

SEVENTEENTH ANNUAL REPORT

BEAR RIVER
COMMISSION

1974



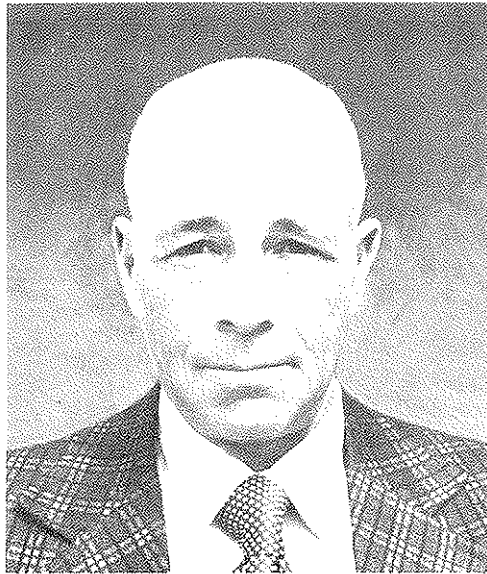
For the Report Year October 1, 1973 to

September 30, 1974

LOGAN, UTAH

April 1, 1975

IN MEMORIAM



FERRIS M. KUNZ

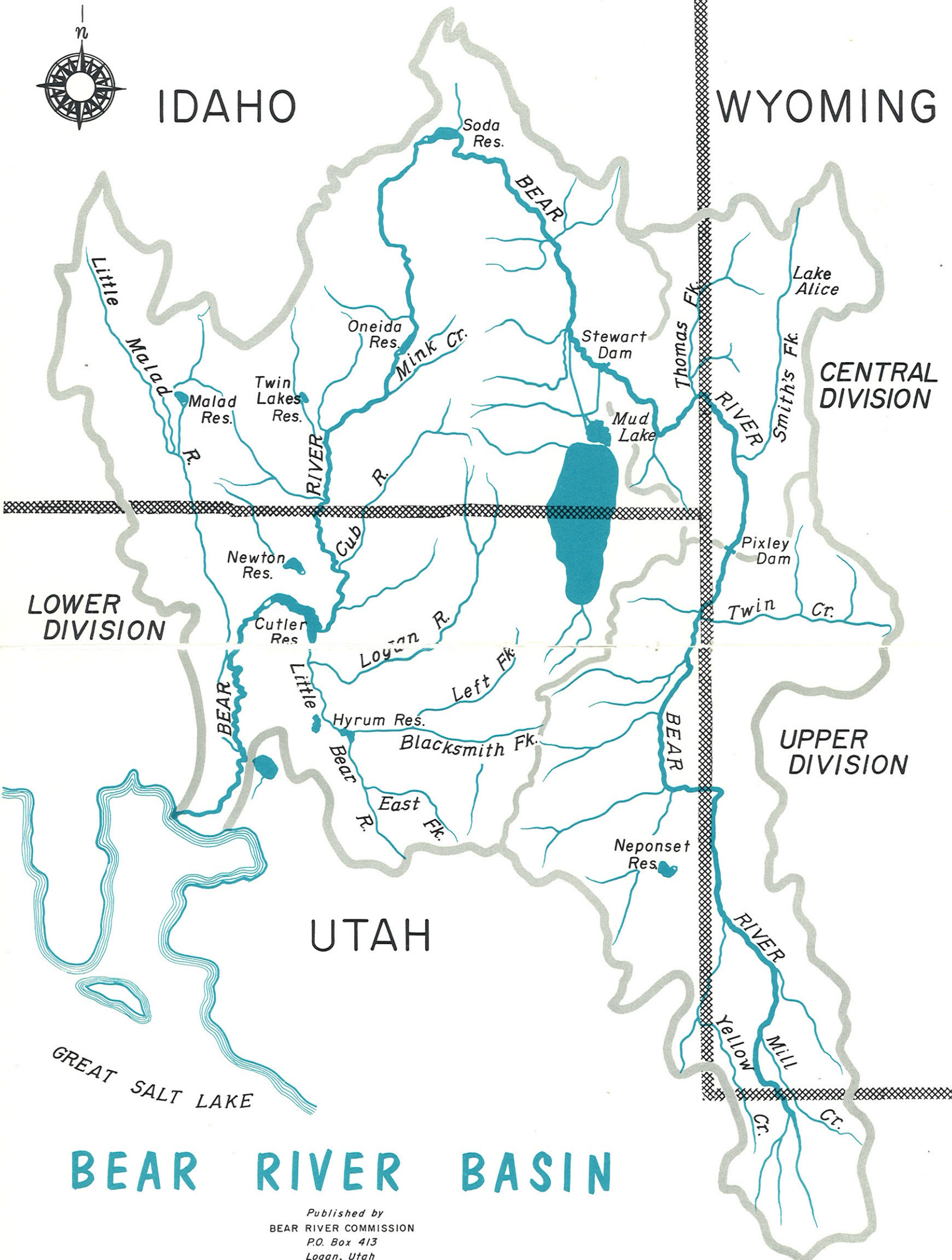
Commissioner from Idaho

Bear River Commission, 1967-74



IDAHO

WYOMING



LOWER DIVISION

CENTRAL DIVISION

UPPER DIVISION

UTAH

GREAT SALT LAKE

BEAR RIVER BASIN

Published by
BEAR RIVER COMMISSION
P.O. Box 413
Logan, Utah

BEAR RIVER COMMISSION

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LOGAN, UTAH

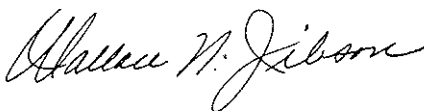
April 1, 1975

Mr. President:

Submitted herewith is the Seventeenth Annual Report of the Bear River Commission, as required by Article III D 2 of the Bear River Compact.

A copy of the report is being transmitted to the Governor of each signatory State to the Bear River Compact.

Very truly yours,

A handwritten signature in cursive script, reading "Wallace N. Jibson".

Wallace N. Jibson
Assistant Secretary

The President
The White House
Washington, D.C.

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SEVENTEENTH ANNUAL REPORT

of the

BEAR RIVER COMMISSION

April 1, 1975

INTRODUCTION

The Bear River Compact determines the rights and obligations of the signatory States of Wyoming, Idaho, and Utah with respect to the waters of Bear River. Federal consent to the Compact was given by the Congress and signed by the President, March 17, 1958. The Bear River Commission was organized as an interstate agency to administer the Compact.

Article III D 2 of the Compact provides that the Bear River Commission shall compile annually a report covering the work of the Commission for the water year ending the previous September 30 and transmit it to the President of the United States and to the Governors of the signatory States on or before April 1 of each year.

Activities of the Bear River Commission during the water year ending September 30, 1974 are summarized in this report. Financial report of the auditors and daily streamflow records are shown in the appendixes.

ORGANIZATION

Ten commissioners, three representing each State and one the United States, constitute the Bear River Commission. The Federal representative serves as Chairman without vote.

Members of the Commission and others associated with the Bear River Compact were grieved to hear of the passing of Ferris M. Kunz, Montpelier, Idaho. Ferris served as a Commissioner from Idaho from April 1967 until his passing in May 1974. He was a member of the Idaho Water Resource Board and the Bear River Negotiating Committee. Clifford J. Skinner, Dingle, Idaho will replace Ferris on the Commission.

J. W. Myers, Wyoming delegate, was elected in Annual Meeting to serve a second term as Vice-Chairman of the Commission. Other officers of the Commission continue to serve in their respective positions.

OFFICERS

Chairman E. O. Larson, Salt Lake City, Utah
Vice-Chairman..... J. W. Myers, Evanston, Wyoming
Secretary-Treasurer Daniel F. Lawrence, Bountiful, Utah
Assistant Secretary Wallace N. Jibson, Logan, Utah

MEMBERS

Idaho

William G. Jenkins Malad, Idaho
J. C. Hedin Preston, Idaho
Clifford J. Skinner Dingle, Idaho
R. Keith Higginson (Ex officio)..... Boise, Idaho

Utah

Daniel F. Lawrence..... Bountiful, Utah
Gordon H. Peart Randolph, Utah
S. Paul Holmgren Bear River City, Utah

Wyoming

Floyd A. Bishop Cheyenne, Wyoming
S. Reed Dayton Cokeville, Wyoming
J. W. Myers Evanston, Wyoming

United States

E. O. Larson Salt Lake City, Utah

Budget Committee

J. W. Myers Evanston, Wyoming
S. Paul Holmgren Bear River City, Utah
William G. Jenkins Malad, Idaho

Operations Committee

S. Reed Dayton Cokeville, Wyoming
J. C. Hedin Preston, Idaho
Gordon H. Peart Randolph, Utah

MEETINGS

Two meetings were held during the report year in accordance with the bylaws as follows:

Regular Meeting—November 19, 1973....Salt Lake City, Utah
 Annual Meeting—April 15, 1974.....Salt Lake City, Utah

BUDGET AND FISCAL DISBURSEMENTS

Adopted Budget

	Fiscal Year Ending 6-30-1974	Fiscal Year Ending 6-30-1975	Fiscal Biennium Ending 6-30-1975
Compact Administration			
Personal Services	\$ 6,714	\$ 6,893	\$ 13,607
Travel and Subsistence	100	100	200
General Office Expense.....	350	200	550
Fiscal and Administrative	362	369	731
Washington Office Tech. Charge....	724	738	1,462
Printing and Reproduction	600	600	1,200
Treasurer (Bond and Audit).....	300	300	600
Transcribing Minutes	100	100	200
Legal Retainer Fee	300	300	600
Sub-Total	\$ 9,550	\$ 9,600	\$ 19,150
 Stream-Gaging Program			
U.S. Geological Survey	\$72,215*	\$76,800	\$149,015
Total	\$81,765*	\$86,400	\$168,165

*As revised by USGS increase of \$715 and prorated decrease of \$1,200.

Allocation of Budget

U.S. Geological Survey	\$36,465	\$38,400	\$ 74,865
State of Idaho	15,100	16,000	31,100
State of Utah	15,100	16,000	31,100
State of Wyoming	15,100	16,000	31,100
Total	\$81,765	\$86,400	\$168,165

All disbursements of Commission funds are made by check on vouchers signed by the Secretary-Treasurer, and approved and countersigned by the Chairman or Vice-Chairman.

The audit of accounts and records, including balance sheet of June 30, 1974 and statement of budget revenue and appropriation accounts for the fiscal year ended June 30, 1974, are included in this report as appendix A.

STREAM-GAGING PROGRAM

A cooperative, basin-wide program of stream gaging is administered by the Geological Survey project engineer at Logan, Utah. The Geological Survey and Bear River Commission contribute equally to finance the collection of daily streamflow records at about 50 gaging stations. An additional eight gaging stations in the basin are operated by Utah Power & Light Company in connection with Federal Power Commission projects. Streamflow records of significance to the Commission are published herein as appendix B.

Gaging stations were discontinued on Malad River near Bear River City and Bear River Duck Club Canal as of January 31, 1974 and September 30, 1973, respectively. South Fork Little Bear River gage was discontinued as of September 30, 1974, and Little Bear River below Hyrum Reservoir as of February 28, 1974.

ADMINISTRATION OF BEAR RIVER COMPACT

Provisions of the Compact are administered and enforced by direction of Bear River Commission. However, water rights within each State are adjudicated and administered in accordance with State law subject to limitations provided in the Compact.

Cooperative stream-gaging agreements with the Geological Survey include a program of administrative and technical assistance to the Commission financed without matching Federal funds. This program is directed by the Geological Survey project engineer at Logan where the project office is also the principal office of the Commission.

The project engineer is Assistant Secretary to the Commission with responsibility of providing technical assistance and current streamflow information required to administer the Compact. He establishes operational procedures, conducts hydrologic studies, compiles annual reports, and maintains the records of the Commission.

Seasonal daily records were collected on about 130 diversions above Bear Lake by district water commissioners under the general supervision of the Geological Survey. These records include all of the diversions from Bear River main stem and Smiths Fork, as they are required to administer the Bear River Compact. Daily discharge records for canals in the Central Division have been published in all annual reports. Records for the Upper Division, beginning in 1971, are now being published. (See frontispiece map for division boundaries and tables 1-10 for the daily records.)

Expenses incurred by the Bear River Commission are paid equally by the signatory States. Compensation and expenses of the Federal representative, each commissioner, and each adviser are paid by the Government which he represents.

WATER SUPPLY

Water supply exceeded the long-time average in all parts of the basin in contrast to a hot and dry summer in which precipitation was about half of normal. Especially noticeable was the abnormally high runoff in May and June that ranged from 120 percent of average in the upper basin to 138 percent in the Logan River drainage.

The bar charts on the opposite page (figure 1) illustrate a comparison of monthly and yearly streamflow in 1974 with a longtime average. Mean flow in cubic feet per second is shown at three gaging stations representing the Upper, Central, and Lower Divisions of the basin. Streamflow at the two upper stations is the major supply for the Upper and Central Divisions so is shown also on daily hydrographs in figures 2 and 3. Seasonal and water-year discharge at these stations is summarized in acre-feet in the following table:

Discharge in Acre-feet — May - September

	Average 1943-74	1973	1974
Upper Bear River	116,400	114,500	129,500
Smith Fork	110,500	81,200	130,600
Logan River	123,900	102,500	165,200

Water Year

	Average 1943-74	1973	1974
Upper Bear River	139,400	138,900	158,500
Smith Fork	143,400	114,500	165,300
Logan River	185,100	166,600	226,300

Diversion from Bear River to Bear Lake (for storage or bypass) was 415,000 acre-feet in 1974 or 66 percent above the 51-year average but typical of recent years. Outflow from the Lake (including bypass) exceeded the inflow with a resulting net loss in content of 47,000 acre-feet.

The bar charts in figure 4, page 16, illustrate the hydrology of Bear Lake in 1974 compared to the 1924-74 average inflow, outflow, and gain. Gain from tributaries, as shown, represents the effect of peripheral tributary and ground-water inflow exclusive of Bear River water. Thus, under natural conditions without Bear River, the Lake in 1974 would have gained 17,000 acre-feet over its evaporation and other losses compared to an average gain of 11,600 acre-feet. Water-year hydrographs of 1973 and 1974 surface elevations are shown in figure 5, page 17.

Bear Lake Elevation (U.P. & L. Datum)

Water Year	Beginning of Water Year	End of Storage Period	End of Water Year
1973	5,920.85	5,921.28	5,919.84
1974	5,919.84	5,922.05	5,919.16

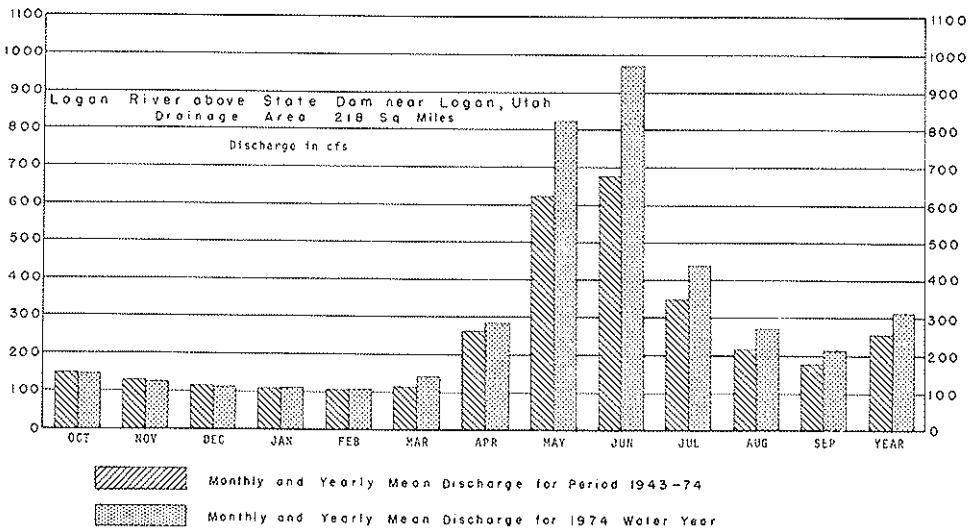
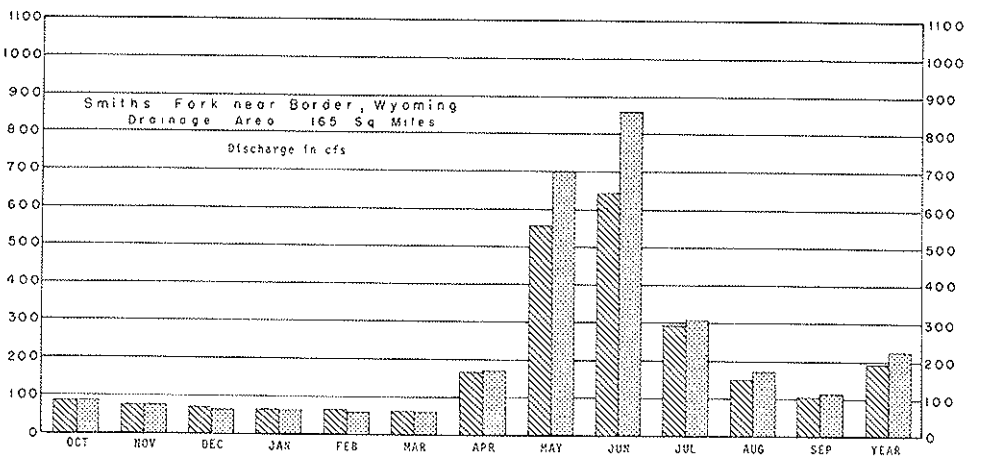
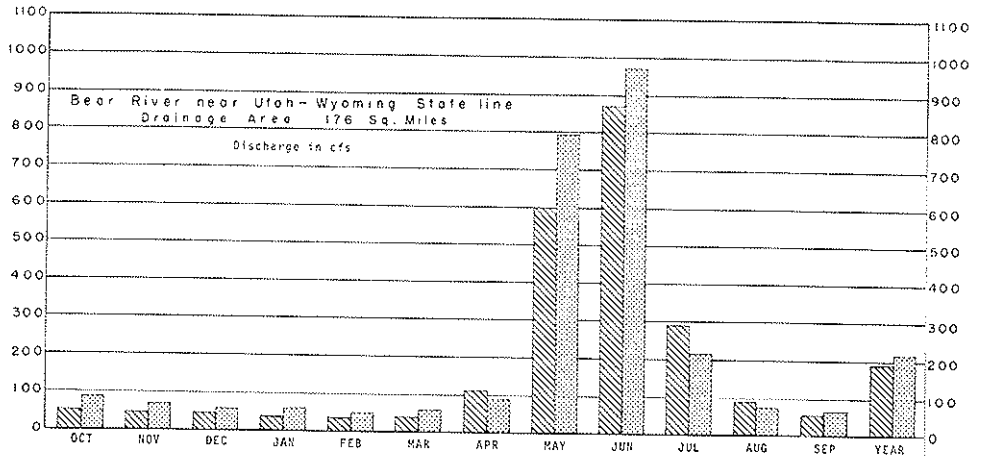
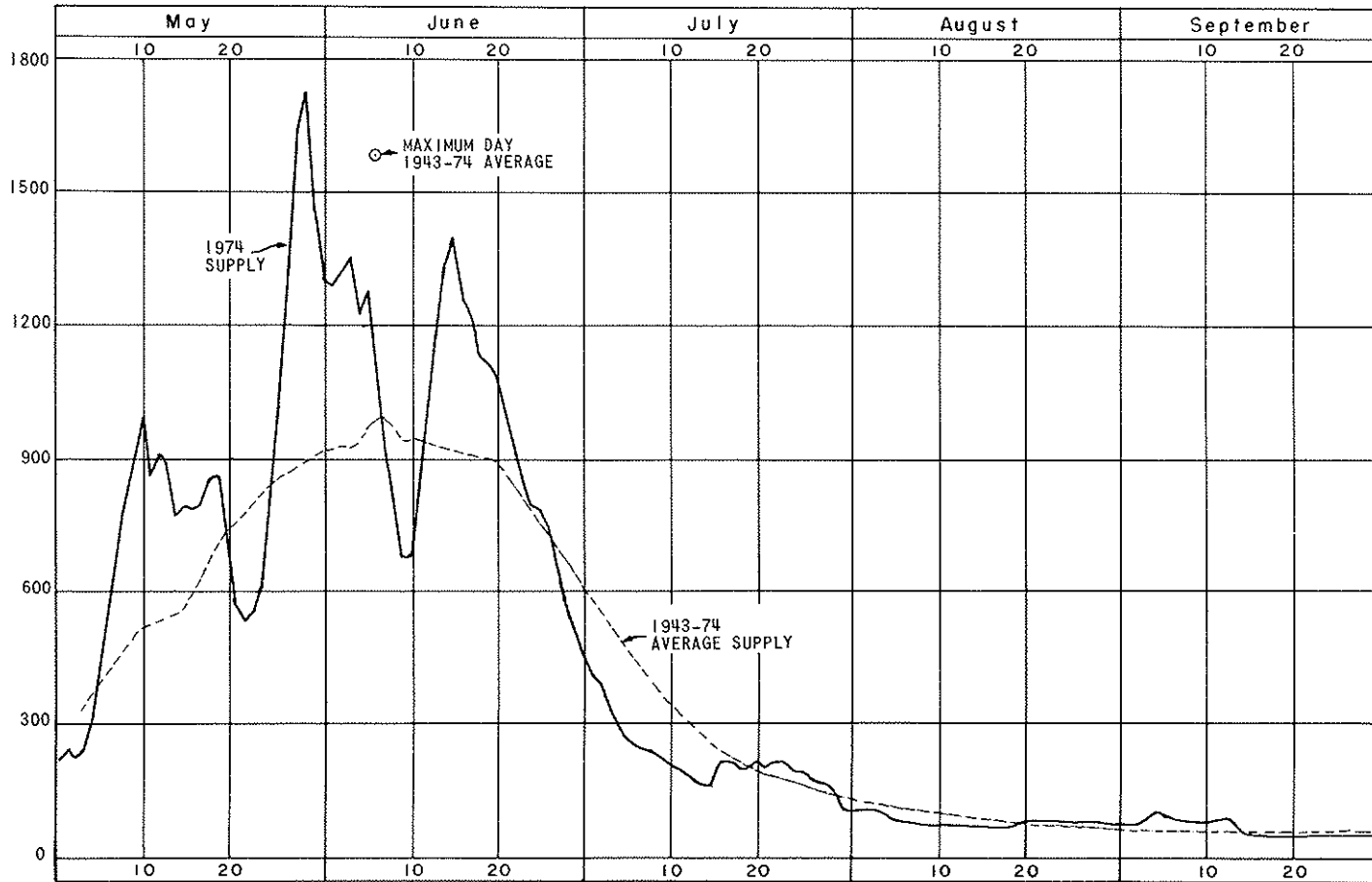


Figure 1. Comparison of discharge at three representative gaging stations in 1974 with average discharge for period 1943-74

