

BEAR RIVER COMMISSION

Minutes of Regular Meeting held in the Governor's Board Room, State Capitol Building, Salt Lake City, Utah - October 27, 1958 at 10:00 a.m.

A meeting of the Bear River Commission was held in the Governor's Board Room of the State Capitol Building, Salt Lake City, Utah, on Monday, October 27, 1958, at 10:00 a.m. Chairman E. O. Larson presided.

Commissioners Present:

IDAHO:

Fred M. Cooper, Grace
Melvin Lauridsen, Montpelier
George N. Carter, Boise

WYOMING:

Earl Lloyd, Cheyenne
J. W. Myers, Evanston
S. Reed Dayton, Cokeville

UTAH:

L. B. Johnson, Randolph
A. V. Smoot, Corinne
Jay R. Bingham, Bountiful

UNITED STATES:

E. O. Larson - Chairman and U. S. representative

Advisers Present:

IDAHO

J. Warren Serrine, Paris, Idaho

WYOMING

H. T. Person, Laramie

UTAH

L. B. Caine, Logan
J. L. Weidmann, Honeyville

Wayne D. Criddle, Engineering Adviser
Robert B. Porter, Legal Adviser

Others:

Wallace N. Jibson, U.S.G.S., Logan, Utah
Russell D. Stoker, Soda Springs, Idaho
W. V. Iorns, U.S.G.S., Salt Lake City, Utah
E. G. Thorum, Salt Lake City, Utah (Utah Power & Light)
E. K. Thomas, Salt Lake City, Utah (U.S.B.R.)
Arden Pope, Sage Wyoming
Ham Wren, Tremonton, Utah
Emil C. Gradert, Fort Bridger, Wyoming
Orson A. Christensen, Brigham City, Utah
Donald C. Norseth, State Engineer's Office, Salt Lake City, Utah
Daniel F. Lawrence, Utah Water & Power Board, Salt Lake City, Utah
James C. Busby, Utah Water & Power Board, Salt Lake City, Utah
H. L. Drew, Bear River Valley Water Users, Tremonton, Utah

CHAIRMAN: (Called on each State - Utah, Idaho and Wyoming, to introduce Commissioners and advisers present. This was done, and the Chairman then introduced the Federal personnel attending the meeting.)

CHAIRMAN: The next item of business is reading of the Minutes of the special meeting held June 17, 1958. We will dispense with the reading of the minutes, if you are all familiar with them. Have you any suggested changes or revisions?

COMMISSIONER BINGHAM: Mr. Chairman, I will move that the Minutes as prepared and distributed to the Commissioners be approved and filed.

COMMISSIONER LAURIDSEN: Seconded the Motion. Motion carried.

MR. JIBSON: The minutes have been distributed to all Commission members, but not to others. I have a supply with me which are now available for distribution.

REPORT OF CHAIRMAN

CHAIRMAN: I do not have a written report. I am very happy to be back with you. I was out of commission for about six months, but now have 100% recovery and am ready to get back on water problems now, and carry on as usual.

The Bear River is a very important stream, and this Commission has important responsibilities to perform. There are several things we must not lose sight of - one of the first being fiscal matters. Your budget committee

was in session this morning. It is very necessary that the budget be worked out in plenty of time to get to the proper officers of each state so that the proposed budget can be submitted to the State Legislatures.

Then there is the matter of operations during compact regulation. The river has been operated in accordance with terms of the compact this past year. Of course, that will point up certain problems to be solved, because all three states want equal treatment to all water users. This may require more major stations or more attention to trouble spots. Some of the matters can be settled, I am sure, as you go along - other matters you will want to refer to the Commission. I understand you have an Operations Committee set up. I do not know whether or not other meetings will be needed. The next meeting, according to the By-laws, will be on the third Monday of April, preceding the operating year. I assume there will be some work for the Operations, or some other Committee to get things in line so any actions can be taken for the operations year, not too many months away.

As Federal Representative, I will cooperate in every way to furnish the Commission any records I have in my possession. Mr. E. K. Thomas is assisting me in this work and can work out with Mr. Bingham and Mr. Jibson so you can set up somewhere, a complete file that will remain intact for the Commission over the years. It is very important that you have a complete file of all actions of this Commission when it was a Compact Commission, and then continue your files as a Commission in Action. Any of the information I have in the Federal Representative file I will be glad to add.

COMMISSIONER JOHNSON: I move the other members of the Commission that the minutes contain a commendation for the work of Wallace Jibson and his office in our operation this summer. We feel everything that could be done in the first

year was done, and I should like to move this become a part of the record of this meeting.

COM. COOPER: Seconded the motion. Motion carried.

REPORT OF SECRETARY-TREASURER

COM. BINGHAM: I would like to make available to those who do not have it, a copy of the bound volume containing the Compact and By-laws.

I want to point out that you will find two different styles of type in the book. This was a matter of economy - we secured copies of the public law from the Government printing office and inserted it direct, and supplemented that with the By-laws as adopted by the Commission. You will find in the front of the book, a table of contents. To supply a detailed reference we went to the additional trouble of preparing an index beginning on page 19. You will note that it is a dual index, giving for each item, both the Compact and By-laws location.

I took the liberty, when we were printing the By-laws, of making one revision and would ask your confirmation of the action. I made this revision because I thought it should be put in the By-laws, as it is actually a part of the compact. It concerns a fiscal item, and can be found in the By-laws on page 16, (Article VI - "Fiscal"), sub-heading 1. You will find that statement, which I think belongs there, is taken completely in text from Article III B of the Compact. This makes the By-laws complete, so far as fiscal matters are concerned.

We have one other item that should have been acted upon at our Montpelier meeting in June. Mr. Bell called to your attention the fact that certain increases had been granted to federal personnel, and it necessitated increase

in the cost of the Cooperative Agreement. We did not foresee the implications of that, and of course it should have been acted upon at that meeting to increase the budget by the amount of these increases - \$600.00 increase in the cost of Professional Services. To enable us to execute the cooperative agreement without the necessity for calling a special meeting, I sent to each Commissioner, a copy of the revised budget, and received your written approval, but for the records, formal adoption of the budget should be made by the Commission.

We have acted without prior specific approval on some other items that were necessary to carry out the purposes of the Commission. We would like your approval of the depository where we have placed the Commission funds. They are in the First Security Bank - an interstate banking system that serves most of the Bear River Compact area, and we found them very accommodating in handling these funds for us. We have acted without prior approval of the Commission, in the interests of having these funds deposited and properly accounted for.

The By-laws also require that the Secretary-Treasurer be bonded. We have, through consultation with individuals who have experience in these matters, arrived at the amount of \$10,000.00, and have had that bond prepared and made retroactive to cover the first deposit of funds belonging to this Commission.

We have made inquiry as to the matter of auditing the accounts of the Commission, and would recommend that you approve the Lincoln G. Kelly Co. as the firm to make the audit. A budget for the next biennium has been prepared and will be submitted by the Budget Committee later in the Agenda.

On the matter of audit, I would like to make a recommendation. We find in reviewing the Compact and the fiscal practices of the states, that it would be desirable for the Commission to operate on a fiscal year basis beginning

July 1 and ending June 30 of the following year. We find, too, that we are required by law to submit a full report on the activities of the Commission covering the water year ending September 30. After consultation with the fiscal people, and checking the records of the Upper Colorado River Commission, we would suggest that the audit be confined to the fiscal year. My recommendation is a practical matter, and makes unnecessary, the expense of hiring an auditor to check two or three items in the ledgers.

We have here a statement of income and expenditures from the Commission, on which I will comment briefly.

BEAR RIVER COMMISSION
STATEMENT OF INCOME AND EXPENDITURES
FOR THE PERIOD OF JULY 1, 1958 TO SEPTEMBER 30, 1958

INCOME:	<u>Approved Budget</u>	<u>Assessments Outstanding</u>	<u>Total Revenue</u>
State of Wyoming	\$ 8,270.00	\$ - - - -	\$ 8,270.00
State of Idaho	8,270.00	8,270.00 *	- - - -
State of Utah	<u>8,270.00</u>	<u>- - - -</u>	<u>8,270.00</u>
TOTAL INCOME	\$24,810.00	\$ 8,270.00	\$16,540.00

* 50% (\$4,135.00) Received 10/7/58

Deduct: Operating Expense	<u>Approved Budget</u>	<u>Unexpended Balance</u>	<u>Total Expenditure</u>
Stream Gaging - U.S.G.S.	\$14,460.00	\$14,460.00	\$
Personal Service	6,640.00	6,640.00	
Travel & Subsistence	1,200.00	1,200.00	
General Office Expense	610.00	597.70	12.30
Printing Annual Report	700.00	700.00	
Treasurer-Bond & Audit	400.00	400.00	
Transcription of Minutes	150.00	80.00	70.00
Fiscal Charge - U.S.G.S.	350.00	350.00	
Miscellaneous	<u>300.00</u>	<u>300.00</u>	
Total Expense	<u>\$24,810.00</u>	<u>\$24,727.70</u>	<u>\$ 82.30</u>

CASH IN BANK AS OF 9/30/58 \$16,457.70

- (a) No petty cash fund has been established
- (b) All funds as received are deposited in First Security Bank of Utah, Salt Lake City, Utah
- (c) Arrangements are complete covering Bond No. F-861977 for Jay R. Bingham, Secretary-Treasurer

Disbursements Made During October, 1958:

	<u>Amount</u>
Voucher No. 3; Rocky Mountain Bank Note Co.	\$ 18.95
Voucher No. 4; Herald Printing Company	39.75
Voucher No. 5, Tanner & Garrett, Boyce, Parkinson and Robbins	55.00

October 27, 1958

You will note that the approved budget assessment to each state is \$8,270.00. As of September 30th the full amount of the budget requirement was received from Wyoming and Utah. The State of Idaho operates on a quarterly basis. On October 7th, after this report was prepared, Idaho paid half of their allocation to cover the quarter ending January 1st.

The second portion of this report shows the approved budget items in the first column. Columns 2 and 3 show unexpended balance, and total expenditure \$12.30 for purchase of ledgers and other bookkeeping materials, and \$70.00 which covers transcription of two Commission Meeting minutes. Total amount \$82.30

The balance as of September 30, 1958, is \$16,457.70. These funds are now on deposit in the First Security Bank, and a bond in the amount of \$10,000.00 has been executed and made retroactive to cover all activities of this account. Since this report, there have been three vouchers prepared and paid on the Commission account, but not included in the above referred to figures. They are to the Rocky Mountain Bank Note Company for printing of checks and vouchers; The Herald Printing Company - costs in preparing By-laws and Compact (Mr. Jibson absorbed part of this expenditure in his Cooperative Agreement). The next item is \$55.00 - expense that was incurred in setting up the accounts of the Commission. We did not anticipate this charge, and hesitated to pay it, but after consideration and discussion with Mr. Cooper we decided that we should pay it.

One other obligation outstanding is the amount of \$50.00 to cover the cost of the bond.

CHAIRMAN: Thank you for your detailed report.

COM. COOPER: I move that we approve the report that has been rendered.

COM. LLOYD: Seconded the motion.

COM. BINGHAM: Maybe we should check these items in order. The first appropriate action of the Commission would be to confirm the one addition to the By-laws of Paragraph I under Article VI.

COM. COOPER: I withdraw my motion for the time being.

ACTION TAKEN ON SECRETARY-TREASURER'S REPORT

(1) Inclusion of paragraph 1 under Article VI of the By-laws taken from the text of the Compact, to make By-laws complete as far as fiscal matters are concerned, and reading as follows:

" 1. All expenses incurred by the Commission in the administration of the Bear River Compact, except those paid by the United States of America, shall be paid by the signatory States on an equal basis."

COM. SMOOT: I move that we approve the action of the Secretary-Treasurer.

COM. LAURIDSEN: Seconded the Motion. Motion carried.

(2) Confirmation of increase in the Budget for fiscal year ending June 30, 1959, in the amount of \$600.00, occasioned by increased personnel costs.

COM. COOPER: That was duly and properly explained at the time of the Montpelier meeting on June 17, and I move that this be confirmed.

COM. LLOYD: Seconded the motion. Motion carried.

(3) Deposit of Commission Funds in the First Security Bank, Salt Lake City, Utah.

COM. SMOOT: I move that the Commission approve the First Security Bank as the depository for Commission Funds.

COM. JOHNSON: Seconded the motion. Motion carried.

(4) Amount of bond to be posted for Secretary-Treasurer, and designation of bonding company.

COM. LLOYD: I move that the Secretary-Treasurer be bonded in the amount of \$10,000.00, and the Massachusetts Bonding Company take care of this bond.

COM. LAURIDSEN: Seconded the motion. Motion carried.

(5) Deferment of making an audit until some time following July 1, 1959, and hiring of Lincoln G. Kelly Co. as auditors.

