STATE OF IDAHO)
(ss
COUNTY OF ADA)

I, R. W. FARIS, do hereby certify that I am the duly appointed, acting, and qualified Commissioner of Reclamation of the State of Idaho, and that as such Commissioner I am the legal custodian of the records of the said Department of Reclamation of the State of Idaho; and

I FURTHER CERTIFY, That the foregoing is a full, true, and correct copy of:

REPORT ON WATER DISTRIBUTION AND HYDROMETRIC WORK, DISTRICT No. 36, 1929, by G. CLYDE BALDWIN, DEPUTY

as the same appears of record in the Department of Reclamation of the State of Idaho.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Department of Reclamation of the State of Idaho at Boise-Idaho, this 27th day January, 1932.

Commissioner of Reclamation

BUREAU OF WATER RESOURCES
MYRON SWENSEN
ASSISTANT COMMISSIONER

STATE OF IDAHO

H. C. BALDRIDGE, GOVERNOR

DEPARTMENT OF RECLAMATION

GEO. N. CARTER, COMMISSIONER

BOISE

April 23, 1930

HONORABLE H. C. BALDRIDGE
Governor, State of Idaho
Boise, Idaho

Sir:

This is the Eleventh Annual Report of the Watermaster of Water District No. 36, Snake River. It is transmitted in accordance with the well-defined policy of informing all those interested in the behavior of Snake River in yielding a water supply to the great valley which it traverses. It is conservative to say that Snake River is the one greatest natural resource Idaho possesses. The State's mines will be worked out, and its forests logged off; but its water reappears each season to renew the moisture of the farm lands and to turn the turbines of power plants.

The system of distribution of Snake River water to its rightful users, as evidenced by decrees of court, has largely been developed by G. Clyde Baldwin, Watermaster and Special Deputy Commissioner of Reclamation. After eleven years of most efficient and satisfactory service, he has resigned his position. Obviously, the resignation was received with considerable regret. However, the organization will continue in much the same manner under Lynn Crandall, the Watermaster-elect, who has heretofore for many years been Commissioner of the Federal Court on Lost River.

The plan of operation of Snake River now in effect is admirable, and must surely be continued in order that the residents of Snake River Valley may enjoy stable conditions in the uses of water.

Very respectfully yours,

GEO. N. CARTER
Commissioner of Reclamation.

STATE OF IDAHO
DEPARTMENT OF RECLAMATION

GEORGE N. CARTER, COMMISSIONER
G. CLYDE BALDWIN, DEPUTY

C. BALDRIDGE, GOVERNOR

WATER DISTRICT NO. 36

IDAHO FALLS, IDAHO.

March 31, 1930

Mr. George N. Carter,
Commissioner of Reclamation,
Boise, Idaho.

Dear Sir:

Submitted herewith is the eleventh and probably the last annual technical report for which I will be responsible, covering regular water distribution and hydrometric operations in District No. 36.

While the 1929 water supply was considerably below normal, the available storage sufficed to compensate for practically all deficiencies. Unusually hot weather during July and August with heavy frosts early in September reduced the yield of certain crops but otherwise the season was generally satisfactory from an agricultural view point.

No unusual difficulties were experienced in river administration and harmony prevailed throughout the district.

U. S. Geological Survey methods have been used as a standard for the collection and compilation of the hydrometric data which are presented herein. In this, in the recomputation of records since the close of the irrigation season and in other respects, the report is consistent with those which have been issued for the ten preceding years. In order to make this individual report reasonably complete in itself, some repetition of previous explanations has been unavoidable. References have been substituted, however, wherever practicable.

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 the past year through the advance of money by the Water Users Protector Association of the North Fork of Snake River and Tributaries, the Upper Snake River Water Users Protective Union, the Twin Falls Canal Company and the North Side Canal Company, Ltd.

Special acknowledgments are due to the North Fork Reservoir Company, the Idaho, Snake River Valley and New Sweden Irrigation Districts and the Aberdeen-Springfield Canal Company for gage readings and to the U. S. Bureau of Reclamation, the Twin Falls Canal Company and the North Side Canal Company, Ltd. for gage readings, results of current meter measurements and other data which were furnished without charge.

Appreciation should again be accorded to you and to the members of the Water Users Committee of Nine of District No. 36 for continued cooperation and for advice and assistance which were freely given whenever required.

The conscientious service of the hydrographers, deputy water masters and other members of the regular organization must also be recognized and full credit be given for their part in the success of the year's operations.

H. S. Kollenborn, D. I. Gardner and Miss Helen George assisted materially in the preparation of this report and their work in this connection is gratefully acknowledged.

Most of the official contacts and associations of my eleven years on this work have been exceedingly pleasant ones and on this score it is with considerable regret that I now propose to venture upon another field of endeavor in a new locality.

Very sincerely yours,

H. Clyde Baldwin

Deputy.

WATER DISTRIBUTION AND HYDROMETRIC WORK

In District No. 36

1929

By G. Clyde Baldwin

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INTRODUCTION

The annual meeting of Water District No. 36, held at Idaho Falls, Idaho on March 4, 1929, was again marked by harmony and lack of sectional controversy.

G. Clyde Baldwin was unanimously reelected to the position of Water Master while eight of the former members of the Committee of Nine, viz, F. A. Miller, Ephraim Ricks, John W. Hart, W. O. Cotton, John E. Kelley, E. V. Berg, E. B. Darlington and R. E. Shepherd were continued in office for the ensuing year. N. V. Sharp was selected as the ninth member of this committee to replace T. M. Baird who formerly represented the Twin Falls Canal Company interests.

Forty-four canals, entitled to 122,766 votes, were represented in person or by proxy and by unanimous action adopted the following report of the Resolutions Committee as the program [redacted] plan for 1929 river operation:

"Your committee have to recommend for the year 1929, water administration of Snake River, Water District No. 36, be had as follows:

I.

That from Jackson Lake (Moran) to Heise storage water shall be charged a transmission loss of 2½%, and in an attempt to establish conditions at Heise as nearly as practicable to pre-reservoir times, that storage water shall be charged a reasonable amount to cover lag and other causes of loss in return flow. Said amount to be repaid and returned to storage water interests before the close of the irrigation season, or before the storage water interests shall have exhausted their rights. It is understood that when a decreed right shall have been cut under river regulations that right shall not be reinstated until such time as its proportion of this amount shall have been repaid.

II.

That from Heise to Lorenzo Bridge a loss of 4.4% be charged storage water. That the gaging station at Lorenzo having been washed out in 1928, said station shall be re-installed whenever in the judgment of the Committee of Nine the same shall be needed or required.

III.

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

IV.

That from Woodville to Blackfoot a loss of 6% be charged to storage water.

V.

That there be a committee of three to carry on, during the year 1929, the study and investigation of the American Falls Reservoir and other questions growing out of the delivery of stored water below Blackfoot. The scope and extent of such study and investigation shall be fixed and determined by said committee and the entire expense of said work shall be paid by the American Falls Reservoir interests as apportioned by said committee. The membership of this committee shall consist of one member to be selected by the Minidoka Project, one member by the Twin Falls Canal Company and one member by the North Side Canal Company.

VI.

That the salary of the Water Master for the year 1929 be fixed at the same rate paid him for the year 1928, that such assistants as may be needed shall be selected by him with the consent of the Committee of Nine, and that all expenditures in connection with water distribution be passed and approved by said Committee of Nine.

VII.

We recommend that the Committee of Nine be empowered to give special attention to the work of this district to determine the necessity of continuing certain hydrometric and other work to the end that the 1929 expense may be materially reduced."

The following special resolution was also included and

accorded the same unanimous approval:

VIII.

"At the annual District No. 36 Water Master election meeting held at Idaho Falls, Idaho on March 5, 1928, the following resolutions were unanimously adopted:

WHEREAS, it has been reliably reported and appears as a fact that the Snake River between Heise and Lorenzo, in Idaho, threatens to leave its present channel and establish a new course across highly improved property and to wash out a new channel which would carry the waters of the streams east and south of Rigby, Idaho to a juncture with the main stream some eight or ten miles above Idaho Falls, and

WHEREAS, such a change in the course of the stream would leave canals upon the north side of the present river channel without a water supply, would destroy the usefulness of many costly irrigation structures, and otherwise cause great property damage and would even endanger the life and safety of many local residents.

NOW, THEREFORE, the water users of District No. 36 of the State of Idaho in annual meeting here assembled, authorize and direct the chairman of said meeting to appoint a special committee to investigate this condition and to prepare data that the matter may be properly presented and further direct that a resolution and petition be thereupon drafted and endorsed by the chairman of this meeting as its act and deed for the purpose of (1) adequately presenting the facts (2) requesting the Federal Government to make immediate investigation and appropriation of funds to insure the protection from such threatened flood conditions of property (including highways, irrigation systems, farms, etc.) and of the lives of people located within this menaced district.

During the past year certain minor surveys and investigations have been made. Among these was a reconnaissance by Army Engineer Officers stationed at Portland, Oregon. The latter have not as yet, however, made any report of their findings or recommendations available to the public and we are reliably advised that such action cannot be expected before June, 1929.

THEREFORE, since the menace still exists and the danger therefrom is just as imminent as heretofore noted and since great damage is sure to be sustained by portions of Madison, Jefferson and Bonneville Counties unless immediate steps are taken to control this situation, this meeting does hereby readopt the above 1928 resolutions and again emphasizes the importance of this matter to the welfare and safety of the people of this district."

J. H. Heath, N. A. Anderson, Wm. Meppen, J. E. Kelley, E. V. Berg, F. A. Miller, R. E. Shepherd, E. B. Darlington and J. R. Bothwell were thereupon again named as members of the Flood Prevention Committee.

In a short session held immediately after the adjournment of the general meeting the Committee of Nine completed their organization for the year by again reelecting John W. Hart as chairman and John Lee as secretary.

Engineers representing different canal companies within the district met with Water Master Baldwin at Idaho Falls on March 29, 1929 for preliminary discussion of the year's budget and plans for reduction of expenditures.

The following summarizes the action taken at this meeting:

"Moved by W. O. Cotton and seconded by J. T. Fisher that the Water Master be asked to submit to the Committee of Nine the budget read to the Engineers Committee on March 29 with recommendation from said engineers that if any reductions are made they can best be in the number of man-months employment or in the expenses. Motion carried unanimously."

On the following day the Committee of Nine met for consideration of the annual Water Master budget. After reducing the automobile allowance to hydrographers and engineers from ten cents, as submitted, to seven cents per mile, the budget was approved in the amount of $14,005.92 as the estimated cost of all regular work properly chargeable against normal flow water users.

The following extract from the minutes of this meeting indicates the desire which was expressed for additional reduction of expenditures:

"Moved by John E. Kelley and seconded by N. V. Sharp that the period of employment of Deputy Water Masters and Hydrographers be left to the discretion of Water Master Baldwin with the understanding that the committee desires same limited as much as practicable without seriously impairing work. Motion carried unanimously."

The provision that employees operating automobiles upon a mileage compensation basis be required to carry property damage and public liability insurance on their cars was waived after F. A. Miller and J. R. Bothwell had given informal opinions that District No. 36 could not be held liable in the event of accidents.

Other business of importance transacted at this time is summarized as follows in the minutes of this meeting:

"The matter of redistribution of District No. 36 operation costs was then brought up by F. A. Miller. After some general discussion it was moved by F. A. Miller and seconded by N. V. Sharp that a committee of three be appointed by the chairman to confer with Water Master Baldwin and formulate recommendations for equitable distribution of costs between stored and normal flow water users and also for segregation of the former between the respective reservoir interests and that pending action to the contrary the 1928 method of prorating these items be continued in effect.
Motion carried.

Chairman Hart later appointed W. O. Cotton, F. A. Miller, and R. E. Shepherd as members of this special committee.

With the consent of the interested parties, J. B. Stocking, W. C. Paul, and N. V. Sharp were designated as the special American Falls Reservoir Committee for the coming year.

Moved by W. O. Cotton and seconded by N. V. Sharp that Water Master Baldwin be authorized to charge such reservoir penalties against Jackson Lake and Henrys Lake users as in his judgment would be fair and equitable whenever bank storage return did not appear adequate to compensate for normal flow losses. Motion carried.

Mr. Baldwin was also authorized to secure advances to the Normal Flow Fund to finance District No. 36 operations in the same manner practiced during preceding years."

At a meeting held in Twin Falls, Idaho on June 12, the committee provided for under Article V of the general river program arbitrarily fixed 2,820 second-feet as the inflow to the river between the Clough and Neeley gaging stations to be used for 1929 river operation. Further

special studies and investigations in the American Falls Reservoir basin were therefore postponed until some future date.

With the exception of this change, the general plan of river administration differed but little from that of 1927 and 1928. Preceding reports* afford detailed descriptions and should be read by those who desire information concerning the gradual evolution of the present system.

Funds for securing hydrometric data of a wide-spread interest character were again provided by the State of Idaho and the U. S. Geological Survey, while operations conducted primarily in connection with water distribution were sustained at the expense of normal flow and stored water users of the district.

Aside from the consolidation of the office of Water Master and Special Deputy, first effected at the beginning of the 1923 season, the organization and division of work has changed but little since the cooperative, central office at Idaho Falls was initiated on a permanent basis in May, 1919.

Actual water deliveries, storage transmission via natural stream channels and other phases of river operation have been conducted each year in accordance with certain regulations and schedules usually adopted by the water users at the annual March election meeting. These regulations cover points on which the statutes and decrees are not sufficiently definite or concerning which available data are too incomplete to afford satisfactory basis for a single fixed method of procedure.

*Water Distribution and Hydrometric Work in District No. 36, 1919; 1920; 1921; 1922; 1923; 1924; 1925; 1926; 1927, and 1928 by G. Clyde Baldwin.

Occasionally also, when unanimous consent has been secured, certain departures from statutory methods prescribed for water distribution have been authorized. The former reports of the Deputy State Commissioner of Reclamation, already referred to, should be consulted for further details or information concerning the changes in these regulations which were in force during former years.

Beginning in April and to an increasing extent in May, the hydrographers were engaged in the reestablishment of gaging stations on both canals and natural streams, the making of necessary minor repairs to station equipment, and in securing measurements for the purpose of defining changes in rating which had occurred since the last previous records were secured. River riders and deputy water masters began work for the season on June 1 but until after the first of July were only employed upon a half time basis.

This change from the usual custom necessarily resulted in securing less accurate canal data than heretofore, because gage readings for more than one month were only obtained on alternate days. Determination of the exact amount of diversions during the nonregulation period, while desirable to complete season records was not considered of vital importance, however, and this appeared to be the least detrimental way in which to effect the reduction of expenditures requested by the Committee of Nine.

Some similar saving also resulted from shortening the period of employment of hydrographers both at the beginning and end of the season.

PERSONNEL

The personnel engaged in the work of distribution during the season of 1929 was as follows:

G. Clyde Baldwin	Deputy State Commissioner of Reclamation, Special Deputy in charge of Jackson Lake, Twin Lakes, Market Lake and American Falls Stored Water Delivery and Water Master of District No. 36.
C. A. McClelland	Hydrographer.
H. S. Kollenborn	Hydrographer, Special Deputy in charge of Henry's Lake Stored Water Delivery and Deputy Water Master in charge of branch office at St. Anthony, Idaho.
David I. Gardner	Hydrographer.
LeRoy W. Beam	Hydrographer.
Helen George	Clerk and office assistant, Idaho Falls Office.
Phyllis Tuckett	" " " " , St. Anthony Office.
Bruno Albert	Deputy Water Master, Upper Fall River division.
Geo. H. Powell	Deputy Water Master and hydrographer St. Anthony division.
T. W. Luetjen	Deputy Water Master and hydrographer Teton River division.
Wm. Burton	Deputy Water Master, Swan Valley canals.
W. J. Kremer	" " " Heise division.
Wm. Sauer	" " " Rigby division.
F. W. Tolles	" " " Idaho Falls division.
E. E. Bingham	" " " Blackfoot division.
T. E. Culley	" " " Minidoka Dam.
W. N. McConnel	" " " and hydrographer at Milner Dam.
J. M. McGinn	Gate Tender, Henry's Lake Dam.
Joseph Markham	Superintendent, Jackson Lake Dam.
Frances W. Herre	Forwarding Agent, Ashton, Idaho.

Mrs. John Keppner, Harold Fuqua, Mrs. Irwin Siepert, W. H. Kramer, O. L. Kofoed, J. A. Clough, E. P. Anderson and S. B. McAbee, gage readers.

DESCRIPTIVE OUTLINE OF 1929 DISTRIBUTION

The monthly surveys of the snow accumulated on the area tributary to Jackson Lake, which have been made by Joseph Markham each winter beginning with 1920, indicated that the 1929 water supply would be somewhat below normal in spite of what had appeared to be unusually heavy snows at the lower altitudes in the valley region. The probable deficiency

MAP OF WATER DISTRICT No. 36

SHOWING

PRINCIPAL STREAMS AND GAGING STATIONS

0 24 48 72

Scale 1 inch = 24 Statute Miles.

REGULAR STATIONS

NO.	
1	Jackson Lake at Moran Wyo.
2	Snake River near Moran Wyo.
3	Snake River near Heise Ida.
4	Great Feeder Canal near Ririe Ida.
5	Snake River at Lorenzo Ida.
6	Snake River near Shelley Ida.
7	Snake River near Blackfoot Ida. (Blackfoot Bridge)
8	Snake River at Clough's Ranch (Formerly listed as near Blackfoot)
9	Snake River at Neeley Ida.
10	Lake Walcott near Minidoka Ida.
11	Snake River near Minidoka Ida.
12	North Side Minidoka Canal near Minidoka, Ida.
13	South Side Minidoka Canal near 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 Ida.
18	Henrys Lake Reservoir near Lake Ida.
19	Henrys Fork near Lake Ida.
20	Henrys Fork near Ashton Ida.
21	Henrys Fork at St. Anthony Ida.
22	Henrys Fork near Rexburg Ida.
23	Fall River near Squirrel Ida.
24	Fall River near Chester Ida.
25	Teton River near St. Anthony Ida.
26	Blackfoot River near Blackfoot
27	American Falls Reservoir at American Falls Ida.
28	Snake River at American Falls 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	Portneuf River at Pocatello Ida.
F	Snake River at Robertson Ranch.

N

Henrys Lake Res.

YELLOWSTONE NATIONAL PARK

Lewis Lake

Henrys Fork

FREMONT CO.

Ashton

Fall River

St. Anthony

Teton River

JEFFERSON CO.

Rexburg

MADISON CO.

Jackson Lake Res.

Rigby

TETON CO.

Idaho Falls

BONNEVILLE CO.

SNAKE RIVER

BINGHAM CO.

Blackfoot

Blackfoot River

Gray's Lake

American Falls Res.

Pocatello

BANNOCK CO.

Portneuf River

CARIBOU CO.

WYOMING IDAHO

GOODING CO.

LINCOLN CO.

JEROME CO.

Jerome

MINIDOKA CO.

BLAINE CO.

Lake Walcott

Rupert

Buhl

Twin Falls

TWIN FALLS CO.

Burley

CASSIA CO.

POWER CO.

American Falls

was not sufficient to cause any serious alarm, however, especially since the prospects for full or practically full storage reservoirs seemed excellent.

Below normal temperatures in April retarded run-off but warm dry weather during the latter half of May brought about a material increase in stream flow which was again checked by several periods of cool weather experienced in June. In consequence of these conditions and the further reduction attributable to the storage of water in Jackson Lake Reservoir no very high peak stages were noted and the normal stream flow sufficed to fill irrigation demands in the upper valley and most of those below American Falls until the early part of July.

Regulation of diversions was first demanded in a letter dated July 1 and actually began on July 6 when diversions under permit and license rights as well as under all decreed rights having a priority date subsequent to December 22, 1915, ceased.

Thereafter rights were regulated in accordance with the following schedule:

July	8	Cut off rights having a priority date subsequent to									June 7,1905
"	12	"	"	"	"	"	"	"	"	"	Aug. 1,1903
"	13	"	"	"	"	"	"	"	"	"	Mar. 26,1903
"	17	"	"	"	"	"	"	"	"	"	Oct. 11,1900
"	18	"	"	"	"	"	"	"	"	"	July 9,1896
"	19	"	"	"	"	"	"	"	"	"	June 14,1895
"	20	"	"	"	"	"	"	"	"	"	Feb. 6,1895
"	26	"	"	"	"	"	"	"	"	"	Aug. 18,1895
"	27	"	"	"	"	"	"	"	"	"	June 1,1892
"	28	"	"	"	"	"	"	"	"	"	Apr. 28,1892
"	29	"	"	"	"	"	"	"	"	"	Dec. 14,1891
Aug.	2	"	"	"	"	"	"	"	"	"	Jan. 24,1891
"	3	Reinstated rights having a priority date earlier than									Dec. 14,1891
"	6	"	"	"	"	"	"	"	"	"	Apr. 27,1892
"	7	"	"	"	"	"	"	"	"	"	Apr. 30,1893
"	8	"	"	"	"	"	"	"	"	"	Aug. 19,1895
"	11	Cut off rights having a priority date subsequent to									Apr. 28,1892
"	12	"	"	"	"	"	"	"	"	"	Dec. 14,1891

Aug.	13	Cut off rights having a priority date subsequent to	Jan. 24,1891
"	15	" " " " " " " " "	Oct. 16,1890
"	16	" " " " " " " " "	July 12,1890
"	17	" " " " " " " " "	June 1,1890
"	21	Reinstated rights having a priority date earlier than	June 11,1890
"	23	" " " " " " " "	Oct. 17,1890
"	27	" " " " " " " "	Jan. 25,1891
"	31	" " " " " " " "	Dec. 14,1891
Sept.	6	" " " " " " " "	Aug. 19,1894
"	10	" " " " " " " "	June 15,1895
"	11	" " " " " " " "	July 10,1896
"	13	" " " " " " " "	Oct. 11,1900
"	14	Upper valley regulation ceased.	
"	20	Regulation in upper valley resumed again.	
		Cut off rights having a priority date subsequent to	Feb. 6.1895
"	24	Reinstated rights having a priority date earlier than	Oct. 11,1900
"	26	General regulation terminated for the season.	

Attention should be called to the fact that both cuts and reinstatements, as previously listed, apply particularly to upper valley canals. These, as a rule, were regulated slightly later than canals below American Falls, due largely to the attempt which was made to make some allowance for the so-called lag as provided in Paragraph 1 of the 1929 river operation program (See page 1).

More regulation was required during September than was the case during the two preceding years.

Conditions existing on September 13 are summarized in the following letter of that date which was forwarded by the Water Master to each member of the Committee of Nine:

"Irrigation demand on the part of all canals in the district has decreased rapidly since the frosts which occurred during the early part of the present month. In consequence, all rights having a priority date earlier than October 11, 1900 have now been reinstated, while at the same time the use of storage has decreased to almost nothing in the upper valley and very materially in the lower valley.

The release of storage from both Jackson Lake and Henrys Lake reservoirs will be terminated today and the discharge past the dams reduced to normal flow only.

In view of the above outlined conditions, it would seem that regulation of canals in the upper valley for the season may safely be ended after tomorrow, September 14 and that the normal flow supply, even though its use is unrestricted, will suffice to fill the further needs of all canals above Blackfoot. The flow past the latter point at present is in excess of 1,000 second-feet, which should provide sufficient margin to care for all real needs.

I had planned to ask for a meeting of your Committee to be held here tomorrow, but after talking with the Secretary of the Committee and with a few of the members who were readily accessible have concluded that such a meeting is hardly warranted at this time, hence am sending this letter to advise you in detail concerning present river conditions and plans for the termination of the season's work. I hope that you will feel free to communicate with me and bring up any matters which, in your judgment, might make an early meeting desirable.

The services of one hydrographer were terminated on August 31, of another on September 5 and this week Mr. C. A. McClelland, who has been my chief assistant for several years, is leaving for California under a transfer to the Ground Water Division of the U. S. Geological Survey. The services of five Deputy Watermasters or River Riders and one part-time clerk will be discontinued after tomorrow except perhaps for one or two day's work at irregular intervals during the balance of the month, all of which is in line with the indicated desire of the Committee to hold expenditures to the minimum consistent with necessary work.

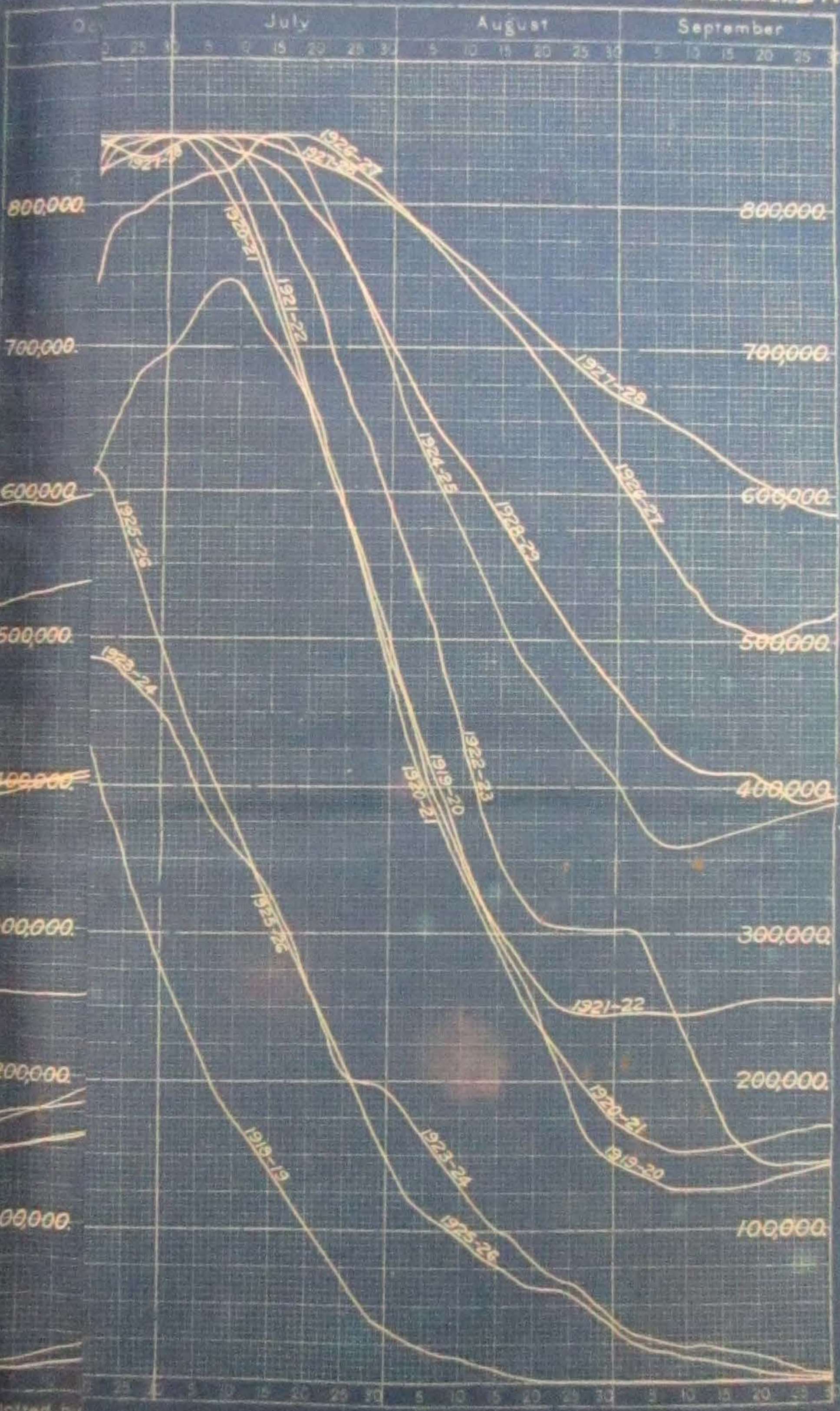
Throughout the balance of the present month, gage readings will be secured at canal stations as frequently as practicable by the remaining personnel in order that data for the entire month may be included in the season's report. It should be understood, however, that some interpolation will be necessary and that in consequence records for the last half of the month will be less dependable than during the time when regular readings were secured."

Unusually warm dry weather followed and the demand for water was such that the available supply proved insufficient to fill the needs of all upper valley canals. Storage was therefore again released from Jackson Lake on September 18 and regulation resumed as previously noted. Fairly general and copious rains soon relieved this situation and general regulation for the season ceased on September 26.

DEPT. OF AGRICULTURE

BEGINNING OCT. 1-1918

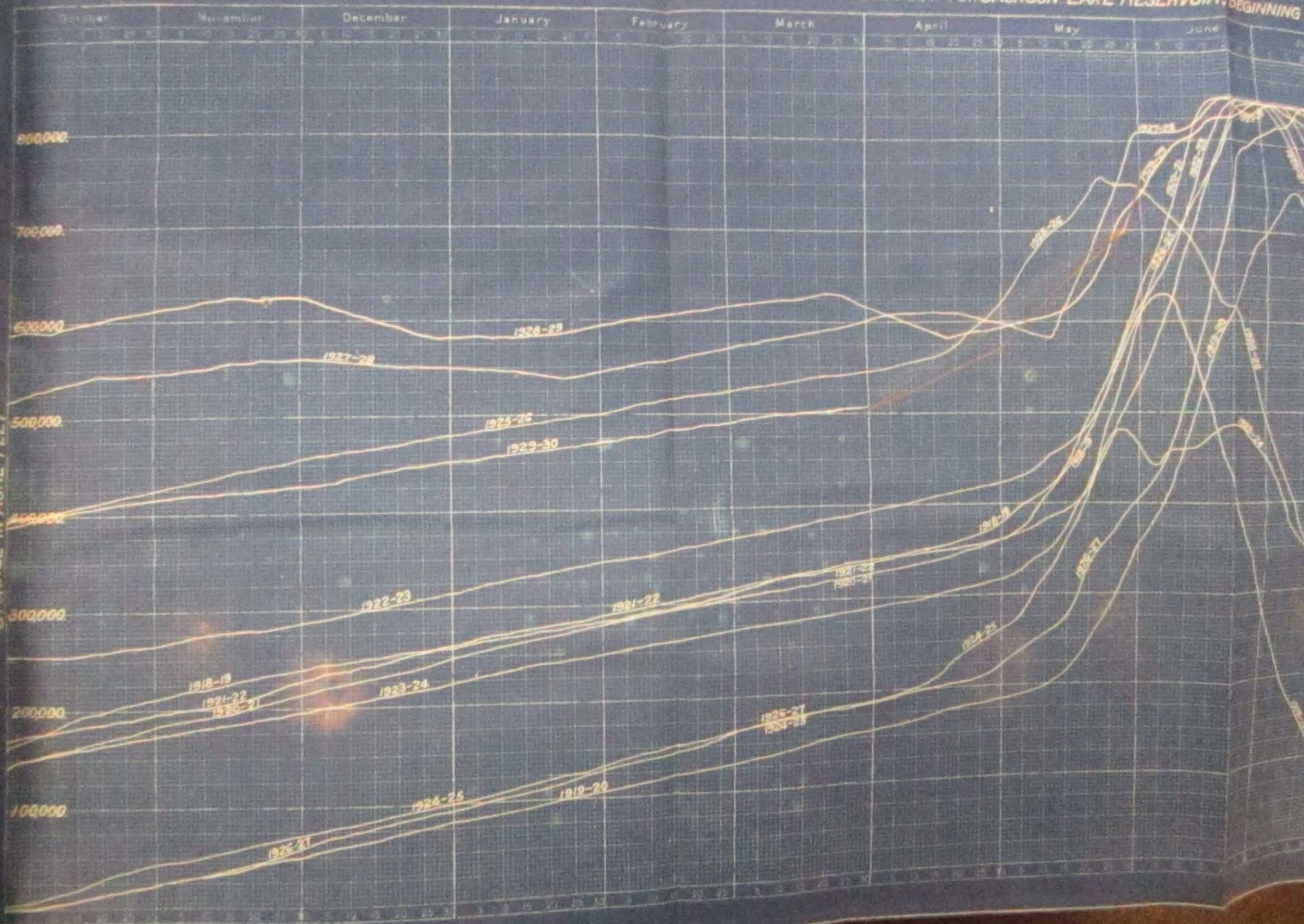
File No. | Washington ..... | Plate No. II.



Plotted by

DEPARTMENT OF THE INTERIOR UNITED STATES GEOLOGICAL SURVEY (WATER RESOURCES BRANCH)

HYDROGRAPH FOR JACKSON LAKE RESERVOIR, BEGINNING



L SURVEY (WATER RESOURCES BRANCH)

HYDROGRAPH FOR JACKSON LAKE RESERVOIR, BEGINNING OCT. 1-1918

File No. Washington (1941) PLATE No. II.

February March April May June July August September

860,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000

STORAGE IN ACRE-FEET

1927-28
1928-29
1920-21
1922-23
1925-26
1921-22
1918-19
1923-24
1926-27
1919-20
1924-25
1917-18
1927-28
1921-22
1920-21
1918-19
1926-27
1924-25
1923-24
1919-20
1925-26
1922-23

Plate II illustrates graphically the manner in which Jackson Lake was filled and drawn down during the period from October 1, 1918 to March 31, 1930. All graphs are plotted on the basis of 1919 capacity tables. (See 1925 and earlier reports for similar graphs covering the period from November 15, 1914 to September 30, 1918).

Lower valley canals again asked to have their rights filled primarily from the American Falls Reservoir but as it was apparent by the end of July that their supply at this point would prove insufficient without borrowing from the water owned by the United States (whose representatives refused any wholesale exchange privilege) no particular effort was made after that time to avoid running some storage past canals in the immediate vicinity of Blackfoot. In all, 140,227 acre-feet of stored water were delivered in this way to the lower reservoir and together with the upper valley usage served to reduce the Jackson Lake hold-over at the end of the season to 389,800 acre-feet - the smallest since 1926 but, with the two exceptions of 1927 and 1928, still the largest of record.

Plate III shows graphs for the American Falls Reservoir covering the period from March 1, 1926 to March 31, 1930 which are similar to those for Jackson Lake which have already been explained.

Attention should here be called to what later proved to be the unwarranted wastage of water during the early part of April which resulted in the failure to completely fill the reservoir in advance of the regular summer draft period. This may be attributed to the desire on the part of officials of the U. S. Bureau of Reclamation to retain

DEPARTMENT OF THE INTERIOR UNITED STATES GEOLOGICAL SURVEY (WATER RESOURCES BRANCH)

HYDROGRAPH FOR AMERICAN FALLS RESERVOIR, BEGINNING MA

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

STORAGE IN ACRE FEET

1927-28

1928-29

1929-30

1926-27

1926

Prepared by Checked by Date

URVEY WATER RESOURCES BRANCH

HYDROGRAPH FOR AMERICAN FALLS RESERVOIR, BEGINNING MARCH 1ST. 1926.

File No.

Field

PLATE NO. III

February March April May June July August September

1,700,000
1,600,000
1,500,000
1,400,000
1,300,000
1,200,000
1,100,000
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000

STORAGE IN ACRE FEET

1926-27

1927-28

1928-29

1926

ample storage space to protect the Minidoka and Milner Dams from damage which might have resulted from high river discharge during the usual June flood water period. It was generally assumed until after the end of the irrigation season that this resultant storage deficiency would be absorbed by the Federal government hence deliveries to other users were actually not curtailed although, perhaps because of the fear of establishing a bad precedent, final charges upon a prorated basis were insisted upon for the data contained in this report.

WATER SUPPLY

If the comparison of annual run-off at the Moran and Neeley gaging stations which has been included in the nine preceding reports, is extended to include the year ending September 30, 1929, the data may be summarized as follows:

Station	Mean annual run-off for 26 years ending September 30, 1929	Run-off for year ending September 30, 1929	% of Mean
Moran	1,106,000	865,000	78.2
Neeley	6,463,000	4,770,000	73.8

In this tabulation all Moran records beginning with the year 1910 have been corrected to take account of the storage in Jackson Lake which has been held over from one climatic year to another. Neeley records, on the other hand, represent actual totals measured at the gaging station except during the last three years of the period when adjustments have been made to take into account the American Falls Reservoir hold-overs. 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. If dependable corrections could be computed to cover all these different

factors, their application to the Neeley data would undoubtedly make the records at the latter station more consistent with those at Moran. This has not been attempted because the development of such corrections from the data available would be difficult, if not almost impossible, and for the further reason that total annual run-off is often not a true measure of summer water supply.

Additional information concerning the latter together with comparisons showing the relative normal flow supply and use by months will be found in a subsequent portion of this report and in the tables on Plate XV.

The fact that the Neeley run-off is again relatively less in comparison with the long time average than is that at Moran would appear to give added weight to the suggestion contained in the 1928 report that this may be partially accounted for by the increased evaporation losses of recent years in the American Falls Reservoir basin. This difference is hardly great enough to warrant any very definite statements, however, in view of the many unknown factors previously referred to.

FLOOD CONTROL

U. S. Army Engineers under the general direction of Colonel G. R. Lukesh spent about three weeks during April in making a survey of that portion of Snake River located between Heise Hot Springs and Roberts. Flood prevention and river control in this section were also discussed at a meeting of those especially concerned which was held at Idaho Falls on April 12. From statements made at this meeting by Colonel Lukesh and Captain R. W. Copeland it appeared that Federal aid in the flood prevention

work could only be expected in the event of some extremely urgent and serious emergency or possibly after the lapse of a considerable period of time through financial cooperation from the threatened area.

Fifteen thousand dollars was appropriated by the 1929 session of the State Legislature and a considerable portion of this money was expended during the year under the supervision of State Commissioner of Reclamation George N. Carter and a commission consisting of S. W. Hall, John W. Hart and T. H. Barnes in temporary bank protection work at the most dangerous points along that portion of Snake River located in Bonneville, Madison and Jefferson Counties.

STORAGE VERSUS FLOOD WATER DIVERSIONS

The filing on June 25, 1929 of the final stipulated decree in the case of the Woodville Canal Company vs. the Clark & Edwards Canal & Irrigation Company, et al, practically ended the possibility of further dispute concerning the relative priority of rights to store water in the principal reservoirs of the district and those for direct diversion of flood water by upper valley canals.

In general, this new decree combines the earlier Rexburg and Foster decrees and accords a priority date of January 22, 1916 to upper valley supplemental diversions, thus making them junior to Jackson Lake storage rights but superior to those for storage in both Henrys Lake and American Falls Reservoirs.

DOMESTIC WATER

The practice first inaugurated in 1920 of making no allowance of water for domestic or culinary use to canals whose entire rights had become invalidated, was again continued.

Sufficient stored water was available to compensate for all normal flow deficiencies and considerable quantities were purchased for seasonal use at prices ranging between $0.25 and $1.00 per acre-foot.

TRANSFERS AND EXCHANGES

The written protest against the temporary transfer of water or the exchange of normal flow for storage, which was filed on March 7, 1927 by the Fall River Irrigation Company and others, was again orally renewed and in consequence neither of these practices was permitted during 1929. (See page 13 of the 1927 report for ruling by the State Commissioner of Reclamation).

Lower valley canals again drew their storage primarily from the American Falls Reservoir but, as previously explained, were also compelled to utilize a portion of their Jackson Lake water. While low river stages were therefore experienced at Blackfoot and upper points they were not as continuous as during the preceding summer, hence there was little need for diversion through other than the normal headings. Exceptions were noted, however, in the cases of the Island and Long Island canals which were in the process of shifting from the main river channel to the Great Feeder as a source of water supply. Because their new canal construction was not entirely completed, each of these two systems was required to utilize both its old and new heading during 1929.

In accordance with the practice of previous years diversion of normal flow from Fall River in lieu of storage released from Henry's Lake and Jackson Lake Reservoirs was again allowed as provided for in Section 5560 of the Idaho Compiled Statutes. Under present conditions

it is only through substitutions of this character that stored water can be delivered to any canal heading in Fall River and similar procedure must be followed to effect delivery of Jackson Lake water to canals heading in Henry's Fork or Teton River. In neither instance can such substitutions be permitted unless the normal flow balances at critical points are in excess of the desired delivery, for if this were not true, intervening canals would be deprived of water to which they were legally entitled. In 1929 as in 1928, for example, the normal flow right of the Enterprise Irrigation District whose supply canal heads in Fall River, became invalid at a time when Henry's Fork was practically dry below the Consolidated Farmers Canal heading. The Jackson Lake storage owned by this District could not be delivered under these circumstances, hence it was necessary for them to arrange to secure storage for a portion of the season from Henry's Lake.

LITIGATION

The principal court action during the year, in so far as the interests of District No. 36 water users are concerned, undoubtedly was the final settlement by stipulated decree of the Woodville or "High Water Decree" case to which reference has already been made. (See page 15).

The case of the Twin Falls Canal Company versus George N. Carter, et al., initiated in April, 1927 for the purpose of changing the interpretation which has thus far been given in river administration to the so-called Foster decree was transferred to Lincoln County where it is still pending before Judge Supthen while at the same time it is now before the State Supreme Court on an appeal from the order denying the

motion for change of venue to Cassia or other specified counties. (See two previous reports for further details).

What might be termed a companion or related case has meanwhile been filed in the name of the United States as plaintiff against the Twin Falls Canal Company and North Side Canal Company as defendants, in the Federal Court, for the purpose of having the Foster decree made a decree of that court. In this action, a demurrer filed by the Twin Falls Canal Company was overruled by Judge McNary in an order dated October 23, 1929. The Court also held that the defendants were estopped by their Jackson Lake contract from questioning the right of the United States to file the action in the Federal Court and to have the relief sought. The Twin Falls Canal Company failed to answer and a default order was thereupon entered. Recently this company filed a motion to have the default order set aside and the case is now pending upon this motion.

On February 7, 1930 a complaint was filed in the District Court of the Ninth Judicial District of the State of Idaho by John A. Garner, Royal Garn and others against G. Clyde Baldwin, Water Master, seeking to secure an exact definition of the irrigation water right which they claim should be appurtenant to their lands under the following as quoted from the so-called Rexburg Decree:

> "Rexburg Milling Company, 3,000 inches, October 1, 1869: Teton River (Woodmansee-Johnston Ditch), for power purposes only, and subject to rights of users for agricultural purposes of water through same ditch."

This case was referred to the Attorney General of Idaho and presumably will not be contested unless other water users should intervene.

With these exceptions there has been practically no change in the status of such pending litigation as pertains to the administration of Water District No. 36 and no new proceedings of general interest have been initiated during the year.

CANAL DELIVERIES

The amount of water diverted daily through each canal heading in Snake River* during the period from June 1 to September 30, 1929 is shown on Plates 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 information 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.

*By a decision of the Board of Geographic Names the stream known locally as South Fork of Snake River is considered to be the upper portion of the main stream and given no other designation than Snake River.

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM SNAKE RIVER FOR JUNE 1929

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
PILOT	0	0	0	0	0	0	0	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	314	358	344	348	349	368	369	428	427	427	420	343	332	349	380	370	372	250	218	202	184	270	339	379	411	413	427	423	445	470	10662
EAST BECK AND WILLOW CREEK	205	214	211	191	180	211	220	230	230	230	230	230	228	228	210	218	200	180	180	230	240	270	260	260	440	436	460	480	530	532	10788
FARMERS FRIEND	205	214	236	244	250	308	320	350	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	340	10200
FOSTER PUMP	135	151	142	122	118	125	136	148	214	220	220	220	218	218	218	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	6511
NELSON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MATTSON and CRAIG	0	0	0	0	0	0	0	0	0	18	28	27	26	25	27	15	3	25	20	18	15	14	14	14	14	14	21	23	25	26	414
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
ROSEBUD	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5	5	4	4	4	4	4	5	5	5	5	5	6	6	6	6	134
ROSEBUD ISLAND	5	5	5	4	4	4	4	4	5	6	6	6	5	5	5	5	5	4	4	4	4	5	5	5	5	5	6	6	6	6	134
BUTLER ISLAND	44	45	46	46	46	46	46	48	51	48	49	48	48	47	46	46	46	23	0	0	0	12	24	32	32	41	56	58	61	62	1159
WHEELER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARRISON	443	345	235	244	244	346	44	450	456	474	498	515	532	247	550	420	291	87	80	185	230	384	537	519	570	564	559	552	545	564	12114
HARRISON	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
CHENEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BENNER	281	150	70	70	80	101	125	138	140	152	163	180	197	250	303	207	111	83	82	85	85	85	85	161	274	312	317	315	312	318	4885
BOISE	183	197	51	54	82	102	188	229	212	305	346	336	322	312	307	247	227	84	82	85	85	85	85	161	254	350	358	364	373	367	5780
BOISE	0	0	0	0	5	11	10	10	11	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	269
GATE and NORD	6	6	6	6	5	11	10	10	11	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	269
BURRIS	81	78	77	76	75	74	72	68	80	77	78	78	78	78	1000	90	81	75	75	61	61	74	87	93	1030	1050	1060	1080	1070	1100	27733
CLAHR and EDWARDS	36	42	0	0	4	68	65	62	80	74	68	67	62	62	75	58	68	43	43	24	12	50	60	79	80	88	103	105	106	121	2202
CANTON	38	42	0	0	0	0	0	30	40	51	50	49	52	52	57	58	60	43	43	24	12	50	60	51	56	58	55	61	62	62	1144
KENTUCK	4	4	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	120
TOTAL	150	148	144	140	182	136	128	137	140	143	142	140	120	101	102	102	78	58	55	137	84	85	83	81	124	167	174	180	178	183	3786
CONSOLIDATED FEEDER	80	81	82	38	37	76	90	85	100	113	118	120	126	132	132	129	124	82	82	88	84	91	96	108	112	123	131	132	132	131	3141
ERNEST	80	81	82	24	24	65	125	152	152	161	168	134	138	143	187	206	152	98	82	74	100	136	145	163	42	241	248	264	258	252	4400
REID	131	134	140	101	125	115	123	152	164	146	143	120	141	142	155	144	134	124	108	92	100	108	134	120	176	151	154	160	201	200	4300
TEXAS FEEDER	150	172	177	174	186	198	221	252	263	274	280	285	271	257	271	291	182	84	150	220	195	220	222	225	228	232	242	252	259	265	6708
NELSON FOREST	0	0	8	8	6	5	10	13	20	24	34	0	19	17	18	18	21	24	19	14	14	15	15	15	14	14	18	21	21	21	472
BILL PETTINGER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	4	3	3	3	3	3	3	4	5	5	5	50
LONG ISLAND	173	192	230	62	206	221	322	372	370	369	370	371	375	370	372	374	320	266	253	243	228	272	276	280	284	286	313	323	337	353	8591
ISLAND	92	80	104	66	98	122	132	134	187	173	178	176	163	151	166	181	176	171	158	135	121	120	125	131	123	116	133	136	142	148	4205
ISLAND	144	155	152	113	126	140	150	160	162	164	157	155	153	150	164	177	139	101	102	104	110	117	146	175	190	204	204	207	203	204	4610
ISLAND	25	25	28	24	25	25	26	27	28	28	28	28	26	26	26	26	24	21	19	16	9	2	2	2	1	1	1	1	2	2	524
CHIEF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEST LABELLE	131	152	132	112	107	138	145	152	152	150	154	117	114	112	113	114	120	126	112	103	98	94	92	91	118	145	148	148	146	145	3763
PARKS and LEWISVILLE	258	29	115	110	204	280	324	336	344	350	345	341	331	317	319	321	297	273	255	237	274	311	304	291	357	377	393	409	422	434	8947
NORTH SIDE	10	11	11	9	11	12	14	21	24	47	60	55	59	51	52	52	38	34	43	39	37	35	42	46	54	81	82	83	85	87	1203
WITTY	5	5	5	5	4	4	4	4	4	5	5	14	14	13	13	13	16	20	16	15	14	12	12	12	11	10	10	11	10	10	278
BRADWELL	2	1	1	1	1	1	1	2	2	3	3	3	3	3	3	3	4	5	6	8	8	7	8	8	8	8	10	11	12	12	143
ELLIS	2	1	1	1	1	1	1	2	2	3	3	3	3	3	3	3	4	4	4	4	4	3	3	3	4	2	7	8	8	8	128
NOT RESIDENT	0	12	10	7	16	26	27	44	42	40	40	43	46	48	48	49	46	44	43	42	42	43	44	45	43	41	42	43	42	42	1058
BUTTE and MARKET LAKE	270	284	298	286	275	284	292	301	310	298	305	270	254	276	318	286	254	220	186	217	220	248	276	272	268	282	297	319	329	325	8309
RICHFIELD	90	88	88	90	91	93	95	98	100	110	104	105	106	102	99	104	109	112	116	112	112	108	103	100	96	102	108	109	112	113	3076
KENYADY	18	20	21	15	17	18	21	22	23	22	22	22	22	22	21	22	23	22	22	22	21	22	22	22	23	25	27	28	29	30	671
BEAR ISLAND and SMITH	2	2	5	5	5	6	4	0	0	1	1	3	1	1	0	0	0	0	1	3	3	6	0	6	5	4	7	7	6	6	94
JUDD	341	438	436	443	430	484	538	552	565	562	560	558	555	624	634	625	556	470	383	385	464	507	548	631	714	747	780	786	733	754	17245
GREAT WESTERN	381	387	377	347	383	398	404	404	401	402	418	426	426	429	435	436	407	372	365	362	376	383	386	416	440	440	478	408	482	481	12080
PORTER	192	198	187	202	217	217	217	210	204	204	243	246	238	242	246	250	214	158	102	141	190	200	210	237	264	273	282	282	282	286	6925
IDAHO FALLS CITY MAIN	3	2	3	3	4	4	4	4	4	4	4	4	4	4	4	0	0	1	1	2	3	3	3	3	4	4	4	4	4	4	99
IDAHOVILLE	57	61	25	60	58	57	56	70	85	84	84	0	88	88	88	86	84	82	81	80	78	72	68	72	75	78	82	86	90	95	2164
SNAKE RIVER VALLEY	485	504	531	533	514	504	502	514	544	571	597	615	605	591	591	539	417	374	374	353	330	385	466	560	693	756	796	809	784	739	16582
TOTAL DIVERS. HEISE TO IDAHOVILLE	5404	5610	5651	5282	5485	6440	7186	7678	7857	7814	7967	7924	7960	7817	8477	7889	6958	5351	4983	5227	5518	6302	6969	7814	8801	9247	9562	9578	9850	9919	219651
EGBERT	680	718	697	677	648	634	643	681	741	720	672	666	670	742	760	744	708	641	562	486	450	502	537	645	773	771	773	784	773	760	20215
BLACKFOOT	293	295	295	292	295	291	296	295	296	294	285	281	282	287	279	278	276	256	237	199	161	172	183	329	355	360	365	372	378	374	10155
MILO LAVA SIDE	93	102	113	113	131	56	42	42	169	141	159	153	152	154	116	105	107	103	113	117	115	115	152	152	160	180	181	142	152	161	4115
PROGRESS	441	424	377	451	438	471	494	490	480	490	525	524	526	526	528	509	471	425	423	393	395	414	368	433	454	528	547	551	545	550	14237
ABERDEEN-SPRINGFIELD	864	851	840	870	820	986	1010	1020	1060	1060	1060	1070	1060	1060	1060	1010	950	950	906	845	845	851	892	946	1040	1130	1190	1220	1230	1260	30478
ATKINSON	97	104	112	117	123	119	111	102	118	124	136	146	139	136	144	134	122	116	111	104	98	97	97	120	143	142	145	147	151	148	3700
RIVERSIDE-JAKINS	0	0	12	9	6	4	2	1	12	11	10	11	11	13	14	14	14	14	16	12	9	10	10	10	10	8	6	6	6	6	280
RIVERSIDE	88	80	83	105	107	128	130	132	138	127	119	121	121	125	131	108	97	100	102	97	96	112	110	112	131	145	141	143	140	139	3528
RIVERSIDE	128	107	142	152	167	184	201	207	213	220	226	220	224	210	156	149	142	117	92	95	98	166	170	158	227	226	226	230	234	231	5441
MILO	53	54	59	43	51	54	51	54	62	62	62	64	64	64	62	52	43	47	51	48	45	42	40	52	63	69	73	77	79	80	1676
MCARTHUR	36	44	52	51	51	56	60	60	67	72	78	68	59	54	54	38	22	21	20	42	40	46	53	61	69	74	78	81	84	78	1470
WATSON	84	107	100	116	101	93	86	101	127	122	118	120	122	126	122	111	100	100	100	98	97	108	120	123	126	126	127	130	132	130	3462
PARSONS	33	32	34	34	33	33	33	34	34	36	35	33	31	34	34	34	34	34	33	30	28	30	33	34	34	34	35	34	32	34	990
TOTAL DIVERS. WOODVILLE TO OLD SIDE	2955	2911	2918	2902	2901	3149	3234	3308	3545	3464	3479	3482	3463	3510	3538	3317	3084	2928	2761	2564	2511	2666	2701	3189	3547	3760	3855	3911	3926	3951	91456
NORTH SIDE MINIDOKA	1540	1520	1500	1460	1490	1490	1540	1560	1560	1550	1550	1550	1520	1550	1550	1250	1191	854	852	854	1020	1120	1160	1210	1350	1370	1420	1450	1480	1490	41335
SOUTH SIDE MINIDOKA	1040	1030	1040	1030	1060	1080	1080	1070	1080	1080	1080	1080	1080	1070	1070	1060	1040	1020	1010	1010	1000	1000	991	991	994	1040	1060	1060	1060	1050	31332
TOTAL MINIDOKA CANALS	2580	2550	2540	2490	2550	2570	2620	2630	2640	2630	2630	2630	2600	2620	2620	2310	2231	1874	1862	1864	2020	2120	2151	2201	2344	2410	2480	2510	2540	2540	72667
PL LATERAL	30	161	87	62	56	76	82	86	56	58	66	56	55	50	51	49	58	57	56	56	56	56	56	56	56	55	55	55	55	55	1665
NORTH SIDE TWIN FALLS	3090	3140	3140	3120	3120	3100	3120	3110	3100	3080	3110	3100	3075	3070	3080	3110	3070	3080	3010	3100	3030	3040	3050	3060	3020	2950	3050	3080	3000	2990	92210
MILNER LOW LIFT	125	131	128	126	118	117	136	137	106	101	131	130	130	120	123	119	134	121	115	136	115	128	129	133	48	33	132	112	134	134	3113
SOUTH SIDE TWIN FALLS	3480	3500	3510	3500	3510	3530	3530	3540	3510	3510	3530	3250	2600	3510	3530	3440	3330	3320	3270	3300	3250	3230	3390	3320	3370	3340	3480	3480	3460	3460	102000
TOTAL TWIN FALLS CANALS	6750	6859	6854	6802	6804	6823	6842	6843	6774	6787	6834	6535	5855	6795	6794	6718	6590	6578	6451	6612	6471	6514	6535	6569	6494	6438	6719	6677	6645	6639	195608