UPPER DIVISION - BEAR RIVER SUPPLY *

CUBIC FEET PER SECOND

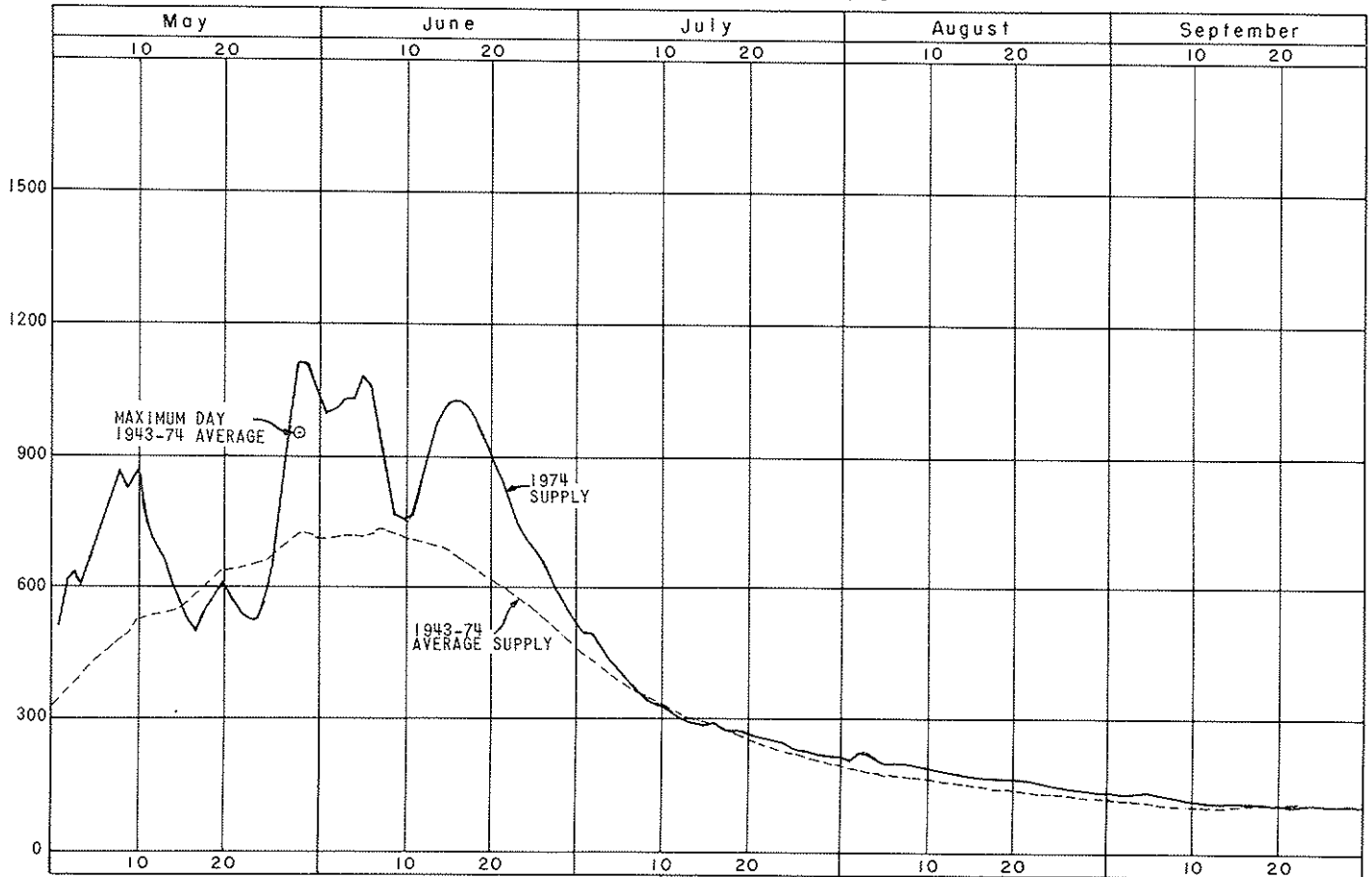


*Bear River near Utah-Wyoming State line

Figure 2

CENTRAL DIVISION - SMITHS FORK SUPPLY *

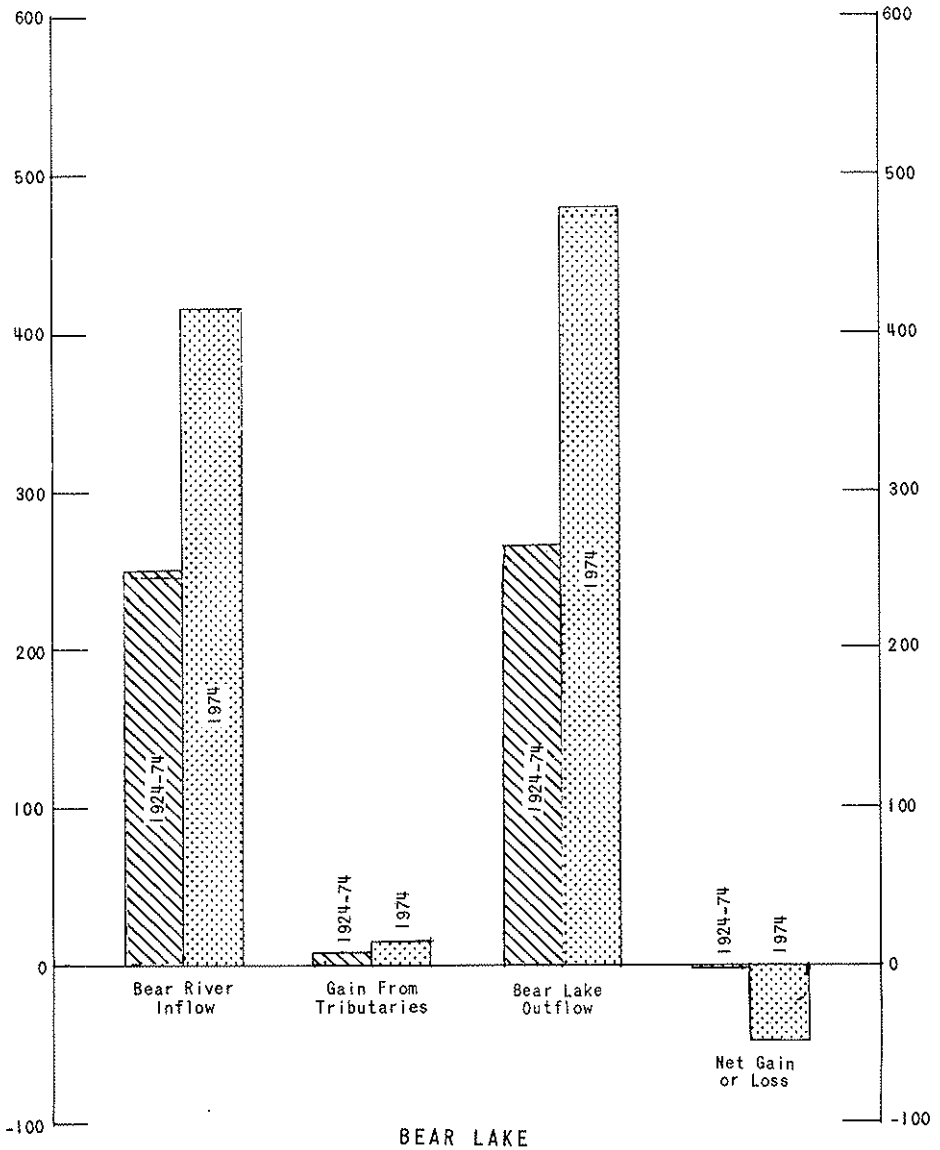
CUBIC FEET PER SECOND



*Smiths Fork near Border, Wyoming

Figure 3

15



ANNUAL QUANTITIES, IN THOUSANDS OF ACRE-FEET

Figure 4

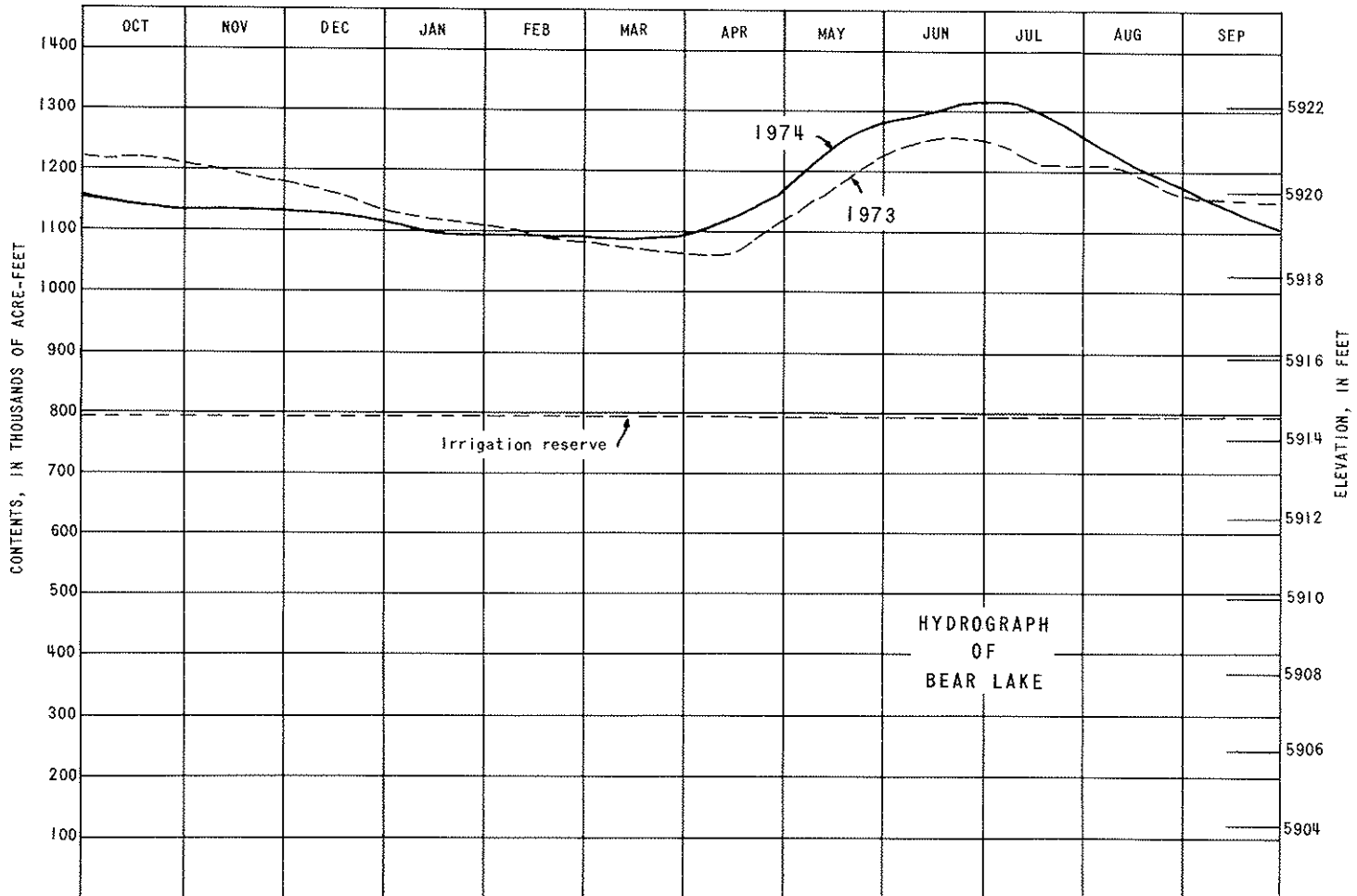


Figure 5

STREAMFLOW DISTRIBUTION

Records of diversions from Bear River main stem above Bear Lake and from Smiths Fork were collected by district water commissioners and submitted weekly to the Assistant Secretary. He computed section diversions and allocations and informed these district commissioners and members of the Commission of the quantities diverted and of State-section allocations, where applicable, for the regulatory action needed to comply with the Compact.

Upper Division

The Upper Division comprises that part of the basin above and including Pixley Dam and includes two sections in Wyoming and two in Utah. The Compact provides that when the total diversions in the division plus the flow passing Pixley Dam are less than 1,250 cfs (divertible flow), a water emergency exists and such divertible flow is allocated to sections as follows:

Upper Utah Section Diversions	0.6 percent
Upper Wyoming Section Diversions	49.3 percent
Lower Utah Section Diversions	40.5 percent
Lower Wyoming Section Diversions	9.6 percent

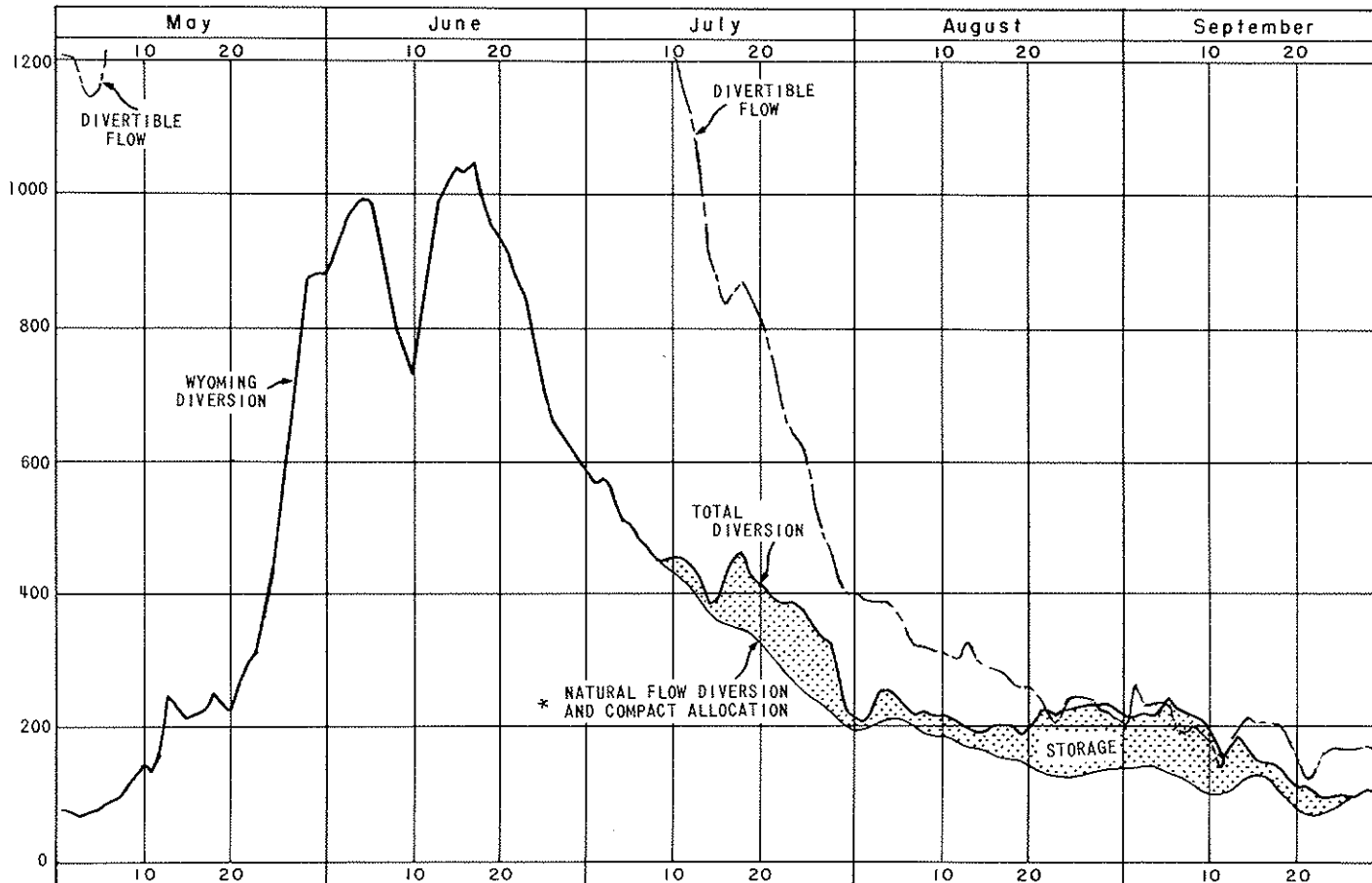
Interstate regulation in years of average or better water supply usually is not required in this division where meadow hay predominates. Article IV of the Compact makes available to other sections the unused allocation in any section. Thus, under present practice, after about July 10 Upper Wyoming Section allocation is increased by 9.6 percent as the Lower Wyoming Section ceases diverting and shortly thereafter is increased by most of Lower Utah's allocation as this section shuts down for haying operations. Except for the first few days in May, divertible flow in these years of good supply does not drop to the 1,250 cfs emergency condition until near mid-July when the two lower sections have ceased diverting for harvesting. Thereafter, Upper Wyoming Section could not conceivably divert in excess of allocation.

Diversion tabulations for the Upper Division, shown on pages 28-32, indicate that divertible natural flow was below 1,250 cfs prior to May 7 and subsequent to July 8 through the balance of the season. All diversions were minimal during the first period, and in the second period Upper Wyoming Section diverted less than its basic allocation of 49.3 percent until August 2. Other sections in the division had virtually ceased diverting prior to August 2, so by Article IV, most of the divertible flow would then be allocated to Upper Wyoming Section. Hydrographs in figures 6-8 (pages 19-21) show water diverted from natural flow and storage in the three principal sections in this division.

Diversion included about 15,000 acre-feet storage from Woodruff Narrows Reservoir (figure 9), about 4,500 acre-feet from Sulphur Creek Reservoir, and 4,200 acre-feet from Whitney Reservoir.