COM. COOPER: I move that the recommendation for an audit to be made some time following July 1, 1959 and the designation of the Lincoln G. Kelly Company as auditors, be approved.

COM. LLOYD: Seconded the motion. Motion carried.

(6) Receiving and filing financial report.

COM. COOPER: I move that the financial report be received and filed.

COM. LLOYD: Seconded the motion. Motion carried.

OPERATION REPORT OF THE ASSISTANT SECRETARY

MR. JIBSON: I appreciate the motion made this morning and the vote of confidence in our work.

I would say that, in general, the Compact operated as smoothly as could be expected this past season. There were a few unforeseen problems and a few that we had anticipated.

I appreciate the cooperation we have received from the States, especially in Wyoming.

I met with a large number of individual users, especially in the Upper Division, during the summer season in my field trips in the Upper Basin, and was very pleased that, without exception, those contacted were behind the Compact and supporting it 100%. Each individual with whom I spoke said he thought the Compact was a good thing, long overdue, and might require some

adjustment on their part, but by and large it was good for the river system.

I have prepared an Operation Report to distribute on general hydrology in connection with flow conditions, and on details of operation of the Compact.

When we left our meeting in April, we had the forecast that a good water year was in the offing, and felt that the Compact would be easier to operate for that reason, but nature seemed to have fooled us somewhat on Bear River. In glancing at a map published in the paper the other day, it appeared the Bear River was the only dry spot in Utah.

I believe that if we read over this report together, and discuss it as we go along, it may save time. It covers most of the points I would like to bring out today.

(Mr. Jibson then commenced reading from his Report dated October 27, 1958.

The report had been distributed to all Commission members present, and is attached hereto and made a part of the minutes.)

(Mr. Jibson paused in the middle of the second paragraph under the heading "Hydrology", referring to the "water year", and commented as follows:)

MR. JIBSON: We considered the deviation from normal was not too bad, for the entire water year. It seems that the period following about June 20th was the critical part of our irrigation season.

(At the end of the second paragraph of his report, Mr. Jibson commented on the table that followed, showing 1958 Discharge in Percent of 1943-58 Mean)

MR. JIBSON: I chose 1954 as a measuring stick, partly because it was one of the drier seasons since 1940, and partly because as the season progressed,

I noticed that we followed so very closely to the total divertible flow in 1954. In the table are computed percentages of run-off in 1958 as compared to the mean for the 1943-1958 period, on Smiths Fork supply at the Border gaging station, the Bear River supply measured above Utah-Wyoming State line, and the combined supply.

Both stations have small diversions, for which no adjustment is made, but for general purposes this could be considered as the supply above diversions for the entire Basin. You will note that in 1954, April to September, June to September and July to September, remained quite low in percentage, while in 1958, the April - September figure was pretty good, equalling 89% of combined mean supply, but progressively dropping off as we get into the drier part of the irrigation season, falling down to 81% in June-September, and 70% in the July-September runoff. The latter period was very comparable to 1954.

Plate 1 is for the Upper Division, and does not include Smith's Fork. During the peak runoff in the latter part of May, and again in the early part of June, we had a fairly representative year on the Upper Bear River - not as good as 1957 - but, as our figures show, not too far below average. But from about June 25th we had a rapid recession and hydrographs are almost coincidental with the 1954 season.

Plate No. 5 shows comparable data for Smith's Fork and very similar hydrographs, as in Plate 1, almost to the day. Our 1958 supply from Smith's Fork approached the 1954 supply and stayed with the earlier year for the balance of the season.

So much for the picture on stream flow and precipitation data. We will read over operational details and any questions or comments on the report

can then be taken up.

(Mr. Jibson then continued to read from his report to the end of the first paragraph under the heading "Compact Operation, Upper Division")

MR. JIBSON: Turn to Plate 2, Hydrograph of Total Divertible Flow. The definitions of Total Divertible Flow is the sum of all diversions in each Section of the Division, plus flow leaving the Division. I have used 1956, rather than 1957, in analyzing Divertible Flow, because diversion records are not available for 1957. It was, however, a slightly better year than 1956.

Turn to plates 3 and 4, and while I read, you can follow on the hydrographs.

(Mr. Jibson read further from his report)

MR. JIBSON: Although actual records of amounts diverted in Upper Wyoming Section were perhaps not all to be desired, I feel we had sufficient accuracy for purposes of regulation. You will notice Wyoming diversions levelled off just below 800 cfs and raised to about 840' at the time Compact regulation went into effect. In the following four-day period, the Wyoming Water Commissioner started at the upper end of the river and regulated each head-gate as he came down the river. If we total the adjudicated rights in the entire Division on a basis of one cfs to 70 acres, the sum closely checks 1250 cfs. Therefore, on the day on which the divertible flow falls just below 1250 cfs, if all diversions are held to their adjudicated rights, the Section total should closely conform to the Section allocation under the Compact. Even though during the initial period of regulation, with much of the water in transit, making it impossible to get a figure of divertible flow each day, it was obvious from the drop in supplies that divertible flow was receding quite rapidly, and as a result, the Wyoming Commissioner had to make further

cuts below the adjudicated rights as he came down the river.

After the cut in Wyoming diversions, they stayed very closely to their allocation until most of the irrigation supplies were gone.

(Mr. Jibson read further from his report down to the end of the third paragraph under "Compact Operation - Upper Division".)

MR. JIBSON: I mention this to show the contrast between the two years, as far as Compact operation is concerned in the Upper Division. In 1954, from the very beginning of the irrigation season, had the Compact been in operation, we would have been under regulation in the Upper Division, and a rather different proportion of flow between Wyoming and Utah would have been noted-- while in 1958, with almost average supplies in most of June, total divertible flow remained above 1250 cfs, and interstate regulation was not possible until after June 21st.

The two upper canals below Woodruff Narrows were taking a very considerable share of the water coming down the river, and were the last two which the Water Commissioner could reach. The actual flow leaving Woodruff Narrows was better than our Lower Utah diversions (which did not include the Francis Lee and Bear River Canals) would indicate. But it does show that regulation is not only possible, but practical, on the river system. There have been doubts in the minds of some users that water could ever be forced down the long expanse in the Upper Division, and do anyone any good. This shows that we can put the water down to Woodruff Narrows. Many of the headgates are in rather bad shape and many times it would take the Water Commissioner a matter of one or two hours to make proper regulation of one diversion. I have reports that many of these headgates in the Upper Division have been replaced this fall. Some were secured and at the site when we were there during the period

of regulation, but had not been installed. Others had fair head works, but were rather difficult for the Water Commissioner to work with. We have a total of about 66 diversions which must be regulated, and regardless of how good the headworks are, it takes quite a lot of time.

(Mr. Jibson continued to read to the bottom of page 2 of his report)

MR. JIBSON: As has been the case in other years in which we have studied probable results of Compact regulation, there is enough return flow from Utah diversions and natural gain coming from the Utah Section to, in general, satisfy the Compact allocations to the Lower Wyoming Section. (B.Q. Dam and Pixley Dam). There probably is a distribution problem at these two dams-- even though flow is leaving the Section below Pixley Dam, the diversion at B. Q. Dam would have difficulty in making greater use of the water. You will notice that the rate of diversion was already low by the time June 21 regulation came around, and considering a week or more before any water could get down to them, we see very little effect of Compact regulation in the Lower Wyoming Section. However, there was sufficient water in the Section to divert up to Compact allocation through that operation period before the supply was practically gone.

(Mr. Jibson read first paragraph on page 3 of his report regarding diversion data in the Upper Division)

MR. JIBSON: There were no trained personnel available in Wyoming to collect complete records in the Upper Division, therefore, spot determinations were made.

(Read first paragraph under heading "Central Division")

MR. JIBSON: Even though 1954 was one of the drier years, we had rains during the summer, and probably a better growing season than 1958. We did notice

this year (1958) our return flows, and therefore some of the water which tends to make up total divertible flow, was less than in 1954, and thus we would have expected the divertible flow to have been smaller. The total consumptive use was perhaps not very different. Incidentally, Plate 6 shows two periods of slight rainfall - one near the end of July and one near the end of August, which somewhat alleviated the situation.

(Read third paragraph on page 3, with comments on Plate 7)

MR. JIBSON: Immediately after the Water Commissioner was notified that regulation should be in effect, he reduced diversions down to below 400 cfs and within about 10 cfs of the corresponding Compact allocation. Then they increased their diversions again slightly, and held them steady for a few days, and on the 11th reduced them again, followed by an increase. By about the 20th of the month, compliance with the Compact was obtained. We did expect a few trouble spots along the river, especially in the Central Division, in which we knew regulation would be in effect throughout the irrigation season. The users in the past had been regulated very little, if any, within their own Section. We found that many users did not know what their actual adjudicated rights were, and they were under the impression in some cases that adjudicated right was much higher, and as a result they were not very agreeable to going along with the regulation in the early part of the season. These problems were straightened out. Wyoming Water Commissioner did an excellent job in the Cokeville area, and deserves a lot of commendation.

(Read last paragraph on page 3, regarding Plate 8, showing diversion date for Idaho Section of the Central Division)

MR. JIBSON: As in other years, we noticed a sudden dip in Idaho diversions after July 1st which is by regulation of rights by the Water Commissioner to

comply with State law. As will be seen in table I, diversions were considerably better than 1954, showing the effect of Compact regulation.

The dashed line - upper graph - on Plate 8, shows total diversions, plus the flow leaving the Section which is used to compute total divertible flow in the Central Division. It includes not only diversions at Stewart Dam, but Rainbow Canal and flow passing Stewart Dam in the Bear River.

(Read second paragraph on page 4 of report regarding termination of water emergencies according to Compact)

MR. JIBSON: It was necessary to take action on this matter before all of the members of the Commission could be contacted. Mr. Cooper was out when I called, and since he represented the State on the receiving end, he would be more vitally concerned than the other States in the Commission. It would be entirely impractical to attempt regulation after the Idaho diversions had been cut off, so the problem was discussed with Commissioner Bingham and accordingly the Wyoming Water Commissioner was informed that he should not regulate beyond October 1st.

(Read last paragraph of his report regarding attached tables prepared as an aid in appraising the net effect of Compact Regulation in the Central Division.)

MR. JIBSON: The good water years 1951, 1952, and 1957, show 100% or better of the Division supply entering Idaho. That should not be construed to mean that there was, therefore, no consumptive use in the Wyoming Section of the Central Division, and that all the water entering the Division went into Idaho. Our total supply was measured at Smith's Fork station above diversions and Bear River below Pixley Dam. There is considerable return flow coming into the river below Pixley Dam, which represents return flow from water diverted at this dam and also at the B. Q. Dam. We have a few records of Bear River

above Sublette Creek which reflect this return flow, but for the period chosen here, our Pixley Dam record is more complete. Likewise, we have a very substantial natural increase to Smith's Fork below the gaging station from tributaries to Smith's Fork, and so our total supply is actually a relative figure rather than an exact one.

We note from table II that in dry years the percentage of that supply entering the Cokeville area which passes the Border gaging station, drops off considerably as would be expected, and our low point in 1954 was 70%, while in 1958, which was very comparable, it rose to 84%, which was higher than 1953 and 1956, and did show that regulation was not in vain. I had been a little apprehensive as to just how much good might be done with regulation in the Smith's Fork area. They divert heavily, around five, or better, acre-feet per acre, but return flow is also very high. What few studies we have been able to make in that area show that perhaps 65% of the diverted water returns to the river system. Therefore, it was a source of apprehension - that sizable gains in the Idaho Section would result by reason of regulation.

We must also consider the fact that water which arrives at Border can also be diverted several times. As that water is diverted again in Idaho and part returned to the river for re-diversion, it can eventually build up to the full amount of original reduction again, and therefore, Idaho would receive the benefit of the actual reduction in acre-feet that takes place in Wyoming. I believe these tables show, without any doubt, that the users in Idaho definitely benefit from Wyoming regulation.

I intended to include a brief statement on Bear Lake which was overlooked, but as you know from the current reports each week, Bear Lake has remained well above the Irrigation Reserve set up in the Compact during the irrigation season.

Elevation on September 30, was 5.917.37, corresponding to a content of 982,300 acre-feet, and at the end of the irrigation season would be approximately 4 ft. above the Irrigation Reserve required for 5,000 acre feet of upstream storage.

Segregation studies of water released from Bear Lake have not been attempted yet. I plan to make these studies, following method used by Mr. Iorns, each year as the Compact is in operation, and hope to report these findings at the April meeting. However, it should be understood that the operation of Bear Lake was under no restrictions this past season by reason of the elevation being above the Reserve.

COM. JOHNSON: At any time were the Smith's Fork diversions cut below the appropriated waters?

MR. JIBSON: Yes. The Water Commissioner reported to me that he was cutting back to about 1909 priorities. His reductions, for perhaps one-third or even one-half of the season, were on a basis of the 1: 70 appropriation, and he tried to maintain that level as long as supplies would allow it. He eventually had to cut off some of the late-dated priorities.

