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on

CANAL DELIVERIES FROM THE BOISE RIVER

and

DIFFERENT FEATURES AFFECTING THESE
DELIVERIES FOR THE PERIOD APRIL 1st
TO SEPTEMBER 30th, 1918, INCLUSIVE.

By

A. V. TALLMAN

Irrigation Engineer

DEPARTMENT OF RECLAMATION

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1. Map of Boise River showing canal diversions.
2. 2-1, 2-2, 2-3, Daily discharge of Boise River during 22 year period.
3. Total monthly and annual flow in acre feet for each irrigation year, 1894
ON

CANAL DELIVERIES FROM THE BOISE RIVER

4. Table in second feet showing average daily flow of Boise River for 22
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FOR THE PERIOD APRIL 1st TO SEPTEMBER 30, 1916.

INCLUSIVE.

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OF ARROWROCK STORAGE WATER AND WATER
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OF THE STATE ENGINEER OF IDAHO.)
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water delivered for entire irrigation season.

BY

A. V. TALLAMEN,

IRRIGATION ENGINEER.

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PREVIOUS MANAGEMENT.

Prior to the year 1914, the State of Idaho, through the State Engineer's Office and the Water Commissioner's 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 five 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-'15-'16-'17-'18, a complete investigation, sanctioned and paid for by the water users, 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 five 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 season of 1915-'16-'17 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 the 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~~ ^{was} ~~thought~~ advisable during the low water period of the irrigation season of 1918 to use some other method for 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 of .01 of a foot. At Bowling river station, 4 miles below Arrowrock, the gage was read several times each day and these gage readings, along with the Arrowrock gage was phoned to Boise before 9 a.m. each day. The drop of the water surface on the Arrowrock gage during a 24 hour period was reduced to acre feet, from Mr. Steward's capacity table, and this quantity subtracted from the total acre feet passing Bowling 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 supply the work.

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

to supply said 75% of the water rights as decreed in said Stewart Decree. Occasionally the quantities derived would show up some very unusual and improbable condition, so averages for two and sometimes three days would be used in order to stabilize the outflow of waters from the Reservoir.

A study of Charts 2, 2-A, 2-B, 2-C and 2-D will give a comparison of the daily discharge of Boise River for the full twelve months period for each year from 1895 to 1916 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-'95 to 1917-'18 inclusive. In Chart 3 the irrigation year was given instead of the calendar year as in the future Arrowroak Reservoir will begin storing water on November 1st for the following seasons demands.

Chart 4 is a table compiled in second feet to show the average daily flow of the Boise River for a 21 year period; average daily flow of 4 highest years, and average daily flow of 4 lowest years.

TEMPORARY DECREE.

The temporary decree issued by Judge Ed. L. Bryon for the season of 1916 was identical to the one issued for the season of 1917 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 the 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 Boise River decrease below the amount necessary

to supply said 75% of the water rights as decreed in said Stewart Decree, or of cutting the flow of the slightly belonged to the flood water rights, or of cutting the flow of the 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, 60% of the amount decreed in the Stewart Decree is hereby fixed and determined as the highest duty of water for the year 1918.

crops, the water master LOW WATER PERIOD.

The conditions that existed throughout the irrigation season of 1918 were installing the temporary dams. This action was later justified by giving to the altogether different than those of 1917 and insofar as the water users were concerned the water requirements were much more evenly distributed throughout the entire season. Very little water was diverted from the River prior to June 1st 1917, thus causing a shortage in the return flow to the lower section of the River while April 1st 1918 found the majority of canals ready to divert

Complete records were again obtained during the flood water period and a water from the River as an early supply was available, and was used, no peak loads for short periods were suddenly required and the water users were continuously ahead of their irrigation requirements. This diversion of water by the canals in April and May had a very marked effect on the return flow to the lower river during the months of July and August and no cuts below 100% of the quantities decreed in the Stewart Decree were made on rights diverting

water from the lower river, with but one or two exceptions, covering not over a period of 2 or 3 days.

The low water period of 1918 came so abruptly that many of the canals did not have ample time in which to install the temporary dams that are used in diverting water from the river into canal headings during the low water period, so it was either a case of dry up entirely some of these canals for a week or 10 days or waste sufficient water down the river to enable the canals to divert their supply while the dams were being placed in the river channels.

This sudden drop in the natural flow of the river placed the water master squarely up against the proposition of either knowingly wasting water that

rightfully belonged to the flood water rights, or of cutting the flow of the river down to such an extent that only a few of the canals would be able to divert their required amount of water. As the water users at this time were irrigating the second cutting of hay and all their small grains and a decreased water supply for a week or ten days would have meant a serious injury to their crops, the Water Master decided to waste sufficient water for a short period to enable the canals to hold a head of water in their canals while they were installing the temporary dams. This action was later justified by giving to the flood water rights any sudden rises in the natural flow of the river caused by rains in the mountains. These sudden increases in the natural flow during the low water period rarely last more than two or three days and if not stored in Arrowrock would be of but little value to the old decreed rights.

Complete records were again obtained during the flood water period and a comparison of these records with those obtained during previous years makes a very interesting study. The extreme low water period which is considered in this report began on July 22 and continued to September 14, at which time a heavy rain occurred and as the balance of the month of September was unusually wet very little irrigation was used.

CLASSIFICATION OF RIVER SECTIONS.

The Boise River was cut into two separate and distinct sections during the low water period of the irrigation season of 1918.

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 and the Lotus Bridge.

DAILY CANAL RECORDS.

Charts B to B-E, inclusive, give the daily discharge in second feet, of

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all canals in Section 1 and 2 of the River for the irrigation season of 1918. The quantities given in these charts include all storage water delivered, and also all water passing past Lotus Bridge as a delivery.

Although the indicated daily net gain may vary somewhat, the averages by months are thought to be fairly accurate and give a very clear idea of the importance of the tributary return flow to the

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. The writer is indebted to Mr. W. G. Steward of the U. S. R. S. for the data furnished on 5 drains which dump their waters into the Boise River.

Charts 6 and 6-A give the daily discharge in second feet for 13 principal tributary streams and the total for each day for the irrigation season.

The regulation of water deliveries to canals during the season of 1918 was

DAILY TRIBUTARY AND SEEPAGE
GAINS TO BOISE RIVER.

very similar to the operation of the same system in previous reports. Several of the canals had breaks away in their system which necessitated considerable

Chart 7 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 1016 second feet for each day of the 184 days.

Chart 8 gives practically the same data as shown in Chart 7 but separates the storage water from the natural flow. Out of a total of approximately 266000 acre feet released from Arrowrock Reservoir all but 14330 acre feet were diverted by the New York Canal, so practically all of the data computed in this report is based entirely on the natural flow of the River.

Of the 14330 acre feet passing the Government Diversion Dam, the following canals diverted the following quantities:- Richbough, 520; Bettlers, 660; Farmers Union, 1650; Phyllis, 10600; and the Farmers Cooperative, 1000 acre feet.

Chart 9 and 9-A give a detailed comparison of the natural flow passing Highland, canal deliveries, tributary and seepage flow, and net gain Highland to

Notes. 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 and seepage flow 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.

CANAL REQUIREMENTS.

The regulation of water deliveries to canals during the season of 1918 was very similar to the operations given in detail in previous reports. Several of the canals had breaks occur in their systems which necessitated considerable wasting of water at short intervals and caused several waves to go down the River upsetting the stable condition that the Water Master tried to maintain. A most serious loss of not only storage water but also of natural flow occurred through the headgate tender of the New York Canal turning out 550 second feet of water from the New York Canal. The resultant wave down the River washed out all the small dams and several of the smaller canals were without water for a week or more.

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 the Dam. A detailed statement of the former troubles caused by this Power Plant and their eradication has already been given in my previous reports.

MODIFICATION OF EMPTYING CANALS.

The same strong spirit of cooperation that existed during the seasons of 1914 to 1917 was very much in evidence during the season of 1918 and the canal managers were very prompt in giving notice of breaks or intent to empty canals as they have been using this water for a number of years and has become a habit 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 DECREASED FLOW.

The time interval established during the seasons of 1915 and 1916 in delivering storage water from Arrowrock Reservoir to the old canals down the River was used again throughout the season of 1918. A detailed statement may be found in my 1917 report.

RESULTS OBTAINED.

Only two separate and distinct sections of the Boise River were maintained during the low water of 1918. The low water period with which this report deals began on July 22 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. As previously mentioned this work was upset several times by breakson canals in Section 1 and these breaks were responsible for the seemingly large head of water wasted from Section 1 and Section 2.

SECTION 1.

Chart 10 shows graphically the condition that existed in section 1 of the River during the low water period, July 22 to September 14, inclusive. This chart shows that the natural flow of the River passing Highland compares the water from the River while during the low water of 1917 very little water was wasted.

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 safeguarded by those 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 were natural flow.

Chart 12 gives a statement of the use made of the natural flow of the River and shows that for the period July 22 to September 14, inclusive 1918, the average daily return flow or gain to the river in this section was 260 second feet. This gain for the low water period of 1918 was 18 second feet greater than that of 1917; 64 second feet greater than that of 1916; and 127 second feet greater than that of 1915; Emphasis should be given the fact that this section diverted practically all of the natural flow of the Boise River for the period July 22 to September 14, inclusive.

SECTION TWO.

In Section 2 the following canals divert water from the River:- Riverside, Farmer's Cooperative, Canyon, Seiberg, Pioneer Dixie, Burkea N. 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 13 gives a table that shows the average daily tributary and seepage gain in this section during the low water period was 490 second feet. This gain for the low water period of 1918 was 81 second feet greater than that of 1917; 51 second feet greater than that of 1916. The increased return flow to this section for the low water period of 1918 over that of 1917 is believed to be due to the early irrigation of higher lands, thus causing the earlier movements of ground water toward the River. During April and May 1918 all canals diverted the water from the River while during the same period of 1917 very little water was

diverted and used.

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 14 was compiled from actual data to show the actual conditions as they existed in Section 2 for the period July 22 to September 14, inclusive, 1916. This table proves conclusively that during this period 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 rights 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 five irrigation seasons and has been so thoroughly established that there is no doubt in the writers mind that any water that 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.

Chart 15 was compiled to show the quantities of water diverted by the Myllic Canal, Caldwell High Line Canal and the Riverside Canal from drain ditches leading to the Boise River. This chart also gives the total daily return flow that would have been available to section 2 had none of the drain water been diverted prior to its arrival at the River.

At the present time there is under construction a canal which will divert approximately 100 second feet of this return flow to Section 2, prior to its arrival at the River, or Indian Creek to be exact, said construction work being pertinent to a new project consisting of about 5000 acres of sage brush land. This diversion of 100 second feet of return flow will bring to focus a contention that has been kept in the background during the past five years due to the fact

that the Water Master did not want to precipitate any trouble along this line until sufficient data had been gathered so that the facts in the case could be justly ascertained. The condition to which I refer is whether or not any canal having an established Court Decree for a definite quantity of water from the Boise River has the right to divert additional waters from a stream, either natural or artificial, which is a tributary stream to the Boise River, and if they do so

divert this additional water should or should it not be deducted from their river diversions.

Just what the effect will be on the return flow to the Boise River after all the drainage systems now contemplated are completed, the writer is unable to state.

The question involved in this particular case are exceedingly important to all of the Decreed Rights on the Boise River and the writer is very much in hopes that the working out of these problems will come in the course of evolution instead of precipitate action.

emphasized the writer that some very carefully planned method will have to be evolved to make use of the TRANSFER that will be carried in this drainage system

so that the water rights diverting water in Section 1 will not be injured.

For fear that some one 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 misconception of the actual existing conditions.

By diverting this drainage water to the Middleton ditches, their river requirements may be so increased that the FILING ON TRIBUTARY STREAMS will not be disturbed

as no water available is concerned. In other words the loss of return flow that Throughout the past four years the State Engineer's Office has held all section 1 may be affected by the reduced legitimate requirements of the up river

...Please note that the writer does not say that the construction of
...will entirely relieve the drainage district of its responsibility in
...water filings made on tributary streams 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 safeguarding the interests of prior
...appropriations of the water of the Boise River drainage area.

EFFECT ON DRAINAGE.

Just what the effect will be on the return flow to the Boise River after all
this particular section on this day. Just how much of this gain of 121.5 second
the drainage systems now contemplated are completed, the writer is unable to
state.

A study carried on during the past year of the plans for draining the lands
lying on the north side of the Boise River between Boise and Middleton has
convinced the writer that some very carefully planned method will have to be
evolved to make use of the water that will be carried in this drainage system
so that the water rights diverting water in Section 1 will not be injured.

This proposed drainage system has two outlets to the River, one at or near
the town of Eagle and one near the town of Middleton. Looking at this proposition
from the viewpoint of the rest of decreed rights in Section 1, the return flow
that has been getting back to the River between the towns 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 water can be made to partly recompense the rights in Section
1 for their 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, said ditches diverting water from the River in Section 1. By
giving this drainage water to the Middleton ditches, their River requirements
may be so lessened that the other rights in Section 1 will not be disturbed as
far as water available is concerned. In other words the loss of return flow to
Section 1 may be offset by the reduced headgate requirements of two or more

canals. Please note that the writer does not say that the construction of feeders will entirely relieve the Drainage District of its responsibility in taking away a part of the water supply available to Section 1, for no one can foretell just what will occur after the drainage system is completed and in operation.

On July 22, 1918, Mr. W. G. Steward of the U. S. R. S. and myself conducted series of measurements on a section of the River as shown in Chart 16 and the table shown on this chart gives a statement of the return flow or net gain to this particular section on this day. Just how much of this gain of 121.6 second feet comes from the adjoining lands on the north side of the River I could not hazard at a guess but it does prove conclusively that there is a gain in this particular section and surely some of it comes from the north side of the River.

Yet another phase of the proposed drainage system that must be over-looked is the effect it will have on the irrigation requirements of the lands that are to be drained and the irrigation canals which are, in some instances, to be paralleled. Chart 17 shows the results of two seepage investigations that were carried on during the irrigation season of 1915 on the Middleton Water, Middleton Mill and Canyon County Canals. The lands under these canals are, generally speaking, composed of a gravelly subsoil formation which is very porous and the ground water table is within sufficient proximity to the surface of the land so that in some cases the crop requirements of irrigation water is materially affected.

As all of the lands under these three 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 as shown in Chart 17 gives the management sufficient water to deliver to each water user from 1 to 1.2 miners inches per acre. After the construction of the drainage system 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 6 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 give only 0.42 inches per acre to be delivered to the farmers 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.

This phase of the effect of drainage on these lands only serves as an added argument in favor of the construction of feeders so that in case these three canal systems need additional irrigation water it can be supplied them from the drainage ditches instead of increasing the demand on the natural flow of the Boise River.

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 18 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 24 years will be comparable to the records obtained during the past 24 years, this chart has been computed to show the data 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 cut, several additional factors have to be known such as acreage under canal, acreage in different crops, class of soil, duty of water

in my judgement 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 and 1918, 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 seasonal conditions. To emphasize this point a study of Charts 21, 22, 23, 24 and 25 shows that during the month of April 1915, the average maximum headgate duty of water for the last half of the month for eighteen canals was 0.90 miners inches per acre while the same period of 1917 shows that only 0.02 miners inches per acre was diverted. I might add that from personal observation I am convinced that but very little of the water diverted during April 1915 was purposely wasted, while all the water diverted during the month of April 1917, was wasted.

In order to arrive at the maximum quantity of water diverted by the canals diverting water from the Boise River and to ascertain the effect of maximum diversions on the duty of water, Charts 22 and 23 were compiled. The data presented in Chart 22 was taken from the Water Master's Reports for the four years involved. This maximum use is based entirely upon the maximum diversion for any one of the canals for any one day of the month on which the quantity might be diverted.

It is to be regretted that a duty of water for the Boise Valley Canals can not be established in acre feet, for if it were possible to do so, it would soon 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 a constantly varying quantity during the low water period of each year

on the average maximum crop requirements and with a stringent ruling on the non it is impossible for most irrigators to postpone the irrigation of certain crops waste of water and proper River and canal regulation, no water will be diverted to the proper time for such application, as at the time the water is actually ed from the River unless it can actually be applied to beneficial use. needed the natural flow of the River may decrease to such an extent that a proper irrigation head cannot be obtained. A sufficient quantity of water will take care of all requirements whereas an average quantity will not.

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 Chart 25 is a condensed table of the Stewart Decree showing dates of priority will be before the Courts continuously throughout the future. On the other hand and amount decreed. A small black circle at the left of each date of priority if a duty is fixed, based on maximum requirements, the same condition that has shows that the decreed right is supplied by return flow in either section 1 or prevailed during the past four irrigation seasons will continue to prevail, Section 2.

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 im-

portant than the duty of water for the waste of water can be eliminated, natural flow for their water supply. All rights filled by return flow in either regardless of the duty of water, if proper River regulation is followed. Section 1 or 2, have been eliminated and do not appear on these tables.

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

Chart 25 is a summary table showing the net results secured on return flow The duty of water established by an average of the diversions of these 18 to the Boise River covering the past 5 irrigation seasons.

canals, covering a four year period, as shown in Charts 24 and 25, 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

1. That tributary flow and storage are important items to be considered loss would result on a majority of the lands in the Boise Valley. in the management of the Boise River.

On Chart 23 will be found a proposed duty of water as established by the writer, from all the data at his command, coupled with the nine years experience available water supply of the River.

2. All tributary and storage waters should be considered as a part of the hehshahad in this study. Many water users will think this duty too high and many too low, but it is the best solution he has to offer for this very knotty, into four sections if properly managed.

problem. This proposed duty is offered with the understanding that it is based

on the average maximum crop requirements and with a stringent ruling on the non-wastage of water and proper River and canal regulation, no water will be diverted from the River unless it can actually be applied to beneficial use.

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

STEWART DECREE.

7. That the return seepage flow to Section 1 is becoming an increasingly important factor.
Chart 26 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 in Section 1 may lose part of their available water if not properly safeguarded.
Section 2.

RECONSTRUCTED TABLE OF STEWART DECREE.

10. That fillings on tributary streams should be carefully watched before Charts 27 and 27-A shows 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.
by proper adjustment of drainage rights.

SUMMARY OF RETURN FLOW.

Chart 28 is a summary table showing the net results secured on return flow to the Boise River covering the past 5 irrigation seasons.

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 extremely low water years the River naturally divides itself into four sections if properly managed.

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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 loose part of their available water if not properly safe-guarded.

9. That the transfer or exchange of any rights 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 Engineer.

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

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

13. That any tributary 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 the duty proposed in this Report by the writer is an arbitrary duty.

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

18. 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.

TABLE IN SECOND FEET SHOWING DAILY FLOW
FOR YEARS 1895 TO 1918

	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
JANUARY	1470 1410 1280 1320 1330	930 1070 720 720 720	1070 1010 1010 950 950	550	2580 2580 2580 2580 2580	1570 1680 1600 1570 1680	1200 1200 1350 1310 1370	1120 1270 1190 1140 1080	1280 1070 945 1040 945			700 700 675 700 750			1180 1100 1100 1070 1070
	1240 1180 950 1100 1240	720 720 450 950 950	890 890 950 950 1010	550	2780 2780 2780 2780 2780	1680 1680 1570 1360 1360	1570 1390 1350 1350 1350	1120 1120 1140 1120 1070	945 945 945 945 945			880 750 750 750 810			965 400 965 1140 1070
	1280 1330 1510 1450 1450	950 1070 950 720 720	890 830 720 620 620	550	2780 2780 2780 2780 2780	1570 1910 2480 2480 2480	1270 1270 1350 1350 1430	900 865 900 900 900	1080 752 500 500 575			880 880 810 810 810			1040 1140 1070 1180 1240
	1240 1240 1310 1330 1260	720 720 720 720 720	620 620 570 570 720	550	2980 2980 2980 2980 2980	3910 3520 2810 2310 2260	1270 1270 1200 1200 1270	1000 878 715 740 1040	1000 678 715 740 1020			810 810 1060 960 880			1100 1100 1070 1070 1240
	1220 1220 1290 1210 1140	1870 1870 1870 1350 1280	830 830 950 770 720	550	2980 2980 2780 2180 2180	2100 2070 2070 2070 1680	1310 1350 1310 1270 1220	1000 970 900 830 830	1950 1680 1380 2400 2400			810 960 880 810 810			1140 1070 930 1040 1100
	1090 1070 1100 1120 1280	1680 1720 1680 1680 1540	620 620 530 530 1010	550	2060 1580 1340 1220 1220	1680 1680 1680 1130 1680	1200 1200 1200 1130 1200	830 760 695 830 1570	2970 2400 1680 1570 1570			880 810 810 750 750			1100 1070 1040 1100 965
	1240 1240 1260 1180 1190	1590 1380 1330 1070 950	1010 950 830 1010 1010	550	1220 1220 1100 1100 1220	1790 1790 1790 1790 1520	1290 1130 1200 1240 1350	1270 1350 1350 1280 1330	1680 1380 1200 1280 1330			810 780 780 810 780			1040 1240 1240 1180 1100
	1190 1190 1180 1150 1210	950 750 1070 1070 1070	1070 1010 1350 1350 1210	550	1220 1100 1340 1580 1270	1520 1570 1570 1680 1570	1290 1160 1160 1100 1200	1350 1310 1600 2000 2000	1330 1200 1330 1280 1260			780 780 810 810 810			1100 1100 1070 1070 1070
	1100 1100 1100 1180 1070	1010 1010 1010 1010 1010	1140 1140 1070 1070 1070	550	1580 1580 1580 1340 1460	1460 1460 1460 1260 1260	1200 1270 1270 1270 1350	1900 1800 1560 1350 1310	1110 945 865 1020 790			810 800 920 960 1010			1000 1000 1000 1000 1000
	1100 1180 1210 1180 1220	1010 1010 1010 1010 1010	1140 1070 950 840 840	1230	1580 1580 1580 1580 1580	1460 1460 1460 1460 1460	1200 1270 1270 1270 1270	1900 1800 1560 1350 1310	1110 945 865 1020 790			810 800 920 960 1010			1000 1000 1000 1000 1000
	1210 1210 1290 1350 1370	1070 1140 1140 1140 1140	830 890 890 890 890	1400	1580 1580 1580 1580 1580	1460 1460 1460 1460 1460	1200 1270 1270 1270 1270	1900 1800 1560 1350 1310	1110 945 865 1020 790			810 800 920 960 1010			1000 1000 1000 1000 1000
	1430 1450 1450 1570	1210 1280 1280 1870	770 770 830 830	1750	1580 1580 1580 1580	1460 1460 1460 1460	1200 1270 1270 1270	1900 1800 1560 1350 1310	1110 945 865 1020 790			810 800 920 960 1010			1000 1000 1000 1000 1000
	1470 1490 1410 1370	1510 1350 1280 1350	840 890 1010 1070	1750	1580 1580 1580 1580	1460 1460 1460 1460	1200 1270 1270 1270	1900 1800 1560 1350 1310	1110 945 865 1020 790			810 800 920 960 1010			1000 1000 1000 1000 1000
	1320 1330 1350 1410 1510	1070 1070 1070 1070 1070	1010 1070 1070 1070 1010	2530	1460 1460 1460 1460 1460	2330 2720 2980 3910 4230	2880 3260 3260 2880 2720	1440 1440 1440 1440 1440	1110 1090 810 11500 1110			2560 3370 810 11500 6760			1050 1050 1050 1050 1050
	1690 1610 1550 1590 1410	1280 1280 1350 1350 1350	1010 890 770 890 890	2770	1340 1400 1400 1340 1340	4810 5980 5980 5880 5880	2630 2330 2180 2180 2180	1420 1340 1340 1340 1340	1200 1200 1360 1570 1570			5320 4890 4890 4890 4890			1450 1390 1390 1390 1390
	1370 1350 1370 1390 1390	1350 1280 1350 1350 1350	890 1070 1070 1010 950	1750	1340 1340 1340 1340 1340	6120 6390 6390 6390 6390	2570 2570 2570 2570 2570	1350 1350 1350 1350 1350	1570 1570 1570 1570 1570			3570 3720 3500 3500 3500			1730 750 6120 10400 10400
	1390 1390 1390 1390 1390	2430 2470 3120 3120 3120	950 1010 1210 1210 1210	1920	2060 1820 1820 1820 1820	6120 6120 6120 6120 6120	2570 2570 2570 2570 2570	1440 1440 1440 1440 1440	1680 1900 2010 2010 2010			4380 4000 3900 3900 3900			1610 1610 1610 1610 1610
	1790 2060 3000 3000 2060	6290 6290 6290 6290 6290	3120 3120 3120 3120 3120	1400	2730 2580 2780 2780 2780	6720 6660 5330 5330 5330	2670 2570 2430 2430 2430	1940 1940 1940 1940 1940	3520 3520 3520 3520 3520			1790 1790 1790 1790 1790			2840 2840 2840 2840 2840
	2590 2590 2590 2590 2590	3930 3930 3930 3930 3930	2430 2430 2430 2430 2430	1750	2580 2580 2580 2580 2580	5060 5060 5060 5060 5060	2180 2180 2180 2180 2180	1440 1440 1440 1440 1440	2070 2070 2070 2070 2070			4040 4040 4040 4040 4040			1650 1650 1650 1650 1650

TABLE IN SECOND FEET SHOWING DAILY FLOW OF BOISE RIVER
FOR YEARS 1895 TO 1918, INC.

(Taken From)

	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
0	2540	1570	1200	1120	1280			700		1180	770		870	990		1080	
0	2580	1680	1200	1270	1070			700		1100	980		750	940		1150	
0	2580	1680	1350	1190	945			675		1100	1100		1105	1020		1220	
0	2580	1570	1310	1140	1040			700		1070	1220		1035	1020		1220	
0	2580	1680	1370	1080	945			750		1040	1220		1035	1260		1220	
0	2780	1680	1510	1120	945			820		960	1170		1070	1230		1220	
0	2780	1680	1390	1120	945			750		900	1170		1140	1160		1220	
0	2780	1570	1350	1140	945			750		965	1140		1140	1230		1080	
0	2780	1360	1350	1120	945			750		1140	1510		1140	1230		950	
0	2780	1360	1350	1070	945			810		1070	1170		1070	1230		827	
0	2780	1570	1270	900	1080			880		1040	1060		1000	1100		827	
0	2780	1910	1270	860	752			880		1140	1020		1000	1100		950	
0	2780	1910	1270	830	500			810		1070	1020		1000	1230		1150	
0	2780	2480	1350	900	500			810		1180	1220		965	1240		1150	
0	2480	4120	1430	900	570			810		1240	1220		965	1240		1150	
0	2980	3910	1270	1000	670			810		1100	3630		870	1670		1080	
0	2980	3520	1270	1080	678			810		1100	2610		870	1660		1080	
0	2980	2810	1200	1120	710			1060		1070	3090		870	1460		1220	
0	2480	2310	1200	1080	790			960		1070	3990		1140	1420		1150	
0	2480	2260	1270	1040	1020			880		1240	5760		1210	1370		1080	
0	2480	2180	1310	1000	1950			810		1140	5780		810	1230		1150	
0	2480	2070	1350	970	1680			960		1070	5760		700	1230		1220	
0	2780	2070	1310	900	1350			880		930	4050		700	1200		1220	
0	2780	2070	1270	830	2400			810		1040	3210		650	1300		1220	
0	2780	1680	1220	830	2100			810		1180	2850		1000	1720		1220	
0	2780	1680	1200	830	2970			960		1180	2950		675	1550		1220	
0	2060	1680	1200	830	2400			880		1100	2270		1000	1550		1370	
0	1580	1680	1200	760	2010			810		1070	2110		1140	1380		1300	
0	1340	1680	1130	695	1680			810		1040	1960		1210	1300		1150	
0	1220	1680	1130	830	1570			750		1100	1880		1320	1230		1220	
0	1220	1680	1200	1120	1470			750		965	1860		2140	1160		1220	
0	1220	1790	1240	1270	1680			810			1860		2450	1100		1220	
0	1220	1740	1130	1350	1380			780			1760		2340	990		1220	
0	1100	1790	1200	1350	1280			780		1240	1760		1680	990		1020	
0	1100	1790	1240	1440	1280			810		1240	1720		1600	1020		950	
0	1220	1680	1130	1350	1280			750		1180	1720		1740	1230		1150	
0	1220	1520	1240	1350	1330			780		1100	1400		1640	1230		827	
0	1100	1570	1160	1310	1200			780		1100	1490		1370	1170		1020	
0	1340	1570	1160	1800	1330			810		1070	1580		1300	1230		1220	
0	1580	1680	1100	2000	1280			810		1070	1500		1230	1230		1020	
0	1470	1570	1200	2000	1300			810		1040	1490		1325	1260		1080	
0	1580	1460	1200	1900	1110			810		1000	1490		1400	1650		1220	
0	1580	1460	1270	1800	945			880		1000	1580		1325	1380		1080	
0	1580	1460	1270	1560	865			920		1000	1580		1370	1340		1080	
0	1340	1460	1270	1350	1020			960		1000	1760		1230	1380		1080	
0	1460	1460	1350	1310	790			1010		965	1760		1170	1260		1080	
0	1460	1460	2430	1270	945			1160		2900	1070		1140	1300		950	
0	1580	1360	1120	1350	1110			1240		2450	1040		1060	1560		1020	
0	1580	1460	1070	1440	1020			1280		2900	1040		1230	1580		1220	
0	1580	1460	2180	1390	1020			1330		2980	965		1230	1780		1220	
0	1580	1460	2180	1350	1020			1310		2040	1000		1230	1580		1220	
0	1460	1680	2020	1270	1020			1280		2900	965		1230	1580		1300	
0	1460	2480	1820	1270	1110			1310		2840	1000		1140	1480		1500	
0	1340	2330	1870	1270	1110			1280		2900	1040		1110	1420		2190	
0	1220	2150	1870	2580	1110			1200		3080	1140		1170	1460		2300	
0	1220	2050	2070	2460	1110			1160		3180	1180		1140	1380		2140	
0	1370	2180	1970	2220	1020			1160		3420	1210		1170	1160		1980	
0	1460	2080	4160	2110	1110			1110		4060	1240		1140	1260		1880	
0	1460	2070	4380	1800	1110			1300		4130	1360		1060	1230		1700	
0	1580	1910	3930	2700	1110	3370		1240	3670	1280	2160	3360	1060	1160	1050	1880	100
0	1920	1580	2040	2400	1610	1150	2760	1110	3060	1210	2270	5500	1060	1230	1100	1880	100
0	1920	1580	2040	2470	1520	1200	2760	1110	3060	1100	2270	5500	1060	1230	1100	1880	100
0	1920	1580	2180	3930	1480	1200	2580	1110	3000	1040	2840	6700	1110	1160	1150	1880	90
0	2260	1460	2040	3080	1440	1200	2560	1110	2950	1140	2420	6700	1230	1040	1200	1580	100
0	2430	1460	2330	2880	1440	1110	2560	1060	4550	1100	2670	7170	1230	1040	1200	2080	100
0	2430	1460	2720	3260	1440	1090	3370	1060	4550	1040	2610	6550	1230	1160	1340	2080	100
0	2260	1460	2980	3260	1440	1020	8180	1240	4700	965	2730	6550	1370	1260	1340	2080	100
0	2260	1340	3910	2880	1440	1020	11500	1350	4710	1000	2790	6700	1495	1230	1340	2490	100
0	2260	1340	4230	2720	1420	1110	6760	1470	4260	1000	2610	6700	1450	1200	1580	2670	90
0	2770	1340	4810	2640	1420	1200	5320	1430	4060	1070	2550	6700	1450	1220	1670	2680	90
0	2600	1400	5990	2430	1340	1200	4890	1390	3930	1210	2550	6850	1495	1230	1670	2680	90
0	2430	1400	5990	2180	1390	1380	4480	1350	3740	1360	2610	7170	1540	1230	2140	3220	100
0	1920	1340	5860	2180	1350	1470	4090	1280	3580	1560	2610	7590	1540	1230	2140	3300	100
0	2090	1340	5860	2180	1350	1470	4090	1160	3580	1560	2610	7590	1540	1230	2140	3300	100
0	1920	1340	6120	2180	1350	1570	3540	880	3670	1070	2550	6850	1495	1230	2140	3220	100
0	1750	1340	6120	2570	1350	1570	3720	750	3540	1210	2550	6850	1495	1230	2140	3220	100
0	1750	1580	6390	2570	1350	1570	3500	810	3540	1040	2550	6850	1495	1230	2140	3220	100
0	1750	1970	6390	2570	1350	1620	7890	880	3540	1040	2550	6850	1495	1230	2140	3220	100
0	1750	2060	6120	2720	1350	1680	4480	1660	3540	1040	2550	6850	1495	1230	2140	3220	100
0	1920	2060	6120	2880	1440	1680	4380	1640	3540	1040	2550	6850	1495	1230	2140	3220	100
0	1750	1820	6120	3930	1440	1900	4000	1630	3540	1040	2550	6850	1495	1230	2140	3220	100
0	1580	1820	6660	3740	1440	2010	3900	1630	3540	1040	2550	6850	1495	1230	2140	3220	100
0	1580	1940	6660	3060	1440	2200	3540	1630	3540	1040	2550	6850	1495	1230	2140	3220	100
0	1400	3760	6660	3060	1440	3320	3460	1640	3540	1040	2550	6850	1495	1230	2140	3220	100
0	1400	2730	6920	2670	1440	3520	3210	1740	3540	1040	2550	6850	1495	1230	2140	3220	10

CHART 2

SHEET-1

U.S.G.S. Records)										SHEET-1			
1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	
770		870	990		1080	930	715	679	5248				
780		750	940		1150	1050	736	891	5346				
1100		940	1020		1220	1050	763	1006	5333				
1220		1105	1020		1220	1050	760	991	5362				
1220		1035	1020		1220	1050	746	936	5246				
1140		1035	1260		1220	990	744	984	2153				
1140		1070	1230		1220	990	740	1253	2078				
1140		1140	1160		1220	930	763	888	1907				
1140		1140	1230		1080	990	766	719	1826				
1140		1140	1230		950	920	763	811	1738				
1040		1070	1230		824	950	736	740	1428				
1040		1000	1100		824	930	754	769	1419				
1040		1000	1100		950	930	764	677	1445				
1220		1000	1230		1150	930	759	662	1621				
790		965	1380		1140	900	717	603	1583				
1630		870	1640		1080	990	723	393	1527				
2610		810	1640		1080	900	719	498	1550				
2610		870	1460		1220	930	733	590	1980				
770		1140	1420		1150	930	746	498	1517				
5780		1210	1370		1080	930	745	590	1437				
5780		810	1230		1150	930	618	590	1360				
5780		700	1230		1220	930	1067	682	1207				
4050		700	1200		1220	930	973	780	1175				
3210		850	1300		1220	770	946	679	1201				
2850		1000	1420		1220	720	975	861	1380				
2850		610	1550		1220	930	908	867	1403				
270		1000	1530		1370	990	889	864	1659				
2110		1140	1380		1300	1050	869	777	1506				
960		1210	1300		1150	1110	836	877	1413				
1880		1320	1230		1320	1050	844	777	1353				
1880		2140	1160		1220	1050	844	690	1386				
1880		2450	1100		1220	1330	835	684	1225				
1760		2340	990		1020	1480	854	684	1287				
1760		1680	990		1020	1480	868	690	1049				
1720		1600	1020		950	1330	834	690	1127				
1720		1740	1230		1150	1180	863	880	1239				
1400		1640	1230		824	1050	887	800	1457				
1490		1370	1170		1020	1050	1017	783	1439				
1580		1350	1230		1220	1050	1106	793	1437				
1580		1230	1230		1020	1050	1127	793	1380				
1490		1325	1260		1080	1050	1128	690	1370				
1490		1325	1360		1220	990	1206	690	1353				
1760		1370	1340		1080	930	1182	748	1488				
1760		1230	1380		1080	930	1106	857	1493				
1760		1170	1260		1080	820	1066	857	1583				
2760		1140	1300		1080	730	1067	857	1584				
2760		1060	1460		950	820	1074	765	1477				
2970		1230	1880		1020	930	1109	800	1432				
2610		1230	1780		1220	1050	1111	972	1382				
2610		1230	1550		1220	1110	1159	923	1486				
1380		1140	1460		1300	1110	1158	927	1417				
2080		1110	1420		1530	1050	1164	825	1449				
2080		1170	1460		2190	1050	1183	834	1345				
2160		1140	1380		2300	1104	1223	937	1366				
2160		1170	1160		2120	995	1224	869	1431				
2160		1170	1160		1980	1070	1223	1026	1425				
2080		1140	1260		1880	1076	1212	1022	1478				
2110		1060	1230		1700	1036	1248	1156	1501				
			1080		1790	1072	1228	1035	1401				
2160	3360	1060	1160	1050	1880	1062	1095	1038	1389				
2270	5000	1060	1230	1140	1880	992	1021	913	1362				
2270	6700	1110	1160	1150	1880	998	961	914	1354				
2270	6700	1230	1040	1200	1580	1080	910	1006	1356				
2670	7170	1230	1040	1200	2080	1019	1039	1036	1442				
2670	6050	1230	1160	1340	2080	1009	1050	916	1242				
2610	6050	1370	1260	1340	2080	1000	976	997	1485				
2730	6700	1495	1230	1340	2490	936	998	991	1461				
2790	6700	1450	1200	1580	2470	962	1399	987	1455				
2610	6700	1458	1220	1670	2880	945	1399	944	1531				
2650	6050	1495	1230	2140	3220	1093	1600	994	1700				
2610	7170	1540	1230	2140	3300	1195	2600	944	1695				
2610	7490	1540	1230	1840	3520	1186	3453	912	1744				
2660	8450	1640	1340	1670	3750	1225	3453	905	1698				
2710	8770	1895	1380	1500	3830	1206	3365	866	1758				
1760	9250	2170	1500	1500	4140	1295	3506	887	2397				
1130	9890	2555	1560	1500	4730	1379	3506	824	2209				
1130	10400	2670	1420	1670	5120	1579	4057	865	2118				
1130	11800	2900	1380	1670	5530	1283	4521	878	2637				
1130	15200	3320	1180	1500	5740	1402	4902	920	2205				
1850	15600	3910	1290	1340	5120	1646	5657	1024	3353				
1850	16600	4200	1300	1720	5780	1951	6184	1016	3813				
1850	16100	4800	1420	1940	5780	2193	6481	1020	4013				
1850	12100	4800	1600	1340	5670	2193	6481	924	3720				
1850	10800	4350	1730	1340	6320	2500	7156	1028	3720				
1850	10280	4340	2030	1200	3580	2349	3751	1006	3720				
1850	9250	3665	2480	1200	3580	2190	3522	933	3720				
1850	9090	3500	2970	1480	3260	2080	4128	906	3720				
1850	8770	3680	3560	1970	3090	2367	4416	1208	3720				
1850	8450	4180	3230	2620	3090	2628	4416	1568	3720				
1850	8290	4680	3130	3130	3000	2023	4416	1698	3720				

A. J. T. 11/11/11
1911-1912

	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
1	2770	3760	2360	1580	2780	5060	2070	1390	7110	4090	1650	4550	6520	2190	665
2	2350	2770	2190	1750	2980	6660	2240	1850	6520	4090	1710	3670	6670	2190	745
3	2460	2830	2080	1750	2980	7450	2430	1930	5720	4480	1750	3240	6970	2270	820
4	2560	2830	2190	1400	3170	6920	2360	2460	5710	5320	1840	3040	7040	2500	755
5	2310	2770	2080	1230	3760	6660	2300	2460	5220	5770	1970	2920	7270	3140	710
6	2210	2770	2080	1400	3760	7180	2300	2460	5220	5010	2320	3540	7350	2400	640
7	2120	4100	2430	1750	3760	7720	2300	3365	5220	5770	2810	4370	7570	2780	5700
8	2250	4270	2310	1580	4580	7450	2300	4160	4370	5890	2920	5110	8230	2900	5700
9	2510	3760	2970	1580	5580	6660	2360	3030	4530	6760	3050	5250	9030	3140	5600
10	2830	4890	3590	2090	7000	6660	2720	2590	7790	10400	2810	5620	11600	5180	6600
11	3020	3730	4890	2260	7600	5860	3480	2590	6610	11500	2570	7830	11600	5380	6350
12	3240	3730	6790	2600	8320	6390	4380	2460	5710	13700	2470	4620	13600	6780	6450
13	3510	4010	7800	3800	8140	7180	5050	2660	4980	15500	2570	4760	14600	8670	7150
14	3680	11000	8660	5170	7450	6120	5720	2590	5220	18000	2490	4930	15600	7950	8000
15	3850	7150	9300	5510	7300	5600	5505	2730	5340	19700	2490	5470	17000	7770	8430
16	4020	6190	12000	6020	10170	6120	5505	3740	5710	17800	2660	6070	16000	8760	9000
17	4200	5910	26200	6360	8500	5860	4160	6240	6240	16400	2820	6300	17500	8040	9150
18	4370	4090	27000	6360	8690	6120	5500	5500	6520	15400	2710	6370	13600	7950	9150
19	4510	4470	29500	6510	7000	6120	6170	5950	6660	17200	2980	6440	12300	8850	9050
20	4690	3930		6510	6700	6120	6870	6700	6810	18000	3380	6520	11300	8600	9350
21	4890	3760		5680	6700	6120	6870	6700	6810	18000	3380	7430	11400	10100	8450
22	4970	4890		5680	7960	6120	7130	6050	11500	12200	3320	8070	11400	10600	8000
23	4890	5130		5680	10910	6120	7740	4640	11000	10100	3590	8550	12400	9900	8200
24	5390	5130		5680	13130	6120	8640	4160	11500	9120	3540	7830	12800	8940	8350
25	5580	5910		5850	11280	6120	7850	3840	12100	9120	3950	7430	12500	7950	8000
26	6010	7150		6540	11650	5860	8030	3940	13300	11100	4410	4520	12100	7570	9400
27	6290	5760		6540	9060	5860	7290	3940	12700	13600	4570	6300	11900	7140	10500
28	6090	5380		6540	7960	5860	7030	3740	10500	11800	4070	6220	11500	6690	10200
29	6220	5670		6360	7300	5860	7520	3550	8410	11100	3760	6520	11300	6510	9000
30	6490	5130		6170	6700	6120	8410	3740	8070	10600	3590	6600	11300	6690	7460
31															
1	6810	5640		6190	6120	6390	8860	3740	7740	10100	3350	6820	10800	7410	7460
2	6190	4890		6020	5300	6660	10200	3550	7420	10100	3470	6970	10800	8040	7630
3	7150	5640		6020	5060	6920	9640	3190	7420	11500	3590	7430	10800	7590	8900
4	7510	7880		5510	7820	7450	10200	3190	8410	12800	3470	8070	10900	8040	10500
5	6790	7880		7650	5300	7450	11100	3190	9150	12200	3260	7430	10900	7590	12400
6	7880	6790		7310	5850	8780	10000	3550	10000	12300	3160	7200	10900	8220	11600
7	7510	6810		7400	9060	9300	10200	3940	10000	12300	3080	7040	11300	9220	10800
8	7150	7150		7400	9800	10100	9780	6170	10000	11800	3120	7350	11700	9800	10500
9	6810	6490		7400	13500	10400	10300	6840	9560	11800	3510	7510	11900	9030	10200
10	6190	5710		7420	19000	11400	10700	6400	9560	12300	3350	8150	12100	8130	10200
11	5640	6170		7420	17200	11900	11200	6400	9560	12300	3350	8150	12100	8130	10200
12	5640	5710		7420	14200	11900	11300	6400	9560	12300	2980	8150	12100	6340	9000
13	5640	5130		5510	13500	8510	12000	7740	11000	12800	2900	8710	11200	6340	8200
14	5640	4890		5510	12500	8510	12200	7740	12700	13200	2580	8470	10100	5740	8000
15	5640	4890		5680	11300	8780	12300	7070	12700	13600	2610	8390	9700	5740	7630
16	6010	4890		5590	10200	8780	12700	7070	11500	13600	2650	7430	10300	5340	8200
17	6090	4670		5590	9300	8510	12700	6840	10600	13600	3300	6440	11100	5140	8600
18	6190	4470		5000	9060	8240	12400	5950	10600	13900	4600	5920	12400	4860	8200
19	6190	4290		4820	7600	8510	11500	5500	8870	13700	4740	5700	13400	4860	8400
20	6490	4290		5000	7300	8240	9740	5160	7170	15000	4710	5700	13300	4700	8300
21	6810	4700		5000	7300	7480	9350	4830	5770	16400	4670	5700	12200	4400	7300
22	6170	4890		4910	8320	7720	8640	4720	12000	16000	4100	5540	11700	4180	6600
23	5640	7150		4910	9060	7450	8000	4600	9980	18700	3990	5320	10900	3940	10200
24	5380	11000		4910	9800	7450	7520	4490	9980	18000	3670	5540	10700	3850	10400
25	5130	12500		4910	10900	7180	7740	4720	5220	16100	3360	5470	9900	3850	10200
26	6490	4890		5000	9800	7180	8410	5500	5340	15500	3420	7040	9600	4620	10200
27	7880	14900		5000	9860	6920	8640	6400	6240	12200	4700	6740	9200	4400	10400
28	6810	9000		6190	10500	6660	9080	6460	12200	4380	6420	9120	9120	4200	12000
29	6490	8700		5680	11300	6660	8640	6460	12800	5360	6440	9120	9120	4100	13100
30	6490	8370		5680	11300	6660	8640	6460	12800	5360	6440	9120	9120	4100	13100
31	6490	8370		5680	11300	6660	8640	6460	12800	5360	6440	9120	9120	4100	13100
1	7470	27000		7910	10200	6120	7740	7070	13300	11800	6070	5700	11700	4030	10200
2	7100	27000		7820	10500	6120	7740	6170	16800	11800	6260	5740	12200	4030	11400
3	7930	32100		7820	12800	6660	7720	5500	16200	10600	5890	5620	12300	4210	13900
4	7930	29500		7480	13900	6920	7070	5280	14400	9440	5380	6070	11900	4210	15700
5	4100	27000		4310	13500	7180	6200	5150	12300	9440	5180	6140	11100	4210	15700
6	4700	25500		4480	13600	7050	5720	4010	12700	10100	4940	6440	10900	4380	16000
7	4100	25500		4140	10500	6920	5450	5160	13300	9770	4860	5700	11000	3940	16000
8	3970	25500		3970	10500	6920	5450	5160	13300	9770	4860	5700	11000	3940	16000
9	3760	27000		4140	9800	6920	5450	5160	13300	9770	4860	5700	11000	3940	16000
10	3590	25300		4480	10200	6120	7600	7310	14700	9440	5010	5540	10800	4380	16000
11	3970	22900		4910	11600	5300	7380	7210	13800	9440	5010	5540	9700	4380	16000
12	3970	22900		5170	13900	5950	7270	6840	12700	8500	4920	5740	9320	4380	16000
13	3760	25500		5170	10200	4920	3930	6570	11800	8180	5080	5990	9320	4380	16000
14	3590	35500		5580	11300	7270	3710	6570	10500	8480	4930	6090	8850	4380	16000
15	3260	32100		6020	12500	7270	3710	5260	10500	8480	4930	6090	8850	4380	16000
16	3590	32100	5100	6020	13500	5730	3930	5380	10500	10100	4000	6600	7210	4380	16000
17	3970	32100	5100	6020	13500	5730	3930	5380	10500	10100	4000	6600	7210	4380	16000
18	3760	30400	4530	5850	16100	6400	4230	5400	10000	10000	3650	6000	5790	4380	16000
19	3760	27000	3500	5850	16700	6400	4230	5400	10000	10000	3650	6000	5790	4380	16000
20	3760	27000	3500	5850	16700	6400	4230	5400	10000	10000	3650	6000	5790	4380	16000
21	3760	27000	3500	5850	16700	6400	4230	5400	10000	10000	3650	6000	5790	4380	16000
22	3760	27000	3500	5850	16700	6400	4230	5400	10000	10000	3650	6000			

