" " " " " " " "	July 12, 1890
"	29	" " " " " " " "	Jan. 24, 1891
"	30	Regulation discontinued.	

During the latter part of June the so-called Pooling Committee was created for the purpose of trying to help those canals and districts most in need of water. This assistance was solicited in the form of storage donations and temporary transfer of valid normal flow rights. John Lee, John Kelley, W. O. Cotton, Neal Anderson and J. C. Jacobsen, the personnel of this committee, were quite active in this work throughout the balance of the summer and through their efforts much was accomplished in the saving of crops which must otherwise have been lost.

The exchange of normal flow for Jackson Lake storage, previously mentioned, proved to be unsatisfactory to many of the lower valley water users and resulted in a number of complaints which were heard by the Committee of Nine at meetings held in Burley on July 5 and at Idaho Falls on July 12. At the latter meeting a special committee was selected to investigate, in particular, the effect of this exchange practice on the distribution of water in District No. 36. This committee, consisting of F. A. Miller, W. O. Cotton, F. A. Banks and C. J. Miller, appointed by Chairman Hart and D. G. Martin selected by the State Commissioner of Reclamation, spent nearly a week in the office at Idaho Falls in the study and analysis of these problems before submitting their report to another general Committee of Nine meeting on July 22. The majority report, signed by Messrs. F. A. Miller, W. O. Cotton, F. A. Banks and D. G. Martin, indicated that while the plan permitting this exchange of normal flow for storage was adopted in good faith and had for its object the application and utilization of water in such a way as to secure its best use and conservation, yet in actual practice the results were not altogether equitable to all water users, hence:

"It is therefore recommended as a compromise for this season only, that five (5) per cent be charged to all the water stored by exchange in Jackson Lake Reservoir and credited to owners of storage rights in Jackson Lake Reservoir, both in the upper and lower valley, in proportion to the ownership therein and that the remaining exchanged storage be delivered without further loss to the parties effecting the storage."

This report was finally adopted and governed the subsequent water distribution within the district.

On September 29, with only 2410 acre-feet of unused storage remaining in Jackson Lake Reservoir, the outlet gates were ordered closed sufficiently to hold the water surface in the lake stationary and on October 3, after reports of a general two day storm had been received, the gates were ordered completely closed to begin storage for the 1925 season.

Plate II illustrates graphically the rate at which Jackson Lake Reservoir was filled or drawn down during the period from November 15, 1914 to April 15, 1925, inclusive. All graphs are plotted on the basis of 1919 capacity tables.

WATER SUPPLY

If the comparison of annual run-off at the Moran and Neeley gaging stations, which has been included in the four preceding reports, is extended to include the year ending September 30, 1924, the data may be summarized as follows:

Station	Mean annual run-off for 21 years ending September 30, 1924.	Run-off for year ending September 30, 1924.	% of mean
Moran	1,098,000	647,730	59.0
Neeley	6,619,000	3,900,000	58.9

In this tabulation all Moran records beginning with the year 1910 have been corrected to take account of the storage in Jackson Lake which is held over from one climatic year to another. Neeley records, on the other hand,

DEPARTMENT OF THE INTERIOR UNITED STATES GEOLOGICAL SURVEY WATER RESOURCES BRANCH HYDROGRAPH FOR JACKSON LAKE BEGINNING

October | November | December | January | February | March | April | May

800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000

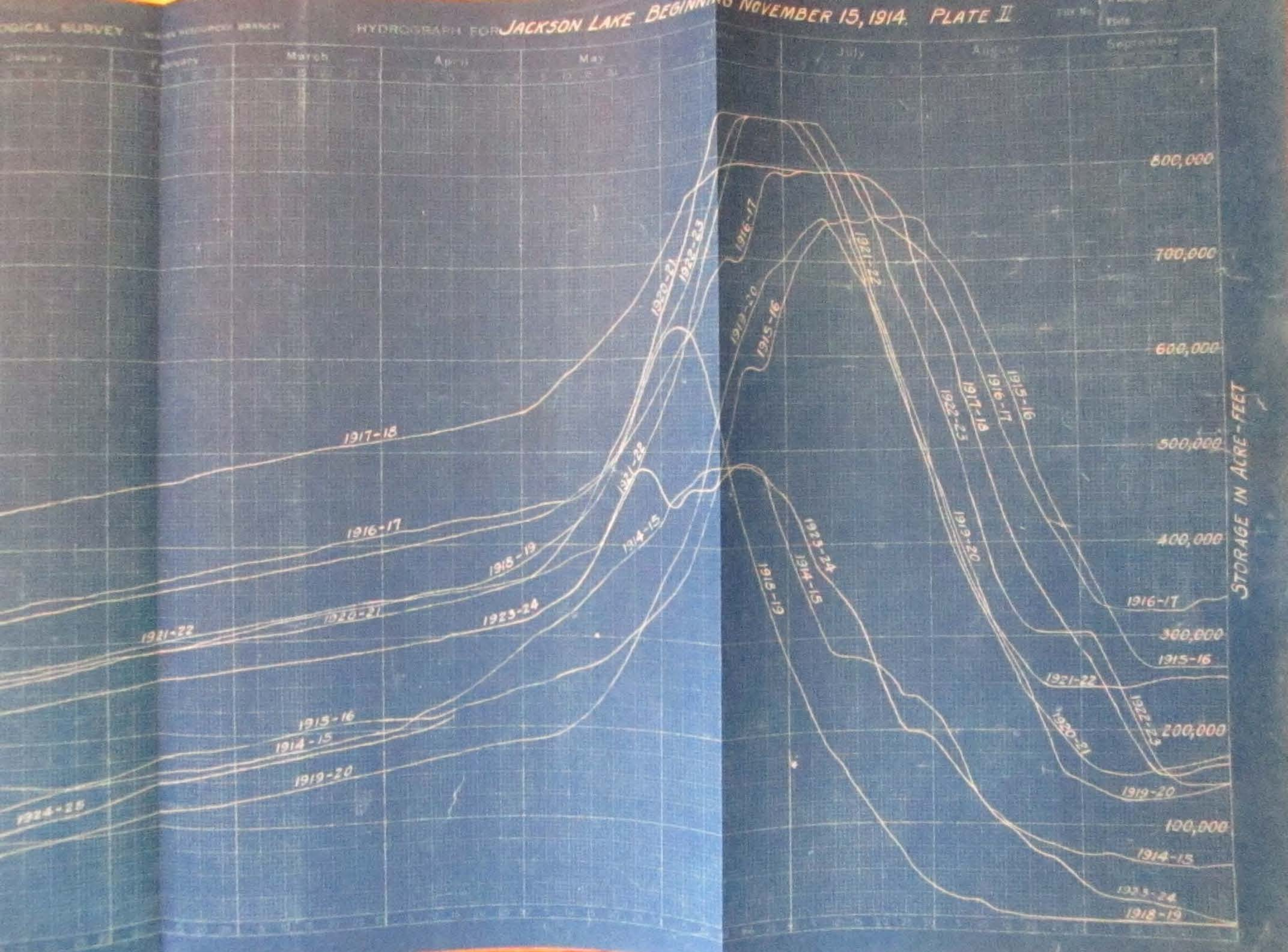
* STORAGE IN ACRE-FEET

1917-18
1916-17
1918-19
1921-22
1920-21
1923-24
1914-15
1924-25
1915-16
1919-20
1922-23

Plotted by Checked by Date

OGICAL SURVEY — WATER RESOURCES BRANCH

HYDROGRAPH FOR JACKSON LAKE BEGINNING NOVEMBER 15, 1914. PLATE II



have not been subjected to any storage corrections, but represent actual totals measured at the gaging station. Variations in the amount diverted for irrigation as well as in the quantity of inflow entering between the two stations also affect the Neeley comparisons. Since annual run-off comparisons are not necessarily applicable as a true measure of the summer water supply and because of the difficulty encountered in computing any dependable storage and diversion corrections for application to the Neeley record, no attempt has been made to apply such corrections to the 1924 results.

Attention is called to the fact that the total run-off for the year ending September 30, 1924 as measured at these two stations is without exception the lowest of record. This unusual deficiency was noted quite generally, not only on Snake River and its tributaries, but also on many other streams which drain the western slopes of the Rocky Mountains.

The run-off was more evenly distributed and better sustained during the principal irrigation months than was the case in some other years of shortage, notably 1919. For this reason canals depending principally upon a normal flow supply fared better as a rule than was anticipated at the beginning of the summer. Additional information on this subject will be found further on in the text of this report and in the tables on Plate XVIII.

STORAGE VERSUS FLOOD WATER DIVERSIONS

While the 1924 regulation of canals to record rights began slightly before the storage of water under reservoir permits was discontinued, upper valley prescriptive right users presumably realized the benefits which they had previously received through the failure of lower valley canals to demand regulation at an earlier date and in consideration thereof registered no complaints.

DOMESTIC WATER

The following quotation from the minutes of the July 12 meeting of the Committee of Nine will serve to explain the 1924 practice with respect to water for domestic use:

"Mr. Baldwin then explained that while in 1919 small streams of water had been left in many canals for domestic use when they would otherwise have been cut dry, since 1920 this practice had been discontinued. Many canals, however, had head gates of such a character that extra work and expense would be required to shut off all the water and on this account he asked the committee for authority to charge seepage past head gates to the storage account of any canal which was supposed to be shut dry and which still had storage to their credit. He also asked authority in the case of canals which had no storage credit and which should be shut dry under the decree, to incur such extra expense as might be required to accomplish this object and charge same as a special account against the individual canal, provided the canal officers would not of their own accord attend to this work.

Moved by W. C. Sollenberger and seconded by R. E. Shephord that where a canal is no longer entitled to normal flow and cannot be shut dry without extra work, the water master be instructed to charge the water passing down the canal against the storage account of the canal, if one exists, and if no storage remains to the credit of the canal and the canal officials failed to shut off all water after due notice, the water master be authorized to incur such expense as may be necessary to accomplish this purpose and charge same against the individual canal. Motion carried."

Very little storage was available for seasonal sale or rental, but some 200 acre-feet of Jackson Lake water is known to have been leased for the season at the rate of $2.00 per acre-foot.

The exchange privilege enabled canals diverting from the main river to accumulate a storage credit early in the season in anticipation of their later needs for domestic use or for other purposes.

On Henrys Fork and Fall River where this plan could not well be put into operation, water for domestic or similar use was furnished in a few extreme cases by donations or transfers through the Pooling Committee.

MUNICIPAL WATER RIGHTS

Both St. Anthony and Idaho Falls arranged during 1924 to secure the use of old decreed water rights, through temporary transfers, to the extent necessary to cover all periods when their own rights were invalid.

It is understood that prior to the beginning of another irrigation season St. Anthony will have provided a ground water supply sufficient for that city's requirements.

TEMPORARY TRANSFERS

The recognition of temporary transfers, under which water is shut out of one canal and turned into another upon submission of a written request from the canal having the valid right, was again continued.

During part of the season these transfers were made through the Pooling Committee in which case the water would first be donated to the pool and then delivered under orders from this committee. This method is somewhat more cumbersome in operation, but tends toward a better use of the water.

EXCHANGE OF NORMAL FLOW FOR STORAGE

The authorization for, general account of and review of complaints respecting the exchange of normal flow for Jackson Lake storage have already been described.

The following form letter with attached regulations was approved by the Committee of Nine and served as the basis for each exchange of this character.

Mr. G. Clyde Baldwin,
Deputy State Commissioner of Reclamation,
Idaho Falls, Idaho.

Dear Sir:

The _ _ _ _ _ _ _ _ _ Company desires to release Normal Flow for exchange.

We will reduce the flow through our canal at the officially recognized gaging station to _ _ _ _ second-feet, at _ _ _ _ on _ _ _ _ _ _ _ _ _ _ _ _ _.

You are authorized to hold our canal at this stage from above date until _ _ _ _ on _ _ _ _, when the release of Normal Flow for credit is to terminate.

It is understood that the water released by us during this period is to be accepted and delivered in lieu of Jackson Lake storage. It is further understood that the credit thus accumulated is to be repaid to our canal from Jackson Lake storage under ordinary regulations for order and delivery of such storage whenever requested by us, provided our Normal Flow rights at that time are insufficient to fill the demands of our canal.

We understand that should this exchange, as a result of unexpected fluctuations in the river, result in any abnormal wastage of water, credit will not be given, but in such case an attempt will be made to notify us immediately and permission will be given to increase the amount of water diverted in our canal up to the limit of our then valid rights.

Sincerely yours,

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Canal Co.

By _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ President

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ Secretary

REGULATIONS:

(1) Normal Flow can only be accepted for exchange during periods when Jackson Lake storage is being transmitted down the river.

(2) Repayments will not be attempted after the service of river riders and deputy water masters has been discontinued for the season.

(3) Acceptance of Normal Flow for exchange may be suspended immediately upon notice whenever necessary to prevent waste of water.

(4) The amount of water accepted for exchange shall be the difference between the amount of water actually diverted by the canal during the release period and the amount which would be allowed valid rights, but in no case for computation purposes shall this latter amount exceed the average actual diversion of the canal for the five days immediately preceding the release period.

(5) Signed agreement similar to above must reach the Special Deputy five days in advance of beginning of exchange.

These regulations are similar to those governing the exchanges completed during previous seasons by canals owning Jackson Lake storage rights, but the practice of previous years proved to be no criterion as to the total amount of water which would be exchanged under the plan when this privilege was extended to all main river canals. In fact, the 1924 actual maximum daily exchange total of 4833 second-feet and the season total of about 243,000 acre-feet proved to be much greater than any advance estimates of these quantities.

Donation of Jackson Lake storage from the pool or from main river canals to those diverting from Henrys Fork or Fall River and to Swan Valley canals involved additional exchanges not materially different in character, since actual deliveries were in such cases made from normal flow while storage was given to other canals in lieu of the normal flow so deducted.

LITIGATION

At the hearing in the court of the Ninth Judicial District at Rigby, Idaho on April 28-29, 1924, wherein the Independent Irrigation Co. sought, in effect, to secure a supplementary decreed water right, Judge Robert M. Terrell who presided, granted a non-suit and charged the costs of the case against the plaintiff Independent Irrigation Co. Appeal from this decision was later taken to the State Supreme Court. (See 1922 and 1923 reports on "Water Distribution and Hydrometric Work in District No. 36" for summary of preceding litigation in this case).

On August 13, 1924 Judge H. F. Ensign, presiding at the time in the court of the Eleventh Judicial District, issued an order fixing September 1 as the date for trial of the action initiated by the Minidoka and Burley Irrigation Districts as Plaintiffs against W. G. Swendsen, Commissioner of Reclamation, G. Clyde Baldwin, Water Master of District No. 36, the members

of the Committee of Nine and about forty upper valley canal companies as Defendants. In this action the plaintiff districts claimed to have been injured as a result of the exchanges of normal flow for Jackson Lake storage which were allowed in 1924, sought to have this practice and the allowance of temporary transfers immediately stopped and also asked to have practically all of the stored water then remaining in Jackson Lake Reservoir awarded to them. Conditional upon the filing by the plaintiffs of a $10,000 bond the judge also granted a restraining order or temporary injunction which required all the defendants to discontinue the exchange and temporary transfer practices complained of and stop delivering storage under these arrangements pending the final hearing of the case on its merits.

This action coming so soon after the Committee of Nine had presumably adjusted the matter of these exchanges for the balance of the season, gave rise to sentiments throughout the upper valley ranging from surprise to intense antagonism towards and charges of bad faith against these two plaintiff irrigation districts.

Unless the court restraining order could be modified at once the whole previously arranged delivery program must be disrupted and many canals which conserved water in good faith during the early part of the season would be deprived of its use at a time when very serious loss, if not absolute failure of crops would surely follow.

Therefore, the defendants, other than W. G. Swendsen, asked for an immediate hearing on the matter of dissolution of the temporary injunction. This request was granted and on August 20-21 the question was argued before Judge Ensign at Hailey, Idaho by S. T. Lowe, representing the plaintiffs, Otto E. McCutcheon, Harry Holden and Douglas Mote for the defendants and Edward A. Walters as a friend of the court.

On the next day, August 22, an order dissolving the temporary injunction was issued by the court.

Thereafter, the final trial of the case was several times postponed and now seems to have been permanently abandoned.

CANAL DELIVERIES

The total amount diverted daily through each canal heading either in the south fork or main river during the period from May 19 to September 30, 1924 is shown on Plates III, IV, V, VI and VII.

Following the practice inaugurated in the 1919 report, except for a few of the smaller canals where estimates were used, all data were recomputed prior to their presentation herein. This practice affords opportunity to more thoroughly analyze the records at each station than is possible in the limited time available during the field season. Wherever changes in rating have been noted, either because of the growth of vegetation, variation of checks or for any other reason, all meter measurements, notes and other data have been carefully reviewed to the end that the final computed data may represent the most reasonable interpretation of these changes, particularly as regards time. On days when more than one stage has been observed mean discharges have been recorded. Daily summaries showing the total diversions between river gaging stations have also been included.

River riders were employed continuously throughout the entire period of record so, with a very few exceptions, daily readings were secured at each station.

The Bramwell-Ellis canal was not discovered until June, hence does not appear at all on Plate III. Records are included beginning June 1, but due to irregular visitation, changes in headgates, gages, etc. the data for this canal are probably but little better than estimates.

USR DISTRIBUTION WATER DISTRICT NO 36

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM SNAKE RIVER FOR MAY 1924

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
HEAD OF CANAL																			121	40	41	66	58	69	59	65	57	70	57	30	31	1000
RILEY																			86	38	35	89	81	76	72	73	73	79	84	78	8	913
EDEMANO																			324	296	340	364	349	337	337	327	318	329	348	282	321	4026
EAST PORK & WILLOW CREEK																			690	532	671	983	944	938	935	915	868	870	833	740	745	8666
EAST SIDE FARMS																			480	432	385	341	349	301	308	308	313	304	302	303	307	4233
EAST SIDE																			232	213	200	210	214	209	200	194	173	173	99	28	28	2143
EDEMANO																			8	4	4	8	6	8	7	8	8	8	2	0	0	76
HOLLISTER																			89	32	31	31	29	28	21	21	20	20	20	20	20	402
HOLLISTER & CRAIG																			9	9	7	5	5	4	4	4	3	3	3	3	3	72
HUNTSMAN																			11	11	10	8	6	5	5	6	5	5	5	5	5	93
KING & RAND																			58	51	51	50	40	50	40	50	51	54	48	45	45	718
KING ISLAND																			17	17	18	19	18	5	5	4	4	3	3	3	3	178
KINNEY																			347	321	301	309	312	305	305	303	294	278	269	28	28	3351
LATHROP																			10	9	8	8	7	6	6	6	5	5	5	5	5	91
LINDLEY																			254	249	243	241	243	243	243	220	177	177	180	18	18	2508
MCCOY																			348	299	284	233	187	178	180	131	30	23	23	5	5	2125
MEAD																			11	10	12	12	9	8	8	9	8	1	1	1	1	91
MILNER & NORD																			1170	1010	958	876	801	801	801	813	804	676	71	71	71	8103
MINIDOKA																			18	18	104	91	72	70	70	70	71	47	23	23	23	644
OAKLEY & EDWARDS																			44	43	42	44	46	44	43	34	24	22	22	23	23	427
RANGER																			17	17	16	12	6	5	3	0	4	4	3	2	2	91
JENNINGS																			158	183	157	149	142	133	131	146	143	134	134	131	131	1890
LE GRAND																																
CONSOLIDATED FEEDER																			126	148	183	183	183	183	185	160	97	83	28	28	28	1616
LEMHI																			210	210	215	216	221	237	208	148	77	79	79	79	80	2102
MAIN																			165	156	156	162	148	116	90	81	110	126	148	96	148	1760
TEXAS FEEDER																			308	237	241	255	154	196	150	180	89	230	87	28	28	3241
WILSON CREEK																			33	31	30	29	22	18	13	7	24	12	18	13	12	287
BILL PETTINGER																			0	0	3	6	6	6	6	6	8	7	7	7	7	75
LONE ISLAND																			419	493	498	373	379	384	317	395	387	388	380	361	386	5761
ISLAND																			140	136	130	194	196	182	181	196	197	200	177	189	189	2288
RIGBY																			235	232	221	209	167	91	146	141	146	143	146	142	151	2313
RILEY																			41	45	44	35	34	31	36	29	30	16	28	28	31	381
WEST LA BELLE																			123	125	84	86	92	86	97	103	126	103	36	36	36	1213
WILLOW & LEMHISVILLE																			393	397	393	389	389	350	350	349	347	350	349	343	343	4702
NORTH ROGBY																			68	67	68	54	72	62	62	68	54	52	53	53	53	804
WHITE																			11	11	11	11	10	6	6	6	8	6	6	6	6	104
JOSEPH POINT																			48	48	52	52	52	50	28	25	28	28	30	27	28	496
BUTTE & MARKET LAKE																			324	324	321	326	351	348	344	342	323	329	330	330	330	3853
ARNOLDI & BURGRAFF																			87	87	84	108	104	102	99	97	68	100	100	99	101	1302
BEAR ISLAND																			5	8	8	8	8	8	8	8	11	11	11	13	12	118
BIRCH WESTLEY																			6	7	8	7	7	5	5	5	1	4	4	4	4	72
CENTER																			349	377	392	394	354	356	400	384	383	383	376	372	344	6343
IDAHO																			204	200	209	207	204	200	200	200	199	200	199	197	197	3804
TWIN FALLS CITY MAIN																			725	717	717	732	713	718	717	671	540	532	532	499	498	8313
WOODVILLE																			15	15	8	15	15	5	4	10	4	5	5	5	5	121
SNAKE RIVER VALLEY																			92	88	96	95	87	96	88	89	87	87	88	88	88	1775
TOTAL DIVERSIONS HEISE TO WOODVILLE																			9160	8845	8781	8820	8100	7817	7749	7564	6829	6906	6560	5731	5720	95852
BLACKFOOT																			640	619	601	592	631	611	550	538	610	626	628	607	607	7370
JOHN LAGRANDE																			350	322	317	339	343	349	350	351	329	329	334	333	333	4304
PORTER																			146	152	148	146	148	142	142	134	119	118	111	114	112	1707
ANDERSON FALLS																			837	839	841	827	838	835	835	825	857	833	835	821	821	10092
LIBERTY																			1050	1040	1040	1040	1050	1040	1040	1040	1050	1100	1120	1100	1100	13570
GRAHAM HANSEN																			159	157	149	151	154	154	15	139	148	152	148	81	12	1767
RICKLEFS																			14	15	12	8	11	8	11	8	11	14	14	12	14	151
SHARON																			103	103	136	114	96	99	98	99	108	103	100	108	101	1352
SPALD																			191	198	187	192	183	192	190	178	184	184	182	180	179	2378
WHITNEY																			68	71	70	69	63	64	65	63	65	0	0	0	0	570
WHITNEY																			73	70	70	71	70	68	67	67	67	67	67	67	67	1000
WILSON																			113	113	112	107	108	94	94	94	94	94	94	94	94	1493
WILSON																			34	34	34	32	28	33	33	33	34	34	34	33	33	519
TOTAL DIVERSIONS WOODVILLE-BLACKFOOT																			3547	3463	3501	3462	3272	3246	3131	3080	3037	3097	3074	3134	2801	42347
SMITH MERRELL																			18	12	12	12	12	18	18	10	10	18	18	18	18	187
TOTAL DIVERSIONS BLACKFOOT-CLOSURE																			12	12	12	12	12	15	18	10	10	18	18	18	18	187
NORTH SIDE MINIDOKA																			1480	1480	1480	1490	1490	1490	1030	1490	1486	1490	1180	749	836	17536
SOUTH SIDE MINIDOKA																			907	924	923	941	930	853	838	944	933	924	930	79	948	11806
TOTAL MINIDOKA CANALS																			2387	2404	2403	2431	2420	2343	1868	2434	2419	2414	2110	1828	1784	29342
PA LATERAL																			38	38	38	39	38	38	40	40	41	40	40	40	40	511
NORTH SIDE TWIN FALLS																			339	342	342	344	347	317	385	401	409	398	2180	2180	2180	13697
SOUTH SIDE TWIN FALLS																			89	80	81	95	102	101	100	102	53	0	0	76	76	1005
TOTAL TWIN FALLS CANALS																			2870	2300	2720	2960	2939	2970	2876	3098	2580	2596	2170	2720	2720	30203
																			3336	3320	3402	3438	3477	3486	3340	3540	3042	3034	4390	5166	3604	43335

U.S. RECLAMATION SERVICE SNAKE RIVER DISTRICT NO. 36 — PLATE NO. IX

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM SNAKE RIVER FOR JUNE 1924

NAME OF CANAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
RILEY	0	0	0	0	1	0	0	0	15	29	19	18	23	18	20	17	21	25	25	25	19	4	2	4	5	11	24	22	16	24	324
ANDERSON	273	271	274	278	283	282	287	271	223	220	210	205	217	237	239	276	253	142	196	242	248	253	253	261	266	265	263	183	0	0	6660
BIG & LITTLE ROCK & HELLEN CREEK	285	280	285	289	282	286	292	286	283	311	316	321	333	300	321	323	322	271	288	286	277	276	278	282	283	283	283	283	283	283	11,592
FARMERS FRIEND	307	309	152	20	190	178	318	309	310	304	306	310	311	311	310	309	310	309	309	309	309	309	309	309	309	309	309	309	309	309	9,111
LITTLEFRIEND	72	63	77	75	77	78	13	13	1	12	21	81	81	85	72	62	82	77	81	79	72	71	111	108	104	103	93	93	93	94	2,214
ALVEDRAIN	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	44
ARMEY	20	20	11	3	6	6	5	5	6	6	5	6	6	7	7	8	7	8	9	9	11	13	13	13	11	11	13	13	11	11	288
HATTON & CRAIG	5	6	6	6	5	5	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	156
BENNETT CREEK	3	3	4	4	4	4	4	4	4	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	104
ROSS & RAND	43	43	45	45	51	48	45	46	48	50	50	50	48	47	46	48	48	44	44	43	47	44	47	47	49	49	50	48	48	47	1,417
BUTLER ISLAND	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	93
STEELE	6	6	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	7	8	8	8	7	8	8	9	9	9	11	9	9	213
HARRISON	274	278	174	34	162	283	283	280	304	294	300	289	297	292	289	413	497	512	493	499	494	485	499	481	499	496	472	225	34	42	10,033
HENRY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	93
SCOFIELD	183	183	5	50	50	97	178	180	180	182	193	200	203	186	176	177	178	185	168	170	175	168	170	174	176	176	135	63	61	45	4,511
RUDY	184	170	153	145	148	151	161	183	180	181	184	185	190	184	193	186	183	187	112	20	17	20	20	39	192	181	93	181	181	18	4,573
RUDY	6	6	7	9	7	5	5	6	2	2	3	8	8	8	8	9	8	6	9	9	9	9	9	9	9	9	9	9	9	9	213
CITE & FORD	7	436	810	801	810	820	801	805	816	801	801	805	812	442	23	23	27	27	315	801	801	801	805	835	801	811	813	844	869	844	19,824
BURGESS	71	71	53	71	71	71	70	70	72	71	71	73	75	74	71	71	72	72	66	73	73	72	78	71	73	71	73	73	73	73	2,110
CLARK & EDWARDS	24	24	23	21	21	34	42	44	44	42	44	44	44	44	44	44	44	44	44	43	43	44	43	43	44	44	43	43	43	43	1,295
LOWDER	1	2	1	1	3	3	4	4	6	8	8	7	8	8	8	8	8	7	8	9	8	8	8	8	8	8	8	8	8	8	213
JENNINGS	118	116	116	117	134	128	131	124	132	123	118	101	135	134	135	138	141	136	107	94	132	132	139	143	142	141	139	143	136	143	3930
LA BELLE																															
CONSOLIDATED FEEDER	55	56	52	56	52	79	75	72	72	70	57	60	60	21	0	0	0	0	46	79	77	81	72	56	79	81	86	78	74	78	1850
LENROOT	78	79	78	78	80	101	159	157	153	153	149	149	96	0	0	0	1	0	0	0	79	117	224	161	169	156	18	168	163	162	3,159
REID	149	149	150	152	150	142	150	148	141	145	100	98	104	98	101	100	98	103	109	103	98	63	88	94	148	150	148	149	139	81	3826
TEXAS FEEDER	28	257	261	170	216	114	116	118	112	117	101	104	175	160	211	239	223	204	191	176	184	131	165	174	177	173	209	214	224	220	4,567
NELSON COREY	19	19	17	13	18	11	14	19	12	13	5	3	12	13	24	23	12	10	6	12	11	2	4	9	13	20	20	12	12	12	400
BILL PETTINGER	2	5	2	0	2	5	5	5	4	2	1	0	0	1	2	2	2	3	3	3	2	0	1	209	302	308	46	32	33	32	1,035
LONG ISLAND	328	327	355	346	352	362	375	384	373	364	348	267	360	328	349	356	377	341	374	355	279	232	83	209	302	308	46	32	33	32	10,000
ISLAND	102	181	119	151	138	295	235	234	229	238	140	119	168	159	203	210	209	196	174	153	130	74	108	132	216	238	230	183	44	141	5,000
RIGBY	151	158	161	156	156	142	141	158	159	156	157	158	159	156	147	163	161	157	154	154	153	158	146	148	158	158	158	111	111	126	4,492
DICTS	11	11	12	14	15	13	32	34	31	30	26	27	17	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	317
WEST LA BELLE	74	106	109	103	104	92	90	88	88	87	104	101	102	100	107	95	96	99	98	90	93	99	98	100	101	97	99	101	100	99	2,900
PARKS & LEWISVILLE	323	319	318	350	345	348	343	336	333	331	335	347	345	341	348	357	355	345	347	350	347	349	346	345	351	343	347	330	336	334	10,000
NORTH RIGBY	0	0	0	83	83	80	50	51	80	80	48	46	80	47	50	48	51	50	50	53	53	54	53	53	53	52	53	53	53	53	1,581
WHITE	6	13	13	13	13	13	13	13	13	13	12	13	14	9	15	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	310
BRUMMELL & ELLIS	13	15	15	15	15	15	4	0	0	0	0	0	8	8	8	8	6	6	6	6	6	6	6	6	6	6	6	6	6	6	213
INDEPENDENT	28	24	24	21	25	25	27	31	26	28	28	32	24	26	30	51	30	26	30	20	18	25	32	22	28	29	28	28	26	26	852
BUTTE & MARKET LAKE	218	218	209	213	198	201	201	206	198	201	190	173	187	219	3	5	327	334	32	314	0	0	0	0	0	0	0	0	0	0	4,000
GOOD	99	102	90	104	99	101	91	92	96	96	98	97	90	88	83	103	91	99	91	91	64	0	0	0	0	0	0	0	0	0	2,000
KENNEDY & BURGRAFF	11	12	6	7	16	2	7	7	7	7	7	7	7	8	8	8	8	8	11	8	5	6	8	8	8	8	8	8	8	8	213
BEAR ISLAND	4	3	1	4	4	4	4	4	1	0	0	4	2	2	2	2	4	4	4	4	4	4	0	4	4	4	4	4	4	4	93
GREAT WESTERN	372	368	0	378	366	362	360	340	317	317	323	310	344	342	342	342	342	341	348	336	312	234	145	169	167	168	167	167	167	167	6,000
PORTER	197	171	176	180	180	177	184	168	159	159	156	183	191	183	174	174	174	191	191	188	183	89	89	89	89	89	89	89	89	89	4,000
IDAHO	317	124	24	31	28	300	313	310	310	302	303	308	309	324	308	313	309	304	313	309	307	307	307	307	307	307	307	307	307	307	9,000
IDAHO FALLS CITY MAIN	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	93
MOODY LIE	35	37	36	33	34	33	31	31	30	31	29	31	29	28	28	28	28	25	25	25	25	25	25	25	25	25	25	25	25	25	1,000
SNAKE RIVER VALLEY	0	0	0	458	612	594	561	556	584	596	191	0	0	0	0	0	0	485	648	610	585	556	546	540	580	593	592	596	595	595	14,000
TOTAL DIVERSIONS HEISE TO MORELVILLE	5120	5061	4594	5153	5167	6296	6550	6527	6326	6621	5993	5743	5997	5460	5523	5637	6018	5875	6296	6274	5747	5007	5090	5335	5481	5508	5	5	5	5	206,000
RESERVATION	609	611	605	594	596	598	860	871	859	585	533	483	444	486	469	367	378	854	821	480	478	263	42	319	227	332	693	618	599	580	19,000
BLACKFOOT	109	4	8	8	7	13	10	10	148	231	246	246	243	248	243	235	241	231	241	239	233	223	82	84	0	0	0	0	0	0	3,000
NEW LAVA SIDE	112	110	110	110	101	123	111	108	111	112	111	0	110	112	110	108	108	108	108	108	108	108	107	107	107	107	107	107	107	107	3,000
PROBST	0	0	0	0	0	0	0	0	306	429	427	425	423	423	423	425	425	425	425	425	425	425	145	0	0	0	0	0	0	0	6,000
AMERICAN FALLS	1160	375	2	2	2	694	1030	1030	1030	1030	1030	844	842	836	221	824	823	822	0	0	0	0	0	0	0	0	0	0	0	0	14,000
CORBETT	6	108	115	113	110	130	111	114	93	93	83	78	79	112	137	135	114	116	109	110	108	108	109	110	108	63	8	8	8	8	2,000
NIELSEN HANSEN	7	17	17	16	11	9	3	4	3	3	4	1	1	6	6	7	11	15	14	18	18	9	3	4	4	3	3	3	3	3	213
RIVERSIDE	100	45	14	13	13	54	90	89	100	96	97	96	100	100	100	100	98	100	97	97	97	98	99	97	99	103	105	31	1	84	3,000
OWSLEY	161	160	167	168	132	181	164	164	164	167	163	163	160	162	164	174	170	180	180	180	176	174	44	0	0	0	0	0	0	0	5,000
TREGO	0	0	0	0	0	0	0	0	0	35	71	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	2,500
WEATHERICK	40	44	40	40	39	41	41	41	43	44	41	41	40	40	44	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	1,300
WATSON	100	100	96	96	97	101	104	97	96	95	95	94	108	101	101	96	98	98	98	97	95	95	95	95	95	95	95	95	95	95	2,900
PARSONS	23	23	24	23	23	23	24	23	23	23	23	23	22	23	24	24	23	23	23	23	23	23	23	23	23	23	23	23	23	23	700
TOTAL DIVERSIONS MORELVILLE TO BLACKFOOT	2358	1602	1202	1185	1169	1969	2385	2376	2681	2906	2918	2780	2699	2736	2304	2318	2284	2327	1684	1940	1854	1609	1076	1685	2183	2415	2360	2218	2214	2196	69,000
SMITH MAXWELL	18	18	18	18	15	18	14	12	14	10	7	0	7	6	7	10	20	20	18	18	18	18	17	18	18	14	18	18	18	18	440
TOTAL DIVERSIONS BLACKFOOT TO CLOVERDALE	18	18	18	18	15	18	14	12	14	10	7	0	7	6	7	10	20	20	18	18	18	18	17	18	18	14	18	18	18	18	440
NORTH SIDE MINIDOKA	923	918	1010	1080	1110	1230	870	1300	1290	1290	1290	1280	1310	1340	1360	1360	1360	1310	1310	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360	39,000
SOUTH SIDE MINIDOKA	724	711	722	711	638	788	812	820	812	812	832	799	800	802	706	702	714	711	709	714	704	704	708	703	717	722	704	712	720	720	20,000
TOTAL MINIDOKA CANALS	1647	1629	1732	1791	1748	2018	2122	2120	2102	2102	2122	2079	2112	2142	2066	2062	2074	2021	2019	2074	2064	2064	2068	2063	2077	2082	2064	2072	2080	2080	59,000
PA LATERAL	40	40	40	42	42	42	35	42	42	42	42	42	42	42	36	34	35	36	38	34	34	36	36	36	36	36	36	36	36	36	1,100
NORTH SIDE TWIN FALLS	2850	2300	2240	2090	2070	697	910	380	359	389	359	364	367	369	389	293	280	278	281	283	283	281	283	283	356	80	0	0	0	0	34,000
MILNER LOW LIFT	97	95	94	95	94	100	97	90	93	94	92	94	88	78	73	74	74	72	73	73	73	73	73	73	74	74	74	74	74	74	2,000
SOUTH SIDE TWIN FALLS	2770	2770	2700	2800	2830	2800	2800	2800	2806	2750	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	2740	82,000
TOTAL TWIN FALLS CANALS	5307	5205	5140	5027	4884	3639	3360	3314	3274	3233	3233	3240	3237	3233	3014	3140	3136	3114	3097	3050	3096	3050	3053	3052	3170	2894	2814	2812	2820	2814	107,000

1924 DISTRIBUTION WATER DISTRICT NO 36 — PLATE NO. 2

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM SNAKE RIVER FOR JULY 1924

NAME OF CANAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
MILEY	27	29	29	25	22	22	22	24	26	20	20	20	16	13	11	14	12	16	22	23	21	23	16	16	15	11	0	0	0	0	0	0
ANDERSON	111	302	321	321	313	329	329	341	300	292	290	281	265	283	292	293	294	316	334	339	326	313	303	307	300	292	268	253	238	236	243	9,546
BASIN DITCH & MILLON CREEK	283	276	276	271	260	254	247	240	238	240	236	243	245	240	240	244	245	243	254	254	245	254	254	254	254	254	254	254	254	254	254	7,812
ASHTON FERRO	139	12	11	12	109	108	107	109	108	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	3,320
CHANDLER	73	78	78	70	74	75	73	71	69	69	71	70	72	73	73	73	73	88	91	94	92	89	93	90	91	93	93	94	95	100	103	2,614
CLARK	0	0	0	0	1	1	1	2	1	0	1	1	1	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	7
HATTON & CRAIG	10	10	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	224
JEFFERSON CREEK	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	155
LYONS & RANO	0	3	5	6	6	6	5	4	4	3	3	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	93
MCNEAL ISLAND	44	46	46	47	48	50	50	50	50	50	50	50	50	48	49	47	48	50	50	48	48	48	50	50	48	47	47	47	47	47	47	1,494
MCNEAL ISLAND	0	0	10	10	9	9	9	10	7	9	9	9	6	5	4	4	3	2	3	1	1	9	8	8	9	9	9	9	9	10	11	210
MYERS	43	43	297	310	310	304	304	304	497	503	500	497	497	497	497	504	504	516	220	18	19	18	493	497	497	497	489	504	504	216	28	11,010
NAVARRO	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	62
NAVARRO	6	6	6	6	6	5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	161
OAKLEY	40	41	43	41	142	216	231	283	263	241	244	241	241	240	246	243	240	246	237	234	254	243	259	247	239	246	247	244	239	247	242	6,911
ROGERS	183	190	189	193	193	193	83	80	120	188	182	184	184	187	189	189	192	188	193	184	195	189	193	174	151	133	124	134	135	99	60	34	5	4,988
RUBY	9	9	9	9	11	8	7	7	7	6	7	6	7	10	9	8	9	9	9	0	1	0	1	1	1	1	1	1	1	1	1	180
RUTT & NORD	442	27	27	27	34	414	828	854	873	847	843	843	847	847	854	850	858	866	850	862	816	405	22	35	29	809	812	820	645	843	860	19,440
BURGESS	70	73	43	6	39	69	71	71	74	71	70	71	71	71	71	71	71	71	68	68	68	23	69	70	66	69	68	71	67	66	66	2,243
CLARK & EDWARDS	46	44	44	45	11	4	4	4	4	31	42	43	44	23	21	19	21	9	0	0	1	0	0	0	0	20	38	49	52	43	43	1,196
LONDON	8	9	9	8	3	1	1	1	1	0	9	6	3	4	5	4	5	2	0	0	0	0	0	0	0	6	15	10	6	10	16	130
JENNINGS	143	133	137	98	90	119	124	106	91	143	131	131	130	132	138	119	145	140	126	143	129	135	145	145	153	91	110	79	88	133	134	3,842
LA BELLE																																
CONSOLIDATED FEEDER	76	84	100	93	105	92	102	127	110	105	102	84	83	80	81	80	82	77	84	93	70	65	81	35	83	61	65	52	48	48	69	2,947
LENROOT	86	0	0	0	0	0	0	45	90	90	91	90	93	90	91	104	120	162	203	209	203	197	203	194	154	100	123	160	148	116	101	3,099
REID	188	185	167	137	148	140	161	123	97	95	99	92	100	94	99	101	100	93	139	152	148	140	158	163	163	90	43	41	55	118	112	3,719
TEXAS FEEDER	204	246	234	192	189	84	79	160	204	210	201	239	239	216	211	191	106	177	169	179	170	169	180	177	140	131	131	93	118	96	150	5,478
WILSON CREEK	25	19	18	14	16	14	11	12	16	9	4	2	2	2	12	14	12	13	12	13	14	12	6	6	5	2	1	0	0	0	2	278
WILL PETTINGER	2	2	2	2	2	2	2	2	2	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	1	0	0	0	0	2	62
LOWER ISLAND	389	386	392	374	316	242	239	234	227	249	254	225	233	222	215	295	308	340	354	371	349	354	349	358	340	207	131	70	58	148	173	8,630
ISLAND	237	237	215	208	226	173	93	176	201	123	116	101	99	82	104	92	103	98	94	95	97	93	81	9	82	92	39	29	28	57	12	4,041
RIGBY	156	156	158	64	66	139	135	154	154	153	154	158	158	158	158	161	154	154	161	157	158	146	148	136	153	152	151	135	126	135	137	4,591
RIGBY	28	28	28	29	30	0	0	0	19	23	27	28	29	23	0	0	9	28	33	28	27	28	30	31	9	0	0	0	0	0	0	565
RILEY	98	98	98	99	97	97	98	98	96	99	99	99	99	99	102	102	100	100	101	96	96	102	98	101	101	100	103	17	15	112	100	3,018
WEST LA BELLE	100	104	99	58	17	17	62	96	91	101	100	99	99	99	102	102	100	100	101	96	96	102	98	101	101	100	103	17	15	112	100	3,018
PARKS & LEWISVILLE	347	357	206	58	206	351	343	333	331	346	354	354	343	343	350	350	354	361	347	352	359	330	359	350	271	330	217	142	206	314	170	9,852
NORTH RIGBY	30	31	28	9	16	52	49	54	35	62	55	51	52	51	52	51	51	50	49	46	44	47	48	49	49	34	34	23	3	20	23	1,186
WHITE	11	9	11	11	9	9	9	9	6	7	9	11	10	2	6	6	7	7	12	11	10	11	12	10	10	10	2	4	6	4	7	10	2	274
BRAMWELL & ELLIS	7	7	8	8	9	9	7	6	6	6	7	7	8	8	8	3	3	5	5	0	0	4	3	5	5	4	4	3	3	3	6	155
INDEPENDENT	28	39	49	49	48	47	45	45	44	32	24	25	25	23	17	17	15	16	16	16	18	17	26	28	31	28	28	26	21	20	20	870
BUTTE & MARKET LAKE	0	81	360	363	346	340	372	360	339	344	300	292	298	186	0	0	0	0	126	253	233	240	240	150	0	0	0	0	109	143	108	3,655
CLIFFORD	73	74	59	7	22	24	71	75	76	74	74	74	72	72	72	69	69	69	66	64	69	70	78	78	76	76	76	78	73	73	72	2,294
STANFORD & BURGRAFF	6	5	6	6	5	4	6	5	5	7	7	7	7	7	7	2	0	5	5	4	4	6	7	7	7	7	7	7	7	7	7	206
BIG ISLAND	3	4	3	4	3	4	1	4	4	4	3	2	2	3	3	2	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	37
GREAT WESTERN	312	320	318	336	364	368	363	364	362	360	135	0	0	0	0	147	212	210	213	220	222	217	207	210	202	201	188	168	134	181	154	118	6220
PORTER	184	196	197	200	179	197	197	197	199	180	60	0	0	0	0	147	212	210	213	220	222	217	207	210	202	201	188	168	134	181	154	118	6220
IDAHO	36	31	36	33	36	705	697	735	734	730	720	720	734	729	742	739	740	732	727	725	734	719	718	691	693	662	668	638	617	662	692	19,117
IDAHO FALLS CITY MAIN	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	155
WOODVILLE	0	0	37	86	84	86	85	86	83	77	69	85	84	59	43	36	36	35	30	30	34	35	31	33	34	35	36	34	33	38	35	1,350
SNAKE RIVER VALLEY	285	294	295	297	295	473	552	544	533	519	512	504	497	473	293	290	444	335	332	306	301	291	259	302	281	244	242	215	210	230	235	9,413
TOTAL DIVERSIONS HEISE TO WOODVILLE	4637	4550	4547	4647	5459	6499	6944	7389	7308	7356	6869	6682	6692	6449	6383	6724	6971	7148	7055	6985	6796	6336	6295	6469	6431	6227	6258	5331	4993	5230	5243	225,816
RESERVATION	580	637	618	228	21	22	10	418	882	473	399	397	372	366	141	6	6	6	7	2	2	0	0	0	0	372	512	239	307	80	17	7,867
BLACKFOOT	346	122	0	0	0	0	92	359	350	330	343	284	252	243	361	357	363	366	369	370	370	369	123	0	0	0	0	0	0	0	0	3,963
NEW LAVARIDGE	107	113	112	114	90	37	76	144	141	143	117	120	110	107	130	105	78	83	92	100	101	101	102	98	98	89	84	84	81	17	10	2,967
PEOPLES	2	277	414	412	414	412	414	412	414	419	385	191	0	0	0	0	0	0	430	437	435	432	425	412	421	421	421	421	421	421	421	8,213
NAMPAH FALLS	850	833	841	841	836	844	841	844	844	847	810	841	832	847	847	835	864	863	868	863	870	864	864	864	864	864	864	864	864	864	864	25,920
GARRETT	3	150	133	132	95	90	111	96	109	68	16	73	73	7	90	108	112	107	109	103	110	110	111	108	110	109	109	109	109	109	109	3,330
NIELSEN HANSEN	9	6	7	6	7	7	7	12	8	9	0	10	5	5	15	15	19	14	14	17	14	15	15	10	14	8	0	0	0	0	0	279
RIVERSIDE	106	100	100	103	97	98	100	108	116	99	127	115	114	113	109	112	111	108	114	114	89	109	104	109	109	109	92	96	106	96	96	3,330
DANSKIN	170	177	170	169	161	172	170	161	179	162	130	137	136	142	146	179	180	174	188	174	166	175	181	170	177	170	173	164	158	160	165	5,155
TABOR	61	60	64	66	44	65	61	64	63	47	34	32	0	0	13	53	55	51	0	0	0	0	22	63	63	63	63	63	63	63	63	1,953
MCFARLICK	41	41	91	19	2	26	43	41	42	42	41	41	42	41	41	41	41	40	43	40	42	40	40	39	41	41	39	38	40	38	39	1,240
MATSON	96	97	97	99	97	97	98	98	96	99	95	97	96	95	96	95	96	95	94	92	93	90	91	94	92	102	96	89	85	93	96	2,976
PARSONS	22	22	22	23	22	22	22	21	22	22	22	21	22	23	22	22	21	21	21	25	22	21	21	22	22	22	21	22	22	22	22	682
TOTAL DIVERSIONS WOODVILLE-BLACKFOOT	2395	2637	2636	2212	1836	1853	2045	2786	2971	2746	2425	2379	2074	2054	2081	1945	1941	2007	2333	2331	2329	2324	2118	2002	2002	1822	1946	1980	1895	1887	1936	67,867
SOUTH MOSCHELLE	18	18	18	18	18	18	18	18	14	12	2	1	2	1	1	2	2	1	0	0	0	0	18	18	18	18	0	1	0	0	0	365
TOTAL DIVERSIONS BLACKFOOT-CLOVERS	18	18	18	18	18	18	18	18	14	12	2	1	2	1	1	2	2	1	0	0	0	0	18	18	18	18	0	1	0	0	0	365
NORTH SIDE MINIDOKA	1380	1380	1430	1440	1440	1420	1420	1440	1450	1460	1480	1480	1480	1480	1470	1450	1450	1450	1380	1380	1360	1330	1320	1300	1280	1270	1310	1340	1310	1310	1340	41,950
SOUTH SIDE MINIDOKA	777	802	813	829	840	842	842	837	873	932	980	944	838	845	859	868	879	879	873	830	820	801	791	795	801	792	795	835	835	830	850	25,983
TOTAL MINIDOKA CANALS	2157	2182	2238	2269	2280	2262	2262	2277	2323	2392	2460	2424	2318	2325	2329	2318	2329	2329	2253	2210	2180	2131	2111	2095	2081	2062	2105	2175	2145	2140	2190	67,933
FA LATERAL	25	0	0	0	0	10	40	40	46	45	48	40	40	40	40	40	40	40	40	40	40	30	0	0	0	0	0	0	0	0	0	1,000
NORTH SIDE TWIN FALLS	2170	1900	1850	1890	1900	1850	1900	364	395	417	439	396	359	359	354	359	359	359	360	359	361	363	363	363	363	363	363	363	363	363	363	11,490
MILNER LOW LIFT	72	76	71	71	70	70	68	72	72	71	71	72	72	72	71	70	70	72	51	42	40	43	43	43	43	43	43	43	43	43	43	1,440
SOUTH SIDE TWIN FALLS	2020	1930	1940	1930	1940	1930	1940	1940	1930	2500	2910	2860	2910	1930	1930	2000	2010	1970	1970	2000	2000	2000	1990	2000	1990	1990	2000	2000	2000	2000	2000	62,000
TOTAL TWIN FALLS CANALS	4287	3906	3901	3891	3910	3850	3948	2416	2415	3033	3428	3278	2886	2429	2424	2469	2481	2441	2436	2439	2441	2436	2396	2406	2396	2396	2443	2443	2443	2443	2443	75,490