COM. JOHNSON: This has been a rather difficult year to draw an overall conclusion, but it would appear then, that the appropriated water for the Smith's Fork lands is not adequate to a good irrigation year.

MR. JIBSON: I think Mr. Dayton would agree with you on that. They have a lot of difficulty in getting over the land at the diversion rate. We should not lose sight of one factor, however, and that is, regardless of the fact that Wyoming is adjudicated at 1: 70 acres, and Idaho at a higher rate, the total divertible flow in the two states is divided on an irrigated acreage basis on all land above Stewart Dam. Therefore, of the total acreage in

the Central Division, Wyoming has 43%, and Idaho, above Stewart Dam, has 57%. Recognizing the fact that Idaho lands are flatter, and would take less applied water to produce a crop; on an equitable basis of irrigated acreage, Wyoming has received her share of the water, even though she has to pro-rate it out thinner, by state law, than Idaho would. We can see from table I, that even with severe regulation in the Wyoming section this year, from June through September they were still able to divert 4 acre-feet per acre.

COM. JOHNSON: May I suggest that there are two things in the practical irrigation picture. The allocation of 1:70 seems to be inadequate and the question of norm say for Smith's Fork and other areas cannot well be based on the adjudicated 1:70. It seems to me what we are trying to get at is most essential use. We are not so sure at this point. We have achieved some regulation, but it seems to me that as uses seem rather favorable in a rather bad year to the Idaho people, maybe we have got to take another look. I think we have discovered that maybe we were wrong in asking for all the water in Pixley Dam.

MR. JIBSON: We should also keep in mind that we have definite conditions under Compact regulation in the Central Division, and the Upper Division. As I view the adjudication of 1:70, it would seem that it has very little bearing because of the fact that our regulation actually starts each year on a basis of the flow passing Border Gaging Station, (350 cfs) rather than the total divertible flow; and therefore, whatever basis may have been used in establishing a total of 870 cfs divertible flow has very little bearing because regulation always begins at an earlier date.

The actual distribution of the water between the two states is divided on an acreage basis, and therefore, as far as equality of Compact division is concerned I cannot see that the 1:70 has any bearing on the division of water

in the Central Division. In the Upper Division, the situation is somewhat different, because of the initiating criteria of regulation which occurs when the total divertible flow drops to 1250 cfs, and which, as I stated, is the amount that would give total diversions of about 1:70 in the Upper Division.

COM. JOHNSON: Was the 350 second-feet at Border at that period too generous an allocation at Stewart Dam?

MR. JIBSON: I am not in a position to answer that. It is a figure arrived at by negotiation. Here again we must consider another item - streamflow characteristics - the flow passing Border is dropping very rapidly at the time this point is reached. In most years there is a matter of only a very few days involved in a sizable change in flow at Border. Incidentally, over a period of about 17 years the beginning date of regulation would average about July 7th, which is a little over a week later than it occurred this year.

COM. JOHNSON: It does involve regulation though, does it not? Did we anticipate in our preliminary study that there would be any water in the Rainbow Canal over the period that those two states are using Smith's Fork allocation? It seems to me that the whole Compact administration of the water is an experiment for a year or two, and we were just too dry for this to be a conclusive year. It seems to me that through some of the circumstances that have arisen, there are things we might take another look at. If next year were to develop the same type of situation, it seems to me that we could have made some mistakes in the Compact allocations, and there is a question in my mind whether we are right. For instance, if Rich County did not use its water it would be allocated to Summit County where there would be no possibility of using it. The principle of giving it to our own state in another Division above us is just not practical there.

MR. JIBSON: It would be very unlikely that you would have water in Rich County that would not be used.

COM. JOHNSON: It is possible that the flow passing Pixley Dam could be used in equalizing the irrigation needs of the area below it. This would require Compact changes, but I do not think the Compact would be perfect in its first form.

MR. JIBSON: In the needs of Idaho diversions we should keep in mind that they are operating under their state law, and the reduction on July 1st is not voluntary. If State law did not limit their rights, they undoubtedly would have diverted near the compact allocation to take advantage of it. In one way they are actually working under a little more handicap than their neighbors in Wyoming, who do not have that type of decree to work under.

COM. JOHNSON: Mr. Chairmen. The flow of water in the Rainbow Canal disturbs me. As I understand it, the number of cfs passing the measuring station there in the canyon gives the point of regulation, but should we have used that as giving us point of interstate regulation in the Central Division, because it means that a lot of water is in the river that can be diverted into the Rainbow Canal, and maybe the Bear Lake did not need it. So it seems to me that some changes might be made in the administration of the water.

MR. JIBSON: It is true that the Rainbow Canal and the flow passing Stewart Dam go to make up the divertible flow of which Wyoming gets 43%. If those two flows were eliminated, then 43% would be smaller because the total divertible flow would also be smaller and Wyoming would get less water.

COM. JOHNSON: It seems to me that the water that had to be diverted into the Rainbow Canal was safe for this year, but it could have been diverted further up and used on other land because it was no immediate good, anymore than it was

water into Bear Lake which of course is available. As we attempted to regulate this for the most beneficial use of the water to the areas, maybe we set up some points of change which were not just right.

MR. JIBSON: There are other interests to be considered, rather than Bear Lake storage. The State of Idaho has to compute natural flow available for their irrigators, to segregate it from storage used, and natural flow is computed at points along the river, so we cannot look at it just as water going to build up the lake. It has a much more vital meaning to other Idaho water users.

COM. JOHNSON: Was not consideration given to the flow rights below Bear Lake as having to be supplied from the flow at Stewart Dam? That is a new angle.

MR. JIBSON: I would not attempt to answer as to how much consideration was given. It is not included in the acreage which provides Idaho with 57% of the water in the Central Division.

COM. JOHNSON: These people have lost 50% of their crops this year and face more problems.

MR. JIBSON: Certainly no one would like to see a crop burn up while water was wasted, or held over for other years, when a dry year was with us. It seemed that everyone felt terms of the Compact were very fair and equitable in interests of both states, and anything that happened this past season came as no particular surprise to us. We knew that all the water which was released from Wyoming would not be applied above the Stewart Dam because they could not do it and conform with state law.

COM. LAURIDSEN: On page 5 of the Compact, the last sentence refers to "remaining 57% of the divertible flow shall be available for use in Idaho in the Central Division but if any portion of such allocation is not used therein it shall be available for use in Idaho in the Lower Division." I wanted to bring

out that this does not go into the letter for storage during the irrigation season.

COM. DAYTON: While our divertible flow is high rather along the lines Mr. Jibson has spoken of, I think we might have to look into this Compact a little further because there are a lot of lands in the Cokeville area that just did not get water. Was there any shortage in the Lower Division?

COM. COOPER: Yes. We found a lot of dry places in Idaho this year. There were large areas where we were able to run released storage water from Bear Lake which saved us, of course, from burning up. But we did have a very definite shortage of natural flow.

MR. STOKER: That is true. As far as natural flow water is concerned that went on down the river, there was less than in 1954.

COM. MYER: Is Bear Lake still high?

COM. SMOOT: I have the figures for September 19 - 5,917.73 feet.

MR. JIBSON: As of today we are about 4 ft. above the reserve in Bear Lake.

COM. MYER: That would indicate that there should be more water stored higher up?

MR. WEIDMANN: That 4 ft. was not accumulated this year?

MR. JIBSON: No. For the past few years, Bear Lake has been up very well, and of course a lot of that 4 ft. is actually from earlier years' storage. Certainly none of it was built up during the irrigation season.

COM. BINGHAM: I move that the report of the Assistant Secretary be received and filed.

COM. COOPER: Seconded the motion. Motion carried.

Meeting adjourned for lunch at 12:00 p.m. and reconvened at 1:30 p.m.

CHAIRMAN: Before we proceed with our business, we have Governor George D. Clyde and Commissioner Wilbur Dexheimer U. S. Bureau of Reclamation, with us.

GOV. CLYDE: I would like to say it looks like home to me. It is nice to have you here in Utah. I am sure you are making a lot of progress on this program. I am watching it with great interest and I am sure it is in good hands.

COM. DEXHEIMER: I am spending the day in Salt Lake, and had a few minutes, and I wanted to come and see you and wish you the best of luck in working out your problems. I understand this is your first formal meeting with a federal representative, and of course we in the Bureau of Reclamation are very much interested in having these things work out so everyone is in agreement and we hope that you people will be able to satisfactorily do that. If there is any way that we can help we will be glad to, and I am sure Mr. Larson has most of the information that might be helpful from our standpoint. I am glad to have this opportunity to be here, and I do not want to keep you from your hard labors.

COM. JOHNSON: Could we suggest one thing to Commissioner Dexheimer. To see to it that the bill of Senators Neuberger and Wayne Morse, concerning the 160 acre limitation, be killed. We will be in an area up there requiring 600 acres apiece to make it feasible, so we watch that with interest. Such a move would finish reclamation in this high area.

COM. DEXHEIMER: All I can say is that we watch this with interest too, but just how much influence we have on these bills is dubious, of course. We recognize the problems in these areas, and think that they have to be dealt with individually. Congress is strictly not in any mood to make a plunge in things of this kind, and we know what the problems are and will do our best.

(Governor Clyde and Com. Dexheimer left the meeting)

BUDGET COMMITTEE REPORT

CHAIRMAN: The next item is the report of the Budget Committee.

COM. SMOOT: Gentlemen, this proposed budget for the next biennium ending June 30, 1961, was pretty well worked out of necessity, by Jay Bingham and Wallace Jibson.

Your Budget Committee met this morning at 9:00 a.m., and went over these items very carefully, and we could find nothing wrong, and everything was very much in line, and I think, due to what experience we have already had, inasmuch as we have not completed a full year, we can see nothing but what this was worked out as closely as possible. We have a letter in which you might be interested, from Mr. Bell, Branch Area Chief, U.S.G.S., and in this letter he has recommended this budget very highly, and sees nothing wrong with it.

I think now, if there are questions they should probably be directed to Mr. Bingham and Mr. Jibson who know the details of this budget better than I.

BEAR RIVER COMMISSION
Proposed Budget

Biennium Ending June 30, 1961

	Budgeted Fiscal Year Ending <u>June 30, 1959</u>	Estimated Fiscal Year Ending <u>June 30, 1960</u>	Estimated Fiscal Year Ending <u>June 30, 1961</u>	Total Esti- mated Bien- nium Ending June 30, <u>1961</u>
<u>COMPACT ADMINISTRATION</u>				
Personal Services	\$ 6,640	\$ 6,900	\$ 7,200	\$14,100
Travel & Subsistence	1,200	1,200	1,200	2,400
General Office Expense	610	700	700	1,400
Printing & Reproduction	700	700	700	1,400
Treasurer (Bond & Audit)	400	400	400	800
Transcribing Minutes	150	150	150	300
Fiscal Unit Charge	350	400	400	800
Miscellaneous	<u>300</u>	<u>300</u>	<u>300</u>	<u>600</u>
Sub Totals	\$10,350	\$10,750	\$11,050	\$21,800
<u>COOPERATIVE PROGRAM</u>				
Stream Gaging (U.S.G.S.)	<u>28,920</u>	<u>29,500</u>	<u>30,100</u>	<u>59,600</u>
Totals	\$39,270	\$40,250	\$41,150	\$81,400
<u>ALLOCATION OF BUDGET</u>				
United States (U.S.G.S.)	14,460	14,750	15,050	29,800
State of Idaho	8,270	8,500	8,700	17,200
State of Utah	8,270	8,500	8,700	17,200
State of Wyoming	<u>8,270</u>	<u>8,500</u>	<u>8,700</u>	<u>17,200</u>
Totals	\$39,270	\$40,250	\$41,150	\$81,400

CHAIRMAN: Any questions?

COM. COOPER: Personal Services cover services of engineers and water masters - is that right?

COM. BINGHAM: The first item under compact administration for the current year -- \$6,640.00 - that covers personal services required to assist in Compact administration and do such work that did not qualify under the Cooperative

Agreement. The U.S.G.S. participate on a 50:50 basis on those measurements which are considered to be generally in the public interest, but to determine divertible flow, and other Compact information, we must measure headgate diversions, and this is to cover those which are outside of the regular cooperative field, but are necessary for Compact administration.

COM. COOPER: Travel and Subsistence. This means the expense to those men?

COM. BINGHAM: Yes. These expenses are not considered part of the Cooperative Agreement.

COM. SMOOT: I move the adoption of the budget.

COM. LAURIDSEN: Seconded the motion. Motion carried.