UPPER DIVISION - UPPER WYOMING SECTION

CUBIC FEET PER SECOND

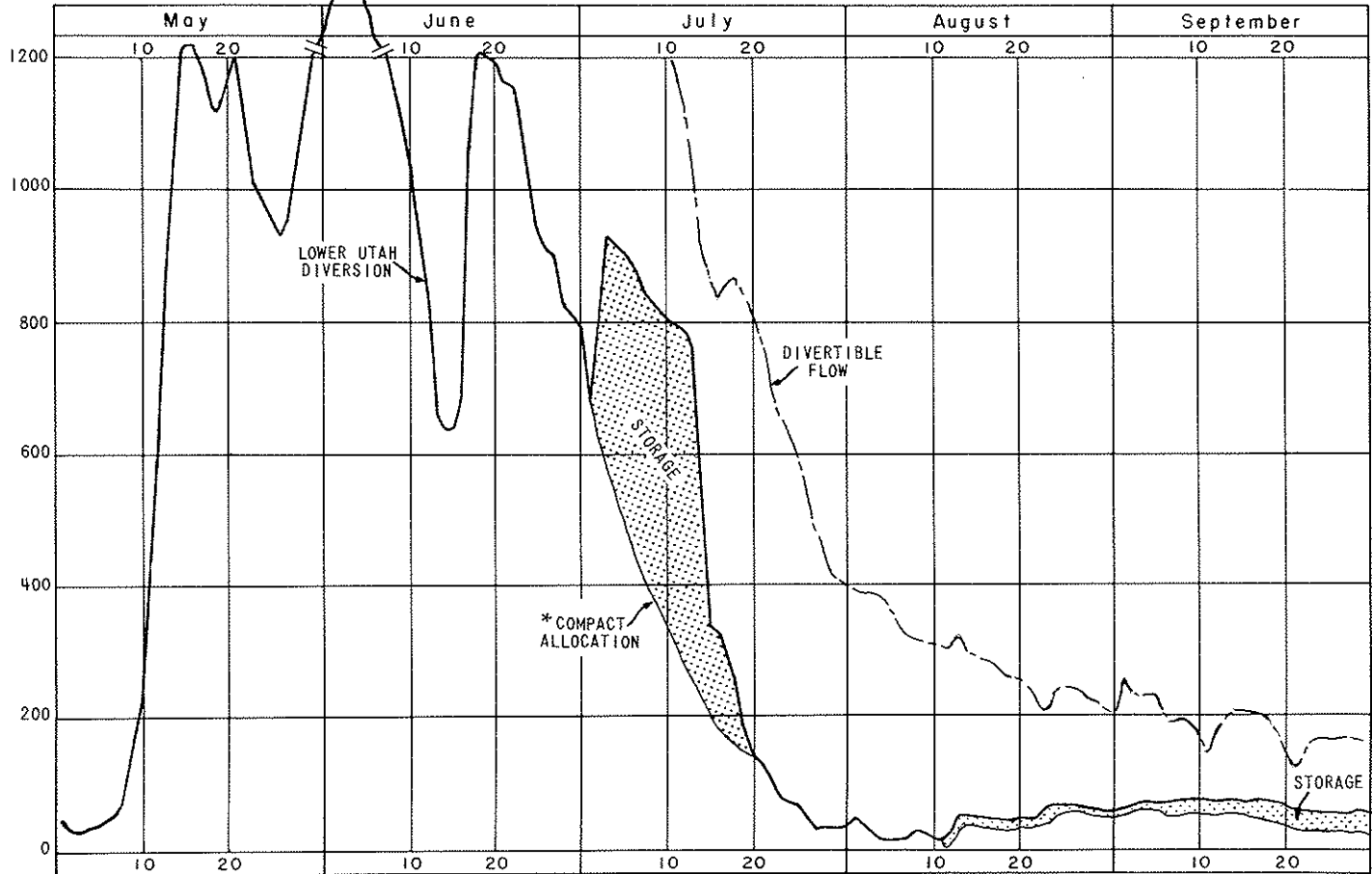


*See footnote, Tables 3-5

Figure 6

UPPER DIVISION - LOWER UTAH SECTION

CUBIC FEET PER SECOND



*See footnote, Tables 3-5

Figure 7

UPPER DIVISION - LOWER WYOMING SECTION

CUBIC FEET PER SECOND

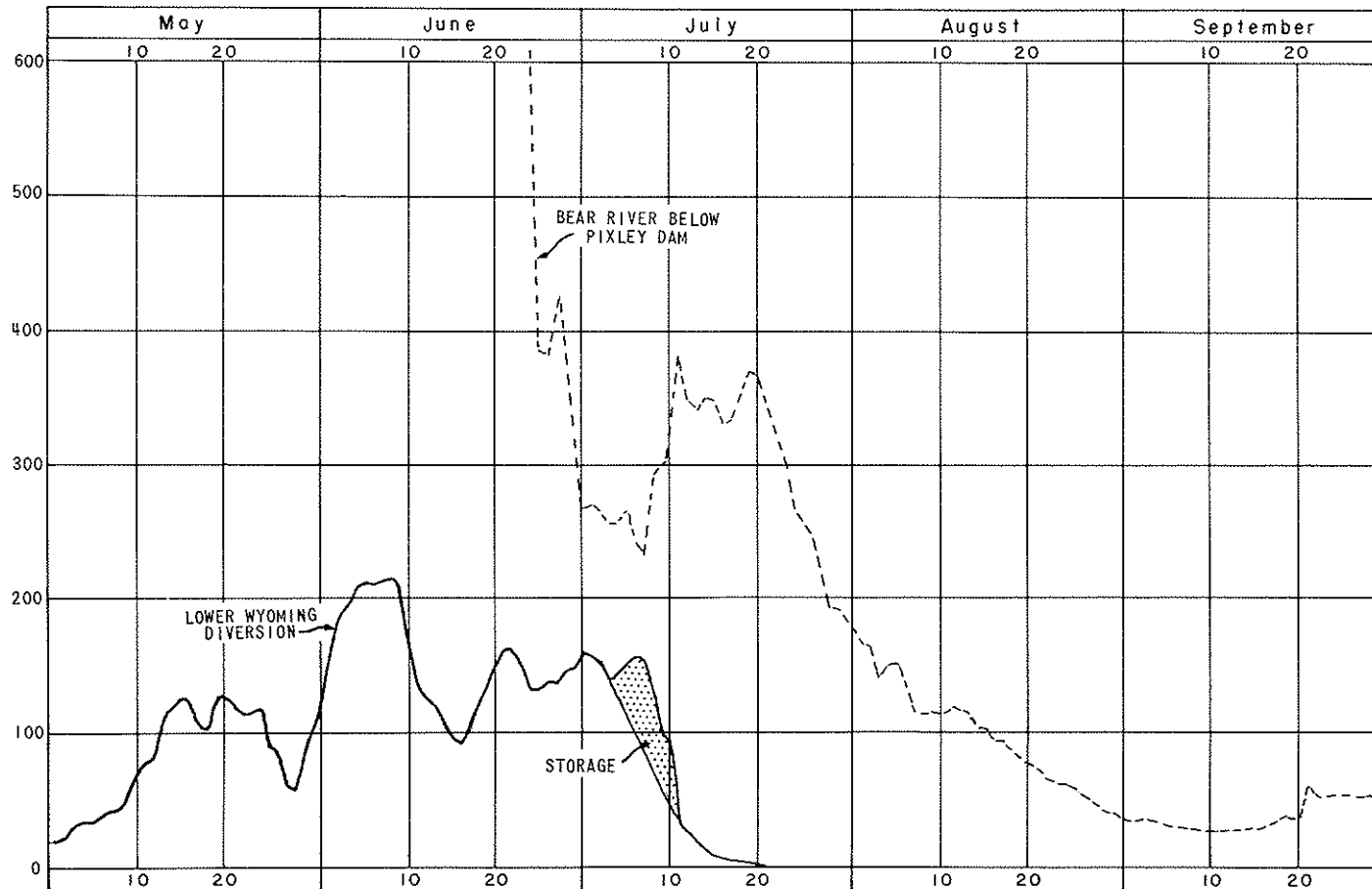


Figure 8

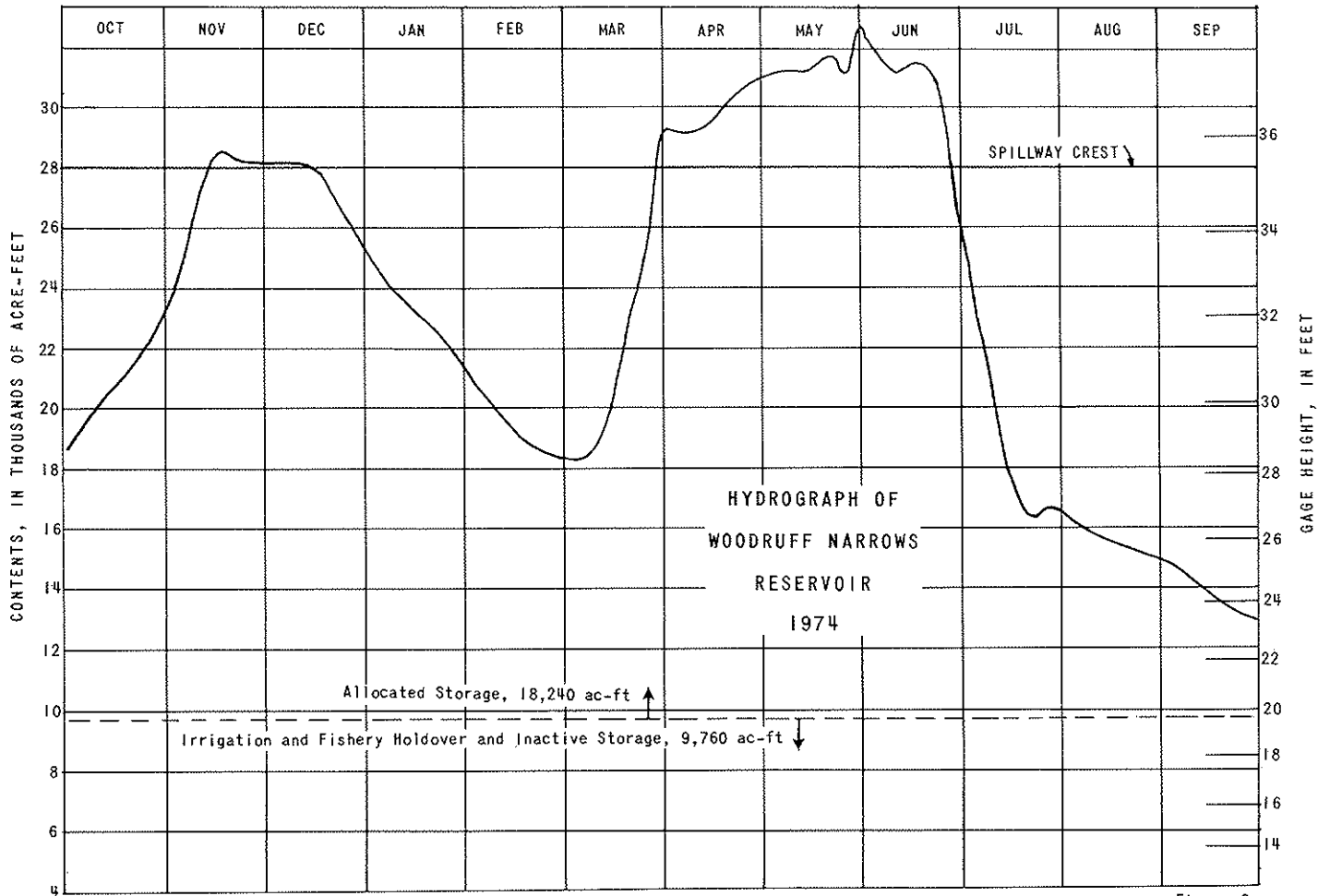


Figure 9

Central Division

The Central Division comprises that part of the basin from Pixley Dam down to and including Stewart Dam (the point of diversion to Bear Lake). It includes a section in Wyoming and one in Idaho.

Divertible flow in the Central Division is the sum of diversions from Smiths Fork and designated tributaries, diversions from Bear River in the division, and flow passing Stewart Dam. A water emergency shall exist when this divertible flow is less than 870 cfs, or when Bear River entering Idaho (gaging station at Border) is discharging less than 350 cfs. Wyoming diversions are limited to 43 percent of the divertible flow during a water emergency.

Diversion and allocation by hydrographs are shown for the two sections in the Central Division in figures 10 and 11 (pages 26 and 27), and corresponding data showing individual canals are included in tables 6 to 10 (pages 33-37). A water emergency, as defined above, became effective July 29 when divertible flow dropped below 870 cfs and on the same day, the flow entering Idaho dropped below 350 cfs. Wyoming diversion was less than compact allocation excepting the first five days in September when the allocation was exceeded by negligible amounts. (See figure 10.)

The usual diversion pattern is shown in figure 11 for Idaho where the Idaho diversion, as plotted, does not include Rainbow Inlet Canal and accordingly is far less than the compact allocation.

Effectiveness of interstate regulation in the dry years of 1961 and 1966 is indicated in the following table by the small spread in diversion rate per acre in the two sections. In good years with less restriction, the Wyoming rate is much higher and reflects the greater requirement of gravelly soils. High rate in 1974 is due to low seasonal rainfall.

Diversion in acre-feet per acre — May - September

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Wyo.	2.16	5.82	5.06	4.48	4.96	3.32	4.78	4.02	4.24	4.25	4.39	4.74	4.24	5.68
Idaho	1.72	3.26	3.28	2.91	2.87	2.95	3.05	3.39	3.48	3.50	3.33	3.35	3.09	3.81

Lower Division

Authority is given the Commission upon its own motion to declare a water emergency in any division, and in the Lower Division such a declaration may be made also upon petition of an aggrieved Utah user against an Idaho user. Upon declaration of an emergency, the Commission is required to enforce water-delivery schedules based on priority of rights without regard to State lines.

No petitions were filed with the Commission or water emergencies declared in the Lower Division in 1974.

Interstate Tributaries

An aggrieved user on an interstate tributary may petition for declaration of water emergency and distribution of flow under direction of the Commission. Interstate arbitration on tributaries was not requested in 1974.

STORAGE

New Storage

The Compact defines storage rights in existing reservoirs above Bear Lake and provides for an additional storage allowance of 36,500 acre-feet annually. Idaho users on Thomas Fork are allotted 1,000 acre-feet of this amount and the remainder is divided equally between Wyoming and Utah.

The reservoirs shown below have been constructed under additional storage provisions of the Compact and all were filled to capacity in 1974. A total allocation to Woodruff Narrows Reservoir for storage of 18,240 acre-feet includes 15,240 acre-feet from Utah and 3,000 acre-feet from Wyoming.

<i>Reservoir</i>	<i>Allocation</i>
Sulphur Creek Reservoir (Wyoming).....	4,614 ac-ft
Sulphur Creek Reservoir Enlargement (Wyoming).....	1,100 ac-ft
J. L. Martin Reservoir, Sulphur Creek (Wyoming)	88 ac-ft
A. J. Barker Reservoir, Yellow Creek (Utah)	162 ac-ft
Hatch Brothers Reservoir (Utah)	350 ac-ft
Woodruff Narrows Reservoir (Utah-Wyoming)	18,240 ac-ft
Whitney Reservoir (Wyoming)	4,200 ac-ft
Wyman Reservoir (Wyoming).....	22 ac-ft
Massae Reservoir (Wyoming)	107 ac-ft
Woodruff Creek Reservoir (Utah)	2,000 ac-ft
Total Allocation	30,883 ac-ft

Bear Lake

Article V of the Compact provides an irrigation reserve level in Bear Lake below which water shall not be released solely for generation of power, except in emergency, but after release for irrigation it may be used in generating power as it is conveyed to irrigation diversion works. The reserve is to be increased by designated amounts as additional storage, under terms of the Compact, is developed above Bear Lake. No development of new storage took place in 1974, so the irrigation reserve elevation remained at 5,914.61 feet with active storage content in the reserve of 794,900 acre-feet. (See figure 5.) This reserve corresponds to 30,000 acre-feet of additional storage allocation.

Bear Lake reached a maximum elevation of 5,922.05 feet (usable content, 1,308,600 acre-feet) June 27-29 from the yearly low in mid-March of 5,918.82 feet. Subsequent irrigation demand (202,000 acre-feet) was higher than since the dry year of 1966 because of abnormally low rainfall during the irrigation season.

APPLICATIONS FOR APPROPRIATION

Article X of the Compact states, "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."

Approved and pending applications presented to the Commission in the 1974 report year included 108.1 cfs for ground-water development and 62.2 cfs for surface water. Breakdown by States shows 74.5 cfs in Utah, 78.1 cfs in Idaho, and 18.1 cfs in Wyoming.

REVIEW OF COMPACT PROVISIONS

Article XIII, Bear River Compact, requires that the Commission review provisions of the Compact at intervals not exceeding twenty years and may propose amendments to any such provision for consideration of the legislatures of the signatory States. Wyoming commissioners have urged such a review with particular emphasis on their recommendations for an increase in storage allocation to the basin above Bear Lake. Discussion on the subject has continued in the 1974 meetings of the Commission.

A proposal to develop additional storage at Woodruff Narrows to be supplied in part by a transfer to storage of direct-flow irrigation rights when not being diverted for irrigation has been suggested by upper basin users. Idaho has objected to such a transfer on the grounds that it is in violation of storage provisions in the Compact. A hearing on the proposed transfer is set for May 23, 1975.

CENTRAL DIVISION - WYOMING SECTION

CUBIC FEET PER SECOND

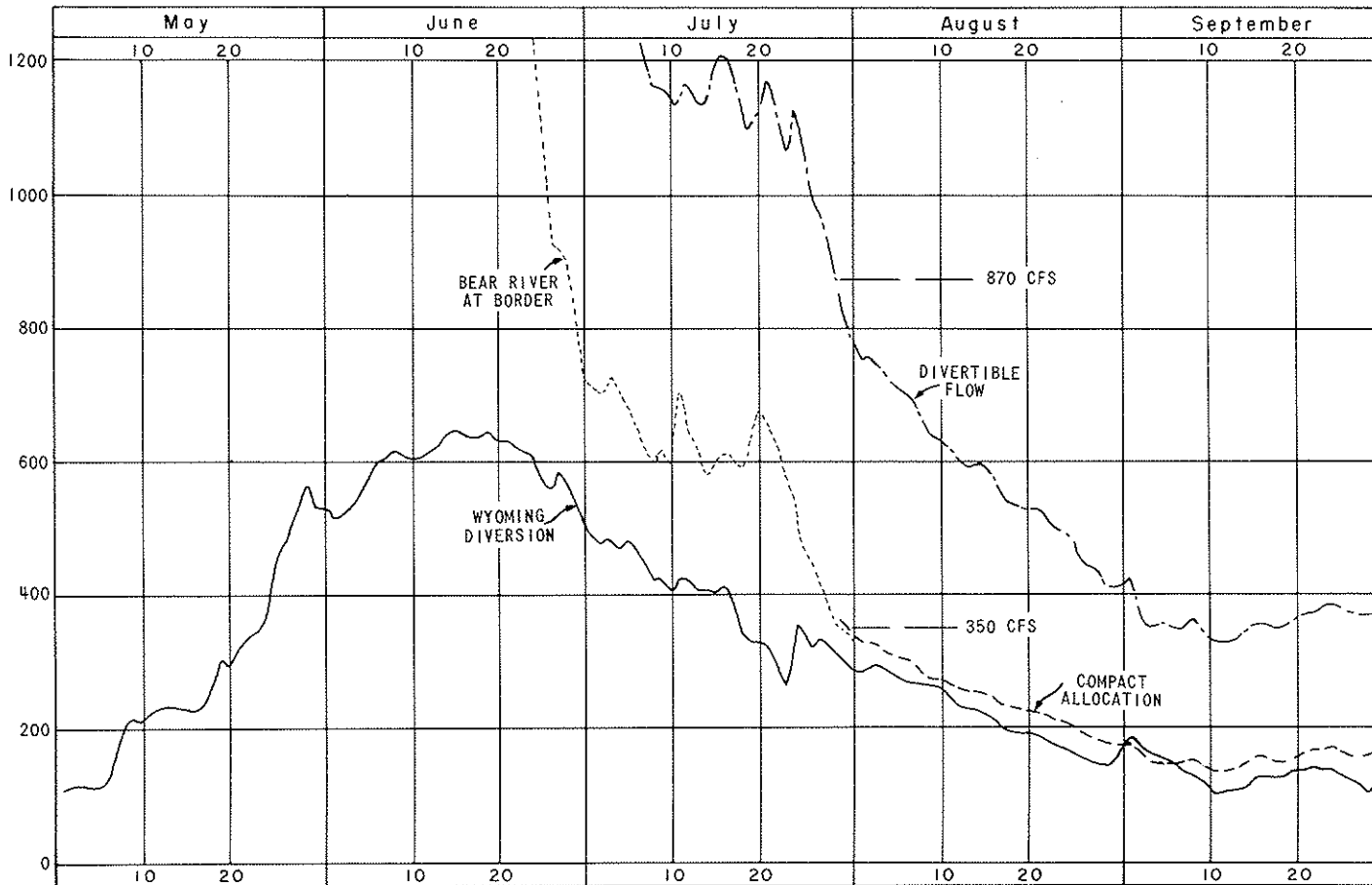


Figure 10

CENTRAL DIVISION - IDAHO SECTION

CUBIC FEET PER SECOND

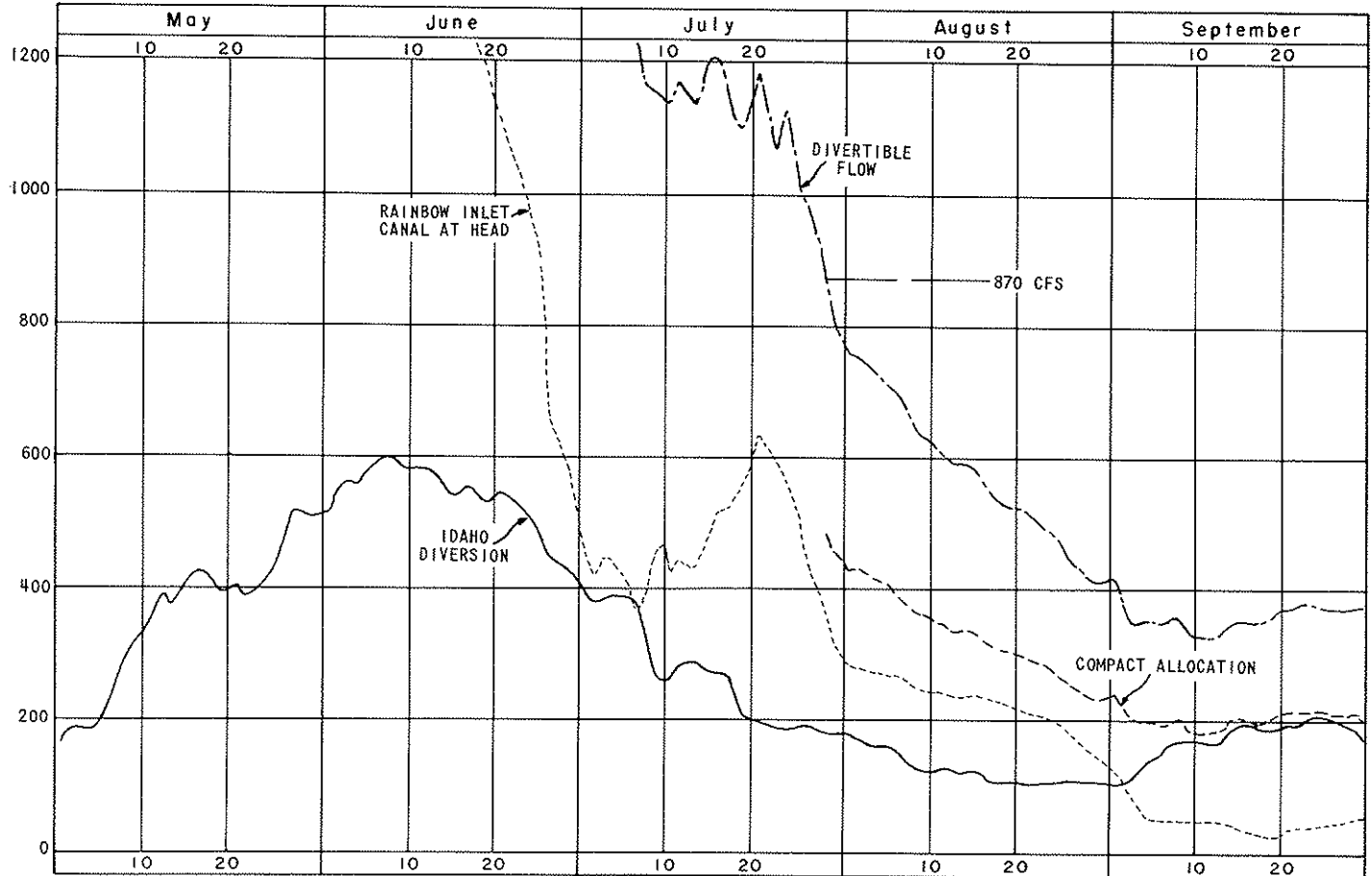


Figure 11

DAILY DISCHARGE IN CFS OF BEAR RIVER CANALS WITH COMPACT ALLOCATION IN UPPER DIVISION

Table with columns for month/year (JULY 1974), canal names (e.g., UPPER UTAH, Movarka, UPPER WYOMING, Williard East Fork), and 31 days of discharge data in CFS. Includes a 'Total Lower Utah' section and 'LOWER WYOMING' section at the bottom.

Note: Divertible Flow is the sum of all diversions plus Bear River below Pixerly Dam minus storage water diverted. Each State section diverted less than compact allocation during period of Water Emergency, July 9-31. (See discussion of Article IV on page 18.)

APPENDIX A

Hatch and Miller

CERTIFIED PUBLIC ACCOUNTANTS
1635 SOUTH MAIN STREET - SUITE 429
SALT LAKE CITY, UTAH 84115
TELEPHONE 801-486-3813

MARK E. HATCH, CPA
GARY L. MILLER, CPA

MEMBER: AMERICAN INSTITUTE OF
CERTIFIED PUBLIC ACCOUNTANTS
UTAH ASSOCIATION OF
CERTIFIED PUBLIC ACCOUNTANTS

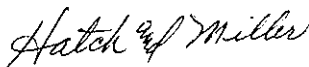
Bear River Commission
Utah State Capitol
Salt Lake City, Utah

Gentlemen:

We have examined the statement of revenue and expenditures of the Bear River Commission for the year ended June 30, 1974.

Our examination was made in accordance with generally accepted auditing standards, and accordingly included tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion the accompanying statement of revenue and expenditures present fairly the result of operations of the Bear River Commission for the twelve months ended June 30, 1974, in conformity with generally accepted accounting principles applied on a basis consistent with the prior year.



Certified Public Accountants

November 15, 1974

BEAR RIVER COMMISSION
Statement of Revenue & Expenditures
For the Fiscal Year Ended June 30, 1974

REVENUE:

Assessments: (note 1)		
State of Wyoming		\$14,000.00
State of Idaho		14,000.00
State of Utah		<u>14,000.00</u>
Total assessments		\$42,000.00
Interest income		<u>1,731.71</u>
Total Revenue		43,731.71

EXPENDITURES:

Commission's portion of direct expenses of the stream gauge program			
Personal Services	\$32,208.00		
Travel and Subsistence	2,208.00		
General Office	3,563.00		
Fiscal and Administration	1,990.50		
Washington Office Charges	<u>3,980.50</u>		
Total		43,950.00	
Administrative Expenses:			
Legal Fee	300.00		
Auditing Fee	215.00		
Transcript of Minutes	100.00		
Annual Report	599.75		
Surety Bond	50.00		
Other	<u>48.50</u>		
Total		<u>1,313.25</u>	<u>45,263.25</u>
Deficiency of Revenues over Expenditures			(1,531.54)
Funds available June 30, 1973			<u>13,867.86</u>
Funds available June 30, 1974			<u>\$12,336.32</u>

FUNDS CONSISTS OF:

Bank overdraft		\$(19,910.38)
Savings subject to withdrawal		<u>32,246.70</u>
Total funds June 30, 1974		<u>\$ 12,336.32</u>

See accompanying notes to the financial statements.

BEAR RIVER COMMISSION
 Comparative Statement of Revenue & Expenditures
 For the Fiscal Years Ended June 30, 1974 and 1973

	<u>1974</u>	<u>1973</u>	<u>Increase (Decrease)</u>
<u>REVENUE:</u>			
Assessments:			
State of Wyoming	\$14,000.00	14,000.00	-
State of Idaho	14,000.00	14,000.00	-
State of Utah	<u>14,000.00</u>	<u>14,000.00</u>	-
Total Assessments	42,000.00	42,000.00	-
Interest income	<u>1,731.71</u>	<u>2,585.33</u>	<u>(853.62)</u>
Total Revenue	<u>43,731.71</u>	<u>44,585.33</u>	<u>(853.62)</u>
<u>EXPENDITURES:</u>			
Commission's portion of direct expenses of the stream gauge program			
Personal Services	32,208.00	30,837.00	1,371.00
Travel and Subsistence	2,208.00	2,275.00	(67.00)
General Office	3,563.00	2,699.00	864.00
Fiscal and Administration	1,990.50	1,863.00	127.50
Washington Office Charges	<u>3,980.50</u>	<u>3,726.00</u>	<u>254.50</u>
Total	43,950.00	41,400.00	2,550.00
Administrative Expenses			
Legal Fee	300.00	300.00	-
Auditing Fee	215.00	200.00	15.00
Transcript of Minutes	100.00	100.00	-
Annual Report	599.75	1,189.00	(589.25)
Surety Bond	50.00	50.00	-
Other	<u>48.50</u>	<u>38.49</u>	<u>10.01</u>
Total	1,313.25	1,877.49	(564.24)
Total Expenditures	<u>45,263.25</u>	<u>43,277.49</u>	<u>1,985.76</u>
Excess (Deficiency) of Revenues over Expenditures	<u>\$(1,531.54)</u>	<u>1,307.84</u>	<u>2,839.38</u>

APPENDIX B

GAGING STATION RECORDS

Records of Streamflow from State line and other key stations are included herein. The record consists of description of the station and a table showing the daily discharge in cubic feet per second and monthly and yearly runoff in acre-feet for the 1974 water year.

The description of the station gives the location, drainage area, records available, type and history of gage, average discharge, extremes of discharge, general remarks, and a statement of cooperation where applicable. This is essentially the same information published in annual water-supply papers of the Geological Survey.

In the monthly summary below the daily table, the line headed "Total" gives the sum of the daily figures; it is the total second-foot-days for the month. The line headed "Mean" gives the average flow in cubic feet per second (second-feet) during the month. Quantities for the month are expressed in acre-feet (line headed "Ac-ft").

Records included herein have been collected by the U. S. Geological Survey through cooperative agreement with the Bear River Commission and by the Utah Power & Light Company.

BEAR RIVER BASIN

104. East Fork Bear River near Evanston, Wyo.

LOCATION.--Lat 40°52'25", long 110°47'00", in SE¼SW¼ sec.26, T.2 N., R.10 E., Summit County, Utah, Wasatch National Forest, on right bank 4.1 mi (6.6 km) upstream from mouth, and 28.7 mi (46.2 km) south of Evanston.

