PERSONAL

Boise, Idaho, Feb. 16, 1923.

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

Dear Sir:

It is my pleasure to submit herewith for your consideration a report of the various hydrometric data relating to the distribution of the waters of the Boise River for the irrigation year of 1922.

I wish to thank you and your office force for the cooperation and assistance that has been given to this work during the past season and trust that the same friendly feeling may continue during the coming year.

Very truly yours,

G. V. Tallman

Water Master Boise River
District 12-A

REPORT

ON

CANAL DELIVERIES FROM BOISE RIVER

AND

DIFFERENT FEATURES AFFECTING THESE DELIVERIES FOR THE IRRIGATION SEASON OF 1922.

(DATA GATHERED BY THE WRITER, ACTING AS SPECIAL DEPUTY COMMISSIONER OF RECLAMATION IN CHARGE OF ARROWROCK STORAGE AND WATER MASTER OF BOISE RIVER, UNDER SUPERVISION OF THE COMMISSIONER OF RECLAMATION OF THE STATE OF IDAHO.

COOPERATIVE DATA ALSO FURNISHED BY THE UNITED STATES RECLAMATION SERVICE, THE UNITED STATES GEOLOGICAL SURVEY, AND THE COMMISSIONERS OF DRAINAGE DISTRICT NO. 2)

By

A. V. Tallman,

Irrigation Engineer.

C H A R T S

1922

1. Map of Boise River showing canal diversions.
2. 2-A, 2-B, 2-C, Daily discharge of Boise River during 28 year period.
3. Total monthly and annual flow in acre feet for each irrigation year 1894-95 to 1921-22, inc.
4. Table in second feet showing average of 4 highest years, average of 4 lowest years and mean daily flow of Boise River for 28 years.
5. 5-A, 5-B, 5-C, 5-D, 5-E, Daily discharge of all canals in Section 1 and 2.
6. 6-A, 6-B, Daily discharge of all principal tributary streams feeding water to Boise River below Highland.
7. Table showing daily natural flow of Boise River passing Highland, deliveries to canals and seepage flow for the irrigation season of 1922.
8. Hydrogram showing daily natural flow of Boise River passing Highland, tributary and seepage gain to River, and deliveries to canals, also storage water delivered for entire irrigation season.
9. Table showing net results secured during the period July 24 to September 30, inc., 1922 on Section 1 of River.

CHARTS (Continued)

10. Table showing net results secured during the period July 24 to September 30, inc., 1922, on Section 2 of the River.
11. Two Hydrograms showing graphically the different quantities of water available in Section 1 and 2 of Boise River for the low water period July 24 to September 30, inc., 1922.
12. Table showing return flow available for canal requirements, based on 1922 decree in Section 2 of Boise River for the period July 24 to September 30, inc., 1922.
13. Revised area and capacity table for Arrowrock Reservoir.
14. Table showing time at which decreed rights are subject to cuts below 60% of full rights, also gives number of days cut prior to September 30th of each year.
15. Table, in acre feet, giving quantities diverted by 18 canals from Boise River for each month of irrigation season of 1922.
16. Chart showing average headgate duty of water in miners inches per acre, for 18 Boise Valley Canals for years 1916 to 1922, inc.
17. Total Monthly Diversions of Canals in Drainage District No. 2
18. Summary table of return flow to Boise River for 9 year period, 1914 to 1922, inc.
19. Diagram showing average conditions on Boise River for 69 day period, July 24 to September 30, inc., 1922.

CHARTS (Continued)

20. Condensed table of Stewart Decree, giving dates of priority and amount decreed.
21. Stewart Decree grouped under canal headings.
22 - 22 A. Reconstructed table of Stewart Decree, eliminating rights supplied by return flow.

PREVIOUS MANAGEMENT

Prior to the year 1914, the State of Idaho, through the State Engineer's Office and the Water Commissioners Office, had never attempted to systematically regulate the deliveries of the waters of the Boise River during the irrigation season so that all water users had a just and equitable distribution of the waters of this stream.

This condition has been changed during the past seven irrigation seasons due to a desire on the part of the water users to get away entirely from the old sectional system of managing the River and to concentrate the authority for carrying on this work in the hands of one person.

Throughout the years 1914 to 1922, inclusive, a complete investigation, sanctioned and paid for by the water users diverting water from the Boise River, has been carried on and the compilation

of the data gathered has been largely responsible for the greater efficiency that has been obtained during the past eight years. At the present time the work performed by Water Masters on Idaho streams is recognized as an Engineering problem, and on most streams, Engineers are now employed to carry on this work.

BOISE RIVER DISCHARGE

The construction of the Arrowrock Dam in the Boise River, below the junction of the two main forks of this stream, by the United States Reclamation Service, has made it necessary to use some accurate or workable method of determining the daily discharge of the natural flow so that in making deliveries to water users the storage water could be separated from natural flow and vice versa.

During the irrigation seasons 1915, 1916, 1917, the U. S. R. S., in cooperation with the U. S. G. S., obtained accurate records on the inflow and outflow of Boise River to and from Arrowrock Reservoir and from the data obtained Mr. W. G. Steward of the U. S. R. S., has compiled a very accurate capacity table for this Reservoir.

The expense incurred in obtaining the total daily inflow into Arrowrock was so great that it was thought advisable during the low water period of the irrigation season of 1918, to use some other method of determining the natural flow.

At a conference between Mr. W. G. Steward, representing the U. S. R. S., and myself, Water Master on the Boise River and representing the old decreed rights, the following method of

arriving at the daily natural flow was adopted and with but few exceptions proved to be very satisfactory to both natural flow users and owners of storage water.

At 8 a. m. of each day the gage on the face of Arrowrock dam was read to closest .01 of a foot. At the Dowling river station, 4 miles below Arrowrock, the Gage was read several times each day and these gage readings, along with the Arrowrock gage was then phoned to Boise before 9 a.m. each day. The drop of the water on the surface of the Arrowrock gage during a 24 hour period was reduced to acre feet, from Mr. Steward's capacity table, and this quantity substracted from the total acre feet passing Dowling during the corresponding 24 hour period gave, in acre feet, the total daily inflow to Arrowrock Reservoir. These quantities were changed to second feet in order to simplify the work.

The daily inflow to Arrowrock plus flow of Moores Creek gave the total daily natural flow available for use by the old decreed rights.

Occasionally the quantities derived would show up some very unusual and improbable conditions, so averages for two and sometimes three days would be used in order to stabilize the outflow of waters from Reservoir.

A study of Charts 2, 2-A, 2-B and 2-C, will give a comparison of the daily discharge of Boise River for the full twelve months period for each year from 1895 to 1922, inclusive.

Chart 3, was compiled from data given in the previous charts and gives the total monthly and annual flow of the Boise River in acre feet for each month and irrigation year, 1894-1895 to 1921-1922, inclusive. In Chart 3, the irrigation year was given instead of the calendar year as in the future Arrowrock Reservoir will begin storing water on November 1st for the following seasons's demands.

Chart 4, is a table compiled in second feet to show the average daily flow of the Boise River for a 28 year period; average daily flow of 4 highest years, and average daily flow of 4 lowest years.

TEMPORARY DECREES

The temporary decree issued by Judge Ed. L. Bryan for the season of 1919 was identical to the one issued for the season of 1917 and 1918 and provided that all waters of the Boise River should be distributed as follows, to-wit: the various rights as adjudicated in the so-called Stewart Decree shall receive 100% until the natural flow of the waters of Boise River shall decrease or until all the rights in said decree cannot receive 100%, at which time the various rights as adjudicated in the so-called Stewart Decree shall first be cut to 75% of the amount of water decreed by the Stewart Decree as the natural flow of Boise River decreases, beginning with the latest rights and proceeding to the earliest rights in the order fixed in said Stewart Decree, and after all rights shall have been reduced to 75% of the amount fixed in the Stewart Decree, should the natural

flow of the waters in the Boise River decrease below the amount necessary to supply said 75% of the water rights as decreed in said Stewart Decree, then the various rights, beginning with the latest and proceeding to the earliest as aforesaid, shall be reduced to 60% of the amount specified in said Stewart Decree and 60% of the amount specified in said Stewart Decree is hereby fixed and determined as the highest duty of water for the year 1919.

The 1919 temporary decree also contained a continuing clause that made it unnecessary to secure a like decree for 1922 so the same methods of making cuts was continued during the low water period of 1922.

FLOOD WATER PERIOD

The unusually heavy snowfall that existed over the entire water-shed of the Boise River during the winter months of 1921-1922 was responsible for the high water conditions that existed on the lower Boise River during the month of May and a part of June.

This period of high water, in fact any period of dangerous high water, so seldom occurs on this stream that the property owners, who own land adjoining the River banks, have become very negligent in taking precautionary measures to prevent damage from this source and it therefore followed that considerable damage was done to low lying lands as well as to headgate diversion works.

The flood that occurred during the month of May 1921 and again in May, 1922, should call to the attention of those

communities interested that some community action should be taken immediately to prevent further damage from these infrequent floods. In fact it will only be a short time until some concerted action on the part of all the water users will be necessary in order to prevent irreparable damage to canal headings as well as adjoining bottom lands.

LOW WATER PERIOD

The low water period on the Boise River, or the time at which actual distribution began, occurred on July 7 and the demand for water by the various canals was greatly increased due to the extremely warm weather that prevailed during the months of July and August. In fact the writer has never experienced, during his nine years of work in the Boise Valley, such a demand for water as existed during the entire growing season of 1922. This demand continued for such a long period of time that the Arrowrock Reservoir storage water was completely exhausted by the 17th of September, and for the first time in nine years the Water Master was unable to beg, borrow or steal water from the old decreed rights in order to assist the Project lands in securing some water with which to finish the season. Ordinarily after the 15th of September the old decreed rights are so far advanced with their irrigation requirements that the Water Master is allowed to use his own discretion in the distribution of the natural flow water and thus take care of those rights that may have been suffering a shortage because of their late priorities, but the fall requirements

for irrigation water held so late in the season that none of the old canals felt justified in giving up any of their available water.

There were two factors that caused this unusual demand for water late in the season, first the long period of hot, dry weather and second, the increased acreage that had been planted to potatoes, corn and head lettuce. There being no market for the August potatoes it became necessary to continue the irrigation until such time as the market made it profitable to ship and as this condition never was reached the potatoes were irrigated as long as the water supply held out.

Had it not been for the Arrowrock storage water serious crop losses would have occurred on the major portions of the lands irrigated from the Boise River water supply.

CLASSIFICATION OF RIVER SECTION

The Boise River was cut into two separate and distinct sections during the low water period of the irrigation season of 1922. Section 1. This section includes all of that part of the River that lies between the Government Diversion Dam and a point immediately below the heading of the Caldwell High Line Canal, about one mile below the town of Star. Section 2. This section includes all of that part of the River that lies between the Caldwell High Line Canal River Heading and the Notus Bridge.

DAILY CANAL RECORDS

Charts 5 to 5-E, inclusive, give the daily discharge in second feet, of all canals in Section 1 and 2 of the River for the irriga-

tion season of 1922. The quantities given in these charts include all storage water delivered, and also all water wasting past Notus Bridge as a delivery.

DAILY TRIBUTARY FLOW

In order to determine the relationship of the tributary return flow to the net gain, data was obtained on all principal streams feeding water to the River below Highland Rating Station.

Charts 6 and 6-B give the total daily discharge in second feet for 15 principal tributary streams and the total for each day for the irrigation season.

DAILY TRIBUTARY AND SEEPAGE GAINS TO BOISE RIVER

Chart 7 gives a detailed comparison of the natural flow passing Highland, canal deliveries, tributary and seepage flow, and net gain, Highland to Notus. This Chart shows that "lagging" in the River is taken into consideration, that is, the natural flow passing Highland on March 31st was delivered to the canals on the following day, or April 1st, etc.

Although the indicated daily net gain may vary somewhat, the averages by months are thought to be thoroughly reliable and give a very clear idea of the importance of the tributary and seepage gain to the River. The average daily net gain to the River from tributary for 1922 was 795 second feet, for 1921 was 990 second feet, for 1920 was 635 second feet, for 1919 was 788 second feet, for 1918 was 1016 second feet. For the season of 1917 this daily flow averaged 1027 second feet; 1916 the average daily net gain was 964 second feet; while in 1915 the average gain was 529 second feet.

Chart 8 shows graphically the total daily deliveries to canals, water available at Highland, including storage water, and net gain to River. The table on this chart shows that there was an average daily net gain to the River of 795 second feet for each day of the 183 days.

CANAL REGULATION

The regulation of water deliveries to canals during the irrigation season of 1922 was very similar to the operation given in detail in previous reports. Breaks were more numerous than during previous years and were caused by the different canals trying to carry sufficient heads of water to care for the peak demands.

BARBER DAM

All fluctuations in the Boise River caused by the Barber Dam have practically been eliminated due to cooperation in the method of operating the power Plant situated at this Dam. Throughout the low water period of 1922, only once was the Barber Pond responsible for any serious fluctuations in the river and at this time the repairs on machinery extending into the pond above the dam necessitated lowering of the pond. When an attempt was made to raise the surface of the pond back to its original elevation an extreme shortage occurred for a 24 hour period on the lower river.

NOTIFICATION OF EMPTYING OF CANAL

The same strong spirit of cooperation that existed during the seasons of 1915, 1916, 1917, 1918, 1919, 1920, and 1921 was very much in evidence during the season of 1922 and the canal managers were very prompt in giving notice of breaks or intent

to empty canals for cleaning purposes. This promptness not only gives the Water Master a chance to save water from going to waste but makes it possible for owners of small dams in the River to protect their property.

DELIVERY OF STORAGE WATER TO OLD DECREED RIGHTS

The time interval used during the past seasons in delivering storage water from Arrowrock Reservoir to the old canals down the River was used again during the season of 1922. Storage water released from Arrowrock at 9 a.m. arrived at the Ridenbaugh heading at 5 p.m.; Settlers heading 10 p.m.; Farmers Union heading 12 midnight; Phyllis, second day at 5 p.m.; and Farmers Cooperative at Caldwell, 2 days, or 9 a.m. of the third day.

RESULTS OBTAINED

Only two separate and distinct sections of the Boise River were maintained during the low water period of 1922. This low water period began on July 7 and the Water Master tried to so regulate the upper section of the River that no water was wasted past the Caldwell High Line Canal. This work was upset several times because of breaks on canals in section 1 and these breaks were responsible for the seemingly large head of water wasted from Section 1 to Section 2.

SECTION ONE

Chart 9, gives a statement of the use made of the water passing Highland, and shows that for the period July 24 to September 30, inclusive, the average daily return flow or gain

to the river in this section was 213 second feet, or a decrease of 68 second feet as compared to the daily gain of the same period of 1921.

Emphasis should be given the fact that this section diverted practically all of the natural flow of the Boise River for the period July 24 to September 30th, inclusive, 1922.

Chart 11, shows graphically the condition that existed in Section 1 of the River during the low water period, July 24 to September 30, inclusive. This Chart shows that the flow of the River passing Highland comprises the main water supply for canals diverting water in this section. The tributary and the seepage gain to this section, although small, as compared to the return flow in Section 2, has a very vital effect on the delivery of water to Decreed rights diverting water from Section 1 of the River and should be safe-guarded by these Rights as they have been using this water for a number of years and has become as much a part of their Right as tho it was natural flow.

This Chart, when compared with like Charts for previous years gives a clearer understanding of the changes that may occur each year and the necessity for gathering the data with which a study may be made of the water resources of any particular drainage area.

SECTION TWO

In Section 2 the following canals divert water from the River: Riverside, Farmers Cooperative, Canyon, Seibenberg, Pioneer Dixie, Eureka No. 2, Upper Center Point, Lower Center Point, Chart 11, shows graphically the quantity of water passing the Caldwell High Line Canal, tributary and seepage gain and the deliveries to canals diverting water in this section.

Chart 10 is a table that shows the average daily tributary and seepage gain in this section during the low water period of 1922 was 467 second feet.

This gain for the low water period of 1922 was 55 second feet less than that of 1921 and can only be accounted for by the fact that the canal that supplies the Notus Project of 6000 acres derives its water supply from drainage waters that formerly flowed into Indian Creek.

AVAILABLE RETURN FLOW, SECTION TWO

In order to quiet any doubt that might arise as to the possibility of drying up the River at the lower end of Section 1 and still have a sufficient supply for all decreed rights in Section 2, Chart 12 was compiled from actual data to show the actual conditions as they existed in section 2 for the period July 24 to September 30, inclusive, 1922. This table proves conclusively that during these periods there was a surplus over the canal requirements, based on 60% of decreed rights but not necessarily on canal capacity or duty of water, in Section 2 and that any right previously transferred to other sections of the River could have been supplied from return flow.

The effect of the return flow on decreed rights in Section 2 as given above has existed during each of the past 8 irrigation seasons and has been so thoroughly established that there is no doubt in the writer's mind that any Water Master in the future will be compelled to deliver any of the natural flow of Boise River to decreed rights diverting water in Section 2 during the low water period.

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The completion of the Notus Project by the United States Reclamation Service and the diversion by said project of approximately 120 second feet per day of the waters that had forserly flowed into Indian Creek caused considerable worry in the minds of those water users who had formerly been depending on this source of water supply as to just what effect this additional diversion would have upon their low water supply. Throughout the season of 1922, the construction of drainage canals was progressing rapdily and completed in Drainage District No. 2 and a large quantity of water was being drawn from the underground reservoir so that the data showing the return flow to section 2 of the Boise River must have been somewhat influenced by this reserve underground storage.

The actual conditions that existed during the low water period of 1922 did not show that any of the rights in section 2 were seriously interferred with by the diversions of the Notus Project.

TRANSFERS

For fear that some will conceive the idea of bringing up the question of transferring water rights from the lower end of the River to the upper end I will again repeat the same paragraph that is to be found in each one of my previous reports.

A sale of decreed rights diverting water in Section 2 and changing their point of diversion to Section 1, is equivalent to selling the rights of Section 1 to a third party, giving them priorities over rights in Section 1, and Section 2 still having the same available water supply as before the sale was made, due to the fact that the return flow to Section 2 is sufficient to supply the canal requirements based on decreed rights, which has been referred to earlier in this report and is here emphasized to eliminate any misconstruction of the actual existing conditions.

FILING TRIBUTARY STREAMS

Throughout the past eight years the State Engineer's Office had held that all water filings made on tributary systems to the Boise River are subject to prior appropriations on the Boise River and must so state on their water filings. This action has proved very effective in safe-guarding the interests of prior appropriations of water of the Boise River drainage area.

EFFECT OF DRAINAGE

Early in the year 1922 all drainage work that was under construction was practically completed and an opportunity was given to study the effect of the run-off of these completed systems on the available water supply of the Boise River. The most recently completed drainage system is that known as Drainage District No. 2, which comprises a total acreage of approximately 29,000 acres.

The constructed drainage system has 3 outlets to the River, one at Collister, one at or near the town of Eagle and one near the town of Middleton. Looking at this proposition from the view-

point of the decreed rights in Section 1, the return flow that has been getting back to the River between the town of Eagle and Star will be carried away from the River by the drainage system and dumped into the River at Middleton, a point which is so situated that the rights in Section 1 will be deprived of their former supply of return flow. The only method by which this drainage can be made to partly recompense the rights in Section 1 for the loss of return flow is to construct two or more feeders from these drainage ditches in such a way that the drain water may be diverted into the Middleton ditches, which was done in the hope that their river requirements might be so lessened that the other rights in section 1 would not be disturbed as far as water available is concerned.

As all of the lands under these canal systems have a decreed right of .6 miners inches per acre, at the River headgate during the low water period the inflow or gain to these canals gave the management sufficient water to deliver to each water user from 1 to 1.2 miners inches per acre. Now that the construction of the drainage system is completed these canals will loose practically all of their surface inflow and all of the seepage gain, as the drain ditches to be effective, must lower the water table to at least 8 feet below the surrounding lands. As it is fair to assume that these canals will have a seepage loss of at least 30%, after the drainage canals are completed, and the only water available for these canals will come from the River, a headgate duty of 0.6 miners inches per acre during the low water period will only give 0.42 inches per acre to be delivered to the Farmer's tap after the 30% loss has been deducted. Knowing this section of

the Valley as well as I do it is my opinion that these lands can not be properly irrigated if they are cut down to 0.42 miners inches per acre.

One of the disturbing factors that occurred in the distribution of water to the canals that irrigated lands within the boundaries of Drainage District No. 2 was large quantities of water required immediately after any given territory had been drained. There is no question but that the lowering of the water table brought about a heavy seepage loss in many of the distribution systems where formerly there had been a large underground, as well as a surface inflow.

Several meetings were held during the winter months of 1921-1922 by representatives of the different canal companies operating in Drainage District No. 2, and an effort was made to arrive at some just and equitable method of apportioning the water developed within the boundaries of this District. Mr. Guy McGee, Drainage Engineer for the District, advanced the plan that was finally adopted and it is as follows:

The total sum of monies assessed against all of the lands lying under each separate canal system was to be determined and the sum total of all assessments made to equal 100% of all developed waters, the quantity of water any given Canal Company would be entitled to would be the percentage the assessments levied under that system would be to the total assessments or total cost of the drainage system.

This method of determining the percentage of developed water that each canal system would be entitled to, left open the question

as to the exact quantity of water that would be developed and the question as to the investigations necessary to determine this quantity was placed entirely in the hands of the Water Master of the Boise River, the interested canal Companies agreeing to pay the entire cost of making such investigations.

An investigation was started early in the season of 1922, with the idea of making a complete study of all the irrigation and drainage problems that pertained to this District and immediately one of the canal companies concerned entered a protest of such a nature that the Water Master thought it best to refrain from participation in this investigation and as a result no special work was carried on during the past season. What few results were obtained are only of a primary nature and it is to be regretted that all of the water users in the District could not agree on some plan for carrying on a complete exhaustive, investigation.

In the writer's opinion this investigation will have to be made by some disinterested party prior to entering of a final Decree on Boise River rights in order to properly present to the Court evidence showing the changed irrigation requirements.

ARROWROCK RESERVOIR

As previously stated in this Report, a table showing the exact capacity in acre feet of Arrowrock Reservoir was computed by Mr. W. G. Steward, of the U. S. R. S. This table is shown on Chart 13, and is furnished in this Report for use by any Water Master in the future.

VALUE OF CANAL PRIORITIES

After the completion of Arrowrock Reservoir several of the canal companies having late priorities, were given the opportunity of purchasing any desired quantity of storage water for late seasonal requirements. Immediately the question arose as to the storage requirements for these respective canal systems so the writer computed the table shown on Chart 14, in order to show the value of each canal priority.

As it is fair to assume that the run-off of the Boise River Drainage Area during the next 28 years will be comparable to the records obtained during the past 28 years, this Chart has been computed to show the six newest decreed rights, depending on natural flow, would have been subject to cut below 60% of a full right, or cut out entirely.

In determining the quantity of storage water needed to extend these six rights subject to cuts, several additional factors have to be known, such as acreage under canal, acreage in different crops, class of soil, duty of water during August and September on like canals having a complete water right, etc. As most of the above factors are known by each one of the canal companies no attempt will be made by the writer to give a table showing the storage requirements unless so requested.

DUTY OF WATER

In my 1917 report a complete statement will be found on the Duty of water which gives the writer's opinion on this subject and as he has but very little to add to this practically all of the same information will be written in this Report. I might add that

my work during the past year has only emphasized the fact that the proper duty of water depends largely upon seasonal conditions and in my judgment a fixed and permanent duty of water for the canals diverting water from the Boise River is not necessary and will not be nearly so satisfactory as a temporary decree established each year as the conditions warrant.

The proper headgate duty of water for canals diverting water from the Boise River has been a very much mooted question since the year 1903.

The data secured by the writer, acting as Water Master of the Boise River during the seasons of 1915, 1916, 1917, 1918, 1919, 1920, 1921 and 1922, although complete to the use made of Boise River water, still leaves a great deal of doubt as to the proper duty of water to be applied to the many different canal systems. The one principal factor that causes the greatest uncertainty is the ever changing season/conditions.

It is to be regretted that a duty of water for the Boise Valley can not be established in acre feet, for if it were possible to do so, it would seem lead to a much higher economic duty. But as most of the lands in the Boise Valley are dependent entirely upon natural flow of the Boise River, and this flow is constantly varying quantity during the low water period of each year, it is impossible for most irrigators to postpone the irrigation of certain crops to the proper time for such application, and at the time the water is actually needed the natural flow of the River may decrease to such an extent that the proper irrigation head cannot be obtained.

It is to be regretted that at this time a few of the water users of this Valley are asking the Court to establish a permanent duty of water for the Boise Valley lands, for the writer feels that if too high a duty is fixed, this question will be before the Courts continuously throughout the future. On the other hand if a duty is fixed, based on maximum requirements, the same condition that has prevailed during the past eight irrigation seasons will continue to prevail, and under this maximum duty there has been absolutely no waste of water when the Boise Valley is considered as a whole. The writer's opinion is that the proper regulation of the deliveries of water to the canal headings is far more important than the duty of water for the waste of water can be eliminated regardless of the duty of water, if proper River regulation is followed.

This is best demonstrated by the fact that during the past eight seasons operating under the old Stewart Decree, 1800 second feet of natural flow, plus the return flow, has filled 2755 second feet of rights.

The duty of water as established by an average of the diversions of these 18 canals, covering a seven year period, as shown in Charts 15 and 16, does not give sufficient water for the majority of the canals for more than two years out of four years and in the writer's opinion, were this duty established, crops loss would result on a majority of the lands in the Boise Valley.

A maximum quantity of water will take care of all crop requirements whereas an average quantity will not.

STUDY OF DIVERSIONS AND RETURN FLOW DRAINAGE DISTRICT NO.2

Chart 17 was compiled for the purpose of making a comparison of the waters diverted by the nine canals serving the lands in drainage Dist.

No. 2 and the waters flowing into and thru the drain canals in said District. This table shows that there was 185,038 acre feet of water diverted during the six months of the irrigation season of 1922 and a total of 83,966 acre feet accounted for. In other words there was 6.38 acre feet per acre diverted, 2.90 acre feet per acre accounted for and 3.48 acre feet per acre used by the plant growth and retained in the ground.

It would be very interesting to the investigator to learn how much of this 3.48 acre feet per acre was used by plant life, how much was lost by evaporation, quantities discharged thru drains during winter months and percentage retained as ground water. These results could only be obtained by a careful investigation which would entail a considerable outlay of time and money.

SUMMARY OF RETURN FLOW

Chart 18, is a summary table showing the net results secured on return flow to the Boise River covering the past nine irrigation seasons.

AVERAGE CONDITION ON BOISE RIVER

Chart 19, shows diagrammatically the average conditions existing on the Boise River during the period July 24 to September 30, inclusive, 1922, or a period of 69 days. This diagram shows at a glance the major canals diverting water from the River and the main tributary streams feeding water to the River. This diagram shows that there was 60% more water delivered to the canals than was available from the natural flow at Highland. The same data

for 1921 showed that 56% more water was delivered than available at Highland, 1919 gave 53%, 1918 gave 58%, 1917 gave 63% and 1915 gave 67%.

Looking at this from another viewpoint the total tributary and seepage gain as shown on this Chart for each year was in 1915, 461 second feet, 1916, 755 second feet, 1917, 599 second feet, 1918, 771 second feet, 1919, 587 second feet, 1921, 788 second feet and 1922, 637 second feet.

STEWART DECREE

Chart 20, is a condensed table of the Stewart Decree showing dates of priority and amount decreed. A small black circle at the left of each date of priority shows that the decreed right is supplied by return flow in either Section 1 or Section 2.

STEWART DECREE GROUPED UNDER CANAL HEADINGS

Chart 21, was made up for the convenience of those canals whose rights are of different dates of priority and amounts. A glance at the name of the canal will also give the number of different rights as well as the total decree in second feet and miners inches.

RECONSTRUCTED TABLE OF STEWART DECREE

Charts 22 and 22-A, show clearly the decreed rights that depend upon natural flow for their water supply. All rights filled by return flow in either Section 1 or 2, have been eliminated and do not appear on these tables.

CONCLUSIONS.

1. That tributary flow and seepage gain are important items to be considered in the management of the Boise River.

2. All tributary and seepage waters should be considered as a part of the available water supply of the River.

3. That in extreme low water years the River naturally divides itself into four sections if properly managed.

4. That in high water years the River naturally divides itself into two sections if properly managed.

5. That during the low water periods the tributary and seepage inflow will supply the demands of the present existing rights in Section 2.

6. That any water wasted down the River from Section 1 to Section 2, works an injury on canal rights in Section 1.

7. That the return seepage flow to Section 1 is becoming an increasingly important factor.

8. That the decreed rights in Section 1 may lose part of their available water if not properly safe-guarded.

9. That the transfer or exchange of any right from a lower Section to a section above, is injurious to the rights already existing in the section above.

10. That filings on tributary streams should be carefully studied before being allowed by the State Department of Reclamation.

11. That water rights diverting water in Section 1 may be enhanced in value by proper adjustment of drainage water rights.

12. That the late priorities may clearly determine their storage water requirements.

13. That any arbitrary duty of water established for Boise Valley Canals will not be conducive to waste.

14. That any duty established will be an arbitrary duty.

15. That we have insufficient data upon which to base an exact duty of water and furthermore probably never will have.

16. That special emphasis should be given the non-wastage of water after it is diverted from the Boise River if a decree is issued on the Boise River Rights.

17. That, primarily, proper River regulation is more important than canal management, for the canal manager has a serious problem to handle if his River supply is a continuously changing factor.

18. That drainage works constructed during 1921 materialy increased return flow to Section 2 of Boise River and offset diversions by Notus Project.

19. That drainage of lands in District No. 2 has increased demand for irrigation water.

20. That large rotation heads of irrigation water must be used by irrigators on lands in Drainage District No. 2.

21. That construction of Feeder Canals from Drainage systems leads to saving of water.

22. That some concerted action will be necessary to confine the flood waters of the Boise River to its present channel.

23. That the Water Master of any stream should consider it his indispensable duty to assist the canal operators in giving better service to the individual water users.

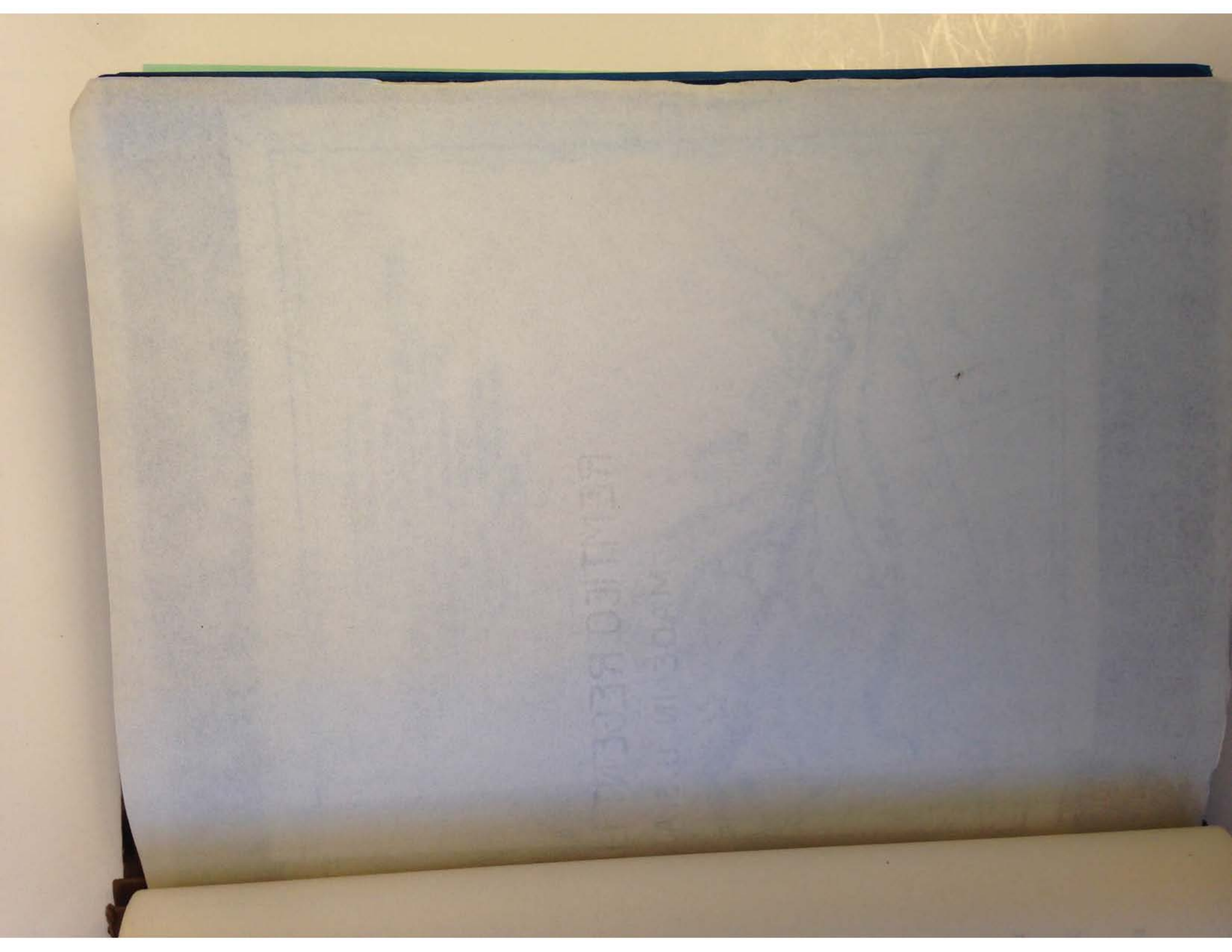
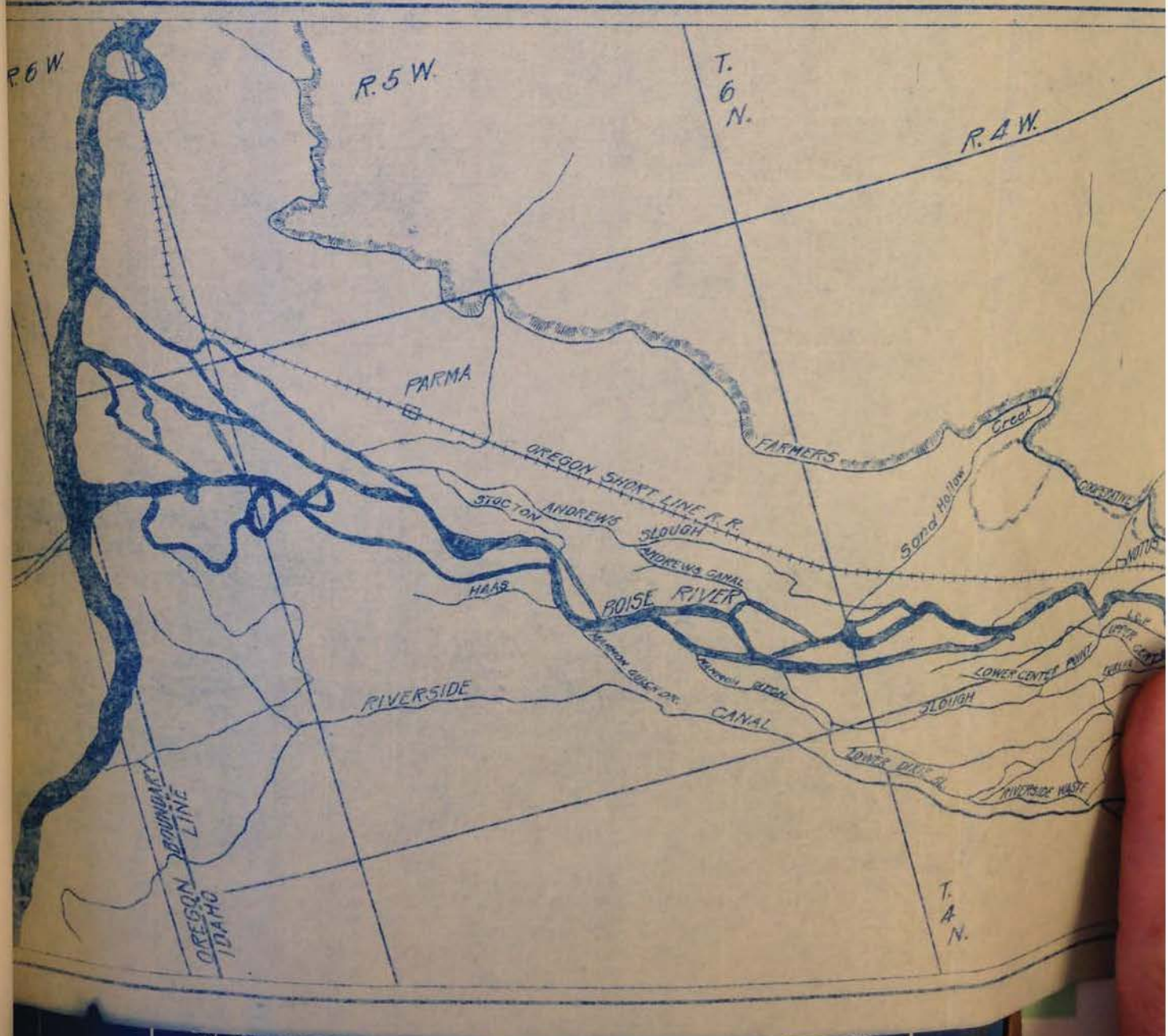


CHART 2.

	1895	1917	1918	1919	1920	1921	1922	1923	1924	1925	
1	147	679	5248	569	883	2600	972				1
2	141	841	40476	605	863	2129	1280				2
3	125	1006	30333	555	875	3154	1255				3



24	1431	934	4377	2381	2168	4927	4669				24
25	1551	1048	4020	2238	2108	5093	4451				25
26	174	1006	3264	3288	1859	4881	3473				26
27	206	933	6243	3278	1852	4443	3156				27
28	300	906	6445	3678	1703	5042	2936				28