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
0	7030	7650	7430	8520	1750	1130	8270	6130	3230	7470	2940	1970					
1	7090	7710	7490	8570	1790	1170	8330	6190	3290	7530	2980	2030					
2	7150	7770	7550	8620	1830	1210	8390	6250	3350	7590	3020	2090					
3	7210	7830	7610	8670	1870	1250	8450	6310	3410	7650	3060	2150					
4	7270	7890	7670	8720	1910	1290	8510	6370	3470	7710	3100	2210					
5	7330	7950	7730	8770	1950	1330	8570	6430	3530	7770	3140	2270					
6	7390	8010	7790	8820	1990	1370	8630	6490	3590	7830	3180	2330					
7	7450	8070	7850	8870	2030	1410	8690	6550	3650	7890	3220	2390					
8	7510	8130	7910	8920	2070	1450	8750	6610	3710	7950	3260	2450					
9	7570	8190	7970	8970	2110	1490	8810	6670	3770	8010	3300	2510					
10	7630	8250	8030	9020	2150	1530	8870	6730	3830	8070	3340	2570					
11	7690	8310	8090	9070	2190	1570	8930	6790	3890	8130	3380	2630					
12	7750	8370	8150	9120	2230	1610	8990	6850	3950	8190	3420	2690					
13	7810	8430	8210	9170	2270	1650	9050	6910	4010	8250	3460	2750					
14	7870	8490	8270	9220	2310	1690	9110	6970	4070	8310	3500	2810					
15	7930	8550	8330	9270	2350	1730	9170	7030	4130	8370	3540	2870					
16	7990	8610	8390	9320	2390	1770	9230	7090	4190	8430	3580	2930					
17	8050	8670	8450	9370	2430	1810	9290	7150	4250	8490	3620	2990					
18	8110	8730	8510	9420	2470	1850	9350	7210	4310	8550	3660	3050					
19	8170	8790	8570	9470	2510	1890	9410	7270	4370	8610	3700	3110					
20	8230	8850	8630	9520	2550	1930	9470	7330	4430	8670	3740	3170					
21	8290	8910	8690	9570	2590	1970	9530	7390	4490	8730	3780	3230					
22	8350	8970	8750	9620	2630	2010	9590	7450	4550	8790	3820	3290					
23	8410	9030	8810	9670	2670	2050	9650	7510	4610	8850	3860	3350					
24	8470	9090	8870	9720	2710	2090	9710	7570	4670	8910	3900	3410					
25	8530	9150	8930	9770	2750	2130	9770	7630	4730	8970	3940	3470					
26	8590	9210	8990	9820	2790	2170	9830	7690	4790	9030	3980	3530					
27	8650	9270	9050	9870	2830	2210	9890	7750	4850	9090	4020	3590					
28	8710	9330	9110	9920	2870	2250	9950	7810	4910	9150	4060	3650					
29	8770	9390	9170	9970	2910	2290	10010	7870	4970	9210	4100	3710					
30	8830	9450	9230	10020	2950	2330	10070	7930	5030	9270	4140	3770					
31	8890	9510	9290	10070	2990	2370	10130	7990	5090	9330	4180	3830					
32	8950	9570	9350	10120	3030	2410	10190	8050	5150	9390	4220	3890					
33	9010	9630	9410	10170	3070	2450	10250	8110	5210	9450	4260	3950					
34	9070	9690	9470	10220	3110	2490	10310	8170	5270	9510	4300	4010					
35	9130	9750	9530	10270	3150	2530	10370	8230	5330	9570	4340	4070					
36	9190	9810	9590	10320	3190	2570	10430	8290	5390	9630	4380	4130					
37	9250	9870	9650	10370	3230	2610	10490	8350	5450	9690	4420	4190					
38	9310	9930	9710	10420	3270	2650	10550	8410	5510	9750	4460	4250					
39	9370	9990	9770	10470	3310	2690	10610	8470	5570	9810	4500	4310					
40	9430	10050	9830	10520	3350	2730	10670	8530	5630	9870	4540	4370					
41	9490	10110	9890	10570	3390	2770	10730	8590	5690	9930	4580	4430					
42	9550	10170	9950	10620	3430	2810	10790	8650	5750	9990	4620	4490					
43	9610	10230	10010	10670	3470	2850	10850	8710	5810	10050	4660	4550					
44	9670	10290	10070	10720	3510	2890	10910	8770	5870	10110	4700	4610					
45	9730	10350	10130	10770	3550	2930	10970	8830	5930	10170	4740	4670					
46	9790	10410	10190	10820	3590	2970	11030	8890	5990	10230	4780	4730					
47	9850	10470	10250	10870	3630	3010	11090	8950	6050	10290	4820	4790					
48	9910	10530	10310	10920	3670	3050	11150	9010	6110	10350	4860	4850					
49	9970	10590	10370	10970	3710	3090	11210	9070	6170	10410	4900	4910					
50	10030	10650	10430	11020	3750	3130	11270	9130	6230	10470	4940	4970					
51	10090	10710	10490	11070	3790	3170	11330	9190	6290	10530	4980	5030					
52	10150	10770	10550	11120	3830	3210	11390	9250	6350	10590	5020	5090					
53	10210	10830	10610	11170	3870	3250	11450	9310	6410	10650	5060	5150					
54	10270	10890	10670	11220	3910	3290	11510	9370	6470	10710	5100	5210					
55	10330	10950	10730	11270	3950	3330	11570	9430	6530	10770	5140	5270					
56	10390	11010	10790	11320	3990	3370	11630	9490	6590	10830	5180	5330					
57	10450	11070	10850	11370	4030	3410	11690	9550	6650	10890	5220	5390					
58	10510	11130	10910	11420	4070	3450	11750	9610	6710	10950	5260	5450					
59	10570	11190	10970	11470	4110	3490	11810	9670	6770	11010	5300	5510					
60	10630	11250	11030	11520	4150	3530	11870	9730	6830	11070	5340	5570					
61	10690	11310	11090	11570	4190	3570	11930	9790	6890	11130	5380	5630					
62	10750	11370	11150	11620	4230	3610	11990	9850	6950	11190	5420	5690					
63	10810	11430	11210	11670	4270	3650	12050	9910	7010	11250	5460	5750					
64	10870	11490	11270	11720	4310	3690	12110	9970	7070	11310	5500	5810					
65	10930	11550	11330	11770	4350	3730	12170	10030	7130	11370	5540	5870					
66	10990	11610	11390	11820	4390	3770	12230	10090	7190	11430	5580	5930					
67	11050	11670	11450	11870	4430	3810	12290	10150	7250	11490	5620	5990					
68	11110	11730	11510	11920	4470	3850	12350	10210	7310	11550	5660	6050					
69	11170	11790	11570	11970	4510	3890	12410	10270	7370	11610	5700	6110					
70	11230	11850	11630	12020	4550	3930	12470	10330	7430	11670	5740	6170					
71	11290	11910	11690	12070	4590	3970	12530	10390	7490	11730	5780	6230					
72	11350	11970	11750	12120	4630	4010	12590	10450	7550	11790	5820	6290					
73	11410	12030	11810	12170	4670	4050	12650	10510	7610	11850	5860	6350					
74	11470	12090	11870	12220	4710	4090	12710	10570	7670	11910	5900	6410					
75	11530	12150	11930	12270	4750	4130	12770	10630	7730	11970	5940	6470					
76	11590	12210	11990	12320	4790	4170	12830	10690	7790	12030	5980	6530					
77	11650	12270	12050	12370	4830	4210	12890	10750	7850	12090	6020	6590					
78	11710	12330	12110	12420	4870	4250	12950	10810	7910	12150	6060	6650					
79	11770	12390	12170	12470	4910	4290	13010	10870	7970	12210	6100	6710					
80	11830	12450	12230	12520	4950	4330	13070	10930	8030	12270	6140	6770					
81	11890	12510	12290	12570	4990	4370	13130	10990	8090	12330	6180	6830					
82	11950	12570	12350	12620	5030	4410	13190	11050	8150	12390	6220	6890					
83	12010	12630	12410	12670	5070	4450	13250	11110	8210	12450	6260	6950					
84	12070	12690	12470	12720	5110	4490	13310	11170	8270	12510	6300	7010					
85	12130	12750	12530	12770	5150	4530	13370	11230	8330	12570	6340	7070					

CHART 2A. SHEET-2

	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	
1	1450	8250	6150	3230	4450	2960	1975	5108	1538	6402				1
2	7450	8290	6660	3770	4100	2920	2230	5908	1386	6266				2
3	8200	8930	6450	4740	3840	3260	2616	6338	1557	6621				3
4	7550	8750	6100	5300	3370	4140	2764	6649	1500	5948				4
5	7100	8750	5750	5280	3730	6260	2684	6947	1522	5910				5
6	6200	8450	5280	4940	4110	7270	2821	6649	2002	4575				6
7	5700	8610	5970	5060	7050	7360	2763	6611	2515	4018				7
8	5700	8930	7520	6100	3990	7760	2591	7382	3849	4545				8
9	5650	8890	4790	7200	7230	7840	2640	7735	2374	4356				9
10	6600	8650	5050	8070	2400	8480	2677	8918	3735	5285				10
11	6550	10500	4750	7870	5280	8500	2799	11761	3081	7036				11
12	6450	12000	4280	7360	5980	8100	2997	11644	4131	7100				12
13	7150	11800	4120	6560	6980	8510	3574	10551	4451	6877				13
14	8000	11200	3890	5780	7710	8750	3719	10610	4446	6838				14
15	8400	10500	3790	5600	8310	9650	3501	10820	3448	6577				15
16	9000	10000	3630	5200	7440	11300	3663	10490	3509	6063				16
17	9150	10000	3750	5240	6900	10100	4073	9840	3093	5537				17
18	9150	10000	3300	5530	7490	9250	4056	9550	2976	5144				18
19	9050	10200	4430	5550	7910	8870	4108	8500	2850	3862				19
20	8750	10200	4710	5240	7520	8800	4130	7540	3091	4125				20
21	8450	10500	4250	4970	8100	8900	4300	7470	3701	4422				21
22	8000	10400	4200	4970	8670	9420	4093	7660	5092	4766				22
23	8200	10500	4620	4600	7650	9570	3728	7490	5400	5569				23
24	8350	10500	5330	7500	6790	9360	3387	9450	7547	6797				24
25	8050	11000	6500	5780	6430	9300	3212	11350	8193	7647				25
26	7950	11300	8200	5760	7140	7970	3296	13460	9086	7167				26
27	7150	11500	8500	5740	7870	8070	3292	14960	9314	6552				27
28	6600	10200	8300	6000	8290	8840	3357	14020	9990	6124				28
29	6510	9000	7640	6440	7430	7630	3493	12050	7615	5937				29
30	6690	7460	7300	8750	6730	6620	3743	10430	6699	5984				30
31	7410	7460	9250	7120	7460	6070	6420	7026	9870	6439	6904			31
32	8090	7630	8610	7250	6960	5560	7770	3604	10380	5992	6947			32
33	7590	8900	7650	8020	6500	5050	8370	3305	11260	6708	7554			33
34	8450	10500	7650	8950	5500	4900	9300	3116	13110	5333	8322			34
35	7520	12500	7170	10580	6500	5200	9440	3020	14070	6606	9307			35
36	8200	11600	6700	10800	8610	7810	7970	2941	15500	6891	10178			36
37	4220	10000	6850	9830	7650	8770	8100	2888	16550	7786	11552			37
38	4800	10500	7490	9170	8610	10400	8720	2903	14530	9186	10905			38
39	5030	10200	8450	10200	11500	9330	9309	13280	10671	7536				39
40	8130	10200	10300	7820	11200	12100	9280	3551	11290	10755	8102			40
41	6870	9000	8600	7650	11700	10600	10200	3871	11490	11090	7368			41
42	6340	8200	9890	7860	11600	10000	10100	4165	8308	12189	7053			42
43	6170	8000	9890	7860	11400	9490	9920	5107	7362	13773	6522			43
44	5740	7680	9730	7840	11700	8470	9280	5486	6601	15296	6544			44
45	5680	8200	9250	9280	11900	7920	9450	5334	6220	17848	6838			45
46	5370	8600	8610	10200	12100	7350	9790	5239	6100	17755	6187			46
47	5700	8400	8130	9650	12700	6980	9600	5033	6260	13816	6905			47
48	7360	8200	8130	10100	12900	7810	9600	5678	7084	10629	5536			48
49	7860	8400	8130	9300	13700	8500	9200	6227	8419	9104	7100			49
50	7260	4300	7650	8830	14300	8370	9450	5725	8397	8562	4942			50
51	7400	9600	7330	8610	15500	8240	9600	5468	8717	8308	4969			51
52	7180	10200	7170	9030	12600	8610	9600	5074	8517	9284	5717			52
53	3960	10500	7650	9300	11800	9440	9920	5796	7777	9928	7632			53
54	3190	10200	9080	9640	10800	11100	9760	5022	7247	11175	7613			54
55	4120	10200	4930	9500	10600	12200	9600	4787	6828	11899	7825			55
56	4620	10400	7970	9100	13000	12400	8690	4461	6249	15111	5076			56
57	4400	2600	8130	8850	13500	12600	8160	4241	5930	11333	5266			57
58	4250	18100	7650	9260	12700	13300	7680	4198	5910	11445	5317			58
59	4100	11700	7330	7700	12500	12700	7490	4667	6140	11442	5973			59
60	4380	10200	7810	8750	12900	12200	7460	4521	6270	12586	7676			60
61	4180	10200	8270	9620	13100	11800	7750	4537	6560	11785	7676			61
62	4030	11600	9090	10680	13200	11400	8020	5048	6620	10945	4740			62
63	3820	11900	9250	11500	13300	11000	8150	5114	6470	10482	5176			63
64	3960	15700	8290	12400	13700	10800	8750	5522	6960	10360	5636			64
65	4250	15900	6950	13400	13600	10500	8500	5067	8179	9402	5555			65
66	2830	16000	6700	13400	14000	9920	7450	3642	9468	9270	5717			66
67	3690	16000	6850	12800	14400	9680	6430	3890	10008	8811	8777			67
68	7400	13000	6250	13300	14800	9280	5800	3821	10178	9153	9016			68
69	7780	13000	5950	13800	15300	9360	5620	3999	10582	9429	10760			69
70	4540	18000	5200	13500	15600	9260	7820	3924	10523	11040	11557			70
71	4280	16000	5350	12200	15100	8720	4650	3545	11623	11428	12061			71
72	4700	9400	5650	12500	13900	8160	7200	3630	10901	11728	11855			72
73	4700	8230	5700	14700	13300	7600	7160	3428	10012	10816	12282			73
74	4310	8230	5500	14700	13300	7600	7160	3428	10012	10816	12282			74
75	5350	11800	5350	14700	13300	7600	7160	3428	10012	10816	12282			75
76	5180	13000	5350	15100	12000	6580	7120	4280	10150	8621	9214			76
77	7190	12800	5200	15000	10500	6080	7720	2699	11048	10288	9914			77
78	7770	12800	5050	14400	7910	5980	5020	2666	11348	11345	1001			78
79	4270	12000	4980	13500	8770	5600	5320	2790	11420	13840	11440			79
80	4330	12000	4190	14000	8610	5530	5620	2820	11450	14535	11770			80
81	4680	11600	4050	13900	8950	5140	5320	2743	11420	14535	11770			81
82	4860	9400	4050	13100	9600	4670	5120	2733	10661	11462	11462			82
83	4900	9200	4050	12500	9300	4570	5120	2733	10661	11462	11462			83
84	4250	8230	4490	12300	8920	4690	4720	2605	10661	11462	11462			84
85	4160	8090	4340	11200	9170	4640	4720	2605	10661	11462	11462			85
86	4520	7800	4360	9500	8720	4360	4720	2605	10661	11462	11462			86
87	4520	7800	4360	9500	8720	4360	4720	2605	10661	11462	11462			87
88	4520	7800	4360	9500	8720	4360	4720	2605	10661	11462	11462			88
89	4520	7800	4360	9500	8720	4360	4720	2605	10661	11462	11462			89
90	4520	7800	4360	9500	8720	4360	4720	2605	10661	11462	11462			90
91	4520	7800	4360	9500	8720	4360	4720	2605	10661	11462	11462			91
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93	4520	7800	4360	9500	8720	4360	4720	2605	10661	11462	11462			93
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95	4520	7800	4360	9500	8720	4360	4720	2605	10661	11462	11462			95
96	4520	7800	4360	9500	8720	4360	4720	2605	10661	11462	11462			

	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
1	3590	9080	3460	3170	11300	2180	2580	2280	4310	5770	2150	4130	8940	57
2	3430	11500	9080	3120	10200	2090	2880	2400	3900	5570	2150	4270	8670	57
3	3430	12500	3600	2600	10200	1980	2880	2340	3520	5540	2060	4480	8850	57
4	3430	12500	3260	2600	9800	1410	2800	2660	3080	5540	1970	4550	9220	57
5	3120	11500	3260	2430	8640	1680	2430	2220	2790	7680	1870	4540	8740	57
6	3120	11000	3070	2600	7760	1620	2300	2110	3020	7680	1790	4200	7770	57
7	3430	10500	2880	2430	7780	1470	2300	2000	2790	7680	1710	4060	6000	57
8	3430	9980	2810	2430	8320	1780	2300	1900	2830	7680	1630	3860	6260	57
9	3270	9080	2420	2600	7780	1760	2180	1900	2610	7680	1550	3670	6670	57
10	3270	8660	2290	2600	7600	1520	2180	1750	2400	7090	1470	3420	6870	57
11	3120	8260	2360	2430	7300	1520	2070	1950	2400	3720	1430	3240	6510	57
12	3120	8260	2360	2600	7000	1520	1970	2000	2260	3370	1350	3180	6240	57
13	3120	7510	2290	2600	6700	1460	1970	2060	2400	3210	1270	2950	6260	57
14	3120	7150	2290	2600	6120	1410	1870	1950	2300	3050	1210	2780	6470	57
15	3120	6490	2290	2600	5580	1270	1780	1900	2260	2800	1170	2510	6100	57
16	3120	5710	2160	2120	5060	1270	1780	1850	2400	2760	1140	2350	5740	57
17	2830	4890	2160	1750	4320	1230	1690	1800	2470	2500	1070	2200	5480	57
18	1870	4770	2290	1660	4580	1190	1670	1700	2400	2500	1030	2060	5250	57
19	1870	4100	2160	1580	4480	1160	1600	1700	2010	2450	1010	1940	5250	57
20	1770	3120	1900	1480	4160	1160	1600	1610	1950	2380	990	1780	5120	57
21	1680	2560	1840	1400	4160	1080	1590	1520	2010	2380	970	1640	4100	57
22	1680	1670	1640	1320	3760	1080	1510	1530	2130	2380	950	1590	3950	57
23	1510	2560	1900	1280	3560	1050	1560	1190	2010	2440	930	1660	3810	57
24	1430	3120	1840	1180	2880	1050	1600	1190	1900	2260	880	1470	3600	57
25	1350	3120	1770	1060	2280	1120	1560	1120	1800	2120	860	1410	3560	57
26	1350	2310	1640	970	2780	1120	1510	1120	1780	1920	840	1370	3320	57
27	1350	2080	1640	890	2580	1050	1350	1120	1780	1810	820	1310	3200	57
28	1280	1870	1580	890	2580	1050	1200	1120	1570	1810	820	1300	3340	57
29	1350	2310	1510	870	2370	990	1130	1120	1770	1810	810	1260	3270	57
30	1350	2310	1560	878	2490	976	1080	1120	1870	1700	780	1240	3250	57
31	1280	2190	1440	872	2390	960	1060	1040	1830	1600	750	1200	2840	57
1	1280	2190	1380	842	2390	930	1060	1040	1290	1550	820	1160	2670	57
2	1210	1870	1380	1060	2060	920	1060	970	1200	1500	760	1110	2500	57
3	1210	2190	1250	892	2040	905	1060	900	1110	1500	760	1000	2350	57
4	1210	1770	1320	872	2040	905	1050	900	1070	1500	760	1000	2340	57
5	1210	1680	1320	872	2060	895	1010	890	1280	1450	760	960	2140	57
6	1140	1680	1320	892	2060	895	950	890	860	1600	760	920	2440	57
7	1140	1390	1320	892	2200	895	860	900	800	1530	700	920	1950	57
8	1140	1090	1250	892	2390	895	850	890	820	1640	675	880	1900	57
9	1070	1540	1250	892	2390	895	750	890	820	1660	675	880	1900	57
10	1070	1510	1180	892	2060	895	750	890	820	1660	675	880	1900	57
11	1070	1510	1180	892	1940	822	800	890	820	1660	675	880	1900	57
12	1070	1350	1180	806	1940	895	830	890	820	1660	675	880	1900	57
13	1070	1280	1120	806	1700	895	830	890	820	1660	675	880	1900	57
14	1070	1210	1120	721	1700	895	830	890	820	1660	675	880	1900	57
15	1010	1210	1060	721	1700	895	830	890	820	1660	675	880	1900	57
16	1010	1210	990	721	1700	895	830	890	820	1660	675	880	1900	57
17	950	1070	990	721	1580	895	830	890	820	1660	675	880	1900	57
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19	950	1070	925	721	1580	895	830	890	820	1660	675	880	1900	57
20	950	1010	860	721	1700	895	830	890	820	1660	675	880	1900	57
21	950	950	795	721	1320	895	830	890	820	1660	675	880	1900	57
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27	950	1010	860	721	1700	895	830	890	820	1660	675	880	1900	57
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1	830	1210	860	550	1340	810	770	720	820	840	560	750	1210	57
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9	830	1070	860	550	1340	810	770	720	820	840	560	750	1210	57
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11	830	1070	860	550	1340	810	770	720	820	840	560	750	1210	57
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19	830	1070	860	550	1340	810	770	720	820	840	560	750	1210	57
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31	830	1070	860	550	1340	810	770	720	820	840	560	750	1210	57

1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916
2180	2280	2280	4310	5770	2150	4130	8940	6580	7680	2970	7230	5500	3530	3180	1899	1916
2040	2280	2400	3800	5540	2150	4130	8670	5560	7500	2780	6860	5050	3400	3030	1823	7360
1980	2280	2340	3520	5540	2060	4280	8250	5740	7500	2660	6108	5610	3270	2890	1780	8710
1910	2300	2660	3080	5540	1970	4350	8250	5740	7680	2600	6300	4050	3400	2760	1767	8074
1680	2430	2220	2520	7680	1870	4350	8250	5740	7680	2720	6350	3710	3140	3770	1672	6908
1620	2300	2110	3020	7680	1790	4200	7770	4440	6010	2360	6220	3770	3140	2960	1872	7015
1470	2300	2000	2750	7680	1710	4060	6008	4400	5770	2250	6280	3630	3140	2710	1894	7302
1400	2300	1900	2830	7680	1630	3860	6260	4400	5470	2140	5720	3490	3020	2470	2065	7394
1340	2180	1900	2610	7680	1550	3670	6670	4320	5170	2140	5680	3280	2770	2280	1762	7511
1320	2180	1950	2400	7680	1470	3470	6870	4100	3210	2030	5370	3100	2650	2300	2201	7336
1320	2070	1950	2400	3720	1430	3220	6510	3960	3720	1980	5250	2970	2420	2340	1666	6069
1320	1970	2000	2260	3370	1350	3180	6260	3560	3650	1880	5020	2770	2200	2160	1582	5816
1300	1970	2040	2400	3210	1270	2930	6260	3430	3410	1830	5680	2840	2100	1980	1539	5584
1270	1870	1950	2330	3050	1210	2740	6260	3470	3170	1780	5520	2840	1990	2010	1517	5211
1270	1780	1900	2260	2800	1170	2570	5400	3670	3050	1730	5350	2720	1870	1840	1474	4830
1270	1780	1850	2400	2760	1140	2350	4780	3670	2930	1680	5480	2600	1800	1780	1428	4471
1230	1690	1800	2470	2500	1070	2200	4480	2740	2810	1380	5280	2450	1710	1710	1228	4661
1190	1640	1700	2400	2500	1030	2060	4240	2420	2590	1500	5150	2480	1710	1620	1196	4001
1160	1600	1700	2010	2420	1010	1940	4250	2320	2540	1500	5290	2480	1620	1570	1111	3584
1160	1600	1610	1950	2380	990	1780	4120	2170	2370	1420	2710	2250	1710	1550	1101	3286
1080	1540	1520	2010	2380	970	1660	4100	2120	2200	1420	2590	2250	1620	1500	1091	3110
1080	1570	1530	2130	2380	950	1580	3950	2030	2150	1420	2420	2030	1620	1430	1007	2894
1050	1530	1490	2010	2440	930	1660	3810	2030	2050	1340	2300	2030	1620	1470	960	2704
1050	1600	1490	1900	2260	880	1470	3600	1850	1970	1300	2190	1830	1470	1470	929	2591
1120	1560	1490	1900	2120	860	1470	3460	1810	1870	1260	2040	1820	1340	1470	894	2465
1050	1570	1120	1780	1840	840	1370	3270	1650	1820	1230	2020	1640	1300	1320	871	2424
1050	1350	1120	1780	1810	820	1370	3200	1580	1970	1160	1970	1640	1250	1250	870	2274
1050	1200	1120	1570	1810	820	1300	3340	1540	2080	1160	1860	1550	1140	1250	845	2162
990	1130	1120	1470	1810	810	1260	3270	1470	1820	1130	1760	1460	1270	1270	831	2050
920	1080	1120	1380	1720	780	1240	3220	1440	1680	1100	1720	1460	1240	1240	813	1924
920	1060	1120	1380	1640	750	1200	2840	1330	1500	1070	1670	1430	1200	1210	844	1869
930	1060	1090	1240	1550	820	1160	2670	1330	1500	1070	1580	2360	1990	1210	939	1807
920	1060	970	1200	1500	760	1110	2500	1300	1500	1040	1540	2250	1890	1210	847	1734
905	1060	900	1110	1500	760	1060	2450	1160	1410	1020	1540	2030	1800	1170	840	1667
895	1050	900	1070	1500	760	1000	2390	1130	1320	990	1500	2030	1710	1280	791	1620
895	1010	830	1280	1450	760	960	2120	1160	1310	990	1460	1830	1710	1210	762	1568
895	960	900	1280	1400	760	920	2490	1190	1270	990	1400	1640	1800	1140	748	1512
895	960	900	1280	1350	700	920	1940	1120	1230	960	1340	1550	1710	1140	747	1463
895	958	830	1280	1640	700	880	1900	1120	1190	960	1370	1460	1620	1070	724	1423
895	958	827	1280	1640	650	840	1800	1190	1190	940	1340	1460	1620	1000	707	1391
895	958	827	1280	1640	650	840	1760	1160	1160	940	1300	1460	1620	1000	693	1368
822	800	830	1280	1160	650	780	1720	990	1140	910	1260	1300	1460	1000	674	1322
815	830	830	1280	1120	640	750	1670	1050	1070	890	1260	1300	1380	1000	674	1294
815	830	830	1280	1120	640	750	1600	1050	1070	890	1260	1300	1380	1000	674	1264
815	830	830	1280	1120	640	750	1520	1030	1030	890	1200	1300	1380	937	651	1264
815	830	830	1280	1120	640	750	1480	1000	1000	890	1200	1300	1380	937	640	1239
815	830	830	1280	1120	640	750	1440	1000	990	890	1160	1230	1310	937	636	1207
815	830	830	1280	1120	640	750	1400	1000	990	890	1160	1230	1310	937	640	1198
815	830	830	1280	1120	640	750	1360	1000	990	890	1160	1230	1310	937	640	1181
815	830	830	1280	1120	640	750	1320	1000	990	890	1160	1230	1310	937	640	1164
815	830	830	1280	1120	640	750	1280	1000	990	890	1160	1230	1310	937	640	1147
815	830	830	1280	1120	640	750	1240	1000	990	890	1160	1230	1310	937	640	1130
815	830	830	1280	1120	640	750	1200	1000	990	890	1160	1230	1310	937	640	1113
815	830	830	1280	1120	640	750	1160	1000	990	890	1160	1230	1310	937	640	1096
815	830	830	1280	1120	640	750	1120	1000	990	890	1160	1230	1310	937	640	1079
815	830	830	1280	1120	640	750	1080	1000	990	890	1160	1230	1310	937	640	1062
815	830	830	1280	1120	640	750	1040	1000	990	890	1160	1230	1310	937	640	1045
815	830	830	1280	1120	640	750	1000	1000	990	890	1160	1230	1310	937	640	1028
815	830	830	1280	1120	640	750	960	1000	990	890	1160	1230	1310	937	640	1011
815	830	830	1280	1120	640	750	920	1000	990	890	1160	1230	1310	937	640	994
815	830	830	1280	1120	640	750	880	1000	990	890	1160	1230	1310	937	640	977
815	830	830	1280	1120	640	750	840	1000	990	890	1160	1230	1310	937	640	960
815	830	830	1280	1120	640	750	800	1000	990	890	1160	1230	1310	937	640	943
815	830	830	1280	1120	640	750	760	1000	990	890	1160	1230	1310	937	640	926
815	830	830	1280	1120	640	750	720	1000	990	890	1160	1230	1310	937	640	909
815	830	830	1280	1120	640	750	680	1000	990	890	1160	1230	1310	937	640	892
815	830	830	1280	1120	640	750	640	1000	990	890	1160	1230	1310	937	640	875
815	830	830	1280	1120	640	750	600	1000	990	890	1160	1230	1310	937	640	858
815	830	830	1280	1120	640	750	560	1000	990	890	1160	1230	1310	937	640	841
815	830	830	1280	1120	640	750	520	1000	990	890	1160	1230	1310	937	640	824
815	830	830	1280	1120	640	750	480	1000	990	890	1160	1230	1310	937	640	807
815	830	830	1280	1120	640	750	440	1000	990	890	1160	1230	1310	937	640	790
815	830	830	1280	1120	640	750	400	1000	990	890	1160	1230	1310	937	640	773
815	830	830	1280	1120	640	750	360	1000	990	890	1160	1230	1310	937	640	756
815	830	830	1280	1120	640	750	320	1000	990	890	1160	1230	1310	937	640	739
815	830	830	1280	1120	640	750	280	1000	990	890	1160	1230	1310	937	640	722
815	830	830	1280	1120	640	750	240	1000	990	890	1160	1230	1310	937	640	705
815	830	830	1280	1120	640	750	200	1000	990	890	1160	1230	1310	937	640	688
815	830	830	1280	1120	640	750	160	1000	990	890	1160	1230	1310	937	640	671
815	830	830	1280	1120	640	750	120	1000	990	890	1160	1230	1310	937	640	654
815	830	830														

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1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
7130	8470	5580	7680	2770	7230	5590	3530	3180	1894	7336	8347	3181				1
7220	8570	5680	7780	2870	7330	5690	3630	3280	1893	8410	8483	2976				2
7310	8670	5780	7880	2970	7430	5790	3730	3380	1780	8574	7952	2773				3
7400	8770	5880	7980	3070	7530	5890	3830	3480	1767	8651	8089	2605				4
7500	8870	5980	8080	3170	7630	5990	3930	3580	1672	8708	7896	2470				5
7600	8970	6080	8180	3270	7730	6090	4030	3680	1872	7015	7188	2176				6
7700	9070	6180	8280	3370	7830	6190	4130	3780	1894	7302	7099	2197				7
7800	9170	6280	8380	3470	7930	6290	4230	3880	2065	7394	6683	2210				8
7900	9270	6380	8480	3570	8030	6390	4330	3980	1762	7511	6293	2052				9
8000	9370	6480	8580	3670	8130	6490	4430	4080	2001	6736	5838	1968				10
8100	9470	6580	8680	3770	8230	6590	4530	4180	1666	6069	5125	1934				11
8200	9570	6680	8780	3870	8330	6690	4630	4280	1582	5816	4666	2086				12
8300	9670	6780	8880	3970	8430	6790	4730	4380	1539	5584	4300	1858				13
8400	9770	6880	8980	4070	8530	6890	4830	4480	1517	5211	3940	1735				14
8500	9870	6980	9080	4170	8630	6990	4930	4580	1370	4838	3492	1658				15
8600	9970	7080	9180	4270	8730	7090	5030	4680	1128	4471	3122	1819				16
8700	10070	7180	9280	4370	8830	7190	5130	4780	1196	4661	3052	1718				17
8800	10170	7280	9380	4470	8930	7290	5230	4880	1111	4001	2971	1600				18
8900	10270	7380	9480	4570	9030	7390	5330	4980	1103	3584	2744	1459				19
9000	10370	7480	9580	4670	9130	7490	5430	5080	1071	3116	2380	1366				20
9100	10470	7580	9680	4770	9230	7590	5530	5180	1007	2894	2210	1385				21
9200	10570	7680	9780	4870	9330	7690	5630	5280	960	2704	2055	1272				22
9300	10670	7780	9880	4970	9430	7790	5730	5380	929	2591	2047	1111				23
9400	10770	7880	9980	5070	9530	7890	5830	5480	892	2468	1881	1283				24
9500	10870	7980	10080	5170	9630	7990	5930	5580	871	2424	1789	1263				25
9600	10970	8080	10180	5270	9730	8090	6030	5680	870	2274	1743	1192				26
9700	11070	8180	10280	5370	9830	8190	6130	5780	845	2162	1716	1118				27
9800	11170	8280	10380	5470	9930	8290	6230	5880	831	2050	1640	1054				28
9900	11270	8380	10480	5570	10030	8390	6330	5980	813	1934	1574	1241				29
10000	11370	8480	10580	5670	10130	8490	6430	6080	849	1869	1514	1327				30
10100	11470	8580	10680	5770	10230	8590	6530	6180	939	1807	1464	994				1
10200	11570	8680	10780	5870	10330	8690	6630	6280	897	1734	1400	1055				2
10300	11670	8780	10880	5970	10430	8790	6730	6380	840	1667	1363	1082				3
10400	11770	8880	10980	6070	10530	8890	6830	6480	791	1620	1371	1121				4
10500	11870	8980	11080	6170	10630	8990	6930	6580	762	1568	1302	1073				5
10600	11970	9080	11180	6270	10730	9090	7030	6680	748	1512	1273	846				6
10700	12070	9180	11280	6370	10830	9190	7130	6780	747	1463	1238	851				7
10800	12170	9280	11380	6470	10930	9290	7230	6880	729	1423	1203	801				8
10900	12270	9380	11480	6570	11030	9390	7330	6980	707	1391	1150	893				9
11000	12370	9480	11580	6670	11130	9490	7430	7080	683	1368	1096	858				10
11100	12470	9580	11680	6770	11230	9590	7530	7180	679	1322	1066	916				11
11200	12570	9680	11780	6870	11330	9690	7630	7280	679	1294	1035	830				12
11300	12670	9780	11880	6970	11430	9790	7730	7380	657	1264	1008	814				13
11400	12770	9880	11980	7070	11530	9890	7830	7480	637	1239	997	895				14
11500	12870	9980	12080	7170	11630	9990	7930	7580	636	1207	971	875				15
11600	12970	10080	12180	7270	11730	10090	8030	7680	640	1198	969	864				16
11700	13070	10180	12280	7370	11830	10190	8130	7780	618	1251	1010	1064				17
11800	13170	10280	12380	7470	11930	10290	8230	7880	577	1377	1093	1021				18
11900	13270	10380	12480	7570	12030	10390	8330	7980	582	1390	1076	981				19
12000	13370	10480	12580	7670	12130	10490	8430	8080	588	1287	1007	953				20
12100	13470	10580	12680	7770	12230	10590	8530	8180	582	1234	967	820				21
12200	13570	10680	12780	7870	12330	10690	8630	8280	578	1187	925	700				22
12300	13670	10780	12880	7970	12430	10790	8730	8380	579	1138	705	809				23
12400	13770	10880	12980	8070	12530	10890	8830	8480	566	1081	681	725				24
12500	13870	10980	13080	8170	12630	10990	8930	8580	548	1055	649	648				25
12600	13970	11080	13180	8270	12730	11090	9030	8680	540	1021	631	650				26
12700	14070	11180	13280	8370	12830	11190	9130	8780	539	1002	614	607				27
12800	14170	11280	13380	8470	12930	11290	9230	8880	529	1000	602	617				28
12900	14270	11380	13480	8570	13030	11390	9330	8980	524	983	587	679				29
13000	14370	11480	13580	8670	13130	11490	9430	9080	516	1052	569	930				30
13100	14470	11580	13680	8770	13230	11590	9530	9180	538	1016	790	784				1
13200	14570	11680	13780	8870	13330	11690	9630	9280	538	976	781	752				2
13300	14670	11780	13880	8970	13430	11790	9730	9380	518	944	766	718				3
13400	14770	11880	13980	9070	13530	11890	9830	9480	518	953	783	858				4
13500	14870	11980	14080	9170	13630	11990	9930	9580	518	969	754	725				5
13600	14970	12080	14180	9270	13730	12090	10030	9680	518	962	741	654				6
13700	15070	12180	14280	9370	13830	12190	10130	9780	518	944	731	520				7
13800	15170	12280	14380	9470	13930	12290	10230	9880	518	933	725	623				8
13900	15270	12380	14480	9570	14030	12390	10330	9980	518	916	713	619				9
14000	15370	12480	14580	9670	14130	12490	10430	10080	518	929	698	653				10
14100	15470	12580	14680	9770	14230	12590	10530	10180	518	923	684	678				11
14200	15570	12680	14780	9870	14330	12690	10630	10280	518	1006	694	1037				12
14300	15670	12780	14880	9970	14430	12790	10730	10380	518	988	701	1044				13
14400	15770	12880	14980	10070	14530	12890	10830	10480	518	957	705	856				14
14500	15870	12980	15080	10170	14630	12990	10930	10580	518	925	705	912				15
14600	15970	13080	15180	10270	14730	13090	11030	10680	518	925	705	900				16
14700	16070	13180	15280	10370	14830	13190	11130	10780	518	917	705	1008				17
14800	16170	13280	15380	10470	14930	13290	11230	10880	518	907	705	927				18
14900	16270	13380	15480	10570	15030	13390	11330	10980	518	897	705	842				19
15000	16370	13480	15580	10670	15130	13490	11430	11080	518	887	705	822				20
15100	16470	13580	15680	10770	15230	13590	11530	11180	518	877	705	802				21
15200	16570	13680	15780	10870	15330	13690	11630	11280	518	867	705	782				22
15300	16670	13780	15880	10970	15430	13790	11730	11380	518	857	705	762				23
15400	16770	13880	15980	11070	15530	13890	11830	11480	518	847	705	742				24
15500	16870	13980	16080	11170	15630	13990	11930	11580	518	837	705	722				

[illegible]

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SCANNED
APR 11 2007

TOTAL MONTHLY FLOW IN ACRE FEET
FOR THE IRRIGATION YEAR, 1894-1895

Year	November	December	January	February	March	April	May	June	July
1894-95	54000	62700	78100	67800	102000	241000	392000	224000	151000
1895-96	54500	50400	72600	67300	156000	293000	551000	1,450,000	382000
1896-97	⁽¹⁾ 61300	⁽³⁾ 64600	50100	54800	87300	⁽⁵⁾ 476000	⁽⁶⁾ 508000	⁽⁵⁾ 415000	142000
1897-98	64100	⁽⁷⁾ 61500	33800	67200	118000	250000	318000	297000	116000
1898-99	55800	151000	159000	77800	113000	422000	603000	726000	353000
1899-1900	89200	95900	122000	95500	303000	577000	507000	300000	836000
1900-01	61300	64600	78800	97800	178000	303000	621000	285000	116000
1901-02	55500	75600	60800	89700	87900	212000	350000	285000	106000
1902-03	54000	62700	81200	63300	142000	444000	516000	595000	146000
1903-04	67800	57500	⁽¹⁾ 124000	⁽²⁾ 108000	262000	666000	824000	516000	200000
1904-05	⁽¹⁾ 54000	⁽¹⁾ 54000	⁽²⁾ 50400	⁽³⁾ 56700	⁽²⁾ 89000	174800	227900	245200	782100
1905-06	40700	40090	50400	56700	100000	335000	424000	344000	162000
1906-07	72600	⁽⁶⁾ 74000	⁽³⁾ 125400	⁽⁴⁾ 155000	343000	666000	676000	530000	333000
1907-08	55500	63300	66400	62100	140000	380000	367000	332000	197000
1908-09	58800	58000	137000	110000	231000	469000	600000	649000	225000
1909-10	199000	124000	79900	66600	562000	607000	509000	308000	109000
1910-11	73200	76200	63010	76340	159570	363520	603970	628580	219700
1911-12	66700	61500	78420	76120	99590	342920	687240	678000	172576
1912-13	67820	60680	53800	51400	101000	372000	569000	410000	157000
1913-14	79700	60900	70700	74400	214000	466000	549000	305000	123000
1914-15	57900	44800	59580	59723	94782	196564	274128	191900	83872
1915-16	45626	53346	49930	63262	197486	555062	582372	588764	293818
1916-17	54020	53702	47628	47694	61740	267080	654556	643322	260216
1917-18	51158	118668	113828	77754	181542	346040	409954	462460	112120
Total	1,594,224	1,689,686	1,906,796	1,822,993	4,123,910	9,424,986	12,304,120	11,409,226	4,322,112
Average	66426	70404	79450	75958	171,830	392,708	512,672	475,384	180,088

(1) Mean of 4 High Years (2) Substituted from 1900 (3) Missing data

(1) Mean of 4 High Years
(2) Substituted from 1906

(3) Substituted from 1900.
(4) Missing days Substituted from 1900.