REPORT OF THE STATE ENGINEERS' COMMITTEE

MR. CRIDDLE: In response to a letter written to the State Engineers of each of the three states by Mr. Jibson on May 6, 1958, a committee was appointed at the meeting in Montpelier, requesting recommendation as to the information which should be given to the Commission in regard to applications made in each of the states. I would like to read a quotation from Mr. Jibson's letter, in which he quotes Article X of the Compact - "Applications for appropriation, for change of point of diversion, place and nature of use, and for exchange of Bear River water shall be considered and acted upon in accordance with the law of the State in which the point of diversion is located, but no such application shall be approved if the effect thereof will be to deprive any water user in another State of water to which he is entitled. The official of each State in charge of water administration shall, upon the filing of an application affecting Bear River water, transmit a copy thereof to the Commission."

At the Montpelier meeting we were charged with coming up with some recommendation on the type and amount of information which should be submitted

to the Commission in regard to these new applications. I would like to read a short report:

RECOMMENDATIONS TO BEAR RIVER COMMISSION ON WATER
APPLICATION NOTICES NEEDED
October 27, 1958

At the last meeting of the Bear River Commission the state engineers of Wyoming, Idaho and Utah were requested to prepare recommendations to the Commission on the notice to be required of application to appropriate water within the Bear River system. Under date of July 7, 1958 each of the other state engineers were sent suggestions from the Utah State Engineer. This included information needed and a form which might be used for reporting to the Commission. The suggestions were that:

1. All applications for surface water appropriations, changes or exchanges should be reported to the Commission.
2. All applications to appropriate, change or exchange underground water for purposes other than domestic or stock watering should be reported.

Under date of September 19th, Mr. Lloyd of Wyoming commented on this recommendation and prepared an alternative recommendation which includes:

1. Lower water users should be advised of installation of all surface water impoundments over 10 acre-feet capacity.
2. All diversions to exceed 0.3 c.f.s. should be reported.
3. Ground water applications need not be reported.

So far Idaho has not commented on the recommendations other than to say that they would do so at the first opportunity.

Although the committee has not come to agreement on the recommendations, I believe it might be well for the Commission to consider these ideas and give further guidance to the sub-committee for its further deliberations.

As a matter of information, the State Engineer of Utah has unapproved applications on file for 31 c.f.s. of ground water in Rich County. These waters, if developed and used during the low flow summer period, which they are bound to do, may materially affect the surface flow downstream. I believe that similar applications and developments in Wyoming and Idaho might be expected. In fact, it seems quite probable that there will be many more applications filed for ground water in the near future.

Respectfully submitted,

/s/ Wayne D. Criddle

Wayne D. Criddle
Chairman, Sub-committee on Applications

MR. CRIDDLE: These 31 cfs applications which are filed in our office have not been approved. They are pending. The Commission has not yet been advised of these applications, although the State Engineer in our office has undertaken to advise the Commission of all applications that are approved on water filings within the State of Utah. We have been doing so for the past several months. Many of these applications, we realize, may not come under the jurisdiction of this Commission. Some of them are small, and of the 14 or so we have sent in, all of these but two are in the lower counties, and therefore those applications could not affect anyone downstream - i.e. any other state. There are two very small applications which we have approved and reported in Rich County. I believe, Mr. Chairman, that this is about as far as we can go at this time. We await further directions from the Commission. Because of varying laws within our states, it is impossible for the State Engineers to come together on all different points. It seems to me that it is up to the Commission to decide what they wish and then request us to do it,

COM. JOHNSON: Would Mr. Criddle point out the difference between his suggestions and those of the two state engineers from Wyoming and Idaho?

MR. CRIDDLE: I believe we would recommend that all surface water applications be put on record. Not that the Commission may necessarily want to do anything about some of the small storage applications at this time, but in order to make a logical inventory of what is happening, it is our feeling that, perhaps all applications for surface water should be on file. Another thing we recommend is that all ground water, except stock and domestic, also be put on file with the Commission. Mr. Lloyd suggested that no storage reservoirs under 10 acre-feet be, necessarily, recorded; that no surface diversions less than 0.3 cfs be recorded; and that no ground water be recorded at this time.

(Suggested form reproduced on next page and made a part of these minutes)

APPLICATION TO APPROPRIATE WATER IN BEAR RIVER

DRAINAGE, STATE OF _____*

State Application No. _____

1. Purpose: Irrigation ___ Domestic ___ Stockwatering ___ Municipal ___ Power ___
Mining ___ Other Uses ___
2. The name of the applicant is _____
3. The Post Office address of the applicant is _____
4. The quantity of water to be appropriated is _____ second-feet or
_____ acre-feet _____
5. The water is to be used each year from _____ to _____ Incl.,
(month) (day) (month) (day)
and stored each year (if stored) from _____ to _____ Incl.
6. The drainage area to which the direct source of supply belongs is _____
7. The direct source of supply is _____
(Name of stream or other source)
8. The point of diversion from the source is in _____ County,
situated at a point (give legal description) _____

9. If water is to be stored, give capacity of reservoir in acre-feet _____
height of dam _____
10. Describe proposed use, and if application is for irrigation purposes, give the
legal subdivisions of the area to be irrigated, etc.: _____

*Each State Engineer will send this form, completed, to the Bear River Commission with copies to each of the other State Engineers prior to approval of the application.

MR. CARTER: As I did not make a written report, perhaps I should talk. I have just come into this office of State Reclamation Engineer, and there have been some difficulties. However, I read the Compact yesterday, and all the minutes, and I have studied Mr. Criddle's recommendation about reporting applications to appropriate water, and also Mr. Lloyd's suggestions. I do not seem to be in disagreement with any of them. I do not see any particular reason why the State Engineers office in Boise should not report these applications. Mr. Lloyd suggests that we eliminate little applications, and he is probably right. There are just two things in Mr. Criddle's proposal - "The water to be used each year from _____ to _____ incl. and stored each (if stored) from _____ to _____ incl. That is indeterminate in Idaho - they can use water when they want it, so that would be a little difficult.

With regard to the note at the bottom of the form stating "Each State Engineer will send this form, completed, to the Bear River Commission, with copies to each of the other State Engineers prior to approval of the application" I wonder how much delay that would cause, if we had to hold some up, waiting approval?

Otherwise, I am sure my office would go along with any of this. I will be very agreeable to anything the Commission, or anyone else, decides.

MR. LLOYD: My point, principally, was that I do not want to burden the Commission with a lot of records that probably would not be too important to them, including small diversions for stock and domestic use, and the small stock reservoir applications. However, we have no objection, particularly to reporting them to the Commission, but were just trying to cut down the size of the reports. On the ground water, it seemed to me that while we would be glad to report these applications, the Compact does not cover ground water,

and does not contain any provisions, as I understand it, to cover ground water. Whether that would be an appropriate thing to report on, or assume that it would be part of the records of this Commission, I do not know. It might be that that would eventually develop and cause some difficulty to the other states, since the compact went into effect, in applications for ground water.

CHAIRMAN: I am wondering if full consideration has been given to Article X of the Compact. I assume the plan of notifying the Commission was to get the States' advice on what was going on. I imagine the State Engineer in any State would desire comment before he acted if he thought it was going to deprive another State of its water.

MR. LLOYD: I wondered how long the Commission would take to take action on what may be filed before it. If you had to hold up approval until the Commission has time to study it, and go into it, just what kind of procedure should we set up?

CHAIRMAN: Does this call for action of the Commission?

MR. PORTER: It is the responsibility of State officials to approve the applications. As far as the Commission is concerned, it is a matter of information only.

MR. JIBSON: Could the Commission, as such, be an objector or protestant to an application?

MR. PORTER: I suppose it could, although I would assume that in most instances the protestant would be an individual or group of a particular state rather than the Commission itself. In answer to Mr. Larsen's question, I do not read this that the Commission takes any action at all. It is merely a matter of information as far as the Commission is concerned.

COM. JOHNSON: I do not think we thought it through when we set it at 20 acre-feet for a stock watering pond. I cannot think of an area having enough forage

to need that much water. It seems to me that we can destroy our irrigation being too generous with any other use. Let us just bring this down to four acres. Otherwise, much of the water would stand there and evaporate. As I study the river now, we are going to need every drop of water if we meet the agricultural and industrial needs of the Bear River. I am sure that the best thing we can do is to ask these state engineers to give every single application careful consideration, and if they would like to report them to us, we would like to know what is happening to this water.

MR. JIBSON: (To Mr. Porter) Supposing Mr. Lloyd grants an application for 10 cfs which, in his opinion, does not affect a lower state. By interpreting your statement to mean that the Commission cannot over-ride that application, then what is accomplished by the Commission examining the application?

MR. PORTER: Your interpretation was correct. The Commission has no power over the engineer.

MR. JIBSON: The statement is made that no such right shall be granted if it affects a lower State. Whose decision would be the authority on this?

MR. PORTER: It is still the State Engineer's decision, but so far as Utah is concerned, that does not prevent that decision from being litigated, and I suppose the Commission could, in an extraordinary situation, take him to Court. Usually, any action would be between specific individuals involved. I do not believe, and the Compact does not so state, that this Commission has any power to over-ride the judgment of the individual State Engineers.

MR. JIBSON: Then Mr. Lloyd's principal objection - that they will be held up an unduly long time awaiting Commission action - would have no justification? He could go ahead and grant an application as he sees fit?

MR. PORTER: That is true. There is nothing that requires the State Engineers

to submit an application and wait any length of time.

CHAIRMAN: If the State Engineer in one of the three states should grant an application which the Commission thought in violation of the Compact, would the Commission call on some appropriate authority, or leave it to the injured state to contest the application?

MR. PORTER: If that were the situation, it would probably be an interstate matter. I doubt if this Commission would be too concerned with a contest between a State Engineer and a citizen of his own state. I think it would be up to the Commission to determine, as a matter of policy, whether they themselves, as a Commission, should undertake to litigate, or leave it to the individual citizens of the state affected.

MR. CRIDDLE: I would like to explain a little further our thinking in suggesting that all surface water applications, at least, be on record, and that all ground water, except for just small uses, be on record also. I do not see that the Commission will want or need to take any action at this time, but by seeing the report of all applications, the Commission can be kept up to date on what is happening, and action can then be taken when it is needed. Without keeping current on these things, I do not know how the Commission will know when, or if, action is needed. Therefore, I feel it would be much better if we could agree to keep the Commission notified of all applications, except domestic and stock watering from underground, which may not be necessary to record. If we do not report everything, however, we come to the problem - should it be 5 ac. ft., 10 ac. ft., or 20 ac. ft. reservoir that is the minimum reported? As far as the work is involved, I do not believe it would amount to too much, and we feel that it would be of some advantage.

COM. CARTER: You expect, then, to be notified of approved applications, not

unapproved? We would be in a fix in Idaho if we had to wait for approval.

MR. PORTER: Maybe we are missing something. The last sentence of Article X of the Compact leaves no doubt but that it means all applications, unless the Commission itself says this is not necessary, and the applications should be transmitted to the Commission when they are filed, not when they are approved. That language is too clear for any exception. I think this Commission should determine which applications at this particular time they do not feel they need to receive, and if they cannot agree upon it, I think the language is mandatory that all must be reported.

COM. BINGHAM: As a point of clarification, Mr. Lloyd, were you talking in terms of simplifying the procedure or is there some reason that would actually prevent you from reporting stock water or impoundments under 10 ac. ft.?

MR. LLOYD: My thought was whether the Commission would be interested in those smaller than that, or in all the rest of them.

COM. BINGHAM: The same would apply so far as the 0.3 cfs diversions you suggested are concerned?

MR. LLOYD: Yes.

COM. BINGHAM: Then it seems to me this is primarily a matter for the Commission, either to give some direction to this committee here today for further study as to setting some rules which they think should be followed in reporting, or to maybe ask the three State Engineers involved to meet and give a report at the next meeting of the Commission.

COM. COOPER: In Section C on page 7 of the Compact, it rather emphasizes the fact that this 20 ac. ft. is the limit. "Subject to existing rights, each State shall have the use of water for farm and ranch domestic, and stock watering purposes, and subject to State law shall have the right to impound water for

such purposes in reservoirs having storage capacities not in excess, in any case, of 20 acre-feet, without deduction from the allocation made by paragraph A of this Article." Then, would it not be up the judgment of the State Engineer to see to it that anyone applying for a stock water reservoir should justify his needs, whether it be 5, 10, or 20 ac. ft.? It seems to me that it is perfectly clear.

COM. SMOOT: I think it is very serious, this proposition of stock watering ponds. I think some determination should be made for us by the State Engineer with regard to the size and needs. Also, where they become irrigation reservoirs instead of stock water reservoirs in some cases - where they shut off a little spring, for instance, and fill up every few days and empty and use it for irrigation purposes. Sometimes this happens. I think it would help the Commission to know each and every application so that at least we would know the trend in that direction. If there is a definite trend, and we feel that there is too much, then maybe through working through our engineers, something can be done about it. I can see nothing wrong with Mr. Criddle's recommendation. With regard to underground water, there is very little known now. How would a big underground well affect return flow to the Bear River? This might be very interesting to this Commission.