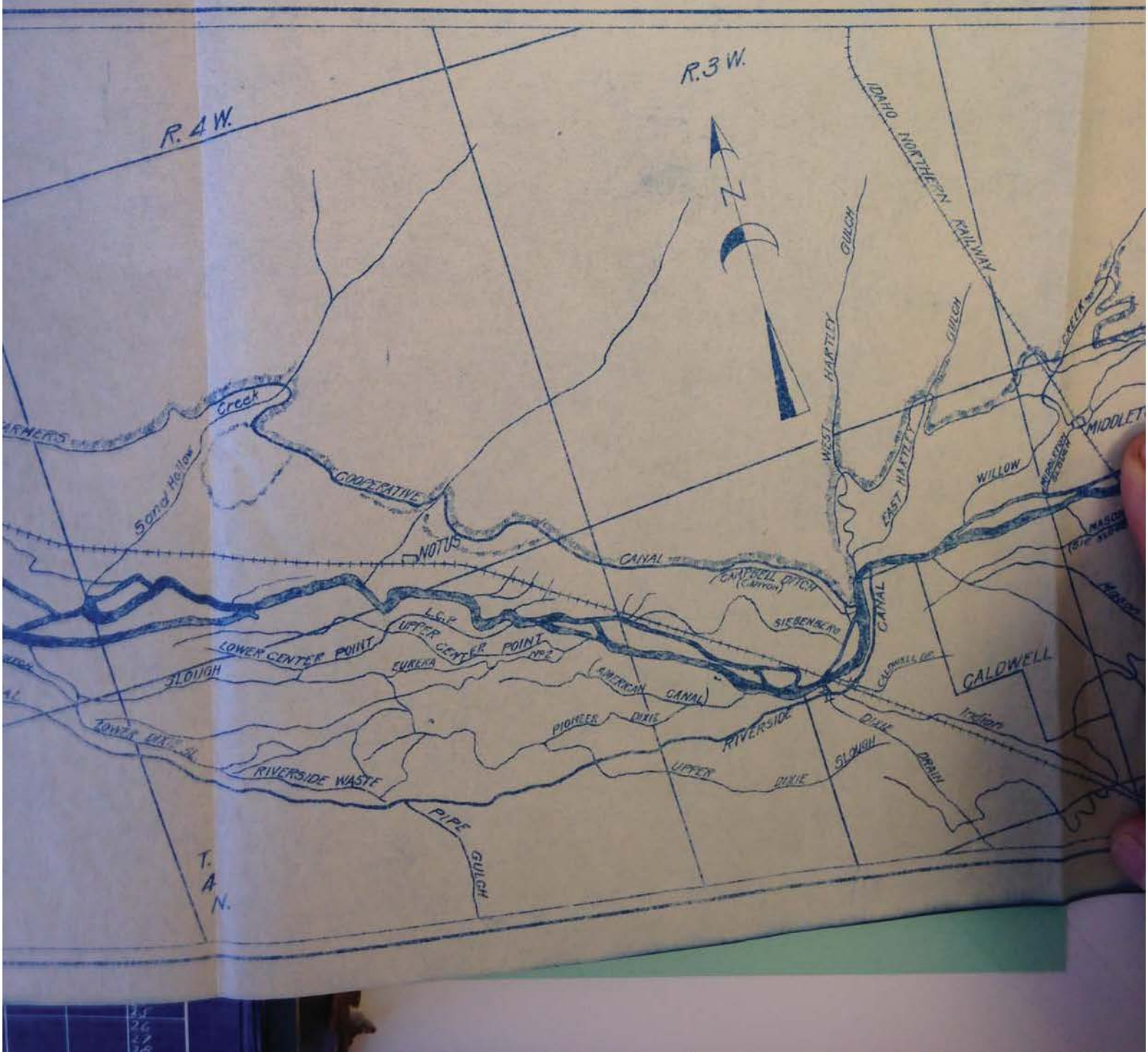
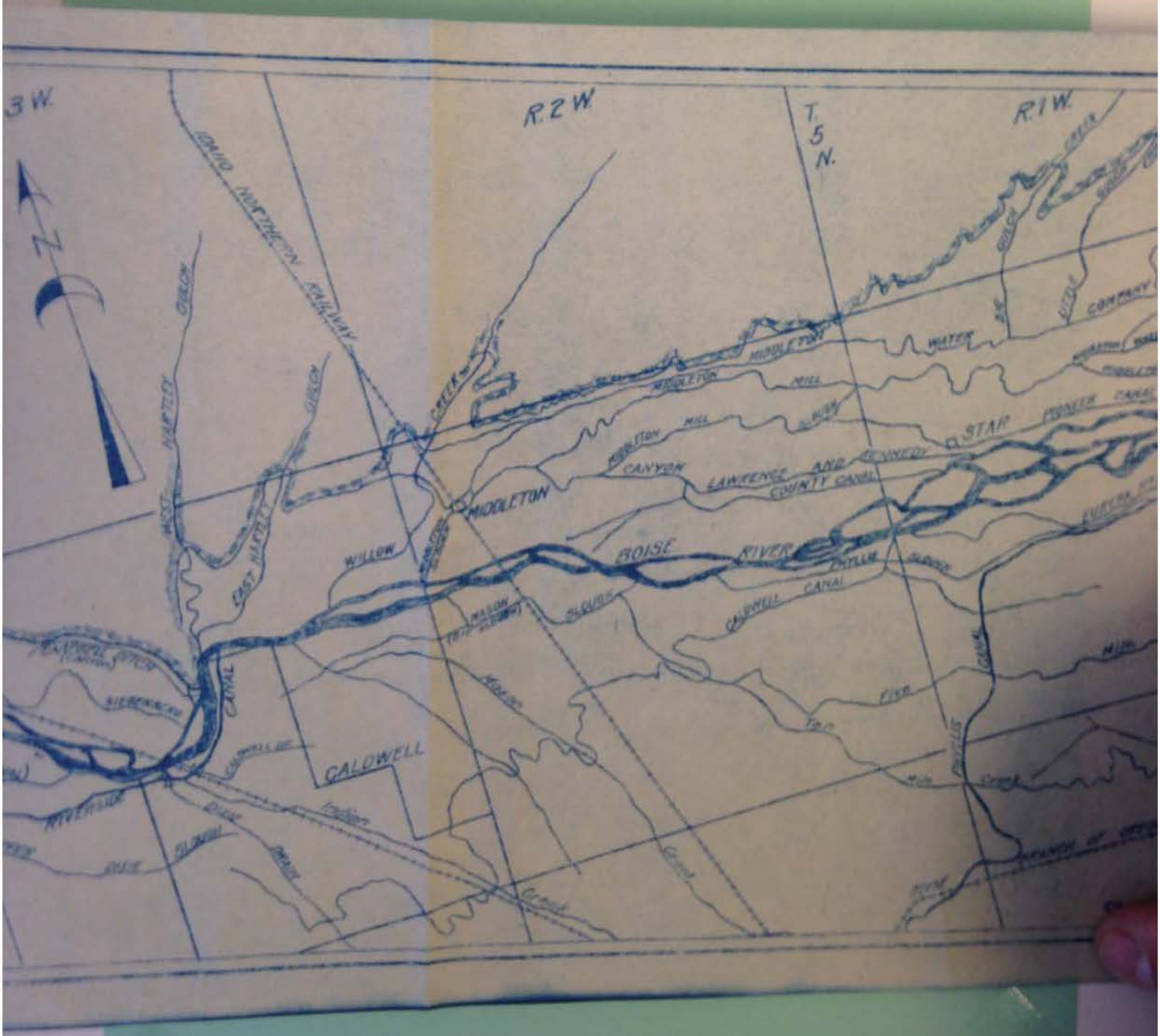
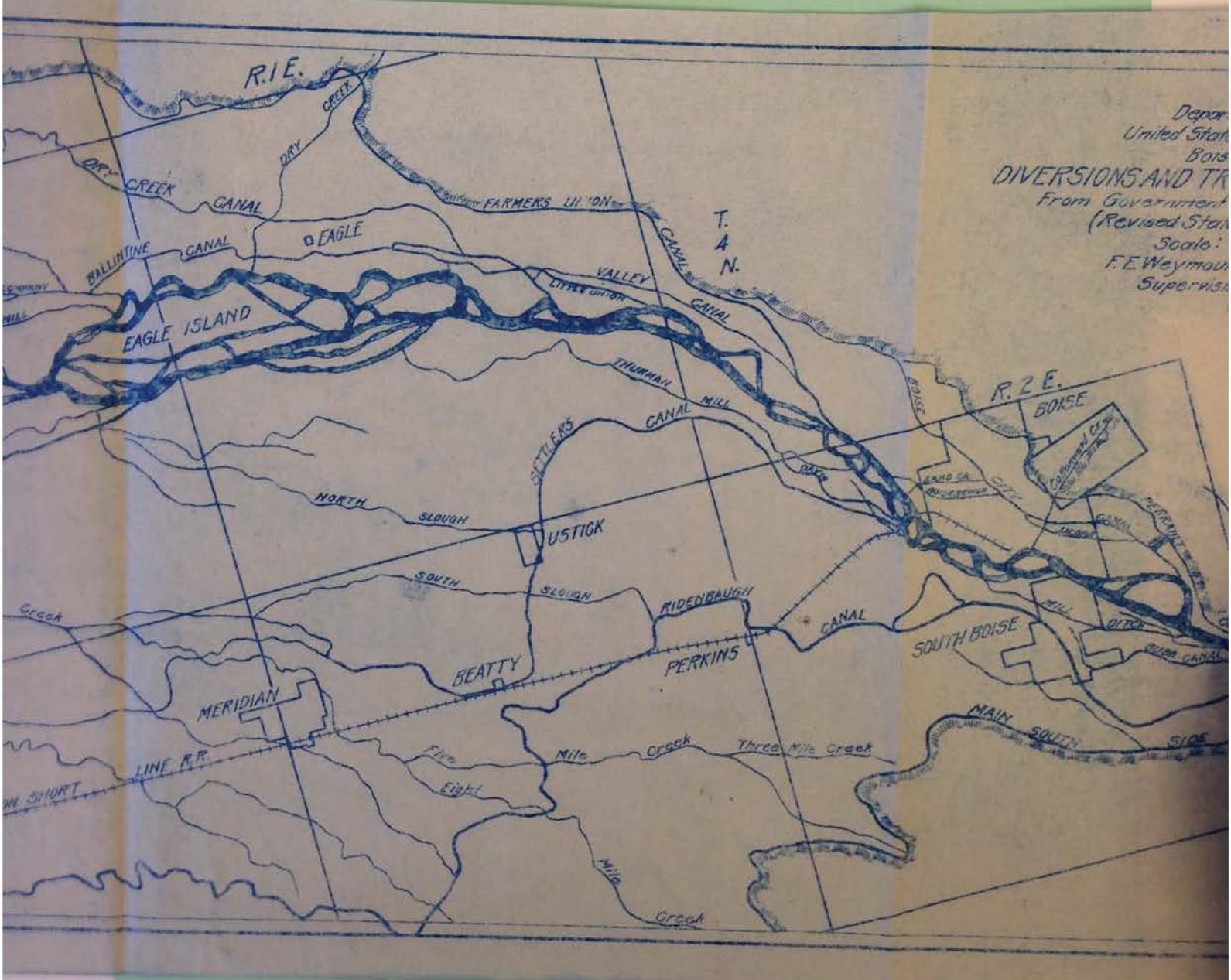
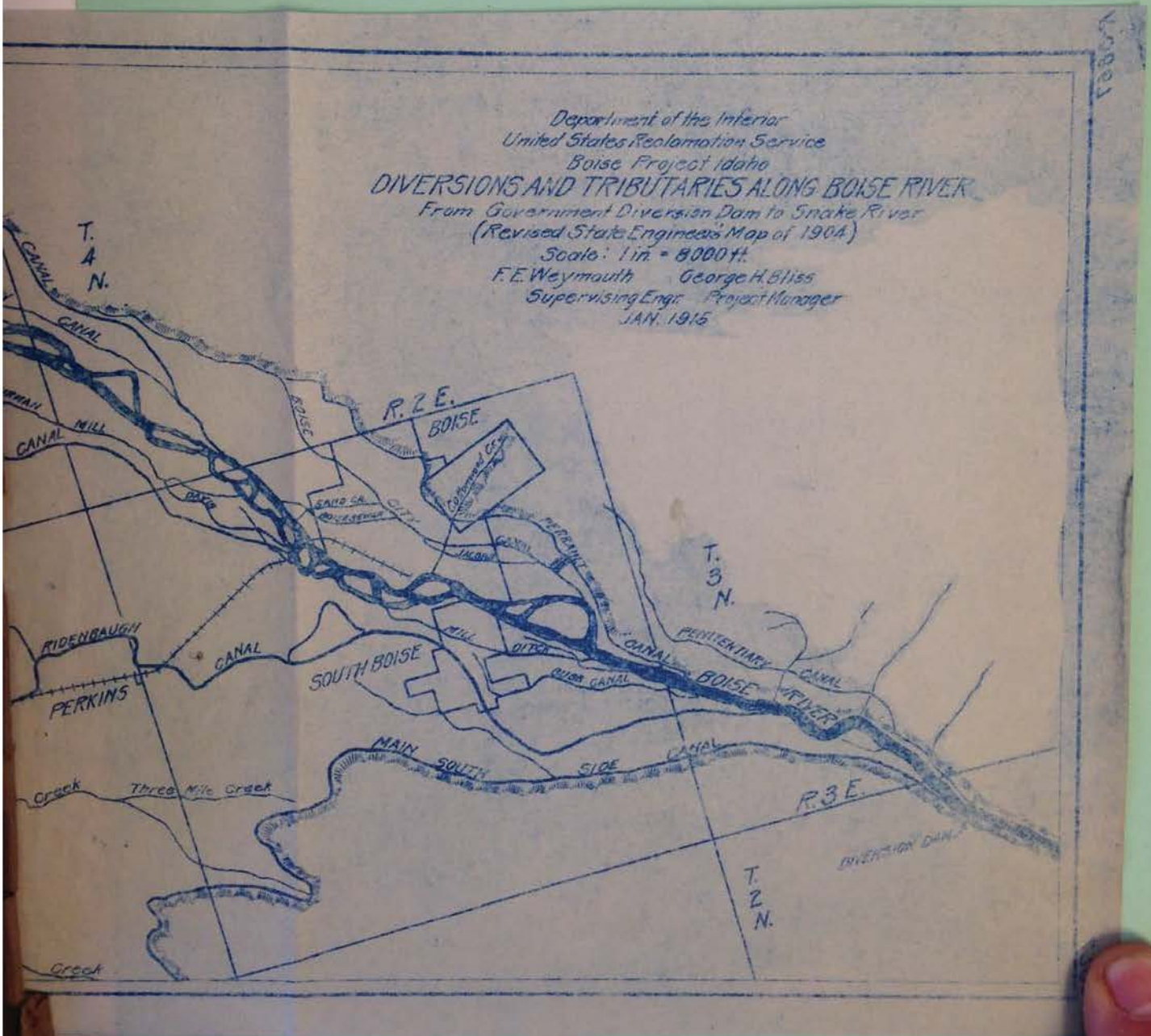


CHART 2.
1925
R. 4 W.
R. 3 W.
N
IDAHO NORTHERN RAILWAY
WEST HARTLEY GULCH
EAST HARTLEY GULCH
Sand Hollow Creek
COOPERATIVE
NOTUS
CANAL
CAMPBELL DITCH (CANYON)
L.G.V.
UPPER CENTER POINT
LOWER CENTER POINT
EUREKA
No 2
SLOUGH
SIEBENLIST'S
CANAL
CALDWELL
(AMERICAN CANAL)
PIONEER
DIXIE
RIVERSIDE
RIVERSIDE WASTE
PIPE GULCH
UPPER DIXIE SLOUGH
DRAIN
WILLOW
MIDDLETON
T. 4 N.


3 W.
R. 2 W.
T. 5 N.
R. 1 W.
N
IDAHO NORTHERN RAILWAY
MIDDLETON
MIDDLETON MILL
MIDDLETON CANYON
LAWRENCE AND REYNOLDS COUNTY CANAL
STAR POWER CANAL
WILLOW
BOISE RIVER
CALDWELL CANAL
CALDWELL
EAST MACKAY CREEK
WEST MACKAY CREEK


2 W.
T. 5 N.
R. 1 W.
R. 1 E.
DRY CREEK
GULCH
LITTLE
COMPANY
WATER
MIDDLETON
MILL
SLOUGH
CANYON
LAWRENCE AND KENNEDY COUNTY CANAL
STAR
PIONEER CANAL
DRY CREEK CANAL
BALLANTINE CANAL
EAGLE
EAGLE ISLAND
EUREKA No. 1
BOISE RIVER
PHYLLIS
CALDWELL CANAL
NORTH
SOUTH
Mile Creek
Five
Ten
MERIDIAN
BEATTY
LINE R.R.
BRANCH OF OREGON SHORT
BOISE


R.1E.
DRY CREEK
DRY CREEK CANAL
FARMERS UNION CANAL
T. 4 N.
EAGLE
BALLANTINE CANAL
EAGLE ISLAND
VALLEY
LITTLE UNION CANAL
THURMAN MILL CANAL
SETTLERS CANAL
R.2E.
BOISE
NORTH SLOUGH
USTICK
SOUTH SLOUGH
RIDENBAUGH CANAL
SOUTH BOISE
BEATTY
PERKINS
MERIDIAN
LINE R.R.
Five Mile Creek
Three Mile Creek
Eight Mile Creek
MAIN SOUTH SIDE


Department of the Interior
United States Reclamation Service
Boise Project Idaho
DIVERSIONS AND TRIBUTARIES ALONG BOISE RIVER
From Government Diversion Dam to Snake River
(Revised State Engineer's Map of 1904)
Scale: 1 in. = 8000 ft.
F.E. Weymouth Supervising Engr.
George H. Bliss Project Manager
JAN. 1915
T. 4 N.
R. 2 E.
BOISE
CANAL
MILL
RISER
DITCH
SAND CR. CITY
JACOBS
PERRAULT
T. 3 N.
PENITENTIARY
RIDENBAUGH
CANAL
SOUTH BOISE
MILL
DITCH
QUINN CANAL
BOISE
RIVER
PERKINS
MAIN SOUTH SIDE CANAL
Creek
Three Mile Creek
R. 3 E.
DIVERSION DAM
T. 2 N.
Creek

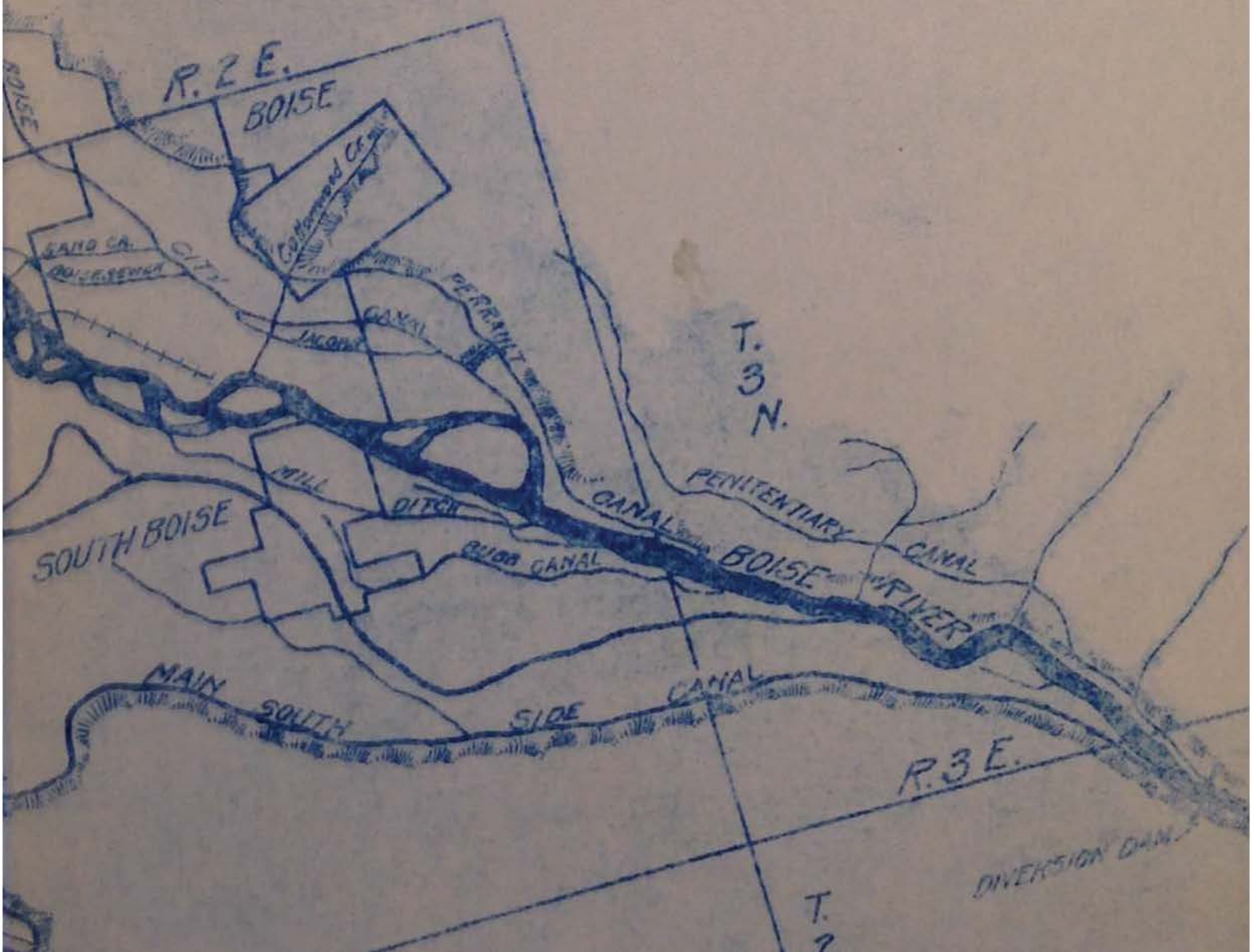
Department of the Interior
United States Reclamation Service
Boise Project Idaho

DIVERSIONS AND TRIBUTARIES ALONG BOISE RIVER

From Government Diversion Dam to Snake River
(Revised State Engineer's Map of 1904)
Scale: 1 in. = 8000 ft.

F. E. Weymouth — Supervising Engr.
George H. Bliss — Project Manager

JAN. 1915



TABLE, IN SECOND FEET, SHOWING D
FOR YEARS 1895

		1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
JANUARY	1	1470	750	1070		2580	1570	1200	1120	1280			760		1130
	2	1440	1070	1010		2580	1680	1200	1270	1070			700		1100
	3	1250	720	1010	550	2580	1680	1350	1190	945			675		1100
	4	1320	720	850		2580	1570	1310	1140	1040			700		1070
	5	1330	720	850		2580	1680	1370	1080	945			750		1070
	6	1270	720	890	550	2780	1680	1570	1120	945			880		965
	7	1130	720	890		2780	1680	1390	1120	945			750		700
	8	930	950	950		2780	1570	1350	1140	945			750		965
	9	1100	950	950		2780	1360	1350	1120	945			750		1140
	10	1270	950	1010	550	2780	1360	1350	1040	945			810		1070
	11	1230	950	890		2780	1370	1270	900	1080			880		1040
	12	1330	1070	830		2780	1910	1270	865	752			830		1170
	13	1510	950	720	550	2780	1910	1270	830	600			810		1070
	14	1430	720	620		2780	2480	1350	900	500			810		1170
	15	1420	720	620		2580	2480	1720	900	570			870		1270
	16	1450	620	620		2980	3910	1270	1000	670			870		1100
	17	1330	1010	570	550	2480	3520	1270	1080	678			870		1100
	18	1370	1250	570		2480	2310	1200	1120	715			1060		1070
	19	1330	1330	570		2580	2330	1200	1080	790			960		1070
	20	1350	1430	720	550	2980	2260	1270	1040	1020			880		1270
	21	1250	1870	830		2580	2180	1310	1000	1950			870		1170
	22	1210	1870	830		2480	2040	1350	970	1680			960		1070
	23	1240	1870	950		2780	2040	1310	900	1380			880		970
	24	1210	1350	770	550	2280	2040	1270	830	2400			870		1070
	25	1140	1280	720		2280	1680	1240	830	4160			870		1180
	26	1040	1510	720		2280	1680	1200	830	2470			960		1180
	27	1070	1680	620	550	2060	1680	1200	830	2400			880		1100
	28	950	1770	620		1580	1680	1200	760	2010			870		1070
	29	1100	1630	830		1340	1680	1130	695	1680			870		1040
	30	1170	1680	950	550	1220	1680	1130	830	1570			750		1100
	31	1280	1590	1010	550	1220	1680	1200	1120	1470			750		1905
FEBRUARY	1	1270	1580	1610		1220	1780	1240	1270	1680			810		
	2	1240	1350	950		1220	1770	1130	1350	1380			780		
	3	1260	1350	830	550	1100	1740	1200	1350	1280			750	1240	
	4	1180	1070	830		1100	1740	1270	1470	1250			810	1270	
	5	1170	1070	1010		1220	1680	1130	1350	1250			750	1180	
	6	1170	950	1070		1220	1520	1240	1350	1330			780	1100	
	7	1190	950	1010	550	1100	1570	1160	1310	1200			780	1100	
	8	1180	1070	950		1340	1570	1160	1800	1330			810	1070	
	9	1180	1070	950		1280	1680	1100	2000	1280			810	1070	
	10	1210	1070	1240	1060	1940	1570	1200	2000	1200			810	1070	
	11	1220	1070	1140		1280	1760	1200	1900	1610			810	3060	1000
	12	1190	1070	1140		1280	1760	1270	1800	945			850	2930	1000
	13	1100	1070	1070		1280	1960	1270	1560	865			780	2900	930
	14	1180	1010	1070	1230	1340	1960	1270	1350	1020			960	2840	930
	15	1270	1070	1070		1460	1760	1350	1310	790			1010	2700	965
	16	1300	1070	1010		1400	1760	2430	1270	945			1160	2500	1070
	17	1180	1010	1010	1750	1280	1360	2120	1350	1110			1240	2930	1070
	18	1210	1010	930		1280	1460	1870	1440	1020			1280	2900	1040
	19	1180	1070	830		1280	1460	2180	1340	1020			1310	2900	965
	20	1230	1070	890		1280	1460	2180	1350	1020			1410	2840	900
	21	1210	1070	830	1700	1460	1680	2020	1270	1020			1280	2900	965
	22	1210	1140	870		1460	2480	1820	1270	1110			1310	2740	1000
	23	1290	1140	890		1340	2310	1770	1270	1160			1280	2900	1040
	24	1350	1140	870		1220	2180	1870	2980	1110			1200	3060	1140
	25	1320	1210	830	1400	1220	1040	2020	2460	1110			1160	3180	1180
	26	1430	1210	770		1340	2180	1970	2220	1020			1160	3420	1210
	27	1350	1280	770		1460	2040	4160	2110	970			1810	4060	1240
	28	1350	1770	830	1750	1460	2040	4380	1800	1110			1300	4130	1320
															1360
MARCH	1	1470	1810	890	1750	1580	1910	3930	1700	1110	3370		1270	3670	1280
	2	1330	1350	890	1920	1580	2040	4600	1610	1150	2700		1110	3060	1210
	3	1440	1350	1010	1720	1380	2040	4270	1520	1200	2760		1110	3060	1160
	4	1410	1280	1070	1720	1580	2180	3930	1480	1200	2560		1110	3000	1090
	5	1470	1310	1070	2260	1460	2040	3060	1440	1200	2560		1110	2930	1140
	6	1320	1070	1010	2430	1400	2330	2880	1740	1110	2560		1060	4550	1100
	7	1330	1070	1070	2430	1460	2720	3260	1740	1090	3370		1060	4340	1070
	8	1350	1240	1140	2260	1960	2490	2260	1440	1020	8180		1240	4480	965
	9	1410	1330	1070	2260	1340	2470	2580	1440	1020	11500		1370	4410	1000
	10	1470	1210	1010	2930	1340	2430	2720	1410	1110	6760		1420	4360	1000
	11	1670	1330	1010	2720	1370	4850	2640	1420	1200	5320		1430	4060	1070
	12	1610	1280	890	2600	1400	3790	2430	1390	1200	4880		1390	3930	1210
	13	1358	1358	770	2430	1400	3790	2180	1390	1380	4480		1358	3770	1360
	14	1410	1358	830	1920	1340	3800	2180	1350	1720	4090		1280	3480	1500
	15	1410	1358	830	2040	1340	3860	2180	1350	1520	3800		1160	3390	2780
	16	1328	1358	890	1920	1340	6720	2180	1350	1570	3540		1230	3670	3750
	17	1358	1280	1090	1758	1340	6720	2570	1350	1570	3720		1250	3540	3810
	18	1476	1358	1070	1750	1358	6390	2570	1350	1570	3900	1930	1810	6120	4090
	19	1410	1330	1070	1750	1400	6390	2570	1350	1620	4880	1850	1880	10000	4108
	20	1410	1330	950	1750	2060	6720	2720	1350	1680	4680	1460	2060	10800	3370
	21	1440	2330	950	1920	2060	6720	2830	1440	1680	4380	1610	1860	11300	3010
	22	1090	2270	1070	1758	1820	6720	3930	1440	1900	4000	1630	1240	8990	2570
	23	1190	3120	1210	1758	1820	6660	4480	1440	2010	3900	1630	1350	8630	2780
	24	1210	4160	1210	1400	1940	6660	3060	1440	2400	3540	1670	1440	7810	3200
	25	1210	4160	1870	1400	1760	6660	3060	1440	3340	3540	1670	2350	7810	3200
	26	1190	6440	3120	1400	2130	6720	2640	1440	3520	3210	1940	2840	6740	3016
	27	1060	5260	3930	1400	2380	6660	2570	1450	4100	3290	2090	3180	6300	2960
	28	1060	4810	3120	1400	2780	5330	2430	1440	4250	3050	1960	3180	6070	2720
	29	1230	4160	1870	1580	2230	5330	2260	1440	3970	4680	1860	3360	5720	2360
	30	1230	4160	1870	1720	2780	4660	2180	1440	3900	4680	1810	3180	5270	3016
	31	1350	4160	1870	1750	2580	4660	2180	1440	3970	4090	1650	3120	5270	3430

EUGENE DIELMANN

N SECOND FEET, SHOWING DAILY FLOW OF BOISE RIVER FOR YEARS 1895 TO 1922 Inc.

2	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
0	1280			700		1180	790		870	990		1080	930	715	679	5248	569
0	1070			700		1100	980		750	940		1150	1050	736	891	4046	605
0	945			675		1100	1100		940	1020		1220	1050	763	1006	3033	555
0	1840			700		1070	1220		1105	1020		1220	1050	760	991	2462	535
0	945			750		1040	1220		1035	1020		1220	1050	746	936	2244	620
0	945			880		965	1140		1035	1260		1220	990	744	984	2153	680
0	945			750		900	1140		1070	1230		1220	990	740	1253	2078	740
0	945			750		965	1140		1140	1160		1220	930	763	988	1904	654
0	945			750		1140	1310		1140	1230		1080	990	766	785	1826	669
0	1080			810		1070	1140		1140	1230		950	930	763	811	1738	674
0	752			880		1040	1060		1070	1230		824	990	736	740	1428	684
0	500			830		1140	1020		1000	1100		824	930	754	769	1419	727
0	500			810		1070	1020		1000	1100		950	930	764	677	1445	798
0	370			810		1180	1220		1000	1230		1150	930	754	662	1621	820
0	640			810		1240	1440		965	1380		1150	900	717	603	1583	801
0	678			810		1100	3030		870	1640		1080	990	723	585	1527	782
0	715			810		1100	2610		810	1660		1080	900	719	498	1450	929
0	790			1060		1070	3090		870	1460		1220	930	733	580	1480	1109
0	1020			960		1070	3990		1140	1320		1150	830	746	448	1577	1158
0	1950			880		1240	3460		1210	1340		1080	930	745	390	1437	1073
0	1680			810		1140	5780		810	1230		1150	930	918	390	1360	1011
0	1380			960		1070	5460		700	1230		1220	930	1067	687	1207	1028
0	2700			880		930	4060		700	1200		1220	930	973	780	1145	1166
0	4100			810		1040	3210		650	1300		1220	770	946	673	1201	1072
0	2490			810		1180	2850		1000	1420		1220	730	978	861	1980	1015
0	2400			960		1180	2490		675	1550		1220	930	908	567	1603	928
0	2010			880		1100	2270		1000	1350		1370	990	889	564	1659	868
0	1680			810		1070	2110		1140	1380		1300	1080	869	777	1506	851
0	1570			810		1040	1960		1210	1300		1150	1110	836	877	1413	774
0	1470			750		1100	1860		1320	1230		1220	1080	874	777	1353	758
				750		965	1860		2140	1160		1220	1050	843	640	1386	688
0	1680			810			1860		2450	1100		1220	1330	835	684		647
50	1380			780			1760		2340	990		1220	1480	854	684		782
50	1280			780		1240	1760		1680	990		1220	1430	868	690		702
70	1250			810		1240	1220		1600	1020		950	1320	834	690		734
50	1250			750		1180	1470		1740	1230		1150	1180	834	680		734
50	1330			780		1100	1400		1670	1230		824	1080	857	800		
10	1200			780		1100	1490		1370	1170		1020	1080	1017	783		
00	1320			810	3540	1070	1580		1300	1230		1220	1050	1106	793		
00	1280			810	3540	1070	1500		1230	1230		1020	1038	1127	783		
00	1200			810	3420	1040	1490		1325	1460		1080	1050	1148	655		
00	1110			810	3060	1000	1440		1410	1350		1220	970	1206	695		
00	945			880	2930	1000	1080		1325	1380		1080	930	1182	948		
60	865			920	2900	930	1960		1370	1340		1080	930	1106	857		
50	1020			960	2840	930	1760		1230	1300		1080	820	1066	857		
10	790			1010	2900	965	1760		1170	1260		1080	730	1057	857		
70	945			1160	2800	1070	2160		1140	1300		950	820	1074	765		
50	1110			1240	2950	1040	3400		1060	1460		1020	930	1109	800		
40	1020			1280	2900	1040	2970		1230	1880		1220	1050	1111	772		
30	1020			1330	2900	965	2610		1230	1780		1220	1110	1138	723		
50	1020			1310	2840	1000	2550		1230	1880		1300	1110	1138	717		
70	1020			1280	2800	965	2380		1140	1460		1030	1050	1164	825		
70	1110			1310	2840	1000	2060		1110	1420		2190	1050	1183	834		
70	1160			1280	2900	1040	2060		1170	1460		2300	1104	1223	837		
80	1110			1200	3060	1140	2160		1170	1380		2140	995	1224	805		
60	1110			1160	3180	1180	2160		1170	1160		1980	1070	1222	1056		
20	1020			1160	3420	1210	2110		1170	1160		1880	1076	1212	1022		
10	1110			1310	4060	1240	2060		1140	1260		1700	1036	1248	1156		
00	1110			1300	4130	1320	2110		1060	1230		1790	1012	1228	1035		
						1360				1080				1160			
00	1110	3370		1240	3670	1280	2160	3360	1060	1160	1050	1880	1062	1093	1038		
10	1150	2760		1110	3060	1210	2270	5300	1060	1230	1100	1880	992	1021	913		
20	1200	2760		1110	3060	1100	2490	6700	1110	1160	1150	1880	998	961	914		
80	1200	2560		1110	3000	1040	2440	6700	1230	1040	1200	1980	1060	910	1006		
40	1200	2560		1110	2950	1140	2670	7170	1230	1040	1200	2080	1019	839	1038		
40	1110	2560		1060	4550	1100	2550	6880	1230	1160	1340	2080	1009	1050	916		
40	1090	3370		1060	4340	1040	2610	6550	1370	1260	1340	2080	1000	976	997		
40	1020	8180		1240	4480	965	2730	6700	1495	1230	1340	2490	936	978	990		
40	1020	11500		1380	4410	1000	2740	6700	1450	1200	1580	2670	962	1049	987		
10	1110	16760		1470	4200	1000	2610	6700	1450	1220	1670	2880	955	1068	1048		
30	1200	5320		1430	4060	1070	2550	6850	1495	1230	2140	3220	1093	2600	904		
90	1200	4880		1390	3930	1210	2610	7170	1570	1230	2140	3300	1195	3064	944		
90	1380	4480		1350	3740	1360	2610	7490	1540	1230	1840	3520	1186	3552	872		
50	1470	4090		1280	3480	1560	2850	8450	1640	1340	1670	3250	1224	3443	905		
50	1570	3900		1160	3540	2780	3210	8770	1895	1380	1500	1830	1206	3345	884		
50	1570	3540		880	3670	3950	3780	9230	2170	1500	1500	4340	1295	3306	837		
50	1570	3720		750	3540	3810	4130	9890	2555	1460	1500	4730	1379	4057	826		
50	1570	3900	1930	810	6220	4940	4130	10400	2670	1420	1670	5120	1283	4521	865		
50	1620	4880	1850	880	10600	4100	3990	11800	2980	1380	1670	5530	1540	4902	888		
50	1680	4680	1660	1060	10800	3270	4130	12200	3370	1380	1500	5780	1669	5057	936		
40	1680	4380	1630	1160	11300	3020	3850	12600	3910	1290	1340	5120	1646	6182	1032		
40	1900	4000	1630	1240	9990	2840	3850	16600	4200	1300	1420	4780	1951	5934	1078		
40	2010	3900	1630	1350	8630	2780	4060	16100	4800	1420	1340	4730	2183	4801	1020		
40	2400	3540	1640	1490	7910	2800	4130	12100	4800	1600	1340	4670	2500	4536	994		
40	3340	3460	1640	2260	7430	3100	4550	10800	4350	1730	1500	4340	2419	4251	1008		
40	3520	3210	1940	2890	6740	3020	4840	10200	3840	2030	1200	3880	2140	3852	1006		
40	4100	3290	2090	3150	6300	2960	3780	9250	3663	2480	1200	3690	1983	3771	933		
40	4750	3050	1860	3180	6070	2720	6280	9090	3500	2270	1480	3260	2080	4128	906		
40	5970	4680	1860	3360	5920	2560	6700	8770	3630	3360	1970	3090	2787	4416	1208		
40	7900	4680	1820	3480	5770	3020	6450	8450	3500	3230	2040	3046	2621	4337	1563		
40	8070	4090	1650	3430	5700	2820	6620	8290	4050	3130	2130	3000	2078	4172	1695		

SE RIVER

CHART 2.

	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	
		1080	930	715	679	5248	569	883	2600	972				1
		1150	1050	736	891	4046	605	863	2129	1280				2
		1220	1050	763	1006	3033	585	835	3154	1255				3
		1220	1050	760	941	2462	535	737	1307	1111				4
		1220	1050	746	936	2244	620	728	2458	921				5
		1220	990	744	984	2153	680	696	2330	1046				6
		1220	990	740	1253	2078	740	784	2279	950				7
		1220	930	763	888	1964	659	787	1757	1178				8
		1080	990	746	785	1826	669	797	1540	1092				9
		950	930	763	811	1738	674	698	1545	983				10
		824	990	736	740	1428	684	674	1393	905				11
		824	930	754	769	1419	727	657	1257	694				12
		950	830	764	677	1445	798	651	1155	797				13
		1150	930	759	662	1621	820	692	1048	927				14
		1150	900	717	603	1583	801	747	1819	802				15
		1080	990	723	585	1527	787	880	1935	728				16
		1080	900	719	498	1450	929	1047	1700	1025				17
		1220	930	733	580	1480	1109	1096	1477	1028				18
		1150	930	746	498	1417	1118	1083	1586	802				19
		1080	930	745	590	1437	1073	1014	2347	878				20
		1150	930	918	590	1360	1011	1012	2032	908				21
		1220	930	1067	682	1207	1028	934	1360	1078				22
		1220	930	973	780	1145	1166	901	1520	984				23
		1220	770	946	673	1201	1072	869	1338	978				24
		1220	730	978	581	1380	1015	976	1760	1078				25
		1220	930	908	867	1603	928	1211	1820	1203				26
		1370	940	889	804	1659	868	2381	1565	1013				27
		1300	1050	864	777	1506	851	2491	1578	1043				28
		1150	1110	836	877	1413	779	2430	1380	943				29
		1220	1050	879	777	1365	758	1984	1257	958				30
		1220	1050	873	690	1386	688	1726	1331	873				31
			1220	1330	835	684	1225	687	1517	1453	973			1
			1220	1480	854	684	1287	732	1498	1262	758			2
			1020	1480	868	690	1040	802	1474	1416	788			3
			950	1320	834	690	1122	835	1428	1230	787			4
			1150	1180	863	880	1229	811	1374	1267	872			5
			824	1050	887	800	1457	814	1345	1178	794			6
			1020	1050	1017	783	1429	832	1334	1208	952			7
			1220	1050	1106	793	1437	885	1255	1196	1152			8
			1020	1050	1127	783	1350	858	1182	1239	1383			9
			1080	1050	1148	675	1370	847	1063	1270	1197			10
			1220	990	1206	690	1353	1062	1021	1485	1110			11
			1080	930	1182	948	1458	1351	976	1213	1014			12
			1080	930	1106	857	1493	1356	1041	1680	889			13
			1080	820	1066	857	1583	1203	999	1900	731			14
			1080	730	1057	857	1534	938	977	2044	670			15
			950	820	1074	765	1477	927	1017	2923	753			16
			1020	930	1105	800	1432	995	1073	2414	1023			17
			1220	1050	1111	972	1382	992	1130	1311	1101			18
			1220	1110	1158	923	1486	973	1089	1236	1280			19
			1300	1110	1158	917	1417	943	1102	1463	1233			20
			1330	1080	1164	825	1449	930	1160	1300	1113			21
			2190	1050	1183	834	1343	908	1176	2193	885			22
			2300	1104	1223	937	1366	943	1147	2204	713			23
			3140	995	1224	865	1431	935	1053	2560	850			24
			1980	1070	1222	1056	1429	916	1050	2090	768			25
			1880	1076	1212	1022	1418	901	971	1800	951			26
			1700	1036	1248	1156	1401	920	938	1980	1019			27
			1790	1012	1228	1035	1401	1087	936	2260	716			28
					1160				927					29
1050	1880	1062	1095	1038	1389	1186	911	2420	966					1
1100	1880	992	1021	973	1362	1278	1059	2403	791					2
1150	1880	948	961	914	1354	1385	1097	3000	1156					3
1200	1980	1060	970	1006	556	1290	1107	3558	1099					4
1200	2080	1019	1037	1038	1242	1154	1206	4963	1176					5
1340	2080	1009	1030	916	1242	1178	1039	5680	1052					6
1340	2080	1000	976	997	1485	1171	1128	4793	1001					7
1340	2490	936	998	990	1361	1163	1022	4212	1109					8
1580	2620	962	1349	987	1455	1210	1080	4605	937					9
1670	2880	955	968	944	597	978	1177	4116	962					10
2140	3220	1093	2600	904	1700	967	1360	3255	889					11
2240	3300	1195	3064	944	1645	1069	1257	4010	917					12
1840	3520	1186	3552	812	1744	1080	1293	4085	990					13
1670	3750	1224	3443	905	1629	1063	1350	3895	725					14
1500	4330	1206	3345	866	1738	1035	1569	4426	483					15
1500	4340	1295	3506	887	2397	1123	1470	4168	777					16
1500	4730	1379	4057	826	2209	1195	1534	4580	1258					17
1670	5120	1283	4521	865	2118	1138	1444	4450	1822					18
1670	5530	1540	4902	898	2607	1133	1393	5725	2246					19
1500	5180	1669	5657	926	2705	1280	1442	5396	2375					20
1340	3720	1646	6189	1034	3355	1488	1443	4581	2310					21
1420	4780	1951	5434	1016	3813	1788	1808	5073	2235					22
1340	4730	2183	4801	1020	4013	1819	2107	4960	2611					23
1340	4670	2500	4436	924	4377	2381	2168	4927	4669					24
1340	4340	2314	3791	1044	4816	3238	2408	5093	4453					25
1200	3880	2190	3522	1006	5264	3288	1889	4881	3723					26
1200	3690	1983	3471	933	6243	3278	1858	4713	3158					27
1180	3260	2080	4128	906	6413	3678	1788	4092	2936					28
1470	3090	2787	4416	1208	6414	4099	1529	4221	2782					29
2040	3040	2612	4389	1563	6477	4872	1537	4306	2429					30
2430	3000	2078	4472	1698	6355	5241	1557	4633	2972					31

JANUARY

FEBRUARY

MARCH

		1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	190
APRIL	1	2470	3760	2560	1580	2780	5060	2070	1390	7110	4090	1650	4550	65
	2	2350	2970	2190	1750	2980	6660	2240	1850	6520	4090	1710	3670	66
	3	2460	2830	2080	1750	2980	7450	2430	1930	5710	4480	1750	3240	69
	4	2560	2830	2190	1400	3170	6920	2360	2460	5710	5320	1840	3060	70
	5	2330	2970	2080	1230	3760	6660	2300	2460	5220	5770	1970	2900	72
	6	2210	2970	2430	1400	3760	7180	2300	2460	5220	6010	2320	3540	73
	7	2120	4100	2430	1750	3760	7220	2300	3365	5220	6770	2810	4340	75
	8	2250	4470	2310	1580	4580	7450	2300	4160	4310	5890	2920	5110	82
	9	2510	3760	2970	1580	5580	6650	2360	3030	4530	6760	3050	5250	90
	10	2830	4890	3590	2090	7000	6660	2220	2590	7740	10400	2810	5620	116
	11	3020	3530	4590	2260	7600	5860	3480	2590	6810	11500	2570	4830	116
	12	3240	3930	6490	2600	8320	6390	4380	2660	5710	13700	2470	4620	136
	13	3510	6810	7880	3800	8140	7180	5050	2660	4980	15500	2570	4760	146
	14	3680	11000	8660	5170	7450	6120	5220	2590	5220	18800	2590	4830	156
	15	3860	9150	14300	5510	7300	5600	5500	2730	5340	18700	2720	5470	170
	16	4020	6190	19000	6020	10170	6120	5050	3740	5710	17800	2660	6070	160
	17	4200	5710	26200	6360	8500	5860	5280	4160	6240	16400	2820	6300	145
	18	4370	4890	27000	6360	8690	6120	5500	5500	6320	15400	2710	6370	136
	19	4510	4470	29500	5570	7000	6120	6170	5350	6660	17200	2980	6440	123
	20	4680	3530		5510	6700	6120	6840	6700	6810	18000	3380	6520	113
	21	4890	3760		5680	6700	6120	6840	5300	7740	15400	3380	7430	114
	22	4770	4890		5680	7960	6120	7180	5450	11500	12200	3320	8070	114
	23	4890	5130		5680	10910	6120	7740	4600	11000	10100	3540	8550	125
	24	5380	5130		5680	13130	6120	8640	4160	11500	9120	3540	7830	125
	25	5410	5910		5850	11280	6120	7850	3840	12100	9120	3540	7430	125
MAY	26	6810	7150		6540	11650	5860	8080	3740	12300	11120	4410	6520	121
	27	6490	5670		6540	9060	5860	7290	3540	12700	13600	4570	6300	119
	28	6840	5380		6540	7960	5860	7070	3740	10300	11800	4070	6220	115
	29	6220	5640		6360	7300	5860	7520	3550	8740	11100	3760	6520	113
	30	6490	5130		6190	6700	6120	8410	3740	8070	10600	3590	6600	113
	1	6810	5640		6190	6120	6390	8860	3740	7740	10100	3350	6820	108
	2	6190	4890		6020	5300	6660	10200	3550	7420	10100	3470	6970	108
	3	7150	5640		6020	5060	6920	9640	3190	7420	11500	3540	7430	108
	4	7510	7880		5510	4820	7450	10200	3190	8710	12800	3490	8070	109
	5	6490	7880		4650	5300	7750	11100	3190	9150	12200	3360	7730	109
	6	7880	6490		4310	5850	8780	10400	3550	10000	12300	3100	7200	109
	7	7510	6810		4480	9060	9300	10200	3940	10000	12200	3080	7040	113
	8	7150	7151		4480	9800	10100	9980	6170	10000	11800	3120	7350	117
	9	6810	6490		4480	13500	10700	10300	6840	9560	11800	3510	7570	119
	10	6190	5910		4820	19000	11400	10700	6700	9560	12300	3350	8550	125
	11	5640	6190		4820	17200	11960	11200	6400	9560	12300	2980	8310	125
	12	5670	5910		4820	14200	11960	11300	6840	9560	12500	2900	8010	123
	13	5670	5380		5510	13500	8510	12000	7740	11600	12500	2710	8710	111
	14	6490	7890		5510	12800	8510	12200	7740	12700	13200	2580	8470	101
	15	6810	7490		5680	11300	8780	12200	7070	12700	13600	2610	8190	87
	16	6810	7890		5590	10200	8780	12700	7070	11500	13600	2650	7430	103
	17	6490	7670		5590	9800	8510	12700	6840	10000	13600	3300	6740	111
	18	6190	7490		5000	9060	8240	12400	5950	10000	13900	4600	5920	125
	19	6190	7280		4820	7600	8510	11500	5500	8870	13900	4740	5700	134
	20	6490	7280		5000	7300	8240	9980	5160	7110	15000	4710	5700	134
	21	6810	7100		5000	7300	7980	9530	4830	5710	16400	4670	5700	122
	22	6190	7880		4910	8320	7720	8640	4720	5220	18800	4100	5580	117
	23	5640	7150		4910	9060	7450	8000	4600	4980	18700	3990	5320	107
	24	5380	11000		4910	9800	7450	7520	4480	4980	19000	3670	5540	107
	25	5130	12500		4910	10900	7180	7740	4720	5220	16100	3360	5470	94
	26	6490	14900		5000	9800	7180	8410	5500	5340	14800	3430	7040	90
	27	7880	14900		5000	9060	6920	8640	6400	6240	12200	4700	6740	92
	28	6810	19000		5080	10300	6920	9080	7520	6660	12200	4380	6520	91
	29	5640	19700		6190	10500	6660	7080	6190	6810	12800	5360	6440	91
	30	4890	23700		5680	11300	6660	8640	7960	7740	11500	5030	6070	107
	31	4670	31200		5250	10900	6390	8190	7740	9150	11800	5120	5920	113
JUNE	1	4470	27000		4910	10200	6120	7740	7070	13300	11800	6070	5700	117
	2	4100	27000		4820	10500	6120	7740	6170	16200	11800	6200	5470	122
	3	3930	32100		4820	12800	6660	7740	5500	16200	10400	5890	5620	119
	4	3930	28500		4480	13900	6920	7070	5280	14400	9440	5380	6070	114
	5	4100	27000		4310	13900	7180	6400	5160	13300	9440	5180	6140	109
	6	3930	24500		4480	11300	7830	5720	5050	12700	10100	4940	6440	104
	7	4100	24500		4140	10500	7450	5500	5160	13300	9770	4860	5700	113
	8	3930	25300		3970	10500	6920	5050	5840	13800	9770	5360	5470	107
	9	3760	23700		4140	9800	6920	4830	6730	14400	9600	5360	5540	102
	10	3590	25300		4650	10200	6120	4600	8520	14400	9440	5010	5320	97
	11	3430	22900		4910	11600	5330	4380	7290	13800	9440	5010	5320	97
	12	3430	22500		5170	13900	4940	4270	6840	12700	8800	4920	5430	93
	13	3760	29500		5510	10200	4940	3930	6510	11500	8180	5050	4900	83
	14	3590	35500		5680	11300	4940	3770	5950	10500	8440	4860	4760	83
	15	3760	32100		6020	10500	4870	3770	5280	10000	8800	4860	4760	83
	16	3590	32100		6020	11300	5230	3930	4380	10500	10100	4000	6600	77
	17	3430	32100	5100	6020	13900	4810	4380	4160	10000	10800	3990	6600	63
	18	3120	31200	4530	5850	16100	4230	4600	3840	10000	10400	3650	5820	63
	19	2970	30400	3900	5850	17200	4230	4830	3990	7740	10100	3110	5700	63
	20	3120	27000	3600	5680	18700	4230	5280	3740	7110	8760	2630	5250	63
	21	3270	27000	3740	5680	15000	4460	5500	3550	6520	8480	3120	5580	77
	22	3390	22900	3940	5680	11300	4340	5280	3550	6240	8180	2990	5640	77
	23	4100	19000	4530	5680	10500	4910	4830	3550	6240	7580	2830	4760	65
	24	4100	13500	3740	5510	12000	3770	4380	3740	5460	6500	2880	4760	65
	25	4100	14300	3600	5170	12000	3520	3770	3550	5220	6010	2880	4900	77
	26	4100	14300	3400	4650	11300	3330	3060	3740	5220	5540	2770	5220	77
	27	3930	27000	3740	4650	10500	2980	2830	4030	5100	5540	2670	5220	77
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	29	3930	9520	3460	3800	12200	2980	2880	2660	4980	5220	2590	5060	77
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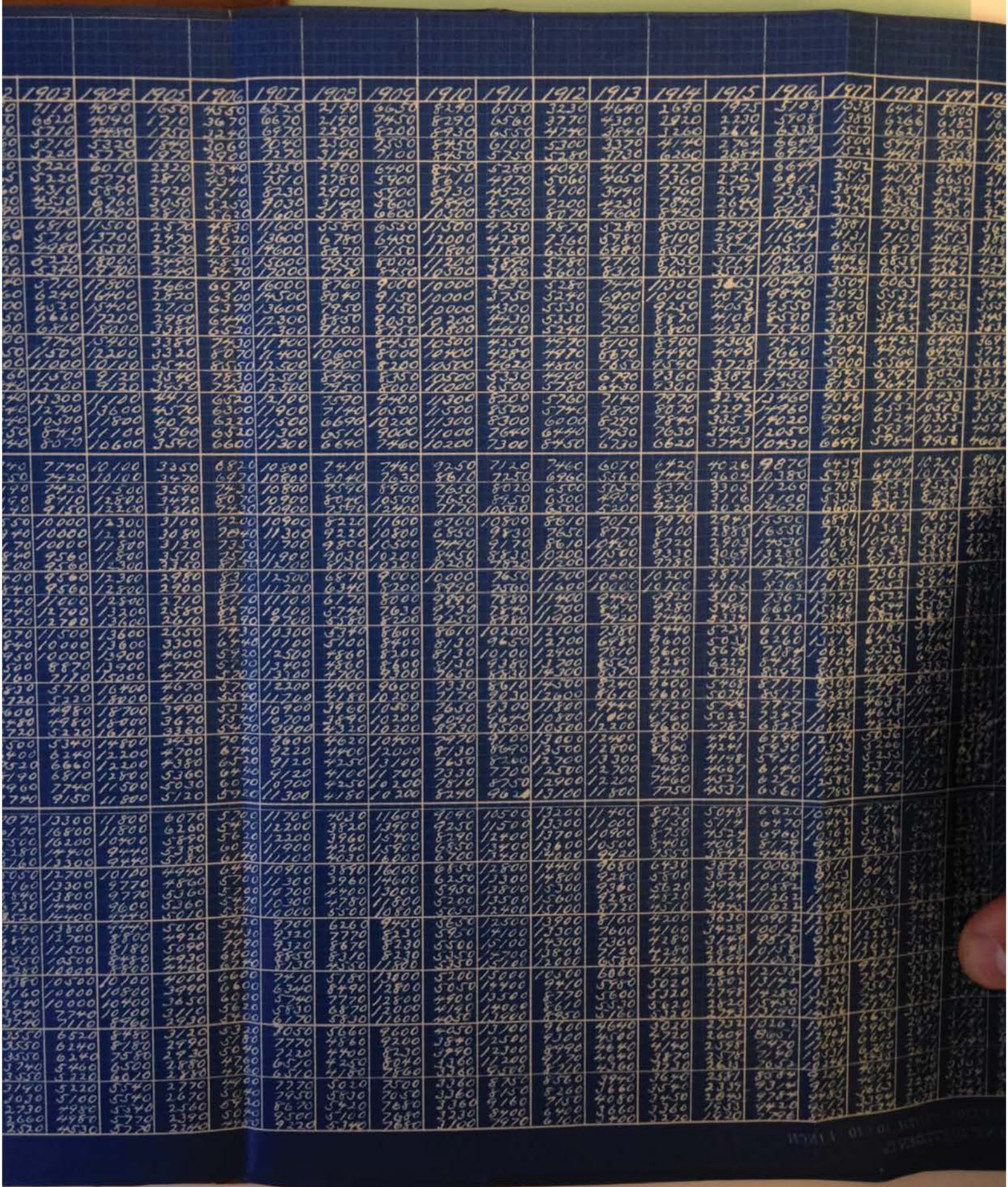