PLATE NO. 31

U.S. GEOLOGICAL SURVEY WATER DISTRICT NO. 9

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM SNAKE RIVER FOR AUGUST 1924

NAME OF CANAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
BLISS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUHL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BURGESS	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	713
CASE & FALLON CREEK	343	344	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	10695
CLEAR LAKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLLINS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COLTHORP & CRAIG	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	93
CRAIGMONT	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	93
DEER & BEAR	42	42	42	41	41	42	42	42	42	43	43	43	43	44	43	44	43	43	40	40	40	40	40	40	36	35	35	35	37	40	41	1260
BUTLER ISLAND	10	10	10	10	10	9	8	8	8	8	8	8	8	8	8	8	8	7	7	8	8	9	8	8	8	8	8	10	8	8	8	260
BYRNE	28	28	28	19	308	497	497	493	480	506	510	516	234	23	25	25	22	20	302	503	503	203	21	17	17	17	21	25	23	28	23	5910
CALDWELL	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	93
CHANEY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	93
BAXTER	243	246	244	249	243	24	243	249	247	241	244	242	247	247	244	244	246	239	247	247	251	257	257	253	267	267	257	263	257	257	257	7733
PIOT	149	193	193	192	192	192	190	190	190	189	200	189	190	192	190	190	193	193	193	193	193	193	193	193	193	193	193	193	193	193	193	5983
PIOT 1	0	0	0	0	1	3	8	9	0	0	0	1	1	1	8	8	8	8	7	3	3	3	2	2	1	2	2	3	3	3	3	96
BITE & NORD	847	843	843	850	548	34	34	41	41	444	847	858	850	847	847	847	847	847	847	847	843	437	40	38	38	37	278	767	763	763	763	17776
BOWLES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLARK & EDWARDS	46	46	46	46	20	68	68	68	68	68	68	69	69	70	70	67	67	35	2	2	2	37	72	71	70	71	72	68	70	68	70	68	1930
CONDIE	14	0	25	44	45	44	44	25	0	0	0	0	0	0	10	10	10	49	48	48	48	46	47	46	15	0	0	21	47	48	46	772
EDWARDS	3	0	3	10	10	10	10	3	0	0	0	0	0	3	0	0	0	8	10	0	10	10	9	9	3	0	0	10	9	9	9	156
LA BELLE	133	139	124	140	134	161	135	150	132	133	126	143	140	116	119	126	116	130	123	116	116	153	122	130	146	140	116	114	119	137	187	4035
CONSOLIDATED FEEDER	78	68	85	65	87	45	92	89	92	90	92	84	81	92	86	63	74	30	83	90	91	79	77	70	68	57	69	67	70	70	78	2428
LEDGE	68	73	70	68	105	125	122	122	125	78	91	3	31	31	31	31	31	31	31	74	116	116	124	66	24	21	21	21	23	66	106	109	2587
REC	10	100	94	21	51	95	91	91	90	91	92	92	92	92	92	92	92	91	80	72	61	79	68	68	68	68	69	68	70	67	70	2598
TEXAS FEEDER	148	213	170	130	142	145	137	134	131	133	134	131	134	136	131	117	143	132	133	145	150	122	123	116	110	97	98	118	120	117	116	3800
NELSON CANAL	14	14	13	12	11	13	13	13	11	12	12	11	13	12	12	10	9	8	10	11	12	8	8	9	7	10	14	13	11	11	11	346
NILE PUTTINGER	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	62
LONE PINE	223	253	298	404	387	393	384	382	369	385	362	364	354	311	314	311	295	283	309	318	326	283	281	262	254	256	245	262	278	272	279	9744
LOWER	86	93	86	84	64	73	72	91	69	63	68	23	72	59	63	68	73	69	71	70	73	42	69	68	73	79	79	82	78	77	76	2314
MAIN	135	138	141	141	141	142	139	134	133	134	130	130	137	139	139	134	113	92	87	89	89	87	120	147	132	126	100	147	153	157	160	4330
MILNER	0	0	20	30	35	33	36	35	14	0	0	0	23	37	35	27	13	14	0	0	0	19	33	30	17	0	0	0	0	0	0	449
OLIVER	104	100	99	100	104	109	100	100	100	77	82	100	98	100	98	92	91	89	88	92	86	70	90	90	81	84	67	70	71	75	76	2762
NEAT LA BELLE	354	354	347	333	338	355	347	347	341	258	233	342	345	331	327	313	302	314	299	321	279	214	340	333	329	314	233	238	235	260	304	9607
PEORIA & LENSVILLE	44	44	44	44	43	37	44	44	44	43	32	32	50	54	49	42	44	42	43	47	45	30	60	57	44	50	42	36	38	48	54	1405
NORTH BIGBY	16	18	12	11	11	11	12	12	12	9	7	13	10	13	11	8	8	6	6	12	8	5	5	7	6	5	4	4	2	2	5	10	335
WHITE	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	133
BRADWELL & ELLIS	8	9	9	9	9	9	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	180
INDEPENDENT	21	27	29	27	28	27	28	22	21	21	21	22	21	20	25	33	35	33	32	37	37	32	32	33	32	30	29	30	31	32	33	880
BOTTE & MARKET LAKE	145	141	149	148	147	147	141	142	143	147	148	148	147	147	143	146	147	151	150	148	150	147	147	155	147	148	148	139	128	15	36	4354
KENNEDY & BURGHART	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	6	6	6	5	5	5	6	6	6	6	162
NEW SHARE	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	0	0	0	2	2	2	2	2	2	0	0	1	0	1	1	1	31
GREAT WESTERN	271	278	286	269	292	290	288	290	286	286	285	285	284	282	280	280	278	276	279	274	272	269	266	265	264	249	247	264	265	248	242	8458
PORTER	123	124	35	122	123	124	121	124	122	124	124	119	119	119	121	124	118	124	121	119	120	102	125	126	121	116	121	119	121	124	122	3890
RANO	497	494	518	496	483	484	480	481	476	479	59	531	541	577	584	58	584	579	537	481	505	519	515	477	473	473	493	491	486	484	491	17455
TWIN FALLS CITY MAIN	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	124
WOODVILLE	32	33	36	41	36	32	32	31	36	36	31	36	34	31	29	28	59	29	22	69	33	46	18	3	2	2	2	2	2	2	2	993
SNAKE RIVER VALLEY	32	30	111	335	329	326	330	327	328	429	422	339	322	329	402	396	360	357	389	378	387	381	389	392	316	262	309	309	318	318	316	10114
TOTAL DIVERSIONS HEAD TO MILNER	6355	5830	5738	6003	6178	5939	5912	5838	5813	6128	6048	6115	6032	5825	5796	5732	5596	5538	5867	6118	6166	5314	4739	4978	4804	4783	4772	5168	5166	5334	5271	175501
RESERVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLACKFOOT	192	161	0	0	0	60	262	252	237	240	242	240	240	80	0	0	0	0	0	0	323	357	314	287	290	290	268	96	0	0	0	4373
NEW LAVENDER	0	93	82	93	97	96	100	96	76	86	80	83	81	93	83	82	76	73	76	76	74	81	81	79	85	90	82	81	18	78	73	34	2149
PEORIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119	172	182	172	174	174	58	0	0	0	0	2531
AMERICAN FALLS	297	297	470	702	858	875	423	702	706	741	722	351	799	797	796	726	238	0	0	163	346	209	253	232	249	436	558	558	423	440	402	12748
CORBETT	20	14	4	32	81	66	76	77	73	99	90	4	0	0	0	0	8	17	57	34	20	10	20	67	9	94	81	94	93	84	38	2	1445
KLEIN HANSEN	0	0	0	0	0	0	1	1	20	17	19	10	13	18	16	8	11	11	11	1	1	1	1	0	8	7	5	6	10	9	10	11	251
RIVERSIDE	20	20	68	111	103	112	107	103	106	100	103	99	100	100	103	99	102	100	100	89	8	57	67	103	102	100	99	103	106	103	100	2800
GRIDLEY	44	30	13	131	150	134	182	122	85	121	131	164	117	168	193	174	220	187	190	30	123	155	64	3	116	149	131	130	132	145	164	4519
TWIN	0	0	0	0	9	51	49	63	71	39	35	32	46	35	38	32	41	27	38	34	27	32	18	36	43	43	40	25	30	41	45	1000
HERRITAGE	8	0	41	44	37	52	50	60	68	47	69	68	48	41	35	49	50	53	54	57	26	38	12	49	43	43	35	28	18	21	39	41	1333
MATSON	21	0	84	14	90	36	125	139	134	141	138	137	119	97	142	160	141	127	133	41	6	47	14	120	103	72	54	15	37	54	95	3927
MARGUET	0	0	13	32	20	41	36	32	32	32	32	31	33	32	32	30	33	32	32	32	27	29	2	15	32	20	13	3	3	17	31	786
TOTAL DIVERSIONS MILNER TO BLACKFOOT	671	561	722	313	455	769	1262	737	718	713	382	1388	1656	1455	1468	1328	917	669	708	854	1084	1220	1055	1220	943	1357	1222	1063	977	911	963	37097
SMITH FALLEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	21
TOTAL DIVERSIONS BLACKFOOT TO CLOSURE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH SIDE MINIDOKA	1330	1310	1320	1300	1250	1240	1240	1260	1270	1300	1350	1310	1270	1020	26	0	0	0	0	0	151	796	1020	1000	961	925	608	0	0	0	0	23253
NORTH SIDE MINIDOKA	845	842	842	840	834	818	786	748	743	740	733	743	748	688	659	613	582	549	516	498	508	532	532	539	494	453	411	394	373	365	344	19349
TOTAL MINIDOKA CANALS	2176	2152	2162	2140	2084	2058	2026	2008	2013	2040	2083	2053	2018	1708	685	613	582	549	516	498	658	1328	1552	1539	1455	1378	1019	394	373	365	344	42602
AM LEDGE	40	40	40	40	37	36	34	33	34	33	0	0	0	0	0	26	26	26	26	26	26	26	26	27	28	29	34	33	32	34	34	34	965
NORTH SIDE TWIN FALLS	319	450	450	445	424	418	411	414	422	240	244	231	233	233	247	260	260	266	256	265	262	265	276	278	276	286	319	316	312	312	308	8768
CLOVER LOW LIFT	53	52	52	52	52	52	52	51	51	52	53	51	51	51	52	53	51	51	51	49	50	48	51	50	50	49	51	51	51	51	51	51	1564
SOUTH SIDE TWIN FALLS	1930	1930	1960	1960	1930	1890	1850	2310	2330	2330	2470	2520	2610	2770	2790	2780	2730	2730	2730	2790	2780	2780	2430	2260	2240	2240	2240	2230	2240	2250	2240	2240	72440
TOTAL TWIN FALLS CANALS	2302	2432	2462	2457	2406	2360	2347	2808	2837	2622	2767	2802	2894	3054	3089	3119	3067	3073	3063	3130	3118	3119	2787	2588	2566	2576	2610	2630	2636	2646	2623	2623	83277

U.S. RECLAMATION SERVICE DISTRICT NO. 36

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM SNAKE RIVER FOR SEPTEMBER 1924

NAME OF CANAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL
BIGLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANDERSON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRANE CREEK & WILLOW CREEK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRYSTAL SPRING	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEER PARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DILLON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HATTON & EDLO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JEFFERSON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE & HAYS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROGERS & MAYO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SALEM ISLAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STEELE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STERLING	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WILSON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACEQUIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BOWER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FOLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AITE & NORD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BURGESS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLARK & EDWARDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOMDEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JENNINGS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LA BELLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONSOLIDATED FELDER	70	74	70	62	59	59	46	43	42	41	41	42	45	41	42	45	36	30	28	24	28	36	42	44	44	42	41	40	38	36	1236
LENROOT	106	97	87	87	82	81	74	68	68	67	63	63	63	60	56	62	49	46	40	37	41	53	56	58	56	56	54	54	52	52	1601
REID	68	66	68	67	65	68	68	65	74	68	67	63	62	61	59	63	51	38	30	26	31	41	50	50	50	49	47	47	47	47	1491
TEXAS FELDER	111	117	116	107	85	82	70	50	50	44	43	39	35	32	26	28	20	16	15	14	23	31	30	30	41	43	43	41	37	29	1407
NELSON COREY	11	11	11	10	10	10	9	12	10	10	9	9	8	8	10	9	8	8	6	5	5	8	9	11	11	9	9	9	8	6	270
HILL BETTINGER	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	54
LONG ISLAND	256	244	242	254	231	227	210	187	181	178	175	170	173	166	157	157	147	143	129	137	137	165	176	167	183	187	164	158	150	144	5464
ISLAND	76	78	76	75	74	74	69	64	63	61	61	58	50	49	46	47	43	39	37	38	35	42	43	49	49	47	68	66	64	62	1705
RIGBY	140	126	126	124	119	117	112	104	97	89	85	83	79	91	86	86	120	125	162	169	148	142	148	147	147	144	111	104	102	101	3224
DILYS	0	0	0	15	67	17	21	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEST LA BELLE	75	82	82	76	77	75	71	68	67	62	60	58	53	52	51	50	62	60	73	74	80	77	79	78	76	78	78	73	75	71	2204
PARKS & LEMHISVILLE	294	313	296	287	282	274	251	201	234	207	198	189	171	150	136	150	198	203	267	239	236	211	217	223	227	225	223	217	211	214	6774
NORTH RIGBY	50	52	45	49	48	44	45	44	39	30	23	21	15	13	14	12	16	18	47	50	54	49	51	46	46	46	46	46	43	41	1161
WHITE	17	13	11	4	4	3	3	3	3	3	3	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	93
BRAMWELL & ELLIS	4	4	4	4	4	3	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INDEPENDENT	33	33	34	28	21	21	21	20	20	19	19	20	18	18	18	18	16	16	16	13	14	14	12	10	11	12	14	16	16	16	506
BUTTE & MARKET LAKE	0	0	0	40	139	101	101	99	100	95	70	0	0	0	0	0	0	0	0	0	10	1	30	88	86	78	87	33	39	39	1393
OAKLEY	61	42	61	60	51	41	44	52	55	61	60	60	60	60	60	60	61	61	61	61	61	61	61	54	52	51	52	24	53	53	1710
KENNEDY & BURGRAFF	6	6	6	5	5	5	3	5	2	1	1	1	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	92
BEAR ISLAND	0	2	3	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GREAT WESTERN	241	211	153	140	126	132	134	132	132	140	147	141	141	139	138	138	130	132	122	115	120	108	115	109	107	111	114	114	115	112	4101
PORTER	128	129	78	37	45	42	41	46	40	40	40	39	40	40	40	40	35	38	35	36	35	38	41	43	44	44	43	44	44	44	1271
IDAHO	429	441	448	480	448	461	428	489	486	485	488	495	492	455	436	440	441	454	447	470	502	554	548	531	564	545	542	544	542	540	14,000
IDAHO FALLS CITY MAIN	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	120
WOODVILLE	2	36	63	63	68	64	53	4	2	2	2	2	2	24	37	31	30	40	37	37	5										434
SNAKE RIVER VALLEY	327	332	339	339	332	338	338	334	327	320	313	316	312	309	304	298	308	314	308	313	328	340	249	208	211	213	211	108	209	208	8,836
TOTAL DIVERSIONS HEISE TO WOODVILLE	3008	4704	4619	4321	4235	4224	4037	4003	4011	4042	4002	3828	3742	3713	3850	3958	3937	3913	3910	3760	3610	3757	3681	3548	3463	3461	3358	3444	3512	3397	117164
RESERVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLACKFOOT	0	60	242	238	243	240	240	241	242	232	242	241	268	244	268	250	243	123	0	0	0	0	0	130	217	215	215	208	215	207	4367
NEW LAFAYETTE	85	87	83	83	80	81	80	80	81	84	80	79	77	69	69	69	73	70	69	55	68	86	72	91	85	85	85	85	85	83	2397
PEOPLES	0	54	178	183	180	185	182	180	169	166	164	24	16	19	17	19	13	10	13	16	13	60	303	290	477	483	480	480	480	480	4,103
AMERICAN FALLS	419	419	244	244	177	99	213	211	211	151	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,420
CORBETT	1	1	1	1	1	61	89	86	87	65	97	103	103	91	71	66	64	54	77	81	95	91	107	93	89	100	98	98	102	102	2,327
NIELSEN HANSEN	4	4	3	3	6	4	2	2	3	10	11	12	10	8	5	5	3	3	10	0	0	3	3	3	3	4	4	4	4	4	127
RIVERSIDE	105	105	99	106	105	103	96	100	90	102	100	102	102	96	81	80	83	69	93	91	85	64	76	75	74	75	73	73	77	78	2,426
ERNSTIN	167	176	166	178	179	190	162	182	156	126	124	134	140	132	124	116	108	97	135	135	(4)	143	142	108	98	100	102	100	107	107	3,970
THEDO	39	41	38	38	41	38	32	38	27	27	27	28	62	32	36	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCCARTNICK	30	44	33	43	44	48	39	45	42	33	27	32	54	51	25	20	11	8	15	12	44	46	66	45	30	34	34	34	40	40	1,091
WATSON	94	107	71	112	126	106	78	102	95	98	69	30	95	87	74	20	31	25	34	23	81	92	113	122	38	44	28	27	33	16	1,784
PARSONS	31	36	17	37	40	34	30	34	33	31	27	31	27	23	22	21	1	1	1	24	24	17	8	19	12	7	18	13	13	16	1,784
TOTAL DIVERSIONS WOODVILLE TO BLACKFOOT	1035	1162	1169	1289	1225	1187	1252	1305	1248	1128	956	910	938	855	810	748	682	499	566	540	691	838	1013	1298	1292	1376	1317	1119	1032	930	30,455
SMITH MAXWELL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL DIVERSIONS BLACKFOOT TO ELDORADO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NORTH SIDE MINIDOKA	0	6	6	85	145	204	248	245	245	246	245	246	246	248	246	246	241	239	236	243	245	246	310	310	304	308	306	216	310	304	7036
SOUTH SIDE MINIDOKA	331	322	321	322	317	316	311	295	278	266	259	250	245	240	231	93	101	93	111	111	172	168	184	173	154	158	130	146	181	182	6,357
TOTAL MINIDOKA CANALS	331	328	327	407	462	520	559	540	523	512	504	496	491	488	482	439	442	432	413	420	417	414	494	483	458	466	436	362	491	486	13,393
PA LATERAL	34	34	33	6	2	0	21	28	28	27	32	34	34	34	34	34	25	0	0	0	0	0	0	0	0	0	0	0	0	0	425
NORTH SIDE TWIN FALLS	290	292	284	1310	1806	1500	1492	1504	1281	1226	1212	1214	1281	1265	1285	1281	1280	1314	1310	1316	1322	1326	1316	1316	1314	1314	1312	1324	1326	1332	43,909
TWIN LOW LIFT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH SIDE TWIN FALLS	2140	2140	2140	1160	321	791	2160	2410	2400	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	2390	72,281
TOTAL TWIN FALLS CANALS	2430	2432	2424	2470	2127	2291	3673	3938	3681	3616	3602	3604	3671	3655	3675	3671	3670	3704	3700	3706	3712	3716	3706	3706	3704	3704	3702	3714	3716	3722	116,190

The Morgan and Rostan Canals were supplied from adjacent canal systems during the entire regulation period so have been omitted altogether from the canal summaries.

Laterals which divert from several of the canals above the main gaging stations are, in these tables, in each case included with the flow in the main canal.

The canals are listed by divisions, each of which represents the territory covered by a deputy water master or river rider. The canals of each division in general are shown in down stream order.

RIVER DATA

The extensive tables found on Plates VIII, IX and X summarize data in regard to total flow, normal and stored water segregation, diversions, losses and gains for each section of the river between Jackson Lake and Milner.

These tables are prepared upon the following time interval basis:

Time from Jackson Lake In Hours	Gaging Station	Period used for comparable daily means
0	Jackson Lake and Moran	Day ending at 4 a.m.
24	Heise	Day ending at 4 a.m. 1st day following
28	Lorenzo and Rexburg	Day ending at 8 a.m. 1st day following
42	Woodville	Day ending at 10 p.m. 1st day following
50	Blackfoot Bridge	Day ending at 6 a.m. 2nd day following
54	Blackfoot (Cloughs)	Day ending at 10 a.m. 2nd day following
68	Neeley	Day ending at 12 midnight 2nd day following
92	Minidoka	Day ending at 12 midnight 3rd day following
116	Milner	Day ending at 12 midnight 4th day following

1924 DISTRIBUTION WATER DISTRICT NO 36

DATE	JACKSON LAKE			MORAN				TWIN LK	
1924	GAGE	CAPAC FT	DRAFT AF	GAGE	DISCH	STD	NAT	DISC	MORAN
May 17	50.44	402740		0.30	35				
18	50.92	413470		0.30	35				
19	51.41	424510		0.30	35				
20	51.90	435560		0.30	35				
21	52.39	446680		0.30	35				
22	52.83	456690		0.30	35				
23	53.25	466280		0.30	35				
24	53.64	475220		H.D.	35				
25	53.80	478890		H.D.	2370				
26	53.86	480260		H.D.	3800				
27	53.83	479570	690	H.D.	4360	348	4012		
28	53.75	477740	1830	H.D.	4840	923	3917		
29	53.52	472470	5270	H.D.	5780	2657	3123		
30	53.17	464450	8020	H.D.	6810	4043	2767		
31	52.77	455320	9130	H.D.	7220	4603	2617		
Jun 1	52.36	446000	9320	H.D.	7280	4699	2581		
2	52.13	440770	5230	H.D.	5290	2637	2653		
3	52.11	440320	450	H.D.	3470	227	3243		
4	52.29	444410	-4090	H.D.	1800	-2062	3862		
5	52.59	451230	-6820	H.D.	536	-3438	3974		
6	52.82	456460	-5230	H.D.	894	-2637	3531		
7	52.97	459870	-3410	H.D.	1780	-1719	3499		
8	52.97	459870	0	H.D.	2800	0	2800		
9	52.97	459870	0	H.D.	2200	0	2200		
10	53.01	460780	- 910	H.D.	1630	- 459	2089		
11	53.01	460780	0	H.D.	1980	0	1980		
12	53.07	462160	-1380	H.D.	1400	- 696	2096		
13	53.23	465820	-3660	H.D.	533	-1845	2378		
14	53.43	470410	-4590	H.D.	564	-2315	2879		
15	53.64	475220	-4810	H.D.	565	-2425	2990		
16	53.84	479800	-4580	H.D.	561	-2309	2870		
17	54.01	483700	-3900	H.D.	537	-1966	2503		
18	54.12	486240	-2540	H.D.	1140	-1281	2421		
19	54.15	486930	- 690	H.D.	2000	- 348	2348		
20	54.15	486930	0	H.D.	1970	0	1970		
21	54.11	486010	920	H.D.	2190	464	1726		
22	54.04	484390	1620	H.D.	2590	817	1773		
23	53.92	481640	2750	H.D.	3280	1386	1894		
24	53.68	476140	5500	H.D.	4710	2773	1937		
25	53.39	469490	6650	H.D.	5250	3353	1897		
26	53.16	464220	5270	H.D.	4670	2657	2013		
27	52.97	459870	4350	H.D.	3990	2193	1797		
28	52.80	456010	3860	H.D.	3660	1946	1714		
29	52.59	451230	4780	H.D.	4040	2410	1630		
30	52.28	444180	7050	H.D.	5160	3554	1606		
Jul 1	51.89	435330	8850	H.D.	6020	4462	1558		
2	51.42	424730	10600	H.D.	6810	5344	1466		

DATE	HEISE						MORAN-HEISE						LORENZO	H-L	REXBURG	
1924	GAGE	DISCH	*RILEY	STD	T LK	NAT	TOT GN	L STD	L T L	GN NAT	STD	T LK	L STD	L T L	GAGE	DISC
May 18	5.37	15000	15036				15001								2.40	59
19	5.30	14720	14756				14721								2.49	63
20	5.18	14250	14285				14250								2.56	66
21	5.11	13980	14012				13977								2.52	64
22	5.07	13820	13849				13814								2.36	57
23	4.97	13440	13467				13432								2.66	71
24	4.62	12110	12135				12100								2.62	69
25	4.48	11600	11622				11587								2.40	59
26	4.99	13510	13533				11163								2.38	58
27	5.34	14880	14905				11105								2.53	65
28	5.22	14410	14434	339		14095	10074	9		10083	329		10		2.39	58
29	5.16	14170	14194	900		13294	9354	23		9377	873		27		2.33	56
30	5.12	14020	14030	2591		11439	8250	66		8316	2513		78		2.27	53
31	5.17	14210	14210	3942		10268	7400	101		7501	3824		118		2.21	51
Jun 1	5.18	14250	14250	4488		9762	7030	115		7145	4353		135		2.10	46
2	5.15	14140	14140	4582		9558	6860	117		6977	4445		137			52
3	4.92	13250	13250	2571		10679	7960	66		8026	2494		77			58
4	4.65	12220	12220	221		11999	8750	6		8756	214		7			64
5	4.65	12220	12221	- 2010		14231	10421	- 52		10369	-1950		- 60		2.65	70
6	4.36	11160	11160	-3352		14512	10624	- 86		10538	-3251		-101		2.86	81
7	4.29	10900	10900	-2571		13471	10006	- 66		9940	-2494		- 77		2.75	76
8	4.30	10940	10940	-1676		12616	9160	- 43		9117	-1626		- 50		2.53	66
9	4.21	10620	10633	0		10633	7833	0		7833	0		0		2.41	60
10	3.94	9680	9704	0		9704	7504	0		7504	0		0		2.32	56
11	3.72	8940	8959	- 448		9407	7329	- 11		7318	- 435		- 13		2.24	53
12	3.69	8840	8858	0		8858	6878	0		6878	0		0		2.17	50
13	3.88	9470	9493	- 679		10172	8093	- 17		8076	- 659		- 20		2.11	48
14	3.80	9200	9218	-1799		11017	8685	- 46		8639	-1745		- 54		2.11	48
15	4.08	10160	10180	-2257		12437	9616	- 58		9558	-2189		- 68		2.20	51
16	4.22	10650	10667	-2364		13031	10102	- 61		10041	-2293		- 71		2.36	58
17	4.13	10340	10361	-2251		12612	9800	- 58		9742	-2183		- 68		2.28	55
18	3.98	9810	9835	-1917		11752	9298	- 49		9249	-1859		- 58		2.18	51
19	3.96	9740	9765	-1249		11014	8625	- 32		8593	-1212		- 37		2.14	49
20	3.93	9640	9665	- 339		10004	7665	- 9		7656	- 329		- 10		2.17	50
21	3.72	8940	8962	0		8962	6992	0		6992	0		0		2.15	49
22	3.62	8610	8624	452		8172	6434	12		6446	433		19		2.13	49
23	3.77	9100	9104	797		8307	6514	20		6534	756		41		2.08	47
24	4.02	9950	9952	1352		8600	6672	34		6706	1274		78		2.06	46
25	4.42	11370	11375	2704		8671	6665	69		6734	2531		173		2.03	45
26	4.55	11860	11864	3269		8595	6614	84		6698	3073		196		2.00	43
27	4.49	11630	11635	2591		9044	6965	66		7031	2472		119		1.93	41
28	4.32	11010	11025	2138		8887	7035	55		7090	2061		77		1.88	39
29	4.12	10300	10324	1897		8427	6664	49		6713	1810		87		1.91	40
30	4.08	10160	10185	2350		7835	6145	60		6205	2186		164		1.87	39
Jul 1	4.27	10830	10857	3465		7392	5697	89		5786	3167		298		1.89	39
2	4.37	11190	11214	4351		6863	5194	111		5305	4064		287		1.90	40
3	4.58	11970	11999	5210		6787	5189	134		5323	5043		167		1.89	39

DAILY SUMMARY OF DATA AT AND BETWEEN

DATE	DIV HEISE-WOOD				WOOD	WOODVILLE				LOR-WOOD		HEISE-
1924	TOTAL	STD	TL	NAT	TH. BAL	GAGE	DISCH	STD	NAT	LSSTD	LTL	TOTGN
May M	9263				6364	7.28	7120					756
20	8843				6545	7.25	7020					475
21	8751				6197	7.19	6830					633
22	8420				6237	7.18	6800					563
23	8100				6323	7.22	6920					597
24	7877				6301	7.22	6920					619
25	7749				5078	6.94	6040					962
26	7364	- 473		7837	4849	6.78	5560	473	5087			711
27	6829	-1207		8036	7287	7.28	7120	1207	5913			- 167
28	6308	-1793		8101	9247	7.83	8980	1793	7187			- 267
29	5880	-2251		8131	9141	7.97	9470	2578	6892	2		329
30	5331	-2651		7982	9424	8.12	10010	3520	6490	4		586
31	5120	-2817		7937	9446	8.17	10190	5317	4873	13		744
Jun 1	5120	-2706		7826	9601	8.20	10300	6511	3789	19		699
2	5061	-2729		7790	9655	8.30	10670	7060	3610	22		1015
3	4594	-2716		7310	10072	8.26	10520	7139	3381	22		448
4	5153	-2423		7576	8683	7.93	9330	4904	4426	13		647
5	5627	-2014		7641	7239	7.61	8210	2227	5983	1		971
6	6296	-1328		7624	6631	7.49	7810	- 612	8422	- 10		1179
7	6550	-1164		7714	5426	7.05	6380	-2071	8451	- 16		954
8	6521	-1212		7733	5144	6.97	6140	-1269	7409	- 13		996
9	6526	-1175		7701	5077	6.94	6040	- 443	6483	- 8		963
10	6621	-1104		7725	4621	6.80	5620	1104	4516	0		999
11	5993	-1447		7440	4280	6.67	5230	1447	3783	0		950
12	5743	-1567		7310	3752	6.52	4800	1134	3666	- 2		1048
13	5997	-1526		7523	3368	6.39	4430	1526	2904	0		1062
14	5460	-1984		7444	4515	6.51	4770	1328	3442	- 3		255
15	5523	-2204		7727	4177	6.53	4830	468	4362	- 9		653
16	5637	-2084		7721	5062	6.83	5710	- 94	5804	- 11		648
17	6014	-1719		7733	5240	6.90	5920	- 562	6482	- 12		680
18	6095	-1537		7632	4818	6.78	3560	- 635	6195	- 11		742
19	6296	-1277		7573	4050	6.65	5180	- 373	5753	- 9		1130
20	6694	- 911		7605	3565	6.49	4710	- 295	5005	- 6		1145
21	6267	-1176		7443	3905	6.45	4600	849	3751	- 2		695
22	6001	-1187		7188	3459	6.35	4320	1187	3133	0		861
23	6100	-1127		7227	3014	6.26	4090	1558	2532	2		1076
24	6335	- 822		7157	3239	6.24	4030	1574	2456	4		791
25	6820	- 292		7112	3594	6.35	4320	1560	2760	6		726
26	6708	- 250		6958	5118	6.70	5320	2768	2552	13		202
27	6113	- 870		6983	6190	6.99	6200	3928	2272	15		10
28	4795	-1980		6775	7253	7.26	7050	4440	2610	12		- 203
29	4513	-2247		6760	6906	7.31	7210	4298	2912	10		304
30	4839	-1882		6721	5890	7.12	6600	3683	2917	9		710
Jul 1	4631	-2144		6781	5939	6.99	6200	4319	1881	11		261
2	4550	-2154		6704	6705	7.31	7210	5305	1905	16		505
3	4947	-1737		6684	6668	7.37	7410	5781	1629	20		742
4	4647	-1890		6537	7750	7.64	8320	6908	1412	25		570

WOODVILLE				DIV WOOD-BLACK			BLACK	BLACKFOOT BRIDGE				WOOD-BLACK		
LSSTD	LTL	GN	NAT	TOTAL	STD	NAT	TH. BAL	GAGE	DISCH	STD	NAT	TOTGN	LSTD	GN
		756		3517			3603		3380			- 223		
		475		3463			3557		3320			- 237		
		633		3501			3329		3070			- 259		
		563		3412			3388		3130			- 258		
		597		3292			3628		3380			- 248		
		619		3256			3664		3490			- 174		
		962		3131			2909		2770			- 139		
		711		3080	- 13	3093	2480		2250	457	1793	- 230	29	-
		- 167		3237	- 61	3298	3883		3610	1192	2418	- 273	76	-
		- 267		3247	- 98	3345	5733		5560	1778	3782	- 173	113	-
		341		3274	- 101	3375	6196		6210	2518	3692	14	161	
12		617		3156	- 113	3269	6854		6770	3415	3355	- 84	218	
31		835		2821	- 403	3224	7369		7260	5377	1883	- 109	343	
91		836		2381	- 812	3193	7919		7700	6884	816	- 219	439	
137		1172		1602	-1720	3322	9068		8800	8253	547	- 268	527	
157		607		1202	-2117	3319	9318		8780	8701	79	- 538	555	
159		737		1185	-2122	3307	8145		7780	6604	1176	- 365	422	
90		979		1169	-2119	3288	7041		6710	4085	2625	- 331	261	-
8		1109		1969	-1354	3323	5841		5330	697	4633	- 511	45	-
70		837		2269	- 920	3189	4111		3850	-1082	4932	- 261	- 69	-
117		906		2276	- 920	3196	3864		3600	- 328	3928	- 264	- 21	-
90		905		2687	- 488	3175	3353		3010	42	2968	- 343	3	-
58		999		2906	- 210	3116	2714		2470	1235	1235	- 244	79	-
0		950		2918	- 187	3105	2312		2120	1536	584	- 192	98	-
0		1033		2780	- 206	2986	2020		1830	1260	570	- 190	80	-
15		1062		2649	- 189	2838	1781		1620	1612	8	- 161	103	-
0		232		2726	- 334	3060	2044		1770	1562	208	- 274	100	-
23		590		2308	- 767	3075	2522		2180	1161	1019	- 342	74	-
63		569		2818	- 338	3156	2892		2540	229	2311	- 352	15	-
79		597		2810	- 369	3179	3110		2720	- 181	2901	- 390	- 12	-
83		663		2243	- 920	3163	3317		3020	268	2752	- 297	17	-
79		1063		1937	-1186	3123	3243		2870	576	2294	- 373	37	-
67		1102		1884	-1192	3076	2826		2500	843	1657	- 326	54	-
43		683		1942	-1123	3065	2658		2390	1854	536	- 268	118	-
12		861		1854	-1075	2929	2466		2240	2126	114	- 226	136	-
0		1097		1409	-1452	2861	2681		2440	2829	- 389	- 241	181	-
21		836		1026	-1871	2897	3004		2730	3238	- 508	- 274	207	-
45		810		1685	-1207	2892	2635		2200	2601	- 401	- 435	166	-
84		388		2283	273	2010	3037		2700	2345	355	- 337	150	-
186		221		2415	2	2413	3785		3440	3690	- 250	- 345	236	-
211		- 72		2364	141	2223	4686		4200	4041	159	- 486	258	-
131		391		2278	- 376	2654	4932		4430	4394	36	- 502	280	-
87		806		2267	- 399	2666	4333		3740	3837	- 97	- 593	245	-
96		436		2393	- 90	2483	3807		3280	4144	- 864	- 527	265	-
175		819		2637	810	1827	4573		4030	4225	- 195	- 543	270	-
214		1049		2636	830	1806	4774		4320	4654	- 334	- 454	297	-
307		762		2212	808	1404	6108		5770	5734	36	- 338	366	
192														

E RIVER GAGING STATIONS FROM JACKSON LAKE WYOMING TO MILNER IDAHO

RR DIV	BLACK RIVER			S-M	CLOUGH	CLOUGHS				B-C	DATE	NEELEY				C-N	DATE	LAKE WALCOTT			NS MINC		SS MINC		NS+SS MINCANS			MIN
	GAGE	DISC	BLACK	CAN	TH BAL	GAGE	DISCH	STO	NAT	GAIN	1924	GAGE	DISCH	STO	NAT	GAIN	1924	GAGE	CAPAC FT	DRAFT	GAGE	DISCH	GAGE	DISCH	TOTAL	STD	NAT	TH BAL
				12		4.46	33.50				Mar 20	4.37	3670			320	Mar 21	40.94	47890	429	9.38	1480	5.20	935	2415			1684
				12		4.42	3280				21	5.08	5510			2230	22	40.92	49680	106	9.40	1490	5.22	941	2431			3185
				12		4.29	3040				22	5.11	5600			2560	23	40.91	49570	56	9.41	1490	5.23	950	2440			3216
				12		4.43	3290				23	5.11	5600			2310	24	40.88	49260	156	9.41	1490	5.26	953	2443			3313
	6.46	303	3683	12	3671	4.62	3650			-21	24	5.27	6070			2420	25	40.89	49360	-50	9.33	1470	5.21	938	2408			3612
	6.48	308	3798	15	3783	4.62	3650			-133	25	5.17	5770			2120	26	40.75	47880	746	9.40	1490	5.23	944	2434			4082
	5.50	95	2865	14	2851	4.16	2810			-41	26	4.95	5150			2340	27	40.54	45670	1114	9.35	1480	5.16	921	2401			3863
0	4.45	11	2261	10	2251	3.82	2270	457	1813	19	27	4.80	4740	457	4283	2470	28	40.50	45240	217	9.33	1470	5.16	924	2394	1511	883	2563
0	4.50	13	3623	10	3613	4.53	3480	1192	2288	-133	28	5.25	6010	1192	4818	2530	29	40.66	46930	-348	H D	1180	5.18	930	2110	2110 est	0	3552
0	4.50	13	5573	18	5555	5.37	5220	1778	3442	-335	29	5.75	7600	1778	5822	2380	30	40.97	50210	-1654	6.00	709	4.68	791	1500	1500 est	0	4446
0	4.48	12	6222	18	6209	5.68	5990	2518	3472	-214	30	6.03	8540	2518	6022	2550	31	41.39	54720	-2274	6.58	826	4.52	748	1574	1574 est	0	4692
0	5.70	125	6895	24	6871	5.94	6710	3415	3295	-161	31	6.17	9040	3415	5625	2330	Jun 1	41.89	60100	-2712	7.04	923	4.43	724	1647	1647 est	0	4681
0	5.31	72	7332	18	7314	6.12	7240	5377	1863	-74	Jun 1	6.30	9500	5377	4123	2260	2	42.46	66330	-3141	7.02	918	4.38	711	1629	1629 est	0	4730
0	5.20	61	7761	18	7743	6.25	7640	6884	756	-103	2	6.40	9870	6884	2986	2230	3	43.14	73840	-3786	7.42	1010	4.42	722	1732	1732	0	4352
0	5.00	44	8844	18	8826	6.63	8880	8253	627	54	3	6.73	11120	8253	2867	2240	4	43.89	82300	-4265	7.74	1080	4.38	711	1791	1791	0	5064
0	4.75	26	8806	18	8788	6.63	8880	8701	179	92	4	6.68	10920	8701	2219	2040	5	44.43	88550	-3151	7.89	1110	4.09	638	1748	1748	0	6021
0	4.38	8	7788	18	7770	6.27	7710	6604	1106	-60	5	6.36	9720	6604	3116	2010	6	44.91	94140	-2818	8.38	1230	4.56	758	1988	1988	0	4914
0	4.30	6	6716	15	6701	5.92	6650	4085	2565	-51	6	6.12	8860	4085	4775	2210	7	45.32	99040	-2470	8.70	1310	4.76	812	2122	747	1375	4268
0	4.10	2	5332	18	5314	5.38	5240	697	4543	-74	7	5.78	7690	697	6993	2450	8	45.58	102170	-1578	8.65	1300	4.79	820	2120	394	1726	3992
0	4.10	2	3852	14	3838	4.76	3920	-1082	5002	82	8	5.47	6690	-1082	7772	2770	9	45.71	103740	-792	8.63	1290	4.76	812	2102	330	1772	3796
0	4.00	1	3601	12	3589	4.63	3670	-328	3998	81	9	5.27	6070	-328	6398	2400	10	45.72	103860	-61	8.63	1290	4.76	812	2102	376	1726	3907
0	4.30	6	3016	14	3002	4.32	3100	42	3058	98	10	5.09	3540	42	5498	2440	11	45.70	103620	121	8.62	1290	4.85	837	2127	401	1726	3534
0	4.10	2	2472	10	2462	4.01	2570	1235	1335	108	11	4.88	4960	1235	3725	2390	12	45.60	102410	610	8.60	1280	4.71	799	2079	1754	325	3491
0	4.00	1	2121	7	2114	3.77	2200	1536	664	86	12	4.76	4640	1536	3104	2440	13	45.41	100130	1149	8.72	1310	4.72	802	2112	2112	0	3677
0	3.80	0	1830	0	1830	3.53	1850	1260	590	20	13	4.66	4380	1260	3120	2530	14	45.21	97720	1215	8.83	1340	4.72	802	2142	2142	0	3453
0	3.70	0	1620	7	1613	3.30	1550	1612	-62	-63	14	4.43	3810	1612	2198	2260	15	45.06	95910	913	8.68	1300	4.36	706	2006	2006	0	2717
0	3.60	0	1770	6	1764	3.43	1720	1562	158	-44	15	4.53	4060	1562	2498	2340	16	44.95	94600	660	8.67	1300	4.37	709	2009	2009	0	2711
0	DRY	0	2180	7	2173	3.74	2150	1161	989	-23	16	4.67	4400	1161	3239	2250	17	44.77	92510	1054	8.68	1300	4.39	714	2014	2014	0	3440
0	3.80	0	2540	10	2530	3.95	2470	229	2241	-60	17	4.75	4610	229	4381	2140	18	44.78	92620	-55	8.69	1310	4.39	711	2021	1040	981	2534
0	5.00	44	2764	20	2744	4.07	2660	-181	2841	-84	18	4.83	4820	-181	5001	2160	19	44.91	94140	-766	8.72	1310	4.41	714	2024	423	1601	2030
0	4.12	2	3022	20	3002	4.25	2970	268	2702	-32	19	4.94	5120	268	4852	2150	20	45.00	95180	-524	8.66	1300	4.43	714	2014	562	1452	2582
0	3.92	0	2870	18	2852	4.21	2900	576	2324	48	20	4.88	4960	576	4384	2060	21	44.95	94600	292	8.50	1260	4.40	704	1964	980	984	3288
0	4.00	1	2501	18	2483	3.99	2530	843	1687	47	21	4.78	4690	843	3847	2160	22	44.96	94720	-61	8.28	1210	4.41	704	1914	1467	447	2715
0	3.70	0	2390	18	2372	3.90	2390	1854	536	18	22	4.71	4510	1854	2656	2120	23	44.93	94370	176	8.27	1200	4.60	748	1948	1948	0	2735
0	3.60	0	2240	18	2222	3.81	2260	2126	134	38	23	4.62	4280	2126	2154	2020	24	44.99	95070	-353	8.20	1190	4.59	743	1933	1933	0	1994
929	DRY	0	2440	17	2423	3.90	2390	2440	-50	-33	24	4.70	4480	2440	2040	2090	25	45.05	95790	-363	8.21	1190	4.50	717	1907	1907	0	2210
808	DRY	0	2730	18	2712	4.05	2630	2730	-100	-82	25	4.80	4740	2730	2010	2110	26	44.86	93550	1129	8.41	1240	4.52	722	1962	1962	0	3907
401	DRY	0	2200	18	2182	3.77	2200	2200	0	18	26	4.63	4300	2200	2100	2100	27	44.65	91110	1230	8.67	1300	4.53	724	2024	2024	0	3506
335	DRY	0	2700	16	2684	4.07	2660	2700	-40	-24	27	4.69	4460	2700	1760	1800	28	44.51	89480	822	8.78	1330	4.52	722	2052	2052	0	3230
250	4.75	26	3466	18	3448	4.41	3370	3440	-70	-78	28	5.02	5350	3440	1910	1980	29	44.45	88780	353	8.93	1370	4.68	764	2134	2134	0	3569
159	5.05	48	4248	18	4230	4.83	4060	4200	-140	-170	29	5.24	5980	4200	1780	1920	30	44.41	88310	237	9.00	1380	4.72	775	2155	2155	0	4062
36	4.45	11	4441	18	4423	4.94	4280	4430	-150	-143	30	5.36	6350	4430	1920	2070	Jul 1	44.40	88200	55	9.00	1380	4.73	777	2157	2157	0	4248
27	4.40	9	3749	18	3731	4.66	3720	3740	-20	-11	Jul 1	5.17	5770	3740	2030	2050	2	44.29	86920	645	8.99	1380	4.82	802	2182	2182	0	4233
364	4.30	6	3286	18	3268	4.42	3280	3280	0	12	2	5.03	5370	3280	2090	2090	3	44.24	86330	297	9.12	1420	4.87	815	2235	2235	0	3432
198	4.30	6	4034	18	4018	4.74	3880	4030	-150	-138	3	5.25	6010	4030	1980	2130	4	44.28	86800	-237	9.20	1440	4.92	829	2269	2269	0	3504
324	4.30	6	4324	18	4308	4.88	4160	4320	-160	-148	4	5.43	6560	4320	2240	2400	5	44.43	88550	-882	9.23	1440	4.96	840	2280	2280	0	3398
36	4.20	4	5714	18	5756	5.42	5340	5770	-430	-416	5	5.68	7360	5770	1590	2020	6	44.86	93550	-2521	9.22	1440	4.97	842	2282	2282	0	2557