DRAINAGE AREA.--34.6 mi² (89.6 km²).

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,760 ft (2,670 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 563 ft³/s (15.9 m³/s) May 28 (gage height, 4.00 ft or 1.219 m); minimum, 5.9 ft³/s (0.17 m³/s) Apr. 8.

REMARKS.--Records good except those for period of no gage-height record, which are fair. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	20	14	11	10	11	14	39	384	173	51	18
2	27	20	14	11	10	11	15	45	389	166	58	18
3	26	20	14	11	10	11	15	39	389	150	50	18
4	25	20	14	11	10	11	14	42	361	135	45	18
5	25	20	14	11	10	11	15	63	363	128	42	18
6	25	18	14	11	10	12	15	82	289	121	41	17
7	24	18	14	11	10	12	15	104	237	116	40	17
8	24	18	14	11	10	12	13	145	202	111	38	16
9	26	18	14	11	10	12	12	209	179	107	36	16
10	27	18	14	11	10	12	12	233	181	103	35	15
11	25	18	13	11	10	13	14	200	222	98	33	16
12	25	18	13	11	10	13	12	205	293	92	32	18
13	26	18	13	11	10	13	15	199	355	87	31	17
14	28	18	13	11	10	13	19	176	414	84	29	17
15	27	18	13	11	10	13	22	171	429	82	28	16
16	26	18	13	10	10	15	26	174	412	88	27	16
17	24	18	13	10	10	20	21	187	416	83	26	15
18	23	18	13	10	10	16	18	200	395	81	26	15
19	22	18	13	10	10	13	16	199	387	88	25	14
20	22	18	13	10	10	13	16	159	385	90	24	14
21	21	16	12	10	10	13	23	134	357	79	24	14
22	20	16	12	10	10	13	25	123	322	73	24	14
23	20	16	12	10	10	13	19	129	300	74	23	14
24	22	16	12	10	10	13	23	154	285	69	22	13
25	21	16	12	10	10	14	32	204	271	64	22	13
26	20	16	12	10	11	18	35	275	256	60	21	13
27	22	16	12	10	11	17	31	379	232	61	21	14
28	23	16	12	10	11	14	33	465	210	60	20	14
29	18	16	12	10	-----	15	28	475	195	54	20	14
30	24	16	12	10	-----	15	30	420	184	52	19	13
31	20	-----	12	10	-----	14	-----	389	-----	50	19	-----
TOTAL	737	530	402	325	283	416	598	6,018	9,288	2,879	952	465
MEAN	23.8	17.7	13.0	10.5	10.1	13.4	19.9	194	310	92.9	30.7	15.5
MAX	29	20	14	11	11	20	35	475	429	173	58	18
MIN	18	16	12	10	10	11	12	39	179	50	19	13
AC=FT	1,460	1,050	797	645	561	825	1,190	11,940	18,420	5,710	1,890	922

WTR YR 1974 TOTAL 22,893 MEAN 62.7 MAX 475 MIN 10 AC=FT 45,410

NOTE.--No gage-height record Nov. 1 to Mar. 2.

BEAR RIVER BASIN

112. West Fork Bear River at Whitney Dam near Oakley, Utah

LOCATION.--Lat 40°50'30", long 110°55'35", in RE4 sec. 9, T.1 N., R.9 E., Summit County, Wasatch National Forest, on left bank, 1,380 ft (421 m) below Whitney Dam, 7 mi (11 km) upstream from Deer Creek, and 21.5 mi (34.6 km) northeast of Oakley.

DRAINAGE AREA.--6.79 mi² (17.59 km²), revised.

PERIOD OF RECORD.--October 1963 to current year. Prior to October 1965 published as, "at Whitney Dam Site."

GAGE.--Water-stage recorder and concrete control with V-notch sharp-crested weir since Aug. 4, 1966. Altitude of gage is 9,120 ft (2,780 m) from topographic map.

AVERAGE DISCHARGE.--8 years (1967-74), 8.88 ft³/s (0.251 m³/s), 6,430 acre-ft/yr (7.93 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 114 ft³/s (3.23 m³/s) July 21 (gage height, 2.76 ft or 0.841 m); minimum daily, 0.52 ft³/s (0.015 m³/s) Aug. 14.
 Period of record: Maximum discharge, 145 ft³/s (4.11 m³/s) June 13, 1965 (gage height, 1.95 ft or 0.594 m); maximum gage height, 3.08 ft (0.939 m) June 26, 1967; no flow July 24 to Sept. 30, Nov. 16-29, 1966.

REMARKS.--Records good. Flow regulated by Whitney Reservoir. Usable capacity between sill of outlet and spillway crest, 4,200 acre-ft (5.18 hm³). Dead storage 500 acre-ft (617,000 m³). Construction of dam began Aug. 1, 1965 and completed October 1966. Storage began July 24, 1966, and reached sill of outlet Nov. 20, 1966. No diversion above station.

REVISIONS.--WRD Utah 1973: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.8	4.2	3.8	3.8	2.6	2.4	2.7	4.8	18	.65	41
2	12	9.8	4.1	3.8	3.8	2.5	2.4	2.7	4.8	17	.63	41
3	12	9.8	3.9	3.8	3.8	2.4	2.4	2.7	8.8	16	.63	40
4	12	9.7	3.9	3.8	3.8	2.4	2.4	2.8	8.7	15	.63	65
5	12	9.6	4.0	3.8	3.8	2.5	2.4	2.8	8.7	15	.63	76
6	12	9.6	4.0	3.8	3.8	2.5	2.4	2.9	8.6	14	.62	73
7	27	9.6	4.0	3.8	3.8	2.5	2.4	2.9	7.1	13	.60	70
8	35	9.6	4.0	3.8	3.8	2.5	2.4	3.0	6.3	12	.59	68
9	38	9.6	4.0	3.8	3.8	2.5	2.4	3.0	5.1	11	.57	67
10	42	9.6	4.0	3.8	3.8	2.5	2.4	3.0	4.7	10	.57	64
11	42	9.6	4.1	3.8	3.8	2.5	2.4	3.0	5.2	9.0	.57	59
12	42	6.5	3.9	3.8	3.8	2.5	2.4	3.1	6.3	12	.57	54
13	38	4.5	3.9	3.8	3.8	2.2	2.4	3.1	6.9	7.0	.57	19
14	35	4.4	3.9	3.8	3.8	2.1	2.4	3.1	7.1	6.0	.52	1.8
15	35	4.3	3.9	3.8	3.8	2.1	2.4	3.1	7.7	5.4	.54	1.7
16	34	4.3	3.9	3.8	3.0	2.1	2.5	3.2	7.5	6.1	.54	1.7
17	34	4.3	3.8	3.8	2.6	2.1	2.5	3.2	6.9	6.1	.54	1.8
18	34	4.2	3.7	3.8	2.6	2.2	2.5	3.3	6.5	6.1	.54	1.7
19	33	4.3	3.8	3.8	2.6	2.2	2.5	3.3	6.7	6.0	1.2	1.7
20	17	4.3	3.8	3.8	2.6	2.4	2.5	3.4	6.7	6.0	3.9	1.8
21	11	4.3	3.7	3.8	2.6	2.6	2.5	3.4	5.9	6.7	3.9	1.8
22	11	4.2	3.7	3.8	2.6	2.6	2.6	3.4	5.0	10.0	3.9	1.8
23	11	4.2	3.7	3.8	2.6	2.6	2.6	3.4	3.8	9.8	3.9	1.8
24	11	4.2	3.7	3.8	2.6	2.5	2.6	3.4	2.7	7.7	3.9	1.8
25	11	4.2	3.7	3.8	2.6	2.5	2.6	3.5	2.7	8.6	3.8	1.7
26	11	4.2	3.8	3.8	2.6	2.4	2.6	3.6	2.6	8.5	3.9	1.7
27	11	4.2	3.8	3.8	2.6	2.3	2.6	3.7	2.4	8.3	4.3	1.8
28	11	4.2	3.8	3.8	2.6	2.3	2.6	3.7	2.1	8.2	4.3	1.8
29	11	4.2	3.8	3.8	2.6	2.3	2.6	3.5	2.0	3.6	4.3	1.8
30	11	4.2	3.8	3.8	2.6	2.3	2.7	3.3	1.9	.75	4.2	1.8
31	10	-----	3.8	3.8	2.6	2.3	-----	3.4	-----	.67	4.2	-----
TOTAL	678	189.5	120.1	117.8	91.2	74.0	74.5	98.6	1,616.8	1,247.42	507.51	767.0
MEAN	21.9	6.32	3.87	3.88	3.26	2.39	2.48	3.18	53.9	40.2	16.4	25.6
MAX	42	9.8	4.2	3.8	3.8	2.6	2.7	3.7	8.8	10.0	4.3	7.6
MIN	10	4.2	3.7	3.8	2.6	2.1	2.4	2.7	4.8	.67	.52	1.7
AC-FT	1,340	376	238	234	181	167	148	196	3,210	2,470	1,010	1,520
CAL YH 1973	TOTAL	2,242.68	MEAN	6.14	MAX	74	MIN	.62	AC-FT	4,450		
WTR YH 1974	TOTAL	5,582.43	MEAN	15.3	MAX	100	MIN	.52	AC-FT	11,070		

BEAR RIVER BASIN

114. West Fork Bear River below Deer Creek, near Evanston, Wyo.

LOCATION.--Lat 40°56'40", long 110°51'40", in NW¼ SW¼ sec. 6, T.2 N., R.10 E., Summit County, Utah, on left bank 0.8 mi (1.3 km) downstream from Deer Creek, 2.1 mi (3.4 km) upstream from mouth, and 22.9 mi (36.8 km) south of Evanston.

DRAINAGE AREA.--52.2 mi² (135.2 km²).

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,190 ft (2,496 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 480 ft³/s (13.6 m³/s) May 9 (gage height, 3.83 ft or 1.167 m); minimum daily, 10 ft³/s (0.28 m³/s) Aug. 18, Sept. 24-26.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Whitney Reservoir. Usable capacity between sill of outlet and spillway crest, 4,200 acre-ft (5.18 hm³). Dead storage 500 acre-ft (617,000 m³). Construction of dam began Aug. 1, 1965 and completed October 1966. Storage began July 24, 1966, and reached sill of outlet Nov. 20, 1966. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	24	18	16	15	15	15	72	274	81	21	44
2	24	24	18	16	15	15	15	94	290	77	21	45
3	24	24	18	16	15	14	15	94	309	73	21	44
4	24	24	18	16	15	14	16	111	305	65	18	67
5	24	24	18	16	15	14	16	154	323	59	16	86
6	24	24	18	16	15	15	16	199	300	54	16	82
7	31	24	18	16	15	15	17	258	256	50	15	79
8	42	24	18	16	15	15	16	318	235	47	15	75
9	46	24	18	16	15	15	14	379	207	45	15	71
10	50	24	18	16	15	16	16	372	195	42	14	67
11	50	24	18	17	15	17	16	331	204	40	14	64
12	50	23	18	19	15	16	15	359	223	38	13	61
13	50	20	18	19	15	14	18	329	241	35	13	52
14	46	20	18	19	15	14	20	293	253	34	12	16
15	45	20	18	19	15	14	22	311	257	28	12	13
16	43	20	17	18	14	16	18	310	247	84	11	12
17	42	20	17	17	14	19	19	314	239	84	11	12
18	42	20	17	16	14	18	20	335	223	86	10	11
19	42	20	17	16	14	15	21	315	210	80	17	11
20	35	20	17	18	14	15	20	243	208	81	42	11
21	25	20	17	16	14	15	20	199	195	82	45	11
22	25	20	17	16	14	15	20	197	175	127	45	11
23	25	20	17	16	14	15	27	208	160	126	45	11
24	26	20	17	16	14	15	36	234	140	105	44	10
25	25	20	17	15	14	15	52	287	140	113	44	10
26	25	20	17	15	14	15	56	317	130	109	44	10
27	24	20	17	15	14	15	46	347	115	109	49	11
28	24	20	17	15	14	15	44	355	105	107	47	12
29	26	20	17	15	-----	21	41	340	95	81	47	11
30	27	20	17	15	-----	15	50	304	88	22	46	11
31	25	-----	17	15	-----	15	-----	285	-----	20	45	-----
TOTAL	1,035	647	542	507	407	477	737	8,766	6,344	2,194	828	1,031
MEAN	33.4	21.6	17.5	16.4	14.5	15.4	24.6	267	211	70.8	26.7	34.4
MAX	50	24	18	19	15	21	56	379	323	127	49	86
MIN	24	20	17	15	14	14	14	72	88	20	10	10
AC-FT	2,050	1,280	1,080	1,010	807	946	1,460	16,400	12,580	4,350	1,640	2,040

WTR YR 1974 TOTAL 23,015 MEAN 63.1 MAX 379 MIN 10 AC-FT 45,650

BEAR RIVER BASIN

115. Bear River near Utah-Wyoming State Line.

LOCATION.--Lat 40°57'55", long 110°51'10", in SE¼ sec. 30, T.3 N., R.10 E., Summit County, Utah, on left bank just downstream from West Fork, 2.8 mi (4.5 km) upstream from Utah-Wyoming State line.

DRAINAGE AREA.--172 mi² (445 km²), revised.

PERIOD OF RECORD.--July 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,965 ft (2,427.7 m) from river-profile map.

AVERAGE DISCHARGE.--32 years, 192 ft³/s (5.437 m³/s), 139,100 acre-ft/yr (172 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,140 ft³/s (60.6 m³/s) May 29 (gage height, 3.42 ft or 1.042 m); minimum daily, 45 ft³/s (1.27 m³/s) Sept. 25, 26.

Period of record: Maximum discharge, 2,980 ft³/s (84.4 m³/s) June 6, 1968 (gage height, 3.79 ft or 1.155 m); maximum gage height 4.27 ft (1.301 m) June 6, 1957; minimum discharge determined, 16 ft³/s (0.45 m³/s) Apr. 11, 1951, Nov. 5, 1954, Nov. 1, 1955, Oct. 30, 1956.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated slightly by Whitney Reservoir completed 1966. Usable capacity 4,200 acre-ft (5.18 hm³). Three diversions above station for irrigation of about 265 acres (107,000 m²) above and 2,600 acres (10.5 km²) below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	83	66	60	53	51	55	215	1,280	424	101	76
2	85	74	66	60	55	48	59	244	1,300	395	112	76
3	83	81	65	60	52	55	62	228	1,340	358	105	75
4	81	81	65	60	52	55	62	240	1,210	302	93	85
5	79	91	65	60	52	56	53	320	1,270	276	85	98
6	79	85	64	60	52	55	61	464	1,100	252	81	88
7	85	83	64	58	52	53	61	622	885	242	80	84
8	93	87	64	58	52	53	56	777	786	240	78	83
9	106	83	62	58	52	53	64	840	678	228	74	80
10	109	83	60	58	52	55	61	984	678	206	73	77
11	109	81	62	58	52	53	61	849	813	200	71	88
12	109	91	64	58	52	52	62	912	993	184	70	92
13	109	81	62	58	52	53	64	885	1,160	167	69	83
14	114	72	60	58	52	55	65	765	1,310	159	65	56
15	111	66	58	58	53	56	62	786	1,390	159	65	53
16	104	81	51	58	50	58	66	777	1,240	216	65	51
17	100	74	61	56	50	65	66	786	1,210	214	63	50
18	96	70	61	62	50	66	78	858	1,120	202	61	48
19	93	70	61	56	50	61	83	858	1,100	202	62	48
20	87	64	58	55	50	62	76	702	1,080	219	81	47
21	76	72	61	56	50	50	76	569	1,010	203	83	46
22	74	59	61	58	50	59	78	527	921	211	84	46
23	74	65	59	58	50	65	96	548	858	212	83	46
24	79	65	61	58	50	52	125	622	804	191	81	46
25	83	65	60	58	50	61	168	813	759	188	81	45
26	78	65	60	59	50	62	208	1,010	718	176	80	45
27	74	65	60	58	51	62	179	1,340	641	167	82	46
28	78	65	60	55	51	61	152	1,610	577	164	80	48
29	79	65	60	56	-----	59	149	1,710	524	142	79	49
30	78	65	60	64	-----	62	165	1,450	472	106	77	47
31	81	-----	60	58	-----	61	-----	1,290	-----	104	76	-----
TOTAL	2,777	2,232	1,911	1,807	1,437	1,764	2,673	24,665	29,227	6,709	2,440	1,902
MEAN	89.6	74.4	61.6	58.3	51.3	57.1	89.1	794	974	216	78.7	63.4
MAX	114	91	66	64	55	66	208	1,710	1,390	424	112	98
MIN	74	59	58	55	50	48	53	216	472	104	61	45
AC-FT	5,510	4,430	3,790	3,580	2,850	3,510	5,300	48,800	57,970	13,310	4,840	3,770

CAL YR 1973 TOTAL 70,664 MEAN 194 MAX 1,520 MIN 41 AC-FT 140,200
 WTR YR 1974 TOTAL 79,489 MEAN 218 MAX 1,710 MIN 45 AC-FT 157,700

PEAK DISCHARGE (BASE, 1,100 cfs).--May 29 (0100) 2,140 cfs (3.42 ft); June 15 (0200) 1,840 cfs (3.20 ft).

BEAR RIVER BASIN

157. Sulphur Creek above reservoir, near Evanston, Wyoming.

LOCATION.--Lat 41°08'38", long 110°48'19", in SE1SW¼ sec.35, T.14 N., R.119 W., Uinta County, on right bank 1.2 mi (1.9 km) downstream from Willow Creek, 2 mi (3.2 km) upstream from Sulphur Creek Dam, and 11.5 mi (18.5 km) southeast of Evanston.

DRAINAGE AREA.--64.2 mi² (166.3 km²), revised.

PERIOD OF RECORD.--October 1957 to current year. Monthly discharge only for October and November 1957, published in WSP 1734.

GAGE.--Water-stage recorder. Altitude of gage is 7,180 ft (2,188 m) from topographic map.

AVERAGE DISCHARGE.--17 years, 16.6 ft³/s (0.470 m³/s), 12,030 acre-ft/yr (14.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 756 ft³/s (21.4 m³/s) Apr. 25 (gage height, 5.57 ft or 1.698 m); minimum, 0.22 ft³/s (0.006 m³/s) Sept. 2.
 Period of record: Maximum discharge, 1,220 ft³/s (34.6 m³/s) Apr. 21, 1965 (gage height, 6.02 ft or 1.835 m); maximum gage height, 6.19 ft (1.887 m) Mar. 11, 1972 (backwater from ice); no flow at times most years.

REMARKS.--Records good except those for winter months, which are poor. Several diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	11	9.0	4.0	3.0	11	63	191	77	6.1	1.7	.24
2	4.5	12	8.0	3.5	3.0	12	40	232	66	5.9	1.1	.28
3	4.3	12	8.0	3.5	3.0	8.0	40	190	64	7.2	1.2	.33
4	4.3	13	8.0	3.5	3.0	6.5	44	149	49	6.4	1.1	.33
5	4.3	9.9	8.0	3.5	3.0	8.0	43	223	62	5.6	.92	.36
6	4.3	10	8.0	3.5	3.0	10	39	257	101	4.5	.84	.36
7	4.3	19	8.0	3.5	3.0	9.0	33	288	72	4.0	.76	.33
8	4.3	20	8.0	3.5	3.0	8.0	32	323	94	3.8	.76	.33
9	4.9	14	8.0	3.5	3.0	8.0	43	409	77	3.2	.68	.33
10	6.9	11	8.0	3.5	3.0	10	27	402	53	3.0	.60	.30
11	7.7	10	8.0	3.0	3.5	13	30	196	45	2.7	.57	.30
12	7.7	11	8.0	3.0	4.0	17	31	235	48	2.5	.51	.33
13	7.7	14	8.0	3.0	4.0	22	29	241	45	2.0	.45	.39
14	6.7	14	8.0	3.0	4.0	27	34	155	36	1.6	.42	.39
15	6.4	12	8.0	3.0	4.0	35	35	154	36	1.9	.42	.39
16	6.4	13	7.0	3.0	4.0	45	34	176	45	1.9	.39	.39
17	5.9	14	7.0	3.0	4.0	60	44	142	48	1.9	.33	.39
18	5.9	14	7.0	3.0	4.0	65	67	268	41	2.4	.30	.39
19	5.9	14	7.0	3.0	4.0	45	82	207	33	1.7	.28	.39
20	5.9	14	7.0	3.0	4.0	35	69	137	29	1.6	.24	.39
21	5.5	12	6.0	3.0	4.0	25	67	92	23	2.0	.24	.39
22	5.6	11	6.0	3.0	4.0	35	49	85	19	1.6	.26	.39
23	5.6	10	6.0	3.0	4.0	50	124	86	15	2.0	.26	.39
24	6.4	9.0	6.0	3.0	4.0	40	205	100	12	2.4	.26	.36
25	7.2	8.0	6.0	3.0	6.0	55	338	137	11	2.7	.24	.33
26	6.9	7.0	5.0	3.0	8.0	76	348	142	9.2	1.7	.24	.33
27	6.1	7.0	5.0	3.0	7.0	77	192	178	8.6	.92	.24	.33
28	6.4	7.0	5.0	3.0	8.5	79	122	180	8.9	1.4	.24	.36
29	6.7	8.0	5.0	3.0	-----	57	111	137	8.0	2.0	.26	.36
30	7.4	9.0	5.0	3.0	-----	77	134	111	7.2	3.2	.26	.36
31	8.6	-----	5.0	3.0	-----	100	-----	81	-----	3.2	.26	-----
TOTAL	185.5	349.9	218.0	98.5	115.0	1,125.5	2,569	5,904	1,242.9	93.02	16.33	10.54
MEAN	5.98	11.7	6.97	3.18	4.11	36.3	85.6	190	41.4	3.00	.53	.35
MAX	8.6	20	9.0	4.0	8.5	100	348	409	101	7.2	1.7	.39
MIN	4.3	7.7	5.0	3.0	3.0	6.5	27	81	7.2	.92	.24	.24
AC-FT	368	694	428	175	228	2,230	5,100	11,710	2,470	185	32	21
CAL YR 1973	TOTAL	10,262.50	MEAN	28.1	MAX	260	MIN	1.3	AC-FT	20,360		
WTR YR 1974	TOTAL	11,926.19	MEAN	32.7	MAX	409	MIN	.24	AC-FT	23,660		

BEAR RIVER BASIN

159. Sulphur Creek below reservoir, near Evanston, Wyoming.

LOCATION.--Lat 41°09'21", long 110°50'05", in SE4SE4 sec.28, T.14 N., R.119 W., Uinta County, on left bank 400 ft (122 m) downstream from Sulphur Creek Dam, 6.3 mi (10.1 km) upstream from mouth, and 10.5 mi (16.9 km) southeast of Evanston.

DRAINAGE AREA.--69.2 mi² (179.2 km²), revised.

PERIOD OF RECORD.--April 1958 to current year.

GAGE.--Water-stage recorder and concrete V-notch control. Altitude of gage is 7,120 ft (2,170 m) from topographic map.

AVERAGE DISCHARGE.--6 years (1958-64), 11.2 ft³/s (0.317 m³/s) 8,110 acre-ft/yr (10.0 hm³/yr). 10 years (1964-74), 28.0 ft³/s (0.793 m³/s) 20,290 acre ft/yr (25.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 425 ft³/s (12.0 m³/s) May 10 (gage height, 3.71 ft or 1.131 m); no flow Oct. 1-23, Sept. 29,30.
 1958-64: Maximum discharge, 164 ft³/s (4.64 m³/s) June 29, 1959 (gage height, 3.67 ft or 1.119 m); no flow at times each year.
 1964-74: Maximum discharge, 425 ft³/s (12.0 m³/s) May 10, 1974 (gage height, 3.71 ft or 1.131 m); no flow at times each year except 1972.