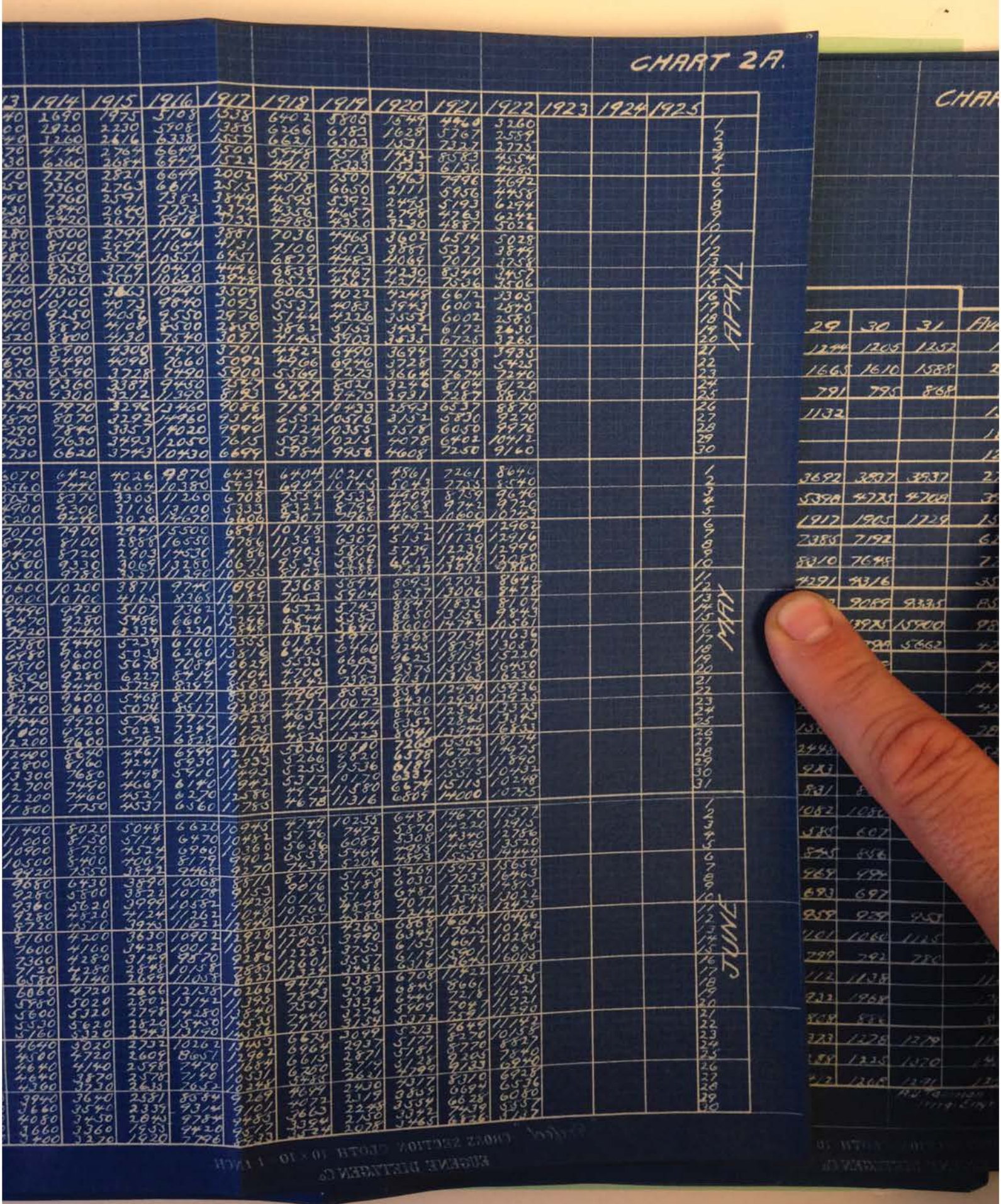
CHART 2A.
1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925
APRIL
MAY
JUNE

	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
JULY														
AUGUST														
SEPTEMBER														

CHART 2B.

1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925		
3180	849	2256	5347	3181	1934	3529	5928	4597				1	JULY
3030	1843	5410	5089	2916	1847	3574	5285	4182				2	
2850	1280	8074	7952	2773	1728	3425	4216	4014				3	
2762	1567	6551	6089	2695	1626	3339	4407	3657				4	
3270	1072	6705	7546	2420	1537	2957	3586	3489				5	
2960	1871	7015	11188	2276	1460	2823	3750	3258				6	
2716	1544	7307	7099	2157	1448	2654	3934	3454				7	
2470	2065	7344	6683	2240	1410	2470	3772	3009				8	
2280	1262	7511	6283	2055	1384	2315	3731	2946				9	
2200	2001	6736	5876	1908	1334	2167	3650	2656				10	
2370	1666	6669	5123	1931	1272	2047	3333	2572				11	
2160	1582	5816	4646	2086	1218	1998	3643	2506				12	
1980	1339	5584	4300	1838	1122	1940	2956	2383				13	
2010	1570	5211	3940	1733	1094	1884	2907	2241				14	
1840	1370	4830	3472	1678	1119	1782	2538	2007				15	
1780	1162	4471	3222	1879	1087	1585	2670	2334				16	
1710	1228	4661	3052	1718	1047	1557	2392	1994				17	
1620	1196	4001	2971	1480	940	1431	2293	1936				18	
1540	1111	3584	2744	1719	914	1424	2217	1861				19	
1530	1102	3238	2574	1651	863	1360	2086	1838				20	
1810	1041	3110	2380	1566	888	1332	1840	1841				21	
1630	1001	2844	2210	1384	835	1270	2042	1776				22	
1470	960	2704	2053	1272	770	1243	1822	1739				23	
1385	892	2465	2047	1283	747	1180	1694	1662				24	
1320	871	2424	1859	1205	746	1109	1677	1573				25	
1250	870	2274	1743	1192	729	1116	1600	1450				26	
1250	845	2162	1716	1118	747	1140	1436	1421				27	
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1210	813	1944	1574	1241	743	1046	1389	1370				29	
1210	849	1869	1514	1327	753	902	1354	1347				30	
												31	
1210	939	1807	1464	994	740	924	1388	1345				1	AUGUST
1210	857	1734	1400	1055	678	882	1333	1273				2	
1190	840	1667	1363	1032	642	831	1387	1328				3	
1280	771	1620	1371	1121	602	767	1250	1420				4	
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1140	748	1512	1273	846	627	702	1226	1481				6	
1140	727	1463	1238	851	643	782	1195	1330				7	
1070	729	1423	1203	801	649	740	1289	1250				8	
1000	707	1391	1150	893	666	765	1231	1070				9	
1000	683	1368	1096	958	628	693	1251	1104				10	
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1000	679	1294	1035	940	628	645	1328	1074				12	
937	651	1264	1008	874	870	621	1109	1003				13	
937	640	1239	977	845	687	578	1062	780				14	
937	636	1207	971	825	624	553	1024	789				15	
873	640	1198	969	964	621	571	996	926				16	
873	618	1251	1010	1064	585	579	975	961				17	
873	577	1217	1043	1021	583	595	998	943				18	
873	582	1390	1076	981	563	558	928	987				19	
873	588	1287	1007	893	556	526	902	935				20	
873	582	1234	967	820	546	480	906	910				21	
812	578	1187	925	780	537	504	762	883				22	
806	575	1138	905	809	543	553	879	862				23	
806	578	1081	831	825	522	624	619	821				24	
800	620	1055	849	848	484	620	748	804				25	
794	595	1027	831	830	482	592	831	825				26	
788	591	1002	874	807	482	604	780	846				27	
782	569	1000	862	877	454	632	747	836				28	
776	534	983	827	879	470	637	651	854				29	
776	536	1052	809	930	502	620	687	867				30	
776	538	1016	790	784	503	639	683	883				31	
718	678	976	781	752	502	684	756	940				1	SEPTEMBER
718	668	944	766	718	493	653	718	969				2	
718	753	940	783	658	503	657	733	947				3	
718	675	969	754	725	511	590	730	922				4	
718	660	962	741	659	511	617	774	893				5	
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718	646	933	725	623	504	464	721	823				7	
718	619	916	713	619	524	519	696	807				8	
718	624	929	698	655	542	544	650	801				9	
718	627	1023	689	678	546	565	693	799				10	
718	632	1006	694	1037	523	565	632	793				11	
718	609	988	701	1044	495	588	648	767				12	
836	679	957	705	956	470	528	670	756				13	
836	682	925	765	912	464	620	687	735				14	
1030	656	917	772	900	491	625	767	715				15	
1170	665	905	736	1008	523	581	708	717				16	
1100	648	880	715	927	581	536	673	751				17	
1100	630	855	699	948	536	797	647	839				18	
1100	631	843	677	936	527	539	638	883				19	
1030	607	843	667	827	512	630	1037	756				20	
1190	607	836	647	817	512	630	1108	736				21	
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963	584	821	720	822	624	676	933	768				23	
963	576	814	951	834	594	629	801	762				24	
963	582	814	814	834	619	614	834	742				25	
888	600	814	773	911	614	609	841	732				26	
888	839	820	735	887	609	634	835	749				27	
888	772	808	719	841	592	635	835	740				28	
888	708	809	640	835	586	624	846	740				29	
888	689	819	744	835	586	624	846	740				30	

CHART

29	30	31	Averag
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791	795	868	83
1132			134
			183
			124
3692	3837	3837	2760
5390	4725	4709	3824
1917	1905	1729	1584
7385	7192		6269
8310	7645		7280
4291	4316		
8902	9088	9335	
12780	13935	15900	
6102	5799	5662	
5329	5078		
8725	9430		
2701	2535		
91	1476	1423	
	2325	2230	
	923	853	
	852	831	
		1042	
		885	

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	1070			2600	1400	930	920	1000			520		1040	
	720			2430	1460	990	830	830			600		1000	
	870			2430	1340	1050	1060	695			625		900	
	870			2270	1340	1050	935	695	830		748		840	
	820			2270	1580	1120	990	695			748			
	820			2270	1580	1050	1020	747			940			
	820			2270	1820	1050	1020	1040	945		850			
	820			2270	1820	1050	920	1080			820			
	820			2270	1580	1460	890	1140			780			
	670			2600	1580	1360	1050	1120	948		560		1180	
	670			2600	1580	1120	1200	1140			520		1180	
	720			2600	1820	1050	1430	1140			520		1240	
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	860			2340	1820	890	955	1040			820		1000	
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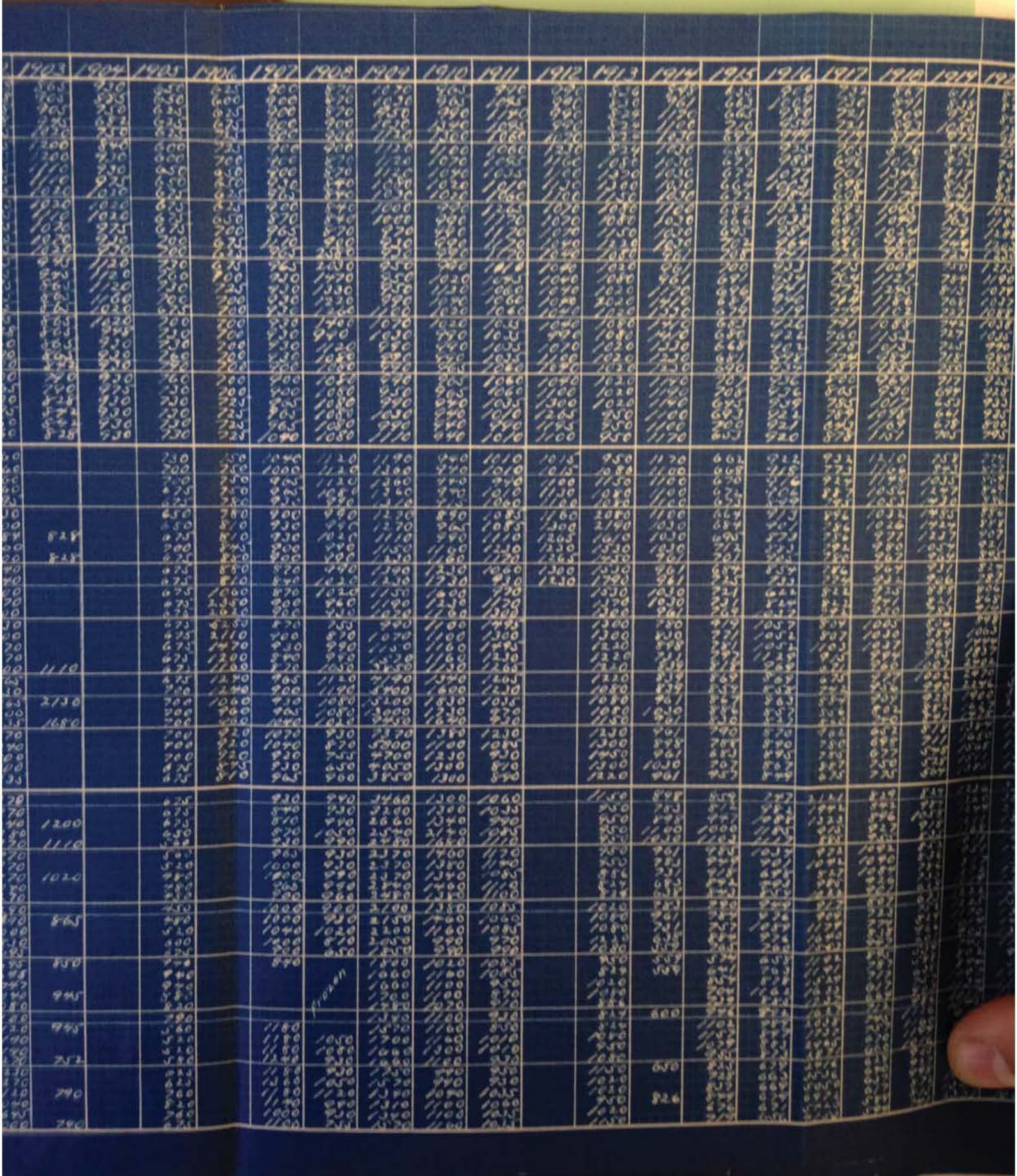
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
frozen

1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	192
865	930	650	625	900	870	1070	965	990	990	836	848	635	909	732	867	611	87
705	585	650	600	900	870	1030	965	1075	940	830	961	663	1009	730	891	838	87
905	750	625	625	900	870	950	990	1140	990	824	1170	665	980	721	909	973	80
745	682	625	675	900	900	1030	1340	1085	990	824	1100	710	954	721	873	1080	25
1020	750	625	725	900	900	1120	1300	1080	1070	824	1030	697	944	779	871	872	25
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945	1120	730	675	965	2030	950	990	1018	1040	1020	961	700	933	775	1009	750	1215
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865	1020	675	700	930	1260	1100	1020	1060	1040	1020	1350	679	919	779	1102	727	1088
865	1020	700	700	930	1400	1070	1020	1035	1040	1080	1400	683	926	791	1088	742	1038
865	948	730	700	930	990	1030	990	1035	990	1080	1410	680	922	760	1533	727	1035
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872	930	730	725	965	1080	990	990	990	1195	950	1100	700	921	834	1169	678	800
828	930	730	725	1040	1080	1110	990	1010	1100	950	1170	633	920	878	1151	705	795
			730	750	1040	1120	1190	990	1010	1015	950	1170	662	922	932	1210	758	779
			700	750	1000	1120	1360	990	1010	1015	1080	1100	668	918	773	1166	843	877
			700	750	965	1120	1360	990	990	1100	1150	1100	670	916	924	1148	1035	869
			675	750	965	1080	1360	990	1010	1130	1080	1100	672	906	887	1056	1247	869
			625	780	930	990	1310	965	1060	1100	1080	1100	673	899	875	1053	1210	886
			650	780	900	990	1270	890	1085	1160	2080	1100	664	913	896	1032	1485	886
			650	810	930	990	1270	965	1085	1300	2190	1030	684	901	786	1026	1424	888
	828		675	810	930	1020	1110	990	1110	1265	1610	1030	695	873	756	977	1237	907
			700	845	900	990	1150	1160	1230	1230	1530	1030	712	883	792	980	1054	921
	828		675	850	900	990	1210	1160	1170	1265	1450	961	707	905	780	967	964	895
			675	850	870	990	1390	1230	1060	1300	1530	961	684	854	786	964	931	827
			675	810	840	1020	1230	1730	930	1230	1790	961	725	733	774	932	906	787
			675	1060	870	1020	1150	1600	970		1530	1030	721	622	822	925	888	906
			675	2350	900	960	1190	1230	1170		1370	1030	731	824	821	941	821	868
			675	2620	900	930	1020	1160	1300		1300	961	769	817	772	950	783	712
			675	6250	870	755	990	1100	1495		1300	780	919	1057	804	1005	806	998
			675	2110	900	870	1070	1100	1300		1300	830	771	1052	807	1030	889	1063
			675	1470	930	990	1130	1160	1495		1220	898	781	1052	803	1037	969	1444
			675	1200	840	950	1370	1160	1230		1220	731	797	1129	935	994	985	1837
	1110		675	1160	870	1050	3850	1130	1265		1220	834	818	969	871	960	1007	2402
			675	1240	965	1120	4190	1340	1265		1220	839	869	869	675	977	1002	2470
			700	1240	900	1140	5400	1600	1230		1080	839	854	858	742	956	990	2146
	2130		700	1060	930	1080	5200	1830	1035		1080	961	867	863	884	907	928	1900
			700	960	965	1080	13000	1730	970		1080	1030	886	857	806	802	881	637
	1680		700	960	1040	1020	9450	1640	930		1150	961	830	822	860	740	841	728
			700	920	1070	930	7370	1380	1230		1230	961	790	870	962	652	818	584
			700	920	1040	870	5800	1100	1085		1300	898	788	890	780	698	711	1058
			700	920	930	755	4700	1230	930		1450	961	683	895	785	677	598	1508
			675	875	930	650	4050	1300	870		1300	1030	767	867	887	750	728	1185
			675	810	965	900	3850	1300	890		1220	961	757	849	675	725	864	1185
			675		930	890	3460	1300	1060		1150	898	859	747	2131	839	827	1236
			675		840	930	3200	1300	1035		950	783	812	981	1941	842	787	1144
	1200		675		810	990	2660	1340	990		950	898	747	1088	1323	856	1058	1144
			650		870	1050	2540	2140	1085		950	1100	1000	1185	915	927	918	1144
	1110		700		930	990	2480	1660	1085		950	1030	1103	1117	855	1015	835	1144
			650		965	930	2370	1460	1170		950	961	985	1037	972	1092	853	1144
			650		1000	930	2370	1380	1140		950	783	949	901	1042	1090	836	1144
	1020		650		1000	990	2370	1340	1085		886	731	918	698	827	1084	786	1144
			650		965	950	2340	1460	1100		827	683	842	809	984	996	835	1144
			650		900	960	2480	1380	1100		824	638	843	854	1022	901	821	1144
			650		1000	900	2100	1380	1085		1020	783	780	949	917	807	821	1144
	865		680		1000	930	2180	1460	1060		1080	961	784	976	909	723	853	1144
			650		1040	1020	2200	1160	1085		1080	731	757	1085	1179	774	836	1144
			600		1000	810	2050	990	970		1220	638	824	776	1060	838	764	1144
			675		800	650	1850	990	990		1080	659	765	760	1063	947	1053	1144
	850		740		840		1800	1020	1085		950	568	574	658	1192	895	578	1144
			740			frozen	1660	1160	1085		824	568	641	703	1141	787	611	1144
			940				1660	1100	950		1020		854	878	1139	717	611	1144
	945		850				1700	1100	570		1080		704	1162	1633	617	781	1144
			820				1750	1070	910		886		739	845	1277	664	781	1144
			790				1350	1100	930		824	600	926	852	1637	712	1126	1144
	945		860		1180		1570	1160	850		824		1102	988	2038	745	757	1144
			820		1180	1050	1700	1160	1010		1060		1157	877	1737	670	757	1144
			820		1180	1080	1660	1300	1010		950		1079	863	2465	660	1046	1144
	752		880		1240	830	1660	1100	930		1080		955	872	2871	660	1046	1144
			825		1180	930	1750	990	950		1150	650	825	679	2416	628	925	1144
			625		1360	1050	1570	990	930		1020		728	663	1536	640	937	1144
	790		760		1180	1120	1390	1040	1035		1020		837	669	1050	637	937	1144
			820		1140	990	1310	1100	1060		950	826	825	675	1772	581	937	1144
			760		1000	930	1370	1100	1035		1020		676	671	1723	584	937	1144
	790		675		1100	755	1570	1160	1035		1150		719	656	1564	584	937	1144

CHART 2C.

1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	
990	830	895	635	909	732	867	611	828	865	789				1
990	830	961	663	1009	730	891	838	813	872	783				2
980	824	1170	665	980	721	909	973	803	890	791				3
990	824	1100	710	954	721	893	1080	786	879	764				4
1070	824	1030	697	944	719	877	972	746	858	764				5
1230	824	1030	686	935	705	876	825	730	937	764				6
1160	1050	1030	677	988	696	1013	822	766	961	771				7
1100	1370	1030	672	1077	701	1346	817	839	861	785				8
1130	1300	1030	664	1003	698	1312	815	886	878	785				9
1100	1150	1030	672	984	698	1178	841	903	975	764				10
1070	1080	1100	682	1022	682	1095	774	1048	1002	757				11
1070	1080	1030	666	1038	687	1049	763	1180	908	778				12
1070	1150	1030	695	987	690	1024	719	1288	835	835				13
1040	1220	1030	702	964	690	980	748	1203	786	850				14
1040	1080	961	708	941	726	968	723	1230	728	821				15
1040	1020	961	700	933	775	1009	750	1215	695	803				16
1040	1080	961	691	934	764	1127	784	1190	750	744				17
1040	1020	1170	696	941	772	1245	813	1079	1022	723				18
1040	1020	1410	687	940	744	1186	768	1037	934	744				19
1040	1020	1330	676	919	779	1102	727	1088	972	746				20
1040	1080	1410	683	926	791	1088	742	1038	921	796				21
990	1080	1410	680	922	760	1153	727	1035	908	800				22
1070	1020	1330	668	902	778	1013	725	990	912	1155				23
1100	1020	1230	681	898	774	984	718	980	821	1017				24
1070	1020	1230	690	934	789	985	750	956	904	984				25
1040	1020	1190	707	936	800	969	717	925	869	1063				26
1100	1020	1190	708	936	805	930	644	928	958	992				27
1300	1020	1140	695	939	785	1017	653	933	1057	906				28
1265	950	1100	693	922	789	1098	661	925	923	1058				29
1195	950	1100	700	921	843	1169	678	900	993	719				30
1100	950	1170	653	920	878	1151	705	795	922	793				31
1015	950	1170	662	922	932	1210	758	779	945	865				1
1015	1080	1100	668	918	773	1166	843	827	925	924				2
1100	1150	1100	670	916	924	1148	1035	869	930	830				3
1130	1080	1100	674	906	887	1056	1247	869	876	794				4
1100	1080	1100	673	899	795	1053	1210	886	884	764				5
1160	2080	1100	664	913	896	1032	1455	886	886	734				6
1300	2190	1030	684	901	786	1026	1424	888	869	769				7
1265	1610	1030	695	873	786	977	1237	907	869	869				8
1230	1530	1030	712	883	792	980	1054	921	920	1000				9
1265	1450	961	701	905	780	967	864	895	898	914				10
1300	1530	961	684	854	786	964	931	824	803	962				11
1230	1790	961	725	733	774	932	906	787	874	944				12
	1530	1030	721	622	822	925	888	806	785	823				13
	1370	1030	731	824	822	941	821	868	871	876				14
	1300	961	763	1017	792	950	783	911	877	898				15
	1300	780	919	1057	804	1005	806	898	933	776				16
	1300	830	771	1052	807	1030	889	1063	777	807				17
	1220	898	781	1052	1037	1037	969	1444	723	1013				18
	1220	791	792	1129	915	994	985	1837	786	1070				19
	1220	834	818	969	871	960	1007	2402	810	1066				20
	1220	839	869	869	675	977	1002	2470	1619	826				21
	1080	839	854	854	742	956	990	2246	5226	756				22
	1080	961	867	863	854	907	928	1900	3063	872				23
	1080	1030	886	857	806	882	822	1622	2350	911				24
	1150	961	830	827	860	840	841	1428	1690	818				25
	1230	961	790	870	782	652	818	1384	1564	620				26
	1300	898	788	890	780	698	711	1650	1601	659				27
	1450	961	683	895	785	677	598	1568	1236	717				28
	1300	1030	767	867	867	750	528	1511	1514	681				29
	1220	961	957	849	675	775	564	1385	1494	745				30
	1150	898	859	747	2121	829	829	1286	3353	705				1
	950	783	812	982	1942	842	787	1260	3890	688				2
	950	898	947	1088	1323	896	1058	1249	2723	650				3
	950	1100	1000	1185	915	927	918	1211	1816	716				4
	950	1030	1103	1177	885	935	935	1168	1582	649				5
	950	961	985	1034	972	1092	852	1011	1435	1000				6
	950	783	949	901	1041	1090	836	951	1470	662				7
	886	731	918	698	827	1084	786	817	1310	821				8
	824	682	892	793	785	926	733	872	1218	784				9
	824	638	843	859	1022	901	628	1019	1350	612				10
	1020	783	790	949	917	807	623	1222	1360	620				11
	1080	961	784	976	909	723	752	1225	1552	655				12
	1080	731	757	1089	1179	774	829	1170	1372	624				13
	1220	638	884	976	1640	838	966	1019	1431	666				14
	1080	559	765	760	1583	947	601	705	1350	527				15
	950	559	574	658	1102	895	539	745	1136	873				16
	824	589	641	763	1191	787	588	802	978	706				17
	1020		854	878	1329	717	638	894	821	655				18
	1080		704	1162	1633	617	757	1097	1184	1010				19
	886		713	855	1237	664	903	1134	1124	1118				20
	824	600	846	852	1627	712	786	1117	1295	974				21
	824		1102	987	1038	745	1126	1092	1173	954				22
	1080		1157	877	1737	757	1160	950	1163	790				23
	950		1079	883	2468	670	1199	909	1220	804				24
	1080		955	823	3827	660	1016	850	1106	1052				25
	1150	650	825	679	2476	628	955	936	1094	1085				26
	1020		728	663	3536	640	927	956	1144	1172				27
	1020		837	669	5050	637	958	982	1141	1246				28
	950	826	845	679	6972	617	872	1074	1127	1361				29
	1020		676	671	5720	588	815	1355	1177	1017				30
	1150		719	656	4258	574	741	1337	1067	1136				31

OCTOBER

NOVEMBER

DECEMBER

29	30	
1244	1205	
1665	1610	
791	785	
1132		
3692	3887	
5398	4725	
1917	1905	
7385	7	
8310		
4291		

TOTAL MONTHLY FLOW, IN ACRE FEET, OF BOISE RIVE
FOR THE IRRIGATION YEAR, 1894-1895 TO 1921-192

Year	November	December	January	February	March	April	May	June	July	August	Sept
1894-'95	54000	62700	78100	67800	102000	241000	372000	224000	151000	63300	52
1895-96	54500	50400	72600	67300	156000	293000	551000	1450,000	382000	81200	57
1896-97	(3) 61300	(3) 64600	50100	54800	87300	(5) 476000	(5) 508000	(3) 445000	142000	66900	619
1897-98	64100	(3) 61500	33800	67200	118000	250000	318000	297000	116000	45300	389
1898-99	55800	151000	159000	77800	113000	422000	603000	726000	353000	109000	684
1899-1900	89200	95900	122000	95500	303000	577000	507000	300000	83600	53100	508
1900-01	61300	64600	78800	97800	178000	303000	621000	285000	116000	51800	4930
1901-02	55500	75600	60800	89700	87900	212000	350000	285000	106000	49100	4060
1902-03	54000	62700	81200	63300	142000	444000	516000	395000	146000	52600	45900
1903-04	67800	57500	(1) 124000	(1) 108000	262000	666000	824000	516000	200000	71300	43340
1904-05	(3) 54000	(3) 54000	(4) 50400	(2) 56700	(1) 89000	174800	227900	245200	78210	39540	34390
1905-06	40700	40090	50400	56700	100000	335000	424000	344000	162000	51600	40800
1906-07	72600	(3) 74000	(3) 125400	(4) 155000	343000	666000	676000	530000	333000	101000	61300
1907-08	55500	63300	66400	62100	140000	380000	367000	332000	197000	64600	55000
1908-09	58800	58000	137000	110000	231000	489000	600000	649000	225000	63300	56800
1909-10	199000	124000	79900	66600	562000	607000	509000	308000	109000	55500	55900
1910-11	73200	76200	63010	76340	159570	363520	603970	628580	219700	73450	5
1911-12	66700	61500	78420	76120	99590	342920	687240	678000	172576	83214	
1912-13	67820	60680	53800	51400	101000	372000	569000	410000	157000	82400	
1913-14	79700	60900	70700	74400	214000	466000	549000	305000	123000	58200	5
1914-15	57900	44800	59580	59723	94782	196564	274128	191900	83872	40960	396
1915-16	45626	53346	49930	63162	197486	555062	562372	588764	293818	80702	53686
1916-17	54020	53702	47628	47694	61740	267080	657556	643322	260216	65224	43935
1917-18	51158	118668	113828	77754	181542	346040	404454	462460	112120	56292	51122
1918-19	56578	49118	50536	52844	114916	396454	509192	240872	69736	36404	34262
1919-20	56548	52610	66528	66720	89254	189044	449230	333468	117328	40586	39034
1920-21	75678	67106	112422	94098	271472	394484	824032	718728	175390	63008	46784
1921-22	39088	44979	60982	53180	113692	319642	752674	659864	148066	65210	47
Total	1,822,116	1,903,444	2,147,264	2,089,835	4,713,244	10,724,610	14839,748	13,362,158	4832,632	1,764,350	1,40
Average	65,076	67,982	78,474	74,637	168,330	383,022	529,991	477,220	172,594	63,012	50 271

(1) Mean of 4 High Years
(2) Substituted from 1906
(3) Substituted from 1900
(4) Missing days substituted from 1900
(5) Missing days substituted from Mean of
(6) " Month "
(7) Interpreted.

TAL MONTHLY FLOW, IN ACRE FEET, OF BOISE RIVER FOR THE IRRIGATION YEAR, 1894-1895 TO 1921-1922.

CHART 3.

ebruary	March	April	May	June	July	August	September	October	Total.
67800	102000	241000	372000	224000	151000	63300	52500	58600	1,580,000
67300	156000	293000	551000	1450,000	382000	81200	37000	53800	3,268,800
54800	87300 (5)	476000 (6)	508000 (7)	415000	142000	66400	61900	62700	2,050,100
67200	118000	250000	318000	297000	116000	45300	38900	52800	1,462,600
77800	113000	422000	603000	726000	353000	109000	68400	83000	2,921,000
95500	303000	577000	507000	300000	83600	53100	50800	63300	2,340,400
97800	178000	303000	621000	285000	116000	51800	49300	55800	1,962,400
89700	87900	212000	350000	285000	106000	49100	40600	45300	1,457,500
63300	142000	444000	516000	595000	146000	52600	45900	58000	2,260,700
(1) 108000	262000	666000	824000	516000	200000	71300	43400	58500	2,998,500
(2) 56700	(2) 89000	174800	227900	245200	78210	35540	34390	42600	1,146,740
58700	100000	335000	424000	344000	162000	51600	40800	42000	1,687,290
(4) 155000	343000	666000	676000	530000	333000	101000	61300	57400	3,194,700
62100	140000	380000	367000	332000	197000	64600	55000	67600	1,850,500
110000	231,000	489000	600000	649000	225000	63300	56800	62700	2,720,600
66600	562000	607000	509000	308000	109000	55500	55900	62700	2,738,600
76340	159570	363520	603970	628580	219700	73450	59460	66670	2,463,670
76120	99590	342920	687240	678000	172576	83214	65644	66970	2,478,894
51400	101000	372000	569000	410000	157000	82400	53900	62700	2,044,700
74400	214000	466000	549000	305000	123000	58200	52200	68900	2,122,000
59723	94782	196564	274128	191900	83872	40960	39672	42410	1,186,291
63262	197486	555062	562372	588764	293818	80702	53686	58658	2,600,712
47694	61740	267080	654556	643322	260216	65224	43950	46004	2,245,136
77254	181542	346040	404954	462460	112120	56292	51122	64442	2,045,430
52844	114916	396454	509192	240872	69736	36404	34262	47968	1,658,880
66720	89284	189044	449730	333468	117328	40586	39034	58900	1,560,750
94098	271472	394484	824032	718728	175390	63068	48784	55492	2,900,754
53180	113692	319642	752674	659864	148066	65210	47974	52168	2,357,519
2,089,835	4,713,244	10,724,610	14839,748	13,362,158	4832,632	1,764,350	1,407,578	1,615,132	61,272,166
74,637	168,330	383,022	529,941	477,220	172,594	63,012	50,271	57,683	2,188,292

(1) Substituted from 1900
(2) Missing days substituted from 1900.
(5) Missing days substituted from Mean of 21 Years.
(6) " Month " " " 21 "
(7) Interpreted.

RUF '22.

TABLE IN SE
FO

		1	2	3	4	5	6	7	8	9
JANUARY	Average 28 Yrs 1895-1922	1339	1300	1260	1223	1211	1198	1221	1180	1164
	4 Highest yrs '96, '99, '07, '09	1472	1578	1520	1522	1550	1580	1580	1610	1600
	4 Lowest yrs '98, '02, '05, '15	825	891	866	860	858	885	852	842	852
FEBRUARY	Average 28 Yrs 1895-1922	1294	1242	1163	1160	1177	1144	1112	1322	1332
	4 Highest Yrs '96, '99, '07, '09	1615	1530	1500	1490	1365	1272	1278	1882	1922
	4 Lowest Yrs '98, '02, '05, '15	990	1040	1040	1032	958	958	922	1052	1230
MARCH	Average 28 Yrs 1895-1922	1709	1766	1841	1903	1886	1945	1979	2139	2361
	4 Highest Yrs '96, '99, '07, '09	2230	2065	2108	2088	2108	2408	2370	2470	2472
	4 Lowest Yrs '98, '02, '05, '15	1438	1408	1487	1392	1457	1485	1382	1469	1513
APRIL	Average 28 Yrs 1895-1922	3930	4031	4254	4401	4401	4485	4536	4648	4
	4 Highest Yrs '96, '99, '07, '09	4905	5018	5245	5148	5275	5120	5318	5725	5
	4 Lowest Yrs '98, '02, '05, '15	1511	1885	2012	2116	2086	2850	2647	2815	2
MAY	Average 28 Yrs 1895-1922	7202	7054	7338	7665	7977	8250	8119	8805	9
	4 Highest Yrs '96, '99, '07, '09	7505	7155	7600	8525	9120	8710	9492	9758	10
	4 Lowest Yrs '98, '02, '05, '15	4326	4101	4026	3826	3530	3415	3597	4168	4
JUNE	Average 28 Yrs 1895-1922	9419	9541	9750	9576	9283	9320	9302	9338	96
	4 Highest Yrs '96, '99, '07, '09	15125	15900	18050	17800	17000	15625	15225	14825	13
	4 Lowest Yrs '98, '02, '05, '15	5775	5591	5183	4802	4623	4590	4485	4772	5
JULY	Average 28 Yrs 1895-1922	4846	4787	4668	4491	4297	4079	3946	3843	36
	4 Highest Yrs '96, '99, '07, '09	9250	9465	9762	9575	8848	8178	7512	7508	71
	4 Lowest Yrs '98, '02, '05, '15	2405	2378	2175	2249	2049	2093	2009	2006	19
AUGUST	Average 28 Yrs 1895-1922	1405	1351	1308	1288	1247	1223	1186	1166	11
	4 Highest Yrs '96, '99, '07, '09	2210	1982	2028	1872	1798	1788	1740	1768	17
	4 Lowest Yrs '98, '02, '05, '15	923	922	848	836	811	826	810	782	65
SEPTEMBER	Average 28 Yrs 1895-1922	849	851	851	831	834	831	811	801	79
	4 Highest Yrs '96, '99, '07, '09	1195	1240	1225	1095	1122	1145	1130	1075	10
	4 Lowest Yrs '98, '02, '05, '15	629	676	661	642	630	638	624	612	6
OCTOBER	Average 28 Yrs 1895-1922	840	863	874	890	894	892	906	931	9
	4 Highest Yrs '96, '99, '07, '09	962	942	892	936	974	954	989	990	9
	4 Lowest Yrs '98, '02, '05, '15	641	669	680	691	684	676	672	686	6
NOVEMBER	Average 28 Yrs 1895-1922	968	968	976	980	974	1020	1018	994	10
	4 Highest Yrs '96, '99, '07, '09	1172	1205	1168	1196	1175	1158	1148	1138	11
	4 Lowest Yrs '98, '02, '05, '15	784	776	798	791	780	780	807	823	9
DECEMBER	Average 28 Yrs 1895-1922	1289	1319	1264	1197	1156	1157	1131	1110	11
	4 Highest Yrs '96, '99, '07, '09	1825	1698	1495	1422	1420	1401	1440	1465	15
	4 Lowest Yrs '98, '02, '05, '15	891	879	930	948	1053	1169	1175	1285	13

TABLE IN SECOND FEET SHOWING AVERAGE DAILY
FOR A 28 YEAR PERIOD, 1895 TO 1922, INC
DAILY FLOW OF 4 HIGHEST YEARS; AVE
DAILY FLOW OF 4 LOWEST YEARS

	DAY																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Jan.	1339	1300	1260	1223	1211	1198	1221	1180	1164	1118	1108	1088	1055	1139	1266	1327	1280	1330	
Feb.	1472	1578	1520	1522	1550	1580	1580	1610	1600	1558	1590	1695	1665	1800	2328	2635	2530	2540	2
Mar.	825	892	866	860	858	885	852	842	852	837	830	806	780	798	790	838	835	915	
Apr.	1294	1242	1163	1160	1177	1144	1112	1322	1332	1322	1301	1286	1297	1256	1243	1356	1434	1396	13
May	1615	1530	1500	1490	1365	1272	1278	1882	1922	1980	1772	1795	1878	1740	1798	1898	2235	2115	20
June	990	1040	1040	1032	958	958	922	1052	1230	1230	1190	1159	1160	1090	1070	1270	1318	1380	1
July	1709	1766	1841	1903	1886	1945	1979	2135	2361	2205	2246	2308	2309	2305	2356	2493	2552	2816	
Aug.	2230	2065	2108	2088	2108	2408	2370	2470	2472	2340	2308	2305	2275	2255	2360	2360	2572	3320	
Sept.	1438	1408	1487	1392	1457	1485	1382	1469	1513	1569	1678	1648	1589	1444	1452	1361	1307	1578	
Oct.	4938	4031	4254	4401	4401	4425	4536	4648	4833	5598	6109	6233	6215	6885	7149	7363		7344	7
Nov.	4905	5018	5245	5148	5275	5120	5318	5785	5992	7522	7420	8075	9175	10512	9975	10327			8
Dec.	1511	1885	2012	2116	2086	2850	2647	2815	2515	2642	2555	2682	3151	3497	3558	4021			4
Jan.	7202	7054	7338	7665	7977	8250	8119	8809	9043	9267	8981	8761	8689	8766	8918	8961			8
Feb.	7505	7155	7600	8525	9120	8710	9492	9758	10522	11802	11222	9878	9495	8855	8200	8498			
Mar.	4326	4101	4026	3826	3530	3415	3557	4168	4475	4530	4518	4631	5267	5329	5123	5137			
Apr.	9419	9541	9750	9576	9283	9320	9302	9338	9064	9245	8457	8124	8924	8802	8235	8687			
May	17125	15900	18050	17800	17000	15675	15225	14875	13800	14075	13400	12588	13312	15970	15632	15952			
June	5725	5591	5183	4802	4623	4590	4455	4792	5080	5231	5210	5088	5065	4852	4615	4266			
July	4846	4787	4668	4491	4292	4079	3946	3843	3676	3466	3271	3179	3017	2877	2714	2575			
Aug.	9250	9468	9762	9575	8848	8178	7512	7508	7180	6762	6448	6292	5970	5440	5055	4650			
Sept.	2405	2378	2175	2245	2040	2093	2008	2006	1953	2005	1869	1883	1782	1734	1632	1518			
Oct.	1405	1351	1308	1288	1247	1223	1186	1168	1135	1079	1061	1054	1013	999	989	970			
Nov.	2210	1982	2028	1872	1798	1768	1740	1768	1742	1630	1570	1500	1418	1387	1338	1320			
Dec.	923	923	848	836	811	825	810	782	694	702	786	740	743	738	717	713			
Jan.	849	851	851	831	834	831	811	801	796	817	846	841	846	859	825	874			
Feb.	1195	1240	1225	1095	1122	1145	1130	1075	1048	1022	1052	1030	1015	1000	1020	1018			
Mar.	629	676	661	642	630	628	624	612	644	645	658	639	649	657	658	678			
Apr.	840	863	874	890	894	892	816	931	923	921	900	928	932	936	972	921			
May	962	943	892	936	974	959	989	990	972	969	960	850	966	1008	986	976			
June	641	669	680	691	684	678	673	685	683	733	768	732	739	769	742	754			
July	968	968	976	980	974	1020	1018	994	1009	984	1005	1007	986	1039	1030	1150			
Aug.	1172	1105	1168	1196	1125	1158	1148	1138	1135	1122	1191	1198	1208	1145	1135	1138			
Sept.	782	776	798	792	780	780	803	833	848	838	844	790	778	774	766	786			
Oct.	1289	1319	1204	1197	1156	1157	1131	1110	1121	1113	1134	1122	1118	1091	1000	1006			
Nov.	1875	1698	1495	1422	1420	1401	1440	1465	1578	1488	1419	1385	1408	1375	1285	1250			
Dec.	891	879	930	948	1053	1169	1175	1385	1353	1391	1382	1264	1219	1186	1141	1245			

COND FEET SHOWING AVERAGE DAILY FLOW OF BOISE RIVER
A 28 YEAR PERIOD, 1895 TO 1922, Inc.; AVERAGE
DAILY FLOW OF 4 HIGHEST YEARS; AVERAGE
DAILY FLOW OF 4 LOWEST YEARS.