PLATE NO VIII

MINIDOKA			N-M	DATE	L MIL	PA LAT		NSTF CAN		PA + NSTF CAN			SSTF CANAL				MIL L LIFT CAN				MIL	MILNER				M-M
GAGE	DISCH	STD	NAT	LOSS	1924	GAGE	GAGE	DISC	GAGE	DISCH	TOTAL	STD	NAT	GAGE	DISCH	STD	NAT	GAGE	DISC	STD	NAT	THBAL	GAGE	DISCH	STD	NAT	GAIN
5.43	3150			-1566	May 22	8.92	1.70	39	2.47	344	383			9.49	2960			2.76	95			- 188	1.54	10			198
5.45	3280			- 95	23	9.10	1.68	38	2.56	367	405			9.51	2970			2.89	102			- 197	1.54	10			207
5.44	3270			- 54	24	9.11	1.69	38	2.60	377	415			9.51	2970			2.88	101			- 216	1.55	10			226
5.46	3300			13	25	8.78	1.72	40	2.63	385	425			9.32	2870			2.87	100	100	0	- 95	1.55	10			105
5.53	3440			172	26	9.05	1.72	40	2.69	401	441			9.56	3000			2.90	102	102	0	- 103	1.55	10			113
5.48	3340			742	27	9.18	1.74	41	2.70	404	445			9.47	2950			H.D.	52	52	0	- 107	1.56	10			117
5.52	3410			453	28	9.53	1.72	40	H.D.	598	638			9.18	2790			DRY	0	0	0	- 18	1.57	11			29
5.78	3950	550	3400	-1387	29	9.90	1.72	40	7.68	2180	2220	1820	400	9.14	2770	- 230	3000	DRY	0	0	0	-1040	1.68	16	16	0	1056
5.28	5060	242	4818	-1508	30	10.23	1.71	40	8.10	2480	2520	702	1818	9.14	2770	- 230	3000	H.D.	76	76	0	- 306	1.71	17	17	0	323
5.36	5240	- 582	5822	- 794	31	10.29	1.72	40	7.93	2500	2540	- 282	2822	9.14	2770	- 230	3000	2.78	96	96	0	- 166	1.68	16	16	0	182
5.32	5150	- 872	6022	- 458	June 1	10.41	1.72	40	7.82	2450	2490	- 532	3022	9.14	2770	- 230	3000	2.80	97	97	0	- 207	1.64	14	14	0	221
5.30	5100	- 525	5625	- 419	2	10.46	1.72	40	7.50	2300	2340	- 285	2625	9.14	2770	- 230	3000	2.76	95	95	0	- 105	1.62	13	13	0	118
5.37	5030	907	4123	- 300	3	10.52	1.72	40	7.38	2240	2280	1157	1123	9.14	2770	- 230	3000	2.74	94	94	0	- 114	1.60	12	12	0	126
5.23	4940	1954	2986	- 588	4	10.32	1.75	42	7.05	2090	2132	1781	351	9.20	2800	165	2635	2.76	95	95	0	- 87	1.58	11	11	0	98
4.70	4870	2003	2867	194	5	10.46	1.75	42	7.02	2070	2112	1775	337	8.90	2630	100	2530	2.74	94	94	0	34	1.59	12	12	0	- 22
5.95	4310	2091	2219	1711	6	10.20	1.75	42	H.D.	697	739	478	261	9.20	2800	842	1958	2.85	100	100	0	671	1.58	11	11	0	- 660
5.62	3620	304	3116	1294	7	10.48	1.63	35	H.D.	310	345	- 22	367	9.20	2800	51	2749	2.80	97	97	0	378	1.60	12	12	0	- 366
5.31	3030	- 370	3400	1238	8	10.58	1.75	42	2.50	382	424	24	400	9.21	2800	- 200	3000	H.D.	90	90	0	- 284	1.62	13	13	0	297
5.26	2940	- 2327	5267	1052	9	10.73	1.75	42	2.34	359	401	-1866	2267	9.16	2780	- 220	3000	2.72	93	93	0	- 334	1.63	13	13	0	347
5.33	3060	- 2940	6000	736	10	10.76	1.75	42	2.34	359	401	-2599	3000	9.11	2750	- 250	3000	2.74	94	94	0	- 185	1.62	13	13	0	198
5.32	3050	- 1622	4672	857	11	10.84	1.75	42	2.34	359	401	-1271	1672	9.10	2740	- 260	3000	2.71	92	92	0	- 183	1.60	12	12	0	195
5.27	2960	- 812	3772	574	12	10.85	1.75	42	2.32	364	406	- 366	772	9.10	2740	- 260	3000	2.73	94	94	0	- 280	1.60	12	12	0	292
5.30	3010	- 390	3400	481	13	10.88	1.75	42	2.33	367	409	9	400	9.10	2740	- 260	3000	2.62	88	88	0	- 227	1.60	12	12	0	239
5.24	2900	- 204	3104	777	14	10.76	1.75	42	2.32	364	406	41	365	9.11	2750	11	2739	2.42	78	78	0	- 334	1.60	12	12	0	346
5.22	2870	- 250	3120	583	15	10.68	1.75	42	2.26	349	391	24	367	9.11	2750	- 3	2753	2.32	73	73	0	- 344	1.59	12	12	0	356
5.20	2840	642	2198	- 123	16	10.64	1.64	36	2.04	295	331	72	259	9.10	2740	801	1939	2.34	74	74	0	- 305	1.59	12	12	0	317
5.24	2900	402	2498	- 189	17	10.52	1.60	34	2.01	288	322	28	294	9.10	2740	536	2204	2.33	74	74	0	- 236	1.59	12	12	0	248
5.26	2940	- 299	3239	500	18	10.29	1.58	32	1.97	278	310	- 71	381	9.07	2730	- 128	2858	2.34	74	74	0	- 174	1.58	11	11	0	185
5.25	2920	- 480	3400	- 386	19	10.48	1.60	34	1.98	281	315	- 85	400	8.67	2510	- 490	3000	2.31	72	72	0	23	1.59	12	12	0	- 11
5.07	2620	- 780	3400	- 590	20	10.62	1.60	34	1.99	283	317	- 83	400	8.64	2490	- 510	3000	2.32	73	73	0	- 260	1.60	12	12	0	272
5.04	2600	- 800	3400	- 18	21	10.64	1.60	34	1.99	283	317	- 83	400	8.66	2500	- 500	3000	2.32	73	73	0	- 290	1.60	12	12	0	302
5.10	2670	- 730	3400	618	22	10.62	1.60	34	1.98	281	315	- 85	400	8.66	2500	- 500	3000	2.32	73	73	0	- 218	1.60	12	12	0	230
5.12	2700	- 700	3400	15	23	10.68	1.61	34	1.99	283	317	- 83	400	8.65	2500	- 500	3000	2.32	73	73	0	- 190	1.60	12	12	0	202
5.01	2620	- 36	2656	118	24	10.61	1.60	34	1.99	283	317	5	312	8.27	2270	- 74	2344	2.33	73	73	0	- 40	1.60	12	12	0	52
4.92	2380	226	2154	- 386	25	10.66	1.60	34	2.29	356	390	137	253	8.00	2120	219	1901	2.34	74	74	0	- 204	1.60	12	12	0	216
4.93	2400	360	2040	- 190	26	10.69	1.60	34	H.D.	557	591	351	240	7.87	2030	230	1800	2.34	74	74	0	- 295	1.60	12	12	0	307
5.33	2890	880	2010	1017	27	10.30	1.60	34	7.06	2200	2234	1998	236	7.82	2010	236	1774	2.34	73	73	0	-1427	1.60	12	12	0	1439
5.54	4290	2190	2100	- 784	28	10.53	1.60	34	7.17	2260	2294	2047	247	7.89	2040	187	1853	2.33	72	72	0	- 116	1.60	12	12	0	128
5.88	4160	2400	1760	- 930	29	10.56	1.60	34	7.21	2270	2304	2097	207	7.89	2040	487	1553	2.34	72	72	0	- 256	1.57	11	11	0	267
5.92	4250	2340	1910	- 681	30	10.62	1.60	34	7.23	2280	2314	2089	225	7.87	2030	345	1685	2.34	72	72	0	- 166	1.58	11	11	0	177
5.92	4250	2470	1780	- 188	July 1	10.58	H.D.	25	H.D.	2170	2195	1986	209	7.84	2020	449	1571	2.33	72	72	0	- 37	1.58	11	11	0	48
5.74	3910	1990	1920	338	2	10.60	DRY	0	6.39	1900	1900	1674	226	7.67	1930	236	1694	2.34	72	72	0	8	1.57	11	11	0	3
5.44	3700	1670	2030	533	3	10.58	DRY	0	6.38	1890	1890	1651	239	7.69	1940	149	1791	2.32	71	71	0	- 201	1.56	10	10	0	211
5.41	3700	1610	2090	- 268	4	10.54	DRY	0	6.37	1890	1890	1644	246	7.67	1930	86	1844	2.32	71	71	0	- 191	1.55	10	10	0	201
5.30	3780	1540	2240	- 382	5	10.50	DRY	0	6.40	1900	1900	1667	233	7.68	1940	193	1747	2.30	70	70	0	- 170	1.58	11	11	0	181
5.37	3820	1930	1890	- 963	6	10.63	H.D.	10	6.38	1890	1900	1636	264	7.64	1920	- 56	1976	2.30	70	70	0	- 110	1.58	11	11	0	121
5.37	3820	1930	1890	- 963	7	10.42	1.72	40	H.D.	1300	1340	1153	187	7.68	1940	537	1403	H.D.	63	63	0	177	1.56	10	10	0	- 167

ALL DISCHARGE QUANTITIES ARE GIVEN IN SECOND FEET UNLESS OTHERWISE NOTED AT TOP OF COLUMN

ⓦ MINIDOKA CANAL NORMAL FLOW MAY 29 - JUNE 2 CREDITED TO NORTH SIDE CANAL CO BY SPECIAL ARRANGEMENT

ⓑ STORAGE CHARGED MILNER LOW LIFT CANAL CO MAY 25 - 27 IN ACCORDANCE WITH LEGAL INTERPRETATION OF CONTRACT

1924 DISTRIBUTION WATER DISTRICT NO 36

DATE	JACKSON LAKE			MORAN				TWIN LK		DATE	HEISE					MORAN-HEISE						LORENZO	H-L		REXBURG		
1924	GAGE	CAPAC.FT	DRFTAF	GAGE	DISCH	STD	NAT	DISC	MORAN	1924	GAGE	DISCH	RILEY	STD	TLK	NAT	TOTGN	LSTD	LTL	GN NAT	STD	TLK	LSTD	LTL	GAGE	DISC
JUL 3	5.085	411910	12820	H.D.	7930	6463	1467			JUL 4	4.76	12640	12665	6301		6364	4735	162		4897	6112		189		1.92	46
4	5.026	398710	13200	H.D.	8300	6655	1645			5	4.90	13170	13192	6489		6703	4892	166		5058	6294		195		2.10	47
5	4.968	385810	12900	H.D.	8330	6504	1826			6	4.95	13360	13382	6341		7041	5052	163		5215	6151		190		2.37	60
6	4.921	375400	10410	H.D.	7130	5248	1882			7	4.78	12710	12732	5117		7615	5602	131		5733	4964		153		2.48	61
7	4.852	369000	6400	H.D.	5170	3227	1943			8	4.35	11120	11144	3146		7998	5974	81		6055	3052		94		2.78	82
8	4.870	364170	4830	H.D.	4070	2435	1635			9	3.93	9640	9656	2374		7282	5586	61		5647	2303		71		2.43	66
9	4.845	358690	5480	H.D.	4090	2763	1327			10	3.79	9170	9190	2694		6496	5100	69		5169	2613		81		2.18	55
10	4.818	352770	5920	H.D.	4060	2985	1075			11	3.71	8900	8920	2910		6010	4860	75		4935	2823		87		2.03	47
11	4.790	346650	6120	H.D.	4060	3086	974			12	3.67	8770	8786	3009		5777	4726	77		4803	2919		90		1.99	43
12	4.762	340570	6080	H.D.	4060	3065	995			13	3.65	8700	8713	2988		5725	4653	77		4730	2898		90		1.94	43
13	4.728	333200	7370	H.D.	4660	3716	944			14	3.72	8940	8952	3623		5329	4292	93		4385	3514		109		1.88	43
14	4.691	325190	8010	H.D.	4960	4038	922			15	3.78	9130	9146	3937		5209	4186	101		4287	3819		118		1.97	47
15	4.650	316390	8800	H.D.	5360	4437	923	0	5360	16	3.81	9230	9242	4326	0	4916	3882	111	0	3993	4196	0	130	0	2.00	48
16	4.600	305660	10730	H.D.	6300	5410	890	14	6314	17	3.94	9680	9696	5275	14	4407	3382	135	0	3517	5117	14	158	0	1.95	46
17	4.537	292300	13360	H.D.	7600	6735	865	17	7617	18	4.30	10940	10962	6567	17	4378	3345	168	0	3513	6370	16	197	1	1.90	44
18	4.467	277540	14760	H.D.	8250	7442	808	17	8267	19	4.43	11410	11433	7256	16	4161	3166	186	1	3353	7038	16	218	0	2.23	51
19	4.393	262060	15480	H.D.	8780	7805	975	16	8796	20	4.62	12110	12131	7610	16	4505	3335	195	0	3530	7382	15	228	1	2.45	68
20	4.334	249860	12200	H.D.	7820	6151	1669	15	7835	21	4.52	11740	11763	5997	14	5752	3928	154	1	4083	5817	14	180	0	2.50	72
21	4.275	237730	12130	H.D.	7310	6116	1194	14	7324	22	4.31	10980	10998	5963	14	5021	3674	153	0	3827	5784	13	179	1	2.57	76
22	4.215	225490	12240	H.D.	7090	6171	919	14	7104	23	4.20	10580	10596	6017	13	4566	3492	154	1	3647	5837	13	180	0	2.46	72
23	4.154	213190	12300	H.D.	7000	6201	799	15	7015	24	4.13	10340	10355	6046	15	4294	3340	155	0	3495	5865	14	181	1	2.47	72
24	4.113	204940	8250	H.D.	5030	4159	871	15	5045	25	3.79	9170	9187	4055	14	5118	4142	104	1	4247	3933	14	122	0	2.45	71
25	4.093	200940	4000	H.D.	2780	2017	763	15	2795	26	3.08	6920	6928	1967	15	4946	4133	50	0	4183	1908	14	59	1	2.37	67
26	4.084	199160	1780	H.D.	1600	897	703	14	1614	27	2.68	5760	5765	875	14	4876	4151	22	0	4173	849	14	26	0	2.27	61
27	4.079	198170	990	H.D.	1140	499	641	13	1153	28	2.57	4930	4933	487	12	4434	3780	12	1	3793	472	11	15	1	2.20	57
28	4.073	196980	1190	H.D.	1140	600	540	13	1153	29	2.29	4720	4720	585	13	4122	3567	15	0	3582	567	13	18	0	2.12	53
29	4.064	195200	1780	H.D.	1370	897	473	11	1381	30	2.27	4680	4680	875	11	3794	3299	22	0	3321	829	10	46	1	1.97	46
30	4.047	191830	3370	H.D.	2240	1699	541	9	2249	31	2.44	5060	5060	1657	8	3395	2811	42	1	2854	1568	8	89	0	1.95	44
31	4.023	187080	4750	H.D.	2920	2395	525	9	2929	AUG 1	2.73	5790	5790	2335	9	3446	2861	60	0	2921	2237	9	98	0	1.97	43
AUG 1	3.975	181550	5530	H.D.	3300	2788	512	9	3309	2	2.92	6270	6295	2718	9	3568	2986	70	0	3056	2620	8	98	1	2.05	47
2	3.965	175700	5850	H.D.	3410	2949	461	8	3418	3	2.99	6420	6431	2875	8	3548	3013	74	0	3087	2720	8	155	0	2.32	58
3	3.927	168300	7400	H.D.	4120	3731	389	7	4127	4	3.25	7130	7131	3638	6	3487	3004	93	1	3098	3347	5	291	1	2.54	69
4	3.890	161120	7180	H.D.	4020	3620	400	7	4027	5	3.28	7220	7236	3529	7	3700	3209	91	0	3300	3190	7	339	0	2.62	74
5	3.855	154410	6710	H.D.	3760	3383	377	6	3766	6	3.18	6920	6943	3298	6	3639	3177	85	0	3262	2955	5	343	1	2.60	73
6	3.822	148080	6330	H.D.	3530	3191	339	6	3536	7	3.10	6680	6703	3111	6	3586	3167	80	0	3247	2825	5	286	1	2.62	75
7	3.790	141970	6110	H.D.	3440	3080	360	36	3476	8	3.12	6740	6764	3003	35	3726	3288	77	1	3366	2763	32	240	3	2.95	93
8	3.759	136120	5850	H.D.	3340	2949	391	42	3382	9	3.10	6680	6701	2875	41	3785	3319	74	1	3394	2593	37	282	4	2.96	94
9	3.723	129330	6790	H.D.	3740	3423	317	40	3780	10	3.20	6830	6851	3337	39	3475	3071	86	1	3158	2923	34	414	5	2.94	94
10	3.688	122750	6580	H.D.	3660	3317	343	38	3698	11	3.20	6710	6730	3234	37	3459	3032	83	1	3116	2833	33	401	4	2.92	93
11	3.651	115880	6870	H.D.	3780	3464	316	38	3818	12	3.27	6770	6790	3377	37	3376	2972	87	1	3060	3016	33	361	4	2.83	82
12	3.620	110110	5770	H.D.	3260	2909	351	38	3298	13	3.17	6390	6410	2836	37	3537	3112	73	1	3186	2569	34	267	3	2.78	85
13	3.595	105480	4630	H.D.	2840	2334	506	37	2877	14	3.03	5900	5919	2276	36	3607	3042	58	1	3101	2112	33	164	3	2.68	80
14	3.572	101270	4210	H.D.	2480	2123	357	39	2519	15	2.93	5540	5558	2070	38	3450	3039	53	1	3093	1973	36	97	2	2.55	74
15	3.552	97600	3670	H.D.	2180	1850	330	40	2220	16	2.85	5220	5237	1804	39	3394	3017	46	1	3064	1743	38	61	1	2.33	63
16	3.533	94120	3480	H.D.	2140	1755	385	32	2172	17	2.78	4960	4980	1711	31	3238	2808	44	1	2853	1658	30	53	1	2.72	82
17	3.511	90090	4030	H.D.	2390	2032	358	34	2424	18	2.82	4980	4998	1981	33	2984	2574	51	1	2626	1922	32	59	1	2.77	83
18	3.480	84460	5630	H.D.	3100	2838	262	31	3131	19	3.22	5850	5871	2767	31	3073	2740	71	0	2811	2684	30	83	1	2.83	85

DAILY SUMMARY OF DATA AT AND BETWEEN SNA

G	HEISE + RILEY RESERVOIR	DATE 1924	DIV HEISE-WOOD TOTAL	STD	TL	NAT	WOOD TH. BAL	GAGE	WOODVILLE DISCH	STD	NAT	LOR-WOOD LSSTD	LSTL	HEISE-WOODVILLE TOTGN	LSTD	LTL	GN NAT	DIV WOOD-BLACK TOTAL	STD	NAT	BLACK TH BAL	BLACKFOOT BRIDGE GAGE	DISCH	STD	NAT	WOOD-BLACK TOTGN	L STD	GN NAT	CUM LOSS STD
9	13074	JUL 5	5499	1030		6529	7515	7.15	8700	7111	1589	31		1125	220		1345	1886	764	1122	6814		6310	5966	344	- 504	381	- 123	2101
8	13670	6	6499	- 18		6517	7171	7.70	8520	6281	2239	31		1349	226		1575	1893	741	1152	6627		6190	5208	982	- 437	332	- 105	1126
0	13982	7	6944	576		6368	7038	7.63	8280	5544	2736	31		1242	221		1463	2049	886	1163	6231		5960	4379	1581	- 271	279	8	0
3	13395	8	7329	856		6473	6066	7.47	7740	4083	3657	25		1674	178		1852	2786	1242	1544	4954		4650	2671	1979	- 304	170	- 134	
26	11970	9	7308	589		6719	4662	7.08	6480	2448	4032	15		1818	109		1927	2971	860	2111	3509		3240	1493	1747	- 269	95	- 174	
8	10324	10	7356	453		6903	2968	6.52	4800	1838	2962	12		1832	83		1915	2746	0	2746	2054		1890	1728	162	- 164	110	- 54	
7	9747	11	6864	366		6498	2883	6.23	4010	2234	1776	13		1127	94		1221	2425	187	2238	1585		1300	1924	- 624	- 285	123	- 162	624
4	9414	12	6682	309		6373	2732	6.19	3910	2500	1410	14		1178	101		1279	2379	716	1463	1531		1370	1489	- 119	- 161	95	- 66	743
8	9264	13	6692	306		6386	2572	6.11	3710	2598	1112	15		1138	105		1243	2074	842	1232	1636		1380	1651	- 271	- 256	105	- 151	1014
9	9172	14	6449	162		6287	2723	6.09	3670	2722	948	14		947	104		1051	2034	836	1218	1616		1300	1773	- 473	- 316	113	- 203	148
5	9387	15	6553	443		6110	2834	6.17	3860	3053	807	18		1026	127		1153	2031	832	1199	1829		1530	2088	- 558	- 299	133	- 166	204
0	9616	16	6724	1126		5598	2892	6.10	3690	2674	1016	19		798	137		935	1943	843	1100	1747		1490	1721	- 231	- 257	110	- 147	227
2	9724	17	6971	1718	0	5253	2753	6.07	3620	2457	1163	21	0	867	151	0	1018	1941	851	1090	1679		1410	1510	- 100	- 269	96	- 173	231
2	10158	18	7148	2055	0	5093	3010	6.10	3690	3036	654	26	0	680	184	0	864	2107	1046	1061	1583		1310	1871	- 561	- 273	119	- 154	273
3	11405	19	7055	1987	20	5048	4350	6.41	4660	4351	309	32	0	310	229	1	540	2353	1494	859	2307		2020	2686	- 666	- 287	171	- 116	360
8	12011	20	6985	1917	10	5058	5026	6.78	5560	5086	474	35	0	534	253	0	787	2331	1674	657	3229		2990	3207	- 217	- 239	205	- 34	382
7	12818	21	6796	1801	13	4982	6022	7.18	6800	5544	1256	37	0	778	265	1	1044	2329	1674	655	4471		4030	3638	392	- 441	232	- 209	542
1	12484	22	6336	1303	8	5025	6148	7.18	6800	4485	2315	29	0	652	209	0	861	2324	1300	1024	4476		4130	2994	1136	- 346	191	- 155	229
5	11763	23	6293	765	15	5513	5470	7.10	6540	4990	1550	29	0	1070	208	1	1279	2113	1060	1053	4427		4030	3694	336	- 397	236	- 161	195
1	11317	24	6409	960	15	5434	4908	6.95	6080	4848	1232	29	0	1172	209	0	1381	2009	929	1080	4071		3650	3684	- 34	- 421	235	- 186	199
6	11081	25	6431	1160	13	5258	4650	6.93	6010	4676	1334	29	0	1360	210	1	1571	2021	928	1093	3989		3550	3523	27	- 439	225	- 214	196
6	9903	26	6427	1014	3	5410	3476	6.69	5290	2899	2391	20	0	1814	142	0	1956	1825	716	1109	3465		3210	2052	1158	- 255	131	- 124	805
8	7606	27	6058	484	3	5571	1548	5.79	3030	1414	1616	10	0	1482	69	1	1552	1340	375	965	1690		1490	977	513	- 200	62	- 138	292
8	6383	28	5335	272	5	5058	1048	5.17	2020	573	1447	4	0	972	30	0	1002	980	190	790	1040		818	360	458	- 222	23	- 199	0
8	5511	29	4995	194	3	4798	516	4.92	1720	276	1444	2	0	1204	17	1	1222	695	- 6	701	1025		588	265	323	- 437	17	- 420	
1	5251	30	5219	80	3	5136	32	4.31	1140	484	656	3	0	1108	21	0	1129	697	- 16	713	443		330	470	- 140	- 113	30	- 83	140
2	5142	31	5280	572	13	4695	- 138	3.84	804	253	551	4	0	942	50	1	993	755	91	664	49		83	152	- 69	34	10	44	207
3	5503	AUG 1	5651	929	15	4707	- 148	3.67	702	631	71	8	1	850	97	1	948	621	279	342	81		4	331	- 327	- 77	21	- 56	536
9	6229	2	5830	983	33	4814	399	4.05	945	1243	- 298	11	0	546	109	0	655	561	440	121	384		0	755	- 755	- 384	48	- 336	129
0	6765	3	5738	1177	33	4528	1027	4.55	1340	1430	- 90	13	0	313	111	1	425	977	490	487	363		2	884	- 882	- 361	56	305	217
3	7014	4	6003	1793	22	4188	1011	4.81	1600	913	687	14	0	589	169	0	758	1313	750	563	287		6	153	- 147	- 281	10	- 271	232
2	7823	5	6172	2160	13	3999	1651	5.03	1850	1170	680	17	0	199	308	1	508	1455	928	527	395		1	227	- 226	- 394	15	- 379	254
0	7976	6	5939	2087	10	3842	2037	5.23	2100	1087	1013	16	0	63	355	0	418	1769	1187	582	331		19	- 94	113	- 312	- 6	- 318	243
5	7678	7	5912	2137	10	3765	1766	5.35	2280	803	1477	15	0	514	358	1	873	1569	1010	559	711		187	- 195	382	- 524	- 12	- 536	205
0	7453	8	5858	2028	10	3820	1595	5.28	2170	783	1387	14	0	575	300	1	876	1471	829	642	699		294	- 43	337	- 405	- 3	- 408	171
4	7698	9	5813	1637	24	4152	1885	5.33	2240	1112	1128	14	0	355	254	3	612	1478	853	625	762		362	243	119	- 400	16	- 384	159
5	7646	10	6120	2066	38	4016	1526	5.24	2120	514	1606	13	0	594	295	4	893	1413	779	634	707		359	- 249	608	- 348	- 16	- 364	98
5	7796	11	6348	2346	38	3964	1448	5.18	2030	562	1468	15	0	582	429	5	1016	1382	749	633	648		324	- 176	500	- 324	- 11	- 335	48
4	7664	12	6425	2250	31	4144	1239	5.12	1960	569	1391	14	0	721	415	4	1140	1588	866	722	372		159	- 279	438	- 213	- 18	- 231	4
4	7674	13	6032	1921	24	4087	1642	5.08	1910	1080	830	15	1	268	376	5	649	1656	993	663	254		50	82	- 32	- 204	5	- 199	8
7	7267	14	5823	1746	30	4047	1444	5.08	1910	810	1100	13	0	466	280	3	749	1455	827	628	455		65	- 16	81	- 390	- 1	- 391	
5	6724	15	5796	1445	30	4321	928	4.97	1780	656	1124	11	0	852	175	3	1030	1458	747	711	322		96	- 86	182	- 226	- 5	- 231	- 18
0	6298	16	5732	1447	30	4255	566	4.77	1560	516	1044	10	0	994	107	2	1103	1328	675	653	232		35	- 149	184	- 197	- 10	- 207	- 36
6	5873	17	5586	1268	31	4287	287	4.42	1230	466	764	9	0	943	70	1	1014	917	291	626	313		105	164	- 59	- 208	11	- 197	- 30
6	5806	18	5579	1341	30	4208	227	4.22	1070	309	761	8	1	843	61	2	906	669	38	631	401		96	255	- 159	- 305	16	- 289	- 14
7	5855	19	5867	1581	30	4256	- 12	4.24	1080	331	749	10	0	1092	69	1	1162	708	50	658	372		114	264	- 150	- 258	17	- 241	
9	6766	20	6118	1793	26	4299	648	4.45	1260	878	382	13	0	612	96	1	709	894	545	349	366		140	313	- 173	- 226	20	- 206	1

AKE RIVER GAGING STATIONS FROM JACKSON LAKE WYOMING TO MILNER IDAHO

DRR APPL STD	BLACK RIVER GAGE	BLACK RIVER DISCH	S-M CANAL	CLOUGH TH BAL	CLOUGHS GAGE	CLOUGHS DISCH	CLOUGHS STD	CLOUGHS NAT	B-C GAIN	DATE 1924	NEELEY GAGE	NEELEY DISCH	NEELEY STD	NEELEY NAT	C-N GAIN	DATE 1924	LAKE WALCOTT GAGE	LAKE WALCOTT CAPACFT	LAKE WALCOTT DRAFT	NSMINC GAGE	NSMINC DISCH	SSMINC GAGE	SSMINC DISCH	NS+SS MINYCAN TOTAL	NS+SS MINYCAN STD	NS+SS MINYCAN NAT	TH
341	4.19	4	6314	18	6296	3.68	5990	6310	- 320	-306	JUL 6	5.92	8170	6310	1860	2180	JUL 7	45.36	99520	-3010	9.23	1440	4.91	842	2282	2282	0	4
982	4.13	3	6193	18	6175	3.67	5960	6190	- 230	-215	7	5.84	7900	6190	1710	1940	8	45.86	105550	-3040	9.23	1440	4.95	837	2277	2277	0	4
126	4.12	2	5962	18	5944	3.58	5730	5505	225	-214	8	5.91	8130	5505	2625	2400	9	46.08	108240	-1356	9.27	1450	5.08	873	2323	2323	0	4
	5.83	148	4798	18	4780	5.12	4660	2671	1989	-120	9	5.60	7100	2671	4429	2440	10	46.06	107990	126	9.38	1480	5.29	932	2412	1383	1029	4
	6.40	290	3530	14	3516	4.56	3530	1493	2037	14	10	5.20	5860	1493	4367	2330	11	45.88	105790	1109	9.37	1480	5.35	950	2430	1463	967	4
	5.78	139	2029	12	2017	3.67	2050	1728	322	33	11	4.72	4530	1728	2802	2480	12	45.66	103140	1336	9.35	1480	5.33	944	2424	2424	0	
624	4.24	5	1305	2	1303	3.17	1380	1300	80	77	12	4.56	4130	1300	2830	2750	13	45.47	100850	1155	9.37	1480	5.17	898	2378	2378	0	
119	3.91	0	1370	1	1369	3.22	1450	1370	80	81	13	4.45	3860	1370	2490	2410	14	45.18	97350	1765	9.33	1470	4.98	845	2315	2315	0	
271	4.25	5	1385	2	1383	3.21	1430	1380	50	47	14	4.43	3810	1380	2430	2380	15	45.02	95430	968	9.18	1430	5.03	859	2289	2289	0	
473	4.18	4	1304	1	1303	3.13	1340	1300	40	37	15	4.42	3790	1300	2490	2450	16	44.92	94250	595	9.07	1400	5.06	868	2268	2268	0	
558	4.13	3	1533	1	1532	3.27	1510	1530	- 20	- 22	16	4.48	3930	1530	2400	2420	17	44.78	92620	822	9.00	1380	5.11	879	2259	2259	0	
231	4.60	14	1504	2	1502	3.25	1480	1490	- 10	- 22	17	4.44	3840	1490	2350	2360	18	44.65	91110	761	9.00	1380	5.12	879	2259	2259	0	
100	4.15	2	1412	2	1410	3.22	1450	1410	40	40	18	4.38	3690	1410	2280	2240	19	44.45	88780	1175	8.86	1350	5.11	873	2223	2223	0	
561	4.11	1	1311	1	1310	3.09	1290	1310	- 20	- 20	19	4.43	3810	1310	2500	2520	20	44.40	88200	292	8.78	1330	5.11	870	2200	2200	0	
666	4.15	2	2022	0	2022	3.63	1990	2020	- 30	- 32	20	4.77	4660	2020	2640	2670	21	44.64	90990	-1407	8.77	1330	5.12	870	2200	2200	0	
277	4.30	4	2994	0	2994	4.24	2950	2990	- 40	- 44	21	4.98	5230	2990	2240	2280	22	44.80	92860	- 943	8.67	1300	5.23	901	2201	2201	0	
392	4.10	1	4031	0	4031	4.77	3940	4030	- 90	- 91	22	5.32	6220	4030	2190	2280	23	44.89	93900	- 524	8.61	1290	5.37	941	2231	2231	0	
1136	4.25	3	4133	0	4133	4.82	4040	4130	- 90	- 93	23	5.38	6410	4130	2280	2370	24	44.94	94490	- 297	8.61	1290	5.35	935	2225	2225	0	
336	3.90	0	4030	18	4012	4.80	4000	4030	- 30	- 12	24	5.27	6070	4030	2040	2070	25	44.96	94720	- 116	8.72	1310	5.34	932	2242	2242	0	
34	DRY	0	3650	18	3632	+.63	3670	3650	20	38	25	5.27	6070	3650	2420	2400	26	44.92	94250	237	8.81	1340	5.34	932	2272	2272	0	
27	4.29	4	3554	18	3536	4.58	3570	3550	20	34	26	5.12	5630	3550	2080	2060	27	44.75	92270	998	8.80	1330	5.35	935	2265	2265	0	
158	4.15	2	3212	18	3194	4.38	3200	3210	- 10	6	27	5.08	5510	3210	2300	2310	28	44.40	88200	2052	8.78	1330	5.34	932	2262	2262	0	
513	4.12	1	1491	10	1481	3.38	1650	1490	160	169	28	4.52	4030	1490	2540	2380	29	43.93	82750	2748	8.78	1330	5.33	930	2260	2260	0	
292	4.15	2	820	1	819	2.83	1000	652	348	181	29	4.22	3320	652	2668	2320	30	43.48	77680	2556	8.76	1320	5.19	890	2210	2210	0	
	4.00	0	588	0	588	2.57	749	265	484	161	30	4.13	3120	265	2855	2371	31	43.17	74180	1765	8.78	1330	4.98	831	2161	2161	0	
-140	4.00	0	330	0	330	2.22	466	330	136	136	31	4.01	2850	330	2520	2384	AUG 1	42.74	71610	1296	8.78	1330	5.03	845	2175	2175	0	
69	DRY	0	83	0	83	1.85	244	83	161	161	AUG 1	3.98	2790	83	2707	2546	2	42.60	67870	1885	8.78	1330	5.02	842	2172	2172	0	
-327	DRY	0	4	0	4	1.63	154	4	150	150	2	3.82	2460	4	2456	2306	3	42.30	64580	1659	8.76	1320	5.03	842	2162	2162	0	
-755	DRY	0	0	0	0	1.60	143	0	143	143	3	3.87	2560	0	2560	2417	4	42.02	61500	1553	8.67	1300	5.03	840	2140	2140	0	
-882	DRY	0	2	0	2	1.61	146	2	144	144	4	3.87	2560	2	2558	2414	5	41.73	58380	1573	8.48	1250	5.02	834	2084	2084	0	
-147	4.00	0	6	0	6	1.60	143	6	137	137	5	3.87	2560	6	2554	2417	6	41.38	54610	1901	8.43	1240	4.96	818	2058	2058	0	
-226	4.00	0	1	0	1	1.59	140	1	139	139	6	3.86	2540	1	2539	2400	7	41.07	51280	1679	8.42	1240	4.82	780	2020	2020	0	
113	4.00	0	19	0	19	1.59	140	19	121	121	7	3.91	2640	19	2621	2500	8	40.72	47570	1870	8.52	1260	4.70	748	2008	2008	0	
382	4.00	0	187	0	187	1.61	146	187	- 41	- 41	8	3.88	2580	187	2393	2434	9	40.41	44290	1654	8.55	1270	4.68	743	2013	2013	0	
337	4.10	1	295	0	295	1.94	306	294	12	11	9	3.96	2750	294	2456	2444	10	40.09	40910	1704	8.67	1300	4.75	761	2061	2061	0	
119	4.12	1	363	0	363	2.07	397	362	35	34	10	4.00	2830	362	2468	2433	11	39.78	37680	1628	8.78	1330	4.72	753	2083	2083	0	
608	DRY	0	359	0	359	2.15	473	359	114	114	11	4.08	3010	359	2651	2537	12	39.55	35290	1205	8.72	1310	4.68	743	2053	2053	0	
500	4.00	0	324	0	324	2.12	451	324	127	127	12	H.D.	2890	324	2566	2439	13	39.00	29590	2874	8.53	1270	4.70	748	2018	2018	0	
438	4.00	0	159	0	159	1.88	301	159	142	142	13	H.D.	2610	159	2451	2309	14	38.66	26140	1739	H.D.	1020	4.46	688	1708	1708	0	
- 32	4.00	0	50	0	50	1.64	186	50	136	136	14	H.D.	2660	50	2610	2474	15	38.49	24410	872	H.D.	26	4.32	652	678	678	0	
81	3.90	0	65	0	65	1.62	178	65	113	113	15	H.D.	2500	65	2435	2322	16	38.32	22690	867	DRY	0	4.16	613	613	613	0	
182	3.90	0	96	0	96	1.63	182	96	86	86	16	H.D.	2680	96	2584	2498	17	38.16	21060	822	DRY	0	4.02	582	582	582	0	
184	3.90	0	35	0	35	1.60	171	35	136	136	17	H.D.	2640	35	2605	2469	18	38.03	19740	665	DRY	0	3.88	549	549	549	0	
- 59	3.90	0	105	0	105	1.61	174	105	69	69	18	H.D.	2630	105	2525	2456	19	37.94	18850	449	DRY	0	3.73	516	516	516	0	
-159	3.85	0	96	0	96	1.58	164	96	68	68	19	H.D.	2550	96	2454	2386	20	37.90	18450	202	DRY	0	3.64	498	498	498	0	
-150	4.20	2	116	0	116	1.60	171	114	57	55	20	H.D.	2710	114	2596	2539	21	38.04	19850	- 706	H.D.	151	3.68	507	658	658	0	
-173	4.02	0	140	0	140	1.71	216	140	76	76	21	H.D.	3680	✓110	* 2570	3464	22	38.11	20560	- 358	H.D.	796	3.88	552	1348	1348	0	