(5) Missing days substitute
(6) " Month
(7) interpreted

Y FLOY IN ACRE FEET OF BOISE RIVER
IGATION YEAR, 1894-1895 TO 1917-1918.

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

	18	19	20	21
2	1450	1486	1553	1681
3	2590	2662	3032	3202
5	215	880	859	822
6	1507	1498	1479	1451
7	2115	2040	2010	1952
8	1320	1357	1392	1300
9	3023	3361	3580	3577
10	3320	4870	4680	2910
11	1578	1622	1607	1657
12	8101	8208	7250	7221
13	9082	8205	7670	7575
14	5655	5657	2555	2915
15	8275	8184	8028	7855
16	8552	8470	8525	8500
17	6307	6321	5150	4926
18	8134	7870	7608	7290
19	16265	16058	15865	14662
20	2060	3930	3720	3270
21	2307	2211	2072	1790
22	3970	3952	3492	3255
23	1096	1150	1285	1200
24	943	941	920	920
25	1232	1242	1215	1210
26	655	682	675	625
27	885	878	863	863
28	948	942	937	925
29	628	612	608	602
30	952	1003	927	1051
31	1058	1172	1230	1205
32	203	782	735	702
33	1161	1055	1198	1251
34	1176	1260	1515	1855
35	848	872	825	867
36	1193	1200	1150	1154
37	1325	1325	1350	1360
38	1328	1248	1202	1202

TABLE IN SEC
FOR

		1	2	3	4	5	6	7	8	9	10
JANUARY	Average 21 Yrs. 1895-1915	1195	1197	1151	1201	1199	1183	1200	1198	1213	1195
	Highest Yrs. '96, '99, '07, '09	1472	1578	1570	1532	1550	1580	1580	1560	1600	1590
	Lowest Yrs. '80, '02, '05, '15	825	872	866	860	858	855	852	842	852	840
FEBRUARY	Average 21 Yrs. 1895-1915	1415	1356	1229	1290	1290	1193	1126	1412	1418	1415
	Highest Yrs. '96, '99, '07, '09	1615	1530	1500	1490	1305	1272	1278	1822	1922	1925
	Lowest Yrs. '80, '02, '05, '15	990	1090	1080	1092	958	958	922	1052	1230	1230
MARCH	Average 21 Yrs. 1895-1915	1857	1942	1992	1973	1971	2027	2085	2385	2617	2397
	Highest Yrs. '96, '99, '07, '09	2230	2065	2108	2088	2106	2408	2370	2470	2472	2345
	Lowest Yrs. '80, '02, '05, '15	1432	1708	1987	1392	1957	1485	1382	1462	1573	1565
APRIL	Average 21 Yrs. 1895-1915	3887	4012	4118	4144	4257	4389	4509	4679	4877	5792
	Highest Yrs. '96, '99, '07, '09	4905	5018	5255	5148	5275	5120	5318	5795	5992	7822
	Lowest Yrs. '80, '02, '05, '15	1511	1885	2012	2116	2086	2850	2647	2815	2575	2642
MAY	Average 21 Yrs. 1895-1915	6889	6833	6787	7459	7541	7731	7751	8320	8685	9183
	Highest Yrs. '96, '99, '07, '09	7505	7155	7600	8025	8120	8710	9492	9782	10572	11882
	Lowest Yrs. '80, '02, '05, '15	4326	4101	4026	3826	3680	3945	3587	4182	4825	4550
JUNE	Average 21 Yrs. 1895-1915	9449	9751	10089	9762	9433	9093	8965	8913	8786	8620
	Highest Yrs. '96, '99, '07, '09	15125	15900	18050	17800	17000	15635	15225	14875	13900	13075
	Lowest Yrs. '80, '02, '05, '15	5725	5571	5723	5822	5623	5500	4485	4772	5080	5231
JULY	Average 21 Yrs. 1895-1915	4806	4759	4692	4592	4556	4121	3924	3841	3650	3461
	Highest Yrs. '96, '99, '07, '09	9250	9468	9762	9575	8898	8172	7512	7508	7180	6763
	Lowest Yrs. '80, '02, '05, '15	2405	2378	2175	2249	2088	2093	2002	2046	1853	1685
AUGUST	Average 21 Yrs. 1895-1915	1461	1297	1387	1323	1282	1249	1235	1202	1172	1099
	Highest Yrs. '96, '99, '07, '09	2210	1982	2028	1972	1798	1782	1780	1768	1742	1630
	Lowest Yrs. '80, '02, '05, '15	923	922	898	836	811	825	810	783	684	702
SEPTEMBER	Average 21 Yrs. 1895-1915	876	887	876	860	873	875	853	837	833	844
	Highest Yrs. '96, '99, '07, '09	1185	1240	1225	1095	1122	1155	1130	1075	1080	1022
	Lowest Yrs. '80, '02, '05, '15	629	676	661	642	620	628	628	612	614	659
OCTOBER	Average 21 Yrs. 1895-1915	854	872	876	898	914	927	925	905	928	925
	Highest Yrs. '96, '99, '07, '09	962	942	892	936	979	957	989	990	972	969
	Lowest Yrs. '80, '02, '05, '15	641	669	680	691	689	672	673	650	682	702
NOVEMBER	Average 21 Yrs. 1895-1915	925	979	984	993	980	1028	1046	1017	1044	1052
	Highest Yrs. '96, '99, '07, '09	1172	1205	1168	1196	1175	1158	1160	1138	1125	1122
	Lowest Yrs. '80, '02, '05, '15	782	776	795	792	780	760	803	833	858	878
DECEMBER	Average 21 Yrs. 1895-1915	1236	1229	1182	1240	1210	1204	1196	1202	1244	1210
	Highest Yrs. '96, '99, '07, '09	1875	1698	1495	1422	1420	1401	1440	1465	1578	1588
	Lowest Yrs. '80, '02, '05, '15	891	879	930	948	1052	1109	1170	1285	1350	1381

TABLE IN SECOND FEET SHOWING AVERAGE DAILY FLOW OF
FOR A 21 YEAR PERIOD, 1895 TO 1915, Inc.; AVERAGE
DAILY FLOW OF 4 HIGHEST YEARS; AVERAGE
DAILY FLOW OF 4 LOWEST YEARS.

	DAY																			
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
201	1199	1183	1200	1198	1213	1156	1184	1180	1119	1235	1354	1467	1379	1450	1486	1543				
22	1550	1580	1580	1610	1600	1558	1590	1695	1665	1800	2328	2635	2530	2570	2662	3032	3			
260	858	855	852	842	852	832	830	806	780	798	790	838	835	915	880	850				
280	1240	1193	1126	1412	1418	1420	1374	1338	1338	1284	1278	1390	1509	1507	1498	1479	14			
290	1368	1272	1278	1852	1922	1980	1772	1795	1878	1740	1798	1898	2235	2115	2040	2010	19			
32	958	958	922	1052	1230	1230	1190	1184	1160	1090	1070	1270	1318	1320	1351	1292	12			
73	1971	2027	2085	2385	2617	2395	2428	2470	2439	2459	2561	2698	2799	3023	3361	3500	35			
284	2108	2408	2370	2470	2472	2340	2308	2305	2275	2255	2360	2360	2572	3320	4470	4650	49			
282	1457	1485	1382	1469	1513	1569	1678	1644	1589	1444	1452	1361	1307	1578	1622	1607	16			
448	4253	4349	4509	4679	4877	5782	5894	6288	6595	7311	7595	7982	8094	8131	8266	7282	72			
148	5275	5120	5318	5795	5992	7522	7420	8075	9175	10512	9975	10322	9518	9082	8205	7670	75			
116	2088	2850	2647	2815	2515	2642	2555	2682	3181	3492	3558	4021	4353	4656	4657	4853	49			
459	7541	7731	7751	8320	8685	9193	8948	8685	8623	8553	8517	8421	8232	8275	8184	8029	78			
25	9130	8710	9492	9788	10522	11802	11222	9878	9495	8855	8200	8498	8492	8558	8470	8545	8300			
26	3530	3415	3597	4168	4475	4530	4518	4631	5267	5328	5172	5107	5191	5307	5321	5150	4492			
762	9433	9093	8905	8913	8706	8620	8371	8458	8681	8748	8326	8399	8361	8134	7870	7608	7290			
800	17000	15675	15225	14875	13900	14075	13400	13588	14312	15970	15682	15852	16288	16465	16358	15868	14662			
202	4623	4590	4495	4782	5080	5231	5210	4889	5065	4882	4615	4266	4233	4060	3930	3773	3270			
852	4356	4121	3924	3841	3670	3461	3302	3194	3060	2928	2789	2615	2439	2303	2211	2072	1988			
785	8848	8178	7512	7508	7180	6762	6448	6292	5970	5740	5089	4650	4240	3972	3842	3492	3255			
249	2048	2093	2008	2036	1953	2005	1869	1883	1789	1734	1632	1518	1462	1396	1350	1288	1230			
23	1282	1249	1235	1202	1172	1099	1081	1070	1042	1027	1020	997	980	943	941	924	916			
272	1798	1788	1740	1768	1742	1630	1578	1500	1418	1358	1338	1320	1315	1232	1202	1215	1210			
236	811	825	810	783	694	702	716	740	743	738	717	713	686	645	688	678	675			
260	873	875	853	839	833	844	874	872	889	885	896	909	903	895	878	863	863			
195	1122	1145	1130	1078	1044	1022	1052	1030	1015	1000	1020	1018	972	948	942	919	925			
42	620	628	624	612	614	649	652	639	649	657	658	678	641	628	614	608	608			
98	914	927	935	935	928	925	939	932	939	950	1004	928	953	969	1003	927	1051			
236	974	959	989	990	972	962	960	950	966	10108	986	976	982	1058	1172	1230	1205			
291	684	678	673	655	683	723	758	732	735	769	789	787	787	783	783	785	782			
193	980	1038	1046	1077	1044	1022	1056	1072	1062	1102	1104	1267	1076	1161	1055	1188	1241			
96	1178	1158	1144	1138	1125	1122	1192	1198	1208	1195	1211	1138	1150	1178	1260	1815	1886			
23	750	750	803	833	848	838	894	790	779	786	766	766	810	858	878	896	867			
40	1210	1204	1196	1202	1244	1210	1207	1189	1168	1098	1058	1072	1126	1171	1300	1150	1154			
22	1420	1401	1440	1465	1578	1488	1418	1385	1408	1325	1255	1258	1342	1325	1395	1450	1360			
48	1053	1109	1175	1285	1253	1291	1252	1264	1219	1186	1141	1245	1261	1328	1748	1502	1346			

AVERAGE DAILY FLOW OF BOISE RIVER
 PERIOD, 1895 TO 1915, IN C.; AVERAGE
 OF 4 HIGHEST YEARS; AVERAGE
 FLOW OF 4 LOWEST YEARS.

CHI

DAY	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
19	1235	1354	1467	1379	1450	1486	1543	1681	1634	1493	1388	1532	1450	1328	1295	1248	1205
25	1800	2328	2635	2530	2570	2662	3032	3202	3058	2688	2345	2148	2115	1922	1795	1668	1610
30	798	780	838	835	915	880	850	822	852	875	740	730	818	812	794	771	795
38	1284	1278	1390	1504	1507	1498	1479	1451	1522	1541	1616	1576	1583	1749	1797	1437	
42	1740	1798	1848	2235	2115	2040	2010	1952	1825	1860	1895	1942	2020	2215	2368		
50	1090	1070	1270	1318	1380	1351	1292	1250	1258	1268	1618	1523	1454	1414	1465		
59	2459	2561	2698	2793	3023	3361	3500	3577	3625	3601	3455	3552	3587	3734	3688	3837	3898
65	2255	2360	2360	2572	3320	4470	4650	4910	4658	4408	4520	4460	5050	5230	5485	5398	4725
69	1444	1652	1361	1307	1578	1622	1607	1658	1693	1708	1785	1700	1742	1739	1695	1917	1905
75	7311	7585	7982	8094	8131	8269	7250	7221	7417	7487	7514	7802	7906	7825	7873	7134	7007
79	10512	9975	10322	9518	9082	8205	7670	7575	8062	9185	9778	8435	10075	9275	8760	8310	7644
87	3492	3558	4021	4353	4656	4657	4855	4915	4536	4381	4192	4213	4546	4786	4426	4291	4316
93	8553	8517	8421	8232	8275	8184	8029	7858	7821	7853	8147	8158	8408	8591	8736	8836	8898
95	8855	8200	8498	8492	8558	8470	8545	8300	8778	9802	10425	10875	11175	11295	12886	12750	13975
97	5322	5173	5127	5191	5307	5321	5150	4992	4701	5428	4523	4554	4598	5057	5284	6108	5795
99	8748	8326	8399	8361	8134	7870	7608	7290	6782	6376	5995	5898	5025	6033	5361	5162	4973
102	15970	15632	15852	16288	16465	16358	15868	14662	12772	11238	10572	10189	10218	13125	9788	9725	9430
105	8852	7615	7261	7233	7060	3930	3773	3970	3707	3680	3627	3559	3298	5112	2865	2781	2535
110	2928	2789	2615	2439	2303	2211	2072	1998	1842	1867	1925	1857	1732	1658	1611	1557	1525
115	5440	5058	4650	4250	3972	3842	3492	3255	2932	2995	2918	2858	2545	2458	2455	2375	223
120	1734	1532	1518	1462	1396	1350	1298	1233	1157	1078	1037	1060	852	925	912	983	88
125	1027	1024	997	980	943	941	935	936	917	918	903	891	851	859	866	859	865
128	1358	1338	1320	1315	1232	1202	1215	1210	1200	1225	1205	1188	1158	1120	1084	1082	1080
133	738	717	713	656	645	689	678	675	663	617	622	688	613	612	607	584	58
135	585	586	909	903	895	879	863	863	849	867	864	877	856	866	861	870	872
140	1000	1020	1018	972	949	942	947	925	908	930	960	975	944	927	939	968	994
145	657	658	678	641	628	614	608	605	605	628	627	632	633	659	682	623	697
149	950	1084	978	953	969	1003	997	1041	995	1005	1000	982	971	972	982	974	966
156	1008	986	976	982	1058	1172	1230	1305	1228	1188	1182	1075	1085	1065	1081	1101	1060
158	762	749	754	757	753	783	735	782	758	754	812	818	815	820	808	799	782
162	1102	1104	1267	1076	1161	1055	1186	1241	1314	1332	1285	1206	1421	1305	1209	1168	1230
165	1195	1135	1138	1180	1178	1260	1515	1886	2180	4645	4089	3220	2715	2325	2020	1972	1968
168	786	766	786	810	844	878	886	867	863	831	845	831	838	855	794	808	886
170	1098	1058	1073	1126	1193	1200	1180	1154	1186	1230	1260	1198	1200	1253	1215	1166	1168
175	1325	1255	1258	1342	1325	1395	1380	1360	1422	1395	1428	1400	1390	1390	1370	1288	1225
178	1186	1141	1245	1261	1328	1348	1352	1402	1346	1367	1347	1351	1405	1478	1502	1413	1281

OF BOISE RIVER
VEERAGE

CHART 4.

PT 16.

20	21	22	23	24	25	26	27	28	29	30	31	Average
1593	1681	1634	1493	1388	1532	1450	1328	1295	1248	1205	1267	1317
3032	3202	3088	2658	2345	2188	2115	1922	1785	1665	1610	1528	2007
850	822	852	875	720	730	818	812	792	771	790	868	830
1479	1451	1522	1581	1616	1576	1583	1749	1797	1437			1424
2010	1952	1875	1860	1885	1943	2020	2215	2368				1830
1292	1250	1258	1264	1619	1523	1464	1414	1466				1215
3500	3577	3625	3601	3455	3552	3587	3734	3688	3807	3898	3786	2880
4850	4910	4658	4408	4520	4460	5050	5730	5685	5075	4735	4708	3424
1607	1658	1693	1708	1745	1700	1742	1739	1695	1917	1905	1725	1584
2250	2221	2417	2457	2514	2582	2906	2825	2873	2634	2007		6426
7670	7575	8062	9185	9778	9435	10025	9225	8760	8310	7644		7780
4855	4915	4536	4387	4192	4213	4646	4786	4426	4281	4316		3813
8029	7855	7821	7553	8147	8158	8405	8481	8736	8836	8898	9155	8201
8545	8300	8778	9802	10825	10875	11125	11255	12880	12750	13925	15900	9678
5150	4992	4701	4624	4523	4548	4598	5087	5284	6102	5785	5262	4763
7608	7290	6782	6376	5795	5888	5525	6053	5061	5162	4923		7630
15868	14662	12792	11238	10572	10169	10218	13125	9788	9725	9430		14104
3723	3970	3707	3690	3627	3559	3288	3172	2828	2781	2635		4274
2072	1928	1882	1867	1925	1857	1732	1658	1611	1557	1520	1363	2714
3492	3255	2932	2885	2918	2858	2545	2458	2405	2348	2075	2236	5258
1288	1233	1157	1078	1037	1060	752	925	918	783	788	883	1560
934	936	917	918	903	891	881	865	866	859	868	855	1051
1215	1210	1200	1225	1205	1188	1158	1120	1084	1082	1080	1022	1441
678	675	663	617	622	688	613	612	607	585	607	589	711
863	863	849	867	864	877	855	866	861	870	872		873
949	925	909	930	960	931	948	922	939	968	994		1024
608	608	608	648	627	652	633	689	682	623	627		644
997	1041	975	1005	1000	986	971	972	982	978	956	967	954
1230	1205	1228	1188	1158	1075	1085	1065	1091	1101	1060	1125	1042
735	782	758	788	812	818	815	820	808	788	772	780	743
1188	1241	1310	1282	1285	1206	1421	1346	1204	1168	1230		1179
1815	1886	2180	4658	4089	3220	2715	2325	2020	1932	1968		1702
886	867	863	881	845	835	830	853	794	800	826		822
1180	1154	1166	1230	1260	1198	1200	1253	1215	1166	1128	1145	1187
1390	1360	1412	1395	1428	1400	1390	1390	1370	1288	1235	1370	1413
1352	1402	1346	1367	1347	1357	1405	1478	1592	1342	1268	1297	1295

T.411.

RECORDED
11/11/1917

APR 18 2012

DISCHARGE IN SECOND FEET OF BOISE
BY DAYS DURING THE IRRIGATION
INCLUDING STORAGE

No.	Name of Canal	APRIL																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	U.S.R.S.	1269	1278	1274	1274	1265	1274	1274	1278	1075	1037	551	551	552	553	553	553	553	440	357
2	New York Stock	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277
3	Ridenbaugh	58	58	60	62	63	63	63	63	63	80	98	108	112	116	120	124	128	132	141
4	Panterritory	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Bubb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Cruzen	10	10	18	26	25	24	25	26	26	51	79	79	78	78	79	79	78	78	76
7	Boise City No. 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Settlers	0	0	0	0	0	0	0	0	0	10	10	14	14	14	25	25	32	32	17
9	Thorman Mill	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7
10	Farmers Union Bk.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
11	Little Union	2	2	5	8	8	7	5	3	0	0	0	0	0	0	0	0	1	1	1
12	Dry Creek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Ballantine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	7 Eagle Island Canals	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
15	Middleton Water Co.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
16	Middleton Mill Ditch	6	6	6	6	6	6	6	6	7	8	8	8	7	7	7	7	7	7	7
17	Phyllis	155	155	155	161	167	167	167	167	167	167	168	169	172	174	176	178	180	180	180
18	Eureka No. 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Pioneer	6	6	6	6	6	6	3	0	0	0	0	0	0	0	0	0	0	0	0
20	Canyon County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Caldwell High Line	0	0	0	0	10	17	26	35	45	45	45	45	55	55	66	66	61	56	56
22	Farmers Cooperative	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Canyon	1	1	1	1	1	1	1	1	1	2	2	2	3	3	3	4	4	4	4
24	Seibenberg	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0
25	Riverside No. 2	149	128	107	111	115	106	97	88	104	120	108	94	80	66	52	38	24	23	21
26	Pioneer Dixie	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Eureka No. 2	1	1	1	1	1	1	0	0	0	2	2	2	2	2	2	2	2	2	2
28	Upper Center Point	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Lower Center Point	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Boise River at Notus	1300	1165	1030	910	1310	1630	1630	2430	2660	3980	5820	6100	5540	5540	5820	5820	5260	4980	4700
31	Miscellaneous	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	Total	3226	3178	3031	2824	3034	3670	3665	4465	4514	5765	7217	7438	6981	6976	7278	7271	6704	6316	5981

CHART 5.

IN SECOND FEET OF BOISE VALLEY CANALS
DAYS DURING THE IRRIGATION SEASON OF 1918.
INCLUDING STORAGE WATER.

APRIL.

2	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
25	103	551	551	552	555	555	555	554	444	357	421	409	431	531	649	772	978	1123	1256	1337	1459	26333
27	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	8310
63	80	98	105	112	116	120	124	128	132	141	150	159	168	177	200	221	238	256	269	282	296	4127
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	144
26	52	74	79	78	78	79	79	78	78	76	75	75	76	76	76	75	76	77	78	79	79	1788
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	5	7	42
0	10	10	14	14	14	25	25	32	32	17	32	41	50	73	78	88	93	68	98	98	103	1015
6	6	6	6	6	6	7	7	7	7	7	7	7	7	15	23	23	23	24	26	27		306
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1403
0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	10	22	35	112
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	25	37
0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2	2	2	2	2	2	19
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	1910
3	3	3	3	3	3	3	3	3	3	3	3	3	3	5	8	73	138	137	136	134	157	854
7	8	8	8	7	7	7	7	7	7	7	7	8	8	9	10	5	0	0	0	0	0	175
167	167	168	169	172	174	176	178	180	180	180	213	247	229	335	292	306	335	0	320	340	340	6162
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	20
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	11	101
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14	188
45	45	45	45	55	55	66	66	61	56	56	56	56	61	81	78	0	82	82	82	81		1398
0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	44	44	207	210	213	216	272	1241
1	2	2	2	3	3	3	4	4	4	4	4	3	3	3	4	5	5	5	5	5	5	87
0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	5	10	15	16	68
104	120	108	94	80	66	52	38	24	23	21	45	69	93	94	95	81	67	97	126	155	152	2705
0	0	0	0	0	0	0	0	0	0	0	0	6	12	12	13	13	12	12	13	13	12	118
0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	7	55
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	11	14	18	22	106
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
660	3880	5820	6100	5540	5540	5820	5820	5260	4940	4700	4150	4150	3880	4150	4980	5260	4980	4980	4760	4760	4410	117865
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	930
7574	5765	7257	7620	6981	6976	7270	7271	6704	6316	5981	5605	5679	5479	6045	7045	7582	7699	7624	7908	8144	8118	177,119

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APR 19 2012

No	Name of Canal	MAY																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	U.S.R.S.	1551	1611	1656	1721	1776	1821	1873	1930	1971	2003	2034	2074	2060	2075	2075	2091	2091	2055	2065	2075
2	New York Stock.	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277
3	Penitentiary	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
4	Pidenbaugh	310	331	353	385	385	385	388	385	385	385	385	382	382	385	394	397	397	397	397	397
5	Bubb	14	14	14	14	15	16	17	16	16	15	14	16	16	21	19	17	18	18	18	17
6	Cruzen	81	84	84	85	84	82	81	81	81	82	83	81	89	77	77	77	70	64	68	73
7	Boise City No. 1.	7	7	7	8	9	10	11	9	7	6	5	5	6	6	6	5	7	8	8	9
8	Settlers	108	113	115	115	115	118	123	128	128	135	135	135	135	140	145	144	143	143	147	14
9	Thurman Mill	37	47	36	47	45	42	39	31	24	24	24	24	24	24	23	23	25	28	27	24
10	Farmers Union B.V.	202	202	202	205	205	182	182	187	187	159	159	187	187	197	205	205	205	187	182	182
11	Little Union	34	33	22	11	11	11	1	1	1	1	1	1	8	13	11	9	6	2	6	10
12	Dry Creek	25	0	24	48	52	56	19	38	56	52	49	49	50	50	48	46	43	40	35	31
13	Ballantine	6	8	7	6	6	7	2	5	5	5	4	5	4	5	6	7	5	2	2	3
14	Eagle Island Canals	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
15	Middleton Water Co.	180	164	148	134	120	107	109	110	108	106	104	101	97	99	104	92	81	82	83	84
16	Middleton Mill Ditch	0	45	90	89	88	88	87	86	86	86	87	88	85	90	93	85	77	55	34	13
17	Phyllis	352	389	405	401	426	428	435	427	428	430	431	430	519	447	448	450	451	452	453	454
18	Eureka No. 1.	18	18	18	17	16	16	17	19	20	20	20	22	22	22	22	22	22	23	24	24
19	Pioneer	24	24	25	25	25	25	27	28	27	26	25	24	23	23	23	21	20	23	26	29
20	Canyon County	51	51	51	54	66	74	75	76	75	74	72	70	69	69	69	67	65	60	54	50
21	Caldwell High Line	81	86	92	92	91	91	91	91	91	84	84	79	79	79	79	84	88	79	36	36
22	Farmers Cooperative	302	344	350	360	353	356	362	362	358	358	356	364	362	364	356	364	368	372	368	368
23	Canyon	14	14	14	15	16	17	11	6	8	10	12	16	20	20	21	19	17	16	14	13
24	Seibenberg	16	17	18	18	18	18	18	18	15	14	13	12	11	11	11	9	7	5	3	2
25	Riverside No. 2	199	195	192	191	190	189	192	195	196	198	200	202	204	202	200	199	197	198	200	203
26	Pioneer Dixie	9	9	9	10	14	15	15	15	16	16	16	17	17	17	18	18	8	6	9	2
27	Eureka No. 2.	17	18	24	20	20	20	20	24	26	28	30	32	32	32	31	30	26	22	18	21
28	Upper Center Point	18	13	7	7	8	9	8	7	7	7	8	8	9	9	9	8	8	8	8	9
29	Lower Center Point	16	17	18	18	17	17	17	16	16	16	16	16	16	16	16	15	13	10	7	2
30	Boise River at Natus	442	442	4150	3380	3630	3880	4700	5540	6160	6980	7200	7700	8420	9220	9880	11800	12800	16200	2600	2600
31	Miscellaneous	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	Total	8452	8634	8487	7841	8161	8440	9200	10192	10796	9678	9425	9468	9311	9268	8741	8242	7703	6352	7308	5411

CHART 5A.

MAY

MAY																															Total
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31							
1873	1938	1971	2003	2034	2064	2095	2125	2155	2185	2215	2245	2275	2305	2335	2365	2395	2425	2455	2485	2515	2545	2575	2605	2635	2665	61697					
277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	8587					
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	155					
388	385	385	385	385	382	382	385	394	397	397	397	397	397	394	394	394	394	394	391	394	394	394	394	394	394	11391					
17	16	16	15	14	16	18	21	19	17	18	18	17	16	18	18	19	19	19	19	19	18	18	17	17	17	527					
81	81	81	82	83	81	89	77	77	77	70	64	68	73	79	83	87	83	80	80	81	81	75	68	75	75	2956					
11	9	7	6	5	5	6	6	6	5	7	8	8	9	9	9	10	10	9	9	10	10	11	12	10	10	255					
123	128	128	135	135	135	135	140	145	144	143	143	147	147	147	147	147	147	147	147	147	147	147	147	147	147	4136					
39	31	24	24	24	24	24	24	23	23	25	28	27	29	25	31	36	34	32	32	31	31	28	25	22	22	925					
182	187	187	159	159	187	187	197	205	205	205	187	182	182	187	187	197	197	197	197	205	187	172	177	177	182	5874					
1	1	1	1	1	1	8	13	11	9	6	2	6	10	12	12	12	12	11	11	12	12	8	5	5	5	305					
19	38	56	52	49	49	50	50	48	46	43	40	35	31	28	31	34	44	54	50	46	42	44	46	46	46	1276					
2	5	5	5	4	5	4	5	6	7	5	2	2	3	2	4	6	7	8	6	4	3	3	3	3	3	150					
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	1957					
89	110	108	106	104	101	97	99	100	92	81	82	83	84	97	110	107	104	90	76	62	49	35	35	34	34	3008					
87	86	86	86	87	88	86	90	93	85	77	55	34	13	13	12	55	97	95	93	90	65	39	38	37	37	2089					
35	427	428	430	431	430	519	447	448	450	451	452	453	454	454	454	462	462	462	462	466	0	0	448	443	453	12756					
17	19	20	20	20	22	22	22	22	22	22	23	23	24	24	24	24	23	23	23	23	0	0	26	23	21	607					
27	28	27	26	25	24	23	23	23	21	20	23	26	30	29	27	24	20	21	23	25	25	25	27	29	29	769					
75	76	75	74	72	70	69	69	69	67	65	60	56	51	50	48	51	55	61	67	75	75	74	73	72	72	2001					
91	91	91	84	84	79	79	79	79	84	88	79	36	36	34	31	31	31	28	31	34	31	37	47	47	47	2006					
2	362	358	358	356	364	362	364	356	364	368	372	368	368	355	356	371	350	366	372	384	362	362	374	374	374	11173					
11	6	8	10	12	16	20	20	21	19	17	16	14	13	18	23	20	14	16	18	20	21	22	22	21	21	500					
8	18	15	14	13	12	11	11	11	9	7	5	3	2	2	2	21	14	14	13	12	12	11	11	11	11	377					
2	195	196	198	200	202	204	202	200	199	197	198	200	203	199	195	190	186	190	194	198	203	200	198	188	188	6091					
5	15	16	16	16	17	17	17	18	18	8	6	4	2	0	0	0	0	0	8	10	14	14	14	15	15	325					
0	20	24	26	28	30	32	32	32	31	30	26	22	18	21	25	29	23	37	41	45	49	52	50	47	47	915					
7	7	7	7	8	8	9	9	9	9	8	8	8	8	9	9	10	11	11	11	10	10	10	10	10	10	286					
16	16	16	16	16	16	16	16	16	15	13	10	7	2	2	1	1	0	0	0	3	5	7	7	7	7	326					
55	61	60	59	58	4700	4700	4420	4420	3880	3380	2880	1630	2660	780	790	768	680	485	657	445	1165	4465	1815	4465	1300	90705					
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	961					
10192	10796	9678	9425	9468	9211	9268	8741	8242	7703	6368	7308	5411	5408	5473	5444	5321	6424	5325	5501	5347	6391	6089	5926	234112							

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No.	Name of Canal	JUNE																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	U.S.R.S.	2127	2122	2127	2122	2127	2127	2122	2117	2122	2138	2138	2138	2138	2148	2138	2138	2143
2	New York Stock	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277
3	Penitentiary	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
4	Ridenbaugh	296	296	313	352	385	391	394	394	394	397	397	397	397	397	397	400	397
5	Bubb	18	20	23	27	30	33	32	32	34	36	37	37	37	37	37	35	33
6	Cruzen	81	81	81	81	83	84	85	79	81	84	87	86	85	86	86	85	86
7	Boise City No. 1	8	10	12	15	18	22	26	19	17	15	13	13	13	11	9	8	7
8	Settlers	131	131	147	152	152	152	152	159	159	159	159	158	158	157	156	155	153
9	Thurman Mill	19	21	24	25	27	29	29	29	49	69	90	86	83	83	59	39	24
10	Farmers Union & BV.	182	182	192	207	213	213	213	213	213	41	152	213	203	203	208	203	203
11	Little Union	5	7	9	12	12	13	15	17	17	16	16	10	3	2	2	2	2
12	Dry Creek	46	47	49	50	51	52	52	56	52	49	47	53	58	55	53	49	46
13	Ballantine	4	4	4	4	4	4	4	5	7	9	11	11	12	11	10	9	8
14	Eagle Island Canal	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
15	Middleton Water Co.	46	58	70	103	91	103	114	117	120	124	126	128	126	124	122	120	118
16	Middleton Mill Ditch	37	37	37	38	37	37	50	70	90	110	82	59	59	53	52	51	50
17	Phyllis	444	443	443	442	447	462	463	467	466	465	0	450	449	449	441	425	411
18	Eureka No. 1	22	23	23	22	23	22	21	21	22	22	0	35	35	35	34	34	27
19	Pioneer	25	20	15	29	24	29	34	35	37	38	43	49	41	33	27	21	15
20	Canyon County	72	73	73	74	76	84	93	86	79	73	69	65	63	61	58	55	52
21	Caldwell High Line	47	47	58	66	81	80	77	87	90	90	90	89	66	50	49	49	46
22	Farmers Cooperative	368	382	116	116	116	112	102	118	336	356	374	374	380	380	382	374	372
23	Canyon	17	14	11	10	9	11	13	15	17	19	15	12	10	8	7	5	4
24	Seibenberg	11	12	12	12	13	9	6	6	6	7	8	9	9	6	8	7	9
25	Riverside No. 2	186	184	181	187	192	195	199	199	199	199	204	209	207	205	203	201	198
26	Pioneer Dixie	16	18	19	19	19	18	18	18	19	20	15	10	10	10	11	11	8
27	Eureka No. 2	48	50	52	54	56	61	66	50	34	18	44	70	68	65	62	59	56
28	Upper Center Point	8	5	3	8	13	12	10	9	7	6	12	17	14	12	10	8	6
29	Lower Center Point	7	6	5	7	9	12	16	14	12	11	13	15	13	11	9	7	5
30	Boise River at Natus	1165	1300	1465	1630	2245	3630	5260	5540	6380	5060	8340	8060	8060	8340	8060	5820	5590
31	Miscellaneous	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	Total	5796	5953	5924	6224	6883	8357	10026	10332	11419	12591	12942	13206	13152	13392	13046	10720	10393

CHART 50

JUNE

LINE																														Total
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30									
2122	2138	2138	2138	2138	2148	2138	2138	2143	2143	2148	2143	2163	2158	1987	1857	2158	2153	2158	2163	2168	2158	63769								
277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	9310								
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	150								
397	397	397	397	397	397	397	400	397	397	397	397	397	398	397	397	397	397	397	397	397	397	11531								
37	36	37	37	37	37	37	35	37	38	39	38	38	38	36	39	32	19	16	15	14	15	232								
81	84	87	86	85	86	86	85	86	85	84	83	82	80	81	83	84	86	87	84	81	84	2505								
17	15	13	13	13	11	9	8	8	7	8	9	9	9	9	9	8	6	4	4	8	7	329								
159	159	159	158	158	157	156	155	153	152	151	151	150	149	149	149	149	149	149	149	149	138	9519								
49	49	49	46	43	43	39	39	24	9	22	34	32	33	36	39	41	41	40	41	42	45	1285								
113	41	152	213	203	203	208	203	203	203	203	203	203	203	203	203	191	191	191	195	195	195	58945								
17	16	16	10	3	2	2	2	2	2	4	6	8	10	10	9	9	12	16	14	11	11	282								
53	49	47	53	58	55	53	49	46	42	44	46	44	43	43	44	45	36	28	31	42	39	1395								
7	9	11	11	12	11	10	9	8	8	12	17	19	20	18	16	14	16	17	17	17	15	327								
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	1410								
120	124	126	128	126	124	122	120	118	115	112	109	108	109	111	112	82	31	64	69	72	76	3000								
90	110	82	59	59	53	52	51	52	51	52	49	45	46	46	47	49	41	32	26	28	70	1532								
266	265	0	450	449	449	441	425	411	406	399	400	389	382	379	373	361	363	371	403	416	383	12231								
22	22	0	35	35	35	24	14	24	27	21	21	20	20	20	20	12	4	4	4	7	10	618								
27	28	43	49	41	33	27	21	15	12	9	30	17	18	20	21	19	17	16	15	15	14	728								
79	73	69	65	63	61	58	55	52	52	52	52	50	48	49	49	47	46	42	38	40	45	1818								
90	90	90	89	65	50	49	49	49	46	45	43	43	45	46	48	47	50	53	31	31	25	1712								
316	316	374	374	380	380	382	374	372	374	368	372	380	375	375	374	368	368	362	332	390	9520									
17	19	15	12	10	8	7	5	4	10	17	15	13	12	14	14	11	12	12	12	13	16	375								
6	7	8	9	9	6	8	7	9	9	9	9	8	8	8	8	7	6	7	6	5	5	243								
199	199	209	209	207	205	203	201	195	203	207	213	220	231	242	255	215	180	141	105	206	208	6126								
19	20	15	10	10	10	11	11	11	8	6	6	6	8	10	11	8	4	4	5	5	5	398								
34	18	94	70	68	65	62	59	56	53	48	42	36	35	34	34	27	20	19	7	5	3	1270								
7	6	12	17	14	14	10	8	6	5	4	9	14	18	12	10	8	7	6	4	3	3	258								
14	11	13	15	13	11	9	7	5	3	2	2	2	2	2	2	1	0	0	0	0	0	188								
138	206	211	206	206	214	208	216	214	208	206	206	206	206	206	206	206	206	206	206	206	206	129915								
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	930								
11919	12991	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	12992	268250								

No.	Name of Canal	JULY															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	U.S.R.S.	2122	2039	1997	1982	1811	1826	1791	1741	1716	1741	1651	1606	1706	1669	1596	1450
2	New York Struck	272	277	277	277	277	277	277	277	277	277	277	277	277	219	219	164
3	Penitentiary	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
4	Bidenbaugh	393	397	397	397	400	397	397	400	400	402	400	400	400	397	400	398
5	Bubb	16	16	16	16	16	16	15	14	14	14	14	13	12	11	10	10
6	Cruzan	86	87	87	87	87	87	85	82	80	80	81	84	87	87	87	79
7	Boise City No. 1	10	14	14	14	12	13	13	13	13	12	11	11	11	11	11	11
8	Settlers	149	155	155	160	160	0	0	100	105	144	144	149	0	0	100	139
9	Thurman Mill	47	47	53	59	65	72	66	60	54	35	18	25	36	36	35	39
10	Farmers Union & BV	199	198	197	196	195	179	178	176	175	174	173	172	173	173	172	170
11	Little Union	10	10	10	11	11	12	12	12	12	12	12	12	12	11	9	12
12	Dry Creek	35	30	33	36	39	43	44	44	45	42	38	42	46	41	36	42
13	Ballantine	13	12	10	9	6	3	6	9	13	11	8	8	7	6	5	8
14	Eagle Island Canals	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
15	Middleton Water Co.	80	85	90	92	95	86	78	97	100	103	91	80	102	124	116	154
16	Middleton Mill Ditch	84	84	84	84	84	74	64	64	64	67	67	66	61	56	54	63
17	Phyllis	427	427	427	424	420	422	394	364	411	450	0	409	434	457	434	441
18	Eureka No. 1	14	14	14	19	24	24	23	23	23	0	0	29	25	21	17	19
19	Pioneer	13	18	23	24	25	26	28	29	27	25	18	11	12	12	14	13
20	Canyon County	49	61	73	73	73	75	78	81	81	81	79	77	76	75	73	87
21	Caldwell High Line	21	21	20	15	48	61	72	50	54	66	72	77	60	33	38	44
22	Farmers Cooperative	322	348	352	350	350	348	316	328	368	364	364	345	354	368	364	367
23	Canyon	19	21	23	21	19	20	21	22	21	20	18	16	17	18	19	10
24	Seibenberg	1	8	14	16	18	17	15	14	13	11	9	8	8	9	9	15
25	Burrowside No. 2	210	203	196	194	192	194	196	199	193	187	181	175	173	171	169	174
26	Pioneer Ditch	0	8	16	18	20	20	20	19	19	18	18	17	20	23	26	27
27	Eureka No. 2	1	1	2	3	4	14	25	36	24	31	28	27	34	42	50	46
28	Upper Center Point	3	3	3	3	2	6	10	13	12	10	8	7	11	14	16	15
29	Lower Center Point	7	7	7	7	7	7	3	0	2	2	4	4	7	11	13	11
30	Boise River at Notus	445	420	360	250	200	119	110	87	284	312	724	155	245	200	190	195
31	Miscellaneous	21	21	21	31	31	31	31	31	31	31	31	31	31	31	31	31
	Total	5186	5094	5028	4920	4793	4521	4420	4467	4733	4774	4591	4385	4489	4370	4267	4226

CHART 5C.

