



C. A. ROBINS
GOVERNOR

STATE OF IDAHO
DEPARTMENT OF RECLAMATION

MARK R. KULP, STATE RECLAMATION ENGINEER

BOISE

January 12, 1948

Hon. C. A. Robins
Governor of Idaho
Building

Dear Governor Robins:

Herewith is transmitted the annual report of
Lynn Crandall, Watermaster of Water District No. 36,
and Special Deputy of the Department of Reclamation for
the administration of stored water.

Irrigation water supply was satisfactory
and holdover reservoir storage is substantial, being
about the same as last year.

Respectfully submitted

MARK R. KULP

State Reclamation Engineer



STATE OF IDAHO

DEPARTMENT OF RECLAMATION

LYNN CRANDALL, WATERMASTER

IDAHO FALLS, IDAHO

WATER DISTRICT NO. 36

January 8, 1948

Mr. Mark R. Kulp
State Reclamation Engineer
Boise, Idaho

Dear Mr. Kulp:

I am transmitting herewith the 1947 annual report of Water District No. 36 covering operations and water deliveries within that District as handled under the cooperative agreement between the State of Idaho, U. S. Geological Survey, and the Snake River Water users.

The year was one of ample water supply, no unusual administrative difficulties occurred and at the close of the 1947 irrigation season there remained 1,390,000 acre-feet of holdover in the reservoirs, about the same as on the same date a year previous.

As the year came to a close important groups of the water-users were in close agreement between themselves and the U. S. Bureau of Reclamation regarding terms for permanent disposal of the Government owned space in American Falls reservoir and of the storage water to be made available from Palisades reservoir. It is hoped that such agreements can be definitely concluded early in 1948 so that actual construction of the Palisades Project can begin this year.

I wish to express my thanks to you and the members of your staff, to the U. S. Bureau of Reclamation and its employees, to the members of the Committee of Nine, and to the Snake River canal companies for advice, assistance and services of various kinds, as well as a tolerant viewpoint towards each others problems, all of which have made it possible to administer the affairs of the District efficiently and equitably. Thanks are also due to the various employees of the District for capable and faithful service and particularly to Henry C. Eagle and Charlotte M. Elg for assistance in the preparation of this report.

Yours truly,

LYNN CRANDALL

Watermaster.

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INTRODUCTION

At the annual watermaster election, held in Idaho Falls on March 3, 1947, Lynn Grandall was elected as watermaster and the following were elected as members of the Committee of Nine:

John E. Kelley, Chairman, N. V. Sharp, Vice-Chairman, H. L. Crawford, Chas. Welteroth, Ival V. Goslin, Eph Ricks, Hyrum Severson, Stanley Loosli, and A. E. Stanger.

Advisory members: S. R. Marean and L. W. Hastings.
Secretary: John Lee.

The same schedule of stored water transmission losses in use for some years past was again approved by the water-users: 2½% Moran to Heise, 4.4% Heise to Lorenzo; 0.5% Lorenzo to Shelley; 6% Shelley to Blackfoot; 4% Lake to Island Park; 2% Island Park to Warm River; 0.5% Warm River to Ashton.

The meeting adopted a budget for the ensuing year of \$30,321.00 to cover expenses of operating the District.

Resolutions adopted by the water-users included the following:

1. Opposition to any attempts to establish a Columbia Valley Authority.
2. Recommendation that the Government owned space in American Falls reservoir be sold to those now leasing same.
3. Recommendation that public lands in the West be retained in Government ownership.

A bill (Section 41-518 Idaho Code Annotated) was passed by the 1947 Idaho Legislature, legalizing the method of collecting assessments being practiced in District 36.

An ample water supply was available in 1947 to all users who could be supplied with stored water. May and June were months of

abundant precipitation on the watershed and it has long been observed that a wet May and June means a good water year on Snake River.

All reservoirs filled to capacity with the first storage draft beginning at American Falls on July 1st. The reservoirs still held 1,390,000 acre-ft. or 48% of capacity when the irrigation season ended on Sept. 30, 1947.

The waste past Milner during the year ending Sept. 30, 1947, in excess of Idaho Power Co. rights, amounted to 1,700,000 acre-ft., of which about 64% was spilled during the non-irrigation season.

General rains thruout the valley brought an end on Sept. 18 to the use of stored water, except for some primary storage water being discharged past Milner after that date by the Idaho Power Co.

Stored water diverted during the season amounted to 1,527,770 acre-ft. or 97% of such diversions in 1946.

The Bureau of Reclamation continued its preliminary work on the Palisade dam project during the year. It is understood that actual construction of this dam could begin soon after any definite agreement is reached between that Bureau and the Snake River water-users regarding the disposal of Government owned space at American Falls, winter conservation of water and related matters. The water-users indicated during the year their adamant opposition to the Government proposal to use all of its remaining American Falls storage water on new lands and it seems apparent that this proposal will have to be modified before any agreement can be reached that would permit construction of Palisades dam.

PERSONNEL

The persons engaged in water distribution during 1947 were as follows:

Lynn Crandall	Watermaster & Deputy Com. of Reclamation
Henry C. Eagle	Assoc. Engineer and Deputy Watermaster
Melvin Luke	Deputy Watermaster & Hydrographer at St. Anthony
Oleen Dummer	Hydrographer
A. H. Bush	Hydrographer
Charlotte M. Elg	Clerk
J. Dean Hill	Deputy Watermaster & Hydrographer, Teton Basin
Don Riggs	Deputy Watermaster, Henrys Fork
Joe Bohi	Deputy Watermaster, Lower Teton R.
Norbert Lenz	Deputy Watermaster, Upper Fall River
D. R. Anthony	Deputy Watermaster, Heise Division
H. M. Bramwell	Deputy Watermaster, Rigby Division
D. W. Dick	Deputy Watermaster, Idaho Falls Division
Eugene Liljenquist	Deputy Watermaster, Blackfoot Division
R. H. Rambo	Deputy Watermaster, Milner Dam
Paul Wendell	Deputy Watermaster, Milner Dam
Lloyd Brown	Deputy Watermaster, Swan Valley Division
S. R. Marean	Supt. Minidoka Project, Bureau of Reclamation
A. W. Heath	Supt. Am. Falls Res., Bureau of Reclamation
James L. Braman	Supt. Jackson Lake, Bureau of Reclamation
S. Geo. Pilcher	Supt. Island Park Res., Bureau of Reclamation
J. J. Taylor	Supt. Grassy Lake, Bureau of Reclamation

Gage readers: Walter Sherwood, Joseph H. Bahr, Jr., Foster B. Randall, H. F. Reimann, D. L. Dutton, Mrs. Irvin Siefert, Walter C. Lenz, James Fugal, D. R. Anthony, Elwin Schofield, T. E. Culley, A. J. Ayers, Wm. Hall.

The watermaster was ill from July 1 to mid-September and the administration of the District, water regulation, etc., during this period was capably handled by Henry C. Eagle.