*MEAN OF NEELEY NORMAL AUG. 11 - 20 AND AUG. 28 - SEPT. 6

✓ 140 JACKSON LAKE 970 AMERICAN FALLS

PLATE NO IX

MIN	MINIDOKA				N-M	DATE	L MIL	PA LAT		NSTF CAN			PA + NSTF CANS			SSTF CANAL				MILL LIFT CAN				MIL	MILNER				M-M
BAL	GAGE	DISCH	STD	NAT	LOSS	1924	GAGE	GAGE	DISC	GAGE	DISCH	TOTAL	STD	NAT	GAGE	DISCH	STD	NAT	GAGE	DISC	STD	NAT	THBAL	GAGE	DISCH	STD	NAT	GAIN
978	4.93	2400	340	1860	478	JUL 8	10.37	1.72	40	2.31	364	404	185	219	7.68	1940	299	1641	2.33	72	72	0	- 16	1.54	10	10	0	26
583	4.82	2240	530	1710	343	9	10.50	1.85	48	2.43	395	443	242	201	7.66	1930	421	1509	2.33	72	72	0	- 205	1.56	10	10	0	215
451	5.04	2570	- 55	2625	1881	10	10.63	1.97	55	2.87	517	572	263	309	H.D.	2500	184	2316	2.32	71	71	0	- 573	1.58	11	11	0	584
814	5.63	3640	240	3400	1174	11	10.64	1.85	48	2.61	439	487	87	400	9.64	2970	- 30	3000	2.32	71	71	0	112	1.60	12	12	0	- 100
539	5.42	3230	- 170	3400	1309	12	10.55	1.72	40	2.29	346	386	- 14	400	9.38	2820	- 180	3000	2.34	72	72	0	- 48	1.60	12	12	0	60
442	5.31	3030	228	2802	412	13	10.70	1.72	40	2.32	354	394	64	330	H.D.	2420	- 52	2472	2.34	72	72	0	144	1.59	12	12	0	- 132
907	5.02	2540	- 290	2830	367	14	10.78	1.72	40	2.32	354	394	61	333	7.79	1990	- 507	2497	2.32	71	71	0	85	1.63	13	13	0	- 72
310	4.95	2430	- 60	2490	880	15	10.72	1.72	40	2.32	354	394	101	293	7.78	1990	- 207	2197	2.30	70	70	0	- 24	1.60	12	12	0	36
289	4.90	2360	- 70	2430	129	16	10.78	1.72	40	2.34	359	399	113	286	7.80	2000	- 144	2144	2.30	70	70	0	- 109	1.61	12	12	0	121
117	4.85	2280	- 210	2490	- 163	17	10.78	1.72	40	2.34	359	399	106	293	7.82	2010	- 187	2197	2.34	72	72	0	- 201	1.62	13	13	0	214
493	4.87	2310	- 90	2400	183	18	10.72	1.72	40	2.34	359	399	117	282	7.78	1990	- 128	2118	1.90	51	51	0	- 130	1.60	12	12	0	142
342	4.88	2320	- 30	2350	22	19	10.85	1.72	40	2.36	364	404	128	276	7.79	1990	- 84	2074	1.71	42	42	0	- 116	1.61	12	12	0	128
642	4.78	2180	- 100	2280	462	20	10.42	1.72	40	2.32	354	394	126	268	7.80	2000	- 12	2012	1.78	45	45	0	- 259	1.60	12	12	0	271
902	4.78	2180	- 320	2500	- 278	21	10.77	1.72	40	2.35	362	402	108	294	7.81	2000	- 206	2206	1.74	43	43	0	- 265	1.61	12	12	0	277
053	4.72	2100	- 540	2640	- 1047	22	10.65	H.D.	30	2.38	369	399	88	311	7.80	2000	- 329	2329	1.76	43	43	0	- 342	1.60	12	12	0	354
086	5.00	2510	270	2240	- 424	23	10.70	DRY	0	H.D.	1760	1760	1497	263	7.78	1990	13	1977	1.96	52	52	0	- 1292	1.60	12	12	0	1304
465	5.69	3760	1570	2190	- 295	24	10.73	DRY	0	6.82	1950	1950	1692	258	7.80	2000	68	1932	1.98	53	53	0	- 243	1.62	13	13	0	256
888	5.64	3660	1380	2280	228	25	10.66	DRY	0	6.85	1970	1970	1702	268	7.65	1920	- 92	2012	1.98	52	52	0	- 282	1.62	13	13	0	295
712	5.62	3620	1580	2040	92	26	10.58	DRY	0	6.88	1980	1980	1740	240	7.59	1900	100	1800	1.98	52	52	0	- 312	1.61	12	12	0	324
035	5.63	3640	1220	2420	395	27	10.58	H.D.	10	7.02	2050	2060	1775	285	7.61	1900	- 235	2135	2.00	53	53	0	- 373	1.60	12	12	0	385
363	5.81	4010	1930	2080	353	28	10.52	1.72	40	7.68	2360	2400	2155	245	7.61	1900	65	1835	1.98	52	52	0	- 342	1.59	12	12	0	354
300	5.86	4120	1820	2300	1180	29	10.50	1.72	40	7.68	2360	2400	2129	271	7.59	1900	- 129	2029	1.99	53	53	0	- 233	1.58	11	11	0	244
518	5.84	4070	1530	2540	448	30	10.40	1.72	40	7.62	2330	2370	2071	299	7.60	1900	- 341	2241	1.98	52	52	0	- 252	1.58	11	11	0	263
666	5.75	3880	1212	2668	- 214	31	10.26	1.71	40	H.D.	1140	1180	866	314	7.60	1900	- 454	2354	1.98	52	52	0	748	1.58	11	11	0	- 737
724	4.73	2110	- 745	2855	614	AUG 1	10.16	1.72	40	2.45	369	409	73	336	7.67	1930	- 589	2519	2.00	53	53	0	- 282	1.57	11	11	0	293
971	4.72	2100	- 420	2520	- 129	2	10.07	1.72	40	2.75	450	490	194	296	7.71	1950	- 274	2224	1.97	52	52	0	- 392	1.57	11	11	0	403
503	4.70	2070	- 637	2707	433	3	9.96	1.72	40	2.76	452	492	174	318	7.72	1960	- 429	2389	2.03	51	51	0	- 433	1.57	11	11	0	444
957	4.70	2070	- 386	2456	- 113	4	9.84	1.72	40	2.54	393	433	144	289	7.72	1960	- 207	2167	2.04	51	51	0	- 374	1.57	11	11	0	385
973	4.71	2090	- 470	2560	- 117	5	9.82	1.66	37	1.96	242	279	- 22	301	7.71	1950	- 309	2259	2.05	52	52	0	- 191	1.57	11	11	0	202
049	4.72	2100	- 458	2558	- 51	6	9.85	1.60	34	1.83	214	248	- 53	301	8.20	2190	- 67	2257	2.06	52	52	0	- 390	1.57	11	11	0	401
403	4.89	2340	- 214	2554	63	7	9.75	1.60	34	1.82	212	246	- 54	300	8.42	2310	56	2254	2.06	52	52	0	- 268	1.57	11	11	0	279
199	4.92	2380	- 159	2539	- 181	8	9.84	1.60	34	1.84	216	250	- 49	299	8.41	2310	70	2240	2.05	52	52	0	- 232	1.59	12	12	0	244
502	4.89	2340	- 281	2621	162	9	9.86	1.60	34	1.87	222	256	- 52	308	8.41	2320	7	2313	2.04	51	51	0	- 287	1.59	12	12	0	299
221	4.92	2380	- 13	2393	- 159	10	9.82	H.D.	17	1.95	240	257	- 25	282	8.69	2470	359	2111	2.03	51	51	0	- 398	1.58	11	11	0	409
393	5.02	2540	84	2456	- 141	11	9.74	DRY	0	1.97	244	244	- 45	289	8.80	2520	353	2167	2.05	52	52	0	- 276	1.60	12	12	0	288
375	5.01	2520	52	2468	- 145	12	9.72	DRY	0	1.94	237	237	- 53	290	8.79	2520	342	2178	2.07	53	53	0	- 290	1.57	11	11	0	301
162	5.03	2550	- 101	2651	- 388	13	9.67	DRY	0	1.92	233	235	- 79	312	9.12	2710	371	2339	2.03	51	51	0	- 444	1.54	10	10	0	454
746	5.16	2770	204	2566	976	14	9.44	DRY	0	1.92	233	233	- 69	302	9.26	2790	526	2264	2.07	53	53	0	- 306	1.54	10	10	0	316
641	5.17	2780	329	2451	- 139	15	9.52	1.50	28	2.04	242	270	- 18	288	9.24	2780	617	2163	2.03	51	51	0	- 321	1.55	10	10	0	331
854	5.14	2730	120	2610	124	16	9.36	1.50	28	2.14	265	293	- 14	307	9.25	2790	487	2303	2.04	51	51	0	- 404	1.55	10	10	0	414
754	5.19	2820	385	2435	- 66	17	9.35	1.50	28	2.12	260	288	2	286	9.24	2780	631	2149	2.07	52	52	0	- 306	1.55	10	10	0	310
920	5.17	2780	196	2584	140	18	9.24	1.50	28	2.12	260	288	- 16	304	9.25	2790	510	2280	2.11	53	53	0	- 351	1.55	10	10	0	361
756	5.15	2750	145	2605	6	19	9.07	1.50	28	2.10	256	284	- 22	306	9.25	2790	491	2299	2.06	51	51	0	- 375	1.54	10	10	0	385
563	5.09	2650	125	2525	- 87	20	8.89	1.50	28	2.18	265	293	- 4	297	9.23	2780	552	2228	2.02	49	49	0	- 472	1.54	10	10	0	482
254	5.03	2550	96	2454	- 296	21	8.74	1.49	28	2.20	262	290	1	289	8.63	2450	285	2165	2.05	50	50	0	- 240	1.52	9	9	0	249
1346	4.81	2220	- 376	2596	- 874	22	8.68	1.48	27	2.25	265	292	- 13	305	8.22	2240	- 51	2291	2.02	48	48	0	- 360	1.50	8	8	0	368
1974	4.84	2270	- 300	2570	- 296	23	8.69	1.49	28	2.30	276	304	2	302	8.22	2240	- 28	2268	2.08	51	51	0	- 325	1.50	8	8	0	333

ALL DISCHARGE QUANTITIES ARE GIVEN IN SECOND FEET UNLESS OTHERWISE NOTED AT TOP OF COLUMN

1924 DISTRIBUTION WATER DISTRICT NO 36

DATE	JACKSON LAKE			MORAN				TWIN LK	DATE	HEISE						MORAN-HEISE				LORENZO	H-L		REXBURG	
1924	GAGE	CAPACFT	DRAFTAF	GAGE	DISCH	STD	NAT	DISC + MORAN	1924	GAGE	DISCH	+ RILEY	STD	TLK	NAT	TOT GN	L STD	LTL	GN NAT	STD	TLK	L STD	LTL	GAGE	DIS
Aug 19	34.50	79040	5420	H.D.	3010	2739	271	30 3040	Aug 20	3.32	5930	5953	2665	29	3259	2913	68	1	2982	2452	27	213	2	2.84	9
20	34.24	74350	4690	H.D.	2760	2365	395	32 2792	21	3.38	5880	5903	2306	31	3566	3111	59	1	3171	2034	27	272	4	2.83	9
21	34.08	71460	2890	H.D.	1770	1457	313	34 1804	22	3.06	4800	4819	1420	33	3366	3015	37	1	3053	1269	29	151	4	2.85	9
22	33.94	68940	2520	H.D.	1600	1271	329	35 1635	23	2.94	4500	4516	1239	35	3242	2881	32	0	2913	1170	33	69	2	2.82	9
23	33.83	66980	1960	H.D.	1330	988	342	35 1365	24	2.77	4100	4112	963	34	3115	2747	25	1	2773	934	33	29	1	2.88	9
24	33.72	65020	1960	H.D.	1330	988	342	35 1365	25	2.68	3900	3910	963	34	2913	2545	25	1	2571	934	33	29	1	3.00	10
25	33.59	62700	2320	H.D.	1430	1170	260	35 1465	26	2.65	3830	3841	1141	34	2666	2376	29	1	2406	1107	33	34	1	2.87	9
26	33.37	58780	3920	H.D.	2280	1976	304	31 2311	27	2.88	4360	4373	1927	30	2416	2062	49	1	2112	1869	29	58	1	3.03	10
27	33.14	54680	4100	H.D.	2350	2067	283	26 2376	28	3.09	4880	4897	2015	26	2856	2521	52	0	2573	1955	25	60	1	2.77	8
28	32.90	50420	4260	H.D.	2450	2148	302	21 2471	29	3.11	4930	4948	2094	20	2834	2477	54	1	2532	1962	19	132	1	2.72	8
29	32.63	45670	4750	H.D.	2680	2395	285	31 2711	30	3.18	5110	5128	2335	30	2763	2417	60	1	2478	2130	27	205	3	2.74	8
30	32.37	41100	4570	H.D.	2520	2304	216	35 2555	31	3.19	5140	5159	2246	34	2879	2604	58	1	2663	2057	31	189	3	2.73	8
31	32.14	37050	4050	H.D.	2300	2042	258	35 2335	Sept 1	3.09	4880	4898	1991	35	2872	2563	51	0	2614	1820	32	171	3	2.68	8
Sept 1	31.93	33370	3680	H.D.	2140	1855	285	31 2171	2	3.03	4720	4737	1809	30	2898	2566	46	1	2613	1617	27	192	3	2.59	7
2	31.75	30240	3130	H.D.	1870	1578	292	28 1898	3	2.95	4520	4535	1539	27	2969	2637	39	1	2677	1368	24	171	3	2.60	7
3	31.62	27980	2260	H.D.	1420	1139	281	26 1446	4	2.73	4010	4023	1111	25	2887	2577	28	1	2606	1010	23	101	2	2.58	7
4	31.50	25890	2090	H.D.	1310	1054	256	21 1331	5	2.65	3830	3842	1028	21	2793	2511	26	0	2537	993	20	35	1	2.85	9
5	31.46	25190	700	H.D.	1110	353	757	16 1126	6	2.68	3900	3904	344	15	3545	2778	9	1	2788	334	15	10	0	3.03	10
6	31.40	24150	1040	H.D.	915	524	391	19 934	7	2.48	3460	3460	511	19	2930	2526	13	0	2539	496	18	15	1	3.12	11
7	31.33	22930	1220	H.D.	917	615	302	20 937	8	2.43	3440	3440	600	19	2821	2503	15	1	2519	582	19	18	0	2.90	9
8	31.30	22410	520	H.D.	794	262	532	18 812	9	2.42	3480	3480	256	18	3206	2668	6	0	2674	248	17	8	1	2.77	9
9	31.30	22410	0	H.D.	630	0	630	16 646	10	2.39	3480	3480	0	15	3465	2834	0	1	2835	0	15	0	0	2.76	9
10	31.30	22410	0	H.D.	581	0	581	13 594	11	2.33	3440	3440	0	13	3427	2846	0	0	2846	0	12	0	1	2.73	8
11	31.28	22060	350	H.D.	583	176	407	12 595	12	2.27	3380	3380	172	12	3196	2785	4	0	2789	162	11	10	1	2.68	8
12	31.25	21540	520	H.D.	596	262	334	10 606	13	2.23	3380	3380	255	10	3115	2774	7	0	2781	239	10	16	0	2.59	8
13	31.20	20670	870	H.D.	740	439	301	9 749	14	2.20	3320	3320	428	8	2884	2571	11	1	2583	390	7	38	1	2.56	8
14	31.12	19280	1390	H.D.	966	701	265	8 974	15	2.30	3510	3511	683	8	2820	2537	18	0	2555	611	7	72	1	2.53	7
15	31.05	18060	1220	H.D.	848	615	233	8 856	16	2.35	3590	3590	600	8	2982	2734	15	0	2749	529	7	71	1	2.50	7
16	31.01	17370	690	H.D.	711	348	363	8 719	17	2.28	3400	3400	339	8	3053	2681	9	0	2690	292	7	47	1	2.48	7
17	30.98	16850	520	H.D.	714	262	452	8 722	18	2.30	3420	3420	255	8	3157	2698	7	0	2705	229	7	26	1	2.45	7
18	30.93	15990	860	H.D.	713	434	279	8 721	19	2.33	3460	3460	423	7	3030	2739	11	1	2751	390	7	33	0	2.37	7
19	30.88	15130	860	H.D.	793	434	359	8 801	20	2.37	3530	3530	423	8	3099	2729	11	0	2740	384	7	39	1	2.54	7
20	30.80	13760	1370	H.D.	1020	691	329	8 1028	21	2.40	3550	3550	674	8	2868	2522	17	0	2539	603	7	71	1	2.86	9
21	30.70	12040	1720	H.D.	1180	867	313	8 1188	22	2.48	3700	3700	845	8	2847	2512	22	0	2534	739	7	106	1	2.94	10
22	30.60	10320	1720	H.D.	1160	867	293	8 1168	23	2.53	3790	3790	845	8	2937	2622	22	0	2644	745	7	100	1	2.81	9
23	30.51	8770	1550	H.D.	1090	782	308	8 1098	24	2.50	3720	3720	762	8	2950	2622	20	0	2642	677	7	85	1	2.96	10
24	30.42	7220	1550	H.D.	1020	782	238	8 1028	25	2.48	3680	3680	762	7	2911	2652	20	1	2673	673	6	89	1	2.91	9
25	30.35	6020	1200	H.D.	958	605	353	7 965	26	2.46	3610	3610	590	7	3013	2645	15	0	2660	532	6	58	1	2.68	8
26	30.29	4990	1030	H.D.	904	519	385	5 909	27	2.41	3530	3530	506	5	3019	2621	13	0	2634	469	5	37	0	2.57	7
27	30.23	3950	1040	H.D.	855	524	331	5 860	28	2.38	3460	3463	511	5	2947	2603	13	0	2616	482	4	29	1	2.49	7
28	30.17	2920	1030	H.D.	819	519	300	2 821	29	2.32	3340	3346	506	2	2838	2525	13	0	2538	482	2	24	0	2.44	7
29	30.14	2410	510	H.D.	557	257	300	0 557	30	2.28	3260	3268	251	0	3017	2711	6	0	2717	243	0	8	0	2.41	6
TOTAL +			524460			269416							257805				6611			244804		13001			
TOTAL -			- 46610			- 23500							- 22912				- 588			- 22225		- 687			
TOTAL			477850			240916		1470					234893	1433		706724	6023	37		222579	1337	12314	96		
MEAN																5196									

TOTAL AND MEAN DETERMINATIONS ARE FOR SEASON AND INCLUDE RECORD FROM PLATES

DAILY SUMMARY OF DATA AT AND BETWEEN SN

HEISE + RILEY + REDWING	DATE 1924	DIV HEISE-WOOD TOTAL	STD	TL	NAT	WOOD TH BAL	WOODVILLE GAGE	DISCH	STD	NAT	LOR-WOOD LS STD	L TL	TOTGN	HEISE-WOODVILLE L STD	L TL	GN NAT	DIV WOOD-BLACK TOTAL	STD	NAT	BLACK TH BAL	BLACKFOOT BRIDGE GAGE	DISCH	STD	NAT	WOOD-BLACK TOTGN	L STD	GN NAT	CU LOS ST
6865	Aug 21	6166	1901	19	4246	699	4.68	1470	539	931	12	0	771	225	2	998	1084	819	265	386		35	-263	298	-351	-17	-368	-17
6815	22	5314	1131	19	4164	1501	4.64	1430	893	537	10	0	771	282	4	215	1220	794	426	210		11	93	-82	-199	6	-193	-
5742	23	4759	471	24	4264	983	4.66	1450	792	658	6	0	467	157	4	628	1055	745	310	395		3	44	-41	-392	3	-389	
5422	24	4598	423	27	4148	824	4.84	1630	741	889	6	0	806	75	2	883	1220	767	453	410		52	-24	76	-358	-2	-360	
5052	25	4404	288	27	4089	648	4.82	1610	641	969	5	1	962	34	2	998	1343	782	561	267		9	-133	142	-258	-8	-266	
4920	26	4284	121	28	4135	636	4.79	1580	808	772	5	0	944	34	1	979	1357	804	553	223		1	4	-3	-222	0	-222	
4775	27	4472	458	28	3986	303	4.68	1470	643	827	6	0	1167	40	1	1208	1222	671	551	248		1	-26	27	-247	-2	-249	
5403	28	5168	1064	26	4078	235	4.55	1340	796	544	9	0	1105	67	1	1173	1063	599	464	277		0	185	-185	-277	12	-265	
5776	29	5166	1440	29	3697	610	4.46	1260	505	755	10	0	650	70	1	721	977	505	472	283		0	0	0	-283	0	-283	
5800	30	5331	1515	33	3783	469	4.39	1200	437	763	10	0	731	142	1	874	911	455	456	289		3	-17	20	-286	-1	-287	
5992	31	5297	1692	32	3573	695	4.33	1150	427	723	11	0	455	216	3	674	963	423	540	187		9	4	5	-178	0	-178	
6016	Sept 1	5008	1650	33	3325	1008	4.53	1330	397	933	10	1	322	199	4	525	1035	485	550	295		11	-83	94	-284	-5	-289	
5729	2	4704	1335	32	3337	1025	4.62	1410	476	934	9	0	385	180	3	568	1162	579	583	248		25	-97	122	-223	-6	-229	
5522	3	4519	985	31	3503	1003	4.75	1540	624	916	8	0	537	200	3	740	1169	682	487	371		9	-55	64	-362	-3	-365	
5325	4	4321	757	31	3533	1004	4.86	1660	604	1056	7	0	656	178	3	837	1289	700	589	371		41	-90	131	-330	-6	-336	
4803	5	4235	521	13	3701	568	4.69	1480	484	996	5	0	912	106	2	1020	1225	617	608	255		66	-125	191	-189	-8	-197	
4765	6	4226	578	3	3645	539	4.73	1520	410	1110	5	0	981	40	1	1022	1187	533	654	333		66	-116	182	-267	-7	-274	
4944	7	4037	458	8	3571	907	4.82	1610	-126	1736	2	0	703	12	0	715	1252	650	602	358		30	-729	759	-328	-47	-375	
4560	8	4003	377	14	3612	557	4.88	1680	117	1563	2	0	1123	17	1	1141	1305	279	1026	375		74	-152	226	-301	-10	-311	
4425	9	4071	376	0	3695	354	4.77	1560	203	1357	3	0	1206	21	0	1227	1248	27	1221	312		62	-165	-103	-250	11	-239	
4392	10	4043	229	7	3807	349	4.56	1350	18	1332	1	1	1001	9	2	1012	1123	0	1123	227		18	17	1	-209	1	-208	
4386	11	4002	199	5	3798	384	4.43	1240	-199	1439	0	0	856	0	0	856	956	0	956	284		17	-187	204	-267	-12	-279	
4330	12	3828	130	6	3692	502	4.41	1220	-130	1350	0	0	718	0	1	719	910	0	910	310		64	-122	186	-246	-8	-254	
4243	13	3742	127	5	3610	501	4.38	1190	34	1156	1	0	689	11	1	701	938	0	938	252		83	32	51	-169	2	-167	
4196	14	3713	145	6	3562	483	4.28	1110	93	1017	1	0	627	17	0	644	855	0	855	255		42	87	-45	-213	6	-207	
4120	15	3850	484	5	3361	270	4.13	1000	-96	1096	2	0	730	40	1	771	810	0	810	190		16	-90	106	-174	-6	-180	
4296	16	3958	561	6	3391	338	3.99	903	47	856	3	0	565	75	1	641	748	0	748	155		5	44	-39	-150	3	-147	
4360	17	3937	465	6	3466	423	3.88	828	61	767	3	0	405	74	1	480	682	0	682	146		0	57	-57	-146	4	-142	
4160	18	3915	472	7	3436	245	3.73	738	-181	919	1	0	493	48	1	542	499	0	499	239		0	-170	170	-239	-11	-250	
4165	19	3910	361	23	3526	255	3.63	678	-133	811	1	0	423	27	1	451	566	0	566	112		8	-125	133	-104	-8	-112	
4166	20	3760	244	23	3493	406	3.77	762	144	618	2	0	356	35	0	391	560	0	560	202		12	135	-123	-190	9	-181	
4320	21	3610	349	23	3238	710	4.09	973	33	940	2	0	263	41	1	305	691	0	691	282		31	31	0	-251	2	-249	
4512	22	3757	485	23	3249	755	4.32	1150	115	1035	3	0	395	74	1	470	838	0	838	312		64	108	-44	-248	7	-241	
4710	23	3687	486	24	3177	1023	4.54	1340	249	1091	4	0	317	110	1	428	1013	0	1013	327		107	234	-127	-220	15	-205	
4724	24	3568	407	14	3147	1156	4.80	1590	334	1256	4	0	434	104	1	539	1298	130	1168	292		183	192	-9	-109	12	-97	
4740	25	3463	101	6	3356	1277	4.83	1620	573	1047	3	1	343	88	2	433	1292	217	1075	328		92	335	-243	-236	21	-215	
4671	26	3461	69	0	3392	1210	4.97	1780	601	1179	3	0	570	92	1	663	1376	0	1376	404		159	565	-406	-245	36	-209	
4473	27	3381	67	0	3314	1092	4.96	1770	462	1308	3	0	678	61	1	740	1327	0	1327	443		206	434	-228	-237	28	-209	
4320	28	3444	64	0	3380	876	4.85	1640	403	1237	2	0	764	39	0	803	1119	0	1119	521		280	379	-99	-241	24	-217	
4198	29	3512	24	0	3488	686	4.73	1520	456	1064	2	0	834	31	1	866	1032	0	1032	488		265	429	-164	-223	27	-196	
4047	30	3499	22	0	3477	548	4.62	1410	458	952	2	0	862	26	0	888	970	0	970	440		239	431	-192	-201	27	-174	
3941	Oct 1	3450	0	0	3450	491	4.47	1270	242	1028	1	0	779	9	0	788*	900	0	900	370		193	227	-34	-171	15	-162	
			78635						217075		1225			14226			49730						181074			11539		
			66825						-7419		-112			-799			-26834						-5482			-351		
			11810	1278					209656		1113	7	10105?	13427	103		22896						175592		-38	48	11208	
													743												-280			

* ESTIMATED

AKE RIVER GAGING STATIONS FROM JACKSON LAKE WYOMING TO MILNER IDAHO

	CORR APP STD	BLACK RIVER GAGE	BLACK RIVER DISCH	+ BLACK	S-M CLOUGH CANALTH	S-M CLOUGH BAL	CLOUGHS GAGE	CLOUGHS DISCH	CLOUGHS STD	CLOUGHS NAT	B-C GAIN	DATE 1924	NEELEY GAGE	NEELEY DISCH	NEELEY STD	NEELEY NAT	C-N GAIN	DATE 1924	LAKE WALCOTT GAGE	LAKE WALCOTT CAPACFT	N5 MIN C DRAFT	N5 MIN C GAGE	N5 MIN C DISCH	S5 MIN C GAGE	S5 MIN C DISCH	N5+S5 MIN CAN TOTAL	N5+S5 MIN CAN STD	N5+S5 MIN CAN NAT
	298	4.02	0	35	0	35	1.58	164	35	129	129	AUG22	4.48	3930	1360	* 2570	3766	AUG23	38.06	20050	257	7.48	1620	3.88	852	1572	1572	0
	-82	4.05	1	12	0	12	1.58	164	11	153	152	23	4.33	3570	1000	* 2570	3406	24	37.94	18850	605	7.40	1000	3.78	529	1529	1529	0
	-41	4.19	2	5	0	5	1.50	137	3	134	132	24	4.14	3140	570	* 2570	3003	25	37.74	16860	1003	7.24	367	3.62	494	1461	1461	0
		4.06	1	53	0	53	1.52	143	0	143	90	25	4.00	2830	260	* 2570	2687	26	37.48	14290	1296	7.05	925	3.43	453	1378	1378	0
		4.00	0	9	0	9	1.51	140	0	140	131	26	3.94	2700	190	* 2570	2560	27	37.34	12900	701	H.D.	608	3.22	411	1019	1019	0
		4.00	0	1	0	1	1.50	137	0	137	136	27	3.93	2680	110	* 2570	2543	28	37.26	12010	449	DRY	0	3.13	394	394	394	0
		4.00	0	1	0	1	1.49	134	0	134	133	28	3.91	2640		0 2640	2506	29	37.17	11220	398	DRY	0	3.02	373	373	373	0
		4.09	1	1	0	1	1.49	134	0	134	133	29	3.90	2620		0 2620	2486	30	37.08	10330	449	DRY	0	2.97	365	365	365	0
		4.21	3	3	0	3	1.49	134	0	134	131	30	3.93	2680		0 2680	2546	31	37.01	9630	353	DRY	0	2.85	344	344	344	0
		4.20	2	5	0	5	1.49	134	0	134	129	31	3.92	2660		0 2660	2526	SEPT 1	36.96	9150	242	DRY	0	2.78	331	331	331	0
		4.15	2	11	0	11	1.49	134	0	134	123	SEPT 1	H.D.	2520		0 2520	2386	2	36.90	8580	287	DRY	0	2.73	322	322	322	0
		4.00	0	11	0	11	1.48	131	0	131	120	2	H.D.	2610		0 2610	2479	3	36.91	8680	-50	DRY	0	2.71	321	321	321	0
		4.02	0	25	0	25	1.49	134	0	134	109	3	H.D.	2530		0 2530	2396	4	36.91	8680	0	H.D.	85	2.72	322	407	407	0
		4.00	0	9	0	9	1.52	143	0	143	134	4	H.D.	2450		0 2450	2307	5	36.86	8200	242	2.51	145	2.69	317	462	462	0
		DRY	0	41	0	41	1.54	150	0	150	109	5	H.D.	2610		0 2610	2460	6	36.83	7910	146	3.00	206	2.67	316	522	522	0
		4.00	0	66	0	66	1.59	168	0	168	102	6	H.D.	2600		0 2600	2432	7	36.76	7250	333	3.31	248	2.64	311	559	559	0
		4.12	1	67	0	67	1.60	171	0	171	104	7	H.D.	2590		0 2590	2419	8	36.66	6290	484	3.29	245	2.55	295	540	540	0
		4.02	0	30	0	30	1.60	171	0	171	141	8	H.D.	2590		0 2590	2419	9	36.56	5340	479	3.29	245	2.45	278	523	523	0
		4.35	4	78	0	78	1.65	191	0	191	113	9	H.D.	2560		0 2560	2369	10	36.50	4770	287	3.30	246	2.36	266	512	512	0
		4.37	4	66	0	66	1.68	203	0	203	137	10	H.D.	2640		0 2640	2437	11	36.44	4200	287	3.29	245	2.32	259	504	504	0
		4.50	8	26	0	26	1.65	191	0	191	165	11	H.D.	2640		0 2640	2449	12	36.39	3720	242	3.30	246	2.26	250	496	496	0
		4.72	16	33	0	33	1.66	195	0	195	162	12	H.D.	2590		0 2590	2395	13	36.34	3240	242	3.30	246	2.22	245	491	491	0
		4.70	16	80	0	80	1.65	191	0	191	111	13	H.D.	2800		0 2800	2609	14	36.31	2760	141	3.31	248	2.20	242	490	490	0
		4.42	5	88	0	88	1.58	164	0	164	76	14	H.D.	2680		0 2680	2516	15	36.28	2670	146	3.30	246	2.16	236	482	482	0
		4.42	5	47	0	47	1.56	157	0	157	110	15	H.D.	2740		0 2740	2583	16	36.20	1910	383	3.30	246	2.13	232	478	478	0
		4.42	5	21	0	21	1.56	157	0	157	136	16	H.D.	2690		0 2690	2533	17	36.10	950	484	3.26	241	1.95	207	448	448	0
		4.39	5	10	0	10	1.55	154	0	154	144	17	H.D.	2700		0 2700	2546	18	35.85	-1430	1200	3.25	239	1.85	193	432	432	0
		4.39	5	5	0	5	1.54	150	0	150	145	18	H.D.	2560		0 2560	2410	19	35.83	-1620	96	3.23	236	1.73	177	413	413	0
		4.18	1	1	0	1	1.53	146	0	146	145	19	H.D.	2670		0 2670	2524	20	35.83	-1620	0	3.28	243	1.72	177	420	420	0
		4.34	4	12	0	12	1.53	146	0	146	134	20	H.D.	2580		0 2580	2434	21	35.77	-2190	287	3.29	245	1.68	172	417	417	0
		4.12	1	13	0	13	1.55	154	0	154	141	21	H.D.	2680		0 2680	2526	22	35.85	-1430	-383	3.30	246	1.65	168	414	414	0
		4.65	13	44	0	44	1.67	199	0	199	155	22	H.D.	2780		0 2780	2581	23	35.88	-1140	-146	3.34	310	1.77	184	494	494	0
		5.00	44	108	0	108	1.75	234	0	234	126	23	H.D.	2740		0 2740	2506	24	35.82	-1720	293	4.02	352	1.71	177	529	529	0
		5.10	52	159	0	159	1.76	239	0	239	80	24	H.D.	2790		0 2790	2551	25	35.78	-2100	192	3.97	344	1.53	154	498	498	0
		4.98	42	225	0	225	1.71	216	0	216	-9	25	H.D.	2720		0 2720	2504	26	35.83	-1620	-242	3.98	346	1.56	158	504	504	0
		5.00	44	136	0	136	1.70	212	0	212	76	26	H.D.	2780		0 2780	2568	27	35.83	-1620	0	3.98	346	1.49	150	496	496	0
		4.90	36	195	0	195	1.70	212	0	212	17	27	H.D.	2620		0 2620	2408	28	35.85	-1430	-96	3.98	346	1.46	146	492	492	0
		5.00	44	250	0	250	1.76	239	0	239	-11	28	H.D.	2890		0 2890	2651	29	35.89	-1050	-192	4.01	350	1.50	151	501	501	0
		5.00	44	324	0	324	1.88	301	0	301	-23	29	H.D.	2780		0 2780	2479	30	36.02	-190	-625	4.04	354	1.51	152	506	506	0
		5.05	48	313	0	313	2.04	397	0	397	84	30	H.D.	3010		0 3010	2613	OCT 1	36.13	-1240	-529	3.99	347	1.43	142	489	489	0
		5.14	56	295	0	295	2.17	488	0	488	193	OCT 1	3.98	2790		0 2790	2302	2	36.19	-1810	-287	4.02	352	1.49	150	502	502	0
		18 75	268	0	268	2.21	517	0	517	249	2	4.00	2830		0 2830	2313	3	36.23	-2190	-192	3.98	346	1.50	151	497	497	0
									175429						179780													
									- 1591						- 1591													
									173838						178189	323923				24982						178503		
																2382												

AS NORMAL FLOW AFTER AUGUST 23

* MEAN OF NEELEY NORMAL AUG 11-20 AND AUG 28 - SEPT 6

1/ 35 JACKSON LAKE 1325 AMERICAN FALLS 3/ 3 JACKSON LAKE 567 AMER

4/ 11 JACKSON LAKE 989 AMERICAN FALLS 6/ AMERICAN FALLS STORAGE

PLATE NO X

N	MINIDOKA				N-M	DATE	L MIL	PA LAT		NSTF CAN		PA + NSTF CANS		
AL	GAGE	DISCH	STD	NAT	LOSS	1924	GAGE	GAGE	DISC.	GAGE	DISCH	TOTAL	STD	NAT
15	4.87	2310	- 260	2570	305	Aug24	8.54	1.52	29	2.31	278	307	5	302
46	4.89	2340	- 230	2570	306	25	8.49	1.60	34	2.30	276	310	8	302
82	4.97	2460	- 110	2570	222	26	8.60	1.60	34	2.34	285	319	17	302
48	5.00	2510	- 60	2570	238	27	8.68	1.60	34	2.48	319	353	51	302
82	4.98	2480	- 90	2570	- 98	28	8.65	1.60	34	2.47	316	350	48	302
35	5.00	2510	- 60	2570	225	29	8.54	1.60	34	2.45	312	346	44	302
65	5.05	2580	- 60	2640	85	30	8.72	1.60	34	2.45	312	346	35	311
04	5.06	2600	- 20	2620	104	31	8.76	1.60	34	2.41	302	336	28	308
89	5.13	2720	40	2680	- 31	SEPT 1	9.00	1.60	34	2.38	295	329	14	315
71	5.12	2700	40	2660	- 129	2	9.11	1.60	34	2.37	292	326	13	313
85	5.01	2520	0	2520	- 35	3	9.18	1.60	34	2.35	288	322	26	296
39	4.82	2240	- 370	2610	- 1	4	9.09	H.D.	8	H.D.	1320	1328	- 479	1807
23	4.88	2320	- 210	2530	- 197	5	9.12	DRY	0	6.82	1800	1800	2	1798
30	4.91	2370	- 80	2450	- 140	6	9.04	DRY	0	H.D.	1500	1500	- 288	1788
34	4.91	2370	- 240	2610	- 136	7	9.35	H.D.	21	2.58	393	414	107	307
74	4.89	2340	- 260	2600	34	8	9.08	1.50	28	2.24	307	335	29	306
34	4.98	2480	- 110	2590	54	9	8.94	1.50	28	2.13	281	309	4	305
46	5.01	2520	- 70	2590	26	10	8.88	1.48	27	2.11	276	303	- 2	305
35	5.04	2570	10	2560	- 235	11	8.94	1.57	32	2.09	272	304	3	301
23	5.01	2520	- 120	2640	- 97	12	8.94	1.60	34	2.10	274	308	- 3	311
86	5.02	2540	- 100	2640	- 154	13	8.90	1.60	34	2.13	281	315	4	311
41	5.02	2540	- 50	2590	- 199	14	8.86	1.60	34	2.15	285	319	14	305
51	4.94	2420	- 380	2800	31	15	8.76	1.60	34	2.14	283	317	- 12	329
44	5.02	2540	- 140	2680	- 196	16	8.66	1.60	34	2.13	281	315	0	315
45	5.03	2550	- 190	2740	95	17	8.41	H.D.	23	2.17	290	313	- 9	322
26	5.18	2800	110	2690	- 74	18	8.58	DRY	0	2.27	314	314	- 2	316
68	5.10	2670	- 30	2700	798	19	8.44	DRY	0	2.26	312	312	- 6	318
43	5.16	2770	210	2560	- 527	20	8.64	DRY	0	2.28	316	316	15	301
50	5.09	2650	- 20	2670	- 400	21	8.79	DRY	0	2.30	322	322	8	314
50	5.12	2700	120	2580	- 250	22	9.45	DRY	0	2.32	326	326	22	304
83	4.72	2100	- 580	2680	- 217	23	9.26	DRY	0	2.28	316	316	1	315
40	4.53	1860	- 920	2780	280	24	8.98	DRY	0	2.28	316	316	- 11	327
04	5.02	2540	- 200	2740	- 36	25	8.75	DRY	0	2.27	314	314	- 8	322
84	5.01	2520	- 270	2790	- 36	26	8.92	DRY	0	2.27	314	314	- 14	328
74	4.73	2400	- 320	2720	- 426	27	9.10	DRY	0	2.30	322	322	2	320
84	4.95	2430	- 350	2780	- 146	28	9.16	DRY	0	2.31	324	324	- 3	327
32	4.94	2420	- 200	2620	- 388	29	9.14	DRY	0	2.32	326	326	18	308
97	4.67	2030	- 860	2890	167	30	8.94	DRY	0	2.30	322	322	- 18	340
49	4.62	1970	- 810	2780	- 321	Oct 1	8.53	1.50	28	2.26	312	340	13	327
72	4.41	1960	- 1050	3010	32	2	8.61	1.50	28	2.26	312	340	- 14	354
01	4.63	1980	- 810	2790	21	3	8.48	1.50	28	2.90	480	508	180	328
41	4.84	2270	- 560	2830	- 129	4	8.68	1.50	28	3.39	624	652	319	333
													47082	
					46977								- 9184	
					- 31404								37898	
					15573		6203							
							46							

SSTF CANAL				MILL LIFT CAN				MIL	MILNER				M-M
GAGE	DISCH	STD	NAT	GAGE	DISC	STD	NAT	TH BAL	GAGE	DISCH	STD	NAT	GAIN
8.22	2240	- 28	2268	2.08	50	50	0	- 287	1.50	8	8	0	295
8.23	2240	- 28	2268	2.07	50	50	0	- 260	1.50	8	8	0	268
8.21	2230	- 38	2268	2.05	49	49	0	- 138	1.50	8	8	0	146
8.23	2240	- 28	2268	2.09	51	51	0	- 134	1.52	9	9	0	143
8.22	2240	- 28	2268	2.10	51	51	0	- 161	1.52	9	9	0	170
8.23	2240	- 28	2268	2.12	52	52	0	- 128	1.52	9	9	0	137
8.22	2240	- 89	2329	2.10	51	51	0	- 57	1.53	9	9	0	66
8.23	2240	- 72	2312	2.09	51	51	0	- 27	1.53	9	9	0	36
8.22	2240	- 125	2365	2.13	53	53	0	98	1.54	10	10	0	- 88
8.22	2240	- 107	2347	H.D.	40	40	0	94	1.57	11	11	0	- 83
8.22	2240	16	2224	DRY	0	0	0	- 42	1.56	10	10	0	52
H.D.	1160	357	803	DRY	0	0	0	- 248	1.54	10	10	0	258
4.72	717	- 15	732	DRY	0	0	0	- 197	1.54	10	10	0	207
4.91	792	130	662	DRY	0	0	0	78	1.54	10	10	0	- 68
H.D.	1980	- 323	2303	DRY	0	0	0	- 24	1.56	10	10	0	34
8.55	2410	116	2294	DRY	0	0	0	- 405	1.55	10	10	0	415
8.53	2400	115	2285	DRY	0	0	0	- 229	1.54	10	10	0	239
8.52	2390	105	2285	DRY	0	0	0	- 173	1.54	10	10	0	183
8.51	2390	131	2259	DRY	0	0	0	- 124	1.54	10	10	0	134
8.51	2390	61	2329	DRY	0	0	0	- 178	1.55	10	10	0	188
8.52	2390	61	2329	DRY	0	0	0	- 165	1.55	10	10	0	175
8.52	2390	105	2285	DRY	0	0	0	- 169	1.55	10	10	0	179
8.51	2390	- 81	2471	DRY	0	0	0	- 287	1.54	10	10	0	297
8.50	2380	15	2365	H.D.	22	22	0	- 177	1.53	9	9	0	186
8.47	2370	- 48	2418	1.67	40	40	0	- 173	1.52	9	9	0	182
8.50	2380	6	2374	H.D.	16	16	0	90	1.53	9	9	0	- 81
8.49	2380	- 2	2382	DRY	0	0	0	- 22	1.53	9	9	0	31
8.56	2410	151	2259	DRY	0	0	0	44	1.54	10	10	0	- 34
8.43	2350	- 6	2356	DRY	0	0	0	- 22	1.56	10	10	0	32
H.D.	1250	- 1026	2276	DRY	0	0	0	1124	1.66	15	15	0	- 1109
8.31	2280	- 85	2365	DRY	0	0	0	- 496	1.66	15	15	0	511
8.28	2270	- 183	2453	DRY	0	0	0	- 726	1.55	10	10	0	736
8.27	2260	- 158	2418	DRY	0	0	0	- 34	1.52	9	9	0	43
8.27	2260	- 202	2462	DRY	0	0	0	- 54	1.52	9	9	0	63
8.22	2240	- 160	2400	DRY	0	0	0	- 162	1.54	10	10	0	172
8.20	2230	- 223	2453	DRY	0	0	0	- 124	1.54	10	10	0	134
8.06	2160	- 152	2312	DRY	0	0	0	- 66	1.54	10	10	0	76
7.89	2070	- 480	2550	DRY	0	0	0	- 362	1.53	9	9	0	371
7.43	1950	- 503	2453	DRY	0	0	0	- 320	1.52	9	9	0	329
7.54	1900	- 756	2656	DRY	0	0	0	- 280	1.52	9	9	0	289
7.44	1860	- 602	2462	DRY	0	0	0	- 388	1.53	9	9	0	397
7.39	1830	- 667	2497	DRY	0	0	0	- 212	1.52	9	9	0	221
					14036								
					- 17105								
					- 3069			6551					
										1417		27965	
												206	

ALL DISCHARGE QUANTITIES ARE GIVEN IN SECOND FEET UNLESS OTHERWISE NOTED AT TOP OF COLUMN

N FALLS

1/ 1500 SECOND FEET LOANED TO NORTH SIDE CANAL CO SEPT 4, 5, & 6 BY TWIN FALLS CANAL CO TO BE REPAID IN 1925

This schedule for time of transmission is the same as the one adopted for the five preceding years, and while not exactly correct for all stages of the river, it is believed to be fairly representative of average conditions, and on this account was used throughout the entire period of record.

The dates given on these three plates are those which agree most nearly with the midday hour on this schedule, but the discharges for all river stations have been computed from recording gage records and agree exactly with the schedule. The summaries of diversions or canal totals are for the dates indicated on the tables.

Note should be taken of the inclusion of the Blackfoot Bridge record in place of that formerly shown for the Porterville station. Data for these two stations are not, however, directly comparable since the new one is located several miles downstream from the Porterville Bridge. Four or five canals also divert from the river between the two sites.

Only stored water quantities are tabulated for the Lorenzo station. Complete segregation of flow would, in this case, involve consideration of all water by-passed through the Great Feeder and this could hardly be shown satisfactorily without the addition of complicated tables to the already voluminous summary herein presented. Losses and gains between the Heise and Lorenzo stations were computed to determine the amounts deducted throughout the season as storage transmission loss and will be discussed further on in this report.

Storage released from the Emma Matilda and Two Ocean Lake Reservoirs is shown under the heading, Twin Lakes.

SEGREGATION OF FLOW

Plate XI shows graphically both the actual total and the computed normal flow past the Moran and Heise gaging stations during the season of 1924. The difference between the total and normal flow graphs on any date of course indicates storage—either impounded or released as the normal flow graph is greater or less respectively, than that indicating total discharge.

These graphs are plotted from the special day discharges with the time interval adjusted to make them coincide with the nearest regular day at Heise. For example, the Heise data shown for July 15 really represent mean quantities for the 24 hour period ending at 4 a.m. on July 16, while the indicated Moran data for July 15 are means for the 24 hour period ending at 4 a.m. on July 15.

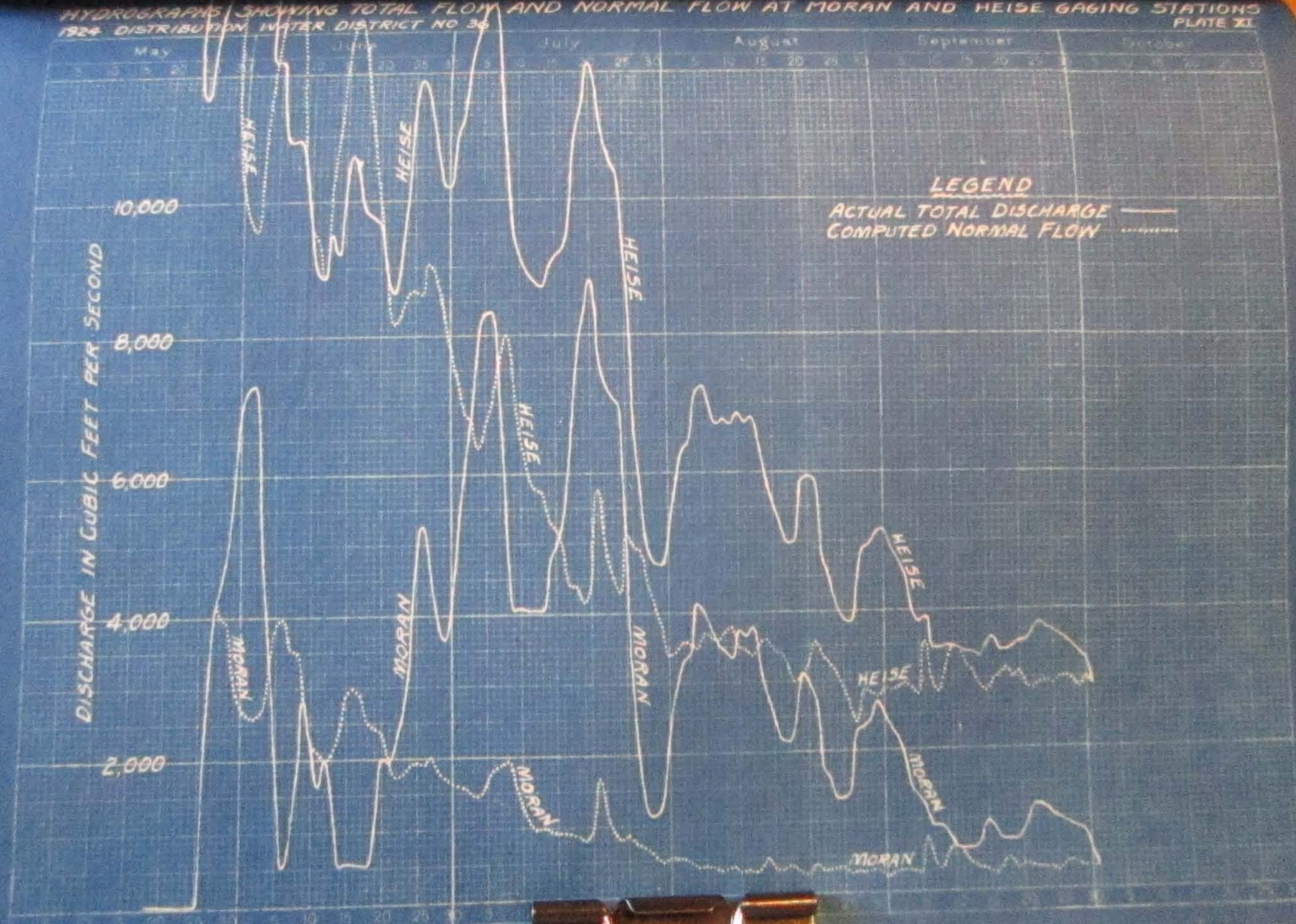
While these diagrams are merely a graphical representation of some of the numerical quantities contained in the tables on Plates VIII, IX and X, they will be of interest and perhaps of some assistance in connection with the explanations and discussions which have preceded as well as those which follow.