JULY

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
1741	1716	1741	1651	1606	1706	1664	1546	1450	1674	1625	1719	1812	1857	1857	1867	1862	1817	1767	1817	1687	1520	1539	1578	54370
277	277	277	277	277	277	219	219	164	164	164	164	131	131	131	131	131	131	131	131	131	131	131	131	6267
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	155
400	400	402	400	400	400	397	400	398	400	400	400	400	403	400	400	393	340	355	352	328	328	328	325	11927
14	14	14	14	13	12	11	10	12	10	9	9	8	8	8	8	8	10	10	9	9	9	9	9	358
82	80	80	81	84	87	87	87	79	78	94	87	86	87	88	85	82	88	88	87	88	84	85	86	2646
13	13	12	11	11	11	11	11	13	11	10	12	10	10	10	8	9	9	10	10	10	10	10	9	3449
100	105	144	144	149	0	0	100	139	149	144	144	144	131	131	131	124	113	114	114	106	106	106	106	3528
60	54	35	18	25	36	36	35	39	36	34	34	30	30	30	29	29	28	28	28	28	28	24	24	1187
176	175	174	173	172	173	173	172	171	170	154	154	138	138	137	136	120	120	119	110	110	110	119	119	4955
12	12	12	12	12	11	9	12	5	5	5	4	7	11	11	11	12	12	11	11	11	14	14	14	324
44	45	42	38	42	46	41	36	42	34	9	24	19	32	36	36	9	45	43	41	41	40	42	45	1122
9	13	11	8	8	7	6	5	8	5	6	7	8	6	5	3	3	9	8	8	9	8	8	10	237
47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	1457
97	100	103	91	80	102	124	116	154	58	57	86	76	56	78	70	62	65	81	81	70	56	69	66	2604
64	64	67	67	66	61	56	54	63	52	45	38	35	41	54	49	47	47	49	48	47	45	46	36	1799
364	411	450	0	409	434	457	434	441	429	411	393	361	315	334	310	283	281	287	287	275	271	269	265	11112
23	23	0	0	29	25	21	17	19	18	18	18	17	17	17	16	15	17	16	17	17	17	17	19	545
29	27	25	18	11	12	12	14	13	13	14	14	15	16	17	17	18	19	19	16	13	14	16	17	556
81	81	81	79	77	76	75	73	87	78	68	67	67	63	2	33	35	44	40	37	39	39	41	65	1900
80	84	66	72	77	60	33	38	42	43	41	31	51	40	44	44	50	57	58	62	39	37	35	40	1479
328	368	364	364	345	354	368	348	364	353	267	232	195	180	166	155	140	184	233	240	249	228	258	256	8923
22	21	20	18	16	17	18	19	14	10	13	15	12	11	13	12	14	14	15	16	15	15	18	14	511
14	13	11	9	8	8	9	9	15	6	6	3	9	3	9	7	2	14	12	9	8	7	15	15	310
199	193	187	181	175	173	171	164	174	172	164	157	75	71	168	173	163	168	172	162	161	160	151	154	5278
19	19	18	18	17	20	23	26	27	19	19	19	18	18	20	17	14	17	15	13	15	17	12	11	533
36	34	31	28	27	34	42	50	48	46	31	22	18	14	30	44	39	33	26	30	29	28	26	26	842
13	12	10	8	7	11	14	17	16	15	10	7	7	6	6	12	17	15	10	15	16	17	17	17	325
0	2	2	4	4	7	11	14	13	11	7	6	8	9	7	11	14	13	15	13	13	12	13	13	265
87	294	312	724	155	245	200	146	195	195	155	110	77	60	55	44	32	28	26	30	36	35	32	33	5250
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	961
4447	4733	4774	4641	4385	4489	4373	4257	4295	4226	4063	4065	3914	3843	3967	3932	3809	3821	3838	3877	3678	3454	3578	3579	131970

SCANNED

APR 18

No	Name of Canal	AUGUST																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	U.S.A.S.	1381	1589	1470	1470	1470	1437	1421	1458	1405	1418	1555	1555	1573	1596	1625	1637	1614
2	New York Stock	121	81	131	131	131	131	81	0	0	0	0	0	0	0	0	0	0
3	Penitentiary	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
4	Ridenbaugh	322	322	325	325	331	331	328	331	331	331	325	331	328	331	325	331	331
5	Bubb	8	8	7	7	7	7	7	7	7	7	7	10	10	9	9	10	9
6	Cruzen	81	77	82	86	89	89	79	82	87	83	83	83	76	83	83	88	84
7	Boise City No. 1	13	12	13	12	11	13	8	9	9	11	10	10	5	5	11	13	13
8	Settlers	105	104	103	102	101	101	101	102	103	103	102	102	101	101	100	99	99
9	Thurman Mill	23	19	20	20	21	21	21	21	20	20	18	16	16	16	23	22	21
10	Farmers Union + B.V.	155	155	155	155	155	155	155	53	155	155	155	63	64	64	116	116	118
11	Little Union	20	16	14	15	16	16	7	10	11	10	9	8	12	12	12	13	10
12	Dry Creek	32	33	32	32	32	34	28	28	32	32	32	33	32	32	32	33	29
13	Balkantine	10	10	9	9	9	8	8	7	8	8	8	8	8	8	7	10	9
14	7 Eagle Island Canals	35	35	35	35	35	35	28	28	28	28	28	28	28	28	28	28	28
15	Middleton Water Co.	64	62	62	62	61	61	54	39	42	52	52	37	48	41	41	54	66
16	Middleton Mill Ditch	40	43	39	39	39	39	40	29	27	27	27	24	40	40	39	41	43
17	Phyllis	265	289	259	256	251	250	217	242	260	272	261	212	229	219	253	268	279
18	Eureka No. 1	18	20	18	19	20	20	18	5	5	5	10	10	18	17	18	18	18
19	Pioneer	15	16	16	15	14	14	13	11	12	13	12	12	14	14	15	15	15
20	Canyon County	66	54	54	52	50	50	38	39	41	43	47	39	41	21	24	36	56
21	Caldwell High Line	36	36	36	27	27	22	23	23	22	22	22	22	22	0	18	45	50
22	Farmers Cooperative	265	262	267	258	262	224	234	214	182	170	186	183	168	192	178	206	257
23	Canyon	11	11	12	13	10	9	10	9	7	6	7	11	10	12	11	10	13
24	Seibenberg	11	12	10	9	10	9	9	9	7	7	6	5	4	4	9	14	24
25	Riverside No. 2	167	160	161	159	159	159	168	157	150	150	147	168	152	151	144	146	151
26	Pioneer Dixie	12	13	12	12	11	10	10	11	10	8	8	8	7	8	10	9	12
27	Eureka No. 2	28	47	45	43	42	39	38	37	41	40	34	30	27	33	33	36	55
28	Upper Center Point	18	8	8	8	7	6	6	8	11	9	10	7	8	9	8	11	11
29	Lower Center Point	15	15	13	12	11	11	9	4	5	5	4	4	4	3	10	9	13
30	Boise River at Notus	48	60	48	48	396	408	360	390	36	36	46	33	36	36	34	34	58
31	Miscellaneous	23	23	23	23	23	23	19	19	19	19	19	19	19	19	19	19	19
	Total	3623	3597	3485	3459	3806	3737	3543	3387	3078	3005	3235	3076	3105	3114	3240	3377	3402

CHART 5D.

AUGUST

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
145/418	1555	1555	1573	1596	1625	1637	1614	1605	1582	1559	1436	1427	1774	1297	1272	1239	1272	1289	1414	1427	1502		45969
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	817
31	331	325	331	328	331	325	331	331	334	331	331	331	331	331	334	331	331	328	328	331	331	331	155
7	7	7	10	10	9	9	10	10	9	9	9	8	7	6	6	7	7	7	8	7	6	6	10213
87	83	83	83	76	83	83	88	84	84	84	88	86	84	87	86	84	82	79	77	75	81	77	239
9	11	10	10	5	5	11	13	13	13	12	12	11	11	9	9	8	10	12	10	12	13	12	2570
103	103	102	102	101	101	100	100	99	99	99	98	98	98	97	97	97	96	96	48	48	48	48	332
20	20	18	16	16	16	23	22	22	21	23	24	23	22	21	20	20	20	20	21	21	21	21	2897
155	155	155	63	64	64	116	116	116	118	118	119	112	119	118	117	116	115	113	113	112	112	111	637
11	10	9	8	12	12	12	13	13	10	7	7	7	7	6	7	6	6	8	8	8	7	10	3755
32	32	32	33	32	32	32	33	26	29	32	30	27	33	30	28	27	29	30	31	33	32	33	318
8	8	8	8	8	8	7	10	10	9	9	9	9	8	8	8	8	6	7	10	8	9	11	959
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	264
42	52	52	37	48	41	41	54	68	66	64	64	66	64	65	66	66	63	65	68	68	69	69	910
27	27	27	24	40	40	39	41	42	43	43	42	41	40	39	39	38	39	38	39	40	40	41	1823
60	272	261	212	229	219	253	268	279	279	256	263	249	249	211	201	187	197	190	181	182	203	213	1177
5	5	10	10	18	17	18	18	18	18	18	18	18	18	18	18	19	19	16	15	14	12	10	7343
12	13	12	12	14	14	15	15	15	15	15	15	15	15	15	15	16	16	17	17	18	18	19	488
41	43	47	39	41	21	24	36	50	56	63	59	61	42	28	24	22	23	23	20	17	17	18	462
22	22	22	22	22	0	18	45	50	50	50	49	51	48	48	45	37	35	22	22	23	23	22	1218
182	170	186	183	168	192	178	206	164	254	270	274	261	247	227	195	172	154	138	125	138	180	222	978
7	6	7	11	10	12	11	10	8	13	13	14	12	11	9	7	6	5	7	6	9	10	10	6472
7	7	6	5	4	9	9	14	5	24	24	19	19	18	16	14	9	2	2	2	15	28	9	299
50	150	147	168	152	151	144	146	153	154	151	145	162	150	145	152	146	136	133	130	126	127	127	346
10	8	8	8	7	8	10	9	12	12	12	13	13	13	13	13	11	12	9	7	7	9	10	4635
41	40	34	30	27	33	33	36	37	55	58	62	60	61	58	56	49	46	42	34	30	29	30	325
11	9	10	7	8	9	8	11	10	11	11	13	13	13	12	8	8	7	6	12	8	10	11	1300
5	5	4	4	4	3	10	9	9	8	13	14	14	13	12	9	5	3	2	2	2	2	2	295
36	36	46	33	36	36	34	34	36	58	105	100	106	114	141	100	75	58	48	36	35	35	36	244
19	14	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	3132
3078	3085	3235	3076	3105	3114	3240	3377	3346	3499	3524	3502	3361	3315	3596	3023	2894	2808	2782	2711	2853	2851	3063	613
																							101185

No.	Name of Canal	SEPTEMBER																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	U.S.R.S.	1601	1637	1638	1492	1305	1213	1217	1213	1217	1193	1180	1176	999	838	985	871	693	649	652
2	New York Stock	0	0	0	0	0	0	0	0	0	0	0	0	0	166	166	166	166	166	166
3	Penitentiary	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
4	Bidenbaugh	332	337	296	290	290	290	290	290	293	290	293	293	290	293	197	233	201	213	214
5	Bubb	5	5	6	6	7	8	8	8	7	7	6	6	6	5	5	5	5	5	5
6	Cruzem	72	74	87	85	85	83	83	73	86	81	84	85	84	83	80	76	74	77	82
7	Boise City No. 1	11	10	9	9	10	10	10	10	10	7	7	7	7	7	7	7	7	7	8
8	Settlers	46	45	45	46	74	78	78	78	78	78	78	78	78	78	78	78	78	78	78
9	Thurman Mill	25	24	24	24	24	24	23	23	23	22	22	22	22	22	21	20	20	21	21
10	Farmers Union No. 1	108	108	102	102	98	104	105	105	105	105	105	105	105	90	90	86	85	85	86
11	Little Union	11	12	12	9	9	12	12	11	11	14	4	4	5	4	5	4	2	2	4
12	Dry Creek	32	30	25	32	33	33	34	33	30	30	28	28	28	28	26	24	7	4	7
13	Ballantine	11	11	11	11	12	12	12	13	14	14	13	14	13	14	8	3	3	3	3
14	7 Eagle Island Canal	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
15	Middleton Water Co.	70	70	75	73	70	67	66	68	71	76	62	65	68	70	79	78	68	41	44
16	Middleton Mill Ditch	41	41	39	39	38	37	36	36	37	37	33	34	36	37	37	36	37	17	17
17	Phyllis	213	224	218	224	225	211	211	229	250	252	213	225	227	190	118	190	119	104	122
18	Eureka No. 1	14	17	17	17	16	16	16	16	16	16	16	15	14	11	11	11	10	11	10
19	Pioneer	20	22	22	20	18	16	14	12	10	8	9	11	13	15	16	17	15	11	9
20	Canyon County	19	29	29	30	25	24	24	31	39	41	32	34	36	38	45	51	41	32	39
21	Caldwell High Line	28	40	40	40	33	38	35	40	30	21	18	15	6	6	6	6	6	8	8
22	Farmers Cooperative	120	120	131	150	144	142	140	150	200	204	212	227	220	222	224	216	190	187	182
23	Canyon	10	10	10	11	11	11	11	11	13	14	8	5	7	8	9	10	10	2	8
24	Seibenberg	30	30	7	11	9	9	9	14	19	25	5	6	6	5	6	7	6	6	17
25	Butterside No. 2	124	138	135	127	143	139	141	140	143	145	139	139	139	135	130	139	135	139	136
26	Pioneer Ditch	9	9	7	6	6	6	6	7	9	7	7	7	8	9	11	13	16	17	16
27	Eureka No. 2	30	30	29	29	31	29	29	30	37	42	45	40	48	50	54	63	52	48	48
28	Upper Center Point	12	10	10	10	11	11	11	11	12	12	9	10	11	9	7	7	5	5	5
29	Lower Center Point	2	2	13	15	15	16	15	15	16	16	16	14	14	14	14	3	3	3	3
30	Base River at Nodus	34	36	34	34	36	75	85	100	107	110	155	200	250	300	371	378	376	258	250
31	Miscellaneous	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	Total	3091	3173	3168	2814	2831	2706	2725	2831	2921	2946	2860	2946	2861	2881	2827	2825	2577	2267	2293

CHART 5E.

FINI
5.

SEPTEMBER

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
142	1180	1176	999	838	985	841	693	649	652	642	642	608	608	608	585	608	608	608	747	765	28627
0	0	0	0	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	2822
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	150
290	293	293	290	293	197	233	201	213	234	233	228	233	125	124	127	122	124	126	124	99	6904
7	6	6	6	5	5	5	5	5	5	6	6	6	8	7	6	6	5	5	6	5	181
81	84	85	84	83	80	76	74	77	82	82	80	81	80	79	81	78	81	79	78	76	2409
7	7	7	7	7	7	7	7	7	7	8	8	10	12	13	13	13	12	12	12	12	284
78	78	78	78	78	78	78	70	70	78	78	78	78	29	21	21	18	15	4	4	4	1681
22	22	22	22	22	22	21	20	20	21	21	20	19	19	18	17	17	16	16	17	17	625
105	105	105	105	90	90	86	75	75	75	66	66	66	44	44	49	40	40	40	40	40	2383
14	4	4	5	4	5	4	2	2	4	4	4	4	3	3	3	3	3	3	3	3	183
30	28	28	28	28	26	24	7	4	7	6	6	6	6	6	6	6	6	6	6	6	560
14	13	14	13	14	8	3	3	3	2	2	2	3	3	4	3	2	2	2	2	2	221
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	840
76	62	65	68	70	74	78	68	41	44	44	45	43	41	40	44	41	41	40	39	39	1733
37	33	34	36	37	37	36	37	17	17	17	17	18	19	17	16	16	16	15	15		848
252	213	225	227	190	118	192	134	154	122	123	124	128	40	40	40	40	40	40	40	40	4537
16	16	15	14	11	11	11	10	11	11	10	9	5	5	5	5	5	5	5	5	5	335
8	9	11	13	15	16	17	15	11	9	7	5	5	5	5	5	5	5	5	5	5	336
41	32	34	36	38	45	51	41	32	39	46	46	40	34	25	14	17	15	8	6	2	892
21	18	15	6	6	6	6	6	6	8	8	8	8	8	8	5	5	5	5	5	5	482
204	212	227	230	232	224	216	192	187	182	200	192	186	180	172	163	153	143	132	123	112	5158
14	8	5	7	8	9	10	10	2	8	9	10	10	8	9	7	8	6	5	3	1	255
25	5	6	6	5	6	7	6	6	6	27	27	26	20	15	10	5	5	5	5	5	366
143	145	139	138	139	135	130	139	135	139	136	134	130	125	117	109	101	92	83	75	67	3799
7	7	7	8	9	11	13	16	16	17	17	16	16	16	14	14	12	12	11	11	9	324
42	45	40	48	56	59	63	52	48	48	48	48	45	42	40	38	34	36	32	28	27	1196
12	12	9	10	11	9	7	7	5	5	5	5	5	6	6	6	5	5	5	5	5	242
16	16	14	14	14	14	14	3	3	3	3	3	3	3	2	2	2	2	2	2	2	246
110	155	200	250	360	372	378	396	258	250	300	295	300	680	1308	1165	1030	790	790	802	814	11528
14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	570
2916	2860	2916	2801	2881	2827	2825	2507	2267	2293	2366	2342	2299	2386	2962	2723	2609	2348	2303	2426	2400	80717

SCANNED

APR 10 2012

TRIBUTARY AND RETURN FLOW TO BOISE RIVER DURING

No	Name of Tributary	APRIL																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Cottonwood Creek	27	27	30	33	33	32	32	33	34	53	73	73	73	73	73	73	73	73
2	Boise Sewer	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
3	Boise Valley Waste	5	5	5	5	5	5	5	5	5	5	5	5	4	4	5	4	3	3
4	Ballantine Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Dry Creek Waste	70	70	66	61	61	60	59	59	59	59	60	58	56	54	52	50	48	46
6	Thurman Mill Slough	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5
7	Phyllis Slough	4	4	4	4	5	4	5	5	5	4	5	6	4	4	6	6	7	7
8	Five Mile Creek	34	34	96	96	96	194	194	194	96	144	138	138	138	138	138	138	138	138
9	Middleton Mill Slough	38	35	33	36	40	38	36	35	39	43	43	43	42	42	41	41	41	41
10	Mason Creek	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Mason Drain	24	23	24	24	23	24	24	24	23	23	23	24	24	25	26	27	23	24
12	Indian Creek	99	139	134	138	120	115	111	99	103	103	78	103	103	103	110	99	97	100
13	Dixie Drain	6	6	6	6	6	6	6	6	6	6	6	10	10	11	11	9	9	9
	Total	322	358	413	418	404	493	487	475	384	455	446	475	469	469	476	463	453	450

No	Name of Tributary	MAY																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Cottonwood Creek	41	44	40	36	40	44	48	50	53	48	44	40	37	34	29	24	21	18
2	Boise Sewer	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
3	Boise Valley Waste	6	7	5	3	7	10	2	5	7	5	2	6	10	44	12	10	10	9
4	Ballantine Waste	6	8	7	6	6	7	2	5	5	5	4	5	4	5	6	7	5	2
5	Dry Creek Waste	6	0	0	0	0	0	0	0	29	28	26	31	36	43	42	41	41	37
6	Thurman Mill Slough	3	4	13	22	21	20	20	20	21	19	18	17	17	16	15	13	13	13
7	Phyllis Slough	6	6	6	6	6	6	7	7	7	6	6	4	4	4	6	6	7	7
8	Five Mile Creek	17	17	34	60	60	60	60	60	60	60	60	34	35	17	41	66	91	63
9	Middleton Mill Slough	38	50	61	69	77	85	108	122	164	163	161	160	159	138	116	106	96	85
10	Mason Creek	18	20	21	24	26	22	23	27	37	36	26	56	44	22	37	22	32	16
11	Mason Drain	44	50	56	62	69	65	61	67	74	68	128	106	63	21	21	74	180	76
12	Indian Creek	76	76	79	81	83	120	120	99	99	99	104	104	106	106	110	102	105	108
13	Dixie Drain	8	8	9	9	9	9	12	12	16	16	16	16	17	18	19	19	20	20
	Total	277	298	339	386	412	456	471	492	580	561	603	587	530	446	462	478	547	404

No	Name of Tributary	JUNE																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Cottonwood Creek	47	51	58	59	52	45	46	48	44	41	38	38	38	35	31	30	28	27
2	Boise Sewer	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
3	Boise Valley Waste	8	9	11	12	12	12	6	10	9	7	5	7	9	7	5	5	4	4
4	Ballantine Waste	4	4	4	4	4	4	4	5	7	9	11	11	12	11	10	9	8	12
5	Dry Creek Waste	33	31	30	29	36	43	43	44	35	26	18	18	19	26	32	34	36	36
6	Thurman Mill Slough	13	10	8	6	5	3	4	4	10	16	21	21	21	21	21	25	22	5
7	Phyllis Slough	6	7	8	8	8	8	8	8	9	9	9	10	9	8	8	7	8	9
8	Five Mile Creek	94	136	117	61	42	37	40	40	52	44	157	35	65	66	81	92	119	101
9	Middleton Mill Slough	111	103	95	69	59	83	117	123	169	125	162	129	129	129	129	129	129	129
10	Mason Creek	30	34	39	35	35	38	42	42	42	42	25	31	30	34	38	44	44	27
11	Mason Drain	78	79	79	68	73	73	85	86	87	88	88	89	106	95	95	96	95	94
12	Indian Creek	122	122	124	126	122	124	120	122	125	128	122	124	124	124	124	124	124	124
13	Dixie Drain	24	26	26	27	27	28	28	29	29	30	30	31	31	32	31	30	29	28
	Total	579	620	604	512	483	506	561	601	636	653	708	577	661	657	685	731	751	700

RY TO BOISE RIVER DURING IRRIGATION SEASON 1918.

CHART 6.

APRIL

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
53	73	73	73	73	73	73	73	73	72	72	69	64	59	54	49	48	46	44	41	38	1574
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	240
5	5	5	4	4	5	4	3	3	3	3	3	3	3	8	13	14	15	12	9	5	174
0	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2	2	2	2	2	2	19
59	60	58	58	54	52	50	48	46	45	44	44	45	45	44	44	44	44	34	23	13	1516
6	6	6	6	6	5	5	5	5	4	4	4	4	4	7	9	9	9	7	5	2	172
4	5	6	4	4	6	6	7	7	7	7	6	5	4	4	4	4	4	5	5	6	150
144	138	138	138	138	138	138	138	138	138	138	138	138	96	43	34	34	17	17	17	17	3109
43	43	43	42	42	41	41	41	41	41	35	31	27	23	19	43	67	53	39	25	32	1142
1	1	1	1	1	1	1	1	1	1	1	2	4	5	6	7	9	8	10	18	18	107
23	23	24	24	25	26	27	23	24	24	18	21	22	23	25	26	22	21	21	32	38	725
103	78	103	103	103	110	99	97	100	97	102	107	97	87	105	109	86	81	76	76	76	3053
6	6	10	10	11	11	11	9	9	9	9	9	6	7	8	6	8	7	6	8	8	228
455	446	475	469	469	476	463	453	455	450	442	443	424	365	333	354	355	315	281	269	263	12209

MAY

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
48	44	40	37	34	29	24	21	18	20	23	26	29	31	32	34	41	49	58	56	56	51	1195
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	240
5	2	6	10	14	12	10	10	9	9	9	9	10	10	12	14	13	12	11	9	6	7	261
5	4	5	4	5	6	7	5	2	2	3	3	4	6	7	8	6	4	3	3	3	3	150
28	26	31	36	43	42	41	41	41	37	33	29	27	25	30	35	41	47	52	50	48	40	858
19	18	17	17	16	15	13	13	13	12	10	9	6	4	5	6	6	6	8	10	11	12	390
6	6	4	4	4	6	6	6	7	7	6	4	5	7	6	7	7	7	6	4	5	4	181
60	60	34	25	17	41	66	81	63	35	39	31	28	31	32	36	89	143	115	120	125	119	1828
163	161	160	159	138	116	106	96	90	85	79	71	64	56	61	81	101	121	141	161	140	119	3253
36	26	56	44	22	37	22	32	16	18	25	25	10	18	18	20	39	58	20	27	32	25	844
68	128	106	63	21	21	74	100	76	41	67	63	70	70	77	84	93	104	92	80	79	77	2202
99	104	104	106	106	110	102	105	108	110	110	113	114	115	115	119	121	139	138	129	126	126	3352
16	16	16	17	18	19	19	19	20	20	21	21	22	22	22	23	23	23	24	24	24	25	546
561	603	587	530	446	462	498	547	471	404	433	412	397	403	425	475	580	721	674	681	663	616	15308

JUNE

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total	
41	38	38	38	35	31	30	28	27	30	33	31	30	31	32	34	32	31	31	30	30	1128	
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	240	
7	5	7	9	7	5	5	4	4	4	4	5	6	8	10	12	12	11	6	2	4	226	
9	11	11	12	11	10	9	8	8	12	17	19	20	18	16	14	16	17	17	17	15	327	
5	26	18	18	19	26	33	34	36	38	38	47	63	29	31	33	35	38	41	27	13	1017	
0	16	21	21	21	21	21	25	22	8	8	9	9	9	14	18	21	16	11	10	8	390	
9	9	9	10	9	8	8	7	8	8	9	9	9	10	10	9	9	8	8	7	7	248	
2	44	151	35	65	66	81	93	119	103	97	97	70	66	52	144	178	123	73	60	21	23	2380
8	148	162	129	129	149	158	169	179	171	163	149	144	142	140	138	136	135	88	36	41	46	3756
2	42	25	31	30	34	38	44	44	27	33	33	36	39	41	36	32	28	19	25	29	33	1036
7	88	88	89	106	95	95	96	95	99	95	92	91	90	88	90	90	91	91	93	103	112	2587
5	138	142	149	174	165	165	171	171	171	180	180	161	170	170	170	162	164	161	180	180	182	789
9	30	30	31	31	32	31	30	29	28	27	26	25	24	23	22	22	21	21	21	20	20	1868
6	653	708	577	661	657	685	731	751	700	704	754	671	643	625	726	753	692	577	521	479	408	ART. 1718

No	Name of Tributary	JULY																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Cottonwood Creek	30	31	32	34	36	37	36	35	34	32	31	34	38	36	34	39	34
2	Boise Sewer	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
3	Boise Valley Waste	5	6	6	5	6	5	5	6	5	5	5	6	6	7	7	7	1
4	Ballantine Waste	13	12	10	9	6	3	6	9	13	11	8	8	7	6	5	8	5
5	Dry Creek Waste	0	0	0	0	0	0	0	0	0	0	0	13	26	25	24	16	16
6	Thurman Mill Slough	7	6	7	6	5	3	6	10	13	11	10	10	11	13	13	12	13
7	Phyllis Slough	7	7	6	6	6	6	6	6	7	8	7	8	9	8	7	7	7
8	Fire Mile Creek	40	0	0	1	3	34	40	47	53	114	130	41	57	44	78	62	26
9	Middleton Mill Slough	52	100	147	118	88	78	67	57	113	169	156	144	148	152	156	147	110
10	Mason Creek	23	12	15	16	17	20	23	23	22	21	21	20	29	28	29	30	31
11	Mason Drain	118	108	102	102	102	85	82	79	87	81	77	74	84	81	82	83	84
12	Indian Creek	147	148	144	151	151	149	149	145	154	159	148	149	151	151	155	143	149
13	Dixie Drain	20	20	19	19	19	19	18	18	19	19	20	19	19	18	18	18	19
	Total	470	458	496	477	447	447	444	443	527	633	621	534	593	576	615	580	440

No	Name of Tributary	AUGUST																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Cottonwood Creek	37	32	22	25	38	42	34	37	42	49	44	38	27	38	45	51	45
2	Boise Sewer	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
3	Boise Valley Waste	7	10	11	8	6	4	8	2	2	2	2	2	2	2	2	2	4
4	Ballantine Waste	10	10	9	9	9	8	8	7	8	8	8	8	8	8	7	10	10
5	Dry Creek Waste	0	0	0	0	0	0	0	6	6	1	1	1	1	4	1	1	4
6	Thurman Mill Slough	7	8	6	7	7	7	8	8	8	9	9	10	11	9	11	11	8
7	Phyllis Slough	5	5	6	5	5	5	6	6	6	8	7	9	6	5	4	5	6
8	Fire Mile Creek	25	38	39	34	33	27	27	25	23	25	28	23	24	60	24	28	21
9	Middleton Mill Slough	80	66	66	66	54	61	61	43	35	36	33	34	28	28	26	25	25
10	Mason Creek	31	27	33	27	22	22	23	24	28	28	26	24	21	16	18	20	24
11	Mason Drain	91	79	74	76	79	89	81	77	88	89	85	81	78	69	71	73	74
12	Indian Creek	144	139	144	134	144	136	138	133	132	129	132	132	141	137	132	134	149
13	Dixie Drain	22	23	23	23	23	24	24	24	24	32	40	49	19	19	18	39	40
	Total	464	456	451	432	428	433	426	400	410	423	424	419	384	403	427	407	423

No	Name of Tributary	SEPTEMBER																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Cottonwood Creek	36	27	27	42	42	38	39	43	47	52	49	49	49	53	56	59	48
2	Boise Sewer	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
3	Boise Valley Waste	6	5	5	5	5	6	7	7	7	8	8	7	10	11	10	8	7
4	Ballantine Waste	11	11	11	11	12	12	12	13	14	14	12	14	13	14	8	3	3
5	Dry Creek Waste	1	1	1	1	1	1	1	1	1	1	1	13	14	13	10	6	6
6	Thurman Mill Slough	6	8	6	6	7	7	7	8	8	8	9	6	7	7	7	6	6
7	Phyllis Slough	8	7	6	5	5	5	7	8	6	9	6	5	5	6	8	7	4
8	Fire Mile Creek	9	8	8	8	9	8	8	9	44	24	21	27	33	50	52	54	54
9	Middleton Mill Slough	22	24	22	30	35	40	49	95	132	105	98	97	112	112	123	115	101
10	Mason Creek	12	12	12	7	3	2	1	4	7	4	10	7	8	9	20	10	5
11	Mason Drain	74	85	67	74	85	78	85	87	89	89	85	85	85	86	99	87	85
12	Indian Creek	138	136	136	137	143	139	141	146	164	158	158	160	171	183	188	196	173
13	Dixie Drain	20	20	20	20	20	20	20	20	20	21	26	26	27	27	26	24	24
	Total	351	362	339	354	395	372	385	449	547	444	442	504	542	574	615	583	524

CHART 6A.

JULY

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
34	32	31	34	38	36	34	39	34	21	32	32	34	37	33	35	28	28	28	26	36	37	39	1081
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	248
5	5	5	6	6	7	7	7	1	1	1	7	6	5	6	6	6	5	4	4	5	2	2	153
13	11	8	8	7	6	5	8	5	6	7	8	6	5	3	3	9	8	8	9	8	8	10	237
0	0	0	13	26	25	24	16	16	24	20	18	1	1	3	0	0	0	0	0	0	0	0	192
12	11	10	10	11	12	12	12	13	11	8	8	8	8	3	9	6	9	10	10	10	6	6	260
7	8	7	8	9	8	7	7	7	7	6	6	6	5	5	5	5	5	6	7	6	4	5	194
53	114	130	41	57	44	78	62	26	20	18	40	20	23	24	23	85	72	50	57	41	21	31	1213
113	169	156	144	148	152	156	147	110	52	50	48	46	44	43	42	47	52	56	60	65	70	76	2753
22	21	21	20	29	28	29	30	31	32	33	34	35	35	25	23	23	34	38	36	34	32	28	823
87	81	77	74	84	81	82	83	84	86	88	91	87	85	91	80	74	75	76	74	80	87	87	2672
154	154	148	149	151	151	155	143	149	136	135	133	135	155	153	146	156	150	145	151	138	139	136	4545
19	19	20	19	19	18	18	18	18	19	19	19	19	20	20	20	21	21	21	22	22	22	22	607
527	633	621	534	593	576	615	580	502	440	423	452	441	431	417	394	427	447	460	474	453	436	450	14978

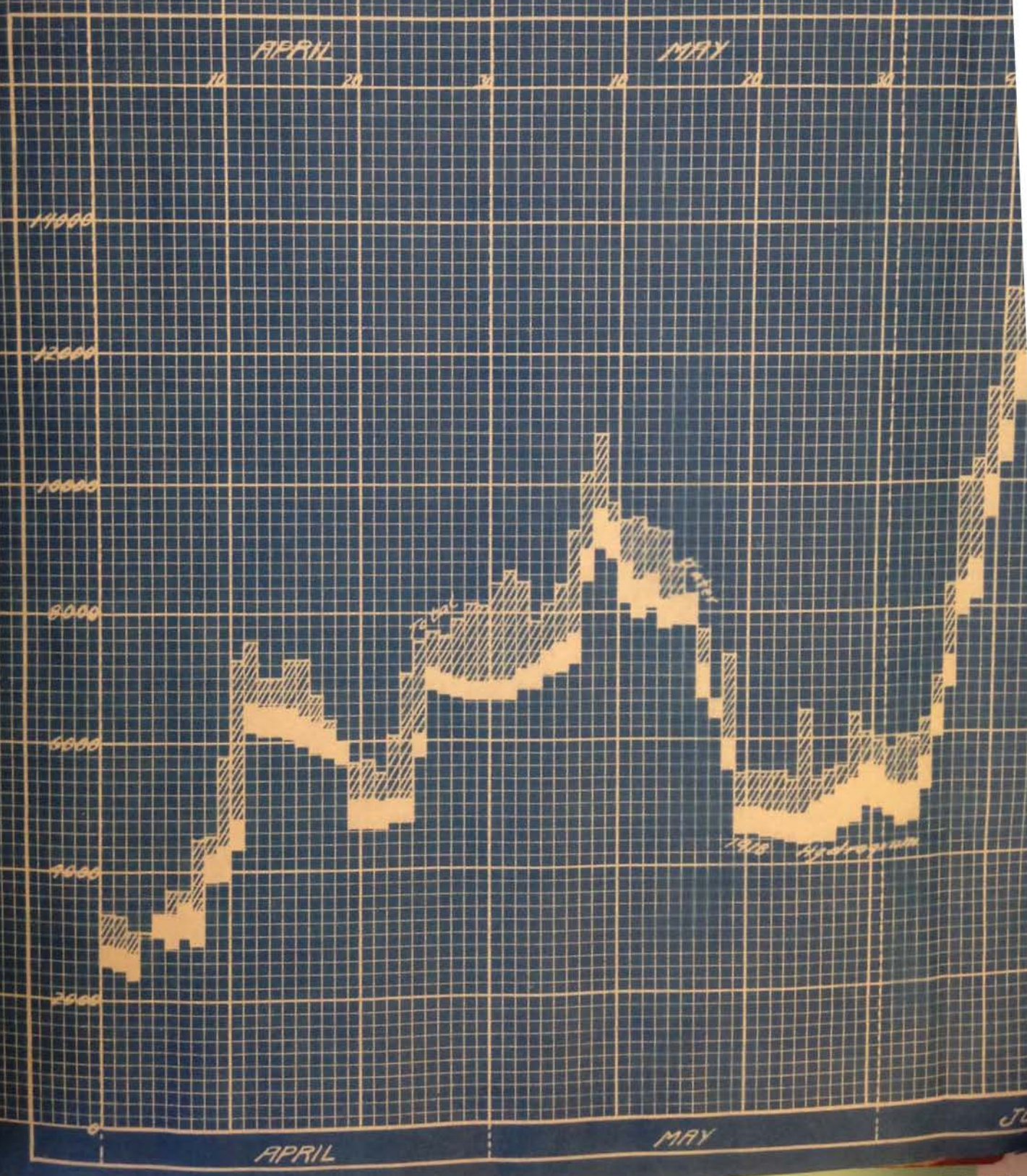
AUGUST

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2	2	2	2	2	2	2	2	2	4	6	6	6	5	5	5	6	7	6	5	4	4	5	145
7	8	8	8	8	8	8	7	10	10	9	9	9	8	8	8	8	6	7	10	8	9	11	264
6	6	1	1	1	1	1	1	1	1	4	6	3	1	1	1	1	1	1	1	1	1	1	47
8	8	9	9	10	11	9	11	11	8	6	10	8	6	8	6	6	5	4	4	4	5	6	228
6	6	8	7	9	6	5	4	5	6	6	6	6	8	8	9	9	7	4	6	6	5	5	192
23	23	25	28	23	24	60	84	28	21	45	42	34	39	41	29	17	12	10	11	10	11	9	895
43	35	35	33	34	28	28	26	25	25	93	132	134	132	132	127	112	120	35	15	15	22	22	1878
24	28	28	26	24	21	16	18	20	24	33	29	36	28	8	7	10	5	4	1	1	1	3	591
77	88	89	85	81	78	69	71	73	74	85	87	90	98	100	98	95	99	86	74	85	95	86	2619
132	129	133	132	141	137	132	134	149	157	159	153	171	166	149	154	147	139	132	127	136	128	131	4374
24	24	32	40	49	19	19	18	39	40	20	21	22	20	21	20	20	21	19	19	19	19	20	746
400	410	423	424	419	384	403	427	407	423	673	557	550	566	543	501	481	478	360	317	327	345	334	13425

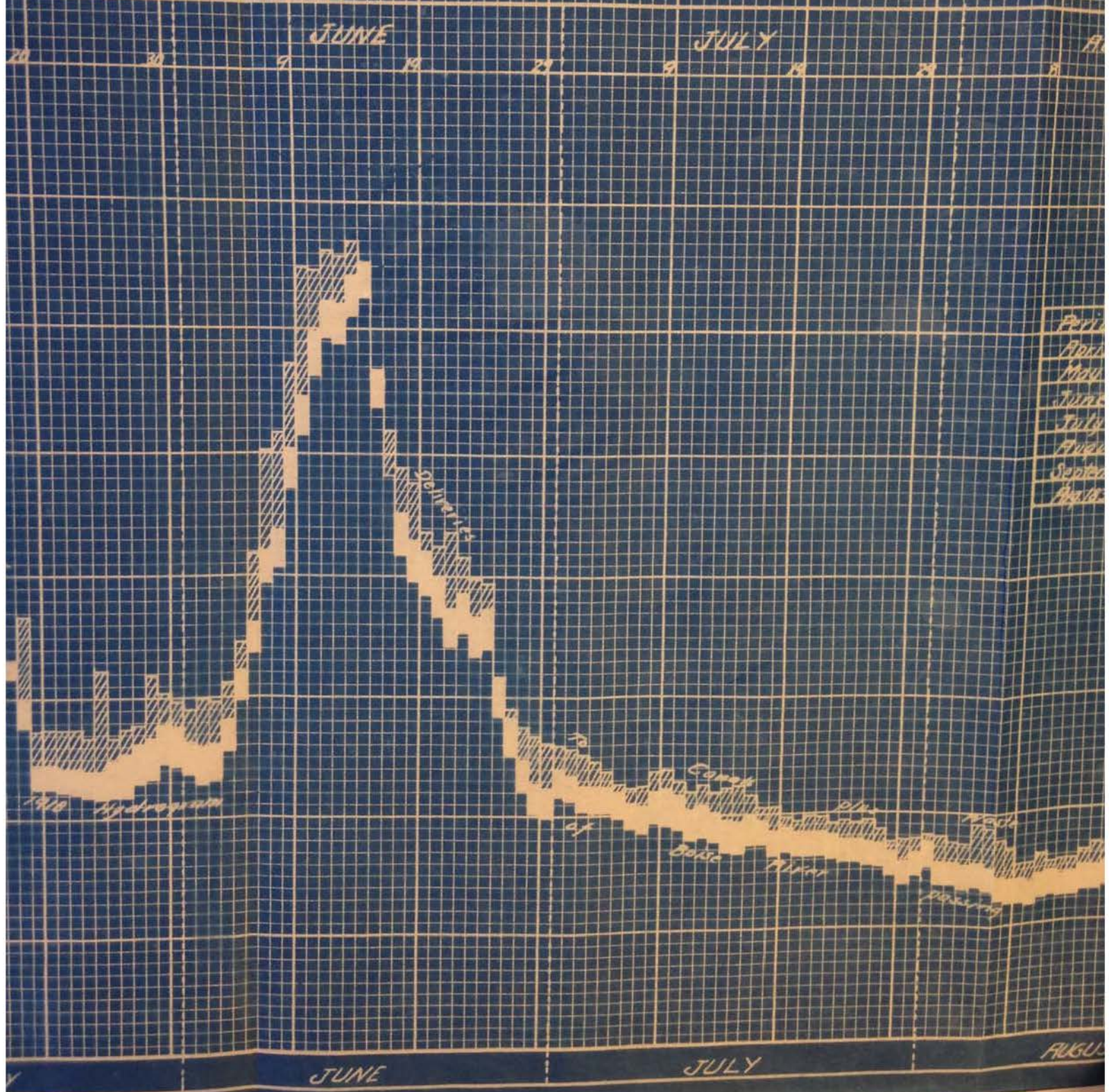
SEPTEMBER

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
43	47	52	49	49	49	53	56	59	48	52	58	58	59	61	64	66	68	66	63	60	59	58	1568
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	240
7	7	8	8	7	10	11	10	8	7	8	8	7	7	8	9	10	7	7	6	6	7	7	219
13	14	14	13	14	13	14	8	3	3	3	2	2	2	3	3	4	3	2	2	2	2	2	221
1	1	1	1	13	14	13	10	6	6	52	25	22	13	21	29	20	13	12	6	6	8	10	310
8	8	8	9	6	7	7	7	6	6	5	5	5	7	8	7	8	9	10	9	10	10	10	222
8	6	4	6	5	5	6	8	7	4	6	7	7	7	7	7	6	5	8	6	4	5	5	1105
9	44	24	21	27	33	50	52	54	54	54	55	55	56	56	211	44	42	22	21	21	21	21	2601
95	132	105	98	97	112	112	123	115	101	81	76	78	69	129	135	126	117	108	99	90	81	72	246
4	7	4	10	7	8	9	20	10	5	5	5	5	6	8	26	12	9	9	8	8	8	10	2427
87	89	89	85	85	85	86	89	87	85	79	85	74	79	81	93	76	74	74	74	73	66	74	4083
146	164	156	158	160	171	183	188	196	173	171	174	178	173	174	175	177	179	181	183	185	187	181	758
20	20	21	26	26	27	27	26	24	24	23	22	21	20	22	25	28	31	33	35	38	40	39	15082
449	547	494	492	504	542	574	615	583	524	547	530	520	506	586	786	585	565	548	520	511	502	497	15082

HYDROGRAPH SHOWING WATER
AND NOTUS FOR THE YEAR



GRAM SHOWING WATER DELIVERIES, BY DAYS, ON BOISE RIVER BETWEEN HIGHLAND AND
 IN NOTUS FOR THE IRRIGATION SEASON OF 1918, INCLUDING STORAGE WATER.



BETWEEN HIGHLAND
STORAGE WATER.

CHART 7. PART 1

AUGUST

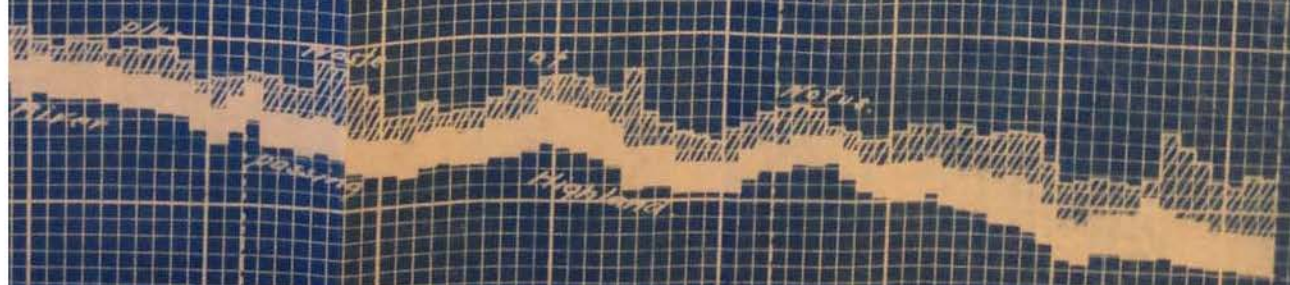
SEPTEMBER

Average Daily Discharge in Second-foot.

Period	Total Flow at Highland	Total Flow at Canyon	Frietary Flow	Seepage Flow	Net Gain to River	Gain per Acre
April	2826	39108	407	677	1284	23
May	6304	7952	888	752	1278	20
June	1660	8992	628	653	1282	17
July	3508	9257	103	266	100	71
August	2863	3264	433	368	801	32
September	1752	2670	503	235	938	53
Average	4412	3928	491	525	1016	23

(Includes Storage water)

Indicates Seepage Return Flow.
Indicates Surface Return Flow.



AUGUST

SEP

SCANNED
APR 11 2012
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BETWEEN HIGHLAND
STORAGE PISTERS.