CHAIRMAN: Apparently the intent of the Compact is pretty clear - the responsibility lies on the State Engineer. What is your pleasure? Shall we consider it today, or shall the three State Engineers try to get together with a definite recommendation to the Commission?

COM. COOPER: I move that the three State Engineers be assigned the responsibility of making further study and make a report to this Commission at our next meeting in April.

COM. JOHNSON: Seconded the Motion.

COM. BINGHAM: I do not object to the motion, but I think it is a directive we have already made, and I wonder if the Commission should not direct what is to be reported.

COM. COOPER: I will change the motion then to include your suggestions.

COM. BINGHAM: This motion would merely place us in confirmity with Article X. We then could work out a procedure to report all applications in a uniform manner.

MR. CRIDDLE: In attempting to serve what we felt was needed here, I think that each of us has given it quite a lot of thought, and tried to fit it in with the type of information we need in our particular states, and also fit in with the laws of our particular states, but they are not alike. I do not believe we can do much good with a directive to study it further. I believe it is up to the Commission to say, if they can, if they want all applications reported, or if they want certain things eliminated. I would hope that the Commission would take action today and direct us in what they would like us to do.

COM. COOPER: I withdraw my motion.

I now move that the State Engineers be requested to file all of the applications for these stock watering ponds. That will put them in the position of making explanation and justifying their need. This to include all diversions to exceed .3 cfs and ground water applications. All applications, just as Article X of the Compact provides.

COM. JOHNSON: Seconded the motion.

COM. CARTER: Does this mean an application, or an approved application?

CHAIRMAN: The last sentence of Article X answers that question - "The official of each State in charge of water administration shall, upon the filing of an application affecting the Bear River water, transmit a copy thereof to the Commission."

COM. CARTER: For a large filing you could not determine that by just looking at the application. It might involve several months of study.

COM. MYER: Article X contains the phrase "affecting Bear River water". That is the catch right there. Who is going to determine what is the effect? I do not see any way around transmitting a copy of the application. It does not say "approved application".

COM. BINGHAM: The application would have to be administered through the State Engineer, and if he finds it does affect Bear River water, he sends a copy in, but he is directed not to approve it if it obviously affects the user down the river.

MR. CRIDDLE: I would like to suggest that we not hold exactly to the language for the reason that there are three different types of applications - one for each State. I would like to suggest to the Commission that they might ask the State Engineers to agree upon the form which gives information pertaining to the water rights, or effect of water rights on the river. We have a lot of questions on our forms which I am sure the Commission would not want to know about, and we can work out a simpler form giving all the information necessary that the Commission wants, and then all report it informally on that form without a lot of extra material.

MR. JIBSON: I might present to the Commission for examination, the type of application Mr. Criddle has sent us. It consists of three sheets for each application, and if we require a copy of every application, there will be a large number of these for the Commission files. I would certainly endorse Mr. Criddle's suggestion that a form be prepared which is suitable to the three states, but which would be much simpler than the regular application, although giving the required information.

CHAIRMAN: Question on Mr. Cooper's motion.

COM. COOPER: All applications, and excluding the 0.3 cfs provision as previously stated.

MR. PERSON: I question ground water applications. Would the state admit that a ground water application would affect the surface water? In that case, the state would not file them would they?

MR. CRIDDLE: Certainly, not every ground water application that is filed in the Upper Bear River is going to affect the flow of the river, nor is every surface water application. I do not believe the Commission would want to take the attitude that every application would be critical, but in looking to the future, are we not playing it safe by putting on record, with the Commission, the applications that are being filed, whether surface or ground water? True, it is not in ~~the~~ Compact, but Article X also says that anything that affects the flow of the river should be reported.

COM. BINGHAM: The fact that the information was filed would in no way affect the State.

MR. PERSON: The filing of this form is an admission that it affects Bear River water. If you filed an application for ground water it would be an admission that a well - maybe 50 miles away - would affect Bear River water.

COM. DAYTON: It appears that this Commission has no authority to write into this Compact any additions.

The determining agency as to whether or not these applications shall be granted, lies with the State Engineer.

CHAIRMAN: The question came up as to whether some of these applications should, or should not, be eliminated, and this motion was to set a policy on that. It should simply clarify the question brought up by the Committee as to whether or not all applications should be put on file, and I contend that the

language of the Compact provides that they all be put on file.

COM. DAYTON: Do you have anything in this Compact that would make us believe that all, or any, underground water filings should be submitted to this Commission?

COM. SMOOT: I contend that any consumptive use of water above our Basin affects our Basin. It affects the water supply for the Lower Basin, whether underground or not.

CHAIRMAN: Question on the motion.

(The motion, as made by Mr. Cooper, later modified and seconded by Mr. Johnson, was as follows:

"I move that the State Engineers be requested to file all of the applications for these stock watering ponds. That will put them in the position of making explanation and justifying their needs. This should include all diversions and ground water applications. All applications, just as Article X provides"

(The motion was carried, with all members voting "Aye", with the exception of Com. Myers and Com. Dayton, who voted "No".)

MR. CRIDDIE: (Asked for direction on using an agreeable form for submission of information on filings)

COM. BINGHAM: I move that the State Engineers proceed to develop a uniform method of reporting to the Commission the water filings referred to in the preceding motion. This form to contain a statement that it does not constitute an admission that the filing affects Bear River water.

COM. COOPER: Seconded the motion. Motion carried.

UNFINISHED BUSINESS

CHAIRMAN: I would like to file a photostat copy of a letter from the President of the United States, appointing me United States Representative of this Commission

June 16, 1958

Dear Mr. Larson:

Pursuant to the provisions of Article III of the Bear River Compact, to which the consent of the Congress was given by the Act of March 17, 1958 (Public Law 85-348), you are hereby appointed as the representative of the United States on the Bear River Commission to serve during the pleasure of the President.

In addition to receiving annually the report of the Commission required by Article III D-2 of the Compact, it would be helpful if you would inform me, from time to time, of any significant developments which may take place in the administration of the Compact.

The Secretary of the Interior has been requested to make the necessary arrangements for your compensation, travel expenses, and other administrative matters.

Sincerely,

/S/ Dwight D. Eisenhower

The Honorable Ernest O. Larson
Regional Director, Region 4
Bureau of Reclamation
Post Office Box 360
Salt Lake City 10, Utah

CHAIRMAN: Mr. Jibson wants to know what his mailing list should be, so will each State Commission inform him of his.

MR. JIBSON: The By-laws limit distribution of some items to Commission members, such as minutes until they are approved in the meeting. However, for such items as Notices of Meetings, and letters of this nature, I would like to obtain an up-to-date mailing list from each state, designating the individuals who should receive such notices.

MR. JIBSON: We have another item in connection with gaging stations installed above and below new reservoir development. Thus far, we have one such station in connection with Sulphur Creek reservoir, recently constructed, and for which two stations were installed by the water users. The Geological Survey, at the present time, has taken over the operation of these stations, one of which will replace an existing one farther downstream, and in this particular case, will replace a regular cooperative station. The second will be a gaging station installed purely for the purpose of complying with State law and administering the Bear River Compact. The question arises as to how the operational costs of such a station should be handled. There are two alternatives. The State in which the station is located could pay for both the installation and operational costs, or the State or local water users, as the case may be, could pay for the installation of such station and its operation be taken over by the Commission, in which case, the cost of operation would come under our budget item of "Compact Administration", and not under the item of "Cooperative Program" (the latter includes other gaging stations having multiple use). As reservoir development takes place in the Upper Basin, we will have quite a number of these stations going in, and we should establish a uniform policy on their operation.

COM. JOHNSON: Any reservoir waters that might be affected in the river channel must be measured as the water enters and as it leaves? Who would be responsible for this?

MR. JIBSON: In Sulphur Creek, the amount of released water was determined by using two stations, one above and one below the reservoir. The Water Commissioner, working for the reservoir company, computed channel loss from preliminary measurements and charged the reservoir with the channel losses. He then distributed released water, comingled with natural flow from Bear River, and the natural flow only, was included in total divertible flow. This was done by adding all diversions, then deducting net reservoir releases (less the loss). It worked out satisfactorily in this instance. As Mr. Johnson suggested, it could get rather complicated if we go into detailed studies of channel losses and other factors which affect the water after it is released.

COM. BINGHAM: Was installation of the two major stations on Sulphur Creek Reservoir financed by the water users?

MR. JIBSON: Yes. Operation has now been taken over by the Geological Survey. Inasmuch as one station is replacing one already in operation on Sulphur Creek, we presume it will come under the Cooperative Program and be on a 50-50 basis. The second station, however, properly comes under Compact Administration, so our question is whether the water users or the State in which it is situated should pay operational cost, or whether it should be paid by the Commission. I think it would be simpler and equitable if the Commission pays the cost of such stations.

COM. COOPER: Is there any reason why the Commission should not?

MR. JIBSON: I cannot see any reason. These stations are definitely part of the operational program of the Commission.

COM. BINGHAM: I move that, as future storage is constructed, measuring devices upstream and downstream from the impoundment be provided by the water users, and the administration of the measurements be provided by the Commission.

COM. COOPER: Seconded the motion. Motion carried.

COM. COOPER: In the minutes of the last meeting, it was stated that there was a request made for an appropriate resolution to be drafted for the family of Mark Kulp, our previous State Commissioner of Reclamation. I would like to state that the resolution was drafted and sent to his family and I have a letter on file that I want to submit for the records here. ?

MR. JIBSON: We discussed in our June meeting in Montpelier, the fact that approximately 5,000 acre-feet of reservoir development has now taken place in the Upper Division and the Irrigation Reserve should be increased accordingly. I do not believe that any formal action was taken in that meeting to increase the Irrigation Reserve, in accordance with Article V of the Compact. I wonder if it would be the pleasure of the Commission today, to take formal action.

COM. BINGHAM: I think Mr. Chairman, that this is entirely proper. However, there is the matter that the documentary evidence supporting that storage, should be made a part of the Commission files. The contour maps and capacity curves of that storage should, at some time, be submitted to the Commission. To my knowledge, that has not been done. Is that right Mr. Lloyd?

COM. LLOYD: That is correct.

COM. BINGHAM: Is it correct that there is approximately 5,000 acre-feet of newly constructed storage in Wyoming?

MR. LLOYD: About 4,600 acre-feet.

COM. BINGHAM: Pending the documentary evidence of that, and to put the matter before the Commission, I move that in accordance with Article V, Paragraph B, of

the Compact, the Irrigation Reserve of the waters of Bear Lake be set in accordance with the Compact, at elevation 5,913.24 feet, which is the lake surface on the Utah Power and Light datum.

COM. SMOOT: Seconded the motion. Motion carried.

COM. JOHNSON: I would like to make clear, at this moment, our position. The fact that the Rich County people, and some lands in Wyoming, have for many years wanted a reservoir in Woodruff Narrows, seems to hang on just a thread, whether it will be feasible or not.

We do not want to take anyone's water to make it feasible, but I do know, that if the Smith's Fork people are subjected to the same type of thing in another year as this last year, they will certainly come in with an application for storage, and I do not see why they should not. All that they would take out of the allocation, certainly would not be stored on the Bear River, and an allocation of storage for them would be expensive for them and would render our project infeasible.

Presently, the Utah Water and Power Board has made an appropriation of \$7,500.00 to examine the Woodruff Narrows sites - those sites in Uintah County and Utah - and is also filing application on those sites, and we hope that someday the Bureau will help us in building a reservoir. The question is, unless we can have at least 20,000 ac. ft. of storage in that particular site, our idea of storage is going to be a dream. All we got out of the Compact was a change to build a reservoir that we probably cannot afford to build, so anything that takes from the allocation, that might go to Lincoln County in Wyoming or might go to Rich County out of Utah's allocation, endangers our project, and we would have hoped that sometime we might spread out the flow of the river and feel more security for our lands. Unless this is spread out and the storage

properly appropriated to the area as a supplemental water supply, then my idea of what the Compact can do for us is only a dream. I thought at the time, after these many years that we got together, we wrote a Compact which would permit us to work together as men of good will, irrespective of state or county lines, and we would make the most beneficial use of the water. I just wanted to leave that thought with you, that we think all we got in help from the Compact was a million dollar job, and our lands will be encumbered over whatever period of time the Congress will accept on repayment. You do have a natural reservoir that seldom fails. I know there are some costs for pumping, operation, etc., but we will not be interest-free either. We know that the 160-acre farm limitation will never work. If we cannot have a larger area of our lands interest-free, it will make it infeasible. I want to make it clear, and keep personalities out of it. There are 13 major canals covering nearly 30,000 acres of land, that will be affected. If we have only 20,000 acre-feet of water, we will try to build it, if it does cost 1,000,000 dollars or more, but let us not lose a chance for the communities to give help.

ANNUAL MEETING

COM. COOPER: I move that we hold the annual meeting on April 20, 1959, in Salt Lake City.