1929 DISTRIBUTION WATER DISTRICT NO. 36

PLATE NO. V

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM SNAKE RIVER FOR JULY 1929

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
RIGBY	32	34	32	33	33	32	30	31	31	28	31	31	30	30	30	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	925
ANDERSON	418	450	426	403	396	395	389	398	384	364	358	349	418	345	401	356	422	465	413	420	392	405	397	389	387	422	435	422	400	403	401	12415
FAIRVIEW AND WILLOW CREEK	486	490	479	463	443	426	403	402	395	382	423	441	418	427	432	422	509	538	575	578	565	578	578	576	580	585	585	585	585	585	601	15233
FARMERS FRIEND	287	287	273	253	248	205	198	185	184	178	171	169	172	178	178	178	186	196	192	163	139	139	142	140	142	154	163	156	112	181	184	5421
CLITSOBISE	1	1	1	0	0	0	3	4	4	3	0	0	1	3	3	3	0	0	0	0	0	0	0	0	1	3	4	4	4	4	3	77
NELSON	7	7	7	8	8	0	3	4	4	8	11	12	22	24	25	22	20	21	12	7	7	8	8	7	7	7	10	15	14	12	13	433
MATTSON AND CRAIG	17	26	26	27	15	14	13	12	11	8	8	6	4	3	2	7	7	7	8	8	6	3	2	1	1	5	5	5	4	4	2	228
ARMSTRONG	6	6	5	5	5	5	5	5	5	5	5	4	5	5	4	5	5	5	5	5	4	4	4	4	5	5	5	5	4	5	2	140
ROSS AND RAND	6	6	4	4	4	4	5	5	5	5	5	4	5	4	5	5	5	5	5	5	4	4	4	4	5	5	5	5	5	5	5	149
EGGERS ISLAND	62	63	68	65	63	56	52	53	54	52	51	50	50	48	51	52	52	51	51	51	50	51	51	51	51	53	52	53	52	53	52	1599
STEELE	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	372
HARRISON	550	572	554	571	537	563	560	563	563	559	546	563	559	559	572	568	572	528	502	481	472	464	468	468	468	466	466	473	498	498	502	16337
CAREY	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	186
BOWER	325	329	321	303	301	319	308	303	310	301	303	301	301	326	321	326	330	326	323	316	317	321	323	323	319	317	314	308	307	308	314	9736
BUTLER	212	209	200	206	208	208	187	154	130	189	211	234	230	229	229	228	230	230	224	228	198	185	185	183	188	190	190	187	181	186	184	7055
RUBY	8	8	8	8	8	8	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	251
KITTLESON	1100	1060	1020	980	937	905	896	892	899	891	887	867	855	891	891	851	895	899	887	887	896	887	899	863	859	855	851	851	843	851	865	28047
BURGESS	109	104	101	93	84	69	70	68	68	68	68	67	75	74	74	73	73	71	71	70	68	70	70	69	70	70	70	70	70	70	70	2152
CLARK AND EDWARDS	66	58	58	41	48	41	37	37	35	35	35	42	40	42	44	42	42	42	43	42	42	44	41	35	41	35	38	35	26	20	21	1267
LOWDER	10	11	10	11	10	9	9	9	9	9	9	10	10	10	11	9	9	9	9	9	8	8	8	7	7	7	7	7	7	7	7	279
JENNINGS	170	171	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	5270
LA BELLE	182	180	167	148	169	151	136	144	137	135	126	135	135	132	146	125	142	136	135	132	103	145	133	134	125	134	135	113	146	142	144	4380
CAREY-DIETZ FEEDER	138	144	119	111	130	150	125	125	122	115	117	121	126	125	134	129	93	93	127	124	123	123	120	118	124	131	124	117	100	81	65	3578
JENPOOT	237	222	188	134	172	161	93	96	153	127	89	80	76	75	117	125	145	166	137	121	131	54	87	94	128	131	130	121	116	116	96	3965
REID	202	203	196	180	173	161	137	140	143	133	122	126	125	124	117	143	151	142	148	143	134	140	138	134	153	148	164	36	169	169	170	4554
TEXAS FEEDER	271	276	250	208	264	205	150	177	169	147	178	216	213	220	238	241	274	284	269	257	146	263	252	245	245	262	262	229	227	229	238	7096
NELSON-CAREY	29	28	16	8	7	14	10	9	4	0	1	1	0	11	15	16	17	16	17	17	16	16	6	16	15	18	18	18	18	16	19	423
NILL PETTINGER	2	2	4	2	2	4	2	2	2	0	2	0	0	2	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	82
LONG ISLAND	384	420	397	270	229	228	210	229	308	246	202	180	178	176	201	199	268	282	343	325	281	252	244	226	233	298	333	316	278	265	280	8282
SCAND	164	218	178	109	96	92	103	136	148	110	105	94	90	88	112	106	134	145	137	179	157	140	134	123	114	143	172	162	139	141	145	4185
RIGBY	203	202	200	195	193	187	152	151	148	152	152	149	158	156	154	152	157	158	156	156	149	166	167	163	163	164	162	161	160	161	162	5107
MILL	61	59	56	48	48	43	27	28	46	42	49	45	39	28	29	28	24	27	27	29	27	27	28	27	0	1	1	0	0	20	21	949
WEST LABELLE	147	145	123	114	115	122	100	100	84	84	92	87	94	109	110	100	105	102	106	107	101	100	96	104	115	115	89	88	98	102	98	3239
PARKS AND LEWISVILLE	436	438	404	373	375	382	352	350	350	348	363	350	348	336	350	345	367	345	348	343	319	370	362	365	366	363	350	352	360	348	349	11154
NORTH RIGBY	86	84	76	70	70	47	38	47	44	48	46	50	48	48	48	48	51	48	48	47	45	53	54	52	53	52	54	50	50	45	50	1574
WHITE	10	10	8	8	8	5	6	6	7	6	7	8	8	6	6	5	5	5	5	7	6	5	6	5	6	5	6	6	7	7	7	204
BRAMWELL	12	12	8	8	10	14	12	12	12	10	6	7	6	7	9	11	12	10	10	10	9	8	9	9	9	9	9	10	10	10	9	299
ELLIS	8	8	5	5	7	7	4	4	4	3	4	4	4	5	5	5	5	5	5	5	3	3	3	3	3	3	4	5	5	5	5	147
INDEPENDENT	45	49	49	47	45	44	43	53	54	52	55	51	50	47	46	47	49	53	54	55	53	52	52	52	53	51	51	51	51	50	50	1555
BUTTE AND MARKET LAKE	321	301	281	188	193	292	286	229	242	254	227	182	251	220	246	255	263	253	242	255	255	270	241	246	234	258	249	284	277	289	292	7876
BASCOM	114	114	114	33	108	112	109	110	110	114	114	114	112	113	112	110	116	111	112	112	110	107	105	109	105	109	109	110	111	112	112	3343
KENNEDY	30	28	26	28	23	20	17	19	17	17	16	15	13	13	13	12	12	13	12	12	12	11	11	11	10	10	10	10	9	8	7	467
BEAR ISLAND AND SMITH	6	7	7	0	4	3	4	4	4	5	5	4	4	4	2	4	4	5	5	5	4	0	0	0	0	0	0	3	3	3	0	92
IDAHO	795	800	804	787	764	794	804	785	775	784	784	780	780	793	795	789	791	793	791	784	775	775	784	787	787	789	783	778	777	777	775	24378
GREAT WESTERN	480	474	474	470	458	469	464	463	458	96	0	0	0	349	487	484	476	466	466	462	458	458	462	460	462	464	463	463	460	458	457	12569
PORTER	286	293	263	245	244	245	243	231	216	51	0	0	0	97	128	138	129	123	183	231	227	217	209	207	209	234	236	234	236	238	238	5853
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	4	124
WOODVILLE	100	94	88	79	86	82	92	92	87	79	21	102	99	89	86	89	90	99	105	104	100	93	87	79	77	79	85	87	82	78	78	2589
SNAKE RIVER VALLEY	777	773	777	729	706	727	730	727	706	697	685	671	657	643	639	677	693	689	691	718	695	673	675	657	661	687	693	677	673	675	677	21564
TOTAL DIVERS. HERE TO WOODVILLE	8042	8052	7873	8639	8670	8576	8052	8011	8072	7302	7074	7156	7135	7573	8088	8188	8433	8228	8456	8455	7984	8106	8083	7952	8001	8289	8352	8060	8137	8168	8201	254802
RIVERVIEW	782	728	767	722	692	681	618	605	605	585	583	613	474	461	400	420	411	461	504	524	502	459	424	445	432	439	456	466	62	6	51	15455
BLACKFOOT	369	375	38	347	326	306	304	274	291	262	302	296	276	299	272	285	278	284	344	356	360	346	323	314	301	296	320	348	343	347	343	8858
NEW LAVA SIDE	173	161	154	149	142	153	154	154	153	153	(5)	153	151	0	0	151	150	155	155	154	154	152	152	154	153	154	151	152	147	150	150	4431
PEOPLES	552	543	549	551	508	488	498	492	480	425	420	429	410	473	482	422	420	422	422	422	424	420	420	420	418	422	414	420	418	418	418	13570
ABERDEEN-SPRINGFIELD	1250	1260	982	845	854	906	1010	1090	1100	1120	1170	1230	1250	1250	1250	1260	1250	1260	1260	1260	1260	1230	1220	1180	1170	1170	1170	1160	1160	1160	35845
AMERICA	144	146	148	132	112	97	98	93	87	102	98	64	41	30	8	6	20	78	152	165	166	163	159	157	136	127	170	134	116	118	116	3384
NELSON-HANSEN	4	10	10	2	0	0	12	9	2	0	0	0	0	0	0	0	0	0	5	11	12	7	4	0	0	0	3	10	8	8	6	128
RIVERSIDE	136	134	130	127	122	115	106	110	105	110	108	110	108	108	102	110	110	112	108	114	110	110	107	108	107	108	114	86	43	110	110	3404
PARSON	278	290	232	214	174	182	173	176	171	164	163	153	144	134	114	118	136	164	190	180	185	182	178	170	178	175	190	180	180	178	178	5430
TREGO	80	72	64	62	60	58	56	55	57	47	29	12	4	12	4	6	28	57	65	76	74	67	51	38	29	65	69	65	66	63	65	1559
WEARYRICK	71	72	72	65	64	44	53	59	53	62	55	52	51	45	30	25	21	30	65	71	72	61	52	52	45	50	64	62	52	51	51	1668
WATSON	129	130	132	120	102	90	86	88	54	90	54	75	67	52	76	62	44	71	129	122	124	111	102	98	101	86	116	105	104	102	102	3005
PARKER	30	34	34	32	34	23	22	21	21	19	23	25	20	8	16	13	8	18	37	39	38	30	23	23	23	19	36	30	23	23	23	773
TOTAL DIVERS. WOODVILLE TO CLANGER	3561	3570	3465	3312	3188	3145	3188	3201	3229	3111	3166	3106	2936	2878	2754	2876	2876	3114	3436	3498	3501	3378	3265	3159	3093	3111	3305	3218	2822	2734	2727	95004
NORTH SIDE MINIDOKA	1500	1500	1530	1540	1540	1550	1550	1550	1550	1540	1570	1560	1580	1580	1580	1580	1580	1580	1580	1570	1580	1580	1580	1580	1580	1550	1580	1580	1550	1590	1580	1580	48540
SOUTH SIDE MINIDOKA	1050	1040	1050	1030	1010	1010	1020	1010	1010	992	1000	1000	994	986	991	1000	1010	1010	1020	1020	1020	1010	1010	1000	1000	1000	1010	997	1020	1030	1050	31364
TOTAL MINIDOKA CANALS	2550	2540	2580	2570	2550	2560	2570	2560	2560	2532	2570	2560	2574	2566	2571	2580	2590	2590	2600	2590	2600	2590	2590	2580	2580	2550	2590	2580	2572	2620	2630	79904
PA LATERAL	55	55	55	41	7	56	54	56	55	56	56	56	56	56	56	56	56	55	54	55	55	54	55	55	55	55	55	56	55	56	55	1627
NORTH SIDE TWIN FALLS	3020	2990	781	3080	3080	3160	3110	3180	3170	3150	3140	3140	3160	3170	3170	3160	3160	3170	3180	3150	3180	3180	3200	3170	3160	3120	3120	3130	3110	3100	3080	94391
MILNER LOW LIFT	134	108	135	132	125	126	125	146	162	158	159	158	128	135	162	162	142	120	122	138	124	159	152	167	166	164	167	166	166	166	150	4528
SOUTH SIDE TWIN FALLS	3480	3480	3490	3480	3550	3520	3550	3520	3590	3590	3580	3580	3600	3610	3600	3590	3600	3610	3610	3580	3600	3600	3610	3600	3610	3590	3600	3630	3630	3630	3620	110350
TOTAL TWIN FALLS CANALS	6689	6610	4401	6710	6758	6922	6841	6972	6978	6934	6936	6934	6944	6971	6988	6967	6957	6954	6967	6923	6960	6994	7011	6992	6991	6931	6942	6981	6961	6952	6905	211526

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM SNAKE RIVER FOR AUGUST 1929

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
[illegible]	22	24	24	24	21	18	17	19	17	18	18	18	18	18	13	8	7	6	5	5	5	6	5	11	12	12	12	12	12	12	11	438
[illegible]	417	421	415	414	414	408	375	370	347	345	342	337	346	361	360	360	355	356	354	347	348	341	304	398	302	307	303	301	296	300	273	10880
[illegible] AND WILLOW CREEK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16590
[illegible] FRIEND	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ENTERPRISE	183	186	138	142	142	124	117	123	114	122	118	118	124	122	127	126	122	120	120	122	98	98	100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	2	1	1	0	0	0	0	0	0	0	0	0	[illegible]
[illegible] AND CRAIG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8	10	13	13	13	13	13	13	12	8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	256
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	4	5	4	4	[illegible]	[illegible]	[illegible]	[illegible]	3	4	4	4	3	3	3	2	2	2	1	3	3	3	3	3	3	3	2	2	2	2	[illegible]	[illegible]
[illegible] ISLAND	51	51	51	51	51	51	51	51	50	49	50	49	48	50	50	46	44	44	44	47	42	44	46	46	46	46	47	47	48	45	46	1484
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8	8	9	8	3	11	10	8	7	8	8	8	5	10	8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	242
[illegible]	506	506	500	502	500	500	500	502	48	481	485	477	479	483	485	374	313	321	319	87	47	53	215	305	382	412	412	418	422	430	392	[illegible]
[illegible]	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	4	5	5	5	4	5	6	5	5	5	5	5	5	5	5	5	153
[illegible]	288	312	305	298	267	254	257	264	260	254	257	257	255	256	256	252	244	248	249	249	247	255	245	238	238	237	242	240	242	242	244	[illegible]
[illegible]	189	192	185	183	185	183	182	183	177	180	176	176	178	182	178	174	188	177	187	188	183	181	176	176	178	182	158	140	138	142	141	5438
[illegible]	[illegible]	[illegible]	6	6	6	6	6	6	5	5	6	6	5	5	5	5	5	6	6	6	7	6	6	6	5	5	5	5	5	5	5	114
[illegible] AND NORD	853	851	851	851	851	843	839	851	838	716	616	608	620	646	643	650	488	408	408	401	567	643	639	639	643	631	635	635	643	646	631	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	66	67	64	65	68	69	66	68	68	68	67	68	58	63	66	62	65	65	61	62	67	66	2062
CLARK AND EDWARDS	34	40	40	40	40	43	41	41	33	30	29	15	17	15	16	26	22	23	37	46	43	39	40	44	31	26	24	34	22	23	20	[illegible]
[illegible]	[illegible]	8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8	[illegible]	8	[illegible]	[illegible]	8	[illegible]	8	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	123
JENNINGS	144	137	142	142	141	137	132	132	118	113	133	128	118	122	128	129	136	139	140	137	118	96	96	87	133	133	132	130	130	132	130	3973
CONSOLIDATED FEEDER	64	64	62	62	63	63	63	63	64	63	61	63	71	64	64	63	64	63	61	63	64	62	60	65	58	57	52	53	58	62	61	1925
[illegible]	78	76	[illegible]	[illegible]	75	78	95	115	107	115	121	120	122	104	82	84	84	85	81	84	82	85	81	81	80	71	62	62	[illegible]	[illegible]	[illegible]	[illegible]
REID	173	137	128	139	141	150	140	151	131	133	131	129	133	136	145	150	153	133	151	150	139	138	142	139	135	131	128	128	127	121	123	[illegible]
TEXAS FEEDER	229	222	222	221	227	227	229	242	241	235	229	227	220	218	216	217	213	213	211	215	211	205	200	198	195	191	185	221	211	217	208	6714
NELSON CORBEY	15	[illegible]	15	16	15	11	17	15	[illegible]	11	17	10	11	15	15	13	13	12	12	11	11	10	10	10	10	9	9	11	12	12	12	385
HILL PETTINGER	3	2	2	3	3	3	3	[illegible]	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	[illegible]
LONG ISLAND	282	373	300	291	284	274	240	211	166	147	143	133	154	153	213	268	327	328	344	358	357	328	315	303	300	281	269	268	261	264	257	[illegible]
[illegible]	154	137	130	149	147	138	112	96	81	81	76	75	104	89	95	101	107	103	45	96	89	83	90	86	83	83	80	76	75	83	71	[illegible]
[illegible]	142	143	162	162	163	162	162	159	159	158	158	159	156	156	156	149	158	158	151	153	155	153	152	152	152	133	134	134	133	134	134	4738
[illegible]	[illegible]	21	21	21	21	21	20	28	28	28	12	0	0	0	0	6	17	11	13	12	11	4	0	0	0	0	0	0	0	0	0	287
WEST LABELLE	113	105	97	94	95	109	112	102	99	105	117	112	112	95	120	92	112	122	126	116	113	121	121	116	116	117	117	116	114	113	112	3435
PARKS AND LEWISVILLE	357	336	326	348	300	300	295	287	280	287	322	306	300	309	307	297	290	265	261	250	272	287	283	275	275	275	261	258	257	257	255	[illegible]
NORTH RIGBY	51	50	45	49	55	51	50	47	46	[illegible]	49	45	49	53	50	48	45	47	48	45	48	46	47	47	41	41	47	47	41	58	49	1502
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	7	7	6	6	4	7	6	6	6	5	4	5	4	4	5	6	6	5	5	5	5	5	5	5	5	177
BRAMWELL	10	9	9	9	9	8	8	8	7	9	8	8	8	8	5	8	7	7	6	6	7	7	7	7	6	6	6	6	6	6	6	231
[illegible]	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	4	4	4	5	4	4	4	4	4	4	4	4	4	4	4	3	138
INDEPENDENT	58	55	54	53	48	48	48	48	43	43	43	42	43	40	42	44	44	45	44	44	45	40	40	39	38	38	37	37	36	37	37	1340
BUTTE AND MARKET LAKE	288	279	262	260	240	233	253	251	234	258	246	241	240	251	220	155	135	223	222	201	206	201	193	143	158	156	143	143	141	143	145	6464
[illegible]	112	115	118	119	72	102	98	102	104	108	106	112	114	112	113	114	114	116	117	117	114	117	116	114	114	114	115	67	114	113	113	3387
[illegible]	7	7	7	6	7	6	5	5	5	4	3	5	5	8	7	7	7	7	8	8	8	7	7	7	7	6	7	8	7	7	7	202
BEAR ISLAND AND SMITH	2	2	2	3	3	2	2	2	2	3	1	2	2	2	2	0	0	0	0	2	2	2	2	3	1	0	0	0	0	0	0	43
[illegible]	777	780	764	765	717	634	751	759	728	699	703	696	697	723	739	746	742	744	746	748	723	694	654	665	645	651	652	584	572	548	512	21544
GREAT WESTERN	434	450	445	442	438	438	435	430	429	426	426	423	418	408	405	400	395	391	388	386	386	384	386	384	381	369	362	359	353	352	353	12496
PORTER	238	281	286	284	286	281	285	252	245	227	221	224	224	231	192	192	190	180	185	187	183	183	178	157	170	170	167	170	168	167	170	6544
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	3	3	3	3	3	3	3	3	116
WOODVILLE	73	76	85	78	78	71	68	62	56	53	49	45	44	44	44	47	46	53	54	54	57	45	19	85	86	85	82	83	72	72	74	1950
SNAKE RIVER VALLEY	685	683	683	635	597	589	565	556	560	560	552	563	575	565	565	558	488	452	450	453	452	448	448	414	403	351	375	377	380	385	386	15803
TOTAL DIVERS HEISE TO WOODVILLE	8155	8080	8093	7982	7786	7656	7575	7578	7277	7126	7007	6928	7014	7056	7075	6506	6670	6597	6638	6385	6436	6427	6435	6338	6401	6341	6232	6119	6092	6143	5985	214740
RESERVATION	3	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	78
BLACKFOOT	348	356	378	346	371	373	362	337	311	302	296	276	271	236	231	311	319	275	280	283	268	257	250	245	229	226	204	200	139	136	204	[illegible]
NEW LAVA SIDE	150	148	145	148	148	147	147	147	147	145	151	150	150	150	109	78	78	82	80	80	80	82	80	80	80	82	117	112	115	114	123	[illegible]
[illegible]	418	418	418	416	418	414	416	416	408	418	183	[illegible]	58	58	35	274	435	429	427	425	427	429	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ABERDEEN-SPRINGFIELD	1180	1170	1170	1160	1130	1060	1040	1040	865	728	845	882	886	875	835	820	785	746	746	698	653	607	628	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CORBETT	116	115	164	135	135	152	159	146	140	139	135	141	143	151	131	125	140	138	130	131	93	109	121	121	122	122	121	121	121	122	121	[illegible]
[illegible]-HANSEN	8	13	15	17	17	17	14	9	7	5	2	2	2	1	4	1	1	5	4	5	5	7	8	7	5	8	6	5	5	6	0	202
RIVERSIDE	118	112	111	110	111	109	105	105	107	108	110	111	106	106	109	108	108	108	108	101	102	110	109	109	107	106	104	106	106	106	100	[illegible]
DANSKIN	175	179	180	178	178	180	179	170	171	169	170	171	170	170	177	177	172	176	172	151	153	154	165	180	177	178	174	170	171	171	170	5331
TREGO	65	64	64	64	[illegible]	61	68	65	65	54	43	53	43	42	47	59	47	59	61	69	67	68	66	66	58	62	65	55	54	53	55	1834
WEARYRICK	55	55	51	55	55	61	47	58	57	58	54	56	51	53	54	55	52	54	53	53	53	53	53	53	53	52	53	39	39	39	39	1575
WATSON	101	102	102	102	104	99	99	102	100	97	102	99	98	102	103	103	97	102	101	101	100	101	100	101	96	97	97	97	97	97	97	[illegible]
[illegible]	23	23	23	23	23	23	23	23	23	23	24	23	23	23	23	23	23	23	23	23	22	23	23	22	22	22	22	22	22	22	22	[illegible]
TOTAL DIVERS WOODVILLE TO CLOUGHS	2759	2710	2825	2756	2776	2659	2625	2626	2344	2245	2111	2028	2005	2008	1945	2134	2261	2199	2187	2122	2025	2092	2091	2108	2068	1808	1735	1717	1732	1724	1531	68401
NORTH SIDE MINIDOKA	1530	1450	1440	1420	1390	1410	1440	1420	1390	1390	1390	1390	1390	1400	1410	1410	1420	1410	1410	1390	1360	1390	1410	1410	1410	1380	1330	1330	1330	1320	1320	43290
SOUTH SIDE MINIDOKA	1060	1070	1080	1100	1090	1090	1100	1090	1080	1070	1060	1060	1070	1070	1060	1060	1060	1060	1060	1060	1060	1060	1060	1060	1050	1050	1050	1050	1050	1050	1040	33020
TOTAL MINIDOKA CANALS	[illegible]	2520	2520	2520	2480	2500	2540	2510	2470	2460	2450	2450	2460	2470	2470	2470	2480	2470	2470	2450	2420	2450	2470	2460	2460	2430	2380	2380	2380	2370	2360	76310
PA LATERAL	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	57	56	56	56	56	56	56	52	57	57	57	57	57	57	57	1749
NORTH SIDE TWIN FALLS	3080	3060	3050	3030	3040	3060	3020	3040	3020	3030	3040	3050	3070	3060	3030	3040	3050	3070	3030	3070	3050	3030	3020	3030	3050	3070	3070	3030	3020	2910	2840	94050
MILNER LOW LIFT	135	142	143	144	144	145	145	145	144	144	146	143	145	145	142	140	118	141	139	140	141	141	122	112	105	138	138	92	65	122	127	4110
SOUTH SIDE TWIN FALLS	3630	3610	3610	3610	3620	3620	3600	3600	3600	3600	3610	3620	3620	3610	3580	3600	3610	3620	3600	3620	3610	3600	3580	3580	3590	3610	3610	3570	3560	3510	3450	111490
TOTAL TWIN FALLS CANALS	6875	6858	6859	6840	6860	6881	6821	6841	6820	6830	6852	6849	6889	6871	6798	6836	6835	6887	6825	6886	6857	6827	6778	6774	6802	6875	6976	6749	6702	6599	6504	211330

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM SNAKE RIVER FOR SEPTEMBER 1929

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
[illegible]	[illegible]	10	12	16	9	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	[illegible]	[illegible]	0	0	0	0	0	0	1	2	62
[illegible]	196	290	313	311	201	223	226	274	227	233	226	218	297	186	181	182	178	175	174	191	171	203	138	126	173	161	157	146	136	127	6481
ANDERSON	477	471	432	424	436	471	473	441	451	403	384	363	343	311	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
EAGLE ROCK AND WILLOW CREEK	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	241	231	214	202	191	184	73	[illegible]	191	209	210	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	231	218	[illegible]	[illegible]	[illegible]	[illegible]	128	[illegible]
FARMERS FRIEND	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8	[illegible]	[illegible]	[illegible]	58	52	45	[illegible]	[illegible]	19	10	34	[illegible]	[illegible]	60	[illegible]	102	[illegible]	[illegible]	[illegible]	73	[illegible]	[illegible]	2280
[illegible]	51	53	50	100	51	[illegible]	[illegible]	0	0	[illegible]	0	0	0	0	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	[illegible]
[illegible]	0	0	0	0	0	0	0	0	0	0	0	0	0	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	7	6	6	6	5	4	3	135
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	6	6	6	0	0	0	[illegible]
[illegible] AND CRESS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	1	[illegible]	1	[illegible]	[illegible]	2	1	1	1	1	1	1	1	1	46
[illegible]	[illegible]	42	44	44	44	44	44	42	42	44	40	41	38	35	35	40	40	41	40	44	49	49	44	44	42	41	41	40	38	38	1271
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5	[illegible]	4	4	4	[illegible]	4	[illegible]	[illegible]	[illegible]	4	4	4	4	4	4	4	[illegible]
BUTTE ISLAND	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	58	80	185	180	171	225	280	334	388	376	405	143	145	135	133	136	133	131	128	112	[illegible]	6722
[illegible]	332	330	311	293	307	292	293	293	282	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	4	4	4	[illegible]	[illegible]	[illegible]	4	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	103	105	96	92	88	137	186	234	283	267	260	286	27	21	25	24	18	117	216	206	197	4810
[illegible]	244	234	242	178	180	180	180	176	168	85	85	86	85	77	72	66	61	[illegible]	56	71	50	[illegible]	[illegible]	[illegible]	54	51	56	[illegible]	[illegible]	[illegible]	2356
[illegible]	142	144	121	119	118	115	115	84	88	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4	4	[illegible]	[illegible]	[illegible]	4	3	2	2	1	[illegible]	0	5	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] AND NORD	635	636	643	635	636	636	627	634	608	624	645	624	616	601	605	608	612	616	605	654	646	608	570	578	579	575	573	570	546	522	18225
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	64	58	59	53	58	62	58	58	56	44	[illegible]	27	17	20	27	71	72	59	98	[illegible]	[illegible]	55	52	46	40	1378
[illegible]	57	53	53	57	55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3	1	[illegible]	2	[illegible]	1	0	2	11	28	27	25	[illegible]	12	9	6	10	14	343
[illegible] AND EDWARDS	21	24	27	27	25	5	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	4	4	[illegible]	1	1	1	1	1	1	31
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	131	133	135	136	134	132	82	78	58	47	51	43	38	36	33	30	27	24	21	21	73	93	73	74	72	66	56	45	40	35	2035
[illegible]	58	51	65	55	57	60	60	49	38	31	33	37	41	35	30	25	32	40	47	54	85	70	50	81	50	42	34	25	25	22	1407
CONSOLIDATED FEEDER	24	28	63	57	63	65	62	56	57	48	42	37	31	24	21	18	47	16	106	135	111	85	80	81	76	71	55	58	55	50	1885
[illegible]	121	113	115	120	118	112	114	85	84	76	68	24	58	51	46	40	44	48	53	57	74	50	38	35	30	38	42	54	52	50	2218
[illegible]	211	207	228	235	232	234	222	208	190	172	151	143	125	116	101	86	84	81	78	76	143	172	156	164	148	135	125	120	116	110	4567
TEXAS FEEDER	11	10	13	14	12	13	11	10	8	5	1	0	0	0	0	0	0	0	0	0	2	5	10	11	10	8	7	5	4	4	172
[illegible]	2	2	2	2	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2	2	2	2	1	1	1	0	31
HILL PETTINGER	186	185	198	205	204	212	217	215	209	208	215	200	187	166	136	105	92	73	96	93	233	241	207	226	219	203	188	171	161	155	5345
[illegible] ISLAND	158	152	187	127	125	145	146	139	127	113	99	83	98	46	30	18	22	25	28	32	115	126	131	134	134	123	111	98	91	86	3036
[illegible]	133	133	141	125	124	124	111	110	116	119	111	109	107	101	121	142	138	130	128	124	148	114	105	107	77	74	71	68	65	63	3240
[illegible]	[illegible]	[illegible]	21	21	28	28	28	28	22	22	23	20	15	15	15	15	15	15	15	15	21	21	21	21	20	18	15	15	12	12	554
[illegible]	102	105	106	104	104	90	[illegible]	[illegible]	[illegible]	83	80	75	75	63	70	74	72	68	65	61	66	69	64	61	60	59	57	53	55	55	2249
[illegible] LABELLE	249	232	241	253	250	233	236	231	226	192	172	166	163	152	154	151	155	161	164	166	245	214	176	160	160	156	152	148	143	140	5714
[illegible] AND LOWVILLE	48	50	50	45	45	44	45	44	44	45	47	45	43	47	40	32	28	21	16	10	44	30	34	35	35	33	32	31	30	30	1131
[illegible]	[illegible]	5	6	6	6	6	6	5	5	5	7	6	6	4	3	3	2	1	1	0	7	9	8	7	7	6	4	3	2	2	144
[illegible]	[illegible]	[illegible]	7	7	7	7	7	7	6	6	8	7	7	3	2	2	2	1	1	0	9	10	8	8	6	6	4	2	1	1	156
BRAMWELL	[illegible]	4	5	4	4	4	5	5	4	5	6	5	5	4	3	3	2	1	1	0	5	5	3	3	3	2	1	0	0	0	95
ELLIS / INDEPENDENT	35	35	32	33	32	32	33	32	34	33	32	32	32	30	29	28	26	25	24	23	24	31	33	34	33	32	32	31	30	30	923
BUTTE AND MARKET LAKE	134	134	133	148	143	140	141	141	141	113	110	108	105	110	120	130	140	150	147	143	140	127	117	108	104	100	96	92	88	85	3658
[illegible]	114	112	112	113	112	114	114	53	33	93	109	110	109	109	108	108	108	107	107	107	107	106	105	99	102	99	96	93	90	90	3033
KENNEDY	6	6	7	7	7	7	7	7	8	4	3	3	3	3	3	3	3	3	3	3	2	2	3	3	2	2	2	1	1	1	113
BEAR ISLAND AND SMITH	0	0	0	0	0	0	6	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
IDAHO	432	483	470	436	400	385	378	388	382	369	375	378	370	361	361	362	377	434	538	510	544	485	405	279	67	0	0	0	0	0	10027
GREAT WESTERN	332	331	345	349	349	349	348	349	346	346	331	323	320	317	311	313	306	290	285	285	292	300	296	275	253	231	214	214	219	205	9055
PORTER	193	193	193	205	197	193	192	192	193	187	192	167	163	155	146	138	129	120	114	109	103	104	109	53	42	30	30	29	28	28	3927
IDAHO FALLS CITY MAIN	1	1	2	2	2	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	13
WOODVILLE	64	64	65	63	70	58	58	59	59	57	56	54	52	48	44	40	36	33	30	36	42	64	79	72	49	48	47	46	45	44	1579
SNAKE RIVER VALLEY	383	383	386	395	353	313	332	332	330	326	325	320	350	367	353	342	310	334	380	339	153	244	190	192	193	191	123	65	60	60	8424
TOTAL DIVERS. HEISE TO WOODVILLE	5853	5889	6046	5874	5733	5569	5527	5261	5056	4665	4571	4486	4341	4138	4133	4145	4207	4355	4504	4686	5069	4830	4375	4002	3411	3203	3090	3003	2837	2692	135590
RESERVATION	[illegible]	[illegible]	224	387	515	412	432	429	418	436	466	447	421	387	341	291	234	164	164	156	189	352	335	217	217	214	241	253	183	180	8751
BLACKFOOT	233	198	205	181	198	176	154	152	161	151	144	191	184	176	183	191	198	181	163	146	159	126	118	156	76	74	71	65	56	62	4514
NEW LAVA SIDE	117	116	114	123	115	110	108	108	116	116	114	110	141	152	152	152	152	151	149	148	111	78	76	70	69	69	70	70	67	63	3315
PEOPLES	364	351	341	351	353	361	397	414	337	343	334	334	330	330	336	342	348	345	345	339	359	238	211	218	211	217	222	228	223	231	9390
ABERDEEN-SPRINGFIELD	713	707	691	636	610	618	621	618	621	610	555	555	555	555	561	565	590	444	398	342	335	601	547	506	544	542	544	550	547	547	[illegible]
CORBETT	128	129	118	131	113	52	51	85	85	88	88	86	85	80	68	56	43	32	20	8	10	24	67	66	56	54	42	30	25	20	2023
[illegible]	2	8	8	1	1	1	1	7	7	4	4	2	0	0	0	0	0	0	0	0	0	0	2	3	4	4	3	3	3	3	53
NIELSEN-HANSEN	85	87	90	98	90	78	76	76	91	108	108	108	103	100	96	92	88	64	39	15	16	48	55	60	61	61	60	60	59	58	2228
RIVERSIDE	164	164	165	151	154	156	153	154	154	151	152	148	145	142	133	125	116	77	39	0	5	30	198	119	112	109	105	102	95	88	3546
DANSKIN	47	41	53	60	63	60	56	63	47	45	45	41	41	38	35	31	28	19	9	0	0	6	40	43	42	39	36	33	25	16	1102
TREGO	38	38	38	40	40	40	41	30	30	29	29	28	28	27	28	30	31	22	12	3	9	18	46	27	27	27	26	26	26	25	861
WEARYRICK	94	95	96	97	97	96	97	97	95	93	92	90	88	86	67	49	30	20	10	0	0	13	100	97	99	95	90	86	86	87	2242
WATSON / PARSONS	22	22	22	22	22	22	22	22	22	21	21	21	21	20	15	11	6	4	2	0	0	0	21	21	21	21	21	21	22	22	510
TOTAL DIVERS. WOODVILLE TO CLOUGHS	1974	1947	2077	2251	2316	2284	2249	2235	2168	2195	2157	2201	2179	2133	2041	1965	1864	1523	1337	1157	1193	1534	1820	1603	1549	1531	1531	1531	1435	1408	55557
NORTH SIDE MINIDOKA	1300	1300	1290	1300	1290	1250	1250	1220	1180	1190	1090	1060	1040	1070	1070	1070	1070	1040	1020	936	806	808	770	753	755	757	764	764	759	759	30721
SOUTH SIDE MINIDOKA	1040	1030	1030	1030	1030	971	954	954	962	932	955	948	965	948	937	917	881	873	878	870	760	594	493	435	413	401	374	350	348	348	23675
TOTAL MINIDOKA CANALS	2340	2330	2320	2330	2320	2221	2204	2174	2142	2122	2045	2008	2025	2018	2007	1987	1951	1913	1858	1806	1566	1402	1263	1188	1168	1158	1138	1114	1107	1107	54396
PE LATERAL	56	57	56	56	56	56	56	57	57	57	55	53	53	53	53	53	53	53	53	53	43	36	28	28	28	28	28	28	28	23	1394
NORTH SIDE TWIN FALLS	2830	2900	2800	2840	2850	2790	2740	2920	2640	2670	2640	2670	2640	2600	2560	2550	2540	2470	2480	2490	2490	2530	2450	2350	2200	2080	2040	1930	1910	1910	75180
MILNER LOW LIFT	125	133	134	138	118	116	119	119	116	98	99	98	99	102	122	122	122	121	22	85	96	101	98	100	99	98	94	92	92	110	3188
SOUTH SIDE TWIN FALLS	3420	3432	3440	3370	3230	3160	3060	2930	2890	2820	2340	2310	2250	2320	2340	2340	2340	2210	2170	2160	2080	2030	1820	1600	1420	1340	1340	1380	1380	1380	70460
TOTAL TWIN FALLS CANALS	6421	6440	6430	6404	6254	6152	5575	5766	5723	5645	5354	5131	5062	5075	5075	5065	5055	4854	4725	4788	4705	4697	4396	4078	3747	3546	3522	3430	3410	3423	150222

As previously explained, canals were only visited every other day during June and for the first few days of July, hence for this period intervening data have of necessity been interpolated. From September 15 to 19 and September 26 to 30 the canal discharges likewise depend upon less frequent readings and have been completed through interpolation or by estimates. Records for the remainder of the season are based upon daily gage heights.

The small Morgan and Rostan diversions were supplied throughout the season from other adjacent canal systems and no water was diverted through the Snake River headings of the Sheppard or Smith-Maxwell canals, hence these have all been eliminated from the 1929 tabular 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.

Beginning with the latter part of July water was diverted through the enlarged Dilts canal for the benefit of the Island system and beginning August 15 part of the Long Island supply was likewise obtained through the West LaBelle heading in the Great Feeder. The data as presented herein have been corrected, however, to show charges against the respective canals which finally received the water and where a supply was derived from two sources the combined or total amount diverted has been shown.

RIVER DATA

The extensive tables found on Plates VIII and IX 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
66½	American Falls	Day ending at 10:30 p. 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.

This schedule is the same as the one adopted for the ten preceding years except that for American Falls 66 hours was used as the time from Jackson Lake during 1926. While not exactly correct for all stages of the river, the intervals listed are believed to be fairly representative of average conditions and in consequence have been used throughout the entire period of record.

1929 DISTRIBUTION WATER DISTRICT NO. 36

DATE 1929	JACKSON LAKE			MORAN				TWIN LAKES		DATE 1929	HEISE						MORAN - HEISE				LORENZO		HEISE - LORENZO		REXBURG	
	GAGE	STOR AC FT	DRAFT AC FT +	GAGE	DISCH	STOR	NOR.	DISCH	+ MORAN		GAGE	DISCH	+ RILEY	STOR'D	TWIN LAKES	NOR.	TOTAL GAIN	LOSS STOR	LOSS TWIN	GAIN NOR	STOR'D	TWIN LAKES	LOSS STOR	LOSS TWIN	GAGE	DISCH
MAY 30	6784	787880		0.39	54		54			MAY 31	3.13	9420	9427			9427										
31	6693	744550		0.41	58		58			JUNE 1	3.47	11020	11020			11020										
JUNE 1	6526	752760		1.49	456		456			2	3.81	12810	12813			12813										
2	6562	761720		0.91	200		200			3	3.78	12690	12707			12707										
3	6590	768700		0.38	52		52			4	3.37	11020	11040			11040										
4	6616	775200		0.37	50		50			5	3.27	10640	10659			10659										
5	6647	782570		0.38	52		52			6	3.52	11620	11640			11640										
6	6674	789740		H.D.	1520		1520			7	3.93	13330	13351			13351										
7	6691	794010		H.D.	3650		3650			8	4.61	16470	16487			16487										
8	6704	797280		5.68	5210		5210			9	5.17	19310	19337			19337										
9	6717	800560		5.88	5570		5570			10	5.31	20050	20073			20073										
10	6724	802330		5.90	5600		5600			11	5.22	19580	19599			19599										
11	6732	804350		5.53	4960		4960			12	4.99	18380	18399			18399										
12	6747	808140		4.49	3360		3360			13	4.62	16520	16539			16539										
13	6758	813440		4.20	2960		2960			14	4.67	16760	16780			16780										
14	6753	819760		4.28	3070		3070			15	4.91	17970	17990			17990										
15	6803	822290		H.D.	6000		6000			16	5.56	21390	21400			21400										
16	6809	823820		6.74	7210		7210			17	5.99	23770	23770			23770										
17	6809	823820		6.76	7250		7250			18	5.85	22990	22997			22997										
18	6809	823820		5.77	5370		5370			19	5.08	18850	18850			18850										
19	6807	823310		4.96	4040		4040			20	4.50	15940	15940			15940										
20	6808	823560		4.34	3150		3150			21	4.13	14220	14220			14220										
21	6818	826100		3.95	2640		2640			22	4.13	14220	14236			14236										
22	6827	828400		4.44	3290		3290			23	4.35	15220	15253			15253										
23	6838	831190		4.33	3130		3130			24	4.34	15180	15206			15206										
24	6847	833480		4.64	3570		3570			25	4.45	15700	15733			15733										
25	6859	836540		4.53	3410		3410			26	4.50	15940	15978			15978										
26	6872	839840		4.53	3410		3410			27	4.62	16520	16553			16553										
27	6883	842640		4.54	3430		3430			28	4.62	16520	16553			16553										
28	6892	844930		4.55	3440		3440			29	4.55	16180	16213			16213										
29	6900	847000		4.89	3940		3940			30	4.67	16760	16794			16794										
30	6900	847000		5.32	4610		4610			JULY 1	4.79	17360	17394			17394										
JULY 1	6896	845950		5.25	4500		4500			2	4.60	16420	16454			16454										
2	6897	846210		4.45	3300		3300			3	4.23	14670	14702			14702										
3	6900	847000		3.94	2630		2630			4	3.92	13290	13323			13323										
4	6897	846210	790	4.44	3290	398	2892			5	3.87	13070	13103	388		12715										
5	6889	844170	2040	4.75	3720	1028	2692			6	3.79	12730	12762	1002		11760										
6	6880	841880	2290	4.62	3540	1155	2385			7	3.57	11820	11850	1126		10724										
7	6870	839340	2540	4.52	3400	1281	2119			8	3.45	11340	11371	1249		10122										
8	6861	837050	2290	4.32	3120	1155	1965			9	3.26	10690	10631	1126		9505										
9	6856	835770	1280	3.87	2540	645	1895			10	3.02	9710	9738	629		9109										
10	6851	834500	1270	3.76	2410	640	1770			11	2.90	9280	9311	624		8687										
11	6846	833230	1270	3.76	2410	640	1770			12	2.86	9140	9171	624		8547										
12	6839	831450	1780	3.87	2540	898	1642			13	2.83	9040	9070	876		8194										
13	6828	828650	2800	4.25	3030	1412	1618			14	2.86	9140	9170	1377		7793										
14	6814	825090	3560	4.61	3530	1795	1735			15	3.02	9710	9741	1750		7991										
15	6796	820510	4580	4.96	4040	2309	1731			16	3.05	9820	9849	2251		7598										
16	6778	814700	5810	5.35	4660	2929	1731	18	4678	17	3.29	10710	10736	2856	18	7862										
17	6761	808140	6560	5.50	4910	3307	1603	32	4942	18	3.39	11100	11123	3224	31	7868										
18	6742	801820	6320	5.49	4890	3186	1704	30	4920	19	3.50	11540	11563	3106	29	8428										
19	6728	795760	6060	5.30	4580	3055	1525	30	4610	20	3.39	11100	11124	2979	29	8116										
20	6715	790000	5760	5.17	4370	2904	1466	30	4400	21	3.19	10330	10354	2831	29	7494										
21	6701	783980	6020	5.22	4450	3035	1415	30	4480	22	3.17	10260	10284	2959	30	7295										
22	6685	777700	6280	5.22	4450	3166	1284	30	4480	23	3.10	10000	10024	3087	29	6908										
23	6668	770690	7010	5.38	4710	3534	1176	30	4740	24	3.04	9780	9804	3446	29	6329										
24	6648	762470	8220	5.72	5280	4144	1136	30	5310	25	3.13	10110	10134	4040	29	6065	4824	104		4889	4553	28	210	2	281	18
25	6632	752760	9710	5.17	6100	4896	1204	30	6130	26	3.33	10870	10896	4773	30	6093	4766	123	0	5130	4572	28	315	2	258	15
26	6614	742820	9940	5.21	6170	5012	1158	30	6200	27	3.41	11180	11204	4887	29	6288	5004	125	0	5292	4416	28	315	2	283	17
27	6594	733450	9370	6.03	5840	4734	1106	30	5870	28	3.27	10640	10663	4616	29	6018	4795	118	0	5428	4418	28	302	2	291	17
25	6570	724030	9400	5.95	5690	4739	951	30	5720	29	3.18	10300	10324	4621	28	5674	4604	118	0	5446	4501	27	307	2	280	17
25	6541	714440	9590	6.00	5780	4835	945	28	5808	30	3.13	10110	10135	4714	28	5593	4521	121	0	5514	4502	23	297	2	284	17
30	6512	704860	9580	6.05	5870	4830	1040	26	5896	31	3.17	10260	10286	4709	25	5552	4390	121	1	4512	4502	23	297	2	284	17
TOTALS			142140		140462	71662	158800	434	230856			842420	843846	69870	423	778553	612950	1792	111	614753	66796	404	30144	19		