CHART 7

AUGUST

SEPTEMBER

Average Daily Discharge in Second-foot

Period	Total Flow at Highland	Local Ditch Flow	Tributary Flow	Seepage Flow	Return Flow	Gain Loss
April	4820	3908	507	577	1084	23
May	6304	7552	828	752	1248	20
June	7660	8892	624	653	1292	17
July	3528	2257	283	266	799	21
August	2863	3264	333	368	561	32
September	1752	2520	303	435	935	53
Post 15 days	4912	3928	491	525	1016	23

(Includes Storage water)

- Indicates Seepage Return Flow
- Indicates Surface Return Flow



AUGUST

SEPTEMBER

SCANNED
APR 11 1912

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JUL 20 1912

10/15/2017

FIPFVL

175X

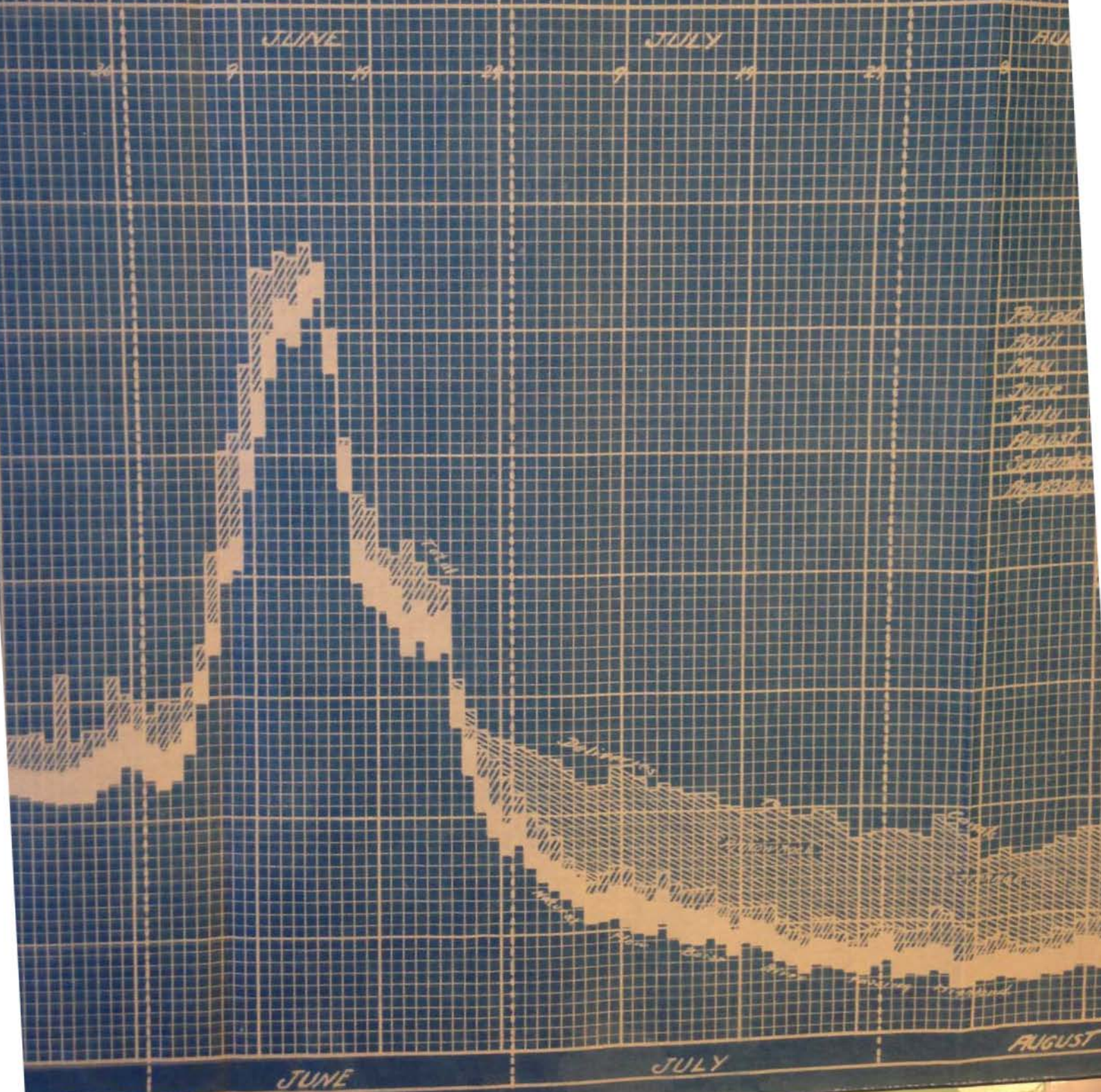


APRIL

MAY

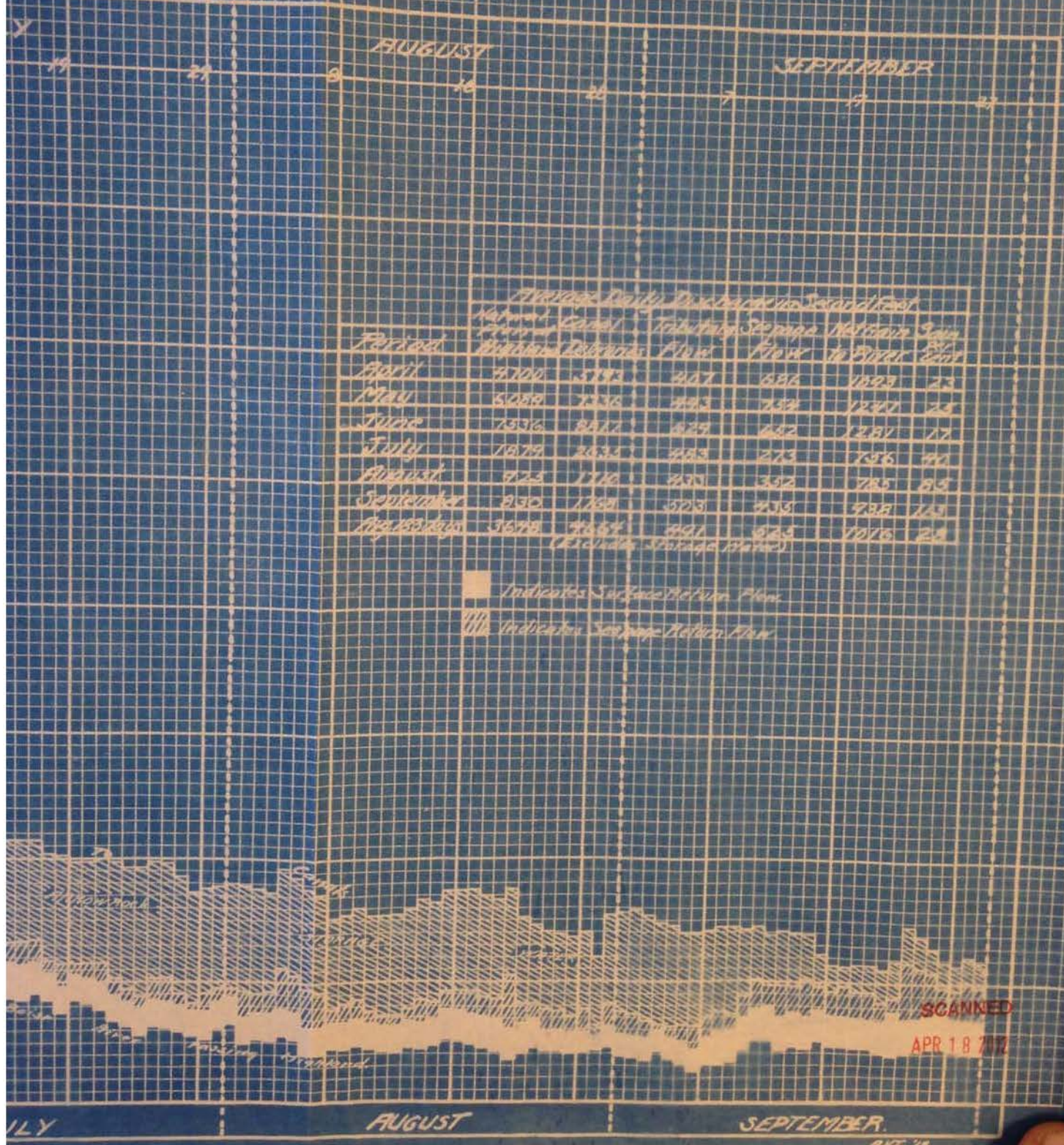
JUNE

HYDROGRAPH SHOWING, DAY BY DAY, NATURAL FLOW OF BOISE RIVER PASSING HIGH TRIBUTARY AND SEEPAGE GAIN TO RIVER, DELIVERIES OF STATE TOWNSHIP AND STORAGE WATER DELIVERED, FOR THE IRRIGATION SEASON 1918



COPY OF BOISE RIVER PASSING HIGHLAND,
DELIVERIES OF SAME TO CANALS,
OF IRRIGATION SEASON OF 1918.

CHART 8.



SCANNED
APR 18 2012

ANNED
F. JR.

TABLE SHOWING WATER AVAILABLE
FOR THE IRRIGATION SEASON

		APRIL																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Natural Flow Boise River Passing Highland.		2570	2486	2340	3045	3008	2830	2999	2874	3842	3860	4362	6182	6097	6097	6095	5970	5830	5537
Total Deliveries to Canals		3325	3178	3031	2934	3334	3670	3665	4465	4541	5765	7257	7538	6981	6976	7278	7271	6704	6083
Total Tributary Flow		322	358	413	418	404	493	487	475	384	455	446	475	469	469	476	463	453	455
Total Seepage Flow		433	334	278	529	78	347	179	116	288	1450	2449	881	416	410	757	838	421	917
Net Gain Highland to Notes		755	692	691	711	326	840	666	1591	672	1905	2895	1356	884	879	1233	1301	874	546
		MAY																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Natural Flow Boise River Passing Highland.		5984	6404	6807	6807	7015	7085	7215	8510	9020	8860	8102	7368	7653	6522	6544	6834	6187	6405
Total Deliveries to Canals		7799	8401	8487	7841	8161	8440	9280	10192	10798	9678	9377	8936	8296	8012	7485	7176	7220	6108
Total Tributary Flow		277	298	339	386	412	456	471	492	580	561	603	587	530	446	462	498	547	471
Total Seepage Flow		1538	1699	1341	648	734	899	1594	1190	1196	257	672	981	713	1044	479	56	486	768
Net Gain Highland to Notes		1815	1997	1680	1034	1146	1355	2065	1682	1766	818	1275	1568	1243	1490	941	442	1033	297
		JUNE																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Natural Flow Boise River Passing Highland.		4676	4556	4644	5091	5945	6725	7877	8116	9456	10310	11238	11876	11780	12207	12506	11324	9444	7893
Total Deliveries to Canals		5748	5953	5924	6224	6883	8357	10026	10323	11419	12491	12946	13208	13152	13397	12045	10695	10143	9341
Total Tributary Flow		579	620	604	512	483	506	561	601	636	653	708	577	661	657	625	731	751	700
Total Seepage Flow		493	777	676	621	445	1126	1588	1615	1327	2028	1002	755	711	528	146	1360	22	748
Net Gain Highland to Notes		1072	1397	1280	1133	928	1632	2149	2216	1963	2681	1710	1332	1572	1185	539	629	729	1440
		JULY																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Natural Flow Boise River Passing Highland.		3524	3181	2916	2773	2605	2470	2176	2197	2210	2052	1968	1934	2086	1858	1735	1698	1819	1718
Total Deliveries to Canals		4386	4018	3852	3608	3278	3023	2825	2985	3091	3024	2788	2758	2972	2770	2611	2648	2679	2320
Total Tributary Flow		470	458	496	477	447	447	444	443	527	633	621	534	593	576	615	580	502	440
Total Seepage Flow		392	379	440	358	226	106	205	355	354	339	199	290	293	336	261	370	358	162
Net Gain Highland to Notes		862	837	936	835	673	553	649	798	881	972	820	874	886	912	876	950	860	602

CHART 9.

IRRIGATING WATER AVAILABLE AND DELIVERIES THEREOF, BY DAYS,
THE IRRIGATION SEASON OF 1918. STORAGE WATER EXCLUDED.

APRIL

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total	Avg.	
62	6182	6097	6097	6045	5970	5830	5537	5144	3862	4195	4923	4723	4762	5770	6807	6777	6553	6124	5917	140999	4700
57	7538	6981	6976	7278	7271	6704	6083	5494	4812	5169	5516	6045	7048	7582	7699	7634	7765	7636	7418	173780	5793
46	475	469	469	476	462	453	455	450	442	443	424	405	333	354	355	365	381	369	263	12209	407
49	881	415	410	757	838	421	91	700	508	581	670	947	1963	1858	537	532	935	1243	1218	20572	686
95	1356	884	879	1233	1301	874	546	350	950	1024	1094	1312	2296	1812	892	847	1216	1512	1481	32781	1093
MAY																					

MAY

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Avg.
67368	7053	6572	6544	6834	6187	6405	5535	4507	4507	4486	4247	4370	4173	4190	4190	4590	4617	4911	4876	188751	6089
778936	8296	8012	7485	7276	7120	6105	7308	5711	5438	5721	5794	5221	6427	5320	5301	5570	5039	6009	5920	227428	7336
33527	530	446	462	425	547	471	462	423	412	397	403	425	425	588	221	674	681	662	616	15308	493
72981	713	1044	479	56	486	768	1369	471	539	590	664	506	1576	342	390	283	1083	475	434	23369	754
51568	1243	1498	941	442	1033	297	1773	904	951	987	1067	931	2051	930	1111	957	1764	1138	1050	38677	1247
TIME																					

JUNE

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total	Avg.	
12	11876	11780	12207	12500	11314	9944	7893	3507	7446	7170	6675	6969	6665	6200	5088	4694	4021	3603	3394	226072	7536
46	13205	13153	13395	13045	16085	1019	87341	9108	8466	8335	8600	8218	7702	7848	6095	5795	5090	4923	7607	264527	8817
8	577	661	657	685	731	751	700	704	754	671	654	685	726	753	671	577	521	479	488	18868	629
12	755	711	528	146	1360	22	748	897	272	494	1282	629	561	345	82	219	505	828	725	19587	652
0	1332	1372	1185	539	629	727	1448	1601	1026	1165	1725	1244	1287	1098	618	796	1236	1007	1213	38455	1281

JULY

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Avg.
1	1924	2086	1858	1735	1698	1819	1718	1486	1719	1651	1560	1385	1272	1111	1283	1265	1192	1118	1057	58257	1879
2	2758	2972	2770	2611	2648	2679	2328	2308	2128	2318	2263	2096	1867	1735	1645	1651	1800	1666	1812	81685	2635
1	534	543	576	615	580	502	448	423	452	411	431	412	389	422	427	460	274	252	236	17978	483
4	290	293	336	261	370	358	168	397	127	156	265	244	241	218	315	186	134	95	322	8450	273
1	874	886	912	876	960	860	602	810	579	587	696	661	595	645	762	786	608	548	718	23428	756

Excess	Requirements	Excess	Requirements	Excess	Requirements
60	540	276	324	357	324
141	540				

SCANNED

APR 18 2012

AUGUST																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Natural Flow Boise River Passing Highland	1327	994	1055	1033	1121	1073	846	851	901	893	958	910	830	819	895	875	964
Total Deliveries to Canals	1906	1861	1910	1867	2231	2166	1937	1836	1579	1635	1729	1446	1455	1440	1577	1688	1676
Total Tributary Flow	764	756	751	732	728	723	726	700	710	723	724	719	684	703	727	707	723
Total Seepage Flow	115	711	304	403	682	660	665	585	268	319	347	151	241	231	255	406	289
Net Gain Highland to Notes	579	861	755	835	1110	1093	1091	985	678	742	771	590	625	634	682	813	712
SEPTEMBER																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Natural Flow Boise River Passing Highland	784	752	718	858	725	659	520	623	619	655	878	1037	1044	856	912	900	927
Total Deliveries to Canals	1479	1449	1350	1280	1237	1261	1235	1409	1505	1464	1790	2024	1963	1973	1953	2048	1977
Total Tributary Flow	351	362	339	354	395	372	385	449	547	444	492	504	542	579	615	583	524
Total Seepage Flow	344	336	293	68	117	230	330	337	339	315	420	443	377	538	426	559	445
Net Gain Highland to Notes	695	697	632	422	572	602	715	746	886	809	912	987	919	1117	1041	1142	969

Summary Table.

Period	Average Daily Discharge in Sec.			
	Natural Flow at Highland	Canal Deliveries	Tributary Flow	Seepage Flow
April	4700	5793	407	686
May	6089	7336	493	754
June	7536	8817	629	652
July	1879	2635	483	273
August	925	1710	433	352
September	830	1768	503	435
Aug. 1st to Sept. 1st	3648	4664	491	525

CHART 9-A.

AUGUST

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Avg.
831	901	893	958	916	830	814	895	875	964	1064	1021	981	893	820	700	809	925	846	850	807	817	879	930	28689	925
836	1574	1635	1729	1786	1755	1448	1577	1088	1676	1827	1872	1820	1728	1714	2105	1641	1628	1575	1515	1411	1565	1085	1610	53023	1710
800	940	423	424	419	584	463	427	407	423	513	557	550	566	543	501	481	478	360	317	327	345	334	343	13425	433
585	268	319	347	161	241	231	255	406	289	250	246	339	267	351	904	351	225	337	358	277	403	178	337	10909	352
885	678	742	771	580	625	634	682	813	712	763	853	889	833	894	1405	832	703	697	675	604	748	206	680	24334	785

SEPTEMBER

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total	Avg	
623	619	655	878	1037	1044	856	912	900	1008	927	948	936	927	817	791	822	834	894	911	889	841	825		24910	830
1409	1505	1464	1790	2024	1963	1973	1953	2048	1977	1838	1903	1848	1844	1718	1774	2371	2252	2181	1953	1901	2006	1974		53051	1768
444	547	444	492	504	542	574	615	583	524	547	530	520	506	586	786	585	565	540	520	511	502	497		15082	503
337	339	315	420	443	377	538	426	554	445	364	477	432	411	315	202	964	853	747	522	501	663	652		13059	435
1786	886	809	912	987	919	1117	1044	1142	969	911	1007	952	917	901	988	1549	1418	1287	1042	1012	1165	1149		28141	938

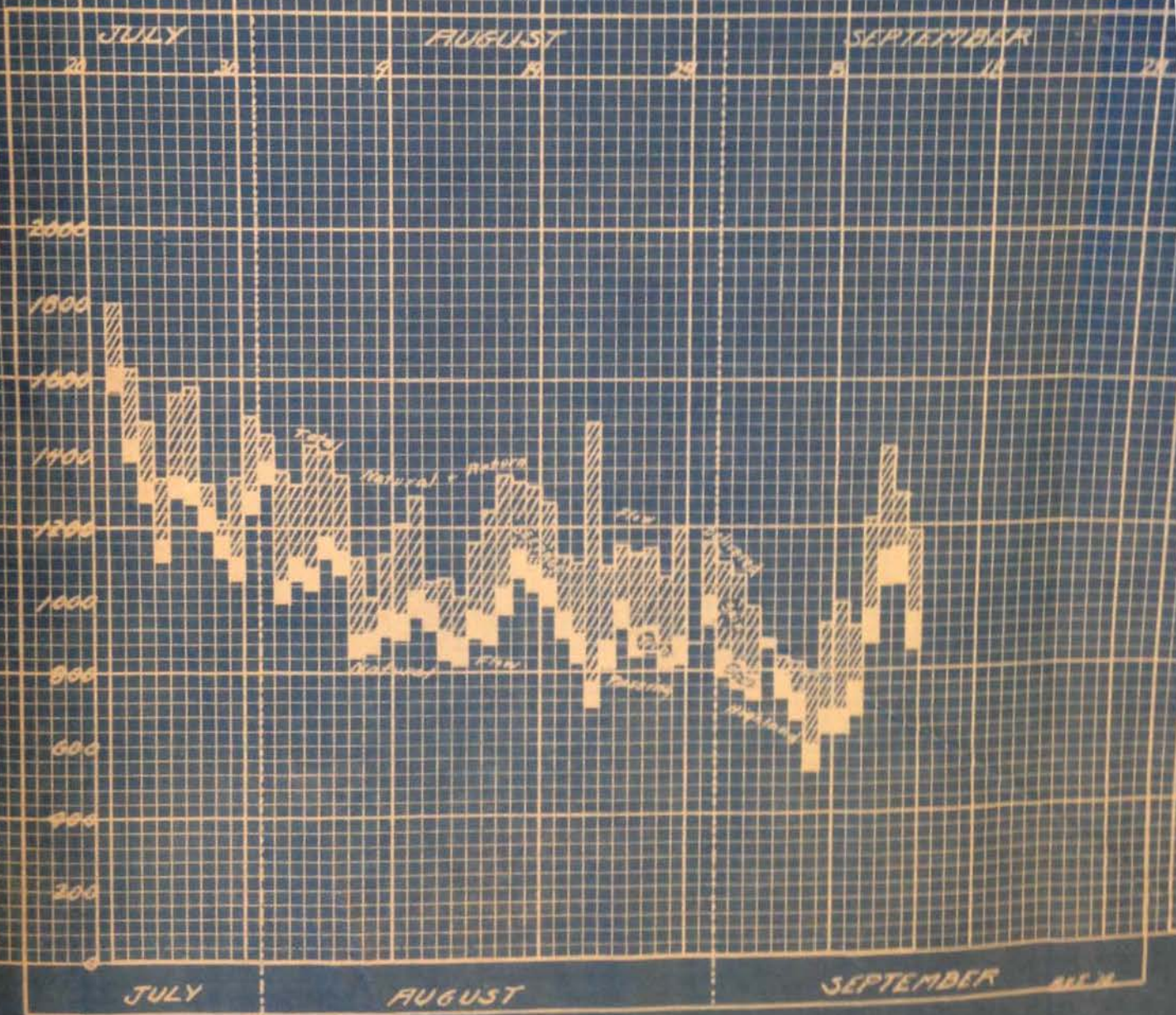
Summary Table.

Period	Average Daily Discharge in Second Feet					
	Natural Flow at Highland	Canal Deliveries	Tributary Flow	Seepage Flow	Net Gain to River	Gain per cent.
April	4700	5793	407	686	1093	23
May	6089	7336	493	754	1247	25
June	7536	8817	629	652	1281	17
July	1879	2635	483	273	756	40
August	925	1710	433	352	785	85
September	830	1768	503	435	938	113
Aug 1 to Sep 30	3648	4664	491	525	1016	28

N.T. 78.

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HYDROGRAPH SHOWING DAILY WATER DELIVERIES OF NATURE AND RETURN FLOW OF BOISE RIVER FOR THE SECTION BETWEEN HIGHLAND AND CANNONVILLE CANAL FOR THE PERIOD JULY 22 TO SEPTEMBER 14, 1916.



AND RUGREIN, SHOWING DAILY WATER DEMANDS, OF NATURAL
AND RETURN FLOW OF BOISE RIVER FOR THE SECTION
BETWEEN HIGHLAND AND CALDWELL HIGHLINE CANAL
FOR THE PERIOD JULY 22 TO SEPTEMBER 14, 1916



CHART NO.

AND DISCHARGE SHOWING DAILY WATER DELIVERIES OF NATURAL
AND RETURN FLOWS OF BOISE RIVER FOR THE SECTION
BETWEEN HIGHLAND AND CALDWELL HIGHLINE CANAL
FOR THE PERIOD JULY 22 TO SEPTEMBER 14, 1918

D. DELIVERIES
MEAN

AUGUST

SEPTEMBER



Period	Natural Flow at Highland	Return Flow	Discharge at Caldwell	Total Flow	Mean Flow	Mean Discharge	Mean Total
July 22-31	1249	1476	69	2784	22.7	18	28
Aug 1-31	925	1193	69	2187	21.0	20	24
Sept 1-14	766	1029	82	1877	26.3	24	28
Aug 22-31	999	1204	71	2274	26.0	26	28

27 28 29 30 31

1365 1192 1118 1059 1291

1073 1312 1315 1341 1409

69 67 67 61 65

244 53 30 226 193

312 120 97 287 258

27 28 29 30 31

850 807 817 879 930

1140 1064 1200 657 1155

55 64 62 62 64

231 191 321 284 161

290 255 393 222 225

27 28 29 30

16

14

1

25

36

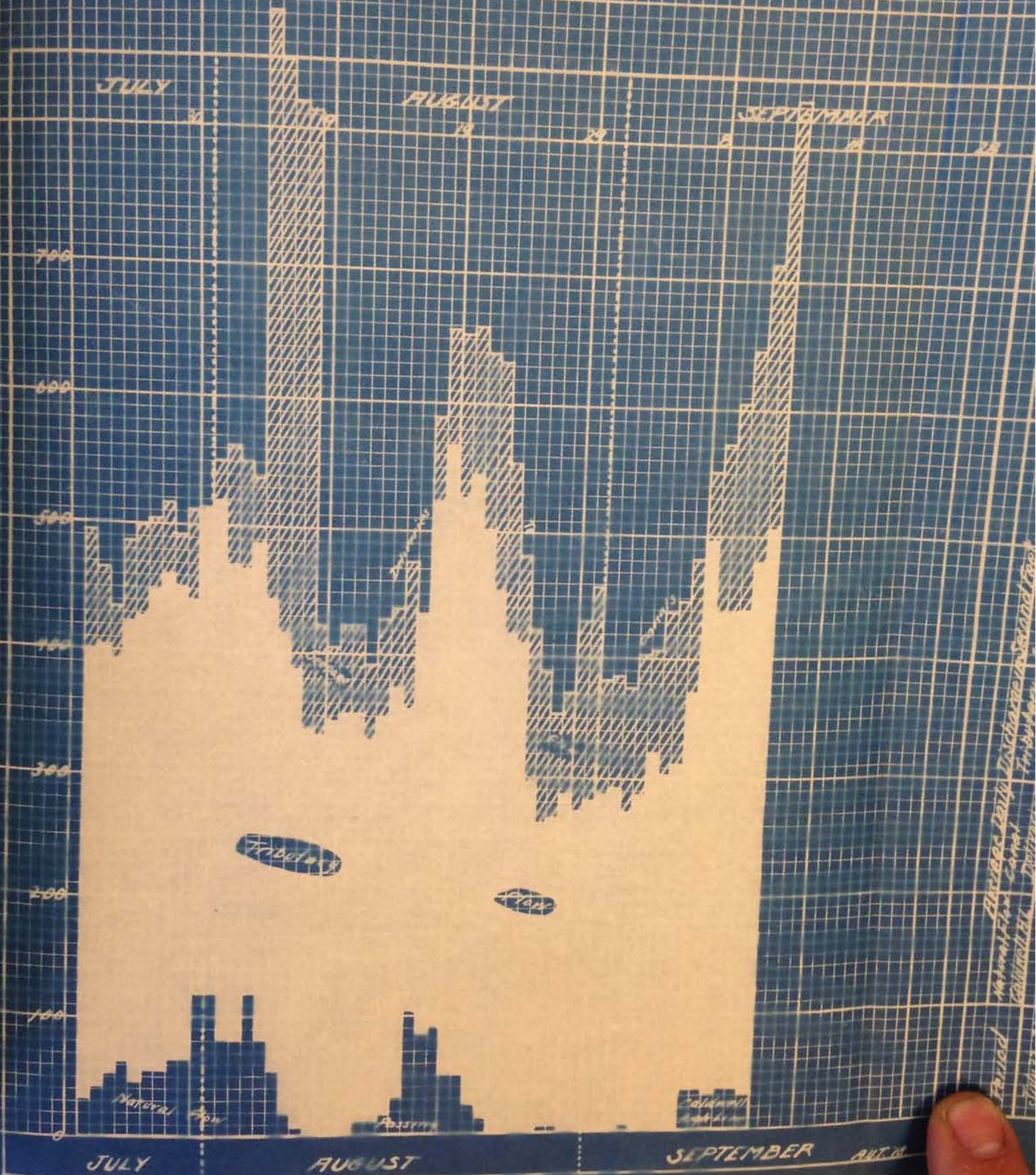
10

AUGUST

SEPTEMBER

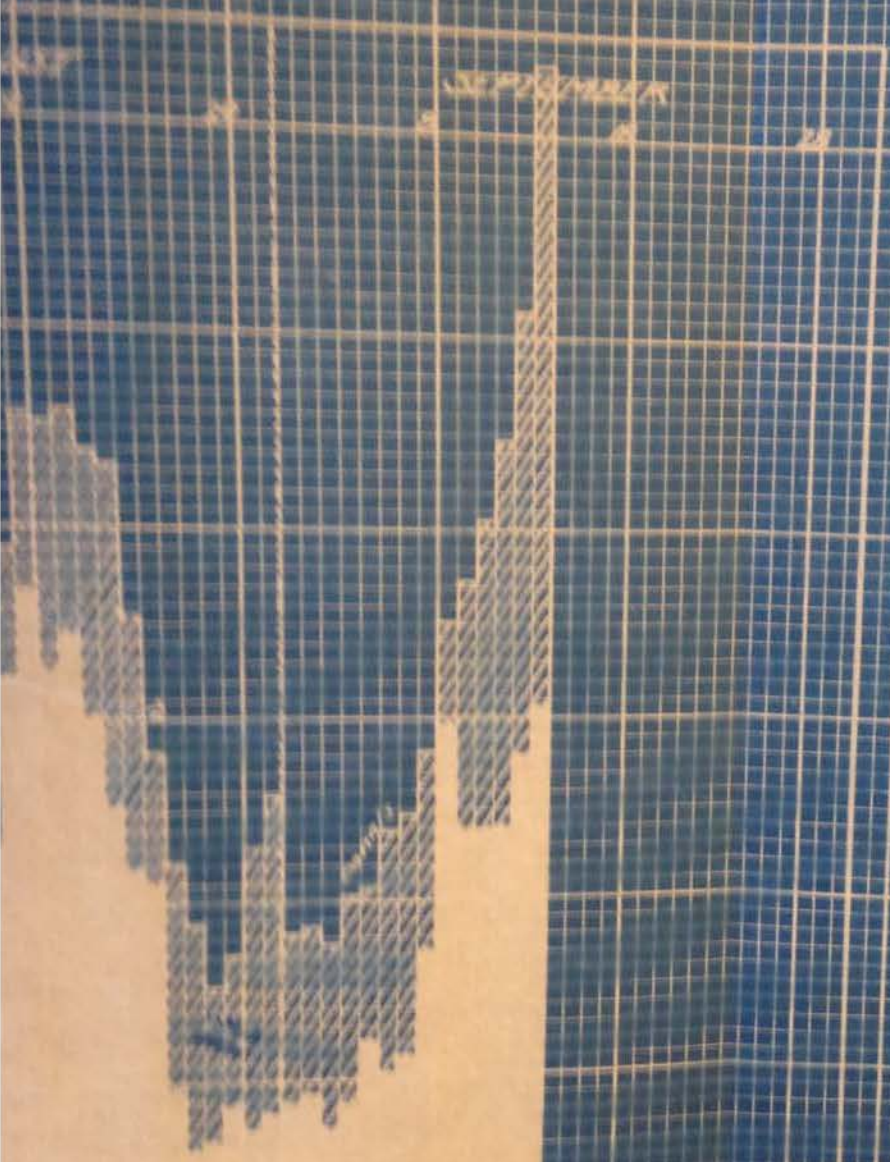
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HYDROGRAPH SHOWING DAILY, NATURAL FLOW OF BOISE RIVER PASSING CHADWELL
HIGH LINE CANAL, TRIBUTARY AND SEEPAGE GAIN, DELIVERIES TO CANALS;
FOR THE SECTION BETWEEN THE CHADWELL HIGH LINE CANAL AND
NOTUS FOR THE PERIOD JULY 22 TO SEPTEMBER 14 INC. 1918.



WATER PASSING CHANNELL
 DELIVERIES TO CHANNALS
 AND LINE CANAL AND
 TO CHANNALS IN 1918.

CHART II.



Period	Water, Ft. Canal	Deliveries, Ft. Canal	Discharge, Ft. Canal	Storage, Ft. Canal	Water, in per cent.
Aug 22-31	60	491	875	38	431
Aug 1-31	34	538	369	139	503
Sept 1-14	17	511	353	192	500
Aug 22-31	35	525	363	123	590
					1700

DELIVERIES
 BETWEEN

27	28	29	30	31
1265	1192	1118	1058	1241
677	1312	1315	1341	1499
68	67	67	61	65
244	53	30	226	193
312	120	97	287	258

27	28	29	30	31
8850	807	817	879	930
1190	1062	1200	657	1155
55	64	62	62	64
231	191	321	284	161
290	255	383	222	225

27	28	29	30	To
				10
				14
				16
				25
				36
				AV.

TABLE SHOWING NATURAL FLOW OF BOISE RIVER
TO CANALS BY DAYS, JULY 22 - SEPT. 14, inc. 19
HIGHLAND AND THE CALDWELL

	JULY																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Natural Flow Boise River Passing Highland																			
Deliveries to Canals																			
Tributary Gain																			
Seepage Gain																			
Net Gain Highland to Caldwell High Line																			
	AUGUST																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Natural Flow Boise River Passing Highland	1327	994	1055	1032	1121	1073	846	851	901	893	958	916	830	814	895	875	964	1064	1021
Deliveries to Canals	1451	1354	1315	1425	1404	1345	1112	1004	1130	1204	1283	1044	1052	1008	1154	1245	1344	1324	1304
Tributary Gain	66	69	66	67	68	69	66	68	74	77	72	67	67	69	74	83	74	74	81
Seepage Gain	58	291	194	326	215	203	200	85	155	234	253	65	155	125	189	287	310	186	207
Net Gain Highland to Caldwell High Line	124	360	260	393	283	272	266	153	229	311	325	132	222	194	263	370	384	260	288
	SEPTEMBER																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Natural Flow Boise River Passing Highland	784	752	718	858	725	659	520	623	619	655	878	1037	1044	856					
Deliveries to Canals	1100	1067	977	882	834	825	790	931	990	928	1217	1414	1288	1171					
Tributary Gain	68	70	68	73	75	72	74	80	85	91	88	97	101	106					
Seepage Gain	248	245	191	49	34	94	196	228	286	182	251	280	143	209					
Net Gain Highland to Caldwell High Line	316	315	259	24	109	166	270	308	371	273	339	377	244	315					

Period	Tributary	Seepage	Total Gain
July 22-31	64	163	227
Aug. 1-31	69	201	270
Sept. 1-14	82	181	263
Avg. 55 days	71	189	260

NATURAL FLOW OF BOISE RIVER PASSING HIGHLAND AND DELIVERIES
 BY DAYS, JULY 22 - SEPT. 14, inc. 1918, FOR THE SECTION BETWEEN
 HIGHLAND AND THE CALDWELL HIGH LINE CANAL.

JULY																								Total	Avg.
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
														1566	1385	1272	1111	1283	1265	1192	1118	1054	1241	12487	1249
														1801	1624	1486	1333	1568	1677	1312	1215	1341	1499	14756	1476
														64	56	56	67	68	68	67	67	61	65	639	64
														171	183	158	155	217	244	53	30	226	193	1630	163
														235	239	214	222	285	312	120	97	287	258	2269	227

AUGUST																															Total	Avg
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31										
7	901	893	958	916	830	814	895	876	964	1064	1031	981	893	820	700	809	925	849	850	807	817	879	930	28689	925							
08	1130	1244	1283	1440	1052	1008	1158	1245	1348	1324	1309	1267	1117	1100	1486	1089	1149	1124	1140	1062	1200	1657	1155	37065	1195							
09	74	77	74	63	67	69	74	83	74	74	81	75	70	67	62	64	67	63	59	64	62	62	64	2130	69							
10	155	234	253	64	155	125	189	287	310	186	207	211	134	213	724	216	157	213	231	191	321	284	161	6276	201							
53	237	311	325	132	222	194	263	370	384	260	288	286	224	280	784	280	224	276	290	255	253	222	225	8376	270							

SEPTEMBER																					Total	Avg.	
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
619	610	878	1037	1040	856																	10728	766
890	938	1217	1414	1200	1171																	14414	1029
85	91	88	87	101	106																	1148	82
286	182	251	280	143	209																	2538	181
371	223	339	377	244	315																	3686	263

AUG. 18.

Period	Tributary	Seepage	Total Gain
July 22-31	64	163	227
Aug. 1-31	69	201	270
Sept. 1-14	82	181	263
Avg. 55 days	71	189	260

TABLE SHOWING THE AVAILABLE WATER PASSING
AND DELIVERIES TO CANALS, BY DAYS, JULY
AND AUGUST, 1914, BETWEEN THE CALDWELL HIGH

JULY																	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Natural Flow Boise River																	
Passing Caldwell High Line																	
Deliveries to Canal Canals																	
Tributary Gain Gain																	
Seepage Gain Gain																	
Net Gain Caldwell High Line to Northside																	

AUGUST																	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Natural Flow Boise River																	
Passing Caldwell High Line																	
Deliveries to Canal Canals																	
Tributary Gain Gain																	
Seepage Gain Gain																	
Net Gain Caldwell High Line to Northside																	

SEPTEMBER																	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Natural Flow Boise River																	
Passing Caldwell High Line																	
Deliveries to Canal Canals																	
Tributary Gain Gain																	
Seepage Gain Gain																	
Net Gain Caldwell High Line to Northside																	

Period	Tributary	Seepage To
July 22-31	375	56
Aug. 1-31	364	139
Sept. 1-14	358	142
Aug. 55 days	365	125

(Storage water excluded)

TABLE WATER PASSING THE CALDWELL HIGH LINE CANAL
 CANALS, BY DAYS, JULY 22 TO SEPT. 14, Inc. 1918, FOR THE
 THE CALDWELL HIGH LINE CANAL AND NOTUS.

CHART 13.

JULY																															Total	Avg.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</

	Tributary	Seepage	Total Gain
1	375	56	431
1	364	139	503
4	358	142	500
Loss	365	125	490

(Storage water excluded)

Period	Available Return Flow	60% Canal Requirements	100% Canal Requirements	Excess
July 22-31	600	324	540	60
Aug. 1-31	681	324	540	357

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TABLE SHOWING RETURN FLOW ACTUALLY FLOWING INTO DO
 REQUIREMENTS, BASED ON 1918 DECREE IN SECT
 THE PERIOD JULY 22 TO SEPTEMBER

	JULY																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Available Water																			
Tributary + Seepage Flow																			
Canal Requirements																			
60% 1918 Decree																			
Excess +																			
Deficit -																			
Canal Requirements																			
100% 1918 Decree																			
Excess +																			
Deficit -																			

	AUGUST																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Available Water																				
Return + Seepage Flow	430	482	470	417	802	796	800	807	424	406	421	423	378	415	419	443	328	503	565	603
Canal Requirements																				
60% 1918 Decree	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324	324
Excess +	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Deficit -	106	158	146	93	478	472	476	483	100	82	97	99	54	91	95	119	4	179	241	279
Canal Requirements																				
100% 1918 Decree	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540
Excess +																				
Deficit -	110	58	70	123	262	256	260	267	116	134	119	117	162	125	121	97	212	37	25	63

	SEPTEMBER																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Available Water																					
Tributary + Seepage Flow	379	382	373	398	403	436	445	478	515	536	573	610	675	802							
Canal Requirements																					
60% 1918 Decree	324	324	324	324	324	324	324	324	324	324	324	324	324	324							
Excess +	+	+	+	+	+	+	+	+	+	+	+	+	+	+							
Deficit -	55	58	49	74	79	112	121	154	191	212	249	286	351	478							
Canal Requirements																					
100% 1918 Decree	540	540	540	540	540	540	540	540	540	540	540	540	540	540							
Excess +																					
Deficit -	161	158	167	142	137	104	95	62	25	4	33	70	135	262							

Period	Average Daily Flow in Second			
	Available Return Flow	60% Canal Requirements	Excess	100% Canal Requirements
July 22-31	431	324	107	540
Aug. 1-31	503	324	179	540
Sept. 1-14	500	324	176	540
Average	490	324	166	540

WATER ACTUALLY FLOWING INTO BOISE RIVER, AVAILABLE FOR CANAL
 BASED ON 1918 DECREE IN SECTION 2 OF BOISE RIVER, FOR
 PERIOD JULY 22 TO SEPTEMBER 14, 1918.

CHART 14.

JULY																						Total	Avg
10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
												401	422	381	423	452	449	463	426	446	394		
												324	324	324	324	324	324	324	324	324	324		
												+	+	+	+	+	+	+	+	+	+		
												137	98	57	99	128	125	139	102	122	70		
												540	540	540	540	540	540	540	540	540	540		
												-	-	-	-	-	-	-	-	-	-		
												79	118	159	117	88	91	77	114	94	146		

AUGUST																																Total	Avg																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

SEPTEMBER																															Total	Avg.		
10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30														
536	573	610	675	802																												7005	500	
324	324	324	324	324																												4536	324	
+	+	+	+	+																												+	+	
212	249	286	351	478																												2469	176	
540	540	540	540	540																												7560	540	
-	+	+	+	+																												555	70	
4	33	70	135	262																														
																															A.U.T. 1918.			

A.K.T. 1918.

Period	Average Daily Flow in Second Feet				
	Available Return Flow	60% Canal Requirements	Excess	100% Canal Requirements	Excess + Deficit -
31	431	324	107	540	109
31	503	324	179	540	37
14	500	324	176	540	40
10	490	324	166	540	50

SCANNED
 APR

Period
 Available
 Return Flow
 60% Canal
 Requirements
 Excess
 100% Canal
 Requirements
 Excess

TABLE SHOWING RETURN FLOW ACTUALLY FLOWING
AND RIVERSIDE IRRIGATION DISTRICTS, AND
BOISE RIVER, FOR THE PERIOD J

		RIVER, FOR THE PERIOD																														
		JULY																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Available Water at River																																
Return + Seepage Flow																																
5 Mile Diverted by Phyllis Canal																																
5 Mile Diverted & Retained by Caldwell High Line																																
Hilson Slough Diverted by Caldwell High Line																																
Mason Cr. Diverted by Caldwell High Line																																
West End Drain at Riverside Canal																																
Total Available Return Flow to Section 2																																
Canal Requirements 100% 1918 Decree																																
Excess +																																
Deficit -																																

		AUGUST																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Available Water at River																																
Return + Seepage Flow		430	482	470	417	802	796	800	807	424	406	421	423	378	415	419	443	328	503	565	60											
5 Mile Diverted by Phyllis Canal		31	31	28	30	28	27	27	24	23	30	27	24	27	28	28	37	31	38	39	37											
5 Mile Diverted & Retained by Caldwell High Line		60	56	41	41	41	35	37	45	43	42	45	47	0	0	0	65	59	39	58	58											
Hilson Slough Diverted by Caldwell High Line		38	37	37	36	35	34	33	33	32	32	32	32	32	32	32	32	32	33	33	33											
Mason Cr. Diverted by Caldwell High Line		10	10	10	10	9	9	9	9	9	8	8	8	8	8	7	7	7	7	7	7											
West End Drain at Riverside Canal		59	59	59	59	59	59	59	59	59	58	56	56	56	56	56	56	56	56	56	59											
Total Available Return Flow to Section 2		628	675	645	593	974	960	965	977	590	576	589	590	501	539	542	640	513	676	758	797											
Canal Requirements 100% 1918 Decree		540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540											
Excess +		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7											
Deficit -		88	135	105	53	434	420	425	437	50	36	49	50	39	1	2	100	27	136	218	257											

		SEPTEMBER																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Available Water at River																																
Return + Seepage Flow		379	382	373	398	403	436	445	478	515	536	573	610	675	802																	
5 Mile Diverted by Phyllis Canal		35	25	22	22	30	31	22	43	36	24	31	43	51	54																	
5 Mile Diverted & Retained by Caldwell High Line		60	60	60	60	60	60	60	59	30	57	47	39	15	15																	
Hilson Slough Diverted by Caldwell High Line		22	22	21	21	21	20	20	19	19	18	18	17	17	17																	
Mason Creek Diverted by Caldwell High Line		5	5	5	5	5	5	5	5	5	4	4	4	4	4																	
West End Drain at Riverside Canal		53	53	56	56	56	55	55	55	55	55	53	53	50	50																	
Total Available Return Flow to Section 2		554	547	537	562	576	607	607	659	660	694	726	766	812	942																	
Canal Requirements 100% 1918 Decree		540	540	540	540	540	540	540	540	540	540	540	540	540	540																	
Excess +		14	7	3	22	35	67	67	119	120	154	186	226	272	402																	
Deficit -																																

URN FLOW ACTUALLY FLOWING INTO BOISE RIVER; RETURN FLOW DIVERTED BY PIONEER
 DE IRRIGATION DISTRICTS, AND CANAL REQUIREMENTS IN SECTION TWO OF
 BOISE RIVER, FOR THE PERIOD JULY 22 TO SEPT. 14, Inc. 1918. DATA IN SECT.