REMARKS.--Records good. Flow regulated by Sulphur Creek Reservoir 400 ft (122 m) upstream (capacity, 7,100 acre-ft or 8.75 hm³). Enlargement completed November 1964. Prior to enlargement (capacity, 4,600 acre-ft or 5.67 hm³). Records prior to 1965 do not include flow over spillway of the dam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	62	8.1	8.2	8.4	14	16	225	106	7.5	27	42
2	0	61	8.1	8.1	8.4	15	16	225	105	7.6	27	41
3	0	61	8.1	8.0	8.5	14	16	225	104	8.6	27	37
4	0	60	8.0	7.8	8.8	15	16	224	104	9.0	27	31
5	0	60	7.6	7.8	8.7	15	16	224	85	9.5	27	37
6	0	60	7.7	7.8	8.7	14	16	224	41	9.6	27	36
7	0	59	7.8	7.8	8.5	14	16	227	41	9.3	27	29
8	0	60	7.8	7.7	8.5	14	16	231	41	9.1	32	29
9	0	59	7.8	7.7	8.5	14	17	270	41	16	36	29
10	0	59	7.8	7.7	8.5	14	17	392	41	25	35	25
11	0	59	7.9	7.6	8.5	14	17	319	41	25	35	17
12	0	58	8.1	7.6	8.5	14	41	272	42	36	40	16
13	0	58	8.1	7.6	8.5	14	94	265	43	45	42	16
14	0	58	8.1	7.7	8.5	14	93	240	43	45	42	15
15	0	57	8.1	7.8	8.5	14	92	230	44	45	42	9.7
16	0	57	8.1	7.8	8.3	14	91	228	46	39	42	9.7
17	0	56	8.2	7.8	8.5	14	92	227	49	37	42	9.6
18	0	56	8.3	7.8	8.6	14	91	227	53	36	41	9.6
19	0	55	8.3	7.8	8.6	14	91	227	55	36	41	30
20	0	55	8.3	7.8	8.6	15	93	226	56	29	46	74
21	0	54	8.1	7.9	8.5	14	92	224	50	24	67	52
22	0	54	8.3	8.0	8.6	15	93	221	47	24	76	9.9
23	0	53	8.3	8.1	8.5	15	156	218	46	24	63	9.9
24	65	46	8.3	8.1	8.8	15	220	114	45	17	56	9.9
25	65	8.3	8.3	8.1	8.8	15	251	34	44	17	56	9.9
26	64	8.3	8.3	8.2	11	15	383	35	25	16	55	9.9
27	64	8.3	8.3	8.3	14	15	331	35	12	12	55	9.9
28	63	8.2	8.3	8.5	14	15	256	36	12	12	54	4.3
29	63	8.1	8.3	8.5	-----	15	231	51	12	12	54	0
30	63	8.1	8.3	8.5	-----	15	227	105	12	13	52	0
31	62	-----	8.3	8.5	-----	15	-----	106	-----	22	42	-----
TOTAL	509	1,426.3	251.4	246.6	252.8	448	3,197	6,107	1,484	677.2	1,335	658.3
MEAN	16.4	47.5	8.11	7.95	9.03	14.5	107	197	49.5	21.8	43.1	21.9
MAX	65	62	8.3	8.5	14	15	383	392	106	45	75	74
MIN	0	8.1	7.6	7.6	8.3	14	16	34	12	7.5	27	0
AC-FT	1,010	2,830	499	489	501	889	6,340	12,110	2,940	1,340	2,650	1,310
CAL YR 1973	TOTAL	12,118.31	MEAN	33.2	MAX	218	MIN	0	AC-FT	24,040		
WTR YR 1974	TOTAL	16,592.60	MEAN	45.5	MAX	392	MIN	0	AC-FT	32,910		

BEAR RIVER BASIN

195. Chapman Canal at State Line, near Evanston, Wyoming.

LOCATION.--Lat 41°24'24", long 111°02'26", in SE½ sec.36, T.17 N., R.121 W., Uinta County, on left bank at highway bridge, 6.5 mi (10.5 km) downstream from headgates and 10 mi (16 km) northwest of Evanston.

PERIOD OF RECORD.--April 1942 to current year (prior to October 1944 irrigation seasons only). Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder and flashboard control. Altitude of gage is 6,570 ft (2,003 m) from river-profile map. Prior to Oct. 11, 1946, nonrecording gage and Oct. 11, 1946 to Aug. 2, 1961, water-stage recorder at site 20 ft (6 m) downstream at same datum.

AVERAGE DISCHARGE.--30 years (1944-74), 19.9 ft³/s (0.564 m³/s) 14,420 acre-ft/yr (17.8 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 143 ft³/s (4.05 m³/s) June 24, 1970; no flow at times each year.

REMARKS.--Records fair. Canal diverts water from Bear River in NW¼ sec.36, T.16 N., R121 W. Many diversions above station for irrigation in Wyoming. Flow at station is for storage in Reponset Reservoir, Utah, and irrigation in Saleratus basin, Utah.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	.85	20	70	39	30	7.8
2						0	.94	22	67	34	32	7.5
3						0	1.0	24	66	33	34	7.4
4						0	1.0	19	66	28	40	7.1
5						0	1.1	22	68	23	34	7.6
6						0	1.2	25	73	20	25	7.6
7						0	1.3	28	60	19	25	8.4
8						0	1.2	39	63	17	23	11
9						.12	.94	95	57	25	23	11
10						.36	1.0	122	51	26	21	17
11						.49	1.2	97	73	26	16	3.3
12						.58	1.4	89	71	18	13	.32
13						.67	1.4	86	81	19	11	12
14						.76	1.8	66	88	18	9.4	15
15						.85	1.1	43	89	16	8.6	14
16						.94	.39	76	109	19	9.4	13
17						1.0	41	72	113	28	8.8	18
18						1.1	44	74	110	52	6.5	17
19						1.1	45	88	91	58	3.1	15
20						1.1	48	77	79	66	4.2	13
21						1.2	44	60	73	71	4.5	11
22						1.2	46	77	79	66	5.3	11
23						1.1	48	74	76	87	6.0	9.1
24						1.1	48	72	69	83	12	7.6
25						1.0	53	66	81	76	14	7.4
26						1.0	55	66	75	64	13	4.9
27						.94	38	69	66	51	13	7.1
28						.94	29	75	60	42	12	8.4
29						.94	22	75	52	46	12	8.8
30						.94	21	77	47	38	11	7.8
31						.85	-----	74	-----	28	10	-----
TOTAL	0	0	0	0	0	20.26	648.33	1,969	2,223	1,236	489.8	296.22
MEAN	0	0	0	0	0	.65	21.6	63.5	74.1	39.9	15.8	9.87
MAX	0	0	0	0	0	1.2	55	122	113	87	40	18
MIN	0	0	0	0	0	0	.85	19	47	16	3.1	.32
AC-FT	0	0	0	0	0	40	1,290	3,910	4,410	2,450	972	588
CAL YR 1973	TOTAL	8,955.56	MEAN	24.6	MAX	134	MIN	0	AC-FT	17,840		
WTP YF 1974	TOTAL	6,862.63	MEAN	18.9	MAX	122	MIN	0	AC-FT	13,650		

BEAR RIVER BASIN

201. Bear River above reservoir, near Woodruff, Utah.

LOCATION.--Lat 41°26'04", long 111°01'01", in NW¼NW¼ sec.29, T.17 N., R.120 W., Uinta County, Wyoming, on right bank 9.3 mi (15.0 km) upstream from Woodruff Narrows Dam and 10 mi (16 km) southeast of Woodruff.

DRAINAGE AREA.--752 mi² (1,948 km²), revised.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,455 ft (1,967.5 m) from river-profile map.

AVERAGE DISCHARGE.--13 years, 256 ft³/s (7.250 m³/s) 185,500 acre-ft/yr (229 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,080 ft³/s (58.9 m³/s) May 11 (gage height, 5.38 ft or 1.640 m); minimum daily, 6.6 ft³/s (0.19 m³/s) Aug. 18, 1974.
 Period of record: Maximum discharge, 3,340 ft³/s (94.6 m³/s) June 13, 14, 1965 (gage height, 5.89 ft or 1.795 m); minimum, 0.1 ft³/s (0.003 m³/s) Aug. 24, 1964.

REMARKS.--Records good except those for winter months, which are fair. Diversion for irrigation of about 43,500 acres (176 km²) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	214	170	110	110	130	326	894	1,670	211	9.8	12
2	123	222	166	103	110	130	303	1,070	1,540	202	8.9	13
3	118	262	150	100	110	130	277	1,140	1,520	222	9.3	18
4	114	208	140	100	110	125	273	1,070	1,460	205	9.3	21
5	112	211	135	100	110	125	269	1,140	1,340	175	9.8	18
6	112	211	130	100	105	125	273	1,270	1,550	144	9.3	21
7	107	228	130	100	105	125	269	1,420	1,280	125	12	21
8	112	254	130	100	105	125	254	1,560	1,080	99	10	13
9	132	239	130	100	105	140	273	1,750	942	71	10	10
10	158	218	130	100	105	150	335	1,910	763	60	12	10
11	166	208	130	110	105	170	298	2,060	674	43	13	25
12	159	205	130	110	105	200	335	1,970	781	32	12	27
13	169	222	130	110	105	240	345	1,940	972	33	12	19
14	166	225	130	110	105	280	375	1,920	1,120	33	13	14
15	166	196	130	110	105	330	380	1,710	1,240	33	12	15
16	164	187	130	110	105	400	375	1,610	1,300	36	12	13
17	158	218	130	110	105	460	404	1,610	1,240	48	8.4	11
18	150	204	130	110	105	463	494	1,560	1,200	218	6.6	10
19	140	197	130	110	105	453	536	1,660	1,130	199	6.6	11
20	140	196	130	110	105	392	590	1,700	1,060	164	7.0	11
21	132	196	120	110	105	335	512	1,390	996	172	7.0	13
22	118	187	120	110	105	298	566	1,160	870	137	9.3	15
23	114	180	120	110	105	281	632	1,040	732	99	31	15
24	155	160	120	110	105	242	850	1,030	644	72	38	15
25	181	150	120	110	105	239	1,120	918	572	62	16	13
26	187	150	120	110	105	290	1,440	1,040	536	40	12	14
27	190	150	120	110	110	321	1,400	1,220	447	32	11	13
28	181	160	120	110	120	345	1,090	1,530	360	26	11	9.8
29	187	170	120	110	-----	321	870	1,780	285	18	10	9.8
30	196	170	120	110	-----	326	812	1,880	236	13	12	9.8
31	190	-----	120	110	-----	380	-----	1,860	-----	11	13	-----
TOTAL	4,639	5,944	4,025	3,320	2,985	8,108	16,276	45,812	29,540	3,035	373.3	440.4
MEAN	150	198	130	107	107	262	543	1,478	985	97.9	12.0	14.7
MAX	196	254	170	110	120	400	1,440	2,060	1,670	222	38	27
MIN	107	150	120	100	105	125	254	894	236	11	6.6	9.8
AC-FT	9,200	11,790	7,480	6,590	5,920	16,080	32,280	90,870	58,590	6,020	740	874
CAL YR 1973	TOTAL 103,082.3	MEAN 282	MAX 1,970	MIN 9.3	AC-FT 204,500							
WTR YR 1974	TOTAL 124,697.7	MEAN 341	MAX 2,060	MIN 6.6	AC-FT 246,900							

BEAR RIVER BASIN

202. Woodruff Narrows Reservoir near Woodruff, Utah.

LOCATION.--Lat 41°30'10", long 111°00'55", in sec.32, T.18 N., R.120 W., Uinta County, Wyoming, in gate house on dam, 5.6 mi (9.0 km) upstream from Wyoming-Utah State line, and 7.7 mi (12.4 km) east of Woodruff.

DRAINAGE AREA.--784 mi² (2,031 km²), revised.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and mercury manometer. Datum of gage is 6,405 ft (1,952.2 m) from levels by Bureau of Reclamation.

EXTREMES.--Current year: Maximum contents, 33,080 acre-ft (40.8 hm³) May 11 (gage height, 38.3 ft or 11.67 m); minimum, 12,900 acre-ft (15.9 hm³) Sept. 29, 30.

Period of record: Maximum contents, 33,080 acre-ft (40.8 hm³) May 11, 1974 (gage height, 38.3 ft or 11.67 m); minimum 6,480 acre-ft (7.99 hm³) Sept. 11-13, 1966.

REMARKS.--Reservoir formed by earth-fill, rock faced dam. Lower portion of spillway cut in natural rock. Storage began Jan. 5, 1962. Total capacity 28,000 acre-ft (34.5 hm³) below spillway crest, which includes 18,240 acre-ft (22.5 hm³) of Compact allocation for irrigation, 4,260 acre-ft (5.25 hm³) of irrigation holdover, 4,000 acre-ft (4.93 hm³) for winter release for fish propagation in Utah, and 1,500 acre-ft (1.85 hm³) of storage for fish propagation in Wyoming. Gage height of spillway is 35.3 ft (10.76 m). Figures given herein represent total contents.

Capacity table (gage height, in feet, and total contents, in acre-feet)

21	10,760	30	20,180
22	11,600	32	23,040
24	13,360	34	25,800
26	15,170	36	29,000
28	17,770	38	32,520

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	GCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18,510	25,760	26,120	25,340	21,180	18,390	29,000	30,850	32,520	26,140	16,240	14,900
2	18,660	24,010	26,120	25,170	21,030	18,260	29,000	31,030	32,180	25,340	16,120	14,900
3	18,780	24,260	26,120	25,010	20,880	18,260	29,000	31,200	32,020	24,710	16,120	14,900
4	18,880	24,510	26,120	24,860	20,700	18,260	28,860	31,200	32,020	24,140	16,120	14,800
5	18,980	24,760	26,120	24,710	20,510	18,130	28,660	31,200	31,850	23,520	16,000	14,800
6	19,080	25,010	26,120	24,560	20,360	18,130	28,660	31,530	32,020	22,590	16,000	14,700
7	19,180	25,260	26,120	24,360	20,270	18,130	28,660	31,690	31,850	21,600	16,000	14,700
8	19,280	25,510	26,120	24,210	20,180	18,130	28,660	32,020	31,370	20,510	15,890	14,590
9	19,380	25,760	26,120	24,060	20,060	18,260	28,660	32,350	31,200	20,060	15,890	14,480
10	19,480	26,010	26,120	24,140	19,960	18,390	29,000	32,320	30,850	19,600	15,890	14,370
11	19,580	27,020	27,970	24,010	19,840	18,510	29,000	33,080	30,410	19,120	15,780	14,370
12	19,680	27,270	27,970	23,890	19,720	18,660	29,000	32,860	30,410	18,640	15,670	14,260
13	19,780	27,520	27,970	23,760	19,600	18,810	29,000	32,520	30,850	18,130	15,670	14,260
14	19,880	27,770	27,970	23,640	19,480	18,960	29,180	32,520	31,200	17,660	15,670	14,140
15	19,980	28,020	27,970	23,520	19,360	19,110	29,180	32,160	31,370	17,130	15,670	14,030
16	20,080	28,270	27,970	23,410	19,240	20,270	29,180	32,020	31,690	16,600	15,570	13,910
17	20,180	28,520	27,970	23,290	19,120	21,320	29,370	31,850	31,690	16,000	15,570	13,800
18	20,280	28,770	27,970	23,160	19,000	22,390	29,550	31,850	31,690	15,670	15,450	13,680
19	20,380	29,020	27,970	23,040	18,880	23,520	29,550	31,850	31,530	15,890	15,450	13,690
20	20,480	29,270	27,970	22,920	18,760	24,710	29,740	32,020	31,370	16,120	15,340	13,580
21	20,580	29,520	27,620	22,760	18,660	24,710	29,740	31,530	31,200	16,240	15,340	13,580
22	20,680	29,770	27,620	22,590	18,760	25,170	29,740	31,370	31,030	16,370	15,220	13,470
23	20,780	29,960	27,620	22,450	18,760	25,800	29,930	31,200	30,830	16,490	15,220	13,360
24	20,880	30,150	27,620	22,310	18,640	26,320	30,230	31,030	30,230	16,490	15,220	13,270
25	20,980	30,340	27,620	22,170	18,640	26,840	30,530	30,850	30,080	16,490	15,220	13,270
26	21,170	30,530	27,620	22,020	18,510	27,550	31,530	31,030	29,550	16,490	15,220	13,180
27	21,360	30,720	27,620	21,860	18,510	28,120	31,690	31,370	29,180	16,490	15,220	13,090
28	21,550	30,910	27,620	21,740	18,390	28,560	31,370	31,650	28,560	16,370	15,110	13,000
29	21,740	31,100	27,620	21,600	18,390	29,000	31,030	32,180	27,630	16,370	15,110	12,900
30	21,930	31,290	27,620	21,460	18,390	29,440	30,850	32,520	27,020	16,370	15,000	12,900
31	22,120	31,480	27,620	21,320	18,390	29,880	30,670	32,700	26,400	16,370	15,000	12,900
MAX	33,520	28,410	26,120	25,340	21,180	29,000	31,690	33,080	32,520	26,140	16,240	14,900
MIN	18,510	15,760	25,100	21,320	18,390	18,130	28,660	30,850	27,020	15,670	15,000	12,900
WTR Yr 1974	32.4	35.4	33.8	30.8	28.5	36.0	37.0	38.1	34.7	26.7	25.5	23.5
(+)	+5,130	+4,600	-2,620	-4,180	-2,930	+10,610	+1,850	+1,850	-5,680	-10,650	-1,370	-2,100
CAL YR 1973	+ 5,900											
WTR YR 1974	- 5,490											

+ Gage height, in feet, at 2400 of last day of month.

* Change in contents, in acre-feet.

BEAR RIVER BASIN

203. Bear River below reservoir, near Woodruff, Utah.

LOCATION.--Lat 41°30'20", long 111°00'50", in NW¼NW¼ sec.32, T.18 N., R.120 W., Uinta County, Wyoming, on right bank, 1,100 ft (340 m) below Woodruff Narrows Dam, 1.6 mi (2.6 km) upstream from Salt Creek, 5.4 mi (8.7 km) upstream from Wyoming-Utah State line, and 7.7 mi (12.4 km) east of Woodruff.

DRAINAGE AREA.--784 mi² (2,031 km²), revised.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 6,398.35 ft (1,950.217 m) above mean sea level (levels by Utah Water Resources Division from Bureau of Reclamation bench mark). Prior to Sept. 26, 1962, at site 175 ft (53.3 m) upstream at same datum.

AVERAGE DISCHARGE.--13 years, 250 ft³/s (7.080 m³/s) 181,100 acre-ft/yr (223 km³/yr).

EXTREMES.--Current year: Maximum discharge, 2,280 ft³/s (64.6 m³/s) May 12 (gage height, 7.35 ft or 2.240 m); minimum daily, 26 ft³/s (0.74 m³/s) Aug. 9, 11-14, 16, 17, 19, Sept. 1, 2.

Period of record: Maximum discharge, 3,000 ft³/s (85.0 m³/s) June 14, 1965 (gage height, 7.88 ft or 2.402 m); no flow July 4, 5, 1962.

REMARKS.--Records excellent except those for period of no gage-height record, which are fair. Flow regulated by Woodruff Narrows Reservoir beginning January 1962 (see sta 10020200). Diversions for irrigation of about 43,500 acres (176 km²) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	66	108	123	140	152	350	852	1,780	502	29	26
2	59	66	109	123	141	153	320	898	1,650	590	29	26
3	60	66	109	124	141	153	310	996	1,560	586	29	27
4	61	67	110	124	142	154	300	1,060	1,520	580	29	27
5	61	67	110	125	142	154	262	1,060	1,420	574	29	34
6	61	67	110	125	142	152	271	1,120	1,440	570	28	46
7	61	67	110	126	143	154	271	1,240	1,460	564	27	46
8	61	67	110	127	144	159	262	1,380	1,270	557	27	45
9	61	67	110	127	145	160	257	1,520	1,110	550	26	45
10	61	67	111	128	146	160	303	1,760	969	544	27	45
11	61	67	111	128	147	161	325	2,150	811	537	26	45
12	61	67	112	129	148	161	329	2,210	764	526	26	46
13	62	67	113	129	148	162	334	2,040	835	200	26	46
14	62	80	114	130	149	162	351	1,970	964	70	26	46
15	62	96	115	130	149	163	369	1,840	1,100	70	27	46
16	62	98	115	131	150	163	375	1,680	1,240	70	26	46
17	63	98	115	131	150	164	387	1,630	1,270	70	26	45
18	63	99	116	131	150	165	421	1,560	1,280	66	27	45
19	63	100	117	132	150	166	468	1,560	1,220	71	26	45
20	63	101	117	132	150	168	524	1,640	1,160	70	27	45
21	63	102	118	132	151	170	546	1,540	1,090	70	27	45
22	64	103	118	133	151	170	534	1,260	1,020	70	27	45
23	64	104	119	134	151	171	557	1,090	902	70	27	45
24	64	104	119	135	151	171	639	1,050	786	70	27	45
25	64	105	120	135	151	172	809	1,010	693	65	27	44
26	64	105	120	136	151	172	1,030	987	752	31	27	44
27	64	105	120	137	151	172	1,290	1,090	667	30	27	44
28	64	106	121	138	152	173	1,240	1,280	568	29	27	44
29	65	108	121	139	-----	175	1,060	1,500	568	29	27	44
30	65	108	122	140	-----	200	906	1,720	490	29	27	39
31	65	-----	122	140	-----	380	-----	1,850	-----	29	27	-----
TOTAL	1,933	2,596	3,562	4,054	4,126	5,312	15,420	44,543	32,379	7,889	840	1,261
MEAN	62.4	86.3	115	131	147	171	514	1,437	1,079	254	27.1	42.0
MAX	65	108	122	140	152	180	1,290	2,210	1,780	590	29	46
MIN	59	66	108	123	140	152	257	852	490	29	26	26
AC-FT	3,830	5,140	7,070	8,040	8,180	10,540	30,590	88,350	64,220	15,650	1,670	2,500
CAL YR 1973 TOTAL	96,505			MEAN 264	MAX 1,750	MIN 39	AC-FT 191,400					
WTR YR 1974 TOTAL	123,909			MEAN 339	MAX 2,210	MIN 26	AC-FT 245,800					

NOTE.--No gage-height record Nov. 16 to Apr. 2.

BEAR RIVER BASIN

265. Bear River near Randolph, Utah

LOCATION.--Lat 41°46'02", long 111°04'20", in SE¼NE¼, sec.7, T.12 N., R.8 E., Rich County, on left bank 3.7 mi (6.0 km) upstream from Twin Creek, 5.0 mi (8.0 km) upstream from Utah-Wyoming State line, and 11 mi (18 km) northeast of Randolph.

DRAINAGE AREA.--1,616 mi² (4,185 km²), revised.

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to Aug. 17, 1971, 0.2 mi (0.3 km) upstream at different datum. Altitude of gage is 6,200 ft (1,889.8 m) from river-profile map.

AVERAGE DISCHARGE.--31 years, 205 ft³/s (5,806 m³/s) 148,500 acre-ft/yr (183 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,600 ft³/s (45.3 m³/s) May 14 (gage height, 6.91 ft or 2.106 m); minimum daily, 14 ft³/s (0.40 m³/s) Sept. 10.
Period of record: Maximum discharge, 2,660 ft³/s (75.3 m³/s) May 8, 1952; maximum gage height, 8.99 ft (2.740 m) June 17, 1965, site and datum then in use; minimum discharge, 1.6 ft³/s (0.045 m³/s) Nov. 12, 1961.