DAY

	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
	1118	1008	1088	1055	1139	1266	1327	1280	1330	1393	1425	1502	1448	1356	1274	1344	1377	1326
	1558	1590	1695	1665	1800	2328	2635	2530	2540	2662	3032	3202	3088	2688	2345	2148	2185	1922
	832	830	806	780	798	790	838	835	915	980	850	822	852	825	740	730	818	812
	1322	1301	1286	1297	1256	1243	1356	1434	1396	1397	1387	1367	1429	1443	1513	1477	1461	1596
	1980	1772	1795	1878	1740	1798	1898	2235	2115	2040	2010	1952	1835	1860	1885	1942	2020	2215
	1230	1190	1189	1160	1090	1070	1270	1318	1380	1351	1292	1250	1258	1264	1619	1523	1464	1414
	2205	2246	2309	2309	2306	2396	2493	2557	2816	3209	3324	3407	3475	3537	3434	3514	3522	3563
	2340	2308	2305	2275	2255	2360	2360	2572	3320	4470	4650	4910	4658	4408	4520	4960	5050	5730
	1569	1678	1644	1589	1444	1452	1361	1307	1578	1622	1607	1659	1693	1708	1745	1700	1742	1739
	5596	6109	6233	6215	6585	7149	7363	7262	7344	7332	6655	6714	7011	7206	7462	7616	8576	7929
	2522	7420	8075	9175	10512	9975	10322	9545	9082	8205	7620	7525	8062	9185	9778	9835	10075	9225
	2642	2555	2682	3151	3492	3558	4021	4353	4656	4657	4855	4915	4586	4387	4192	4213	4546	4786
	9267	8981	8761	8685	8760	8915	8961	8841	8629	8652	8455	8221	8331	8463	8588	8791	8969	8804
	11802	11222	9878	9485	8855	8200	8498	8492	8558	8470	8545	8300	8778	9402	10425	10575	11175	11285
	4530	4578	4631	5267	5329	5123	5137	5191	5307	5321	5150	4991	4701	4824	4523	4444	4578	5087
	9295	8457	8174	8934	8802	8235	8587	8519	8375	8241	7254	7167	7057	6654	5225	5984	5808	6049
	14075	13400	13588	14312	15970	15832	15952	16285	16465	16358	15868	14662	12792	11238	10572	10168	10218	13125
	5231	5210	5089	5065	4552	4615	4266	4233	4060	3930	3723	3970	3707	3690	3627	3557	3298	3112
	3466	3271	3179	3017	2877	2744	2575	2403	2265	2212	2041	1976	1865	1820	1723	1782	1687	1604
	6762	6445	6292	5970	5440	5035	4650	4250	3972	3542	3492	3455	2932	2985	2918	2658	2545	2558
	2005	1869	1883	1782	1734	1632	1518	1462	1396	1350	1298	1233	1157	1078	1037	1060	952	925
	1079	1061	1054	1013	999	989	970	965	940	937	917	911	884	892	873	862	865	894
	1630	1570	1500	1418	1358	1338	1320	1345	1232	1202	1215	1310	1200	1225	1205	1188	1158	1120
	702	786	740	743	738	717	713	656	645	689	678	675	661	687	622	684	618	612
	817	846	841	846	854	825	874	865	863	855	804	843	829	844	853	860	841	846
	1022	1057	1030	1015	1000	1020	1018	972	944	942	949	925	905	930	960	975	984	939
	648	653	639	649	657	658	678	641	628	614	605	608	605	658	627	652	633	699
	921	900	928	932	936	972	921	941	963	944	976	1006	971	985	970	961	951	952
	969	960	950	966	1005	986	976	981	1058	1172	1230	1305	1228	1188	1158	1125	1045	1065
	733	758	732	739	769	746	754	757	753	743	735	746	756	784	812	818	825	836
	984	1005	1007	986	1039	1030	1150	1027	1077	1069	1182	1233	1246	1269	1520	1496	1258	1169
	1121	1191	1198	1208	1165	1135	1138	1150	1178	1260	1815	1856	2150	4645	4089	3220	2745	2315
	818	844	720	779	774	766	786	810	894	878	886	867	862	831	846	845	838	850
	1113	1134	1122	1118	1091	1000	1006	1023	1055	1153	1142	1130	1125	1125	1252	1244	1173	1268
	1468	1419	1385	1408	1375	1285	1258	1342	1325	1375	1346	1360	1422	1395	1428	1400	1390	1390
	1391	1382	1264	1319	1186	1141	1245	1261	1328	1348	1352	1402	1386	1362	1347	1351	1405	1378

CHART 4.

Y FLOW OF BOISE RIVER
nc.; AVERAGE
AVERAGE
ARS.

18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
1330	1393	1425	1502	1446	1356	1274	1244	1222	1326	1397	1244	1205	1252	1266
2540	2662	3032	3202	3088	2685	2345	2148	2145	1922	1795	1665	1610	1588	2007
915	940	850	822	802	826	740	730	718	812	792	791	796	868	830
1396	1397	1387	1367	1429	1043	1513	1477	1461	1596	1634	1132			1341
2115	2040	2010	1952	1875	1860	1585	1942	2030	2215	2360				1830
1380	1351	1292	1250	1258	1264	1619	1523	1464	1414	1466				1245
2816	3209	3324	3407	3475	3537	3434	3514	3523	3563	3654	3692	3707	3837	2760
3320	4470	4650	4910	4655	4508	4520	4960	5050	5230	5485	5398	4785	4760	3928
1578	1622	1607	1659	1693	1708	1745	1700	1742	1739	1695	1917	1965	1229	1594
7314	7332	6655	6714	7011	7206	7462	7616	8026	7929	7719	7355	7192		6269
9081	8205	7670	7575	8062	9185	9778	9435	10075	9275	8760	8310	7695		7750
4656	4657	4856	4915	4516	4387	4191	4313	4526	4786	4826	4291	4816		3513
8729	8652	8458	8221	8301	8463	8588	8231	8969	8904	8923	8902	9089	9335	8550
9553	9470	8595	8300	8778	9902	10425	10375	11134	11295	12550	12250	11935	11960	9838
5302	5311	5150	4992	4701	4824	4923	4966	4598	5087	5294	4702	5294	5662	3263
8375	8241	7254	7562	7057	6654	8225	5984	5868	6099	6501	6329	6928		7928
16965	16358	15868	14662	12793	11338	10572	10168	10318	8346	9288	8725	9430		9404
4060	3930	3723	3970	3707	3690	3627	3552	3398	3112	3894	3701	3635		3234
2265	2212	2041	1926	1861	1826	1773	1782	1677	1604	1556	1581	1476	1423	2809
3972	3842	3492	3255	2934	1995	2918	2588	2545	2548	2495	2446	2326	2210	5252
1396	1350	1298	1243	1157	1078	1037	1060	952	926	944	983	923	853	1640
946	937	917	911	884	892	873	862	865	844	841	831	852	831	1023
1337	1302	1315	1310	1300	1325	1345	1178	1158	1120	1084	1082	1080	1092	1341
695	689	671	675	661	687	622	684	615	612	607	590	607	589	711
863	855	864	843	829	844	853	860	841	846	839	845	858		1052
944	942	945	935	909	930	960	935	944	929	937	969	994		1034
628	614	608	608	605	644	627	652	633	699	682	693	697		644
963	944	926	1086	971	980	970	961	853	852	961	908	952	963	935
1658	1773	1830	1865	1838	1884	1858	1835	1845	1866	1891	1101	1080	1115	1092
758	793	735	799	750	784	813	818	815	830	808	799	791	780	943
1077	1069	1182	1263	1296	1258	1580	1596	1284	1109	1117	1112	1138		1122
1178	1260	1215	1382	1350	1405	1089	1220	1315	1325	1030	1033	1068		1202
884	879	881	867	863	841	845	865	838	856	784	808	838		838
1055	1153	1144	1130	1125	1125	1258	1284	1173	1265	1131	1133	1178	1270	1166
1335	1295	1346	1360	1323	1378	1358	1390	1390	1330	1184	1335	1370	1491	1343
1328	1348	1382	1402	1384	1367	1387	1361	1295	1274	1268	1243	1268	1291	1346

Irrig. Engr.

CHART 4.

...Y FLOW OF BOISE RIVER
...INC.; AVERAGE
...AVERAGE
...ARS.

18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
1330	1393	M25	1502	1446	1356	1274	1249	1277	1326	1397	1244	1205	1252	1266
2540	2662	3032	3202	3088	2658	2345	2148	2145	1923	1795	1665	1610	1589	2007
915	960	850	822	852	826	740	730	818	811	792	791	795	868	830
1396	1392	1387	1367	1426	1453	1519	1477	1461	1596	1644	1132			1341
2115	2040	2010	1952	1875	1860	1855	1942	2030	2215	2368				1830
1380	1351	1292	1350	1258	1344	1619	1529	1464	1414	1466				1245
3816	3209	3324	3407	3426	3537	3438	3514	3522	3563	3654	3692	3897	3937	2760
3320	4470	4650	4910	4658	4408	4520	4960	5050	5230	5485	5398	5235	5260	3938
1578	1622	1607	1659	1693	1708	1745	1760	1742	1739	1695	1912	1965	1729	1504
7314	7332	8655	6714	7011	7706	7462	7636	8576	7929	7258	7385	7592		6269
9082	8205	7670	7575	8662	9185	9775	9835	10025	9275	8760	8310	7640		7380
4656	4657	4855	4915	4536	4387	4192	4213	4586	4786	4836	4791	4826		3513
8179	8652	8458	8221	8331	8463	8588	8791	8969	8864	8921	8902	9089	9185	8550
8558	8970	8595	8300	8778	9802	10425	10575	11134	11295	12560	12280	13935	15960	9578
5307	5341	5150	4992	4701	4824	4823	4995	4558	5087	5295	6102	5794	5862	5263
8395	8241	7254	7562	7057	6657	6325	5984	5868	6098	6501	6329	5078		7928
16465	16358	15568	14662	12792	11338	10572	10168	10118	11126	9288	9235	9430		11404
4060	3930	3723	3970	3707	3690	3627	3509	3298	3112	3854	3701	3635		3734
2265	2213	2041	1976	1865	1830	1733	1732	1687	1604	1558	1581	1476	1523	2809
3972	3542	3492	3455	2932	2985	2918	2558	2545	2548	2451	2484	2326	2330	3452
1396	1350	1298	1233	1157	1078	1037	1060	952	925	944	941	937	937	1240
940	937	917	911	884	892	873	862	865	894	891	851	857	831	1023
1232	1202	1215	1240	1206	1225	1208	1178	1158	1120	1084	1082	1080	1072	1441
695	689	678	675	661	677	622	688	648	642	607	580	607	589	711
863	855	864	843	829	844	858	860	841	846	839	845	858		852
944	942	949	925	907	930	966	976	984	929	904	969	994		1019
628	614	608	608	685	688	627	651	638	689	682	693	697		644
963	944	976	1006	977	985	970	961	955	927	961	959	952	948	935
1258	1223	1230	1365	1245	1184	1153	1125	1045	1065	1091	1101	1066	1115	1092
753	723	735	734	760	784	812	818	865	830	808	799	781	786	763
1677	1669	1782	1983	1944	1868	1580	1576	1788	1109	1117	1112	1138		1332
1175	1260	1816	1855	1850	4045	3089	3320	3715	3316	3020	2733	2764		2302
804	828	884	967	861	801	846	868	838	861	784	808	853		832
1055	1053	1144	1230	1226	1231	1253	1246	1221	1268	1232	1283	1278	1279	1166
1326	1295	1396	1360	1233	1295	1288	1290	1296	1316	1282	1335	1320	1341	1306
1328	1276	1351	1363	1396	1367	1387	1351	1206	1278	1283	1413	1368	1371	1346

...Engineer
...Engr.

DISCHARGE, IN S

BY DAYS DURIN

No.	Name of Canal	1	2	3	4	5	6	7	8	9	10
1	U.S.R.S.	600	765	787	924	924	1000	957	1025	1106	1132
2	New York Stock	277	277	277	277	277	277	277	277	277	277
3	Penitentiary	0	0	0	0	0	0	0	0	0	0
4	Ridenbaugh	0	0	0	0	0	0	0	0	0	0
5	Bubb	0	0	0	0	0	0	0	0	0	0
6	Cruzen	30	38	38	38	52	52	52	52	60	60
7	Boise City No. 1.	0	0	0	0	0	0	0	0	0	0
8	Settlers	0	0	0	0	0	0	0	0	0	0
9	Thurman Mill	0	0	0	0	0	0	0	0	0	0
10	Farmers Union B.V.	0	0	0	0	0	0	0	0	0	0
11	Little Union	0	0	0	0	0	0	0	0	0	0
12	Dry Creek	0	0	0	0	0	0	0	0	0	0
13	Ballantine	0	0	0	0	0	0	0	0	0	0
14	T Eagle Island Canals	0	0	0	0	0	0	0	0	0	0
15	Middleton Water Co.	40	42	42	43	43	43	43	45	45	45
16	Middleton Mill Ditch	19	19	19	18	18	18	18	18	18	18
17	Phyllis	0	0	0	0	0	0	0	0	0	0
18	Eureka No. 1.	0	0	0	0	0	0	0	0	0	0
19	Pioneer	0	0	0	0	0	0	0	0	0	0
20	Canyon County	20	20	20	20	20	20	20	20	20	20
21	Caldwell High Line	0	0	0	0	0	0	0	0	0	0
22	Farmers Cooperative	0	0	0	0	0	0	0	0	0	0
23	Canyon	0	0	0	0	0	0	0	0	0	0
24	Seibenberg	0	0	0	0	0	0	0	0	0	0
25	Riverside No. 2	0	0	0	0	0	0	0	0	0	0
26	Pioneer Dixie	0	0	0	0	0	0	0	0	0	0
27	Eureka No. 2	0	0	0	0	0	0	0	0	0	0
28	Upper Center Point	0	0	0	0	0	0	0	0	0	0
29	Lower Center Point	0	0	0	0	0	0	0	0	0	0
30	Boise River at Notus	1700	1700	1780	2240	2240	2440	2440	2650	2140	20
31	Miscellaneous	0	0	0	0	0	0	0	0	0	0
	Total	2686	2861	2963	3560	3574	3850	3807	4176	3692	36

April May June

Plotted by ..... Checked by ..... Date .....

DISCHARGE, IN SECOND FEET, OF BOISE VALLEY CAN

BY DAYS DURING THE IRRIGATION SEASON OF 1922. INCLUDING STORA

APRIL.

5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
924	1000	957	1025	1106	1132	1211	1150	1159	1176	1141	1176	1185	1185	1194	1202	1202	1203
277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	111	90
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	52	52	52	60	60	48	48	46	46	46	50	50	55	55	55	61	61
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23	23	26
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	43	43	45	45	45	45	51	51	51	56	60	66	66	66	66	72	73
18	18	18	18	18	18	17	17	17	17	17	16	16	16	16	16	15	15
0	0	0	0	0	0	0	0	0	0	98	98	125	125	172	172	188	200
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	20	20	20	20	20	21	21	21	21	21	21	21	21	21	21	22	22
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	35	35
0	0	0	0	0	0	0	0	22	35	21	19	22	30	37	34	31	31
0	0	0	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	3	3	3	3	3	3	3	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2240	2440	2440	[illegible]	2650	2140	2050	1870	1870	1870	1870	1780	1700	1700	1780	1870	2240	2650
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3574	3850	3807	[illegible]	4176	3692	3669	3434	3463	3496	3550	3500	3465	3478	3644	3846	4280	4686

May

June

July

PLATE

CHART 5.

T, OF BOISE VALLEY CANALS

N SEASON OF 1922. INCLUDING STORAGE.

RIL.

15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
1141	1176	1185	1185	1194	1202	1202	1203	753	760	745	878	838	862	846	1037	30123
277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	8310
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	72	111	90	131	120	118	126	123	129	149	169	1338
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	50	50	55	55	55	61	61	61	61	65	67	68	68	68	70	1621
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	23	23	23	26	26	26	26	29	33	65	75	80	455
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	42	61	61	61	61	61	347
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	47	47	47	47	47	47	282
56	60	66	66	66	66	72	73	73	80	85	85	91	101	101	101	1871
17	16	16	16	16	16	15	15	15	15	15	14	14	14	14	14	493
98	98	125	125	172	172	188	200	212	212	212	223	233	245	245	245	3005
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10
21	21	21	21	21	21	22	22	22	22	22	22	22	22	22	22	630
0	0	0	0	0	35	35	35	42	42	50	50	50	62	75	90	566
21	19	22	30	37	34	31	31	30	37	37	41	47	59	89	86	708
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	51
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1870	1780	1700	1700	1780	1870	2240	2650	3100	3340	3340	3850	4400	4970	5880	5880	79990
0	0	0	0	0	0	0	0	0	0	31	31	31	31	31	31	186
3550	3500	3465	3478	3644	3846	4280	4686	4745	4995	5115	5804	6338	7016	7983	8223	129,986

July August September

No.	Name of Canal	1	2	3	4	5	6	7	8	9	10	
1	U.S.R.S.	1139	1233	1323	1445	1531	1581	1641	1691	1731	1751	17
2	New York Stock	277	277	277	277	277	277	277	277	277	277	2
3	Penitentiary	0	0	0	0	0	0	10	10	10	10	
4	Aldenbaugh	185	205	223	228	252	273	294	318	338	346	3
5	Bubb	5	5	6	6	6	6	7	7	7	7	
6	Cruzen	74	74	74	70	70	70	70	74	73	75	
7	Boise City No. 1.	4	4	4	4	4	4	7	7	7	7	
8	Settlers	86	92	98	101	110	110	114	117	131	137	13
9	Thurman Mill	0	0	0	10	20	22	24	26	27	28	2
10	Farmers Union + B.V.	61	88	100	110	122	144	172	190	206	215	22
11	Little Union	12	12	12	0	0	0	12	12	12	13	1
12	Dry Creek	16	16	16	0	0	30	35	41	44	48	4
13	Ballantine	0	9	8	8	8	10	10	10	10	11	1
14	7 Eagle Island Canals	47	47	47	47	47	47	47	47	47	47	4
15	Middleton Water Co.	101	101	89	74	86	92	100	130	132	120	11
16	Middleton Mill Ditch	41	47	56	66	80	114	114	117	121	125	12
17	Phyllis	258	271	285	300	335	370	372	0	0	392	42
18	Eureka No. 1.	0	0	0	0	0	0	15	0	0	15	1
19	Pioneer	19	17	15	14	13	14	14	16	17	19	2
20	Canyon County	22	22	22	56	53	56	60	60	68	72	7
21	Caldwell High Line	100	100	100	100	100	100	100	0	100	94	10
22	Farmers Cooperative	119	112	154	157	204	194	234	244	263	0	28
23	Canyon	19	19	22	24	26	26	24	20	15	12	1
24	Seibenberg	5	5	5	6	7	12	12	12	13	14	1
25	Riverside No. 2.	0	0	0	0	78	80	174	176	180	180	18
26	Pioneer Dixie	0	0	0	0	0	0	0	0	0	0	0
27	Eureka No. 2.	0	0	14	14	14	18	22	32	32	35	35
28	Upper Center Point	0	0	0	12	12	12	12	14	14	14	14
29	Lower Center Point	0	0	0	0	0	0	0	0	0	0	0
30	Boise River at Notus	6190	6190	6830	7160	7490	8170	8520	8870	8170	8170	7490
31	Miscellaneous	31	31	31	31	31	31	31	31	31	31	31
	Total	8831	8977	9811	10320	10976	11863	12524	12549	12076	12065	11898

April May

Plotted by Checked by Date

MAY.

	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
	1531	1581	1641	1691	1731	1751	1711	1761	1781	1781	1791	1651	1771	1791	1791	1821	1831	
	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	
	0	0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
	252	273	294	318	338	346	368	393	414	417	360	395	393	411	419	424	431	
	6	6	7	7	7	7	9	9	9	9	9	9	10	10	10	12	12	
	70	70	70	74	73	75	76	76	76	76	76	76	74	72	72	70	68	
	4	4	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	
	110	110	114	117	131	137	137	144	151	165	172	175	179	175	179	179	179	
	20	22	24	26	27	28	29	29	28	28	27	26	26	26	26	26	25	
	122	144	172	190	206	215	221	221	221	227	227	227	238	243	248	248	248	
	0	0	12	12	12	13	13	13	13	13	14	14	11	11	11	12	12	
	0	30	35	41	44	48	48	52	55	55	60	67	75	75	65	60	55	
	8	10	10	10	10	11	13	13	14	14	15	16	21	19	17	15	13	
	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	
	86	92	100	130	132	120	114	112	112	120	130	130	111	111	113	111	111	
	80	114	114	117	121	125	125	125	112	100	100	100	112	114	109	108	108	
	335	370	372	0	0	392	422	428	425	425	425	425	426	448	448	367	383	
	0	0	0	15	0	0	15	15	17	40	40	40	39	40	40	40	24	
	13	14	14	14	16	17	19	22	26	29	32	35	38	36	34	32	30	
	53	56	60	60	68	72	77	81	82	83	84	84	84	84	84	85	85	
	100	100	100	0	100	94	100	5	106	106	100	100	100	0	87	87	94	
	204	194	234	244	263	0	281	293	318	308	308	325	344	360	362	365	353	
	26	26	24	20	15	12	12	12	12	12	11	10	10	10	10	10	9	
	7	12	12	12	13	14	14	13	11	9	7	4	4	4	4	5	5	
	78	80	174	176	180	180	180	180	180	186	190	192	190	190	160	130	110	
	0	0	0	0	0	0	0	0	6	8	8	15	15	15	18	20	20	
	14	18	22	32	32	35	35	35	35	35	42	50	50	50	50	49	49	
	12	12	12	14	14	14	14	14	15	15	17	19	19	19	10	10	10	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7490	8170	8520	8870	8170	8170	7490	7490	7490	7490	7160	7160	7160	6830	6830	7160	7830	7490
	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	10976	11863	12524	12549	12076	12065	11898	11914	12107	12126	11781	11721	11871	11515	11568	11817	12468	12432

May June July

PLATE

CHART 5A

MAY.

15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
1791	1651	1771	1791	1791	1821	1831	1841	1861	1861	1861	1841	1852	1831	1861	1871	1811	53058
277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	8587
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	250
360	395	393	411	419	424	431	437	440	439	437	437	435	436	435	440	439	11462
9	9	10	10	10	12	12	12	9	9	9	9	8	8	8	9	10	261
76	76	74	72	72	70	68	66	66	66	64	62	62	60	60	60	59	2161
8	8	8	8	8	8	8	7	7	7	7	7	7	6	6	6	6	202
172	175	179	175	179	179	179	183	186	183	186	183	179	183	183	183	183	4763
27	26	26	26	26	26	25	25	25	25	25	24	24	24	23	23	22	493
227	227	238	243	248	248	248	248	248	248	238	238	238	238	238	238	243	6392
14	14	11	11	11	12	12	13	14	14	14	11	11	9	8	7	7	330
60	67	75	75	65	60	55	50	48	49	50	50	51	52	50	43	43	1399
15	16	21	19	17	15	13	11	9	9	9	9	10	10	10	10	10	351
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	1457
130	130	111	111	113	111	111	111	91	113	112	111	111	97	81	72	94	3293
100	100	112	114	109	108	108	108	108	108	108	108	101	97	95	95	101	3123
425	425	426	448	448	367	383	383	441	441	444	264	411	425	419	450	450	11333
40	40	39	40	40	40	24	24	24	24	21	21	14	0	26	28	28	615
35	38	36	34	32	30	30	28	27	27	27	27	28	30	30	30	31	787
84	84	84	84	84	85	85	86	86	86	87	87	88	89	91	92	92	2288
100	100	100	0	87	87	94	94	94	94	100	94	100	100	82	94	100	2731
308	325	344	360	362	365	353	350	358	354	354	352	351	333	333	353	362	8798
11	10	10	10	10	10	9	9	8	8	8	8	8	8	8	8	8	406
7	4	4	4	4	5	5	5	6	6	6	7	7	8	8	8	10	242
190	192	190	190	160	130	110	110	109	110	130	0	0	0	0	0	0	3215
8	15	15	15	18	20	20	20	6	6	0	0	0	0	0	0	0	157
42	50	50	50	50	49	49	49	48	48	48	48	48	48	48	48	48	1142
17	19	19	19	10	10	10	7	5	5	5	8	12	14	16	16	16	356
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7160	7160	7160	6830	6830	7160	7830	7490	7490	7490	7830	12300	11900	9970	8170	7160	7160	242810
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	961
11781	11721	11871	11515	11568	11817	12468	12132	12179	12195	12545	16671	16421	14441	12654	11709	11698	373423

July August September

PLATE ....

CHART 5A.

18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
91	1791	1821	1831	1841	1861	1861	1861	1841	1852	1831	1861	1871	1811	53058
77	277	277	277	277	277	277	277	277	277	277	277	277	277	8587
10	10	10	10	10	10	10	10	10	10	10	10	10	10	250
11	419	424	431	437	440	439	437	437	435	436	435	440	439	11462
10	10	12	12	12	9	9	9	9	8	8	8	9	10	261
72	72	70	68	66	66	66	64	62	62	60	60	60	59	2161
8	8	8	8	7	7	7	7	7	7	6	6	6	6	202
75	179	179	179	183	186	183	186	183	179	183	183	183	183	4763
26	26	26	25	25	25	25	25	24	24	24	23	23	22	493
43	248	248	248	248	248	248	238	238	238	238	238	238	243	6392
11	11	12	12	13	14	14	14	11	11	9	8	7	7	330
75	65	60	55	50	48	49	50	50	51	52	50	43	43	1395
19	17	15	13	11	9	9	9	9	10	10	10	10	10	351
47	47	47	47	47	47	47	47	47	47	47	47	47	47	1457
11	113	111	111	111	91	113	112	111	111	97	81	72	94	3293
14	109	108	108	108	108	108	108	108	101	97	95	95	101	3123
48	448	367	383	383	441	441	444	264	411	425	419	450	450	11333
40	40	40	24	24	24	24	21	21	14	0	26	28	28	615
34	32	30	30	28	27	27	27	27	28	30	30	30	31	787
84	84	85	85	86	86	86	87	87	88	89	91	92	92	2288
0	87	87	94	94	94	94	100	94	100	100	82	94	100	2731
60	362	365	353	350	358	354	354	352	351	333	333	353	362	8798
10	10	10	9	9	8	8	8	8	8	8	8	8	8	406
4	4	5	5	5	6	6	6	7	7	8	8	8	10	242
90	160	130	110	110	109	110	130	0	0	0	0	0	0	3215
15	18	20	20	20	6	6	0	0	0	0	0	0	0	157
50	50	49	49	49	48	48	48	48	48	48	48	48	48	1142
19	10	10	10	7	5	5	5	8	12	14	16	16	16	356
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	6830	7160	7830	7490	7490	7490	7830	12300	11900	9970	8170	7160	7160	242810
31	31	31	31	31	31	31	31	31	31	31	31	31	31	961
15	11568	11817	12468	12132	12179	12195	12545	16671	16421	14441	12654	11709	11698	373423

August

September

No.	Name of Canal	1	2	3	4	5	6	7	8	9	10	11
1	U.S.R.S.	1841	1893	1841	1861	1893	1857	1847	1847	1847	1867	1847
2	New York Stock	277	277	277	277	277	277	277	277	277	277	277
3	Penitentiary	10	10	10	10	10	10	10	10	10	10	10
4	Aldenbaugh	445	445	447	450	451	451	455	456	472	472	481
5	Bubb	10	10	10	12	12	12	12	16	16	16	16
6	Cruzen	59	59	60	60	60	62	62	60	60	60	62
7	Boise City No.1	7	7	7	7	7	7	7	7	9	9	9
8	Settlers	183	183	183	186	186	193	193	186	186	190	190
9	Thurman Mill	24	24	28	27	29	30	33	36	36	36	38
10	Farmers Union+B.V.	248	248	248	248	33	243	248	248	248	248	248
11	Little Union	8	9	9	10	11	12	7	1	1	9	9
12	Dry Creek	90	90	90	76	82	82	93	93	93	90	90
13	Ballantine	10	11	12	12	13	14	14	13	13	13	13
14	7 Eagle Island Canals	47	47	47	47	47	47	47	47	47	47	47
15	Middleton Water Co.	117	121	121	121	121	142	142	152	142	120	120
16	Middleton Mill Ditch	108	108	114	114	114	111	115	114	114	110	107
17	Phyllis	480	480	480	480	480	480	502	502	480	480	460
18	Eureka No.1	28	28	28	28	28	28	28	28	28	28	28
19	Pioneer	32	32	32	32	33	33	29	24	24	24	25
20	Canyon County	92	92	93	94	95	96	97	98	98	98	98
21	Caldwell High Line	100	100	100	106	106	112	112	112	112	106	106
22	Farmers Cooperative	360	379	393	386	390	393	393	393	392	374	369
23	Canyon	9	9	12	20	20	20	20	12	12	12	12
24	Seiberberg	10	11	12	12	14	16	16	14	14	14	16
25	Riverside No.2	0	0	106	106	108	104	138	174	176	180	180
26.	Pioneer Dixie	22	20	20	20	20	15	18	20	20	20	20
27	Eureka No.2	49	49	49	50	50	50	52	55	55	55	55
28	Upper Center Point	16	16	16	16	16	17	17	18	18	18	12
29	Lower Center Point	0	0	0	0	0	0	0	0	0	0	0
30	Boise River at Notus	6830	6830	7160	7830	8870	9600	11100	10700	9470	9230	7830
31	Miscellaneous	31	31	31	31	31	31	31	31	31	31	31
	Total	11543	11619	12036	12729	13607	14545	16115	15744	15001	14238	12806

April May June

Plotted by ..... Checked by ..... Date .....

JUNE

5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1893	1857	1847	1847	1847	1867	1847	1816	1867	1816	1862	1821	1852	1821	1847	1821	1873	1847
277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
451	451	455	456	472	472	481	482	385	422	445	436	451	456	453	455	456	451
12	12	12	16	16	16	16	16	14	14	14	14	14	13	12	12	12	12
60	62	62	60	60	60	62	62	62	64	65	65	67	67	68	68	66	66
7	7	7	7	9	9	9	9	9	9	9	6	6	6	6	6	6	6
186	193	193	186	186	190	190	190	190	190	186	190	190	190	190	193	193	193
29	30	33	36	36	36	38	38	36	36	32	32	30	28	26	27	27	29
33	243	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248
11	12	7	1	1	3	9	12	12	12	12	13	13	14	15	15	15	15
82	82	93	93	93	90	90	90	90	102	100	88	77	77	77	73	73	72
13	14	14	13	13	13	13	14	14	14	16	16	15	15	14	10	10	10
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
121	142	142	152	142	120	120	120	120	100	81	81	81	69	57	90	90	103
114	111	115	114	114	110	107	107	107	107	114	111	108	108	107	105	107	108
480	480	502	502	480	480	460	464	470	417	397	401	383	383	380	398	410	410
28	28	28	28	28	28	28	24	28	28	28	24	24	24	27	27	27	27
33	33	29	24	24	24	25	25	25	24	24	23	23	22	21	23	23	25
95	96	97	98	98	98	98	98	98	96	96	93	93	93	90	97	99	99
106	112	112	112	112	106	106	100	194	87	24	19	15	15	15	15	79	85
390	393	393	393	392	374	369	360	353	348	318	295	278	260	268	276	308	330
20	20	20	12	12	12	12	11	11	11	11	11	10	10	10	10	10	10
14	16	16	14	14	14	16	17	17	17	16	16	12	10	11	9	8	8
108	104	138	174	176	180	180	180	180	185	185	185	190	195	199	168	138	140
20	15	18	20	20	20	20	22	22	22	23	23	23	19	17	13	9	9
50	50	52	55	55	55	55	58	58	55	55	55	48	48	41	42	43	43
16	17	17	18	18	18	12	12	12	12	12	12	9	9	6	7	8	8
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8870	9600	11100	10700	9970	9230	7830	6190	6830	9230	11500	11500	9600	8520	8520	8170	8170	7830
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
13607	14543	16115	15744	15001	14238	12806	11130	11817	14031	16238	16143	14225	13085	13080	12743	12873	12540

May June July

PLATE

CHART 5B.

15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
1862	1821	1852	1821	1847	1821	1873	1847	1847	1867	1888	1888	1888	1878	1878	1857	55675
277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	8310
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	300
445	436	451	456	453	455	456	451	461	0	294	442	442	452	461	459	12928
14	14	14	13	12	12	12	12	12	12	12	12	12	12	14	14	389
65	65	67	67	68	68	66	66	64	62	60	60	60	60	60	60	1870
9	6	6	6	6	6	6	6	5	5	5	5	5	6	6	6	204
186	190	190	190	190	193	193	193	193	193	193	193	193	193	186	186	5684
32	32	30	28	26	27	27	29	29	29	32	35	37	37	37	37	955
248	248	248	248	248	248	248	248	248	248	248	248	248	248	254	254	7232
12	13	13	14	15	15	15	15	15	15	15	14	14	14	14	14	343
100	88	77	77	77	73	73	72	73	73	73	92	100	79	82	77	2537
16	16	15	15	14	10	10	10	12	12	12	13	14	14	15	16	394
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	1410
81	81	81	69	57	90	90	103	116	110	110	112	115	113	112	113	3312
114	111	108	108	107	105	107	108	114	101	101	101	114	108	107	114	3278
397	401	383	383	380	398	410	410	418	413	488	498	488	506	506	492	13626
28	24	24	24	27	27	27	27	27	42	42	42	42	24	24	38	877
24	23	23	22	21	23	23	25	25	28	30	32	33	33	33	33	825
96	93	93	93	90	97	99	99	99	100	100	101	102	102	102	102	2911
24	19	15	15	15	15	79	85	106	89	75	68	75	85	80	62	2460
318	295	278	260	258	276	308	330	362	375	382	385	390	393	392	390	10675
11	11	10	10	10	10	10	10	12	15	15	15	16	16	16	16	394
16	16	12	10	11	9	8	8	8	8	8	8	7	9	10	12	360
185	185	190	195	199	168	138	140	140	0	0	0	226	226	222	222	4253
23	23	23	19	17	13	9	9	9	11	12	14	15	15	15	20	528
55	55	48	48	41	42	43	43	43	43	43	44	44	44	44	48	1468
12	12	9	9	6	7	8	8	8	8	7	7	5	5	0	5	332
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15500	15500	9600	8520	8520	8170	8170	7830	7490	4110	3330	2640	2430	2430	1860	1530	217830
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	930
16238	16143	14225	13085	13080	12743	12873	12549	12301	8334	7940	7434	7480	7467	6895	6542	362,290

July | August | September

No.	Name of Canal	1	2	3	4	5	6	7	8	9	10	11	12
1	U.S.R.S.	1846	1888	1867	1878	1867	1909	1909	1919	1898	1919	1909	1909
2	New York Stock	277	277	277	277	277	277	277	277	277	277	277	277
3	Penitentiary	10	10	10	10	10	10	10	10	10	10	10	10
4	Ridenbaugh	460	453	430	453	459	458	464	460	462	462	462	465
5	Bubb	16	16	16	15	15	17	17	17	18	19	19	18
6	Cruzen	60	61	61	61	61	61	63	63	60	63	63	63
7	Boise City No.1	6	6	8	8	8	8	8	8	7	7	7	7
8	Settlers	176	151	176	165	151	151	186	183	183	183	183	183
9	Thurman Mill	36	36	36	36	36	36	36	36	36	36	36	35
10	Farmers Union + B.V.	254	232	254	232	232	254	221	221	221	221	221	221
11	Little Union	15	15	15	15	15	15	15	15	15	14	14	14
12	Dry Creek	23	27	30	52	54	56	58	86	100	79	79	90
13	Ballantine	16	17	17	17	17	17	18	18	18	18	18	17
14	7 Eagle Island Canals	47	47	47	47	47	47	47	47	47	47	47	47
15	Middleton Water Co.	116	103	90	90	90	121	109	145	121	109	112	116
16	Middleton Mill Ditch	107	104	101	101	101	101	96	96	102	107	84	102
17	Phyllis	492	470	369	315	353	379	499	499	499	499	499	497
18	Eureka No.1.	38	38	38	35	35	28	31	31	31	31	31	33
19	Pioneer	32	32	30	29	29	28	27	23	19	15	12	9
20	Canyon County	100	95	92	90	86	91	96	94	92	90	95	100
21	Caldwell High Line	39	29	29	62	36	60	63	82	20	87	88	88
22	Farmers Cooperative	389	372	360	333	311	288	311	246	238	220	209	212
23	Canyon	12	12	8	8	9	9	10	10	10	9	8	8
24	Seiberberg	14	17	17	17	11	9	9	10	10	10	9	5
25	Riverside No.2	220	220	219	210	213	199	205	198	220	214	213	213
26	Pioneer Dixie	28	30	32	32	33	17	9	9	7	40	36	36
27	Eureka No. 2.	48	32	16	16	22	33	43	42	52	46	62	62
28	Upper Center Point	0	0	0	8	8	8	11	9	12	11	11	18
29	Lower Center Point	0	0	0	0	5	12	15	20	22	23	18	18
30	Boise River at Natus	1110	880	618	410	340	140	65	36	53	50	24	24
31	Miscellaneous	31	31	31	31	31	31	31	31	31	31	31	31
	Total	6018	5701	5294	5053	4962	4870	4959	4941	4891	4947	4887	4928

April May June

Plotted by ..... Checked by ..... Date .....

JULY

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
1909	1909	1919	1898	1919	1909	1909	1919	1919	1940	1919	1919	1909	1983	1935	1914	1993	2
277	277	277	277	277	277	277	277	277	277	277	277	277	219	277	277	219	
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
458	464	460	462	462	462	465	470	469	462	471	458	468	467	452	455	462	4
17	17	17	18	19	19	18	18	17	17	16	16	16	15	15	14	14	
61	63	63	60	63	63	63	63	65	65	65	64	64	63	63	63	65	
8	8	8	7	7	7	7	7	7	9	9	9	9	9	6	6	6	
151	186	183	183	183	183	183	183	183	183	183	180	177	180	180	180	180	1
36	36	36	36	36	36	35	33	33	30	30	28	26	26	26	25	25	
254	221	221	221	221	221	221	221	221	221	221	221	221	221	221	221	221	2
15	15	15	15	14	14	14	15	15	16	16	16	17	17	17	17	17	
56	58	86	100	79	79	90	88	67	65	63	63	63	62	61	59	58	
17	18	18	18	18	18	17	16	15	15	13	13	12	11	11	12	12	
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	
121	109	145	121	109	112	116	112	95	98	109	116	98	98	98	98	98	
101	96	96	102	107	84	102	119	104	80	77	74	112	87	87	80	80	
379	499	499	499	499	499	497	327	327	506	505	504	504	503	0	0	972	9
28	31	31	31	31	31	33	23	23	24	25	26	26	27	0	0	36	
28	27	23	19	15	12	9	9	9	10	15	19	26	32	30	30	28	
91	96	94	92	90	95	100	93	82	71	63	85	80	76	77	78	80	
60	63	82	20	87	88	88	95	102	29	75	87	45	45	45	87	51	
288	311	246	238	220	209	212	228	282	246	200	223	225	230	316	372	388	24
9	10	10	10	9	8	8	10	10	10	9	9	9	9	10	10	10	
9	9	10	10	10	9	5	8	9	9	8	8	8	11	18	17	17	
199	205	198	220	214	213	213	204	212	186	189	192	180	173	167	156	150	16
17	9	9	7	40	36	36	37	6	16	21	24	24	24	24	20	19	2
33	43	42	52	46	62	62	63	70	62	62	63	58	59	60	63	63	5
8	11	9	12	11	11	18	18	10	22	15	16	16	16	16	16	10	
12	15	20	22	23	18	18	17	8	18	17	16	6	9	12	8	13	
140	65	36	53	50	24	24	28	81	28	24	42	36	27	490	410	386	8
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	3
4870	4959	4941	4891	4947	4887	4928	4789	4806	4803	4785	4856	4800	4787	4797	4776	5261	48

May

June

July

PLATE.

CHART 5C.