The irregularities noted in the Heise normal flow after about July 24 are undoubtedly due very largely to the fact that the single time interval used is too short for proper application during the lower river stages which pertained during the balance of the season. The net effect is similar to that usually experienced on rapid changes of river stage and attributed to increments from or loss to adjacent ground water reservoirs depending respectively upon whether the river dropped or rose. In reality such normal flow fluctuations as the sudden rise on July 25-27 and the drops noted on July 31, August 18-19 and August 27 are probably due to variable combinations of the two above mentioned factors with the time interval in this case increasing in relative importance as the river stage diminishes.

HYDROGRAPHS SHOWING TOTAL FLOW AND NORMAL FLOW AT MORAN AND HEISE GAGING STATIONS

1924 DISTRIBUTION WATER DISTRICT NO 36

PLATE XI



Because of the extent and irregularity as to time of the normal flow-storage exchanges, which necessitated making corresponding variations in the amount of water released from Jackson Lake Reservoir, total discharge fluctuations during 1924 were somewhat larger and more frequent than usual in an ordinary season.

JACKSON LAKE AND LAKE WALCOTT STORAGE DELIVERIES

The amount of stored water released each day from Jackson Lake was determined from the reservoir capacity tables by noting the quantity corresponding to the daily decrease in stage indicated by the lake gage readings. Occasional irregularities in the latter, attributable to wind effect, were largely eliminated by short period interpolations or adjustments.

This method of determining the proportion of the total daily flow passing the dam and the Moran gaging station, which is stored water, has been in use for several years. Its use assumes a certain balancing of comparatively unknown factors. Normal flow rights should obtain the benefit of such natural storage as would have been created in the old lake during flood periods and they should not be required to stand the extra evaporation loss attributable to the larger flooded area of the present reservoir. On the other hand the storage owners should obtain the benefit of all the additional ground or bank storage which results from the increased elevation of the water surface in the lake.

The primary object of the investigations conducted during 1924 by Thomas R. Newell and for several years previous by employees of the U. S. Bureau of Reclamation was to secure a more accurate segregation between stored water and normal flow at the outlet of the reservoir. The data thus secured indicate that the method just described is not strictly applicable

under all conditions of river flow and reservoir operation, but hardly suffice as yet to warrant the preparation and adoption of any more equitable plan of division.

The storage transmission loss schedule agreed upon for 1924 provided for flat percentage deductions of 2.5 per cent between Moran and Heise, 0.5 per cent between Lorenzo and Woodville and 6.0 per cent between Woodville and Blackfoot, but after fixing a minimum of 3.0 per cent left the actual amount to be deducted for the section from Heise to Lorenzo to be determined by what is called the "two day mean method." Under this method the percentage loss actually applied each day is the mean of the computed losses for the two preceding days, but in arriving at this mean 3.0 per cent is used for days on which losses of less than that amount or actual net gains are indicated by the solution of the following equation:

$$\text{Percentage loss} = \frac{\text{actual daily loss}}{\text{approximate average flow in section}} = \frac{U + T - D - L}{\frac{1}{2}(U + T + L)}$$

Where U equals total flow at upper river station (Heise in this case)
T " inflow from tributary streams entering within section
D " total diversions throughout section
L " total flow at lower river station (Lorenzo)

The 1924 daily losses or gains for the Heise-Lorenzo section as computed from this equation are shown graphically on Plate XII which also contains hydrographs for both of the terminal river stations and a corresponding graph showing the sectional loss in second-feet. The diagrams have all been adjusted to make them correspond to the nearest Heise dates.

A general discussion of river losses and gains will be found further on in this report, (pages 32-38) but attention should here be directed to a few characteristics of these curves. For example, the actual daily percentage losses show a pronounced tendency to increase as river discharges decrease,

HYDROGRAPHS ILLUSTRATING NET LOSSES AND GAINS BETWEEN HEISE AND LORENZO GAGING STATIONS
1924 DISTRIBUTION WATER DISTRICT NO 36

PLATE XII

May | June | July | August | September | October

DISCHARGE IN CUBIC FEET PER SECOND

12,000
10,000
8,000
6,000
4,000
2,000

HEISE

LORENZO

GAIN
500
0
500
LOSS

LOSS OR GAIN HEISE TO LORENZO (SECOND-FEET)

GAIN
5%
0
5%
LOSS

LOSS OR GAIN HEISE TO LORENZO

HEISE (PERCENT)

LORENZO

and while the average for the period May 25 to July 31, when most of Jackson Lake storage was delivered, is very evidently less than 3 per cent, the mean for the low stages of August and September is much higher. The average applied transmission loss for this section for the entire period of storage delivery amounts to 5.2424 per cent, which of course is greater than the actual average because of the 3.0 per cent minimum provision.

Another variable item provided for in the 1924 program was the so-called allowance for lag in storage transmission. This is in effect only an advance of storage to normal flow users and hence must be repaid before the end of the storage delivery period. For this reason it does not add to the final losses charged but is carried in a plus and minus account and appears on Plates VIII, IX and X under the heading "Cum. Loss Stored." No definite limit was placed on this item by the Committee of Nine and in consequence it became in the season's operation simply a balancing account in all respects similar to the same column shown in the reports for other years except for the use of Blackfoot Bridge in place of the older Blackfoot or Clough station as the terminal point for making the adjustment.

Transmission deductions for all storage delivered to canals diverting above the Blackfoot gaging station were computed upon the basis of losses to the Woodville station, as specified in the purchase contracts. Obviously it would be impracticable to calculate losses to the heading of each individual canal and this group method was doubtless originally adopted to avoid the necessity for such procedure. Since more than half the Jackson Lake storage owned in the upper valley is diverted above the Woodville station and the balance within a distance of about twelve miles below that point, this plan would seem to be at least reasonably fair to all concerned. 1924 calculations show that upon the basis of the final seasonal loss these upper valley canals

should have received at their headings 91.9267 per cent of the regular stor-
age turned out for them at Moran. Because of the increase during the season
of the applied loss between Heise and Lorenzo, canals exhausting their stor-
age rights early in the summer were actually entitled to somewhat more than
this amount, while those with later storage draft should have received less.

The distinction between permanent storage rights acquired by purchase and temporary rights secured through exchange should here be emphasized, for the latter, as previously explained, were adjusted in such a manner that canals holding them were entitled to receive at their headings 95 per cent of the water which they originally released under prearranged agreement.

The Minidoka and Twin Falls canals were charged with prorata transmission losses to the Blackfoot Bridge station and on the basis of season deliveries were entitled to receive at their headgates 86.4111 per cent of the amounts released for them at the Jackson Lake outlet gates or the equivalent thereof in water accepted for exchange. Here again, however, the variable loss between Heise and Lorenzo was a factor and actual deliveries were upon a slightly larger or smaller ratio depending upon the time of completion.

Plate XIII shows 1924 daily and total deliveries of Jackson Lake storage from permanent rights, from temporary rights acquired through exchange of normal flow and from donations for Snake River canals located above the Blackfoot Bridge station, together with a tabular summary of all these items for each canal and for the entire upper valley group.

All minus quantities listed on this plate represent credits, while plus items indicate deductions.

The eleven columns of the tabular summary in left to right order may be briefly explained as follows:

Column 1. Accumulations from the exchange of normal flow for storage.

" 2. Actual storage (both permanent and temporary) diverted.

" 3. Penalty charged against all storage rights acquired through the exchange of water.

" 4. Credit accruing to regular Jackson Lake owner canals from the exchange penalty.

" 5. Donations to the North Side Canal Co. Ltd.

" 6. Algebraic summary of amounts shown in columns 1-5, inclusive.

" 7. Donations to and receipts from the pool account (other than those shown in column 5.)

" 8. Algebraic summary of amounts listed in columns 7-8, inclusive.

" 9. Quantities in column 8 converted into acre-feet.

" 10. Jackson Lake equivalent of column 9.

" 11. Jackson Lake ownership right.

All amounts shown in columns 1-9 are on the basis of canal head-gate or Woodville river station deliveries.

Comparison of the quantities in column 10 with those in column 11 indicates a somewhat wider divergence between the actual storage draft by canals owning permanent rights in Jackson Lake Reservoir and the amount to which they were entitled, than would normally be expected under good river administration. In general, these apparent discrepancies may be explained by (1) additional complication of bookkeeping attributable to the exchange of normal flow for storage, as a result of which the total amount to be handled or accounted for in the upper valley was practically trebled; (2) the continued delivery of storage to canals in this section for nearly six weeks after the Jackson Lake rights of lower valley canals had been exhausted and

1924 DISTRIBUTION WATER DISTRICT NO 36

	MAY 25	26	27	28	29	30	31	JUNE 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
SNAKE VALLEY CANALS																												
POPLAR IRRIGATION DIST. (RILEY)						- 14	- 24	- 24	- 24	- 12			- 12	- 24	- 24	- 11												
PROGRESSIVE IRRIGATION DIST.			- 113	- 235	- 301	- 317	- 309	- 306	- 313	- 305	- 317	- 248	- 206	- 225	- 230	- 219	- 212	- 218	- 212	- 194	- 107						
FARMERS FRIEND CANAL CO.									- 149	- 281	- 161																	
ENTERPRISE CANAL CO.		- 44	- 75	- 83	- 84	- 83	- 86	- 89	- 92	- 84	- 86	- 84	- 89	- 88	- 88	- 90	- 88	- 88	- 85	- 84	- 83	- 76	- 82	- 84	- 86	- 83	- 8	
NELSON DITCH																												
MATTSON-CRAIG CANAL CO.									- 9	- 17	- 14	- 14	- 15	- 16	- 14	- 14	- 15	- 14	- 13	- 13	- 12	- 12	- 13	- 12	- 11	- 1	- 9	
ARNSBERGER DITCH																			- 3	- 6	- 6	- 6	- 6	- 6	- 6	- 6		
HARRISON CANAL CO.		- 115	- 205	- 220	- 230	- 215	- 219	- 220	- 221	- 324	- 423	- 336	- 210	- 215	- 218	- 192	- 204	- 198	- 209	- 201	- 206	- 209	- 85					
IDAHO IRR. DIST. (BOOMER & IDAHO)		- 78	- 292	- 297	- 296	- 289	- 295	- 276	- 688	- 902	- 897	- 896	- 491	- 287	- 288	- 288	- 227	- 195	- 191	- 191	- 266	- 297	- 286	- 291	- 280	- 306	- 29	- 30
RUDY CANAL CO.		- 71	- 162	- 167	- 165	- 157	- 95											12	32	34	28	37	30	27	31	- 34	- 13	12
BURGESS CANAL CO.				- 374	- 729	- 729	- 729	- 729	- 364												- 358	- 777	- 777	- 773	- 773	- 485		
CLARK & EDWARDS CANAL CO.																												
WONDER CANAL CO. (LOWD. & JENNGS)		- 16	- 22	- 24	- 25	- 25	- 25	- 25	- 24	- 26	- 28	- 28	- 13															
LA BELLE CANAL CO																												
SUNNYDELL IRR. DIST. (CONSOL. FEED)		- 34	- 62	- 67	- 82	- 82	- 84	- 79	- 96	- 40	30	28	- 41	- 79	- 82	- 82	- 84	- 77	- 54	16	- 23	- 44	- 44	- 114	- 154	- 114	- 7	- 7
LENROOT CANAL CO.		- 70	- 141	- 139	- 139	- 139	- 138	- 140	- 91	- 42	- 42	- 40	- 19	- 16	- 61	- 65	- 65	- 21	23	- 54	- 120	- 120	- 120	- 119	- 120	- 120	- 12	- 4
REID CANAL CO.																		- 37	- 47	- 41	- 47	- 44	- 45	- 47	- 42	- 41	- 4	- 4
TEXAS FEEDER CANAL CO.																												
LONG ISLAND CANAL CO.																												
ISLAND CANAL CO.																												
CANALS IN HENRYS FORK AREA																												
RIGBY CANAL CO.																												
DILTS CANAL CO.		- 4	- 8	- 12	- 19	- 26	- 27	- 27	- 27	- 26	- 24	- 25	- 25	- 6						- 11	- 28	- 28	- 28	- 27	- 27	- 27	- 2	- 2
WEST LA BELLE CANAL CO.																												
PARKS & LEWISVILLE CANAL CO.																												
NORTH RIGBY CANAL CO.																												
BUTTE & MARK. LAKE CANAL CO.		- 73	- 126	- 126	- 126	- 126	- 128	- 128	- 137	- 133	- 148	- 145	- 145	- 140	- 148	- 145	- 156	- 173	- 159	- 127						- 7	- 31	
OSGOOD CANAL CO.																												
KENNEDY CANAL CO.																												
NEW SWEDEN IRRIG. DIST.																												-12
MARTIN CANAL CO.			5	10	10	10	5																		3	5	5	
BEAR ISLAND PUMP																												
WOODVILLE CANAL CO.		- 41	- 59	- 39	- 65	- 60	- 63	- 61	- 59	- 60	- 63	- 62	- 63	- 64	- 65	- 66	- 65	- 67	- 65	- 67	- 68	- 70	- 68	- 68	- 71	- 55	- 5	- 2
SNAKE RIVER VAL. IRRIG. DIST.					- 399	- 602	- 602	- 602	- 600	- 142								- 387	- 578	- 578	- 578	- 578	- 578	- 213				
TOTAL -		- 473	- 1212	- 1803	- 2261	- 2661	- 2822	- 2706	- 2729	- 2716	- 2453	- 2042	- 1328	- 1164	- 1212	- 1175	- 1104	- 1459	- 1631	- 1599	- 2030	- 2261	- 2131	- 1755	- 1571	- 1282	- 91	- 11
TOTAL +		0	5	10	10	10	5	0	0	0	0	30	28	0	0	0	0	0	12	64	73	46	57	47	36	34	5	5
TOTAL HEISE TO SHELLEY		- 473	- 1207	- 1793	- 2251	- 2651	- 2817	- 2706	- 2729	- 2716	- 2423	- 2014	- 1328	- 1164	- 1212	- 1175	- 1104	- 1447	- 1567	- 1526	- 1984	- 2204	- 2084	- 1719	- 1537	- 1277	- 91	- 11
BLACKFOOT CANAL CO.								- 238	- 363	- 359	- 359	- 360	- 354	- 357	- 357	- 199	- 115	- 121	- 121	- 122	- 119	- 124	- 115	- 126	- 130	- 120	- 12	- 5
NEW LAVASIDE DITCH CO.		- 13	- 28	- 33	- 36	- 33	- 35	- 35	- 37	- 37	- 37	- 46	- 24	- 36	- 39	- 36	- 35	- 36	- 55	- 37	- 35	- 37	- 37	- 39	- 39	- 39	- 3	- 5
PEOPLES CANAL CO.							- 273	- 424	- 424	- 424	- 424	- 424	- 424	- 424	- 424	- 158												
ABERDEEN SPRINGFIELD CAN CO									- 743	- 1116	- 1116	- 1116	- 424								- 143	- 588	- 169	- 169	- 718	- 992	- 99	- 9
CORBETT SLOUGH CANAL CO.						- 15	- 30	- 30	- 30	- 30	- 34	- 21	- 29	- 38	- 35	- 30	- 30	- 30	- 30	- 30	- 37	- 18	- 17	- 35	- 33	- 35	- 4	- 6
RIVERSIDE CANAL CO.									58	- 86	- 87	- 87	- 34															
DANSKIN CANAL CO.																												
TREGO CANAL CO.		- 33	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 30											
HEARTRICK CANAL CO.																												
TOTAL -		- 13	- 61	- 98	- 101	- 113	- 403	- 812	- 1720	- 2117	- 2122	- 2119	- 1354	- 920	- 920	- 488	- 210	- 187	- 206	- 189	- 334	- 767	- 338	- 369	- 920	- 1186	- 1192	- 11
TOTAL +		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL SHELLEY TO BLACKFOOT		- 13	- 61	- 98	- 101	- 113	- 403	- 812	- 1720	- 2117	- 2122	- 2119	- 1354	- 920	- 920	- 488	- 210	- 187	- 206	- 189	- 334	- 767	- 338	- 369	- 920	- 1186	- 1192	- 11
TOTAL UPPER VALLEY CANALS																												

JACKSON LAKE STORAGE DELIVERIES (REGULAR AND EXCHANGE) - STORAGE

JULY

21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8
	2	4	2	5	4	1	8	17	18	20	19	25	19	20	22	22	24
						-337	-768	-768	-768	426							
			51	97	94	91	89	88	87	-162	-289	-289	-289	-92	107	106	103
87	-53		-5		31	50	24	23	25	46	72	70	64	68	69	67	65
					-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
9	-7	-5	-1	4	4	6	6	4	3	3	3						
							-269	-464	-454	-373	-293	-41	172	172	168	168	168
301	-303	-299	-299	-289	-298	-350	-879	-879	-879	-894	-886	-877	-878	-275			
137	-136	-136	-50	50	45	50	45	45	45	47	48	47	51	57	-80	-122	-22
			39	161	226	233	226	229	226	-198	-613	-613	-613	-606	-226	188	214
												-27	-64	-31			
													14	-12	-21	-21	-21
													-39	-67	-24		
77	-33	48	46	35	43	41	35	30	30	34	25	26	19	31	18	28	53
41	57	104	100	144	144	143	144	140	148	42	-44	-44	-41	-39	-32	-24	-11
47								9	37	38	35	17					
															-105	-103	-14
							-19	-117	-35					-53	-127	-130	-135
							-39	-122	-35								
													-73	-91	-18		
26	-15											14	29	20			
													-42	-83	-83	-38	
												-143	-291	-143			
												-12	-46	-34			
312	-321	-321	-321	-321	-321	-321	-321	-321	-321	-321	-240						
													-66	-51	-49	-2	
21	-213	-281	-277	-275	-279	-281	-273	-161									
5	5	5	5	5	5	5	5	5	2								
										1	2	1	2	1	2	2	
23				-35	-76	-85	-85	-86		-85	-86	15	86	84	86	85	86
	-170	-246	-112	92	88	76	92	81	76	85	94	95	97	95	275	352	344
181	-1251	-1288	-1065	-885	-934	-1566	-2654	-2918	-2579	-2460	-2452	-2047	-2443	-1578	-765	-440	-203
5	64	161	243	593	684	696	674	671	697	316	298	310	553	548	747	1016	1057
176	-1187	-1127	-822	-292	-250	-870	-1980	-2247	-1882	-2144	-2154	-1737	-1890	-1030	-18	576	856
34			-178	-262	-64												
38	-42	-42	-40	-40	-44	-40	-39	-39	-37	-40	-32	-35	-33	-57	-110	-71	
		-282	-424	-424	-424	-422	-424	-424	-422	-422	253	390	388	390	388	390	390
992	-992	-992	-992	357	870	685	798	353	192	372	833	841	841	836	844	841	844
39	-41					-55	-100	-102									
							-29	-99	-66								
		-136	-172	-58													
			-65	-66	-65	-66	-65	-65	-66								
													-22	-39	-15		
1123	-1015	-1452	-1871	-1207	-597	-583	-657	-729	-591	-462	-276	-401	-421	-462	-491	-345	0
0	0	0	0	0	870	585	798	353	192	372	1086	1231	1229	1226	1232	1231	1242
1123	-1015	-1452	-1871	-1207	273	2	141	-376	-399	-90	810	830	808	764	741	886	1242

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
16	20	20	16	13	12	16	12	16	22	23	21	23	18	16	15	17	8
57	59	55	64	64	65	67	65	61	71	70	71	38					
57	-57	65	64	64	63	65	63	63	78	89	87	85	83	86	91	90	83
	2	4	4	4	3	1		3	9	8	8	8	8	7	4	1	
			159	159	159	159	288	400	417	121	-81	-80	-80		278	398	159
46	45	42	42	45	47	47	50	46	51	46	53	47	53	33	9		
233	47	203	203	207	207	214	210	338	466	450	462	416	3	-618	-605	-343	169
47	-21																
														-26	-26	2	24
36	31	28	10	9	6	7	6	8	3	10	19				7	1	9
4	-4	-3	-4	-1	-1	17	30	46	88	161	185	179	173	179	172	130	76
														8	13	13	1
142																	

VATIONS AND RECEIPTS – UPPER VALLEY

28	29	30	31	AUG 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	SEPT 1	2
																				7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
3					25	11	1	16	23	23	24																										
								120	276	286	281	20	5		15	13						1	19	33											242	229	216
			34	67	67	57	64	69	57	51	59	57	58	32	25																				
15		41	46	42	84	88	95	97	97	99	100	97	99	95	103	94	79	67	66	60	69	71	67	69	64	67	59	64	65	74	98	88	87	86	84	57
					1		4	7	6	6	7	8	8	2	7	3	9	8	5	3	4	10	10	10	7	3						3	2	1	2	2	1
												2					1	1						1			3	1	1	5	1	1	1	1	209	367
167	167	-122	- 71	- 71	- 70	- 66	- 70	219	409	409	404	391	417	421	427	146	- 66	- 63	- 66	- 67	- 61	211	415	414	114	- 83	- 75	- 75	- 74	- 70	- 66	- 68	- 66	- 68	387	391
						128	456	643	675	670	657	576	589	557	491	461	402									17							386	389	391		
- 43	-122	-112	- 30	56	51	66	80	70	80	78	78	80	78	77	88	77	78	80	78	20																
180	203	203	207	447	443	443	450	148	-366	-366	-359	-359	44	447	458	450	447	447	447	447	447	447	447	443	37	-360	-362	-362	-363	-122	367	363	369	363	- 12	-384
12	27	27	27	19		27	54	55	54	54	27										57	58	48	58	56	56	55	18			31	56	57	53	15	
				20	24	40	61	57	15	62	59	62	60	62	54	51	62	56	53	44	40	53	60	71	59	57	50	48	37	39	47	50	50	54	50	54
76	74	42	29					62	107	104	104	107	60	13	13	13	13	13	13	13	13	56	98	98	106	48	6	3	3	3	5	48	88	91	88	46
		18	12	1				6	25	21	21	20	22	22	22	22	24	20	22	22	21	10														
	50	100	100	100	30			19	59	69						56	86	201	230	140	140	67		61	94	110	133	128	28	33	40	47	43	43	40	19
						20	30	35	33	36	35	14				23	37	35	27	13	14															
-260	- 45		128	143	161	169	168	147	147	141	142	143	147	148	148	147	147	143	146	147	151	150	148	150	147	147	155	141	148	148	159	124	151	95		
																		2	2	2	2	2	2	2	2	2	1	1	1	1	2	2	2	2	2	2
-139	-180		214	217	258	229	209	212	212	207	218	214	212	211	206	205	203	203	206	199	202	197	202	200	193	193	193	187	200	210	205	208	214	206	211	182
12	12	12	12	16	16	16	16	17	18	18	12	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	6	6	6	6
				2	2	2	1	1	2	1	2	1	2									1				1						1	2			
34	38	31	25	32	33	36	41	36	32	32	30	30	30	31	30	34	31	26	28	54	74	77	88	93	60	18	2	2	2	2	2	2	2	2	2	38
215	- 30	-160	-161	-162	-162	- 89	133	124	126	130	127	168	229	222	159	122	189	202	186	160	157	159	178	187	181	184	192	115	62	124	159	118	118	116	327	332
-442	-377	-394	-262	-233	-232	-155	- 70	0	-366	-366	-359	-359	0	0	0	0	- 66	- 63	- 66	- 67	- 61	0	0	0	0	-443	-437	-437	-437	-192	- 66	- 68	- 66	- 68	- 12	-384
714	571	474	834	1162	1215	1332	1863	2160	2453	2503	2387	1796	2066	2346	2250	1921	1812	1508	1513	1335	1402	1581	1793	1901	1131	914	860	725	558	650	1130	1508	1581	1760	1662	1719
272	194	80	572	929	983	1177	1793	2160	2087	2137	2028	1637	2066	2346	2250	1921	1746	1445	1447	1268	1341	1581	1793	1901	1131	471	423	288	121	458	1064	1440	1515	1692	1650	1335
					161				160	262	252	257	240	242	242	240	80							223	357	314	287	290	290	288	96						
						30	53	57	56	60	50	35	40	40	43	41	43	43	42	36	35	36	34	41	41	39	45	50	13	1						
182	- 14	- 18	- 18	- 18	- 18	- 18	- 18	- 18	- 18	242	384	411	401	399	116	- 24	- 24	- 24	- 24	- 24	- 24	- 24	252	394	407	401	396	399	115	- 24	- 24	- 24	- 24	- 24	152
																													345	558	598	475	400	400	469	317
	2	2	2	105	297	297	470	704	858	875	314					538	799	799	796	726	238															
									26	66	76	77	73	59	30	- 105	- 109	- 109	- 109	- 101												24	38	2		
	6	6	4				8	11	5	12	7	3	6		3				3																1	1
									36	49	63	71	39	35	32	46	38	38	32	41	27	38	36	27	32	18	36	43	43	40	25	30	41	45		
																																		39	41
	0	- 14	- 18	- 18	- 18	- 18	- 18	- 18	- 18	- 18	0	0	0	0	0	- 105	- 133	- 133	- 133	- 125	- 24	- 24	- 24	0	0	0	0	0	0	0	- 24	- 24	- 24	- 24	- 24	
	190	8	2	109	297	458	508	768	946	1205	1010	829	853	779	749	971	1126	940	880	800	315	62	74	545	819	794	745	767	782	804	695	623	529	479	441	24	0
	190	- 6	- 16	91	279	440	490	750	928	1187	1010	829	853	779	749	866	993	827	741	673	291	38	50	545	819	794	745	767	782	804	671	599	505	455	423	509	577
																																			485	519

3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL (-)	TOTAL (+)	5% PENALTY CHARGE	5% PENALTY CREDIT	DONATION TO NORTH SIDE CAN(S)
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	0	315			
187																												- 169	763	8	- 9	1457
29	28	28	23	21	11	16																						- 7654	1943	383		275
																												- 1712	2423	86	- 14	
																												- 2371	4876	119	- 44	
																												- 10	0	1		
																												- 261	246	13		
																												- 46	22	2		
361	324	109	- 63	- 66	- 78	- 51						164	281	284	296	200	42											- 8706	11060	435	- 36	730
388	380																	175	256	268	252							- 18171	9987	908		1680
																												- 1977	2678	99	- 14	
383	- 380	- 106	159	163	173	166						163	134	30	6													- 16316	15924	816	- 37	1437
																												- 122	0	6		116
																												- 476	1065	24	- 7	46
																												- 130	0	6		124
50	42	39	39	26						1			1				24	24	38	44	44							- 1803	2839	90	- 29	
																												- 2554	4355	128	- 22	
																												- 480	502	24		
																												- 222	0	11		211
																												- 758	0	38		162
																												- 196	0	10		186
60	70	70	70																									0	2556	0		
																												- 182	0	9		173
	15	27	17	21	8																							- 500	726	25		
																												- 246	0	12		234
																												- 577	0	29		548
																												- 92	0	5		87
	40	139	101	101	99	100	95	70									10	1	30	88	86	73	39	39	39			- 7934	7104	397		610
																												- 168	0	8		160
2	1	1	1	1	1																							0	41	0	- 1	
73	19	13	14	12	9																							- 4509	12030	225	- 127	547
6	6	4	6	9	9	9	5	5	5	5	5	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	0	734	0	- 11	
2	1																											0	47	0	- 1	
63	63	58	46	25	4	2	2	2	2	2	24	37	31	30	40	37	37	5	1	1	1	1	1	1	1	1	1	- 2188	2604	109		146
139	139	132	138	138	134	127	120	115	116	112	109	104	98	105	114	108	115	128	144	69	8	11	13	11	8	7	5	- 7729	15229	387	- 181	1437
383	- 380	- 106	- 63	- 66	- 78	- 51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	- 88259				
368	1137	627	641	524	455	427	229	199	130	127	145	484	561	465	472	361	244	349	485	486	407	101	69	67	64	24	22		100069			
385	751	521	578	458	377	376	229	199	130	127	145	484	561	465	472	361	244	349	485	486	407	101	69	67	64	24	22		11810	4413	- 533	10366
242	258	243	240	240	241																130	217										
460	402	333	255	373																								- 7818	7103	391		479
																												- 1712	1157	86		213
2	2																											- 8081	12798	404	- 58	806
																												- 12611	33798	631	- 308	958
																												- 1527	477	76		244
																												- 546	288	27		184
																												- 366	0	18		348
38	38	41	38	37	38	27																						- 1366	1338	68		
																												- 76	0	4		72
0	0	0	0	0	0	0															0	0						- 34103				
692	700	617	533	650	279	27															130	217							56959			
692	700	617	533	650	279	27															130	217							22856	1705	- 366	3304
																												-122362	1570028	6118	- 899	13670

ALL DISCHARGE QUANTITIES ARE

PLATE NO XIII

GEBRAIC SUM OF) AND (-)	POOL ADJUSMT ACCOUNT	DELIVERY IN SEC. FT.	DELIVERY IN ACRE FT.	JACK. LAKE EQUIVLNT ACRE FT	JACK. LAKE RIGHT ACRE FT.
315	- 315	0			
593		593	1176	1280	1200
3871	3871	0			
1058		1058	2099	2283	2000
2580		2580	5117	5566	6100
9	9	0			
2		- 2	- 4	- 4	0
22		- 22	- 44	- 48	0
3483	- 800	2683	5322	5789	5000
5596	4156	- 1440	- 2856	- 3107	0
786	140	926	1837	1998	2000
1824		1824	3618	3936	5120
0		0			
652	- 125	527	1045	1137	1040
0		0			
1097	320	1417	2811	3058	4000
1907	320	1587	3148	3424	3000
46		46	91	99	0
0		0			
558	558	0			
0		0			
2556	- 2556	0			
0		0			
251	- 251	0			
0		0			
0		0			
0		0			
177	- 177	0			
0		0			
40		40	79	86	✓ 155
8166		8166	16197	17620	✓17600
723		723	1434	1560	1500
46		46	91	99	✓ 100
671	- 671	0			
9143	947	10090	20013	21771	25000
26056					
155	- 155	0			
256	256	0			
5869	- 2162	3707	7353	7999	8000
22468	- 2685	19783	39239	42685	42685
730		- 730	- 1448	- 1575	0
47		- 47	- 93	- 101	0
0		0			
40	- 40	0			
0		0			
7499					
53555	0	53555	106225	115555	124500

✓355 ACRE FEET LESS 100 ACRE FT SOLD TO BEAR ISLAND AND 100 ACRE FT SOLD TO W. H. ROWBERRY

✓17500 JACKSON LAKE RIGHT PLUS 100 ACRE FT. KENNEDY DELIVERED TO W.H. ROWBERRY THROUGH NEW SWEDEN CANAL

✓100 ACRE FT BOUGHT FROM KENNEDY

N IN SECOND FEET UNLESS OTHERWISE NOTED AT TOP OF COLUMN

1924 DISTRIBUTION WATER DISTRICT NO 36

	MAY 25	26	27	28	29	30	31	JUNE 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
USRS - STORED IN LAKE WALCOTT				-1149	0	618	1595	2735	2715	3100	4481	5522	4478	3411	2283	1330	723	161	0	0	0	0	0	0	0	0
USRS - MINIDOKA CANALS				0	627	1500	1874	1647	1629	1732	1791	1748	1988	741	324	330	376	401	1386	1394	1154	653	912	1275	720	317
MILNER LOW LIFT IRRIGATION DIST				0	0	76	96	97	95	94	95	94	100	97	90	93	94	92	94	88	28	73	74	74	74	72
TWIN FALLS CANAL CO				0	-221	-221	-221	-222	-223	-223	171	107	848	58	-193	-213	-243	-253	-253	-253	18	4	808	543	-122	-483
NORTH SIDE CANAL CO LTD				0	1827	710	-276	-526	-279	1162	1786	1780	483	-17	30	-1860	-2593	-1266	-361	14	46	29	77	33	-66	-80

	MAY 25	26	27	28	29	30	31	JUNE 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
USRS - MINIDOKA CANALS				1511	1483	0	0	0	0	0	0	0	0	0	0	0	0	0	368	718	988	1353	1097	737	320	96
MILNER LOW LIFT IRRIGATION DIST.	100	102	32																							
TWIN FALLS CANAL CO.																										
NORTH SIDE CANAL CO. LTD																										

	MAY 25	26	27	28	29	30	31	JUNE 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
05600D - UTAH IDAHO SUGAR CO																										

JACKSON LAKE STORAGE DELIVERIES (REGULAR AND EX

	20	21	22	23	24	25	26	27	28	29	30	JULY 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	204	96	0	0	0	0	0	-118	0	0	0	280	0	0	0	379	1725	3462	3168	2653	1148	140	0	0	0	0	0	0	0	0	0	6	0	0	230	0
	562	980	1341	1838	1684	1773	411	0	33	923	1682	2157	1859	1469	2089	2280	2282	2282	2277	2323	1383	1463	1632	1662	1394	1329	1296	1478	1392	1239	1353	2200	1416	2204	2225	2126
	73	73	73	73	73	74	74	73	72	72	72	72	72	71	71	70	70	63	72	72	71	71	72	72	71	70	70	72	51	42	45	43	43	52	53	52
	-503	-493	-493	-493	- 67	226	237	243	194	493	351	455	242	154	91	199	- 50	542	304	426	190	- 23	-173	- 45	-500	-200	-138	-180	-121	- 78	- 5	-200	-322	20	75	- 85
	- 78	- 78	- 80	- 78	10	142	356	2003	2052	2102	2094	1991	1679	1656	1649	1672	1641	1158	190	247	268	92	- 9	69	67	106	119	112	122	134	131	114	93	1502	1698	1708

LAKE WALCOT

	19	20	21	22	23	24	25	26	27	28	29	30	JULY 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	96	0	0	126	110	249	134	1551	2024	2019	1211	473	0	323	766	180	0	0	0	0	0	0	0	792	716	921	960	972	781	867	984	847	0	785	27	0	116

TWIN LAKES

	19	20	21	22	23	24	25	26	27	28	29	30	JULY 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
																															20	10	13	8	15	15	13

ANGE) — STORAGE DONATIONS AND RECEIPTS — LOWER YALLEY

27	28	29	30	31	AUG 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	S
0	0	-303	0	0	0	0	0	0	0	-59	-84	0	-209	-78	0	0	-196	-501	-484	-630	-461	-495	-502	-249	0	0	0	0	0	0	0	0				
266	1146	0	177	717	347	276	5	268	59	0	0	1	0	0	9	6	0	0	0	0	0	0	0	0	122	1077	1325	962	534	177	50	33				
53	52	53	52	52	53	52	51	51	52	52	52	52	51	51	52	53	51	53	51	51	52	53	51	49	50	48	51	50	50	49	51	51	52			
229	72	-123	-335	-448	-583	-268	-423	-201	-303	-61	62	77	14	365	360	348	376	531	622	492	636	515	496	557	290	-47	-24	-24	-24	-34	-23	-23	-23			
781	2160	2134	2076	871	78	199	179	149	-17	-48	-49	-44	-47	-20	-40	-48	-74	-64	-13	-9	7	-11	-17	1	5	-9	6	9	12	21	55	52	48			

STORAGE DELIVERIES

27	28	29	30	31	AUG 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	S
999	1116	2260	2033	1444	1828	1896	2157	1872	2025	2058	2020	2007	2013	2061	2074	2047	2018	1708	678	613	582	549	516	498	536	271	247	567	927	1201	969	361	373	365	344	3
																																		51	51	
																																		-84	-67	-1
																																		39	32	

ORAGE DELIVERIES

27	28	29	30	31	AUG 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	S
3	5	3	3	13	15	33	33	22	13	10	10	10	24	38	38	31	24	30	30	30	31	30	30	26	19	19	24	27	27	28	28	26	29	33	32	

EPT 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	OCT 1	2	3	4	TOTAL (-)
																																		- 3518
																																		- 10705
																																		- 8156
																																		JACKSON
																																		STORAGE
																																		HOLDOV
																																		AVAILA

EPT 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	OCT 1	2	3	4	TOTAL (-)
331	322	321	407	462	522	559	540	523	512	504	496	491	490	482	478	448	432	413	420	417	414	494	529	498	504	496	492	501	506	489	502	497	0	
53	40	0	0	0	0	0	0	0	0	0	0	0	0	0	22	40	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
120	-101	21	362	- 9	135	-318	122	120	110	136	66	67	110	- 76	20	- 43	11	3	156	- 1	-1018	- 77	- 178	- 153	- 197	-155	-218	- 147	- 475	-498	- 751	- 597	- 662	- 5945
19	18	31	-474		6	-283	112	33	9	3	8	2	8	19	- 7	4	- 5	2	- 2	20	13	29	8	- 6	- 4	- 10	7	2	23	- 14	17	- 10	184	323	- 815

DRAFT ON LAKE WA[SCOTT M]

LESS MILNER LOW LIFT SPECIAL PRESE[RV]
GAIN NEELEY TO MILNER CORRESPOND[ENCE]

EPT 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	OCT 1	2	3	4	TOTAL (-)
33	32	31	31	13	3	8	14	0	7	5	6	5	6	3	6	6	7	23	23	23	23	24	14	6										0

ALL DISCHARGE QUANTITIES ARE GIVEN IN SECOND FEET UNLESS

PLATE NO XIV

EPT 1	TOTAL (+)	ALGEBRAIC SUM OF (+) AND (-)	5% PENALTY CREDIT	BALANCE	MISCELL CREDIT ITEMS	DELIVERY IN SEC. FT.	DELIVERY IN ACRE FT.	JACK. LAKE EQUIVLNT ACRE FT.	JACK. LAKE RIGHT ACRE FT.
	46143	40625							
	90944	90944 -	1958	129611 - [a]4351		125260	248450	287521	288310
	6024	6024 -	102	5922		5922	11746	13593	15000
	12919	2210 -	660	1550		1550	3074	3558	10082
	46542	38386 -	2186	36200 - [b]12850		23350	46314	[c]53597	42368
	AKE STORAGE DELIVERED TO UPPER VALLEY (PLATE XIII)							115555	124500
	CREDITED TO NORMAL FLOW AT BLACKFOOT BRIDGE							4026	
	R 1925							2410	
	IE 1924							480260	480260

[a] AMERICAN FALLS STORAGE RELEASED TO MINIDOKA PROJECT AUGUST 21 - 27. TOTAL 4351 SECOND FEET

EPT 1	TOTAL (+)	ADJUSMT FROM J.L. STORAGE	DELIVERY IN SEC. FT.	DELIVERY IN ACRE FT.	JACK. LAKE EQUIVLNT ACRE FT.
331	87559	- 40625	46934	93091	107731
53	527	0	527	1045	1210
120	1439	0	- 4506	- 8937	- 10343
19	971	0	156	310	358
			43111	85509	98956
	Y 28 - OCT 3		22425		
			20686		
	SON CHARGE		254		
	G PERIOD		20432		

[b] DONATION OF UPPER VALLEY WATER TO NORTH SIDE CANAL CO. NET AT MILNER

[c] 44644 ACRE FT. JACKSON LAKE PLUS 8953 ACRE FT. LAKE WALCOTT AND AMERICAN FALLS STORAGE CREDIT FROM MINIDOKA PROJECT.

EPT 1	TOTAL (+)	ADJUSTMT	DELIVERY IN SEC. FT	DELIVERY IN ACRE FT	TWIN LK. EQUIVLNT ACRE FT.
33	1278	0	1278	2535	2757

OTHERWISE NOTED AT TOP OF COLUMN

the river was supposed to be dry below the last canal in the vicinity of Blackfoot; (3) the variable transmission loss schedule used for the section between the Heise and Lorenzo river stations; (4) the difference between the revised computations used in this final report and the less dependable operation period data.

The totals at the bottom of the sheet show that in spite of overdrafts by some canals the entire upper valley group lacked 8945 acre-feet of using all the storage to which they were entitled at Jackson Lake. Since only 2410 acre-feet remained in the reservoir at the close of the season it is apparent that 6535 acre-feet of Jackson Lake rights or 5647 acre-feet at Blackfoot Bridge passed the latter point and became available for lower valley use in addition to the amount which could be legitimately claimed by that section.

Plate XIV serves to extend and complete the Jackson Lake delivery account and also contains summaries of the storage delivered from Lake Walcott and from Twin Lakes.

Lake Walcott deliveries were limited to the Minidoka canals during the times when there was Jackson Lake storage in the river. This fact accounts for the minus quantities which are shown on a number of dates as stored in Lake Walcott. Storage delivered to the canals diverting at Milner prior to May 28 and subsequent to August 29 was from Lake Walcott. Because of the Twin Falls Canal Co. underdraft during the latter part of the season this storage shows largely as minus charges but must be considered in connection with the other table if a complete balancing of quantities is to be obtained.

In both the Jackson Lake and Lake Walcott tables the minus deliveries listed for the Twin Falls Canal Co. and the North Side Canal Co. Ltd. indicate Lake Walcott credits on account of normal flow right underdrafts. To a

considerable extent those represent prearranged exchanges of normal flow for storage similar in character, except for the omission of the 5 per cent penalty, to the upper valley exchanges for Jackson Lake water. Combined with these, however, is the ordinary plus and minus account which is maintained as a matter of convenience in order to avoid the necessity for changing the canal head-gates with each little variation in the normal flow of the river.

The tabular summaries shown on this sheet are not materially different in character from those of Plate XIII which have already been discussed in some detail, but some of the items require additional explanation.

The 4351 second-feet credited to the Minidoka Project represent water impounded at American Falls by the Idaho Power Co. prior to the beginning of 1924 regulation which was released August 21-27 in exchange for power and not returned again until October. The 8953 acre-feet credited to the North Side Canal Co. Ltd. is the Jackson Lake equivalent of the sum of 5940 acre-feet stored in Lake Walcott prior to the beginning of regulation and 1796 acre-feet of American Falls storage donated by the Idaho Power Co. as a compensation for injury resulting from the impounding of water at that point prior to May 22. From the two American Falls quantities it will be noted that a total storage there of slightly more than 10,000 acre-feet is indicated. Most of this was originally created in February, 1924 when additional flash-boards were placed on the Power Company's dam.

The following additional table will assist in showing the extent to which lower valley canals utilized their Jackson Lake storage rights:

Jackson Lake Equivalents in Acre-Feet
1924 Right less Actual Draft

Name	From Jackson Lake Summary	From Lake Walcott Summary	Algebraic Total
Minidoka Project	789	-17728	-16939
North Side Canal Co. Ltd.	-2276	- 358	- 2634
Twin Falls Canal Co.	6524	10343	16867
Milner Low Lift Irrigation Dist.	1407	- 1210	197
Algebraic Total	6444	- 8953	- 2509

In this table overdrafts and underdrafts are represented respectively by minus and plus quantities.

The net total overdraft of 2509 acre-feet when added to the 4026 acre-feet credited to normal flow below Blackfoot Bridge accounts in toto for the 6535 acre-feet (Jackson Lake equivalent) of upper valley storage rights which passed that station during the season.

Most of the large underdraft of the Twin Falls Canal Co., as shown by the daily records, accumulated after August 21 when the normal flow more than sufficed to fill the requirements of this company. Because of the equalization at Lake Walcott the Minidoka Project, in default of any orders to the contrary, became the chief beneficiary of this situation.

The small balance remaining to the credit of the Milner Low Lift Irrigation District was exhausted by a short run about the middle of October.

Throughout the entire summer, wastage past Milner was limited to leakage through the dam, hence the extraordinary waste item which usually appears in these tables has been omitted. The small unavoidable waste has been prorated in the usual manner between the two largest canal systems in proportion to their ownership of the dam, viz. 6/11 against the Twin Falls Canal Co. and 5/11 against the North Side Canal Co. Ltd. These amounts have then been

added to the daily canal diversions before the latter were listed on this plate.

TWIN LAKES STORAGE DELIVERIES

Water delivered to the Osgood canal of the Utah-Idaho Sugar Co. from the small Emma Matilda-Two Ocean or Twin Lakes Reservoirs is listed and summarised in the last table on Plate XIV. Transmission losses on this water were computed on the basis of the Jackson Lake storage losses to the Woodville river station.

A considerable amount of work was done early in the season in enlarging and straightening the Two Ocean Lake outlet and a little later the Emma Matilda outlet was also dredged out slightly and a new dam with gate section installed. Steady delivery from these reservoirs was frequently interfered with, however, by the building up of beaver dams, so the practice established in previous years of accumulating a storage credit whenever it was practicable to release more water than was required for immediate diversion was again adhered to. This, together with the occasional unexpected reinstatement of portions of the Osgood normal flow rights, accounts for the small excess of storage released over and above the amount actually used.

RIVER LOSSES AND GAINS

Losses and gains throughout different sections of Snake River are included in the data contained on Plates VIII, IX and X, but the changes in the quantities and the relation which these changes have to the discharge of the river at different points are much more readily noted when indicated graphically.

Plate XV contains hydrographs of the total flow passing the Heise, Woodville and Blackfoot Bridge gaging stations during the period from May 18 to

APPARENT GAINED OR LOST FLOWS AND GAINS BETWEEN HEISE AND BLACKFOOT GAGING STATIONS
SNAKE RIVER DISTRIBUTION WATER DISTRICT NO. 36

DISCHARGE IN CUBIC FEET PER SECOND

12,000
10,000
8,000
6,000
4,000
2,000
1000 GAIN
0
1000 GAIN LOSS
0
1000 LOSS

HEISE TO WOODVILLE

WOODVILLE TO BLACKFOOT

HEISE

WOODVILLE

BLACKFOOT

HEISE

WOODVILLE

BLACKFOOT

HEISE

WOODVILLE

BLACKFOOT

September 30, together with graphs showing the net losses and gains in the two intervening sections. All graphs are plotted to the same scale and with a time interval allowance to make them coincide with the Heise dates.

The tendency, which has been noted during previous seasons, toward increased losses coincident with sharp rises in river stage and the reverse of decreased losses or increased gains at the time of rapid drops in the river is again evidenced.