SNOW SURVEYS

Records of the snow measurements on the Jackson Lake watershed as made by the Bureau of Reclamation from 1919 to date are given in the following table:

Table showing average snow depth and
water content in inches on Jackson Lake watershed
(Observations made 14-21st of each month)

Year	January		February		March		April	
	Snow	Water	Snow	Water	Snow	Water	Snow	Water
1919	36	8.1	45	12.0	52	16.8	49	18.4
1920	40	9.6	54	13.8	74	21.5	70	23.0
1921			63	17.9	65	20.6	56	21.3
1922	54	14.2	72	18.2	73	22.0	64	23.4
1923	43	11.3	51	15.6	64	20.7	54	23.0
1924	44	10.8	47	13.5	51	15.8	48	17.7
1925	50	12.8	66	24.0	75	25.9	50	21.9
1926	32	9.0	52	14.0	49	16.6	40	15.6
1927	66	18.5	75	27.0	82	33.0	85	36.0
1928	58	18.0	59	20.4	69	23.8	80	31.5
1929	37	8.8	60	16.5	61	20.2	62	22.0
1930	36	8.3	49	13.5	53	16.8	27	11.7
1931	25	5.2	30	6.2	35	8.4	27	8.9
1932	47	12.1	64	20.0	69	24.0	61	25.0
1933	46	10.8	67	18.8	67	21.6	62	24.0
1934	36	8.5	35	12.9	40	15.3	33	15.7
1935	51	12.2	46	14.3	52	17.9	60	23.8
1936	61	13.8	77	23.1	82	29.9	75	32.0
1937	39	8.4	60	16.2	60	19.7	61	24.3
1938	42	11.3	61	18.9	65	22.5	67	27.7
1939	46	11.6	69	20.4	74	24.0	42	19.1
1940	28	6.3	43	11.3	55	18.5	40	17.6
1941	43	11.2	53	15.3	49	15.8	34	13.5
1942	35	9.6	50	14.5	53	16.6	35	14.1
1943	67	23.2	91	33.3	100	37.4	67	33.7
1944	25	5.6	38	9.0	49	13.5	37	13.6
1945	35	9.0	61	15.4	56	18.7	56	20.3
1946	47	14.2	65	20.0	70	23.6	58	23.7
1947	50	14.4	57	19.1	69	23.6	64	24.8
Average, inches	43	11.3	57	17.1	62	20.8	54	21.6

The above table is the average of results at Moran, Moran Canyon, Arizona Station, Huckleberry Divide, Snake River Station, Coulter Creek, Lewis Lake Divide, Aster Creek, and Glade Creek.

The 1947 water content as a percentage of average was as follows: January 127%, February 112%, March 113%, April 115%. The 1947 run-off at Moran was 110% of average.

The results of snow measurements by the Bureau of Reclamation on the Buffalo River watershed are shown in the following table. Buffalo River, which enters Snake River about six miles below Moran, drains a region of high elevation and is one of the last of the Snake River tributaries to reach its peak flow each year.

Table showing average snow depths and water content in inches on Buffalo River watershed

<u>Year</u>	<u>Feb. 1-6</u>		<u>Mar. 23-29</u>	
	<u>Snow</u>	<u>Water</u>	<u>Snow</u>	<u>Water</u>
1924	40	11.2		
1925	48	13.6		
1926	42	11.5		
1927	43	11.9		
1928	44	12.4		
1929	38	10.2		
1930	41	10.5		
1931	17	4.0		
1932	35	9.1		
1933	34	10.0		
1934	27	7.8		
1935	40	11.0		
1936	46	11.9	61	21.0
1937	33	8.4	45	13.8
1938	50	13.0	62	19.4
1939	45	12.2	52	17.3
1940	29	6.3	40	12.0
1941	36	9.3	46	14.6
1942	38	9.4	48	13.4
1943	67	22.7	74	29.7
1944	35	7.9	50	13.3
1945	38	9.5	54	16.8
1946	53	13.0	56	18.6
1947	53	15.2	60	20.8
Average inches	40	10.9	54	17.5

The foregoing figures are the average of results obtained at Turpin Meadows, Four-Mile Meadows, Black Rock, and Twogwotee Pass.

The 1947 snow survey on the Buffalo River watershed showed 140% of average in February and 119% late in March.

Beginning with 1936 snow surveys have been made available by the Irrigation Division, Soil Conservation Service, Department of

Agriculture in cooperation with the Forest Service, Bureau of Reclamation, National Park Service, and State of Idaho. Results of such measurements at the principal stations on the upper Snake River drainage are as follows:

Depth in Inches

		<u>Last of</u>		<u>Last of</u>		<u>Last of</u>		<u>Last of</u>		<u>Last of</u>	
		<u>Dec.</u>		<u>Jan.</u>		<u>Feb.</u>		<u>Mar.</u>		<u>Apr.</u>	
		<u>Snow</u>	<u>Water</u>	<u>Snow</u>	<u>Water</u>	<u>Snow</u>	<u>Water</u>	<u>Snow</u>	<u>Water</u>	<u>Snow</u>	<u>Water</u>
<u>Valley View Ranch (Henrys Fork)</u>											
1936 Season	22		5.0	-	-	-	-	58	19.8		
1937 "	23		3.1	-	-	-	-	47	13.8	31	12.2
1938 "	-		-	-	-	-	-	62	20.0	30	12.5
1939 "	22		3.8	-	-	-	-	40	12.2		
1940 "	8		0.7	21	4.0	33	7.8	31	10.1		
1941 "	20		2.9	-	-	-	-	32	9.3		
1942 "	21		4.0	-	-	-	-	38	10.9		
1943 "	31		6.5	-	-	-	-	58	21.1	14	6.3
1944 "	14		2.6	-	-	-	-	41	10.5		
1945 "	22		2.8	-	-	-	-	38	10.0		
1946 "	34		7.2	-	-	46	12.4	50	15.5		
1947 "	37		8.8	43	11.2	49	13.4	46	14.3		
Average	23		4.3	32	7.6	43	11.2	45	14.0	25	10.4

Big Springs (Henrys Fork)

1936 "	24		5.5	54	15.6	65	21.8	70	23.3		
1937 "	26		3.4	52	10.5	63	17.6	59	20.2	41	17.9
1938 "	28		6.5	40	9.6	53	14.8	72	23.3	32	12.0
1939 "	31		7.8	48	11.4	60	18.3	50	17.8		
1940 "	11		0.9	27	6.1	46	11.9	41	14.0		
1941 "	34		6.0	46	11.2	47	13.0	45	14.2		
1942 "	30		5.1	47	10.4	55	15.4	48	16.0		
1943 "	53		12.9	82	23.9	87	29.6	76	30.0	32	15.9
1944 "	11		1.6	29	6.1	48	12.0	52	15.2		
1945 "	26		3.6	30	7.0	49	13.3	54	16.4		
1946 "	47		9.9	54	13.6	60	18.7	65	23.2		
1947 "	44		12.3	52	15.0	58	17.5	58	20.7		
Average	30		6.3	47	11.7	58	16.9	58	19.5		

Island Park (Henrys Fork)

1936 Season	21		4.2	41	11.0	54	15.6	50	16.0		
1937 "	25		3.0	44	9.0	51	14.6	48	14.5	33	12.1
1938 "	26		5.9	37	8.2	48	11.9	64	19.5	18	7.6
1939 "	24		4.9	48	10.1	53	14.4	33	11.2		
1940 "	10		1.0	27	5.1	41	10.9	35	11.7		
1941 "	28		4.1	38	8.4	40	10.3	32	9.6		
1942 "	29		4.9	42	9.7	47	12.5	41	13.1		
1943 "	42		9.8	70	19.1	70	23.3	59	20.6	0	0

Last of Dec.		Last of Jan.		Last of Feb.		Last of Mar.		Last of Apr.	
Snow	Water	Snow	Water	Snow	Water	Snow	Water	Snow	Water

Island Park (Henrys Fork) cont'd

1944 Season	11	1.0	24	3.6	39	8.3	43	11.7	
1945 "	22	3.1	26	5.2	42	10.5	35	11.3	
1946 "	36	8.0	45	10.2	53	14.4	50	17.1	
1947 "	37	8.9	42	10.6	47	13.8	46	15.1	
Average	26	4.9	40	9.2	49	13.3	45	14.3	

Grassy Lake (Fall R.)