REMARKS.--Records good except those for winter months, which are fair. Diversion for irrigation of about 94,500 acres (382 km²) above station. Flow regulated by Woodruff Narrows Reservoir beginning January 1962 (see sta 10020200).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	117	140	136	207	198	356	1,130	901	304	102	21
2	116	117	140	124	210	198	399	1,040	1,080	251	93	20
3	116	117	140	137	206	198	425	958	1,190	256	103	18
4	115	117	137	150	207	198	420	970	1,170	308	108	16
5	116	121	140	166	205	198	406	1,040	1,140	325	103	16
6	117	115	150	168	204	213	402	1,100	1,120	315	96	15
7	116	123	150	181	204	225	391	1,120	1,180	272	95	15
8	115	124	150	181	203	235	379	1,140	1,190	264	88	15
9	117	121	163	180	203	245	379	1,190	1,220	268	81	15
10	120	114	137	181	203	255	383	1,230	1,230	247	88	14
11	121	108	134	178	203	260	397	1,280	1,050	244	85	15
12	115	104	154	176	203	270	450	1,340	883	258	81	15
13	109	101	160	173	203	290	453	1,440	826	277	79	16
14	109	97	148	170	203	300	458	1,570	710	284	72	17
15	115	86	138	168	203	308	458	1,520	726	254	67	18
16	110	90	126	168	203	317	467	1,360	782	260	64	18
17	109	104	135	165	203	330	470	1,280	781	265	54	23
18	109	116	164	165	201	338	475	1,240	697	291	52	20
19	109	131	150	162	201	303	487	1,200	717	275	49	21
20	109	138	172	165	201	222	519	1,160	768	270	33	49
21	109	145	150	162	201	196	558	1,090	762	241	47	35
22	108	131	150	175	201	178	594	1,080	736	217	45	36
23	108	130	150	177	201	165	600	1,100	630	209	43	38
24	107	130	150	178	200	152	606	1,010	582	190	41	38
25	107	130	150	200	199	145	634	808	523	181	36	39
26	108	130	150	207	199	147	699	697	441	162	32	39
27	108	130	140	206	199	145	788	630	418	151	29	40
28	109	130	150	201	199	149	908	616	410	143	26	33
29	110	130	150	196	-----	151	1,000	616	372	133	25	33
30	110	130	150	205	-----	232	1,100	678	344	126	23	36
31	112	-----	150	205	-----	323	-----	755	-----	119	23	-----
TOTAL	3,476	3,577	4,568	5,406	5,675	7,084	16,061	33,388	24,579	7,360	1,963	744
MEAN	112	119	147	174	203	229	535	1,077	819	237	63.3	24.8
MAX	121	145	172	207	210	338	1,100	1,570	1,230	325	108	49
MIN	107	86	126	124	199	145	356	615	344	119	23	14
AC-FT	6,890	7,090	9,060	10,720	11,260	14,050	31,860	66,230	48,750	14,600	3,890	1,480
CAL YR 1973	TOTAL	97,969	MEAN	268	MAX	1,460	MIN	65	AC-FT	194,300		
WTR YR 1974	TOTAL	113,881	MEAN	312	MAX	1,570	MIN	14	AC-FT	225,900		

BEAR RIVER BASIN

285. Bear River below Pixley Dam, near Cokeville, Wyo.

LOCATION.--Lat 41°56'20", long 110°59'05", in SE¼SE¼ sec.25, T.23 N., R.120 W., Lincoln County, 800 ft (243 m) downstream from Pixley Dam, 11 mi (18 km) south of Cokeville, and 17.5 mi (28.2 km) downstream from Twin Creek.

DRAINAGE AREA.--2,032 mi² (5,263 km²), revised.

PERIOD OF RECORD.--October 1941 to November 1943 (published as Bear River near Cokeville), October 1952 to September 1956, May 1958 to current year (irrigation seasons only). Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 6,185 ft (1,885.2 m) from river-profile map. Oct. 31, 1941 to Nov. 30, 1943, at site 200 ft (61 m) downstream at different datum.

EXTREMES.--Current season: Maximum discharge, 1,330 ft³/s (37.7 m³/s) May 17 (gage height, 8.09 ft or 2.466 m); minimum daily, 28 ft³/s (0.79 m³/s) Sept. 9-13.
 Period of record: Maximum daily discharge, 2,300 ft³/s (65.1 m³/s) Mar. 25, 1956; minimum daily recorded, 0.3 ft³/s (0.008 m³/s) Aug. 21, 1961.

REMARKS.--Records good. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APP	MAY	JUN	JUL	AUG	SEP	
1								1,060	648	272	166	36	
2								1,070	713	267	163	37	
3								1,040	772	258	142	35	
4								994	921	255	150	33	
5								998	969	265	153	31	
6								1,040	977	245	138	31	
7								1,070	980	235	118	30	
8								1,090	977	290	116	29	
9								1,080	1,030	303	117	28	
10								1,020	1,160	306	116	28	
11								1,040	1,230	383	120	28	
12								1,070	1,160	351	117	28	
13								1,090	948	342	116	28	
14								1,110	861	351	105	29	
15								1,140	783	349	102	29	
16									1,170	772	331	95	30
17							514	1,260	742	336	92	33	
18							520	1,250	675	349	87	38	
19							537	1,130	687	370	81	36	
20							553	1,120	580	366	78	38	
21							605	1,100	696	346	73	60	
22							637	1,070	699	315	68	52	
23							651	1,060	677	300	64	54	
24							675	1,050	594	269	62	56	
25							690	1,000	386	256	60	54	
26							718	872	383	246	55	53	
27							783	764	425	225	51	52	
28							861	687	379	195	45	53	
29							934	632	314	194	41	47	
30							988	537	269	185	41	46	
31								588		175	36		
TOTAL								31,202	22,507	8,932	2,968	1,162	
MEAN								1,007	750	288	95.7	38.7	
MAX								1,260	1,230	383	166	60	
MIN								537	269	175	36	28	
AC-FT								61,690	44,640	17,720	5,890	2,330	

THE SEASON AC-FT 66,771

BEAR RIVER BASIN

320. Smiths Fork near Border, Wyo.

LOCATION.--Lat 42°17'16", long 110°52'14", in NW¼ sec.33, T.27 N., R.118 W., Lincoln County, on left bank 4.5 mi (7.2 km) upstream from Howland Creek, 6 mi (10 km) downstream from Hobbie Creek, and 12 mi (19 km) northeast of Border.

DRAINAGE AREA.--165 mi² (427 km²).

PERIOD OF RECORD.--May 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,680 ft (2,036 m) from topographic map. Prior to Oct. 16, 1945, at site 0.8 mi (1.3 km) downstream at different datum.

AVERAGE DISCHARGE.--32 years, 198 ft³/s (5,607 m³/s) 143,500 acre ft/yr (177 hm²/yr).

EXTREMES.--Current year: Maximum discharge, 1,150 ft³/s (32.6 m³/s) May 30 (gage height, 4.79 ft or 1.460 m); minimum, 32 ft³/s (0.91 m³/s) Mar. 21, 1974.
 Period of record: Maximum discharge, 1,610 ft³/s (45.6 m³/s) June 18, 1971 (gage height, 5.61 ft or 1.710 m); minimum recorded, 32 ft³/s (0.91 m³/s) Mar. 21, 1974, result of freezeup.

REMARKS.--Records good except those for winter periods, which are fair. One diversion for irrigation of about 200 acres (809,000 m²) above station.

REVISIONS (WATER YEARS).--WSP 1734: 1952 (M).

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	87	69	64	60	54	58	515	1,000	500	209	132
2	91	75	68	64	62	54	59	621	1,010	493	218	131
3	90	75	66	64	60	53	57	662	1,030	469	225	131
4	89	73	64	64	60	53	56	605	1,030	436	211	129
5	87	71	62	64	60	55	53	676	1,080	411	205	124
6	87	76	66	64	60	55	57	747	1,060	392	200	123
7	86	79	69	64	60	56	57	793	969	376	202	122
8	87	86	68	64	60	55	57	870	854	358	200	121
9	90	84	69	64	60	54	62	828	774	344	194	119
10	89	78	64	64	60	55	66	878	750	331	192	115
11	86	76	61	64	60	54	64	749	769	320	186	115
12	86	78	68	64	60	54	67	709	828	307	181	117
13	84	80	67	64	60	55	63	678	967	298	180	116
14	83	76	69	66	60	57	64	626	983	290	176	114
15	82	75	68	68	60	57	70	572	1,020	283	173	110
16	81	75	68	68	60	56	80	522	1,030	298	170	108
17	79	76	65	68	60	57	91	506	1,020	285	166	107
18	79	76	65	68	60	59	116	544	1,000	271	163	105
19	78	73	64	68	58	58	147	571	957	272	161	102
20	76	66	63	68	59	57	169	614	920	266	160	102
21	77	72	64	65	55	58	164	577	871	262	160	102
22	77	71	64	64	56	57	179	545	814	257	156	101
23	76	77	64	64	56	54	248	538	765	249	152	100
24	78	76	63	64	56	54	347	535	725	247	151	97
25	76	73	64	62	56	57	477	579	693	239	149	97
26	74	64	64	64	56	58	597	665	665	233	146	96
27	73	68	64	63	56	60	499	821	626	228	144	97
28	74	68	64	61	56	63	420	971	589	225	142	96
29	74	71	64	58	-----	61	397	1,110	553	221	140	94
30	72	68	64	59	-----	60	439	1,110	523	218	138	93
31	78	-----	64	59	-----	60	-----	1,040	-----	215	136	-----
TOTAL	2,533	2,245	2,026	1,991	1,646	1,752	5,280	21,757	25,815	9,596	5,386	3,316
MEAN	81.7	74.8	65.4	64.2	58.8	56.5	176	702	861	310	174	111
MAX	92	88	69	68	62	63	597	1,110	1,080	500	225	132
MIN	72	64	61	58	55	53	53	506	523	215	136	93
AC-FT	5,020	4,450	4,020	3,950	3,260	3,480	10,470	43,160	51,200	19,030	10,680	6,580

CAL YR 1973 TOTAL 56,872 MEAN 153 MAX 795 MIN 54 AC-FT 110,800
 WTR YR 1974 TOTAL 83,343 MEAN 228 MAX 1,110 MIN 53 AC-FT 165,300

BEAR RIVER BASIN

395. Bear River at Border, Wyoming

LOCATION.--Lat 42°12'40", long 111°03'11", in NE¼NE¼ sec.15, T.14 S., R.46 E., Bear Lake County, Idaho, on left bank 0.2 mi (0.3 km) west of Wyoming-Idaho State line, 0.5 mi (0.8 km) west of Border, and 2.1 mi (3.4 km) upstream from Thomas Fork.

DRAINAGE AREA.--2,486 mi² (6,439 km²), revised.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft (1,844.537 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--37 years, 426 ft³/s (12.06 m³/s) 308,600 acre-ft/yr (381 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,040 ft³/s (57.8 m³/s) May 11 (gage height, 7.15 ft or 2.179 m); minimum daily, 130 ft³/s (3.68 m³/s) Sept. 21.
 Period of record: Maximum discharge, 3,680 ft³/s (104 m³/s) May 11, 1952 (gage height, 8.89 ft or 2.710 m); minimum daily, 30 ft³/s (0.85 m³/s) Aug. 18-22, 1940.

REMARKS.--Records good except those for winter months, which are fair. Diversions for irrigation of about 122,000 acres (494 km²) above station.

DAY	DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	272	281	330	310	330	350	612	1,620	1,520	708	326	137
2	270	281	330	310	330	360	662	1,840	1,580	697	319	134
3	266	268	330	310	330	365	683	1,860	1,610	725	321	142
4	263	266	330	310	330	385	694	1,880	1,710	704	303	142
5	266	248	330	310	330	360	680	1,860	1,850	680	299	149
6	266	263	330	300	330	350	666	1,860	1,960	640	296	149
7	266	281	330	300	330	380	645	1,900	1,990	610	279	158
8	268	299	330	300	330	410	639	1,960	1,970	595	266	153
9	270	308	330	300	330	500	632	2,000	1,860	620	268	149
10	277	294	330	300	330	700	652	2,010	1,860	590	268	149
11	281	288	330	300	330	700	659	2,040	1,880	710	268	146
12	283	285	330	300	330	740	686	2,010	1,920	640	266	148
13	279	290	330	300	330	800	711	1,980	1,900	620	266	151
14	270	292	330	300	330	850	700	1,960	1,800	580	259	153
15	261	285	330	300	330	880	710	1,960	1,720	590	246	144
16	261	281	310	300	330	900	715	1,940	1,680	612	234	136
17	261	279	310	300	330	1,050	725	1,900	1,700	603	242	134
18	259	292	310	300	330	1,100	751	1,880	1,610	587	242	137
19	257	322	310	300	330	1,100	798	1,840	1,560	596	240	142
20	257	321	310	300	330	850	840	1,830	1,510	680	234	132
21	253	321	310	330	330	680	854	1,860	1,460	656	222	130
22	253	320	310	330	330	580	900	1,800	1,440	626	218	146
23	251	320	310	330	330	514	956	1,740	1,380	571	222	139
24	251	320	310	330	330	464	1,070	1,660	1,290	542	214	146
25	253	320	310	330	330	438	1,200	1,620	1,130	467	199	158
26	251	330	310	330	340	458	1,330	1,550	928	455	193	157
27	251	330	310	330	340	467	1,440	1,490	912	424	188	157
28	251	330	310	330	340	502	1,460	1,510	896	384	180	158
29	251	330	310	330	-----	496	1,500	1,560	820	348	175	153
30	253	330	310	330	-----	484	1,530	1,550	715	345	166	146
31	257	-----	310	330	-----	523	-----	1,520	-----	336	158	-----
TOTAL	8,128	8,975	9,910	9,680	9,270	18,736	26,110	55,990	46,161	17,941	7,577	4,375
MEAN	262	299	320	312	331	604	870	1,806	1,539	579	244	146
MAX	283	330	330	330	340	1,100	1,530	2,040	1,990	725	326	158
MIN	251	248	310	300	330	350	612	1,490	715	336	158	130
AC-FT	16,120	17,600	19,660	19,200	18,390	37,160	51,790	111,100	91,560	35,590	15,030	8,680
CAL YR 1973	TOTAL 174,006	MEAN 477	MAX 1,780	MIN 182	AC-FT 345,100							
WTR YR 1974	TOTAL 222,853	MEAN 611	MAX 2,040	MIN 130	AC-FT 442,000							

BEAR RIVER BASIN

460. Rainbow inlet canal near Dingle, Idaho

LOCATION.--Lat 42°13'48", long 111°17'43", in S½ sec.3, T.14 S., R.44 E., Bear Lake County, on left bank 1.5 mi (2.4 km) west of Dingle and 1.8 mi (2.9 km) downstream from headworks at Stewart Dam.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only prior to October 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage datum is 5,922.6 ft (1,805.03 m) above mean sea level (by topographic survey). Prior to Oct. 1, 1923, at site 300 ft (91 m) downstream at different datum; Oct. 1, 1923 to Oct. 27, 1944, at site 0.5 mi (0.8 km) downstream at different datum.

AVERAGE DISCHARGE.--32 years, 337 ft³/s (9,544 m³/s) 244,200 acre ft/yr (301 km³/yr).

EXTREMES.--Current year: Maximum discharge, 2,150 ft³/s (60.9 m³/s) May 12 (gage height, 6.13 ft or 1.868 m); minimum, 23 ft³/s (0.65 m³/s) Sept. 19.
 Period of record: Maximum discharge, 4,180 ft³/s (118 m³/s) May 7, 1952 (gage height, 8.62 ft or 2.627 m); minimum daily, 1 ft³/s (0.028 m³/s) on several days in 1931, 1934, 1940, 1948.

REMARKS.--Records good. Discharge measurements generally made three to five times a week. Canal diverts from Bear River at Stewart Dam in NE¼ sec.34, T.13 S., R.44 E., for storage in Bear Lake. At times flow in canal is augmented by surplus water from Black Otter Slough entering at the station and by seepage and wastage from irrigation lands on both sides of canal.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	301	282	326	218	290	295	633	1,720	1,260	448	292	124
2	303	299	323	213	285	304	721	1,790	1,280	420	282	103
3	302	296	285	207	290	312	752	1,860	1,310	446	281	74
4	298	283	300	200	308	322	784	1,960	1,310	437	275	57
5	293	267	300	206	277	317	777	1,980	1,400	421	269	55
6	297	284	241	212	309	336	764	1,970	1,490	406	266	57
7	297	303	275	219	304	346	752	2,020	1,590	368	273	53
8	301	319	297	226	298	359	743	2,060	1,620	389	257	53
9	305	365	278	235	281	393	724	2,090	1,620	450	248	53
10	312	356	259	242	281	434	740	2,110	1,570	457	245	50
11	314	338	260	248	254	504	780	2,120	1,540	409	243	50
12	319	331	273	253	218	496	760	2,140	1,550	447	241	48
13	320	339	298	265	221	626	801	2,110	1,560	436	232	46
14	317	339	265	276	225	684	816	2,060	1,550	423	238	47
15	306	333	255	274	230	747	816	2,050	1,450	486	240	34
16	299	317	273	278	268	851	807	2,000	1,360	512	231	30
17	298	319	274	277	272	929	819	1,990	1,320	517	229	31
18	289	332	289	265	307	1,060	855	1,910	1,310	517	227	35
19	283	341	279	263	295	1,190	886	1,870	1,270	542	223	26
20	287	364	259	242	295	1,170	941	1,860	1,170	586	214	32
21	289	357	270	251	299	873	1,010	1,830	1,110	646	217	39
22	294	324	292	293	251	711	1,050	1,800	1,070	615	214	36
23	285	245	294	278	255	622	1,090	1,810	1,040	600	210	38
24	276	269	312	277	257	558	1,150	1,710	1,010	574	206	39
25	273	269	282	276	260	517	1,240	1,570	929	535	199	39
26	272	252	268	277	261	515	1,300	1,480	788	459	189	42
27	273	270	255	281	263	537	1,410	1,380	635	430	173	45
28	275	293	248	286	283	556	1,500	1,260	627	404	164	49
29	270	300	240	296	-----	597	1,620	1,300	587	356	155	49
30	274	321	233	306	-----	603	1,650	1,320	527	316	146	61
31	278	-----	227	301	-----	598	-----	1,290	-----	315	133	-----
TOTAL	9,100	9,309	8,520	7,939	7,637	18,362	28,691	56,440	36,853	14,367	7,012	1,495
MEAN	294	310	275	256	273	592	956	1,821	1,228	463	226	49.8
MAX	320	365	326	306	309	1,190	1,650	2,140	1,620	646	292	124
MIN	270	245	227	200	218	295	633	1,280	527	315	133	26
AC-FT	18,050	18,460	16,900	15,750	15,150	36,420	56,910	111,900	73,100	28,500	13,910	2,970

CAL YR 1973 TOTAL 166,949 MEAN 457 MAX 1,870 MIN 58 AC-FT 331,100
 WTR YR 1974 TOTAL 205,725 MEAN 564 MAX 2,140 MIN 26 AC-FT 408,100

BEAR RIVER BASIN

465. Bear River below Stewart Dam, near Montpelier, Idaho

LOCATION.--Lat 42°15'14", long 111°17'35", in NE¼ sec. 34, T.13 S., R.44 E., Bear Lake County, on right bank 300 ft (91 m) downstream from Stewart Dam and 4.5 mi (7.2 km) south of Montpelier.

DRAINAGE AREA.--2,853 mi² (7,389 km²), revised.

PERIOD OF RECORDS.--January 1922 to current year. Monthly discharge only January 1922 to September 1945, published in MSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,950 ft (1,814 m) from topographic map.

AVERAGE DISCHARGE.--52 years, 49.2 ft³/s (1,393 m³/s) 35,650 acre ft/yr (44.0 hm³/yr).

EXTRIMES.--Current year: Maximum discharge, 22 ft³/s (0.62 m³/s) Oct. 1 (gage height, 1.30 ft or 0.396 m); minimum, 2.3 ft³/s (0.065 m³/s) Jan. 15.

REMARKS.--Records good. Discharge measurements generally made once a week. Water diverted at Stewart Dam through Rainbow inlet canal (see station 10046000) for storage and regulation in Bear Lake. Many diversions above station for irrigation.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	8.8	7.1	4.5	4.1	4.9	7.6	11	15	12	6.0	4.0
2	9.2	8.7	7.3	4.2	4.2	5.1	8.1	11	15	12	6.0	3.6
3	9.0	8.6	6.9	3.9	4.2	5.2	8.1	11	15	12	6.0	3.8
4	8.9	8.5	6.5	3.8	4.2	5.3	7.9	11	15	12	6.0	5.2
5	8.7	8.4	6.1	3.5	4.2	5.5	7.8	11	15	12	6.0	5.1
6	8.5	8.5	5.9	3.3	4.2	5.6	7.6	11	14	12	5.9	4.8
7	8.4	8.6	6.4	3.2	4.1	5.8	7.4	11	14	12	5.8	4.6
8	8.2	8.6	6.4	3.1	4.0	5.8	7.3	11	14	12	5.7	4.8
9	8.7	8.7	7.0	3.1	4.0	5.7	7.2	11	14	12	5.7	4.7
10	8.8	8.8	6.5	3.1	4.0	5.7	7.3	12	12	12	5.7	4.3
11	6.7	9.1	6.5	3.1	4.0	5.5	7.4	12	12	12	5.7	4.3
12	8.7	8.8	6.5	3.2	3.9	7.4	7.4	12	12	12	5.7	4.3
13	8.7	8.6	6.4	3.3	3.8	7.4	7.4	12	12	12	5.7	4.3
14	8.7	8.5	6.4	3.3	3.8	7.4	7.4	12	12	12	5.7	4.3
15	8.5	8.2	6.4	3.1	3.8	7.2	7.2	12	12	12	5.7	4.3
16	8.2	7.9	6.4	3.2	3.9	7.3	7.3	12	12	12	5.7	4.3
17	8.3	7.8	6.4	3.2	3.9	7.4	7.4	12	12	12	5.7	4.3
18	8.4	7.7	6.4	3.3	4.0	7.9	7.9	12	12	12	5.7	4.3
19	8.4	7.5	6.5	3.3	4.0	8.3	8.3	12	12	12	5.7	4.3
20	8.5	7.9	6.5	3.4	4.1	8.9	8.9	12	12	12	5.7	4.3
21	8.7	7.9	6.5	3.4	4.2	9.1	9.1	12	12	12	5.7	4.3
22	8.6	7.8	6.5	3.5	4.2	9.3	9.3	12	12	12	5.7	4.3
23	8.9	7.5	6.6	3.7	4.2	9.9	9.9	12	12	12	5.7	4.3
24	9.0	7.0	6.6	4.0	4.2	10	10	12	12	12	5.7	4.3
25	9.1	6.3	6.6	3.9	4.2	8.6	8.6	12	12	12	5.7	4.3
26	9.1	6.0	6.0	4.0	4.1	8.4	8.4	12	12	12	5.7	4.3
27	8.7	6.0	5.7	4.1	4.2	8.2	8.2	12	12	12	5.7	4.3
28	8.6	6.3	5.4	4.1	4.6	8.1	8.1	12	12	12	5.7	4.3
29	8.9	6.5	5.2	4.0	4.0	7.9	7.9	12	12	12	5.7	4.3
30	8.9	6.8	4.9	4.0	4.0	7.8	7.8	12	12	12	5.7	4.3
31	8.8	4.7	4.7	4.1	4.1	7.6	7.6	12	12	12	5.7	4.3
TOTAL	270.7	227.6	195.7	110.5	114.4	321.9	256.4	370	370	418	292.0	178.7
MEAN	8.73	7.92	6.31	3.56	4.09	10.4	8.55	11.9	11.9	13.9	9.42	5.76
MAX	9.4	9.4	7.3	4.5	4.6	18	11	14	14	15	12	6.3
MIN	6.2	6.0	4.7	3.1	3.8	4.9	7.2	11	12	12	6.1	4.5
AC-Ft	537	471	388	219	227	638	509	734	734	829	579	354
CAL YR 1974 TOTAL	2,722.4	2,915.5	2,722.4	1,951.7	1,105.5	3,219.9	2,564.4	3,700	3,700	4,180	2,920.0	1,787.7
MEAN	7.46	7.99	7.46	5.64	3.18	9.49	7.46	9.49	9.49	10.49	7.46	5.64
MAX	18	18	18	18	18	18	18	18	18	18	18	18
MIN	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
AC-Ft	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400

BEAR RIVER BASIN

555. Bear Lake at Lifton, near St. Charles, Idaho

LOCATION.--Lat 42°07'16", Long 111°18'52", in NE¼ sec.16, T.15 S., R.44 E., Bear Lake County, in Lifton pumping plant of Utah Power & Light Company, 3.5 mi (5.6 km) east of St. Charles.