While the indicated gains between Heise and Woodville are somewhat less and the losses from Woodville to Blackfoot are slightly larger than those of the preceding year the differences are not as great as might be expected when comparing a year of nearly normal run-off with one where an extreme deficiency was noted. If the comparison is made with the low water year 1919 the ground water return is shown to be very much greater in 1924 throughout the entire section from Heise to Blackfoot, while the gains shown for the section from Heise to Woodville also average more than for either 1920 or 1921. This favorable condition can doubtless be largely attributed to the unusually heavy upper valley canal diversions during the months of April and May.

Variations in the quantity of water diverted by intervening canals, in the amount of return flow or loss and in the discharge of tributary streams account for the difference noted in the shape of the three hydrographs.

During 1921, 1922 and 1923 a total of seven sets of measurements were obtained covering all surface waste or return flow entering the river between the Woodville and Blackfoot gaging stations. These tests have been summarized and discussed in the reports for the respective seasons during which they were secured. The reasonableness of the storage transmission loss of 6 per cent which has been applied through this section of the river during the past three years can only be determined by investigations of this or a

more comprehensive character and in consequence one more similar test was completed during the 1924 low water period and is tabulated as follows:

Right Bank River			Left Bank River		
Name	Date	Amt.	Name	Date	Amt.
Fugal Gulch	9/12	0.00			
Rosdside	"	0.00			
Woodville Bridge					
	9/12	0.00	#1-2	9/12	0.00
#1	"	0.10			
#2	"	0.00			
#3-5	"	0.10			
#6 (Woodville)					
Lower Shelley Bridge					
#10-25	9/12	0.00	#3-10	9/12	0.0
Firth Bridge					
#25a-25b	9/13	0.00	#11	9/13	0.50
#26 (New Sweden)	"	0.50	#12	"	0.10
#26a	"	0.10	#13-21	"	0.00
#27-30	"	0.00			
#31 (Waste below Rose)	"	0.40			
#31a	"	0.00			
#32 (New Lavaside)	"	1.00			
Porterville Bridge					
#33-43	9/14	0.00	#22-23	9/14	0.00
#44 (Regular Wasteway)	"	7.76	#23b	"	0.05
#45	"	0.00	#24 (Blackfoot)	"	23.50
			#24a	"	0.00
			#25 (Slough)	"	0.50
Lower Blackfoot Bridge					
#46	9/14	0.05	#26-28	9/14	0.00
#47-52	"	0.00	#29	"	0.50
#53 (Parsons)	"	0.25	#30-31	"	0.00
#54 (Watson)	"	4.00			
#55 (Combined wasteway)	"	5.00			
#56 (Peoples)	"	0.00			
#57-59	"	0.00			
Blackfoot Gaging Station (Cloughs) on Snake River					
Total Right Bank		19.26	Total Left Bank		25.15

measured with a current meter, while those not measured were estimated as closely as possible by the hydrographers who made the investigation.

Analysis of these results in the same manner as those of former years, by adding this surface waste as measured inflow, increases the net average loss between the Woodville and Clough river gaging stations for this three day period from 110.33 second-feet to 154.74 second-feet. At the extremely low river stages prevailing at that time, this represents 23.03 per cent of the mean river flow at the two ends of the section.

No Jackson Lake storage was being delivered to the lower valley during September and no appreciable amount would ever be delivered at such a low river stage, so this very high percentage can hardly be used as a measure of the loss to be applied in the transmission of storage through this section of the river. The test illustrates, however, the relatively heavy losses which may be expected at very low river stages and in conjunction with previous year determinations, shows that such losses have a closer relation to the wetted perimeter than to river discharge.

The slight differences in the diagrams introduced as a result of the use of the Blackfoot Bridge station as the lower terminal instead of the older Blackfoot or Clough Station may be studied with the aid of the extra graph included on Plate XVI which also contains similar curves to those shown on Plate XV covering the section between Clough's and Neeley.

The Neeley hydrograph is complete for the five months from May 1 to October 31, but the other records are limited to the period covered by the data on Plates VIII, IX and X.

Idaho Power Co. storage and release of water at American Falls accounts for the sudden decrease and increase in the net gain between Cloughs and

HYDROGRAPHS ACCENTUATING NET ACCRUED AND GAINS BETWEEN BLACKFOOT BRIDGE AND NEELEY GAGING STATIONS

PLATE XII

GEM DISTRIBUTION WATER DISTRICT NO 36

May | June | July | August | September | October

NET GAIN CLOUGHS TO NEELEY

BLACKFOOT BRIDGE TO CLOUGHS

CLOUGHS PLUS PORTNEUF

NEELEY

DISCHARGE IN CUBIC FEET PER SECOND

10000
8000
6000
4000
2000

1000 GAIN
0
1000 LOSS
500 GAIN
0
500 LOSS

Meeley noted on May 19-20 and August 21-27, respectively. The average net gain in this section for the four months June to September, inclusive (Meeley dates), after eliminating the American Falls storage released in August and also the discharge of Portneuf River as measured at the Pocatello station, amounts to 2279 second-feet. This is more than four hundred second-feet less than the 1924 mean and is slightly less even than that for the low water year of 1919. Comparison with the latter shows the 1924 deficiency to have been confined to the early part of the irrigation season as the gains throughout this section during August and September were greater than those of 1919. No thoroughly satisfactory explanation of the variations in this ground water return can be made until more information becomes available concerning the source of supply of the Portneuf bottom springs which contribute the larger part of this water. If, as seems probable, these springs are fed chiefly from underground reservoirs of considerable size whose water originates at some distance from the surface outlets, the early season deficiency in comparison with 1919 might be attributed to the generally more severe water shortage, while the increase during August and September could perhaps be accounted for by the greater waste and return flow to be expected from adjacent irrigation systems in view of the heavier late season use of water by the latter in 1924.

Additional information on this subject will doubtless be afforded by the data concerning the flow of individual springs located in the Portneuf or American Falls bottoms which were collected in 1923-1924 by employees of the U. S. Bureau of Reclamation but which were not available for study when this report was prepared.

Beginning with the 1926 irrigation season, when it is anticipated that some irrigation storage will be obtained at the new American Falls Reservoir,

added importance will be attached to the inflow between Blackfoot and Neeley because of the necessity which will then exist for an equitable segregation between normal flow and stored water even at times when no Jackson Lake deliveries are in transit.

Plate XVII shows net gain or loss graphs for the two sections between the Neeley and Minidoka and the Minidoka and Milner gaging stations respectively. It also includes curves showing the fluctuations in water surface elevation at both Lake Walcott and Lake Milner, together with hydrographs for the river stations below the Minidoka and Milner dams. All these are plotted to coincide with Lake Walcott or Minidoka dates.

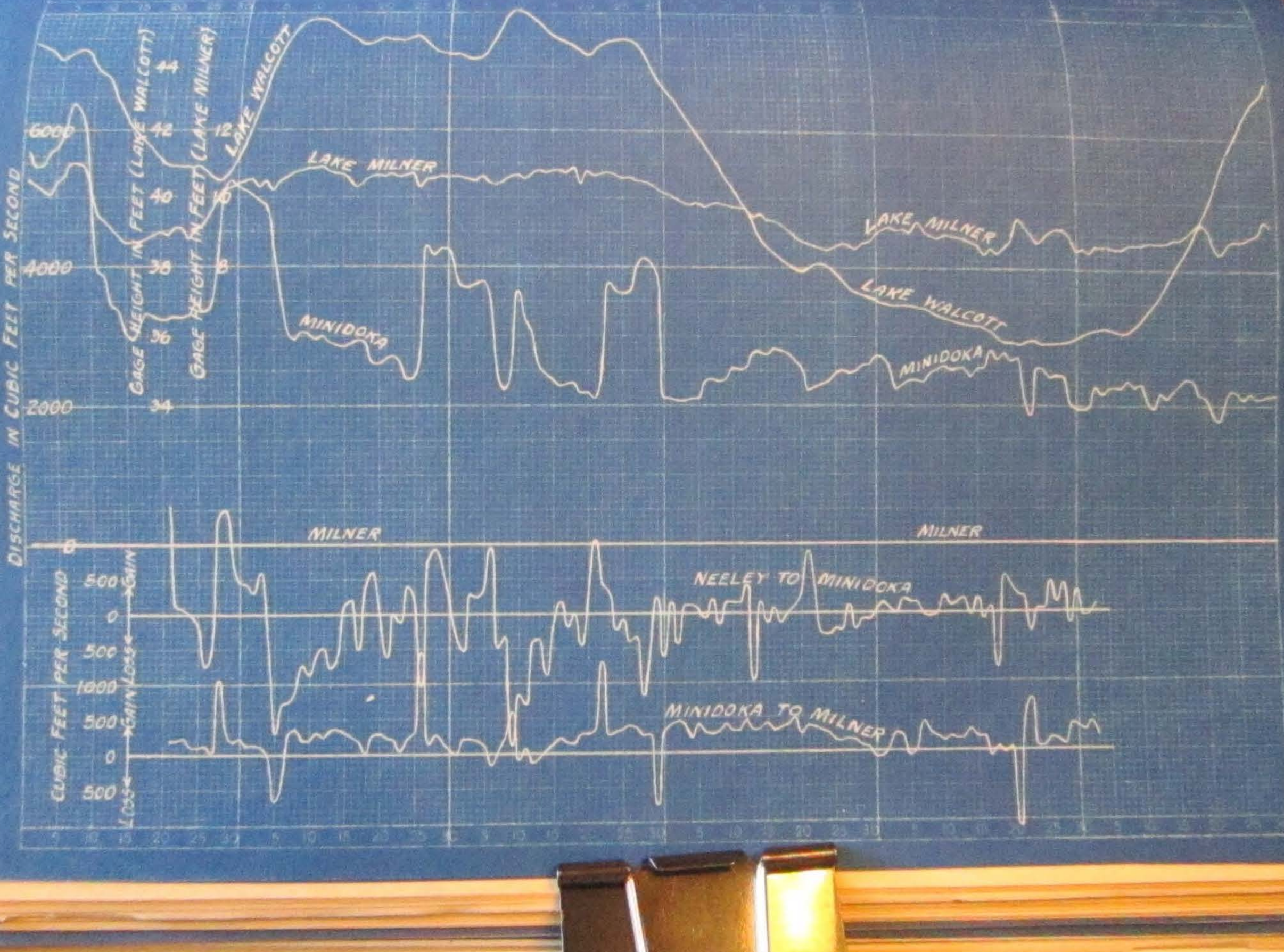
Because of the water shortage and also by reason of the added power made available by the construction of a transmission line from American Falls to connect with the Minidoka system, it was possible to utilize Lake Walcott as an equalizing reservoir to a greater extent than has been permissible for several years. This fact assisted materially in the river administration and not only facilitated more satisfactory deliveries (through normal flow-storage exchanges) to the canals diverting at Milner Dam, but also helped to avoid any waste of water such as sometimes occurs in an ordinary year when Lake Walcott must be maintained at nearly full capacity.

The general trend of the gain or loss curves, as well as the irregularities noted therein, differ but little from those of former years and can probably be similarly explained.

From May 21 to July 25 when Lake Walcott was either being built up or was maintained at nearly full capacity the average daily net loss in the section from Neeley to Minidoka was 95 second-feet while from July 26 to October 3 when the reservoir was either being drawn down or was maintained at a very low stage an average daily net gain of 1 second-foot is indicated for

...PER DISTRIBUTION WATER DISTRICT NO 36 ... AND MILNER GAGING STATIONS

PLATE XXII



the same section. Just why both these quantities should be so much smaller respectively than the losses and gains noted during other years under somewhat similar reservoir conditions, is not apparent, but the change from loss to gain with heavy draft upon the lake is still noticeable and is an indication of the benefit derived from bank storage. The fact that for the entire season the average daily loss in this section was only 46 second-feet as against amounts ranging from the former minimum of 145 in 1919 to the maximum of 301 in 1920 may perhaps be attributed to this bank storage return because the reservoir reached a lower stage in 1924 than at any time during the five previous irrigation seasons.

The average net gain for the season for the section from Minidoka to Milner amounted to 206 second-feet in comparison with similar quantities for other years ranging between the 1919 minimum of 249 and the 1923 maximum of 366. This is readily explained by the decreased waste or return water which entered the river from the Minidoka Project, where the 1924 shortage was even more noticeable than that of 1919.

From Neeley through to Milner, because of the small average loss at Lake Walcott, the mean daily gain for 1924 amounted to 160 second-feet or 4 second-feet more than the former maximum noted in 1923.

Most of the more pronounced irregularities in the two gain or loss graphs are probably due to (1) inapplicability at certain river stages of the single time interval used; (2) wind effect on the ponded water of Lakes Walcott and Milner; (3) increase or decrease of Lake Milner storage which was not taken into account in the computations.

NORMAL FLOW COMPARISON

The purpose of Plate XVIII is to afford a comparison of the normal flow water supply available during the respective irrigation seasons 1919-1924 for

SUMMARY BY MONTHS OF NORMAL FLOW CONDITIONS BETWEEN THE HEISE-REXBURG AND BLACKFOOT GAGING STATIONS IRRIGATION SEASONS 1919 1920 1921, 1922 1923 & 1924.

DISTRIBUTION WATER DISTRICT NO 36 — PLATE NO XVIII

	HEISE NOR. FLOW	REXBURG	BLACKFOOT RIVER	RETURN FLOW BLACKFOOT	HEISE TO BLACKFOOT	NORMAL FLOW GAIN	FROM STORED LOSS	TOTAL NORMAL FLOW SUPPLY	TOTAL DIVERSIONS HEISE TO BLACKFOOT	STORED DIVERSIONS HEISE TO BLACKFOOT	NORMAL FLOW DIVERSION HEISE TO BLACKFOOT	BALANCE AT BLACKFOOT STATION	NORMAL FLOW PASSING BLACKFOOT STATION
JUNE													
1919	241439	22477	400	-18994	16728	262050	264752	10433	254319	7731	7731		
1920	552010	84910	3205	-14579	0	625546	310026	0	310026	315520	315520		
1921	683677	153110	5039	-33854	0	807972	277462	0	277462	530510	530510		
1922	595489	113110	8190	-2304	0	714485	331545	0	331545	382940	382940		
1923	482579	90200	11597	23918	0	608294	262414	0	262414	345880	345880		
1924	303207	15476	201	10631	4577	334092	233547	-66484	300031	34061	[a]34061		
JULY													
1919	121226	21652	14	-4693	12321	150520	180218	35521	144697	5823	5823		
1920	353997	31670	4810	8812	6048	405337	317285	7089	310196	95141	95141		
1921	308767	30480	3213	5651	7803	355914	323826	11031	312795	43119	43119		
1922	297375	31066	6471	25067	10796	370775	321988	4681	317307	53468	53468		
1923	365108	28661	5864	22459	10881	432973	328971	4020	324951	108022	108022		
1924	171278	17345	655	23098	9853	222229	255842	39689	216153	6076	[a]6076		
AUGUST													
1919	98839	19894	78	3938	5123	127872	129054	2217	126837	1035	1035		
1920	177244	24553	5266	34866	6390	248319	259201	25851	233350	14969	14969		
1921	182975	35843	8209	29756	5620	262403	260670	10608	250062	12341	12341		
1922	192659	34222	6897	37086	7071	277935	252849	15156	237693	40242	40242		
1923	178904	28659	5979	35700	11008	260250	265384	23833	241551	18699	18699		
1924	101953	25686	16	13484	6060	147199	210169	67074	143095	4104	[a]4104		
SEPTEMBER													
1919	87115	22601	345	2234	0	112195	107517	0	107517	4678	4678		
1920	[b]66389	[b]21130	[b]2290	[b]10585	[b]521	[b]100915	[b]71638	[b]0	[b]71638	[b]29277	[b]29277		
1921	129235	50960	4525	26655	184	211559	149132	0	149132	62427	62427		
1922	183751	39758	1996	15950	0	191455	142769	0	142769	48686	48686		
1923	120623	30825	3798	23299	5571	184116	194718	22851	171867	12249	12249		
1924	87479	24983	503	15364	1890	130219	141596	15613	125983	4236	[a]4236		

[a] THEORETICAL; SEE TEXT FOR EXPLANATION

[b] ALL DISCHARGE QUANTITIES ARE LISTED IN SECOND FEET
INCLUDES EMMA MATILDA AND TWO OCEAN LAKE STORAGE
RECORDS FOR SEPTEMBER 1-15 (INCLUSIVE) ONLY

the so-called Idaho Falls area. It consists of a table showing by months the principal component parts which make up the normal flow of Snake River and the extent to which water of this character is used in the territory between the Heise and Rexburg gaging stations at the upper end and the Blackfoot or Clough station at the lower end of this section.

The quantities listed are all summarized from the more extensive river data tables contained in District No. 36 water distribution reports. Time intervals have been adjusted to correspond as nearly as practicable to Heise dates.*

The following brief explanation which is almost identical with that contained in the 1923 report is included for the convenience of the reader:

Columns 1-4 Sufficently described by headings.

Column 5 Net gain in the section. To be complete it should probably have added to it the quantities contained in the same lines in Column 6.

Column 6 If the storage transmission loss is correctly determined, any indicated normal flow gain from that source is really additional return flow. The quantities shown in this column reflect changes in transmission loss schedules which should be taken into account in comparing the data for different years.

Column 7 The algebraic sum of the quantities listed in the five preceding columns.

Columns 8-10 Headings afford sufficient explanation.

Column 11 "Total Normal Flow Supply" less "Normal Flow Diversion Heise to Blackfoot."

Column 12 Equivalent to column 11 on which it affords a check, as the results here given for all years except 1924 were taken direct from the river data sheets. Because of the use of the Blackfoot Bridge rather than the older Blackfoot or Clough station as an adjustment point, theoretical rather than actual totals must be used for the latter point in this one year if a check on column 11 is to be secured.

*1922 and 1923 reports erroneously state that these records have been adjusted to correspond with actual canal diversion dates.

flow is complicated by the large number of exchanges which were made. For example, the minus storage shown as being diverted during June represents the excess of the normal flow accepted for exchange over actual storage diversions while the normal flow shown as diverted in the same month very evidently is a theoretical rather than an actual quantity.

The analysis of 1924 conditions afforded by this comparative summary illustrates very plainly certain more or less pronounced peculiarities, some of which have already been mentioned.

(1) With the exception of one year in each case, the return flow from Heise to Blackfoot during June and July is the largest shown for the six year period, while even in August and September this item is much larger than for 1919.

(2) For each of the four months the total normal flow supply is materially less than that shown for any other year except 1919.

(3) Total diversions during June were less than those for that month in any of the other five years, while for each of the other three months, only 1919 showed lower totals.

(4) Total diversions for the four months exceeded those of 1919 by about 160,000 second-feet, but were less than the totals for the other years by from 160,000 to 210,000 second-feet. (From the incomplete data available total diversions in this section during May, 1924 are believed to have been materially greater than during the same month in any previous year—enough so in fact to bring a five months' total up to that of a year of nearly average water supply.)

(5) Nearly thirty thousand second-feet more normal flow passed the Blackfoot station in the four months tabulated than in 1919, but from

more than four to almost six hundred thousand second-feet less went by than during the other four years.

From the data herein presented it is therefore readily apparent that central section canals fared comparatively well during 1924 in spite of the general deficiency in run-off. This was partially due to the well sustained normal flow and further to the benefits derived through the storage exchange practice. The normal flow available for the use of lower valley canals on the other hand was but little greater than in 1919, while their storage was much less. Hence, from the standpoint of irrigation water supply the year was the worst of record in the lower part of District No. 36.

GROUND WATER

In connection with the Meeker investigation, records were maintained during the 1923 irrigation season on 134 wells distributed over what was designated as the Snake River Cone—a triangular area extending in a general northwesterly direction from an apex at the Heise gaging station.

The ground water levels throughout this cone area are believed to have a material influence not only upon the river losses between the Heise and Lorenzo gaging stations, but also on the amount of return flow noted as entering between Lorenzo and Woodville. For this reason it seemed advisable to secure some observations during 1924, but because of limited personnel and the more intensive work required during a water shortage period, only one set of measurements was obtained.

The following table summarizes in groups the water surface elevations of the wells visited August 15 to 22 by comparison with those of the same dates during the preceding year:

Area	Number of wells*	Average 1923 minus 1924 water surface elevation	Range of difference noted	Notes
North side of Snake River Heise to Yellowstone Branch O. S. L. R. R.	21	3.3 feet	-1 to +11 ft.	1924 deficiency most noticeable close to foot hills. Only two wells show increase over 1923
Yellowstone Branch O.S.L.R.R. to Henrys Fork on north side of Snake River	9	0.1 foot	-3 to +1 ft.	Very small differences noted. Only two wells show increase over 1923
Between Snake River and Great Feeder from Heise to Yellowstone Branch O.S.L.R.R.	20	1.9 feet	0 to +5 ft.	No very marked trend in differences as to exact location
Between Snake River and Great Feeder west of Yellowstone Branch O.S.L.R.R.	14	0.3 foot	-1 to +1 ft.	Small differences. Only one well shows increase over 1923
South side of Great Feeder Heise to Yellowstone Branch O. S. L. R. R.	24	3.0 feet	-2 to +7 ft.	Greatest differences noted in southwest part of this section Only one well shows increase over 1923
South side of Great Feeder west of Yellowstone Branch O. S. L. R. R.	26	1.9 feet	-1 to +8 ft.	Wells farthest from Great Feeder show greatest differences Only two wells show increase over 1923

*5 wells found dry or caved in when visited and not included in the above summary. 3 observations showing erratic results omitted. No readings at 12 wells in 1924.

This tabulation shows clearly that, as might be expected, the water table was generally lower in 1924 and indicates the sections where the depletion in comparison with the former year was most noticeable. The smallest

differences, it should be noted, occur in portions of the area which are known to be largely sub-irrigated.

No very dependable conclusions can be drawn from such meager data, but study of other records shows that during the period covered by the observations river losses between Heise and Lorenzo were greater and gains between Lorenzo and Woodville were smaller, respectively, in 1924 than in 1923.

WATER DISTRIBUTION AND HYDROMETRIC WORK IN THE HENRYS FORK-FALL RIVER-TETON AREA

C. A. McClelland again filled the position of hydrographer and deputy water master in direct charge of hydrometric work and water distribution in the so-called North Fork section and in addition acted as Special Deputy for the delivery of stored water from Henrys Lake Reservoir. All other deputies and assistants working in this section reported to and received their instructions from him, while he in turn worked under general supervision from the office in Idaho Falls.

An office was maintained during the summer in the St. Anthony Bank & Trust Co. building at St. Anthony and a part time clerk was employed from May 21 to September 15, inclusive, to look after this office and to assist with correspondence, checking of computations, etc.

The following abstract from a report prepared by Mr. McClelland affords a brief summary of the work in this part of District No. 36.

Canal and river measurements, gage readings and minor repairs to station equipment occupied most of Mr. McClelland's time prior to the beginning of regulation.

C. R. Black assisted with this work and filled the combined position of hydrographer and deputy water master for the Teton River division from May 19 to June 5, after which time he was replaced by W. F. Dawson whose services in this section continued throughout the balance of the season. Mr. Black was also again employed during part of July and August for work in the vicinity of Henrys Lake.

Regular daily gage readings and reports were initiated on May 20 and maintained until September 30.

Low water conditions existed from the beginning of the season, to such an extent that canals having young rights received only a very scanty supply.

By May 31 diversion dams had been tightened up and the entire available normal flow was being utilized. For several days thereafter it was necessary to cut off decreed rights beyond or in advance of the main Snake River regulation. The ground water in the sub-irrigated sections had been so raised by early application, however, that it was soon possible for a few of the older canals to reduce their diversions and render some assistance through temporary transfers. This partial relief, together with light rains on June 7 and 18-19, helped to defer beginning the draft upon Henrys Lake storage until about the last of June.

This stored water was of immense value to the owner canals, but was insufficient in amount to warrant the lease or sale of any appreciable quantity to other users.

Because of the very limited normal flow supply, temporary transfers, either direct or through the pooling committee, were not made to the extent which has been customary in former years. The tendency which has been heretofore noted for the canals having the valid rights to limit their donations to adjacent users, or at least to those diverting from the same side of Henrys Fork, was again evident and was the cause of a considerable amount of friction and dispute; all of which added to the difficulties of river administration.

No storage, other than the small amounts made available through donations and utilized by exchange, was available for the canals diverting from Fall River. In consequence, crop losses were generally greater in the territory served from this source than in other sections. Likewise much inconvenience, if not actual suffering, was here occasioned by the frequent lack of water for domestic or culinary use and for boiler use of threshing machine outfits.

Unusual water shortage was also experienced in the Teton River area where the supply proved insufficient to fill decreed rights after May 27. This drainage contributed no surface flow to the main river system so it was impracticable for the pooling committee to arrange any exchanges which would furnish relief and aside from a few local transfers little could be done to improve the situation.

Distribution to canals below the forks of the Teton was somewhat

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM HENRYS FORK AND TRIBUTARIES FOR MAY 1920

FALL RIVER CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
YELLOWSTONE																			20	24	24	30	30	23	23	25	24	23	23	23	24	
FARMERS FIELD																			0	0	0	16	16	25	29	33	30	32	30	24	20	310
MARYSVILLE																			102	129	147	163	156	172	174	184	177	176	165	160	153	2501
TOTAL DIV ARBOR SQUIRREL																			122	153	171	196	202	220	226	242	231	232	218	199	199	2811
FARMERS OWN																			36	45	39	41	39	40	46	45	46	40	46	39	41	530
ENTERPRISE																			150	151	150	141	141	138	138	137	137	141	140	137	143	1944
BELL																			13	13	13	5	5	6	5	12	5	5	4	4	3	93
FALL RIVER																			388	397	406	412	402	387	381	400	400	393	381	370	364	5081
McBEE																			13	14	14	14	13	10	10	13	13	9	7	3	3	135
CHESTER																			89	84	86	86	78	74	69	74	73	62	54	46	45	945
SILKEY																			30	31	32	27	23	22	20	25	27	16	9	4	6	271
CURR																			40	41	41	45	30	28	29	30	32	27	26	24	24	417
WHITE																			6	6	6	7	6	5	4	5	5	4	3	2	2	61
TOTAL DIV SQUIRR TO CHESTER																			765	782	787	778	737	710	696	736	740	694	665	629	641	9371

HENRYS FORK CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
DEWEY																			18	18	18	21	25	25	20	26	25	23	27	24	26	296
LAST CHANCE																			91	9	90	91	92	85	88	89	88	80	76	74	74	1109
ST ANTHONY UNION																			612	593	587	597	568	546	570	584	580	570	465	479	504	9835
FARMERS FRIEND																			278	276	265	235	245	224	232	233	248	234	231	221	209	3125
TWIN GROVES																			161	162	164	151	147	144	147	151	162	148	148	134	132	1943
SALEM UNION																			232	233	236	238	242	221	230	236	239	231	221	209	206	2964
TOTAL DIV ASHTON TO ST ANTHONY																			1392	1293	1362	1333	1319	1245	1293	1354	1332	1246	1188	1141	1151	16669
EGIN																			353	368	371	337	375	275	329	364	368	281	176	145	90	4081
ST ANTHONY UNION FEEDER																			104	107	108	104	92	99	100	102	97	85	79	96	50	1223
INDEPENDENT																			345	363	363	366	336	320	322	304	322	288	283	281	282	4137
CONSOLIDATED FARMERS																			287	289	289	262	281	262	244	251	262	222	244	168	187	3198
TOTAL DIV ST ANTHONY TO REXBG																			1144	1177	1236	1069	1084	956	995	1071	1049	886	887	691	760	12619

TETON RIVER CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
SIDDOWAY																			21	19	19	23	22	18	17	23	15	23	21	20	13	254
WILFORD																			178	172	196	196	172	160	163	178	171	153	153	146	135	2173
TETON IRRIGATION																			57	59	67	59	39	39	41	44	46	34	72	52	48	661
GOOD LUCK																			7	7	7	7	7	6	6	6	6	5	5	5	4	98
PIONEER																			32	31	31	31	30	25	25	27	24	20	19	17	14	326
STEWART																			28	31	28	38	37	34	31	40	34	31	30	27	24	413
PINCOCK EVINGTON																			47	45	41	39	39	28	27	37	30	20	20	17	18	353
PINCOCK GARNER																			38	34	35	35	34	28	25	41	39	30	30	30	27	446
TETON ISLAND FEEDER																			370	388	370	364	387	313	296	347	313	269	258	236	210	4121
ROXANA																			22	22	20	25	27	26	26	26	25	21	19	20	17	296
ISLAND WARD																			63	60	45	45	46	34	33	44	31	20	19	18	16	415
WOODMANSEE JOHNSON																			20	19	19	29	30	26	26	27	24	21	21	19	18	299
CITY OF REXBURG																			64	62	59	57	57	56	54	64	52	46	44	39	45	689
REXBURG IRRIGATION																			267	267	262	258	262	231	219	230	230	185	153	145	120	2830
TOTAL DIVERSIONS																			1246	1210	1189	1206	1189	1035	999	1124	1030	886	866	792	705	13459

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM HENRY'S FORK AND TRIBUTARIES FOR JUNE 1924

FALL RIVER CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL
YELLOWSTONE	23	24	24	24	24	24	24	23	24	24	23	7	0	0	22	24	24	24	0	0	0	0	0	0	0	0	0	0	0	0	368
HARRISELLO	31	0	0	0	33	34	26	23	25	23	22	0	0	0	0	23	25	22	0	0	0	0	0	0	0	0	0	0	0	0	290
MARYSVILLE	151	156	164	143	183	180	103	165	158	148	152	73	0	0	146	176	177	193	0	0	0	0	0	0	0	0	0	0	0	0	2216
TOTAL DIV ABOVE SQUIRREL	206	180	188	192	242	238	153	211	207	195	197	80	0	0	186	224	227	241	0	0	0	0	0	0	0	0	0	0	0	0	3167
FARMERS OWN	34	0	0	0	0	38	38	36	36	34	33	10	9	9	36	38	35	33	8	7	7	7	7	7	7	7	7	6	6	6	499
ENTERPRISE	79	0	0	0	0	0	106	141	138	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	543
BELL	3	6	6	7	5	5	5	4	2	2	2	1	3	5	6	6	5	3	1	3	3	4	4	5	5	4	4	4	3	3	117
FALL RIVER	372	385	410	328	456	444	393	350	328	342	332	342	391	437	456	442	400	368	309	391	370	366	414	397	324	414	410	408	404	404	11886
McBEE	2	14	15	15	15	15	13	13	7	11	10	12	12	12	12	10	9	10	8	14	13	9	5	7	5	5	6	5	4	3	291
CHESTER	73	15	0	53	76	70	58	48	36	34	34	8	0	0	62	60	49	52	10	10	0	10	10	7	6	6	6	6	6	6	811
SILKEY	8	17	29	30	27	27	21	23	11	8	8	18	29	27	33	28	27	24	10	19	18	18	13	16	16	13	25	24	23	19	613
CURR	24	47	40	30	34	34	32	28	26	27	26	34	36	34	41	34	32	31	28	32	31	30	28	32	29	32	30	30	29	30	951
WHITE	2	3	5	5	6	5	4	2	1	1	1	1	2	5	5	0	3	14	4	3	6	5	5	2	0	0	2	7	4	4	107
TOTAL DIV SQUIRR TO CHESTER	597	487	506	468	619	638	670	645	515	638	646	426	482	529	651	618	558	535	377	479	468	447	446	470	392	486	490	490	440	475	18318

HENRY'S FORK CANALS.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL
DEWEY	24	0	0	9	22	26	23	21	28	27	25	23	16	15	22	21	24	23	18	15	17	15	15	10	10	7	12	9	11	7	435
LAST CHANCE	72	29	33	40	92	89	78	76	68	66	66	64	70	77	78	78	68	62	56	66	63	68	67	73	78	72	72	71	77	76	2045
ST ANTHONY UNION	497	525	528	517	459	409	389	377	373	396	420	418	434	441	470	470	450	440	423	431	425	418	418	431	441	431	447	445	485	499	13519
FARMERS FRIEND	149	99	84	52	65	216	221	209	188	184	107	68	0	45	62	61	39	0	40	40	44	42	28	11	95	17	28	18	15	13	1996
TWIN GROVES	114	84	84	147	145	143	130	101	100	99	79	68	130	130	132	132	134	128	133	141	134	132	94	30	27	27	60	30	26	28	2926
SALEM UNION	216	191	239	236	236	218	215	196	188	192	170	174	180	167	169	203	192	209	222	238	184	188	165	152	149	181	177	177	141	142	5689
TOTAL DIV ASHTON TO ST ANTHONY	1072	928	968	1001	1019	1101	1056	980	945	986	867	815	830	875	933	965	907	862	892	931	861	880	777	757	800	754	818	770	755	776	26670
EGIN	306	235	291	293	297	277	227	218	201	243	251	251	263	275	281	291	279	271	241	267	231	216	824	271	277	284	285	295	283	308	7948
ST ANTHONY UNION FEEDER	60	68	79	86	72	63	59	37	37	32	47	54	65	66	72	74	68	52	36	57	58	58	50	48	30	35	32	37	54	51	1657
INDEPENDENT	298	338	369	331	289	289	278	240	229	203	229	244	264	263	280	289	283	217	140	121	231	217	199	68	170	105	112	144	209	211	6916
CONSOLIDATED FARMERS	89	220	255	103	319	262	255	268	251	184	193	140	283	266	304	268	193	316	123	293	220	190	220	172	186	142	106	93	86	185	5994
TOTAL DIV ST ANTH TO REXBG	753	861	988	813	977	891	819	763	718	668	720	659	865	870	937	922	823	656	560	738	740	681	693	689	683	587	535	569	632	760	28670

TETON RIVER CANALS.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL
SIDDOWAY	11	11	24	19	21	19	19	18	12	11	9	9	9	10	19	18	18	17	16	13	11	11	13	12	11	11	10	10	9	8	403
WILFORD	131	129	118	88	88	101	101	94	99	102	93	88	88	97	102	91	91	90	88	84	80	81	87	92	96	83	81	83	76	76	2791
TETON IRRIGATION	60	80	71	65	75	41	53	54	57	57	53	57	57	81	74	73	68	70	66	65	62	64	71	72	70	78	76	74	71	70	1980
GOOD LUCK	4	4	12	10	11	12	12	15	19	18	17	17	16	16	18	16	16	16	15	14	14	15	15	14	13	14	12	11	11	10	407
PIONEER	13	13	17	19	15	16	15	16	14	20	18	16	17	16	20	21	21	20	19	18	18	18	18	18	13	12	12	15	14	13	494
STEWART	21	18	14	13	13	13	12	12	12	7	9	14	14	14	17	30	29	28	27	26	25	25	26	24	15	14	13	14	13	12	526
PINCOCK BYINGTON	11	11	11	8	6	5	9	9	9	10	9	9	9	10	10	18	14	12	12	12	11	12	12	12	12	9	8	8	7	7	302
PINCOCK GARNER	28	18	11	16	8	6	7	5	5	17	7	13	11	11	19	21	15	16	14	13	10	12	13	13	11	11	10	10	9	9	349
TETON ISLAND FEEDER	180	185	236	285	307	302	277	269	247	205	190	170	185	236	261	261	280	280	266	242	226	234	242	239	228	228	228	231	218	216	7153
ROXANA	16	14	17	18	18	17	25	25	21	23	23	15	15	10	11	12	15	16	16	16	16	16	17	16	17	15	13	10	9	5	485
ISLAND WARD	14	13	3	6	5	5	5	24	22	28	26	38	37	34	16	27	26	22	21	21	18	18	18	17	15	13	10	9	9	6	562
WOODMANSEE JOHNSON	6	7	10	28	24	25	22	21	21	20	19	15	20	21	23	23	23	22	22	21	19	20	20	20	9	9	9	9	9	10	528
CITY OF REXBURG	43	38	48	43	46	42	46	44	49	46	44	42	43	48	50	50	48	47	46	40	35	37	36	36	37	38	37	32	30	32	1252
REXBURG IRRIGATION	113	111	116	145	135	166	190	180	165	138	136	109	127	128	143	165	146	143	148	145	137	140	128	122	121	135	122	126	120	117	4183
TOTAL DIVERSIONS	651	652	708	763	812	769	793	785	732	702	653	632	668	732	783	826	810	799	771	730	682	703	716	707	683	593	642	646	613	597	21455

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM HENRYS FORK AND TRIBUTARIES FOR JULY 1924

FALL RIVER CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
YELLOWSTONE	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
HARRISFELD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MARYSVILLE	0	0	0	0	0	0	0	12	91	45	26	44	91	91	91	55	4	8	8	8	8	8	8	8	7	7	7	7	7	7	8	604
TOTAL DIV ABOVE SQUIRR	0	0	0	0	0	0	0	12	91	45	26	44	100	99	99	64	4	8	8	8	8	8	8	8	7	7	7	7	7	7	8	636
FARMERS OWN	6	6	6	6	6	6	6	6	5	6	6	6	13	10	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122
ENTERPRISE	0	0	0	0	0	0	0	0	63	113	117	115	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	476
BELL	2	2	5	4	4	5	5	4	1	1	1	4	4	4	4	4	4	1	0	0	0	0	3	4	4	4	4	4	4	5	0	91
FALL RIVER	372	370	370	370	368	374	376	376	246	246	282	272	280	284	280	276	284	372	348	340	368	323	324	360	316	314	310	312	310	327	344	10114
McBEE	4	4	4	4	4	4	4	5	0	0	3	6	7	7	9	5	6	1	0	0	0	0	7	0	7	5	6	6	6	9	4	137
CHESTER	6	6	6	6	6	6	6	6	6	6	6	6	12	12	11	11	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	130
SILKEY	20	22	22	21	20	21	23	24	0	5	20	9	12	12	10	12	17	4	0	0	0	0	14	13	17	17	16	15	15	23	0	406
CURR	31	31	30	30	30	31	32	30	22	5	19	17	19	21	17	16	21	20	24	26	24	21	25	23	24	24	24	30	26	25	26	744
WHITE	5	6	7	6	7	9	10	4	0	0	0	0	0	0	0	0	1	4	9	10	10	9	2	4	4	1	0	1	1	2	2	114
TOTAL DIV SQUIRR TO CHESTER	446	447	450	447	445	456	462	455	343	382	459	435	413	350	345	338	339	408	381	396	402	353	375	406	372	365	360	368	362	386	376	12329

HENRYS FORK CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
DEWEY	14	20	19	19	20	20	21	20	20	21	19	20	20	20	20	16	20	21	21	23	24	24	21	21	21	19	17	17	17	18	18	611
LAST CHANCE	56	38	38	38	39	40	54	54	54	51	50	46	46	47	35	44	42	9	0	58	72	70	70	70	68	66	64	64	62	61	60	1566
ST ANTHONY UNION	434	429	414	416	422	427	425	398	384	384	398	395	427	426	436	431	409	407	422	432	400	398	395	395	395	387	411	411	447	481	458	12938
FARMERS FRIEND	0	0	0	0	0	0	0	0	0	0	0	0	32	24	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	117
TWIN GROVES	142	111	114	33	0	0	0	0	22	123	130	129	88	60	18	0	0	0	0	0	0	0	0	0	0	0	0	0	28	95	35	1131
SALEM UNION	171	180	180	45	0	0	0	0	109	227	222	232	226	239	236	152	132	136	117	119	123	126	124	124	123	125	121	141	156	140	137	4184
TOTAL DIV ASH TO ST ANTH	823	778	765	551	481	487	500	472	589	806	819	822	839	816	773	643	603	573	560	632	619	616	610	610	607	595	613	633	709	775	741	30542
EGIN	303	287	285	296	291	291	295	277	205	208	199	192	241	299	287	279	337	208	201	295	299	301	293	301	303	291	308	297	279	259	269	8477
ST ANTH UNION FEEDER	45	59	63	67	76	78	51	38	32	46	44	50	46	46	60	61	50	66	74	64	87	87	87	82	80	86	72	73	56	58	53	1394
INDEPENDENT	170	162	162	160	170	160	162	159	148	146	138	131	115	112	121	163	179	144	127	112	148	157	201	197	197	187	182	138	116	108	138	4664
CONSOLIDATED FARMERS	149	179	191	150	233	161	183	163	206	204	268	270	200	167	193	157	180	110	88	88	132	77	152	156	163	157	150	149	148	157	144	5029
TOTAL DIV ST ANTH TO REXBG	647	687	701	672	770	690	691	637	591	604	649	643	602	614	661	665	656	528	490	579	666	622	733	716	723	701	662	657	598	579	604	20564

TETON RIVER CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
SIDDOWAY	8	7	13	12	11	10	10	12	11	11	9	8	9	9	7	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
WILFORD	78	80	72	71	69	71	69	73	70	68	68	83	83	78	71	62	61	68	74	69	80	74	69	67	66	64	59	53	51	49	46	2116
TETON IRRIGATION	76	73	72	70	72	70	72	67	65	63	76	61	17	0	42	51	33	63	63	55	57	64	62	63	63	60	64	57	56	60	58	1835
GOOD LUCK	12	12	11	11	11	11	11	12	12	10	9	9	9	9	9	9	8	8	8	9	11	10	9	9	8	8	9	8	8	7	7	294
PIONEER	12	12	12	12	12	13	13	15	13	13	12	11	12	10	10	10	8	8	8	10	12	12	10	10	10	10	12	12	12	12	11	360
STEWART	11	11	11	11	12	12	12	11	10	12	12	12	13	11	11	11	11	11	11	12	14	12	12	12	11	12	12	12	12	12	11	360
PINCOCK BYINGTON	7	7	7	7	6	7	7	7	7	7	8	7	7	7	7	8	8	7	7	7	9	8	7	7	7	6	5	12	12	12	11	13	235
PINCOCK GARNER	3	7	9	7	6	6	6	15	10	10	9	9	8	7	7	9	9	8	9	11	13	10	11	10	6	5	12	12	12	11	13	235
TETON ISLAND FEEDER	192	185	188	182	180	195	185	221	198	185	166	136	175	161	158	147	142	133	129	136	236	180	161	156	133	120	103	107	109	100	94	4933
ROXANA	14	16	16	16	16	16	16	16	16	13	13	11	12	12	11	11	11	11	11	13	13	13	2	2	1	1	9	9	6	6	6	339
ISLAND WARD	5	4	1	1	1	1	0	9	8	10	9	9	9	9	10	10	10	10	11	10	10	10	26	26	27	27	6	6	2	2	2	231
WOODMANSEE JOHNSON	9	9	8	8	7	8	7	8	6	6	6	4	6	12	22	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142
CITY OF REXBURG	31	31	21	20	22	22	28	33	30	27	30	33	29	35	29	26	21	21	22	29	44	44	40	36	27	26	26	26	29	37	33	836
REXBURG IRRIGATION	184	119	132	132	182	138	182	140	138	132	168	148	138	138	138	134	130	129	94	118	134	136	124	118	109	98	114	114	108	100	104	3503
TOTAL DIVERSIONS	587	573	573	565	547	577	568	639	589	567	543	461	519	515	537	504	448	475	447	499	633	563	533	506	465	435	436	414	403	359	351	16048

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM HENRYS FORK AND TRIBUTARIES FOR AUGUST 1924.