1940 Season	34	13.3	50	21.5	78	32.6	66	33.0	47	28.4
1941 "	61	18.2	72	23.7	75	27.5	64	23.9	57	28.6
1942 "	40	13.2	52	16.9	71	23.6	66	23.9	45	20.8
1943 "	74	19.4	114	36.1	113	42.3	106	42.8	82	44.8
1944 "	36	8.6	42	10.8	61	17.1	63	22.1	44	19.0
1945 "	60	11.1	60	17.1	79	27.3	84	31.6	83	32.2
1946 "	66	17.8	90	24.2	89	31.2	87	35.3	82	35.1
1947 "	49	13.5	63	19.2	65	22.7	77	29.2	74	29.6
Average	52	14.4	68	21.2	79	28.0	77	30.0	64	29.8

Bechler Ranger Sta. (Fall R.)

1936 Season	40	9.6	71	20.6	87	29.1	87	31.0		
1937 "	26	4.5	59	13.1	72	22.3	68	24.8	58	26.0
1938 "	32	8.2	52	14.1	59	18.9	91	29.4		
1939 "	39	10.0	69	17.2	85	25.1	57	24.4	18	8.3
1940 "	31	6.1	43	12.8	56	18.0	63	25.0	31	15.8
1941 "	42	9.4	58	15.3	59	18.8	46	16.4		
1942 "	30	6.9	46	12.4	62	18.3	58	20.2	25	9.7
1943 "	-	-	-	-	99	34.0	82	35.0	35	19.0
1944 "	-	-	32	7.5	45	12.3	48	15.4	22	8.3
1945 "	40	6.4	38	9.9	58	18.7	63	20.5	42	17.7
1946 "	37	8.1	54	15.4	74	23.5	65	25.0	-	-
1947 "	37	10.9	52	14.4	49	16.1	51	17.9	31	13.4
Average	35	8.0	52	13.9	67	21.3	65	23.8	33	14.8

Teton Pass #2 (Teton R.)

1936 "	35	9.6	93	25.4	125	41.0	145	48.0		
1937 "	-	-	51	14.8	78	25.7	90	31.4		
1938 "	41	11.7	-	-	86	33.0	121	44.9		
1939 "	61	17.1	69	20.8	97	34.3	96	37.1		
1940 "	18	1.3	60	14.3	76	21.5	79	28.8		
1941 "	51	12.0	64	15.3	71	19.7	70	23.9		
1942 "	41	10.1	56	18.2	72	24.4	79	27.8		
1943 "	76	24.4	125	47.0	131	55.0	149	66.4		
1944 "	-	-	34	8.6	69	15.6	65	21.9		
1945 "	51	10.1	54	15.6	77	24.1	95	30.8		
1946 "	61	18.9	83	24.5	87	31.1	92	34.5		
1947 "	66	21.8	78	27.0	89	31.0	107	42.0		
Average	50	13.7	70	21.1	88	29.7	99	36.5		

	Last of Dec.		Last of Jan.		Last of Feb.		Last of Mar.		Last of Apr.	
	Snow	Water	Snow	Water	Snow	Water	Snow	Water	Snow	Water
<u>State Line (Teton R.)</u>										
1936 Season	21	4.0	49	11.4	66	21.0	75	28.0		
1937 "	-	-	32	8.1	45	12.6	42	15.0	27	11.8
1938 "	15	2.0	-	-	41	12.9	56	20.7		
1939 "	31	6.1	34	7.1	46	12.1	35	12.8		
1940 "	6	0.4	31	5.2	36	8.6	27	10.1		
1941 "	30	5.0	36	7.3	42	10.1	30	9.7		
1942 "	24	4.0	33	9.1	39	12.0	39	12.4		
1943 "	46	13.7	65	21.3	67	24.0	64	26.2		
1944 "	-	-	24	5.1	35	8.3	36	8.4		
1945 "	31	5.6	28	7.0	39	10.3	45	13.1		
1946 "	30	7.1	49	11.0	46	13.2	40	14.0		
1947 "	22	6.1	35	8.8	39	11.0	33	11.0		
Average	26	5.4	38	9.2	45	13.0	43	15.1		

<u>East Rim (Hoback R.)</u>										
1936 Season	10	1.7	-	-	-	-	62	22.6		
1937 "	17	2.8	-	-	-	-	38	12.2	35	12.9
1938 "	19	4.0	-	-	-	-	45	13.2	20	6.9
1939 "	23	4.9	-	-	-	-	33	7.2	-	-
1940 "	-	-	-	-	25	7.0	24	6.0	-	-
1941 "	-	-	-	-	35	10.4	32	11.0	-	-
1942 "	-	-	-	-	32	7.0	32	7.9	-	-
1943 "	-	-	-	-	51	15.9	54	18.1	-	-
1944 "	-	-	-	-	27	5.8	31	7.1	-	-
1945 "	-	-	-	-	31	6.8	33	8.6	-	-
1946 "	-	-	-	-	39	9.5	41	11.6	-	-
1947 "	-	-	-	-	32	8.2	35	9.7	20	7.0
Average	17	3.4	-	-	34	8.8	38	11.4	25	8.9

<u>Bryan Flat (Hoback R.)</u>										
1936 Season	11	1.7	32	7.1	45	15.8	55	19.5		
1937 "	14	2.2	19	4.4	34	9.2	30	10.3	15	5.6
1938 "	13	2.8	21	5.5	26	6.7	39	11.4	0	0
1939 "	17	3.9	30	6.6	31	8.4	24	8.0		
1940 "	4	0.3	20	4.6	20	6.5	16	4.3		
1941 "	24	5.3	26	5.8	33	9.5	23	9.0		
1942 "	19	3.2	23	5.2	29	5.4	28	7.4		
1943 "	42	10.9	55	13.5	57	17.4	44	14.4		
1944 "	5	0.8	14	2.0	19	3.2	21	5.2		
1945 "	22	3.5	23	4.0	28	7.7	31	7.7		
1946 "	25	5.4	35	7.2	38	7.2	33	9.4		
1947 "	18	4.1	25	6.5	25	7.4	24	9.0	0	0
Average	18	3.7	27	6.1	32	8.7	30	9.6		

<u>Yellowjacket Flat (Gros Ventre R.)</u>										
1936 Season	8	1.0	20	2.9	36	10.2	38	11.3	-	-
1937 "	9	1.2	13	2.3	22	4.3	20	4.4	10	2.9
1938 "	12	2.8	16	3.2	21	4.2	31	7.5	0	0

	Last of Dec.		Last of Jan.		Last of Feb.		Last of Mar.		Last of Apr.	
	Snow	Water	Snow	Water	Snow	Water	Snow	Water	Snow	Water

Yellowjacket Flat (Gros Ventre R.) cont'd.