DAILY SUMMARY OF DATA AT AND BETWEEN SNAKE RIVER

1929 DATE	DISCHARGE IN SECOND-FEET	HEISE–LORENZO LOSS STOR.	HEISE–LORENZO LOSS TWIN L.	REXBURG GAGE	REXBURG DISCH.	HEISE+RILEY+REXB'G	1929 DATE	DIVERSIONS HEISE–WOODVILLE TOTAL	DIVERSIONS HEISE–WOODVILLE STOR.	DIVERSIONS HEISE–WOODVILLE NOR.	WOOD THEO. BAL.	WOODVILLE GAGE	WOODVILLE DISCH.	WOODVILLE STOR.	WOODVILLE NOR.	LORENZO–WOODVILLE LOSS STOR.	LORENZO–WOODVILLE LOSS TWIN L.	HEISE–WOODVILLE TOTAL GAIN	HEISE–WOODVILLE LOSS STOR.	HEISE–WOODVILLE LOSS TWIN L.	HEISE–WOODVILLE GAIN NOR.	DIVERSIONS WOODVILLE–BL. BR. TOTAL	DIVERSIONS WOODVILLE–BL. BR. STOR.	DIVERSIONS WOODVILLE–BL. BR. NOR.	BL. BR. THEO. BAL.	BLACKFOOT BR. DISCH.	BLACKFOOT BR. STOR.	BLACKFOOT BR. NOR.	WOOD.–BL. BR. TOTAL GAIN	WOOD.–BL. BR. STOR.	WOOD.–BL. BR. LOSS TWIN L.
MAY 30	64			4.08	1530	10357	JUNE 1	6464		6464	4493	6.52	6000		6000			1507			1507	2692		2692	3808							
31	64			4.47	1810	12830	2	5972		5972	6858	7.24	7030		7030			172			172	2875		2875	4155							
JUNE 1	65			5.21	2450	15263	3	5651		5651	9612	7.92	9400		9400			-212			-212	2858		2858	6542							
2	65			5.58	2820	15527	4	5282		5282	10245	8.06	9910		9910			-335			-335	2902		2902	7008							
3	65			5.13	2380	13420	5	5495		5495	7925	7.58	8190		8190			265			265	3016		3016	5174							
4	66			4.52	1850	12509	6	6440		6440	6069	7.25	7200		7200			1131			1131	3148		3148	4052							
5	66			4.29	1680	13320	7	7186		7186	6134	7.22	6970		6970			836			836	3234		3234	3736							
6	66			4.32	1700	15051	8	1678		1678	7373	7.48	7840		7840			467			467	3308		3308	4532							
7	66			4.80	2080	18567	9	7857		7857	10710	8.30	10800		10800			90			90	3456		3456	7344							
8	67			5.17	2420	21757	10	7876		7876	13881	9.01	13500		13500			-381			-381	3464		3464	10036							
9	67			5.60	2840	22913	11	7987		7987	14926	9.32	14710		14710			-216			-216	3478		3478	11237							
10	67			5.96	3200	22799	12	7924		7924	14875	9.40	15020		15020			145			145	3482		3482	11538							
11	67			6.43	3650	22049	13	7960		7960	14089	9.24	14400		14400			311			311	3483		3483	10937							
12	67			6.30	3460	19999	14	7817		7817	12182	8.83	12800		12800			618			618	3510		3510	9290							
13	67			6.45	3550	20330	15	8477		8477	11853	8.77	12580		12580			127			127	3538		3538	9042							
14	67			6.64	3710	21700	16	7861		7861	13839	9.05	13660		13660			-179			-179	3517		3517	10343							
15	68			7.18	4240	25640	17	6658		6658	18982	10.39	19030		19030			48			48	3084		3084	15946							
16	68			8.14	5320	29090	18	5351		5351	23739	11.42	23380		23380			-359			-359	2928		2928	20452							
17	68			8.86	6120	29117	19	4983		4983	24134	11.52	23810		23810			-324			-324	2761		2761	21049							
18	68			8.70	5960	24810	20	5227		5227	19583	10.75	20530		20530			947			947	2564		2564	17966							
19	68			7.88	5020	20960	21	5518		5518	15442	9.84	16780		16780			1338			1338	2517		2517	14263							
20	68			6.60	3590	17810	22	6302		6302	11508	8.90	13070		13070			1562			1562	2666		2666	10404							
21	68			6.08	3070	17306	23	6969		6969	10337	8.56	11780		11780			1443			1443	2731		2731	9049							
22	68			6.08	3110	18363	24	7814		7814	10549	8.57	11820		11820			1271			1271	3189		3189	8631							
23	68			6.27	3340	18548	25	8801		8801	9745	8.25	10620		10620			875			875	3647		3647	6916							
24	68			6.14	3250	18983	26	9237		9237	9746	8.10	10060		10060			314			314	3793		3793	6267							
25	68			6.10	3240	19213	27	9562		9562	9651	8.05	9880		9880			229			229	3892		3892	5988							
26	68			6.12	3270	19823	28	9573		9573	10250	8.16	10280		10280			30			30	3971		3971	6309							
27	68			6.02	3170	19723	29	9850		9850	9873	8.14	10210		10210			337			337	3976		3976	6234							
28	68			5.78	2940	19153	30	9919		9919	9234		10260		10260			1026			1026	3951		3951	6309							
29	69			5.92	3090	19884	JULY 1	10042		10042	9842	8.17	10320		10320			478			478	3961		3961	6359							
30	69			5.93	3110	20504	2	9952		9952	10552	8.34	10950		10950			398			398	3973		3973	6977							
JULY 1	68			5.42	2610	19064	3	9473		9473	9591	8.06	9910		9910			319			319	3655		3655	6255							
2	68			4.92	2160	16862	4	8639		8639	8223	7.68	8540		8540			317			317	3312		3312	5228							
3	68			4.61	1900	15223	5	8670		8670	6553	7.39	7540		7540			987			987	3188		3188	4352							
4	68	17		4.36	1710	14813	6	8516	284	8232	6297	7.22	6970	85	6885	2		673	19		692	3145	21	3124	3825	60						
5	68	44		4.05	1480	14242	7	8052	489	7563	6190	7.18	6800	464	6336	5		610	49		659	3188	64	3124	3612	379						
6	68	50		3.83	1310	13160	8	8011	463	7548	5149	7.01	6220	608	5612	5		1071	55		1126	3231	68	3163	2989	508						
7	68	55		3.64	1190	12561	9	8072	457	7615	4489	6.83	5630	731	4899	6		1141	61		1202	3229	56	3173	2401	634						
8	68	50		3.43	1050	11681	10	7302	320	6982	4379	6.68	5130	751	4379	5		751	55		806	3111	65	3046	2019	665						
9	68	28		3.35	982	10720	11	7074	358	6716	3646	6.56	4760	240	4520	3		1114	31		1145	3166	50	3116	1594	179						
10	68	27		3.25	912	10223	12	7156	388	6768	3061	6.38	4250	206	4044	3		1183	30		1213	3106	50	3056	1144	147	784	213				
11	68	27		3.09	808	9979	13	7139	450	6689	2840	6.23	3870	144	3726	3		1030	30		1060	2996	51	2945	874	84	677	190				
12	68	27		2.96	730	9800	14	7573	514	7059	2227	6.03	3410	320	3090	4		1183	42		1225	2878	55	2823	532	49	249	74				
13	68	38		2.85	665	9835	15	8088	777	7311	1747	5.85	3030	532	2498	7		1283	68		1351	2754	258	2496	276	18	258	153	171			
14	68	61		2.79	620	10361	16	8138	801	7337	2223	5.93	3200	864	2336	8		977	85		1062	2878	300	2578	322	9	330	521	313			
15	68	77		2.72	575	10424	17	8433	902	7531	1991	5.94	3220	1239	1981	11		1229	110		1339	2816	250	2626	344	4	330	592	340			
16	68	99		2.66	557	11293	18	8228	1216	7012	3065	6.20	3800	1517	2283	14	0	735	140	1	876	3114	250	2864	686	85	1191	1105	600			
17	67	126	1	2.69	585	11708	19	8456	1570	6886	3256	6.42	4350	1526	2824	15	0	1098	157	2	1257	3436	250	3186	914	111	1198	716	436			
18	67	142	2	2.66	580	12143	20	8455	1661	6794	3688	6.48	4510	1321	3189	15	0	822	152	1	975	3494	607	2887	1016	111	671	0	345			
19	67	137	1	2.62	570	11794	21	7984	1803	6181	3810	6.45	4430	1059	3371	14	0	620	145	1	766	3501	298	3203	929	115	515	0	214			
20	68	131	1	2.62	570	11794	22	8106	1792	6314	2963	6.31	4070	929	3141	14	0	1107	138	1	1246	3378	925	3053	692	115	515	0	124			
21	68	124	1	2.69	715	11069	23	8088	1804	6279	2936	6.19	3789	1038	2742	14	1	844	144	3	991	3265	648	2617	515	93	361	0	168			
22	68	120	2	2.91	735	11019	24	7952	1747	6205	2797	6.06	3480	1217	2263	15	0	683	151	1	835	3159	1054	2105	321	93	315	0	177			
23	68	130	1	2.86	725	10749	25	8001	1748	6253	2493	5.99	3320	1558	1762	16	0	827	168	1	996	3093	1170	1923	227	93	215	0	217			
24	68	132	1	2.77	690	10494	26	8289	2008	6281	2669	6.02	3590	1863	1527	19	0	721	197	1	919	3111	1568	1543	279	93	215	0	281			
25	68	142	1	3.02	824	10958	27	8352	2079	6273	3264	6.25	3920	2489	1431	23	0	656	233	2	891	3305	1560	1745	615	93	215	0	389			
26	68	178	1	2.81	720	11616	28	8060	2034	6026	3179	6.33	4120	2643	1477	23	0	341	232	1	580	3218	1556	1662	902	93	215	0	389			
27	68	215	1	2.72	635	11839	29	8197	2011	6186	3186	6.22	3885	2407	1443	22	1	114	227	2	341	2822	1561	1261	1028	93	215	0	389			
28	68	208	1	2.58	510	11275	30	8168	2043	6125	2901	6.11	3590	2381	1209	22	0	689	225	1	915	2784	1561	1173	856	93	215	0	389			
29	68	205	1	2.54	445	11069	31	8201	2089	6112	2753	6.09	3550	2422	1128	23	0	797	230	1	1028	2727	1561	1166	523	93	215	0	389			
30	68	201	1	2.47	815	10954	AUG. 1	8199	2120	6079	2906	6.12	3670	2382	1238	23	0	714	230	2	946	2750	1580	1170	870	93	215	0	389			
JULY	207	2		2.96	819	11105		487692	53928	448764	493255		533050	32936	500114	334	2	39795	3408	21	43224	199160	16837	182324	333890	1588						

1929 DETWEEN SNAKE RIVER GAGING STATIONS FROM JACKSON LAKE, WYOMING TO MILNER IDAHO.

DATE 1929	JACKFOOT BR.			WOOD - BL. BR.			CORR. APP'D STOR	CUM. LOSS STOR	BLACKFOOT RIVER		BL. BR CLOUGH THEO. BAL.	CLOUGHS				BL. BR CLOUGH GAIN	WOOD + BL. RIV.	DIVERS WOOD. CLOUGH	WOOD-CLOUGH	
	DISCH.	STOR	NOR.	TOTAL GAIN	LOSS STOR	GAIN NOR	STOR	STOR	GAGE	DISCH.		GAGE	DISCH	STOR	NOR				DIVERS CLOUGH	TOTAL GAIN
MAY 30									532	91		422	3340		3340		6091	2692	3399	-59
31									593	186		475	4360		4360		7216	2875	4241	-19
JUNE 1									628	247		568	6440		6440		9647	2858	6789	-349
2									621	235		576	6640		6640		10145	2902	7243	-603
3									577	159		508	5050		5050		8349	3016	5333	-283
4									508	59		455	3960		3960		7259	3148	4111	-151
5									478	25		436	3600		3600		6895	3234	3761	-161
6									520	74		473	4320		4320		7914	3308	4606	-286
7									586	174		583	6810		6810		10974	3456	7518	-708
8									610	215		683	9590		9590		13715	3464	10251	-661
9									567	143		717	10650		10650		14853	3473	11380	-730
10									554	123		725	10910		10910		15143	3482	11661	-751
11									508	59		704	10240		10240		14459	3463	10996	-756
12									454	14		657	8820		8820		12814	3510	9304	-484
13									448	11		653	8700		8700		12591	3538	9053	-353
14									410	73		707	10330		10330		13783	3317	10416	-86
15									730	433		854	15560		15560		19469	3084	16385	-825
16									803	583		968	20250		20250		23963	2928	21035	-185
17									804	585		978	20760		20760		24395	2761	21634	-874
18									718	410		902	17630		17630		20940	2564	18516	-746
19									610	210		802	13800		13800		16990	2517	14473	-673
20									543	102		695	10180		10180		13172	2666	10506	-326
21									528	80		658	9050		9050		11860	2731	9129	-79
22									521	71		635	8390		8390		11891	3189	8702	-312
23									465	17		571	6680		6680		10637	3647	6990	-310
24									454	12		542	5980		5980		10072	3793	6279	-299
25									449	9		532	5750		5750		9889	3892	5997	-247
26									449	9		540	5930		5930		10289	3971	6318	-388
27									457	12		539	5910		5910		10222	3976	6246	-336
28									470	20		528	5650		5650		10280	3951	6329	-679
29									462	14		544	6030		6030		10334	3961	6373	-343
30									456	12		565	6540		6540		10962	3973	6989	-449
JULY 1									449	9		550	6170		6170		9919	3655	6264	-94
2									443	7		510	5250		5250		8547	3312	5235	15
3									484	28		470	4400		4400		7568	3188	4380	20
4		60			4				499	41		435	3720	60	3660		7011	3145	3866	-146
5		376			24				478	23		427	3560	376	3184		6823	3188	3635	-75
6		508			32				589	167		404	3140	508	2632		6387	3231	3156	-16
7		634			41				610	201		372	2600	634	1966		5831	3229	2602	-2
8		645			41				558	117		336	2050	645	1405		5247	3111	2136	-86
9		179			11				511	53		305	1640	179	1461		4813	3166	1647	-7
10	931	147	784	-213	9	-204			462	14	945	260	1140	147	993	195	4264	3106	1158	-18
11	684	87	597	-190	6	-184			436	4	688	220	800	87	713	112	3874	2996	878	-78
12	458	249	209	-74	16	-58			444	6	464	180	532	249	283	68	3416	2878	538	-6
13	105	258	-153	-171	16	-155	153	-153	453	10	115	137	308	105	203	193	3040	2754	286	22
14	9	530	-521	-313	34	-279	521	-674	456	11	20	117	226	9	217	206	3211	2878	333	-107
15	4	930	-926	-340	59	-281	926	-1600	425	2	6	112	208	4	204	202	3222	2876	346	-138
16	86	1191	-1105	-600	76	-524	1105	-2705	412	1	87	113	212	86	126	125	3801	3114	687	-475
17	481	1199	-718	-433	77	-356	718	-3423	461	13	494	172	486	481	5	-8	4363	3436	927	-441
18	671	671	0	-345	43	-302	0	-3423	529	76	747	210	730	671	59	-17	4586	3494	1092	-362
19	715	715	0	-214	46	-168	0	-3423	536	85	800	222	816	715	101	16	4515	3501	1014	-198
20	568	568	0	-124	36	-88	0	-3423	556	114	682	212	744	568	176	62	4184	3378	806	-62
21	527	367	0	-148	23	-125	0	-3423	510	52	419	179	526	367	159	107	3832	3265	567	-41
22	153	153	0	-168	10	-158	0	-3423	437	4	157	147	354	153	201	197	3484	3159	325	-29
23	430	365	-315	-177	23	-154	315	-3738	424	2	52	123	249	50	199	197	3322	3093	229	-20
24	432	247	-215	-217	18	-199	215	-3953	426	2	64	110	201	62	139	137	3292	3111	281	-80
25	584	378	-539	-281	56	-225	539	-4492	445	7	341	147	354	334	20	13	3927	3305	522	-268
26	718	1022	-304	-189	65	-124	309	-4801	542	94	807	217	779	713	66	-28	4214	3218	936	-217
27	1	785	-784	-260	51	-209	27	-4828	604	191	959	241	969	768	201	10	4041	2824	1219	-250
28	292	171	121	-179	42	-115	79	-4907	467	16	708	218	786	692	94	78	3606	2744	872	-86
29	235	309	-74	-183	52	-136	174	-5081	410	1	636	208	716	635	81	80	3551	2727	824	-103
30	432	154	66	-182	48	-134	66	-5147	430	3	691	213	751	688	63	60	3623	2750	873	-122
TOTALS		15133			966		5147			5824			322267	99868	312281		538877	199160	339717	-17450

DATE 1929	AMERICAN FALLS RESERVOIR																			
	GAGE	STORAGE ACRE FT.																		
JUNE 2	4539.53	1422310																		
3	4526	1418710																		
4	4524	1417680																		
5	4522	1416650																		
6	4513	1412020																		
7	4499	1404840																		
8	4484	1397270																		
9	4478	1391720																		
10	4472	1391220																		
11	4486	1398280																		
12	4502	1406370																		
13	4518	1414600																		
14	4931	1421280																		
15	4941	1426420																		
16	4954	1433110																		
17	4976	1442870																		
18	5009	1461470																		
19	5024	1490270																		
20	5120	1519770																		
21	5160	1541060																		
22	5183	1555970																		
23	5205	1565080																		
24	5217	1571660																		
25	5221	1573770																		
26	5218	1572140																		
27	5216	1571050																		
28	5215	1570510																		
29	5215	1570510																		
30	5215	1570510																		
JULY 1	5213	1569420																		
2	5213	1569420																		
3	5212	1568880																		
4	5206	1565620																		
5	5195	1559700																		
6	5178	1550650																		
7	5160	1541060																		
8	5142	1531430																		
9	5126	1522960																		
10	5109	1513910																		
11	5090	1503880																		
12	5069	1492890																		
13	5046	1480850																		
14	5022	1468280																		
15	4998	1455730																		
16	4976	1442870																		
17	4947	1429510																		
18	4922	1416650																		
19	4896	1403320																		
20	4870	1390210																		
21	4844	1377100																		
22	4819	1364490																		
23	4792	1350950																		
24	4765	1337580																		
25	4736	1323280																		
26	4706	1308380																		
27	4674	1292450																		
28	4643	1277550																		
29	4614	1263550																		
30	4587	1250490																		
31	4561	1238010																		
AUG. 1	4536	1226020																		
2	4511	1214050																		

1929 DE

DATE 1929	RESERVOIR DRAFT ACFT	RESERVOIR DRAFT SECFT	ARB. INFLOW CLOUGH-NEELEY	THEO. BAL. NEELEY	NEELEY GAGE	NEELEY DISCH.	NEELEY STOR.	NEELEY NOR.	LOSS CLOUGH-NEELEY	DATE 1929	LAKE WALCOTT GAGE	LAKE WALCOTT STOR. ACFT	LAKE WALCOTT DRAFT SECFT	N.S. MIN. C. GAGE	N.S. MIN. C. DISCH.	S.S. MIN. C. GAGE	S.S. MIN. C. DISCH.	NS&SS MIN.CAN. TOTAL	NS&SS MIN.CAN. STOR	NS&SS MIN.CAN. NOR	MIN THEO. BAL.	MINIDOKA GAGE	MINIDOKA DISCH.	MINIDOKA STOR	MINIDOKA NOR.	LOSS NEELEY MIN.	DATE 1929
MAY 30	8740	4405	2820	10566	6.65	10700	4540	6160	-134	JUNE 3	4.4473	92040	116	9.90	1550	5.58	1050	2600	874	1726	8216	7.39	1950	3	1.96		
31	3600	1815	2820	8995	6.50	10140	2960	7180	-1145	4	4473	92040	0	9.90	1550	5.58	1050	2580	854	1726	7560	7.12	1760	3	1.96		
JUNE 1	1030	519	2820	9779	6.38	9710	450	9260	69	5	4473	92040	0	9.91	1550	5.62	1060	2610	0	2610	7100	6.59	6800	3	1.96		
2	1030	519	2820	9979	6.40	9780	320	9460	199	6	4475	92270	-116	9.91	1550	5.68	1080	2630	0	2630	7034	7.00	6820	3	1.96		
3	4630	2334	2820	10204	6.40	9780	1910	7870	424	7	4473	92040	116	9.91	1550	5.69	1080	2630	760	1870	7264	7.05	6960	3	1.96		
4	7180	3620	2820	10400	6.39	9740	2960	6780	660	8	4473	92040	0	9.91	1550	5.67	1070	2620	894	1726	7120	7.07	6900	3	1.96		
5	7570	3816	2820	10236	6.39	9740	3320	6420	496	9	4474	92160	-60	9.90	1550	5.68	1080	2630	904	1726	7056	7.01	6850	3	1.96		
6	5550	2798	2820	9938	6.38	9710	2570	7140	228	10	4475	92270	-55	9.90	1550	5.68	1080	2630									
7	500	252	2820	9882	6.38	9710	80	9630	172	11	4475	92270	0	9.90	1550	5.69	1080	2630									
8	-7060	-3559	2820	8851	6.38	9710	0	9710	-859	12	4478	92620	-176	9.91	1550	5.71	1080	2630									
9	-8090	-4079	2820	9391	6.35	9600	0	9600	-209	13	4478	92620	0	9.91	1550	5.69	1080	2630									
10	-8230	-4149	2820	9581	6.31	9450	0	9450	131	14	4478	92620	0	9.90	1550	5.68	1070	2620									
11	-6680	-3368	2820	9692	6.31	9450	0	9450	242	15	4480	92860	-121	9.90	1550	5.68	1070	2620									
12	-5140	-2591	2820	9049	6.32	9490	0	9490	-441	16	4484	93320	-232	H.D.	1250	5.65	1060	2310									
13	-6690	-3518	2820	8147	6.23	9170	0	9170	-1023	17	4494	94490	-590	7.32	949	5.60	1040	1989									
14	-9760	-4920	2820	8230	6.07	8610	0	8610	-380	18	4495	94600	-55	7.34	954	5.52	1020	1974									
15	-18600	-9377	2820	9003	6.04	8510	0	8510	493	19	4497	94840	-121	7.33	952	5.48	1010	1962									
16	-28800	-14520	2820	8550	5.99	8340	0	8340	210	20	4497	94840	0	7.34	954	5.49	1010	1964									
17	-29500	-14873	2820	8707	6.00	8370	0	8370	337	21	4497	94840	0	7.64	1020	5.49	1000	2020									
18	-21290	-10734	2820	9716	5.96	8240	0	8240	1476	22	4494	94490	176	8.07	1120	5.50	1000	2120									
19	-14910	-7517	2820	9103	5.85	7860	0	7860	1243	23	4485	93440	529	8.24	1160	5.49	997	2157	297	1860	6282	6.74	6110	110	5000	122	
20	-9110	-4593	2820	8407	5.84	7830	0	7830	577	24	4472	91920	766	8.48	1210	5.47	991	2201	310	1830	6395	6.81	6300	300	6000	95	
21	-6580	-3317	2820	8553	5.85	7860	0	7860	693	25	4457	90180	877	8.98	1330	5.49	994	2324	464	1860	6416	6.83	6350	350	6000	63	
22	-2110	-1064	2820	10146	6.00	8370	0	8370	1776	26	4443	88550	822	9.17	1570	5.67	1040	2410	40	2370	6782	6.98	6740	740	6000	42	
23	1630	822	2820	10322	6.18	9000	0	9000	1322	27	4443	88550	0	9.38	1420	5.76	1060	2480	0	2480	6559	6.88	6490	490	6000	69	
24	1090	550	2820	9350	6.17	8960	160	8800	390	28	4443	88550	0	9.49	1450	5.77	1060	2510	0	2510	6450	6.86	6410	120	6090	40	
25	540	272	2820	8842	6.09	8680	110	8570	162	29	4438	87960	297	9.61	1480	5.78	1060	2540	0	2540	6457	6.85	6380	350	6030	57	
26	0	0	2820	8750	6.03	8470	0	8470	280	30	4429	86920	524	9.67	1490	5.78	1050	2540	70	2470	6454	6.86	6410	410	6000	44	
27	0	0	2820	8730	6.03	8470	0	8470	260	JULY 1	4420	85870	529	9.69	1500	5.79	1050	2550	0	2550	6449	6.86	6410	490	5920	39	
28	1090	549	2820	9019	6.02	8440	0	8440	579	2	4431	87150	-645	9.69	1500	5.77	1040	2540	0	2540	5255	H.D.	5230	610	5900	25	
29	0	0	2820	8850	(6.02)	8440	0	8440	410	3	4440	88200	-529	9.84	1530	5.76	1030	2560	120	2440	5351	H.D.	5300	700	5000	51	
30	540	272	2820	9632	6.17	8960	0	8960	672	4	4437	87850	176	9.88	1540	5.77	1030	2570	0	2570	6566	6.90	6520	130	6390	46	
JULY 1	3260	1644	2820	10634	6.33	9490	500	8990	1144	5	4437	87850	0	9.89	1540	5.78	1010	2550	0	2550	6940	7.04	6910	470	6440	30	
2	5920	2985	2820	11055	6.49	10070	2000	8070	985	6	4444	88660	-408	9.92	1550	5.74	1010	2560	490	2070	7102	7.09	6960	960	6000	142	
3	9050	4563	2820	11783	6.62	10550	3330	7220	1233	7	4456	90060	-705	9.90	1550	5.79	1020	2570	844	1726	7274	7.10	7080	1580	5500	194	
4	9590	4835	2820	11375	6.60	10480	4000	6480	895	8	4467	91340	-545	9.90	1550	5.78	1010	2560	834	1726	7245	7.07	6990	2250	4740	285	
5	9580	4830	2820	11210	6.51	10140	4136	6004	1070	9	4474	92160	-413	9.90	1550	5.79	1010	2560	834	1726	7151	6.97	6910	2452	4458	451	
6	8520	4295	2820	10255	6.32	9450	3998	5452	805	10	4474	92160	0	9.89	1540	5.77	994	2534	808	1726	6916	6.95	6660	2934	3726	256	
7	9050	4563	2820	9983	6.32	9450	4665	4785	533	11	4474	92160	0	9.98	1570	5.81	1000	2570	1185	1385	6880	6.94	6630	3230	3400	250	
8	10030	5057	2820	9927	6.32	9450	5225	4225	477	12	4471	91810	176	10.04	1580	5.83	1000	2580	1755	825	7045	6.99	6770	3370	3400	245	
9	10990	5541	2820	10001	6.32	9450	5169	4281	551	13	4467	91340	237	10.08	1580	5.83	994	2574	1693	881	7115	7.01	6820	3420	3400	295	
10	12040	6070	2820	10030	6.32	9450	5637	3813	580	14	4466	91240	55	10.08	1580	5.82	988	2568	2155	413	6957	6.94	6650	3250	3400	307	
11	12570	6337	2820	9957	(6.30)	9380	5847	3533	577	15	4565	91110	61	10.04	1580	5.85	991	2571	2438	133	6870	6.92	6540	3140	3400	330	
12	12550	6327	2820	9679	(6.31)	9420	6317	3103	259	16	4460	90530	292	10.04	1580	5.91	1000	2580	2580	0	7182	7.02	6820	3710	3110	312	
13	12860	6483	2820	9511	6.32	9450	6427	3024	161	17	4457	90180	176	10.04	1580	5.94	1010	2590	2590	0	7056	6.99	6740	3440	3316	274	
14	13360	6736	2820	9782	6.31	9380	6343	3037	402	18	4454	89830	176	10.04	1580	5.97	1010	2590	2590	0	6946	6.98	6710	3310	3402	255	
15	12860	6483	2820	9511	6.30	9350	6326	3024	161	19	4451	89480	176	10.05	1580	6.02	1020	2600	2600	0	6936	6.98	6710	3310	3402	216	
16	13330	6720	2820	9752	6.30	9350	6404	2946	402	20	4448	89130	176	10.02	1570	6.06	1020	2590	2590	0	6854	6.97	6690	3290	3402	174	
17	13110	6610	2820	9916	6.38	9630	6805	2825	286	21	4451	89480	176	10.04	1580	6.05	1020	2600	2600	0	7014	7.02	6820	3420	3402	194	
18	13110	6610	2820	10160	6.42	9780	6901	2879	380	22	4454	89830	176	10.04	1580	6.05	1010	2590	2590	0	6914	7.01	6800	3300	3500	174	
19	12510	6358	2820	9994	6.41	9740	6819	2921	254	23	4457	90180	176	10.05	1580	6.07	1010	2580	2580	0	6934	7.00	6770	3270	3500	154	
20	13340	6826	2820	10390	6.40	9710	6714	2996	680	24	4469	90539	176	10.05	1580	6.06	1000	2590	2590	0	7004	7.01	6800	3300	3500	204	
21	13370	6741	2820	10087	6.40	9710	6731	2979	377	25	4462	90760	116	10.07	1590	6.05	1000	2580	2580	0	7014	7.03	6850	3350	3500	241	
22	14350	7235	2820	10409	6.40	9710	6689	3021	699	26	4464	90990	116	10.06	1580	6.07	1010	2580	2590	0	7148	7.09	6940	3540	3402	198	
23	11660	5874	2820	10536	6.49	10030	6911	3119	526	27	4469	91570	292	10.06	1580	6.04	997	2587	2587	0	7115	7.01	6900	3500	3400	215	
24	15560	7839	2820	10901	6.56	10290	7331	2959	511	28	4478	92240	590	10.07	1590	6.07	1020	2610	2610	0	7095	7.00	6910	3510	3400	220	
25	15100	7613	2820	10787	6.56	10290	7450	2840	497	29	4488	93900	585	10.07	1590	6.07	1030	2610	2610	0	7090	7.00	6910	3510	3400	241	
26	14760	7439	2820	10718	6.56	10290	7404	2886	428	30	4499	95070	590	10.06	1580	6.07	1050	2630	2630	0	7088	6.99	6740	3340	3402	246	
27	14560	7338	2820	10568	6.47	9910	6959	3021	408	31	4503	95550	242	10.06	1580	6.07	1060	2590	2590	0	7091	7.02	6820	3420	3400	216	
28	12910	6274	2820	9960	6.47	9560	6646	2914	333	AUG 1	4501	95310	121	(9.95)		6.05	1070	2620	2620	0	6960	6.91	6690	3270	3420	181	
29	12070	6045	2820	9581	6.47	9560	6659	2901	21	2	4503	95550	121	(9.95)		6.00	1080	2620	2620	0	6960	6.91	6690	3270	3420	181	
30	11660	5845	2820	9616	6.32	9380	6497	2883	236	3	4503	95550	0	9.97	1440												
													-1654		91219			63858	155115	63725	8558	43447		41203	10	12591		
				581240		192200	389040	25281																			

PLATE NO. VIII

DAT 192	P.A. STOR.	P.A. NOR.	LOSS NEELEY MIN.	DATE 1929	LAKE MILNER GAGE	P.A. LATER. GAGE	P.A. LATER. DISCH.	N.S.T.F. CAN. GAGE	N.S.T.F. CAN. DISCH.	P.A. LAT. & N.S.T.F. CAN. TOTAL	P.A. LAT. & N.S.T.F. CAN. STOR.	P.A. LAT. & N.S.T.F. CAN. NOR.	S.S.T.F. CANAL GAGE	S.S.T.F. CANAL DISCH.	S.S.T.F. CANAL STOR.	S.S.T.F. CANAL NOR.	MILNER L.L.CAN. GAGE	MILNER L.L.CAN. DISCH.	MILNER L.L.CAN. STOR.	MILNER L.L.CAN. NOR.	MILNER THEO. BAL.	MILNER GAGE	MILNER DISCH.	MILNER STOR.	MILNER NOR.	MIN. MILNER GAIN
MAY	5516	4434	266	JUNE 4	10.93	1.94	56	8.74	3120	3176	1742	1434	10.31	3500	500	3000	2.14	126	126	0	-1148	H.D.	1080	1080	0	-68
	5706	5451	400	5	11.04	1.94	56	8.76	3120	3176	722	2454	10.33	3510	510	3000	2.04	118	118	0	-356	3.41	221	221	0	-135
JUNE	6150	6650	300	6	11.10	1.94	56	8.78	3120	3176	56	3120	10.35	3530	0	3530	2.03	117	117	0	-23	3.17	171	171	0	-154
	6510	6830	214	7	11.07	1.94	56	8.79	3120	3176	0	3176	10.36	3530	0	3530	2.27	136	12	124	-22	4.04	412	412	0	434
	5960	6000	306	8	11.05	1.94	56	8.79	3110	3166	166	3000	10.37	3540	540	3000	2.28	137	137	0	-117	3.08	154	154	0	-37
	5046	4694	310	10	11.03	1.94	56	8.77	3100	3156	1102	2054	10.33	3510	510	3000	H.D.	108	108	0	-26	3.62	415	415	0	749
	5436	5414	175	11	11.13	1.94	56	8.76	3090	3146	1452	1694	10.32	3510	510	3000	2.21	131	131	0	-47	(3.53	203	203	0	230
	5740	7000	120	12	11.10	1.93	55	8.82	3100	3155	0	3155	10.36	3530	530	3000	2.21	131	131	0	-23	3.50	157	157	0	174
	6310	7080	134	13	11.03	1.93	55	8.77	3070	3125	0	3125	H.D.	3250	0	3250	2.21	130	0	130	425	(4.41	571	106	465	746
	6290	6970	290	14	11.07	1.94	56	8.76	3070	3126	0	3126	H.D.	2600	0	2600	2.23	130	0	130	915	4.17	464	0	464	-451
	6200	6830	200	15	11.07	1.92	55	8.78	3080	3135	0	3135	10.32	3510	0	3510	2.28	129	0	129	-85	2.52	78	0	78	163
	6150	6830	29	16	11.09	1.83	49	8.84	3110	3159	0	3159	10.35	3530	0	3530	2.23	129	0	129	-164	2.74	104	0	104	268
	6410	7180	178	17	11.09	1.94	56	8.76	3070	3126	0	3126	10.22	3440	0	3440	H.D.	119	0	119	-38	4.72	782	0	782	770
	6861	7181	271	18	11.00	1.96	57	8.79	3080	3137	0	3137	10.03	3330	0	3330	2.29	134	0	134	180	3.54	251	0	251	-71
	6336	6636	281	19	11.03	1.95	56	8.66	3010	3066	0	3066	10.01	3320	0	3320	2.13	121	0	121	-258	3.76	310	0	310	568
	6308	6548	187	20	11.03	1.94	56	8.82	3100	3156	0	3156	9.93	3270	0	3270	2.06	115	0	115	-151	2.48	70	0	70	221
	6475	6775	76	21	11.03	1.94	56	8.74	3050	3106	0	3106	10.01	3320	0	3320	2.32	136	64	72	-372	3.19	169	169	0	541
	6130	6350	130	22	10.95	1.94	56	8.74	3040	3096	36	3060	9.90	3250	0	3250	H.D.	115	95	20	-171	2.30	52	52	0	225
	6170	6320	106	23	11.03	1.94	56	8.77	3050	3106	106	3000	9.96	3290	0	3290	2.20	128	128	0	-294	2.20	43	43	0	337
	6110	6000	122	24	11.06	1.94	56	8.80	3060	3116	116	3000	9.58	3120	180	3120	2.19	129	129	0	-345	(2.20	43	43	0	388
	6300	6000	95	25	11.00	1.94	56	8.76	3020	3076	76	3000	10.01	3320	320	3000	2.23	133	133	0	-459	(2.72	96	96	0	555
	6350	6000	63	26	11.01	1.93	55	8.63	2950	3005	5	3000	10.09	3370	370	3000	H.D.	48	48	0	-194	2.95	126	126	0	320
	6140	6000	42	27	11.09	1.92	55	8.81	3050	3105	105	3000	10.08	3360	360	3000	2.21	133	133	0	-148	(2.50	70	70	0	218
	6150	6520	60	28	10.94	1.92	55	8.79	3030	3085	45	3040	10.27	3480	480	3000	2.23	134	134	0	-21	(2.62	84	84	0	63
	6120	6290	40	29	10.98	1.92	55	8.73	3000	3055	55	3000	10.28	3480	0	3480	H.D.	112	112	0	-247	2.93	110	110	0	347
	6350	6030	57	30	11.00	1.92	55	8.71	2990	3045	45	3000	10.24	3460	170	3290	2.22	134	134	0	-239	2.27	48	48	0	287
	6410	6000	44	JULY 1	11.01	1.92	55	8.77	3020	3075	75	3000	10.27	3480	480	3000	2.22	134	134	0	-279	2.14	38	38	0	317
	6490	5920	35	2	10.96	1.92	55	H.D.	2520	2575	0	2575	10.28	3480	135	3345	H.D.	105	105	0	250	2.16	40	40	0	-210
	6670	5900	25	3	10.94	1.92	55	H.D.	781	836	0	836	10.19	3430	0	3430	2.24	135	0	135	829	4.05	416	0	416	413
	6700	6000	51	4	10.90	H.D.	14	8.56	3080	3094	94	3000	10.28	3480	480	3000	2.25	136	136	0	-1410	1.85	25	25	0	1435
	6130	5390	46	5	11.05	H.D.	7	8.57	3080	3087	87	3000	10.34	3520	130	3390	2.13	126	126	0	-2215	1.72	20	20	0	255
JULY	6470	6440	30	6	11.13	1.94	56	8.70	3150	3206	206	3000	10.46	3590	150	3440	2.12	126	126	0	-2	2.24	50	50	0	82
	6350	6000	142	7	11.12	1.94	56	8.62	3110	3166	166	3000	10.39	3550	550	3000	2.11	125	125	0	-19	2.25	51	51	0	-68
	6534	5434	194	8	11.03	1.94	56	8.76	3180	3236	742	2494	10.45	3590	590	3000	2.38	146	146	0	-108	4.30	520	520	0	412
	6252	4752	285	9	11.05	1.94	56	8.74	3170	3226	1472	1754	10.45	3590	590	3000	2.37	162	162	0	-12	2.38	63	63	0	51
	6452	4478	457	10	11.02	1.94	56	8.69	3150	3206	1928	1278	10.45	3590	590	3000	2.36	158	158	0	-244	2.06	36	36	0	280
	6934	3726	256	11	11.00	1.94	56	8.67	3140	3196	2470	726	10.44	3580	580	3000	2.34	159	159	0	-275	1.96	31	31	0	306
	6230	3400	250	12	11.01	1.94	56	8.67	3140	3196	2796	400	10.44	3580	580	3000	2.33	158	158	0	-304	1.96	31	31	0	335
	6310	3400	276	13	11.05	1.94	56	8.72	3160	3216	2816	400	10.47	3600	600	3000	H.D.	128	128	0	-174	2.15	43	43	0	217
	6420	3400	293	14	11.01	1.94	56	8.78	3170	3226	2826	400	10.48	3610	610	3000	H.D.	135	135	0	-151	2.26	52	52	0	206
	6320	3400	307	15	10.99	1.94	56	8.78	3170	3226	2826	400	10.47	3600	600	3000	2.57	162	162	0	-358	2.20	47	47	0	405
	6140	3400	350	16	11.00	1.92	55	8.71	3160	3215	2815	400	10.45	3590	590	3000	2.57	162	162	0	-427	2.12	40	40	0	467
	6117	3103	312	17	11.00	1.92	55	8.72	3160	3215	2850	365	10.47	3600	862	2738	H.D.	142	142	0	-137	2.20	47	47	0	184
	6111	3025	296	18	11.00	1.91	54	8.78	3170	3224	2868	356	10.43	3610	943	2667	2.05	120	120	0	-214	2.16	43	43	0	257
	6318	3037	256	19	11.04	1.92	55	8.75	3160	3215	2876	357	10.49	3610	930	2680	2.07	122	122	0	-257	2.28	54	54	0	311
	6212	3024	216	20	11.02	1.93	55	8.69	3150	3205	2849	356	10.44	3580	912	2668	2.28	138	138	0	-213	1.98	32	32	0	245
	6224	2435	156	21	11.04	1.94	56	8.75	3180	3236	2889	347	10.47	3600	1001	2599	H.D.	124	124	0	-190	2.12	40	40	0	239
	6255	2482	174	22	11.05	1.93	55	8.75	3160	3215	2905	352	10.47	3600	1107	2493	2.24	159	159	0	-314	2.10	39	39	0	353
	6241	2479	194	23	11.08	1.92	55	8.78	3200	3255	2916	339	10.49	3610	1070	2540	H.D.	152	152	0	-197	2.34	59	59	0	255
	6179	2435	174	24	11.06	1.93	55	8.77	3170	3225	2881	344	10.47	3600	1023	2577	2.24	167	167	0	-192	2.28	54	54	0	246
	6104	2283	154	25	11.06	1.92	55	8.77	3160	3215	2862	353	10.48	3610	966	2644	2.23	166	166	0	-221	2.24	50	50	0	271
	6241	2179	204	26	11.08	1.93	55	8.72	3120	3175	2825	350	10.45	3590	961	2629	2.23	166	166	0	-311	1.93	31	31	0	342
	6182	2041	141	27	11.10	1.93	55	8.75	3120	3175	2820	355	10.47	3600	934	2666	2.24	167	167	0	-92	2.04	35	35	0	127
	6121	2119	208	28	11.10	1.93	55	8.80	3130	3185	2818	367	10.51	3630	878	2752	2.23	166	166	0	-241	2.51	62	62	0	103
	6084	2113	213	29	11.10	1.93	55	8.80	3110	3165	2817	348	10.51	3630	1019	2611	2.23	166	166	0	-161	2.73	68	68	0	229
	6150	2216	234	30	11.05	1.94	56	8.77	3100	3156	2822	334	10.51	3630	1124	2505	2.23	166	166	0	-192	2.60	65	65	0	247
	6187	2242	220	31	11.08	1.93	55	8.79	3080	3135	2795	340	10.50	3620	1074	2546	2.22	150	150	0	-255	2.69	74	74	0	329
	6141	2241	241	AUG. 1	11.10	1.94	56	8.80	3080	3136	2781	355	10.51	3630	964	2666	H.D.	131	131	0	-55	2.79	70	70	0	255
	6174	2241	241	2	11.09	1.94	56	8.80	3080	3136	2775	361	10.45	3610	1039	2571	2.24	182	182	0	-43	3.55	208	208	0	251
	6141	2241	241	3	11.08	1.94	56	8.79	3050	3106	2765	341	10.45	3610	1050	2560	2.24	183	183	0	-119	2.23	43	43	0	227
	6147	2241	241	4	11.07	1.94	56	8.78	3030	3086	2747	339	10.48	3610	1066	2544	2.36	144	144	0	-210	2.16	43	43	0	253
	6250	5000	2491				3549		189431	192780	81759	11102		216940	31588	185352		8417	7059	1358	-6057		87688	58938	26890	44345

DISTRIBUTION WATER DISTRICT NO 36

DATE 1929	JACKSON LAKE			MORAN				TWIN LAKES		DATE 1929	HEISE						MORAN - HEISE			LORENZO	HEISE-LORENZO	REXBURG			
	GAGE	STO AC/FT	DRAFT AC/FT	GAGE	DISCH	STOR	NOR	DISCH	+MORAN		GAGE	DISCH	+RILEY	STOR'D	TWIN LAKES	NOR	TOTAL GAIN	LOSS STOR	LOSS EVAP	GAIN NOR	STORD	TWIN LAKES	GAGE	DISCH	STORAGE
JULY 31	5.93	695300	9560																						
AUG 1	5.93	685540	9760	6.17	6100	4820	1280	23	6123	AUG 1	326	10600	10624	4700	22	5902	4501	120		4622	4493	21	20		
2	5.93	675790	9750	6.22	6190	4921	1269	21	6211	2	332	10830	10854	4798	20	6036	4643	126		4769	4587	19	21		
3	5.93	666080	9710	6.14	6040	4916	1124	21	6061	3	322	10450	10474	4793	20	5661	4413	131		4537	4582	19	21		
4	6.40	658090	7990	6.07	5910	4898	1014	20	5930	4	318	10300	10324	4774	20	5530	4394	122		4516	4564	19	21		
5	6.06	649860	8230	5.98	5790	4149	1241	17	5407	5	317	10260	10281	3927	19	6335	4571	101		4672	3754	18	17		
6	6.04	642150	7710	5.55	4990	3887	1103	15	5005	6	309	9960	9978	4045	17	5916	4511	104		4615	3867	19	18		
7	6.04	635420	6730	5.10	4260	3393	867	15	4275	7	292	9350	9367	3790	14	5563	4362	97		4460	3623	13	16		
8	6.01	628920	6500	4.95	4020	3277	743	15	4035	8	277	8830	8849	3308	15	5526	4574	85		4659	3163	14	15		
9	5.99	622200	6720	4.97	4060	3388	672	12	4072	9	259	8230	8247	3195	15	5037	4212	82		4294	3054	14	14		
10	5.98	615520	6680	4.95	4020	3368	652	10	4030	10	256	8130	8148	3303	12	4833	4076	85		4161	3158	11	15		
11	5.93	608590	6930	5.08	4230	3494	736	10	4240	11	253	8040	8058	3284	9	4765	4028	84	1	4113	3140	9	14	0	24
12	5.92	600950	7640	5.27	4530	3852	678	10	4540	12	254	8070	8088	3407	10	4671	3848	87		3935	3257	9	15	1	26
13	5.88	592880	8070	5.42	4770	4069	701	10	4780	13	259	8230	8248	3756	10	4482	3708	96		3804	3591	10	16	0	27
14	5.82	584340	8540	5.49	4890	4305	585	10	4900	14	266	8460	8478	3967	10	4501	3698	102		3800	3792	10	17	0	28
15	5.76	575810	8530	5.51	4920	4300	620	10	4930	15	271	8620	8633	4197	10	4426	3753	108		3841	4012	10	18	0	29
16	5.72	567800	8010	5.41	4750	4038	712	10	4760	16	270	8590	8598	4192	10	4396	3668	108		3775	4008	9	18	0	28
17	5.74	560020	7780	5.35	4660	3922	738	10	4670	17	268	8520	8527	3937	9	4581	3767	101	1	3869	3764	9	16	0	25
18	5.83	552020	8000	5.35	4660	4033	627	10	4670	18	266	8460	8466	3824	10	4632	3796	98		3894	3658	10	16	0	26
19	5.81	544060	7960	5.35	4660	4013	647	10	4670	19	265	8420	8425	3932	10	4483	3755	101		3856	3759	9	17	1	27
20	5.77	536110	7950	5.33	4630	4008	622	10	4640	20	262	8330	8336	3918	9	4414	3666	100	1	3767	3741	9	16	0	25
21	5.82	527930	8180	5.37	4690	4124	566	10	4700	21	258	8200	8206	3908	10	4298	3566	100		3666	3736	10	17	0	27
22	5.89	520260	7670	5.27	4530	3867	663	10	4540	22	258	8200	8206	4021	10	4175	3506	103		3609	3844	10	17	0	27
23	5.92	512820	7440	5.18	4390	3751	639	10	4400	23	259	8230	8239	3770	10	4459	3699	97		3796	3604	9	16	1	26
24	5.95	505400	7420	5.16	4350	3741	609	10	4360	24	255	8100	8111	3657	9	4445	3711	94	1	3806	3496	9	16	1	26
25	5.96	498470	6930	5.04	4160	3494	666	10	4170	25	250	7940	7952	3647	10	4295	3592	94		3686	3487	9	16	0	25
26	5.93	492470	6000	5.00	4100	3025	1075	10	4110	26	245	7780	7792	3407	10	4375	3622	87		3709	3257	10	15	0	25
27	5.90	485780	6690	4.97	4060	3373	687	10	4070	27	243	7720	7732	2949	10	4773	3622	76		3698	2819	10	13	0	23
28	5.86	479340	6440	4.93	4000	3247	753	10	4010	28	241	7660	7672	3289	10	4373	3602	84		3686	3144	9	14	1	24
29	5.82	473620	5720	4.83	3840	2884	956	10	3850	30	238	7570	7582	2812	10	4760	3732	72		3804	2688	9	12	1	22
30	5.80	467430	6190	4.80	3800	3121	679	10	3810	31	233	7420	7431	3043	9	4379	3621	78	1	3700	2909	9	13	0	22
31	5.80	461010	6420	4.79	3780	3237	543	7	3787	SEPT 1	228	7270	7281	3156	7	4118	3494	81		3575	3017	7	13	0	20
SEPT 1	5.74	454640	6370	4.80	3800	3211	589	4	3804	2	233	7420	7430	3131	4	4295	3626	80		3706	2993	4	13	0	17
2	5.75	449410	5230	4.80	3800	2636	1164	2	3802	3	248	7880	7893	2570	2	5521	4091	66		4157	2457	2	11	0	15
3	5.74	443270	6140	4.80	3800	3096	704	0	3800	4	248	7880	7892	3019	0	4873	4092	77		4169	2886		13		23
4	5.97	437140	6130	4.69	3640	3091	549		3640	5	238	7570	7579	3014		4565	3939	77		4016	2881		13		23
5	5.72	431500	5640	4.45	3360	2844	516		3360	6	232	7390	7390	2773		4617	4030	71		4101	2651		12		22
6	5.51	426760	4740	4.16	2910	2390	520		2910	7	227	7240	7240	2330		4910	4330	60		4390	2227		10		21
7	5.34	422930	3830	3.78	2430	1931	499		2430	8	2.11	6790	6790	1883		4907	4360	48		4408	1800		8		16
8	5.18	419320	3610	3.61	2230	1820	410		2230	9	1.92	6270	6270	1774		4496	4040	45		4086	1696		7		15
9	5.04	416160	3160	3.40	2000	1593	407		2000	10	1.80	5960	5960	1553		4407	3960	40		4000	1485		6		14
10	5.93	413690	2470	3.10	1680	1245	435		1680	11	1.66	5600	5600	1214		4386	3920	31		3951	1161		5		13
11	5.85	411910	1780	2.74	1340	897	443		1340	12	1.53	5280	5280	874		4406	3940	23		3963	836		3		13
12	5.80	410790	1120	2.26	942	565	377		942	13	1.42	5010	5010	551		4459	4068	14		4082	527		2		14
13	5.78	410340	450	1.76	588	227	361		588	14	1.24	4590	4590	221		4369	4002	6		4008	211		1		14
14	5.78	410340	0	1.36	391		391		391	15	1.08	4240	4241			4241	3850			3850					
15	5.78	410340	0	1.36	391		391		391	16	0.97	4010	4011			4011	3620			3620					
16	5.78	410340	0	1.33	376		376		376	17	0.95	3960	3961			3961	3585			3585					
17	5.78	410340	0	1.27	348		348		348	18	0.92	3900	3901			3901	3553			3553					
18	5.73	409220	1120	H.D	913	565	348		913	19	0.89	3840	3840	551		3289	2927	14		2941	527		24		
19	5.57	405640	3580	3.49	2100	1805	295		2100	20	1.37	4890	4890	1760		3130	2790	45		2835	1682		78		
20	5.43	402510	3130	3.71	2350	1578	772		2350	21	1.86	6120	6120	1539		4581	3770	39		3809	1471		68		
21	5.32	400060	2450	3.69	2320	1235	1085		2320	22	1.90	6220	6220	1204		5016	3900	31		3931	1151		52		
22	5.21	396700	3360	3.70	2340	1694	646		2340	23	1.85	6090	6090	1652		4438	3750	42		3792	1579		76		
23	5.03	393570	3130	3.57	2180	1578	602		2180	24	1.83	6040	6040	1539		4501	3860	39		3899	1471		68		
24	4.91	390910	2660	3.12	1700	1341	359		1700	25	1.64	5550	5550	1307		4243	3850	34		3884	1250		57		
25	4.83	388800	1110	2.77	1360	560	800		1360	26	1.52	5250	5250	546		4704	3890	14		3904	522		24		
26	4.79	390910		1.95	731		731		731	27	1.41	4980	4980			4980	4249			4249					
27	4.82	392010		1.41	415		415		415	28	1.14	4370	4370			4370	3955			3955					
28	4.82	392110		0.59	100		100		100	29	1.05	4180	4181			4181	4081			4081					
TOTAL			457200		430067	230505	199562	836	430903			127537.0	127729.4	22474.2	81.5	105173.7	84639.1	576.3	21	85275	24853	779	588		