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
1919	1919	1909	1983	1935	1914	1993	2048	2038	2058	2048	2081	2071	2081	2081	2071	60645
277	277	277	219	277	277	219	164	164	164	164	131	131	131	131	131	7289
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	310
471	458	468	467	452	455	462	458	468	460	452	436	407	398	389	392	13982
16	16	16	15	15	14	14	13	12	13	14	14	14	14	15	15	486
65	64	64	63	63	63	65	65	65	67	67	67	67	67	68	68	1981
9	9	9	9	6	6	6	8	8	8	8	8	8	8	8	8	237
183	180	177	180	180	180	180	180	180	180	130	130	130	130	130	130	5200
30	28	26	26	26	25	25	25	24	23	23	23	23	23	23	23	923
221	221	221	221	221	221	221	221	190	190	190	190	190	190	190	190	6735
16	16	17	17	17	17	17	16	16	16	15	15	12	12	12	12	466
63	63	63	62	61	59	58	58	58	59	60	60	58	57	55	57	1905
13	13	12	11	11	12	12	15	17	18	18	18	18	17	17	17	493
47	47	47	47	47	47	47	47	35	35	35	35	35	35	35	35	1361
109	116	98	98	98	98	98	98	108	107	107	107	80	80	85	91	3205
77	74	112	87	87	80	80	80	80	67	67	80	61	54	57	61	2709
505	504	504	503	0	0	472	451	453	453	453	453	462	289	399	399	12830
25	26	26	27	0	0	36	37	35	35	35	35	26	26	26	26	891
15	19	26	32	30	30	28	27	23	21	20	20	19	18	17	16	674
63	85	80	76	77	78	80	82	83	83	80	76	76	72	70	70	2598
75	87	45	45	45	87	51	51	62	52	51	39	62	39	28	24	1752
200	233	225	230	316	372	388	246	255	239	234	233	244	242	217	217	8326
9	9	9	9	10	10	10	9	7	7	7	7	11	15	18	20	310
8	8	8	11	17	17	17	15	11	10	8	7	5	3	3	11	319
187	192	180	173	167	156	150	164	178	162	147	156	158	160	161	162	5801
21	24	24	24	24	20	19	22	25	20	15	12	11	10	12	15	666
62	63	58	59	60	63	63	58	52	54	55	48	51	55	53	51	1574
15	16	16	16	16	16	10	12	14	14	15	12	16	16	16	16	382
17	16	6	9	12	8	13	15	15	15	18	19	16	14	12	10	391
24	42	36	27	490	410	386	86	54	64	78	68	39	36	36	37	3800
31	31	31	31	31	31	31	31	23	23	23	23	23	23	23	23	897
4785	4856	4800	4787	4797	4776	5261	4812	4763	4727	4647	4613	4534	4326	4397	4408	151138

July

August

September

No.	Name of Canal	1	2	3	4	5	6	7	8	9	10	11	12	
1	U.S.R.S.	2071	2060	2081	2038	1934	1894	1874	1857	1847	1847	1737	1731	
2	New York Stock	131	131	131	164	164	164	164	131	81	81	81	0	
3	Penitentiary	10	10	10	10	10	10	10	10	10	10	10	10	
4	Aldenbaugh	397	395	392	371	386	405	395	390	351	380	362	374	
5	Bubb	16	16	17	17	17	14	14	14	11	11	10	10	
6	Cruzen	67	67	65	65	65	65	65	65	65	64	64	64	
7	Boise City No. 1	7	7	7	7	8	8	8	4	4	4	4	4	
8	Settlers	130	130	130	135	135	135	135	121	110	113	113	113	
9	Thurman Mill	23	23	23	23	20	20	20	20	20	20	19	19	
10	Farmers Union BV	190	190	190	190	190	190	190	156	156	156	156	156	
11	Little Union	12	12	12	12	12	12	9	9	9	9	9	9	
12	Dry Creek	54	53	59	54	49	49	50	50	42	44	43	44	
13	Ballantine	17	17	16	16	16	16	16	14	14	10	10	12	
14	T Eagle Island Canals	35	35	35	35	28	28	28	28	28	28	28	28	
15	Middleton Water Co	80	80	80	80	80	70	59	65	62	60	57	62	
16	Middleton Mill Ditch	63	63	59	58	57	56	55	48	41	38	37	37	
17	Phyllis	395	395	404	353	380	380	362	362	327	277	277	277	30
18	Eureka No. 1	30	30	21	35	8	8	8	8	8	8	8	8	
19	Pioneer	16	16	15	15	15	17	17	17	17	17	16	16	
20	Canyon County	70	65	60	60	58	57	56	53	50	48	46	49	
21	Caldwell High Line	28	24	28	24	24	24	17	17	17	17	16	16	
22	Farmers Cooperative	217	217	234	303	372	347	329	325	278	244	278	217	17
23	Canyon	20	12	15	17	13	13	14	13	7	16	17	19	1
24	Seibenberg	11	11	13	15	17	16	12	10	12	9	9	9	
25	Riverside No. 2.	152	142	149	156	157	148	139	138	128	123	126	128	12
26	Pioneer Dixie	15	12	15	15	15	15	15	15	14	13	14	14	1
27	Eureka No. 2	50	49	55	67	49	47	45	44	40	32	41	51	5
28	Upper Center Point	11	14	14	14	14	14	14	14	14	8	14	12	1
29	Lower Center Point	10	11	13	18	18	18	18	18	16	17	17	17	1
30	Boise River at Notus	37	37	39	84	140	104	102	98	78	62	53	42	3
31	Miscellaneous	23	23	23	23	19	19	19	19	19	19	19	19	1
	Total	4388	4347	4405	4474	4470	4363	4259	4133	3876	3785	3691	3567	352

April May June

Plotted by Checked by Date

AUGUST.

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1874	1857	1847	1847	1737	1731	1731	1731	1684	1731	1794	1813	1903	1913	1853	1853	1883	1893
164	131	81	81	81	0	0	0	0	0	0	0	0	0	0	0	0	0
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
395	390	351	380	362	374	377	368	380	359	367	363	362	360	365	364	359	360
14	14	11	11	10	10	10	10	6	6	6	6	6	7	7	7	7	7
65	65	65	64	64	64	64	66	66	64	64	64	64	65	65	65	65	67
8	4	4	4	4	4	4	4	9	9	9	9	9	9	9	9	9	7
135	121	110	113	113	113	113	113	113	113	115	115	115	115	114	114	114	114
20	20	20	20	19	19	19	19	19	18	18	18	18	18	18	18	18	18
190	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156
9	9	9	9	9	9	9	10	10	12	12	12	12	12	12	12	6	6
50	50	42	44	43	44	44	44	39	41	40	45	48	45	45	44	44	42
16	14	14	10	10	12	14	14	16	18	18	18	18	17	17	17	17	17
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
59	65	62	60	57	62	68	75	62	50	51	52	54	55	55	68	82	85
55	48	41	38	37	37	41	43	40	40	40	40	40	40	40	40	47	47
362	362	327	277	277	277	307	304	357	359	362	362	350	350	350	350	350	350
8	8	8	8	8	8	8	11	13	11	8	8	20	20	20	20	20	20
17	17	17	17	16	16	16	16	17	17	17	17	17	17	16	16	16	16
56	53	50	48	46	49	49	53	55	57	60	63	65	69	77	85	74	65
17	17	17	17	16	16	0	4	15	36	51	34	51	51	51	48	49	49
329	325	278	244	278	217	170	170	174	179	214	190	186	190	207	210	258	269
14	13	7	16	17	19	18	16	14	12	10	14	13	15	16	17	19	19
12	10	12	9	9	9	8	6	6	6	5	7	10	10	10	6	8	7
139	138	128	123	126	128	121	114	110	107	104	128	125	128	131	136	125	125
15	15	14	13	14	14	15	16	16	15	15	15	14	14	14	17	17	15
45	44	40	32	41	51	50	46	48	45	41	42	41	45	49	49	58	58
14	14	14	8	14	12	12	12	10	9	8	10	10	10	11	10	11	11
18	18	16	17	17	17	12	6	6	5	4	5	5	6	7	8	8	12
102	98	78	62	53	42	36	35	32	35	35	36	35	28	32	32	37	35
19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
4259	4133	3876	3785	3691	3567	3529	3519	3530	3567	3681	3699	3804	3822	3804	3828	3914	3927

June July August

PLATE

CHART 5.D.

T.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
1794	1813	1903	1913	1853	1853	1883	1893	1784	1642	1480	1497	1444	1436	1427	55463
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1423
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	310
367	363	362	360	365	364	357	360	368	368	386	389	386	380	365	11624
6	6	6	6	7	7	7	7	7	7	8	8	8	10	10	10	313
64	64	64	64	65	65	65	65	67	67	67	67	68	68	68	66	2031
9	9	9	9	9	9	9	9	7	7	7	7	7	7	7	7	217
115	115	115	115	114	114	114	114	114	113	113	113	113	113	113	3660
18	18	18	18	18	18	18	18	18	18	18	18	18	18	16	573
156	156	156	156	156	156	156	156	156	156	161	161	161	161	161	161	5104
12	12	12	12	12	12	12	6	6	6	9	9	10	11	6	6	308
41	40	45	48	45	45	44	44	42	40	40	42	44	47	47	48	1420
18	18	18	18	17	17	17	17	17	17	17	16	16	16	16	13	486
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	896
50	51	52	54	55	55	68	82	85	85	80	75	75	75	75	77	2134
40	40	40	40	40	40	40	47	47	47	47	41	41	41	41	46	1414
359	362	362	350	350	350	350	350	350	350	350	368	350	350	350	350	10808
11	8	8	20	20	20	20	20	20	20	20	20	20	20	20	20	499
17	17	17	17	17	16	16	16	16	16	18	18	19	19	19	18	519
57	60	63	65	69	77	85	74	65	56	53	50	59	50	55	55	1822
36	51	34	51	51	51	48	49	49	44	38	27	18	32	38	41	929
179	214	190	186	190	207	210	258	269	215	188	154	148	143	165	204	6995
12	10	14	13	15	16	17	19	19	16	16	17	17	17	22	25	589
6	5	7	10	10	10	6	8	7	6	6	5	5	4	6	7	272
107	104	128	125	128	131	136	125	125	125	128	131	135	139	132	127	4057
15	15	15	14	14	14	17	17	15	15	19	28	30	30	31	33	541
45	41	42	41	45	49	49	58	58	51	49	46	42	38	44	47	1459
9	8	10	10	10	11	10	11	11	11	10	10	9	8	12	17	358
5	4	5	5	6	7	8	8	12	12	12	13	13	14	16	18	373
35	36	36	35	28	32	32	37	35	35	23	24	26	28	30	39	1489
19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	605
3567	3681	3699	3804	3822	3804	3828	3914	3927	3745	3564	3391	3395	3346	3375	3413	118611

July

August

September

No	Name of Canal	1	2	3	4	5	6	7	8	9	10	11	
1	U.S.R.S.	1466	1466	1285	1276	1264	1255	1276	126	1268	1352	1352	1
2	New York Stock	0	0	0	0	0	0	0	0	0	0	0	
3	Penitentiary	10	10	10	10	10	10	10	0	10	10	10	
4	Ridenbaugh	354	340	334	327	331	326	338	30	331	327	329	3
5	Bubb	10	10	10	9	9	9	8	1	11	11	10	
6	Cruzen	64	64	64	60	60	60	60	8	58	58	60	
7	Boise City No.1.	6	6	6	6	6	6	4	4	4	4	4	
8	Settlers	112	112	112	112	112	112	112	2	112	112	108	1
9	Thurman Mill	16	16	15	15	14	14	13	2	12	12	12	
10	Farmers Union-B.V.	161	161	161	161	161	161	150	1	150	137	150	1
11	Little Union	6	6	6	6	7	7	7	7	7	7	7	
12	Dry Creek	48	48	49	48	46	44	40	5	41	40	40	4
13	Ballantine	12	12	9	9	9	9	9	5	5	5	5	
14	T Eagle Island Canals	28	28	28	28	28	28	28	8	28	28	28	2
15	Middleton Water Co.	82	86	90	81	72	66	61	0	60	58	56	5
16	Middleton Mill Ditch.	45	42	42	41	39	37	36	6	35	34	33	3
17	Phyllis	350	350	350	350	318	301	230	2	230	223	213	21
18	Eureka No.1.	20	20	20	20	17	14	15	5	15	10	10	
19	Pioneer	18	17	17	16	16	16	15	5	15	12	12	1
20	Canyon County	55	55	56	48	54	51	48	9	47	46	45	4
21	Caldwell High Line	49	49	44	44	24	20	12	2	12	6	6	
22	Farmers Cooperative	207	208	220	223	236	223	218	7	217	207	214	208
23	Canyon	22	18	19	20	15	10	9	7	9	9	9	9
24	Seibenberg	7	7	8	9	6	4	4	4	12	18	18	19
25	Riverside No.2.	116	104	107	111	108	106	108	2	103	103	103	102
26	Pioneer Dixie	27	25	30	30	26	22	21	2	22	22	22	22
27	Eureka No.2	0	52	48	48	38	28	51	7	47	46	42	40
28	Upper Center Point	17	17	18	20	15	12	16	4	13	12	12	12
29	Lower Center Point	20	17	17	17	12	5	5	5	5	5	5	5
30	Boise River at Notus	78	40	66	435	386	98	47	2	50	45	42	39
31	Miscellaneous	19	19	19	19	19	19	19	3	19	19	19	19
	Total	3425	3405	3260	3599	3458	3073	2970	2	2948	2980	2976	2899

April May June

Plotted by ..... Checked by ..... Date .....

SEPTEMBER.

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1255	1276	126	1268	1352	1352	1285	1285	980	950	980	387	394	67	100	103	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	10	0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
326	338	30	331	327	329	329	329	312	326	320	316	297	312	286	290	285	285	27
9	8	1	11	11	10	10	5	5	5	5	3	3	2	1	1	1	1	
60	60	8	58	58	60	62	62	62	62	64	67	67	69	72	72	72	65	6
6	4	4	4	4	4	4	4	6	6	6	7	7	7	7	7	7	7	
112	112	2	112	112	108	108	108	105	105	105	105	88	88	66	52	71	71	7
14	13	2	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	1
161	150	1	150	137	150	150	150	150	150	150	110	110	110	110	110	94	94	9
7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	
44	40	6	41	40	40	40	40	40	40	31	31	31	31	31	30	30	30	30
9	9	5	5	5	5	5	5	5	6	6	6	6	6	6	9	9	9	8
28	28	8	28	28	28	28	28	28	28	28	28	28	28	28	14	14	14	14
66	61	0	60	58	56	55	55	47	38	38	38	38	38	42	46	52	58	64
37	36	6	35	34	33	33	32	30	27	28	30	30	32	34	37	40	44	43
301	230	0	230	223	213	214	225	215	204	204	180	164	147	148	91	148	181	181
14	15	5	15	10	10	9	8	8	8	8	8	8	8	7	7	7	7	7
16	15	5	15	12	12	12	9	9	8	8	8	8	9	10	21	28	36	35
51	48	8	47	46	45	45	45	45	44	44	44	43	42	42	42	41	40	40
20	12	2	12	6	6	6	6	12	12	6	6	6	4	5	4	4	4	4
223	218	7	217	207	214	208	194	184	183	174	170	165	174	167	167	125	130	121
10	9	9	9	9	9	9	12	16	16	16	16	16	16	16	12	9	9	9
4	4	4	12	18	18	19	19	19	18	18	18	18	18	10	6	6	6	
106	108	2	103	103	103	102	102	102	104	104	104	105	105	105	110	110	1	
22	21	2	22	22	22	22	19	17	15	15	15	15	15	15	15	15	1	
28	51	7	47	46	42	40	40	40	37	37	37	35	35	33	30	30	30	
12	16	4	13	12	12	12	11	11	10	10	10	9	9	9	7	7	7	
5	5	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0	
98	47	7	50	45	42	39	37	37	37	37	37	37	36	36	31	31	28	26
19	19	7	19	19	19	19	19	19	19	19	19	19	19	19	10	10	10	10
3073	2970	25	2948	2980	2976	2899	2883	2537	2486	2489	1828	1775	1455	1433	1352	1274	1323	1335

June July August

PLATE

CHART SE

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16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
380	387	394	67	100	103	0	0	0	0	0	0	148	160	172	21547
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	300
320	316	297	312	286	290	285	285	278	286	240	195	210	166	173	8902
5	3	3	2	1	1	1	1	1	1	1	1	1	1	1	157
64	67	67	69	72	72	72	65	65	60	54	54	49	49	55	1848
6	7	7	7	7	7	7	7	7	3	3	3	3	3	3	136
105	105	88	88	66	52	71	71	71	71	71	52	48	56	52	2721
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	379
150	110	110	110	110	110	94	94	94	94	94	61	94	94	94	3829
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	189
31	31	31	31	31	30	30	30	30	30	30	30	30	30	30	1095
6	6	6	6	6	9	9	9	8	8	8	8	9	9	9	226
28	28	28	28	28	14	14	14	14	14	14	14	14	14	14	700
38	38	38	38	42	46	52	58	64	72	63	53	43	41	40	1693
28	30	30	32	34	37	40	44	43	41	39	36	34	34	34	1078
204	180	164	147	148	91	148	181	181	181	182	182	92	92	92	6268
8	8	8	8	7	7	7	7	7	7	6	6	6	6	6	313
8	8	8	9	10	21	28	36	35	36	35	30	10	10	10	501
44	44	43	42	42	42	41	40	40	40	40	41	43	43	43	1360
6	6	6	4	5	4	4	4	4	4	4	4	5	6	12	392
174	170	165	174	167	167	125	130	121	123	127	123	123	127	148	5323
16	16	16	16	16	12	9	9	9	7	7	7	7	7	7	363
18	18	18	18	10	6	6	6	5	4	4	4	4	4	4	301
104	104	105	105	105	110	110	114	114	118	118	118	114	112	112	3264
15	15	15	15	15	15	15	15	14	14	14	14	14	14	14	560
37	37	35	35	33	30	30	30	30	28	28	28	26	26	26	1063
10	10	9	9	9	7	7	7	6	4	4	4	4	4	4	308
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128
37	37	37	36	36	31	31	28	26	28	31	28	34	35	35	1977
19	19	19	19	19	10	10	10	10	10	10	10	10	10	10	480
2489	1818	1775	1455	1433	1352	1274	1323	1305	1312	1255	1134	1203	1181	1228	67421

July | August | September

TRIBUTARY AND RETURN

No.	Name of Tributary	1	2	3	4	5	6	7	8	9	10	11	12
1	Cottonwood Creek	8	8	8	8	22	22	22	20	14	16	12	12
2	Boise Sewer	9	9	9	9	9	9	9	9	9	9	9	9
3	Davis Drain	4	4	4	4	4	5	5	5	5	5	5	5
4	Collister Drain	7	7	7	7	7	7	7	7	7	7	7	7
5	Eagle Drain	18	18	18	18	13	13	13	13	13	13	16	22
6	Dry Creek Waste	5	5	14	14	14	14	11	11	11	11	17	17
7	Phyllis Waste	4	4	4	4	4	5	5	5	5	5	5	4
8	Five Mile Creek	14	14	15	15	15	15	15	15	18	18	18	18
9	South Middleton Drain	50	51	51	51	51	51	52	52	52	50	50	50
10	Middleton Slough Drain	11	11	11	11	13	12	12	12	12	15	15	18
11	Hartley Drain	4	4	4	5	5	5	5	5	6	6	6	6
12	Mason Creek	8	8	8	8	8	8	11	11	11	11	11	11
13	Mason Drain	43	43	43	43	43	46	46	46	46	46	47	47
14	Indian Creek	57	57	57	60	60	60	63	63	63	67	67	67
15	Dixie Drain	10	10	10	10	10	10	10	10	10	11	11	11
	Total	252	253	263	267	278	282	286	284	282	290	296	304

No.	Name of Tributary	1	2	3	4	5	6	7	8	9	10	11	12
1	Cottonwood Creek	20	20	20	17	14	17	17	18	17	19	30	30
2	Boise Sewer	9	9	9	9	9	9	9	9	9	9	9	9
3	Davis Drain	7	7	7	7	7	8	8	8	8	8	8	8
4	Collister Drain	8	8	8	8	9	9	9	9	9	9	9	9
5	Eagle Drain	14	14	20	13	22	22	34	14	44	38	39	32
6	Dry Creek Waste	11	11	11	11	11	11	11	14	14	14	16	16
7	Phyllis Waste	4	5	5	6	7	7	7	7	6	6	6	5
8	Five Mile Creek	85	67	52	37	21	26	32	37	43	48	53	58
9	South Middleton Drain	49	54	59	64	70	67	63	61	59	59	59	58
10	Middleton Slough Drain	87	72	57	41	25	22	18	15	12	9	12	15
11	Hartley Drain	4	4	5	6	7	7	7	7	7	7	6	5
12	Mason Creek	12	14	16	18	20	20	20	20	19	19	19	18
13	Mason Drain	67	67	67	67	67	70	74	76	79	83	87	91
14	Indian Creek	93	89	84	80	75	78	81	85	87	89	72	56
15	Dixie Drain	12	12	12	12	12	12	13	13	13	14	14	15
	Total	482	453	432	396	376	385	403	393	426	431	439	425

April May June

Plotted by ..... Checked by ..... Date .....

TARY AND RETURN FLOW TO BOISE RIVER, IRRIGATION

APRIL.

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
22	20	14	16	12	12	10	10	10	14	14	18	18	18	18	23	24
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
5	5	5	5	5	5	5	5	5	5	5	5	5	5	7	7	7
7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8
13	13	13	13	13	16	22	13	16	16	16	16	16	16	16	16	16
14	11	11	11	11	17	17	17	17	18	18	18	18	18	21	21	21
5	5	5	5	5	5	4	4	4	4	4	4	6	6	6	6	6
15	15	15	18	18	18	18	18	18	30	68	68	101	110	109	109	123
51	52	52	52	50	50	50	50	49	49	49	49	48	48	48	48	48
12	12	12	12	15	15	18	18	20	20	22	22	24	24	24	29	29
5	5	5	6	6	6	6	6	6	6	4	4	4	4	4	4	3
8	11	11	11	11	11	11	9	9	9	10	10	10	10	10	10	10
46	46	46	46	46	47	47	47	47	50	50	50	50	50	50	53	53
60	63	63	63	67	67	67	67	70	70	70	70	70	70	70	73	73
10	10	10	10	11	11	11	11	11	11	12	12	12	12	12	12	12
82	286	284	282	290	296	304	292	299	315	359	359	399	408	412	423	44

MAY.

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
17	17	18	17	19	30	30	30	30	30	30	26	20	14	14	14	12
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	8	8
9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	9	9
22	34	14	44	38	39	32	32	34	34	38	44	34	34	38	38	38
11	11	14	14	14	16	16	16	17	18	20	20	23	23	25	25	27
7	7	7	6	6	6	5	5	5	5	6	6	6	6	6	6	6
26	32	37	43	48	53	58	55	52	44	40	44	48	52	56	56	63
67	63	61	59	59	59	58	62	66	71	76	78	80	82	84	86	88
22	18	15	12	9	12	15	30	45	48	61	61	61	70	72	70	66
7	7	7	7	7	6	5	6	6	6	7	7	7	7	7	7	8
20	20	20	19	19	19	18	20	22	23	24	24	24	23	22	22	
70	74	76	79	83	87	91	97	103	108	113	116	116	122	127	130	
78	81	85	87	89	72	56	64	72	80	89	90	96	104	112	121	
12	13	13	13	14	14	15	16	16	17	18	18	18	19	19	19	
385	403	393	426	431	439	425	459	494	510	548	560	559	582	608	620	634

June July

PLATE

...SE RIVER, IRRIGATION SEASON 1922.

CHART 6.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
14	18	18	18	18	23	24	24	22	22	23	23	23	25	511
9	9	9	9	9	9	9	9	9	9	9	9	9	9	270
5	5	5	7	7	7	7	7	7	7	7	7	7	7	167
8	8	8	8	8	8	8	8	8	8	8	8	8	8	228
16	16	16	16	16	16	10	10	10	10	14	14	22	28	463
18	18	18	21	21	21	21	21	21	19	19	17	16	14	479
4	6	6	6	6	6	6	6	6	5	5	5	5	5	147
68	101	110	109	109	123	121	121	121	126	126	127	113	98	1897
49	48	48	48	48	48	47	47	48	48	48	47	47	48	1477
22	24	24	24	29	29	42	43	76	90	90	92	91	90	999
4	4	4	4	4	3	3	3	3	3	3	4	4	4	133
10	10	10	10	10	10	10	10	10	8	6	12	12	12	291
50	50	50	50	53	53	53	53	56	56	58	60	62	65	1502
70	70	70	70	73	73	73	73	74	74	75	76	81	87	2057
12	12	12	12	12	12	10	10	10	10	10	10	11	11	322
359	399	408	412	423	441	444	445	481	495	501	511	511	511	10943

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
26	20	14	14	14	12	12	10	10	10	10	10	9	9	8	547
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	279
7	7	7	7	8	8	8	9	9	9	9	9	9	9	9	246
10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	280
44	34	34	38	38	38	40	40	40	40	40	40	39	39	39	1027
20	23	23	25	25	27	30	30	30	30	30	30	30	30	28	633
6	6	6	6	6	6	6	6	6	6	7	7	7	7	9	189
44	48	52	56	56	63	69	65	68	74	86	98	111	96	84	1820
78	80	82	84	86	88	90	99	107	116	125	131	147	150	151	2611
61	61	70	72	70	66	62	60	58	56	56	54	53	55	58	1481
7	7	7	7	7	8	8	10	10	12	14	15	16	16	16	257
24	24	23	22	22	21	21	25	30	34	38	41	45	43	41	758
116	116	122	127	130	130	135	144	153	162	170	176	180	176	170	3523
90	96	104	112	121	130	138	140	147	150	152	154	155	150	140	3253
18	18	19	19	19	19	20	22	24	26	28	30	31	31	30	575
560	559	582	608	620	634	657	678	710	743	783	813	850	829	801	17479

July

August

September

No.	Name of Tributary	1	2	3	4	5	6	7	8	9	10	11	
1	Cottonwood Creek	8	8	8	8	8	10	11	11	11	11	8	
2	Boise Sewer	10	10	10	10	10	10	10	10	10	10	10	
3	Davis Drain	9	9	8	8	8	8	8	9	9	10	10	
4	Collister Drain	9	9	9	9	9	9	9	9	8	8	8	
5	Eagle Drain	48	48	47	47	54	64	65	58	56	41	41	
6	Dry Creek Waste	26	24	22	20	19	18	11	3	3	3	3	
7	Phyllis Waste	11	11	13	14	15	16	15	14	14	14	14	
8	Five Mile Creek	70	48	55	55	52	50	47	44	42	42	40	
9	South Middleton Drain	153	153	154	154	157	160	127	95	97	100	120	
10	Middleton Slough Drain	55	47	38	34	30	22	31	40	40	40	40	
11	Hartley Drain	16	17	17	17	17	18	14	10	10	10	10	
12	Mason Creek	40	40	37	37	33	32	30	25	27	27	28	
13	Mason Drain	165	160	156	150	146	140	153	164	160	160	153	
14	Indian Creek	128	120	111	102	94	86	87	88	95	102	110	
15	Dixie Drain	30	29	29	29	28	28	29	30	29	29	28	
	Total.	778	733	714	694	680	671	647	610	611	607	623	

No.	Name of Tributary	1	2	3	4	5	6	7	8	9	10	11	12
1	Cottonwood Creek	6	6	6	6	6	7	7	7	8	5	5	5
2	Boise Sewer	10	10	10	10	10	10	10	10	10	10	10	10
3	Davis Drain	9	9	9	9	9	9	9	9	9	10	10	10
4	Collister Drain	8	8	8	8	8	8	8	8	8	8	8	8
5	Eagle Drain	37	35	32	41	40	37	41	45	45	45	44	42
6	Dry Creek Waste	5	4	4	4	3	3	3	3	3	3	3	3
7	Phyllis Waste	11	11	11	11	11	11	12	12	12	12	12	12
8	Five Mile Creek	37	37	29	42	40	38	38	36	36	34	34	33
9	South Middleton Drain	120	120	115	117	119	117	115	113	111	109	114	119
10	Middleton Slough Drain	32	30	28	27	26	31	36	41	48	54	64	75
11	Hartley Drain	9	9	9	9	9	10	10	12	12	13	13	15
12	Mason Creek	28	27	27	26	25	27	30	32	35	37	40	42
13	Mason Drain	100	97	97	93	91	93	93	97	97	100	103	107
14	Indian Creek	86	82	82	78	76	74	80	86	87	89	92	92
15	Dixie Drain	24	25	26	28	30	29	27	25	25	26	26	25
	Total.	522	510	493	509	503	504	519	536	546	555	578	598

April May June

Plotted by ..... Checked by ..... Date .....

JUNE.

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10	11	11	11	11	8	8	7	7	7	7	7	9	9	9	9	7	11	11
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
8	8	9	9	10	10	10	10	10	10	10	10	10	10	9	9	9	9	8
9	9	9	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9
64	65	58	56	41	41	29	28	28	62	62	43	41	40	43	32	62	50	45
18	11	3	3	3	3	3	5	5	5	7	8	10	12	3	3	3	3	3
16	15	14	14	14	14	15	15	15	15	15	15	15	15	11	11	11	11	11
50	47	44	42	42	40	40	28	30	40	62	90	110	130	102	74	66	62	58
160	127	95	97	100	120	122	140	152	150	136	139	143	158	149	141	135	140	135
22	31	40	40	40	40	44	47	62	60	60	75	88	100	88	76	70	63	56
18	14	10	10	10	10	10	10	10	11	11	11	11	11	9	8	8	8	8
32	30	25	27	27	28	30	30	32	32	33	33	34	35	35	33	32	30	28
140	153	164	160	160	153	153	153	150	150	144	144	142	140	138	136	134	134	132
86	87	88	95	102	110	122	126	130	140	147	154	159	165	150	134	127	120	113
28	29	30	29	29	28	28	27	27	26	26	25	24	23	23	24	24	24	24
671	647	610	611	607	623	632	645	677	727	739	773	815	867	788	709	707	684	651

JULY.

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
7	7	7	8	5	5	5	5	6	6	7	7	7	7	7	7	8	8	8
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
9	9	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9
37	41	45	45	45	44	42	39	39	36	40	40	41	42	43	44	44	43	44
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
11	12	12	12	12	12	12	11	11	11	11	10	10	10	9	9	8	8	7
38	38	36	36	34	34	33	33	33	33	32	32	32	31	35	39	43	48	52
117	115	113	111	109	114	119	125	113	104	96	88	81	96	112	117	123	129	134
31	36	41	48	54	64	75	85	79	73	66	59	52	65	77	71	66	61	55
10	10	12	12	13	13	15	17	17	17	14	14	14	14	13	13	13	13	12
27	30	32	35	37	40	42	44	43	43	40	40	38	36	36	36	36	36	36
93	93	97	97	100	103	107	112	112	112	111	111	111	110	110	114	114	117	120
74	80	86	87	89	92	92	86	85	91	92	94	104	98	93	76	67	78	90
29	27	25	25	26	26	25	30	28	26	26	27	26	25	24	23	22	25	27
504	514	536	546	555	578	598	618	597	584	567	554	548	566	591	581	576	598	617

May June July August

PLATE

CHART 6A.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
7	9	9	9	9	7	11	11	9	9	8	8	7	7	258
10	10	10	10	10	10	10	10	10	10	10	10	10	10	300
10	10	10	9	9	9	9	8	8	8	8	8	8	8	268
9	9	9	9	9	9	9	9	9	8	8	8	8	8	261
43	41	40	43	32	62	50	45	62	50	48	39	38	38	1409
8	10	12	3	3	3	3	3	3	3	3	4	5	5	245
15	15	15	11	11	11	11	11	11	11	11	11	11	11	392
90	110	130	102	74	66	62	58	53	48	43	40	37	35	1693
139	143	158	149	141	135	140	135	130	127	125	125	125	120	4062
75	88	100	88	76	70	63	56	50	42	36	36	36	34	1540
11	11	11	9	8	8	8	8	9	9	10	9	9	9	337
33	34	35	35	33	32	30	28	27	26	25	27	29	28	935
144	142	140	138	136	134	134	132	132	130	129	116	103	100	4267
154	159	165	150	134	127	120	113	106	100	93	93	93	90	3485
25	24	23	23	24	24	24	24	24	24	24	23	22	23	783
773	815	867	788	709	707	684	651	643	605	581	557	541	526	20235

July

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
7	7	7	7	7	8	8	8	9	9	9	10	10	11	11	226
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	310
10	10	10	10	10	10	10	10	11	11	11	11	11	11	11	308
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	265
40	40	41	42	43	44	44	43	44	46	45	44	45	44	44	1291
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	98
11	10	10	10	9	9	8	8	7	6	6	6	7	7	8	301
32	32	32	31	35	39	43	48	52	55	56	57	58	55	52	50	1260
96	88	81	96	112	117	123	129	134	131	127	124	121	122	102	91	3515
66	59	52	65	77	71	66	61	55	51	46	40	35	35	35	36	1579
14	14	14	14	13	13	13	13	12	12	12	12	11	11	11	11	381
40	40	38	36	36	36	36	36	36	36	34	32	30	32	32	30	1066
111	111	111	110	110	114	114	117	120	123	120	118	116	116	117	118	3350
92	94	104	98	93	76	67	78	90	87	83	91	89	87	91	95	2681
26	27	26	25	24	23	22	25	27	27	28	28	27	27	27	26	815
567	554	548	566	591	581	576	598	617	616	599	594	582	569	563	553	17446

August

September

No.	Name of Tributary	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Cottonwood Creek	11	11	12	12	12	12	12	12	11	11	11	8	8
2	Boise Sewer	10	10	10	10	10	10	10	10	10	10	10	10	10
3	Davis Drain	11	11	11	11	11	10	10	10	10	10	10	10	10
4	Collister Drain	9	9	9	9	9	9	9	9	9	9	9	9	9
5	Eagle Drain	45	43	48	50	50	48	46	46	44	44	42	40	40
6	Dry Creek Waste	3	4	4	4	4	4	4	4	4	4	4	4	4
7	Phyllis Waste	9	9	10	10	10	10	10	10	10	10	10	10	10
8	Five Mile Creek	45	40	37	41	46	49	53	53	54	56	57	43	40
9	South Middleton Drain	82	72	63	68	73	78	84	79	74	70	66	65	64
10	Middleton Slough Drain	36	36	36	41	50	62	74	72	70	70	69	60	51
11	Hartley Drain	11	11	11	11	11	10	10	10	10	9	9	9	8
12	Mason Creek	34	34	35	37	40	40	41	39	36	35	34	28	23
13	Mason Drain	122	122	126	124	122	120	118	115	115	112	110	106	100
14	Indian Creek	108	108	115	122	127	127	127	123	108	104	102	100	97
15	Dixie Drain	20	21	21	22	21	20	19	22	25	25	25	26	26
	Total	556	541	548	572	596	609	627	614	590	579	568	528	500

No.	Name of Tributary	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Cottonwood Creek	16	14	12	10	10	10	10	11	11	11	10	9	9
2	Boise Sewer	10	10	10	10	10	10	10	10	10	10	10	10	10
3	Davis Drain	9	9	9	9	9	9	9	8	8	8	8	8	8
4	Collister Drain	9	9	9	10	10	10	10	10	10	10	10	10	9
5	Eagle Drain	47	42	42	42	40	38	38	38	38	38	35	35	25
6	Dry Creek Waste	4	4	4	4	4	5	5	5	5	5	5	5	5
7	Phyllis Waste	15	15	14	14	14	14	13	13	13	12	12	12	11
8	Five Mile Creek	16	15	15	15	14	14	15	15	15	16	17	17	16
9	South Middleton Drain	76	76	77	78	79	81	85	82	80	78	76	75	75
10	Middleton Slough Drain	24	27	30	35	40	32	27	27	27	27	28	28	28
11	Hartley Drain	11	12	12	12	13	13	14	14	15	16	16	16	16
12	Mason Creek	9	8	8	8	8	7	7	8	8	9	10	11	11
13	Mason Drain	108	106	106	101	101	99	97	95	93	90	90	89	83
14	Indian Creek	106	115	119	122	122	122	111	136	121	107	105	102	100
15	Dixie Drain	26	26	28	29	30	31	31	27	29	31	28	25	24
	Total	486	488	495	499	504	495	482	449	483	468	460	452	430

April May June

Plotted by ..... Checked by ..... Date .....

AUGUST.

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	2
12	12	11	11	11	8	8	9	9	11	11	11	12	10	8	7	7	9	
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
10	10	10	10	10	10	10	8	8	8	8	8	8	8	8	9	9	9	
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
46	46	44	44	42	40	40	38	38	36	36	36	36	38	38	38	38	40	4
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
10	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	11	11	
53	53	54	56	57	43	40	31	22	14	15	17	17	18	18	20	22	22	2
84	79	74	70	66	65	64	64	63	62	62	63	65	67	70	73	74	74	7
74	72	70	70	69	60	51	42	33	22	26	30	28	25	22	19	19	19	1
10	10	10	9	9	9	8	8	7	7	6	9	9	9	10	10	10	10	1
41	39	36	35	34	28	23	18	12	7	6	5	7	9	11	13	13	12	1
118	115	115	112	110	106	100	95	88	81	79	76	81	84	87	90	88	88	8
127	123	108	104	102	100	97	94	94	93	93	90	97	98	99	97	93	98	9
19	22	25	25	25	26	26	25	25	26	27	25	25	25	25	29	26	24	2
627	614	590	579	568	528	500	465	432	400	402	404	419	425	430	434	433	439	4

SEPTEMBER.

	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
0	10	11	11	11	10	9	9	9	9	8	8	20	24	30	30	30	28	26	2
0	10	10	10	10	10	10	10	10	10	10	10	10	40	10	10	10	10	10	1
9	9	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	
0	10	10	10	10	10	10	9	9	9	9	9	9	9	9	10	10	10	10	1
8	38	38	38	38	35	35	25	25	25	35	35	35	35	35	35	35	36	36	3
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	7	7	7	7	
4	13	13	13	12	12	12	11	11	11	9	9	9	9	9	8	8	8	8	
4	15	15	15	16	17	17	16	15	13	13	12	12	11	11	10	10	9	9	
1	85	82	80	78	76	75	75	75	75	75	75	75	75	72	70	68	68	66	6
2	27	27	27	27	28	28	28	28	27	26	25	24	23	23	23	22	22	22	2
3	14	14	15	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	1
7	7	8	8	9	10	11	11	12	13	14	14	16	16	16	16	18	18	18	1
9	97	95	93	90	90	89	83	76	72	70	70	66	66	66	66	66	66	63	6
2	111	136	121	107	105	102	100	98	97	96	96	94	94	92	92	90	89	87	8
1	31	27	29	31	28	25	24	23	22	22	22	22	23	23	23	24	24	24	2
5	482	499	483	468	460	452	430	410	412	416	414	421	425	426	425	423	420	411	39

June July August

PLATE

CHART 6B.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
11	11	12	10	8	7	7	9	11	15	15	15	10	24	22	359
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	310
8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	289
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	279
36	36	36	38	38	38	38	40	40	40	42	42	44	44	44	1294
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	123
10	11	11	11	11	11	11	11	11	12	12	13	14	15	15	337
15	17	17	18	18	20	22	22	24	26	24	22	20	17	16	979
62	63	65	67	70	73	74	74	75	76	76	76	75	75	76	2204
26	30	28	25	22	19	19	19	18	17	17	17	17	18	21	1137
6	9	9	9	10	10	10	10	11	11	11	11	10	10	10	299
6	5	7	9	11	13	13	12	11	10	10	9	10	10	9	638
79	76	81	84	87	90	88	88	88	86	91	96	101	106	110	3127
93	90	97	98	99	97	93	98	99	100	100	102	104	112	117	3248
27	25	25	25	25	29	26	24	24	23	23	22	22	24	26	739
402	404	419	425	430	434	433	439	444	448	453	457	459	487	498	15,362

BER.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
8	20	24	30	30	30	28	26	22	11	11	9	9	8	435
10	10	10	10	10	10	10	10	10	10	10	10	10	10	300
8	8	8	9	9	9	9	9	9	9	9	9	10	10	261
9	9	9	9	10	10	10	10	10	10	10	10	10	10	289
35	35	35	35	35	35	36	36	36	38	38	38	38	38	1091
5	5	5	5	7	7	7	7	7	7	7	7	7	7	165
9	9	9	9	8	8	8	8	7	7	7	7	7	7	313
3	12	12	11	10	10	9	9	8	7	7	7	7	6	367
75	75	75	75	70	68	68	66	63	60	60	60	58	58	2171
26	25	24	23	23	22	22	22	22	21	21	21	20	20	770
16	16	16	16	16	16	16	16	16	16	16	16	16	16	452
14	14	16	16	16	18	18	18	18	21	21	21	22	22	408
70	70	66	66	66	66	66	63	61	59	59	59	56	56	2353
96	96	94	94	92	90	89	87	85	85	85	83	83	83	3017
22	22	22	23	23	24	24	24	24	25	25	25	24	24	764
16	414	421	425	426	425	423	420	411	398	386	386	382	377	375	13158

July August September

TABLE SHOWING WA
FOR

	1	2	3	4	5	6	7	8	9	10	11	
Boise River at Highland	1644	1930	1114	1300	3054	2985	2892	3058	3444	3142	2926	
Deliveries to Canals	2686	2861	2963	3560	3574	3850	3807	4087	4176	3642	3669	
Total Tributary Flow	252	253	263	267	278	282	286	284	282	290	296	
Total Seepage Flow	790	678	586	993	242	583	629	745	400	260	447	
Net Gain Highland to Notus	1042	931	849	1260	520	865	915	1029	682	550	743	

	1	2	3	4	5	6	7	8	9	10	11	
Boise River at Highland	7470	7730	8410	8996	9720	10743	11662	12266	12080	12080	11520	1
Deliveries to Canals	8831	8977	9811	10320	10976	11863	12524	12549	12076	12065	11898	1
Total Tributary Flow	482	453	432	396	376	385	403	393	426	431	439	
Total Seepage Flow	879	794	969	928	880	735	459	- 110	- 430	- 446	- 61	
Net Gain Highland to Notus	1361	1247	1401	1324	1256	1120	862	283	- 4	- 15	378	

	1	2	3	4	5	6	7	8	9	10	11	12
Boise River at Highland	10868	11142	11545	12336	12770	13874	15095	16058	15220	13622	12550	11
Deliveries to Canals	11543	11619	12036	12729	13607	14545	16115	15744	15001	14238	12806	11
Total Tributary Flow	778	733	714	694	680	671	647	610	611	607	623	6
Total Seepage Flow	- 103	- 256	- 223	- 301	157	0	373	- 924	- 830	9	- 367	- 6
Net Gain Highland to Notus	675	477	491	393	837	671	1020	- 314	- 219	616	256	

	1	2	3	4	5	6	7	8	9	10	11	12
Boise River at Highland	5362	4897	4432	4157	3874	3862	3838	4179	4169	4106	4106	41
Deliveries to Canals	6018	5701	5294	5053	4962	4870	4959	4941	4891	4947	4887	49
Total Tributary Flow	522	510	493	509	503	504	519	536	546	565	578	5
Total Seepage Flow	134	294	369	385	585	504	602	226	176	286	203	2
Net Gain Highland to Notus	656	804	862	894	1088	1008	1121	762	722	841	781	8

	1	2	3	4	5	6	7	8	9	10	11	12
Boise River at Highland	3563	3549	3515	3572	3554	3358	3352	3346	3211	3116	2974	29
Deliveries to Canals	4388	4347	4405	4474	4470	4363	4259	4133	3876	3785	3691	35
Total Tributary Flow	556	541	548	572	596	609	627	614	590	579	568	5
Total Seepage Flow	269	257	342	330	320	396	280	173	75	90	149	
Net Gain Highland to Notus	825	798	890	902	916	1005	907	787	665	669	717	6

	1	2	3	4	5	6	7	8	9	10	11	12
Boise River at Highland	2652	2690	2775	2606	2416	2341	2329	2269	2266	2171	2135	2
Deliveries to Canals	3425	3405	3260	3549	3458	3073	2970	2975	2948	2980	2976	28
Total Tributary Flow	486	488	495	499	504	495	482	449	483	468	460	4
Total Seepage Flow	287	227	- 10	494	538	237	159	207	199	321	381	2
Net Gain Highland to Notus	773	715	485	993	1042	732	641	706	682	789	841	7

April May

Plotted by ..... Checked by ..... Date .....

SHOWING WATER AVAILABLE AND DELIVERIES THEREOF, BY DAYS FOR THE IRRIGATION SEASON OF 1922.

APRIL.

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	2
3058	3444	3142	2926	2928	2799	2918	2932	2771	2885	2840	2795	2840	3055	3305	3895	4380	4500	44
4087	4176	3642	3669	3434	3463	3496	3550	3500	3465	3478	3644	3846	4280	4686	4745	4995	5115	38
284	282	280	286	304	292	299	315	359	359	399	408	412	423	441	444	445	481	
745	400	260	447	202	372	279	303	370	221	239	441	594	802	940	406	170	134	8
1029	682	550	743	506	664	578	618	729	580	638	849	1006	1225	1381	850	615	615	13

MAY.

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	2
12246	12080	12080	11520	11242	11178	11082	11093	11061	11136	11432	10800	10990	11280	11176	11040	11200	11168	138
12549	12076	12065	11898	11914	12107	12126	11781	11721	11871	11515	11568	11817	12468	12132	12179	12195	12545	166
393	426	431	439	425	459	494	510	548	560	559	582	608	620	634	657	678	710	7
110	430	446	61	247	470	550	178	112	175	476	186	219	568	322	482	317	667	20
283	4	15	378	672	929	1044	688	660	735	83	768	827	1188	956	1139	995	1377	28

JUNE.

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	2
16058	15220	13622	12550	11116	9992	10130	11525	14655	12930	12035	11771	11721	11440	11217	10533	9427	7990	69
15744	15001	14238	12806	11130	11817	14031	16238	16143	14225	13085	13080	12743	12873	12549	12301	833		74
610	611	607	623	632	645	677	727	739	773	815	867	788	709	707	684			
924	830	9	367	618	1180	3224	3986	649	522	235	542	234	724	625	1084			
314	219	616	256	14	1825	3901	4713	1488	1295	1050	1309	1022	1433	1332	1768			

JULY.

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
4179	4167	4106	4106	4102	4096	4065	4061	4057	4024	3999	3909	3983	3983	3940	3918	3894	
4941	4891	4947	4987	4928	4789	4806	4803	4785	4856	4800	4787	4797	4776	5261	4812	4763	
536	546	555	578	598	618	597	584	567	554	548	566	591	581	576	598	617	
226	176	286	203	228	75	144	158	161	278	253	312	223	212	745	296	252	
762	722	841	781	826	693	741	742	728	832	801	878	814	793	1321	894	869	

AUGUST.