1939 Season	16	2.6	20	3.9	26	5.2	19	5.1	-	-
1941 "	-	-	19	3.3	-	-	23	5.1	-	-
1942 "	-	-	21	3.3	-	-	21	4.3	-	-
1943 "	-	-	-	-	47	10.1	45	12.3	-	-
1944 "	-	-	-	-	16	1.0	20	4.7	-	-
1946 "	-	-	-	-	26	5.9	28	5.7	-	-
1947 "	-	-	-	-	24	5.4	25	5.9	0	0
Average	11	1.9	18	3.2	27	5.8	27	6.6		

Grover Park Divide (Salt River)

1936 Season	16	3.4	46	12.6	46	15.8	69	19.6		
1937 "	23	4.1	24	4.5	36	10.8	36	11.4		
1938 "	16	4.2	25	5.6	25	7.9	42	12.4		
1939 "	-	-	23	6.4	36	9.4	20	7.6		
1940 "	13	2.0	26	6.6	31	9.9	25	9.8		
1941 "	27	4.6	30	7.0	31	9.1	21	8.0		
1942 "	-	-	26	5.2	31	8.5	28	8.8		
1943 "	33	7.6	46	13.8	43	13.9	45	15.2		
1944 "	16	3.0	24	4.4	27	6.1	36	7.8		
1945 "	31	4.2	28	5.4	32	8.2	42	11.2	29	10.1
1946 "	25	4.1	44	8.0	39	10.0	32	9.1		
1947 "	20	4.8	30	6.8	34	8.1	26	8.3	0	0
Average	22	4.1	31	7.2	34	9.8	35	10.8		

CCC Camp FF12 (Salt River)

1936 Season	23	5.9	35	10.7	53	17.1	71	22.7		
1937 "	17	3.5	22	4.4	36	9.2	35	12.3		
1938 "	18	4.4	30	6.7	32	8.4	43	13.2		
1939 "	-	-	29	5.7	36	10.2	21	7.8		
1940 "	9	1.0	26	5.9	27	8.8	22	8.4		
1941 "	23	4.4	25	6.6	31	8.1	23	8.2		
1942 "	-	-	24	4.5	29	6.8	26	7.2		
1943 "	33	7.4	50	14.7	46	14.2	48	15.7		
1944 "	16	2.1	21	3.8	28	5.9	40	9.3	12	4.1
1945 "	-	-	26	5.3	34	9.3	40	10.5	22	8.6
1946 "	24	4.6	32	7.1	38	8.5	32	9.0		
1947 "	25	5.3	37	8.4	38	9.9	32	10.6	16	6.3
Average	21	4.3	30	7.0	36	9.7	36	11.2	17	6.3

Deadman Ranch (Greys R.)

1936 Season	19	2.6	36	9.6	58	19.1	77	24.8		
1937 "	15	2.5	24	5.1	37	9.3	32	9.4		
1938 "	13	2.5	24	4.9	26	7.6	35	10.5		
1939 "	28	4.1	36	6.6	36	9.4	T	T		
1940 "	T	T	22	3.4	20	3.1	0	0		
1941 "	29	5.9	29	8.0	31	10.7	20	8.0	0	0
1942 "	19	2.0	24	3.8	31	5.8	29	6.7		
1943 "	-	-	59	17.4	57	19.8	54	18.4	0	0
1944 "	-	-	16	1.3	18	2.9	20	5.3		

	Last of Dec.		Last of Jan.		Last of Feb.		Last of Mar.		Last of Apr.	
	Snow	Water	Snow	Water	Snow	Water	Snow	Water	Snow	Water
<u>Deadman Ranch</u> (Greys R.) Cont'd.										
1945 Season	28	4.0	26	4.0	33	8.8	32	8.5	18	6.0
1946 "	29	3.9	34	7.5	37	10.6	25	9.2		
1947 "	20	6.5	28	5.7	27	7.8	18	6.3	0	0
Average	20	3.4	30	6.4	34	9.6	29	8.9		
<u>Greys Boundary</u> (Greys River)										
1936 Season	-	-	38	9.3	46	14.9	50	18.9		
1937 "	-	-	25	3.0	40	10.3	31	11.6		
1938 "	16	3.9	29	6.9	29	8.6	32	12.4		
1939 "	-	-	41	8.0	44	13.3	23	7.6		
1940 "	2	0.2	29	7.2	28	9.5	14	6.1		
1941 "	-	-	26	5.6	28	8.9	16	5.9		
1942 "	24	4.1	26	5.9	36	8.1	31	8.9		
1943 "	44	10.5	46	12.2	47	15.5	41	14.7	0	0
1944 "	7	1.0	18	3.0	20	4.9	18	5.3		
1945 "	26	4.8	25	5.5	32	9.1	40	13.1	16	5.5
1946 "	28	6.9	42	8.6	42	12.9	30	11.5		
1947 "	14	3.7	20	5.7	21	6.7	16	6.6	0	0
Average	20	4.4	30	6.7	34	10.2	28	10.2		
<u>Somsen's Ranch</u> (Greys Lake)										
1936 Season	-	-	35	10.5	51	16.5	64	20.7		
1937 "	-	-	28	5.6	36	10.7	36	12.0		
1938 "	-	-	25	5.4	29	7.6	40	12.6		
1939 "	-	-	33	6.2	38	9.8	15	5.5		
1940 "	-	-	24	5.0	26	7.8	19	6.9		
1941 "	-	-	27	6.0	31	8.3	26	7.9		
1942 "	-	-	29	6.8	33	9.1	33	9.5		
1943 "	-	-	51	15.3	48	15.8	48	17.2	0	0
1944 "	-	-	19	2.4	23	4.2	30	7.0		
1945 "	-	-	24	5.8	37	9.0	43	12.6	28	9.5
1946 "	-	-	35	9.5	39	11.8	35	13.8		
1947 "	-	-	31	7.8	35	9.8	27	9.5		
Average	-	-	30	7.2	36	10.0	35	11.3		

At the end of March 1947 the snow supply (water content) averaged the following % normal on different sections of the watershed: Jackson Lake 113%, Tributaries Jackson Lake to Heise 90%, Island Park 104%, Fall River 86%, Teton River 94%. The runoff for 1947 was 110% of normal at Moran, 105% at Heise, 107% from Island Park, 109% on Fall River, and 103% on Teton River. The actual runoff, except at Moran, was somewhat greater than was indicated by the

snow surveys, probably due to the May and June precipitation being above normal.

REGULATION SCHEDULE

The following schedule shows rights being filled during 1947:

July 2	Cut off Jan. 22, 1916 rights.
" 5	Cut off rights later than Oct. 7, 1905.
" 8	Filled part of Aug. 6, 1908 right.
" 9	Filled 50% Oct. 7, 1905 right.
" 10	Filled 20% Oct. 7, 1905 right.
" 11	Filled all Oct. 7, 1905 right.
" 12	Filled 50% Oct. 7, 1905 right.
" 14	Cut off rights later than Mar. 26, 1903.
" 21	Cut off all 1900 priorities above Blackfoot.
" 25	Cut off 1898 priorities.
" 27	Cut off 1896 priorities.
" 29	Filled 50% of Feb. 6, 1895 right.
Aug. 3	Restored Feb. 6, 1895 right.
" 4	Restored July 9, 1896 right.
" 8	Cut off 1896 priorities.
" 10	Restored July 9, 1896 priorities.
" 16	Cut off 1896 priorities.
" 17	Filled 70% Feb. 6, 1895 right.
" 18	Filled 10% Feb. 6, 1895 right.
" 19	Cut off Feb. 6, 1895 right.
" 20	Cut off all 1895 rights.
" 21	Cut off Aug. 18, 1894 rights.
" 23	Restored rights prior to Feb. 6, 1895.
" 24	Filled 50% Feb. 6, 1895 right.
" 28	Cut off Feb. 6, 1895 right.
Sept. 4	Cut off 1894 rights.
" 5	Filled 20% Dec. 14, 1891 right.
" 6	Cut off all 1891 rights.
" 10	Restored June 1, 1891 rights.
" 11	Filled 80% Feb. 6, 1895 rights.
" 13	Filled 50% Feb. 6, 1895 rights.
" 16	Cut off 1893 rights.
" 18	Restored all rights - discontinued regulation.