DAILY SUMMARY OF DATA AT AND BETWEEN SNAKE RIVE

DATE 1929	HEISE–LORENZO JA	GAGE	REXBURG GAGE	REXBURG DISCH	MARKT LAKE SPGS	HEISE+ RILEY+ REXBG	DATE 1929	DIVERSIONS HEISE–WOODVILLE TOTAL	DIVERSIONS HEISE–WOODVILLE STOR.	DIVERSIONS HEISE–WOODVILLE NOR.	WOOD. THEO. BAL.	WOODVILLE GAGE	WOODVILLE DISCH	WOODVILLE STOR	WOODVILLE NOR.	LORENZO WOODVILLE LOSS STOR TWNT	HEISE–WOODVILLE TOTAL GAIN	HEISE–WOODVILLE LOSS STOR	HEISE–WOODVILLE GAIN STOR	DIVERSIONS WOODVILLE–BLACKFOOT BR. TOTAL	DIVERSIONS WOODVILLE–BLACKFOOT BR. STOR	DIVERSIONS WOODVILLE–BLACKFOOT BR. NOR.	BL.BR THEO BAL	BLACKFOOT BR. DISCH	BLACKFOOT BR. STOR	BLACKFOOT BR. NOR.	WOODVI
AUG 31			237	770		11594	AUG 2	8283	2187	6096	3111	645	3920	2304	1616	21	191	210		1740	1176	564	1450				
AUG 1	51		317	934		11788	3	8053	2066	5987	3735	639	4520	2317	1803	21	385	234		1820	1618	1211	1421				
2	50		329	1010		11484	4	7962	2014	5948	3522	643	4450	2564	1886	21	928	234		1163	1755	1582	1178				
3	48	1	324	976		11300	5	7786	1923	5863	3514	645	4450	2497	1953	23	1076	233		1310	2116	1552	1184				
4	48	1	325	982		11263	6	7656	1810	5846	3607	645	4560	2617	1943	2677	19	0	1013	192		1205	2529	1493	206	1921				
5	50		329	1010		10988	7	7575	1589	5986	3413	638	4450	2274	2156	19	1	017	191	2	216	2965	1432	243	1765				
6	50		317	934		10301	8	7579	1556	6023	2722	620	3970	2062	1908	18	0	1246	185		1434	2625	1040	585	1245				
7	66		300	841		9690	9	7277	1429	5848	2413	604	3550	1742	1858	16	0	1177	161		1339	2344	805	539	1246				
8	61		285	760		9007	10	7126	1308	5818	1881	582	3110	1745	1365	15	0	1229	156		1386	2249	728	521	861				
9	65		278	700		8848	11	7007	1276	5731	1841	570	2880	1877	1003	16	0	1039	161		1201	2111	1028	1083	769				
10	54	0	264	655		8713	12	6923	1354	5569	1790	562	2740	1778	961	16	0	950	160	0	1110	2024	947	1077	716				
11	50	1	268	675		8763	13	7014	1583	5431	1749	558	2670	1667	1003	16	0	921	166	1	1088	2005	953	1052	665				
12	55	0	277	720		8968	14	7056	1770	5286	1912	562	2740	1813	927	18	0	828	183	0	1011	2008	949	1059	732				
13	55	0	286	765		9243	15	7075	1806	5269	2168	574	2960	1977	983	19	0	792	194	0	986	1945	891	1054	1015				
14	54	1	289	780		9413	16	6906	1874	5032	2507	584	3150	2128	1022	20	0	643	205	0	848	2134	1084	1050	1016				
15	53	0	293	802		9378	17	6670	1814	4856	2708	589	3260	2183	1077	20	0	552	204	1	757	2263	1230	1033	997				
16	53	0	297	824		9329	18	6597	1834	4763	2732	602	3550	1920	1630	19	0	818	192	0	1010	2199	1179	1020	1351				
17	52	1	305	868	3	9296	19	6638	1849	4789	2652	607	3660	1799	1861	18	0	1008	186	0	1194	2187	1169	1018	1473				
18	52	0	301	852	3	9191	20	6385	1609	4776	2911	608	3680	2140	1540	15	0	769	192	1	962	2122	1121	1001	1558				
19	52	0	302	868	3	9077	21	6436	1544	4892	2755	610	3730	2187	1543	19	0	975	191	0	1166	2025	1056	969	1705				
20	57	0	303	880	3	9089	22	6427	1513	4914	2650	608	3680	2214	1466	19	0	1030	191	0	1221	2002	1012	990	1678				
21	56	1	303	890	3	9132	23	6455	1209	5246	2634	609	3710	2625	1085	19	1	1076	196	1	1273	2051	1058	992	1659				
22	51	0	308	924	3	9038	24	6338	1182	5156	2794	609	3710	2413	1297	18	0	916	184	1	1101	2108	1109	999	1602				
23	50	1	309	940	3	8895	25	6401	1242	5159	2637	607	3660	2245	1415	18	0	1023	179	0	1202	2068	1106	962	1592				
24	50	0	308	946	3	8741	26	6341	1231	5110	2554	605	3620	2248	1372	17	0	1066	177	1	1244	1808	839	969	1812				
25	50	0	316	1000	3	8765	27	6232	804	5428	2509	600	3500	2447	1053	16	0	991	166	0	1157	1735	758	977	1765				
26	50	1	323	1050	3	8725	28	6119	652	5467	2616	602	3550	2163	1387	14	0	934	144	0	1078	1717	775	942	1833				
27	50	0	328	1090	3	8765	29	6092	657	5435	2633	604	3590	2480	1110	16	0	957	161	1	1119	1732	790	942	1858				
28	51	1	335	1140	3	8725	30	6143	674	5469	2622	604	3590	2348	1242	15	0	968	154	0	1122	1724	791	933	1866				
29	4	1	336	1160	3	8594	31	5989	610	5379	2736	608	3680	2074	1606	13	0	944	137	1	1082	1931	983	948	1749				
30	4	0	346	1220	3	8594	SEPT 1	5893	604	5289	2701	606	3640	2299	1341	15	0	939	149	0	1088	1974	1063	911	1666				
31	3	0	348	1230	3	8503	2	5889	533	5356	2614	605	3620	2476	1144	15	0	1006	154	0	1160	1947	1039	908	1678				
SEPT 1	3	0	351	1250	3	8663	3	6046	495	5551	2617	610	3730	2487	1243	15	0	1113	153	0	1266	2077	950	1127	1653				
2	3		344	1200	3	9095	5	5783	433	5300	3362	639	4450	2439	2011	14		1088	147		1235	2376	642	1734	2074				
3	3		342	1190	3	8772	6	5569	389	5180	3203	636	4380	2478	1902	14		1177	147		1324	2284	618	1666	2096				
4	2		343	1200	4	8594	7	5527	410	5117	3097	631	4250	2228	2022	13		1183	135		1318	2249	525	1724	2001				
5	3		341	1190	4	8434	8	5261	323	4938	3178	630	4220	1893	2327	11		1047	114		1161	2259	125	2134	1961				
6	3		339	1170	4	7964	9	5058	78	4980	2906	625	4100	1713	2387	9		1194	92		1286	2188	0	2188	1912				
7	3		349	1230	4	7504	10	4665	171	4494	2889	615	3850	1516	2334	9		1011	87		1098	2195	0	2195	1655				
8	3		361	1310	4	7274	11	4571	50	4521	2703	611	3750	1428	2322	7		1047	75		1122	2192	0	2192	1553				
9	3		377	1410	4	7014	12	4486	49	4437	2528	601	3520	1106	2414	6		992	59		1051	2201	0	2201	1319				
10	3		375	1400	4	6684	13	4341	49	4292	2343	587	3220	783	2437	4		877	42		919	2179	0	2179	1041				
11	4		356	1290	5	6305	14	4138	50	4088	2167	570	2880	474	2406	3		713	27		740	2133	0	2133	747				
12	3		340	1200	5	5795	15	4133	49	4084	1662	550	2530	161	2369	1		868	11		879	2041	0	2041	489				
13	3		328	1130	5	5376	16	4145	0	4145	1231		2210	0	2210			979			979	1965	0	1965	245				
14	3		308	1020	5	5036	17	4207	0	4207	829		1900	0	1900			1071			1071	1864	0	1864	36				
15	3		303	994	6	4961	18	4355	0	4355	606		1580	0	1580			974			974	1523	0	1523	51				
16	3		298	970	6	4877	19	4504	0	4504	373	448	1260	0	1260			887			887	1337	0	1337	– 77				
17	4		297	970	6	4816	20	4696	403	4283	130		1330	121	1209	3		1200	27		1227	1157	121	1036	178				
18	5		310	1050	6	5946	21	5069	370	4699	877	462	1400	1304	96	8		523	86		609	1193	335	858	207				
19	5		353	1310	6	7436	22	4830	320	4510	2606	557	2650	1144	1506	7		44	75		119	1534	601	933	1116				
20	5		399	1620	6	7846	23	4375	239	4135	3471	623	4040	906	3134	6		569	59		628	1820	0	1820	2220				
21	5		407	1680	6	7776	24	4002	39	3964	3774	646	4650	1533	3117	8		876	81		957	1603	0	1603	3047				
22	5		401	1630	4	7674	25	3411	0	3411	4263	658	4980	1464	3516	7		717	75		792	1549	0	1549	3431				
23	5		390	1560	4	7114	26	3203	0	3203	3911	654	4870	1244	3626	6		959	63		1022	1531	0	1531	3339				
24	5		387	1540	3	6793	27	3090	0	3090	3703	648	4700	519	4181	3		997	27		1024	1531	0	1531	3169				
25	5		397	1600	3	6583	28	3003	0	3003	3580	644	4590	0	4590			1010			1010	1531	0	1531	3059				
26	5		405	1670	3	6043	29	2837	0	2837	3206	634	4320	0	4320			1114			1114	1435	0	1435	2885				
27	5		402	1640	3	5824	30	2692	0	2692	3132	625	4100	0	4100			968			968	1403	0	1403	2692				
BOTTOM																											
	36		19750	163	147458		82482	83442	14384	650132		74625	131113	61513	7	1074	4	96118	10963	40	107121	820368	55903	264455	425882				

1929 [BET]WEEN SNAKE RIVER GAGING STATIONS FROM JACKSON LAKE, WYOMING TO MILNER IDAHO

DATE 1929	BLACKFOOT BR. DISCH.	STOR.	NOR.	WOODV.-BLK. BR. TOTAL GAIN	LOSS STOR.	GAIN NOR.	CORR. APP'D STOR.	CUM. LOSS STOR.	BLACKFOOT RIVER GAGE	DISCH.	BL. BR. CLOUGH THEO. BAL.
JULY 31	336	686	250	-214	44	-170	-250	-4897	4.53	10	946
AUG. 1	253	845	408	-238	54	-184	-408	-4489	4.45	7	1260
2	320	890	430	-335	57	-278	-430	-4059	4.52	9	1329
3	496	982	514	-318	63	-255	-514	-3545	4.96	37	1533
4	506	423	1083	-415	27	-388	-1083	-2462	4.39	5	1511
5	445	791	654	-320	51	-269	-654	-1808	4.34	4	1449
6	163	961	202	-182	61	-121	-202	-1606	4.97	37	1200
7	012	871	141	-234	56	-178	-141	-1465	5.10	50	1062
8	649	956	-307	-212	61	-151	307	-1772	4.95	34	683
9	548	798	-250	-221	51	-170	250	-2022	4.90	28	576
10	541	782	-241	-175	50	-125	241	-2263	5.19	58	599
11	537	671	-134	-128	43	-85	134	-2397	5.11	47	584
12	504	812	-308	-228	52	-176	308	-2705	4.97	33	537
13	661	1021	-360	-354	65	-289	360	-3065	4.98	33	694
14	751	981	-230	-265	63	-202	230	-3295	5.12	45	796
15	808	896	-88	-189	57	-132	88	-3383	5.02	35	843
16	107	697	410	-244	44	-200	-410	-2973	5.08	41	1148
17	236	592	644	-237	38	-199	-644	-2329	5.18	52	1288
18	292	958	334	-266	61	-205	-334	-1995	5.22	57	1349
19	384	1063	321	-321	68	-253	-321	-1674	5.38	77	1461
20	415	1130	285	-263	72	-191	-285	-1389	5.23	58	1473
21	374	1472	-98	-285	94	-191	98	-1487	5.13	46	1420
22	375	1226	149	-227	78	-149	-149	-1338	5.17	51	1426
23	340	1071	269	-252	68	-184	-269	-1069	5.02	35	1375
24	522	1324	198	-290	85	-205	-198	-871	5.20	54	1576
25	512	1588	-76	-253	101	-152	76	-947	5.22	57	1569
26	528	1305	223	-305	83	-222	-223	-724	4.99	33	1561
27	564	1589	-25	-294	101	-193	25	-749	4.90	26	1590
28	548	1464	84	-318	93	-225	-84	-665	4.85	22	1570
29	425	1026	399	-324	65	-259	-399	-266	4.75	16	1441
30	364	1162	202	-302	74	-228	-202	-64	4.72	16	1380
31	415	1351	64	-258	86	-172	-64	0	5.03	42	1457
SEPT. 1	445	1445	0	-208	92	-116	0	0	5.58	120	1565
2	539	1539	0	-350	98	-252	0	0	6.23	233	1772
3	689	1689	0	-385	108	-277	0	0	6.45	278	1967
4	709	1748	-39	-387	112	-275	-39	-39	6.61	308	2017
5	640	1601	39	-361	102	-259	39	0	6.31	253	1893
6	662	1662	0	-299	106	-193	0	0	6.10	215	1877
7	610	1610	0	-302	103	-199	0	0	6.10	215	1825
8	425	1425	0	-230	91	-139	0	0	5.73	153	1578
9	344	1342	2	-214	86	-128	0	0	5.36	96	1440
10	144	1040	104	-175	66	-109	0	0	4.90	39	1183
11	921	736	185	-120	47	-73	0	0	4.57	15	936
12	665	446	219	-82	28	-54	0	0	4.50	12	677
13	377	151	226	-112	10	-102	0	0	4.67	21	398
14	147	0	147	-98		-98	0	0	4.31	5	152
15	15	0	15	-21		-21	0	0	4.02	1	16
16	0	0	0	-57		-57	0	0	4.00	1	1
17	0	0	0	77		77	0	0	4.00	1	1
18	0	0	0	-173	0		0	0	4.00	1	1
19	0	911	-911	-207	58		911	-911	H.D.	19	19
20	501	510	-9	-615	33		9	-920	H.D.	358	859
21	772	852	920	-448	54		920	0	(7.83)	543	2315
22		1441			92		0	0	6.82	348	
23		1376			88		0	0	6.27	246	
24		1169			75		0	0	5.62	135	
25		488			31		0	0	5.62	135	
26									5.66	142	
27									5.50	117	
28									5.66	142	
TOTALS		70698			4512					11134	

DATE 1929	CLOUGHS GAGE	DISCH.	STOR.	NOR.	BL. BR. CLOUGH GAIN	WOODV. + BL. RIV.	DIVERS. WOODV. CLOUGH	WOOD-CLOUGH UNDER CLOUGH	TOTAL GAIN
JULY 31	2.45	1000	936	64	54	3230	2770	1160	-50
AUG. 1	2.76	1330	1253	77	70	4327	2829	[illegible]	[illegible]
2	2.92	1480	1320	160	151	4459	2795	1664	-184
3	3.05	1640	1496	144	107	4627	2776	1851	-211
4	3.07	1660	1506	154	149	4625	2699	1926	-266
5	3.01	1590	1445	145	141	4434	2665	1769	-179
6	2.77	1320	1163	157	120	4097	2625	1382	-92
7	2.63	1170	1012	158	108	3640	2344	1296	-125
8	2.28	864	649	215	181	3144	2249	835	-31
9	2.06	702	548	154	126	2908	2111	797	-95
10	2.03	681	541	140	82	2798	2024	774	-93
11	1.90	594	537	57	10	2717	2005	712	-118
12	1.90	594	504	90	57	2773	2008	765	-171
13	2.18	786	661	125	92	2993	1945	1048	-262
14	2.28	864	751	113	68	3195	2134	1061	-197
15	2.30	880	808	72	37	3295	2253	1032	-152
16	2.65	1190	1107	83	42	3591	2199	1392	-202
17	2.81	1360	1236	124	72	3712	2187	1525	-165
18	2.87	1430	1292	138	81	3737	2122	1615	-185
19	2.97	1540	1384	156	79	3807	2025	1782	-242
20	3.02	1600	1415	185	127	3738	2002	1736	-136
21	2.95	1520	1374	146	100	3756	2051	1705	-185
22	2.95	1520	1375	145	94	3761	2108	1653	-133
23	2.92	1480	1340	140	105	3695	2068	1627	-147
24	3.09	1690	1522	168	114	3674	1808	1866	-176
25	3.10	1700	1512	188	131	3557	1735	1822	-22
26	3.10	1700	1528	172	139	3583	1717	1866	-166
27	3.15	1760	1564	196	170	3616	1732	1884	-24
28	3.13	1740	1548	192	170	3612	1724	1888	-148
29	3.04	1630	1425	205	189	3696	1931	1765	-135
30	2.93	1500	1364	136	120	3656	1974	1682	-182
31	3.04	1630	1415	215	173	3662	1947	1715	-85
SEPT. 1	3.10	1700	1445	255	135	3850	2077	1773	-73
2	3.39	2100	1539	561	328	4403	2281	2122	-22
3	3.60	2410	1689	721	443	4728	2376	2352	58
4	3.62	2440	1709	731	423	4688	2284	2404	36
5	3.49	2240	1640	600	347	4503	2249	2254	-14
6	3.49	2240	1662	578	363	4435	2259	2176	64
7	3.45	2180	1610	570	355	4315	2188	2127	53
8	3.22	1860	1425	435	282	4003	2195	1808	52
9	3.08	1680	1342	338	240	3846	2192	1654	26
10	2.85	1400	1040	360	217	3559	2201	1358	42
11	2.60	1140	736	404	204	3235	2179	1056	84
12	2.28	864	446	418	187	2892	2133	759	105
13	1.97	640	151	489	242	2551	2041	510	130
14	1.53	383	0	383	231	2215	1965	250	133
15	1.25	257	0	257	241	1901	1864	37	220
16	1.10	201	0	201	200	1581	1523	58	143
17	1.07	191	0	191	190	1261	1337	-76	267
18	1.08	195	0	195	194	1331	1157	174	21
19	1.12	208	0	208	189	1419	1193	226	-18
20	1.84	557	501	56	-358	3008	1534	1474	-917
21	3.57	2360	1772	588	45	4583	1820	2763	-403
22	4.07	3200	1441	1759		4998	1603	3395	-195
23	4.26	3540	1376	2164		5226	1549	3677	-137
24	4.15	3340	1169	2171		5005	1531	3474	-134
25	4.09	3230	488	2742		4835	1531	3304	-74
26	4.06	3180	0	3180		4732	1531	3201	-21
27	3.93	2950	0	2950		4437	1435	3002	-52
28	3.86	2830	0	2830		4242	1408	2834	-4
TOTALS		413928	70698	343230		757384	320368	437016	-23089

DATE 1929	AMERICAN FALLS RESERVOIR GAGE	STORAGE A.F.	DRA[FT]	[ST]OR.	NOR.	L.L. CAN. STOR	NOR
AUG. 3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	4465	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0
5	4444	1182380	[illegible]	[illegible]	[illegible]	[illegible]	0
6	4423	1172490	[illegible]	[illegible]	[illegible]	[illegible]	0
7	4403	1163070	[illegible]	[illegible]	[illegible]	[illegible]	0
8	4382	1153360	[illegible]	[illegible]	[illegible]	144	0
9	4360	1143220	[illegible]	[illegible]	[illegible]	144	0
10	4337	1132620	[illegible]	[illegible]	[illegible]	[illegible]	0
11	4313	1121550	[illegible]	[illegible]	[illegible]	143	0
12	4287	1109700	[illegible]	[illegible]	[illegible]	143	0
13	4259	1109070	[illegible]	[illegible]	[illegible]	145	0
14	4231	1084450	[illegible]	[illegible]	[illegible]	[illegible]	0
15	4203	1071820	[illegible]	[illegible]	2910	118	0
16	4176	1059910	[illegible]	[illegible]	[illegible]	141	0
17	4150	1048460	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	4124	1037010	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	4099	1026020	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	4074	1015230	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	4049	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	4025	994260	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	4002	984390	[illegible]	[illegible]	3005	[illegible]	[illegible]
24	3978	974350	10040	[illegible]	[illegible]	138	[illegible]
25	3955	964750	9600	[illegible]	2965	138	[illegible]
26	3932	955150	9600	[illegible]	[illegible]	[illegible]	[illegible]
27	3910	945970	9180	[illegible]	[illegible]	[illegible]	[illegible]
28	3888	[illegible]	[illegible]	[illegible]	3009	122	[illegible]
29	3870	929670	[illegible]	[illegible]	2992	127	[illegible]
30	3853	922800	6810	[illegible]	3016	125	[illegible]
31	3835	915510	[illegible]	[illegible]	3012	133	[illegible]
SEPT. 1	3818	908640	6870	[illegible]	3025	134	[illegible]
2	3799	900970	7670	[illegible]	2956	[illegible]	[illegible]
3	3781	893910	7060	[illegible]	3035	118	[illegible]
4	3763	886650	7260	3635	3075	116	[illegible]
5	3747	880570	6080	3099	3381	[illegible]	[illegible]
6	3733	875080	5490	2710	3400	[illegible]	[illegible]
7	3719	869590	5490	[illegible]	3400	[illegible]	[illegible]
8	3704	863710	5880	2940	3400	[illegible]	[illegible]
9	3689	857950	5760	[illegible]	3398	[illegible]	[illegible]
10	3673	851850	6100	[illegible]	3390	[illegible]	[illegible]
11	3656	845370	6480	[illegible]	3255	[illegible]	[illegible]
12	3640	839270	6100	[illegible]	3158	[illegible]	[illegible]
13	3625	833560	5710	[illegible]	3180	[illegible]	[illegible]
14	3608	827080	6480	[illegible]	3224	[illegible]	[illegible]
15	3590	820320	6760	[illegible]	3238	[illegible]	[illegible]
16	3571	813280	7040	[illegible]	3309	121	[illegible]
17	3546	804020	[illegible]	[illegible]	3203	[illegible]	[illegible]
18	3520	794380	[illegible]	[illegible]	3077	[illegible]	[illegible]
19	3494	784810	9570	[illegible]	3021	[illegible]	[illegible]
20	3469	775790	9020	[illegible]	3011	101	[illegible]
21	3447	767860	[illegible]	[illegible]	3015	[illegible]	[illegible]
22	3424	759560	8300	[illegible]	3028	100	[illegible]
23	3402	751630	[illegible]	[illegible]	2876	[illegible]	[illegible]
24	3387	746360	[illegible]	[illegible]	3400	[illegible]	[illegible]
25	3376	742490	[illegible]	[illegible]	3421	[illegible]	[illegible]
26	3367	739330	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	3365	738630	[illegible]	0	[illegible]	[illegible]	[illegible]
28	3372	741090	[illegible]	0	[illegible]	[illegible]	[illegible]
29	3376	743200	[illegible]	0	2830	[illegible]	[illegible]
30	3399	750570	[illegible]	0	2150	[illegible]	[illegible]
OCT. 1	3428	761010	[illegible]	0	2040	[illegible]	[illegible]
TOTALS			6700	[illegible]	[illegible]	[illegible]	[illegible]

1928

DAT	RESERVOIR		THEO. BAL.	ARR. INFLOW CLOUGH	NEELEY				LOSS CLOUGH	DATE	LAKE WALCOTT			N.S. MIN. C.		S.S. MIN. C.		N.S. & S.S. MIN. CANS			MIN. THEO.	MINIDOKA				LOSS NEELEY	DATE
1928		DRAFT	NEELEY	NEELEY	GAGE	DISCH.	STOR.	NOR.	NEELEY	1929	GAGE	STORAGE	DRAFT	GAGE	DISCH.	GAGE	DISCH.	TOTAL	STOR	NOR	BAL.	GAGE	DISCH	STOR	NOR	MIN.	
JULY	30	5510	9330	2820	626	9140	6256	2884	190	AUG. 4	4.2450	91310	121	9.31	1420	5.51	1100	2520	2520	0	6411	6.66	6.540	3.75	2.65	2.15	2.15
AUG.	30	5460	9610	2820	627	9170	6273	2897	440	5	4.500	95160	66	9.26	1390	5.57	1090	2480	2480	0	6426	6.66	6540	3.75	2.65	2.15	2.15
	30	4986	9286	2820	626	9100	6120	2980	186	6	4.497	94840	171	9.34	1410	5.57	1090	2500	2500	0	6771	6.57	6.540	3.75	2.65	2.15	2.15
	30	4986	9446	2820	625	9030	6066	2964	416	7	4.491	94140	353	9.41	1440	5.60	1100	2540	2540	0	6843	6.91	6.540	3.75	2.65	2.15	2.15
	20	4749	9229	2820	624	8960	5986	2974	269	8	4.484	93320	414	9.37	1420	5.57	1090	2510	2510	0	6803	6.91	6.520	3.75	2.65	2.15	2.15
	10	4895	9305	2820	624	8960	5995	2965	345	9	4.478	92620	353	9.26	1390	5.51	1080	2470	2470	0	6843	6.91	6.520	3.75	2.65	2.15	2.15
	40	5112	9252	2820	625	8960	5983	2977	292	10	4.473	92040	292	9.28	1390	5.88	1070	2460	2420	0	6792	6.95	6.460	3.75	2.65	2.15	2.15
	00	5344	9334	2820	623	8890	5912	2978	444	11	4.469	91570	237	9.25	1390	5.87	1060	2450	2450	0	6671	6.95	6.460	3.75	2.65	2.15	2.15
	70	5581	9265	2820	623	8890	5855	3035	375	12	4.465	91110	232	9.25	1390	5.87	1060	2450	2450	0	6672	6.91	6.520	3.75	2.65	2.15	2.15
	50	5974	9496	2820	630	9140	6166	2974	356	13	4.465	91110	0	9.27	1390	5.88	1070	2460	2460	0	6680	6.96	6.490	3.75	2.65	2.15	2.15
	30	6368	9869	2820	636	9350	6390	2960	519	14	4.469	91570	-232	9.38	1400	5.88	1070	2470	2470	0	6648	6.94	6.430	3.75	2.65	2.15	2.15
	20	6363	9777	2820	634	9280	6403	2877	497	15	4.471	91810	-121	9.51	1410	5.87	1060	2470	2470	0	6689	6.96	6.490	3.75	2.65	2.15	2.15
	30	6368	9782	2820	634	9240	6330	2910	542	16	4.471	91810	0	9.52	1410	5.87	1060	2470	2470	0	6710	6.97	6.520	3.75	2.65	2.15	2.15
	10	6005	9611	2820	634	9240	6295	2945	371	17	4.472	91920	-55	9.53	1420	5.87	1060	2480	2480	0	6705	6.95	6.460	3.75	2.65	2.15	2.15
	50	5773	9457	2820	633	9170	6237	2933	287	18	4.473	92040	-60	9.52	1410	5.87	1060	2470	2470	0	6640	6.93	6.410	3.75	2.65	2.15	2.15
	50	5773	9473	2820	633	9170	6278	2892	303	19	4.474	92160	-60	9.51	1410	5.87	1060	2470	2470	0	6640	6.96	6.490	3.75	2.65	2.15	2.15
	90	5541	9551	2820	635	9200	6297	2903	351	20	4.476	92390	-116	9.42	1390	5.86	1060	2450	2450	0	6634	6.96	6.430	3.75	2.65	2.15	2.15
	80	5410	9590	2820	635	9170	6226	2944	420	21	4.479	92740	-176	9.29	1360	5.86	1060	2420	2420	0	6574	6.95	6.460	3.75	2.65	2.15	2.15
	80	5410	9660	2820	634	9140	6182	2958	520	22	4.480	92860	-60	9.40	1390	5.87	1060	2450	2450	0	6630	6.95	6.460	3.75	2.65	2.15	2.15
	00	5193	9553	2820	633	9060	6084	2976	493	23	4.479	92740	60	9.52	1410	5.86	1060	2470	2470	0	6650	6.98	6.540	3.75	2.65	2.15	2.15
	70	4976	9396	2820	633	9060	6055	3005	336	24	4.479	92740	0	9.52	1410	5.83	1050	2460	2460	0	6600	6.98	6.540	3.75	2.65	2.15	2.15
	40	5062	9402	2820	630	8960	5994	2966	442	25	4.478	92620	60	9.52	1410	5.83	1050	2460	2460	0	6560	6.95	6.460	3.75	2.65	2.15	2.15
	00	4840	9180	2820	629	8920	5955	2965	260	26	4.476	92390	116	9.38	1380	5.82	1050	2430	2430	0	6606	6.96	6.490	3.75	2.65	2.15	2.15
	00	4840	9140	2820	628	8890	5930	2960	250	27	4.474	92160	116	9.17	1330	5.82	1050	2380	2380	0	6626	6.96	6.490	3.75	2.65	2.15	2.15
	80	4628	9138	2820	627	8860	5872	2988	278	28	4.474	92160	0	9.17	1330	5.82	1050	2380	2380	0	6480	6.91	6.350	3.75	2.65	2.15	2.15
	20	4548	9068	2820	623	8720	5712	3008	348	29	4.476	92390	-116	9.17	1330	5.83	1050	2380	2380	0	6224	6.79	6.030	3.75	2.65	2.15	2.15
	80	3670	8190	2820	606	8130	5138	2992	60	30	4.471	91810	292	9.14	1320	5.82	1050	2370	2370	0	6052	6.72	5.840	2.85	2.92	2.15	2.15
	70	3464	8044	2820	597	7830	4814	3016	214	31	4.462	90760	529	9.11	1320	5.80	1040	2360	2360	0	5999	6.70	5.820	2.84	3.016	2.15	2.15
	90	3675	8235	2820	597	7830	4818	3012	405	SEPT. 1	4.452	89600	585	9.06	1300	5.79	1040	2340	2340	0	6075	6.72	5.870	2.858	3.012	2.15	2.15
	70	3464	7914	2820	597	7830	4805	3025	84	2	4.440	88200	706	9.04	1300	5.75	1030	2330	2330	0	6206	6.78	6.060	3.085	3.025	2.15	2.15
	70	3867	8187	2820	596	7800	4844	2956	387	3	4.428	86800	706	9.01	1290	5.76	1030	2320	2320	0	6186	6.77	6.060	3.104	2.956	2.15	2.15
	60	3559	8009	2820	596	7800	4765	3035	209	4	4.417	85520	645	9.02	1300	5.77	1030	2330	2330	0	6115	6.75	6.030	2.985	3.045	2.15	2.15
	60	3660	8180	2820	593	7700	4625	3075	480	5	4.411	84820	353	8.98	1290	5.75	1030	2320	2320	0	5783	6.63	5.710	2.835	3.015	2.15	2.15
SEPT.	60	3065	7985	2820	590	7600	4219	3381	385	6	4.410	84700	60	8.81	1250	5.55	911	2221	2221	0	5439	6.49	5.380	1.999	3.381	2.15	2.15
	90	2768	7958	2820	591	7630	4089	3541	368	7	4.413	85050	-176	8.82	1250	5.49	954	2204	2063	141	5250	6.41	5.210	1.810	3.400	2.15	2.15
	90	2768	8028	2820	590	7600	4049	3551	428	8	4.419	85750	353	8.67	1220	5.49	954	2174	2023	151	5073	6.35	5.060	1.660	3.400	2.15	2.15
	80	2965	8025	2820	591	7630	4210	3420	395	9	4.423	86220	-237	8.51	1180	5.52	962	2142	2122	20	5251	6.41	5.240	1.840	3.400	2.15	2.15
	60	2904	7964	2820	591	7630	4232	3398	334	10	4.430	87030	-408	8.45	1160	5.52	962	2122	2122	0	5100	6.34	5.090	1.692	3.398	2.15	2.15
	00	3075	8075	2820	590	7600	4210	3390	475	11	4.440	88200	-590	8.12	1090	5.51	959	2049	2049	0	4961	6.24	4.870	1.480	3.390	2.15	2.15
	80	3267	7947	2820	589	7570	4315	3255	377	12	4.453	89710	-761	7.98	1060	5.54	968	2028	2028	0	4781	6.12	4.590	1.355	3.265	2.15	2.15
	00	3075	7575	2820	576	7150	3992	3158	425	13	4.461	90640	-469	8.01	1060	5.53	965	2025	2025	0	4656	6.06	4.470	1.312	3.158	2.15	2.15
	10	2879	7099	2820	566	6840	3660	3180	259	14	4.465	91110	-237	8.02	1070	5.47	948	2018	2018	0	4585	6.08	4.540	1.350	3.190	2.15	2.15
	80	3267	7227	2820	565	6800	3576	3224	427	15	4.469	91570	-232	8.04	1070	5.43	937	2007	2007	0	4561	6.09	4.540	1.348	3.192	2.15	2.15
	60	3408	7092	2820	563	6740	3502	3238	352	16	4.469	91570	0	8.05	1070	5.36	917	1987	1987	0	4753	6.18	4.780	1.52	3.260	2.15	2.15
	40	3549	7009	2820	567	6870	3561	3309	139	17	4.458	90290	645	8.05	1070	5.23	881	1951	1951	0	5564	6.55	5.710	2.01	3.700	2.15	2.15
	60	4669	7872	2820	590	7600	4397	3203	272	18	4.467	91340	-529	7.90	1040	5.20	873	1913	1913	0	5158	6.42	5.380	2.10	3.280	2.15	2.15
	40	4860	7937	2820	590	7600	4523	3077	337	19	4.476	92390	-529	7.83	1020	5.22	878	1898	1898	0	5175	6.41	5.380	2.09	3.290	2.15	2.15
	70	4825	7846	2820	589	7570	4549	3021	276	20	4.491	94140	-882	7.34	936	5.19	870	1806	1806	0	4882	6.45	5.480	2.09	3.390	2.15	2.15
	20	4548	7559	2820	588	7540	4529	3011	19	21	4.502	95430	-650	6.65	806	H.D	760	1566	1566	0	5324	6.61	5.920	2.98	3.411	2.15	2.15
	30	3998	7013	2820	588	7540	4525	3015	-527	22	4.506	95910	-242	6.66	808	H.D	594	1402	1402	0	5896	6.73	6.240	3.05	3.190	2.15	2.15
	00	4185	7213	2820	586	7470	4442	3028	-257	23	4.506	95910	0	6.48	770	H.D	493	1263	1263	0	6207	6.82	6.520	3.06	3.460	2.15	2.15
	30	3998	7375	2820	592	7670	4794	2876	-295	24	4.508	96150	-121	6.40	753	3.35	435	1188	1188	0	6361	6.82	6.520	3.04	3.480	2.15	2.15
	70	2657	7837	2820	594	7730	4322	3408	107	25	4.506	95910	121	6.41	755	3.23	413	1168	1160	8	6683	6.91	6.770	3.31	3.621	2.15	2.15
	70	1951	7971	2820	594	7730	3151	4579	241	26	4.512	96630	-363	6.42	757	3.15	401	1158	0	1158	6209	6.67	6.140	2.91	3.230	2.15	2.15
	60	1593	7953	2820	594	7730	2746	4984	223	27	4.542	100250	-1825	6.45	764	3.00	374	1138	0	1138	4767	H.D	4.520	2.38	2.142	2.15	2.15
	00	353	6513	2820	550	6340	1349	4991	178	28	4.564	102900	-1336	6.45	764	2.87	350	1114	0	1114	3890	5.52	3.480	1.82	1.662	2.15	2.15
	60	-1240	4810	2820	490	4610	0	4610	200	29	4.555	101810	549	6.43	759	2.86	348	1107	0	1107	4052	5.60	3.640	1.91	1.771	2.15	2.15
	10	-1064	4936	2820	490	4610	0	4610	326	30	4.558	102170	-182	6.43	759	2.86	348	1107	0	1107	3321	5.15	2.830	1.57	1.251	2.15	2.15
	70	-3716	2054	2820	H.D.	1640	0	1640	414	OCT. 1	4.525	98200	2001	6.38	749	2.68	316	1065	0	1065	2367	4.63	2.040	1.21	0.830	2.15	2.15
	40	-5263	587	2820	EST.	150	0	150	287	2	4.470	91690	32282	6.38	749	2.68	316	1065	0	1065							
1101A		040	33781	2	1095760	344044		1053020	475803	577217	42760					292		162308		118013	280321	185857	94464	17299		154170	2651

PLATE NO. IX

1928 A DAT	SER.	NOR.	LOSS NEELEY MIN.	DATE 1929	LAKE MILNER GAGE	P.A. LATER. GAGE	P.A. LATER. DISCH.	N.S.T.F. CAN. GAGE	N.S.T.F. CAN. DISCH.	P.A.LAT.&N.S.T.F. CAN. TOTAL	P.A.LAT.&N.S.T.F. CAN. STOR.	P.A.LAT.&N.S.T.F. CAN. NOR.	S.S.T.F. CANAL GAGE	S.S.T.F. CANAL DISCH	S.S.T.F. CANAL STOR.	S.S.T.F. CANAL NOR.	MILNER L.L.CAN. GAGE	MILNER L.L.CAN. DISCH	MILNER L.L.CAN. STOR.	MILNER L.L.CAN. NOR.	MILNER THEO. BAL.	MILNER GAGE	MILNER DISCH.	MILNER STOR.	MILNER NOR.	MIN. MILNER GAIN
1928	3058	2884	201	AUG 5	11.12	1.94	56	8.78	3040	3096	2757	339	10.50	3620	10775	2545	2.36	144	144	0	-320	231	56	56	0	376
	3043	2897	216	6	11.14	1.94	56	8.81	3060	3116	2775	341	10.50	3620	10764	2556	2.37	145	145	0	-341	249	65	65	0	406
AUG 30	3060	2980	231	7	11.08	1.94	56	8.75	3020	3076	2725	351	10.47	3600	9711	2629	2.37	145	145	0	-281	208	38	38	0	319
	3090	2976	303	8	11.08	1.94	56	8.78	3040	3096	2747	349	10.47	3600	9585	2615	2.37	145	145	0	-301	215	43	43	0	344
	3090	2946	2914	345	9	11.05	1.94	56	8.75	3020	3076	2726	350	10.47	3600	9576	2624	2.37	144	144	0	-300	206	36	36	0	336
	3120	3055	2965	323	10	11.06	1.94	56	8.76	3030	3086	2737	349	10.47	3600	9984	2616	2.37	144	144	0	-310	208	38	38	0	348
	3110	3083	2977	332	11	11.07	1.94	56	8.78	3040	3096	2746	350	10.48	3610	9983	2627	2.40	146	146	0	-392	229	54	54	0	446
	3140	3082	2978	217	12	11.11	1.94	56	8.80	3050	3106	2756	350	10.50	3620	9992	2628	2.36	143	143	0	-409	238	63	63	0	472
	3100	3085	3035	152	13	11.10	1.94	56	8.84	3070	3126	2769	357	10.50	3620	9942	2678	2.36	143	143	0	-369	245	70	70	0	459
	3110	3116	2974	190	14	11.07	1.94	56	8.81	3060	3116	2766	350	10.49	3610	9986	2624	2.38	145	145	0	-381	224	50	50	0	431
	3150	3170	2960	218	15	11.07	1.95	56	8.74	3020	3076	2728	348	10.44	3580	9968	2612	2.36	142	142	0	-368	191	28	28	0	396
	3130	3213	2877	199	16	11.08	1.95	56	8.78	3040	3096	2758	338	10.47	3600	10611	2539	2.35	140	140	0	-346	201	33	33	0	379
	3120	3210	2910	250	17	11.08	1.96	57	8.80	3050	3107	2765	342	10.48	3610	10422	2568	H.D.	118	118	0	-315	232	57	57	0	372
	3130	3215	2945	245	18	11.10	1.95	56	8.84	3070	3126	2780	346	10.50	3620	10211	2599	2.37	141	141	0	-427	249	75	75	0	502
	3150	3217	2933	230	19	11.10	1.94	56	8.76	3030	3086	2741	345	10.47	3600	10122	2588	2.35	139	139	0	-415	190	28	28	0	443
	3150	3198	2892	150	20	11.10	1.94	56	8.83	3070	3126	2786	340	10.50	3620	10682	2552	2.36	140	140	0	-396	260	87	87	0	483
	3190	3187	2903	144	21	11.08	1.94	56	8.79	3050	3106	2764	342	10.48	3610	10492	2561	2.37	141	141	0	-367	202	34	34	0	401
	3190	3186	2944	144	22	11.02	1.94	56	8.77	3030	3086	2740	346	10.47	3600	10022	2598	2.37	141	141	0	-391	210	39	39	0	430
	3150	3202	2958	170	23	11.03	1.94	56	8.74	3020	3076	2728	348	10.44	3580	9702	2610	H.D.	122	122	0	-318	203	34	34	0	352
	3160	3264	2976	110	24	11.08	1.87	52	8.76	3030	3082	2732	350	10.45	3580	9542	2626	H.D.	112	112	0	-234	199	32	32	0	265
	3270	3435	3005	60	25	11.08	1.97	57	8.79	3050	3107	2753	354	10.47	3590	9392	2651	H.D.	105	105	0	-262	220	47	47	0	309
	3240	3194	2966	100	26	11.14	1.97	57	8.84	3070	3127	2778	349	10.52	3610	9932	2617	2.32	138	138	0	-415	275	106	106	0	521
	3200	3225	2965	116	27	11.03	1.97	57	8.84	3070	3127	2778	349	10.52	3610	9942	2616	2.32	139	139	0	-396	360	270	270	0	656
	3200	3230	2960	136	28	11.04	1.96	57	8.77	3030	3087	2739	348	10.47	3570	9582	2612	H.D.	92	92	0	-259	335	208	208	0	457
	3180	3262	2988	130	29	11.05	1.96	57	8.75	3020	3077	2725	352	10.47	3560	9242	2636	H.D.	65	65	0	-352	345	231	231	0	583
	3220	3222	3008	194	30	11.08	1.96	57	8.53	2910	2967	2613	354	10.40	3510	8562	2654	2.08	122	122	0	-569	190	28	28	0	597
	3280	3248	2992	212	31	11.04	1.96	57	8.40	2840	2897	2545	352	10.36	3480	8402	2640	H.D.	127	127	0	-664	181	24	24	0	688
	3270	3204	3016	179	SEPT. 1	11.07	1.94	56	8.32	2800	2856	2501	355	10.31	3440	7792	2661	H.D.	125	125	0	-601	172	20	20	0	621
	3290	3258	3012	205	2	11.07	1.96	57	8.32	2800	2857	2503	354	10.33	3450	7922	2658	2.21	133	133	0	-570	174	21	21	0	591
	3270	3235	3025	146	3	11.07	1.94	56	8.32	2800	2856	2500	356	10.32	3440	7712	2669	2.23	134	134	0	-370	174	21	21	0	391
	3270	3204	2956	126	4	11.08	1.94	56	8.39	2840	2896	2548	348	10.21	3370	7622	2608	2.27	138	138	0	-344	176	22	22	0	366
	3260	3295	3035	85	5	11.07	1.95	56	8.40	2850	2906	2549	357	9.99	3230	5522	2678	H.D.	118	118	0	-224	176	22	22	0	245
SEP	3260	3335	3075	23	6	11.06	1.95	56	8.29	2790	2846	2484	362	9.89	3160	4472	2713	2.00	116	116	0	-412	175	21	21	0	433
	3280	3399	3381	59	7	11.05	1.95	56	8.19	2740	2795	2398	398	9.74	3060	77	2983	2.04	119	119	0	-595	174	21	21	0	616
	3490	3210	3400	40	8	11.04	1.96	57	8.04	2660	2717	2247	470	9.52	2930	0	2930	2.04	119	119	0	-536	174	21	21	0	557
	3490	3260	3400	13	9	11.04	1.96	57	8.02	2660	2717	2207	510	9.46	2890	0	2890	2.00	116	116	0	-663	176	22	22	0	685
	3480	3240	3400	11	10	11.03	1.96	57	8.04	2670	2727	2047	680	9.16	2720	0	2720	1.75	98	98	0	-305	176	22	22	0	327
	3460	3292	3398	10	11	10.39	1.93	55	8.03	2660	2715	1857	858	8.84	2540	0	2540	1.77	99	99	0	-264	176	22	22	0	286
	3460	3180	3390	91	12	10.42	1.90	53	8.04	2670	2723	1643	1080	8.41	2310	0	2310	1.76	98	98	0	-261	177	22	22	0	283
	3440	3135	3255	191	13	10.50	1.90	53	8.01	2660	2713	1708	1005	8.30	2250	0	2250	1.77	99	99	0	-472	179	23	23	0	495
	3400	3112	3158	186	14	10.45	1.90	53	7.89	2600	2653	1815	838	8.42	2320	0	2320	1.81	102	102	0	-605	181	24	24	0	629
	3410	3060	3180	45	15	10.47	1.90	53	7.82	2560	2613	1778	840	8.47	2340	0	2340	2.01	122	122	0	-535	183	24	24	0	559
	3380	3116	3224	21	16	10.52	1.90	53	7.80	2550	2603	1719	884	8.47	2340	0	2340	2.08	122	122	0	-525	184	25	25	0	550
	3360	3142	3238	-27	17	10.38	1.90	53	7.78	2540	2593	1695	898	8.47	2340	0	2340	2.08	122	122	0	-275	HD	1500	1500	0	1775
	3340	3101	3309	-146	18	10.33	1.90	53	7.63	2470	2523	1424	1099	8.21	2210	0	2210	2.06	121	121	0	-856	560	1320	1320	0	1464
	3260	3177	3203	-222	19	10.18	1.90	53	7.66	2480	2533	1500	1033	8.14	2170	0	2170	H.D.	22	22	0	-655	595	1610	1600	0	955
	3240	3203	3077	-207	20	10.02	1.90	53	7.67	2490	2543	1626	917	8.12	2160	0	2160	1.57	85	85	0	-592	625	1870	1870	0	1278
	3170	3159	3021	-598	21	10.14	1.72	43	7.68	2490	2533	1592	941	7.96	2080	0	2080	1.73	96	96	0	-771	605	1700	1700	0	929
	3020	3109	3011	-596	22	10.06	1.60	36	7.76	2530	2566	1585	981	7.87	2030	0	2030	1.80	101	101	0	-1223	695	2520	2520	0	1297
	1930	3225	3015	-344	23	10.12	1.46	28	7.60	2450	2478	1283	1195	7.41	1820	0	1820	1.76	98	98	0	-1844	720	2760	2760	0	916
	3300	3192	3028	-313	24	9.88	1.46	28	7.40	2350	2378	950	1428	6.95	1600	0	1600	1.79	100	100	0	-2442	800	3550	3550	0	1108
	2830	3144	2876	-159	25	9.89	1.46	28	7.09	2200	2228	772	1456	6.52	1420	0	1420	1.77	99	99	0	-2776	810	3650	3650	0	877
	2270	3170	3400	-87	26	9.75	1.45	28	6.82	2080	2108	48	2060	6.32	1340	0	1340	1.75	98	98	0	-3224	830	3850	3850	0	626
	2170	3119	3421	-69	27	9.70	1.45	28	6.73	2040	2068	7	2061	6.38	1360	0	1360	1.70	94	94	0	-2618	740	2950	2950	0	532
	2160	3174	3846	-247	28	9.64	1.45	28	6.50	1930	1958	0	1958	6.43	1380	0	1380	1.67	92	0	92	-1090	526	1060	644	416	-30
	2100	0	3480	410	29	9.72	1.45	28	6.46	1910	1938	0	1938	6.43	1380	0	1380	1.67	92	0	92	-710	503	931	0	931	861
	2460	0	3240	412	30	9.43	H.D.	23	6.46	1910	1933	0	1933	6.43	1380	0	1380	1.93	110	0	110	-217	555	1280	0	1280	1065
	2110	0	2830	491	OCT. 1	8.95	DRY	0	H.D.	1320	1320	0	1320	6.36	1350	0	1350	DRY	0	0	0	-160	523	1050	0	1050	880
	2210	0	2150	426	2	8.65	DRY	0	H.D.	679	679	0	679	6.37	1350	0	1350	DRY	0	0	0	-121	517	1800	0	1800	1378
	2440	0	2040	327		8.17	DRY	0	380	889	889	0	889	6.28	1310	0	1310	DRY	0	0	0	-159	587	1540	0	1540	1599
								6259		849329	855588	202697	152891		388440	623778	326063		15173	1352	1652	-5031		45956	36045	9907	51987

The dates given on these two plates are those which agree most nearly with the midday hour, 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.

Only stored water quantities have been tabulated for the Lorenzo station where no records were obtained during 1929. Even in former years when discharge data were available the same procedure was followed, for the reason that complete segregation of flow at this point could not be shown satisfactorily without taking into consideration the water by-passed through the Great Feeder.

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

Records were not kept of the inflow from Market Lake Springs prior to the time when this water was delivered as storage for the benefit of the Butte and Market Lake Canal.

No attempt was made to maintain the Blackfoot Bridge station except during that portion of the season when river stages were low enough to permit securing wading measurements. Hence, only such discharge data as are believed to be dependable have been tabulated.

The "Clough to Neeley Gain" column which has been included in former reports has been replaced by one showing the net loss between these two stations as determined upon the arbitrary inflow basis of 2,820 second-feet. Subtraction of the daily net loss quantities from this latter amount will give net gains comparable to those contained in earlier reports.

In most other respects the river data presented herein conform and are consistent with those tabulated for preceding seasons.

SEGREGATION OF FLOW

Plate X shows graphically both the total discharge and the computed normal flow past the Moran and Heise gaging stations during the season of 1929. The difference between the total and normal flow graphs on any date, of course, indicates storage.

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 20 really represent mean quantities for the 24 hour period ending at 4 a. m. on July 21 while the indicated Moran data for July 20 are means for the 24 hour period ending at 4 a. m. on July 20.

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

Attention is directed to the comparatively low peak mean daily discharge at the Heise station which is about one-third less in amount than that noted for the preceding year.

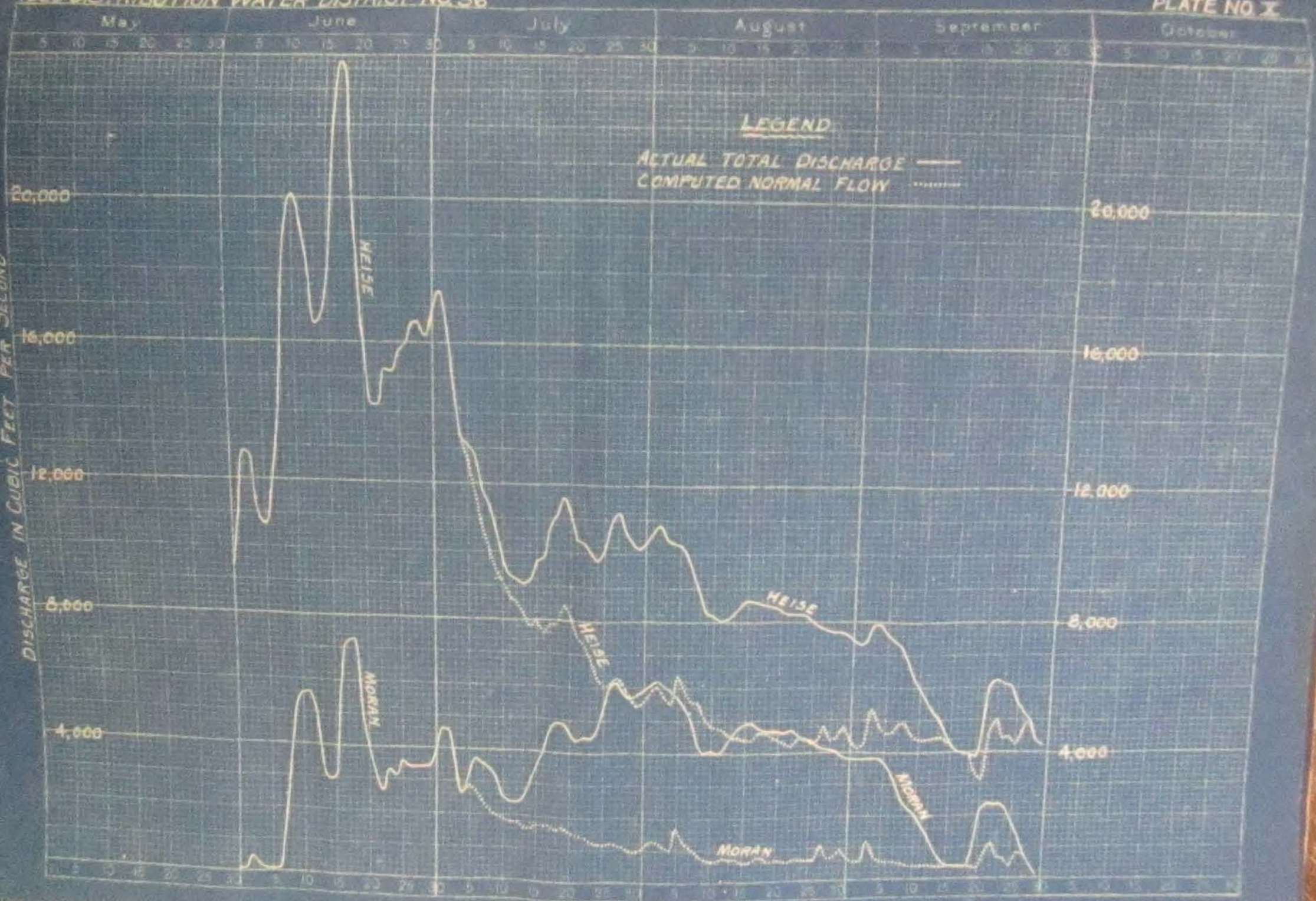
The pronounced drop in the Heise normal flow shown on September 19 and 20 is probably attributable to inapplicability of the 24 hour time interval at the low river stage of that period. In most other respects the variations noted in the different graphs are readily

9-279-1-Sept. 1922 DEPARTMENT OF THE INTERIOR UNITED STATES GEOLOGICAL SURVEY

HYDROGRAPH SHOWING TOTAL AND NORMAL FLOW AT THE MORAN AND HEISE STATIONS

1929 DISTRIBUTION WATER DISTRICT NO. 36

PLATE NO. X



accounted for by precipitation or by changes in the amount of storage released from Jackson Lake.