FALL RIVER CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
YELLOWSTONE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARRISFIELD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MARYSVILLE	0	0	0	0	0	114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	5	5	0	0	0	174
TOTAL DIV ABOVE SQUIRREL	0	0	0	0	0	114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	5	5	0	0	0	174
FARMERS OWN	0	0	0	0	0	0	0	0	0	0	0	0	27	27	0	0	0	0	0	23	22	22	0	0	0	4	14	0	0	0	0	139
ENTERPRISE	0	0	0	0	0	0	71	0	0	12	12	12	87	74	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	143
BELL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24	24	49
FALL RIVER	336	335	193	0	0	0	0	0	0	0	0	0	0	239	221	329	212	97	0	0	0	8	2	2	2	1	3	1	0	0	0	12
McDEE	1	2	8	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	8	8	8	8	8	32	8	30	38	2026
CHESTER	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
SILKEY	2	0	0	0	0	0	0	0	0	0	0	0	10	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	6	0	0	32
CURR	24	24	12	18	19	20	24	24	24	23	23	23	18	12	16	24	24	24	24	24	24	24	24	24	24	23	26	26	23	22	22	22	683
WHITE	1	2	2	2	2	1	2	4	3	3	3	3	2	1	5	3	3	4	4	3	3	3	3	3	3	3	2	2	2	2	2	3	76
TOTAL DIV SQUIRR TO CHESTER	365	366	216	27	21	21	97	28	27	38	38	38	149	352	320	261	239	125	28	30	27	69	47	37	34	47	51	93	62	78	63	3443

HENRYS FORK CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
DEWEY	18	18	20	21	21	19	19	18	18	18	18	17	16	15	7	14	10	17	16	15	15	14	15	15	10	13	11	4	4	10	10	463
LAST CHANCE	12	0	60	74	76	74	84	78	78	76	76	74	74	71	61	66	76	77	70	60	52	50	44	43	36	36	39	35	26	25	29	1714
ST ANTHONY UNION	458	414	445	431	436	429	432	422	416	416	395	387	380	377	366	351	357	353	353	354	380	382	330	345	299	310	305	299	241	283	281	11537
FARMERS FRIEND	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	107
TWIN GROVES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	40
SALEM UNION	140	145	146	144	150	145	145	144	144	144	142	133	131	127	131	126	124	126	126	130	133	133	122	111	111	111	109	109	111	111	77	3985
TOTAL DIV ASHTON TO STANTHONY	695	577	640	670	683	667	680	662	656	654	633	611	601	590	565	557	572	573	605	559	580	581	569	520	466	478	468	447	435	433	401	17246
EGIN	201	220	201	224	203	220	257	265	261	259	267	249	263	263	263	235	227	224	243	216	205	205	214	218	197	197	197	198	199	197	190	6963
STANTHONY UNION FEEDER	50	70	77	90	82	70	68	69	69	68	100	98	94	102	99	89	99	84	97	99	98	104	104	100	94	106	104	102	97	93	97	2373
INDEPENDENT	80	102	94	221	209	205	207	201	199	193	191	160	121	127	126	113	121	115	115	115	113	113	115	108	108	127	124	134	131	134	128	4358
CONSOLIDATED FARMERS	146	132	149	166	140	157	139	152	145	145	144	120	130	132	106	89	83	83	100	139	140	149	130	96	80	82	46	42	37	36	36	2439
TOTAL DIV STANTHONY TO REXBG	475	524	521	701	634	652	671	687	674	665	702	627	608	624	594	526	530	506	565	569	556	573	563	516	479	482	471	473	464	460	451	17533

TETON RIVER CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
SIDDOWAY	15	12	11	11	11	11	12	12	11	10	10	10	11	11	10	9	9	9	9	9	9	9	6	6	3	0	0	0	0	0	0	244
WILFORD	38	40	40	32	22	22	23	22	22	22	21	19	24	22	22	22	21	16	16	16	17	18	3	9	7	3	3	3	3	4	5	563
TETON IRRIGATION	60	51	51	48	42	40	44	44	44	39	41	41	41	41	42	49	48	48	50	45	38	46	33	26	17	4	4	4	5	4	4	1096
GOOD LUCK	7	7	7	6	4	4	4	4	3	3	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	115
PIONEER	9	10	7	7	7	8	10	12	11	11	11	11	13	13	13	13	12	11	10	10	10	10	10	11	11	11	11	11	11	12	12	329
STEWART	11	13	10	7	7	7	6	6	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	215
PINCOCK BYINGTON	4	4	4	4	4	4	4	4	3	3	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	128
PINCOCK GARNER	12	12	12	12	12	12	12	9	4	5	8	5	7	6	7	7	7	6	7	7	7	7	7	7	7	6	7	7	8	9	10	250
TETON ISLAND FEEDER	96	90	92	82	90	90	100	86	90	88	86	86	86	86	84	75	76	68	68	71	76	80	79	79	79	76	80	80	80	82	84	2662
POKANA	6	6	6	6	4	5	5	5	7	7	7	7	7	7	7	7	7	6	5	5	5	5	5	5	5	5	5	5	5	5	5	197
ISLAND WARD	2	2	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
WOODMANSEE JOHNSON	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	14	19
CITY OF REXBURG	34	19	19	24	31	30	30	30	30	31	33	32	33	36	35	34	32	32	32	33	31	30	30	29	28	30	30	32	32	32	30	940
REXBURG IRRIGATION	107	109	111	100	129	120	120	116	111	114	116	118	122	111	104	105	99	105	96	94	113	104	114	114	114	115	132	132	132	58	32	3337
TOTAL DIVERSIONS	401	375	372	341	364	356	391	351	343	340	348	344	359	349	340	337	326	315	304	302	308	322	307	306	296	271	280	287	289	281	290	10177

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM HENRYS FORK AND TRIBUTARIES FOR SEPT. 1924

FALL RIVER CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL
YELLOWSTONE	0	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	9	9	9	5	6	5	6	5	9	9	9	8	9	9	175
HARRIGFELD	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	6	3	5	3	4	4	4	4	3	4	4	2	4	92
MARYSVILLE	0	8	8	8	8	8	7	8	13	13	14	15	27	24	24	24	24	24	24	11	10	11	9	11	44	43	49	40	41	41	551
TOTAL DIV ABOVE SQUIRREL	0	15	15	15	15	15	14	15	20	20	21	21	33	30	30	30	36	38	36	21	20	20	18	20	57	67	62	72	74	74	818
FARMERS OWN	0	7	7	7	7	8	7	9	9	9	13	13	13	13	13	13	13	13	13	9	8	9	9	9	18	9	18	13	13	18	305
ENTERPRISE	0	54	87	87	86	56	0	0	0	29	29	28	28	29	29	40	64	65	65	45	0	0	0	0	34	64	71	73	74	74	1215
BELL	0	0	0	0	0	2	1	1	1	1	1	2	4	4	4	4	3	4	3	4	2	2	2	2	2	2	1	1	2	1	56
FALL RIVER	30	8	20	38	48	52	8	154	231	227	223	216	216	214	214	204	204	212	205	10	10	10	10	10	189	182	185	180	178	194	3365
McBEE	0	0	0	0	0	7	8	2	1	1	1	1	0	0	0	1	0	0	1	4	10	4	1	1	1	0	0	0	0	0	48
CHESTER	0	0	0	0	13	15	15	13	11	12	11	10	10	10	10	10	11	12	12	18	9	9	9	9	9	9	11	11	10	10	289
SILKEY	0	0	0	0	0	22	20	15	8	7	6	4	4	4	2	2	1	1	1	10	6	5	4	4	2	1	1	1	0	0	181
CURR	22	22	20	19	24	25	25	23	21	20	18	18	18	11	10	9	8	8	7	10	21	20	20	17	14	9	7	6	4	4	410
WHITE	4	4	3	3	4	6	5	4	1	1	0	0	0	0	0	0	0	0	0	6	4	5	4	4	4	1	1	0	0	0	64
TOTAL DIV SQUIRR TO CHESTER	56	95	137	154	184	193	89	221	283	307	302	292	293	285	282	283	304	315	310	116	70	64	59	56	268	277	290	285	281	274	6497

HENRYS FORK CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL
DEWEY	9	9	8	8	15	2	2	0	0	1	3	3	4	3	6	4	5	5	6	6	5	5	4	4	9	12	12	11	11	10	182
LAST CHANCE	21	25	22	21	20	19	18	16	16	17	17	17	16	17	17	18	18	19	20	22	13	15	13	19	14	12	12	9	11	12	406
ST ANTHONY UNION	274	276	271	269	217	215	215	206	203	206	206	205	188	188	188	190	190	190	192	188	188	200	196	198	193	188	188	208	206	204	6250
FARMERS FRIEND	26	30	29	4	4	4	4	4	4	20	33	33	40	40	40	40	40	45	38	5	5	5	5	5	5	5	5	37	32	22	615
TWIN GROVES	30	27	27	4	4	4	4	4	4	4	4	15	27	26	27	27	27	28	26	5	5	5	5	5	5	5	5	23	21	21	440
SALEM UNION	51	50	46	44	41	42	41	40	36	49	56	56	56	56	50	50	50	50	50	44	34	32	32	32	32	32	32	32	32	31	1279
TOTAL DIV ASHTON TO ST ANTHONY	410	417	403	360	301	286	284	270	263	297	319	329	331	330	328	329	330	337	332	270	250	262	255	269	254	256	304	303	303	304	9278
EGIN	195	190	176	176	183	177	177	174	174	117	117	117	117	117	134	135	147	145	143	150	150	148	140	126	128	126	126	123	136	134	4402
ST ANTHONY UNION FEEDER	90	100	96	98	94	88	87	83	82	77	77	78	64	60	58	58	66	72	67	84	79	75	64	73	62	58	60	43	47	46	2172
INDEPENDENT	131	106	60	60	63	60	60	100	97	98	85	84	88	78	72	72	70	97	88	115	127	115	148	153	151	146	144	136	141	141	3081
CONSOLIDATED FARMERS	62	96	98	86	74	52	29	28	59	101	101	101	101	101	101	101	101	101	101	68	36	36	36	36	36	36	53	72	72	74	2149
TOTAL DIV ST ANTHONY TO REXBG	478	492	430	420	414	377	353	385	418	393	380	380	365	356	365	366	384	415	399	417	397	374	388	388	377	362	373	374	395	395	11804

TETON RIVER CANALS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL
SIDDOWAY	0	0	0	0	8	8	8	8	8	8	8	8	8	8	8	7	7	7	6	7	7	7	6	6	6	6	11	11	11	11	204
WILFORD	7	10	10	10	10	10	11	10	10	10	10	10	10	10	10	10	9	9	10	10	10	10	21	38	39	40	42	44	44	45	529
TETON IRRIGATION	4	4	7	44	42	44	44	36	35	36	23	14	14	13	13	10	17	24	28	28	28	28	26	27	28	24	34	35	32	36	779
GOOD LUCK	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	1	1	9	9	8	55
PIONEER	12	12	12	11	12	13	13	12	13	11	11	11	11	11	7	7	6	6	6	6	6	6	4	4	11	11	11	11	11	9	287
STEWART	6	6	6	6	6	7	7	6	6	6	6	6	6	6	7	7	7	7	7	6	6	6	3	5	9	9	9	9	9	9	199
PINCOCK BYINGTON	0	0	0	0	0	0	0	0	0	4	4	5	5	5	5	1	1	1	1	1	1	1	1	1	1	1	1	1	6	5	52
PINCOCK GARNER	6	6	6	6	6	6	6	6	5	5	6	6	6	6	6	5	3	4	3	3	4	1	13	11	10	13	14	13	13	13	211
TETON ISLAND FEEDER	79	76	79	79	82	94	98	80	86	90	138	138	142	142	138	163	147	149	173	170	168	144	138	122	120	119	133	120	113	118	3647
ROXANA	4	4	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5	5	6	6	6	7	7	6	6	5	5	6	6	6	139
ISLAND WARD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WOODMANSEE JOHNSON	20	20	18	20	18	20	20	7	9	12	9	4	5	4	4	4	3	3	3	3	3	3	4	6	6	6	6	6	11	11	265
CITY OF REXBURG	6	6	7	7	22	22	16	22	22	23	23	21	21	21	22	15	17	18	18	18	20	15	16	13	12	13	13	13	13	11	436
REXBURG IRRIGATION	134	136	104	105	106	102	107	104	111	118	118	111	109	109	103	93	98	96	91	90	90	86	86	73	71	73	70	74	75	74	2918
TOTAL DIVERSIONS	281	280	285	292	313	331	335	296	310	328	361	339	342	340	330	328	321	330	353	349	350	315	326	311	320	333	350	351	361	358	9774

unsatisfactory because of the crude facilities afforded for division of the water between the north and south channels. Regulation at this point could only be secured by the expensive and laborious process of adding or removing rock and brush at different points on a sort of makeshift community dam. When one group of users succeeded in diverting a larger proportion of the flow into their channel it necessarily reduced the supply in the other branch. Canals having their headings in the latter were then apt to retaliate by further work at the dam. Since the water is not decreed at this point of division but rather at the heads of the individual canals, regulation by deputy water master Dawson was limited to the latter, although advice as to the control at the forks was frequently given. The obvious remedy for this situation would be the construction of a permanent dam and easily operated controlling works; in which case, equitable division between the two channels might be added to the regular duties of the river deputy.

While the 1924 season was one of light crop production for the area supervised from the St. Anthony office when taken in its entirety, the available water supply is believed to have been distributed and applied more efficiently than for several years. The early season warnings of the impending shortage were generally heeded and where even small amounts of water were obtainable during the latter part of the summer, good crops were usually secured. The vital necessity of attempting to secure storage for the use of both Fall and Teton River canals was again most forcibly emphasized.

Actual deliveries to the canals diverting from Henrys Fork, Fall and Teton Rivers are shown on Plates XIX, XX, XXI, XXII and XXIII. On May 19 and 20 daily readings were not secured for some of the canals, but discharges have in all such cases been completed by interpolation. In the matter of recomputation of data as well as in other respects, the records here presented correspond and are consistent with those contained on Plates III, IV, V, VI and VII.

Plates XXIV and XXV summarize data in regard to the flow of the three principal streams, diversions therefrom, losses and gains throughout different sections, in so far as it is practicable to show all these facts from the existing records.

The time interval basis used for the computation of records from the river gaging stations as presented in these tables is as follows:

DAILY SUMMARY OF DATA AT AND BETWEEN GAGING STATIONS ON HENRY'S

...DISTRIBUTION WATER DISTRICT NO 36

| HENRYS LAKE RESERVOIR | | | HENRYS FORK | | | | | | | | | | | | | FALL RIVER | | | | | | | | | | | | |

PLATE NO. XXIV

RK AND TRIBUTARIES.

HENRY'S FORK

THEO. BAL. AT ST. ANT.	ST ANTHONY STA. GAGE	DISCH	STOR.	NOR.	GAIN ASN TO ST ANT.	DIVERS BELOW ST. ANTH STOR.	NOR.	THEO. BAL. BELOW DIVERS	EST. BAL. BELOW DIVERS
1337	379	1540		1540	153		1117	423	
1293	372	1490		1430	142		1136	294	
1157	365	1390		1320	163		1069	251	
1381	379	1530		1540	159		1084	456	
1215	367	1350		1350	135		956	394	
937	354	1160		1160	223		995	165	
1076	365	1290		1290	214		1071	219	
1228	366	1330		1330	102		1035	295	
943	347	1060		1060	116		934	126	
862	343	1010		1010	148		887	123	
576	334	834		834	258		661	173	
400	320	750		750	350		560	190	
561	314	693		693	132		753	-60	0
733	325	802		802	49		861	-59	0
858	342	996		996	138		988	8	
1079	355	1170		1170	91		813	357	
1281	370	1400		1400	119		977	423	
1159	369	1390		1380	221		891	489	
937	349	1090		1090	153		819	271	
711	331	866		866	155		763	103	
591	319	740		740	149		718	22	0
504	310	655		655	151		668	-13	0
606	314	693		693	87		720	-27	0
575	315	702		702	127		689	13	0
710	328	834		834	124		865	-31	0
859	340	970		970	111		870	100	0
865	342	996		996	111		937	59	0
835	343	1010		1010	175		922	88	0
723	330	855		855	132		823	32	0
576	315	702		702	126		656	46	0
402	303	596		596	194		560	36	0
578	314	693		693	115		738	-45	0
551	316	712		712	161		740	-28	0
509	313	684		684	175		681	3	0
525	311	664		664	139		693	-29	0
523	312	674		674	151		659	15	0
398	311	664		664	266		683	-19	0
397	296	540		540	143		587	-47	0
327	293	518		518	191		535	-17	0
366	290	495		495	129		569	-74	0
495	304	604	96	518	109	64	568	-28	0
565	313	684	198	486	119	67	693	-76	0
427	309	646	227	419	219	15	652	-21	0
527	307	630	168	462	103	56	631	-57	0
563	311	664	199	465	101	45	656	-37	0
777	323	782	190	592	5	219	453	110	
867	332	878	261	617	11	321	449	108	
906	338	947	289	658	41	241	449	257	
931	342	996	245	751	65	227	444	325	
1081	350	1100	259	841	19	184	459	463	
821	325	802	315	487	-19	6	585	211	
559	316	712	375	337	153	4	600	108	
524	306	621	200	421	97	68	581	-28	
496	302	587	217	370	91	70	573	-56	
456	296	540	216	324	84	0	602	-62	
574	301	678	133	445	4	166	448	-36	
664	309	646	-136	782	-18	234	427	-16	
782	310	655	-48	703	-97	249	422	-10	
725	309	646	-37	703	-79	84	602	-40	
786	312	674	70	604	-112	133	395	146	
733	318	731	59	672	-2	117	373	241	
713	326	813	81	732	100	122	457	234	
985	340	970	220	750	-15	173	493	304	
1006	344	1020	220	800	15	125	497	398	
1043	342	996	255	741	-47	161	574	261	
1020	342	996	169	827	-24	116	600	280	
1000	341	983	118	865	-17	141	582	260	
967	336	912	23	889	-45	123	578	211	
874	327	824	17	807	-50	91	571	162	

TETON RIVER

ST ANTH STA. GAGE	DISCH	DIVERS	THEO. BAL. BELOW DIVERS	EST. BAL. BELOW DIVERS	THEO BAL HENRY'S FK STA'N & TETON RIVER	HENRY FK. NR. REXBG	GAIN BELOW ST ANTH
2.02	1410	1210	200		623	663	40
1.95	1370	1189	181		475	645	170
1.91	1340	1189	151		415	574	159
1.54	1110	1035	75		607	711	104
1.38	1020	999	21		469	692	223
1.62	1160	1124	36		176	581	405
1.54	1110	1038	72		256	589	333
1.22	923	886	37	*	367	650	283
1.17	894	866	28		163	587	424
1.05	825	792	33		151	661	510
0.88	729	708	21		206	536	330
0.82	696	651	45		211	511	300
0.78	674	652	22		-15	466	481
0.90	740	708	32		-37	526	463
1.10	853	763	90		40	586	546
1.20	911	812	99		447	646	199
1.16	888	769	119		522	706	184
1.14	877	793	84		608	816	208
1.07	836	785	51		355	765	410
0.96	773	752	21		154	663	509
0.87	723	702	21		43	609	566
0.77	668	653	15		8	569	561
0.75	657	632	25		-12	536	548
0.81	690	668	22		38	507	469
0.96	773	732	41		-9	482	491
1.10	853	783	70		141	482	341
1.14	877	826	51		129	519	390
1.14	877	810	67		139	587	448
1.09	848	799	49		99	552	453
1.02	808	771	37		95	511	416
0.93	757	730	27		73	494	421
0.86	718	682	36		-18	507	525
0.85	712	703	9		8	498	490
0.89	734	716	18		12	490	478
0.94	762	707	55		-11	470	481
0.89	734	663	71		70	462	392
0.87	723	693	30		52	451	399
0.86	718	642	76		-17	439	456
0.83	701	646	55		59	413	354
0.80	684	615	69		-19	394	413
0.76	663	597	66		41	405	364
0.74	652	587	65		-10	391	401
0.70	630	573	57		-44	398	354
0.69	625	573	52		0	401	401
0.69	625	565	60		15	398	383
0.69	625	547	78		170	409	239
0.75	657	577	80		186	478	292
0.75	657	568	89		337	600	263
0.86	718	639	79		414	663	249
0.80	684	589	95		542	826	284
0.71	636	567	69		306	668	362
0.63	604	542	62		177	557	380
0.61	583	561	22		-34	494	528
0.64	598	519	79		17	478	461
0.65	604	515	89		53	459	406
0.60	578	537	41		26	435	409
0.55	552	504	48		30	470	440
0.53	542	448	94		54	482	428
0.46	507	475	32		178	443	265
0.45	502	447	56		296	578	282
0.51	532	499	33		267	687	420
0.74	652	633	19		373	721	348
0.78	674	563	111		509	765	256
0.65	604	533	71		392	721	329
0.57	562	506	56		396	724	328
0.53	542	468	74		334	716	382
0.49	522	438	84		295	673	378
0.48	517	436	81		249	618	369

* TETON RIVER PRACTICALLY DRY BELOW ALL DIVERSIONS AFTER MAY 27.

DAILY SUMMARY OF DATA AT AND BETWEEN GAGING STATIONS ON HENR

STRIBUTION WATER DISTRICT NO. 36

| HENRYS LAKE RESERVOIR | | | HENRYS FORK | | | | | | | | | | | | | | | | | | FALL RIVER | | | | | | | | | | | | | | | | | |

RYS FORK AND TRIBUTARIES.

PLATE NO. XXV

HENRYS FORK												TETON RIVER					THEO BAL. HEN FK ST ANT + TETON RIVER	HEN FK NR. REXBG	GAIN BELOW ST. ANTH.
			ST ANTHONY STA.				GAIN ASH TO ST ANT	DIVERS BELOW ST ANTH		THEO BAL BELOW DIVERS	EST BAL BELOW DIVERS	ST ANTH. STA			THEO BAL BELOW DIVERS	EST BAL BELOW DIVERS			
		THEO BAL AT ST ANT	GAGE	DISCH	STOR	NOR		STOR	NOR			GAGE	DISCH	DIVERS					
												0.45	502	417	85				
												0.45	493	403	90				
												0.43	493	389	104				
												0.43	493	391	102				
												0.39	474	401	73				
												0.39	469	375	94				
												0.37	464	372	92				
												0.36	459	341	118				
												0.34	450	364	86				
												0.33	464	371	93				
												0.33	478	351	127				
												0.30	464	343	121				
												0.31	469	340	129				
												0.31	469	348	121				
												0.30	464	344	120				
												0.31	469	359	110				
												0.32	474	349	125				
												0.30	464	340	124				
												0.23	439	317	122				
												0.24	436	325	111				
												0.23	432	315	117				
												0.23	432	304	128				
												0.24	436	302	134				
												0.23	432	308	124				
												0.25	441	322	119				
												0.24	436	307	129				
												0.22	427	300	127				
												0.21	423	286	137				
												0.19	414	271	143				
												0.20	418	285	133				
												0.19	414	287	127				
												0.17	405	289	116				
												0.19	414	288	126				
												0.19	414	299	115				
												0.18	409	281	128				
												0.17	405	280	125				
												0.18	409	253	156				
												0.21	423	292	131				
												0.20	418	315	103				
												0.27	490	391	119				
												0.31	469	335	134				
												0.24	436	296	140				
												0.23	432	310	122				
												0.25	441	328	113				
												0.27	450	361	89				
												0.26	446	339	107				
												0.24	436	342	94				
												0.22	427	340	87				
												0.21	423	330	93				
												0.19	414	328	86				
												0.17	405	321	84				
												0.18	409	330	79				
												0.23	432	353	79				
												0.24	436	349	87				
												0.23	432	350	82				
												0.20	418	315	103				
												0.19	414	326	88				
												0.16	400	311	89				
												0.16	400	320	80				
												0.20	418	333	85				
												0.21	423	350	73				
												0.20	418	351	67				
												0.20	418	351	67				
												0.20	418	353	65				

Time from Henrys Lake in hours	Gaging Station	Period used for comparable daily means
0	Henrys Lake Outlet near Lake	Day ending at 2 p.m.
40	Henrys Fork at Warm River	Day ending at 6 a.m. 2nd day following
50	Henrys Fork near Ashton	Day ending at 4 p.m. 2nd day following
	Fall River near Squirrel	*Day ending at 10 a.m. 2nd day following
	Fall River near Chester	Day ending at 5 p.m. 2nd day following
54	Henrys Fork at St. Anthony	Day ending at 8 p.m. 2nd day following
	Teton River near St. Anthony	Day ending at 6 p.m. 2nd day following
66	Henrys Fork near Rexburg	Day ending at 8 a.m. 3rd day following

*Approximate means used. No recording gage records available.

This schedule is so arranged as to make the data correspond to the river records on Plates VIII, IX and X. The dates indicated on the tables are for the nearest midnight to midnight or calendar days.

In the column headed "Est. Bal. Below Divers." zero discharge is indicated for Henrys Fork on 27 days in June and July when the dam of the Consolidated Farmers Canal is known to have been tightened up to divert all the water possible. In addition to this period the stream is believed to have been practically dry from July 11 to 17 and perhaps also on one or two other days. Actual continuous measurement of the water wasting past the last dam is not considered practicable and for this reason estimates have only been included for days when either personal inspection was made or other reliable information secured.

A somewhat similar situation exists with respect to the measurement of water passing the last diversion dams on Teton River but here waste, other than small amounts of return flow entering too near the mouth to be again

used in that section, was practically nil after May 27. The fact that a theoretical balance averaging slightly more than eighty second-feet is shown for this period is an indication of comparatively heavy channel transmission losses. A considerable portion of the lower Teton lands are known to sub-irrigate, hence at least part of these losses doubtless represent water beneficially applied for irrigation in this way.

In order to avoid complication of records, all Jackson Lake storage transferred upstream, by exchange, to canals in the Henrys Fork area is included with the normal flow diversions as listed. Therefore the stored diversions refer only to water from Henrys Lake Reservoir.

Plate XXVI contains a curve showing the way in which storage was drawn from Henrys Lake Reservoir together with actual total and computed normal flow hydrographs for Henrys Fork at the Lake, Warm River and Ashton gaging stations. These graphs are all plotted with time interval adjusted to coincide with the nearest calendar day at the Ashton station.

At low reservoir stages the gage at the dam became an unsatisfactory index of capacity—presumably because of the water surface slope in the comparatively narrow outlet between the lake and the dam. For this reason considerable uncertainty exists as to the exact amount of storage drawn off each day during the latter part of the season and the reservoir graph is consequently shown as a broken line after August 7.

Comparison of the graphs for the three river stations shows that while the Warm River records are fairly consistent with those for the Lake station, many irregularities appear at Ashton. Without doubt these can be attributed to interference with stream flow at the Ashton power plant, where a sufficient storage capacity exists to easily account for these discrepancies through failure of the operators to always release the same amount entering the

...AND DISTRIBUTION WATER DISTRICT NO 36

PLATE XXVI

May | June | July | August | September | October

DISCHARGE IN CUBIC FEET PER SECOND

2000
1600
1200
800
400

STORAGE IN ACRE-FEET

40,000
32,000
24,000
16,000
8,000
0

HENRY'S LAKE RESERVOIR

ASHTON
WARM RIVER
ASHTON
WARM RIVER
ASHTON
WARM RIVER
LAKE
LAKE
LAKE

impounding basin.

The computed normal flow graphs appear to be somewhat more reasonable than those of 1923 but they still show a slight tendency to diminish as the amount of storage released increases. The opposite trend is also noted quite generally, coincident with decreases in total stream flow. Prior to the 1924 release of stored water a new and more direct outlet channel was constructed through a large portion of the Henrys Lake bottom land and this eliminated much, but not all, of the former lag attributable to the flooding of meadows and other low ground.

HENRYS LAKE STORAGE DELIVERIES

That the 1923-24 Henrys Lake storable run-off was exceptionally small is at once evident from the fact that the amount impounded between the time the outlet gates were shut down late in September and the following May when they were again opened to allow the passage of normal flow totalled only about 16,000 acre-feet. It was therefore particularly fortunate that an unused surplus or hold-over of about 32,000 acre-feet remained at the close of the 1923 irrigation season.

The reservoir was operated in practically the same manner as during the preceding year until about the middle of August, after which the amount of stored water released was limited by the carrying capacity of the outlet channel between the lake and the dam. Difficulty was also experienced with floating islands of sod and brush which drifted into this outlet and caused partial stoppage of the flow until they were removed. Beginning August 12 or 13 the gates were raised and kept clear of the water surface until about 8:00 P.M. on September 8 when, with a little more than 5000 acre-feet of supposedly usable storage still remaining in the reservoir, they were shut down to the extent necessary to allow only normal flow to pass the dam. Orders

to begin storing water for the 1925 season were forwarded on October 3.

Plate XXVII contains the final summary account of all stored water released from Henrys Lake. Head-gate deliveries to the respective canals are shown for actual diversion dates.

Where a minus quantity is given on the "Unused Storage" line an excess storage delivery is indicated, or, in other words, normal flow was actually delivered to the canals instead of storage. This line shows at a glance the irregularities of delivery, together with the compensating character of the individual day errors. The algebraic total of unused storage for the enti period indicates encroachment upon normal flow rights to the extent of only 337 acre-feet—an amount well within the limits of error to be expected in river operation. During July 8-10 a part of the storage in transit was purposely held back at the Ashton power dam and this was turned down in addition to the regular flow July 14-16. This transaction accounts for th largest variations between the available and delivered storage.

The small amount charged against the Marysville Canal was handled through an exchange of water in the manner previously described in this report. No storage was required by the St. Anthony Union system.

The maximum indicated daily delivery amounted to 651 second-feet but more than 600 second-feet was actually used on seven different days. The amount available at the Ashton station, on the other hand, exceeded 600 second-feet on only two days although the maximum was almost the same as the greatest daily draft. It would seem therefore, that if future requirements are to be filled from this source, the channel between the lake and the dam should be deepened and enlarged to the extent necessary to permit heavier storage withdrawals at medium and low stages.

HENRYS LAKE STORAGE DELIVERIES - 1924.

	May 29	30	31	Jun 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Jul 1	2	3	4	5	Total to Jul 5	Total to Aug 12
MARYSVILLE												18	91	45																										
DEWEY					5	4	4	20	20	16	15	5	6	4	5	5	15	16	11	15	16	16	18	19	19	16	16	16	14	12	12	12	13	13	15	13	15	21	21		
LAST CHANCE					25	23	33	30	31	42	31						46	22	23				53	71	70	65	70	68	67	69	61	40	70	59				60	74	76		
SALEM UNION																		236	152	152	136	117	119	123	124	124	124	123	123	121	141	136	140	137	140	145	141	144	150		
EGIN																																						14	3		
INDEPENDENT	69	67	15		56	45	149	168	160	144	101						89	121	166	44	23	29	34	41	48	59	40	55	46	21	28	24	30	55	58	92	91	721	269		
CONSOL FARM.							70	153	81	83	83	6	4	68	70		77	113	77	40	110	58	88	132	77	72	76	83	77	70	69	62	77	64	144	132	149	66	140		
TOTAL DELIVERIES	69	67	15		86	72	256	371	292	292	230	23	101	117	75	5	227	508	429	251	285	260	312	336	338	366	326	298	317	288	311	293	280	295	345	282	461	1580	999	
UNUSED STORAGE	+22	+131	+210		+112	+54	-29	-40	-48	-18	-75	+309	+371	+132	+141	+216	-33	-376	-291	-41	-63	-68	-41	+47	+93	+94	+53	-23	-100	-74	-96	-55	-68	-24	-64	-118	-65	-178	-796		
AVAIL AT ASHTON	86	198	225		198	226	227	311	340	310	305	332	472	249	222	221	194	138	132	110	222	92	271	433	433	460	379	325	317	214	265	238	212	264	318	396	396	476	504		

	Aug 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Sep 1	2	3	4	5	6	7	8	9	10	11	12		
MARYSVILLE																																						148	293
DEWEY	19	19	13	13	13	13	12	11	10	2	9	10	12	11	10	10	9	10	10	5	8	6	3	0	5	5	4	4	3	3	10							738	1414
LAST CHANCE	74	84	78	78	76	76	74	74	71	61	66	76	77	70	60	52	50	44	43	35	33	26	71	45	46	52	41	16			3							2842	5637
SALEM UNION	145	145	144	144	144	144	33	31	127	31	126	124	126	114	110	103	95	96	83	78	71	62	66	68	71	77												5930	11762
EGIN	20	57	65	61	59	67	49	63	63	63	35	27	24	43	16	5	5	14	12																			775	1537
INDEPENDENT	205	207	198	190	193	191	141	101	111	97	99	121	58	111	104	97	107	105	62	37	79	67	71	45	46	22	11											6514	10337
CONSOL FARM	157	139	152	145	145	144	130	130	132	106	89	83	83	51	65	60	54	48	96	50	52	46	42	37	36	17	2	46	11									5149	10213
TOTAL DELIVERIES	620	651	650	631	620	635	539	510	514	460	424	441	380	400	365	327	320	317	306	205	243	207	253	195	204	173	58	65	14	3	13							21096	41843
UNUSED STORAGE	-179	-33	-26	+19	-52	-111	-48	-36	-58	-33	-25	+14	+147	-4	-3	-10	-28	-44	-42	+134	-23	-3	-71	-33	-61	-46	+53	+28	+72	+69	+56	+62	+44	+41	+39	+33	+22	+4	-170	-337
AVAIL. AT ASHTON	491	568	624	650	568	524	491	476	456	427	399	445	427	396	362	317	292	273	264	239	220	204	182	162	143	127	111	93	86	72	69	62	44	41	39	33	22	4	20926	41506

HENRYS LAKE EQUIVALENT

	May 29	30	31	Jun 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Aug 1	2	3	4	5		
TOTAL DELIVERIES	65	63	15	58	74	261	379	295	295	235	23	103	119	77	5	232	518	438	256	291	255	318	344	343	373	333	365	323	294	317	299	286	304	340	310	478	663	611		
UNUSED STORAGE	+23	+134	+216	+14	+157	-80	-61	+43	+19	+77	+316	+179	+35	+50	+126	-34	-378	-297	-44	-69	-59	-82	-48	+97	+96	+54	-23	+102	-76	-47	-56	-69	-35	-65	-34	-66	-178	-296		

	Aug 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Sep 1	2	3	4	5	6	7	8	9	10	11	12		
TOTAL DELIVERIES	633	664	663	644	633	648	550	520	524	469	453	450	339	405	372	334	327	323	312	209	248	211	268	199	208	177	59	66	4	3	14							21524	42692
UNUSED STORAGE	-132	-85	-27	+19	-43	-113	-49	-36	-59	-34	-25	+4	+148	-4	-3	-10	-29	-46	-43	+135	-23	-3	-72	-34	-62	-47	+54	+29	+73	+70	+57	+63	+43	+42	+40	+44	+13	+4	-173	-343
																																						21351	42349

TOTAL DRAFT FROM RESERVOIR IN ACRE FT. JUN 29 - SEP 12 .... 42 349

The exact method used in the final segregation and summary of Henrys Lake storage is described as follows:

(1) The amount of stored water releasod from the reservoir each day prior to August 6 (Lake date) was determined from the capacity tables by noting the quantity corresponding to the daily decrease in stage indicated by the lake gage readings. Short period interpolations or adjustments were sometimes required in order to eliminate irregularities presumably attributable to wind effect. (This is the Jackson Lake method). Beginning August 6 the normal flow at the Lake gaging station was estimated—chiefly upon the basis of tributary inflow measurements made just before that date by Mr. Black and upon changes in weather conditions. The difference between this amount and the total flow past the station was then assumed to represent storage.

(2) 1.5 per cent was deducted between the lake and the Warm River gaging station and an additional 0.5 per cent between the latter point and the Ashton station, for transmission loss. While these losses correspond with the recommendations submitted by Consulting Engineer R. I. Meeker on August 14, 1923, they are almost purely arbitrary in character since no data have as yet been secured to afford a basis for any scientific determination.

Plate XXVIII contains hydrographs for the two gaging stations on Fall River and a graph showing indicated net gains or losses above the lower or Chester station. These are plotted to coincide with the dates at the upper station.

The average net gain between these two stations is much smaller than that noted in former years, a fact directly attributable to the marked deficiency in the water supply to which the Fall River canals were entitled.

Some of the irregularities in these curves are rather hard to explain, but it seems probable that most of them are due to the inaccurate daily mean

GAIN AND LOSS BETWEEN THE SQUIRREL AND CHESTER GAGING STATIONS — FALL RIVER

PLATE XCVIII

RIVER DISTRIBUTION WATER DISTRICT NO 36

May | June | July | August | September | October

SQUIRREL TO CHESTER

200 GAIN

0

200 LOSS

2000

1600

1200

800

400

DISCHARGE IN CUBIC FEET PER SECOND

SQUIRREL

CHESTER

SQUIRREL

CHESTER

discharges computed for the Squirrel station which is not equipped with a recording gage.

The hydrograph for the Rexburg station and graphs showing gains and losses on Henrys Fork above and below St. Anthony are included on Plate XXIX. These curves are all plotted to agree with the Rexburg dates.

The relatively well sustained return flow shown throughout the month of June is probably the result of unusually heavy use of water during April and May, while the material decrease in this item indicated later in the season reflects the smaller canal diversions then necessitated by the general shortage.

Attention is directed to the uniformly low discharge at the Rexburg station throughout the ordinary May and June high water period.

DISTRIBUTION IN SWAN VALLEY

Swan Valley water distribution was handled in practically the same manner as during the four previous years. A deputy water master was appointed for this section, but his salary and other expenses incident to the work were paid directly by the local water users; hence, no charges against the canals in this area were included in the annual water master's bill. Copies of instructions regarding cuts and reinstatements were forwarded to this deputy, who was directed to regulate diversions in accordance with these orders.

By the early part of August rights had been cut to such an extent that most of those on Rainy Creek were invalid. The question then arose as to whether, because of supposedly very heavy channel losses, between the lower end of the canyon and the mouth of the stream, the river would receive any material benefit if the canals which diverted at the upper point were actually deprived of what little water they could get out of the stream at that

GAIN AND LOSS BETWEEN THE ASHTON AND REXBURG GAGING STATIONS — HENRYS FORK
PLATE XXIX

IDAHO DEPARTMENT OF RECLAMATION
SNAKE RIVER DISTRIBUTION WATER DISTRICT NO 36

May | June | July | August | September | October

DISCHARGE IN CUBIC FEET PER SECOND

ASHTON TO ST. ANTHONY

2000
200 GAIN
0
200 LOSS

ST. ANTHONY TO REXBURG

1600
200 GAIN
1200
0
200 LOSS

REXBURG

800
400

time. Most of the local residents were of the opinion that the losses would be sufficient to absorb the entire available flow, but since this was not conclusively proven, arrangements were made for an actual test which was carried on August 11-13 under the supervision of Deputy Water Master Burton and one of the hydrographers detailed from the Idaho Falls office. This test showed that over 50 per cent of the water turned back into the stream at the canal headings reached Snake River in about 24 hours, in consequence of which the cuts were continued in effect.

Thereafter water was contributed through the pooling committee to both Rainy and Palisade Creek canals in sufficient amount to protect orchard trees and small garden patches from serious loss.

DISTRIBUTION ON SAND CREEK, FREMONT COUNTY

Distribution of Sand Creek water in Fremont County was provided for in the manner followed for the Swan Valley section. Hyrum E. Bowman, who was appointed as Deputy Water Master, apparently succeeded in making the necessary apportionments and cost adjustments locally since no request for other assistance was received. As explained in previous reports, this stream is not a surface tributary to Henrys Fork during periods when the use of water for irrigation is in any way limited.

CLIMATOLOGICAL DATA

Study of the U. S. Weather Bureau monthly and annual climatological summaries covering the twelve months ending September 30, 1924 affords much information of interest and serves to explain many phases of the water supply deficiency which might otherwise be difficult to understand.

The following notes from the Idaho and Wyoming section reports will

serve to emphasize the principal monthly peculiarities:

October 1923. Precipitation above normal except extreme upper portion of Snake River drainage where slight deficiencies were recorded.

November 1923. Average temperatures above normal. Precipitation short over entire area.

December 1923. Both temperature and precipitation nearly normal.

January 1924. Dry and cold. The Idaho report says,—"It was the driest January since 1902" and "Only four times in the thirty-one years of record for January has a lower mean temperature for the State been recorded."

February 1924. The warmest February for many years but deficient in precipitation.

March 1924. Cold and dry. For Idaho "the driest March since 1914."

April 1924. Mean temperature nearly normal. The Idaho report shows "It was the driest April the State has experienced in the 31 years for which records are available."

May 1924. "This was with but one exception, May, 1897, the warmest May of record for Idaho, and without exception, by a considerable margin, the driest May. It was the seventh consecutive month with less than normal precipitation and as a consequence drought prevailed generally in all the dry land areas. The demand for irrigation water was heavy while the level of water in storage reservoirs was generally far below normal for the season. Many water courses were already dry and the run-off in the larger streams was the least in many years. It was entirely too dry for the best crop progress. Germination was slow and very irregular, due to dry soil. In the irrigated districts late sown seed had to be irrigated up, never a satisfactory process."

June 1924. Practically normal as to temperature. The Wyoming report says "June, 1924 was unusually dry." In Idaho "It was another dry month, the eighth consecutive month with less than normal precipitation. Drought conditions were acute over practically the entire State."

July 1924. Conditions more nearly normal both as to temperature and precipitation.

August 1924. Another month of subnormal precipitation. About average temperature.

September 1924. The eleventh consecutive month with less than normal precipitation for the State of Idaho as a whole. Weather conditions were in the main favorable for the maturing of crops.

The amount and distribution of precipitation at the principal observation points throughout District No. 36 territory is shown graphically for the 1924 water regulation period on Plates XXX and XXXI.

The record at the Riverside station near the west entrance to Yellowstone National Park is not altogether consistent with those for the other stations and probably should be eliminated from comparative studies since it is the only one shown for a location outside the Snake River drainage area.

The following table summarizes precipitation data for Snake River, Moran, Irwin, Ashton, Idaho Falls, Blackfoot, Pocatello, American Falls and Twin Falls by months for the year ending September 30, 1924:

Month	Total Number of Stations	Number Above Normal	Number Below Normal	Monthly Aver. Precip. in inches for all Years of Record	Average Precip. in inches for specific month	Mean Departure from Average Amount in inches
1923						
October	9	5	4	1.315	1.952	+0.637
November	9	0	9	1.258	0.551	-0.707
December	9	4	5	1.324	1.430	+0.106
1924						
January	9	0	9	1.875	0.632	-1.243
February	9	1	8	1.402	0.833	-0.569
March	9	0	9	1.673	0.792	-0.881
April	9	0	9	1.351	0.708	-0.643
May	9	0	9	1.824	0.438	-1.386
June	9	0	9	1.302	0.465	-0.837
July	9	4	5	0.910	1.044	+0.134
August	9	1	8	0.763	0.120	-0.643
September	9	3	6	1.084	0.924	-0.160
			Total	16.081	9.889	-6.192

It is interesting to note that this representative group of nine widely scattered observation stations, at which records have been obtained over a period ranging from 13 to 29 years each, show a total precipitation for this twelve month period amounting to 61.5 per cent of the normal amount in comparison with an indicated run-off for the same period totalling 59 per cent of a 21 year average (see pages 13-14).

DAILY PRECIPITATION DIAGRAM - SNAKE RIVER AREA

1924 DISTRIBUTION WATER DISTRICT NO 36

PLATE NO XXX

May | June | July | August | September

TOTAL FOR PERIOD IN INCHES

PRECIPITATION IN INCHES

SNAKE RIVER — 5.75

MORAN — 4.21

IRWIN — 3.62

IDAHO FALLS — 1.93

BLACKFOOT — 2.20

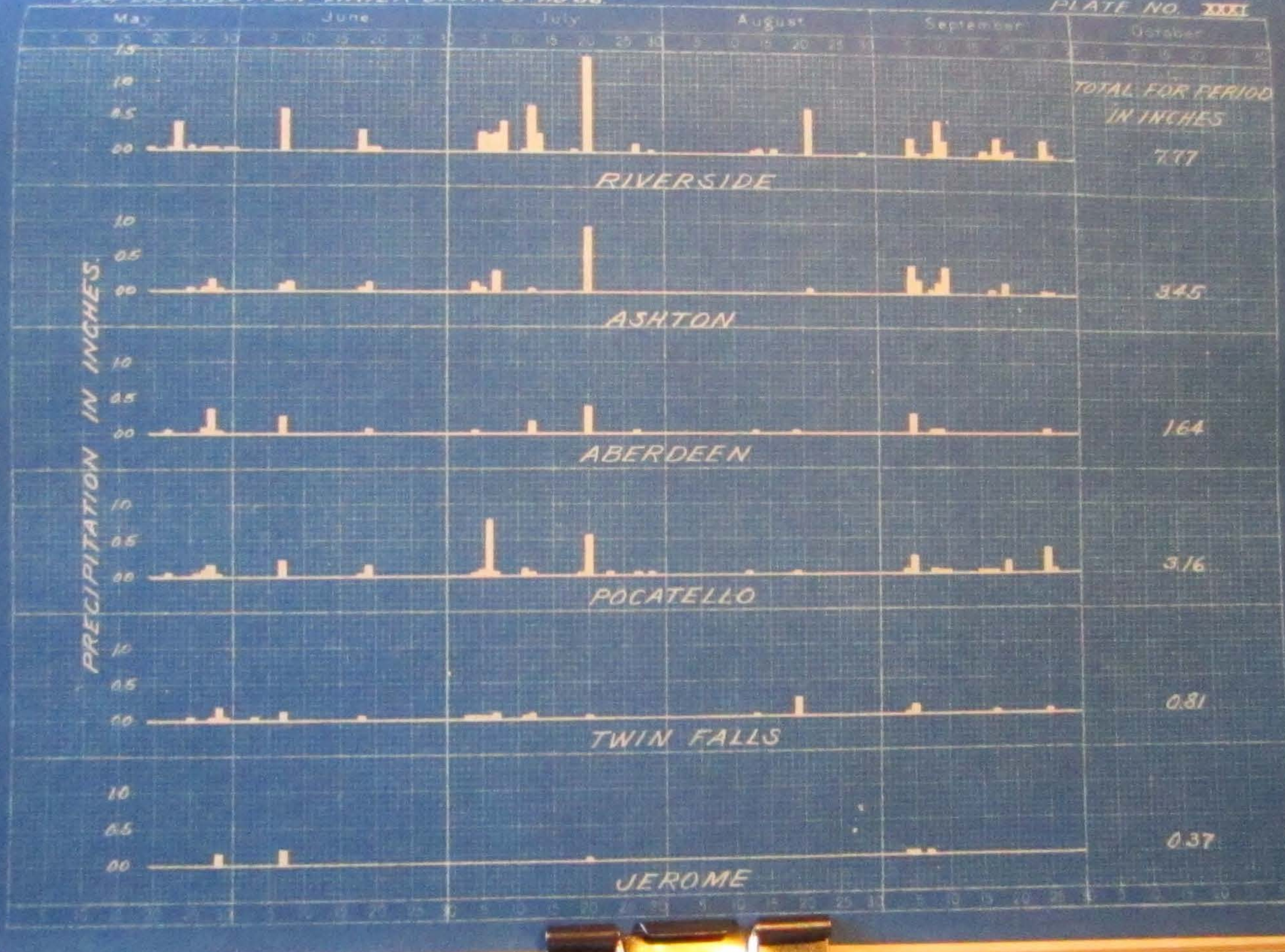
AMERICAN FALLS — 1.61

BURLEY — 1.57

WEEKLY PRECIPITATION DIAGRAM - SNAKE RIVER AREA

DRY DISTRIBUTION WATER DISTRICT NO. 36

PLATE NO. XXX



Records at Moran, Wyo. which are considered especially important because of their direct applicability to conditions at Jackson Lake Reservoir, show that, with the single exception of December 1923, the precipitation was less than the average during every month from July 1923 to September 1924, inclusive. Precipitation at this station alone for the twelve months previously listed amounts to 63.5 per cent of a 13 year average.

The very general drought experienced during the spring months accounts to a large degree for the 1924 crop shortage through the resultant poor seed germination and increase in destructive insect pests.

EVAPORATION

The evaporation records available for stations within or close to District No. 36 territory have been tabulated for 1924 and are presented on Plate XXXII in substantially the same form used in the 1922 and 1923 reports.