Storage draft at American Falls charged to the canal companies began on July 1. That reservoir reached its lowest level on Sept. 18 after which storage began to accumulate for 1948. Stored water release from Jackson Lake began July 9, from Henrys Lake July 31, and Island Park July 12. No stored water was used from Grassy Lake in 1947 but about 2,000 acre-feet were spilled as a precautionary

measure by the Government late in September after water regulation had been discontinued.

The 1916 priority flood water rights in the upper valley were cut off on July 2, one day earlier than in 1946. On July 21 the 1900 priorities were cut which means that no normal flow was discharged past Blackfoot after that date. During most of the regulation period thereafter the normal flow rights being filled hovered in the neighborhood of the Feb. 6, 1895 priority of the Aberdeen-Springfield canal, this right being intermittently off and on or partly filled. The low point of the cuts was reached Sept. 6-10 when all 1891 rights were cut off.

The rains of Sept. 17-18 were of sufficient magnitude to greatly reduce the use of irrigation water, thereby permitting storage to begin in the reservoirs and also maintain an ample flow past Blackfoot thereafter.

The run-off of Teton River in 1947 was sufficient to fill all demands on that stream thruout the season without requiring the diversion of any water thru the Cross Cut canal. Teton River rights were regulated according to the Snake River schedule.

From July 12 to 25th the rights on Henrys Fork and Fall River were cut to priorities several years earlier than those being filled on Snake River, due to inadequate local supply of natural flow.

The natural flow arising below Blackfoot July 21 to Sept. 18 was delivered to the Twin Falls Canal Co. and North Side Canal Co. in accordance with their decree of Oct. 11, 1900 priority. Whenever the rights are cut to earlier than 1900 priority the upper valley canals are entitled to all the normal flow above Blackfoot, and at

such times the river below Blackfoot is operated as a separate stream insofar as normal flow rights are concerned with its normal flow supplied entirely from water entering the river below Blackfoot.

WATER SUPPLY

Run-off at typical measuring stations during the year ending September 30, 1947, was as follows:

<u>Station</u>	<u>1947 run-off (acre-ft.)</u>	<u>Average run-off past years (acre-ft.)</u>	<u>Years record</u>	<u>1947 per- cent of average</u>
Snake R. at Moran	1,129,000	1,028,000	44	110
Snake R. nr. Heise	5,287,000	5,034,000	44	105
Snake R. at Neeley	5,326,000	5,668,000	51	94
Fall R. nr. Squirrel	588,200	538,400	34	109
Teton R. nr. St. Anthony	556,400	541,100	20	103
Henrys Fk. at Warm River	765,800	718,200	33	107
Henrys Fk. nr. Rexburg	1,384,000	1,389,000	39	100

The run-off at Moran and Heise has been corrected for Jackson Lake holdovers; at Neeley for American Falls holdovers; at Warm River for Henrys Lake and Island Park holdovers; at Rexburg for Henrys Lake, Island Park and Grassy Lake holdovers; at Squirrel for Grassy Lake holdovers; and at St. Anthony for discharge from Cross Cut Canal into Teton River.

The run-off was normal or above at all stations except Neeley where the present run-off is decreased by losses in American Falls reservoir and increased diversions by upper valley canals over what occurred in similar years prior to the building of American Falls dam, which earlier run-off is included in computing the average of past years.

Peak flow of Snake River at Heise occurred on June 10, amounting to 25,100 sec.-ft., of which about 7,600 sec.-ft. was being spilled from Jackson Lake. This is about the same peak flow that occurred in 1946.

The peak flow at Clough ranch station near Blackfoot was 24,300 sec.-ft. on June 12-13. Flood protection works built by the Army Engineers prevented this discharge from causing substantial damage that otherwise would likely have occurred. The canals on the north side of the river between Heise and Lorenzo were able to divert a little more water during the season than a year ago but at times were unable to divert the full amount desired due to the river being too low.

Water spilled past Milner, in excess of Idaho Power Co. rights, since American Falls reservoir was built, is shown in the following tabulation:

Water Spilled Past Milner in Excess of Idaho
Power Company Rights

<u>Year ending</u> <u>Sept. 30</u>	<u>Acre-feet</u>	<u>Year ending</u> <u>Sept. 30</u>	<u>Acre-feet</u>
1927	1,600,000	1937	382,000
1928	3,830,000	1938	1,300,000
1929	1,900,000	1939	900,000
1930	1,120,000	1940	85,000
1931	350,000	1941	3,000
1932	0	1942	499,000
1933	0	1943	2,680,000
1934	0	1944	1,700,000
1935	0	1945	988,000
1936	620,000	1946	2,520,000
		1947	1,700,000

During recent years enough water has been available to operate the Minidoka power plant during the winter months and still fill American Falls reservoir. Future dry years, however, are apt to occur any time in which the use of this power right of earlier priority may prevent American Falls reservoir from filling.

The following table shows reservoir holdovers during the past ten years:

Holdovers on Sept. 30 in acre-feet

<u>Year</u>	<u>Jackson Lake</u>	<u>American Falls</u>	<u>Lake Walcott</u>	<u>Henrys Lake</u>	<u>Island Park</u>	<u>Grassy Lake</u>	<u>Total</u>
1938	398,710	684,720	79,480	25,100	0	0	1,188,010
1939	313,170	252,050	76,770	49,200	52,700	0	743,890
1940	166,350	264,380	- 900	36,500	17,050	520	483,900
1941	226,110	319,800	18,850	38,900	39,230	8,170	651,060
1942	321,330	410,360	93,550	43,810	60,620	10,910	940,580
1943	650,340	897,050	42,710	76,200	84,050	14,750	1,765,100
1944	300,570	534,450	78,020	55,900	51,900	6,420	1,027,260
1945	568,030	924,820	91,460	64,200	56,775	13,400	1,718,685
1946	402,740	718,970	83,770	62,700	51,465	12,110	1,331,755
1947	463,990	686,770	94,950	55,600	75,520	13,220	1,390,050
Average	381,130	569,340	65,870	50,810	54,400(a)	9,950(b)	1,131,500

(a) 9 years

(b) 8 years

The combined capacity of these reservoirs when full is 2,872,000 acre-ft. The 1947 holdover was about 48% of capacity. The holdover has been in excess of 1,000,000 acre-ft. for the past five years indicating that this was a period of unusually favorable water supply. During this same period there has been a considerable increase in dry farm acreage in eastern Idaho as a result of presently profitable yields of wheat from such lands. How long such favorable conditions will continue is of course unknown, but based on past experience another drought cycle may be expected sooner or later, and the waterusers should not neglect to provide themselves with an additional supply of stored water whenever possible against such a contingency.

TRANSFERS AND EXCHANGES

Two water transfers were made under the provisions of the Idaho Statutes:

- Transfer No. 708 Teton Island Canal and Salem Irrigating Canal Co.; 3.2 sec.-ft. May 15, 1883 priority, waters of Teton River originally decreed to N. P. Hansen; transferred 1.6 sec.-ft. to lands under Teton Island Canal and 1.6 sec.-ft. to lands under Salem Irrigating Canal Co.
- No. 714 Vernal G. Park, 3.8 sec.-ft. of waters of Snake River, June 1, 1885 priority, originally decreed to Butler Island Canal Co., transferred to Harrison Canal.