STORAGE DELIVERIES FROM JACKSON LAKE, TWIN LAKES, MARKET LAKE SPRINGS AND AMERICAN FALLS RESERVOIRS.

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. The difference between this amount and the total discharge at the outlet (as measured at the Moran gaging station) is then considered to be the normal stream flow.

While this method of segregation has now been used for more than ten years, the balancing of certain comparatively unknown factors which it assumes should not be overlooked, viz., that natural lake storage and evaporation loss from the excess area of the present reservoir which are properly creditable to normal flow are exactly offset by the bank or ground storage return which might otherwise be claimed as additional stored water.

An investigation was conducted during 1924 by Thos. R. Newell for the purpose of checking the fairness of the above described plan of operation and also to obtain data from which a more accurate but still workable method might possibly be derived. The data thus secured indicated that although the method in use was not strictly applicable under all conditions of river flow and reservoir operation, it was nevertheless reasonably equitable under certain specific conditions

of rapid and fairly complete drawdown immediately following the beginning of the normal flow deficiency period, provided further allowance or concession was made to younger rights to compensate for the old natural lake storage benefits.

While draft upon the storage impounded in this reservoir was not especially rapid during 1929, it exceeded that of the two preceding seasons both as to rate and total amount and for this reason the methods heretofore used were again continued without attempting the application of any special reservoir loss charges, even though the latter might have been permissible under the Committee of Nine resolution quoted on page 5. (See also pages 23 and 24 of 1928 report for further discussion of this problem).

The storage transmission loss schedule agreed upon for 1929 again provided for flat percentage deductions of 2.5 between Moran and Heise, 4.4 between Heise and Lorenzo, 0.5 between Lorenzo and Woodville and 6.0 between Woodville and Blackfoot Bridge. The basis for these various charges has been fully described in preceding reports.

Transmission deductions for all storage delivered to canals diverting above the Blackfoot Bridge gaging station were computed upon the basis of losses to Woodville, 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 twenty miles below that point, this plan would seem to be at least reasonably fair to all concerned.

On the basis of the 1929 schedule of losses, these upper valley canals received at their headgates 92.74395 per cent of the stored water turned out for them at Moran.

All lower valley canals were charged an additional 6.0 per cent, making their headgate deliveries amount to 87.179313 per cent of the amounts released for their benefit at the outlet of the upper reservoir.

The same percentage losses were applied to Twin Lakes storage, all of which was later pooled with Jackson Lake water for headgate delivery upon the Woodville basis to the Osgood canal of the Utah-Idaho Sugar Company.

Inflow from Market Lake Springs was similarly credited to the account of the Butte and Market Lake Canal Company but in this instance (because of the close proximity of inflow and diversion points), without the application of any transmission loss charges.

No distinction was made as to the source of stored water delivered to canals diverting from the river below the American Falls Reservoir. Season rights in the latter were subject to prorated reservoir loss deductions but all water delivered in excess of the calculated normal flow passing the Neeley station was classed as storage.

Plate XI shows 1929 daily and total storage deliveries to all canals diverting from Snake River and in addition includes Jackson Lake and American Falls deliveries through substitution to Henrys Fork and Fall River canals.

1929 DISTRIBUTION WATER DISTRICT 36

NAME	MAY 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
POPLAR IRRIGATION DISTRICT																													
PROGRESSIVE IRRIG. DISTRICT																													
FARMERS FRIEND CANAL CO.																													
ENTERPRISE CANAL CO.																													
NELSON (HOLT) CANAL																													
MATTSON-CRAIG CANAL																													
HARRISON CANAL & IRRIG. CANAL																													
IDAHO IRRIG. DIST.																													
RUDY IRRIG. CANAL CO.																													
BURGESS CANAL & IRRIG. CO.																													
LOWDER CANAL CO.																													
SUNNYDELL IRRIG. DIST.																													
LENROOT CANAL CO.																													
REID CANAL COMPANY																													
* ENTERPRISE IRRIG. DIST.																													
* TWIN GROVES CANAL & IRRIG. CO.																													
* FARMERS OWN DITCH CO.-LTD.																													
DILTS CANAL																													
BUTTE & MARKET LAKE CANAL CO.																													
UTAH-IDAHO SUGAR CO. (OSGOOD)																													
K. M. NANDORFF (BEAR ISLAND)																													
C. D. SMITH																													
J. D. KENNEDY																													
NEW SWEDEN IRRIG. DIST.																													
MARTIN CANAL CO.																													
CITY OF IDAHO FALLS																													
WOODVILLE CANAL CO.																													
SNAKE RIVER VALLEY IRRIG. DIST.																													
TOTAL DIVERS-HEISE-WOODV.																													
BLACKFOOT IRRIG. CO.																													
PEOPLES CANAL & IRRIG. CO.																													
ABERDEEN-SPRINGFIELD CANAL CO.																													
CORBETT SLOUGH DITCH CO.																													
TREGO DITCH CO.																													
TOTAL DIVERS-WOODV.-BLACKFT.																													
																										297	371	464	
MINIDOKA PROJECT CANALS			620	817	1231	1062	854			763	854	904	904						77	24	55	125	160	133					
NORTH SIDE CANAL CO. LTD.			177	639	1908	2154	822	134	186	236	1227	1544	842	48					92	28	24	204	372	459					
TWIN FALLS CANAL CO.			213	1040	1270	971	631	943	223	624	660	621	637	58					64	95	128	129	133	48					
MILNER LOW LIFT IRRIG. DIST.				124	149	135	118	117	12	137	108	131	131																
IDAHO POWER CO.																													
U.S. NEW DIVISIONS																													
AMER. FALLS RES. DIST. (UNASSIGNED)																													
TOTAL LOWER VALLEY			1010	2620	4558	4322	2425	1194	421	1760	2889	3200	2514	106					233	147	207	755	1036	1084					

* HENRYS FORK AND FALL RIVER CANALS. DISCHARGES HERE LISTED ONE DAY LATER THAN ACTUAL DRAFT.

DAILY STORAGE TABULATIO

1925	28	29	30	JUL 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
PO									4	6	7	7	7	7	7	6	6	7	5	14	23	23	24	24	24	24	24	24	26	24	23	24	25	26	24	24
PR																		133	162	229	200	195	192	200	190	200	200	200	207	218	188	181	196	214	210	209	
FA																						34	59	60	48	39	34	39	44	44	36	33	32	40	40	45	
EN																		133				42	103	139	139	142	140	142	156	163	156	172	181	184	183	185	
NE																													1	3	4	4	4	3		
MA																													3	8	7	5	5			
HA									65	106	105	104	101	109	105	100	101	113	109	114	109	109	22	13	6	9	10	9	167	168	180	200	199	203	208	207
IDA									83	112	98	85	85	87	87	81	89	116	115	121	119	114	100	92	96	107	110	106	106	103	86	84	85	89	90	92
RU														20	59	75	73	74	73	74	82	83	87	56	44	44	42	46	49	49	46	45	45	43	48	50
BU									36	94	91	98	91	86	87	90	91	90	90	95	98	87	166	254	247	258	223	218	214	211	210	205	210	214	223	210
LO																																			14	22
SL																																			20	20
LE																					49	83	80	79	79	76	74	80	87	80	73	56	31	21	39	47
RE																		20	40	40	84	93	77	87	50	43	50	84	87	86	80	77	77	57	23	20
EN											15	11	6	12	6	10	77	20	3											14	18	19	19	20	23	20
TI																								60	140	140	139	138	141	138	139	139	139	134	137	138
FA																																		43	85	84
DI												18	14	21	21	11																	20	31	1	12
BI																																				
U																					27	78	78	76	73	71	75	71	75	76	76	77	78	78	78	82	84
K																						2	4	4							2	2	2		2	2
C									1				1	1							1	1	1								1	1	1			
J																																				
NI									62	110	98	77							95	95	90	90	80	97	88	79	74	71	74	102	102	101	99	100	98	98	136
M									16	32	32	32							32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	30	30
CI																						2	3	3	3	4	3	3	3	4	3	3	3	4	3	3
W																						11	20	18	15	20	21	20	21	20	64	96	82	78	78	79	76
SI									17	29	17	25	15	15	16	77	77	77	77	93	289	491	518	521	521	521	500	461	487	493	477	473	475	477	485	493
T									284	489	463	457	320	358	388	450	514	777	801	902	1216	1570	1661	1803	1792	1804	1747	1748	2008	2079	2034	2011	2045	2089	2120	2187
BI																																			398	390
PE									21	64	68	56	65	50	50	51	55	58	50																	
AI																			200	250	250	250	250	607	298	325	648	1054	1170	1170	1170	1160	1160	1160	1160	1180	1170
C																																		7	8	7
TI																																				
T									21	64	68	56	65	50	50	51	55	258	300	250	250	250	607	298	325	648	1054	1170	1568	1560	1556	1561	1561	1561	1580	1574
M			70			120			490	844	834	834	808	1185	1755	1693	2155	2438	2580	2590	2590	2600	2590	2600	2590	2590	2580	2590	2580	2590	2587	2610	2610	2630	2530	2520
NS	95	77	58	92	18		106	96	234	195	1240	1513	1945	2484	2810	2837	2856	2852	2833	2875	2889	2911	2864	2907	2921	2953	2914	2890	2839	2835	2858	2863	2865	2847	2781	2778
T	60	196	446	501	157		493	141	172	572	612	612	609	597	597	622	632	621	612	884	965	951	929	1028	1128	1092	1044	988	978	954	900	1041	1146	1096	986	1061
M	112	134	134	134	105		136	126	126	125	146	162	158	159	158	128	135	162	162	142	120	122	138	124	159	152	167	166	166	167	166	166	166	158	113	142
IC																																				
U																																				
AI																																				
T	267	407	708	727	280	120	735	363	1022	1736	2832	3121	3520	4425	5320	5280	5778	6013	6187	6491	6564	6584	6521	6654	6798	6787	6705	6634	6563	6546	6511	6580	6781	6723	6470	6496

N AND SUMMARY

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	3	4	5	6	7	L.I. LAKE [illegible] AM FIS [illegible]
24	24	21	18	17	19	17	18	18	18	18	18	13	8	7	6	5	6	6	6	9	11	12	12	12	12	12	12	11	11	10	13	12	9		0	755
197	195	192	186	121	111	73	86	85	78	97	108	113	107	104	98	97	90	91	88	40															0	(a) 12433
31	36	38	34	26	33	28	6																												0	0
138	144	144	124	117	123	114	122	118	118	124	122	122	126	122	120	120	122	98	98	100	99	96	96	93	93	93	95	91	91	93	97	100	97	94	20	9977
														1	2	1	2	1	1																0	0
												3	6	6	6	5	6	6	5	1																(d) 300
202	203	201	202	201	204	182	182	187	178	181	184	186	96	254	263	260	28				6	83	114	113	120	123	131	97	40	5	12				0	1138
90	90	50		8	23																															(f) 2525
44	42	44	41	41	42	36	38	35	35	37	40	37	33	47	35	46	47	42	45	35	29	37	40	17											0	
211	210	210	203	198	211	194	75				5	2	10		8	7																			0	711
23	22	23	26													12	23	18	14	21	19	6	1												0	
16	18	20	19	19	19	20	19	17	19	27	22	20	19	20	19	17	19	20	18	16	21	14	13	12	9	14	18	17	14	13	25	22	13	16	40	
33	37	39	39	52	71	63	71	82	81	98	80	58	60	60	59	57	60	58	61	57	57	56	47	38	38	38	38	23	25	20	21	18	19	18	0	427
																																				(h) 85
139	136	136	138	138	138	140	144	144	143	142	141	141	138	138	136	136	138	137	136	136	136	136	136	138	44				70	49	49	51	50	49		(i) 140
75	72	72	71	71					91	56	64	66	66	35	25	23	23	23	24	20	20	20	20	21	21	22	22	23	23	21						(j) 30
					16	16	19	18	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	7		10	13	13	13	18		(k) 15
21	21	21	21	20				12					6	17	11	13	12	11	4											11						9
												94	153	133	220	220	199	203	199																0	28
84	85	70	69	64	68	70	74	72	78	80	78	84	91	91	92	94	94	90	94	82	80	80	80	81	33	80	79	79	81	78	78	79	78	80		(m) 95
2	2	2	2	2	2	2	2		2	2	2	2					2	2	2	2	2															2
		1					1	1													1	1														
																																			5	
137	131	130	124	96	87	80	58	53	52	254	450	409	403	397	382	385	384	381	378	376	352	363	350												0	(n) 27
30	30	30	30	30	30	30	30	30	30	24	24	24	24	24	24	24	24	24	24	24	24	24	24												0	2
3	3	4	3	3	3	4	3	3	3	4	3	3	3	4	3	3	3	4	3	3	2	3	2	2	2	3	2	2	2	3	1	1	1	1		(o)
83	78	78	71					49	45	44	44	44	47	46	53	54	54	57	45	19	89	88	85	82	83	72	72	74	64	37						(p) 7
483	435	397	389	365	356	360	360	352	363	375	365	365	358	288	252	250	253	252	248	248	214	203	191	175	177	180	185	186	183	183	186	195	153	113	30	25
2066	2014	1923	1810	1589	1556	1429	1308	1276	1354	1583	1770	1806	1874	1814	1834	1849	1609	1544	1513	1209	1182	1242	1231	804	652	657	674	610	604	533	495	491	433	389	415	16
																																				(q)
394	391	394	390	392				158	33	34	34	11	250	411	404	403	401	403	405	400	405	401	132	30	33	35	39	249	340	332	279		29		0	2
1170	1160	1130	1060	1040	1040	805	728	845	882	886	873	839	820	789	746	746	698	653	607	648	692	692	695	716	731	743	740	722	713	707	671	319	613	618	325	(r) 5
54	66	68	43					25	32	33	42	41	14	30	29	20	22			11	12	13	12	12	11	12	12	12	10							(s)
																																				(t)
1618	1617	1592	1493	1432	1040	805	728	1028	947	953	949	891	1084	1230	1179	1169	1121	1056	1012	1059	1109	1106	839	758	775	790	791	983	1063	1039	950	319	642	618	325	8
2520	2520	2480	2500	2540	2510	2470	2460	2450	2450	2460	2470	2470	2470	2480	2470	2470	2450	2420	2450	2470	2460	2460	2430	2380	2380	2380	2370	2360	2340	2330	2320	2330	2320	2221	[illegible]	
2765	2747	2757	2775	2725	2747	2726	2731	2746	2756	2769	2766	2728	2758	2765	2780	2741	2786	2764	2740	2728	2732	2753	2778	2778	2739	2725	2613	2545	2510	2513	2510	2558	2559	2494	[illegible]	
1071	1088	1097	1086	992	1007	995	1005	1005	1014	964	1008	983	1079	1064	1043	1027	1090	1067	1023	988	971	961	1015	1016	980	946	871	853	790	803	782	774	564	458	[illegible]	
143	144	144	145	145	145	144	144	146	143	143	145	142	140	118	141	139	140	141	141	122	112	105	138	139	92	65	122	127	125	133	134	138	118	116	[illegible]	
499	6499	6478	6506	6402	6409	6335	6346	6347	6363	6336	6389	6323	6447	6427	6434	6377	6466	6392	6354	6308	6275	6279	6361	6313	6191	6116	5976	5885	5765	5779	5746	5800	5561	5289	[illegible]	

	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	REGULAR SEC. FT	SPECIAL SEC. FT	TOTAL SEC. FT	TOTAL AC. FT	JACKSON L EQUIV A.F	JACKSON RIGHT A.F	NITRO EQUIV A.F
																							911	3	914	1813	1955	1200	755
	96	87																					5816	265	6081	12061	13005		(a) 12493
														90	98	89	75						751	108	859	1704	1837	200	0
																							6626		6626	13142	14170	(b) 410	9517
															2								27		27	54	58	(c) 6	0
																							74		74	147	158		(d) 300
																							7262	127	7389	14656	15803	(e) 369	11384
																							2818	181	2999	5948	6413		(f) 25259
																							2272		2272	4506	4859	(g) 525	0
	16	4																					5793	36	5829	11562	12467	512	7115
	18	12	10	4										10	45	26	6						244		244	484	522	104	0
														91	67	41	45						1725		1725	3421	3689	400	0
	50	50	50	50	49	49	49	50	49														3172	66	3238	6422	6924	300	4275
																							95	38	133	264	285		(h) 851
*															78	35	39	38					6341		6341	12577	13561		(i) 14000
*	18	19	18																				1302		1302	2583	2785		(j) 3000
*															7	13	3						601		601	1192	1285		(k) 1500
																							350		350	694	748		979
	80	19		59										73	73	72	71						1421		1421	2818	3038	(l) 2000	2851 (l)
																							4354	32	4386	8700	9381		(m) 9567
					1																		54		54	107	115		213
																							15		15	30	32		76
																							0		0	0		355	0
																							7982	346	8328	16518	17810	5000	(n) 27225
																							1352		1352	2682	2892	1500	2214
																							145		145	288	311		(o) 350
																							2253	123	2376	4713	5082		(p) 7355
	4132	132		58										139		44							18021	389	18360	36417	39266	15000	25970
	2410	323	78	171	50	49	49	50	49					403	370	320	239	38					81777	1664	86441	165503	178451	53315	167707
																												(q)	0 (q)
																							11093	260	11353	22518	24280	8000	21379
														121	335	601							42706	1170	43876	87027	93835	42685	(r) 56036
	525	125																					674		674	1337	1442		(s) 3827
																													(t) 0
														121	335	601							54473	1430	55903	110882	119557	50685	81242
	525	125																											
																									188715	374311			
	2063	2023	2122	2122	2049	2028	2025	2018	2007	1987	1951	1913	1898	1806	1566	1402	1263	1188	1160						208544	413641			
	2408	2257	2217	2057	1867	1653	1718	1826	1784	1730	1706	1435	1511	1637	1603	1597	1294	961	784	59	18	12			69238	137332			
	88	11	12	12	12	12	13	13	13	14	14	14	14	14	14	13	14	14	13	14	14	13			13803	27578			
	119	119	116	98	99	98	99	102	122	122	122	121	22	85	96	101	98	100	99	98	94				27624	54791			
											1475	1295	1585	1845	1675	2495	2735	3525	3625	3825	2925	619							
																									507924	1007453			
	4678	4410	4467	4289	4027	3791	3855	3959	3926	3853	5268	4778	5030	5387	4954	5608	5404	5788	5681	3996	3051	644							

PLATE NO 7C

19	20	21	22	23	24	25	26	27	28	REGULAR SEC. FT.	SPECIAL SEC. FT.	TOTAL SEC. FT.	TOTAL AC. FT.	JACKSON L. EQUIV. A.F.	JACKSON L. RIGHT A.F.	L.L. LAKE EQUIV AM. FLS. RT A.F.	TOT. SEASONAL L.L. LAKE RTS. A.F.
										911	3	914	1813	1955	1200	755	1955
										5816	265	6081	12061	13005	0	(a) 12493	(a) 12493
										751	108	859	1704	1837	2000	0	2000
	90	98	89	75						6626		6626	13142	14170	(b) 4100	9977	(b) 14077
										27		27	54	58	(c) 60	0	(c) 60
		2								74		74	147	158		(d) 300	(d) 300
										7262	127	7389	14656	15803	(e) 3690	11384	(e) 15074
										2818	181	2999	5948	6413		(f) 25259	(f) 25259
										2272		2272	4506	4859	(g) 5250	0	(g) 5250
										5793	36	5829	11562	12467	5120	7115	12235
										244		244	484	522	1040	0	1040
	10	45	26	6						1725		1725	3421	3689	4000	0	4000
	91	67	41	45						3172	66	3238	6422	6924	3000	4275	7275
										95	38	133	264	285		(h) 851	(h) 851
		78	35	39	38					6341		6341	12577	13561		(i) 14000	(i) 14000
										1302		1302	2583	2785		(j) 3000	(j) 3000
		7	13	3						601		601	1192	1285		(k) 1500	(k) 1500
										350		350	694	748		979	979
										1421		1421	2818	3038	(l) 2000	2851	(l) 4851
	73	73	72	71						4354	32	4386	8700	9381		(m) 9567	(m) 9567
										54		54	107	115		213	213
										15		15	30	32		76	76
										0		0	0		355	0	355
										7982	346	8328	16518	17810	5000	(n) 27223	(n) 32223
										1352		1352	2682	2892	1500	2214	3714
										145		145	288	311		(o) 350	(o) 350
										2253	123	2376	4713	5082		(p) 7355	(p) 7355
	139		44							18021	339	18360	36417	39266	15000	25970	40970
	403	370	320	239	38					81777	1664	83441	165503	178451	53315	167707	221022
																(q) 0	(q) 0
										11093	260	11353	22518	24280	8000	21379	29379
	121	335	601							42706	1170	43876	87027	93835	42685	(r) 56036	(r) 98721
										674		674	1337	1442		(s) 3827	(s) 3827
																(t) 0	(t) 0
	121	335	601							54473	1430	55903	110882	119557	50685	81242	131927
898	1806	1566	1402	1263	1188	1160						188715	374311				76051
611	1637	1603	1597	1294	961	784	59	18	12			208544	413641				(u) 320007
14	14	14	13	14	14	13	14	14	13			69238	137332				97183
22	85	96	101	98	100	99	98	94				13803	27378				0
35	1845	1675	2495	2735	3525	3625	3825	2925	619			27624	54791				0
																	810
																	0
30	5387	4954	5608	5404	5788	5681	3996	3051	644			507524	1007453				494051

NOTES

(a) Sold 300 ac. ft to Mattson Craig and 1000 ac. ft. to Twin Groves Canal & Irrig. Co.

(b) Sold 2000 ac. ft. to Rudy Irrig. Canal Co.

(c) Purchased from Harrison Canal & Irrg. Co

(d) Purchased from Progressive Irrig. Dist

(e) Sold 60 ac. ft. to Nelson (Holt) Canal, and 1250 ac. ft. to Rudy Irrig. Canal Co.

(f) Sold 20 ac. ft. to Edwards Ditch; 5 ac. ft. to New Sweden Irrig. Dist; and 350 ac. ft. to City of Idaho Falls. (Edwards right included herein.)

(g) Purchased 2000 ac. ft. from Enterprise Canal Co. & 1250 ac. ft. from Harrison Canal & Irrig. Co.

(h) Sold 2000 ac. ft. to Twin Groves Canal & Irrig. Co.

(i) Purchased 2000 ac. ft. from Blackfoot Irrig. Co.

(j) Purchased 2000 ac. ft. from Reid Canal Co. and 1000 ac. ft. from Progressive Irrig. Dist.

(k) Purchased 1500 ac. ft from Woodville Canal Co.

(l) Purchased 2000 ac. ft. from No. Side Canal Co. Ltd. Should also be credited with 323 ac. ft from Market Lake Springs (headgate delivery)

(m) Am. Falls rebate not provided for in 1929. Should also be credited with 1658 ac. ft. released from Twin Lakes during 1929.

(n) Purchased 5 ac. ft. from Idaho Irrig. District.

(o) Purchased 350 ac. ft. from Idaho Irrig. District.

(p) Sold 1500 ac. ft. to Farmers Own Ditch Co.

(q) Sold 2000 ac. ft. to Enterprise Irrig. Dist. and 12274 ac. ft. to Aberdeen-Springfield Canal Co.

(r) Purchased 12274 ac. ft from Blackfoot Irrig. Co., 1380 ac. ft from Trego Canal Co. & 4052 ac. ft. from U.S. Govt.

(s) American Falls rebate requested in cash.

(t) Sold 1380 ac. ft. to Aberdeen Springfield Canal Co.

(u) Sold 2000 ac. ft. to Butte & Market Lake Canal Co.

SEASONAL AM. FALLS EQUIV. JACKSON L. ACRE FEET	SEASONAL AM. FALLS RIGHT ACRE FEET	TOTAL SEASONAL AM. FALLS RIGHT ACRE FEET
70533	296782	367315
296787	279079	575866
90131	148744	238875
	30131	30131
	43050	43050
751	827880	828631
	666	666
458202	1626332	2084534

A summary of 1929 season rights is also included. In the case of the American Falls Reservoir these have been prorated on the basis of 1,626,332 acre-feet (June 25 maximum of 1,573,770 plus 52,562 early season draft as measured at Neeley Station) maximum possible season delivery but all lower valley canal rights as tabulated are still subject to reservoir loss deductions. The latter total 71,752 acre-feet for the draft period subsequent to June 25 and should be prorated according to the following table:

Name	Maximum 1929 Total Am. Falls Reservoir Right(a)	Prorated 1929 Am. Falls Res. Loss	Net 1929 Total Am. Falls Res. Right (a)
Minidoka Project	367,315	13,094	354,221
North Side Canal Co., Ltd.	575,866 (b)	12,313	563,553 (b)
Twin Falls Canal Co.	238,875	6,563	232,312
Milner Low Lift Irrig. District	30,131	1,329	28,802
Idaho Power Company	43,050	1,899	41,151
U. S. New Divisions	828,631	36,525	792,106
Am. Falls Res. Dist. (Unassigned)	666	29	637
Total	2,084,534	71,752	2,012,782

(a) Includes Am. Falls equiv. of Jackson Lake Rights.
(b) Includes rights of Hillsdale Irrigation District.

Notes on Plate XI explain reduction or increase of rights by reason of seasonal sale or purchase of storage.

During the early part of the delivery period a few charges were made against upper valley canals on account of water ordered but for various reasons not accepted. These are included with actual deliveries in the daily tabulation but are segregated under the "Special" heading in the season summary.

All stored water diversions have been listed upon a headgate basis except those of the Idaho Power Company which were measured at the river gaging station immediately below Milner Dam. These latter account

for 27,624 second-feet of the 49,266 second-feet total flow which passed this point during the 125 day period ending October 3, 1929. The remaining 21,642 second-feet may be segregated as follows:

Normal flow wasted during June and at the end of the season	9,907	sec.-ft.
General waste prorated against all lower valley canals	2,812	" "
Unavoidable waste charged 5/11 against the North Side Canal Co. and 6/11 against the Twin Falls Canal Co.	7,110	" "
Waste attributable to high stage maintained in Lake Milner and charged against the North Side Canal Co., Ltd.	1,813	" "
Total	21,642	" "

All stored water waste has been included in the daily deliveries as listed on Plate XI and this accounts for the differences noted in comparison with the charges shown on Plates VIII and IX.

The comparatively few overdrafts shown are largely explained by the fact that actual deliveries were made upon the assumption that all American Falls rights except those of the United States would be upon a full reservoir or 100 per cent basis, whereas, as previously explained on pages 12-13, the deficiency was finally prorated against all owners in determining the season rights recorded in this report.

It is interesting to note that nearly 85 per cent of all upper valley storage rights and nearly 81 per cent of those of the lower valley (Government, power and unassigned water excluded) was utilized during 1929. This comparatively heavy group usage together with the rather numerous supplemental purchases made by individual canals clearly indicates that existing rights would be far from adequate to compensate completely for the greater shortage in normal flow to be expected in seasons similar to those of 1919 and 1924.

The rather heavy overdraft noted for the Minidoka Project canals might easily have been avoided by drawing upon Lake Walcott storage in September. The excess delivery to the Idaho Power Company over and above their summer or primary right was charged against the larger secondary right which becomes available to them after the end of the irrigation season.

RIVER LOSSES AND GAINS

Losses and gains throughout different sections of Snake River are included in the data contained on Plates VIII and IX 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 XII contains hydrographs of the total flow passing the Heise, Woodville and Clough gaging stations, together with graphs showing the net losses and gains in the two intervening sections and also in the section from Blackfoot Bridge to Clough's. The latter, of course, only covers that portion of the season during which the Blackfoot Bridge records were dependable. It will be noted that the sectional gains and losses are plotted to a different scale from the hydrographs and in consequence their variations appear somewhat exaggerated.

The general characteristics of these curves are not materially different from those heretofore presented. Gains and losses, as might be expected, are rather irregular during periods of rapid fluctuation in river stage but during the major part of the season are reasonably consistent with those of other years. In comparison with 1927 and 1928, gains shown in 1929 are generally smaller, while losses are likewise larger, all of which

HYDROGRAPHS ILLUSTRATING NET LOSSES AND GAINS BETWEEN HEISE AND CLOUGHS GAGING STATIONS
1929 DISTIBUTION WATER DISTRICT NO. 36

PLATE NO. XII

May | June | July | August | September | October

DISCHARGE IN CUBIC FEET PER SECOND

HEISE TO WOODVILLE

20,000 — 0 — 1,000 GAIN

WOODVILLE TO CLOUGHS

16,000 — 0 — 1,000 GAIN / 1,000 LOSS

WOODVILLE TO BLACKFOOT BRIDGE

12,000 — 0 — 1,000 LOSS / 1,000 GAIN

8,000

4,000

HEISE

WOODVILLE

CLOUGHS

points toward the more careful use of water and consequent reduction of waste which usually accompanies a reduction in supply.

No further surface waste and return flow measurements were obtained hence nothing can be added to the discussions contained in preceding reports relative to the equity of the percentage transmission loss schedules which have been used.

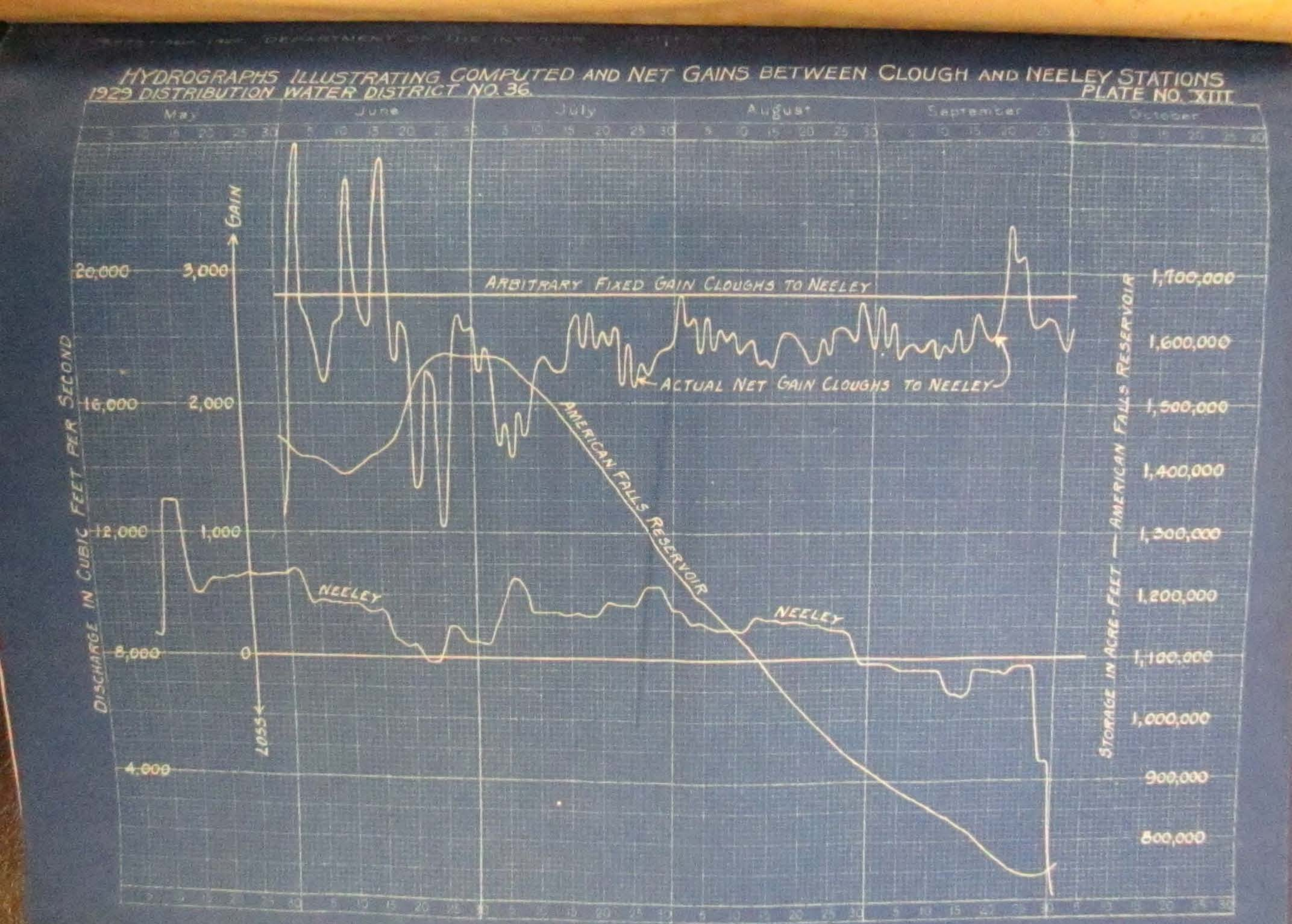
Plate XIII affords a graphical study of the inflow between the Clough and Neeley gaging stations and its relation to changes in the amount of storage impounded in the American Falls Reservoir. The Neeley total discharge hydrograph has been added for the convenience of those who may desire to make comparisons of reservoir inflow and outflow.

The graph showing the net gain between the Clough and Neeley stations introduces the reservoir factors and is therefore decidedly irregular. The difference between it and the arbitrary fixed gain of 2,820 second-feet represents the over-all or net loss through the reservoir as determined upon this hypothesis. Discontinuance of the special investigation carried on during the two preceding seasons by Thomas R. Newell makes anything approaching a direct computation of 1929 reservoir losses impossible, but the following comparison should be of interest because of the check it affords upon the applicability of the assumed average inflow during the three normal storage draft months:

Year	Mean daily over-all loss Clough-Neeley			Calculated or arbitrary daily aver. inflow between Clough & Neeley stations		
	July	Aug.	Sept.	July	Aug.	Sept.
1927	823	386	340	2760	2960	3000
1928	607	282	148	2790	2830	2850
1929	560	338	234	2820	2820	2820

HYDROGRAPHS ILLUSTRATING COMPUTED AND NET GAINS BETWEEN CLOUGH AND NEELEY STATIONS
1929 DISTRIBUTION WATER DISTRICT NO. 36.

PLATE NO. XIII



The exposed water surface area was less in 1929 during each of the three months than in the two preceding years and on that score smaller losses would be expected. General climatic and run-off conditions would also point toward a smaller average inflow between the two stations in 1929. Both these factors, when studied in connection with the loss and inflow comparison, indicate that the use of 2,820 second-feet as average daily inflow was reasonably satisfactory but probably favored normal flow to the detriment of stored water rights during the greater part of the regulation period. Further substantiation is afforded by comparison of the average daily inflow for the season after first deducting the discharge of Portneuf River at Pocatello as follows:

1927	2,693
1928	2,662
1929	2,707
Mean 1919-1928	2,515

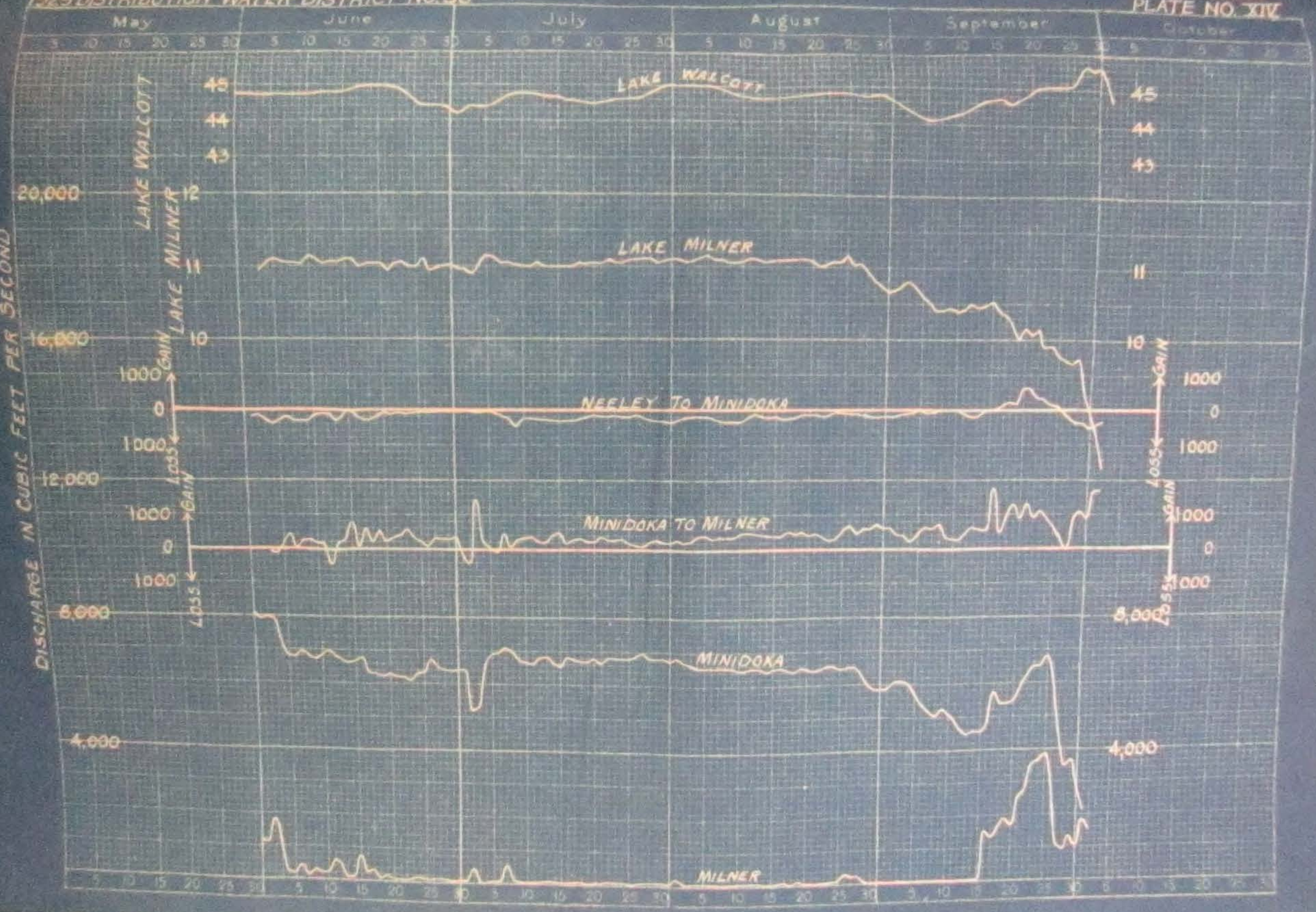
The pronounced rise in the net gain graph shown on Plate XIII noted during the latter part of September is presumably due chiefly to the rather heavy rains experienced at that time. The general upward trend of this graph after the early part of July is consistent with previous years and is explained by the decreased loss and increased inflow to be expected with heavy reservoir draft.

Plate XIV 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.

HYDROGRAPH ILLUSTRATING NET LOSSES AND GAINS BETWEEN NEELEY AND MILNER STATIONS

1929 DISTRIBUTION WATER DISTRICT NO. 36

PLATE NO. XIV



It will be noted that these curves are similar to those contained in former reports. Those showing sectional gains and losses are more regular than usual - due, no doubt, to the generally uniform river stages which pertained and the consequent diminution of error attributable to time interval.

The average net loss for the entire 122 day period listed for the section from Neeley to Minidoka amounted to 154 second-feet, while for the corresponding time the average net gain noted between Minidoka and Milner was 426 second-feet. The following table summarizes these records for the last eleven seasons:

Year	Summer Average Daily Loss Neeley-Minidoka	Summer Average Daily Gain Minidoka-Milner	Summer Average Daily Gain Neeley-Milner
1919	145	249	104
1920	301	323	22
1921	254	296	42
1922	248	344	96
1923	210	366	156
1924	46	206	160
1925	188	355	167
1926	197	230	33
1927	347	348	1
1928	111	353	242
1929	154	426	272
Mean for 11 Year period	200	318	118

Attention was directed in the 1928 report to certain fairly well defined relationships indicated by these figures which are of interest and will perhaps bear repetition:

(1) Loss between Neeley and Minidoka depends very largely upon the stages maintained in Lake Walcott during and prior to the particular season under consideration. Rapid draw downs over wide range of stage, such as those noted during the latter part of the 1919 and 1924 seasons,

result in material bank storage return to the river which offsets or nullifies in part, at least, the earlier period losses. Long continued, low, pre-irrigation season lake levels of the character experienced during the winter of 1926-7 so deplete the adjacent ground storage that after the water surface is again raised, increased channel losses must be expected until the ground reservoir is sufficiently replenished to once more establish a condition of equilibrium. The heavy loss of 1927 is probably accounted for in this way.

(2) Gain between Minidoka and Milner may be expected to vary more or less directly with the general water supply for the particular season. In deficient supply years such as 1919, 1924 and 1926 less water was delivered to Minidoka Project lands and the water applied was more carefully conserved than in such years as 1925, 1927, 1928 and 1929. Hence in the former both the ground return and the surface waste were undoubtedly smaller in amount than in other seasons when the available supply was in excess of all requirements.

(3) Gain from Neeley through to Milner is an algebraic combination of the quantities listed for the other two sections and for this reason the seasonal variations are harder to analyze than those for the shorter intervening sections.

Small percentage errors in river data would appear relatively large in the preceding table of losses and for this reason too much weight should not be given to the results secured during any one season. With this fact in mind, the comperatively small loss noted between Neeley and Minidoka for both 1928 and 1929 may be cited as possibly attributable to a rise in the

adjacent ground water table which in turn may be due to the higher water levels in the American Falls Reservoir which have pertained during the past three years.

New drains on the Minidoka South Side tract partially explain the pronounced increase in the gain noted between the Minidoka and Milner River stations during 1929. Independent surface return flow measurements made throughout this section during the last three summers by Messrs. W. G. Steward and H. G. Haight of the Twin Falls Canal Company show the following average totals which are reasonably consistent with the tabular quantities obtained from the river data sheets:

YEAR	AMOUNT
1927	312 second-feet
1928	281 " "
1929	370 " "

NORMAL FLOW COMPARISON

The purpose of Plate XV is to afford a condensed comparison of the normal flow water supply available during the respective irrigation seasons 1919-1929 for 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.*

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

SUMMARY BY MONTHS OF NORMAL FLOW AT HEISE, REXBURG, AND BLACKFOOT GAGING STATIONS IRRIGATION SEASONS 1919–1929

PLATE NO. XV

UPPER SNAKE RIVER DISTRICT NO. 36

YEAR	HEISE	REXBURG	BLACKFOOT RIVER	RETURN FLOW HEISE TO BLACKF'T	NORM. FLOW GAINS FROM STOR'D LOSS	TOTAL NORM. FLOW SUPPLY	TOTAL DIVERS. HEISE TO BLACKF'T	STOR'D DIVERS. HEISE-BLKFT	NORM. FLOW DIVERSIONS HEISE-BLKFT	BALANCE AT BLACKFOOT STATION	NORM. FLOW PASSING BLK'FT STA.
JUNE											
1919	241439	22477	400	-18994	16728	262050	24752	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	331345	0	331345	382940	382940
1923	482679	90200	11597	23918	0	608294	262414	0	262414	345880	345880
1924	303207	15476	201	10631	4577	334092	253547	-6484	300031	34061	ᵂ 34061
1925	499874	123010	4830	25290	0	653004	314594	0	314594	338410	ᵂ 338410
1926	273736	24483	78	12507	14003	324827	271980	-29310	301290	23537	ᵂ 23537
1927	769629	222720	3547	22579	0	1018475	302135	0	302135	716340	ᵂ 716340
1928	535941	92550	6787	53258	0	688536	275266	0	275266	413270	413270
1929	477105	96520	4184	-1102	0	576707	313097	0	313097	263610	263610
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	370773	321988	4681	317307	53468	53468
1923	365108	28661	5864	22459	10881	432973	328971	4020	324951	108022	ᵂ 108022
1924	171278	17345	655	23098	9853	222229	255842	39689	216153	6076	ᵂ 6076
1925	431518	82730	4470	38754	7175	564647	331306	3577	327729	236918	ᵂ 236918
1926	161280	28155	54	18374	14360	222223	243236	24417	218819	3404	ᵂ 3404
1927	500607	98850	3160	41057	2171	645845	357867	9368	348499	297346	ᵂ 297346
1928	384962	41538	2488	26015	1332	456335	343880	18929	324951	131384	131384
1929	276001	32241	1366	21808	4395	335811	350752	50765	299987	35824	35824
AUGUST											
1919	98839	19894	78	3938	5123	127872	129034	2217	126837	1035	1035
1920	117244	24553	5266	34866	6390	248319	259201	25851	233350	14969	14969
1921	182975	35843	8209	29756	5620	ᵂ 262403	260670	10608	250062	12341	12341
1922	192659	34222	6897	37086	7071	277935	252849	15156	237693	40242	40242
1923	178904	28569	5979	35700	11008	260250	265384	23833	241551	18699	18699
1924	101953	25686	16	13484	6060	147199	210169	67074	143095	4104	ᵂ 4104
1925	213661	45400	5963	32383	15047	312454	281504	3753	277751	34703	ᵂ 34703
1926	127966	28940	134	14822	5264	177126	198605	23454	175151	1975	ᵂ 1975
1927	218894	43590	7688	45871	8748	324791	292973	10018	282955	41836	ᵂ 41836
1928	162608	32339	4405	41405	4002	264759	300983	47578	253405	11354	11354
1929	150508	27565	1113	24298	7693	211177	280059	78364	201695	9482	9482
SEPTEMBER											
1919	87115	22501	345	2234	0	112195	107517	0	107517	4678	4678
1920	° 66389	° 21130	° 2290	° 10585	° 521	° 100915	° 71638	° 0	° 71638	° 29277	° 29277
1921	129235	50960	4525	26655	184	211559	149132	0	149132	62427	62427
1922	133751	39758	1996	15950	0	191455	142769	0	142769	48686	48686
1923	120623	30825	3798	23299	3571	184116	194718	22851	171867	12249	12249
1924	87479	24983	503	15364	1890	130219	141596	15613	125983	4236	ᵂ 4236
1925	142414	° 56000	° 9268	° 23884	° 2280	233846	150283	° 0	° 150283	° 83563	° 83563
1926	95060	29468	1064	10731	2172	138515	142137	4869	137268	1247	ᵂ 1247
1927	161014	53890	5027	30407	5566	255904	188009	885	187124	68780	ᵂ 68780
1928	125924	40930	3006	29996	3413	202869	213109	13076	200033	2836	2836
1929	127676	37998	4194	26387	3426	199681	185283	10216	175067	26614	26614

NOTES:- ALL DISCHARGE QUANTITIES LISTED IN SECOND FEET.
ᵂ THEORETICAL : SEE TEXT FOR EXPLANATION.
° INCLUDES EMMA MATILDA AND TWO OCEAN LAKE STORAGE.
ᵃ RECORDS FOR SEPTEMBER 1–15 (INCLUSIVE) ONLY.
ᵇ RECORDS FOR SEPTEMBER 1–28 (INCLUSIVE) ONLY.

The following brief explanation which is almost identical with that contained in the 1928 report is included for the convenience of the reader:

Columns 1-4 Sufficiently 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 Diversions 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, 1925, 1926, 1927, 1928 and 1929 were taken direct from the river data sheets. Because of the use of the Blackfoot Bridge instead of the older Blackfoot or Clough station as an adjustment point, theoretical rather than actual totals must be used for the latter point in these five years if a check on column 11 is to be secured.

The 1924 and 1926 segregations of diversions as between stored water and normal flow are complicated by the exchanges which were made. For example, the minus storage shown as being diverted during June of these years 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 1929 conditions to be derived from this summary emphasizes certain more or less pronounced peculiarities, some of which have already been mentioned.

(1) During the months of June, July and August and also for the entire four months, the total normal flow supply was less than for any other year listed with the exception of the three low water seasons of 1919, 1924 and 1926.

(2) Barring two years in June, one year in July, three years in August and three years in September, total diversions exceeded those of corresponding months while the total diversions for the entire four months were larger than during any other years except 1927 and 1928.

(3) More stored water was diverted between Heise and Blackfoot during July and August and also during the entire season than in any preceding year.

(4) Less water passed Blackfoot during each of the months of July and August and during the entire four months period than in any other years tabulated with the three exceptions of 1919, 1924 and 1926.

GROUND WATER

The ground water study described in the preceding report was continued throughout 1929 under the supervision of Harold T. Stearns, Associate Geologist, U. S. Geological Survey and is now almost completed.

Additional funds were provided for this work as follows:

U. S. Geological Survey	$2,750.00
State of Idaho	3,000.00
Lower Valley Irrigation Interests and Idaho Power Company	1,000.00

The scope of the investigation was broadened to include additional areas tributary or adjacent to the upper Snake River basin - particularly the Lost River region where a number of test wells were drilled.

No independent well data were secured during 1929 by employees of District No. 36, hence no attempt will be made herein to discuss this work or the results accomplished in any further detail, but the reader will be referred to the forthcoming report of Mr. Stearns which should be available on or about July 1, 1930.

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

H. S. Kollenborn 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 during 1929. All other deputies and assistants working in this area reported to and received their instructions from him, while he, in turn, worked under general orders issued from the office at Idaho Falls.

For the third successive season, summer headquarters were maintained in the jury room at the Court House in St. Anthony.

A brief general summary of the work in this part of District No. 36 is afforded by the following abstract from a report prepared by Mr. Kollenborn:

> The month of May was devoted to the reestablishment of river and canal gaging stations, the securing of gage readings and discharge measurements and the completion of minor repairs to equipment.
>
> With the assistance of Bruno Albert and T. W. Luetjen regular gage readings were secured beginning June 1, but stations were only visited on alternate days prior to the arrival of Geo. H. Powell on June 16. Thereafter daily records were obtained except during the period September 15 to 19 and after September 24.

Phyllis Tuckett was employed upon a half time basis to act as office clerk from June 1 to September 16.

In other respects the personnel arrangements were substantially the same as those of former years except that both Messrs. Luetjen and Powell were assigned to specific daily routes and were paid in the same manner as other river riders, although each acted also as hydrographer for the canals in his territory. This change is believed to have effected a slight saving in expense.

Stream flow was fairly well sustained until the early part of July and during this period diversions were unrestricted. Regulation began on July 6 and in general conformed to the orders from the Idaho Falls office. From July 14 to 18 on Henrys Fork and Fall River and from August 15 to 29 on Teton River, however, it was necessary to cut rights in advance of the main river schedule because of insufficient supply in these respective streams.

Storage was first released from Henrys Lake Reservoir on July 13 and draft continued thereafter throughout practically the entire regulation period. Six thousand three hundred seventy acre-feet were sold at a unit price of $1.00 per acre-foot, to canals having no ownership rights in the reservoir. Stored water was delivered to systems diverting from Fall River through substitution, in the manner described in previous reports.

During the latter part of September an Au long distance stage indicator was installed by the Utah Power and Light Company to facilitate river control at their Ashton dam. This installation was completed too late in the season to be of much assistance during 1929 but it should be of considerable value in 1930.