No attempt has been made on this plate to apply any coefficients to reduce the records to a comparable basis; hence, the following information concerning the different stations is listed for the benefit of those who may desire to make practical application of the data.

Arrowrock, Deer Flat and Jerome

Class "A" stations of the U. S. Weather Bureau, equipped with a galvanized iron evaporation pan 48 inches in diameter and 10 inches deep, placed with the bottom level with the ground. The depth of water in the pan is maintained at 6 to 8 inches and the evaporation is measured with a Marvin hook gage and still-well. A Robinson cup anemometer, maximum and minimum thermometers and standard 8 inch rain gage complete the station equipment.

Jackson Lake

ROUND PAN. This pan corresponds in size and mounting to the U. S. Weather Bureau standard above described. Observations were made by the cup method.

SQUARE PAN. Equipped with a pan constructed by lining a box with zinc and soldering all breaks or holes. Size, 3 feet square by 14 inches deep. Set slightly into the ground with earth banked around sides to water level which was maintained at a depth of 12 inches. Measurements were made daily by adding or removing enough water to bring the level up to the top of

EVAPORATION
SUMMARY BY MONTHS FOR STATIONS MAINTAINED IN SNAKE RIVER DRAINAGE IRRIGATION SEASON OF 1924.

1924 DISTRIBUTION WATER DISTRICT NO 36

PLATE NO XXXII

NAME OF STATION AND KIND OF EVAPORATION PAN	ALTITUDE IN FEET	MEAN TEMP. DEGREES FAHRENHEIT	TOTAL PRECIPITATION INCHES	TOTAL EVAP INCHES	MEAN DAILY EVAP INCHES	RECORD FURNISHED BY
JUNE						
ARROW ROCK LAND PAN	3230	65.4	0.14	9.519	0.317	U.S.B.R.
DEER FLAT " "	2510	66.1	0.55	7.851	0.262	U.S.B.R.
JEROME " "	3893	65.8	0.20	[a] 1.684	0.337	N.S.C.C.
JACKSON LAKE ROUND PN.	6770	51.2	1.02	[b] 4.606	0.256	NEWELL
JACKSON LAKE SQ. PN.	6770	51.2	1.02	5.155	0.172	NEWELL
JULY						
ARROW ROCK LAND PAN	3230	74.9	0.03	11.699	0.377	USBR
DEER FLAT " "	2510	72.2	TRACE	8.632	0.278	USBR
JEROME " "	3893	73.8	TRACE	9.539	0.308	NSCC
JACKSON LAKE ROUND PN.	6770	56.8	1.13	7.558	0.244	NEWELL
JACKSON LAKE SQ PN.	6770	56.8	1.13	5.666	0.183	NEWELL
AUGUST						
ARROW ROCK LAND PAN	3230	71.9	TRACE	10.549	0.340	USBR
DEER FLAT " "	2510	70.8	0.25	7.018	0.226	USBR
JEROME " "	3893	71.0	0.00	8.284	0.267	NSCC
JACKSON LAKE ROUND PN.	6770	54.1	0.40	8.594	0.277	NEWELL
JACKSON LAKE SQ. PN.	6770	54.1	0.40	6.098	0.197	NEWELL
SEPTEMBER						
ARROW ROCK LAND PAN	3230	63.4	0.14	6.382	0.213	USBR
DEER FLAT " "	2510	NO RECORD	NO RECORD	NO RECORD	NO RECORD	USBR
JEROME " "	3893	63.5	0.02	4978	0.166	NSCC
JACKSON LAKE ROUND PN.	6770	47.2	1.25	4.895	0.163	NEWELL
JACKSON LAKE SQ. PN.	6770	47.2	125	3428	0.114	NEWELL

[a] TOTAL FOR JUNE 26-30.

[b] TOTAL FOR JUNE 13-30.

NO EVAPORATION RECORDS SECURED AT MUD LAKE DURING 1924.

a sharp point set in the center of the pan. The temperature of the water varied through a range of 10 or 15 degrees Fahrenheit above and below mean air temperature, and on several occasions, early in June and late in September, the pan was frozen during the early part of the day.

Some difference in exposure, due to the location of the respective stations, also exists, but is not believed to be of sufficient importance to warrant including more detailed descriptions herein.

NEW CONSTRUCTION AND REPAIRS

New gaging stations were installed early in the season on Snake River at Lorenzo and below the Blackfoot Bridge.

At the former the installation consisted of a recording gage above the railroad bridge and cable measuring equipment across the main channel below the adjacent highway bridge. A second cable will probably be required across an auxiliary channel if complete records are to be secured at this station during a normal or high water year.

Below the Blackfoot Bridge the river flows at medium and high stages in three different and well defined channels and on this account two recording gage and three cable installations were required to adequately equip the station.

EXPENDITURES

A complete statement of expenditures covering the year ending March 31, 1925 follows. This statement includes all items which appeared in the annual water master's bill for the season of 1924, as well as everything pertaining to the work of the Idaho Falls office. No attempt has been made, however, to segregate expense for strictly hydrometric work from that for water distribution, as in many respects these phases are too closely related to warrant more than an arbitrary separation.

The items shown in the column headed "Regular Work" correspond to the

total expenditures for what may be termed ordinary work, i.e., those items covered in the pre-season budget. All water user charges coming under this heading were prorated on the basis of 60 per cent against normal flow and 40 per cent against stored water. Stored water totals were in turn segregated between the three principal reservoirs in the district in proportion to their approximate available capacities. The 1923 capacity ratio was used for this purpose during April and May, following which 402 for Jackson Lake, 47 for Henrys Lake and 4 for Twin Lakes were applied.

The "Special Work" column covers the cost of installing the two new river gaging stations, the entire field and office expense of the work carried on by T. R. Newell in the vicinity of Jackson Lake, the Committee of Five investigation and a few other less important items, none of which were included in the year's budget. Most of these expenditures were also prorated between normal flow and stored water users in the manner above outlined.

EXPENDITURES FOR WATER DISTRIBUTION AND HYDROMETRIC WORK

April 1, 1924 to March 31, 1925

		Regular Work	Special Work
Water Master, Special Deputy and Deputy			
G. Clyde Baldwin,	Salary Apr. 2-8, Apr. 11-Mar. 31, 11 27/30 mo. at $400	$4760.00	
	Expenses do	155.57	
	Auto hire do	245.32	
	Salary Apr. 9-10, 2/30 mo. at $400		$26.67
	Expenses do		0.75
	Auto hire do		14.17
Special Engineer			
T. R. Newell	Salary May 21-31, 10/30 mo. at $250		83.33
	Salary June 1-Feb. 8, 8 8/30 mo. at $325		2686.67
	Expenses May 21-Feb. 8		657.96
	Boat & Auto hire do		1162.42

			Regular Work	Special Work
Engrossraphers				
C. A. McClelland,	Salary Apr. 1-9, 18-22 & Apr. 30-Mar. 31, 11 15/30 mo. at $200		$2300.00	
	Expenses	do	99.89	
	Auto hire	do	724.88	
	Salary Apr. 10-17 & 23-29,15/30 mo. at $200			$100.00
	Expenses	do		8.20
	Auto hire	do		86.92
Lester L. Bryan	Salary Apr. 1-9 & Apr. 27-Mar. 31, 11 13/30 mo. at $200		2286.67	
	Expenses	do	92.33	
	Auto hire	do	801.58	
	Salary Apr. 10-26, 17/30 mo. at $200			113.33
	Expenses	do		30.85
	Auto hire	do		52.65
Hans H. Coffin	Salary, May 1-Oct. 15, 5 15/30 mo. at $150		825.00	
	Expenses	do	70.80	
	Auto hire	do	914.68	
	Salary Apr. 14-30, 17/30 mo. at $150			85.00
	Expenses	do		6.50
	Auto hire	do		17.81
F. A. Backman	Salary June 17-Sept. 28, 3 12/30 mo. at $150		510.00	
	Expenses	do	60.65	
	Auto hire	do	649.35	
C. R. Black	Salary May 19-June 5; July 7-Aug. 6, 1 17/30 mo. at $150		235.00	
	Expenses	do	137.82	
	Auto hire	do	243.94	
W. F. Dawson	Salary June 6-9,11-Sept. 30, 3 24/30 mo. at $145		551.00	
	Expenses	do	79.89	
	Auto hire	do	778.18	
Deputy Water Masters				
T. W. Luetjen	Salary May 21-Sept. 30, 4 10/30 mo. at $50		216.67	
	Auto hire	do	216.67	
	Expenses	do		2.75
Ernest Luetjen	Salary May 20-Sept. 30, 134 days at $4		536.00	
	Auto hire	do 3	402.00	
	Expenses	do		15.15
Ira Moore	Salary May 19-Sept. 30, 135 days at $4		540.00	
	Auto hire	do 3.50	472.50	
Wm. Sauer	Salary	do 4	540.00	
	Auto hire	do 3.25	438.75	
C. A. McCurdy	Salary	do 4	540.00	
	Auto hire	do 3.50	472.50	
D. G. Taylor	Salary	do 4	540.00	
	Auto hire	do 2.75	371.25	
W. N. McConnel	Salary	do, 4 12/30 mo. at $40	176.00	
	Expenses	do do	4.41	
	Auto hire	do do	10.14	

		Regular Work	Special Work
Stenographers			
Mrs. Bessie M. Rees	Salary Apr. 1-June 30, 3 mo. at $110	$ 330.00	
	Salary July 1-Feb. 1 & Feb. 7 to Mar. 31, 8 25/30 mo. at $125	1104.17	
	Salary Feb. 2-6, 5/30 mo. at $125		$20.83
Mrs. Wilma Adams	Salary June 1-Sept. 15, 3 15/30 mo. at $40	140.00	
Gage Readers			
Ira Moore	Salary, Miscellaneous dates. Job basis	126.73	
E. L. Jennings	Salary May 23-Sept. 30, 131 days at $1	131.00	
J. A. Clough	Salary May 17-Sept. 30, 137 days at 1	137.00	
	Salary Apr. 1-May 16 & Oct. 1-Mar. 31, 7 16/30 mo. at $10	75.33	
Eva Davis	Salary May 24-Sept. 30, 130 days at $1	130.00	
Mrs. Irvin Siepert	Salary May 17-Oct. 4, 141 days at $0.75	105.75	
	Salary Apr. 8-May 16 & Oct. 5-Nov. 4, 2 9/30 mo. at $5	11.50	
Harold Fuqua	Salary May 20-Sept. 30, 4 11/30 mo. at $12	52.40	
	Salary May 1-19, 19/30 mo. at $5	3.17	
A. J. Cheney	Salary May 7-Sept. 30, 4 24/30 mo. at $8	38.40	
H. E. Sheppard	Salary Apr. 1-May 10 & Nov. 8-Mar. 31, 6 3/30 mo. at $15	91.50	
	Salary May 11-Nov. 7, 5 27/30 mo. at $10	59.00	
E. Luetjen	Salary Apr. 1-May 19, 1 19/30 mo. at 9	14.70	
J. D. Luetjen	Salary Oct. 1-Mar 31, 6 mo. at $9	54.00	
A. M. Anderson	Salary Apr. 16-May 31, 1 15/30 mo. at $4	6.00	
Mrs. J. F. Johnson	Salary May 2-19 & Oct. 1-31, 1 18/30 mo. at $5	8.00	
B. F. Smith	Salary Nov. 30-Mar. 6, 97 days at $0.60	58.20	
	Salary Mar. 7-31, 7 trips at $1	7.00	
C. N. Kemper	Salary Apr. 4-Nov. 30, Mar. 18-31, 8 10/30 mo. at $4	33.33	
P. W. Wernette	Salary Apr. 1-June 30, 3 mo. at $5	15.00	
R. E. Reid	Salary Apr. 1-Mar. 31, 12 mo. at $10	120.00	
Secretary, Water Users Committee of Nine			
John Lee	Salary 13 days during period May 13-Mar. 2 at $5		65.00
	Expenses do		36.05
	Auto hire do		31.85
Special Investigation Committee			
W. O. Cotton	Salary July 16-19,20($\frac{1}{4}$day),21-22, 6$\frac{1}{4}$ days at $10		62.50
P. A. Miller	Salary July 16-19, 21-22, 6 days at $10		60.00
	Expenses do		17.98
P. A. Banks	Salary July 16-17, 19, 21-22, 5 days at $10		50.00
	Expenses do		22.60
D. G. Martin	Salary July 16-17, 19, 21-22, do		50.00
C. J. Miller	Salary July 17-22, 6 days at $10		60.00
	Expenses do		43.90

Special Investigation Committee		Regular Work	Special Work
Court Reporter			
R. W. Jones	Salary July 22, 1 day at $25		$25.00
	Expenses		5.00
Materials, labor and equipment for gaging stations		$384.17	1549.78
Rent, St. Anthony office, May 21-Sept. 30, 4 10/30 mo. at $20		86.67	
Telephone and telegraph		628.34	4.95
Premium and filing fees on official bonds		43.00	
Field and office supplies		439.63	
Interest on borrowed money		312.54	

SOURCES OF REVENUE

Normal Flow Fund	$13394.67	$4385.57
Stored Water Users (through State) Jackson Lake	7989.10	2752.54
U. S. Geological Survey	398.92	
U. S. Indian Service	1163.76	
U. S. Treasury (Federal Salary Bonus)	30.00	
State of Idaho (Cooperative Stream Measurement Fund)	2552.44	
State of Idaho (State Commissioner of Reclamation)	232.96	
North Fork Reservoir Co. (through State)	864.74	74.70
North Fork Canals (Headgate expense)		17.90
Utah-Idaho Sugar Company (through State)	75.96	7.86
Swan Valley Water Users	43.42	
	$26745.97	$7238.57

*FUNDS AVAILABLE APRIL 1, 1925

Normal Flow Fund (a)	$1660.11
U. S. Geological Survey (b)	759.14
U. S. Indian Service (b) Actual expenditures not exceeding	322.12
State of Idaho (c) Cooperative Stream Measurement Fund	738.36
Jackson Lake Stored Water Users (a)	14.18
North Fork Reservoir Co. (d)	49.01
	$3542.92

*Amounts given in this table represent funds in bank or definitely known to be available after all accounts have been settled and adjusted to and including March 31, 1925.

(a) Additional funds probably available on or before June 1, 1925.
(b) Represents amount available for expenditure prior to July 1, 1925.
(c) Amount alloted for expenditure prior to July 1, 1925. (Subject to slight change)
(d) Represents unexpended portion of money advanced.

Two important items are not included in these summaries for the reason that their exact value is not definitely known. These are:

(1) The rent equivalent of the office quarters and furniture in the Federal Building at Idaho Falls. Because of the cooperation with the U. S. Geological Survey this very desirable office space and equipment is made available without charge.

(2) The cost of securing the necessary prints for and the binding of 55 copies of the 1923 report which was paid direct by the State Commissioner of Reclamation.

The total cost of all work is shown to be larger than that of the preceding year by $4774.76, of which $1745.61 represents the added cost of special work, while the balance is largely due to the longer regulation period and consequent extra expenditures of a water shortage year.

RECOMMENDATIONS

Continued support of the Committee of Nine in their attempts to provide for the solution of the many complicated water distribution problems of the district and hearty cooperation on the part of all in their efforts to promote a spirit of fairness and harmony between different canals and sections as well as between stored and normal flow water users is again urged. The personnel of this committee represents practically all factions and interests and if adequately supported should be able eventually to adjust most of the difficulties encountered in an equitable manner without resort to expensive litigation.

WATER RIGHTS

While changes in the decreed rights of District No. 36 during the last two years are few in number and are limited to permanent transfers, annulments and supplemental decrees; it has seemed advisable, in order to make this report as complete as practicable, to again include a tabulation of all rights which have been granted to users located in the principal regulation zones.

This information has therefore been prepared in the form of diagrams and tabular summaries and is presented on Plates XXXIII, XXXIV and XXXV.

On the diagrams, the longer vertical line at the right hand side of each triangular block represents approximately the priority date, and the horizontal length of the block the size of the right. Very small rights appear simply as vertical lines. Exact dates and amounts are given in the adjacent tabular summary. Wherever two names appear in the latter for a single decreed right, the larger letters refer to the canal through which the water is now diverted and the smaller to the source from which the right was obtained. Under the "Decree" heading the amount of the individual right is

listed; under "Total" the total of all decreed rights to which the canal is entitled; and under "Older" the total of all older valid rights is given.

What may be termed permanent storage rights in Jackson Lake Reservoir are shown in the column headed "Storage" on Plate XXXV.

1924 DISTRIBUTION WATER DISTRICT NO. 36

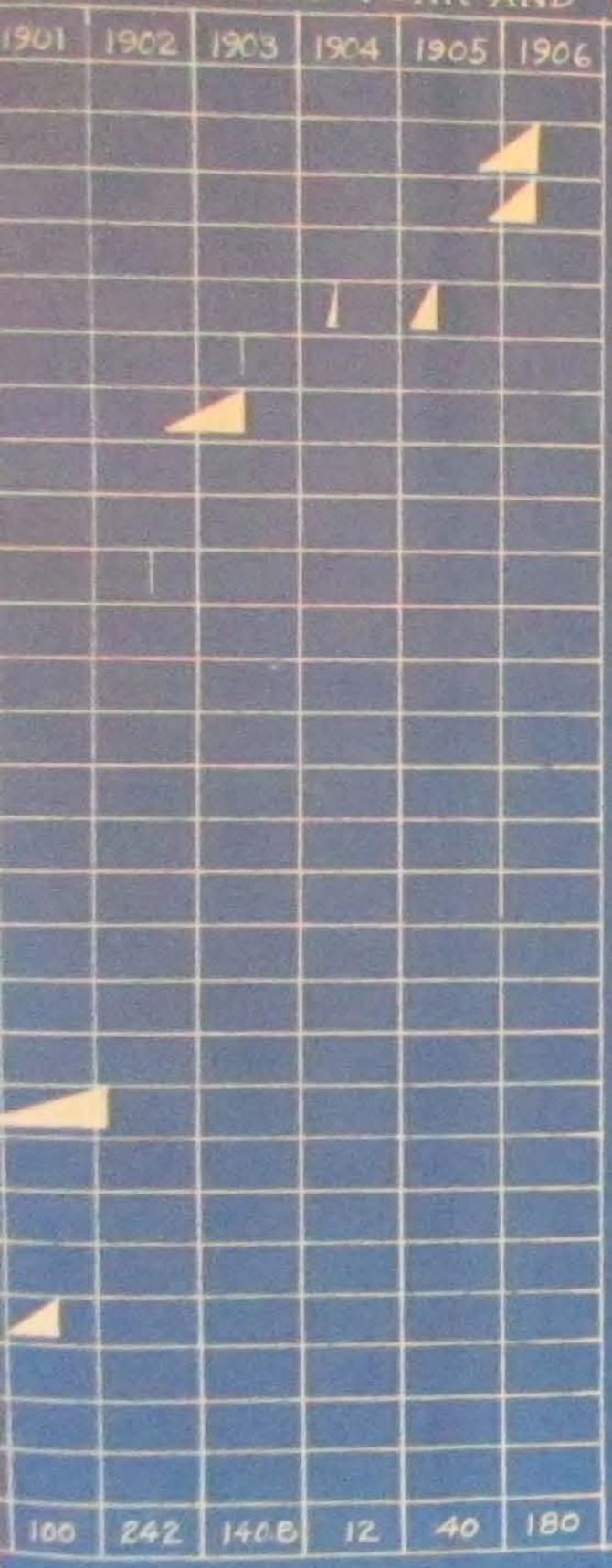
DECREES AND PRIORITY OF WATER R

PARTY OR CANAL	TOTALS F	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
ISLAND PARK L&C CO	50																
YELLOWSTONE	125																
HARRIGFELD	140																
MARYSVILLE	305																
FARMERS OWN	64																
GF ALVERY	36																
ENTERPRISE	1402																
BELL	52																
FALL RIVER	460																
McBEE	166																
CHESTER	112																
SILKEY	267																
CURR	345																
WHITE	136																
CRABB-MAURER	74																
Z. SUNDBERG	12																
DEWEY	372																
LAST CHANCE	225																
ST ANTHONY UNION	700																
FARMERS FRIEND	240																
TWIN GROVES	150																
SALEM UNION	300																
HOFF	10																
CITY OF ST ANTHONY	100																
EGIN																	
INDEPENDENT	400																
CONSOL'D FARMERS	255																
ANNUAL TOTALS S.F.	43442	300	0	209	607.2	479.2	211.5	38.4	680.8	10	7.2	790	159	225	37.2	0	63

SCALE 300 SEC FT = 1 INCH

GHTS HENRY'S FORK AND FALL RIVER IDAHO

PLATE NO XXXIII



DATE	DEGREE	PARTY OR CANAL	TOTAL	OLDER
1906 MAY 1	100	YELLOWSTONE	125	25
MAY 1	80	HARRIGFELD	140	60
1905 MAY 1	40	FARMERS OWN	86	46
1904 MAY 1	12	FARMERS OWN	86	34
1903 JUN 12	140.2	ENTERPRISE	140.2	0
JUN 1	0.6	C F ALVERY (WEST)	3.6	3.0
1902 JUL 16	2.0	McBEE (SMITH)	16.6	14.6
◁ FEB 5	240	FARMERS FRIEND	390	150
▷ 1901 AUG 17	100	CITY OF ST ANTHONY	100	0
1900 SEP 24	3.0	C F ALVERY	3.6	0
AUG 4	60	HARRIGFELD	140	0
1898 MAY 15	37.2	DEWEY	37.2	0
1897 FEB 9	225	LAST CHANCE (120 AFTER JULY 1)	225	0
1896 JUN 1	3.0	McBEE (LLOYD)	16.6	11.6
APR 18	10	HOFF	10	0
APR 1	34	FARMERS OWN	86	0
APR 1	112	CHESTER	112	0
1895 NOV 5	305	MARYSVILLE	305	0
NOV 5	25	YELLOWSTONE	125	0
JUN 14	400	INDEPENDENT 360 JULY 2-16. 400 JULY 16-31 360 AUG 1 AND AFTER	400	0
JUN 1	55	CONSOLIDATED FARMERS	255	200
MAY 10	5.0	McBEE (MOON)	16.6	6.6
1894 JUN 1	3.0	McBEE (MITCHELL)	16.6	3.6
JUN 1	3.0	L J MAURER	6.0	3.0
JUN 1	1.2	Z SUNDBERG	1.2	0
1893 JUN 1	10	ISLAND PARK	50	40
1892 JUL 29	× 100	ST ANTHONY UNION	700	600
JUN 1	4.0	WHITE (FARNSWORTH)	13.6	9.6
JUN 1	2.4	CURR (BLANCHARD)	34.5	32.1
JUN 1	1.4	A P CRABB	1.4	0
JUN 1	3.0	L J MAURER	6.0	0
JUN 1	150	FARMERS FRIEND (TWIN GROVES)	390	0
JUN 1	120	CONSOLIDATED FARMERS	255	80
APR 28	300	SALEM UNION (240 AFTER JULY 1)	300	0
1891 JUN 1	3.6	McBEE (SEELEY)	16.6	0
JUN 1	4.8	CURR (BROWN)	34.5	27.3
JUN 1	3.0	ISLAND PARK	50	1.0
1890 JUN 1	80	CONSOLIDATED FARMERS	255	0
JUN 1	* 26.7	SILKEY	26.7	0
JUN 1	2.4	CURR (BLANCHARD)	34.5	24.9
JUN 1	2.4	WHITE (HT WHITE)	13.6	7.2
MAR 1	200	EGIN	400	200

DATE	DEGREE	PARTY OR CANAL	TOTAL	OLDER
1889 SEP 26	5.2	BELL	5.2	0
JUN 15	1.0	ISLAND PARK	5.0	0
JUN 1	4.6 ◁	FALL RIVER (3.6 AFTER JULY 1)	4.6	0
JUN 1	4.0	CURR (FARNSWORTH)	34.5	20.9
1888 JUN 21	6.00	ST ANTHONY UNION 2.00 JULY 2-16 6.00 JULY 17-31 3.00 AFTER AUG 1	7.00	0
1888 JUN 1	○ 7.2	WHITE	13.6	0
1887 JUN 10	+ 20.9	CURR	34.5	0
1885 MAR 1	2.00	EGIN	4.00	0

TOTAL RIGHTS
4.00 TO JULY 2
3.00 JULY 2-16
4.00 JULY 17-31
3.00 AFTER AUG 1

NOTE:-
ALL DECREES LISTED IN SEC FT

◁ 160 AFTER JULY 1

▷ OWNED BY UTAH P&L CO.

* SILKEY 1890 RIGHT IN NAME OF DRAKE, SILKEY, SUNDBERG AND FARNSWORTH

○ WHITE 1888 RIGHT IN NAME OF HYRUM BROWN, HENRY T. WHITE AND AT&RJ FARNSWORTH

\+ CURR 1887 RIGHT IN NAME OF O.L. WILSON, RICHARD HUMPHERY, JOHN AND WM. HATHAWAY, JOSEPH CURR.

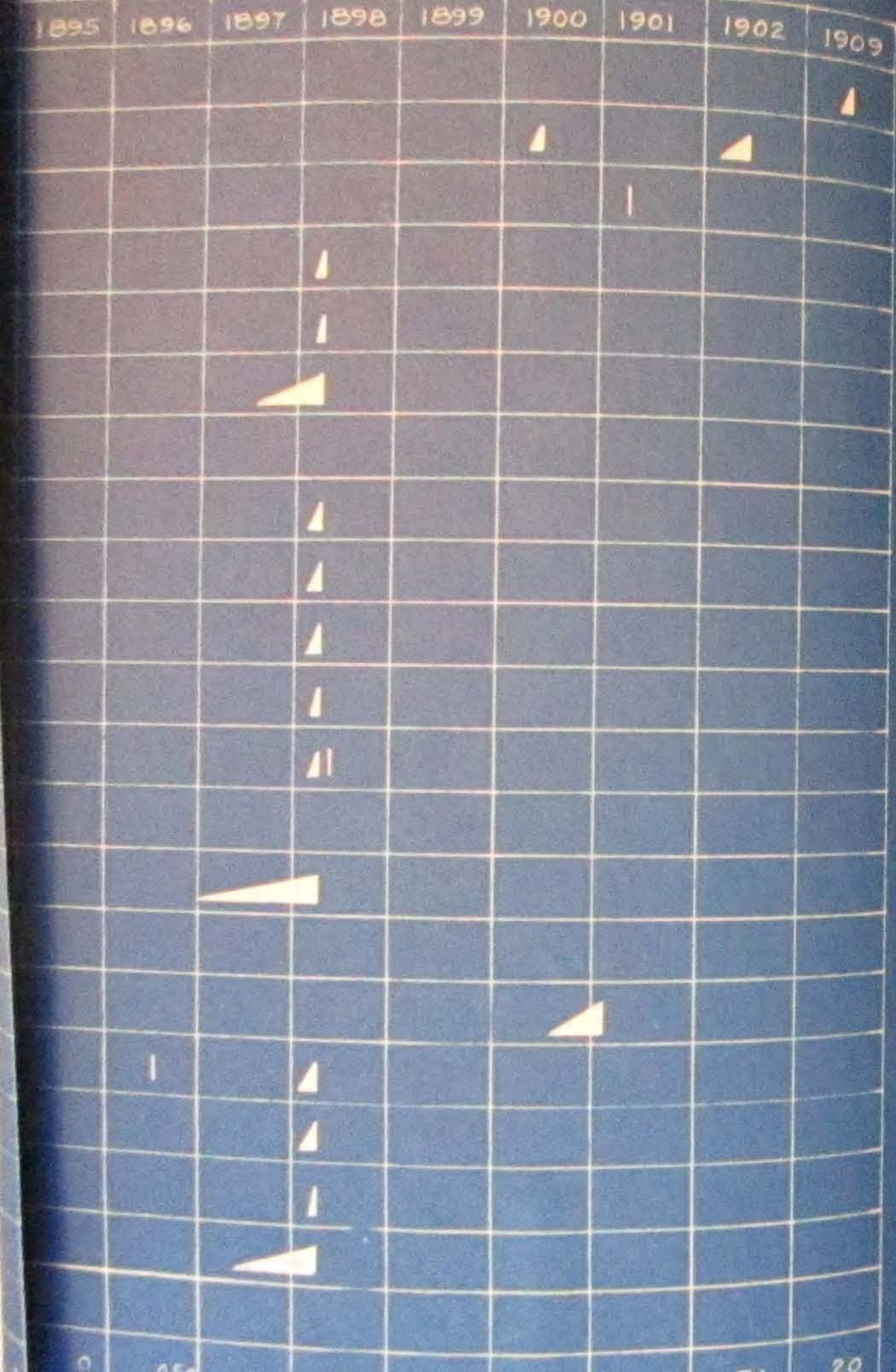
× DIVERTED BY ST. ANTHONY UNION FEEDER CANAL

1924 DISTRIBUTION WATER DISTRICT No 36

DECREES AND PRIORITY OF WATER RIGHTS

PARTY OR CANAL	TOTAL SF	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893
PEACEFUL VALLEY	20															
CANYON CREEK	70															
HAGUE	2															
SIDDOWAY	29													1	1	
McCORMICK-ROWE	13	1														
WILFORD	200															
TETON IRRIGATION	130															
GOOD LUCK	36															
PIONEER	28.56															
STEWART	31.00															
PINCOCK-BYINGTON	21.12															
PINCOCK-GARNER	28.08															
N.P. HANSEN	32															
TETON ISLAND FEED.	603.56															
ROXANA	16															
ISLAND WARD	100															
WOODMANSEE-JOHNS.	494															
CITY OF REXBURG	60															
STEWART-WALTERS	10															
REXBURG-IRRIG.	300															
ANNUAL TOTALS S.FT	1750.32	4.40	0	0	0	181.12	325.10	264.64	0.50	0	3.36	24.64	0	9.20	7.68	0

SCALE — 300 SEC FT. = 1 INCH



DATE	DECREE	PARTY OR CANAL	TOTAL	OLDER	
1909 JUN 7	20	PEACEFUL VALLEY	20	0	1885
1902 JUN 1	54	CANYON CREEK	70	16	
1901 MAR 25	2	HAGUE	2	0	
JAN 23	100	ISLAND WARD	100	0	
1900 JUN 1	16	CANYON CREEK	70	0.	1884
1898 MAY 15	3.2	PINCOCK-GARNER (H.J CLARK)	28.08	24.88	
APR 1	15.32	SIDDOWAY	29.00	13.68	
APR 1	8.6	McCORMICK-ROWE	13.00	4.40	
APR 1	132.16	WILFORD	200	67.84	
APR 1	26	GOOD LUCK	36	10	
APR 1	18	PIONEER	28.56	10.56	
APR 1	18	STEWART	31.00	13.00	
APR 1	16	PINCOCK-GARNER	26.08	8.88	
APR 1	32.6	WOODMANSEE-JOHNS. (JOHN S. EAMES CLARK & HOUGH)	49.4	16.80	
APR. 1	33	CITY OF REXBURG	60	27	
APR. 1	6.64	STEWART-WALTERS	10	3.36	1883
APR 1	170	REXBURG IRRIGATION	300	130	
APR 1	14	PINCOCK-BYINGTON	21.12	7.12	
APR 1	240.06	TETON ISLAND FEED (HILL, TETON ISLAND, WOLF, DAVID NELSON, CHRISTIAN MORTENSEN, WINDMILL, WITHERS & YOUNG)	603.56	363.50	
1896 JUL 15	0.5	WOODMANSEE-JOHNS. (JOHN S. EAMES)	49.4	16.3	1879
1894 JUN 1	0.2	WOODMANSEE-JOHNS. (ALFRED RICKS)	49.4	16.1	
1892 JUN 1	7.68	SIDDOWAY (AFTER JULY 1)	29.0	6.0	
1891 JULY 1	6.0	SIDDOWAY	29.0	0	
JUN 1	3.2	WOODMANSEE-JOHNS. (CLARK & HOUGHTON)	49.4	12.9	
1889 OCT 1	12.4	WOODMANSEE-JOHNS	49.4	0.50	
OCT 2	10	TETON IRRIGATION	130	12.0	
1889 MAY 1	2.24	TETON ISLAND FEED (C MORTENSEN)	603.56	361.26	
1888 JUN 1	3.36	STEWART-WALTERS	10	0	
1806 JUN 1	0.50	WOODMANSEE-JOHNS (MARTIN L. NAVE)	49.4	0	
1885 JUN 1	16	ROXANA	16	0	
JUN 1	240	TETON ISLAND FEED	603.56	121.26	

R1

PLATE NO. XXXIV

DATE	DECREE	PARTY OR CANAL	TOTAL	OLDER
MAY 31	4.32	TETON ISLAND FEED. (WINDMILL WITHERS-YOUNG)	603.56	11694
MAY 1	4.32	TETON ISLAND FEED (DAVID NELSON)	603.56	112.62
JUN 1	67.84	WILFORD	200	0
JUN 1	120	TETON IRRIGATION	130	0
JUN 1	9	STEWART	31	4
JUN 1	25.3	TETON ISLAND FEED (WOLF)	603.56	87.32
MAY 22	70	TETON ISLAND FEED. (TETON ISLAND)	603.56	17.32
MAY 1	6.96	TETON ISLAND FEED. (HILL)	603.56	10.36
MAR 1	7.12	PINCOCK-BYINGTON	21.12	0
MAR 1	8.88	PINCOCK-GARNER	28.08	0
JUN 10	130	REXBURG IRRIGATION	300	0
JUN 10	27	CITY OF REXBURG	60	0
MAY 15	32	N.P. HANSEN	3.2	0
MAY 1	10.56	PIONEER	28.56	0
MAY 1	4.00	STEWART	31.00	0
MAR 1	10.36	TETON ISLAND FEED	603.56	0
JUN 1	1.40	McCORMICK-ROWE	13.0	0

NOTE
ALL DECREES LISTED IN SEC.FT.

1894 DISTRIBUTION WATER DISTRICT NO 36

PARTY OR CANAL	TOTAL S.F.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
RILEY	24.											
ANDERSON & E.R. AND W. CREEK	800.											
FARMERS FRIEND	342.83											
ENTERPRISE	188.											
NELSON	1.											
PATTSON CRAIG	20.16											
ARNSBERGER	6.											
HEISE	5.6											
BUTLER ISLAND	57.78											
ROSS & RAND	3.34											
STEELE	3.8											
HARRISON	460.48											
CHENEY	6.											
BOOMER & IDAHO	1000.											
RUDY	191.24											
KITE & NORD	8.8											
BURGESS	800.											
CLARK & EDWARDS	70.											
LONDER & JENNINGS	52.											
EAST LA BELLE	140.											
CONSOLIDATED FEEDER	184.											
LENROOT	220.											
REID	150.											
TEXAS FEEDER	280.											
NELSON COREY	168											
HILL PETTINGER	13.											
LONG ISLAND	458.65											
ISLAND	290.											
RIGBY	160.											
DILTS	28.											
WEST LA BELLE	109.32											
PARKS & LEWISVILLE	351.12											
NORTH RIGBY	50.											
WHITE	6.98											
BRAMWELL & ELLIS	6.8											
INDEPENDENT	34.											
BUTTE & MARKET LAKE	366.4											
056000	132.45											
KENNEDY	2481											
PORTER GR. WESTERN & MARTIN	561.08											
BEAR ISLAND	3.5											
TAYLOR & GOSHEN	46.											
CITY OF IDAHO FALLS	188.											
WOODVILLE	125.5											
SNAKE RIVER VALLEY	710.											
RESERVATION	600.											
BLACKFOOT	366.8											
NEW LAVASIDE	152.											
PEOPLES	4242											
ABERDEEN SPRINGFIELD	1250											
CORBETT SLOUGH	23943											
NIELSEN HANSEN	15.											
RIVERSIDE	100.											
DANSKIN	180.											
TREGO	69.41											
MEARYRICK	41.2											
WATSON SLOUGH	97.4											
PARSONS	22.											
SMITH MAXWELL	17.8											
USRS MINIDOKA CANALS	2726.											
SCHODDE	2.											
TWIN FALLS SOUTH SIDE	3000.											
TWIN FALLS NORTH SIDE	3000.											
MILNER LOW LIFT CAN. CO												
ANNUAL TOTALS IN SEC. FT.	21000.70	200.00	60.00	60.00	160.00	483.00	680.40	454.20	264.80	1781.54	2041.00	1052.40

REVISED CHART AND TABULAR

1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904

1234.80 175.00 99.50 442.00 1704.00 403.50 0.00 68.00 76.00 3753.96 0.00 176.60 1946.00

ARY OF PRINCIPAL SOUTH FORK AND SNAKE RIVER WATER RIGHTS

1905	1906	1907	1908	STORAGE
				1200
				0
				2000
				6100
				0
				0
				0
				0
				0
				0
				5000
				0
				0
				2000
				0
				5120
				0
				1040
				0
				4000
				3000
				0
				0
				0
				0
				0
				0

DATE	DECREE	PARTY OR CANAL	TOTAL	OLDER
		FARMERS FRIEND Long Island	342.83	334.83
		LENROOT	220.	18.
		RUDY	191.26	111.26
		REID	150.	70.
		CONSOLIDATED FEEDER Sunnydell-Lyman	184.	0.
		TEXAS FEEDER Liberty Park Co.	280.	174.
		HARRISON O.H. Olive	460.48	48.48
		31 LONG ISLAND	458.65	447.34
		ISLAND Long Island	290.	75.
		43 HARRISON Long Island	460.48	48.05
		26 KENNEDY & BURGRAFF Long Island	24.81	11.16
		2 IDAHO	740.	40.
		43 CORBETT SLOUGH	239.43	0.
		75 OSGOOD Corbett Slough	132.45	3.70
		82 KENNEDY & BURGRAFF Corbett Slough	24.81	8.34
		0. ANDERSON & E.R. AND W.C. Farmers Progress	800.	500.
		0. SNAKE RIVER VALLEY Cedar Point	710.	0.
		0. NEW LAVASIDE	152.	20.
		5. KENNEDY & BURGRAFF W.S Lyle Amendment	24.81	3.34
		0. RUDY	191.26	11.26
		0. IDAHO	740.	0.
		0. BOOMER Idaho Canal & Imp Co.	260.	0.
		02 WATSON SLOUGH	97.4	67.2
		66 PEOPLES Watson Slough	424.2	7.6
		3.2 WEARYRICK Watson Slough	41.2	38.
		0. RIGBY	160.	40.
		0. BURGESS	800.	20.
		0. DANSKIN	180.	100.
		2. EAST LABELLE	140.	48.
		8. TEXAS FEEDER Liberty Park Co.	280.	134.
		11.12 PARKS & LEWISVILLE	351.12	140.
		2888 HARRISON Parks & Lewisville	460.48	19.17
		2. RUDY C.E. Rostan	191.26	9.26
		334 ROSS & RAND Supplemental	3.34	0.
		2. STEELE Supplemental Probert	3.8	1.
		8.91 LONG ISLAND	458.65	439.25
		0. ISLAND Long Island	290.	45.

DATE	DECREE	PARTY OR CANAL	TOTAL	OLDER
1888 JUN 1	0.88	PORTER & GR. WESTERN Long Island	561.08	146.10
" " 1	0.65	HARRISON Long Island	460.48	18.52
" " 1	0.38	KENNEDY & BURGRAFF Long Island	24.81	2.96
" " 1	20.	FARMERS FRIEND Long Island	342.83	314.83
" " 1	0.8	PORTER & GR. WESTERN John Mattson	561.08	145.40
" " 1	2.4	MATTSON-CRAIG Supplemental Ranch	20.16	4.8
" " 1	6.8	BRAMWELL 4.4 ELLIS 2.4 Supplementary May 1925	6.8	0.0
" MAY 13	3.2	WATSON SLOUGH H.M. Palmer	97.4	64.
" " 1	1.0	PORTER & G.R. WESTERN J.B. Morgan	561.08	144.10
" JAN 18	300.	FARMERS FRIEND	342.83	14.83
1887 JUN 15	20.	RIGBY	160.	20.
" " 10	10.	BURGESS	800.	10.
" " 1	90.	RIVERSIDE	100.	10.
" " 1	38.	TEXAS FEEDER Liberty Park Co.	280.	98.
" " 1	12.	NELSON-COREY	16.8	0.
" " 1	4.8	MATTSON-CRAIG R.A. Craig	20.16	0.
" " 1	30.	ISLAND	290.	15.
" " 1	46.1	LONG ISLAND	458.65	393.15
" " 1	0.87	PORTER & GR. WESTERN Long Island	561.08	143.53
" " 1	0.64	HARRISON Long Island	460.48	17.88
" " 1	0.39	KENNEDY & BURGRAFF Long Island	24.81	2.57
" " 1	12.	FARMERS FRIEND Long Island	342.83	2.83
1886 JUL 23	100.	DANSKIN	180.	0.
" JUN 15	10.	RIGBY	160.	10.
" " 10	10.	BURGESS	800.	0.
" " 1	1.6	WATSON SLOUGH Eliz. Kratzer	97.4	62.4
" " 1	15.	ISLAND	290.	0.
" " 1	50.	TEXAS FEEDER Texas Sl. & Lib. Park	280.	48.
" " 1	0.8	PORTER & GR. WESTERN John Mattson	561.08	142.73
" " 1	4.8	PORTER & GR. WESTERN Oscar Martin	561.08	137.93
" " 1	2.	RUDY Rostan	191.26	7.26
" " 1	40.	REID	150.	30.
" " 1	58.98	LONG ISLAND	458.65	334.17
" " 1	0.64	HARRISON Long Island	460.48	17.24
" " 1	0.38	KENNEDY & BURGRAFF Long Island	24.81	2.19
" MAY 3	38.	WEARYRICK	41.2	0.

DATE	DECREE	PARTY OR CANAL	TOTAL	OLDER
1886 MAY 1	2.	PORTER & GR. WESTERN J.B. Morgan	561.08	135.93
" JAN 7	120.	PORTER & GR. WESTERN New Sweden Dist	561.08	15.93
1885 JUN 30	22.	PARSONS	22.	0.
" " 15	10.	RIGBY	160.	0.
" " 10	12.4	HARRISON S.T. & W. Summers	460.48	4.84
" " 10	1.	STEELE S.T. & W. Summers	3.8	0.
" " 1	10.	RIVERSIDE	100.	0.
" " 1	48.	TEXAS FEEDER Texas Sl. & Lib. Park	280.	0.
" " 1	100.	PARKS & LEWISVILLE	351.12	40.
" " 1	48.	EAST LA BELLE	140.	0.
" " 1	9.	LENROOT	220.	9.
" " 1	30.	REID	150.	0.
" " 1	109.32	WEST LA BELLE	109.32	0.
" " 1	6.98	WHITE West La Belle	6.98	0.
" " 1	3.7	OSGOOD West La Belle	132.45	0.
" " 1	57.78	BUTLER ISLAND	57.78	0.
" " 1	7.26	RUDY Butler Island	191.26	0.
" " 1	2.83	FARMERS FRIEND Butler Island	342.83	0.
" " 1	0.93	PORTER & GR. WESTERN Butler Island	561.08	15.
" " 1	1.2	HARRISON Butler Island	460.48	3.64
" " 1	58.97	LONG ISLAND	458.65	273.20
" " 1	0.64	HARRISON Long Island	460.48	3.00
" " 1	0.39	KENNEDY & BURGRAFF Long Island	24.81	1.80
" MCH 6	62.4	WATSON SLOUGH	97.4	0.
" " 6	7.6	PEOPLES Watson Slough	424.2	0.
" FEB 27	70.	CLARK & EDWARDS	70.	0.
1884 JUN 4	34.	INDEPENDENT	34.	0.
" " 1	20.	NEW LAVASIDE	152.	0.
" " 1	20.	PARKS & LEWISVILLE	351.12	20.
" " 1	9.	LENROOT	220.	0.
" " 1	58.98	LONG ISLAND	458.65	216.22
" " 1	0.64	HARRISON Long Island	460.48	2.36
" " 1	0.38	KENNEDY & BURGRAFF Long Island	24.81	1.42
" APR 3	340.	ANDERSON & E.R. AND W.C.	800.	160.
1883 JUN 10	50.	NORTH RIGBY	50.	0.
" " 1	20.	PARKS & LEWISVILLE	351.12	0.
" " 1	15.	NIELSEN-HANSEN	15.	0.
" " 1	15.	PORTER & GR. WESTERN Nielsen Hansen	561.08	0.
" " 1	58.97	LONG ISLAND	458.65	157.25

DATE	DECREE	PARTY OR CANAL	TOTAL	OLDER
1883 JUN 1	0.64	HARRISON Long Island	460.48	
" " 1	0.39	KENNEDY & BURGRAFF Long Island	24.81	
1882 JUN 1	58.98	LONG ISLAND	458.65	
" " 1	0.64	HARRISON Long Island	460.48	
" " 1	0.38	KENNEDY & BURGRAFF Long Island	24.81	
1881 JUN 1	58.96	LONG ISLAND	458.65	
" " 1	0.65	HARRISON Long Island	460.48	
" " 1	0.39	KENNEDY & BURGRAFF Long Island	24.81	
1880 AUG 1	160.	ANDERSON & E.R. AND W.C. Farmers Progress	800.	
" JUN 11	39.31	LONG ISLAND	458.65	
" " 11	0.43	HARRISON Long Island	460.48	
" " 11	0.26	KENNEDY & BURGRAFF Long Island	24.81	

NOTE :- ALL DECREES ARE LISTED IN SECOND FEET IN ABOVE SUMMARY.
STORAGE IS LISTED IN ACRE FEET.
OSGOOD HAS STORAGE IN TWIN LAKES.
USRS HAS ADDITIONAL STORAGE IN LAKE WALCOTT.
LICENSE AND PERMIT RIGHTS DO NOT APPEAR.

SCALE OF DIAGRAM :-
300 SEC FT - 1 INCH