JULY

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Avg.
												461	422	381	423	452	449	463	426	446	394	4317	431
												28	38	34	34	28	38	28	30	28	30	316	32
												24	37	20	2	28	18	26	26	68	40	289	29
												37	37	37	37	37	38	38	38	38	38	375	37
												13	13	13	12	12	12	11	11	11	10	118	12
												59	59	60	61	61	61	58	58	58	59	594	59
												622	606	545	569	618	616	624	589	649	571	6009	600
												540	540	540	540	540	540	540	540	540	540	5400	540
												82	66	5	29	78	76	84	49	109	31	609	60

AUGUST

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Avg.
406	421	423	378	415	419	443	328	503	566	603	609	614	619	552	479	421	385	349	365	428	453	15608	503
30	27	24	27	28	28	37	31	38	39	37	48	47	48	36	46	44	31	28	34	34	42	1033	34
42	45	47	0	0	0	65	59	39	58	58	54	58	62	62	60	60	60	60	60	60	60	1468	47
32	32	32	32	32	32	32	32	33	33	33	33	33	33	32	31	30	27	25	24	23	23	984	33
8	8	8	8	8	7	7	7	7	7	7	7	7	6	6	6	6	6	5	5	5	5	231	7
58	56	56	56	56	56	56	56	56	56	56	59	59	59	59	59	56	56	56	56	56	56	1780	57
576	589	590	501	539	542	640	513	676	758	797	810	818	827	747	678	617	565	523	544	606	641	21104	681
540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	16740	540
36	49	50	39	1	2	100	27	136	218	257	270	278	287	207	138	77	25	17	4	66	101	4364	141

SEPTEMBER

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total	Avg.
536	573	610	675	802																	7005	500
24	31	43	51	54																	469	34
57	47	39	15	15																	682	49
18	18	17	17	17																	272	19
4	4	4	4	4																	65	5
55	53	53	50	50																	755	54
694	726	766	812	942																	9248	661
540	540	540	540	540																	7560	540
154	186	226	272	402																	1688	121

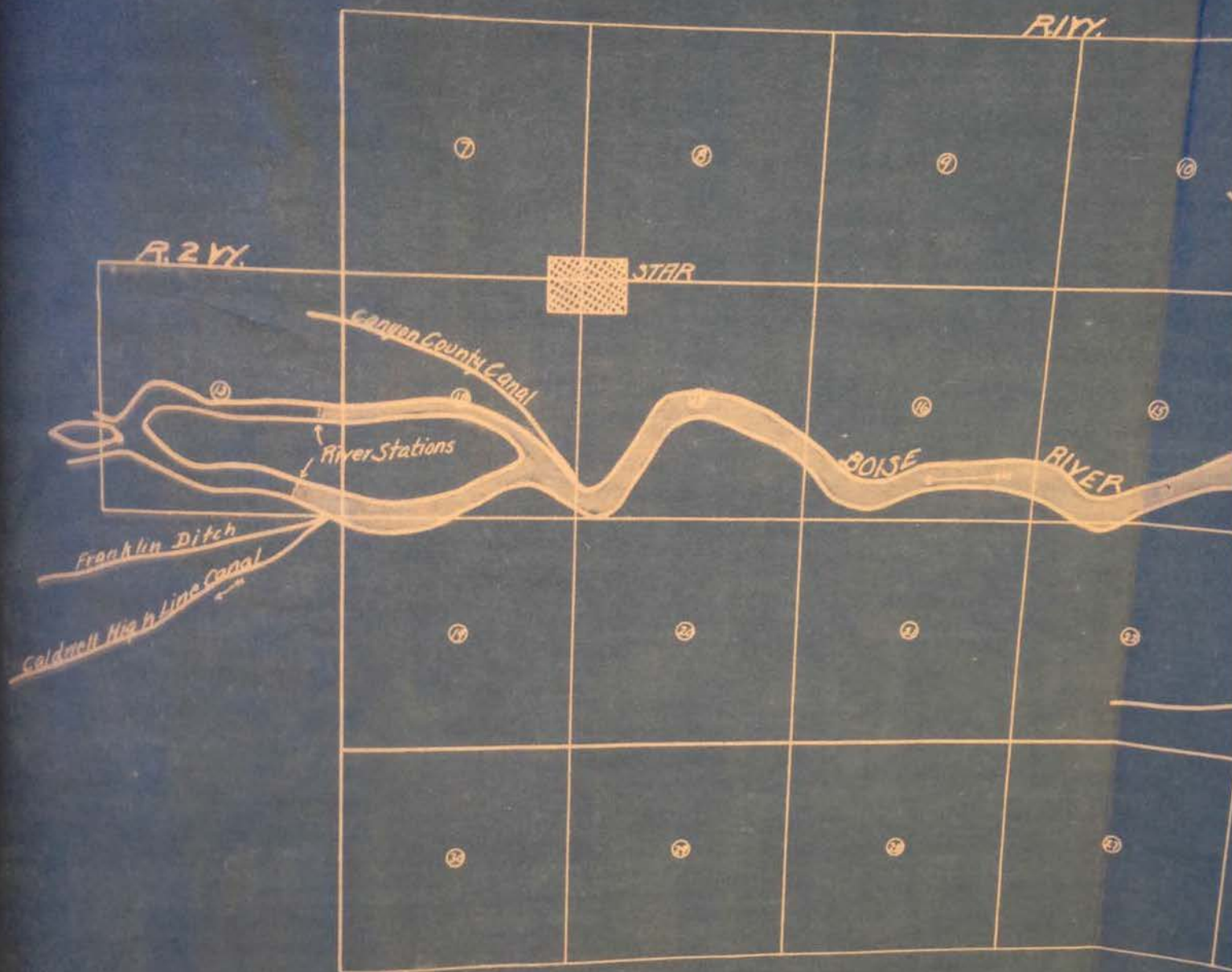
Average Daily Flow in Second Feet.		
Available	60% Canal	100% Canal
Period	Return Flow	Requirements
July 22-31	6.00	Excess

INTO BOISE RIVER; RETURN FLOW DIVERTED BY PIONEER
CANAL REQUIREMENTS IN SECTION TWO OF
JULY 22 TO SEPT. 14, Inc. 1918. DATA IN SEC. FT.

CHART 15.

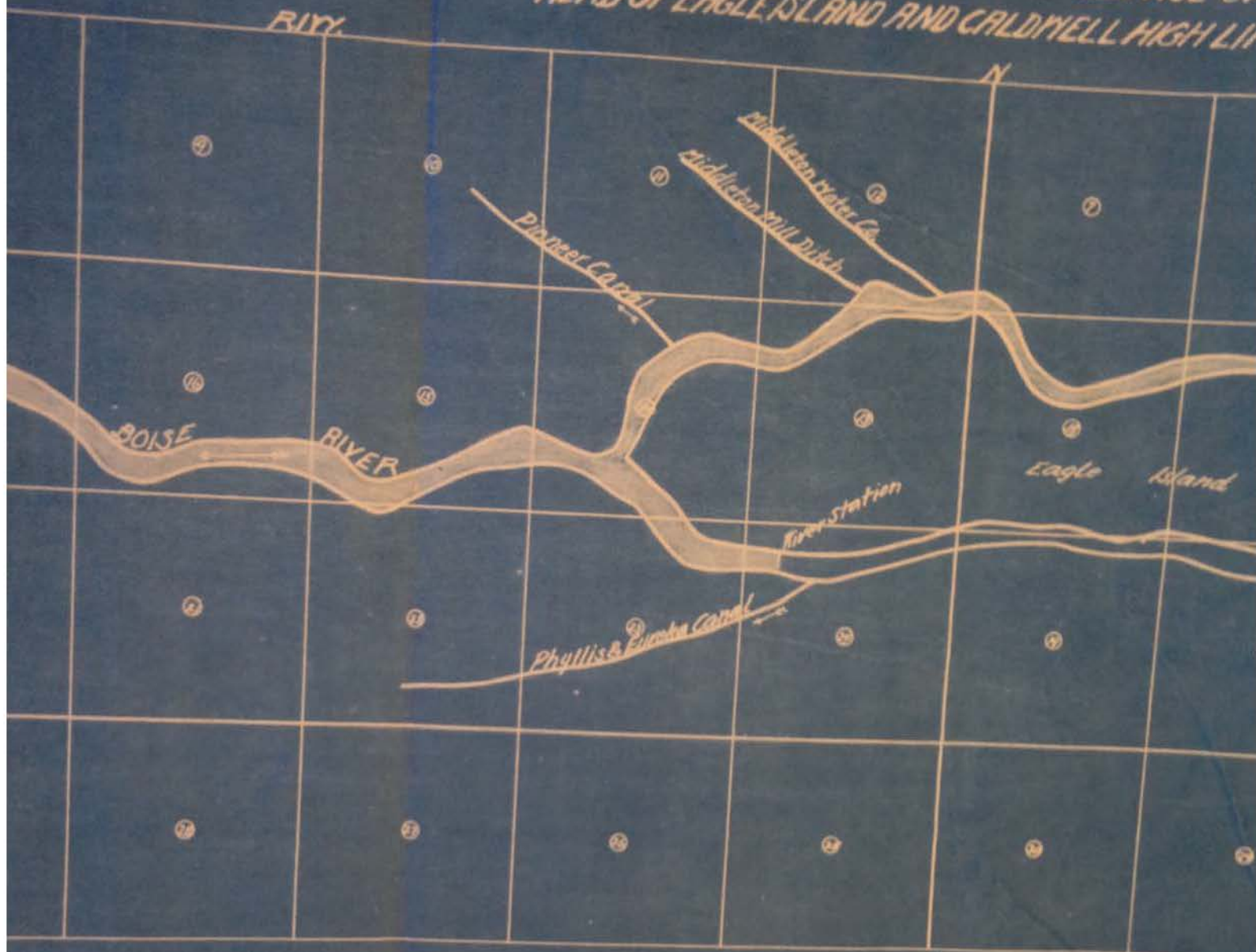
19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Avg.
			461	422	381	423	452	449	463	426	446	394	4317	431
			28	38	34	34	28	38	28	30	28	30	316	32
			24	37	20	2	28	18	26	26	68	40	289	29
			37	37	27	27	37	38	38	38	28	38	375	37
			13	13	13	12	12	12	11	11	11	10	118	12
			59	59	60	61	61	61	58	58	58	59	594	59
			622	606	545	569	618	616	624	589	649	571	6009	600
			540	540	540	540	540	540	540	540	540	540	5400	540
			+	+	+	+	+	+	+	+	+	+	+	+
			82	66	5	29	78	76	84	49	109	31	609	60
19	20	21	22	23	24	25	26	27	28	29	30	31	Total	Avg.
3565	802	609	614	619	552	479	421	385	349	265	428	455	15608	503
359	37	48	47	48	36	46	44	31	28	34	34	42	1033	34
58	58	54	58	62	62	60	60	60	60	60	60	60	1468	47
33	33	33	33	33	32	31	30	27	25	24	23	23	984	33
7	7	7	7	7	6	6	6	6	5	5	5	5	231	7
56	58	58	58	58	58	56	56	56	56	56	56	56	1780	57
738	787	810	818	827	747	678	617	565	523	544	606	641	21104	681
540	540	540	540	540	540	540	540	540	540	540	540	540	16740	540
+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
218	257	270	278	287	207	138	17	25	17	4	66	101	4364	141
19	20	21	22	23	24	25	26	27	28	29	30	Total	Avg.	
												7005	500	
												469	34	
												682	49	
												272	19	
												65	5	
												755	54	
												9248	661	
												7560	540	
												+	+	+
												1688	121	

Period	Average Daily Flow in Second Feet.		
	Available Return Flow	60% Canal Requirements	100% Canal Requirements
July 22-31	600	324	540
Aug. 1-31	681	324	540
Sept. 1-14	661	324	540
Average	661	324	540



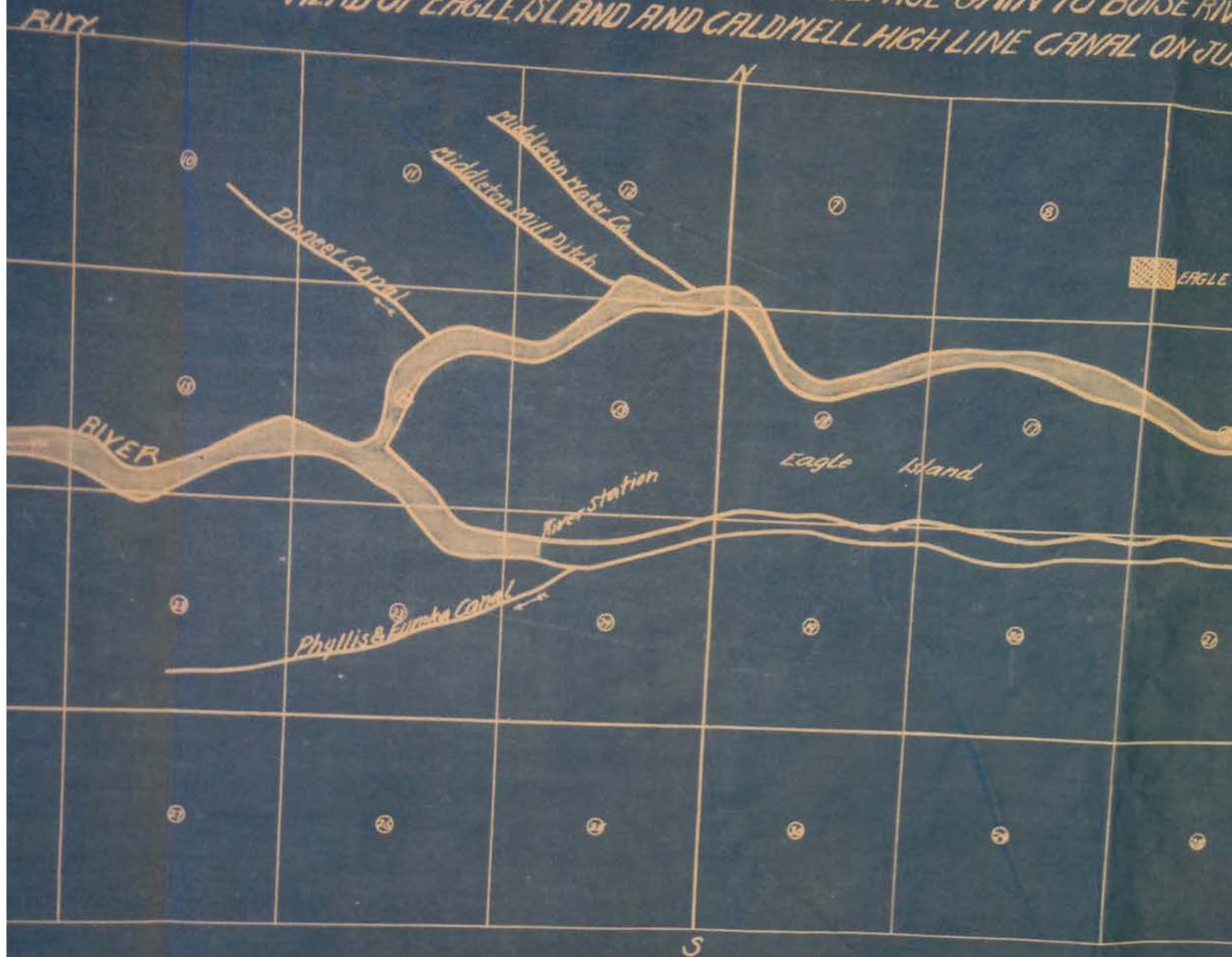
North Branch Boise
South "
Middleton Water
Middleton Mill
Pioneer Canal
Canyon County
Caldwell High L
Franklin Ditch
Boise River Middle
Boise River below
Total

INVESTIGATION OF TRIBUTARY AND SEEPAGE G HEAD OF EAGLE ISLAND AND CALDWELL HIGH LI



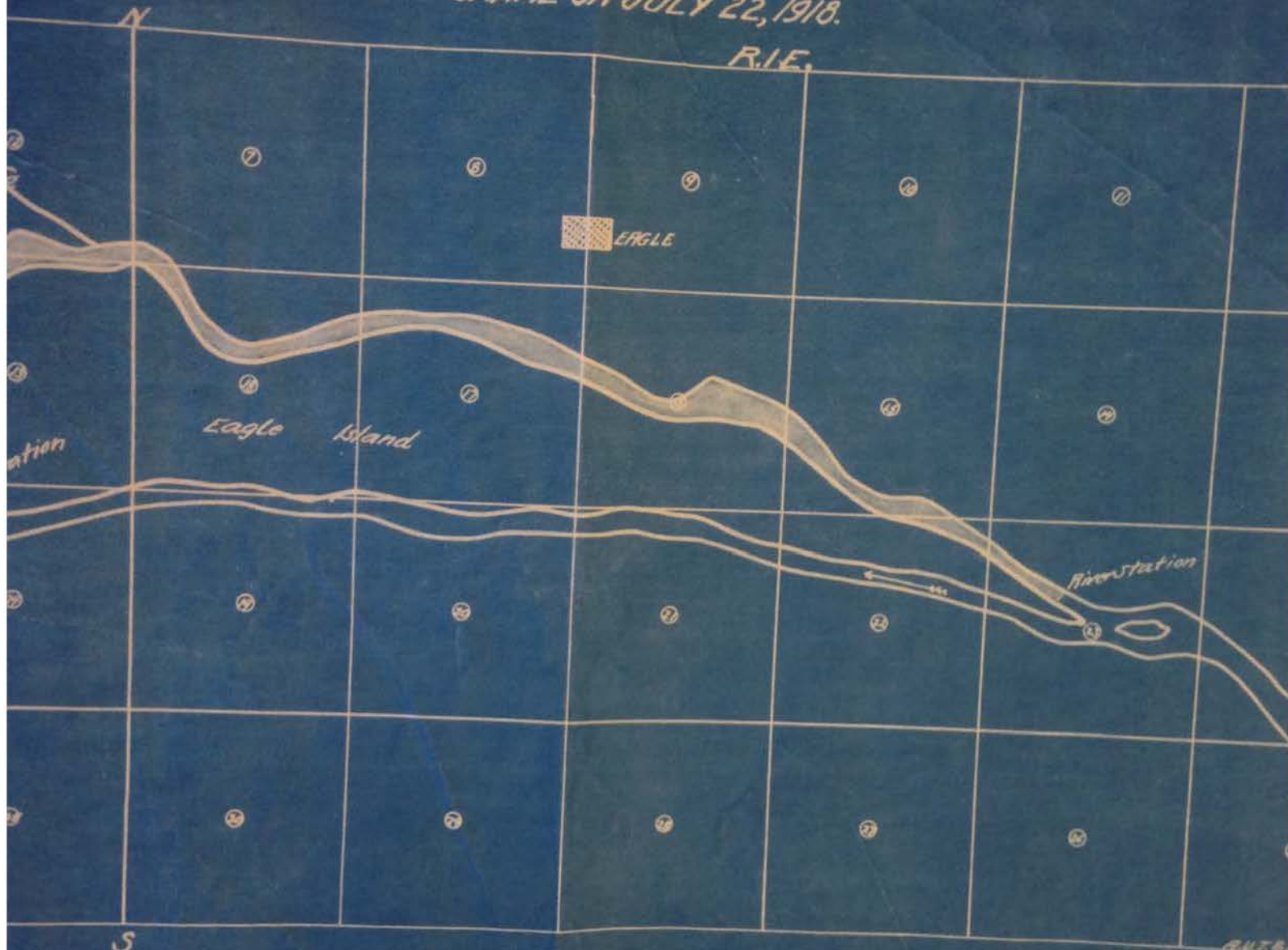
	Available Water	Second Feet Diversion	Net
North Branch Boise River at Head Eagle Island	122.0		
South " " " below Phyllis Head Gate	25.6		
Middleton Water Co.		77.9	
Middleton Mill Ditch.		53.6	
Pioneer Canal		17.3	
Canyon County Water Co.		2.0	
Caldwell High Line Canal.		44.2	
Franklin Ditch.		4.0	
Boise River Middle Channel below C.H.L. Canal		37.1	
Boise River below Caldwell High Line Canal		33.1	
Total	147.6	269.2	12

INVESTIGATION OF TRIBUTARY AND SEEPAGE GAIN TO BOISE RIVER HEAD OF EAGLE ISLAND AND CALDWELL HIGH LINE CANAL ON JULY



	Available Water	Second Feet	
		Diversions	Net Gain
North Branch Boise River at Head Eagle Island	122.0		
South " " " below Phyllis Head Gate	25.6		
Middleton Water Co.		77.9	
Middleton Mill Ditch		53.6	
Pioneer Canal		17.3	
Canyon County Water Co.		2.0	
Caldwell High Line Canal		44.2	
Franklin Ditch		4.0	
Boise River Middle Channel below C.H.L. Canal		37.1	
Boise River below Caldwell High Line Canal		33.1	
Total	147.6	269.2	121.6

ITARY AND SEEPAGE GAIN TO BOISE RIVER BETWEEN AND CALDWELL HIGH LINE CANAL ON JULY 22, 1918.



	Second Feet		
	Available Water	Diversions	Net Gain
land	122.0		
nd Gate	25.6		
		77.9	
		53.6	
		17.3	
		2.0	
		44.2	
		4.0	
Canal		37.1	
Canal		33.1	
	147.6	269.2	121.6

CHART 16.

R.I.E.



Feet	Net Gain
7.9	
7.6	
7.3	
2.0	
4.2	
4.0	
7.1	
3.1	
9.2	121.6

105

SEEPAGE INVESTIGATION OF THE MIDDLETON WATER CO. MIDDLETON
AND CANYON COUNTY WATER CO. CANALS, JUNE 28 AND

1915

1915

STATION	JUNE 28				Gain per cent of Intake	Discharge	
	Discharge in Second Feet.			From		To	
	From	Into	Gain				
Sta. A. Heading Middleton Water Co.		62.5					
" A. " " Mill Ditch		98.4					
Tributaries 1-14		24.7	24.7				
Laterals 1-11	92.7				86.5		
Sta. B. Opposite Star	125.5				59.2		
Seepage Gain		32.6	32.6				
Total	218.2	218.2	57.3	35	145.7		145.7
Sta. B		125.5					59.2
Tributaries 1-7		6.2	6.2				
Laterals	55.7				40.9		
Sta. C. Opposite Kingsbury	100.5				36.1		
Seepage Gain		24.5	24.5				12.0
Total	156.2	156.2	30.7	25	77.0		77.0
Sta. C.		100.5					36.1
Tributaries		72.1	72.1				46.0
Laterals	99.2				60.2		
Sta. D. Middleton	85.4				32.2		
Seepage Gain		12.0	12.0				10.3
Total	184.6	184.6	84.1	84	92.4		92.4
Heading Canyon Co. Canal		72.9					54.4
Tributaries		35.7	35.7				30.7
Laterals	62.6				49.5		
Canyon Co. above Middleton Mts.	53.1				33.1		
Seepage Gain		7.1	7.1		2.5		
Total	115.7	115.7	42.8	59	85.1		85.1

SUMMARY

	Dist. Miles	Seepage Gain	Trib. Gain	Total
June 28, 1915. Heading M. Water Co. & M. Ditch to Middleton Sta.	16.1	69.1	103.0	
July 27, 1915. " " " " " " " " " " " "	16.1	39.0	78.9	
June 28, 1915 Heading Canyon Co. Ditch to Middleton Slough	6.5	7.1	35.7	
July 27, 1915 " " " " " " " " " " " "	6.5	-2.5	30.7	
June 28, '15 Total Intake Three Canals		233.8	Sec. Ft.	
July 27, '15 " " " " " " " " " " " "		156.3	" "	
June 28, '15 Seepage and Tributary Gain		91. %	Intake	
July 27, '15 " " " " " " " " " " " "		94. %	" "	
June 28, '15 Gain per Mile		4. %	" "	
July 27, '15 " " " " " " " " " " " "		4.2 %	" "	

CHART 17

CHART 17

SARS

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INVESTIGATION OF THE MIDDLETON WATER CO. MIDDLETON MILL DITCH
 CANYON COUNTY WATER CO. CANALS, JUNE 28 AND JULY 27, 1915.

1915

JUNE 28

JULY 27

Gain in Second Feet.			Discharge in Second Feet			
Into	Gain	Gain per cent of Intake	From	Into	Gain	Gain per cent of Intake
62.5				64.7		
98.4				37.2		
24.7	24.7			27.3	27.3	
			86.5			
			59.2			
32.6	32.6			16.5	16.5	
218.2	57.3	35	145.7	145.7	43.8	43
125.5				59.2		
6.2	6.2			5.6	5.6	
			40.9			
			36.1			
24.5	24.5			12.2	12.2	
156.2	30.7	25	77.0	77.0	17.8	30
100.5				36.1		
72.1	72.1			46.0	46.0	
			60.2			
			32.2			
12.0	12.0			10.3	10.3	
184.6	84.1	84	92.4	92.4	56.3	156
72.9				54.4		
35.7	35.7			30.7	30.7	
			49.5			
			33.1			
			2.5		-2.5	
7.1	7.1		85.1	85.1	28.2	52
115.7	42.8	59				

SUMMARY

	Dist. Miles	Seepage Gain	Trib. Gain	Total Gain	Gain % Intake
Ditch to Middleton Sta.	16.1	69.1	103.0	172.1	107
" " " "	16.1	39.0	78.9	117.9	115
to Middleton Slough	6.5	7.1	35.7	42.8	59
" " " "	6.5	-2.5	30.7	28.2	52
Total Intake Three Canals		233.8	Sec. Ft.		
" " " "		156.3	" "		
Seepage and Tributary Gain		91.7	% Intake		
" " " "		94	%		
Gain per Mile		4	%		
" " " "		42	%		

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AUG

TABLE SHOWING TIME AT WHICH DECREED RIGHTS
ARE SUBJECT TO CUTS BELOW 60% OF FULL
RIGHT, FOR 24 YEAR PERIOD, 1895-1918, 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 Foot	New York Stock Total Rights 60% = 166 Second Foot	Farmers Union Right No. 126 60% = 66 Second Foot	Settlers Ditch Right No. 122 60% = 44.06 Second Foot	Pioneer Irrig. D. Right No. 117 60% = 12.0 Second Foot	Ridenbaugh C Right No. 106 60% = 222.50 Second Foot	
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	Pioneer Irrig. Dist. Right No. 135
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	New York Stock Rights 60% of 222.50 = 166 Sec. F.
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	Farmers Union Right No. 126. 60% = 66 Sec. F.
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	Settlers Irrig. Dist. Right No. 122. 60% = 44 Sec. F.
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 48 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	Pioneer Irrig. Dist. Right No. 117. 60% = 120 Sec. F.
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 23 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	

6/24/94 12:35-1:30 PM
Landing 1910

21	186500	2
22	188300	2
23	201700	2
24	204100	2
25	206500	2
26	208900	2
27	211300	2
28	214000	2
29	216300	2
30	218600	2
31	221000	2
32	223400	2
33	225800	2
34	228200	2
35	230600	2
36	233000	2
37	235400	2
38	237800	2
39	240200	2
40	242600	2
41	245000	2
42	247400	2
43	249800	2
44	252200	2
45	254600	2
46	257000	2
47	259400	2
48	261800	2
49	264200	2
50	266600	2
51	269000	2
52	271400	2
53	273800	2
54	276200	2
55	278600	2
56	281000	2
57	283400	2
58	285800	2
59	288200	2
60	290600	2
61	293000	2
62	295400	2
63	297800	2
64	300200	2
65	302600	2
66	305000	2
67	307400	2
68	309800	2
69	312200	2
70	314600	2
71	317000	2
72	319400	2
73	321800	2
74	324200	2
75	326600	2
76	329000	2
77	331400	2
78	333800	2
79	336200	2
80	338600	2
81	341000	2
82	343400	2
83	345800	2
84	348200	2
85	350600	2
86	353000	2
87	355400	2
88	357800	2
89	360200	2
90	362600	2
91	365000	2
92	367400	2
93	369800	2
94	372200	2
95	374600	2
96	377000	2
97	379400	2
98	381800	2
99	384200	2
100	386600	2

[illegible]

Aug. 1918

REVISED
AREA AND CAPACITY TABLE FOR FARRINGTON
(Capacities derived from the Records of)

Storage in Flats	Feet	Duff	Elev	Storage in Flats	Feet	Duff	Elev	Storage in Flats	Feet	Duff	Elev	Storage in Flats	Feet	Duff	Elev
2936	0		3037	2900	133	3046	13220	390	3091		44300				
57	2	2	2	3060	160	47	13620	420	93		45500				
58	6	4	3	3230	170	48	16030	470	93		46500				
59	11	5	4	3405	175	49	16430	470	94		47500				
2960	19	6	3065	3585	180	5030	16850	430	3093		48500				
61	29	10	6	3770	185	51	17320	480	96		49600				
62	41	12	7	3960	190	52	17720	450	97		50700				
63	53	14	8	4150	190	53	18230	460	98		51800				
64	71	16	9	4345	195	54	18700	470	99		52900				
2965	89	18	3070	4535	200	5535	19190	480	5100		54000				
66	109	20	11	4730	205	56	19670	490	1		55200				
67	131	22	12	4920	210	57	20170	500	2		56400				
68	153	24	13	5110	220	58	20680	510	3		57600				
69	181	26	14	5300	220	59	21200	520	4		58800				
2970	205	28	3075	5490	220	6090	21730	530	5103		60000				
71	239	30	16	5680	230	61	22270	540	6		61300				
72	272	33	17	5880	230	62	22820	550	7		62600				
73	308	36	18	6070	240	63	23380	560	8		63900				
74	347	39	19	6270	250	64	23950	570	9		65200				
2975	389	42	3080	6470	250	6535	24530	580	3110		66500				
76	424	45	21	6670	260	66	25130	600	11		67800				
77	462	48	22	6870	260	67	25750	620	12		69200				
78	503	51	23	7070	270	68	26380	630	13		70600				
79	547	54	24	7270	280	69	27030	650	14		72000				
2980	625	58	3085	7470	280	7070	27690	660	3115		73000				
81	725	60	26	7670	290	71	28360	670	16		74400				
82	770	65	27	7870	290	72	29050	690	17		75800				
83	840	70	28	8070	300	73	29750	700	18		77200				
84	915	75	29	8270	310	74	30460	710	19		78600				
2985	995	80	3090	8470	310	7535	31180	720	3120		80000				
86	1075	80	31	8670	310	76	31910	730	21		81500				
87	1160	85	32	8870	320	77	32650	740	22		83000				
88	1230	90	33	9070	320	78	33410	740	23		84500				
89	1345	95	34	9270	320	79	34190	770	24		86000				
2990	1445	100	3095	9470	320	8035	34970	780	3125		87500				
91	1550	105	36	9670	330	81	35770	800	26		89100				
92	1660	110	37	9870	330	82	36570	800	27		90700				
93	1780	120	38	10070	340	83	37390	810	28		92300				
94	1905	125	39	10270	350	84	38190	810	29		93900				
2995	2235	130	3098	10470	350	8535	39000	820	3130		95500				
96	2170	135	40	10670	360	86	39800	820	31		97200				
97	2310	140	42	10870	370	87	40600	830	32		98900				
98	2450	145	43	11070	370	88	41420	830	33		100600				
99	2595	150	44	11270	380	89	42260	840	34		102300				
3000	2745	155	3098	11470	380	9035	43120	850	3135		104000				

REVISED

NO CAPACITY TABLE FOR HARCHIRUCK RESERVOIR.
 Values derived from the Records of Inflow and Outflow

CHART 19

Compiled by M. S. S. S. S.
 1964-1965

Storage in Billion Feet	Diff.	Elev.	Storage in Billion Feet	Diff.	Elev.	Storage in Billion Feet	Diff.	Elev.	Storage in Billion Feet	Diff.
13220	390	30871	44600	1000	3136	105700	1700	3181	196900	2000
13320	400	92	44700	1000	37	107700	1700	82	198300	2000
13420	410	93	44800	1000	38	109700	1700	83	201700	2000
13520	420	94	44900	1000	39	110900	1700	84	204100	2000
13620	430	30873	45000	1000	3950	112300	1700	3183	206500	2000
13720	440	96	45100	1100	91	114300	1800	26	209000	2000
13820	450	97	45200	1100	92	116100	1800	57	211300	2000
13920	460	98	45300	1100	93	117900	1800	88	213400	2000
14020	470	99	45400	1100	94	119700	1800	89	216300	2000
14120	480	3100	45500	1100	1183	121300	1800	3190	218200	2000
14220	490	1	45600	1200	96	123400	1800	91	221600	2000
14320	500	2	45700	1200	97	123300	1800	92	224200	2000
14420	510	3	45800	1200	98	127200	1900	93	227800	2000
14520	520	4	45900	1200	99	129700	1900	94	230900	2000
14620	530	3103	46000	1200	3150	131000	1900	3193	232400	2000
14720	540	6	46100	1300	51	133000	2000	96	234600	2000
14820	550	7	46200	1300	52	135000	2000	97	237200	2000
14920	560	8	46300	1300	53	137000	2000	98	239800	2000
15020	570	9	46400	1300	54	139000	2000	99	242400	2000
15120	580	3110	46500	1300	3153	141000	2000	3200	245100	2000
15220	590	11	46600	1300	55	143000	2000	1	247800	2000
15320	600	12	46700	1300	57	145000	2000	2	250800	2000
15420	610	13	46800	1300	58	147000	2000	3	253500	2000
15520	620	14	46900	1300	59	149000	2000	4	256200	2000
15620	630	15	47000	1300	60	151000	2000	5	259000	2000
15720	640	16	47100	1300	61	153000	2000	6	261800	2000
15820	650	17	47200	1300	62	155000	2000	7	264600	2000
15920	660	18	47300	1300	63	157000	2000	8	267400	2000
16020	670	19	47400	1300	64	159000	2000	9	270200	2000
16120	680	3113	47500	1300	3156	161000	2000	3203	273000	2000
16220	690	16	47600	1400	61	163000	2100	6	275800	2000
16320	700	17	47700	1400	62	165000	2100	7	278600	2000
16420	710	18	47800	1400	63	167000	2100	8	281400	2000
16520	720	19	47900	1400	64	169000	2100	9	284200	2000
16620	730	3120	48000	1400	3159	171000	2100	3206	287000	2000
16720	740	21	48100	1400	66	173000	2200	11	289800	3000
16820	750	22	48200	1400	67	175000	2200			
16920	760	23	48300	1400	68	177000	2200			
17020	770	24	48400	1400	69	179000	2200			
17120	780	3123	48500	1400	3162	181000	2200			
17220	790	24	48600	1400	71	183000	2300	2967-Cont'd. of Chart 19		
17320	800	25	48700	1400	72	185000	2300	3018-Cont'd. of Chart 19		
17420	810	26	48800	1400	73	187000	2300	3106-Cont'd. of Chart 19		
17520	820	27	48900	1400	74	189000	2300	3203-Cont'd. of Chart 19		
17620	830	3126	49000	1400	3165	191000	2300	3217-Cont'd. of Chart 19		
17720	840	31	49100	1400	76	193000	2300			
17820	850	32	49200	1400	77	195000	2300			
17920	860	33	49300	1400	78	197000	2300			
18020	870	34	49400	1400	79	199000	2300			
18120	880	3129	49500	1400	3168	201000	2300			

SCANNED
 APR 18 2011



SHOWING THE

FOR

JULY 22

22.5 Sec. 7
Farm Storage 3 Sec. 7
8.46 Sec. 7

Settlers Nat. Farm 26 S.F.
Settlers Storage 7 S.F.
Davis 9 S.F.
Durman Mill 23 S.F.
Durman Waste 7 S.F.

Eagle Island Canal 32 Sec. 7

Phillips Nat. Farm 16 S.F.
Payson 100 S.F.
Eureka Nat. 16 S.F.

Boise Valley
Farmers Union Storage 10 S.F.
Farmers Union Nat. Farm
+ Boise Valley 101 S.F.
Boise Valley
Waste 53 S.F.
Boise Valley
8 S.F.

Ballantyne Canal & waste 4 S.F.
Duck Creek Canal
2 S.F.
32 S.F.

Phillips Nat. Farm 16 S.F.
67 S.F.

Section 1

DIAGRAM
 SHOWING THE AVERAGE CONDITIONS ON
BOISE RIVER
 FOR A PERIOD OF 55 DAYS
 JULY 22 TO SEPTEMBER 14, INCLUSIVE.
 1918.

Section
Sect. 1.
Sect. 2
Total

* Incl
Ther



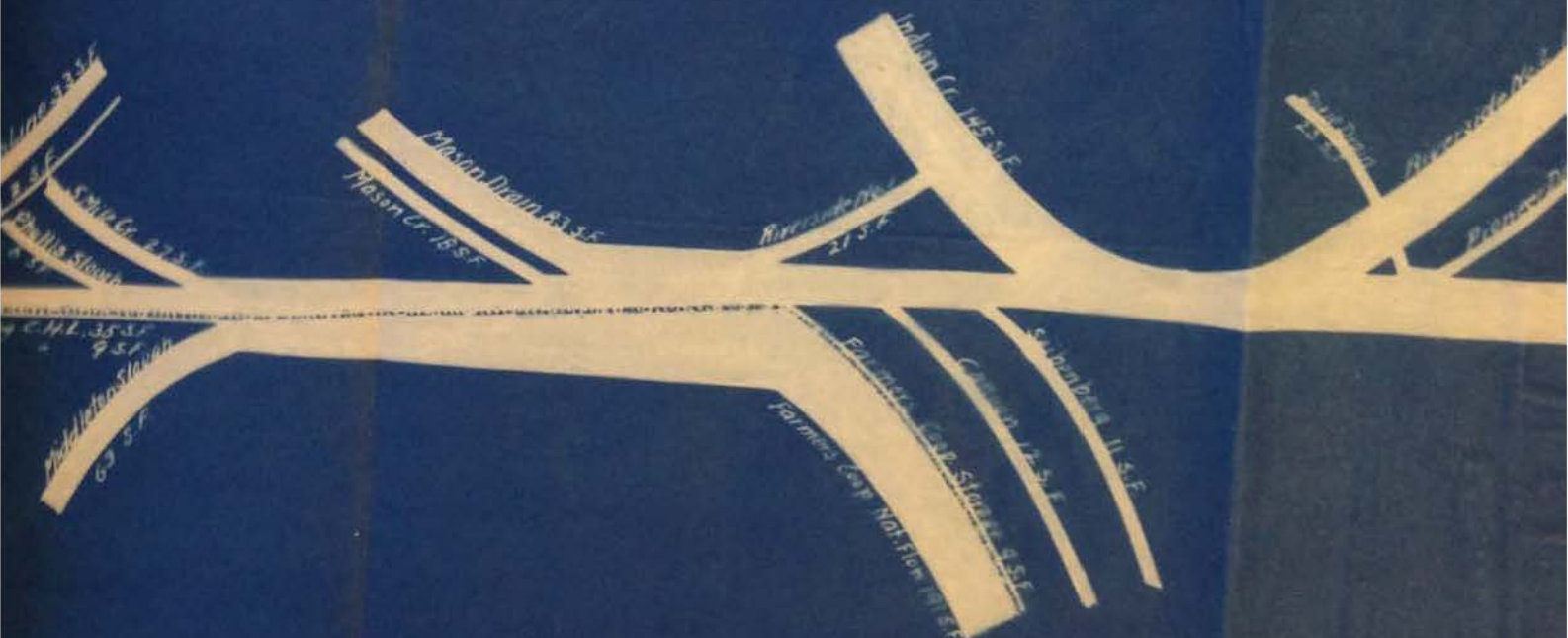
ON

LOW WATER PERIOD FOR NATURAL FLOW WATER

Average per Day For 55 Days, July 22 to September 14, 1961							
Section	Delivered to Canals	In River & Tributary	Seepage Gain	Tributary Gain	Total Gain	* Delivered	For Sale
Sect. 1	1188	1009	200	79	279	1223	
Sect. 2	435	400	127	365	492	527	
Total	1623	1409	327	444	771	1750	

* Includes Quantities passing to Section below.

There was delivered to Canals 58% more water than available at Highland.



Section 2

LOW WATER PERIOD FOR NATURAL FLOW WATER

per Day For 55 Days, July 22 to September 14, 1918

In River & Tributary	Seepage Gain	Tributary Gain	Total Gain	* Delivered	Passed to Sect. Below
1009	200	79	279	1223	35
400	127	365	492	527	92
1409	327	444	771	1750	

quantities passing to Section below.

Delivered to Canals 58% more water than available at Highland.



Section 2

SCANNED

TABLE, IN ACRE FEET, SHOWING QUANTITIES DIVERTED BY 18
FROM BOISE RIVER FOR EACH MONTH OF IRRIGATION SEASON

Canal	April	May	June	July	August	September	Total
Pickenbaugh	8254	22782	23062	23854	20426	13008	111182
Settlers	2030	8272	9038	7056	5794	3362	35852
Farmers Union	1984	9002	9386	7302	5670	3512	36856
Boise Valley	822	2746	2304	2408	1840	1254	11374
Dry Creek	74	2552	2790	2244	1918	1120	10688
Ballantyne	38	300	654	474	528	442	2736
Middleton Water Co.	1708	6016	6000	5208	3646	3466	26064
Middleton Mill Ditch	350	4178	3064	3598	2354	1696	15280
Phyllis	12324	25512	24462	22224	14686	9074	108822
Pioneer	202	1538	1456	1112	924	672	5904
Canyon Co.	376	4002	3636	3800	2436	1784	16036
Farmers Corp.	2482	22346	19040	17846	12944	10316	84974
Canyon	274	1016	750	1028	598	510	4076
Seibenberg	136	754	494	620	692	732	3428
Pioneer Div.	236	642	696	1066	650	688	3938
Eureka No. 2	110	1830	2540	1684	2600	2392	11156
Upper C. Point	212	572	516	650	590	484	3024
Lower C. Point	0	656	376	530	488	492	2542
Total	31512	114716	110264	102698	78764	55764	493738

Month	Acre Feet Diverted			Acre Feet Diverted, per Acre			Rate in Miners Inches per Acre			Percent Diverted in Month		
	1916	1917	1918	1916	1917	1918	1916	1917	1918	1916	1917	1918
April	38752	3792	31512	.34	.03	.28	.28	.02	.23	7.9	0.9	6.4
May	91894	50150	114716	.81	.44	1.01	.65	.36	.81	18.7	11.5	23.2
June	94162	112326	110264	.83	.99	.97	.69	.82	.81	19.2	25.8	22.3
July	106068	115366	102698	.94	1.02	.91	.76	.82	.73	21.5	26.5	20.8
August	86590	90236	78764	.76	.80	.69	.61	.65	.56	17.6	20.8	16.0
September	73978	62678	55764	.65	.55	.49	.54	.46	.41	15.1	14.5	11.3
Total	491444	434548	443738	4.33	3.84	4.35	.59	.62	.59	100.0	100.0	100.0

CHART 21.