COM. LAURIDSEN: Seconded the motion. Motion carried.

MISCELLANEOUS

COM. BINGHAM: For a point of information, we have had some inquiry at our office for some little pamphlet on the Bear River Compact. I wondered if the other states had felt a similar need, either for the Legislature or water users. If so, it would appropriately be a Commission activity. It boils down to cost -

in our budget we might take care of the annual report and some modest kind of pamphlet as well.

COM. LAURIDSEN: I move that Mr. Bingham draw up and have printed, a small folder, in conjunction with the annual report, for the use of the public, in general, on the Bear River Compact.

COM. LLOYD: Seconded the motion. Motion carried.

The meeting adjourned at 3:20 p.m.

REPORT TO BEAR RIVER COMMISSION

October 27, 1958

Wallace N. Gibson
Assistant Secretary

Report on streamflow and Compact operation

Hydrology

Precipitation on Bear River drainage was well below normal during the water year ending September 30, 1958. Rainfall at Evanston was about 67% of normal for the ten-month period ending July 31. Logan precipitation was 75% for the water year but only 55% for May - September period.

Streamflow above Bear Lake was also below normal for the water year and was very deficient during the late summer months. Based on tentative computations, Bear River supply for the full water year was about 86% and Smith's Fork about 98% of the past 16-year mean flow. The following table shows comparative data in percentages of 16-year means for 1954 and 1958 irrigation seasons. The table indicates quite comparable supplies in the two years for the July - September period.

1958 DISCHARGE IN PERCENT OF 1943-58 MEAN

	<u>April-Sept.</u>		<u>June-Sept.</u>		<u>July-Sept.</u>	
	<u>1954</u>	<u>1958</u>	<u>1954</u>	<u>1958</u>	<u>1954</u>	<u>1958</u>
Smith's Fork Supply	75%	95%	69%	92%	80%	85%
Bear River Supply	56%	83%	35%	70%	44%	50%
Combined Supply	66%	89%	51%	81%	65%	70%

On Plates 1 and 5 are plotted 1958 hydrographs of Bear River and Smith's Fork above practically all diversions compared with similar

hydrographs for 1954 and 1957. These show almost identical flows in 1954 and 1958 after June 25th.

Compact Operation

Upper Division

Plate 2 shows total divertible flow in the Upper Division, 1954, 1956, and 1958. Plates 3 and 4 show diversions in the three principal Sections of this Division plotted with total divertible flow and Compact allocation for the Upper Wyoming Section.

The divertible flow dropped below 1250 cfs on June 21, initiating interstate regulation under terms of the Compact. A period of about four days elapsed before all Upper Wyoming diversions could be regulated by the local Water Commissioner. At least half of this lag could have been eliminated with more satisfactory headworks. Section diversions were near Compact allocations for the balance of time that irrigation water was available. Supplies diminished to stock water proportions before July 15th and further interstate regulation became impractical.

The Lower Utah Section received some benefit from this regulation, as shown on the hydrograph, but the period of available supplies was short, following initial regulation. Plate 2 shows that regulation would have been in effect the entire season in 1954, whereas in 1958 the divertible flow was dropping very rapidly by the beginning date of regulation.

Plate 4 shows Lower Wyoming Section diversions and the flow passing Pixley Dam out of the Division. A flow of about 75 cfs was recorded past Pixley Dam after regulation began, which gradually dropped off to about 50 cfs by July 10th. This Section diverted or could have diverted its allocation during the period of interstate regulation.

Since much of the diversion data in the Upper Division was obtained on a spot-determination basis, seasonal diversion in acre-feet per acre is not available. Continuous recorders used in Lower Utah and Lower Wyoming Section after about May 20th will provide this data for most of the season.

Central Division

Plate 6 is a hydrograph of divertible flow in the Central Division, 1954, 1956, and 1958. It is noted that 1958 supplies after June 25th were slightly above the corresponding period in 1954, but divertible flow was slightly less. This would be expected in the hot, dry season just past, in which consumptive use of diverted water was greater, thus decreasing return flow from water applied.

Plate 7 shows operational detail of the Compact in Wyoming Section. Flow passing the Bear River at Border gaging station, dropped below 350 cfs June 29th. Divertible flow was near 1000 cfs at this time. Thus, as in other years of record, the flow at Border was the initiating criteria for interstate regulation. Wyoming diversions were reduced within two days to practical limits of allocation. Following initial reduction, however, was a period of about two weeks in which diversions exceeded allocations by 40 to 50 cfs. A few cases of local dissension made it very difficult for the local Water Commissioner to make proper regulation. These difficulties were ironed out and as the graph indicates, very good compliance was obtained thereafter for the balance of the season.

Plate 8 shows diversion data for Idaho Section of the Central Division. The sudden drop in diversions after July 1st is due to cutting of meadow

rights under state decree. Diversions, plus flow leaving the Division via Rainbow Inlet Canal and Bear River below Stewart Dam, follow closely the corresponding Compact allocation.

Article IV of the Bear River Compact provides that water emergencies shall terminate on October 15 unless terminated sooner or extended by the Commission. The Water Commissioner of District #5 in Idaho, notified the Commission office on October 3rd that Idaho diversions had been cut off or reduced to stockwater in compliance with state law, and that subsequent records would not be forthcoming from his office. Accordingly, the local Wyoming Water Commissioner was so informed and no further regulation carried out.

The following tables have been prepared as an aid in appraising the net effect of Compact regulation in the Central Division. Table I summarizes diversions in acre-feet per acre for the period June - September of 1954, 1956, and 1958. It should be noted that it does not reflect the increased flow arriving at Stewart Dam by reason of Compact regulation in Wyoming. Table II shows the flow passing Border for the past 10 years as a percentage of the principal supply entering the Central Division. As would be expected, the ratio is high in wet years (even exceeding 100%) and low in the drier years. In 1954, 70% of the July - September supply passed into Idaho, while in 1958, even though consumptive use of diverted water was greater, 84% of the supply entered Idaho.

Table I
DIVERSIONS IN ACRE-FEET PER ACRE

	<u>June-September</u>		
	<u>1954</u>	<u>1956</u>	<u>1958</u>
Wyoming Section	4.86	5.40	4.00
Idaho Section*	2.01	2.61	2.54

* Does not include diversion to Bear Lake or flow passing Stewart Dam.

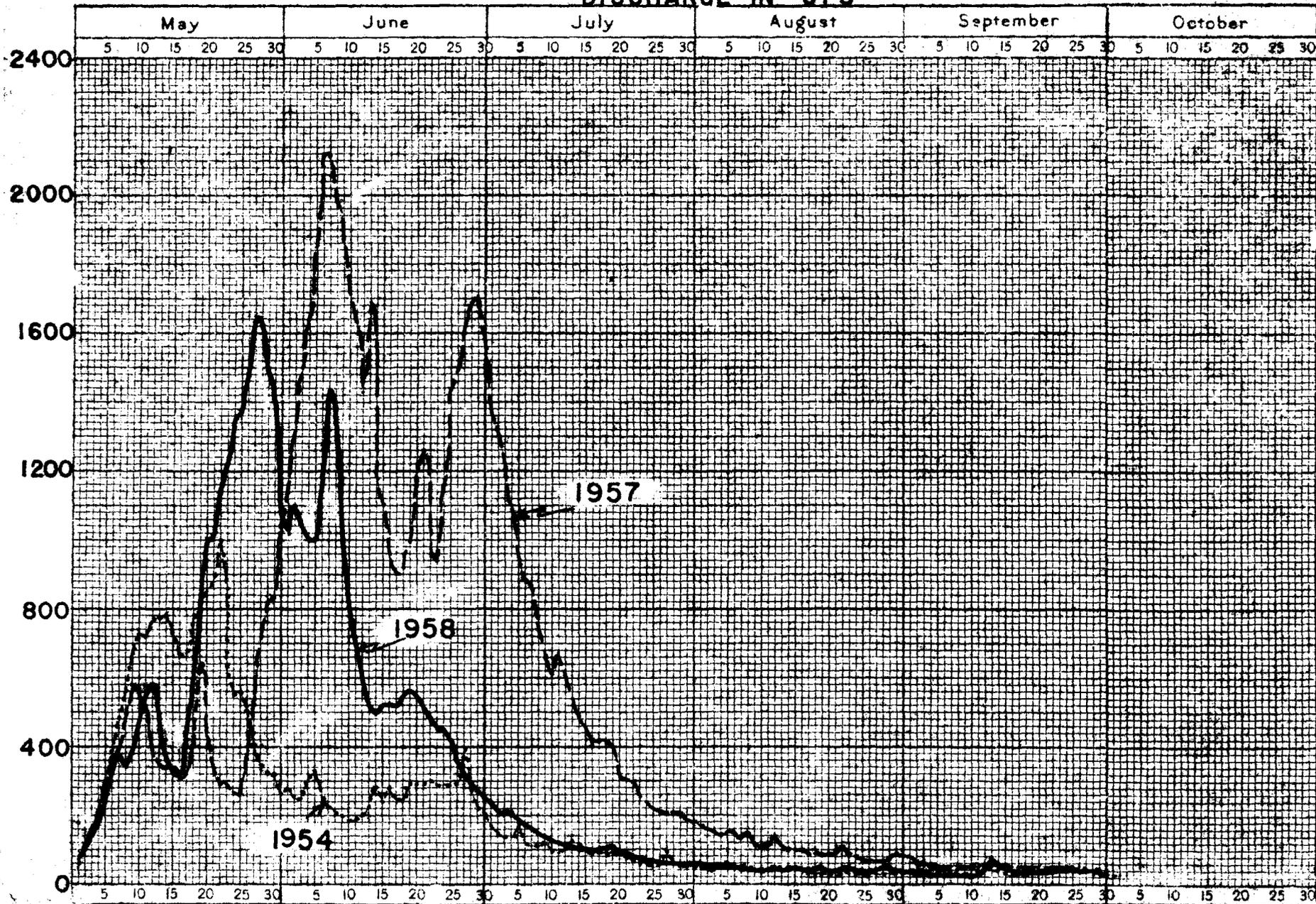
Table II
DISCHARGE, JULY-SEPTEMBER, IN THOUSANDS OF ACRE-FEET

<u>Year</u>	<u>Smith's Fork above diversions</u>	<u>Bear River below Pixley Dam</u>	<u>Total* Supply</u>	<u>Bear River at Border</u>	<u>Percentage Passing Border</u>
1949	27.8	18.0**	45.8	41.6	91%
1950	47.8	29.2**	77.0	83.3	108%
1951	40.2	28.1**	68.3	69.5	102%
1952	30.4	34.5	64.9	65.2	100%
1953	34.2	12.4	46.6	38.3	82%
1954	26.6	1.8	28.4	19.9	70%
1955	26.0	7.1	33.1	26.3	79%
1956	34.0	7.9	41.9	34.6	83%
1957	44.2	32.5**	76.7	78.5	102%
1958	28.3	3.5	31.8	26.8	84%