While some reduction in crop yield may be attributed to shortage of water supply, losses of this character were considerably reduced by the use of stored water. In fact, with the exception of a few areas supplied from Fall and Teton Rivers the supply proved adequate for all requirements.

No serious administration difficulties were encountered and water distribution was effected throughout the season in an orderly manner.

Actual deliveries to the canals diverting from Henry's Fork, Fall and Teton Rivers are shown on Plates XVI, XVII, XVIII and XIX. These are based upon daily gage readings except during the first half of the month of June and portions of September when readings were obtained at less frequent intervals. Discharges for days when no observations were made have been supplied by interpolation or by estimate.

U.S. DISTRIBUTION WATER DISTRICT NO 36

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM HENRYS FORK AND TRIBUTARIES FOR JUNE 1929

FALL RIVER CANALS

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
TF LOWSTONE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARROP LD	0	0	0	0	0	0	0	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	24	24	23	26	29	38	47	50	52	50	67	72	78	92	106	116	127	123	111	120	126	135	141	0	0	121	136	153	160	174	2569
TOTAL DIVERS ABOVE SQUIRREL	24	24	23	26	29	38	47	50	52	50	67	72	78	92	106	116	127	123	111	120	126	135	141	0	0	121	136	153	160	174	2569
FARMERS OWN	0	0	0	0	0	0	0	0	0	0	2	3	27	27	30	34	32	29	29	34	35	36	36	39	39	38	38	42	43	39	559
ALMY	3	4	4	3	4	4	5	6	6	6	5	4	3	4	4	4	4	4	4	4	3	4	3	3	4	4	5	4	4	4	122
ENTERPRISE	119	118	118	126	125	127	129	139	149	150	151	150	145	150	151	151	146	131	123	147	145	148	147	147	147	153	152	155	155	151	4245
BELL	10	10	10	9	8	8	8	10	11	11	11	11	11	11	11	11	11	10	4	3	3	7	9	10	10	11	11	11	11	12	254
FALL RIVER	307	304	305	311	322	362	403	424	445	436	426	414	403	412	420	406	382	307	292	166	347	340	366	378	366	403	435	416	452	464	11209
MABEE	8	8	8	8	7	7	7	8	8	18	12	12	12	14	15	16	12	4	1	1	0	0	1	1	1	2	12	3	8	11	223
CHESTER	74	72	70	66	64	68	71	75	79	78	77	78	79	82	85	84	88	82	77	72	68	72	73	71	77	81	90	92	91	94	2338
SILKEY	22	21	20	19	18	19	20	20	20	18	17	17	17	18	18	16	14	7	6	5	5	5	5	4	9	9	19	17	17	17	438
CURR	57	58	58	54	51	52	53	46	39	34	30	30	31	36	41	44	23	21	19	17	17	16	28	29	30	45	47	57	67	40	1180
WHITE	4	2	1	1	1	1	1	2	3	3	3	3	3	3	8	1	1	0	0	0	0	4	3	4	4	5	4	6	5	6	77
TOTAL DIVERS-SQUIRREL TO CHESTER	604	599	594	597	600	648	697	730	760	746	732	721	711	757	775	765	715	598	555	433	622	631	671	689	687	752	817	813	850	842	20711

HENRYS FORK CANALS

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
DEWEY	20	22	25	25	25	24	24	24	23	24	24	23	22	22	22	22	24	25	25	20	18	17	16	16	21	23	21	20	19	22	658
LAST CHANCE	80	80	81	78	74	78	82	81	80	80	81	74	68	78	88	73	86	51	64	64	69	79	78	85	84	80	81	78	78	86	2321
ST ANTHONY UNION	555	553	551	523	496	513	531	550	550	508	467	444	420	402	385	326	383	259	290	331	341	358	343	403	487	503	510	524	511	535	13591
FARMERS FRIEND	287	290	292	281	270	269	269	276	282	289	296	196	192	224	257	234	89	110	112	92	193	190	214	219	231	210	184	238	235	216	6739
TWIN GROVES	154	166	167	154	152	159	166	163	164	158	162	164	166	165	164	125	132	144	139	132	164	149	145	127	120	137	156	154	154	152	4538
SALEM UNION	256	128	0	129	258	258	258	149	0	100	201	208	215	222	229	240	216	209	209	218	222	219	235	222	232	238	237	241	240	246	6028
TOTAL DIVERS-ASHTON TO ST ANTH	1354	1229	1106	1190	1274	1302	1330	1245	1099	1159	1231	1109	1083	1113	1145	1022	930	738	839	857	1027	1012	1042	1072	1175	1192	1189	1255	1237	1259	33875
EGIN	351	353	355	346	338	342	346	350	353	335	317	322	313	296	279	244	241	204	202	234	251	247	265	263	272	270	270	298	296	270	8763
ST ANTHONY UNION FEEDER	110	105	100	99	98	100	103	106	110	88	66	68	67	68	68	60	61	42	64	81	74	56	52	50	49	69	70	78	60	62	2284
INDEPENDENT	388	378	367	354	340	348	355	350	345	309	273	286	298	286	275	212	202	180	173	206	264	260	266	260	298	298	303	293	293	298	8158
CONSOLIDATED FARMERS	324	324	324	326	316	318	324	328	334	344	344	341	264	0	100	233	225	211	201	197	231	247	245	253	264	296	304	308	306	306	8150
TOTAL DIVERS-ST ANTH TO REXBURG	1173	1160	1146	1125	1092	1108	1128	1134	1142	1076	1000	1017	942	650	722	749	729	637	640	718	826	810	828	832	883	933	947	947	929	936	27956

TETON RIVER CANALS

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
SIDDOWAY	26	26	20	15	14	14	14	15	15	15	14	14	12	11	12	12	13	5	4	2	2	5	5	6	6	15	18	20	21	23	400
WILFORD	179	181	173	165	165	165	166	168	177	186	184	182	181	180	184	187	183	180	113	110	110	152	160	161	158	161	173	185	183	189	5041
TETON IRRIGATION	72	53	50	47	50	47	50	52	51	50	49	48	48	49	56	62	56	46	41	42	42	50	52	69	74	84	81	81	115	98	1765
GOOD LUCK	14	14	14	13	12	10	22	34	30	27	24	22	22	22	16	10	11	10	8	8	14	15	16	17	31	33	33	35	35	33	605
PIONEER	43	27	25	23	34	46	36	26	30	34	33	32	28	23	24	24	34	12	11	10	32	32	33	33	45	46	29	29	46	44	914
STEWART	24	27	26	26	18	10	26	43	46	50	48	47	47	47	48	48	34	31	26	25	23	24	24	23	52	52	56	55	55	55	1116
PINCOCK BYINGTON	23	23	21	19	16	14	14	14	16	19	19	19	18	18	22	27	27	25	22	21	21	23	24	22	24	24	26	24	24	26	636
PINCOCK GARNER	34	34	29	24	22	35	37	39	42	46	42	38	38	37	38	38	37	34	17	14	22	21	26	27	31	30	42	49	46	37	1004
TETON ISLAND FEEDER	430	472	422	373	340	392	394	396	436	475	472	468	468	468	482	497	447	267	247	309	303	379	389	386	386	419	444	440	419	450	12270
NORTH SALEM	0	0	0	0	0	0	2	3	8	14	13	12	11	10	11	12	52	30	50	30	22	20	23	20	19	8	10	9	8	12	409
ROXANA	16	17	14	12	12	12	15	18	24	29	29	29	28	26	27	28	27	25	13	10	7	7	8	11	12	34	24	34	34	23	609
ISLAND WARD	65	66	64	62	62	61	70	80	81	82	72	63	47	31	30	30	25	25	24	24	20	35	35	32	31	64	66	62	60	56	1525
WOODMANSEE JOHNSON	45	5	20	30	28	27	30	32	20	9	16	22	22	22	22	22	31	25	25	23	22	21	22	38	39	35	45	44	42	44	851
CITY OF REXBURG	41	41	44	46	50	59	65	65	67	70	67	68	64	66	66	68	72	66	69	62	44	44	60	49	50	48	46	53	66	60	1736
REXBURG IRRIGATION	235	233	215	197	212	228	229	230	245	268	266	264	260	257	259	261	183	178	173	161	160	161	168	155	160	209	224	222	228	228	6473
TOTAL DIVERS-TETON RIVER	1247	1223	1137	1052	1038	1120	1170	1218	1292	1374	1348	1328	1294	1267	1297	1326	1225	942	838	858	842	995	1062	1054	1113	1284	1323	1337	1375	1376	35349

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM HENRYS FORK AND TRIBUTARIES FOR JULY 1929

FALL RIVER CANALS

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
YELLOWSTONE	0	0	0	0	0	0	0	0	0	0	0	0	5	7	14	0	0	7	10	4	0	0	0	0	0	0	0	0	0	0	0	47
HARRIGFELD	0	6	0	0	2	11	10	11	14	19	19	18	18	19	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147
MARYSVILLE	169	182	170	182	197	196	205	194	190	182	178	190	196	200	204	200	200	200	68	0	0	0	0	0	0	0	0	0	103	93		3699
TOTAL DIVERS ABOVE SQUIRREL	169	182	170	182	199	207	215	205	204	201	197	213	221	233	210	200	207	210	72	0	0	0	0	0	0	0	0	0	103	93		3893
FARMERS OWN	40	48	48	43	41	41	32	41	40	45	44	46	46	46	32	0	0	6	6	36	46	45	45	45	47	47	39	20	21	20	19	1075
ALMY	6	5	4	4	3	1	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
ENTERPRISE	149	156	157	158	153	143	155	151	146	152	147	150	147	20	3	101	135	135	140	144	140	140	139	138	141	138	139	139	139	134	137	4166
BELL	111	8	6	9	6	5	5	3	5	5	5	4	3	5	6	5	3	3	7	7	6	3	4	5	5	5	5	4	4	5	4	161
FALL RIVER	431	448	437	437	387	361	351	340	340	364	357	353	336	336	357	357	328	342	314	355	353	353	357	357	355	355	351	353	355	347	345	11272
MEBEE	6	7	3	6	2	3	3	2	1	2	2	3	8	5	5	5	5	4	12	9	9	8	7	7	7	6	6	4	3	4	3	152
CHESTER	89	100	89	83	72	55	54	34	28	22	32	20	16	41	51	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	805
SILKEY	14	16	15	12	4	9	9	4	18	13	13	8	6	15	15	15	10	12	12	15	15	15	14	14	13	22	23	23	21	14	6	415
CURR	38	35	31	45	40	33	33	29	26	24	13	12	12	14	13	13	12	17	29	30	29	29	32	32	26	26	29	30	32	30	32	829
WHITE	5	4	2	1	0	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	4	3	1	31
TOTAL DIVERS-SQUIRREL TO CHESTER	789	827	792	798	708	651	646	605	606	628	614	597	569	482	482	515	493	519	580	599	598	593	598	598	594	593	593	578	579	557	547	18934

HENRYS FORK CANALS

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
DEWEY	22	20	20	20	20	20	23	21	21	21	21	20	20	21	8	5	5	21	23	23	23	23	21	21	21	19	18	20	21	23	23	608
LAST CHANCE	79	65	56	62	49	54	60	56	56	52	52	50	53	58	22	0	10	47	48	51	52	51	56	54	54	51	50	50	48	56	55	1557
ST ANTHONY UNION	516	460	443	433	415	427	463	478	423	313	361	414	409	468	487	495	457	481	487	497	500	439	435	463	396	459	497	502	503	505	499	14121
FARMERS FRIEND	204	159	149	145	154	138	138	127	123	126	122	118	166	138	0	0	0	0	0	0	0	0	0	0	0	0	0	53	51	54	50	2041
TWIN GROVES	151	141	139	119	117	112	114	111	110	109	109	107	116	112	118	125	124	141	140	140	140	139	137	136	137	134	133	66	0	43	85	3605
SALEM UNION	230	219	227	222	211	161	151	164	151	160	158	167	164	154	181	188	188	222	225	234	233	215	211	211	213	223	222	186	65	0	116	5652
TOTAL DIVERS-ASHTON TO ST ANTH.	1202	1064	1034	1021	966	912	949	937	884	781	823	876	928	951	816	813	784	912	923	945	948	867	860	885	823	886	920	877	694	681	828	27150
EGIN	268	261	274	268	256	232	229	254	270	254	252	246	242	241	247	251	249	254	256	279	281	281	286	259	0	274	274	302	315	319	324	8028
ST ANTHONY UNION FEEDER	62	44	48	73	44	62	7	59	56	43	44	43	40	64	77	84	81	75	83	109	109	110	103	103	123	102	91	35	35	97	92	2319
INDEPENDENT	303	284	280	266	257	206	275	271	240	200	223	220	200	229	275	284	282	271	204	129	129	118	118	118	121	110	124	129	147	160	151	6324
CONSOLIDATED FARMERS	271	261	252	240	216	209	204	199	190	209	190	119	79	58	106	218	211	102	185	190	190	216	216	206	183	167	169	171	181	185	185	5778
TOTAL DIVERS-ST ANTH. TO REXBURG	904	850	854	847	773	709	715	783	756	706	709	628	561	592	705	837	823	702	728	707	709	725	723	726	427	654	658	697	738	761	752	22450

TETON RIVER CANALS

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
SIDDOWAY	21	23	20	21	20	18	17	16	15	11	10	10	9	12	11	11	9	9	10	12	11	10	8	7	7	8	6	6	4	6	5	362
WILFORD	187	179	167	168	162	155	151	147	141	138	136	133	130	127	123	137	140	94	82	85	68	66	67	64	65	64	65	63	62	62	68	3496
TETON IRRIGATION	95	91	80	100	99	83	79	80	79	67	67	63	67	67	71	77	84	60	59	75	65	88	80	74	87	74	94	88	98	96	90	2485
GOOD LUCK	39	37	31	31	31	25	25	21	21	18	18	17	17	16	15	13	13	11	10	9	8	8	7	7	8	8	8	8	7	7	9	502
PIONEER	44	43	43	31	30	24	24	23	23	31	30	30	28	25	24	24	24	12	12	11	10	10	10	10	10	9	11	10	11	11	11	743
STEWART	54	57	51	47	48	34	32	29	28	24	23	26	25	27	26	26	22	16	15	12	10	12	12	10	13	10	12	10	11	10	11	428
PINCOCK BYINGTON	26	24	22	22	22	17	18	17	15	15	14	14	14	14	14	14	17	15	11	9	9	8	8	8	13	8	8	8	8	8	8	599
PINCOCK GARNER	37	43	40	37	42	35	22	22	20	20	19	18	17	17	16	23	24	18	12	11	11	11	12	11	9	8	9	10	9	8	8	3562
TETON ISLAND FEEDER	440	396	386	366	347	318	318	322	294	279	273	270	267	267	261	250	279	291	366	353	350	328	300	291	273	294	291	285	267	267	273	9143
NORTH SALEM	15	28	19	18	40	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	386
ROXANA	25	21	18	18	15	13	11	12	10	5	5	8	8	8	14	10	9	10	11	11	15	13	15	13	12	12	12	15	11	9	9	672
ISLAND WARD	54	56	52	52	44	41	40	35	35	32	30	27	30	29	46	41	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	644
WOODMANSEE JOHNSON	47	47	41	39	34	30	28	25	23	23	23	24	24	23	17	16	12	25	20	12	16	14	13	11	10	10	11	10	11	11	14	1384
CITY OF REXBURG	62	57	51	54	63	58	48	46	41	39	53	54	55	58	55	51	50	36	45	41	28	28	30	26	26	24	27	29	36	36	27	5097
REXBURG IRRIGATION	230	227	219	218	212	211	198	190	188	183	182	184	181	180	175	158	141	140	154	132	130	141	130	129	129	124	126	119	134	121	121	5097
TOTAL DIVERS-TETON RIVER	1380	1329	1230	1222	1209	1085	1011	989	933	889	881	878	872	870	868	851	848	737	807	773	735	731	692	661	662	653	680	659	655	642	654	27102

PLATE NO XXIII

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM HENRYS FORK AND TRIBUTARIES FOR AUGUST 1923

FALL RIVER CANALS

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
TEGHTER-STONE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARD SCRUFF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MARSHALL	101	97	93	98	101	97	101	101	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	803
TOTAL DIVERS-HIGH SQUIRREL	101	97	93	98	101	97	101	101	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	803
FARMERS OWN	20	20	20	20	19	19	20	24	26	26	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	7	0	0	0	601
ALVEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ENTERPRISE	138	139	136	136	138	138	138	140	144	144	143	142	141	141	138	138	136	136	137	136	136	136	136	134	138	141	137	137	138	87	4239	
BELL	3	3	3	3	3	3	4	4	4	5	5	5	5	4	4	4	3	4	4	3	3	2	2	2	2	2	3	2	2	3	3	114
FALL RIVER	344	357	345	355	356	340	330	332	335	353	359	356	353	351	349	353	353	357	355	349	346	345	342	342	340	342	361	347	367	340	349	10835
MESSER	5	2	2	4	4	1	0	0	0	4	6	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
CHESTER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SURVEY	4	6	4	11	14	15	9	10	9	20	19	19	17	17	17	16	14	14	16	12	10	8	7	8	6	6	15	7	7	12	11	360
CURR	28	30	28	15	21	26	20	15	24	38	30	30	31	26	31	25	25	25	25	25	25	25	25	25	25	28	24	27	21	21	21	798
WHITE	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	0	0	0	0	0	3
TOTAL DIVERS-SQUIRREL TO ROBERTS	545	560	541	546	575	544	521	529	568	592	580	575	569	559	558	556	551	556	559	546	539	536	532	533	529	533	568	539	540	521	471	16592

HENRYS FORK CANALS

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
ALVEY	23	24	24	24	24	23	23	20	19	16	13	16	15	18	18	18	18	19	18	18	20	18	18	17	16	16	17	17	18	18	16	562
LAST CHANCE	56	61	50	56	56	56	54	50	47	42	38	43	40	45	44	44	45	44	46	47	52	46	46	33	32	32	48	54	52	52	28	1435
ST ANTHONY UNION	505	411	393	406	406	391	401	401	404	398	388	412	404	406	387	387	387	391	391	390	396	390	388	343	343	345	351	351	361	323	319	11366
FARMERS FRIEND	55	59	47	49	46	46	50	50	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	435
TWIN GROVES	84	75	72	72	71	71	80	90	74	105	91	56	64	66	66	35	25	23	23	23	24	20	20	20	20	21	21	22	22	23	23	1502
SALEM UNION	181	181	184	183	183	204	226	215	211	208	201	194	185	187	183	183	187	190	62	202	202	198	187	173	176	187	170	154	167	156	132	5658
TOTAL DIVERS-ST ANTH TO STANTH	902	817	770	790	786	791	834	826	788	769	731	721	708	722	698	667	662	667	540	680	693	672	659	586	587	601	607	594	620	572	518	21578
ESIN	239	302	302	295	281	269	301	274	266	263	247	271	308	299	295	295	299	302	290	266	266	249	222	222	202	202	205	205	205	210	207	8119
ST ANTHONY UNION FEEDER	103	102	96	95	94	94	90	83	91	88	84	91	93	92	86	94	94	94	89	92	93	91	92	94	80	80	93	95	96	92	92	2842
INDEPENDENT	157	160	164	164	155	140	137	134	147	142	121	118	118	120	123	134	164	164	167	162	164	124	124	126	124	124	127	118	118	118	103	4261
CONSOLIDATED FARMERS	152	190	188	190	181	181	201	216	192	197	197	192	169	176	206	190	174	178	181	183	183	183	171	146	140	129	121	127	131	131	133	5369
TOTAL DIVERS-ST ANTH TO REXBURG	751	754	750	744	711	678	729	707	696	690	649	678	688	687	710	713	731	738	727	703	706	647	609	588	546	535	546	545	545	551	535	20591

TETON RIVER CANALS

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
BIDDOWAY	4	2	1	1	5	5	3	10	11	11	9	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
WILFORD	67	82	100	98	99	95	93	93	77	68	68	68	68	68	69	69	68	68	68	68	68	67	66	66	68	67	64	65	66	67		2288
TETON IRRIGATION	87	81	78	85	80	75	78	78	78	69	74	76	75	74	70	70	71	72	65	74	71	75	78	67	64	60	57	53	0	59	29	2127
GOOD LUCK	10	10	9	9	9	9	9	9	8	7	7	9	9	8	8	9	7	7	8	7	8	9	8	8	8	9	9	9	8	8	9	267
PIONEER	10	9	8	8	11	8	9	10	9	10	10	9	9	10	10	9	9	8	9	9	8	10	10	11	10	9	9	8	8	9	10	286
STEWART	14	14	10	11	11	12	11	11	11	13	12	12	13	14	21	14	14	14	14	14	14	14	14	13	13	13	13	13	12	13	14	405
PITCOCK BYINGTON	6	8	8	8	8	8	8	8	7	8	7	8	8	7	7	7	7	8	7	8	8	7	7	7	8	9	8	8	8	9	9	211
PITCOCK GARNER	9	10	9	9	9	9	8	8	8	8	8	9	7	7	7	7	7	7	9	8	8	7	7	7	8	9	8	8	8	9	9	251
TETON ISLAND FEEDER	285	282	288	278	276	270	267	261	250	251	256	250	244	239	239	239	239	236	214	214	217	212	209	201	195	190	193	190	195	206	206	7283
NORTH SALEM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROXANA	10	26	15	15	16	16	15	18	13	2	2	2	6	6	7	7	8	8	9	7	6	6	6	3	3	3	3	3	3	3	3	297
ISLAND WARD	0	6	0	0	0	0	0	0	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	15	14	12	12	13	12	11	11	11	12	12	13	9	10	7	1	1	1	1	1	1	5	5	4	3	1	1	1	6	8	6	221
CITY OF REXBURG	29	31	25	18	19	22	23	28	28	25	25	28	27	23	23	22	22	24	22	22	21	21	24	26	25	23	26	25	27	22	26	752
REXBURG IRRIGATION	126	141	134	130	133	132	133	129	131	133	132	125	139	120	117	118	111	137	137	132	127	125	129	132	135	136	141	141	137	144	163	4100
TOTAL DIVERS-TETON RIVER	674	708	701	677	689	672	674	674	642	619	622	613	616	586	585	572	562	570	566	564	553	554	555	544	536	534	535	557	493	557	578	18564

U.S. RECLAMATION SERVICE DISTRICT NO. 36 — FORM NO. 728

DAILY DISCHARGE IN SECOND FEET OF CANALS DIVERTING FROM HENRYS FORK AND TRIBUTARIES FOR SEPTEMBER 1929

FALL RIVER CANALS

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
WILLOW STONE	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	3	3	3	3	4	0	0	0	0	0	0	0	0	0	36
FAIRFIELD	0	0	0	0	0	0	0	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	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 DIVERS ABOVE SQUIRREL	0	0	0	0	0	0	0	0	0	0	0	4	5	4	5	6	6	7	7	7	11	2	0	5	5	5	4	4	4	4	98
FARMERS OWN	10	20	21	20	26	26	26	26	27	26	26	25	25	25	25	25	25	25	16	7	10	8	8	7	11	14	16	18	21	21	586
ALMY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ENTERPRISE	49	49	51	50	49	50	50	50	50	49	49	49	50	49	78	108	108	108	108	78	35	39	38	38	13	0	90	88	88	88	1739
ENTERPRISE	3	3	5	4	4	4	5	5	5	5	5	5	5	5	4	3	4	4	4	4	6	6	6	6	6	6	6	5	4	4	141
BELL	237	235	250	311	307	284	284	282	280	280	280	271	275	275	266	257	233	227	221	215	227	32	95	93	91	93	91	91	90	90	6311
FALL RIVER	2	2	2	4	4	5	6	6	6	1	1	1	1	1	0	0	0	1	1	2	3	3	2	2	2	2	2	1	1	0	65
MABEL	0	0	0	0	0	0	0	0	0	0	10	18	16	15	14	14	13	14	15	12	0	0	0	0	8	8	8	7	6	6	192
CHESTER	5	8	8	8	8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	7	7	8	8	7	7	7	0	0	0	0	182
SILKEY	26	26	26	25	25	24	25	25	17	17	17	17	17	17	16	16	19	18	18	17	20	19	18	18	18	18	18	18	18	18	591
CURR	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	0	0	1	1	2	3	2	2	1	1	1	1	1	1	33
WHITE																															
TOTAL DIVERS-SQUIRREL to CHESTER	337	344	406	423	424	403	406	403	393	386	396	400	397	395	410	429	408	405	395	343	311	118	176	173	157	142	232	229	229	228	9898

HENRYS FORK CANAL

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
DEWEY	7	6	7	6	6	5	5	5	4	5	5	5	4	4	5	7	8	8	8	8	8	5	8	8	6	6	6	6	6	6	187
LAST CHANCE	29	28	32	46	44	42	42	42	30	31	32	31	30	30	26	23	23	23	24	12	0	0	0	0	25	31	31	32	32	32	803
ST ANTHONY UNION	310	268	268	262	262	258	258	258	258	208	47	47	200	206	224	241	235	230	224	218	252	258	250	250	242	205	134	133	132	132	6470
FARMERS FRIEND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	49	84	79	75	41	0	0	0	0	0	0	0	0	0	0	352
TWIN GROVES	21	21	21	21	71	74	70	71	73	74	75	74	74	75	74	74	73	73	73	73	73	73	73	71	72	72	73	71	72	73	1978
SALEM UNION	122	158	154	141	138	72	73	72	72	74	76	75	72	72	70	68	70	71	71	72	76	79	76	75	74	75	75	55	52	49	2480
TOTAL DIVERS-ASHTON to ST ANTH.	489	481	482	476	521	451	448	448	437	392	235	232	380	387	423	463	493	484	475	424	409	419	407	404	419	389	319	297	294	292	12270
EGIN	208	208	207	202	199	175	178	174	176	176	150	148	130	130	129	128	127	126	128	131	133	135	133	133	133	135	81	81	80	78	4352
ST ANTHONY UNION FEEDER	33	32	81	84	82	78	68	54	56	43	41	19	19	19	28	36	45	54	67	80	90	90	89	89	84	52	30	30	30	31	1754
INDEPENDENT	92	98	36	91	89	91	91	68	45	44	35	52	120	121	124	126	129	132	115	38	45	42	40	33	39	123	105	105	104	103	2702
CONSOLIDATED FARMERS	131	123	129	135	158	178	178	176	178	183	144	129	129	129	125	123	123	121	121	125	129	125	119	121	119	119	119	117	121	123	4056
TOTAL DIVERS-ST ANTH to REXBURG	524	527	519	512	528	514	515	472	455	446	430	388	398	399	406	413	424	433	431	434	397	392	381	382	377	429	335	333	335	335	12864

TETON RIVER CANALS

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
SIDDOWAY	0	0	0	0	0	0	0	0	0	0	3	3	3	4	3	4	4	5	5	6	7	15	12	9	7	10	12	11	9	8	144
WILFORD	67	65	68	68	67	66	67	66	65	65	65	65	66	65	80	94	93	93	82	80	72	78	71	72	60	63	78	73	67	60	2169
TETON IRRIGATION	38	57	75	57	56	53	53	51	49	48	49	50	53	25	26	26	38	51	54	44	45	51	52	51	51	52	56	51	46	41	1444
GOOD LUCK	11	8	12	11	10	8	5	9	9	8	9	9	8	8	8	8	9	10	12	10	12	15	12	9	8	10	12	11	9	8	281
PIONEER	10	10	10	10	9	9	9	9	9	9	9	8	8	8	8	8	11	11	11	10	13	16	14	13	12	13	14	13	13	12	329
STEWART	14	13	14	14	14	13	13	13	12	12	12	12	12	12	12	12	12	11	11	10	13	16	14	13	12	13	14	13	12	10	324
PINCOCK BYINGTON	4	4	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	11	8	8	7	7	8	8	8	11	9	8	164
PINCOCK GARNER	8	7	8	5	5	7	7	7	7	7	7	7	6	9	9	9	9	8	8	8	9	12	9	8	8	8	11	9	8	6	176
TETON ISLAND FEEDER	239	236	247	236	253	230	247	244	239	247	244	238	233	204	198	193	188	182	160	172	204	287	344	214	206	198	281	250	239	208	6776
NORTH SALEM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	11	16	22	11	0	0	0	0	0	0	0	0	0	0	0	66
ROXANA	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	123
ISLAND WARD	8	7	8	5	5	7	7	7	7	7	7	7	6	9	9	9	9	8	8	8	9	12	9	8	8	8	11	9	8	6	176
WOODMANSEE JOHNSON	239	236	247	236	253	230	247	244	239	247	244	238	233	204	198	193	188	182	160	172	204	287	344	214	206	198	281	250	239	208	6776
CITY OF REXBURG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	11	16	22	11	0	0	0	0	0	0	0	0	0	0	0	66
REXBURG IRRIGATION	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	123
TOTAL DIVERS-TETON RIVER	518	544	614	411	403	585	377	548	513	574	854	545	527	513	543	542	565	571	504	482	536	584	535	510	477	499	530	561	529	500	16543

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 IV, V, VI and VII.

Plates XX and XXI summarize data in regard to the flow of the three principal streams, diversions therefrom, losses and gains throughout different sections, insofar as it is practicable to show all these facts in such tables.

The time interval basis used therein for the presentation of river records is as follows:

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.

This schedule is arranged to make the river records correspond as regards time with those on Plates VIII and IX. The dates indicated on the tables are for the nearest midnight to midnight or calendar days.

*Approximate means used. No recording gage records available.

DAILY SUMMARY OF DATA AT AND BETWEEN GAGIN

HENRYS LAKE RESERVOIR / HENRYS FORK — LAKE

1929 DATE	Henrys Lake Reservoir GAGE	STORAGE AC. FT.	TOTAL DRAFT AC. FT.	STORAGE LOSSES AC. FT.	NET DR. AC. FT.	Lake GAGE	DISCH.	STOR'D	NORM.
MAY 30									
31									
JUNE 1	3172	59116							
2	3173	59176							
3	3175	59295				0.97	33		33
4	3176	59355				0.98	34		34
5	3178	59474				0.99	35		35
6	3178	59474				1.00	36		36
7	3175	59295				1.00	36		36
8	3176	59355				0.99	35		35
9	3177	59414				0.99	35		35
10	3182	59713				0.98	34		34
11	3187	60010				0.98	34		34
12	3191	60250				0.99	35		35
13	3193	60368				0.97	33		33
14	3197	60607				0.93	30		30
15	3202	60908				0.87	26		26
16	3208	61272				0.87	26		26
17	3219	61940				0.89	28		28
18	3230	62609				0.91	29		29
19	3233	62791				0.90	28		28
20	3231	62670				0.87	26		26
21	3234	62852				0.89	27		27
22	3237	63034				0.88	27		27
23	3238	63095				0.89	28		28
24	3237	63034				0.89	28		28
25	3238	63095				0.88	27		27
26	3239	63156				0.88	27		27
27	3243	63398				0.89	28		28
28	3246	63581				0.91	29		29
29	3252	63946				0.93	30		30
30	3255	64128				0.95	32		32
JULY 1	3256	64189				0.95	32		32
2	3256	64189				0.95	32		32
3	3257	64250				0.97	33		33
4	3256	64189				0.98	34		34
5	3255	64128				0.99	35		35
6	3254	64067				1.00	36		36
7	3253	64006				1.01	36		36
8	3252	63946				1.08	41		41
9	3250	63824				1.32	62		62
10	3248	63702				1.34	64		64
11	3247	63642				1.33	62		62
12	3245	63520				1.28	57		57
13	3242	63338	182	100	82	1.53	82	41	41
14	3237	63034	304	100	204	2.23	172	103	69
15	3230	62609	425	100	325	2.50	213	164	49
16	3222	62123	486	95	391	2.81	263	197	66
17	3213	61576	547	95	452	2.82	264	228	36
18	3204	61029	547	95	452	2.89	276	228	48
19	3196	60547	482	90	392	2.95	286	198	88
20	3187	60010	537	90	447	3.00	294	225	69
21	3178	59474	536	90	446	2.95	284	225	59
22	3169	58938	536	85	451	2.95	284	227	57
23	3160	58400	538	85	453	2.94	282	228	54
24	3151	57864	536	85	451	2.86	269	227	42
25	3142	57327	537	80	457	2.88	272	230	42
26	3131	56670	657	80	577	H.D.	344	291	53
27	3115	55716	954	80	874	3.88	473	441	32
28	3094	54471	1245	75	1170	H.D.	628	590	38
29	3067	52890	1581	75	1506	5.06	775	759	16
30	3041	51370	1520	75	1445	5.00	756	729	27
31	3014	49848	1522	70	1452	5.02	762	732	30
			13672	1645	12027			6063	

HENRYS FORK — WARM RIVER

DATE	GAGE	DISCH.	STOR'D	NORM.
MAY 31	4.90	1190		1190
JUNE 1	4.92	1200		1200
2	5.00	1260		1260
3	5.01	1270		1270
4	4.94	1220		1220
5	4.87	1170		1170
6	4.84	1150		1150
7	4.83	1140		1140
8	4.83	1140		1140
9	4.83	1140		1140
10	4.84	1150		1150
11	4.90	1190		1190
12	4.95	1230		1230
13	4.94	1210		1210
14	4.86	1150		1150
15	4.80	1110		1110
16	4.89	1180		1180
17	5.14	1350		1350
18	5.25	1430		1430
19	5.11	1330		1330
20	4.91	1180		1180
21	4.84	1130		1130
22	4.79	1090		1090
23	4.74	1060		1060
24	4.71	1030		1030
25	4.71	1030		1030
26	4.70	1020		1020
27	4.68	1010		1010
28	4.66	996		996
29	4.64	983		983
30	4.62	970		970
JULY 1	4.60	957		957
2	4.59	950		950
3	4.57	938		938
4	4.56	931		931
5	4.55	924		924
6	4.54	918		918
7	4.54	918		918
8	4.53	912		912
9	4.53	912		912
10	4.55	924		924
11	4.54	918		918
12	4.54	918		918
13	4.54	918		918
14	4.57	938	40	898
15	4.66	996	101	895
16	4.71	1030	161	869
17	4.75	1060	194	866
18	4.78	1080	225	855
19	4.83	1110	224	886
20	4.84	1120	195	925
21	4.83	1110	222	888
22	4.79	1080	222	858
23	4.78	1080	224	856
24	4.77	1070	225	845
25	4.75	1060	224	836
26	4.74	1050	226	824
27	4.76	1070	287	783
28	4.88	1170	434	736
29	5.03	1280	581	699
30	5.17	1400	748	652
31	5.27	1490	718	772
AUG 1	5.31	1530	721	809
		69471	5972	63499

HENRYS FORK — ASHTON

DATE	GAGE	DISCH.	STOR'D	NORM.
JUNE 1	1.16	1840		1840
2	1.19	1890		1890
3	1.28	2060		2060
4	1.24	1980		1980
5	1.21	1930		1930
6	1.13	1780		1780
7	1.10	1730		1730
8	1.15	1820		1820
9	1.07	1670		1670
10	1.12	1760		1760
11	1.09	1690		1690
12	1.22	1930		1930
13	1.15	1800		1800
14	1.17	1840		1840
15	1.13	1760		1760
16	1.07	1660		1660
17	1.22	1930		1930
18	1.37	2210		2210
19	1.36	2190		2190
20	1.24	1960		1960
21	1.12	1750		1750
22	1.04	1590		1590
23	1.02	1550		1550
24	1.02	1550		1550
25	1.05	1600		1600
26	1.10	1690		1690
27	1.01	1540		1540
28	0.97	1470		1470
29	0.93	1400		1400
30	0.92	1380		1380
JULY 1	0.92	1380		1380
2	0.90	1350		1350
3	0.87	1300		1300
4	0.89	1330		1330
5	0.85	1260		1260
6	0.86	1280		1280
7	0.89	1330		1330
8	0.87	1300		1300
9	0.87	1300		1300
10	0.86	1280		1280
11	0.87	1300		1300
12	0.85	1260		1260
13	0.86	1280		1280
14	0.86	1280		1280
15	0.85	1260	40	1220
16	0.92	1380	100	1280
17	0.95	1430	160	1270
18	0.96	1450	193	1257
19	1.00	1520	224	1296
20	1.01	1540	223	1317
21	1.02	1550	194	1356
22	1.00	1500	221	1279
23	0.98	1470	221	1249
24	0.98	1470	223	1247
25	0.98	1470	224	1246
26	0.98	1470	223	1247
27	0.97	1450	225	1225
28	1.00	1500	286	1214
29	1.08	1620	432	1188
30	1.12	1690	578	1112
31	1.17	1780	744	1036
AUG 1	1.21	1850	714	1136
2	1.32	2060	717	1343
		100640	5942	94698

SQUIRREL

DATE	GAGE	DISCH.	CANALS ABOVE STATION	SQUIRREL PLUS CANALS ABOVE
MAY 31	3.40	1740	21	1761
JUNE 1	3.70	2150	24	2174
2		2020	24	2044
3	3.50	1880	23	1903
4		1750	26	1776
5	3.30	1620	24	1644
6		1780	38	1818
7	3.56	1950	47	1997
8		2160	50	2210
9	3.85	2360	52	2412
10		2500	50	2550
11	4.05	2640	67	2707
12		2500	72	2572
13	4.00	2510	38	2548
14		2220	92	2312
15	4.20	2860	106	2966
16		3090	115	3205
17	4.50	3320	127	3447
18	4.30	3020	123	3143
19	3.60	2010	111	2121
20	3.50	1880	120	2000
21	3.50	1880	125	2005
22	3.55	1940	135	2075
23	3.60	2010	141	2151
24	4.10	2720	0	2720
25	4.15	2790	0	2790
26	4.30	3020	121	3141
27	4.55	3390	142	3532
28	4.30	3020	157	3177
29	4.45	3240	184	3424
30	4.55	3540	193	3733
JULY 1	4.35	3090	169	3259
2	3.90	2430	182	2612
3	3.50	1880	170	2050
4	3.30	1620	182	1802
5	3.05	1310	199	1509
6	2.75	990	207	1197
7		920	215	1135
8	2.50	850	205	1055
9	2.45	720	204	924
10	2.43	704	201	905
11	2.40	680	197	877
12	2.32	618	213	831
13	2.25	565	221	786
14	2.25	565	233	798
15	2.24	558	210	768
16	2.20	530	209	739
17	2.23	551	207	758
18	2.20	530	210	740
19	2.24	558	[illegible]	[illegible]
20	2.45	720	0	[illegible]
21	2.44	712	0	[illegible]
22	2.42	696	0	[illegible]
23	2.40	680	0	[illegible]
24	2.38	664	0	[illegible]
25	2.38	664	0	[illegible]
26	2.38	664	0	[illegible]
27	2.38	664	0	[illegible]
28	2.38	664	0	[illegible]
29	2.35	640	0	[illegible]
30	2.20	530	103	633
31	2.20	530	93	623
AUG 1	2.23	551	101	652
		104218	6555	[illegible]

FALL RIVER — DIVERSIONS

DATE	TOTAL	STOR.
JUNE 1	628	
2	623	
3	617	
4	623	
5	623	
6	686	
7	744	
8	780	
9	812	
10	796	
11	739	
12	793	
13	789	
14	849	
15	881	
16	881	
17	842	
18	721	
19	[illegible]	
20	[illegible]	
21	[illegible]	
22	[illegible]	
23	812	
24	589	
25	687	
26	813	
27	853	
28	[illegible]	
29	1034	
30	1035	
JULY 1	958	
2	1004	
3	[illegible]	
4	780	
5	907	
6	[illegible]	
7	851	
8	810	
9	810	
10	829	
11	811	
12	810	
13	[illegible]	
14	715	
15	692	
16	715	
17	[illegible]	
18–31	[illegible]	
AUG 1	[illegible]	
	474[illegible]	

…AND BETWEEN GAGING STATIONS ON HENRYS FORK AND TRIBUTARIES

FALL RIVER

192_ DATE	Squirrel plus Canals Above	Diversions: Date	Diversions: Total	Diversions: Stor.	Diversions: Norm.	Theo. Bal. Chest.	Chester: Gage	Chester: Disch.	Gain Above Chest.
MAY	1761	JUNE 1	628		628	1133	3.76	1690	557
	2174	2	623		623	1551	3.95	1940	389
JUN	2044	3	617		617	1427	3.90	1870	443
	1903	4	623		623	1280	3.68	1600	320
	1776	5	629		629	1147	3.49	1380	233
	1649	6	686		686	963	3.56	1460	497
	1818	7	744		744	1074	3.66	1570	496
	1997	8	780		780	1217	3.79	1730	513
	2210	9	812		812	1398	3.91	1890	492
	2412	10	796		796	1616	4.01	2020	404
	2550	11	799		799	1751	4.15	2200	449
	2707	12	793		793	1914	4.39	2540	626
	2672	13	789		789	1883	4.20	2270	387
	2648	14	849		849	1799	4.17	2230	431
	2812	15	881		881	1931	4.37	2510	579
	2966	16	881		881	2085	4.64	2920	835
	3206	17	842		842	2364	5.05	3570	1206
	3447	18	721		721	2726	4.91	3340	614
	3143	19	666		666	2477	4.23	2320	-157
	2121	20	553		553	1568	3.91	1890	322
	2000	21	748		748	1252	3.61	1510	258
	2006	22	766		766	1240	3.78	1720	480
	2075	23	812		812	1263	3.93	1910	647
	2151	24	689		689	1462	4.19	2260	798
	2720	25	687		687	2033	4.28	2390	357
	2790	26	873		873	1917	4.35	2480	563
	3141	27	959		959	2182	4.50	2700	518
	3532	28	966		966	2566	4.41	2570	4
	3173	29	1034		1034	2139	4.30	2410	271
	3424	30	1035		1035	2389	4.41	2570	181
	3733	JULY 1	958		958	2775	4.25	2340	-435
	3259	2	1009		1009	2250	3.84	1800	-450
JUL	2612	3	962		962	1650	3.45	1340	-310
	2050	4	980		980	1070	3.14	1020	-50
	1802	5	907		907	895	2.90	801	-94
	1509	6	858		858	651	2.79	498	-153
	1197	7	861		861	336	2.41	449	113
	1135	8	810		810	325	2.28	375	50
	1055	9	810		810	245	2.06	264	19
	924	10	829		829	95	1.87	185	90
	905	11	811		811	94	1.83	170	76
	877	12	810		810	67	1.66	116	49
	831	13	790		790	41	1.57	96	55
	786	14	715		715	71	1.55	92	21
	798	15	692		692	106	1.81	156	50
	768	16	715	101	614	53	1.81	156	103
	730	17	700	135	565	30	1.56	94	64
	758	18	729	135	594	29	1.45	72	43
	740	19	652	140	512	88	1.31	50	-38
	630	20	599	113	486	31	1.91	188	157
	720	21	598	38	560	122	1.89	181	59
	712	22	593	38	555	119	1.84	165	46
	696	23	598	37	561	98	1.80	153	55
	680	24	598	38	560	82	1.74	137	55
	664	25	594	39	555	70	1.69	124	54
	664	26	599	40	559	65	1.66	116	51
	664	27	593	33	560	71	1.63	109	38
	664	28	578	18	560	86	1.60	102	16
	664	29	579	21	558	85	1.59	100	15
	640	30	660	123	537	-20	1.48	77	97
	633	31	640	112	528	-7	(1.25)	42	49
	623	AUG. 1	666	121	545	-43	1.18	34	77
	652	2	657	117	540	-5	1.25	42	47
TOT	110803		47431	1399	46032	63372		77104	13732

HENRYS FORK

Date	Ashton plus Chest.	Divers. above St. Anth.: Total	Stor'd	Norm.	Theo. Bal. St. Anth.	St. Anthony: Gage	Disch.	Stor.	Norm.	Gain Ashton St. Anth.	Divers. below St. Anth.: Total	Stor'd	Norm	Theo. Bal. Below Divers	Est. Bal. Below Divers
JUNE 1	3530	1354		1354	2176	4.25	2360		2360	184	1173		1173	1187	
2	3830	1229		1229	2601	4.46	2810		2810	209	1160		1160	1650	
3	3930	1106		1106	2824	4.50	2900		2900	76	1146		1146	1754	
4	3580	1190		1190	2390	4.35	2570		2570	180	1125		1125	1445	
5	3310	1274		1274	2036	4.14	2130		2130	94	1092		1092	1038	
6	3240	1302		1302	1938	4.11	2070		2070	132	1108		1108	962	
7	3300	1330		1330	1970	4.10	2050		2050	80	1128		1128	922	
8	3550	1245		1245	2305	4.32	2500		2500	195	1134		1134	1366	
9	3560	1099		1099	2461	4.34	2550		2550	89	1142		1142	1408	
10	3780	1159		1159	2621	4.46	2810		2810	189	1076		1076	1734	
11	3890	1231		1231	2659	4.52	2950		2950	291	1000		1000	1950	
12	4470	1109		1109	3361	4.75	3490		3490	129	1017		1017	2473	
13	4070	1083		1083	2987	4.61	3150		3150	163	942		942	2208	
14	4070	1113		1113	2957	4.62	3180		3180	223	650		650	2530	
15	4270	1145		1145	3125	4.68	3320		3320	195	722		722	2598	
16	4580	1022		1022	3558	4.89	3840		3840	282	749		749	3091	
17	5500	930		930	4570	5.35	5040		5040	470	729		729	4311	
18	5550	798		798	4752	5.36	5060		5060	308	637		637	4423	
19	4510	839		839	3671	4.89	3840		3840	169	640		640	3200	
20	3850	857		857	2993	4.56	3040		3040	47	718		718	2322	
21	3260	1027		1027	2233	4.28	2420		2420	187	826		826	1594	
22	3310	1012		1012	2298	4.25	2360		2360	62	810		810	1550	
23	3460	1042		1042	2418	4.37	2610		2610	192	828		828	1782	
24	3810	1072		1072	2738	4.46	2810		2810	72	832		832	1978	
25	3990	1175		1175	2815	4.49	2880		2880	65	883		883	1997	
26	4170	1192		1192	2978	4.60	3130		3130	152	933		933	2197	
27	4240	1189		1189	3051	4.63	3200		3200	149	947		947	2253	
28	4040	1255		1255	2785	4.59	3110		3110	325	947		947	2163	
29	3810	1237		1237	2573	4.44	2770		2770	197	925		925	1845	
30	3950	1259		1259	2691	4.51	2920		2920	229	936		936	1984	
JULY 1	3720	1202		1202	2518	4.42	2720		2720	202	904		904	1816	
2	3150	1064		1064	2086	4.15	2150		2150	64	850		850	1300	
3	2640	1034		1034	1606	3.93	1730		1730	124	854		854	876	
4	2350	1021		1021	1329	3.80	1510		1510	181	847		847	663	
5	2061	966		966	1095	3.60	1200		1200	105	773		773	427	
6	1778	912		912	866	3.45	978		978	112	709		709	269	
7	1779	949		949	830	3.38	917		917	87	715		715	202	
8	1675	937		937	738	3.26	783		783	45	783		783	0	30
9	1564	884		884	680	3.24	762		762	82	756		756	6	
10	1465	781		781	684	3.22	741		741	57	706		706	35	
11	1470	823		823	647	3.20	720		720	73	709		709	11	25
12	1376	876		876	500	3.08	608		608	108	628		628	-20	22
13	1376	928		928	448	3.02	557		557	109	561		561	-4	2
14	1372	951		951	421	2.98	524		524	103	592		592	-68	2
15	1416	816		816	600	3.13	654	40	614	54	705		705	-51	2
16	1536	813	5	808	723	3.25	772	-6	778	49	837		837	-65	2
17	1524	784	15	769	740	3.27	794	10	784	54	823		823	-29	2
18	1522	912	68	844	610	3.16	682	-10	692	72	702		702	-20	7
19	1570	924	71	852	647	3.18	701	13	688	54	728	4	724	-27	32
20	1728	945	74	871	783	(3.29)	814	36	778	31	707	129	578	107	
21	1731	948	75	873	783	3.29	814	81	733	31	709	129	580	105	
22	1665	867	74	793	798	3.33	860	109	751	62	725	118	607	135	
23	1623	860	77	783	763	3.27	794	107	687	31	723	118	605	71	
24	1607	885	75	810	722	3.26	783	110	673	61	726	118	608	57	
25	1594	823	75	748	771	3.31	836	110	726	65	427	121	306	409	
26	1586	886	70	816	700	3.22	741	113	628	41	654	110	544	87	
27	1559	920	68	852	639	3.12	644	124	520	5	658	124	534	-14	
28	1602	877	123	754	725	3.22	741	145	596	15	697	160	537	44	
29	1720	694	126	568	1026	3.50	1060	285	775	34	738	248	490	322	
30	1767	681	133	548	1086	3.55	1130	322	808	44	761	265	496	369	
31	1822	828	244	584	994	3.50	1060	388	672	66	752	256	496	308	
AUG. 1	1884	902	315	587	982	3.49	1050	278	772	68	751	269	482	299	
2	2102	817	331	486	1285	3.65	1280	269	1011	-5	754	270	484	526	
Total	177744	63384	2019	61365	114360		121980	2524	119456	7620	51919	2439	49480	70061	

TETON RIVER

Date	St. Anthony Station: Gage	Disch.	Divers.
JUNE 1	2.16	1520	1247
2	2.67	1880	1223
3	2.45	1720	1137
4	2.01	1410	1052
5	1.82	1280	1032
6	2.03	1450	1120
7	2.48	1720	1170
8	2.77	1920	1215
9	3.05	2130	[illegible]
10	3.11	2170	[illegible]
11	3.04	2120	[illegible]
12	2.84	1970	[illegible]
13	2.65	1840	[illegible]
14	2.69	1610	[illegible]
15	3.01	2100	[illegible]
16	3.22	2310	[illegible]
17	3.35	2130	[illegible]
18	3.64	2510	[illegible]
19	2.87	1990	[illegible]
20	2.54	1720	[illegible]
21	2.15	1450	[illegible]
22	2.28	1530	[illegible]
23	2.42	1720	[illegible]
24	2.33	1760	[illegible]
25	2.51	1740	[illegible]
26	2.58	1790	[illegible]
27	2.75	1910	[illegible]
28	2.73	1900	[illegible]
29	2.57	1850	[illegible]
30	2.82	1960	[illegible]
JULY 1	2.32	1960	[illegible]
2	2.58	1790	[illegible]
3	2.33	1620	[illegible]
4	2.18	1510	[illegible]
5	2.03	1410	[illegible]
6	1.82	1290	[illegible]
7	1.67	1180	[illegible]
8	1.56	1110	[illegible]
9	1.43	1030	[illegible]
10	1.35	986	[illegible]
11	1.33	974	[illegible]
12	1.31	962	[illegible]
13	1.27	933	[illegible]
14	1.24	921	[illegible]
15	1.21	904	[illegible]
16	1.21	904	[illegible]
17	1.23	915	[illegible]
18	1.22	910	[illegible]
19	1.21	962	[illegible]
20	1.30	956	[illegible]
21	1.20	898	[illegible]
22	1.17	881	[illegible]
23	1.11	845	[illegible]
24	1.01	793	[illegible]
25	0.99	782	[illegible]
26	1.07	798	[illegible]
27	0.95	760	[illegible]
28	0.90	734	[illegible]
29	0.91	739	[illegible]
30	0.89	729	[illegible]
31	0.88	729	[illegible]
AUG. 1	0.93	750	[illegible]
2	1.09	835	[illegible]
Total		89529	[illegible]

…TIONS ON HENRYS FORK AND TRIBUTARIES

PLATE NO. XX.