FEET, SHOWING QUANTITIES DIVERTED BY 18 CANALS
 RIVER FOR EACH MONTH OF IRRIGATION SEASON OF 1918.

June	July	August	September	Total	Acres Irrig.	Acre Feet per Acre		
						1918	1917	1916
23062	23854	20426	13808	112186	25000	4.49	3.88	4.14
9038	7056	5794	3362	35552	12300	2.89	2.64	3.31
9386	7302	5670	3512	36856	8800	4.19	3.19	3.84
2304	2408	1840	1254	11374	2729	4.17	2.37	4.74
2790	2244	1918	1120	10698	2720	3.93	3.85	4.60
654	474	528	442	2436	578	4.22	3.03	3.47
6000	5208	3646	3466	26044	5704	4.57	2.78	3.75
3064	3598	2354	1696	15240	3245	4.70	4.83	4.65
24462	22224	19686	9074	108282	22000	4.92	5.12	4.95
1456	1112	924	672	5904	1286	4.59	4.25	5.15
3636	3800	2436	1784	16034	3790	4.23	3.74	4.76
19040	17846	12944	10316	84974	15500	5.48	4.49	5.58
750	1028	598	510	4070	1382	2.94	3.25	3.34
494	620	692	732	3428	767	4.47	3.59	4.68
696	1066	650	648	3938	3082	1.27	1.42	1.76
2540	1684	2600	2392	11156	2560	4.36	3.58	4.15
516	650	590	484	3024	636	4.75	3.69	5.13
376	530	488	492	2542	1309	1.94	1.18	1.91
110264	102698	78784	55764	493738	113388	4.35	3.84	4.33

Diverted	Acre Feet Diverted, per Acre			Rate in Miners Inches, per Acre			Percent Diverted in Month		
	1918	1916	1917	1918	1916	1917	1916	1917	1918
1918	1916	1917	1918	1916	1917	1918	1916	1917	1918
31512	.34	.03	.28	.28	.02	.23	7.9	0.9	6.4
114716	.81	.44	1.01	.65	.36	.81	18.7	11.5	23.2
110244	.83	.99	.97	.69	.82	.81	19.2	25.8	22.3
102698	.94	1.02	.91	.76	.82	.73	21.5	26.5	20.8
78784	.76	.80	.69	.61	.65	.56	17.6	20.8	16.0
55764	.65	.55	.49	.54	.46	.41	15.1	14.5	11.3
493738	4.33	3.84	4.35	.59	.62	.59	100.0	100.0	100.0

SCANNED

APR 18

TABLE SHOWING MAXIMUM HEADGATE DUTY OF
FOR 18 CANALS DIVERTING WATER FROM
DURING THE IRRIGATION SEASON

Canal	APRIL 1-15				APRIL 16-30				MAY				JUNE	
	1915	1916	1917	1918	1915	1916	1917	1918	1915	1916	1917	1918	1915	1916
Ridenbaugh	0.48	0.27	0	0.24	0.86	0.74	0	0.59	0.61	0.73	0.69	0.79	0.80	0.86
Settlers	0.36	0.44	0	0.10	0.59	0.50	0	0.42	0.55	0.62	0.44	0.62	0.66	0.58
Farmers Union	0.35	0.23	0	.0	0.82	0.81	0	0.69	0.68	0.78	0.27	0.88	0.84	0.83
Boise Valley	0.49	0.49	0	.0	1.00	1.00	0	1.09	1.00	1.00	1.00	1.01	1.00	1.00
Dry Creek	0.53	0.26	0	.0	1.01	0.89	0	0.46	0.80	0.98	0.51	1.03	1.10	0.99
Ballantine	0	0	0	.0	0.87	1.21	0	0.17	0.35	0.70	0.35	0.69	1.04	1.04
Middleton Water Co.	0.84	0.08	0	0.03	0.89	0.82	0	1.38	0.72	0.84	0.54	1.58	0.93	0.73
Middleton Mill Ditch	0.21	0.06	0	0.12	1.26	1.20	0	0.15	1.17	1.23	0.74	1.50	1.26	1.04
Phyllis	0.61	0.40	0	0.40	0.74	0.72	0.34	0.77	0.88	0.90	0.96	1.07	0.91	0.94
Pioneer	0.35	0.39	0	0.23	1.55	1.09	0	0.55	1.32	1.32	0.93	1.16	1.40	1.55
Canyon Co.	0	0	0	0.09	1.39	0.88	0	0.21	0.89	1.12	0.80	1.00	0.92	1.19
Farmers Coop	0.74	0.20	0	0	0.97	0.88	0	0.88	0.98	1.01	0.99	1.24	1.01	1.00
Canyon	0.28	0	0	0.11	0.62	0.94	0	0.19	0.62	1.52	0.90	0.83	1.01	0.87
Seibenberg	1.11	.0	0	0.13	1.04	0	0	1.04	1.04	0.90	0.72	1.37	1.24	1.04
Pioneer Ditch	0	0.02	0	0	0.52	0.37	0	0.21	0.52	0.52	0.26	0.29	0.48	0.50
Eureka No. 2	0.53	0.27	0	0.04	0.64	0.74	0	0.13	1.11	0.86	1.19	1.01	1.09	1.05
Upper Point	0.78	0	0	0	1.02	1.10	0	1.73	1.02	1.18	0.40	1.41	1.18	1.34
Lower Point	0	0	0	0	0.38	0	0	0	0.38	0.38	0.27	0.69	0.65	0.61
Total	7.66	3.11	0	1.49	16.17	13.89	0.34	10.66	14.64	16.59	11.96	18.17	17.52	17.29
Average	0.42	0.17	0	0.08	0.90	0.77	0.02	0.59	0.81	0.92	0.66	1.01	0.97	0.95

Year	Summary of Average Flow in Mins.			
	April 1-15	April 16-30	May	June
1915	0.42	0.90	0.81	0.97
1916	0.17	0.77	0.92	0.95
1917	0.00	0.02	0.66	0.96
1918	0.08	0.59	1.01	1.08
Average	0.17	0.57	0.85	0.99

DURING MAXIMUM HEADGATE DUTY OF WATER, IN MINER INCHES CONTINUOUS FLOW, FOR 18 CANALS DIVERTING WATER FROM BOISE RIVER, BASED ON MAXIMUM DIVERSITY DURING THE IRRIGATION SEASONS OF THE YEARS 1915, 1916, 1917, 1918.

1917	1916	1915	MAY			JUNE				JULY				AUGUST		
1917	1916	1915	1916	1917	1918	1915	1916	1917	1918	1915	1916	1917	1918	1915	1916	1917
0	0.59	0.61	0.73	0.69	0.79	0.80	0.86	0.80	0.80	0.80	0.78	0.81	0.81	0.66	0.77	0.73
0	0.42	0.55	0.62	0.44	0.62	0.66	0.58	0.65	0.65	0.65	0.62	0.68	0.65	0.38	0.55	0.67
0	0.69	0.68	0.78	0.27	0.88	0.84	0.83	0.72	0.90	0.81	0.77	0.73	0.82	0.53	0.61	0.80
0	1.09	1.00	1.00	1.00	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.59	0.59	0.59
0	0.46	0.80	0.98	0.51	1.03	1.10	0.99	1.22	1.07	1.07	0.91	1.12	0.84	0.80	0.84	0.80
0	0.17	0.35	0.70	0.35	0.69	1.04	1.04	0.60	1.75	0.87	0.70	1.38	1.11	0.87	0.70	1.04
0	1.38	0.72	0.84	0.54	1.58	0.93	0.73	0.78	1.12	0.89	0.92	0.95	1.35	0.61	0.61	0.82
0	0.15	1.17	1.23	0.74	1.50	1.26	1.09	1.60	1.69	1.05	1.08	1.15	1.29	0.51	0.92	1.14
0.34	0.77	0.88	0.90	0.96	1.07	0.91	0.94	1.05	1.06	0.75	0.97	1.07	1.04	0.44	0.83	0.95
0	0.55	1.32	1.32	0.93	1.16	1.40	1.55	1.40	1.90	0.93	1.94	1.20	1.13	0.85	1.01	1.01
0	0.21	0.89	1.12	0.80	1.00	0.92	1.19	1.07	1.23	0.89	1.03	1.15	1.07	0.72	0.84	0.76
0	0.88	0.98	1.01	0.99	1.24	1.01	1.00	1.12	1.23	0.83	1.10	1.15	1.18	0.50	0.94	0.99
0	0.19	0.62	1.52	0.90	0.83	1.01	0.87	1.37	0.62	0.62	1.05	1.09	0.80	0.80	1.05	1.01
0	1.04	1.04	0.90	0.72	1.37	1.24	1.04	1.05	0.85	0.85	1.50	1.34	1.17	0.85	1.63	1.30
0	0.21	0.52	0.52	0.26	0.29	0.48	0.50	0.30	0.32	0.44	0.31	0.53	0.44	0.40	0.35	0.37
0	0.13	1.11	0.86	1.19	1.01	1.09	1.05	1.20	1.33	0.86	1.09	1.05	0.98	0.80	0.93	1.17
0	1.73	1.02	1.18	0.40	1.41	1.18	1.34	0.86	1.34	1.34	1.34	1.34	1.34	1.02	1.25	1.96
0	0	0.38	0.38	0.27	0.69	0.65	0.61	0.72	0.61	0.49	0.38	0.57	0.53	0.38	0.23	0.37
0.34	10.66	14.64	16.59	11.96	18.17	17.52	17.21	17.29	19.47	15.14	17.49	18.21	17.55	16.71	14.65	16.70
0.02	0.59	0.81	0.92	0.66	1.01	0.97	0.95	0.96	1.08	0.84	0.97	1.01	0.97	0.65	0.81	0.93

Year	Summary of Average Flow in Miners Inches per Acre Irrigated						
	April-15	April-16-30	May	June	July	August	September
1915	0.42	0.90	0.81	0.97	0.84	0.65	0.51
1916	0.17	0.77	0.92	0.95	0.97	0.81	0.71
1917	0.00	0.02	0.66	0.96	1.01	0.93	0.60
1918	0.08	0.59	1.01	1.08	0.97	0.78	0.77
Average	0.17	0.57	0.85	0.99	0.95	0.79	0.65

CHART 22.

WATER, IN MINER INCHES CONTINUOUS FLOW, BY MONTHS,
 FROM BOISE RIVER, BASED ON MAXIMUM DIVERSIONS,
 SEASONS OF THE YEARS 1915, 1916, 1917, 1918.

LINE	JULY					AUGUST				SEPTEMBER				ACRES	
	1917	1918	1915	1916	1917	1918	1915	1916	1917	1918	1915	1916	1917	1918	IRRIGATED
	0.80	0.80	0.80	0.78	0.81	0.81	0.66	0.77	0.78	0.67	0.80	0.64	0.69	0.67	25000
	0.65	0.65	0.65	0.62	0.68	0.65	0.38	0.55	0.67	0.43	0.38	0.42	0.46	0.32	12309
	0.72	0.90	0.81	0.77	0.73	0.82	0.53	0.61	0.80	0.70	0.51	0.48	0.52	0.43	8800
	1.00	1.00	1.00	1.00	1.00	1.00	0.59	0.59	0.59	0.60	0.59	0.59	0.59	0.60	2729
	1.22	1.07	1.07	0.91	1.12	0.84	0.80	0.84	0.80	0.62	0.50	0.77	0.62	0.66	2720
	0.60	1.75	0.87	0.70	1.38	1.11	0.87	0.70	1.04	0.95	0.52	0.87	1.04	1.21	578
	0.78	1.12	0.89	0.92	0.95	1.35	0.61	0.61	0.82	0.60	0.57	0.42	0.40	0.68	5704
	1.60	1.69	1.05	1.08	1.15	1.29	0.51	0.92	1.34	0.66	0.52	0.86	0.74	0.63	3245
	1.05	1.06	0.75	0.97	1.07	1.04	0.44	0.83	0.95	0.65	0.35	0.76	0.73	0.57	22000
	1.40	1.90	0.93	1.94	1.20	1.13	0.85	1.01	1.01	0.74	0.66	1.01	0.70	0.89	1286
	1.07	1.23	0.89	1.03	1.15	1.07	0.72	0.84	0.76	0.87	0.57	0.70	0.55	0.67	3790
	1.12	1.23	0.83	1.10	1.15	1.18	0.50	0.94	0.99	0.88	0.58	0.73	0.59	1.07	15500
	1.37	0.62	0.62	1.05	1.09	0.80	0.80	1.05	1.01	0.51	0.51	0.62	0.62	0.51	1382
	1.05	0.85	0.85	1.50	1.24	1.17	0.85	1.63	1.30	1.82	0.65	1.17	0.78	1.95	767
	0.38	0.32	0.44	0.31	.53	0.44	0.40	0.35	0.37	0.21	0.27	0.37	0.29	0.27	3082
	1.20	1.33	0.86	1.09	1.05	0.98	0.80	0.93	1.17	1.21	0.51	0.74	0.62	1.23	2560
	0.86	1.34	1.34	1.34	1.34	1.34	1.02	1.25	1.96	1.41	0.63	1.41	0.71	0.94	636
	0.42	0.61	0.49	0.38	0.57	0.53	0.38	0.23	0.34	0.57	0.31	0.34	0.23	0.61	1309
	17.29	19.47	15.14	17.49	18.21	17.55	11.71	14.65	16.70	14.10	9.23	12.70	10.88	13.91	113388
	0.96	1.08	0.84	0.97	1.01	0.97	0.65	0.81	0.93	0.78	0.51	0.71	0.60	0.77	

AUG 1918

Miners/Inches per Acre Irrigated			
June	July	August	September
0.97	0.84	0.65	0.51
0.95	0.97	0.81	0.71
0.96	1.01	0.93	0.60
1.08	0.97	0.78	0.77
0.99	0.95	0.79	0.65

 SCANNED
 APR 18 2018

WATER, IN MINER INCHES CONTINUOUS FLOW, BY MONTHS,
ON BOISE RIVER, BASED ON MAXIMUM DIVERSIONS,
SEASONS OF THE YEARS 1915, 1916, 1917, 1918.

CHART 22.

LINE	JULY					AUGUST				SEPTEMBER				ACRES IRRIGATED
	1917	1918	1915	1916	1917	1918	1915	1916	1917	1918	1915	1916	1917	1918
0.80	0.80	0.80	0.78	0.81	0.81	0.66	0.77	0.78	0.67	0.60	0.64	0.69	0.67	25000
0.65	0.65	0.65	0.62	0.68	0.65	0.38	0.55	0.67	0.43	0.38	0.42	0.46	0.32	12300
0.72	0.90	0.81	0.77	0.73	0.82	0.53	0.61	0.80	0.70	0.51	0.48	0.52	0.43	8800
1.00	1.00	1.00	1.00	1.00	1.00	0.59	0.59	0.59	0.60	0.59	0.59	0.59	0.60	2729
1.22	1.07	1.07	0.91	1.12	0.84	0.80	0.84	0.80	0.62	0.50	0.77	0.62	0.66	2720
0.60	1.75	0.87	0.70	1.38	1.11	0.87	0.70	1.04	0.95	0.52	0.87	1.04	1.21	578
0.78	1.12	0.89	0.92	0.95	1.35	0.61	0.61	0.82	0.60	0.57	0.42	0.40	0.68	5704
1.60	1.69	1.05	1.08	1.15	1.29	0.51	0.92	1.34	0.66	0.52	0.86	0.74	0.63	3245
1.05	1.06	0.75	0.97	1.07	1.04	0.44	0.83	0.95	0.65	0.35	0.76	0.73	0.57	22000
1.40	1.90	0.93	1.94	1.20	1.13	0.85	1.01	1.01	0.74	0.66	1.01	0.70	0.89	1286
1.07	1.23	0.89	1.03	1.15	1.07	0.72	0.84	0.76	0.87	0.57	0.70	0.55	0.67	3790
1.12	1.23	0.83	1.10	1.15	1.18	0.50	0.94	0.99	0.88	0.58	0.73	0.59	1.07	15500
1.37	0.62	0.62	1.05	1.09	0.80	0.80	1.05	1.01	0.51	0.51	0.62	0.62	0.51	1382
1.05	0.85	0.85	1.50	1.24	1.17	0.85	1.63	1.30	1.82	0.65	1.17	0.78	1.95	767
0.38	0.32	0.44	0.31	.53	0.44	0.40	0.35	0.37	0.21	0.27	0.37	0.29	0.27	3082
1.20	1.33	0.86	1.09	1.05	0.98	0.80	0.93	1.17	1.21	0.51	0.74	0.62	1.23	2560
0.86	1.34	1.34	1.34	1.34	1.34	1.02	1.25	1.96	1.41	0.63	1.41	0.71	0.94	636
0.42	0.61	0.49	0.38	0.57	0.53	0.38	0.23	0.34	0.57	0.31	0.34	0.23	0.61	1309
17.29	19.47	15.14	17.49	18.21	17.55	11.71	14.65	16.70	14.10	9.23	12.70	12.88	13.91	113388
0.96	1.08	0.84	0.97	1.01	0.97	0.65	0.81	0.93	0.78	0.51	0.71	0.60	0.77	

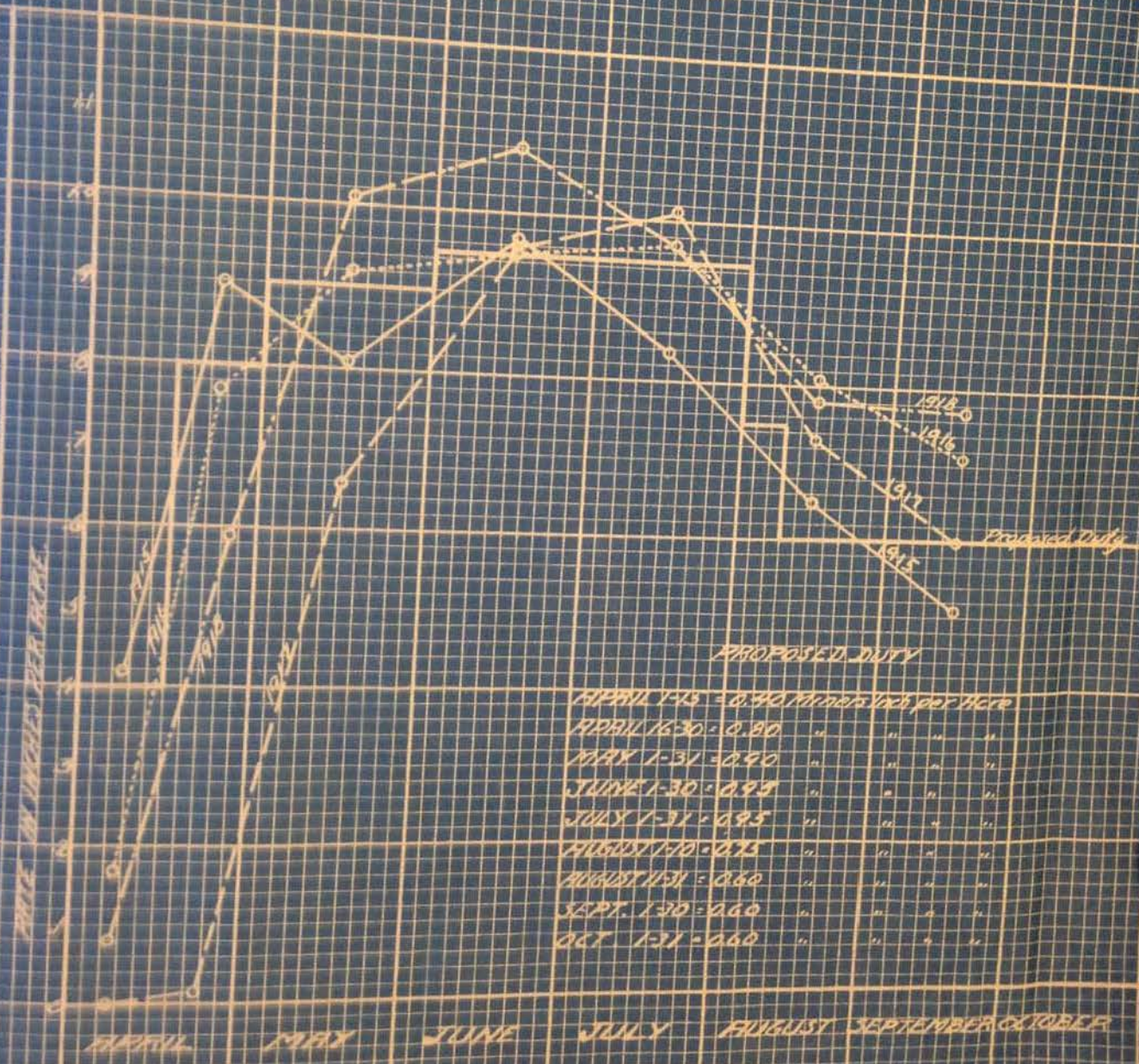
AUG 1918

Miners Inches per Acre Irrigated			
June	July	August	September
0.97	0.84	0.65	0.51
0.95	0.97	0.81	0.71
0.96	1.01	0.93	0.60
1.08	0.97	0.78	0.77
0.99	0.95	0.79	0.65

SCANNED
APR 10 2011

CHART

CHART SHOWING AVERAGE MAXIMUM DUTY OF WATER IN MINERS INCHES PER ACRE FOR 18 BOISE VALLEY CANALS FOR YEARS 1915, 1916, 1917 AND 1918; ALSO PROPOSED AVERAGE DUTY OF WATER FOR FUTURE YEARS



PROPOSED DUTY

APRIL 1-15	= 0.40	Miners Inch per Acre
APRIL 16-30	= 0.80	" " " "
MAY 1-31	= 0.90	" " " "
JUNE 1-30	= 0.95	" " " "
JULY 1-31	= 0.95	" " " "
AUGUST 1-10	= 0.75	" " " "
AUGUST 11-31	= 0.60	" " " "
SEPT. 1-30	= 0.60	" " " "
OCT 1-31	= 0.60	" " " "

SCANNED
APR 18 2012

CHART 23.

SHOWING AVERAGE MAXIMUM DUTY OF WATER IN INCHES PER ACRE FOR 15 BOISE VALLEY CANALS YEARS 1915, 1916, 1917 AND 1918; ALSO PROPOSED AVERAGE DUTY OF WATER FOR ALL CANALS



PROPOSED DUTY

APRIL 1-15	= 0.40	inches per acre
APRIL 16-30	= 0.80	" " "
MAY 1-31	= 0.90	" " "
JUNE 1-30	= 0.90	" " "
JULY 1-31	= 0.95	" " "
AUGUST 1-10	= 0.75	" " "
AUGUST 11-31	= 0.60	" " "
SEPT. 1-30	= 0.60	" " "
OCT. 1-31	= 0.60	" " "

JUNE JULY AUGUST SEPTEMBER OCTOBER

8/11/1918

OF WATER, IN MINER IN
FROM BOISE RIVER, BR
Y SEASONS OF THE YEAR

JUNE			JULY	
1916	1917	1918	1915	1916
0.60	0.76	0.77	0.73	0.73
0.48	0.56	0.61	0.52	0.56
0.63	0.36	0.89	0.31	0.70
1.00	1.00	0.70	0.79	1.00
0.66	0.92	0.85	0.73	0.73
0.60	0.43	0.95	0.52	0.43
0.56	0.69	0.88	0.66	0.65
0.85	1.24	0.78	0.72	0.66
0.80	1.02	0.93	0.56	0.86
0.78	0.97	0.93	0.70	0.90
0.92	0.89	0.80	0.68	0.71
0.94	1.06	1.02	0.51	0.97
0.40	0.83	0.45	0.25	0.57
0.65	0.72	0.53	0.52	0.90
0.31	0.31	0.19	0.29	0.23
0.74	0.95	0.83	0.55	0.64
0.78	0.63	0.67	0.78	0.78
0.38	0.31	0.23	0.27	0.19
11.98	13.65	13.01	10.09	12.21
0.67	0.76	0.72	0.56	0.68

in Miners Inches per Acre			
June	July	August	September
0.70	0.56	0.46	0.57
0.67	0.68	0.57	0.58
0.76	0.75	0.67	0.67
0.72	0.67	0.67	0.67
0.71	0.67	0.67	0.67

SCANNED
APR 10 2012

TABLE SHOWING AVERAGE HEADGAT
FOR 18 CANALS DIVERTING
DURING THE IRR

Canal	APRIL 1-15				APRIL 16-30				MAY			
	1915	1916	1917	1918	1915	1916	1917	1918	1915	1916	1917	1918
Bidenbough	0.26	0.06	0	0.16	0.68	0.60	0	0.39	0.32	0.42	0.36	0.74
Settlers	0.11	0.22	0	0.02	0.41	0.38	0	0.25	0.18	0.50	0.19	0.54
Farmers Union	0.11	0.04	0	0	0.48	0.51	0	0.38	0.35	0.41	0.09	0.82
Boise Valley	0.18	0	0	0	1.00	0.73	0	0.50	0.55	1.00	0.18	0.81
Dry Creek	0.09	0.11	0	0	0.81	0.63	0	0.04	0.59	0.77	0.16	0.75
Ballantine	0	0	0	0	0.26	0.43	0	0.03	0.09	0.43	0.09	0.43
Middleton Water Co.	0.18	0.07	0	0.03	0.72	0.61	0	0.48	0.43	0.70	0.15	0.85
Middleton Mill Ditch	0.12	0.04	0	0.11	0.85	0.46	0	0.08	0.25	0.83	0.25	1.03
Phyllis	0.21	0.18	0	0.38	0.14	0.29	0.20	0.55	0.56	0.82	0.64	0.93
Pioneer	0.04	0.04	0	0.08	0.97	0.66	0	0.16	0.47	0.90	0.31	0.97
Canyons	0	0	0	0	0.78	0.34	0	0.17	0.30	0.95	0.13	0.85
Farmers Gap	0.37	0.08	0	0	0.76	0.59	0	0.08	0.76	0.93	0.43	1.16
Canyon	0.25	0	0	0.06	0.40	0.40	0	0.15	0.15	0.20	0.33	0.60
Seibenberg	0.26	0	0	0.07	0.59	0	0	0.23	0.46	0.72	0.16	0.78
Pioneer Ditch	0	0.02	0	0	0.32	0.24	0	0.13	0.23	0.24	0.13	0.16
Eureka No. 2	0.13	0.03	0	0.02	0.39	0.49	0	0.05	0.98	0.59	0.35	0.57
Upper Point	0.23	0	0	0	0.78	0.63	0	0.55	0.86	0.86	0.13	0.72
Lower Point	0	0	0	0	0.19	0	0	0	0.19	0.33	0.07	0.40
Total	2.54	0.89	0	0.93	10.53	7.99	0.20	4.22	8.22	11.58	4.72	12.11
Average	0.14	0.05	0	0.05	0.58	0.44	0.01	0.23	0.46	0.64	0.26	0.73

Year	Summary of Average Ft.		
	April 1-15	April 16-30	May
1915	0.14	0.58	0.7
1916	0.05	0.44	0.6
1917	0.00	0.01	0.2
1918	0.05	0.23	0.7
Average	0.05	0.32	0.57

AVERAGE HEADGATE DUTY OF WATER, IN MINER INCHES CONTINUOUS FLOW, BY
 CANALS DIVERTING WATER FROM BOISE RIVER, BASED ON AVERAGED DIVERSIONS
 DURING THE IRRIGATION SEASONS OF THE YEARS 1915, 1916, 1917 & 1918.

	MAY				JUNE				JULY				AUGUST			
1918	1915	1916	1917	1918	1915	1916	1917	1918	1915	1916	1917	1918	1915	1916	1917	1918
0.39	0.32	0.42	0.36	0.74	0.73	0.60	0.76	0.77	0.73	0.73	0.78	0.77	0.48	0.68	0.69	0.66
0.25	0.18	0.50	0.19	0.54	0.56	0.48	0.56	0.61	0.52	0.56	0.58	0.46	0.34	0.43	0.49	0.38
0.38	0.35	0.41	0.09	0.82	0.67	0.63	0.36	0.89	0.31	0.70	0.69	0.67	0.37	0.50	0.55	0.52
0.50	0.55	1.00	0.18	0.81	1.00	1.00	1.00	0.70	0.79	1.00	1.00	0.71	0.59	0.59	0.59	0.55
0.04	0.59	0.77	0.16	0.75	0.77	0.66	0.92	0.85	0.73	0.73	0.88	0.66	0.59	0.64	0.64	0.57
0.03	0.09	0.43	0.09	0.43	0.43	0.60	0.43	0.95	0.52	0.43	0.78	0.69	0.60	0.60	0.60	0.76
0.48	0.43	0.70	0.25	0.85	0.74	0.56	0.69	0.88	0.66	0.65	0.59	0.74	0.58	0.45	0.51	0.52
0.08	0.75	0.83	0.35	1.03	0.91	0.85	1.24	0.78	0.72	0.66	0.95	0.90	0.46	0.65	0.80	0.58
0.55	0.56	0.82	0.64	0.93	0.72	0.80	1.02	0.93	0.56	0.86	1.01	0.81	0.29	0.73	0.84	0.54
0.16	0.47	0.90	0.31	0.97	0.97	0.78	0.97	0.93	0.70	0.90	0.97	0.71	0.70	0.70	0.66	0.59
0.17	0.30	0.95	0.33	0.85	0.78	0.82	0.89	0.80	0.68	0.71	0.88	0.80	0.61	0.70	0.53	0.52
0.08	0.76	0.93	0.43	1.16	0.74	0.94	1.06	1.02	0.51	0.97	1.07	0.93	0.38	0.70	0.63	0.68
0.15	0.15	0.28	0.33	0.60	0.51	0.40	0.83	0.45	0.25	0.57	0.62	0.61	0.33	0.43	0.46	0.35
0.23	0.46	0.72	0.26	0.78	0.65	0.65	0.72	0.53	0.52	0.90	0.72	0.65	0.52	0.85	0.65	0.72
0.13	0.23	0.24	0.13	0.16	0.29	0.31	0.31	0.19	0.29	0.23	0.29	0.27	0.23	0.24	0.21	0.17
0.05	0.98	0.59	0.35	0.57	0.88	0.74	0.95	0.83	0.55	0.64	0.64	0.53	0.56	0.60	0.56	0.82
0.55	0.86	0.86	0.23	0.72	0.86	0.78	0.63	0.67	0.78	0.78	0.94	0.82	0.71	0.71	0.78	0.74
0	0.19	0.23	0.04	0.40	0.42	0.38	0.31	0.23	0.27	0.19	0.27	0.32	0.27	0.11	0.23	0.30
4.22	8.22	11.58	4.72	13.11	12.63	11.98	13.65	13.01	10.09	12.21	13.66	12.05	8.61	10.31	10.42	9.97
0.23	0.46	0.64	0.26	0.73	0.70	0.67	0.76	0.72	0.56	0.68	0.75	0.67	0.48	0.57	0.58	0.55

Summary of Average Flow in Miners Inches per Acre Irrigated							
	April 1-15	April 16-30	May	June	July	August	September
5	0.14	0.58	0.46	0.70	0.56	0.48	0.37
6	0.05	0.44	0.64	0.67	0.68	0.57	0.51
7	0.00	0.01	0.26	0.76	0.75	0.58	0.44
8	0.05	0.23	0.73	0.72	0.67	0.55	0.44
avg	0.05	0.32	0.52	0.71	0.67	0.55	0.44

CHART 24.

WATER, IN MINER INCHES CONTINUOUS FLOW, BY MONTHS,
BOISE RIVER, BASED ON AVERAGE DIVERSIONS
SEASONS OF THE YEARS 1915, 1916, 1917 & 1918.

NE		JULY					AUGUST			SEPTEMBER				ACRES
1917	1918	1915	1916	1917	1918	1915	1916	1917	1918	1915	1916	1917	1918	IRRIGATED
0.76	0.77	0.73	0.73	0.78	0.77	0.48	0.68	0.69	0.66	0.50	0.62	0.58	0.46	25000
0.56	0.61	0.52	0.56	0.58	0.46	0.34	0.43	0.49	0.38	0.27	0.41	0.33	0.23	12300
0.36	0.89	0.31	0.70	0.69	0.67	0.37	0.50	0.55	0.52	0.19	0.42	0.28	0.33	8800
1.00	0.70	0.79	1.00	1.00	0.71	0.59	0.59	0.59	0.55	0.59	0.59	0.59	0.38	2729
0.92	0.85	0.73	0.73	0.88	0.66	0.59	0.64	0.64	0.57	0.46	0.57	0.63	0.31	2720
0.43	0.95	0.52	0.43	0.78	0.69	0.60	0.60	0.60	0.76	0.35	0.60	0.60	0.64	578
0.69	0.88	0.66	0.65	0.59	0.74	0.58	0.45	0.51	0.52	0.51	0.37	0.23	0.51	5704
1.24	0.78	0.72	0.66	0.95	0.90	0.46	0.65	0.80	0.58	0.37	0.54	0.60	0.43	3245
1.02	0.93	0.56	0.86	1.01	0.81	0.29	0.73	0.84	0.54	0.26	0.60	0.54	0.34	22000
0.97	0.93	0.70	0.90	0.97	0.71	0.70	0.70	0.66	0.59	0.35	0.58	0.58	0.43	1286
0.89	0.80	0.68	0.71	0.88	0.80	0.61	0.70	0.53	0.52	0.53	0.55	0.41	0.39	3790
1.06	1.02	0.51	0.97	1.07	0.93	0.38	0.70	0.63	0.68	0.39	0.63	0.47	0.55	15500
0.83	0.45	0.25	0.57	0.62	0.61	0.33	0.43	0.46	0.35	0.12	0.36	0.36	0.31	1382
0.72	0.53	0.52	0.90	0.72	0.65	0.52	0.85	0.65	0.72	0.46	0.65	0.52	0.78	767
0.31	0.19	0.29	0.23	0.29	0.27	0.23	0.24	0.21	0.17	0.16	0.29	0.21	0.18	3082
0.95	0.83	0.55	0.64	0.64	0.53	0.56	0.60	0.56	0.82	0.48	0.55	0.41	0.78	2560
0.63	0.67	0.78	0.78	0.94	0.82	0.71	0.71	0.78	0.74	0.47	0.71	0.47	0.63	636
0.31	0.23	0.27	0.19	0.27	0.32	0.27	0.11	0.23	0.30	0.19	0.23	0.15	0.31	1309
13.65	13.01	10.09	12.21	13.66	12.05	8.61	10.31	10.42	9.97	6.62	9.27	7.96	7.99	113388
0.76	0.72	0.56	0.68	0.75	0.67	0.48	0.57	0.58	0.55	0.37	0.51	0.44	0.44	

A.K.T. 1918.

A.K.T. 1918.

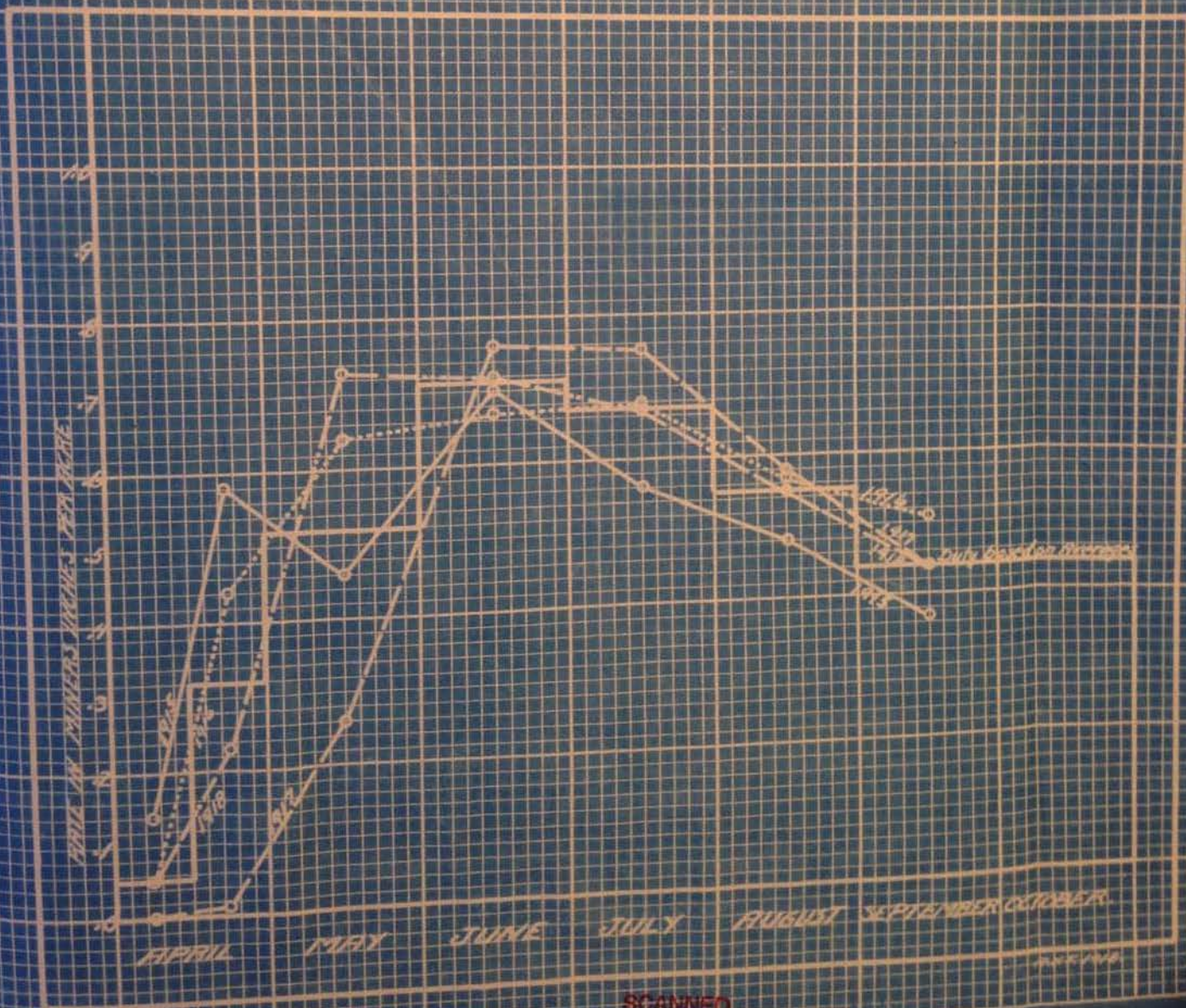
in Miners Inches per Acre Irrigated				
June	July	August	September	
0.70	0.56	0.48	0.37	
0.67	0.68	0.57	0.51	
0.76	0.75	0.58	0.44	
0.72	0.67	0.55	0.44	
0.71	0.67	0.55	0.44	

SCANNED

APR

CHART 25.

CHART SHOWING AVERAGE DUTY OF WATER IN
FIVE INCHES PER HOUR FOR BOKSE VALLEY
CENTRALS FOR YEARS 1915, 1916, 1917, 1918. ALSO
AVERAGE DUTY BASED ON AVERAGE.



SCANNED

APR 18 2012

STEWART DECREE.

No.	Date	Name	Amt. Decreed		No.	Date	Name	Amt. Decreed		No.
			Sec. Ft.	Inches				Sec. Ft.	Inches	
1	6-1-64	Thomas Davis	2.20	110	46	6-1-69	Mason Creek Ditch Co.	37.20	1860	91
2	6-1-64	Jacobs Canal Co.	20.00	1000	47	6-1-69	T.W. Boone	3.50	175	92
3	6-1-64	Middleton Mill Ditch	12.80	640	48	6-1-70	W.J. Hamming	2.60	130	93
4	6-1-64	Thomas Andrews	3.30	165	49	6-1-70	Pioneer Canal	25.72	1286	94
5	6-1-64	Catlin & Mace	2.86	143	50	6-1-69	Barber Lumber Co.	2.24	112	95
6	6-1-64	T.C. Catlin	3.30	165	51	6-1-70	Thomas Andrews	1.30	65	96
7	6-1-64	C.C. Havird	3.30	165	52	6-1-71	Catlin & Mace	7.86	393	97
8	6-1-64	Pioneer Dickey Ditch Co.	20.00	1000	53	6-1-71	Peter Meeras	1.80	90	98
9	6-1-65	Seibenberg Ditch Co.	13.42	671	54	6-1-71	Middleton Mill Ditch Co.	33.70	1685	99
10	6-1-65	Allen V. Webster	1.20	60	55	6-1-72	J.F. Varyan	.70	35	100
11	6-1-65	J.F. Varyan	.66	33	56	6-1-72	J.F. Varyan	1.40	70	101
12	6-1-65	Graham & Gilbert	4.40	220	57	6-1-72	Mary C. Davis	4.40	220	102
13	6-1-65	Eureka Water Co.	33.32	1666	58	6-1-72	Edward N. Hart	3.30	165	103
14	6-1-65	New Union Ditch Co.	13.76	688	59	6-1-74	J.W. Boone	2.20	110	104
15	6-1-65	Boise Valley Irrig. Ditch	54.58	2729	60	6-1-75	Farmers Cooperative D. Co.	10.00	500	105
16	6-1-65	Ridenbaugh & Rossi	9.20	460	61	6-1-76	Edward B. Mary Clark	2.30	115	106
17	6-1-65	Ridenbaugh & Rossi (Pomeroy)	265.80	13290	62	6-1-76	John Cecil	.44	22	107
18	6-1-65	Denver & Idaho Land Co.	.80	40	63	6-1-77	Thomas Hkens	5.20	260	108
19	6-1-65	Martha Bowman	2.88	144	64	6-1-77	W.H. Conway	.90	45	109
20	6-1-65	Bird Bowman	6.40	320	65	6-1-77	Middleton Water Co.	114.08	5704	110
21	6-1-65	G.W. Gess	2.90	145	66	7-1-77	Perrault & Johnson (Pomeroy)	200.00	10000	111
22	6-1-65	Robert McGurre	3.20	160	67	5-1-78	Nampa-Meridian Irrig. D.	17000	8500	112
23	6-1-65	C.W. Cooper	3.20	160	68	6-1-78	John Mammam	4.20	210	113
24	6-1-65	J.W. Roland	2.40	120	69	6-1-78	Julia Mammam	3.36	168	114
25	6-1-65	Draper & Wells	3.94	197	70	6-1-78	Charles Ellen	8.80	440	115
26	6-1-65	Thomas J. Palmer	1.60	80	71	6-1-78	R.H. Stockton	4.40	220	116
27	6-1-65	Noah W. Palmer	1.58	79	72	6-1-79	New Dry Creek Ditch Co.	31.32	1566	117
28	6-1-65	J.N. Tucker	7.00	350	73	6-1-79	D. Mumford	4.00	200	118
29	6-1-65	Thomas Andrews	6.00	300	74	6-1-80	Smith Stockton	1.76	88	119
30	5-1-66	J. Perrault & R. Johnson	50.00	2500	75	6-1-80	Isaham Joplin	2.40	120	120
31	6-1-66	William P. Kennedy	2.60	130	76	10-20-80	Joseph Goble	.90	45	121
32	6-1-66	Manville and Leonard	3.50	175	77	10-29-80	Franklin Ditch Co.	27.60	1380	122
33	6-1-66	Boise City Canal Co.	38.06	1903	78	6-1-82	Allen V. Webster	.90	45	123
34	6-1-66	Franklin Ditch Co.	15.40	770	79	6-1-82	Susie Campbell	.60	30	124
35	6-1-67	Canyon Co. Water Co.	75.80	3790	80	6-1-82	J.T. Barber	1.60	80	125
36	6-1-68	Martha E. McCarthy	14.10	705	81	6-1-82	Sonora Joplin	3.40	170	126
37	6-1-68	H.D. & Dora Goodman	3.20	160	82	6-1-82	S.W. Hutchinson	.44	22	127
38	6-1-68	T.T. Johnson	3.20	160	83	6-1-82	Johnson	.44	22	128
39	6-1-68	Ross, Allen, Dilley & Ross	8.54	427	84	6-1-82	Andrew J. Joplin	2.86	143	129
40	6-1-68	S.S. Gray	1.40	70	85	6-1-82	James L. Graham	2.20	110	130
41	6-1-69	John Mammam	1.80	90	86	6-1-83	Farmers Cooperative Ditch	20.00	1000	131
42	6-1-69	Isaac Bedal	1.60	80	87	6-1-83	Francis M. Joplin	.90	45	132
43	6-1-69	Frederich Ode	3.60	180	88	6-1-83	W.F. Black	12.00	600	133
44	6-1-69	Prior Burnett	8.50	425	89	11-9-83	Eureka Ditch Co. No. 2	21.70	1085	134
45	6-1-69	Pioneer Dixie Ditch Co.	35.44	1772	90	6-1-84	Pomeroy Irrig. District	53.10	2655	135

• Indicates Rights supplied by return flow to River.