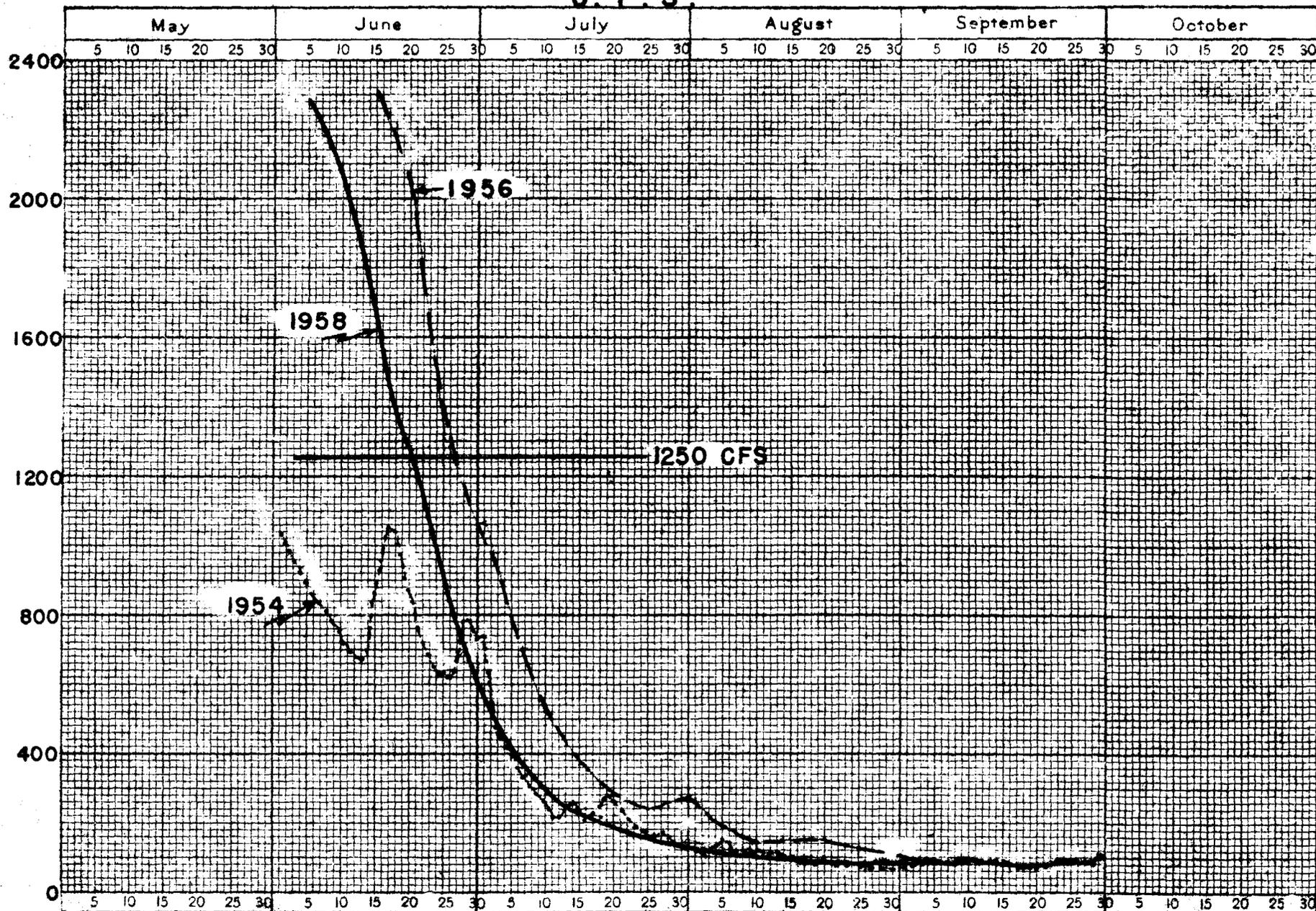
* Total supply does not include tributaries of Smith's Fork below gaging station nor return flows from diversions at Pixley Dam.

** Computed from correlation with Bear River near Randolph.

UPPER DIVISION - BEAR RIVER near UT-WYO LINE DISCHARGE IN CFS



UPPER DIVISION - TOTAL DIVERTIBLE FLOW C. F. S.

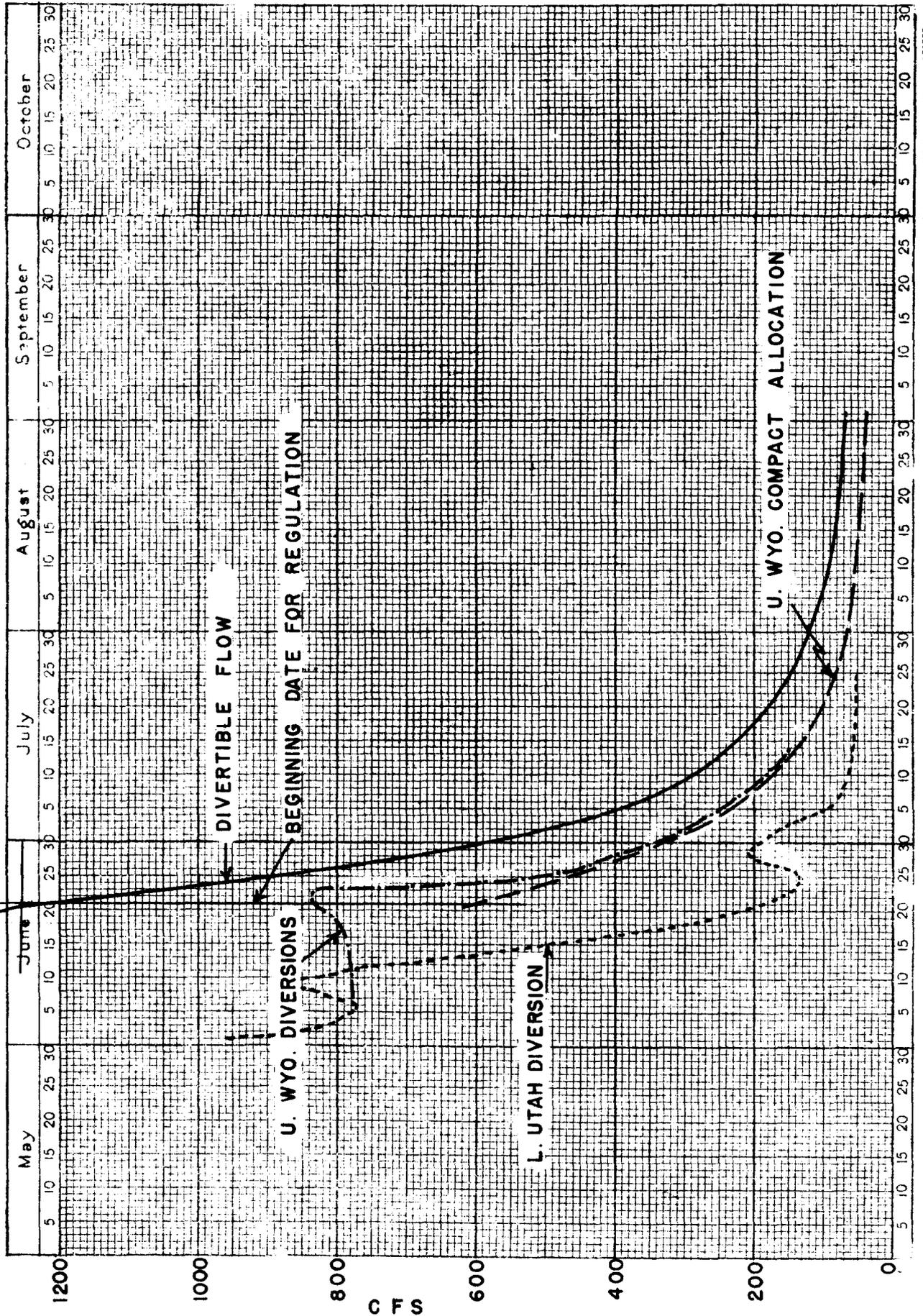


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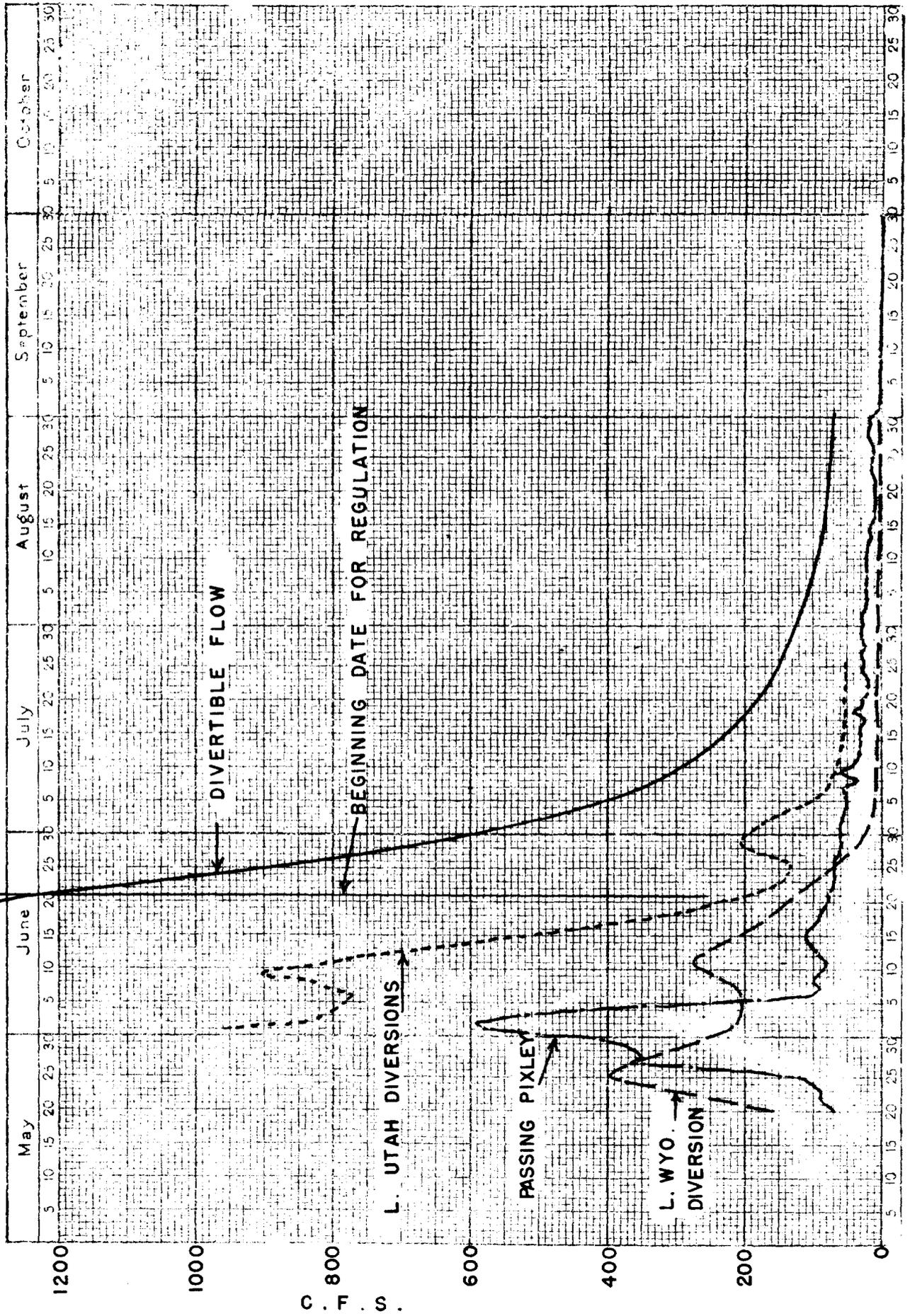
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

(WATER RESOURCES BRANCH)

UPPER DIVISION



UPPER DIVISION



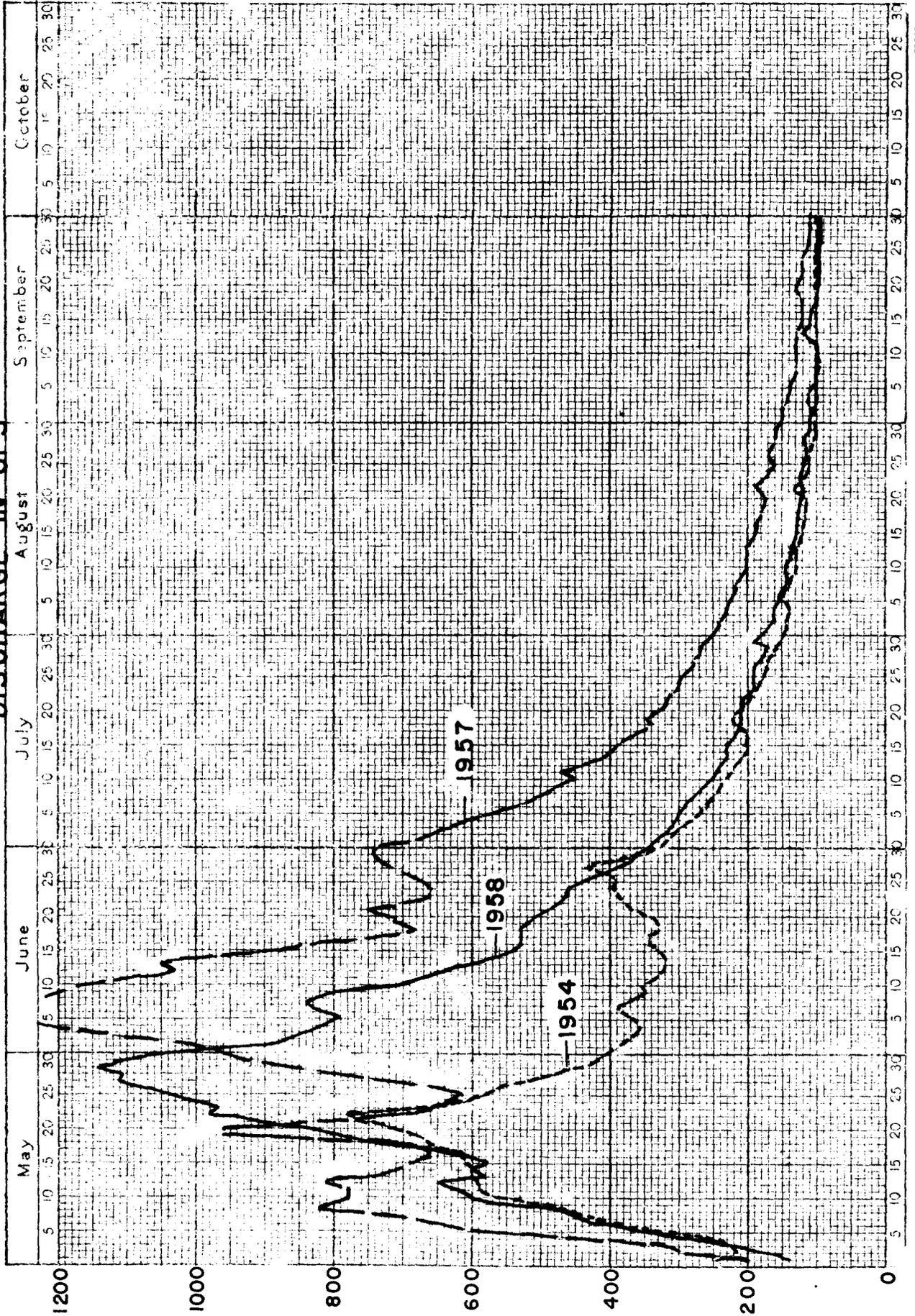
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(WATER RESOURCES BRANCH)