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
3346	3241	3116	2974	2987	2883	2951	2899	2968	3019	3018	3081	3171	3122	3085	3140	3122	3138	29
4133	3876	3785	3691	3567	3529	3519	3530	3567	3681	3699	3804	3822	3804	3828	3914	3927	3745	35
644	590	574	568	528	500	465	432	400	402	404	419	425	430	439	433	439	444	
173	75	90	149	52	146	103	199	199	260	277	304	226	252	304	341	366	163	
787	665	669	717	580	646	568	631	599	662	681	723	651	682	743	774	805	607	

SEPTEMBER.

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
319	2269	2246	2191	2135	2193	2107	2074	1738	1811	1666	1156	1020	799	785	756	756	
1970	2975	2948	2980	2976	2899	2883	2537	2486	2489	1828	1775	1455	1433	1352	1274	1323	
482	499	483	468	460	452	430	420	412	416	414	421	425	426	425	423	420	
159	207	199	321	381	254	346	43	336	262	252	198	10	208	142	95	147	
641	706	682	789	841	706	776	463	748	678	162	619	435	634	567	518	567	549

June July August

D DELIVERIES THERE OF, BY DAYS, PLATE
SEASON OF 1922.

CHART 7.

	18	19	20	21	22	23	24	25	26	27	28	29	30		Avg.
85	2840	2795	2840	3055	3305	3895	4380	4500	4445	4990	5570	6476	7042		3430
65	3478	3644	3846	4280	4686	4745	4995	5115	5804	6338	7016	7983	8223		4333
59	399	408	412	423	441	444	445	481	495	501	511	511	511		365
21	239	441	594	802	940	406	170	134	864	847	935	996	670		538
80	638	849	1006	1225	1381	850	615	615	1359	1348	1446	1507	1181		903

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
36	11432	10800	10990	11280	11176	11040	11200	11168	13848	16824	15575	13090	11662	10900	11305
71	11515	11568	11817	12468	12132	12179	12195	12545	16671	16421	14441	12654	11709	11698	12046
60	559	582	608	620	634	657	678	710	743	783	813	850	829	801	564
75	-476	186	219	568	322	482	317	667	2080	-1186	-1947	-1286	-782	- 03	177
735	83	768	827	1188	956	1139	995	1377	2823	- 403	-1134	- 436	47	798	741

	18	19	20	21	22	23	24	25	26	27	28	29	30		Avg.
12930	12035	11771	11721	11440	11217	10533	9427	7990	6940	6478	6386	6230	5782		11113
14225	13085	13080	12743	12873	12549	12301	8334	7940	7434	7480	7467	6895	6542		12076
773	815	867	788	709	707	684	651	643	605	581	557	541	526		674
522	235	542	234	724	625	1084	-1744	- 693	- 111	421	524	124	234		289
1295	1050	1309	1022	1433	1332	1768	-1093	- 50	494	1002	1081	665	760		963

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
4024	3999	3909	3983	3983	3940	3918	3894	3933	3805	3797	3774	3674	3612	3608	4039
4856	4800	4787	4797	4776	5261	4812	4763	4727	4647	4613	4534	4326	4397	4408	4875
554	548	566	591	581	576	598	617	616	599	594	582	569	563	553	563
278	253	312	223	212	745	296	252	178	243	222	178	83	222	247	273
832	801	878	814	793	1321	894	869	794	842	816	760	652	785	800	836

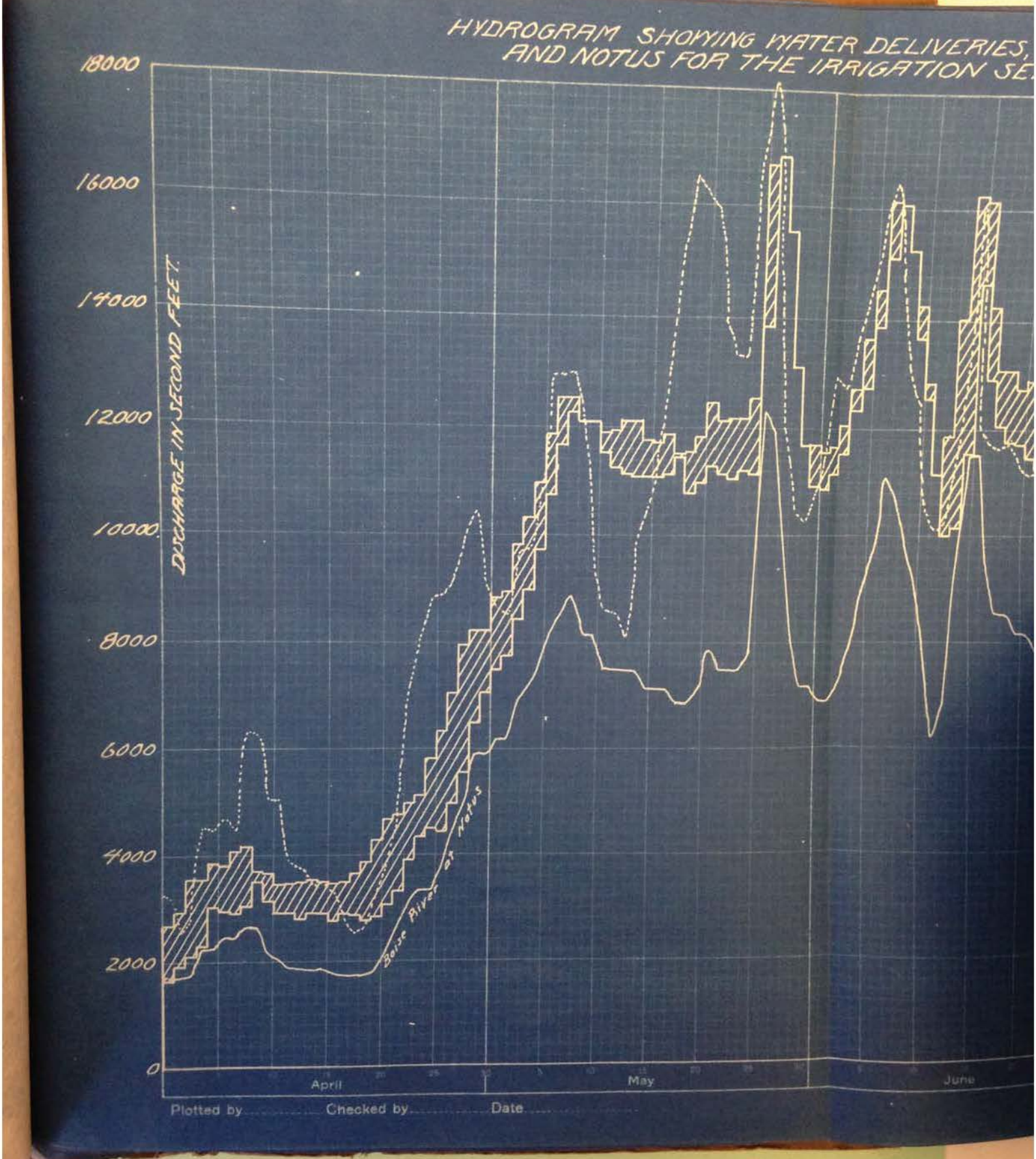
T.

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
3019	3018	3081	3171	3122	3085	3140	3122	3138	2991	2852	2816	2731	2719	2682	3113
3681	3699	3804	3822	3804	3828	3914	3927	3745	3564	3391	3395	3346	3375	3413	3826
402	404	419	425	430	439	433	439	444	448	453	457	459	487	498	496
260	277	304	226	252	304	341	366	163	125	86	122	156	169	223	217
662	681	723	651	682	743	774	805	607	573	539	579	615	656	721	713

BER.

	18	19	20	21	22	23	24	25	26	27	28	29	30		Avg.
	1666	1156	1020	799	785	756	756	756	783	762	762	749	752	769	1629
	1828	1775	1455	1433	1352	1274	1323	1305	1312	1255	1134	1203	1181	1228	2247
	414	421	425	426	425	423	420	411	398	386	386	382	377	375	439
	-252	198	10	208	142	95	147	138	131	107	- 14	72	52	84	179
	162	619	435	634	567	518	567	549	529	493	372	454	429	459	618

July August September

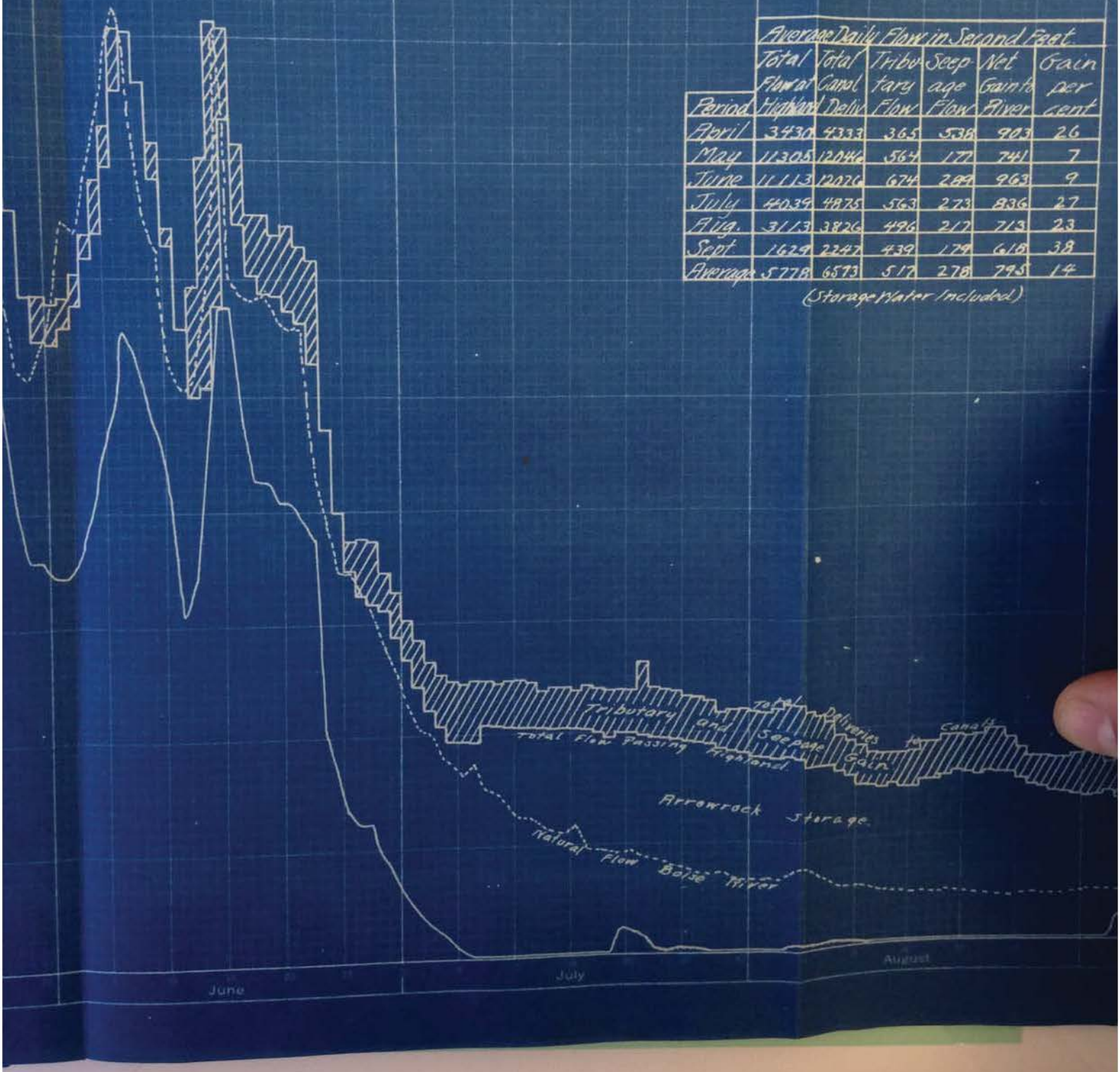

HYDROGRAM SHOWING WATER DELIVERIES,
AND NOTUS FOR THE IRRIGATION SE
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
DISCHARGE IN SECOND FEET.
Boise River at Notus
April
May
June
Plotted by
Checked by
Date

TER DELIVERIES, BY DAYS, ON BOISE RIVER BETWEEN HIGHLAND
RRIGATION SEASON OF 1922. INCLUDING STORAGE WATER.

PLA

	Average Daily Flow in Second Feet.					
Period	Total Flow at Highland	Total Canal Deliv.	Tributary Flow	Seepage Flow	Net Gain to River	Gain per cent
April	3430	4333	365	538	903	26
May	11305	12046	564	177	741	7
June	11113	12076	674	289	963	9
July	4039	4875	563	273	836	27
Aug.	3113	3826	496	217	713	23
Sept.	1629	2247	439	179	618	38
Average	5778	6573	517	278	795	14

(Storage Water Included)



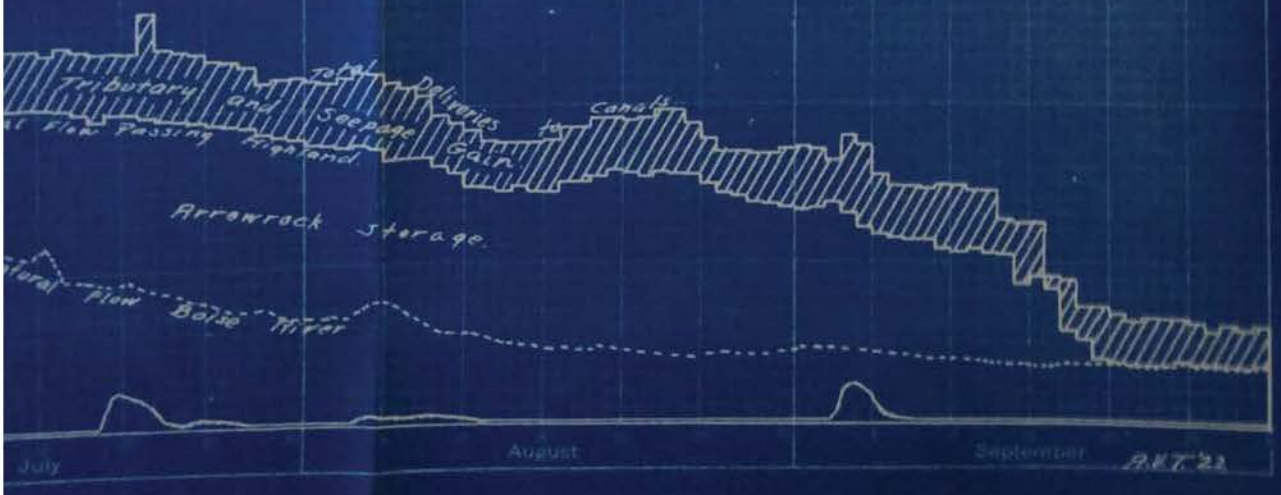
ER BETWEEN HIGHLAND
LDING STORAGE WATER.

PLATE

CHART 8.

Period	Average Daily Flow in Second Feet. Total Flow at Highland	Total Canal Deliv.	Tributary Flow	Seepage Flow	Net Gain to River	Gain per cent
April	3430	4333	365	538	903	26
May	11305	12046	564	177	741	7
June	11113	12076	674	289	963	9
July	4039	4875	563	273	836	27
Aug.	3113	3826	496	217	713	23
Sept.	1629	2247	439	179	618	38
Average	5778	6573	517	278	795	14

(Storage Water Included)



A.E.T. 22

TABLE SHOWING TOTAL FLO
AND DELIVERIES TO CANA
FOR THE SECTION BETWEE

Period	Tributary	Seepage	Total Gai
July 24-31	87	155	242
Aug. 1-31	86	153	239
Sept. 1-30	85	95	180
Avg. 69 days	85	128	213

	1	2	3	4	5	6	7	8	9	10	11	12	13
Total Flow Boise River Passing Highland	3563	3549	3515	3572	3554	3358	3352	3346	3211	3116	2974	2987	2883
Deliveries to Canals	3872	3853	3861	3896	3735	3697	3631	3504	3320	3277	3124	3062	3109
Tributary Gain	89	88	94	96	96	93	91	91	88	88	86	81	81
Seepage Gain	220	216	252	228	85	246	188	67	21	73	64	- 6	145
Net Gain Highland to Caldwell High Line.	309	304	346	324	181	339	279	158	109	161	150	75	226

	1	2	3	4	5	6	7	8	9	10	11	12	13
Total Flow Boise River Passing Highland	2652	2690	2775	2606	2416	2341	2329	2269	2266	2191	2135	2193	2107
Deliveries to Canals	2931	2917	2727	2686	2616	2574	2504	2490	2475	2522	2518	2451	2452
Tributary Gain	95	88	86	85	83	82	82	82	82	82	78	77	66
Seepage Gain	184	139	-134	- 5	117	151	93	139	127	249	305	181	279
Net Gain Highland to Caldwell High Line	279	227	- 48	80	200	233	175	221	209	331	383	258	345

April May June

Plotted by ..... Checked by ..... Date .....

LE SHOWING TOTAL FLOW OF BOISE RIVER PASSING HIGHLAND
ND DELIVERIES TO CANALS, BY DAYS, JULY 24 TO SEPT. 30 inc. 1922.
FOR THE SECTION BETWEEN HIGHLAND AND CALDWELL HIGH LINE CANAL.

JULY.

	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
																	3894	3933
																	4165	4151
																	84	88
																	187	130
																	271	218

	Tributary	Seepage	Total Gain
1	87	155	242
1	86	153	239
0	85	95	180
ays	85	128	213

AUGUST.

	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	2
352	3346	3211	3116	2974	2987	2883	2951	2899	2968	3019	3018	3081	3171	3122	3085	3140	3122	3138	2
631	3504	3320	3277	3124	3062	3109	3119	3134	3235	3295	3303	3416	3454	3411	3504	3449	3422	3302	3
91	91	88	88	86	81	81	78	78	78	78	78	79	79	77	77	77	81	83	
188	67	21	73	64	- 6	145	90	157	189	198	207	256	204	212	342	232	219	81	
279	158	109	161	150	75	226	168	235	267	276	285	335	283	289	419	309	300	164	

SEPTEMBER.

	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
329	2269	2266	2191	2135	2193	2107	2074	1238	1811	1666	1156	1020	799	785	756	756	756	783	
504	2490	2475	2522	2518	2451	2452	2107	2066	2084	1427	1380	1051	1045	978	945	987	985	991	
82	82	82	82	78	77	66	66	66	75	75	87	92	98	101	101	100	98	94	
93	139	127	249	305	181	279	- 33	262	198	- 314	137	- 61	148	92	88	731	131	114	
175	221	209	331	383	258	345	33	328	273	- 239	224	31	246	193	189	231	229	208	

June July August

PLATE

ER PASSING HIGHLAND
Y 24 TO SEPT. 30 inc 1922.
ALDWELL HIGH LINE CANAL.

CHART 9.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
							3894	3933	3805	3797	3774	3674	3612	3608	3762
							4165	4151	4090	4081	3983	3789	3887	3889	4004
							84	88	87	86	88	87	88	88	87
							187	130	198	198	121	28	184	193	155
							271	218	285	284	209	115	272	281	242

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
3019	3018	3081	3171	3122	3085	3140	3122	3138	2991	2852	2816	2731	2719	2692	3113
3295	3303	3416	3454	3411	3504	3449	3422	3302	3158	2976	2987	2958	2938	2908	3352
78	78	79	79	77	77	77	81	83	87	89	89	86	100	98	86
198	207	256	204	212	342	232	219	81	80	35	82	141	119	118	153
276	285	335	283	289	419	309	300	164	167	124	171	227	219	216	239

ER.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	Avg.
1666	1156	1020	799	785	756	756	756	783	762	762	749	752	769	1629
1427	1380	1051	1045	978	945	987	985	991	927	813	881	855	878	1809
75	87	92	98	101	101	100	98	94	85	85	83	84	83	85
-314	137	-61	148	92	80	131	131	114	80	-34	49	19	26	95
-239	224	31	246	193	189	231	229	208	165	51	132	103	109	180

July August September

TABLE SHOWING
HIGH LINE C
TO SEPTEM

	1	2	3	4	5	6	7	8	9	10	11
Total Flow Boise River Passing Caldwell High Line	7	11	3	111	60	56	60	46	31	16	2
Deliveries to Canals	523	505	547	689	795	722	688	675	587	524	569
Tributary Gain	467	453	454	476	500	516	536	523	502	491	482
Seepage Gain	49	41	90	102	235	150	92	106	54	17	85
Net Gain Caldwell High Line to Notus	516	494	544	578	735	666	628	629	556	508	567

	1	2	3	4	5	6	7	8	9	10	11
Total Flow Boise River Passing Caldwell High Line	0	0	0	0	0	9	13	5	5	9	9
Deliveries to Canals	494	488	533	913	842	508	479	490	478	467	467
Tributary Gain	391	400	409	414	421	413	400	417	401	386	382
Seepage Gain	103	88	124	499	421	86	66	68	72	72	76
Net Gain Caldwell High Line to Notus	494	488	533	913	842	499	466	485	473	458	458

Period	Tri
July 24-31	5
Aug. 1-31	4
Sept. 1-30	3
Avg. 69 days	39

April May June

Plotted by ..... Checked by ..... Date .....

TABLE SHOWING THE AVAILABLE WATER PASSING THE CALDWELL HIGH LINE CANAL AND DELIVERIES TO CANALS, BY DAYS, JULY 24 TO SEPTEMBER 30 inc. 1922; FOR SECTION 2 OF BOISE RIVER.

JULY.

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
																	13	
																	611	58
																	533	52
																	65	4
																	598	57

Period	Tributary	Seepage	Total Gain
July 24-31	500	47	547
Aug. 1-31	410	64	474
Sept. 1-30	354	85	439
Avg. 69 days	396	71	467

AUGUST.

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
6	60	46	31	16	2	4	22	21	20	81	50	51	51	78	84	161	76	46	43
2	688	675	587	524	569	509	442	421	416	413	436	447	439	446	477	485	541	551	486
6	536	523	502	491	482	447	419	387	354	322	324	326	340	346	353	362	356	358	361
0	92	106	54	17	85	58	01	13	42	10	62	70	48	22	40	- 38	109	147	82
6	628	629	556	508	567	505	420	400	396	332	386	396	388	368	393	324	465	505	443

SEPTEMBER.

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
9	13	5	5	9	9	8	8	1	0	6	6	5	4	3	4	4	3	5	5
08	479	490	478	467	467	456	439	431	420	411	407	400	408	391	378	333	339	325	326
13	400	417	401	386	382	375	364	354	346	341	339	334	333	328	324	322	320	313	304
86	66	68	72	72	76	73	67	76	74	64	62	61	71	60	50	7	16	7	17
99	466	485	473	458	458	448	431	430	420	405	401	395	404	388	374	329	336	320	321

June July August

PLATE

PASSING THE CALDWELL
GNALS, BY DAYS, JULY 24
ION 2 OF BOISE RIVER.

CHART 10.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
							13	9	20	30	0	14	25	20	16
							611	585	577	562	551	551	528	539	563
							533	528	512	508	494	482	475	465	500
							65	48	45	24	57	55	28	54	47
							598	576	557	532	551	537	503	519	547

T.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
50	51	51	78	84	161	76	46	43	45	13	17	33	21	12	43
436	447	439	446	477	485	541	551	486	451	428	425	421	458	517	517
324	326	340	346	353	362	356	358	361	361	364	368	373	387	400	410
62	70	48	22	40	- 38	109	147	82	45	51	40	15	50	105	64
386	396	388	368	393	324	465	503	443	406	415	408	388	437	505	474

MBER.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	Avg.
6	6	5	4	3	4	4	3	5	5	5	5	4	3	0	4
407	400	408	391	378	333	339	325	326	333	326	326	329	350		343
339	334	333	328	324	322	320	313	304	301	301	299	293	292		354
62	61	71	60	50	7	16	7	17	27	20	23	33	58		85
401	395	404	388	374	329	336	320	321	328	321	322	326	350		439

July August September

AKT 22

PLATE

PASSING THE CALDWELL
ANALS, BY DAYS, JULY 24
ION 2 OF BOISE RIVER.

CHART 10.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
							13	9	20	30	0	14	25	20	16
							611	585	577	562	551	551	528	539	563
							533	528	512	508	494	482	475	465	500
							65	48	45	24	57	55	28	54	47
							598	576	557	532	551	537	503	519	547

T.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
50	51	51	78	84	161	76	46	43	45	13	17	33	21	12	43
436	447	439	446	477	485	541	551	486	451	428	425	421	458	517	517
324	326	340	346	353	362	356	358	361	361	364	368	373	387	400	410
62	70	48	22	40	- 38	109	147	82	45	51	40	15	50	105	64
386	396	388	368	393	324	465	508	443	406	415	408	388	437	505	474

MBER.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	Avg.
6	6	5	4	3	4	4	3	5	5	5	5	4	3	0	4
407	400	408	391	378	333	339	325	326	333	326	326	329	350		343
339	334	333	328	324	322	320	313	304	301	301	299	293	292		354
62	61	71	60	50	7	16	7	17	27	20	23	33	58		85
401	395	404	388	374	329	336	320	321	328	321	322	326	350		439

July August September Aug. 22

PLATE

PASSING THE CALDWELL
GNALS, BY DAYS, JULY 24
ION 2 OF BOISE RIVER.

CHART 10.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
							13	9	20	30	0	14	25	20	16
							611	585	577	562	551	551	528	539	563
							533	528	512	508	494	482	475	465	500
							65	48	45	24	57	55	28	54	47
							598	576	557	532	551	537	503	519	547

T.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
50	51	51	78	84	161	76	46	43	45	13	17	33	21	12	43
436	447	439	446	477	485	541	551	486	451	428	425	421	458	517	517
324	326	340	346	353	362	356	358	361	361	364	368	373	387	400	410
62	70	48	22	40	38	109	147	82	45	51	40	15	50	105	64
386	396	388	368	393	324	465	505	443	406	415	408	388	437	505	474

MBER.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	Avg.
6	6	5	4	3	4	4	3	5	5	5	5	4	3	0	4
407	400	408	391	378	333	339	325	326	333	326	326	329	350		343
339	334	333	328	324	322	320	313	304	301	301	299	293	292		354
62	61	71	60	50	7	16	7	17	27	20	23	33	58		85
401	395	404	388	374	329	336	320	321	328	321	322	326	350		439

July August September ART. 22

PLATE

PASSING THE CALDWELL
SIGNALS, BY DAYS, JULY 24
STATION 2 OF BOISE RIVER.

CHART 10.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
							13	9	20	30	0	14	25	20	16
							611	585	577	562	551	551	528	539	563
							533	528	512	508	494	482	475	465	500
							65	48	45	24	57	55	28	54	47
							598	576	557	532	551	537	503	519	547

T.

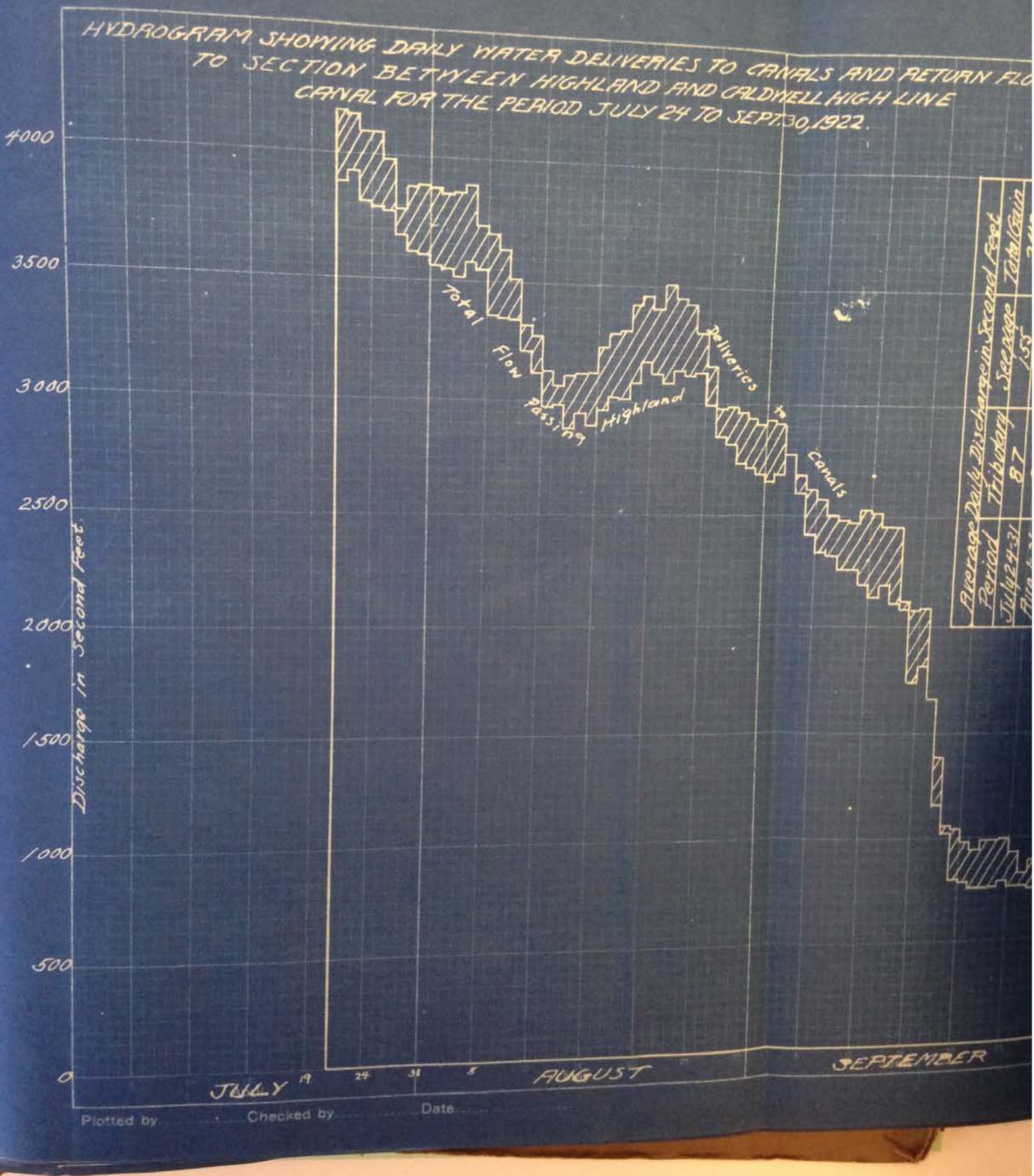
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
50	51	51	78	84	161	76	46	43	45	13	17	33	21	12	43
436	447	439	446	477	485	541	551	486	451	428	425	421	458	517	517
324	326	340	346	353	362	356	358	361	361	364	368	373	387	400	410
62	70	48	22	40	- 38	109	147	82	45	51	40	15	50	105	64
386	396	388	368	393	324	465	505	443	406	415	408	388	437	505	474

BER.

17	18	19	20	21	22	23	24	25	26	27	28	29	30	Avg.
6	6	5	4	3	4	4	3	5	5	5	5	4	3	0	4
407	400	408	391	378	333	339	325	326	333	326	326	329	350		343
339	334	333	328	324	322	320	313	304	301	301	299	293	292		354
62	61	71	60	50	7	16	7	17	27	20	23	33	58		85
401	395	404	388	374	329	336	320	321	328	321	322	326	350		439

July | August | September

ART 22


HYDROGRAM SHOWING DAILY WATER DELIVERIES TO CANALS AND RETURN FLO
TO SECTION BETWEEN HIGHLAND AND CALDWELL HIGH LINE
CANAL FOR THE PERIOD JULY 24 TO SEPT. 30, 1922.
4000
3500
3000
2500
2000
1500
1000
500
0
Discharge in Second Feet.
Total Flow Passing Highland
Deliveries to Canals
JULY
19
24
31
5
AUGUST
SEPTEMBER
Average Daily Discharge in Second Feet.
Period
Tributary
Seepage
Total Gain
July 24-31
87
Plotted by
Checked by
Date

PLATE

S AND RETURN FLOW
HIGH LINE
1922.

HYDROGRAPH SHOWING DAILY WATER DELIVER
TO CANALS AND RETURN FLOW TO SECTION
BETWEEN THE CALDWELL HIGH LINE CANAL
AND NOTUS FOR THE PERIOD JULY 24
TO SEPTEMBER 30 Inc. 1922.

Average Daily Discharge in Second Feet.			
Period	Tributary	Seepage	Total Gain
July 24-31	87	155	242
Aug. 1-31	86	153	239
Sept. 1-30	85	95	180
Avg. 68 days	85	128	213

DISCHARGE IN SECOND FEET.

700
600
500
400
300
200
100
0

Deliveries to Canals

Tributary and Seepage Flow

Boise River

passing Caldwell

High Line Canal

Canals

July

August

SEPTEMBER

PLATE

CHART-II.

HYDROGRAPH SHOWING DAILY WATER DELIVERIES TO CANALS AND RETURN FLOW TO SECTION BETWEEN THE CALDWELL HIGH LINE CANAL AND NOTUS FOR THE PERIOD JULY 24 TO SEPTEMBER 30 Inc. 1922.

Average Daily Discharge in Second Feet			
Period	Tributary	Seepage	Total Gain
July 24-31	500	47	547
Aug. 1-31	410	64	474
Sept. 1-30	354	85	439
Avg. 68 days	396	71	467

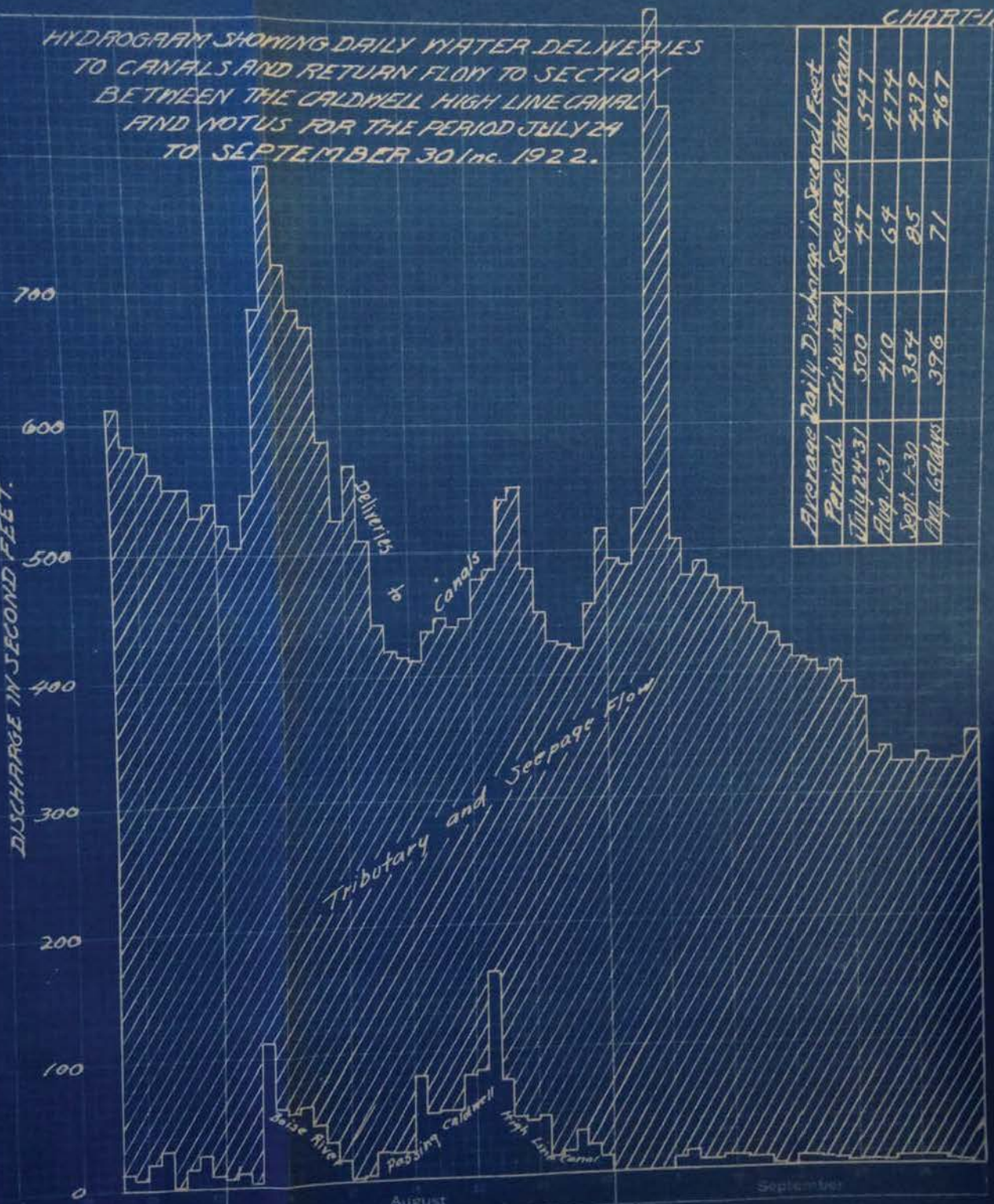


TABLE SHOWING AC
BASED ON RIVER D

	1	2	3	4	5	6	7	8	9	10	11	12
Available Water Return + Seepage Flow	516	494	544	578	735	666	628	629	556	508	567	3
Canal Requirements 60% of Decree	324	324	324	324	324	324	324	324	324	324	324	3
Excess +	+	+	+	+	+	+	+	+	+	+	+	
Deficit −	192	170	220	254	411	342	304	305	232	184	243	1
Canal Requirements 100% of Decree	540	540	540	540	540	540	540	540	540	540	540	5
Excess +	−	−	+	+	+	+	+	+	+	−	+	
Deficit −	24	46	4	38	195	126	88	89	16	32	27	3

	1	2	3	4	5	6	7	8	9	10	11	12
Available Water Return + Seepage Flow	494	488	533	913	842	499	466	485	473	458	458	4
Canal Requirements 60% of Decree	324	324	324	324	324	324	324	324	324	324	324	32
Excess +	+	+	+	+	+	+	+	+	+	+	+	
Deficit −	170	164	209	589	518	175	142	161	149	134	134	12
Canal Requirements 100% of Decree	540	540	540	540	540	540	540	540	540	540	540	54
Excess +	−	−	−	+	+	−	−	−	−	−	−	
Deficit −	46	52	07	373	302	41	74	55	67	82	82	9

SUMMARY TABL
Average Daily Flow in Second

	Available Return Flow		60% Canal Requirements		Excess		100% C Requir	
	Aug.	Sept.	Aug.	Sept.	Aug.	Sept.	Aug.	S
1916	518	555	324	285	194	270	540	
1917	410	386	324	324	86	62	540	
1918	503	500	324	324	179	176	540	
1919	325	307	324	324	1	−17	540	
1920	426	420	324	324	102	96	540	
1921	526	512	324	324	202	188	540	
1922	474	439	324	324	150	115	540	
Average	455	446	324	318	131	127	540	

April May June

Plotted by..... Checked by..... Date.....

1922.

TABLE SHOWING ACTUAL RETURN FLOW TO BOISE RIVER AVAILABLE FOR CANAL BASED ON RIVER DECREE, IN SECTION 2 OF BOISE RIVER, FOR THE PERIOD JULY

JULY.

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SUMMARY TABLE.																		
Average Daily Flow in Second Feet.																		
ble low ept.	60% Canal Requirements		Excess		100% Canal Requirements		Deficit.											
	Aug.	Sept.	Aug.	Sept.	Aug.	Sept.	Aug.	Sept.										
355	324	285	194	270	540	475	22	+80										591
386	324	324	86	62	540	540	130	154										324
500	324	324	179	176	540	540	37	40										+ 274
307	324	324	1	-17	540	540	215	233										540
420	324	324	102	96	540	540	114	120										+ 58
512	324	324	202	188	540	540	14	28										
439	324	324	150	165	540	540	66	101										
446	324	318	131	127	540	531	85	85										

AUGUST.

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
666	628	629	556	508	567	505	420	400	396	332	386	396	388	368	393	324	465	505
324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324
+ 342	+ 304	+ 305	+ 232	+ 184	+ 243	+ 181	+ 96	+ 76	+ 72	+ 8	+ 62	+ 72	+ 64	+ 44	+ 69	0	+ 141	+ 181
540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540
+ 126	+ 88	+ 89	+ 16	- 32	+ 27	- 35	- 120	- 140	- 144	- 208	- 154	- 144	- 152	- 172	- 147	- 216	- 75	- 35

SEPTEMBER.

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
499	466	485	473	458	458	448	431	430	420	405	401	395	404	388	374	329	336	320
324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324
+ 175	+ 142	+ 161	+ 149	+ 134	+ 134	+ 124	+ 107	+ 106	+ 96	+ 81	+ 77	+ 71	+ 80	+ 64	+ 50	+ 5	- 12	- 4
540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540
- 41	- 74	- 55	- 67	- 82	- 82	- 92	- 109	- 110	- 120	- 135	- 139	- 145	- 136	- 152	- 166	- 211	- 204	- 220

June July August

PLATE

...O BOISE RIVER AVAILABLE FOR CANAL REQUIREMENTS ... CHART-12.
...F BOISE RIVER, FOR THE PERIOD JULY 24 TO SEPT. 30.

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
								598	576	557	532	551	537	503	519	547
								324	324	324	324	324	324	324	324	324
								+ 274	+ 252	+ 233	+ 208	+ 227	+ 213	+ 179	+ 195	+ 223
								540	540	540	540	540	540	540	540	540
								+ 58	+ 36	+ 17	− 8	+ 11	− 3	− 37	− 21	+ 7

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
2	386	396	388	368	393	324	465	505	443	406	415	408	388	437	505	474
4	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324
− 8	+ 62	+ 72	+ 64	+ 44	+ 69	0	+ 141	+ 181	+ 119	+ 82	+ 91	+ 84	+ 64	+ 113	+ 181	+ 150
40	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540
− 08	− 154	− 144	− 152	− 172	− 147	− 216	− 75	− 35	− 97	− 134	− 125	− 132	− 152	− 103	− 35	− 66

...BER.