DRAINAGE AREA.--435 mi² (1,127 km²), approximately (does not include Mud Lake drainage).

PERIOD OF RECORD.--October 1903 to June 1906 (elevations only), January 1921 to current year. Monthly contents only January 1921 to September 1945 published in WSP 1314. Published as Bear Lake at Fish Haven 1903-06.

GAGE.--Water-stage recorder. Datum of gage is 5,900 ft (1,798.3 m) above mean sea level, unadjusted (Utah Power & Light Company datum).

EXTREMES.--Current year: Maximum contents, 1,309,000 acre-ft (1.61 km³) June 27-29 (elevation, 5,922.05 ft or 1,805.041 m); minimum, 1,083,000 acre-ft (1.34 km³) Mar. 12-19 (elevation, 5,918.82 ft or 1,804.056 m).
Period of record: Maximum contents, 1,423,000 acre-ft (1.75 km³) June 10, 1923 (elevation, 5,923.68 ft or 1,805.538 m); no usable contents Nov. 9-19, 1935 (elevation, 5,902.00 ft or 1,798.930 m lower limit of pumps).

REMARKS.--Outflow regulated by gates and pumps at the north end of Bear Lake and by gates in dike at north end of Mud Lake, a shallow interconnected lake. Principal inflow to Bear Lake is from Bear River through Rainbow inlet (station 10046000) and Dingle inlet canals, man-made diversions into Mud Lake from which flow can empty into Bear Lake either through the pumping plant or through an opening in the dividing causeway, or the flow can be routed directly into the Outlet canal. (See station 10059500.) Capacity of Bear Lake is 1,421,000 acre-ft (1.75 km³) between elevation 5,902.00 ft or 1,798.930 m (lower limit of pumps) and 5,923.65 ft or 1,805.529 m (present upper limit of storage with existing facilities). Storage water used for irrigation and power development. Figures given herein represent usable contents.

COOPERATION.--Gage heights furnished by Utah Power & Light Company, under general supervision of Geological Survey, in connection with a Federal Power Commission project. Contents computed by Geological Survey from capacity table based on data furnished by Utah Power and Light Company.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

5,918.50	1,060,400	5,921.50	1,269,900
5,919.00	1,095,200	5,922.00	1,305,000
5,919.50	1,130,000	5,922.50	1,340,100
5,920.00	1,164,900	5,923.00	1,375,400
5,920.50	1,199,900	5,923.40	1,403,600
5,921.00	1,234,900		

CONTENTS, IN THOUSANDS OF ACRE-FEET, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,153	1,127	1,127	1,109	1,098	1,089	1,096	1,161	1,273	1,307	1,264	1,178
2	1,152	1,127	1,127	1,108	1,098	1,089	1,097	1,166	1,275	1,307	1,262	1,175
3	1,151	1,127	1,127	1,108	1,097	1,089	1,097	1,170	1,276	1,307	1,259	1,171
4	1,150	1,127	1,126	1,106	1,097	1,089	1,098	1,175	1,278	1,307	1,255	1,168
5	1,150	1,127	1,125	1,106	1,097	1,088	1,099	1,180	1,279	1,307	1,252	1,166
6	1,148	1,127	1,125	1,105	1,097	1,088	1,101	1,185	1,280	1,307	1,249	1,162
7	1,147	1,127	1,124	1,104	1,097	1,087	1,102	1,189	1,282	1,306	1,245	1,159
8	1,145	1,127	1,124	1,104	1,096	1,086	1,104	1,194	1,283	1,306	1,242	1,157
9	1,144	1,127	1,123	1,102	1,096	1,086	1,106	1,199	1,285	1,306	1,238	1,154
10	1,143	1,127	1,122	1,101	1,095	1,085	1,108	1,204	1,286	1,305	1,235	1,150
11	1,142	1,127	1,122	1,100	1,095	1,084	1,110	1,209	1,288	1,304	1,231	1,148
12	1,141	1,127	1,122	1,099	1,095	1,083	1,113	1,214	1,290	1,304	1,228	1,144
13	1,141	1,127	1,121	1,099	1,094	1,083	1,115	1,218	1,292	1,303	1,225	1,141
14	1,140	1,127	1,120	1,098	1,094	1,083	1,118	1,223	1,294	1,302	1,222	1,138
15	1,139	1,127	1,120	1,098	1,094	1,083	1,120	1,227	1,296	1,302	1,220	1,135
16	1,138	1,127	1,120	1,098	1,093	1,083	1,122	1,231	1,298	1,301	1,218	1,131
17	1,137	1,127	1,119	1,098	1,093	1,083	1,124	1,234	1,300	1,299	1,215	1,128
18	1,136	1,127	1,118	1,098	1,093	1,083	1,127	1,237	1,302	1,297	1,213	1,125
19	1,134	1,127	1,118	1,098	1,093	1,083	1,128	1,240	1,304	1,295	1,211	1,122
20	1,134	1,127	1,118	1,098	1,092	1,086	1,130	1,243	1,305	1,293	1,208	1,120
21	1,133	1,127	1,117	1,098	1,092	1,086	1,132	1,246	1,306	1,292	1,206	1,118
22	1,132	1,127	1,116	1,098	1,092	1,088	1,134	1,249	1,305	1,290	1,203	1,116
23	1,131	1,127	1,115	1,098	1,092	1,089	1,136	1,252	1,307	1,288	1,201	1,115
24	1,131	1,127	1,115	1,098	1,091	1,090	1,139	1,255	1,308	1,285	1,198	1,113
25	1,130	1,127	1,113	1,098	1,091	1,092	1,142	1,257	1,308	1,283	1,196	1,112
26	1,129	1,127	1,113	1,098	1,090	1,092	1,145	1,260	1,308	1,281	1,193	1,111
27	1,129	1,127	1,112	1,098	1,090	1,092	1,148	1,262	1,309	1,278	1,191	1,110
28	1,129	1,127	1,111	1,098	1,090	1,093	1,150	1,264	1,309	1,276	1,188	1,108
29	1,128	1,127	1,111	1,098	-----	1,095	1,153	1,266	1,309	1,273	1,185	1,107
30	1,128	1,127	1,111	1,098	-----	1,095	1,157	1,269	1,308	1,271	1,182	1,106
31	1,128	-----	1,110	1,098	-----	1,095	-----	1,271	-----	1,268	1,180	-----
MAX	1,153	1,127	1,127	1,109	1,098	1,095	1,157	1,271	1,309	1,307	1,264	1,178
MIN	1,128	1,127	1,110	1,098	1,090	1,083	1,096	1,161	1,273	1,268	1,180	1,106

(+) 5,919.47 5,919.46 5,919.21 5,919.04 5,918.92 5,919.00 5,919.89 5,921.51 5,922.04 5,921.47 5,920.22 5,919.16
(-) -26.0 -1.0 -17.0 -12.0 -8.0 45.0 +62.0 +114.0 +37.0 -40.0 -88.0 -74.0

CAL YR 1973..... ± -28.0
WTR YR 1974..... ± -48.0

† Elevation, in feet, at end of month.
± Change in contents, in thousands of acre-feet.

BEAR RIVER BASIN

595. Bear Lake outlet canal near Paris, Idaho

LOCATION.--Lat 42°13'00", long 111°20'35", in SW¼ sec.8, T.14 S., R.44 E., Bear Lake County, on right bank 2,000 ft (610 m) downstream from headgates (at dike) and 3 mi (5 km) southeast of Paris.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only January 1922 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage datum is 5,912.6 ft (1,802.16 m) above mean sea level (from topographic survey).

AVERAGE DISCHARGE.--52 years, 368 ft³/s (10.42 m³/s (266,600 acre ft/yr (329 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,410 ft³/s (39.9 m³/s) July 23 (gage height, 18.29 ft or 5.575 m); minimum daily, 15 ft³/s (0.42 m³/s) Apr. 30 to May 7.
 Period of record: Maximum daily discharge, 1,870 ft³/s (53.0 m³/s) Aug. 8, 1924; minimum daily, 1 ft³/s (0.28 m³/s) for many days in 1937, 1954, 1959, 1961, 1964.

REMARKS.--Records good. Discharge measurements generally made five or six times a week during periods of release from Bear Lake.

COOPERATION.--Records collected by Utah Power & Light Co., under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	637	216	602	734	702	750	17	15	638	1,000	1,360	1,180
2	659	203	670	732	688	695	17	15	660	1,030	1,370	1,170
3	644	185	699	762	685	674	17	15	640	992	1,380	1,170
4	636	182	673	791	689	711	17	15	651	962	1,380	1,190
5	634	149	706	802	681	832	17	15	765	963	1,380	1,190
6	634	80	744	811	679	887	17	15	930	1,010	1,390	1,170
7	626	37	745	829	685	957	17	15	962	988	1,380	1,200
8	623	41	725	857	694	960	17	199	821	1,020	1,380	1,180
9	617	45	723	866	710	951	17	385	707	1,110	1,370	1,160
10	663	49	726	841	702	951	17	336	673	1,100	1,320	1,150
11	659	52	714	811	692	918	17	301	646	1,180	1,330	1,150
12	651	289	703	796	699	768	17	302	642	1,220	1,330	1,150
13	664	505	697	797	712	791	17	291	632	1,200	1,290	1,160
14	672	507	691	772	700	811	16	297	725	1,120	1,280	1,170
15	675	464	689	661	687	790	16	294	924	1,150	1,190	1,190
16	667	414	688	537	677	738	16	306	923	1,340	1,130	1,200
17	660	419	688	484	680	673	16	304	933	1,350	995	1,210
18	656	422	689	408	685	653	16	293	937	1,340	1,060	1,010
19	654	427	683	421	706	397	16	294	1,030	1,340	1,060	1,030
20	646	425	660	399	667	18	16	305	967	1,360	1,060	1,200
21	643	415	692	455	702	18	16	311	1,010	1,370	1,060	776
22	529	407	690	522	697	18	16	302	1,070	1,370	1,090	437
23	423	399	696	550	701	18	16	307	1,060	1,390	1,150	435
24	427	388	716	592	669	18	16	303	1,010	1,390	1,150	439
25	433	385	654	611	665	18	16	308	990	1,390	1,130	417
26	432	413	703	685	725	18	16	320	954	1,380	1,140	403
27	331	445	750	682	722	18	16	429	961	1,360	1,160	327
28	207	435	698	698	746	18	16	535	1,020	1,360	1,180	229
29	208	428	682	707	-----	17	16	552	1,320	1,350	1,220	209
30	209	480	704	685	-----	17	15	570	988	1,350	1,190	143
31	211	-----	727	682	-----	17	-----	622	-----	1,370	1,190	-----
TOTAL	17,030	9,306	21,627	20,980	19,447	15,120	492	8,546	25,859	37,855	38,095	27,045
MEAN	549	310	698	677	695	488	16.4	276	862	1,221	1,229	902
MAX	675	507	750	866	746	960	17	622	1,070	1,390	1,390	1,210
MIN	207	37	602	399	665	17	15	15	632	962	995	143
AC-FT	33,780	18,460	42,900	41,610	38,570	29,990	976	16,950	51,290	75,090	75,560	53,640
CAL YR 1973	TOTAL	213,075	MEAN	584	MAX	1,440	MIN	10	AC-FT	422,600		
WTR YR 1974	TOTAL	241,402	MEAN	661	MAX	1,390	MIN	15	AC-FT	478,800		

BEAR RIVER BASIN

927. Bear River at Idaho—Utah State Line

LOCATION.--Lat 42°00'47", long 111°55'14", in NW¼NE¼ sec.29, T.16 S., R.39 E., Franklin County, Idaho, on left bank 1,050 ft (320 m) downstream from inlet canal to Cub River pumps, 1.1 mi (1.8 km) downstream from Heston Creek, 1.8 mi (2.9 km) upstream from State line, and 3.5 mi (5.6 km) southeast of Weston.

DRAINAGE AREA.--4,881 mi² (12,642 km²), revised.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,420 ft (1,347 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 2,980 ft³/s (84.4 m³/s) Apr. 29 (gage height, 6.40 ft or 1.951 m); minimum daily, 416 ft³/s (11.8 m³/s) Sept. 30.

Period of record: Maximum discharge, 4,190 ft³/s (119 m³/s) June 12 (gage height, 8.25 ft or 2.515 m); minimum daily, 73 ft³/s (2.07 m³/s) Nov. 20, 1970.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are fair. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,350	757	1,050	1,100	1,500	1,500	1,860	1,680	1,540	1,170	903	1,150
2	1,130	730	1,240	1,000	1,500	1,750	1,820	1,570	1,570	1,130	1,060	998
3	1,240	919	936	1,150	1,500	1,700	1,530	1,600	1,670	1,030	918	1,280
4	1,210	791	1,220	1,350	1,500	1,600	1,380	1,740	1,690	1,060	1,140	994
5	1,110	435	1,450	1,400	1,500	1,600	1,380	1,710	1,640	1,070	981	1,290
6	1,190	783	1,360	1,300	1,400	1,700	1,420	1,870	1,710	969	1,110	861
7	1,310	862	1,290	1,400	1,400	1,900	1,170	1,880	1,660	858	965	1,300
8	883	864	1,370	1,400	1,400	1,900	1,560	1,540	1,730	1,020	1,130	1,150
9	1,300	845	1,260	1,300	1,400	2,100	1,220	1,960	1,770	996	1,170	1,150
10	1,190	766	1,310	1,550	1,400	2,100	1,450	2,120	1,680	897	1,110	1,030
11	1,130	749	1,260	1,400	1,400	2,200	1,350	1,960	1,460	984	1,260	1,240
12	1,220	1,080	1,240	1,250	1,400	2,200	1,590	1,810	1,550	1,030	1,130	1,230
13	1,180	1,150	1,489	1,350	1,400	2,100	1,560	1,870	1,410	1,000	1,400	1,130
14	1,190	1,230	1,440	1,450	1,400	1,900	1,490	1,870	1,710	1,030	989	1,180
15	858	910	1,190	1,500	1,400	1,950	1,490	1,750	1,620	1,000	1,050	1,190
16	1,320	1,120	1,360	1,500	1,400	2,030	1,410	1,450	1,670	938	1,080	1,200
17	1,210	1,180	1,510	1,500	1,400	2,250	1,420	1,670	1,610	1,230	1,060	1,430
18	1,250	1,090	1,380	1,500	1,500	2,270	1,510	1,490	1,510	1,060	1,090	1,120
19	1,190	1,340	1,170	1,500	1,500	2,320	1,370	1,570	1,670	1,000	1,130	1,160
20	1,460	896	1,330	1,500	1,500	1,860	1,580	1,370	1,560	1,090	925	1,270
21	1,240	1,160	1,390	1,500	1,500	1,650	1,610	1,740	1,210	1,030	1,110	1,250
22	1,180	1,040	1,380	1,500	1,500	1,700	1,570	1,770	1,330	1,060	1,090	1,320
23	1,360	1,110	1,340	1,500	1,600	1,540	1,510	1,480	1,150	935	1,140	945
24	1,100	1,010	1,390	1,800	1,400	1,540	1,650	1,400	1,200	1,130	895	795
25	1,080	1,070	1,410	1,500	1,300	1,610	1,600	1,370	1,120	1,200	1,170	636
26	1,130	1,050	1,230	1,500	1,500	1,620	2,060	1,500	1,110	982	1,130	570
27	1,130	1,140	1,420	1,500	1,500	1,750	1,710	1,680	1,120	940	979	479
28	1,110	1,130	1,470	1,500	1,600	1,860	1,830	1,620	1,010	1,040	989	877
29	1,110	939	1,320	1,500	-----	1,720	1,960	1,720	1,020	1,220	965	489
30	770	1,070	1,470	1,500	-----	1,600	1,350	1,580	1,000	906	1,140	416
31	704	-----	1,300	1,500	-----	1,770	-----	1,740	-----	1,220	994	-----
TOTAL	35,835	29,236	40,966	43,900	40,800	57,490	46,610	52,080	43,700	32,225	33,213	31,331
MEAN	1,156	975	1,321	1,416	1,457	1,855	1,554	1,680	1,457	1,040	1,071	1,044
MAX	1,460	1,340	1,510	1,550	1,600	2,320	2,060	2,120	1,770	1,230	1,400	1,430
MIN	704	435	936	1,000	1,300	1,500	1,170	1,370	1,000	858	895	416
AC-FT	71,080	57,990	81,260	87,080	80,930	114,000	92,450	103,300	86,680	63,920	65,880	62,150

CAL YR 1973 TOTAL 430,879 MEAN 1,180 MAX 2,080 MIN 168 AC-FT 854,600
WTR YR 1974 TOTAL 487,386 MEAN 1,335 MAX 2,320 MIN 416 AC-FT 966,700

NOTE.--No gage-height record Jan. 2 to Mar. 15.

BEAR RIVER BASIN

930. Cub River near Preston, Idaho

LOCATION.--Lat 42°08'28", long 111°41'19", in SW¼ sec.5, T.15 S., R.41 E., Franklin County, Cache National Forest, on right bank 0.2 mi (0.3 km) upstream from headgates of Cub River-Worm Creek Canal, 0.7 mi (1.1 km) upstream from forest boundary, and 10 mi (16 km) east of Preston.

DRAINAGE AREA.--31.6 mi² (81.8 km²), revised.

PERIOD OF RECORD.--March 1940 to September 1952, October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,285.1 ft (1,610.90 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--31 years, 84.4 ft³/s (2.390 m³/s) 61,150 acre-ft/yr (75.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 654 ft³/s (18.5 m³/s) May 29 (gage height, 2.75 ft or 0.838 m); minimum, 13 ft³/s (0.37 m³/s) Feb. 19.

Period of record: Maximum discharge, 803 ft³/s (22.7 m³/s) June 11, 1971 (gage height, 3.13 ft or 0.954 m); maximum gage height, 3.83 ft (1.167 m) June 2, 1943; no flow for part of Jan. 29, 1965, result of snowslide.

REMARKS.--Records good except those for period of no gage-height record, which are fair. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	26	24	21	22	21	35	165	550	185	66	41
2	27	26	24	20	21	28	35	204	539	176	65	40
3	27	26	24	21	21	27	35	234	556	165	63	40
4	27	26	24	22	21	25	33	244	595	154	62	39
5	27	26	23	22	22	24	32	268	612	146	62	39
6	27	26	23	22	21	24	33	314	610	141	61	38
7	27	26	23	22	21	26	35	355	535	134	62	38
8	27	26	23	21	21	26	37	438	446	128	60	37
9	27	26	22	21	20	26	44	502	354	123	59	37
10	27	26	22	21	20	27	49	543	328	118	57	37
11	27	26	22	21	21	28	46	460	357	114	57	36
12	27	26	23	21	21	28	48	398	399	109	55	36
13	27	26	23	22	21	29	43	371	433	106	55	36
14	27	26	23	21	21	29	41	340	460	100	54	35
15	27	26	22	21	20	29	45	300	466	97	52	35
16	27	26	22	21	21	30	50	266	475	94	51	34
17	27	26	22	23	21	30	57	247	469	91	51	34
18	27	27	23	24	21	30	75	268	460	88	51	34
19	27	26	22	24	21	30	88	319	442	87	50	34
20	27	25	22	24	19	30	95	327	420	85	49	33
21	27	25	22	23	19	30	84	280	395	82	48	32
22	27	25	22	22	19	30	83	247	358	80	47	32
23	27	24	22	22	19	30	110	229	320	78	47	32
24	27	25	22	22	20	30	143	224	290	76	46	32
25	27	24	22	22	20	35	169	265	271	75	45	32
26	26	24	22	22	20	40	196	362	256	74	44	32
27	26	24	22	22	20	38	174	502	239	72	44	32
28	26	24	22	22	20	35	151	593	224	70	43	31
29	26	23	21	22	-----	35	138	637	209	69	43	31
30	26	23	21	21	-----	35	138	617	197	67	42	31
31	26	-----	21	22	-----	35	-----	583	-----	67	41	-----
TOTAL	831	761	695	677	574	920	2,342	11,102	12,265	3,251	1,631	1,050
MEAN	26.8	25.4	22.4	21.8	20.5	29.7	78.1	358	409	105	52.6	35.0
MAX	27	27	24	24	22	40	196	637	612	185	66	41
MIN	26	23	21	20	19	21	32	165	197	67	41	31
AC-FT	1,650	1,510	1,380	1,340	1,140	1,820	4,650	22,020	24,330	6,450	3,240	2,080

CAL YR 1973 TOTAL 26,341 MEAN 72.2 MAX 604 MIN 18 AC-FT 52,290
 WTR YR 1974 TOTAL 36,099 MEAN 98.9 MAX 637 MIN 19 AC-FT 71,600

NOTE.--No gage-height record Oct. 5 to Nov. 14.

BEAR RIVER BASIN

1090. Logan River above State dam, near Logan, Utah

LOCATION.--Lat 41°44'40" long 111°47'00" in NE¼ sec.36, T.12 N., R.1 E., Cache County, on right bank at Logan plant of Utah Power & Light Co. (abandoned), 0.5 mi (0.8 km) upstream from State dam, and 2.5 mi (4.0 km) east of Logan.

DRAINAGE AREA.--214 mi² (554 km²), revised.

PERIOD OF RECORD.--June 1896 to current year. Published as Logan River near Logan prior to 1913. Records since May 1913 equivalent to earlier records if records for Utah Power & Light Co.'s tailrace near Logan are added. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,680 ft (1,426 m) from topographic map. Prior to May 7, 1913, nonrecording gage at various sites within 0.5 mi (0.8 km) downstream, below confluence of tailrace, at different datums. May 7 to Sept. 30, 1913, water-stage recorder at present site at different datums and Oct. 1, 1913 to Sept. 3, 1938, at datum about 2.3 ft (0.70 m) lower than present datum.

AVERAGE DISCHARGE.--61 years (1913-74), 118 ft³/s (3.342 m³/s) 85,490 acre-ft/yr (105 hm³/yr). Average combined discharge of Logan River above State dam and Logan, Hyde Park & Smithfield Canal, 78 years (1896-1974), 275 ft³/s (7.788 m³/s) 199,200 acre-ft/yr (246 hm³/yr). See REMARKS.

EXTREMES (River only).--Current year: Maximum discharge, 1,320 ft³/s (37.4 m³/s) June 6 (gage height, 5.54 ft or 1.689 m); minimum daily, 78 ft³/s (2.21 m³/s) Jan. 2.
 Period of record: Maximum discharge, 2,000 ft³/s (56.6 m³/s) Mar. 21, 1916, gage height, 5.6 ft or 1.71 m, datum then in use, from rating curve extended above 1,000 ft³/s (28.3 m³/s); minimum daily, 6 ft³/s (0.17 m³/s) Nov. 7, 1940.

(Combined flow, Logan River above State dam and Logan, Hyde Park & Smithfield Canal).--Current year: Maximum discharge, 1,350 ft³/s (38.2 m³/s) June 6; minimum daily, 84 ft³/s (2.38 m³/s) Jan. 2.
 Period of record: Maximum observed discharge, 2,480 ft³/s (70.2 m³/s) May 24, 1907; minimum daily, 50 ft³/s (1.42 m³/s) Jan. 21, 1935.