One sec.-ft. of Kelley Springs water was spilled into the river and diverted thru the Sunnyside Canal. Two sec.-ft. of Long Island water was diverted thru the White ditch.

LITIGATION

The following rights were awarded by the District Court in Fremont County in summary suits against the watermaster:

D. Worth Smith and Geo. D. Keyser, Jr.: 10 sec.-ft. of the waters of Indian Creek (5 sec.-ft. to each plaintiff) with priority of July 5, 1900. These rights were based on old filings and actual use for many years but same had never been previously decreed.

A. E. Bramwell and Viola M. Bramwell: 15.6 sec.-ft. Feb. 20, 1909 priority, of the waters of Snake River to be diverted from the "Great Feeder" or "Dry Bed." This right is based on use of water according to testimony of the plaintiffs. The land is located near the lower end of the Great Feeder.

CANAL DELIVERIES

Daily diversions from Snake River during the 1947 irrigation season by canals between Hoise and Blackfoot are shown on Plates 6 to 10 inclusive. Daily diversions thruout the year by lower valley canals are shown on Plates 34 to 44 inclusive. Measurements on some of the principal canals and streams on the headwater areas are shown on Plate 24.

Total diversions during the irrigation season by all users in the District, including headwater areas, as computed for the 1947

watermaster bill, amounted to 7,440,000 acre-ft. or 190,000 acre-ft. more than in 1946.

Diversions during 1947 irrigation season by
Snake River Canals (downstream order from Heise)

Canal	Diversions (acre-ft.)	Acres Irrigated	Acre-feet per acre
Riley	4,690	800	5.9
Anderson & Eagle Rock	228,000 (a)	31,508	7.2
Farmers Friend	82,500	10,300	8.0
Enterprise	34,000	5,000 (b)	6.8
Nelson	350	60	5.8
Mattson & Arnsberger	3,420	500	6.8
Ross & Rand	900	160	5.6
Butler Island	12,300	1,150	10.7
Steele	2,020	280	7.2
Harrison	114,000	12,000	9.5
Cheney	1,440	200	7.2
Rudy & Boomer	50,000	5,500	9.1
Kite & Nord	1,560	235	6.6
Burgess	221,000	22,000	10.0
Clark & Edwards	19,700	1,800	10.9
Lowder & Jennings	10,600	1,000	10.6
East Labelle	31,500	2,400	13.1
Sunnydell	36,200	3,760	9.6
Lenroot	30,300	4,000	7.6
Reid	38,200	5,300	7.2
Texas Feeder	63,600	9,000	7.1
Nelson Corey	2,240	460	4.9
Hill Pottinger	650	150	4.3
Rigby	47,200	4,000	11.8
Dilts	7,910	600	13.2
Island	37,800	3,500	10.8
W. Labelle & Long Island	118,000	9,000	13.1
Parks & Lewisville	84,100	7,000	12.0
No. Rigby	14,700	1,500	9.8
White	1,120	160	7.0
Ellis	1,130	100	11.3
Bramwell	1,250	180	7.0
Butte & Market Lake	84,800	18,000	4.7
Osgood	26,700	6,500	4.1
Bear Island & Smith	640	170	3.8
Idaho	256,000 (a)	35,500	7.2
Kennedy	11,100	2,600	4.3
Great Western & Porter	202,000	28,900	7.0
Coy & Kellar	230	70	3.3
Woodville	20,500	3,000	6.8
Snake River Valley	158,000 (a)	21,000	7.5
Reservation	236,500 (c)	33,000	7.2
Blackfoot	84,100	13,000	6.5

Canal	Diversions (acre-ft.)	Acres Irrigated	Acre-feet per acre
New Lava Side	36,400	5,500	6.6
Peoples	134,000	18,000	7.4
Aberdeen	320,000	61,000	5.2
Corbett	43,900	6,000	7.3
Nielsen Hansen	2,380	460	5.2
Riverside	27,700	3,000	9.2
Danskin	52,000	6,000	8.7
Trego	16,200	1,500	10.8
Wearyrick	15,400	1,500	10.3
Watson	31,300	4,000	7.8
Parsons	7,350	800	9.2
Minidoka Irr. Dist.	464,000	70,682	6.5
Burley Irr. Dist.	287,000	45,000	6.4
No. Side Canal Co.	1,059,000	161,480	6.6
Twin Falls Canal	1,033,000	202,661	5.1
Milner Low Lift	50,520	9,033	5.6
Gooding Project	401,500	59,300	6.8
Total	6,364,600	961,259	6.6

(a) Received some water from Willow and Sand Creeks.

(b) About 1,900 acres of this supplied thru Eagle Rock canal after July 29.

(c) 126,000 from Snake River. Balance from Blackfoot River and Sand Creek

Total diversions by the Snake River canals as above tabulated were 86,000 acre-ft. more than in 1946 and were the greatest ever recorded during any past irrigation season.

Of 3,295,020 acre-ft. diverted by lower valley canals, 1,176,600 acre-ft. or 36% was stored water. Of the 3,070,000 acre-ft. diverted by upper valley main river canals, 243,850 acre-ft. or 8% was stored water.

The following tabulation shows the amount of water used by months in various sections of the District during the past ten years:

Diversions in Thousands of Acre-feet
Heise to Blackfoot

<u>Year</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Season</u>
1938	356	680	628	592	465	2721
1939	585	620	691	564	393	2853
1940	548	630	594	462	289	2523
1941	444	618	648	492	434	2636
1942	314	684	720	588	391	2697
1943	417	545	750	666	510	2888
1944	327	406	679	610	415	2437
1945	337	455	700	629	453	2574
1946	504	585	738	606	400	2833
1947	573	565	774	626	424	2962
Average	440	579	692	584	417	2712

Henrys Fork and Tributaries
(excluding headwater creeks)

1938	185	238	180	159	119	831
1939	228	225	206	167	117	943
1940	230	213	182	136	92	853
1941	209	216	183	146	93	847
1942	151	243	211	176	103	884
1943	165	209	218	188	119	899
1944	157	176	192	178	102	805
1945	141	181	206	168	109	805
1946	215	212	206	175	93	901
1947	198	195	223	173	102	891
Average	188	211	201	167	105	872

1939-47 figures are after deduction for water spilled from
Cross Cut Canal into Teton River.

Minidoka Project

<u>Year</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Season</u>
1938	32	147	145	145	167	113	749
1939	77	164	130	165	159	97	792
1940	35	162	156	173	159	50	735
1941	20	152	125	169	148	90	704
1942	15	87	155	181	170	101	709
1943	33	162	105	182	167	103	752
1944	16	115	85	180	167	106	669
1945	7	121	122	178	167	102	697
1946	30	154	136	180	160	82	742
1947	50	164	93	182	164	101	754
Average	32	143	125	174	163	94	731

North Side Canal Co. Project

<u>Year</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Season</u>
1938	51	180	201	211	212	155	1010
1939	95	208	197	217	215	111	1043
1940	61	176	194	208	193	103	935
1941	67	186	172	206	194	110	935
1942	71	178	189	217	221	161	1037
1943	70	195	180	222	225	170	1062
1944	47	156	159	219	219	163	963
1945	54	185	177	223	220	154	1013
1946	61	206	201	226	226	137	1057
1947	81	211	175	228	223	159	1077
Average	66	188	184	218	215	142	1013

Twin Falls Project

1938	55	186	187	198	215	167	1008
1939	126	208	195	215	221	150	1115
1940	70	191	201	220	220	126	1028
1941	101	194	174	209	214	138	1030
1942	82	175	177	212	216	149	1011
1943	97	200	166	214	221	156	1054
1944	53	160	148	212	218	161	952
1945	53	184	175	214	217	156	999
1946	78	202	194	213	217	133	1037
1947	91	212	170	220	220	141	1054
Average	81	191	179	213	218	148	1030

Gooding Project

1938	3	39	61	76	74	63	316
1939	31	76	69	79	75	53	383
1940	18	71	82	91	83	57	402
1941	21	71	75	96	88	63	414
1942	18	77	78	96	90	67	426
1943	2	64	62	91	92	57	368
1944	5	63	73	93	90	67	391
1945	14	75	77	90	80	61	397
1946	19	80	85	90	79	57	410
1947	28	79	71	88	78	59	403
Average	16	70	73	89	83	60	391

Diversions were above normal during May, July and August, and were below normal during June due to rains. A very heavy demand for water occurred during July when the precipitation was far below normal.