	17	18	19	20	21	22	23	24	25	26	27	28	29	30		Avg.
05	401	395	404	388	374	329	336	320	321	328	321	322	326	350		339
24	324	324	324	324	324	324	324	324	324	324	324	324	324	324		324
+ 81	+ 77	+ 71	+ 80	+ 64	+ 50	+ 5	+ 12	− 4	− 3	+ 4	− 3	− 2	+ 2	+ 26		+ 15
40	540	540	540	540	540	540	540	540	540	540	540	540	540	540		540
− 35	− 139	− 145	− 136	− 152	− 166	− 211	− 204	− 220	− 219	− 212	− 219	− 218	− 214	− 190		− 201

July August September

REVISED

AREA AND CAPACITY TABLE FOR ARROWROCK R

(Capacities derived from the Records of Reservoi

Elev.	Storage in Acre-feet	Diff.	Elev.	Storage in Acre-feet	Diff.	Elev.	Storage in Acre-feet	Diff.	Elev.	Storage in Acre-feet	Diff.
2956	0		3001	2900	155	3046	131220	390	3091	443500	1000
57	2	2	2	3060	160	47	135620	400	92	453500	1000
58	6	4	3	3230	170	48	140030	410	93	463500	1000
59	11	5	4	3405	175	49	144450	420	94	473500	1000
2960	19	8	5	3585	180	3050	148880	430	3095	483500	1000
61	29	10	6	3770	185	51	153320	440	96	494600	1100
62	41	12	7	3960	190	52	157770	450	97	505700	1100
63	55	14	8	4150	190	53	162230	460	98	516800	1100
64	71	16	9	4345	195	54	166700	470	99	527900	1100
2965	89	18	3010	4545	200	3055	171180	480	3100	539000	1100
66	109	20	11	4750	205	56	175670	490	1	551200	1200
67	131	22	12	4960	210	57	180170	500	2	563400	1200
68	155	24	13	5180	220	58	184680	510	3	575600	1200
69	181	26	14	5400	220	59	189200	520	4	587800	1200
2970	209	28	3015	5620	220	3060	193730	530	3105	600000	1200
71	239	30	16	5850	230	61	198270	540	6	613200	1300
72	272	33	17	6080	230	62	202820	550	7	626400	1300
73	308	36	18	6320	240	63	207380	560	8	639600	1300
74	347	39	19	6570	250	64	211950	570	9	652800	1300
2975	389	42	3020	6820	250	3065	216530	580	3110	666000	1300
76	434	45	21	7080	260	66	221120	590	11	679200	1300
77	482	48	22	7340	260	67	225720	600	12	692400	1300
78	533	51	23	7610	270	68	230330	610	13	705600	1300
79	587	54	24	7890	280	69	234950	620	14	718800	1300
2980	645	58	3025	8170	280	3070	239580	630	3115	732000	1300
81	705	60	26	8460	290	71	244220	640	16	745200	1300
82	770	65	27	8750	290	72	248870	650	17	758400	1300
83	840	70	28	9050	300	73	253530	660	18	771600	1300
84	915	75	29	9360	310	74	258200	670	19	784800	1300
2985	995	80	3030	9670	310	3075	262880	680	3120	798000	1300
86	1075	80	31	9980	310	76	267570	690	21	811500	1350
87	1160	85	32	10300	320	77	272270	700	22	825000	1350
88	1250	90	33	10620	320	78	276980	710	23	838500	1350
89	1345	95	34	10940	320	79	281700	720	24	852000	1350
2990	1445	100	3035	11260	320	3080	286430	730	3125	865500	1350
91	1550	105	36	11590	330	81	291170	800	26	879100	1360
92	1660	110	37	11920	330	82	295920	800	27	892700	1360
93	1780	120	38	12260	340	83	300680	810	28	906300	1360
94	1905	125	39	12610	350	84	305450	810	29	919900	1360
2995	2035	130	3040	12960	350	3085	310230	820	3130	933500	1360
96	2170	135	41	13320	360	86	315020	830	31	947200	1370
97	2310	140	42	13690	370	87	319820	840	32	960900	1370
98	2450	140	43	14060	370	88	324630	850	33	974600	1370
99	2595	145	44	14440	380	89	329450	860	34	988300	1370
3000	2745	150	3045	14830	390	3090	334280	870	3135	1002000	1370

REVISED

AREA AND CAPACITY TABLE FOR ARROWROCK R

(Capacities derived from the Records of the Reclama

Elev.	Storage in Acre Feet	Diff.	Elev.	Storage in Acre Feet	Diff.	Elev.	Storage in Acre Feet	Diff.	Elev.	Storage in Acre Feet	Diff.
2956	0		3081	2900	155	3046	131720	390	3091	44300	1000
57	2	2	2	3060	160	47	135620	400	92	45300	1000
58	6	4	3	3230	170	48	140030	410	93	46300	1000
59	11	5	4	3405	175	49	144450	420	94	47300	1000
2960	19	8	3086	3585	180	3050	148880	430	3095	48300	1000
61	29	10	6	3770	185	51	153320	440	96	49300	1000
62	41	12	7	3960	190	52	157770	450	97	50300	1000
63	55	14	8	4150	190	53	162230	460	98	51300	1000
64	71	16	9	4345	195	54	166700	470	99	52300	1000
2965	89	18	3010	4545	200	3055	171180	480	3100	53300	1000
66	109	20	11	4750	205	56	175670	490	1	54300	1000
67	131	22	12	4960	210	57	180170	500	2	55300	1000
68	155	24	13	5180	220	58	184680	510	3	56300	1000
69	181	26	14	5400	220	59	189200	520	4	57300	1000
2970	209	28	3015	5620	220	3060	193730	530	3105	58300	1000
71	239	30	16	5830	230	61	198270	540	6	59300	1000
72	272	33	17	6080	250	62	202820	550	7	60300	1000
73	308	36	18	6320	240	63	207380	560	8	61300	1000
74	347	39	19	6570	250	64	211950	570	9	62300	1000
2975	389	42	3020	6820	250	3065	216530	580	3110	63300	1000
76	434	45	21	7080	260	66	221120	590	11	64300	1000
77	482	48	22	7340	260	67	225730	610	12	65300	1000
78	533	51	23	7610	270	68	230380	630	13	66400	1100
79	587	54	24	7890	280	69	235050	650	14	67500	1100
2980	645	58	3025	8170	280	3070	239740	660	3115	68600	1100
81	705	60	26	8460	290	71	244460	670	16	69700	1100
82	770	65	27	8750	290	72	249230	690	17	70800	1100
83	840	70	28	9050	300	73	254050	700	18	71900	1100
84	915	75	29	9360	310	74	258960	710	19	73000	1100
2985	995	80	3030	9670	310	3075	263980	720	3120	74100	1100
86	1075	80	31	9980	310	76	269110	730	21	75200	1100
87	1160	85	32	10300	320	77	274350	740	22	76300	1100
88	1250	90	33	10620	320	78	279710	760	23	77500	1200
89	1345	95	34	10940	320	79	285180	770	24	78600	1100
2990	1445	100	3035	11260	320	3080	290770	780	3125	79700	1100
91	1550	105	36	11590	330	81	296470	800	26	80800	1100
92	1660	110	37	11920	330	82	302270	800	27	81900	1100
93	1780	120	38	12260	340	83	308180	810	28	83000	1100
94	1905	125	39	12610	350	84	314190	810	29	84100	1100
2995	2035	130	3040	12960	350	3085	320300	820	3130	85200	1100
96	2170	135	41	13320	360	86	326520	820	31	86300	1100
97	2310	140	42	13690	370	87	332850	830	32	87400	1100
98	2460	150	43	14060	370	88	339290	840	33	88500	1100
99	2615	155	44	14440	380	89	345840	850	34	89600	1100
3000	2775	160	3045	14830	390	3090	352500	860	3135	90700	1100

REVISED

Y TABLE FOR ARROWROCK RESERVOIR.

CHART 19.

ed from the Records of Inflow and Outflow.]

Compiled by U.S.G.S. Jan. 1918.

Diff	Elev.	Storage in Acre feet	Diff.	Elev.	Storage in Acre feet	Diff.	Elev.	Storage in Acre feet	Diff.
390	3091	443300	1000	3136	1063700	1700	3187	1769000	2400
400	92	453900	1000	37	1074400	1700	92	1793400	2400
410	93	463500	1000	38	1091100	1700	93	2017000	2400
420	94	473500	1000	39	1108000	1700	94	2041400	2400
430	3095	483500	1000	3140	1122400	1700	3195	2065800	2400
440	96	494600	1100	41	1143300	1800	96	2090000	2500
450	97	505700	1100	42	1161100	1800	97	2115000	2500
460	98	516800	1100	43	1179000	1800	98	2140000	2500
470	99	528000	1100	44	1197000	1800	99	2165000	2500
480	3100	539200	1200	3145	1215000	1800	3200	2190000	2500
490	1	551200	1200	46	1233400	1900	91	2221600	2600
500	2	564400	1200	47	1253300	1900	92	2244200	2600
510	3	577600	1200	48	1272200	1900	93	2271800	2600
520	4	590800	1200	49	1291100	1900	94	2304400	2600
530	3105	600000	1200	3150	1311000	1900	3205	2332000	2600
540	6	613000	1300	51	1333000	2000	96	2364600	2600
550	7	626000	1300	52	1354000	2000	97	2397200	2600
560	8	639000	1300	53	1377000	2000	98	2429800	2600
570	9	652000	1300	54	1399000	2000	99	2462400	2600
580	3110	665000	1300	3155	1421000	2000	3210	2495000	2600
590	11	678000	1300	56	1443000	2000	1	2527600	2600
600	12	691100	1300	57	1463000	2000	2	2560600	2800
610	13	704200	1300	58	1487000	2000	3	2593400	2800
620	14	717300	1300	59	1508000	2000	4	2626200	2800
630	3115	730400	1300	3160	1531000	2000	3215	2659000	2800
640	16	743400	1400	61	1553100	2100	6	2691800	2900
650	17	756500	1400	62	1575300	2100	7	2724800	2900
660	18	769600	1400	63	1597500	2100	8	2757700	2900
670	19	782600	1400	64	1619800	2100	9	2790600	2900
680	3120	795600	1400	3165	1642000	2100	3220	2823500	3000
690	21	808500	1500	66	1663700	2200	11	2856500	3000
700	22	823000	1500	67	1685400	2200			
710	23	838500	1500	68	1708100	2200			
720	24	854000	1500	69	1730800	2200			
730	3125	869500	1500	3170	1753500	2300	2967	Center of Spillway Gates.	
740	26	884800	1600	71	1776800	2300	3018	C.L. of Diversion Tunnel.	
750	27	900200	1600	72	1799100	2300	3065	C.L. of Power Tunnel.	
760	28	915500	1600	73	1821400	2300	3109	Crest of Spillway Weir.	
770	29	930800	1600	74	1843700	2300	3200	Crest of Diversion Weir.	
780	3130	946000	1600	3175	1866000	2300			
790	31	961200	1700	76	1885300	2300			
800	32	978200	1700	77	1907600	2300			
810	33	995200	1700	78	1929900	2300			
820	34	1012300	1700	79	1952200	2300			
830	3135	1029000	1700	3180	1974500	2300			

Percent Diversion

1917	1916	1915	
6.9	6.4	7.0	
11.5	23.2	26.7	2
25.8	22.3	23.8	2
26.5	20.8	19.1	2
20.8	16.0	14.2	16.0
14.5	11.3	9.2	11.2
100.0	100.0	100.0	100.0

1917 1916

3.88 4.14

2.64 3.31

3.46 4.32

2.37 4.74

3.85 4.60

3.03 3.47

2.78 3.75

4.83 4.65

TABLE SHOWING TIME AT WHICH DECREED RIGHTS ARE SUBJECT TO CUTS BELOW 60% OF FULL RIGHT, FOR 28 YEAR PERIOD, 1895-1922, Inc. ALSO GIVES NUMBER OF DAYS CUT PRIOR TO SEPTEMBER 30th OF EACH YEAR.

Year	Pioneer Irrig. D. Right No. 135 60% = 33.80 Second Feet.	New York Stock Total Rights. 60% = 166 Second Feet.	Farmers Union Right No. 126 60% = 66 Second Feet.	Settlers Ditch Right No. 122 60% = 44.06 Second Feet.	Pioneer Irrig. D. Right No. 117 60% = 120 Second Feet.	Fridenbaugh Right No. 106 60% = 222.50 Second Feet.
1895	Aug. 9 51 days	Aug. 16 39 days	Sept. 1 3 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1896	Aug. 18 41 days	Aug. 20 36 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1897	Aug. 16 30 days	Aug. 17 29 days	Aug. 21 12 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1898	July 25 68 days	July 26 66 days	Aug. 12 50 days	Aug. 15 47 days	Aug. 15 47 days	Aug. 23 27 days
1899	Sept. 22 9 days	Sept. 26 5 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1900	July 27 64 days	July 29 64 days	Aug. 10 47 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1901	July 31 62 days	Aug. 5 57 days	Aug. 7 51 days	Aug. 23 27 days	Sept. 30 0 days	Sept. 30 0 days
1902	July 31 62 days	Aug 2 60 days	Aug. 8 54 days	Aug. 20 42 days	Aug. 23 39 days	Sept. 30 0 days
1903	Aug. 6 56 days	Aug. 6 56 days	Aug. 8 49 days	Aug. 13 35 days	Aug. 16 29 days	Sept. 30 0 days
1904	Aug. 24 38 days	Aug. 24 38 days	Aug. 24 32 days	Aug 26 17 days	Aug. 26 16 days	Sept. 2 9 days
1905	July 17 76 days	July 18 75 days	July 24 69 days	July 29 64 days	Aug. 2 60 days	Aug. 9 53 days
1906	Aug. 3 59 days	Aug. 5 57 days	Aug. 8 53 days	Aug. 11 45 days	Aug. 16 36 days	Sept. 21 10 days
1907	Sept. 9 22 days	Sept. 14 16 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1908	Aug. 10 50 days	Aug. 10 46 days	Aug. 27 15 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1909	Aug. 12 43 days	Aug. 13 41 days	Aug. 21 24 days	Aug. 23 9 days	Aug. 27 3 days	Sept. 30 0 days
1910	July 31 57 days	Aug. 2 55 days	Aug 19 27 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1911	Aug. 21 41 days	Aug 25 34 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1912	Aug. 23 22 days	Aug. 23 22 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1913	Aug. 22 39 days	Aug 22 39 days	Sept. 15 12 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1914	Aug. 8 49 days	Aug. 9 48 days	Aug. 16 36 days	Aug 22 22 days	Sept. 1 12 days	Sept. 30 0 days
1915	July 21 72 days	July 21 72 days	July 26 65 days	Aug. 4 56 days	Aug. 5 55 days	Aug 13 36 days
1916	Aug. 24 38 days	Aug 25 37 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1917	Aug. 11 45 days	Aug. 11 45 days	Aug. 20 34 days	Sept 6 17 days	Sept. 30 0 days	Sept. 30 0 days
1918	July 29 41 days	July 29 40 days	Aug. 12 16 days	Aug. 14 16 days	Aug. 21 13 days	Sept. 3 6 days
1919	July 12 81 days	July 13 80 days	July 23 70 days	July 23 70 days	July 27 61 days	Aug. 4 53 days
1920	July 15 78 days	July 16 77 days	Aug. 2 60 days	Aug. 5 57 days	Aug 6 53 days	Aug 12 30 days
1921	Aug 3 68 days	Aug 6 45 days	Aug. 4 32 days	Aug 19 32 days	Aug 22 24 days	Sept 4 16 days
1922	Aug 4 63 days	Aug. 12 50 days	Aug. 19 43 days	Aug 22 35 days	Aug 28 28 days	Sept. 4 3 days

SUMMARY TABL

Pioneer Irrigation District Right No. 135	10 yrs. avg. 66 d 16 " " 44 2 " " 15 28 " " 50
New York Stock Rights 60% of 277 = 166 Sec. Ft.	7 Yrs. avg. 68 d 19 " " 46 2 " " 10 28 " " 47
Farmers Union Right No. 126. 60% = 66 Sec. Ft.	3 Yrs. avg. 6 17 " " 3 8 " " 28 " " 3
Settlers Irrig. Dist. Right No. 122 60% = 44 Sec. Ft.	2 Yrs. avg. 67 13 " " 34 13 " " 1 28 " " 21
Pioneer Irrig. Dist Right No. 117. 60% = 120 Sec. Ft.	1 Yr. avg. 61 d 12 " " 34 15 " " 1 28 " " 17
Nampa-Meridian Irrig. Dist. Right No. 106.	5 yrs avg 7 23 " " 2

TABLE SHOWING TIME AT WHICH DECREED RIGHTS ARE SUBJECT TO CUTS BELOW 60% OF FULL RIGHT, FOR 28 YEAR PERIOD, 1895-1922, Inc. ALSO GIVES NUMBER OF DAYS CUT PRIOR TO SEPTEMBER 30th OF EACH YEAR.

Year	Pioneer Irrig. D. Right No. 135 60% = 33.80 Second Feet	New York Stock Total Rights. 60% = 166 Second Feet.	Farmers Union Right No. 126 60% = 66 Second Feet.	Settlers Ditch Right No. 122 60% = 44.06 Second Feet.	Pioneer Irrig. D. Right No. 117 60% = 120 Second Feet.	Fridenbaugh Right No. 106 60% = 222.50 Second Feet.
1895	Aug 9 51 days	Aug 16 39 days	Sept 1 3 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1896	Aug. 18 41 days	Aug 20 36 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1897	Aug. 16 43 days	Aug 17 29 days	Aug 21 12 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1898	July 25 68 days	July 26 66 days	Aug. 12 50 days	Aug. 15 47 days	Aug 15 47 days	Aug 23 27 days
1899	Sept. 22 9 days	Sept. 26 5 days	Sept. 30 0 days	Sept. 30 0 days	Sept 30 0 days	Sept. 30 0 days
1900	July 27 64 days	July 29 64 days	Aug. 10 47 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1901	July 31 62 days	Aug. 5 57 days	Aug. 7 51 days	Aug. 23 27 days	Sept. 30 0 days	Sept. 30 0 days
1902	July 31 62 days	Aug 2 60 days	Aug. 8 54 days	Aug. 20 42 days	Aug. 23 39 days	Sept. 30 0 days
1903	Aug. 6 56 days	Aug 6 56 days	Aug. 8 49 days	Aug. 13 35 days	Aug. 16 29 days	Sept. 30 0 days
1904	Aug. 24 38 days	Aug 24 38 days	Aug. 24 32 days	Aug. 26 17 days	Aug. 26 16 days	Sept. 2 9 days
1905	July 17 76 days	July 18 75 days	July 24 69 days	July 29 64 days	Aug. 2 60 days	Aug. 9 53 days
1906	Aug 3 59 days	Aug. 5 57 days	Aug. 8 53 days	Aug. 11 45 days	Aug. 16 36 days	Sept. 21 10 days
1907	Sept. 9 22 days	Sept 14 16 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1908	Aug. 10 50 days	Aug. 10 46 days	Aug. 27 15 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1909	Aug. 12 43 days	Aug. 13 41 days	Aug. 21 24 days	Aug. 23 9 days	Aug. 27 3 days	Sept. 30 0 days
1910	July 31 57 days	Aug. 2 55 days	Aug 19 27 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1911	Aug. 21 41 days	Aug 25 34 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1912	Aug. 23 33 days	Aug 23 33 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1913	Aug. 22 39 days	Aug 22 39 days	Sept. 15 12 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1914	Aug. 8 49 days	Aug 9 48 days	Aug. 16 36 days	Aug. 22 22 days	Sept. 1 12 days	Sept. 30 0 days
1915	July 21 72 days	July 21 72 days	July 26 65 days	Aug. 4 56 days	Aug. 5 55 days	Aug 13 36 days
1916	Aug. 24 38 days	Aug 25 37 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days	Sept. 30 0 days
1917	Aug. 11 45 days	Aug. 11 45 days	Aug. 20 34 days	Sept 6 17 days	Sept. 30 0 days	Sept. 30 0 days
1918	July 29 41 days	July 29 40 days	Aug. 12 16 days	Aug. 14 16 days	Aug. 21 13 days	Sept. 3 6 days
1919	July 12 81 days	July 13 80 days	July 23 70 days	July 23 70 days	July 27 61 days	Aug. 4 53 days
1920	July 15 78 days	July 16 77 days	Aug. 2 60 days	Aug. 5 57 days	Aug 6 53 days	Aug 12 30 days
1921	Aug 3 59 days	Aug. 6 55 days	Aug. 24 32 days	Aug 19 32 days	Aug 22 29 days	Sept. 4 16 days
1922	Aug 4 43 days	Aug. 12 50 days	Aug. 19 43 days	Aug 22 35 days	Aug 28 28 days	Sept. 19 3 days

SUMMARY TABL

Pioneer Irrigation District Right No. 135	10 yrs. avg. 66 d 16 " " 44 2 " " 15 28 " " 50
New York Stock Rights 60% of 277 = 166 Sec. Ft.	7 Yrs. avg. 68 d 19 " " 46 2 " " 10 28 " " 47
Farmers Union Right No. 126. 60% = 66 Sec. Ft.	3 Yrs. avg. 6 17 " " " 8 " " " 28 " " J
Settlers Irrig. Dist. Right No. 122 60% = 44 Sec Ft.	2 Yrs. avg 67 13 " " 34 13 " " 1 28 " " 21
Pioneer Irrig Dist Right No. 117. 60% = 120 Sec Ft.	1 Yr. avg 61 d 12 " " 34 15 " " 1 28 " " 17
Nampa-Meridian Irrig. Dist. Right No. 106.	5 yrs avg 23 " " 2

H DECREED RIGHTS
LOW 60% OF FULL
OD, 1895-1922, Inc.
YS CUT PRIOR
OF EACH YEAR.

...tch	Pioneer Irrig. D... Right No. 117 60% = 120 Second Feet.	Ridenbaugh Right No. 106 60% = 222.50 Second Feet.
...22	Sept. 30 0 days	Sept. 30 0 days
...06	Sept. 30 0 days	Sept. 30 0 days
...ct	Sept. 30 0 days	Sept. 30 0 days
...ays	Aug 15 47 days	Aug 23 27 days
...ays	Sept. 30 0 days	Sept. 30 0 days
...ays	Sept. 30 0 days	Sept. 30 0 days
...ays	Sept. 30 0 days	Sept. 30 0 days
...ays	Aug 23 39 days	Sept. 30 0 days
...ays	Aug. 16 29 days	Sept. 30 0 days
...ays	Aug 26 16 days	Sept. 2 9 days
...ays	Aug. 2 60 days	Aug. 9 53 days
...ays	Aug. 16 36 days	Sept. 21 10 days
...ays	Sept. 30 0 days	Sept. 30 0 days
...ays	Sept. 30 0 days	Sept. 30 0 days
...ays	Aug. 27 3 days	Sept. 30 0 days
...ays	Sept. 30 0 days	Sept. 30 0 days
...ays	Sept. 30 0 days	Sept. 30 0 days
...ays	Sept. 30 0 days	Sept. 30 0 days
...ays	Sept. 30 0 days	Sept. 30 0 days
...ays	Sept. 1 12 days	Sept. 30 0 days
...ays	Aug. 5 53 days	Aug. 13 36 days
...ays	Sept. 30 0 days	Sept. 30 0 days
...ays	Sept. 10 0 days	Sept. 30 0 days
...ays	Aug. 21 13 days	Sept. 3 6 days
...ays	July 27 61 days	Aug. 4 34 days
...ays	Aug 6 53 days	Aug 12 30 days
...ays	Aug 22 24 days	Sept 4 16 days
...ays	Aug. 29 28 days	Sept. 14 3 days

CHART-14.

SUMMARY TABLE

Pioneer Irrigation District Right No. 135	10 yrs. avg. 66 days - July. 16 " " 44 " - Aug. 2 " " 15 " - Sept. 28 " " 50 " .
New York Stock Rights 60% of 277 = 166 Sec. Ft.	7 Yrs. avg. 68 days - July. 19 " " 46 " - Aug. 2 " " 10 " - Sept. 28 " " 47 " .
Farmers Union Right No. 126. 60% = 66 Sec. Ft.	3 Yrs. avg. 68 days - July. 17 " " 38 " - Aug. 8 " " 2 " Sept. 28 " " 31 " .
Settlers Irrig. Dist. Right No. 122 60% = 44 Sec. Ft.	2 Yrs. avg. 67 days - July. 13 " " 34 " - Aug. 13 " " 1 " - Sept. 28 " " 21 " .
Pioneer Irrig. Dist Right No. 117. 60% = 120 Sec. Ft.	1 Yr. avg. 61 days - July. 12 " " 34 " - Aug. 15 " " 1 " Sept. 28 " " 17 " .
Nampa - Meridian Irrig. Dist. Right No. 106	5 yrs avg. 40 days - Aug. 23 " " 2 day - Sept.

A.U.T. 1922

Acre Feet per Acre						
1922	1921	1920	1919	1918	1917	1916
4.82	5.15	4.27	4.47	4.49	3.88	4.14
3.98	3.93	3.33	3.02	2.89	2.64	3.31
5.55	5.71	3.83	3.61	4.55	3.46	4.32
5.65	5.18	5.02	4.87	4.17	2.37	4.74
6.14	5.88	5.14	4.51	3.93	3.85	4.60
6.75	4.25	5.00	6.16	4.22	3.03	3.47
5.44	4.95	4.27	3.68	4.57	2.78	3.75
7.45	4.65	4.71	4.65	4.70	4.83	4.65
5.26	5.25	4.74	4.94	4.92	5.12	4.95
5.17	4.53	5.29	4.64	4.59	4.25	5.15
6.15	6.30	3.79	4.02	4.23	3.74	4.76
5.27	6.00	5.45	4.36	5.48	4.49	5.58
2.84	3.60	2.68	2.68	2.94	3.25	3.34
4.03	4.57	4.45	4.21	4.47	3.59	4.68
1.59	2.34	1.56	1.25	1.27	1.42	1.76
5.24	5.93	5.21	4.79	4.36	3.58	4.15
5.46	4.48	4.58	5.15	4.25	3.69	5.13
1.36	1.57	2.50	1.57	1.94	1.16	1.41
4.96	5.09	4.32	4.13	4.35	3.84	4.33

A.U.T. 1922.

...s Inches per Acre				Per cent Diver...			
...79	1920	1921	1922	1916	1917	1918	1919
.23	.16	.38	.13	7.9	6.9	6.4	7.0
.90	.79	.74	.81	18.7	11.5	23.2	26.7
.82	.86	.90	.98	19.2	25.8	22.3	23.8
.64	.77	.90	.89	21.5	26.5	20.8	19.1
.48	.56	.68	.71	17.6	20.8	16.0	14.2
.92	.40	.53	.52	15.1	14.5	11.3	9.2
	.59	.69	.68	100.0	100.0	100.0	100.0

TABLE, IN ACRE FEET, SHOWING QUANTITIES DIVERTE
FROM BOISE RIVER FOR EACH MONTH OF IRRIGATION S

Canal	April	May	June	July	August	September	To
Ridenbaugh	2676	22924	25856	27964	23248	17804	12
Settlers	910	9526	11368	10400	7320	5442	4
Farmers Union	592	9830	10894	9778	7622	5346	4
Boise Valley	102	2954	3570	3692	2786	2312	1
Dry Creek	0	2798	5074	3810	2840	2190	1
Ballantine	0	702	788	986	972	452	3
Middleton Water Co	3742	6586	6624	6410	4268	3386	31
Middleton Mill Ditch	986	6246	6556	5418	2828	2156	24
Phyllis	6010	22666	27252	25660	21616	12536	115
Pioneer	20	1574	1650	1348	1038	1002	66
Canyon Co.	1360	4576	5822	5196	3644	2720	233
Farmers Coop	1416	17596	21350	16652	13990	10646	816
Canyon	0	812	788	620	978	726	39
Seltenberg	102	484	720	638	544	602	304
Pioneer Dixie	0	314	1056	1332	1082	1120	496
Eureka No 2	0	2284	2936	3148	2918	2126	1341
Upper Point	0	712	664	764	716	616	341
Lower Point	0	0	0	782	746	256	176
Total	17916	112584	132968	124598	99156	71438	558660

Month	Acre Feet Diverted							Acre Feet Diverted per Acre							A
	1916	1917	1918	1919	1920	1921	1922	1916	1917	1918	1919	1920	1921	1922	1916
April	38752	3792	31512	32346	21948	51884	17916	.34	.03	.28	.28	.19	.46	.16	.28
May	91894	50150	114716	123910	110206	103686	112584	.81	.44	1.01	1.11	.97	.92	1.00	.65
June	94162	112326	110264	112044	117400	121154	132968	.83	.99	.97	.99	1.04	1.08	1.18	.69
July	106068	115366	102698	90080	107586	126442	124598	.94	1.02	.91	.77	.95	1.12	1.11	.76
August	86590	90236	78784	66448	78452	98616	99156	.76	.80	.69	.59	.69	.88	.88	.61
September	73978	62678	55764	43534	54836	71126	71438	.65	.55	.49	.39	.48	.63	.63	.54
Total	491444	434548	493738	470862	490428	573408	558660	4.33	3.84	4.35	4.15	4.32	5.09	4.96	.57

TIES DIVERTED BY 18 CANALS
E IRRIGATION SEASON OF 1922.

CHART-15.

September	Total	Acres Irrig	Acre Feet per Acre						
			1922	1921	1920	1919	1918	1917	1916
17804	120472	25000	4.82	5.15	4.27	4.47	4.49	3.88	4.14
5442	44966	12300	3.98	3.93	3.33	3.02	2.89	2.64	3.31
5346	44062	8100	5.55	5.71	3.83	3.61	4.55	3.46	4.32
2312	15416	2729	5.65	5.18	5.02	4.87	4.17	2.37	4.74
2190	16712	2720	6.14	5.88	5.14	4.51	3.93	3.85	4.60
452	3900	578	6.75	4.25	5.00	6.16	4.22	3.03	3.47
3386	31016	5704	5.44	4.95	4.27	3.68	4.57	2.78	3.75
2156	24190	3245	7.45	4.65	4.71	4.65	4.70	4.83	4.65
12536	115740	22000	5.26	5.25	4.74	4.94	4.92	5.12	4.95
1002	6632	1286	5.17	4.53	5.29	4.64	4.59	4.25	5.15
2720	23318	3790	6.15	6.30	3.79	4.02	4.23	3.74	4.76
10646	81650	15500	5.27	6.00	5.45	4.36	5.48	4.44	5.58
726	3924	1382	2.84	3.60	2.68	2.68	2.94	3.25	3.34
602	3090	767	4.03	4.57	4.45	4.21	4.47	3.59	4.68
1120	4904	3082	1.59	2.34	1.56	1.75	1.27	1.42	1.76
2126	13412	2560	5.24	5.93	5.21	4.79	4.36	3.58	4.15
616	3472	636	5.46	4.48	4.58	5.15	4.25	3.69	5.13
256	1784	1309	1.36	1.57	2.50	1.57	1.94	1.18	1.41
71438	558660	112688	4.96	5.09	4.32	4.13	4.35	3.84	4.33

AVT. 1922.

er Acre			Rate in Miners Inches per Acre							Per cent Diverted in Month						
20	1921	1922	1916	1917	1918	1919	1920	1921	1922	1916	1917	1918	1919	1920	1921	1922
19	.46	.16	.28	.02	.23	.23	.16	.38	.13	7.9	0.9	6.4	7.0	4.5	9.1	3.2
77	.92	1.00	.65	.36	.81	.90	.78	.74	.81	18.7	11.5	23.2	26.7	22.5	18.1	20.2
04	1.08	1.18	.69	.82	.81	.82	.86	.90	.98	19.2	25.8	22.3	23.8	23.9	21.1	23.8
25	1.12	1.11	.76	.82	.73	.64	.77	.90	.89	21.5	26.5	20.8	19.1	21.9	22.1	23.3
69	.88	.88	.61	.65	.56	.48	.56	.68	.71	17.6	20.8	16.0	14.2	16.0	17.2	17.7
48	.63	.63	.54	.46	.41	.32	.40	.53	.52	15.1	14.5	11.3	9.2	11.2	12.4	12.8
32	5.09	4.96	.59	.52	.59	.57	.59	.69	.68	100.0	100.0	100.0	100.0	100.0	100.0	100.0

CHART-16

CHART SHOWING AVERAGE HEADGATE DUTY OF WATER IN MINERS INCHES PER ACRE FOR 18 BOISE VALLEY CANALS FOR YEARS 1916 TO 1922 inc.

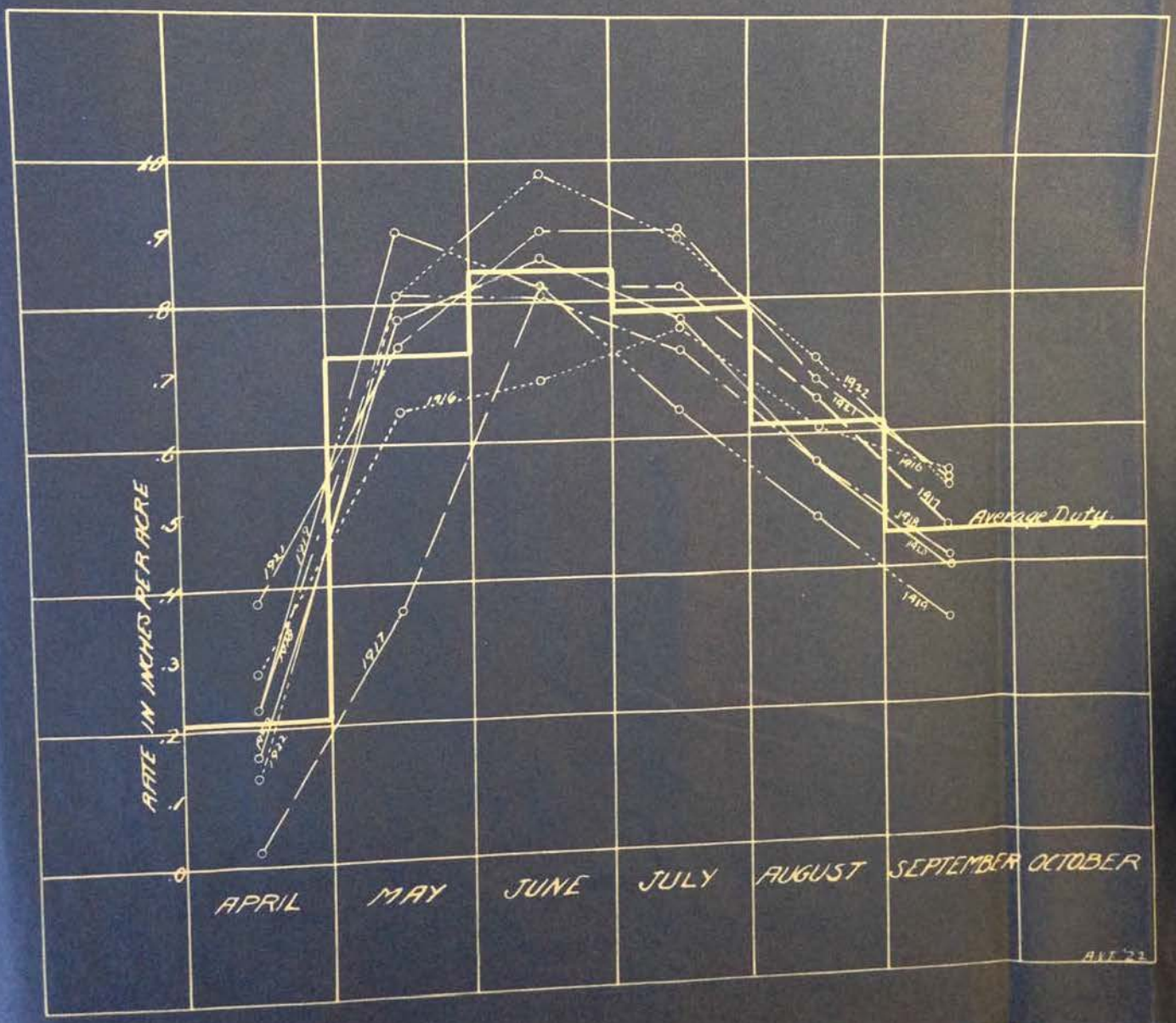
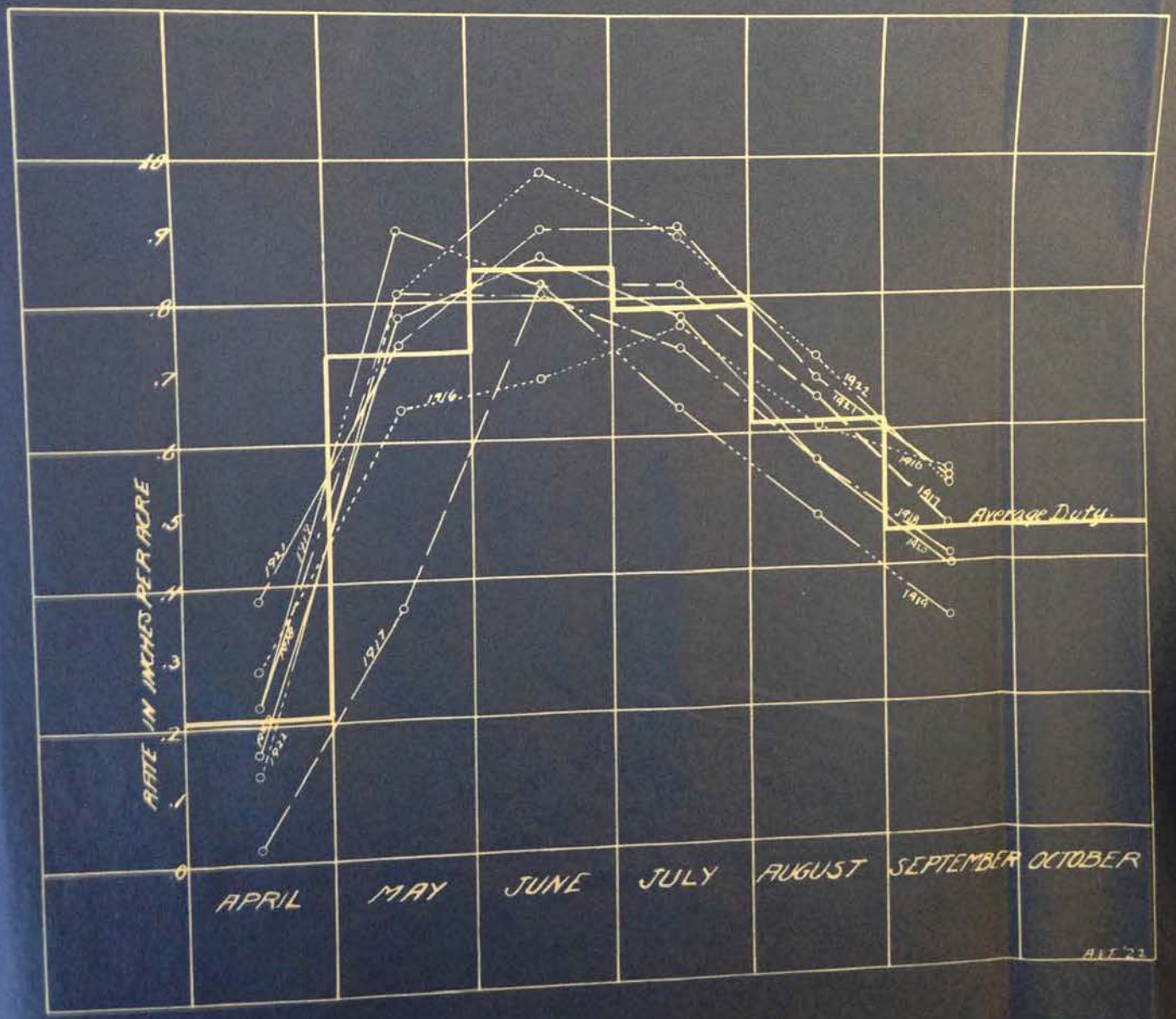


CHART-16

CHART SHOWING AVERAGE HEADGATE DUTY OF WATER IN MINERS INCHES PER ACRE FOR 18 BOISE VALLEY CANALS FOR YEARS 1916 TO 1922 inc.



TOTAL MONTHLY DIVERSIONS, IN ACRE FEET, OF CANALS IN DRAINAGE DISTRICT NO. 2 FOR 29000 ACRES. IRRIGATION SEASON 1922.

Canal	APRIL	MAY	JUNE	JULY	AUGUST	SE
Farmers Union	592	9830	10894	9778	7622	
Boise Valley	102	2954	3570	3692	2786	
Little Union	0	660	686	932	616	
Dry Creek	0	2798	5074	3810	2840	
Ballantine	0	702	788	986	972	
Pioneer	20	1574	1650	1348	1038	
Middleton Water Co. Middleton Mill Ditch } + Star Feeder.	4728	12832	15070	15530	10508	
Canyon County + Long Feeder	1360	5774	6614	6124	4516	3
Total	6802	37124	44346	42200	30898	236

TOTAL MONTHLY FLOW, IN ACRE FEET, OF DRAINAGE CANALS IN DRAINAGE DISTRICT NO. 2. SEASON 1922.

Drain	APRIL	MAY	JUNE	JULY	AUGUST	SEP
Eagle Drain	926	2054	2818	2582	2588	21
Dry Creek Waste	958	1266	490	196	246	3
Star Feeder	0	0	1890	3702	3412	30
Long Feeder	0	1198	792	928	872	6
South Middleton Drain	2954	5222	8124	7030	4408	43
Middleton Slough Drain	1498	2962	3080	3138	2274	15
Hartley Drain	266	514	674	762	598	9
Total	7102	13216	17868	18358	14398	130

6.38 Acre Feet per Acre Diverted.
2.90 " " " " Accounted for.
3.48 " " " " Used and retained.

CHART-17.

ONTHLY DIVERSIONS, IN ACRE FEET,
ALS IN DRAINAGE DISTRICT NO. 2
29000 ACRES. IRRIGATION SEASON 1922.

APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	Total
592	9830	10894	9778	7622	5346	44062
102	2954	3570	3692	2786	2312	15416
0	660	686	932	616	378	3272
0	2798	5074	3810	2840	2190	16712
0	702	788	986	972	452	3900
20	1574	1650	1348	1038	1002	6632
4728	12832	15070	15530	10508	8640	67308
1360	5774	6614	6124	4516	3348	27736
6802	37124	44346	42200	30898	23668	185038

ONTHLY FLOW, IN ACRE FEET, OF DRAINAGE
S IN DRAINAGE DISTRICT NO. 2. SEASON 1922.

APRIL	MAY	JUNE	JULY	AUGUST	SEPT.	Total
926	2054	2818	2582	2588	2182	13150
958	1266	490	196	246	330	3486
0	0	1890	3702	3412	3098	12102
0	1198	792	928	872	628	4418
2954	5222	8124	7030	4408	4342	32080
1498	2962	3080	3158	2274	1540	15012
266	514	674	762	598	904	3718
7102	13216	17868	18358	14398	13024	83966

638 Acre Feet per Acre Diverted.
290 " " " " Accounted for.
348 " " " " Used and retained.

CHART-17.

ONTHLY DIVERSIONS, IN ACRE FEET,
ALS IN DRAINAGE DISTRICT NO. 2
29000 ACRES. IRRIGATION SEASON 1922.

APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	Total
592	9830	10894	9778	7622	5346	44062
102	2954	3570	3692	2786	2312	15416
0	660	686	932	616	378	3272
0	2798	5074	3810	2840	2190	16712
0	702	788	986	972	452	3900
20	1574	1650	1348	1038	1002	6632
4728	12832	15070	15530	10508	8640	67308
1360	5774	6614	6124	4516	3348	27736
6802	37124	44346	42200	30698	23668	185038

ONTHLY FLOW, IN ACRE FEET, OF DRAINAGE
S IN DRAINAGE DISTRICT NO. 2. SEASON 1922.

APRIL	MAY	JUNE	JULY	AUGUST	SEPT.	Total
926	2054	2818	2582	2588	2182	13150
958	1266	490	196	246	330	3486
0	0	1890	3702	3412	3098	12102
0	1198	792	928	872	628	4418
2954	5222	8124	7030	4408	4342	32080
1498	2962	3080	3158	2274	1540	15012
266	514	674	762	598	904	3718
7102	14216	17868	18358	14348	13024	83966 A.F. 22

638 Acre Feet per Acre Diverted.
290 " " " " Accounted for.
348 " " " " Used and retained.

SUMMARY TABLE, IN SECOND FEET, OF DAILY RETURN FLOW FOR NINE YEAR PERIOD, 1914 TO 1922. Inc.

CHART-

RETURN FLOW TO ENTIRE RIVER.

Year	April	May	June	July	August	September	Average
1914				465	276	469	403
1915	447	861	545	498	381	460	533
1916	939	1192	1191	1006	727	739	964
1917		1214	1341	1179	690	715	1027
1918	1093	1247	1281	756	785	938	1016
1919	822	1008	1048	598	558	549	763
1920	441	629	817	697	630	596	635
1921	1075	1475	880	888	811	814	990
1922	903	741	963	836	713	618	795

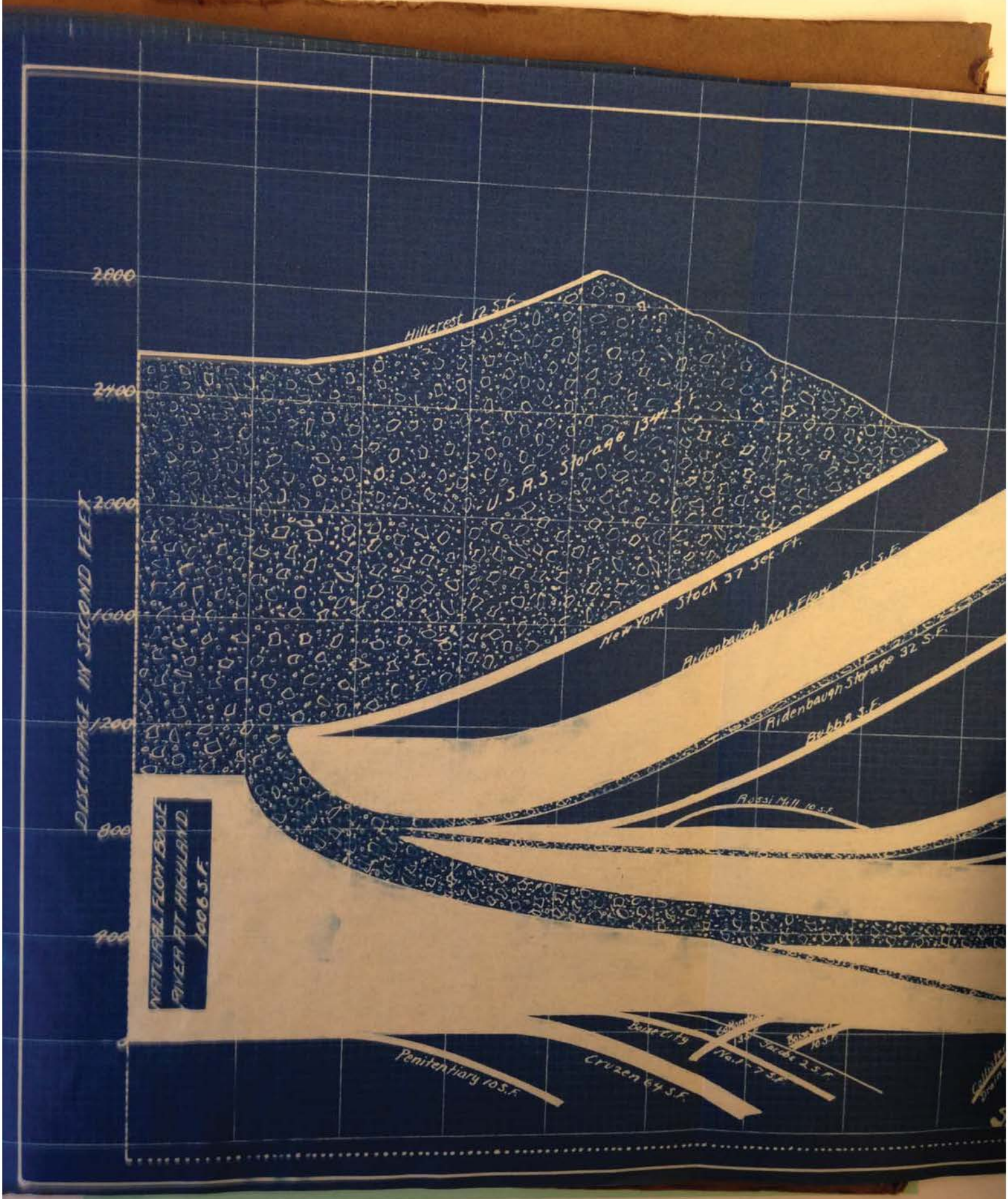
RETURN FLOW TO SECTION ONE.