REMARKS.--Records good. Water diverted from river and springs above station for power, irrigation, and municipal supply. Flow regulated by Logan City powerplant above station. For records of combined flow of Logan River and Logan, Hyde Park & Smithfield Canal, see following page. Combined flow record excludes that in Logan City culinary pipe lines. During 1963 site of gaging station for Logan, Hyde Park & Smithfield Canal was changed; records of combined flow since that time are equivalent to previous records. Utah Power and Light Co. stopped diverting water from river November 1970 at which time the tailrace station was discontinued.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	133	111	65	105	101	166	427	1,010	550	230	165
2	129	121	114	78	101	118	186	520	1,010	520	227	165
3	127	114	111	65	101	116	174	576	1,620	503	227	163
4	125	116	112	105	99	109	167	584	1,060	482	224	165
5	125	114	109	111	105	107	160	691	1,200	461	215	163
6	123	120	109	104	97	111	163	735	1,230	444	213	160
7	121	123	112	105	96	111	165	802	1,120	431	215	158
8	118	131	111	104	93	112	169	915	993	411	215	156
9	121	125	105	102	96	112	186	964	890	395	210	154
10	118	121	104	105	96	112	199	1,020	855	379	210	149
11	120	118	111	105	94	118	186	865	865	368	202	152
12	115	111	112	107	96	126	204	816	870	350	202	152
13	116	127	112	107	101	127	189	778	920	339	196	152
14	118	129	111	105	97	125	161	735	945	332	194	152
15	118	123	109	107	99	131	191	683	988	325	194	152
16	120	121	107	105	99	137	207	624	1,010	328	191	152
17	120	121	111	109	101	145	238	633	1,000	318	191	149
18	120	121	109	109	97	167	291	706	975	308	184	149
19	112	123	102	111	102	167	308	740	955	301	181	149
20	118	116	102	111	101	160	316	749	930	314	161	152
21	118	116	105	109	95	153	285	665	900	361	184	154
22	118	118	107	101	101	149	304	615	860	308	181	163
23	116	114	109	105	94	149	372	593	826	281	179	163
24	111	116	104	105	94	145	465	593	783	273	177	163
25	114	114	105	104	96	143	541	669	740	269	172	158
26	112	114	102	107	99	147	606	778	702	256	174	156
27	111	114	102	102	99	154	524	960	669	253	167	158
28	108	112	112	104	101	172	448	1,120	653	250	163	160
29	112	114	109	104	-----	172	395	1,150	587	244	165	165
30	111	114	109	102	-----	174	363	1,060	576	244	165	160
31	114	-----	101	104	-----	199	-----	1,030	-----	235	163	-----
TOTAL	3,677	3,566	3,349	3,205	2,753	4,261	8,391	23,776	27,142	10,833	5,992	4,709
MEAN	119	120	106	103	96.3	137	280	767	905	349	193	157
MAX	129	133	114	111	105	199	606	1,150	1,230	500	230	165
MIN	105	112	101	78	95	101	160	427	576	235	163	149
AC-FT	7,290	7,120	6,640	6,360	5,460	8,450	16,640	47,160	53,840	21,490	11,890	9,340

CAL YR 1973 TOTAL 69,719 MEAN 191 MAX 855 MIN 101 AC-FT 138,300
 WTR YR 1974 TOTAL 101,676 MEAN 275 MAX 1,230 MIN 78 AC-FT 201,700

BEAR RIVER BASIN

1090. Logan River above State dam, near Logan, Utah—continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF LOGAN RIVER ABOVE STATE DAM
AND LOGAN, HYDE PARK & SMITHFIELD CANAL AT HEAD, NEAR LOGAN, UTAH,
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	136	119	91	110	106	167	462	1,060	651	309	239
2	147	130	122	84	106	123	167	556	1,080	628	306	239
3	144	125	119	89	106	118	175	613	1,100	610	306	237
4	142	125	120	111	104	114	168	621	1,130	566	302	234
5	142	123	117	117	110	112	161	691	1,250	566	293	229
6	140	129	117	110	102	116	164	786	1,260	549	291	226
7	138	132	120	111	101	116	166	853	1,150	535	293	223
8	135	140	119	110	98	117	170	967	1,020	514	293	221
9	136	134	113	108	101	117	187	1,030	920	497	288	219
10	133	130	110	111	101	117	200	1,050	885	480	287	214
11	135	127	117	111	99	123	187	906	901	469	279	217
12	133	130	118	113	101	125	204	887	942	450	279	217
13	131	136	116	115	106	132	189	849	997	438	272	217
14	133	138	117	111	102	130	181	805	1,030	430	270	217
15	133	131	115	113	104	136	192	752	1,060	423	270	217
16	135	129	113	111	104	141	212	693	1,060	426	266	217
17	135	129	117	115	106	149	242	702	1,070	415	266	214
18	135	129	115	115	102	171	294	776	1,060	404	259	214
19	135	131	108	117	107	171	310	811	1,040	396	256	214
20	133	126	108	117	106	164	320	820	1,020	395	256	217
21	133	124	111	115	98	157	287	734	962	377	259	212
22	133	126	113	107	106	153	310	664	942	361	256	210
23	133	122	115	111	99	153	389	661	905	358	254	210
24	133	126	110	111	99	149	481	661	875	355	252	210
25	129	122	111	110	101	147	557	739	842	350	246	205
26	127	122	108	112	104	151	622	647	603	337	248	203
27	126	122	108	107	104	158	540	1,020	770	334	248	205
28	123	120	118	109	106	176	463	1,160	733	330	247	197
29	126	122	119	109	-----	175	410	1,200	696	324	243	195
30	125	122	115	107	-----	176	403	1,120	674	324	239	190
31	125	-----	107	109	-----	200	-----	1,100	-----	315	237	-----
TOTAL	4,155	3,836	3,553	3,385	2,893	4,393	8,568	25,556	29,277	13,629	8,370	6,479
MEAN	134	128	115	109	103	142	285	824	976	440	270	216
MAX	147	140	122	117	110	200	622	1,200	1,260	651	309	239
MIN	123	120	107	84	98	106	161	462	674	315	237	190
AC-FT	8,240	7,610	7,050	6,710	5,740	6,710	16,970	50,690	58,070	27,030	16,600	12,850
CAL YR 1973	TOTAL	79,120	MEAN	217	MAX	923	MIN	107	AC-FT	156,900		
WTR YR 1974	TOTAL	114,084	MEAN	313	MAX	1,260	MIN	84	AC-FT	226,300		

BEAR RIVER BASIN

1170. Hammond (East Side) Canal near Collinston, Utah

LOCATION.--Lat 41°49'51", long 112°03'24", in SE¼ sec.27, T.13 N., R.2 W., Box Elder County, on right bank 3,600 ft (1,097 m) downstream from Cutler Dam and 4 mi (6 km) north of Collinston.

PERIOD OF RECORD.--June 1912 to current year. Prior to 1915, published as Hammond Ditch near Collinston. Monthly discharge only for some periods, published in WSP 1514.

GAGE.--Water-stage recorder. Prior to May 22, 1914, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--62 years, 51.2 ft³/s (1.450 m³/s) 37,090 acre-ft/yr (45.7 hm³/yr).

EXTREMES.--Maximum daily discharge, 184 ft³/s (5.21 m³/s) June 29, 1963; no flow at times in each year.

REMARKS.--Records good. Canal diverts from east side of Bear River in NW¼SW¼ sec.26 T.13 N., R.2 W., at dam at which West Side Canal and intake of Cutler powerplant also divert. Water from this canal and West Side Canal used for irrigation of about 58,000 acres (235 km²) below station in eastern Box Elder County.

COOPERATION.--Gage-height record and 5 discharge measurements furnished by Utah Power & Light Co.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	6.0					C	79	140	165	146	131
2	22	0					C	67	147	164	146	127
3	22	0					C	74	148	163	148	125
4	22	0					C	79	147	164	147	127
5	22	0					C	89	138	165	147	125
6	20	0					0	100	127	165	148	124
7	20	0					C	125	125	164	148	122
8	20	0					C	134	117	162	148	115
9	22	0					C	146	118	159	148	112
10	22	0					C	148	118	158	148	112
11	22	0					0	148	125	159	148	112
12	22	0					C	145	133	158	148	108
13	22	0					C	147	145	158	148	107
14	22	0					C	147	150	157	148	108
15	19	0					C	145	155	154	148	105
16	17	0					C	148	158	155	148	101
17	17	0					C	146	161	150	149	99
18	16	0					C	148	154	150	148	99
19	16	0					C	149	166	146	148	99
20	17	0					C	134	166	146	149	100
21	17	0					C	112	166	144	148	99
22	17	0					C	111	166	133	149	99
23	17	0					C	109	165	144	148	99
24	17	0					C	118	167	141	148	96
25	17	0					C	126	165	137	146	96
26	17	0					C	125	166	146	140	97
27	17	0					C	131	157	153	139	96
28	16	0					0	134	165	153	140	94
29	16	0					C	136	165	152	139	89
30	17	0					C	160	134	165	152	137
31	16	-----					-----	133	-----	149	136	-----
TOTAL	595	6.0	0	0	0	0	.80	3,862	4,495	4,768	4,526	3,206
MEAN	19.2	.23	0	0	0	0	.027	125	150	154	146	107
MAX	29	6.0	0	0	0	0	.80	149	167	165	149	131
MIN	16	0	0	0	0	0	0	67	117	133	136	88
AC-FT	1,180	12	0	0	0	0	1.6	7,660	8,920	9,460	8,900	6,360
CAL YR 1973	TOTAL	18,271.00	MEAN	50.1	MAX	174	MIN	0	AC-FT	36,240		
WTR YR 1974	TOTAL	21,458.80	MEAN	58.8	MAX	167	MIN	0	AC-FT	42,560		

BEAR RIVER BASIN

1175. West Side Canal near Collinston, Utah

LOCATION.--Lat 41°49'55", long 112°03'36", in SW¼ sec.27, T.13 N., R.2 W., Box Elder County, on left bank 4,200 ft (1,280 m) downstream from Cutler Dam and 4 mi (6.4 km) north of Collinston.

PERIOD OF RECORD.--June 1912 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Prior to May 22, 1914, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--62 years, 243 ft³/s (6.882 m³/s) 176,100 acre-ft/yr (217 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 763 ft³/s (21.6 m³/s) July 11, 1967; no flow for periods in every year except 1914.

REMARKS.--Records excellent. Canal diverts from west side of Bear River in NE¼SE¼ sec.27, T.13 N., R.2 W., at dam at which Hammond (East Side) Canal and intake of Cutler powerplant also divert. Water from this canal and Hammond (East Side) Canal used for irrigation of about 58,000 acres (235 km²) below station in eastern Box Elder County.

COOPERATION.--Gage-height record and 8 discharge measurements furnished by Utah Power & Light Co.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	104	87	75	71	45		171	703	759	689	691
2	177	104	87	75	70	44		194	703	759	697	677
3	177	104	87	75	70	44		269	701	755	691	669
4	177	104	86	75	70	44		334	703	753	681	661
5	175	103	86	75	70	38		340	666	755	677	653
6	176	103	85	75	71	30		427	615	757	673	643
7	175	103	85	75	71	29		474	599	757	675	639
8	176	103	85	75	70	28		532	565	755	673	637
9	176	103	85	75	69	28		627	563	755	697	632
10	176	103	84	75	69	27		679	565	757	701	620
11	175	102	81	75	69	26		685	595	747	685	615
12	175	103	80	75	68	26		669	639	747	675	594
13	175	102	80	75	68	26		661	679	739	681	565
14	175	97	80	75	68	26		661	701	727	687	548
15	157	97	80	75	58	23		667	709	715	691	550
16	140	96	79	75	66	13		681	711	715	701	539
17	140	96	78	75	65	13		679	721	709	699	529
18	139	96	78	75	64	5.0		661	741	707	699	527
19	140	95	78	75	65	0		681	741	713	699	527
20	139	95	78	75	55	0		596	743	705	699	527
21	140	94	78	75	64	0		489	745	683	695	527
22	139	94	78	75	56	0		512	747	667	685	527
23	139	94	78	74	45	0		565	741	663	679	527
24	137	94	77	72	45	0		563	741	659	681	533
25	137	94	76	72	45	0		575	739	671	681	542
26	127	94	76	71	45	0		588	741	681	681	537
27	120	94	76	70	45	0		616	745	675	681	526
28	120	93	77	70	45	0		675	753	681	681	520
29	119	87	77	70	-----	0		691	757	679	681	520
30	115	86	77	70	-----	0		701	759	675	685	520
31	104	-----	76	71	-----	0	-----	701	-----	677	691	-----
TOTAL	4,716	2,937	2,495	2,290	1,757	516.0	0	17,364	20,826	22,197	21,291	17,322
MEAN	152	97.9	80.5	73.9	62.8	16.6	0	560	594	716	687	577
MAX	177	104	87	75	71	45	0	701	759	759	701	691
MIN	104	86	76	70	45	0	0	171	563	659	673	520
AC-FT	9,350	5,830	4,950	4,540	3,490	1,020	0	34,440	41,310	44,030	42,230	34,360
CAL YR 1973 TOTAL	98,146.20			MEAN 269	MAX 735	MIN 0	AC-FT 194,700					
WTR YR 1974 TOTAL	113,711.00			MEAN 312	MAX 759	MIN 0	AC-FT 225,500					

BEAR RIVER BASIN

1180. Bear River near Collinston, Utah

LOCATION.--Lat 41°50'03", long 112°03'16", in NW¼SE¼ sec.27, T.13 N., R.2 W., Box Elder County, on right bank 800 ft (244 m) downstream from Cutler plant of Utah Power & Light Co., 2,000 ft (610 m) downstream from Cutler Dam, and 5.5 mi (8.8 km) north of Collinston.

DRAINAGE AREA.--6,267 mi² (16,232 km²), revised.

PERIOD OF RECORD.--July 1889 to current year. Published as "at Collinston" prior to 1900. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 4,276.13 ft (1,303.364 m) above mean sea level (levels by Bureau of Reclamation). Prior to Nov. 8, 1913, nonrecording gage, and Nov. 8, 1913 to Sept. 10, 1938, water-stage recorder, at site 0.8 mi (1.3 km) downstream at different datums.

EXTREMES.--Current year: Maximum discharge, 3,960 ft³/s (112 m³/s) Mar. 21, June 8 (gage height, 4.77 ft or 1.454 m); minimum daily, 192 ft³/s (5.44 m³/s) Aug. 17.

Period of record: Maximum discharge observed, 11,600 ft³/s (329 m³/s) June 7-10, 1909 (gage height, 7.70 ft or 2.34 m, site and datum then in use); minimum daily, 10 ft³/s (0.28 m³/s) Aug. 4-12, 18-23, 1905; practically no flow at 2400 Aug. 5, 1920.

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoir, power developments, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Eleven discharge measurements furnished by Utah Power & Light Co.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,120	1,100	1,190	1,470	2,030	2,320	3,190	3,820	3,110	797	390	713
2	1,720	1,770	1,570	1,300	2,570	2,990	3,140	3,780	3,080	786	536	805
3	1,376	1,290	1,790	1,200	2,110	3,370	3,360	3,360	3,050	848	641	613
4	1,750	690	1,510	1,500	2,210	3,320	3,280	3,430	2,690	747	609	327
5	1,450	1,410	1,640	1,400	2,090	3,210	3,040	3,500	2,880	579	620	1,390
6	1,670	1,370	2,040	600	1,350	3,200	2,690	3,590	3,000	240	375	817
7	1,620	1,270	1,570	1,500	2,280	3,780	2,760	3,600	3,030	319	728	1,110
8	1,890	1,150	2,100	1,700	2,300	3,870	2,590	3,450	3,600	540	711	952
9	1,630	1,140	1,990	1,800	1,950	3,860	2,580	3,800	3,700	1,060	803	728
10	1,400	1,410	1,870	1,700	1,760	3,870	2,760	3,750	3,450	309	374	756
11	1,820	1,460	1,830	1,740	1,950	3,870	2,810	3,790	3,200	233	889	983
12	1,560	1,540	1,830	1,590	1,410	3,860	3,100	3,790	2,990	468	802	1,090
13	1,390	1,170	1,840	2,010	1,420	3,800	3,240	3,790	2,770	650	845	1,180
14	1,840	1,760	1,690	1,750	2,050	3,810	3,280	3,770	2,730	328	929	1,140
15	1,490	1,340	1,570	2,040	2,660	3,880	3,190	3,770	2,430	496	810	1,160
16	1,960	1,890	2,310	1,900	2,640	3,840	2,970	3,370	2,460	789	803	1,300
17	1,470	1,580	1,820	2,030	2,680	3,710	3,060	3,010	2,880	899	192	748
18	1,280	1,570	1,890	2,320	2,410	3,680	2,960	2,770	2,630	693	204	1,150
19	1,460	1,760	1,450	2,390	1,490	3,740	2,820	2,160	2,330	882	952	1,250
20	1,760	1,460	2,070	2,740	2,690	3,700	3,120	2,090	1,550	709	477	1,070
21	1,200	2,410	1,500	3,040	2,300	3,860	3,240	2,840	1,810	705	551	1,230
22	2,550	1,310	1,700	2,880	1,780	3,550	3,290	2,970	2,330	466	643	1,190
23	1,250	1,970	2,250	2,740	2,110	3,260	3,340	2,950	1,640	843	906	1,220
24	1,590	1,630	1,810	2,690	1,910	3,050	3,350	2,930	1,790	804	544	950
25	1,750	1,400	1,760	1,900	1,240	2,860	3,430	2,930	1,070	848	618	737
26	1,580	1,810	2,040	2,860	1,510	2,720	3,680	1,950	1,200	638	775	843
27	1,830	1,520	1,690	2,550	2,030	2,800	3,820	2,400	1,150	605	913	485
28	1,810	1,290	1,400	2,180	1,890	2,610	3,840	2,320	987	599	777	483
29	1,360	1,450	2,660	2,300	-----	2,970	3,840	2,210	806	480	423	563
30	963	2,510	1,610	1,670	-----	2,940	3,820	3,080	720	405	256	826
31	1,290	-----	2,060	2,260	-----	3,060	-----	3,110	-----	656	704	-----
TOTAL	49,843	45,434	56,050	61,750	56,800	105,340	95,590	98,080	71,058	19,218	19,800	27,809
MEAN	1,608	1,514	1,808	1,992	2,029	3,398	3,186	3,164	2,369	620	639	927
MAX	2,550	2,510	2,660	3,040	2,690	3,880	3,840	3,820	3,700	1,060	952	1,390
MIN	963	690	1,190	600	1,240	2,320	2,580	1,950	720	233	192	327
AC-FT	98,866	90,110	111,200	122,500	112,700	208,900	189,600	194,500	140,900	38,120	39,270	55,160
CAL YR 1973	TOTAL	623,349	MEAN	1,708	MAX	3,720	MIN	20	AC-FT	1,236,000		
WTR YR 1974	TOTAL	706,768	MEAN	1,936	MAX	3,880	MIN	192	AC-FT	1,402,000		

BEAR RIVER BASIN

1260. Bear River near Corinne, Utah

LOCATION.--Lat 41°34'35", long 112°06'00", in SEWNEK sec.30, T.10 N., R.2 W., Box Elder County, on right bank 1.2 mi (1.9 km) downstream from Salt Creek, 2.0 mi (3.2 km) northeast of Corinne, and 2.8 mi (4.5 km) downstream from Malad River.

DRAINAGE AREA.--7,029 mi² (18,205 km²), revised.

PERIOD OF RECORD.--October 1949 to September 1957, October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,204.6 ft (1,281.56 m) unadjusted. Auxiliary nonrecording gage 7,800 ft (2,380 m) downstream July 27, 1950 to Nov. 21, 1955.

AVERAGE DISCHARGE.--19 years, 1,771 ft³/s (50.15 m³/s) 1,283,000 acre-ft/yr (1.58 km³/yr).

EXTREMES.--Current year: Maximum discharge, 4,340 ft³/s (123 m³/s) Mar. 12, 13 (gage height, 11.64 ft or 3.548 m); minimum daily, 195 ft³/s (5.52 m³/s) July 12.
 Period of record: Maximum discharge, 7,370 ft³/s (209 m³/s) June 17, 1971 (gage height, 15.12 ft or 4.609 m); minimum daily, 72 ft³/s (2.04 m³/s) Aug. 20, 21, 26, Sept. 8, 1964, July 5, 1970.

REMARKS.--Records good except those for winter months, which are fair. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas. Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,990	1,390	1,930	1,890	2,500	2,010	3,110	3,920	3,130	821	674	622
2	2,020	1,320	1,550	1,500	2,480	2,850	3,260	3,970	3,150	856	536	769
3	1,750	1,740	1,640	1,400	2,590	3,500	3,250	3,830	3,120	844	574	836
4	1,630	1,480	1,730	1,600	2,380	3,440	3,370	3,610	3,000	827	722	768
5	1,730	898	1,680	1,650	2,310	3,400	3,320	3,620	2,850	781	718	521
6	1,620	1,430	1,870	700	2,100	3,230	3,110	3,720	2,980	718	708	1,260
7	1,750	1,540	2,010	1,600	1,850	3,520	2,820	3,780	3,116	353	517	1,030
8	1,810	1,450	1,820	1,900	2,370	3,980	2,800	3,820	3,210	319	702	1,130
9	1,890	1,690	2,070	2,000	2,130	4,110	2,680	3,720	3,616	444	819	1,080
10	1,790	1,330	2,060	1,900	2,120	4,180	2,670	3,960	3,690	1,000	918	958
11	1,570	1,530	2,020	1,900	2,050	4,240	2,880	3,980	3,470	563	578	745
12	1,890	1,640	1,940	1,900	2,150	4,330	3,010	4,030	3,200	195	897	1,060
13	1,720	1,680	1,940	2,200	1,720	4,300	3,240	4,050	2,960	466	944	1,260
14	1,700	1,460	1,960	2,000	1,860	4,190	3,390	4,060	2,780	846	1,010	1,320
15	1,790	1,790	1,740	2,300	2,370	4,150	3,430	4,050	2,680	443	1,000	1,240
16	1,650	1,630	1,900	2,200	2,690	4,140	3,350	4,010	2,490	528	953	1,320
17	1,870	1,870	2,040	2,300	2,680	4,060	3,150	3,520	2,590	805	940	1,410
18	1,700	1,770	1,880	2,500	2,900	3,910	3,160	3,140	2,770	1,080	491	1,010
19	1,450	1,860	1,910	2,700	2,680	3,850	3,100	2,860	2,560	793	212	1,220
20	1,610	1,780	2,060	3,000	2,430	3,810	2,990	2,420	2,320	913	897	1,390
21	1,760	1,840	1,940	3,300	2,310	3,800	3,220	2,560	1,720	839	618	1,250
22	1,620	1,940	1,680	3,200	2,510	3,860	3,340	3,030	1,950	789	698	1,380
23	1,950	1,680	1,940	3,100	2,400	3,620	3,420	3,120	2,230	714	690	1,420
24	1,610	1,970	2,010	3,000	1,980	3,340	3,460	3,100	1,810	622	991	1,350
25	1,690	1,880	1,920	2,300	2,200	3,130	3,470	3,070	1,840	944	698	1,180
26	1,920	1,550	1,920	3,200	2,060	2,930	3,540	2,970	1,340	1,000	698	936
27	1,810	1,780	2,110	2,900	1,800	2,830	3,750	2,320	1,310	666	811	1,030
28	1,920	1,680	1,700	2,600	1,900	2,840	3,880	2,220	1,310	743	1,000	635
29	1,900	1,590	1,940	2,600	-----	2,760	3,920	2,300	1,100	678	901	640
30	1,510	1,770	2,140	2,250	-----	2,970	3,930	2,660	905	918	590	628
31	1,160	-----	1,890	2,200	-----	3,000	-----	3,070	-----	594	382	-----
TOTAL	53,770	48,898	58,940	69,700	63,520	110,280	98,020	104,490	75,185	21,842	22,887	31,438
MEAN	1,735	1,630	1,901	2,248	2,269	3,557	3,267	3,371	2,506	705	738	1,048
MAX	2,020	1,970	2,140	3,300	2,900	4,330	3,930	4,060	3,690	1,080	1,010	1,420
MIN	1,160	898	1,550	700	1,720	2,010	2,670	2,220	905	195	212	521
AC-FT	106,700	96,490	116,900	138,200	126,000	218,700	194,400	207,300	149,100	43,320	45,400	62,360
CAL YR 1973	TOTAL 696,197	MEAN 1,907	MAX 3,830	MIN 90	AC-FT 1,381,000							
WTR YR 1974	TOTAL 758,970	MEAN 2,079	MAX 4,330	MIN 195	AC-FT 1,505,000							