RIVER DATA

Daily segregation of stored water and normal flow at the various gaging stations on the main river is shown on Plates 12-13. The computed losses between gaging stations as tabulated on these plates are based on the transmission loss schedule approved at the annual water meeting and listed on page 1.

The segregation of stored water and natural flow at the various gaging stations was made on the same basis used for a number of years past and which has been fully described in previous annual reports. The natural flow at Cloughs ranch gaging station was taken as 180 second-feet plus Blackfoot River after the 1900 priority rights were cut, leaving no natural flow to pass the lowest canal diversion near Blackfoot. This is the flow, as near as could be estimated, that would be supplied from rising water just above the Clough station under 1947 conditions.

Stored water discharged past the Clough station during 1947 amounted to 55,563 sec.-ft. or 110,200 acre-ft. This represents part of the unused 1947 holdover of American Falls water owned or leased by upper valley canals.

The inflow from Clough to Neeley is shown on Plate 11. Daily records are available of the discharge of Portneuf River at Pocatello and of the Aberdeen wasteways. The flow of the various spring creeks does not vary much from day to day. These were measured on or about May 12, June 5, 20, July 6, 30, Aug. 19, Sept. 20, and the discharge interpolated on intervening days to get the figures shown on Plate 11.

The gain from Neeley to Milner during the period of storage draft by the Minidoka Project July 1 to Sept. 19, amounting to 51,680 acre-ft., was credited as an additional storage supply for that Project in accordance with the interpretation of the Foster decree that has been followed since the entry of that decree in 1913.

STORED WATER DELIVERIES

The contract amounts of water were allotted by the Bureau of Reclamation in Jackson Lake and American Falls reservoirs as follows:

1947 Allotment in Acre-feet (Downstream order from Heise)

<u>Canal</u>	<u>American Falls</u>		<u>Jackson</u>	<u>Total</u>
	<u>Regular</u>	<u>Lease</u>		
Poplar Irr. Dist.	793	350	1,200	2,343
Progressive Irr. Dist.	14,609	6,110	0	20,719
Farmers Friend	0	0	2,000	2,000
Enterprise Canal Co.	10,509	4,800	6,100	21,409
Harrison Canal Co.	11,994	6,084	5,000	23,078
Rudy	2,000	3,735	2,000	7,735
Burgess	7,496	10,300	5,120	22,916
Lowder	0	0	1,040	1,040
Sunnydell	0	0	4,000	4,000
Lenroot	4,504	2,200	3,000	9,704
Reid	3,002	1,320	0	4,322
Dilts	1,034	432	0	1,466
Enterprise Irr. Dist.	12,000	3,000	0	15,000
Butte & Market Lake	3,002	11,156	0	14,158
Osgood	15,852	8,600	0	24,452
Bear Island	225	105	0	330
Smith	79	32	0	111
Kennedy	0	0	355	355
Idaho	26,986	9,910	0	36,896
Martin	2,250	1,260	1,500	5,010
New Sweden Irr. Dist.	28,528	14,000	5,000	47,528
Woodville	9,000	740	0	9,740
Snake River Valley	27,643	13,000	15,000	55,643
Blackfoot	15,033	6,600	0	21,633
Peoples	22,519	14,710	8,000	45,229
Aberdeen	41,333	67,420	42,685	151,438

1947 Allotment in acre-feet (cont'd.)

<u>Canal</u>	<u>American Falls</u>		<u>Jackson</u>	<u>Total</u>
	<u>Regular</u>	<u>Lease</u>		
Corbett	4,000	1,540	0	5,540
Trego	1,462	563	0	2,025
Minidoka District	50,000	21,000	186,030	257,030
Burley District	0	24,000	139,780	163,780
Milner Low Lift	34,113	15,000	0	49,113
Twin Falls Canal	151,185	0	97,183	248,368
Hillsdale Irr. Dist.	41,146	0	0	41,146
N. S. Canal Co.	279,110	172,033	322,007	773,150
Gooding Project	400,000	0	0	400,000
Idaho Power Co.	45,000	0	0	45,000
U. S.	0	13,593	0	13,593
Total	1,266,407	433,593	847,000	2,547,000

The United States withheld 13,593 acre-feet of the lease water for rental to non-lease holders who had no other source of storage water supply. It rented 13,282 acre-ft. of this amount to over 100 individuals and small canal companies in the upper valley at 30¢ per acre-ft.

Lower valley owners of Jackson Lake storage rights agreed that their water in Jackson Lake might be exchanged during 1947 for Government-owned American Falls water leased or rented to upper valley canals and individuals. The total of such leases and rentals in the upper valley during 1947 amounted to 211,560 acre-ft. Owing to a good supply of natural flow the upper valley canals, however, used less than 50% of their total stored water in 1947, so that most of this leased water still remained in Jackson Lake at the end of the season.

Rentals of water to individual canals are shown in detail on Plates 14, 22 and 23.

The allotment from Lake Walcott was 99,760 acre-feet on July 1. This Lake, however, held the same amount of water on September 18

at the end of the season of storage use, so there was no actual withdrawal from that Lake during the 1947 irrigation season.

The Minidoka Project was also allotted 51,680 acre-ft. gain Neeley to Milner.

Market Lake Springs discharged 1,210 acre-ft. into the river during the storage use period which was delivered to the Owners Mutual Irrigation Company, one of the users in the Kennedy Ditch.

The American Falls reservoir loss amounted to 0.62% of capacity and the reservoir allotments to lower valley canals should be decreased by this amount to determine available supply at their headgates. All such canals, however, had large holdovers of stored water at the close of the season so that the question of this reservoir loss was of little practical importance.

Total stored water spilled past Milner amounted to 17,503 sec.-ft. or 34,717 acre-ft., of which 26,527 acre-ft. were charged to the Idaho Power Company and 8,190 acre-ft. was operation waste and leakage thru Milner dam. There was no specific charge of the latter item to the several canal companies diverting from the river at Milner dam as this was unnecessary with the ample supply of water available in 1947.