STEWART DECREE.

CHART 26.

Decreed Inches	No.	Date	Name	Amt. Decreed Sec. Ft. Inches	No.	Date	Name	Amt. Decreed Sec. Ft. Inches
110	46	6-1-69	Mayon Creek Ditch Co.	37.20 1860	91	6-1-84	Riverside Irrig. Dist.	20.00 1000
1000	47	6-1-69	T.W. Boone.	3.50 175	92	10-17-84	Settlers Canal Co.	99.06 4953
640	48	6-1-70	W.J. Hamming	2.60 130	93	6-1-86	New Dry Creek Ditch	15.22 761
165	49	6-1-70	Pioneer Canal	25.72 1286	94	6-1-86	Thomas Davis	13.40 670
143	50	6-1-69	Barber Lumber Co.	2.24 112	95	1-23-87	Wm C. L & E. Young	4.00 200
165	51	6-1-70	Thomas Andrews	1.30 65	96	10-1-87	American Ditch Assoc.	47.80 2390
165	52	6-1-71	Catlin & Mace	7.86 393	97	6-1-88	New Dry Creek Ditch Co.	7.86 393
1000	53	6-1-71	Peter Meeras	1.80 90	98	6-1-88	R. V. Linder	4.00 200
671	54	6-1-71	Middleton Mill Ditch Co.	33.70 1685	99	6-1-88	Leri Smith	1.30 65
60	55	6-1-72	J.F. Varyan	.70 35	100	6-1-88	Charlotte Calhoun	1.40 70
33	56	6-1-72	J.F. Varyan	1.40 70	101	6-1-88	Ed. J. Linder	1.46 73
220	57	6-1-72	Mary C. Davis	4.40 220	102	6-1-88	Lizzie Everett	1.20 60
1666	58	6-1-72	Edward H. Hart	3.30 165	103	6-1-88	Jessie Wilson	1.40 70
688	59	6-1-74	T.W. Boone	2.20 110	104	6-1-88	Thomas Andrews	.90 45
2729	60	6-1-75	Farmers Cooperative D. Co.	10.00 500	105	7-1-88	Farmers Coop. Ditch Co.	50.00 2500
460	61	6-1-76	Edward B. Mary Clark	2.30 115	106	8-20-88	Nampa-Meridian Irrig. D.	370.84 18542
13290	62	6-1-76	John Cecil	.44 22	107	5-1-89	Chas. S. Miller	.06 3
40	63	6-1-77	Thomas Aikens	5.20 260	108	5-1-89	Lommi's L. Roseley	.02 1
144	64	6-1-77	W.H. Conway	.90 45	109	5-1-89	J.B. J. Utter & C.B. Taylor	2.40 120
320	65	6-1-77	Middleton Water Co.	114.08 5704	110	5-1-89	South Boise Mutual Irrig. Co.	6.00 300
145	66	7-1-77	Perrault & Johnson (New)	200.00 10000	111	5-1-89	Estate of J.H. Gallagher	2.94 147
160	67	5-1-78	Nampa-Meridian Irrig. D.	17000 8500	112	5-1-89	Anna H. Fogarty	.05 2
160	68	6-1-78	John Mammari	4.20 210	113	5-1-89	Grace Call	.10 5
120	69	6-1-78	Julia Mammari	3.36 168	114	5-1-89	Samuel H. Canfield	.03 1
197	70	6-1-78	Charles Ellen	8.80 440	115	6-1-89	Sonora Joplin	.06 3
80	71	6-1-78	R.H. Stockton	4.40 220	116	6-1-89	Sonora Joplin	1.20 60
79	72	6-1-79	New Dry Creek Ditch Co.	31.32 1566	117	9-1-90	Pioneer Irrig. District	200.00 10000
350	73	6-1-79	D. Mumford	4.00 200	118	6-1-91	W.H. Conway	2.20 110
300	74	6-1-80	Smith & Stockton	1.76 88	119	6-1-91	Thomas Davis	.54 27
2500	75	6-1-80	Isham Joplin	2.40 120	120	6-1-91	Middleton Mill Ditch Co.	17.00 850
130	76	10-20-80	Joseph Goble	.90 45	121	6-1-91	Thomas Andrews	3.50 175
175	77	10-29-80	Franklin Ditch Co.	27.60 1380	122	6-1-91	Settlers Canal Co.	73.44 3672
1903	78	6-1-82	Allen V. Webster	.90 45	123	6-1-91	Thomas Aiken	.80 40
770	79	6-1-82	Susie Campbell	.60 30	124	5-1-93	Riverside Irrig. District	80.00 4000
3790	80	6-1-82	J.T. Barber	1.60 80	125	6-1-94	R.H. Stockton	1.76 88
705	81	6-1-82	Sonora Joplin	3.40 170	126	7-2-94	Farmers Union Ditch Co.	110.00 5500
185	82	6-1-82	S.W. Hutchinson	.44 22	127	5-1-95	Charles R. & J. M. Nash	1.00 50
160	83	6-1-82	Johnson	.44 22	128	7-1-95	Matthew Casey	.66 33
427	84	6-1-82	Andrew J. Joplin	2.86 143	129	7-1-96	Farmers Coop. Ditch Co.	83.50 4175
70	85	6-1-82	James L. Graham	2.20 110	130	10-1-99	Riverside Irrig. District	20.00 1000
90	86	6-1-83	Farmers Cooperative Ditch	20.00 1000	131	3-23-00	New York Canal Co.	219.10 10955
80	87	6-1-83	Francis M. Joplin	.90 45	132	5-17-00	Canyon Ditch Co.	10.00 500
180	88	6-1-83	W.H. Black	12.00 600	133	6-1-01	Riverside Irrig. District	70.00 3500
425	89	11-9-83	Eureka Ditch Co. No. 2	21.70 1085	134	10-25-01	Canyon Ditch Co.	5.00 250
1772	90	6-1-84	Pioneer Irrig. District	53.10 2655	135	4-1-04	Pioneer Irrig. District	56.30 2815

• Indicates Rights supplied by return flow to River.

CHART 27.

CHART

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 PERIOD JULY 19 TO OCTOBER 31 INC. 1915, OR THE 60% PERIOD.

URN
C.

No. of Decree	No. of Right based on 1915 Results	Name	Amount Decreed 100%	Amount Decreed 60%	Quantities Passing Highland necessary to fill 60% of Decree	Average
33	1	Boise City Canal Co.	38.06	22.83	22.83	403
34	2	Franklin Ditch Co.	15.40	9.24	32.07	533
35	3	Canyon Co. Water Co.	75.80	45.48	77.55	964
36	4	Martha E. McCarthy	14.10	8.46	86.01	1027
37	5	Goodman and Goodman	3.70	2.22	88.23	1016
40	6	S. S. Gray	1.40	.84	89.07	
42	7	Isaac Bedal	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	Average
52	12	T. C. Catlin and Pollatte Mace	7.86	4.72	135.41	123
53	13	Peter Meeres	1.80	1.08	136.49	137
54	14	Middleton Mill Ditch Co.	33.70	20.22	156.71	196
55	15	J. E. Yaryan	.70	.42	157.13	242
56	16	J. E. Yaryan	1.40	.84	157.97	260
57	17	Mary C. Davis	4.40	2.64	160.61	
58	18	Edward N. Hart	3.30	1.98	162.59	
61	19	Edward and 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	275
67	24	Nampa-Meridian Irrig. D.	170.00	102.00	338.34	281
72	25	New Dry Creek Ditch Co.	31.32	18.79	347.13	521
75	26	Isham Joplin	2.40	1.44	358.57	469
76	27	Joseph Goble	.90	.54	359.11	490
76	27	Franklin Ditch Co.	27.60	16.56	376.67	
77	28	Allen V. Webster	.90	.54	376.21	
78	29	Sissie Campbell	.60	.36	376.57	
79	30	J. T. Barber	1.60	.96	377.53	
80	31	Sonora Joplin	3.40	2.04	379.57	
81	32	S. W. Hutchinson	.44	.26	380.09	
82	33	Johnson	.44	.26	380.09	
83	34	Andrew J. Joplin	2.86	1.72	380.09	
84	35	Andrew J. Joplin				

Rights 1 to 32 inc. Stewart Decree, taken care of by Return Flow in Sect. 1
RIGHTS 33 TO 35

SCANNED
APR 20 1971

CHART 27 A.

RETURN
18, Inc.

SHEET 2

No. of Decree Right Stewart on 1915 Decree Results	No. of Right based on 1915 Results	Name	Amount Decreed 100%	Amount Decreed 60%	Quantities Passing High land necessary to fill 60% of Decree	Number	Average
85	36	James L. Graham	2.20	1.32	383.13	59	4.03
87	37	Francis M. Toplin	.90	.54	383.67	60	5.33
90	38	Pioneer Irrigation District	53.10	31.86	415.53	39	9.64
92	39	Settlers Canal Co.	99.06	59.44	474.97	15	10.27
93	40	New Dry Creek Ditch Co.	15.22	9.13	484.10	38	10.16
94	41	Thomas Davis	13.40	8.04	492.14		
97	42	New Dry Creek Ditch Co.	786	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	Number	Average
101	46	Ed J. Linder	1.46	.88	501.76	01	1.23
102	47	Lizzie Everett	1.20	.72	502.48	50	1.37
103	48	Jessie Wilson	1.40	.84	503.32	99	1.96
106	49	Nampa-Meridian Irrig. D.	370.84	222.50	725.82	25	2.42
107	50	Charles S. Miller	.06	.04	725.86	63	2.60
108	51	Lommi L. Haseley	.02	.01	725.87		
109	52	S. & J. Utter & C. B. Taylor	2.40	1.44	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 H. Fogarty	.05	.03	732.70		
113	56	Grace Call	.10	.06	732.76	Number	
114	57	Samuel H. Canfield	.03	.02	732.78	80	2.75
115	58	Sonora Toplin	.06	.03	732.81	00	2.81
116	59	Sonora Toplin	1.20	.72	733.53	40	3.21
117	60	Pioneer Irrigation District	200.00	120.00	853.53	186	4.29
118	61	W. H. Conway	2.20	1.32	854.85	200	4.90
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	Farmer's Union Ditch Co.	110.00	66.00	975.91		
127	67	Charles Rein & Jane Keoh	1.00	.60	976.51		
128	68	Matthew Casey	.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	1142.47		

APR 18 2012

SUMMARY TABLE, IN SECOND FEET, OF DAILY RETURN FLOW FOR FIVE YEAR PERIOD, 1914 TO 1918, Inc.

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

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

RETURN FLOW TO SECTION TWO.

Year	April	May	June	July	August	September	
1914				357	213	280	275
1915				249	245	300	281
1916					503	540	521
1917					425	386	409
1918				431	503	500	490

Years 1917 and 1918 influenced by diversions. See Chart 15.

SCANNED

APR 18 2012

SUMMARY TABLE, IN SECOND FEET, OF DAILY RETURN
FLOW FOR FIVE YEAR PERIOD, 1914 TO 1918, Inc.

RETURN FLOW TO ENTIRE RIVER.

April	May	June	July	August	September	Average
			465	276	469	403
447	861	545	498	381	460	533
939	1192	1191	1006	727	739	964
	1214	1341	1179	690	715	1027
1093	1247	1281	756	785	938	1016

RETURN FLOW TO SECTION ONE.

April	May	June	July	August	September	Average
			139	70	201	123
			122	130	150	137
				194	199	196
				254	225	242
			227	270	263	260

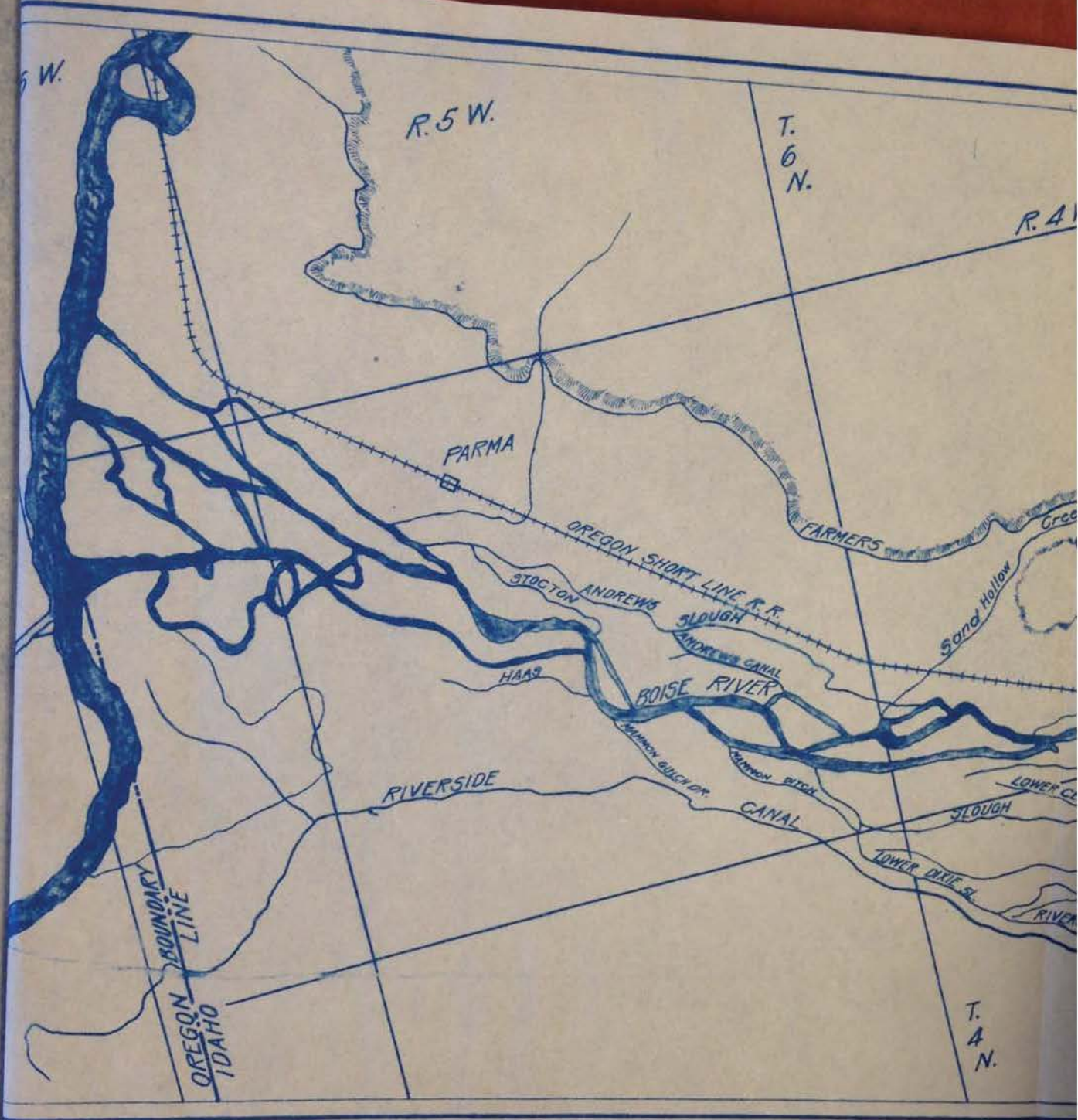
RETURN FLOW TO SECTION TWO.

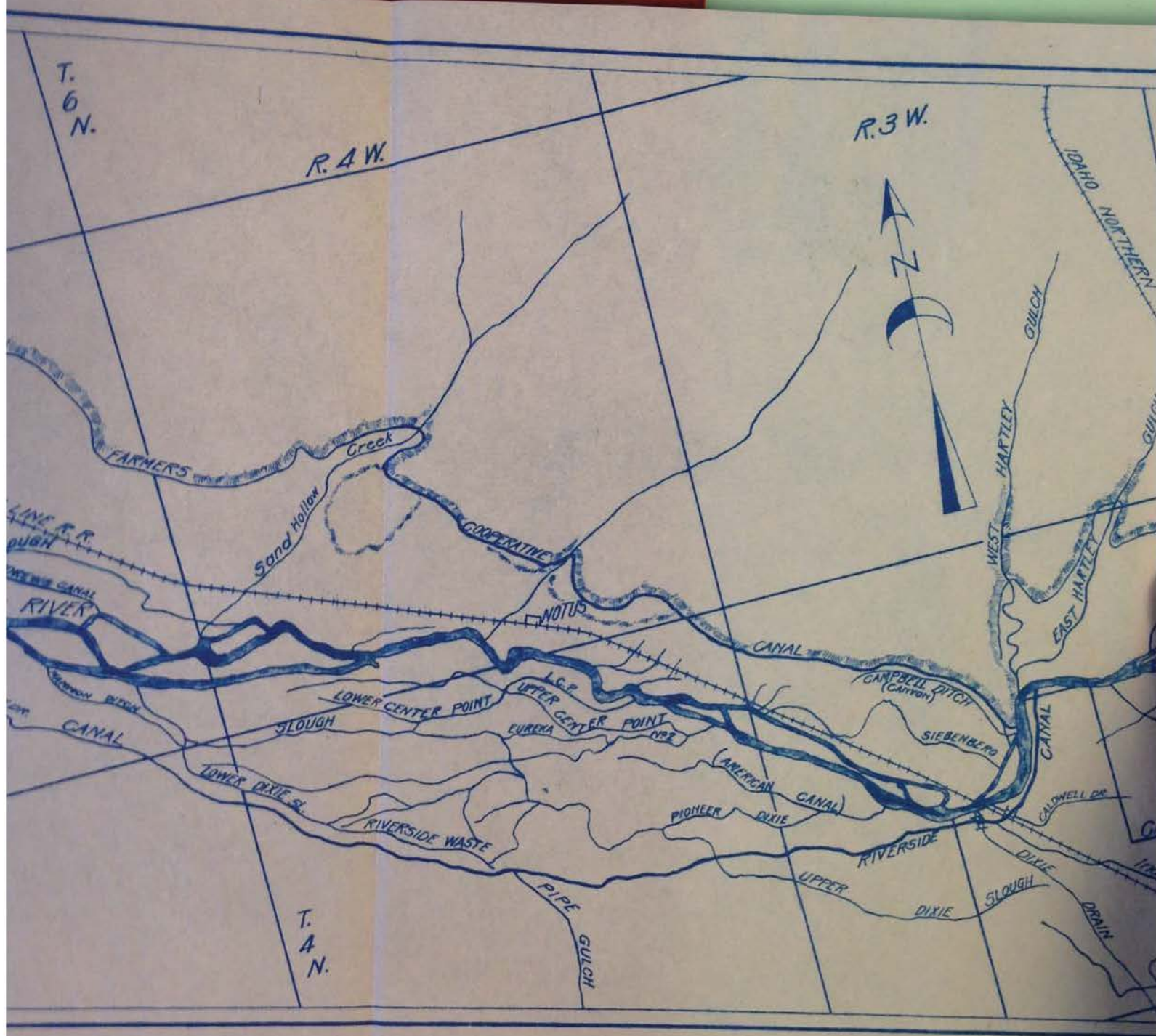
April	May	June	July	August	September	
			357	213	280	275
			249	245	300	281
				503	540	521
				425	386	409
			431	503	500	490

Years 1917 and 1918 influenced by diversions. See Chart 16.

NOT FOR

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APR 18 2012

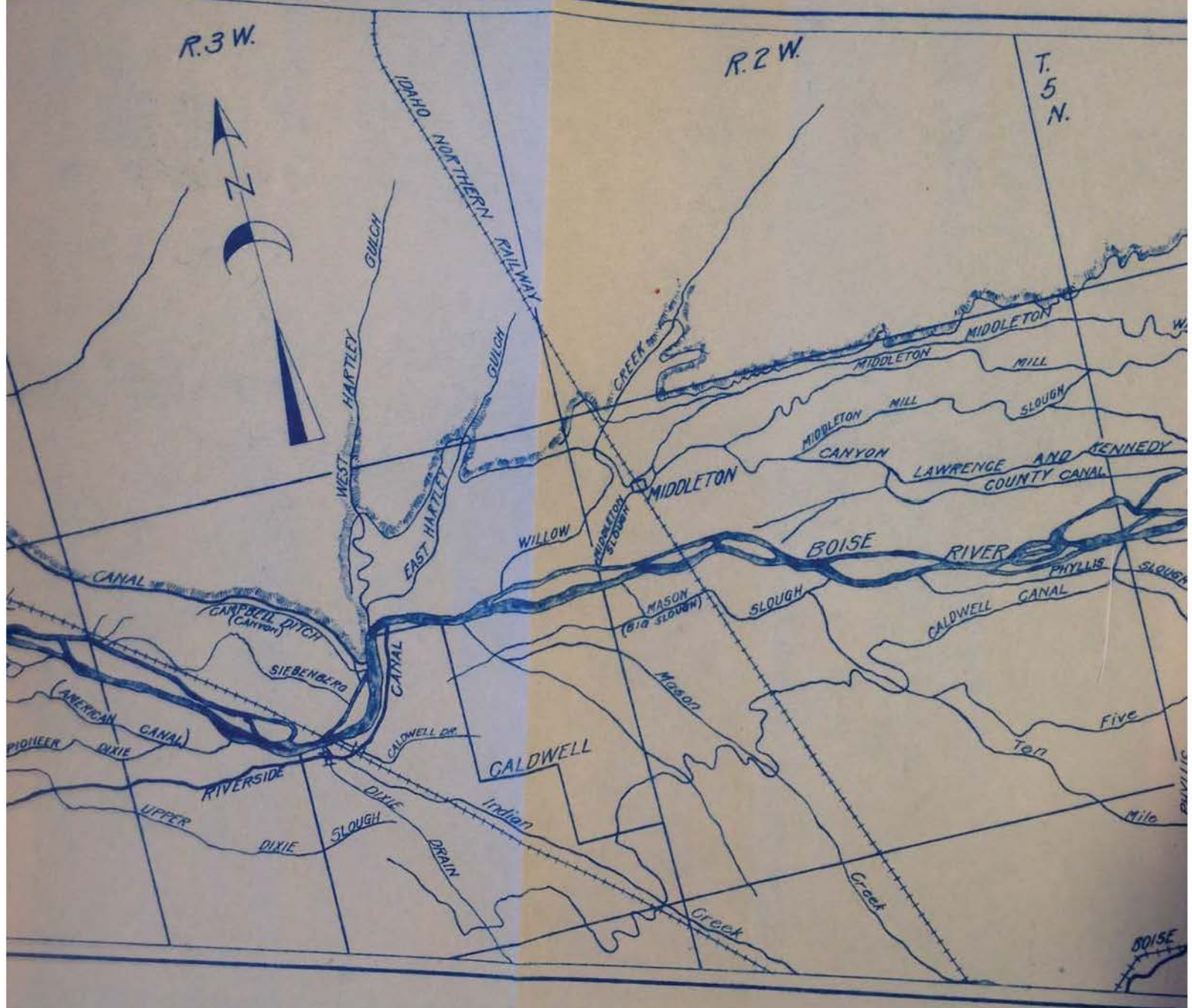




R.3 W.

R.2 W.

T.5 N.

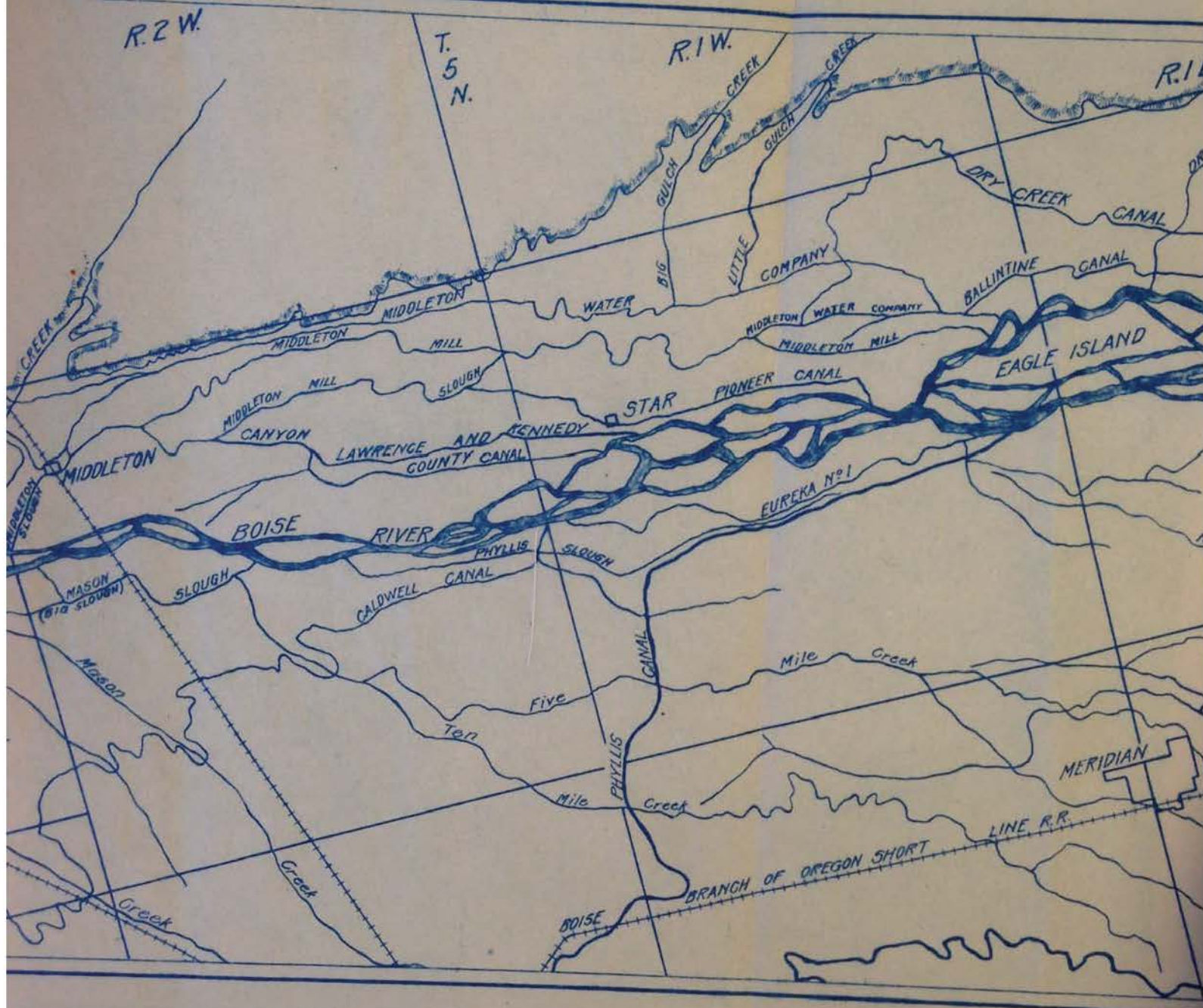


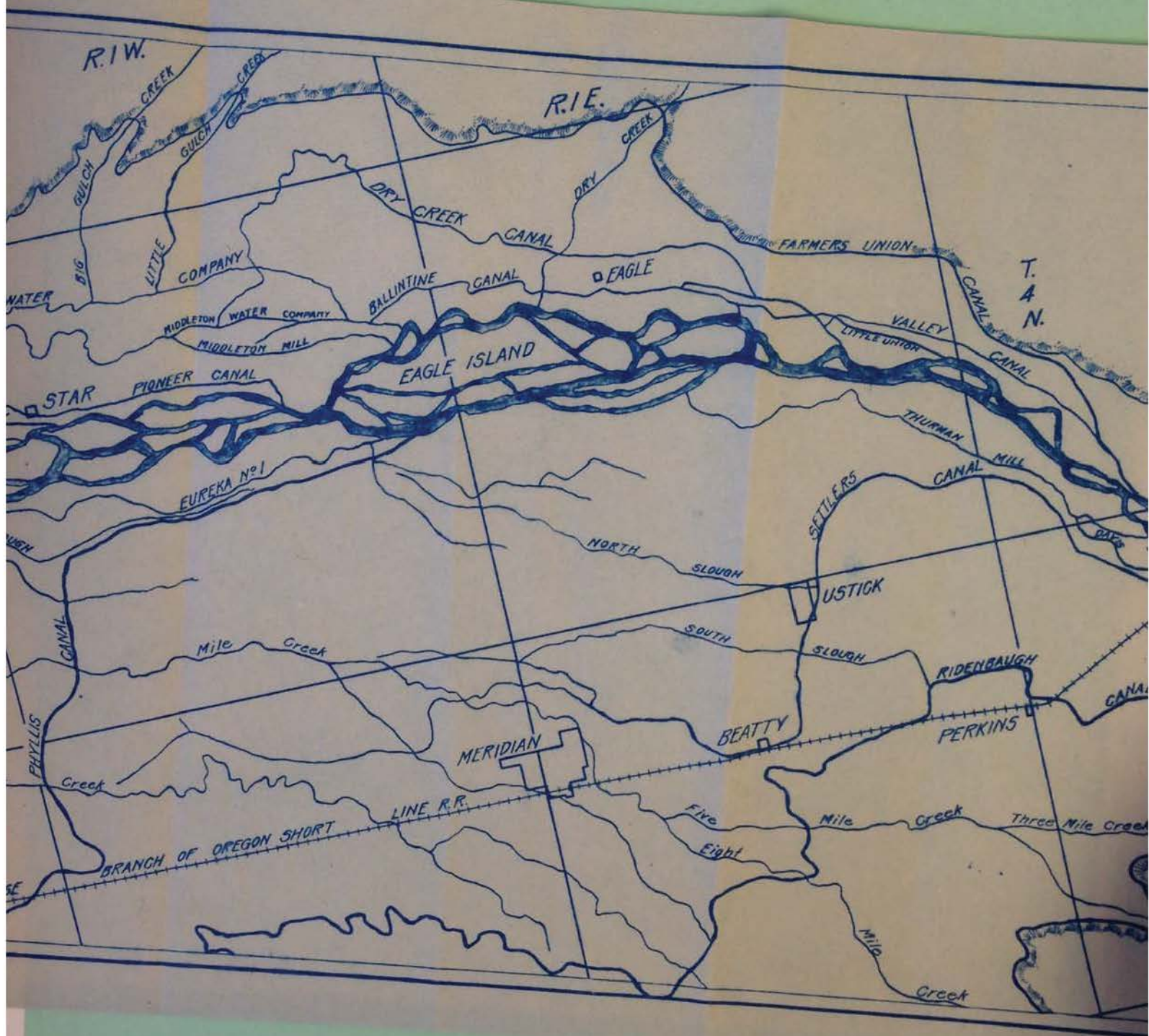
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N.

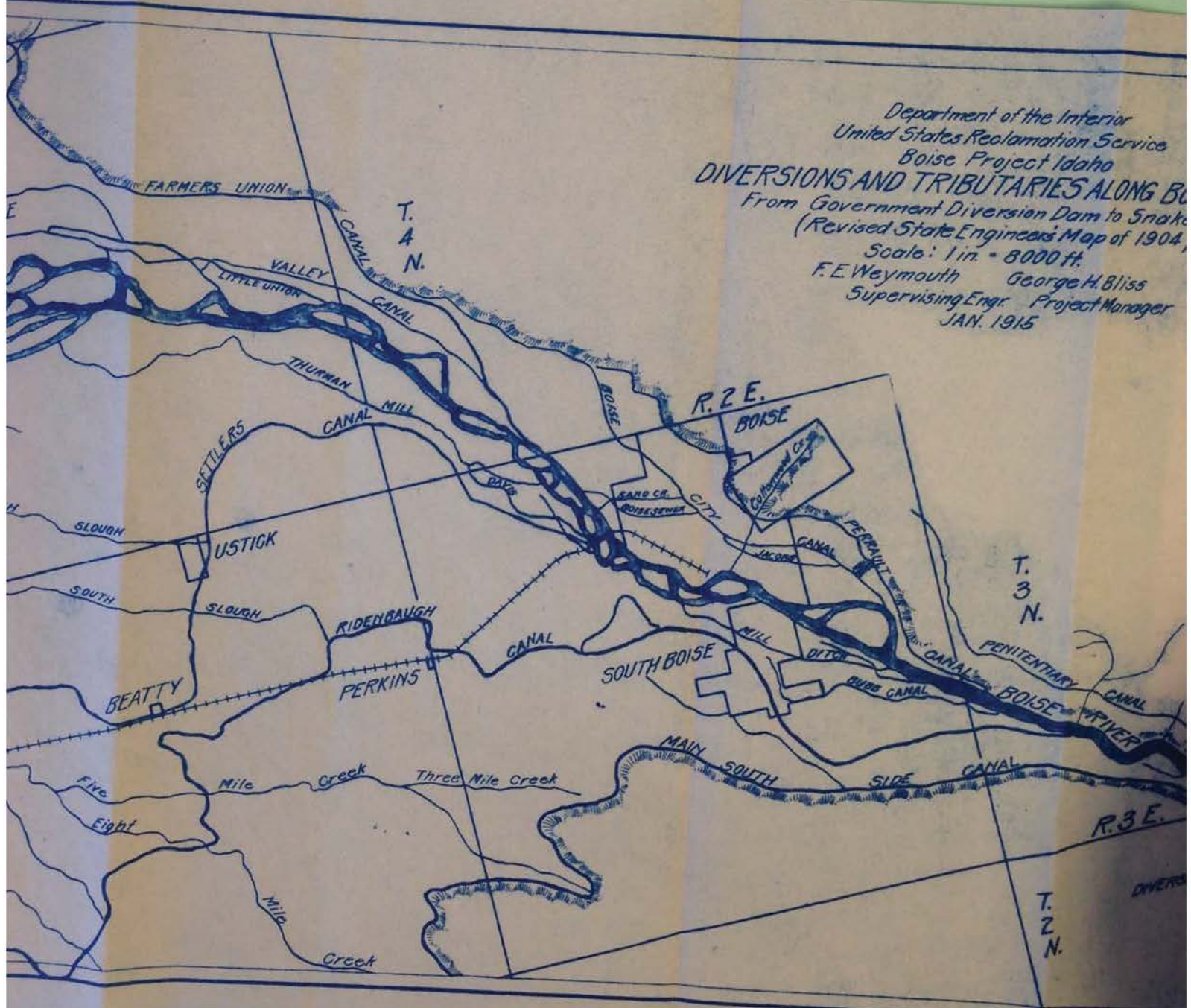
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R.1E.



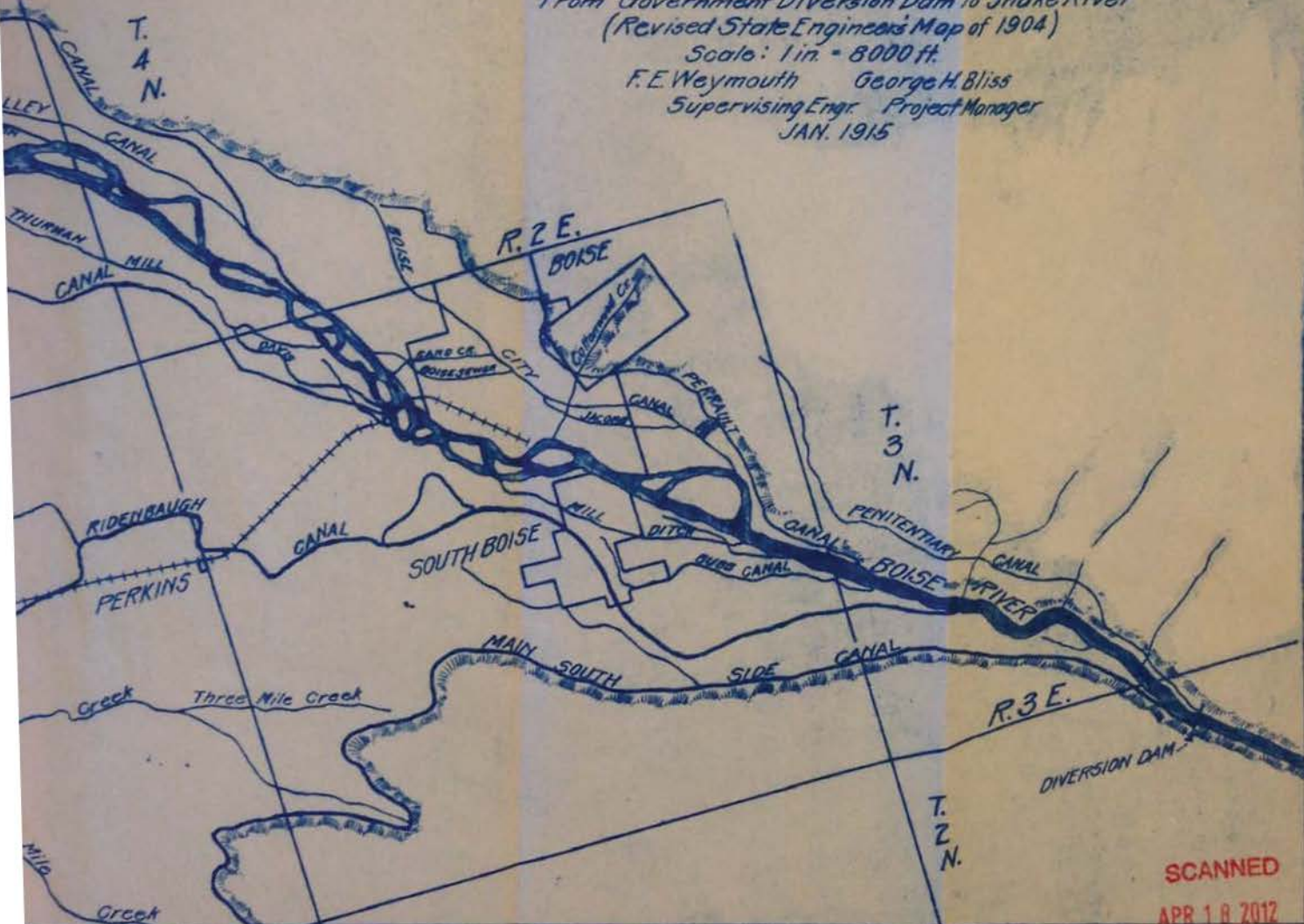


Department of the Interior
 United States Reclamation Service
 Boise Project Idaho
DIVERSIONS AND TRIBUTARIES ALONG BO
 From Government Diversion Dam to Snake
 (Revised State Engineer's Map of 1904,
 Scale: 1 in. = 8000 ft.
 F.E. Weymouth George H. Bliss
 Supervising Engr. Project Manager
 JAN. 1915



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 George H. Bliss
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JAN. 1915



SCANNED
APR 18 2012

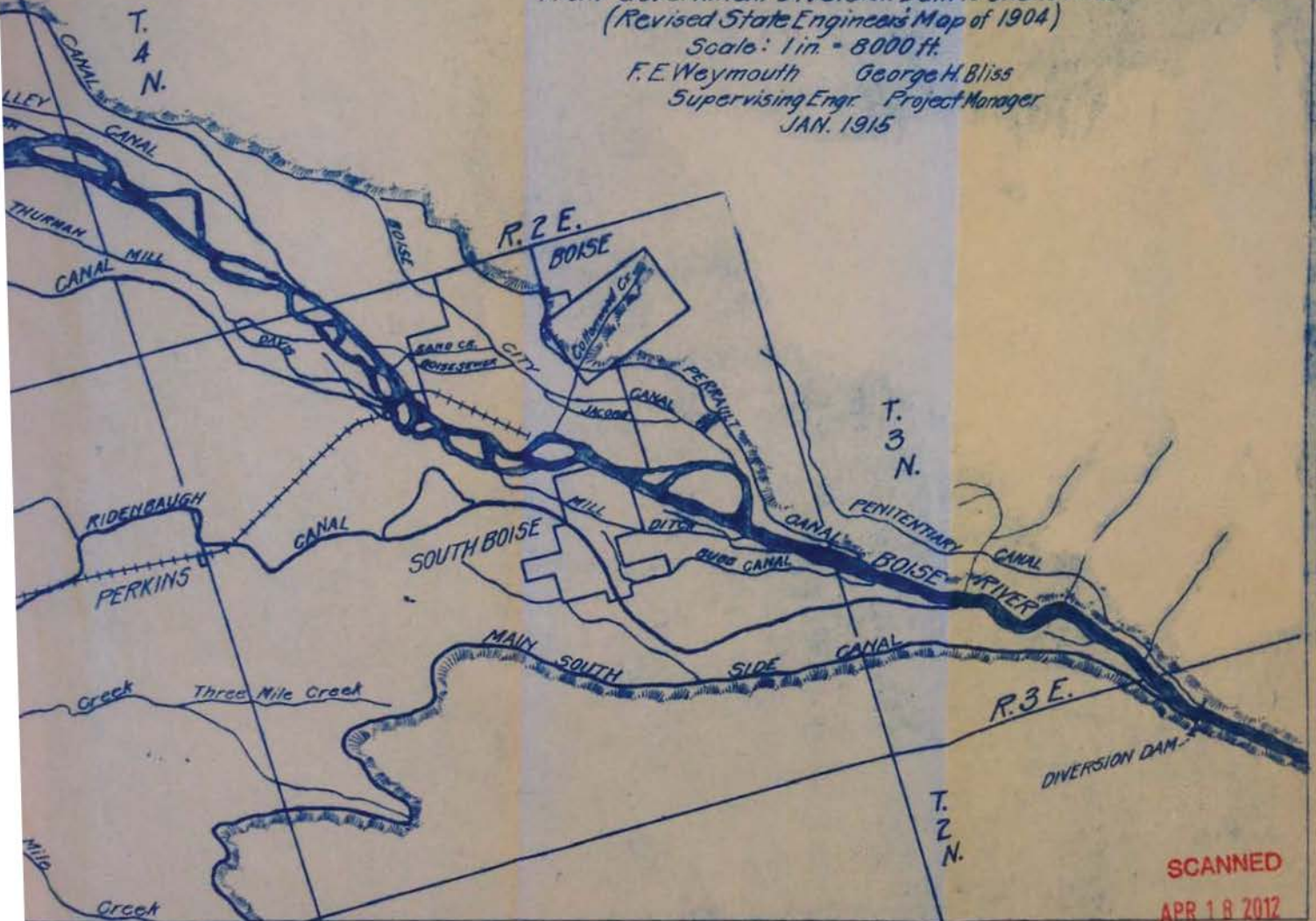
Department of the Interior
United States Reclamation Service
Boise Project Idaho

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 George H. Bliss
Supervising Engr. Project Manager
JAN. 1915



SCANNED
APR 18 2012