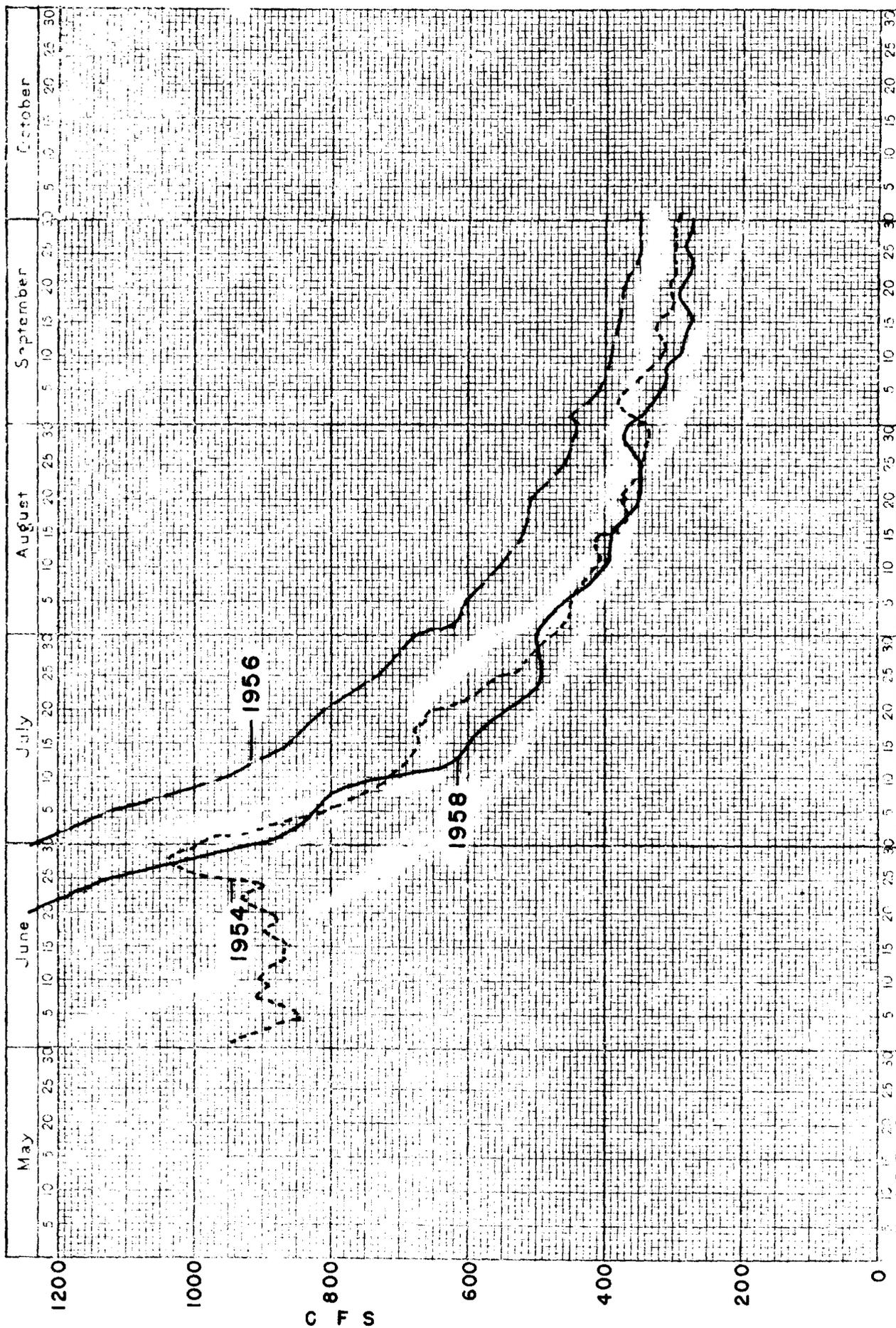
CENTRAL DIVISION - SMITHS FORK SUPPLY DISCHARGE IN CFS



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April 1954

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

CENTRAL DIVISION - DIVERTIBLE FLOW IN CFS



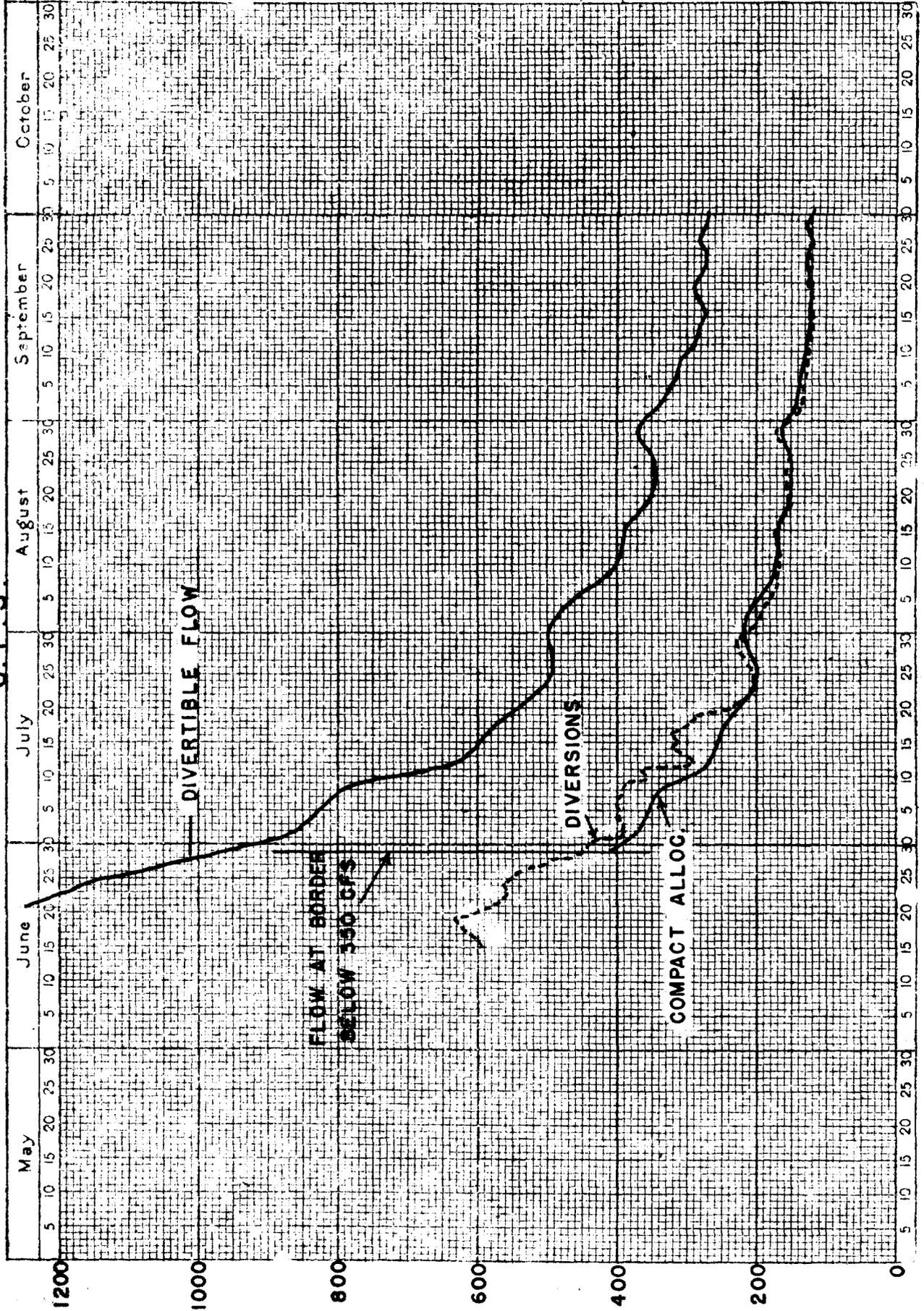
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GEOLOGICAL SURVEY

(WATER RESOURCES BRANCH)

CENTRAL DIVISION - WYOMING ALLOCATION & DIVERSION C.F.S.



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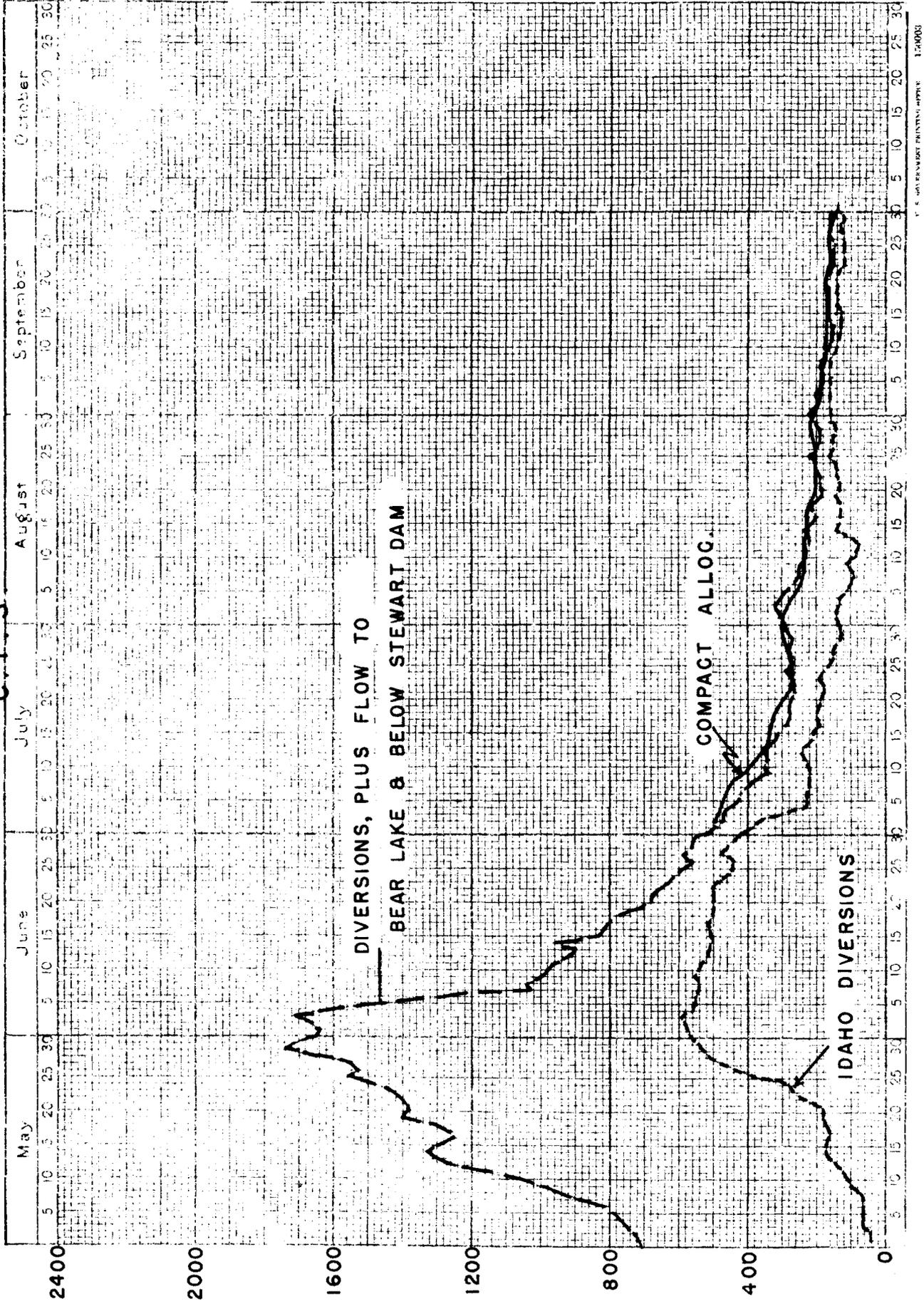
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(WATER RESOURCES BRANCH)

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C.F.S.



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