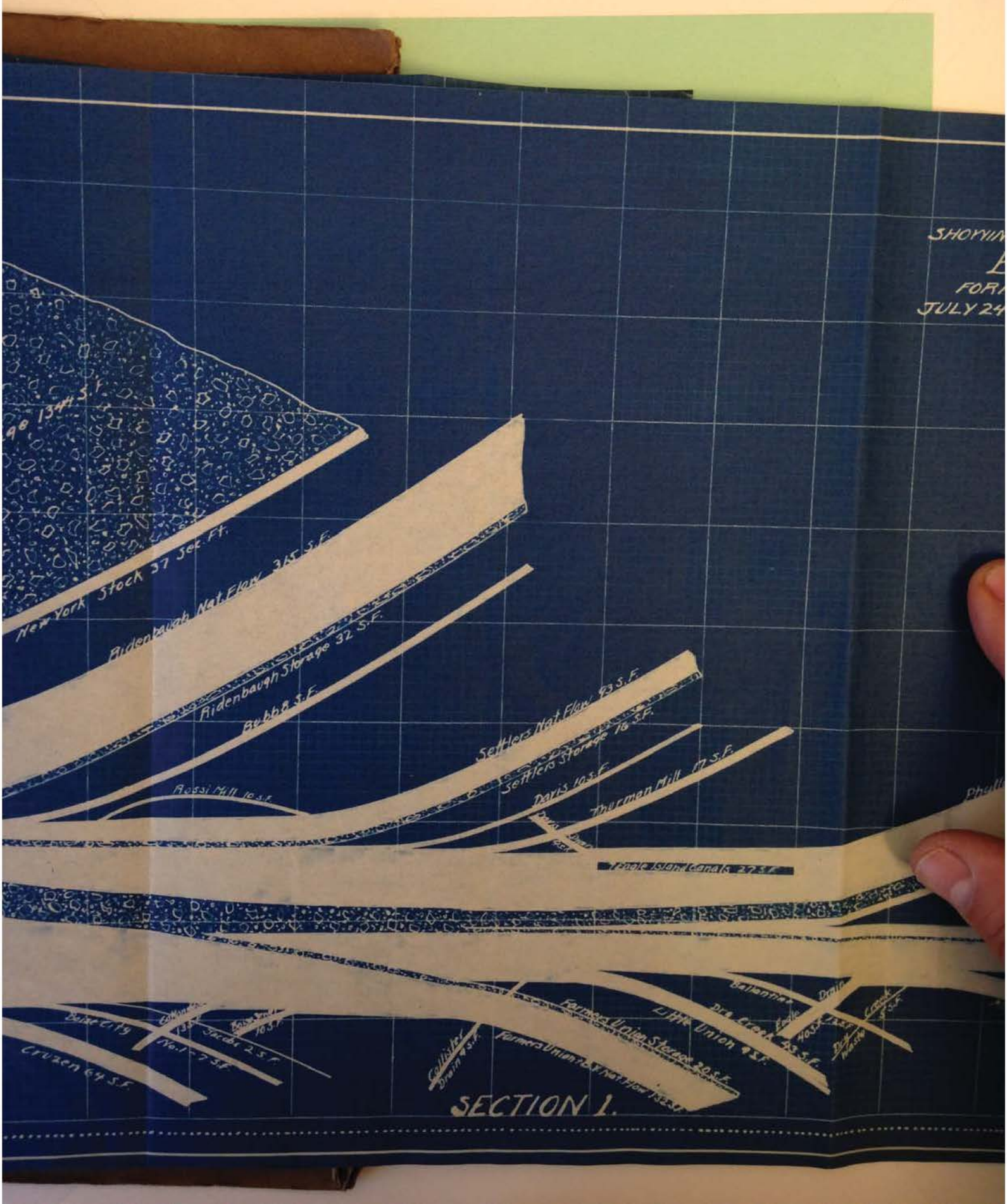
Year	April	May	June	July	August	September	Average
1914				139	70	201	123
1915				122	130	150	137
1916					194	199	196
1917					254	225	242
1918				227	270	263	260
1919				252	233	248	242
1920					203	118	178
1921					285	267	281
1922				242	239	180	213

RETURN FLOW TO SECTION TWO.

Year	April	May	June	July	August	September	Average
1914				357	213	280	275
1915				249	245	300	281
1916					503	540	521
1917					425	386	409
1918				431	503	500	490
1919				352	325	307	328
1920					426	420	424
1921					526	512	522
1922				547	474	439	467

AUT '22


DISCHARGE IN SECOND FEET
2800
2400
2000
1600
1200
800
400
0
Hillcrest 17 S.F.
U.S.R.S. Storage 134 S.F.
New York Stock 37 Sec. Ft.
Aidenbaugh Nat. Flow 385 S.F.
Aidenbaugh Storage 32 S.F.
Bubba S.F.
Rossi Mill 10 S.F.
NATURAL FLOW BASE
RIVER AT HIGHLAND
1006 S.F.
Penitentiary 10 S.F.
Cruzen 64 S.F.
Bone City
Jacobs 2 S.F.


SHOWIN
FORM
JULY 24
New York Stock 37 Sec. Ft.
Aidenbaugh Nat. Flour 345 S.F.
Aidenbaugh Storage 32 S.F.
Settlers Nat. Flour 93 S.F.
Settlers Storage 76 S.F.
Davis 10 S.F.
Thurman Mill 17 S.F.
Rossi Mill 10 S.F.
Bike City
Cruzen 64 S.F.
Collister Drain 4 S.F.
Farmers Union Store 20 S.F.
Little Union 4 S.F.
Ballantine
SECTION 1.

DIAGRAM

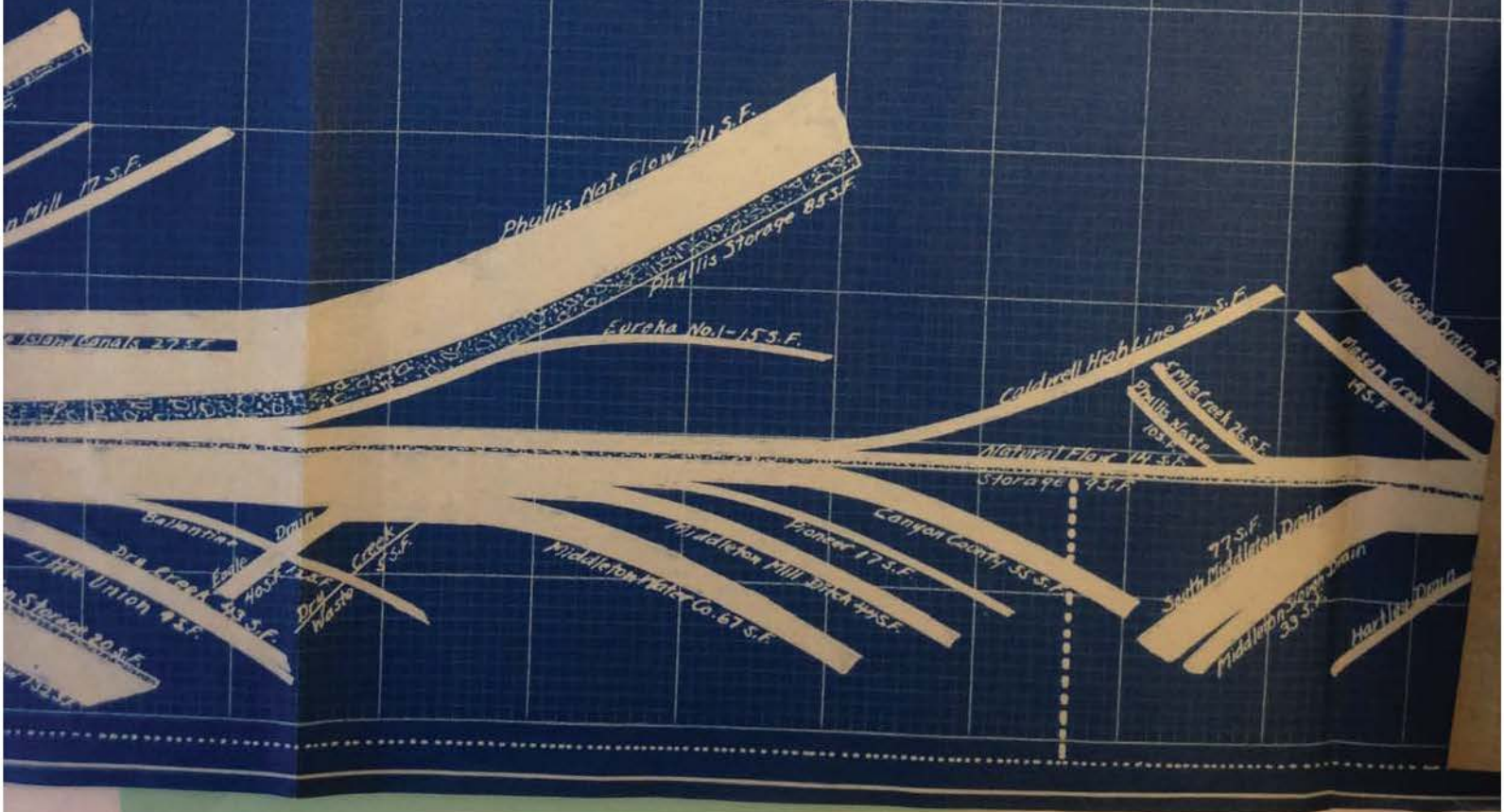
SHOWING THE AVERAGE CONDITIONS ON

BOISE RIVER

FOR A PERIOD OF 69 DAYS

JULY 24 TO SEPTEMBER 30 Inc.

1922.



LOW WATER PERIOD FOR NATURAL FLOW M

Section	Average per day for 69 days, July 24 to Septem: Delivered to Canals	In River & Tributary	Seepage Gain	Tributary Gain	Total Gain
1.	1231	1092	139	86	225
2.	426	410	16	396	412
Total	1657	1502	155	482	637

*Includes Quantities passing to Section below.

There was delivered to Canals 60% more water than

SECTION 2.

LOW WATER PERIOD FOR NATURAL FLOW WATER.

Average per day for 69 days, July 24 to September 30 Inc. 1922.

Section	Delivered to Canals	In River & Tributary	Seepage Gain	Tributary Gain	Total Gain	* Delivered	Passed to Sect. Below
1.	1231	1092	139	86	225	1245	14
2.	426	410	16	396	412	482	56
Total	1657	1502	155	482	637	1727	

*Includes Quantities passing to Section below.

There was delivered to Canals 60% more water than available at Highland.

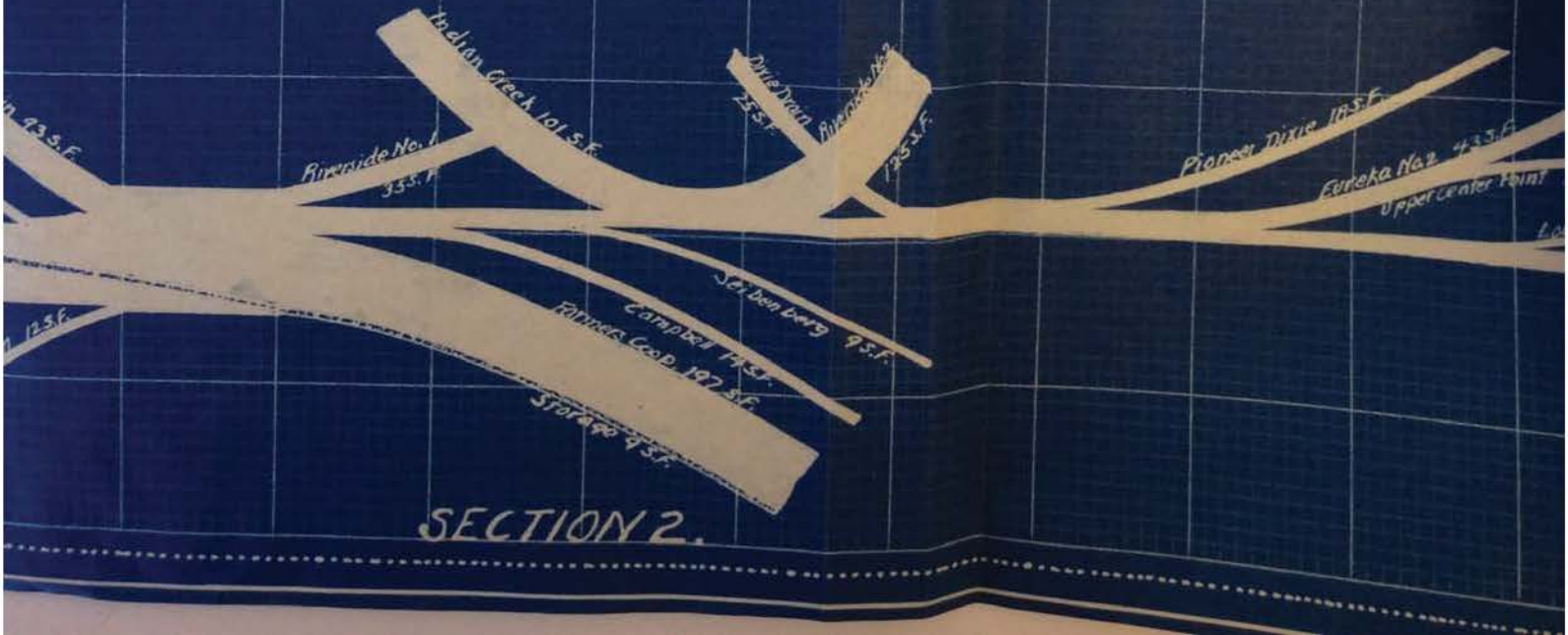


CHART-19.

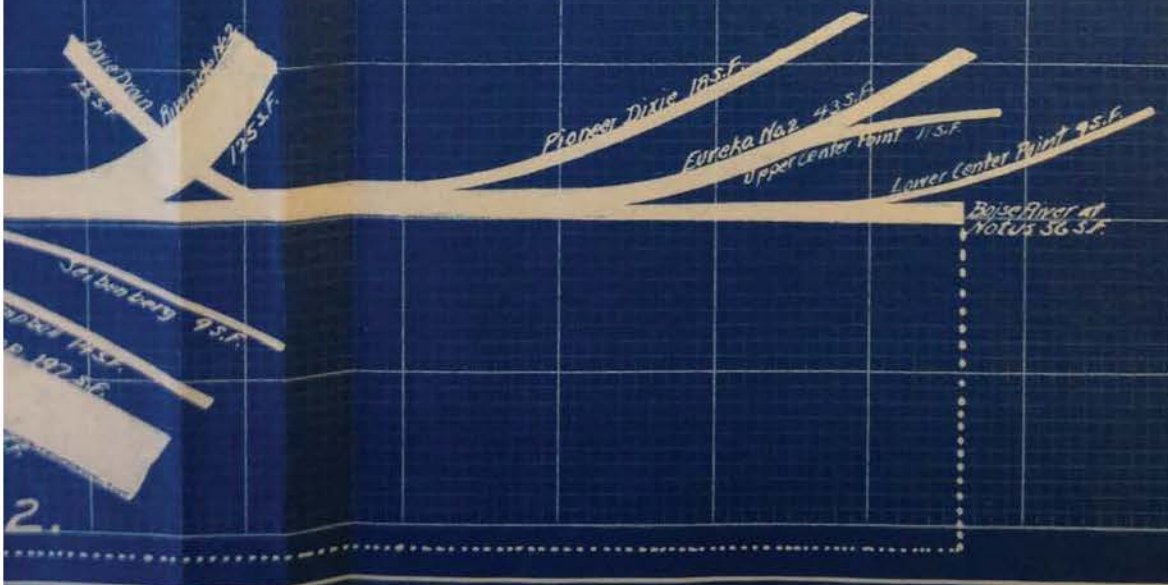
D FOR NATURAL FLOW WATER.

s. July 24 to September 30 inc. 1922.

ge	Tributary Gain	Total Gain	* Delivered	Passed to Sect. Below
39	86	225	1245	14
16	396	412	482	56
55	482	637	1727	

g to Section below.

als 60% more water than available at Highland.



2.

RKT'22

STEWART DECREE.

No	Date	Name	Amt. Decreed Sec. Ft.	Inches
1	6-1-64	Thomas Davis	2.20	110
2	6-1-64	Jacobs Canal Co.	20.00	1000
3	6-1-64	Middleton Mill Ditch	12.80	640
4	6-1-64	Thomas Andrews	3.30	165
5	6-1-64	Catlin & Mace	2.86	143
6	6-1-64	T.C. Catlin	3.30	165
7	6-1-64	C.C. Havird	3.30	165
8	6-1-64	Pioneer Dixey Ditch Co	20.00	1000
9	6-1-65	Seibenberg Ditch Co.	13.42	671
10	6-1-65	Allen V. Webster	1.20	60
11	6-1-65	J.F. Yaryan	.66	33
12	6-1-65	Graham & Gilbert	4.40	220
13	6-1-65	Eureka Water Co.	33.32	1666
14	6-1-65	New Union Ditch Co.	13.76	688
15	6-1-65	Boise Valley Irrig. Ditch Co.	54.58	2729
16	6-1-65	Ridenbaugh & Rossi	9.20	460
17	6-1-65	Ridenbaugh & Ross (Power)	265.80	13290
18	6-1-65	Denver & Idaho Land Co.	.80	40
19	6-1-65	Martha Bowman	2.88	144
20	6-1-65	Bird Bowman	6.40	320
21	6-1-65	G.W. Gess	2.90	145
22	6-1-65	Robert McGuire	3.20	160
23	6-1-65	C.W. Cooper	3.20	160
24	6-1-65	J.W. Roland	2.40	120
25	6-1-65	Draper & Wells	3.94	197
26	6-1-65	Thomas J. Palmer	1.60	80
27	6-1-65	Noah W. Palmer	1.58	79
28	6-1-65	J.N. Tucker	7.00	350
29	6-1-65	Thomas Andrews	6.00	300
30	5-1-66	J. Perrault & R. Johnson	50.00	2500
31	6-1-66	William P. Kennedy	2.60	130
32	6-1-66	Manville and Leonard	3.50	175
33	6-1-66	Boise City Canal Co.	38.06	1903
34	6-1-66	Franklin Ditch Co.	15.40	770
35	6-1-67	Canyon Co. Water Co.	75.80	3790
36	6-1-68	Martha E. McCarthy	14.10	705
37	6-1-68	H.D. & Dora Goodman	3.70	185
38	6-1-68	T.T. Johnson	3.20	160
39	6-1-68	Ross, Allen, Dilley & Ross.	8.54	427
40	6-1-68	S.S. Gray	1.40	70
41	6-1-69	John Mammon	1.80	90
42	6-1-69	Isaac Bedal	1.60	80
43	6-1-69	Frederich Ode	3.60	180
44	6-1-69	Prior Burnett	8.50	425
45	6-1-69	Pioneer Dixie Ditch Co.	35.44	1772
46	6-1-69	Mason Creek Ditch Co.	37.20	1860
47	6-1-69	T.W. Boone.	3.50	175
48	6-1-70	W.T. Hamming	2.60	130
49	6-1-70	Pioneer Canal	25.72	1286
50	6-1-69	Barber Lumber Co.	2.24	112
51	6-1-70	Thomas Andrews	1.30	65
52	6-1-71	Catlin & Mace	7.86	393
53	6-1-71	Peter Meeres	1.80	90
54	6-1-71	Middleton Mill Ditch Co	33.70	1685
55	6-1-72	J.F. Yaryan	.70	35
56	6-1-72	J.F. Yaryan	1.40	70
57	6-1-72	Mary C. Davis	4.40	220
58	6-1-72	Edward N. Hart	3.30	165
59	6-1-74	J.W. Boone	2.20	110
60	6-1-75	Farmers Cooperative I.D.Co.	10.00	500
61	6-1-76	Edward & Mary Clark	2.30	115
62	6-1-76	John Cecil	.44	22
63	6-1-77	Thomas Aikens	5.20	260
64	6-1-77	W.H. Conway	.90	45
65	6-1-77	Middleton Water Co	114.08	5704
66	7-1-77	Perrault & Johnson (Power)	200.00	10000
67	5-1-78	Nampa-Meridian Irrig. D.	170.00	8500
68	6-1-78	John Mammon	4.20	210
69	6-1-78	Julia Mammon	3.36	168
70	6-1-78	Charles Allen	8.80	440
71	6-1-78	R.H. Stockton	4.40	220
72	6-1-79	New Dry Creek Ditch Co	31.32	1566
73	6-1-79	D. Mumford	4.00	200
74	6-1-80	Smith Stockton	1.76	88
75	6-1-80	Isham Joplin	2.40	120
76	10-20-80	Joseph Goble	.90	45
77	10-29-80	Franklin Ditch Co.	27.60	1380
78	6-1-82	Allen V. Webster	.90	45
79	6-1-82	Susie Campbell	.60	30
80	6-1-82	J.T. Barber	1.60	80
81	6-1-82	Sonora Joplin	3.40	170
82	6-1-82	S.W. Hutchinson	.44	22
83	6-1-82	Johnson	.44	22
84	6-1-82	Andrew J. Joplin	2.86	143
85	6-1-82	James L. Graham	2.20	110
86	6-1-83	Farmers Cooperative Ditch	20.00	1000
87	6-1-83	Francis M. Joplin	.90	45
88	6-1-83	W.A. Black	12.00	600
89	11-9-83	Eureka Ditch Co. No. 2	21.70	1085
90	6-1-84	Pioneer Irrig. District	53.10	2655
91	6-1-84	Rin		
92	10-17-84	Sen		
93	6-1-86	Ne		
94	6-1-86	Th		
95	1-23-87	Wm		
96	10-1-87	Am		
97	6-1-88	New		
98	6-1-88	A.I		
99	6-1-88	Lev		
100	6-1-88	Cha		
101	6-1-88	Ed.		
102	6-1-88	Liz		
103	6-1-88	Jos		
104	6-1-88	Thom		
105	7-1-88	Farm		
106	8-20-88	Nam		
107	5-1-89	Chas		
108	5-1-89	Lomm		
109	5-1-89	S.B.J.		
110	5-1-89	South		
111	5-1-89	Estate		
112	5-1-89	Anna		
113	5-1-89	Grace		
114	5-1-89	Samuel		
115	6-1-89	Sonora		
116	6-1-89	Sonora		
117	9-1-90	Pioneer		
118	6-1-91	W.H. Co		
119	6-1-91	Thoma		
120	6-1-91	Middle		
121	6-1-91	Thomas		
122	6-1-91	Settler		
123	6-1-91	Thomas		
124	5-1-93	Rivers		
125	6-1-94	R.H. Sto		
126	7-2-94	Farmers		
127	5-1-95	Charles		
128	7-1-95	Mathew		
129	7-1-96	Farmers		
130	10-1-99	Riversid		
131	3-23-00	New Yo		
132	5-17-00	Canyon		
133	6-1-01	Riversid		
134	10-25-01	Canyon		
135	4-1-04	Pioneer		

• Indicates Rights Supplied by return flow to River.

STEWART DECREE.

CHART 20.

Amt. Decreed Sec. Ft.	Amt. Decreed Inches
2.20	110
20.00	1000
12.80	640
3.30	165
28.86	1443
7.30	165
3.30	165
20.00	1000
13.42	671
1.20	60
.66	33
4.40	220
73.32	1666
13.76	688
54.58	2729
9.20	460
65.80	13290
.80	40
2.88	144
6.40	320
2.90	145
3.20	160
3.20	160
2.40	120
3.94	197
1.60	80
1.58	79
7.00	350
6.00	300
50.00	2500
2.60	130
3.50	175
38.06	1903
15.40	770
75.80	3790
14.10	705
3.70	185
3.20	160
8.54	427
1.40	70
1.80	90
1.60	80
3.60	180
8.50	425
35.44	1772

No	Date	Name	Amt. Decreed Sec. Ft.	Amt. Decreed Inches
46	6-1-69	Mason Creek Ditch Co.	37.20	1860
47•	6-1-69	T. W. Boone.	3.50	175
48	6-1-70	W. J. Hamming	2.60	130
49	6-1-70	Pioneer Canal	25.72	1286
50	6-1-69	Barber Lumber Co.	2.24	112
51•	6-1-70	Thomas Andrews	1.30	65
52	6-1-71	Catlin & Mace	7.86	393
53	6-1-71	Peter Meeres	1.80	90
54	6-1-71	Middleton Mill Ditch Co	33.70	1685
55	6-1-72	J. F. Varyan	.70	35
56	6-1-72	J. F. Varyan	1.40	70
57	6-1-72	Mary C. Davis.	4.40	220
58	6-1-72	Edward N. Hart	3.30	165
59•	6-1-74	J. W. Boone	2.20	110
60•	6-1-75	Farmers Cooperative D. Co.	10.00	500
61	6-1-76	Edward & Mary Clark.	2.30	115
62	6-1-76	John Cecil	.44	22
63	6-1-77	Thomas Aikens	5.20	260
64	6-1-77	W. H. Conway	.90	45
65	6-1-77	Middleton Water Co	114.08	5704
66•	7-1-77	Perrault & Johnson (Power)	200.00	10000
67	5-1-78	Nampa-Meridian Irrig. D	170.00	8500
68•	6-1-78	John Mammon	4.20	210
69•	6-1-78	Julia Mammon	3.36	168
70•	6-1-78	Charles Allen	8.80	440
71•	6-1-78	R. H. Stockton	4.40	220
72	6-1-79	New Dry Creek Ditch Co	31.32	1566
73•	6-1-79	D. Mumford	4.00	200
74•	6-1-80	Smith Stockton	1.76	88
75	6-1-80	Isham Joplin	2.40	120
76	10-20-80	Joseph Goble	.90	45
77	10-29-80	Franklin Ditch Co.	27.60	1380
78	6-1-82	Allen V. Webster	.90	45
79	6-1-82	Susie Campbell	.60	30
80	6-1-82	J. T. Barber	1.60	80
81	6-1-82	Sonora Joplin	3.40	170
82	6-1-82	S. W. Hutchinson	.44	22
83	6-1-82	Johnson	.44	22
84	6-1-82	Andrew J. Joplin	2.86	143
85	6-1-82	James L. Graham	2.20	110
86•	6-1-83	Farmers Cooperative Ditch	20.00	1000
87	6-1-83	Francis M. Joplin	.90	45
88•	6-1-83	W. A. Black	12.00	600
89•	11-9-83	Eureka Ditch Co No. 2	21.70	1085
90	6-1-84	Pioneer Irrig. District	53.10	2655
91•	6-1-84	Riverside Irrig. Dist.	20.00	1000
92	10-17-84	Settlers Canal Co.	99.06	4953
93	6-1-86	New Dry Creek Ditch	15.22	761
94	6-1-86	Thomas Davis	13.40	670
95•	1-23-87	Wm C. L & E Young	4.00	200
96•	10-1-87	American Ditch Assoc.	47.80	2390
97	6-1-88	New Dry Creek Ditch Co	7.86	393
98	6-1-88	A. V. Linder	4.00	200
99	6-1-88	Levi Smith	1.30	65
100	6-1-88	Charlotte Calhoun	1.40	70
101	6-1-88	Ed. J. Linder	1.46	73
102	6-1-88	Lizzie Ererett.	1.20	60
103	6-1-88	Jessie Wilson.	1.40	70
104•	6-1-88	Thomas Andrews	.90	45
105•	7-1-88	Farmers Coop. Ditch Co.	50.00	2500
106	8-20-88	Nampa-Meridian Irrig D.	370.84	18542
107	5-1-89	Chas. S. Miller	.06	3
108	5-1-89	Lommis L. Moseley	.02	1
109	5-1-89	S. & J. Utter B. C. & Taylor	2.40	120
110	5-1-89	South Boise Mutual Irrig Co	6.00	300
111	5-1-89	Estate of J. H. Gallagher	2.94	147
112	5-1-89	Anna H. Fogarty	.05	2
113	5-1-89	Grace Call	.10	5
114	5-1-89	Samuel H. Canfield	.03	1
115	6-1-89	Sonora Joplin	.06	3
116	6-1-89	Sonora Joplin	1.20	60
117	9-1-90	Pioneer Irrig. District	200.00	10000
118	6-1-91	W. H. Conway	2.20	110
119	6-1-91	Thomas Davis	.54	27
120	6-1-91	Middleton Mill Ditch Co.	17.00	850
121•	6-1-91	Thomas Andrews	3.50	175
122	6-1-91	Settlers Canal Co.	73.44	3672
123	6-1-91	Thomas Aiken	.80	40
124•	5-1-93	Riverside Irrig. District	80.00	4000
125•	6-1-94	R. H. Stockton	1.76	88
126	7-2-94	Farmers Union Ditch Co.	110.00	5500
127	5-1-95	Charles Rein & Jane Koch	1.00	50
128	7-1-95	Mathew Casey	.66	33
129•	7-1-96	Farmers Coop. Ditch Co	83.50	4175
130•	10-1-99	Riverside Irrig. District	20.00	1000
131	3-23-00	New York Canal Co.	219.10	10955
132•	5-17-00	Canyon Ditch Co.	10.00	500
133•	6-1-01	Riverside Irrig. District	70.00	3500
134•	10-25-01	Canyon Ditch Co.	5.54	277
135	4-1-04	Pioneer Irrig. District	56.34	2817

• Indicates Rights supplied by return flow to River.

A. J. Hoffman
Irrig. Engr.

STEWART DECREE GROUPED UNDER CANAL HEADINGS.

Name of Canal	No.	Date	Amount Decreed Sec. Ft.	Amount Decreed Inches
New York Canal Co	131	3/23/00	219.10	109.55
Nampa-Meridian Irrigation District	67	5/1/78	170.00	8500
	106	8/20/88	370.84	18542
		Total	540.84	27042
Rein & Keah	127	5/1/85	1.00	50
Bubb	107-114	5/1/89	11.60	580
Meeres	53	6/1/71	1.80	90
Rossi	16&18	6/1/65	10.00	500
Manville-Leonard	32	6/1/66	3.50	175
Davis	94	6/1/86	13.40	670
Little Davis	119	6/1/91	0.54	27
Settlers	92	10/17/84	99.06	4953
	122	6/1/91	73.44	3672
		Total	172.50	8625
Thurman Mill	7 to 16 to 87	6/1/64 to 6/1/83	36.90	1845
Penitentiary	50	6/1/66	2.24	112
Cruzen	30B66	5/1/66	50.00	2500
Boise City	33	6/1/66	38.06	1903
Jacobs	182	6/1/64	22.20	1110
Farmers Union Boise Valley [Combined]	126	7/2/94	110.00	5500
	15	6/1/65	54.58	2729
		Total	164.58	8229
Dry Creek	72,93,97	6/1/79-86-88	54.40	2720
New Union	14	6/1/65	13.76	688
Ballantyne	98to103&123	6/1/88-91	11.56	578
Middleton Water Co.	65	6/1/77	114.08	5704
Middleton Mill Ditch	3,40,54,120	6/1/64-68-71-91	64.90	3245
Pioneer Canal	49	6/1/70	25.72	1286
Kennedy	31	6/1/66	2.60	130
Canyon County	35	6/1/67	75.80	3790
Conway & Hamming	48,64,118	6/1/70-77-91	5.70	285
Thomas Aikens	63	6/1/77	5.20	260
Catlin & Mace	58,52	6/1/64-71	10.72	536
Hart & Davis	6,57,59	6/1/64-72-72	11.00	550

Name of Canal	No.	Date	A
Graham & Gilbert	12	6/1/65	
Warm Springs	61,80,82 to 85	6/1/76-82-82	
Joplin	81,115,116	6/1/82-89	
Phyllis Pioneer Irrig District	90	6/1/84	
	117	9/1/90	2
	135	4/1/04	
		Total	3
Eureka No. 1	13	6/1/65	
Caldwell High Line	34,77,46	7/4/65,12/29/80	
Riverside Irrigation District.	88	6/1/83	
	91	6/1/84	
	95	1/23/87	
	124	5/1/93	
	130	10/1/99	
	133	6/1/01	
		Total	2
Pioneer Dixie Ditch Co.	8,45,96	9/1/64,64/69	
	Sold to Hillcrest Irr. D.		
	Net water right		
Eureka No. 2	89	11/8/93	
Upper Center Point	23 to 27	6/1/65	
Lower Center Point	19to22,34,37,77	6/1/65-86-87-88	
Mammon	41,68,69,70	6/1/69-78	
Haas	39	6/1/68	
Farmers Cooperative Ditch Co.	60	6/1/75	
	86	6/1/83	
	105	7/1/88	
	128	7/1/96	
		Total	1
Canyon	96,132,134	11/97,5/76	
Seibenberg	9	6/1/65	
Andrews	4,28,29,44,47	6/1/64-65-69	
	41,53,102,121	6/1/70-72-88-91	
Stockton	20,24,125	6/1/78-80-94	

CHART 21

RT DECREE GROUPED UNDER CANAL HEADINGS.

	Date	Amount Decreed Sec. Ft.	Inches
	3/23/00	219.10	109.55
7	5/1/78	170.00	8500
6	8/20/88	370.84	18542
	Total	540.84	27042
7	5/1/95	1.00	50
14	5/1/89	11.60	580
3	6/1/71	1.80	90
18	6/1/65	10.00	500
2	6/1/66	3.50	175
4	6/1/86	13.40	670
9	6/1/91	0.54	27
2	10/17/84	99.06	4953
2	6/1/91	73.44	3672
	Total	172.50	8625
87	6/1/64 to 6/1/83	36.90	1845
0	6/1/66	2.24	112
66	5/1/66	50.00	2500
3	6/1/66	38.06	1903
2	6/1/64	22.20	1110
26	7/2/94	110.00	5500
15	6/1/65	54.58	2729
	Total	164.58	8229
3,97	6/1/79-86-88	54.40	2720
4	6/1/65	13.76	688
1038123	6/1/88-91	11.56	578
5	6/1/77	114.08	5704
64,120	6/1/64-68-71-91	64.90	3245
19'	6/1/70	25.72	1286
91	6/1/66	2.60	130
95	6/1/67	75.80	3790
4,118	6/1/76-77-91	5.70	285
63	6/1/77	5.20	260
8.52	6/1/69-71	10.72	536
57.58	6/1/64-72-72	11.00	550

Name of Canal	No.	Date	Amount Decreed Sec. Ft.	Inches
Graham & Gilbert	12	6/1/05	4.40	220
Warm Springs	61,80,82 & 1085	6/1/26-82-82	8.34	417
Joplin	61,115,116	6/1/82-89	2.06	103
Phyllis Pioneer Irrig District	90	6/1/84	53.10	2655
	117	9/1/90	200.00	10000
	135	7/1/94	56.34	2817
		Total	309.44	15472
Eureka No. 1	13	6/1/05	33.72	1686
Caldwell High Line	34,77,96	7/1/05, 9/1/20	80.20	4010
Riverside Irrigation District.	88	6/1/83	12.00	600
	91	6/1/84	20.00	1000
	95	1/23/87	4.00	200
	124	5/1/83	80.00	4000
	130	10/1/89	20.00	1000
	133	6/1/91	70.00	3500
		Total	206.00	10300
Pioneer Dixie Ditch Co.	0.45,96	6/1/64-83-89	61.64	3082
	Sold to Hillcrest Irr. D.		21.52	1076
	Net water right		40.12	2006
Eureka No. 2	89	11/5/03	51.20	2560
Upper Center Point	23 to 27	6/1/65	12.72	636
Lower Center Point	19,21 Serv. 11	6/1/65-68-83	26.08	1304
Mammen	41,68,69,76	6/1/69-78	18.16	908
Haas	39	6/1/68	8.54	427
Farmers Cooperative Ditch Co.	60	6/1/75	10.00	500
	86	6/1/83	20.00	1000
	105	7/1/88	50.00	2500
	128	7/1/96	83.50	4175
		Total	163.50	8175
Canyon	26,32,119	10/20, 5/26,	27.04	1352
Seibenberg	9	6/1/65	13.92	696
Andrews	4,48,49,51	6/1/68-72-81	36.00	1800
Stockton	21,24,25	6/1/78-80-84	8.24	412

CHART 22

RECONSTRUCTED TABLE OF STEWART DECREE SHOWING THE ORDER AND PRIORITIES OF THE DIFFERENT RIGHTS EXISTING IN SECTION ONE OF BOISE RIVER AND DEPENDING ON THE NATURAL FLOW PASSING HIGHLAND FOR THE YEARS 1915 TO 1920 Inc.

No. of Decreed Right Stewart Decree	No. of Right based on present conditions	Name	Amount Decreed 100%	Amount Decreed 60%	Quantities Passing Highland necessary to fill 60% of Decree
33	1	Boise City Canal Co.	38.06	22.83	22.83
34	2	Franklin Ditch Co.	15.40	9.24	32.07
35	3	Canyon Co. Water Co.	75.80	45.48	77.55
36	4	Martha E McCarthy	14.10	8.46	86.01
37	5	Goodman and Goodman	3.70	2.22	88.23
40	6	S. S. Gray	1.40	.84	89.07
42	7	Isaac Bodal	1.60	.96	90.03
46	8	Mason Creek Ditch Co.	37.20	22.32	112.35
48	9	W. J. Hamming	2.60	1.56	113.91
49	10	Pioneer Canal (star)	25.72	15.44	129.35
50	11	Barber Lumber Co.	2.24	1.34	130.69
52	12	T.C. Catlin & Polleta Mace	7.86	4.72	135.41
53	13	Peter Meeves	1.80	1.08	136.49
54	14	Middleton Mill Ditch Co.	33.70	20.22	156.71
55	15	J. F. Varyan	.70	.42	157.13
56	16	J. F. Varyan	1.40	.84	157.97
57	17	Mary E. Davis	4.40	2.64	160.61
58	18	Edward N. Hart	3.30	1.98	162.59
61	19	Edward & Mary Clark	2.30	1.38	163.97
62	20	John Cecil	.44	.26	164.23
63	21	Thomas Aikens	5.20	3.12	167.35
64	22	W. H. Conway	.90	.54	167.89
65	23	Middleton Water Co.	114.08	68.45	236.34
67	24	Nampa-Meridian Irrig D	170.00	102.00	338.34
72	25	New Dry Creek Ditch Co.	31.32	18.79	357.13
75	26	Isham Joplin	2.40	1.44	358.57
76	27	Joseph Gable	.90	.54	359.11
77	28	Franklin Ditch Co.	27.60	16.56	375.67
78	29	Allen V. Webster	.90	.54	376.21
79	30	Susie Campbell	.60	.36	376.57
80	31	J. T. Barber	1.60	.96	377.53
81	32	Senora Joplin	3.40	2.04	379.57
82	33	S. W. Hutchinson	.44	.26	379.83
83	34	Johnson	.44	.26	380.09
84	35	Andrew J. Joplin	2.86	1.72	381.81

Rights 1 to 32 Inc Stewart Decree, taken care of by Return Flow in Sec 1.

A. K. Tallman
Irrig. Engr.

CHART 22A.

No. of Decreed Right Stewart Decree	No. of Right based on present Conditions	Name	Amount Decreed 100%	Amount Decreed 60%	Quantities Passing High-land necessary to fill 60% of Decree
85	36	James L. Graham	2.20	1.32	383.13
87	37	Francis M. Joplin	.90	.54	383.67
90	38	Pioneer Irrigation Dist.	53.10	31.86	415.53
92	39	Settlers Canal Co.	99.06	59.44	474.97
93	40	New Dry Creek Ditch Co.	15.22	9.13	484.10
94	41	Thomas Davis	13.40	8.04	492.14
97	42	New Dry Creek Ditch Co.	7.86	4.72	496.86
98	43	A.V. Linder	4.00	2.40	499.26
99	44	Levi Smith	1.30	.78	500.04
100	45	Charlotte Calhoun	1.40	.84	500.88
101	46	Ed. J. Linder	1.46	.88	501.76
102	47	Lizzie Everett	1.20	.72	502.48
103	48	Jessie Wilson	1.40	.84	503.32
106	49	Nampa Meridian Irrig. D	370.84	222.50	725.82
107	50	Charles S. Miller	.06	.04	725.86
108	51	Lemmis L. Haseley	.02	.01	725.87
109	52	S. & J. Utter & C.B. Taylor	2.40	1.444	727.31
110	53	South Boise Mutual Irrig. Co.	6.00	3.60	730.91
111	54	Estate of J.H. Gallaher	2.94	1.76	732.67
112	55	Anna M. Fogarty	.05	.03	732.70
113	56	Grace Call	.10	.06	732.76
114	57	Samuel H. Canfield	.03	.02	732.78
115	58	Sonora Joplin	.06	.03	732.81
116	59	Sonora Joplin	1.20	.72	733.53
117	60	Pioneer Irrigation District	200.00	120.00	853.53
118	61	W.H. Conway	2.20	1.32	854.85
119	62	Thomas Davis	.54	.32	855.17
120	63	Middleton Mill Ditch Co.	17.00	10.20	865.37
122	64	Settlers Canal Co.	73.44	44.06	909.43
123	65	Thomas Aiken	.80	.48	909.91
126	66	Farmers Union Ditch Co.	110.00	66.00	975.91
127	67	Charles Rein & Jane Keech	1.00	.60	976.51
128	68	Mathew Gosey	.66	.40	976.91
131	69	New York Canal Co.	219.10	131.46	1108.37
135	70	Pioneer Irrig District	56.34	33.80	1142.17

H.M.T.

CHART 22H.

No. of Decreed Right Stewart Decree	No. of Right based on present Conditions	Name	Amount Decreed 100%	Amount Decreed 60%	Quantities Passing High land necessary to fill 60% of Decree
85	36	James L. Graham	2.20	1.32	383.13
87	37	Francis M. Joplin	.90	.54	383.67
90	38	Pioneer Irrigation Dist.	53.10	31.86	415.53
92	39	Settlers Canal Co.	99.06	59.44	474.97
93	40	New Dry Creek Ditch Co.	15.22	9.13	484.10
94	41	Thomas Davis	13.40	8.04	492.14
97	42	New Dry Creek Ditch Co.	7.86	4.72	496.86
98	43	A.V. Linder	4.00	2.40	499.26
99	44	Levi Smith	1.30	.78	500.04
100	45	Charlotte Calhoun	1.40	.84	500.88
101	46	Ed. J. Linder	1.46	.88	501.76
102	47	Lizzie Everett	1.20	.72	502.48
103	48	Jessie Wilson	1.40	.84	503.32
106	49	Nampa Meridian Irrig. D	370.84	222.50	725.82
107	50	Charles S. Miller	.06	.04	725.86
108	51	Lommis L Haseley	.02	.01	725.87
109	52	S.B.J. Utter & C.B. Taylor	2.40	1.44	727.31
110	53	South Boise Mutual Irria Co.	6.00	3.60	730.91
111	54	Estate of J.H. Callaher	2.94	1.76	732.67
112	55	Anna M Fogarty	.05	.03	732.70
113	56	Grace Call	.10	.06	732.76
114	57	Samuel H Canfield	.03	.02	732.78
115	58	Sonora Joplin	.06	.03	732.81
116	59	Sonora Joplin	1.20	.72	733.53
117	60	Pioneer Irrigation District	200.00	120.00	853.53
118	61	W.H. Conway	2.20	1.32	854.85
119	62	Thomas Davis	.54	.32	855.17
120	63	Middleton Mill Ditch Co.	17.00	10.20	865.37
122	64	Settlers Canal Co.	73.44	44.06	909.43
123	65	Thomas Aiken	.80	.48	909.91
126	66	Farmers Union Ditch Co.	110.00	66.00	975.91
127	67	Charles Reim & Jane Keoh	1.00	.60	976.51
128	68	Mathew Casey	.66	.40	976.91
131	69	New York Canal Co.	219.10	131.46	1108.37
133	70	Pioneer Irrig District	56.34	33.80	1142.17

ANT.