Chester Gage	Chester Disch.	Gain Above Chest.	Ashton Plus Chest.	Henrys Fork: Divers. Above St. Anth. Total	Stor'd	Norm.	Theo. Bal. St. Anth.	St. Anthony Gage	St. Anthony Disch.	St. Anthony Stor.	St. Anthony Norm.	Gain Ashton St. Anth.	Divers. Below St. Anth. Total	Stor'd	Norm	Theo. Bal. Below Divers.	Est. Bal. Below Divers.	Teton River: St. Anthony Station Gage	Disch.	Divers.	Theo. Bal. Below Divers.	Est. Bal. Below Divers.	Theo. Bal. Henrys Fork Rexb'g	Henrys Fork Near Rexb'g	Gain Below Saint Anth.
[illegible]	1650	557	3530	1354		1354	2176	4.25	2360		2360	184	1173		1173	1187		2.16	1520	1247	273		1460	1810	350
[illegible]	1640	386	3830	1229		1229	2601	4.46	2810		2810	209	1160		1160	1650		2.57	1880	1223	657		2307	2450	143
[illegible]	1870	413	3930	1106		1106	2824	4.50	2900		2900	76	1146		1146	1754		2.46	1720	1137	583		2337	2820	483
[illegible]	1590	320	3580	1190		1190	2390	4.35	2570		2570	180	1125		1125	1445		2.01	1410	1052	358		1803	2380	577
[illegible]	1380	233	3310	1274		1274	2036	4.14	2130		2130	94	1092		1092	1038		1.82	1280	1035	245		1283	1850	567
[illegible]	1420	491	3240	1302		1302	1938	4.11	2070		2070	132	1108		1108	962		2.09	1450	1120	330		1292	1690	398
[illegible]	1570	496	3300	1330		1330	1970	4.10	2050		2050	80	1128		1128	922		2.48	1720	1170	550		1472	1700	228
[illegible]	1730	513	3550	1245		1245	2305	4.32	2500		2500	195	1134		1134	1366		2.17	1920	1215	705		2071	2080	9
3.91	1890	492	3560	1099		1099	2461	4.34	2550		2550	89	1142		1142	1408		3.05	2130	1292	838		2246	2420	174
4.01	2020	404	3780	1159		1159	2621	4.46	2810		2810	189	1076		1076	1734		3.11	2170	1374	796		2530	2840	310
4.15	2200	449	3890	1231		1231	2659	4.52	2950		2950	291	1000		1000	1950		3.04	2120	1348	772		2722	3200	478
[illegible]	2240	626	4470	1109		1109	3361	4.75	3490		3490	129	1017		1017	2473		2.84	1970	1328	642		3115	3650	535
4.20	2270	387	4070	1083		1083	2987	4.51	3150		3150	163	942		942	2208		2.65	1840	1294	546		2754	3460	706
4.17	2230	431	4070	1113		1113	2957	4.62	3180		3180	223	650		650	2530		2.69	1870	1267	603		3133	3550	417
4.31	2510	579	4270	1145		1145	3125	4.68	3320		3320	195	722		722	2598		3.01	2100	1297	803		3401	3710	309
[illegible]	2920	835	4580	1022		1022	3558	4.89	3840		3840	282	749		749	3091		3.29	2310	1326	984		4075	4240	165
5.05	3570	1206	5500	930		930	4570	5.35	5040		5040	470	729		729	4311		3.85	2730	1225	1505		5816	5320	-496
4.91	3340	614	5550	798		798	4752	5.36	5060		5060	308	637		637	4423		3.64	2570	942	1628		6051	6120	69
4.23	2320	-157	4510	839		839	3671	4.89	3840		3840	169	640		640	3200		2.87	1990	838	1152		4352	5960	1608
3.91	1890	322	3850	857		857	2993	4.56	3040		3040	47	718		718	2322		2.34	1620	858	762		3084	5020	1936
[illegible]	1510	228	3260	1027		1027	2233	4.28	2420		2420	187	826		826	1594		2.15	1490	842	648		2242	3590	1348
[illegible]	1720	480	3310	1012		1012	2298	4.25	2360		2360	62	810		810	1550		2.28	1580	995	585		2135	3070	935
[illegible]	1910	647	3460	1042		1042	2418	4.37	2610		2610	192	828		828	1782		2.48	1720	1062	658		2440	3110	670
[illegible]	2250	798	3810	1072		1072	2738	4.46	2810		2810	72	832		832	1978		2.53	1760	1054	706		2684	3340	656
[illegible]	2350	357	3990	1175		1175	2815	4.49	2880		2880	65	883		883	1997		2.51	1740	1113	627		2624	3250	626
4.35	2480	563	4170	1192		1192	2978	4.60	3130		3130	152	933		933	2197		2.58	1790	1284	506		2703	3240	537
4.50	2700	518	4240	1189		1189	3051	4.63	3200		3200	149	947		947	2253		2.75	1910	1323	587		2840	3270	430
4.41	2570	4	4040	1255		1255	2785	4.59	3110		3110	325	947		947	2163		2.73	1900	1337	563		2726	3170	444
4.30	2410	271	3810	1237		1237	2573	4.44	2770		2770	197	925		925	1845		2.57	1850	1375	475		2320	2940	620
4.41	2570	181	3950	1259		1259	2691	4.51	2920		2920	229	936		936	1984		2.82	1960	1376	584		2568	3090	522
[illegible]	2340	-435	3720	1202		1202	2518	4.42	2720		2720	202	904		904	1816		2.82	1960	1380	580		2396	3110	714
3.84	1800	-450	3150	1064		1064	2086	4.15	2150		2150	64	850		850	1300		2.58	1790	1329	461		1761	2610	849
[illegible]	1340	-310	2640	1034		1034	1606	3.93	1730		1730	124	854		854	876		2.33	1620	1230	390		1266	2160	894
[illegible]	1020	-50	2350	1021		1021	1329	3.80	1510		1510	181	847		847	663		2.18	1510	1222	288		951	1900	949
[illegible]	801	-94	2061	966		966	1095	3.60	1200		1200	105	773		773	427		2.03	1410	1209	201		628	1710	1082
[illegible]	498	-153	1778	912		912	866	3.43	978		978	112	709		709	269		1.84	1290	1085	205		474	1480	1006
[illegible]	449	113	1779	949		949	830	3.38	917		917	87	715		715	202		1.67	1180	1011	169		371	1310	939
[illegible]	375	50	1675	937		937	738	3.26	783		783	45	783		783	0	30	1.56	1110	989	121		121	1190	1069
[illegible]	264	19	1564	884		884	680	3.24	762		762	82	756		756	6		1.43	1030	933	97		103	1050	947
[illegible]	185	90	1465	781		781	684	3.22	741		741	57	706		706	35		1.35	986	889	97		132	982	850
[illegible]	179	76	1470	823		823	647	3.20	720		720	73	709		709	11	25	1.33	974	887	87		98	912	814
[illegible]	116	49	1376	876		876	500	3.08	608		608	108	628		628	-20	22	1.31	962	878	84		64	808	744
[illegible]	96	55	1376	928		928	448	3.02	557		557	109	561		561	-4	2	1.27	939	872	67		63	730	667
[illegible]	92	21	1372	951		951	421	2.98	524		524	103	592		592	-68	2	1.24	921	870	51		-17	665	682
[illegible]	156	50	1416	816		816	600	3.13	654	40	614	54	705		705	-51	2	1.21	904	868	36		-15	620	635
[illegible]	152	103	1536	813	5	808	723	3.25	772	-6	778	49	837		837	-65	2	1.21	904	851	53		-12	575	587
[illegible]	94	64	1524	784	15	769	740	3.27	794	10	784	54	823		823	-29	2	1.23	915	848	67		38	557	519
[illegible]	74	43	1522	912	68	844	610	3.16	682	-10	692	72	702		702	-20	7	1.22	910	737	173		153	585	432
[illegible]	[illegible]	-38	1570	923	71	852	647	3.18	701	13	688	54	728	4	724	-27	32	1.31	962	807	155		128	580	452
[illegible]	[illegible]	157	1728	945	74	871	783	3.29	814	36	778	31	707	129	578	107		1.30	956	773	183		290	670	380
[illegible]	[illegible]	59	1731	948	75	873	783	3.29	814	81	733	31	709	129	580	105		1.20	898	735	163		268	715	447
[illegible]	[illegible]	45	1665	867	74	793	798	3.33	860	109	751	62	725	118	607	135		1.17	881	737	144		279	735	456
[illegible]	[illegible]	53	1623	820	71	783	763	3.27	794	107	687	31	723	118	605	71		1.11	848	692	156		227	725	498
[illegible]	[illegible]	55	1607	885	75	810	722	3.26	783	110	673	61	726	118	608	57		1.01	792	651	131		188	690	502
[illegible]	[illegible]	54	1594	823	75	748	771	3.31	836	110	726	65	427	121	306	409		0.99	782	662	120		529	824	295
[illegible]	[illegible]	31	1586	886	70	816	700	3.22	741	113	628	41	654	110	544	87		1.02	798	653	145		232	720	488
[illegible]	[illegible]	38	1559	920	68	852	639	3.12	644	124	520	5	658	124	534	-14		0.95	760	680	80		66	635	569
[illegible]	[illegible]	16	1602	877	123	754	725	3.22	741	145	596	16	697	160	537	44		0.90	734	659	75		119	610	491
[illegible]	[illegible]	15	1720	694	126	568	1026	3.50	1060	285	775	34	738	248	490	322		0.91	739	659	80		402	745	343
[illegible]	[illegible]	97	1767	681	133	548	1086	3.55	1130	322	808	44	761	265	496	369		0.89	729	642	87		456	819	363
[illegible]	[illegible]	43	1822	828	244	584	994	3.50	1060	388	672	66	752	256	496	308		0.89	729	654	75		383	819	436
[illegible]	[illegible]	77	1884	902	315	587	982	3.49	1050	278	772	68	751	269	482	299		0.93	750	674	76		375	770	395
[illegible]	[illegible]	37	2102	817	331	486	1285	3.65	1280	269	1011	-5	754	270	484	526		1.09	836	708	128		654	934	280
	[illegible]	[illegible]	177744	63384	2019	61365	114360		121980	2524	119456	7620	51919	2439	49480	70061			89529	63833	25696		95757	132275	36518

1929 DISTRIBUTION WATER DISTRICT NO. 36

DAILY SUMMARY OF DATA AT AND BETWEE[N]

HENRYS LAKE RESERVOIR — HENRYS FORK: LAKE

1929 DATE	Henrys Lake Reservoir GAGE	STORAGE AC. FT.	TOTAL DRAFT AC. FT.	STORAGE LOSS AC. FT.	NET DR. AC. FT.	Lake GAGE	DISCH.	STOR'D	NORM.
AUG. 1	[illegible]	48340	1508	70	1438	4.99	751	725	26
2	[illegible]	46849	1491	70	1421	4.99	751	716	35
3	[illegible]	45416	1433	65	1368	4.88	718	690	28
4	2913	43983	1433	65	1368	4.83	702	690	12
5	2889	42622	1361	65	1296	4.78	689	654	35
6	2870	41557	1065	65	1000	H.D.	533	504	29
7	2859	40940	617	60	557	3.12	301	281	20
8	2850	40436	504	60	444	2.79	247	224	23
9	2843	40043	393	60	333	2.54	206	168	38
10	2834	39595	448	60	388	2.55	206	196	10
11	2818	38642	953	60	893	H.D.	478	450	28
12	2800	37633	1009	60	949	4.14	511	479	32
13	2782	36647	986	55	931	4.07	494	469	25
14	2763	35606	1041	55	986	4.19	521	497	24
15	2742	34456	1150	55	1095	4.38	566	552	14
16	2722	33360	1096	55	1041	4.36	558	525	33
17	2702	32265	1095	55	1040	4.35	553	524	29
18	2681	31138	1127	55	1072	4.35	550	541	9
19	2661	30068	1070	50	1020	4.35	548	514	34
20	2641	28998	1070	50	1020	4.30	533	514	19
21	2625	28142	856	50	806	3.90	436	406	30
22	2609	27286	856	50	806	3.87	427	406	21
23	2593	26438	848	50	798	3.86	425	402	23
24	2575	25498	940	50	890	4.09	477	449	28
25	2554	24401	1097	45	1052	4.41	556	530	26
26	2533	23304	1097	45	1052	4.42	556	530	26
27	2513	22259	1045	45	1000	4.35	538	504	34
28	2494	21280	979	45	934	4.14	487	471	16
29	2479	20529	751	45	706	3.61	369	356	13
30	2465	19829	700	45	655	3.52	351	330	21
31	2451	19129	700	40	660	3.53	351	333	18
SEPT. 1	2439	18528	601	40	561	3.27	301	283	18
2	2430	18078	450	40	410	2.84	229	207	22
3	2422	17678	400	40	360	2.76	215	182	33
4	2415	17327	351	40	311	2.50	172	158	14
5	2411	17127	200	35	165	2.05	110	83	27
6	2408	16977	150	35	115	1.81	80	58	22
7	2403	16727	250	35	215	2.27	136	108	28
8	2398	16483	244	35	209	2.28	136	105	31
9	2393	16249	234	35	199	2.28	137	100	37
10	2390	16108	141	30	111	1.78	76	56	20
11	2387	16014	94	30	64	1.72	71	32	39
12	2385	15874	140	30	110	1.74	73	56	17
13	2383	15780	94	30	64	1.52	52	32	20
14	2382	15733	47	25	22	1.32	36	11	25
15						1.32	36		36
16						1.31	36		36
17						1.30	35		35
18	2378	15546				1.30	36		36
19	2376	15452	94	20	74	1.64	66	37	29
20	2374	15358	94	20	74	1.70	72	37	35
21	2374	15311	47	20	27	1.70	72	14	58
22	2372	15264	47	20	27	1.72	74	14	60
23	2373	15311				1.32	37		37
24	2374	15358				1.30	35		35
25						1.31	37		37
26						1.31	37		37
27						1.31	37		37
28						1.31	37		37
29									
30									
TOTALS			48069	3905	44164			22266	

HENRYS FORK: WARM RIVER

DATE	GAGE	DISCH.	STOR'D	NORM.
AUG. 2	5.37	1550	714	836
3	5.30	1530	705	825
4	5.30	1530	680	850
5	5.30	1530	680	850
6	5.25	1490	644	846
7	5.16	1430	496	934
8	4.92	1250	277	973
9	4.77	1140	221	919
10	4.69	1080	165	915
11	4.57	1070	193	877
12	4.82	1180	443	737
13	4.96	1280	472	808
14	4.97	1280	462	818
15	4.96	1290	490	800
16	5.03	1330	544	786
17	5.05	1340	517	823
18	5.05	1340	516	824
19	5.04	1340	533	807
20	5.04	1340	506	834
21	5.03	1330	506	824
22	4.98	1290	400	890
23	4.92	1250	400	850
24	4.89	1230	396	834
25	4.88	1220	442	778
26	4.97	1280	522	758
27	5.02	1320	522	798
28	(5.03)	1330	496	834
29	5.02	1320	464	856
30	4.93	1250	351	899
31	4.83	1180	325	855
SEPT. 1	4.79	1150	328	822
2	4.77	1140	279	861
3	4.69	1080	204	876
4	4.65	1060	178	882
5	4.60	1020	156	864
6	4.53	976	82	894
7	4.49	950	57	893
8	4.54	983	106	877
9	(4.55)	990	103	887
10	4.48	944	98	846
11	4.45	924	55	869
12	4.45	911	32	879
13	4.45	897	55	842
14	4.45	884	32	852
15	4.45	871	11	860
16	4.45	858		858
17	4.44	844		844
18	(4.30)	831		831
19	4.33	849		849
20	4.44	918	37	881
21	4.52	970	37	933
22	4.47	938	14	924
23	4.44	918	14	904
24	4.40	893		893
25	4.37	874		874
26	4.37	874		874
27	4.36	868		868
28	4.34	855		855
29	4.34	855		855
		135916	21932	113984

HENRYS FORK: ASHTON

DATE	GAGE	DISCH.	STOR'D	NORM.
AUG. 3	1.31	2040	710	1330
4	1.30	2020	701	1319
5	1.30	2000	677	1323
6	1.28	1960	677	1283
7	1.24	1890	641	1249
8	1.15	1730	494	1236
9	1.08	1600	276	1324
10	0.99	1450	220	1230
11	0.93	1380	164	1216
12	0.99	1450	193	1257
13	1.01	1480	441	1039
14	1.08	1600	470	1130
15	1.09	1620	460	1160
16	1.09	1620	487	1133
17	1.11	1660	541	1119
18	1.14	1710	514	1196
19	1.14	1710	513	1197
20	1.14	1710	530	1180
21	1.17	1760	503	1257
22	1.14	1710	503	1207
23	1.09	1620	398	1222
24	1.07	1590	398	1192
25	1.05	1550	394	1156
26	1.07	1590	440	1150
27	1.11	1660	519	1141
28	1.13	1690	519	1171
29	1.15	1730	494	1236
30	1.12	1670	462	1208
31	1.07	1590	349	1241
SEPT. 1	1.02	1520	323	1197
2	1.02	1520	326	1194
3	1.03	1540	278	1262
4	0.93	1360	203	1157
5	0.93	1360	177	1183
6	0.93	1360	155	1205
7	0.87	1260	82	1178
8	0.83	1200	57	1143
9	(0.87)	1260	105	1155
10	0.90	1310	102	1208
11	0.92	1350	98	1252
12	0.89	1310	55	1255
13	0.84	1250	32	1218
14	0.83	1230	55	1175
15	0.83	1230	32	1198
16	0.78	1150	11	1139
17	0.78	1150		1150
18	(0.77)	1150		1150
19		1150		1150
20	(0.77)	1150		1150
21	0.85	1280	37	1243
22	0.91	1380	37	1343
23	0.90	1380	14	1366
24	0.86	1310	14	1296
25	0.79	1200		1200
26	0.79	1200		1200
27	0.79	1200		1200
28	0.78	1200		1200
29	0.76	1170		1170
30	0.77	1180		1180
		187740	21822	165918

SQUIRREL — CANALS

DATE	GAGE	DISCH.	CANALS ABOVE STATION	DISCH. PLUS CANALS ABOVE
AUG. 2	2.22	544	97	641
3	2.18	516	99	615
4	2.16	502	98	600
5	2.24	558	101	659
6	2.18	516	97	613
7	2.15	495	101	596
8	2.18	516	101	617
9	2.21	537	18	555
10	2.25	572		572
11	2.24	558		558
12	2.24	558		558
13	2.24	558		558
14	2.23	551		551
15	2.22	544		544
16	2.22	544		544
17	2.22	544		544
18	2.20	530		530
19	2.25	565		565
20	2.20	530		530
21	2.21	537		537
22	2.20	530		530
23	2.20	530		530
24	2.19	523		523
25	2.19	523		523
26	2.20	530		530
27	2.29	595		595
28	2.21	537		537
29	2.22	544		544
30	2.24	558		558
31	2.18	516		516
SEPT. 1	2.18	516		516
2	2.18	516		516
3	2.25	565		565
4	2.20	530		530
5	2.20	530		530
6	2.20	530		530
7	2.21	537		537
8	2.19	523		523
9	2.18	516		516
10	2.16	502		502
11	2.16	502		502
12	2.16	502	4	506
13	2.15	495	5	500
14	2.15	495	4	499
15	2.14	488	5	493
16	2.14	488	6	494
17	2.12	476	6	482
18	2.12	476	7	483
19	2.12	476	7	483
20	2.12	476	7	483
21	2.35	640	11	651
22	2.34	632	[illegible]	[illegible]
23	2.20	530	[illegible]	[illegible]
24	2.18	516	[illegible]	[illegible]
25	2.16	502	5	[illegible]
26	2.30	502	5	[illegible]
27	2.20	530	4	[illegible]
28	2.16	502	4	[illegible]
29	2.14	488	4	[illegible]
		135460	7388	

FALL [RIVER] (continues beyond page edge)

AT AND BETWEEN GAGING STATIONS ON HENRYS FORK AND TRIBUTARIES

1929 DISTR

1929 Date	Hen[rys Fork] Gage	[Ca]nals [a]bove [...]ation	Squirrel plus Canals above	Fall River Diversions Date	Diversions Total	Diversions Stor'd	Diversions Norm.	Theo. Bal. Chest.	Chester Gage	Chester Disch.	Gain above Chest.	Ashton plus Chest.
Aug. 1	293	97	641	Aug. 3	640	119	521	1	1.24	41	40	2081
2	29[illegible]	99	615	4	644	118	526	-29	1.11	28	37	2048
3	29[illegible]	98	600	5	676	120	556	-76	1.09	26	102	2025
4	291	101	659	6	641	116	525	18	1.06	24	6	1984
5	288	97	613	7	622	101	521	-9	1.01	20	29	1910
6	287	101	596	8	630	101	529	-34	1.02	21	55	1751
7	28[illegible]	101	617	9	586	18	568	31	0.98	18	-13	1618
8	28[illegible]	18	555	10	592		592	-37	(1.14)	31	68	1481
9	284		572	11	580		580	-8	1.23	40	48	1420
10	283		558	12	575		575	-17	1.20	36	53	1486
11	281		558	13	569		569	-11	1.21	37	48	1517
12	280		558	14	559		559	-1	1.26	43	44	1643
13	278		551	15	559		559	-8	1.12	29	37	1649
14	276		544	16	556		556	-12	1.21	37	49	1657
15	274		544	17	551		551	-7	1.22	38	45	1698
16	272		544	18	556		556	-12	1.21	37	49	1747
17	270		530	19	559		559	-29	1.29	47	76	1757
18	268		565	20	546		546	19	1.23	40	21	1750
19	266		530	21	539		539	-9	1.20	36	45	1796
20	264		537	22	536		536	1	1.18	34	33	1744
21	262		530	23	532		532	-2	1.18	34	36	1654
22	260		530	24	533		533	-3	1.18	34	37	1624
23	259		523	25	529		529	-6	1.19	35	41	1585
24	257		523	26	533		533	-10	1.21	37	47	1627
25	255		530	27	568	97	471	-38	1.28	46	84	1706
26	253		595	28	539	137	402	56	1.31	50	-6	1740
27	251		537	29	540	137	403	-3	1.27	44	47	1774
28	249		544	30	521	138	383	23	1.36	57	34	1727
29	247		558	31	471	17	454	87	1.56	81	-6	1671
30	246		516	Sept. 1	337		337	179	2.01	223	44	1743
31	245		516	2	344		344	172	2.03	231	55	1751
Sept. 1	243		516	3	406		406	110	2.04	235	125	1775
2	24[illegible]		565	4	423		423	142	1.97	208	66	1568
3	24[illegible]		530	5	424		424	105	1.90	184	78	1544
4	241		530	6	403		403	127	1.89	181	54	1541
5	241		530	7	406		406	124	1.90	184	60	1444
6	240		537	8	403		403	134	1.93	194	60	1394
7	240		523	9	393		393	130	1.93	194	64	1454
8	23[illegible]		516	10	386		386	130	1.93	194	64	1504
9	23[illegible]		502	11	396		396	106	1.93	194	88	1544
10	23[illegible]		502	12	404		404	98	1.91	188	90	1498
11	23[illegible]	4	506	13	402		402	104	1.91	188	84	1438
12	23[illegible]	5	500	14	399		399	101	1.90	184	83	1414
13	23[illegible]	4	499	15	415		415	84	1.87	175	91	1405
14	23[illegible]	5	493	16	435		435	58	1.74	137	79	1287
15		6	494	17	414		414	80	1.72	131	51	1281
16		6	482	18	412		412	70	1.83	162	92	1312
17		7	483	19	402		402	81	1.84	165	84	1315
18	23	7	483	20	350		350	133	1.91	188	55	1338
19	23	7	483	21	322		322	161	2.32	358	197	1638
20	23	11	651	22	120		120	531	2.70	586	55	1966
21	23	2	634	23	176		176	458	2.45	428	-30	1808
22	23	0	530	24	178		178	352	2.39	395	43	1705
23	23	5	521	25	162		162	359	2.37	384	25	1584
24	23	5	507	26	147		147	360	2.38	390	30	1530
25		5	607	27	236		236	371	2.39	395	24	1595
26		4	534	28	233		233	301	2.28	339	38	1539
27		4	505	29	233		233	273	2.24	320	47	1490
28		4	492	30	232		232	260	2.20	301	41	1481
Totals		388	142848		73906	2618	71288	68942		85821	16879	273561

HENRYS FORK

1929 Date	Divers. above St. Anth. Total	Divers. above St. Anth. Stor'd	Divers. above St. Anth. Norm.	Theo. Bal. St. Anth.	St. Anthony Gage	St. Anthony Disch.	St. Anthony Stor.	St. Anthony Norm.	Gain Ashton St. Anth.	Divers. below St. Anth. Total	Divers. below St. Anth. Stor'd	Divers. below St. Anth. Norm.
Aug. 1	770	305	465	1311	3.64	1260	286	974	-51	750	272	478
2	790	312	478	1258	3.62	1230	271	[illegible]	-28	744	274	470
3	786	305	477	1240	3.61	1220	248	972	-20	711	256	455
4	791	324	462	1193	3.59	1190	232	958	-3	678	241	437
5	834	127	707	1076	3.51	1080	413	667	4	729	138	591
6	826	120	706	925	3.40	940	273	667	15	707	150	557
7	788	99	689	830	3.32	848	159	689	18	696	147	549
8	769	58	711	712	3.27	794	162	632	82	690	142	548
9	731	252	479	689	3.21	730	-88	818	41	649	238	411
10	721	253	468	765	3.3[illegible]	825	-31	856	60	678	230	448
11	708	240	468	[illegible]	3.33	850	201	649	51	688	207	481
12	722	250	472	921	3.41	952	220	732	31	687	215	472
13	698	245	453	951	3.45	1000	215	785	49	710	249	461
14	667	245	422	990	3.44	990	242	748	0	713	244	469
15	662	250	412	1036	3.44	990	291	699	-46	731	258	473
16	667	253	414	1080	3.50	1060	263	797	-20	738	262	476
17	540	126	414	1217	3.54	1120	387	733	-97	721	262	459
18	680	267	413	1070	3.49	1050	263	787	-20	703	265	438
19	693	274	419	1103	3.49	1050	224	826	-53	706	267	439
20	672	262	410	1072	3.49	1050	241	809	-22	647	227	420
21	659	251	408	995	3.46	1020	147	873	25	609	215	394
22	586	223	363	1038	3.50	1060	175	885	22	598	192	396
23	587	224	363	998	3.46	1020	170	850	22	546	184	362
24	601	235	366	1026	3.45	1000	205	795	-25	535	173	362
25	607	235	372	1099	3.53	1110	187	923	11	542	65	378
26	594	221	373	1145	3.53	1110	151	949	-36	545	65	380
27	620	237	383	1154	3.53	1110	120	990	-44	549	69	380
28	572	226	346	1155	3.59	1190	98	1092	35	551	69	382
29	518	176	342	1153	3.56	1150	153	994	-3	535	56	379
30	489	158	331	1254	3.64	1260	165	1095	6	524	43	381
31	481	34	447	1270	3.63	1240	292	948	-30	527	93	434
Sept. 1	482	39	443	1293	3.64	1260	239	1021	-33	519	96	423
2	476	52	424	1092	3.55	1130	151	979	38	512	91	421
3	521	50	471	1023	3.51	1080	127	953	57	528	89	439
4	451	47	404	1090	3.50	1060	108	952	-30	514	91	423
5	448	47	401	996	3.44	990	35	955	-6	515	91	424
6	448	47	401	946	3.46	1020	10	1010	74	472	68	404
7	437	34	403	1017	3.50	1060	71	989	43	455	45	410
8	392	36	356	1112	3.56	1150	66	1084	38	445		445
9	235		235	1309	3.64	1260	98	1162	-49	430		430
10	232		232	1266	3.63	1240	55	1185	-26	389		389
11	380		380	1058	3.51	1080	32	1048	22	398		398
12	387		387	1027	3.46	1020	55	965	-7	399		399
13	423		423	982	3.44	990	32	958	8	406		409
14	463		463	824	3.35	882	11	871	58	413		413
15	493		493	788	3.36	894		894	106	424		424
16	484		404	828	3.36	894		894	66	433		433
17	475		475	840	3.45	1000		1000	160	431		431
18	424	8	416	914	3.47	1030	-8	1038	116	434	98	336
19	409	8	401	1229	3.62	1230	[illegible]	1201	[illegible]	397	45	352
20	419	9	410	1547	3.81	1530	28	1502	-17	392	42	350
21	407		407	1401	3.72	1380	14	1366	-21	381		381
22	404		404	1301	3.64	1260	14	1246	-41	382		382
23	419		419	1165	3.59	1190		1190	25	377		377
24	389		389	1201	3.58	1170		1170	-31	429		429
25	319		319	1276	3.61	1220		1220	-56	335		335
26	297		297	1242	3.62	1230		1230	-12	333		333
27	294		294	1196	3.61	1220		1220	24	335		335
28	292		292	1189	3.60	1200		1200	11	335		335
Totals	95513	9192	86321	178048		186159	10012	176147	8111	83869	9578	74291

...S ON HENRYS FORK AND TRIBUTARIES

PLATE NO. XXI.

...HESTER GAGE	...HESTER DISCH.	GAIN ABOVE CHEST.	ASHTON PLUS CHEST.	DIVERS. ABOVE ST. ANTH. TOTAL	DIVERS. ABOVE ST. ANTH. STOR'D	DIVERS. ABOVE ST. ANTH. NORM.	THEO. BAL. ST. ANTH.	ST. ANTHONY GAGE	ST. ANTHONY DISCH.	ST. ANTHONY STOR.	ST. ANTHONY NORM.	GAIN ASHTON ST. ANTH.	DIVERS. BELOW ST. ANTH. TOTAL	DIVERS. BELOW ST. ANTH. STOR'D	DIVERS. BELOW ST. ANTH. NORM.	THEO. BAL. BELOW DIVERS.	EST. BAL. BELOW DIVERS.
				HENRYS FORK													
24	41	40	2081	770	305	465	1311	364	1260	286	974	-51	150	272	478	510	
11	28	37	2048	790	312	478	1258	362	1230	271	959	-28	144	274	470	486	
99	26	102	2026	786	309	477	1240	361	1220	248	972	-20	111	256	455	509	
36	24	6	1984	191	329	462	1193	359	1190	232	958	-3	678	241	437	512	
01	20	29	1910	834	127	707	1076	351	1080	413	967	4	729	138	591	351	
2	21	55	1751	826	120	706	925	340	940	278	967	15	707	150	557	253	
8	18	-13	1518	188	99	589	830	332	848	159	689	18	696	147	549	152	
4	31	68	1481	69	58	711	712	327	794	162	632	82	690	142	548	104	
3	40	48	1420	731	252	479	689	321	730	-88	818	41	649	238	411	81	
0	36	53	1486	12	253	468	765	330	825	-61	886	60	678	230	448	147	
1	37	48	1517	708	240	468	809	333	860	201	959	51	688	207	481	172	
5	45	42	1545	722	250	472	921	341	952	220	952	31	687	215	471	265	
2	29	37	1549	698	245	453	951	345	1000	215	785	49	710	249	461	290	
1	37	49	1557	667	245	422	990	344	990	242	748	0	713	244	469	277	
1	38	45	1598	692	250	412	1036	344	990	291	699	-46	731	258	473	259	
9	37	49	1747	667	253	414	1080	350	1060	261	799	-20	738	262	476	322	
8	47	76	1757	540	126	414	1217	354	1120	387	733	-57	727	268	459	393	
3	40	21	1750	680	267	413	1070	349	1050	263	787	-20	703	265	438	547	
0	36	45	1796	693	274	419	1103	349	1050	229	821	-53	706	267	439	344	
2	34	33	1744	672	262	410	1072	349	1050	241	809	-22	647	227	420	403	
1	34	36	1654	653	251	408	995	346	1020	147	873	25	609	215	394	411	
1	34	37	1624	586	223	363	1038	350	1060	175	885	22	588	192	396	472	
1	35	41	1585	587	224	363	998	346	1020	170	850	22	546	184	362	474	
1	37	47	1627	601	235	366	1026	345	1000	205	795	-26	535	173	362	465	
1	46	84	1706	607	235	372	1099	353	1110	187	923	11	546	168	378	564	
1	50	-5	1740	594	221	373	1146	353	1110	161	949	-36	545	165	380	565	
1	44	47	1774	620	237	383	1154	353	1110	120	990	-44	549	169	380	561	
1	37	34	1727	572	226	346	1155	359	1190	98	1052	35	551	169	382	539	
1	81	-5	1671	518	176	342	1153	356	1150	156	994	-3	535	156	379	615	
2	223	44	1743	489	158	331	1254	364	1260	165	1095	6	524	143	381	736	
2	231	59	1751	481	34	447	1270	363	1240	292	948	-30	527	98	429	713	
2	235	125	1775	482	39	443	1293	364	1260	239	1021	-33	519	96	423	741	
2	208	66	1568	476	52	424	1092	355	1130	151	979	38	512	91	421	618	
1	184	78	1544	521	50	471	1023	351	1080	127	953	57	528	89	439	552	
1	181	54	1541	451	47	404	1090	350	1060	108	952	-30	514	91	423	546	
1	184	60	1444	448	47	401	996	344	990	35	955	-6	515	91	424	475	
1	194	60	1394	448	47	401	946	346	1020	10	1010	74	472	68	404	548	
1	194	64	1454	437	34	403	1017	350	1060	-71	989	43	455	45	410	605	
1	194	64	1504	392	36	356	1112	356	1150	66	1084	38	446		446	704	
1	194	88	1547	235		235	1309	364	1260	98	1162	-49	430		430	830	
1	188	90	1498	232		232	1266	363	1240	55	1185	-26	388		388	852	
1	188	84	1438	380		380	1058	351	1080	32	1048	22	398		398	682	
1	184	83	1414	387		387	1027	346	1020	55	965	-7	399		399	621	
1	175	91	1405	423		423	982	344	990	32	958	8	406		406	584	
1	137	79	1287	443		443	824	335	882	11	871	58	413		413	469	
1	131	51	1281	493		493	788	336	894		894	106	424		424	470	
1	162	92	1312	484		484	828	336	894		894	56	433		433	461	
1	165	84	1315	475		475	840	345	1000		1000	160	431		431	569	
1	188	55	1338	424	8	416	914	347	1030	-8	1038	116	434	98	336	596	
1	358	197	1638	409	8	401	1229	362	1230	29	1201	1	397	45	352	833	
1	582	55	1966	419	9	410	1547	381	1530	28	1502	-17	392	42	350	1138	
1	228	-20	1808	407		407	1401	372	1380	14	1366	-21	381		381	999	
1	295	43	1705	404		404	1301	364	1260	14	1246	-41	382		382	978	
1	284	25	1584	419		419	1165	359	1190		1190	25	377		377	813	
1	290	30	1590	389		389	1201	358	1170		1170	-31	429		429	741	
1	255	24	1595	313		313	1276	361	1220		1220	-56	335		335	885	
1	239	38	1539	297		297	1242	362	1230		1230	-12	333		333	897	
1	220	47	1490	294		294	1196	361	1220		1220	24	355		355	885	
1	211	41	1481	292		292	1189	360	1200		1200	-11	335		335	865	
21	16879	27356	35513	9192	86321	178048		186159	10012	176147	8111		83869	9578	74291	102290	

TETON RIVER ST. ANTHONY STATION GAGE	ST. ANTHONY STATION DISCH.	ST. ANTHONY STATION DIVERS.	THEO. BAL. BELOW DIVERS.	EST. BAL. BELOW DIVERS.	THEO. BAL. HENRYS FORK NEAR REXB'G	HENRYS FORK NEAR REXB'G	GAIN BELOW SAINT ANTH.
1.00	787	101			526	1010	414
0.92	745	577			524	995	422
1.00	787	689			520	995	375
0.99	782	672	110		507	982	375
0.91	739	674	55		522	1010	388
0.89	729	574	55		416	934	518
0.87	719	545	17		288	841	553
0.83	698	519	19		229	760	531
0.81	688	522	23		163	700	537
0.78	673	513	20		141	655	508
0.75	658	516	42		207	675	458
0.73	649	585	63		214	720	506
0.70	634	585	49		328	765	437
0.70	634	572	42		339	780	441
0.69	629	562	57		339	780	441
0.69	625	570	53		281	802	475
0.70	634	566	68		381	824	443
0.68	625	564	51		461	868	407
0.66	615	553	53		408	852	444
0.63	601	554	47		406	868	462
0.63	601	555	46		450	880	430
0.64	606	544	62		457	890	433
0.61	592	536	56		534	924	390
0.62	596	534	52		530	940	410
0.63	601	535	65		527	945	418
0.63	601	531	64		530	1000	470
0.63	601	495	106		667	1090	423
0.66	615	557	58		597	1140	543
0.72	644	578	56		681	1160	479
0.87	720	578	42		778	1220	442
0.84	706	566	40		753	1230	477
0.70	634	514	20		761	1250	489
0.75	658	511	47		665	1200	535
0.70	634	503	31		583	1190	607
0.67	620	585	35		581	1200	619
0.65	610	577	33		508	1190	582
0.65	610	568	42		530	1170	640
0.63	601	578	28		633	1230	597
0.63	601	576	25		729	1310	581
0.61	592	554	38		868	1410	542
0.61	592	545	47		899	1400	501
0.61	592	527	65		747	1290	543
0.61	592	513	79		700	1200	500
0.57	574	543	31		615	1130	515
0.52	551	562	-11		458	1020	562
0.59	582	565	17		487	994	507
0.54	560	571	-11		450	970	520
0.47	523	504	25		594	970	376
0.48	534	482	52		648	1050	402
0.59	582	536	46		879	1310	431
0.92	745	586	159		1247	1670	423
0.84	703	535	168		1167	1680	513
0.68	625	510	115		1093	1630	537
0.63	601	477	124		957	1560	603
0.62	596	499	97		838	1540	702
0.87	719	590	129		1014	1600	586
0.89	729	561	168		1065	1670	605
0.74	654	529	125		1010	1640	630
0.67	620	500	120		985	1590	605
		127107	97555	29552		131842	197561	65719

Actual continuous measurement of the water wasting past the last diversion dams on Henry's Fork and Teton River is not considered practicable and for that reason the "Est. Bal. below Diversions" columns are blank except for days when either personal inspection was made or other reliable information was secured. Waste and return flow from adjacent irrigated lands enter the lower portions of both streams and comprise the total discharge measured at the Rexburg station at times when all available water is diverted at the upper points.

The "Storage Loss" column at Henry's Lake Reservoir is similar to that contained in the 1928 report and the quantities listed therein represent rather arbitrary deductions made to offset as nearly as practicable the excess of reservoir loss over bank storage return. Without the application of such a charge the normal flow at the outlet of the lake would have been almost entirely absorbed to effect an equalization, whereas, under the method followed, the normal at the Lake gaging station is quite consistent with measurements secured for three seasons prior to the completion of the outlet dam. (See page 40 of the 1928 report for further discussion of reservoir losses).

In order to avoid unnecessary complications, all stored water quantities shown on Plates XX and XXI represent Henry's Lake water or (in the case of Fall River canals) normal flow substituted therefor. Diversions in lieu of storage released from Jackson Lake are here tabulated as normal flow but have been properly charged as stored water in the summary of deliveries from the latter source shown on Plate XI.

TOTAL AND NORMAL FLOW AT THE LAKE, WARM RIVER AND ASHTON STATIONS ON HENRYS FORK

1929 DISTRIBUTION WATER DISTRICT NO. 36

PLATE NO. XXII

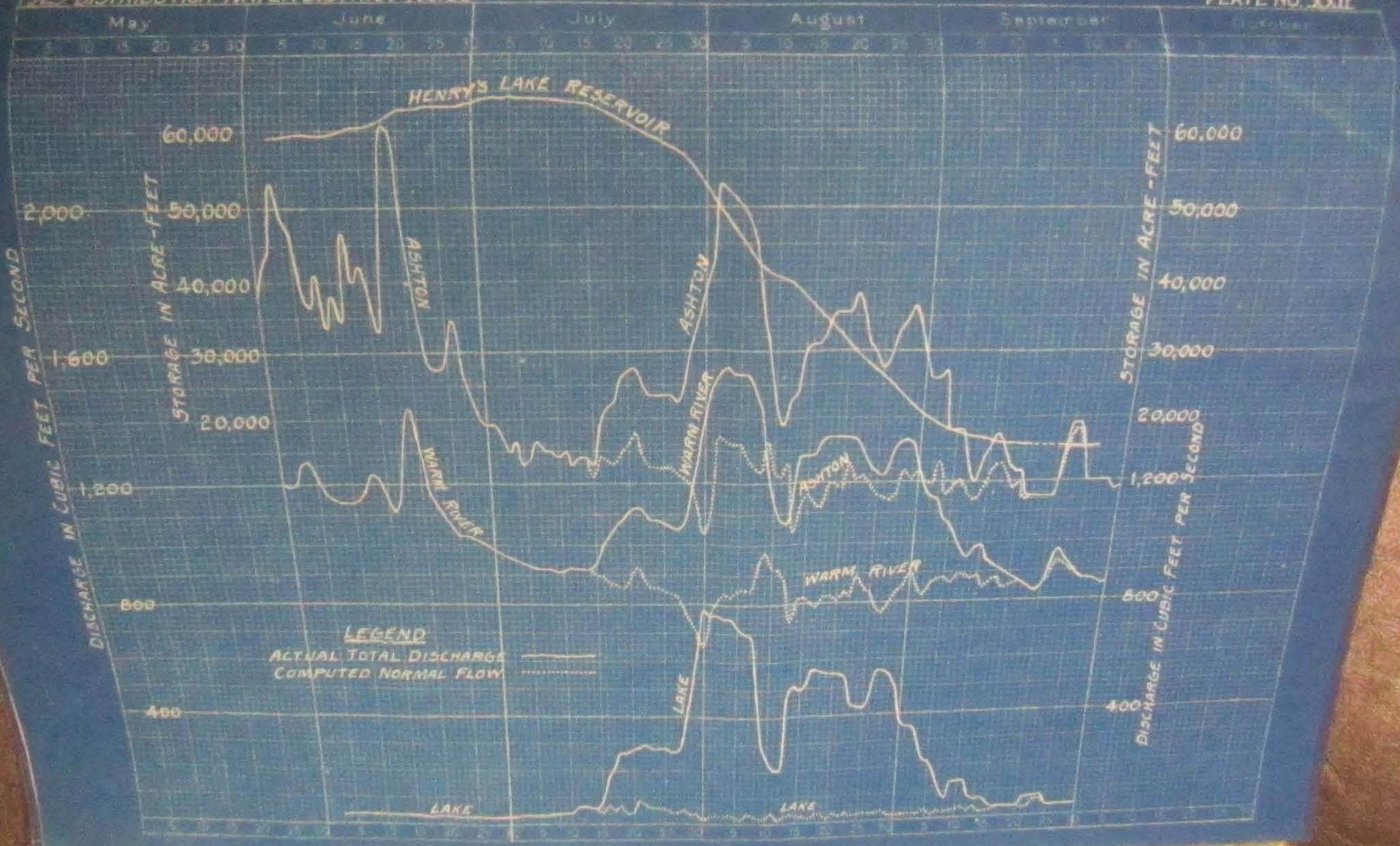


Plate XXII contains a curve showing the way in which storage was drawn from Henry's Lake Reservoir together with actual total and computed normal flow hydrographs for Henry's Fork at the Lake, Warm River and Ashton gaging stations. These graphs are all plotted with time interval adjusted to coincide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

The Ashton record conforms more closely with that for the Warm River station than was the case during most of the preceding seasons but some apparent inconsistencies are still noted which can probably be attributed very largely to faulty regulation at the Ashton Dam of the Utah-Power and Light Company.

The extremely low normal flow indicated at both the Warm River and Ashton stations on July 31 is probably due to the impounding of water in side channels and bottom lands on the rapidly rising river stage of that period. Similar though less pronounced depressions in the normal graphs on August 13 and 27 are explained in like manner, while the peaks accompanying rapid drops in river stage are accounted for by return flow from the same sources.

STORAGE DELIVERIES FROM HENRYS LAKE RESERVOIR

Plate XXIII contains a tabulation of daily deliveries of Henry's Lake storage together with summaries which afford comparisons between total actual use and stored water available each day and for the entire season.

Because of changes in the status of normal flow rights which cannot be forecast in advance and because of the lack of any equalizing

1929 DISTRIBUTION WATER DISTRICT 1

DATE	MARYS-VILLE CANAL	FARMERS OWN CANAL	ENTER-PRISE CANAL	TOTAL FALL RIV. CANALS	DEWEY CANAL	LAST CHANCE CANAL	FARMERS FRIEND CANAL	SALEM UNION CANAL	INDEPEN-DENT CANAL	CONSOL. FARMERS CANAL	TOTAL HEN. FORK CANALS	TOTAL HEADGATE DELIVERY	AVAILABLE ASHTON STATION	UNUSED AT HEAD GATE	HEN. LAKE EQUIV.-TOT. DELIVERY	UNUSED HEN. L. EQUIV.
JULY 15													40	40		41
16			101	101	5						5	106	100	- 6	108	- 6
17			135	135	5	10					15	150	160	10	153	10
18			135	135	21	47					68	203	193	- 10	207	- 10
19			140	140	23	48			4		75	215	224	9	219	9
20		29	84	113	23	51			129		203	316	223	-93	322	- 95
21		38		38	23	52			129		204	242	194	-48	247	- 49
22		38		38	23	51			118		192	230	221	- 9	235	- 9
23		37		37	21	56			118		195	232	221	- 11	237	- 11
24		38		38	21	54			118		193	231	223	- 8	236	- 8
25		39		39	21	54			121		196	235	224	- 11	240	- 11
26		40		40	19	51			110		180	220	223	3	224	3
27		33		33	18	50			124		192	225	225	0	230	0
28		18		18	20	50	53		129	31	283	301	286	- 15	307	- 15
29		21		21	21	48	57		147	101	374	395	432	37	403	38
15													33	33		38
16													32	32		33
17													11	11		11
18																
19																
20					8				98		106	106	0	-106	108	-108
21					8				45		53	53	37	- 16	54	- 16
22					9				42		51	51	37	- 14	52	- 14
23													14	14		14
24													14	14		14

TOTAL SEC.FT.	1009	488	1121	2618	973	2534	649	5036	6765	2813	18770	21388	21822	434	21822	445
TOTAL AC. FT.	2001	968	2224	5193	1930	5026	1287	9989	13418	5579	37229	42422	43283	861	43282	882
H.L. EQUIV. TOT.	2041	988	2269	5298	1969	5128	1313	10192	13690	5692	37984	43282	44164	882	43282	882
* SEAS. STOR. RT.	2000	1000	2000	5000	8118		1370	12840	14219	10665	47212				52212	
BALANCE	-41	12	-269	-298	1021		57	2648	529	4973	9228				8930	

* ST. ANTHONY UNION AND EGIN RIGHTS OF 3608 AC. FT. EACH, NOT LISTED.

PLATE NO. XXIII

or detention reservoir near the lower diversion points, it is not practicable to deliver the exact amount of storage which is available for use each day. Hence it has been customary to permit small overdrafts and underdrafts so long as a fairly even balance is maintained over any considerable period of time and for the whole season. In 1929, it will be noted that 434 second-feet of stored water in all were made available for use which were not actually diverted. Had individual canals been charged with all water ordered but for various reasons not accepted, much, if not all, of this excess might have been absorbed by specific changes.

Deliveries to the Marysville, Farmers Own and Enterprise Companies were effected under the substitution method previously described while storage rights of these three canals and also of the Farmers Friend system were acquired through seasonal purchase.

The Henry's Lake Reservoir is owned and controlled by the North Fork Reservoir Company whose stock, in turn, is held by seven different canal companies. The latter together with their relative percentage participation are listed as follows: Dewey and Last Chance (combined), 15.3; St. Anthony Union, 6.8; Salem Union, 24.2; Egin, 6.8; Independent, 26.8; and Consolidated Farmers, 20.1. While these percentages define the individual rights, actual diversions upon a disproportionate basis may be sanctioned by mutual agreement.

The amount of stored water released from the reservoir each day was determined from the capacity tables by noting the quantity corresponding to the daily decrease in stage indicated by the Lake gage readings and thereafter applying an arbitrary deduction for losses as already explained on page 40 and tabulated on Plates XX and XXI.

A transmission loss of 1.5 per cent was charged between Henry's Lake and Warm River and an additional 0.5 per cent was deducted between the latter point and the Ashton station. These losses correspond with the recommendations submitted by Consulting Engineer R. I. Meeker on August 14, 1923 and are identical with those which have been used since that time. They have never been checked or substantiated by any scientific investigation.

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

The heavy gains noted during June are probably due to the unmeasured tributary inflow (chiefly from Squirrel Creek) while the irregularities in the gain or loss curve are doubtless largely attributable to the inaccurate daily mean discharges computed for the Squirrel Station at which only staff gage readings were secured.

Hydrographs for the Ashton, St. Anthony and Rexburg gaging stations on Henry's Fork together with curves showing gains or losses in the intermediate sections are included on Plate XXV. All are plotted to agree with the Rexburg dates.

The irregularities noted during June are not unusual and can doubtless be attributed to poor definition of river ratings and to inapplicability of the single time interval during periods of rapid changes in river stage.

The large net gains between St. Anthony and Rexburg are characteristic of this section and are attributable chiefly to return flow from the Egin Bench and Teton River areas.

NET LOSSES AND GAINS BETWEEN THE SQUIRREL AND CHESTER GAGING STATIONS ON FALL RIVER
1923 DISTRIBUTORY WATER DISTRICT NO. 36

PLATE NO. XXIV

May | June | July | August | September

DISCHARGE IN CUBIC FEET PER SECOND

5,000
4,000
3,000
2,000
1,000

1,000
500
0
500

GAIN
LOSS

SQUIRREL TO CHESTER

GAIN
LOSS

500
0
500

CHESTER

SQUIRREL

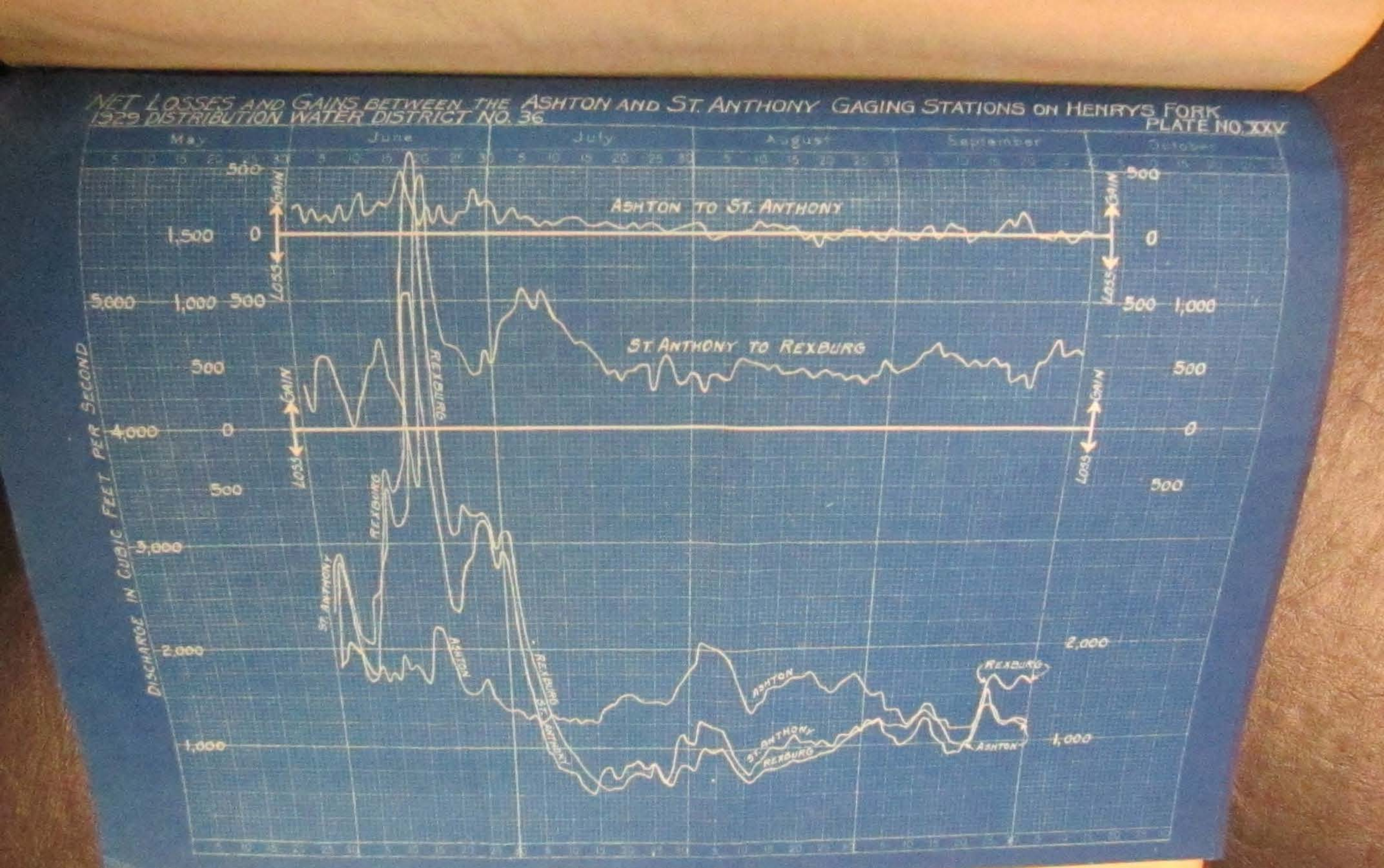
CHESTER

SQUIRREL

CHESTER

NET LOSSES AND GAINS BETWEEN THE ASHTON AND ST. ANTHONY GAGING STATIONS ON HENRYS FORK
1929 DISTRIBUTION WATER DISTRICT NO. 36

PLATE NO. XXV



DISTRIBUTION IN SWAN VALLEY

William Burton was again appointed as deputy water master for the Swan Valley section but his salary and other expenses incident to the work were paid directly by the local water users, in accordance with the custom followed during preceding years. Copies of all instructions regarding cuts and reinstatements were forwarded to him by mail and he was directed to regulate all diversions in accordance with these orders. Aside from the slight delay resulting from the method of communication, regulation in this section was therefore consistent with that in other portions of the district.

Rainey Creek water users were advised that the recently approved permanent transfers from the Long Island canal system would not be honored when this stream under normal regulation was dry below the lowest of the upper group of diversions.

No unusual difficulties or controversies were reported from this territory during the season.

CLIMATOLOGICAL DATA

Study of the U. S. Weather Bureau monthly and annual climatological summaries covering the twelve months ending September 30, 1929 affords much information of interest and serves to explain certain phases of the year's water supply which might otherwise be difficult to understand.

The following notes from the Idaho and Wyoming section reports describe the principal monthly peculiarities:

October	1928	In Idaho, the seventh consecutive month of below normal precipitation. Average conditions in Wyoming.
November	1928	All weather conditions nearly normal in the upper Snake River drainage area.
December	1928	A cold month with about the average amount of precipitation mostly in the form of snow.

January	1929	With only one exception the coldest January of record in Idaho. Snowfall particularly heavy at lower elevations and generally above normal in amount.
February	1929	Except for 1903 the coldest February of record in Idaho. Less than average precipitation mostly in the form of snow.
March	1929	Temperatures nearly normal with a slight deficiency in precipitation.
April	1929	In Idaho the coldest April since 1922. More than the usual amount of precipitation.
May	1929	A very dry month. Temperatures slightly below normal.
June	1929	A cool and comparatively wet month.
July	1929	The driest July of record for Idaho. Hotter than usual. Crops made rapid growth.
August	1929	Mean temperature for Idaho equal to previous high mark established in 1915. Precipitation below normal.
September	1929	Heavy frosts occurred during the early part of the month and temperatures were generally below normal. Total precipitation slightly above the average but confined chiefly to the last third of the month.

The unusually hot weather experienced during July and August was detrimental to certain crops, while the heavy frosts of early September occasioned very serious damage to alfalfa seed and materially reduced the yield of potatoes in many sections of the valley. With these exceptions, climatic conditions were generally favorable and farm produce in the aggregate was probably nearly normal in amount.

The amount and distribution of precipitation at the principal observation points in District No. 36 territory is shown graphically for the irrigation season on Plates XXVI and XXVII.

DAILY PRECIPITATION CHART—SNAKE RIVER AREA—1929

1929 DISTRIBUTION WATER DISTRICT NO. 36

PLATE NO XXVI

PRECIPITATION IN INCHES

May | June | July | August | September | October

TOTAL FOR PERIOD IN INCHES

SNAKE RIVER — 6.94
2.12, 2.64, 0.37, 1.81, No Record

MORAN — 8.30
0.78, 2.32, 0.65, 1.21, 5.34

IRWIN — 2.92
0.21, 0.82, 0.95, 0.29, 0.70

IDAHO FALLS — 3.41
0.49, 1.42, 0.20, 0.33, 0.97

BLACKFOOT — 3.26
0.48, 1.05, 0.11, 0.15, 1.47

BURLEY — 2.28
0.00, 1.38, 0.12, 0.28, 0.50

DAILY PRECIPITATION CHART-SNAKE RIVER AREA-1929

1929 DISTRIBUTION WATER DISTRICT NO. 36

PLATE NO. XXVII

May | June | July | August | September | October

PRECIPITATION IN INCHES

TOTAL FOR PERIOD IN INCHES

RIVERSIDE

1.0 / 0.5 / 0.0

0.67 | 0.72 | 0.40 | 0.26 | 0.70 | 2.75

ASHTON

1.0 / 0.5 / 0.0

0.53 | 2.53 | 0.33 | 0.46 | 1.55 | 5.40

ABERDEEN

1.0 / 0.5 / 0.0

0.52 | 0.99 | 0.30 | 0.46 | 0.91 | 3.18

POCATELLO

1.0 / 0.5 / 0.0

0.40 | 1.47 | 0.11 | 1.31 | 1.27 | 4.30

TWIN FALLS

1.0 / 0.5 / 0.0

0.04 | 0.75 | 0.00 | 0.21 | 0.39 | 1.39

JEROME

1.0 / 0.5 / 0.0

0.01 | 1.08 | 0.00 | 0.12 | 0.39 | 1.60

The record at Riverside near the west entrance to Yellowstone National Park is not altogether consistent with those for the other stations but has been included because of its proximity to Henry's Lake. No records were secured at the Snake River station during September.

The following table summarizes data for Snake River, Moran, Irwin, Ashton, Idaho Falls, Blackfoot, Pocatello and Twin Falls by months, for the year ending September 30, 1929:

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
1928						
October	8	3	5	1.320	1.256	-0.064
November	8	4	4	1.282	1.436	+0.154
December	8	4	4	1.431	1.264	-0.167
1929						
January	8	6	2	1.841	2.411	+0.570
February	8	1	7	1.369	1.164	-0.205
March	8	2	6	1.581	1.294	-0.287
April	8	5	3	1.350	1.610	+0.260
May	8	0	8	1.711	0.631	-1.080
June	8	6	2	1.301	1.625	+0.324
July	8	0	8	0.915	0.340	-0.575
August	8	3	5	0.768	0.690	-0.078
September	8	6	2	1.122	1.406	+0.284
Total				15.991	15.127	-0.864

This summary corresponds with those contained in the reports for 1926, 1927 and 1928 with respect to stations included and source of information (monthly and annual climatological Bulletins of the U. S. Weather Bureau). Totals for December at Irwin and for September at Snake River were estimated but all other records were complete for the year.

Observations have been continued at these eight stations for periods ranging from 19 to 35 years and for this reason as well as because of their general distribution throughout the upper Snake drainage area, the combined data may be expected to be fairly representative in character when applied to District No. 36. The group totals show that precipitation for the entire twelve months amounted to 94.6 per cent of the average while actual run-off for the same time, as determined from records secured at the river gaging station at Moran, Wyoming, represented 78.2 per cent of a 26 year mean.

While this percentage spread between precipitation and run-off is not so great as that noted during some previous years it is also not so readily explained. Grouping of the two Wyoming stations by themselves helps very little in accounting for this apparent discrepancy although the fact that Snake River (the highest altitude station) alone shows a relationship of 87.7 per cent strengthens the theory that the year's precipitation was relatively less at very high elevations than in the valley sections. It is believed, however, that a still more important factor is to be found in the depletion of ground water attributable to drouth during the latter part of the preceding year (October 1928 in Idaho was the seventh consecutive month of below normal precipitation). More than the usual amount of the winter snow and later rainfall was therefore required to remedy this situation and a lower percentage run-off naturally resulted.

EVAPORATION

No special evaporation data were obtained during the year but summer records are available for stations located at the Milner and

Arrowrock Dams and may be found in the publication of the U. S. Weather Bureau.

NEW CONSTRUCTION AND REPAIRS

In the effort to limit expenditures as much as practicable, repairs to gaging station equipment were confined to those which were absolutely essential while construction by the District organization consisted of the installation of a recording gage shelter and cable measuring equipment at a new station on Teton River near the lower end of Teton Basin.

The long distance water stage indicator which was installed on Henry's Fork at the Ashton plant of the Utah Power and Light Company has been previously mentioned. One or two canal companies also added water stage recorder equipment during the year without expense to District No. 36.

EXPENDITURES

A complate summary of expenditures covering the year ending March 31, 1930 follows. This statement includes all general charge items which appeared in the annual water master's bill for the season of 1929, 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.

Salaries and expenses of Upper Valley members of the Committee of Nine which were not charged against the whole district have been omitted.

Except for the portion of the Water Master's salary which, through pre-season agreement, was paid by the American Falls Reservoir interests all general water users charges were prorated upon the basis of 60 per cent against normal flow and 40 per cent against stored water. The Utah-Idaho Sugar Company and the North Fork Reservoir Company paid respectively $3.75 and $42.50 per month as their portion of the latter, while the remainder was assessed against the Jackson Lake and American Falls Reservoirs.

EXPENDITURES FOR WATER DISTRIBUTION AND HYDROMETRIC WORK

April 1, 1929 to March 31, 1930.

Water Master, Special Deputy and Deputy			
G. Clyde Baldwin,	Salary April 1-Mar. 31, 12 mos. @ $450.00		$5400.00(a)
	Expenses	do	46.95
	Auto hire	do	158.27
Lynn Crandall,	Salary Mar. 4, 12-21 & 25-31, 17/30 mo. @ $366.66 1/6		207.78
	Auto hire		3.22
Hydrographers			
C. A. McClelland,	Salary April 1-Sept. 30, 6 mos. @ $266.66 2/3		1600.00
	Expenses	do	73.05
	Auto hire	do	407.76
R. S. Kollenborn,	Salary April 1-15, 1/2 mo. @ $216.66 2/3		108.33
	Apr. 16-Mar. 31, 11½ mos. @ $233.33 1/3		2683.33
	Expenses	do	47.75
	Auto hire	do	536.69
D. I. Gardner,	Salary June 1-Mar. 31, 10 mos. @ $190.00		1900.00
	Expenses	do	95.50
	Auto hire	do	598.18
L. W. Beam,	Salary May 18 & 25-31 & June 1-Aug. 31, 3 7/30 mos. @ $160.00		517.33
	Expenses	do	2.23
	Auto hire	do	316.68

(a)$500.00 of this item paid direct by American Falls Reservoir interests.

Deputy Water Masters

Bruno Albert,	Salary June 1,3,5,7,9,11,13,15 & 17-30, June 1- Sept. 14 & Sept. 20-25,	3 12/30 mos. @ $50		$170.00
	Auto hire do	3 12/30 mos. @ $50		170.00
T. W. Luetjen,	Salary June 1-Sept. 30,	122 days @ $4.00		488.00
	Auto hire do	122 days @ $4.00		488.00
Geo. H. Powell,	Salary June 16-Sept. 5,	82 days @ $4.00		328.00
	Auto hire do	82 days @ $3.50		287.00
W. J. Kremer,	Salary June 1-7, 15-21 & 29-30, July 1-Sept. 14, Sept. 19-25 & 28,	100 days @ $4.00		400.00
	Auto hire June 1,3,5,7,15,17,19,21 & 29, July 1 & 3-31, Aug. 1-Sept. 14, Sept. 19-25 & 28,	92 days @ $4.00		368.00
	do June 2,4,6,16,18,20 & 30 & July 2,	8 days @ $3.75		30.00
Wm. Sauer,	Salary June 8-14 & 22-28, July 3-Sept. 14, Sept. 20-25 & 28,	95 days @ $4.00		380.00
	Auto hire June 9,11,13,23,25 & 27,	6 days @ $4.00		24.00
	do June 8,10,12,14,22,24,26 & 28, July 3- Sept. 14, Sept. 20-25 & 28,	89 days @ $3.75		333.75
F. W. Tolles,	Salary June 1,3,5,7,9,11,13,15,17,19,21,23, 25,27 & 29, July 1 & 3-31, Aug. 1- Sept. 14, Sept. 21-25 & 28,	96 days @ $4.00		384.00
	do	96 days @ $3.75		360.00
	Auto hire			
E. E. Bingham,	Salary June 1,3,5,7,9,11,13,15,17,19,21,23,25, 27 & 29, July 1 & 3-31, Aug. 1-Sept. 14, Sept. 21-25 & 28,	96 days @ $4.00		384.00
	do	96 days @ $3.25		312.00
	Auto hire	4 mos. @ $50.00		200.00
W. N. McConnel	Salary June 1-Sept. 30,	3 mos. @ $135.00		405.00
		9 mos. @ $140.00		1260.00
Stenographers				
Helen George,	Salary April 1-June 30, July 1-Mar. 31,	3 16/30 mos. @ $40.00		141.33
Phyllis Tuckett,	Salary June 1-Sept. 16,	2 days @ $4.00		8.00
Effie Carlson	Salary			

Desk Readers

Harold Fuqua	Salary April 1-May 31	2 mos. @ $5.00	$10.00
	June 1-Sept. 30	4 mos. @ $12.00	48.00
	Oct. 1-Dec. 31	3 mos. @ $6.00	18.00
	Jan. 1-Mar. 31	3 mos. @ $8.33 1/3	25.00
Mrs. I. Siepert	Salary April 1-May 31,	2 mos. @ $5.00	10.00
	June 1-Sept. 30,	122 days @ $1.00	122.00
	Oct. 1-Nov. 16	12 trips @ $1.00	12.00
W. H. Kramer,	Salary July 6-Sept. 14, Sept. 19-25 & 28,	79 days @ $1.00	79.00
O. L. Kofoed,	Salary May 6-31,	25/30 mo. @ $5.00	4.17
	June 1-Sept. 30,	122 days @ $1.00	122.00
J. A. Clough,	Salary April 1-May 31 & Oct. 1-March 31,	8 mos. @ $10.00	80.00
	June 1-Sept. 30,	122 days. @ $1.00	122.00
Mrs. J. Keppner,	Salary April 1-March 31, 12 mos. @ $15.00		180.00
Walter Lenz,	Salary April 1-May 31 & Sept. 16-March 31,	8½ mos. @ $9.00	76.50
Roy Morgan,	Salary April 1-May 31 & Oct. 5-November 6,	18 trips @ $1.00	18.00
Mrs. J. Johnson,	Salary April 16-30,	1/2 mo. @ $5.00	2.50
James Fugal,	Salary April 6-May 31,	1 25/30 mo. @ $5.00	9.17
O. Mortensen,	Salary Nov. 14-March 31,	84 trips @ 60¢	50.40
S. B. McAbee,	Salary June 1-Sept. 30,	4 mos. @ $10.00	40.00
E. P. Anderson,	Salary Oct. 1-May 31,	8 mos. @ $8.00	64.00*
	June 1-Sept. 30,	4 mos. @ $50.00	200.00*

Secretary, Water Users Committee of Nine

John Lee,	Salary March 3-4 & 30 & Sept. 24, 4 days @ $5.00		20.00*
	do		9.78*
	Expenses do		4.22*
	Auto hire		

Audit of Accounts covering period June, 1919-March, 1930.

C. P. Bryan,	Salary covering audit of accounts,	Job	125.00

*Computed for year ending September 30, 1929.

Miscellaneous

Labor on construction & repair of gaging stations	$121.75
Field & office materials, supplies and equipment	271.64
Telephone and telegraph	392.65
Premiums on official bonds	25.75
Interest on borrowed money	86.43
Employee's Compensation Insurance	38.24
Total	$24,014.33

EXPENDITURES FROM VARIOUS FUNDS

U. S. Geological Survey,	
Normal Flow.Water Users	1,168.16
Stored Water Users (Jackson Lake & American Falls)	11,753.05
Sheppard & Company	7,797.01
North Fork Reservoir Company	31.49
Utah-Idaho Sugar Company	510.00
State of Idaho (Cooperative Stream Measurement Fund)	45.00
Total	2,709.62
	$24,014.33

*FUNDS AVAILABLE APRIL 1, 1930

Normal Flow Fund (a)	$439.64
Jackson Lake Stored Water Users (a)	17.95
North Fork Reservoir Co. (b)	75.00
Utah-Idaho Sugar Co. (a)	0.00
Sheppard & Company (b)	17.60
U. S. Geological Survey (c)	690.42
State of Idaho (Cooperative Stream Measurement Fund) (d)	208.10
Total	$1,448.71

*Amounts given in this table represent funds in bank or definitely known to be available after all accounts (except a few outstanding claims which had not yet been presented) were settled and adjusted to and including March 31, 1930.

(a) Additional funds probably available on or before June 1, 1930.
(b) Represents unexpended portion of money advanced.
(c) Represents amount available for expenditure prior to July 1, 1930.
(d) Amount allotted for expenditure prior to July 1, 1930.
(Subject to slight change).

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 1928 report which was paid direct by the State Commissioner of Reclamation.

After deducting $1,698.94 covering salary and expenses of the hydrographer assisting Mr. Newell on special work from the total expenditures of the preceding year, the cost of the same or similar work for the two years compares as follows:

Year ending March 31, 1929	$25,469.28
Year ending March 31, 1930	24,014.33.

The principal sources through which this reduction of $1,454.95 was effected have already been mentioned. Still larger savings would have resulted had it been possible to discontinue regulation after August 31 as in the previous year.

WATER RIGHTS

Numerous changes in the normal flow water rights of the principal Snake River canals resulted from the confirmation by the court of the so-called Woodville or "High Water" decree.

These, together with minor revisions attributable to permanent transfers and changes in points of diversion, are all shown for canals having their source of supply in channels of the main river, on Plate XXVIII. Storage rights are here also listed for the first time on the basis of final American Falls Reservoir costs.

1929 DISTRIBUTION WATER DISTRICT NO. 36

	PARTY OR CANAL	STORAGE JACKSON L	STORAGE AM FALLS RES	DECREES SEC. FT	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	18	1893	189
1	RILEY																		
2	ANDERSON & E R WILLOW CR	1200	793	24															
3	FARMERS FRIEND		14609	1100	160				540										
4	ENTERPRISE	2000		50624										309					
5	NELSON	6100	10509	250						283		1318	3204	519					
6	MATTSON-CRAIG			475															
7	ARNSBERGER			3416															
8	HEISE			900								480	240						
9	BUTLER ISLAND			560													6		
10	ROSS & RAND			6054															
11	STEELE			814						5054									
12	HARRISON			504						2			334						
13	CHENEY	5000	11994	55592						624			2			80			
14	BOOMER & IDAHO			14	43	55	65	64	64	1524	64	442	3212	449	240				
15	RUDY		26986	1000										6					
16	KITE & NORD	2000		31126									300	700					
17	BURGESS			1380						726	2		102	30					
18	CLARK & EDWARDS	5120	7496	100141												880			
19	LOWDER & JENNINGS			100							10	1080	3806		240				
20	EAST LABELLE	1040		85						70									
21	CONSOLIDATED FEEDER			166											26			26	
22	LENROOT	4000		184						48			92						
23	REID	3000	4504	220										44					
24	TEXAS FEEDER		3002	190					9	9				6		15		5	
25	NELSON-COREY			312						30	40			80					
26	HILL-PETTINGER			1680						48	50	38	38	38		14		14	14
27	LONG ISLAND			1596								12				480			
28	ISLAND			40935							24	48	48	32		144			
29	RIGBY			28644	3852	5897	5897	5898	5898	5897	5897	1699							
30	DILTS		1034	258							1476	2952	2916	1944		19356			
31	WEST LABELLE			38						10	10	20	120						
32	PARKS & LEWISVILLE			12932						10932									
33	NORTH RIGBY			43512				20	20	100			2112						
34	WHITE			80				50											
35	BRAMWELL			1698						698									
36	ELLIS			1320									1320						
37	INDEPENDENT			680									480						
38	BUTTE & MARKET LAKE		3002	2920					2920										
39	OSGOOD		15852	36870					230							36640			
40	KENNEDY & BURGRAFF	355		13389					250	370					1670	1099			
41	PORTER & GR WEST'N & MARTIN	6500	30852	3292	26	38	38	38	38	133	599	37	177		1688	420			
42	BEAR ISLAND & CD		304	70105				15			122	96	197		1612		400		
43	TAYLOR & GOSHEN			350															
44	CITY OF IDAHO FALLS			46															
45	WOODVILLE		9297	188															
46	SNAKE RIVER VALLEY	15000	27643	16350										200					
47	RESERVATION			778												1598	600		
48	BLACKFOOT		15033	61598										36680					
49	NEW LAVA SIDE			36680										60		72			
50	PEOPLES	8000	22519	182					20										
51	ABERDEEN-SPRINGFIELD	42685	(a) 40433	62420						760			1660						
52	CORBETT SLOUGH		4000	1250										10943				130	
53	NIELSEN-HANSEN			23943				15											
54	RIVERSIDE			15						10		9935	122	159					
55	DANSKIN			14216							100		80						
56	TREGO		1462	200												6541			
57	WEARY RICK			8741							38	936	440	160					
58	WATSON SLOUGH			8386						6240	160		3540						
59	PARSONS			13540						22									
60	SMITH-MAXWELL			40												182			
61	MARES-MINIDOKA CANALS	325810	50000	182															
62	SUNDODE			2726															
63	TWIN FALLS CANAL CO.	97183	156182	2.															
64	TWIN FALLS N.S.L. & W. CO.	322007	(b) 293003	3600.															
65	MINNERLOW LIFT CANAL CO		34113	3300															
	TOTALS FOR YEAR IN SEC. FT.		(c) 14086		19921	6000	6000	16000	48300	6814	45420	26083	17916	8202	6456	10524	1258	130	
	TOTALS TO DATE IN SEC. FT.	847000	(d) 798708	2392515	199	259	319	479	962	1644	2098	2359	4150	6177	7229	8464			

REVISED CHART AND TABULAR SUMMARY OF PRINCIPAL SOUTH FORK AND SNAKE RIVER WA

	92	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	19	1914	1915	1916
1																									300
2																									168
3											24														42
4				120			68																		
5									475																14
6									1296																3
7																									
8											560														10
9																									280
10				160																					
11																									9
12									14																8
13														36											
14				160																					120
15																									3
16																									200
17																									3
18																									3
19											140														26
20								76																	
21		14	14	12								100													
22																									40
23											3														32
24												10													
25																									
26			28																						9
27																									30
28																									78
29																									30
30																									19
31																									
32																									2
33																									
34									100.																
35																									
36																									145
37					350																				
38									46.																
39									140.								48.								38
40		8550							40.																68
41					400.							110.													
42																									30
43																									200
44			400.																						
45				1250.																					
46																									30
47																									20
48																									18
49											4														30
50																									30
51																									18
52												126									1000				
53																									600
54				2.																					300
55									3000.												350				
56									400.					2250.											
57		00	3450	44200	1704.00	40350	0.00	68.00	76.00	3757.71	0.00	1763.01	2400	4300	22800	0.00	0.00	13500.0							
58			8139.	9181.	10885.	11288.	11288.	11356.	11432.	15190.	15190.	15366.	7312.	17360.	19646.	19646.	19646.	20996.							

SNAKE RIVER WATER RIGHTS

	1913	1914	1915	1916	
1					1
2				300.	2
3				160.	3
4				62.	4
5					5
6				14.	6
7				3.	7
8					8
9				10.	9
10				2.80	10
11					11
12				96.	12
13				8.	13
14					14
15				120.	15
16				5.	16
17				200.	17
18				30.	18
19				33.	19
20				26.	20
21					21
22					22
23				40.	23
24				32.	24
25					25
26					26
27					27
28					28
29				98.	29
30				10.	30
31				20.	31
32				84.	32
33				30.	33
34				10.	34
35					35
36				2.	36
37					37
38					38
39					39
40					40
41				145.	41
42					42
43					43
44					44
45				38.	45
46				68.	46
47					47
48					48
49				30.	49
50				200.	50
51					51
52					52
53					53
54				30.	54
55				20.	55
56				18.	56
57				30.	57
58				36.	58
59				18.	59
60					60
61					61
62					62
63		600.			63
64		300.			64
65					65
		900.00	202.80		
		21896.	23925.		

DATE	DECREE	PARTY OR CANAL	TOTAL	OLDER
1916 JAN. 22	300.	ANDERSON & E.R.& WILLOW CR	1100.	800.
" JAN. 22	160.	FARMERS FRIEND	506.24	346.24
" JAN. 22	62.	ENTERPRISE	250.	188.
" JAN. 22	14.	MATTSON-CRAIG	34.16	20.16
" JAN. 22	3.	ARNSBERGER	9.	6.
" JAN. 22	10.	BUTLER ISLAND	60.54	50.54
" JAN. 22	2.80	ROSS & RAND (J.H.STONE)	8.14	5.34
" JAN. 22	96.	HARRISON	555.92	459.92
" JAN. 22	8.	CHENEY	14.	6.
" JAN. 22	120.	RUDY	311.26	191.26
" JAN. 22	5.	KITE & NORD	13.80	8.80
" JAN. 22	200.	BURGESS	1001.41	801.41
" JAN. 22	30.	CLARK & EDWARDS	100.	70.
" JAN. 22	33.	LOWDER & JENNINGS	85.	52.
" JAN. 22	26.	EAST LABELLE	166.	140.
" JAN. 22	40.	REID	190.	150.
" JAN. 22	32.	TEXAS FEEDER	312.	280.
" JAN. 22	98.	RIGBY	258.	160.
" JAN. 22	10.	DILTS	38.	28.
" JAN. 22	20.	WEST LABELLE	129.32	109.32
" JAN. 22	84.	PARKS & LEWISVILLE	435.12	351.12
" JAN. 22	30.	NORTH RIGBY	80.	50.
" JAN. 22	10.	WHITE	16.98	6.98
" JAN. 22	2	ELLIS	6.80	4.80
" JAN. 22	145.	PORTER,GR.WESTERN & MARTIN	701.05	556.05
" JAN. 22	38.	WOODVILLE	163.50	125.50
" JAN. 22	68.	SNAKE RIVER VALLEY	778.	710.
" JAN. 22	30.	NEW LAVA SIDE	182.	152.
" JAN. 22	200.	PEOPLES	624.20	424.20
" JAN. 22	30.	RIVERSIDE	142.16	112.16
" JAN. 22	20.	DANSKIN	200.	180.
" JAN. 22	18.	TREGO	87.41	69.41
" JAN. 22	30.	WEARYRICK	83.36	53.36
" JAN. 22	36.	WATSON SLOUGH	133.40	97.40
" JAN. 22	18.	PARSONS	40.	22
1915 DEC. 23	300.	TWIN FALLS N.S. LAND & W. CO.	3300.	3000.
" DEC. 22	600.	TWIN FALLS CANAL CO.	3600.	3000.
1908 AUG. 6	1000.	U.S.B.R. "FOSTER" (MINIDOKA)	2726.	1726.
" JUN. 16	350.	T.F. NO. SIDE L.& W. CO. "FOSTER"	3300.	2650.
1905 JUN. 7	2250.	T.F. NO. SIDE L.& W. CO. "FOSTER"	3300.	400.
" JUN. 1	36.	RUDY	311.26	155.26
1904 OCT. 22	48.	CITY OF IDAHO FALLS	188.	140.
1903 SEPT. 1	110.	SNAKE RIVER VALLEY	778.	600.
" JUN. 1	100.	LENROOT	220.	120.
" JUN. 1	10.	HILL-PETTINGER	15.96	5.96
" MAR. 26	1726.	U.S.B.R. "FOSTER" (MINIDOKA)	2726.	0.
1902 JUN. 1	3.	HILL-PETTINGER	15.96	2.96
" JUN. 1	24.	RILEY	24.	0.
" JUN. 1	4	TREGO	87.41	83.41
" MAY 1	5.60	HEISE	5.60	0.
" APR. 14	140.	CONSOLIDATED FEEDER	184.	44.
1900 OCT. 11	400.	T. F. NO. SIDE L.& W. CO. "FOSTER"	3300.	0.
" OCT. 11	3000.	TWIN FALLS CAN. CO. "FOSTER"	3600.	0.
" JUN. 16	46.	TAYLOR & GOSHEN	46.	0.
" JUN. 16	100.	OSGOOD (UTAH-IDAHO SUGAR CO)	133.89	33.89
" JUN. 16	40.	WOODVILLE	163.50	85.50
" JUN. 1	14.	RUDY	311.26	141.26
" APR. 30	4.75	NELSON	4.75	0.
" APR. 30	12.96	MATTSON-CRAIG	34.16	7.20
" APR. 20	140.	CITY OF IDAHO FALLS	188.	0.
1899 JUN. 1	76.	LENROOT	220.	44.
1898 APR. 15	68.	ENTERPRISE	250.	120.
1896 JUL. 9	400.	SNAKE RIVER VALLEY	778.	200.
" JUN. 1	3.50	BEAR ISLAND (WEIR)	3.50	0.

DATE	DECREE	PARTY OR CA
1895 JUN. 1	12.	TEXAS FEEDER
" JUN. 1	160.	BURGESS
" APR. 1	2.	SCHODE
" MAR. 22	120.	ENTERPRISE
" FEB. 6	1250.	ABERDEEN-SPRING
		(AMERICAN FALLS CAN
" JAN. 9	160.	HARRISON
1894 AUG. 18	400.	PEOPLES
" JUN. 1	28.	DILTS (DILTS & LABEL
" JUN. 1	14.	TEXAS FEEDER (TEXA
1893 JUN. 1	14.	TEXAS FEEDER
" APR. 30	85.50	WOODVILLE
1892 JUN. 1	5.	LENROOT (AMENDED
" JUN. 1	14.	TEXAS FEEDER (TEX
" JUN. 1	26.	LOWDER & JENNING
" MAY 1	130.	CORBETT SLOUGH
1891 DEC. 14	600.	RESERVATION (1880 CA
" JUN. 1	4.80	NELSON-COREY (P.O.C
" JUN. 1	6.	ARNSBERGER
" JUN. 1	144.	HILL-PETTINGER
" JUN. 1	15.	LENROOT (AMENDED
" JUN. 1	193.56	ISLAND
" JAN. 24	14.	TEXAS FEEDER (TEXA
	400.	GREAT WESTERN & P
		(GEN SWENSON DIST
1890 NOV. 24	72.	NEW LAVA SIDE
" OCT. 16	17.	BUTTE & MARKET L
		(LAVA OUTFLOW)
" OCT. 16	349.40	BUTTE & MARKET L
" OCT. 16	10.60	OSGOOD (UTAH-IDAHO SU
" JUL. 12	240.	HARRISON
" JUN. 10	240.	BURGESS
" JUN. 1	8.80	KITE (NORD-KITE)
" JUN. 1	80	STEER (HATFIELD)
" JUN. 1	65.41	TREGO
" JUN. 1	4.20	KENNEY & BURG
" JUN. 1	039	OSGOOD (MERRILL-HI
" JUN. 1	26.	LOWDER & JENNIN
" FEB. 21	1.82	SMITH-MAXWELL
" FEB. 21	15.98	RESERVATION (SM
1889 JUL. 10	366.80	BLACKFOOT
" JUL. 10	10.61	OSGOOD (UTAH-IDA
		SMERRILL
" JUL. 10	13.79	GREAT WESTERN
" JUL. 10	8.80	KENNEY & BUR
" JUN. 2	6.	CHENEY
" JUN. 1	.67	GREAT WESTN &
" JUN. 1	9.19	FARMERS FRIE
" JUN. 1	6.	LENROOT
" JUN. 1	.32	HILL-PETTINGE
" JUN. 1	30.	RUDY
" JUN. 1	80.	REID
" JUN. 1	44.	CONSOLIDATED
		(SUNNYSIDE DITCH)
" JUN. 1	1.59	RIVERDE
" JUN. 1	38.	TEXAS FEE
" JUN. 1	1.60	WEARYRICK
" JUN. 1	19.44	ISLAND (WEIR)
" JUN. 1	4.49	HARRISON
" JUN. 1	.26	KENNEY &
" MAY 11	700.	IDAHO (WEIR)
" MAY 1	109.43	CORBETT
" MAY 1	6.00	OSGOOD
" MAY 1	1.66	GREAT
" MAY 1	2.82	KENNEY

RTY OR CANAL	TOTAL	OLDER	DATE			DECREE
S FEEDER	312.	268.	1889	APR	15	300.
GESS	1001.41	641.41	"	APR.	6	
ODDE	2.	0.	"	MAR.	1	200.
ERPRISE	250.	0.	"	JAN.	12	60.
RDEEN-SPRINGFIELD (AMERICAN FALLS CANAL CO.)	1250.	0.	1888	AUG.	13	5.
ISON	555.92	299.92	"	AUG.	13	100.
LES	624.20	24.20	"	AUG.	13	40.
S (DILTS & LABELLE CO.)	38.	0.	"	JUL.	15	260.
S FEEDER (TEXAS SLOUGH CO.)	312.	254.	"	JUL.	15	30.20
S FEEDER	312.	240.	"	JUL.	15	16.60
OVILLE	163.50	0.	"	JUN.	15	3.20
OOT (AMENDED 6-1-03)	220.	39.	"	JUN.	10	120.
S FEEDER (TEXAS SLOUGH CO.)	312.	226.	"	JUN.	1	380.
ER & JENNINGS	85.	26.	"	JUN.	1	.48
ETT SLOUGH	239.43	109.43	"	JUN.	1	.61
RVATION (IDAHO CANAL & IMP. CO.)	615.98	15.98	"	JUN.	1	80.
ON-COREY (P.O. CARLSEN)	16.80	12.	"	JUN.	1	92.
BERGER	9.00	0.	"	JUN.	1	38.
PETTINGER	15.96	1.52	"	JUN.	1	211.12
OOT (AMENDED 6-1-03 & 99)	220.	24.	"	JUN.	1	32.12
D	286.44	92.88	"	JUN.	1	2.
S FEEDER (TEXAS SLOUGH CO.)	312.	212.	"	JUN.	1	3.34
T WESTERN & PORTER (NEW SWEDEN DISTRICT)	701.05	156.05	"	JUN.	1	2.
LAVA SIDE	182.	80.	"	JUN.	1	1.22
E & MARKET LAKE (AVINA CUTSHAW)	368.70	351.70	"	JUN.	1	29.16
			"	JUN.	1	.97
E & MARKET LAKE	368.70	2.30	"	JUN.	1	1.77
OD (UTAH IDAHO SUGAR CO.)	133.89	23.29	"	JUN.	1	21.04
SON	555.92	59.92	"	JUN.	1	2.40
ESS	1001.41	401.41	"	JUN.	1	13.20
& NORD (HATFIELD-NORD-PARSONS)	13.80	0.	"	JUN.	1	4.80
E (HATFIELD)	9.04	8.24	"	JUN.	1	1.20
O	87.41	0.	"	MAY	13	3.20
EDY & BURGRAFF	32.92	28.72	"	MAY	1	1.
OD (MERRILL-NIBLEY-ET. AL.)	133.89	22.90	"	JAN.	18	300.
ER & JENNINGS (6-1-00 ERROR)	85.	0.	1887	JUN.	15	20.
-MAXWELL	1.82	0.	"	JUN.	10	10.
RVATION (SMITH-MAXWELL)	615.98	0.	"	JUN.	1	99.35
K FOOT	366.80	0.	"	JUN.	1	.48
OD (UTAH-IDA-SUGAR CO 448) (MERRILL-NIBLEY 6.13)	133.89	12.29	"	JUN.	1	38.
			"	JUN.	1	12.
T WESTERN & PORTER	701.05	142.26	"	JUN.	1	4.80
EDY & BURGRAFF	32.92	19.92	"	JUN.	1	29.52
EY	14.	0.	"	JUN.	1	16.99
WEST'N & PORTER (LONG ISLAND)	701.05	141.59	"	JUN.	1	.96
ERS FRIEND (LONG ISLAND)	506.24	337.05	"	JUN.	1	4.42
OOT	220.	18.	"	JUN.	1	.97
ETTINGER	15.96	1.20	"	JUN.	1	13.18
	311.26	111.26	"	JUN.	1	.80
	190.	70.	"	JUN.	1	9.36
LIDATED FEEDER (DELL-LYMAN)	184.	0.	1886	JUL.	23	100.
SIDE	142.16	110.57	"	JUN.	15	10.
S FEEDER (LIBERTY PARK CO.)	312.	174.	"	JUN.	10	10.
Y RICK (LONG ISLAND)	83.36	51.76	"	JUN.	1	1.60
K (LONG ISLAND)	286.44	73.44	"	JUN.	1	14.76
SON (LONG ISLAND)	555.92	55.43	"	JUN.	1	50.
EDY & BURGRAFF (LONG ISLAND)	32.92	19.66	"	JUN.	1	5.60
(IDAHO IRRIG. DIST.)	740.	40.	"	JUN.	1	2.
ETT SLOUGH	239.43	0.	"	JUN.	1	40.
OD (UTAH-IDA-SUGAR CO 492 MERR-NIB 47)	133.89	6.20	"	JUN.	1	.24
T WESTERN & PORTER	701.05	139.93	"	JUN.	1	5.89
			"	JUN.	1	.64
DY & BURGRAFF (CORBETT)	32.92	16.84	"	JUN.	1	.39

PARTY OR CANAL	TOTAL	OLDER	DATE			DECREE
ANDERSON & E.R. & WILLOW CR. (FARMERS PROGRESS)	1100.	500.	1886	MAY	3	
SNAKE RIVER VALLEY (CEDAR POINT)	778.		"	MAY	1	
NEW LAVA SIDE	182.	0.				
KENNEDY & BURGRAFF (W.S. LYLE AMEND)	32.92	20.	"	JAN.	7	
RUDY	311.26	11.84	1885	JUN.	30	
IDAHO (IDAHO IRRIG. DIST.)	740.	11.26	"	JUN.	15	
BOOMER (IDAHO IRRIG. DIST.)	260.	0.	"	JUN.	10	
WATSON SLOUGH	133.40	0.	"	JUN.	10	
PEOPLES (WATSON SLOUGH)	624.20	67.20	"	JUN.	1	
WEARYRICK (WATSON SLOUGH)	83.36	7.60	"	JUN.	1	
RIGBY	258.	48.56	"	JUN.	1	
BURGESS	1001.41	40.	"	JUN.	1	
HILL-PETTINGER	15.96	21.41	"	JUN.	1	
BURGESS (LONG ISLAND)	1001.41	.72	"	JUN.	1	
DANSKIN	200.	20.80	"	JUN.	1	
EAST LA BELLE	166.	100.	"	JUN.	1	
TEXAS FEEDER (LIBERTY PARK CO.)	312.	48.	"	JUN.	1	
PARKS & LEWISVILLE	435.12	136.	"	JUN.	1	
HARRISON	555.92	140.	"	JUN.	1	
RUDY (C.E. ROSTAN)	311.26	23.31	"	JUN.	1	
ROSS & RAND (SUPPLEMENTAL)	8.14	9.26	"	JUN.	1	
STEELE (SUPPLEMENTAL-PROBERT)	9.04	2.	"	JUN.	1	
RIVERSIDE (LONG ISLAND)	142.16	6.24	"	JUN.	1	
ISLAND (LONG ISLAND)	286.44	109.35	"	JUN.	1	
GREAT WESTERN & PORTER (LONG ISLAND)	701.05	44.28	"	JUN.	1	
KENNEDY & BURGRAFF	32.92	138.96	"	MAR.	6	
FARMERS FRIEND (LONG ISLAND)	506.24	10.07	"	MAR.	6	
MATTSON-CRAIG (SUPPLEMENTAL-RANDS)	34.16	316.01	"	FEB.	27	
BRAMWELL (SUPPLEMENTAL)	13.20	4.80	1884	JUN.	4	
ELLIS (SUPPLEMENTAL)	6.80	0.	"	JUN.	4	
WEARYRICK (LONG ISLAND)	83.36	0.	"	JUN.	4	
WATSON SLOUGH (H.M. PALMER)	133.40	47.36	"	JUN.	1	
GREAT WESTERN & PORTER (J.B. MORGAN-SHATTUCK)	701.05	64.	"	JUN.	1	
FARMERS FRIEND	506.24	137.96	"	JUN.	1	
RIGBY	258.	16.01	"	JUN.	1	
BURGESS	1001.41	20.	"	JUN.	1	
RIVERSIDE	142.16	10.80	"	APR.	3	
HILL-PETTINGER	15.96	10.	1883	JUN.	10	
TEXAS FEEDER (LIBERTY PARK CO.)	312.	.24	"	JUN.	1	
NELSON-COREY	16.80	98.	"	JUN.	1	
MATTSON-CRAIG (R.A. CRAIG)	34.16	0.	"	JUN.	1	
ISLAND	286.44	0.	"	JUN.	1	
LONG ISLAND	409.35	14.76	"	JUN.	1	
GREAT WESTERN & PORTER	701.05	392.36	"	JUN.	1	
HARRISON (LONG ISLAND)	555.92	137.	1882	JUN.	1	
KENNEDY & BURGRAFF (LONG ISLAND)	32.92	18.89	"	JUN.	1	
FARMERS FRIEND (LONG ISLAND)	506.24	9.10	"	JUN.	1	
BURGESS (LONG ISLAND)	1001.41	2.83	1881	JUN.	1	
WEARYRICK (LONG ISLAND)	83.36	10.	"	JUN.	1	
DANSKIN	200.	38.	"	JUN.	1	
RIGBY	258.	0.	1880	AUG.	1	
BURGESS	1001.41	10.	"	JUN.	11	
WATSON SLOUGH (ELIZABETH KRATZER)	133.40	0.	"	JUN.	11	
ISLAND	286.44	62.40	"	JUN.	11	
TEXAS FEEDER (TEXAS SLOUGH & LIB. PARK)	312.	0.				
KENNEDY & BURGRAFF	32.92	48.				
RUDY (ROSTAN)	311.26	3.50				
REID	190.	7.26				
HILL-PETTINGER	15.96	30.				
LONG ISLAND	409.35	0.				
HARRISON (LONG ISLAND)	555.92	333.39				
KENNEDY & BURGRAFF	32.92	18.25				
		3.11				

DATE			DECREE	PARTY OR CANAL	TOTAL	OLDER
1883	APR.	15	300.	ANDERSON & E.R. & WILLOW CR. (FARMERS PROGRESS)	1100.	500.
"	APR.	6	200.	SNAKE RIVER VALLEY (CEDAR POINT)	778.	0.
"	MAR.	1	60.	NEW LAVA SIDE	182.	20.
"	JAN.	12	5.	KENNEDY & BURGRAFF (W.S. LYLE AMEND.)	32.92	11.84
1888	AUG.	13	100.	RUDY	311.26	11.26
"	AUG.	13	40.	IDAHO (IDAHO IRRIG. DIST.)	740.	0.
"	AUG.	13	260.	BOOMER (IDAHO IRRIG. DIST.)	260.	0.
"	JUL.	15	30.20	WATSON SLOUGH	133.40	67.20
"	JUL.	15	16.60	PEOPLES (WATSON SLOUGH)	624.20	7.60
"	JUL.	15	3.20	WEARYRICK (WATSON SLOUGH)	83.36	48.56
"	JUN.	15	120.	RIGBY	258.	40.
"	JUN.	10	380.	BURGESS	1001.41	21.41
"	JUN.	1	.48	HILL-PETTINGER	15.96	.72
"	JUN.	1	.61	BURGESS (LONG ISLAND)	1001.41	20.80
"	JUN.	1	80.	DAWSKIN	200.	100.
"	JUN.	1	92.	EAST LA BELLE	166.	48.
"	JUN.	1	38.	TEXAS FEEDER (LIBERTY PARK CO.)	312.	136.
"	JUN.	1	211.12	PARKS & LEWISVILLE	435.12	140.
"	JUN.	1	32.12	HARRISON	555.92	23.31
"	JUN.	1	2.	RUDY (C.E. ROSTAN)	311.26	9.26
"	JUN.	1	3.34	ROSS & RAND (SUPPLEMENTAL)	8.14	2.
"	JUN.	1	2.	STEELE (SUPPLEMENTAL-PROBERT)	9.04	6.24
"	JUN.	1	1.22	RIVERSIDE (LONG ISLAND)	142.16	109.35
"	JUN.	1	29.16	ISLAND (LONG ISLAND)	286.44	44.28
"	JUN.	1	.97	GREAT WESTERN & PORTER (LONG ISLAND)	701.05	138.96
"	JUN.	1	1.77	KENNEDY & BURGRAFF	32.92	10.07
"	JUN.	1	21.04	FARMERS FRIEND (LONG ISLAND)	506.24	316.01
"	JUN.	1	2.40	MATTSON-CRAIG (SUPPLEMENTAL-RANDS)	34.16	4.80
"	JUN.	1	13.20	BRAMWELL (SUPPLEMENTAL)	13.20	0.
"	JUN.	1	4.80	ELLIS (SUPPLEMENTAL)	6.80	0.
"	JUN.	1	1.20	WEARYRICK (LONG ISLAND)	83.36	47.36
"	MAY	13	3.20	WATSON SLOUGH (H.M. PALMER)	133.40	64.
"	MAY	1	1.	GREAT WESTERN & PORTER (J.B. MORGAN - SHATTUCK)	701.05	137.96
"	JAN.	18	300.	FARMERS FRIEND	506.24	16.01
1887	JUN.	15	20.	RIGBY	258.	20.
"	JUN.	10	10.	BURGESS	1001.41	10.80
"	JUN.	1	99.35	RIVERSIDE	142.16	10.
"	JUN.	1	.48	HILL-PETTINGER	15.96	.24
"	JUN.	1	38.	TEXAS FEEDER (LIBERTY PARK CO.)	312.	98.
"	JUN.	1	12.	NELSON-COREY	16.80	0.
"	JUN.	1	4.80	MATTSON-CRAIG (R.A. CRAIG)	34.16	0.
"	JUN.	1	29.52	ISLAND	286.44	14.76
"	JUN.	1	16.99	LONG ISLAND	409.35	392.36
"	JUN.	1	.96	GREAT WESTERN & PORTER	701.05	137.
"	JUN.	1	4.42	HARRISON (LONG ISLAND)	555.92	18.89
"	JUN.	1	.97	KENNEDY & BURGRAFF (LONG ISLAND)	32.92	9.10
"	JUN.	1	13.18	FARMERS FRIEND (LONG ISLAND)	506.24	2.83
"	JUN.	1	.80	BURGESS (LONG ISLAND)	1001.41	10.
"	JUN.	1	9.36	WEARYRICK (LONG ISLAND)	83.36	38.
1886	JUL.	23	100.	DAWSKIN	200.	0.
"	JUN.	15	10.	RIGBY	258.	10.
"	JUN.	10	10.	BURGESS	1001.41	0.
"	JUN.	1	160.	WATSON SLOUGH (ELIZABETH KRATZER)	133.40	62.40
"	JUN.	1	14.76	ISLAND	286.44	0.
"	JUN.	1	50.	TEXAS FEEDER (TEXAS SLOUGH & LIB. PARK)	312.	48.
"	JUN.	1	560.	KENNEDY & BURGRAFF	32.92	3.50
"	JUN.	1	2.	RUDY (ROSTAN)	311.26	7.26
"	JUN.	1	40.	REID	190.	30.
"	JUN.	1	.24	HILL-PETTINGER	15.96	0.
"	JUN.	1	58.97	LONG ISLAND	409.35	333.39
"	JUN.	1	.64	HARRISON (LONG ISLAND)	555.92	18.25
"	JUN.	1	.38	KENNEDY & BURGRAFF	32.92	3.11

DATE			DECREE	PARTY
1886	MAY	3	38.	WEARYRIC
"	MAY	1	2.	GREAT WES (SHA
"	JAN.	7	120.	GREAT WE (NEW SH
1885	JUN.	30	22.	PARSONS
"	JUN.	15	10.	RIGBY
"	JUN.	10	13.40	HARRISON
"	JUN.	10	1.	STEELE (S.
"	JUN.	1	10.	RIVERSIDE
"	JUN.	1	48.	TEXAS FEE
"	JUN.	1	100.	PARKS & LE
"	JUN.	1	48.	EAST LA BE
"	JUN.	1	9.	LENROOT
"	JUN.	1	30.	REID
"	JUN.	1	109.32	WEST LA BI
"	JUN.	1	6.98	WHITE
"	JUN.	1	.370	OSGOOD (UTA
"	JUN.	1	50.54	BUTLER ISL
"	JUN.	1	5.24	STEELE (BUT
"	JUN.	1	7.26	RUDY (BUTLE
"	JUN.	1	2.83	FARMERS
"	JUN.	1	2.	ROSS & RAN
"	JUN.	1	58.97	LONG ISLA
"	JUN.	1	1.84	HARRISON
"	MAR.	6	1.33	KENNEDY &
"	MAR.	6	62.40	WATSON SL
"	FEB.	27	7.60	PEOPLES (WA
1884	JUN.	4	70.	CLARK & E
"	JUN.	4	29.20	INDEPENDE
"	JUN.	1	2.30	BUTTE & MA
"	JUN.	1	2.50	OSGOOD (UT.
"	JUN.	1	20.	NEW LAVA S
"	JUN.	1	20.	PARKS & LE
"	JUN.	1	9.	LENROOT
"	JUN.	1	58.98	LONG ISLA
"	JUN.	1	.64	HARRISON
"	APR.	3	.38	KENNEDY &
1883	JUN.	10	340.	ANDERSON-H
"	JUN.	1	50.	NORTH RIC
"	JUN.	1	20.	PARKS & L
"	JUN.	1	15.	NIELSON-HA
"	JUN.	1	15.	GREAT WE
"	JUN.	1	58.98	LONG ISLA
"	JUN.	1	.64	HARRISON
"	JUN.	1	.38	KENNEDY
1882	JUN.	1	58.97	LONG ISLA
"	JUN.	1	.65	HARRISON
"	JUN.	1	.38	KENNEDY
1881	JUN.	1	58.97	LONG ISLA
"	JUN.	1	.65	HARRISON
"	JUN.	1	.38	KENNEDY
1880	AUG.	1	160.	ANDERSON
"	JUN.	11	38.52	LONG ISLA
"	JUN.	11	.43	HARRISON
"	JUN.	11	.26	KENNEDY

ES

1 feet; storage in acre feet.
ar Co.) has storage in Twin Lakes.
dditional storage in Lake Walcott.
t. under option - see note (c)
wned by the Hillsdale Irrig. Dist
ion to purchase.
ield Canal Co., 2086. ac.ft.
Dist. (Fall river), 12000. " ".

ower Company	45000. ac.ft.
st. (unallotted)	699. " "
rights under option)	855593. " "
Total,	901292. " "