The Idaho Power Company drew 6,400 acre-ft. of its primary stored water past Milner Sept. 18-30 after the canal companies had ceased use of storage. Total supply and disposal of stored water during the season was as follows:

Supply and Disposal of Stored Water, 1947
(acre-feet)

Supply

Jackson Lake, July 9	848,000	--
American Falls, July 1	1,700,000	
Lake Walcott, July 1	99,760	
Grassy Lake, July 12	15,213	
Island Park, July 12	134,315	
Henrys Lake, July 27	70,575	
Gain Neeley to Milner*	51,680	
Sheridan Creek right*	1,547	
Market Lake Springs*	1,210	
Idaho Power Co. use from nat. flow Sept. 18-30*	6,400	
Total	2,928,700	

Disposal

Used by Snake River rights	1,446,981	
Used by Henrys Fork rights	80,789	
Transmission losses Snake River	35,706	
Transmission losses Henrys Fork	2,425	
American Falls Res. loss	10,500	
Storage Waste past Milner	8,190	
Henrys Lake loss	655	
<u>Holdovers</u>		
Jackson Lake, Sept. 19	451,000	
American Falls, Sept. 18	649,450	
Lake Walcott, Sept. 19	98,560	
Island Park, Sept. 20	75,130	
Henrys Lake, Sept. 17	54,471	
Grassy Lake, Sept. 18	14,965	
Total	2,928,822	

*Natural flow handled on same basis as stored water
for convenience in tabulation.

The following tabulation shows storage used from Jackson Lake and American Falls reservoirs during 1947. In preparing this table all upper valley canals were charged with 7.26% loss from reservoir to headgates. Lower valley canals were charged with 0.62% American Falls Reservoir loss.

Storage used during 1947 Irrigation Season
From Jackson Lake and American Falls

Reservoirs
(Acre-feet)

	<u>Jackson Lake</u>		<u>American Falls</u>	
	<u>at Reservoir</u>	<u>at headgate</u>	<u>at Reservoir</u>	<u>at Headgate</u>
Aberdeen	42,685	39,585	18,604	17,259
American Falls Dist. #2	0	0	209,197	207,900
Austin (Lyle)	155	144	0	0
Austin (Smith)	0	0	58	54
Blackfoot	0	0	1,307	1,212
Burgess	5,120	4,748	14,597	13,537
Minidoka Project (a)	257,510	255,913	50,000	49,690
Butte & Market Lake	0	0	532	494
Corbett	0	0	378	351
Dilts	0	0	158	147
Enterprise Canal Co.	6,100	5,657	11,944	11,076
Enterprise Irr. Dist.	0	0	15,000	13,913
Farmers Friend	1,211	1,123	0	0
Harrison	3,843	3,564	0	0
Idaho Irr. Dist.	0	0	14,460	13,408
Idaho Power Co.	0	0	26,692	26,527
Klussman	0	0	250	232
Lenroot	3,000	2,782	1,975	1,832
Lowder	122	113	0	0
Martin	1,500	1,391	3,119	2,893
Milner Low Lift	0	0	30,952	30,760
New Sweden Dist.	5,000	4,637	18,188	16,868
No. Side Canal Co.	0	0	466,990	464,095
Owners Mutual	200	185	0	0
Peoples	8,000	7,419	14,070	13,051
Poplar Irr. Dist.	1,200	1,113	877	813
Progressive Dist.	0	0	14,982	13,894
Reid	0	0	905	839
Rudy	2,000	1,855	5,179	4,803
S. R. Valley Dist.	15,000	13,910	19,984	18,534
Sunnydell Dist.	3,288	3,049	0	0
Trego	0	0	39	36
Twin Falls Canal	0	0	117,293	116,566
Utah-Idaho Sugar Co.	0	0	9,795	9,084
Woodville	0	0	1,196	1,109
Non lease rentals	0	0	12,441	11,537
Total	355,934	347,188	1,081,162	1,062,514

(a) Exchanged for American Falls.

RIVER LOSSES AND GAINS

Losses and gains between river stations are shown by monthly averages in the following tabulations, using time intervals given on Plate 15.

Gain in Snake River, Moran to Heise, 1947
(Heise dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Moran	45,824	165,790	120,200	118,060	87,481	537,355
Heise & Riley	511,967	578,197	394,847	285,991	200,193	1,971,195
Tot. gain s.f.	466,143	412,407	274,647	167,931	112,712	1,433,840
Mean gain s.f.	15,050	13,750	8,860	5,417	3,757	9,372
Tot. gain ac.ft.	924,581	817,997	544,754	333,087	223,561	2,843,980

The gain during September was practically the same as during that month a year ago. During the other months the gain was greater than in 1946. For the entire season the gain, or inflow Moran to Heise, was 73% of the total run-off at Heise.

Gain in Snake River, Heise to Shelley, 1947
(Heise dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Heise & Riley	511,967	578,197	394,847	285,991	200,193	1,971,195
Rexburg	110,750	107,300	27,367	36,122	51,720	333,259
Tot. Supply	622,717	685,497	422,214	322,113	251,913	2,304,454
Diversions	186,166	201,024	276,196	222,925	153,294	1,039,605
Shelley	444,360	509,340	160,910	130,540	123,960	1,369,110
Total use	630,526	710,364	437,106	353,465	277,254	2,408,715
Tot. gain s.f.	7,809	24,867	14,892	31,352	25,341	104,261
Mean gain s.f.	252	829	480	1,011	845	681
Tot. gain a.f.	15,489	49,323	29,538	62,186	50,263	206,799

The season's gain was 83% of that in 1946. The July-September gain averaged 779 sec.-ft. compared to 895 sec.-ft. a year ago, and 776 sec.-ft. in 1945. Ground water levels in Rigby were reported slightly lower than in 1946.

Gain or loss in Snake River, Shelley to Clough Ranch, 1947
- is loss
(Shelley dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Shelley	442,700	510,220	165,390	131,940	122,990	1,373,240
Blackfoot R.	1,597	3,443	850	2,118	2,186	10,194
Tot. Supply	444,297	513,663	166,240	134,058	125,176	1,383,434
Diversions	102,315	83,206	113,781	92,587	60,433	452,302
Clough	328,420	420,760	57,921	45,085	69,001	921,187
Total Use	430,735	503,966	171,702	137,672	129,434	1,373,509
Tot. diff. s.f.	-13,562	-9,697	5,462	3,614	4,258	-9,925
Mean diff. s.f.	-437	-323	176	117	142	-65
Tot. diff. ac.f.	-26,900	-19,233	10,833	7,168	8,446	-19,680

The actual loss in this section is greater than the net loss above tabulated by the unknown amount of surface waste from canals

into the river plus ground water inflow for several miles above the Clough station. This ground-water inflow for 1947 conditions was about 180 sec.-ft.

Gain or loss in Snake River, Clough to Neeley, 1947

- is loss

(Neeley dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Clough	326,635	418,595	67,876	44,861	66,635	924,602
Inflow	89,383	84,980	82,123	84,142	84,556	425,184
Res. draft	- 2,970	- 2,390	219,690	219,730	68,770	502,830
Tot. supply	413,048	501,185	369,689	348,733	219,961	1,852,616
Neeley	400,900	493,610	362,200	345,900	226,090	1,828,700
Tot.diff.s.f.	-12,148	- 7,575	- 7,489	- 2,833	6,129	-23,916
Mean diff.s.f.	- 392	- 252	- 242	- 91	204	- 156
Tot.diff.ac.f.	-24,096	-15,024	-14,854	- 5,619	12,157	-47,436

Reservoir losses occurred during all months except September when bank storage return and rains were sufficient to overcome losses and produce a net gain. The loss during the period of storage use July 1 to Sept. 18 was 10,500 acre-ft. or 0.62% of reservoir capacity.

Gain or Loss in Snake River, Neeley to Minidoka, 1947

- is loss

(Minidoka dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Neeley	400,930	493,210	362,300	346,130	228,190	1,830,760
Walcott draft	-2,310	-1,700	600	1,460	120	- 1,830
Total supply	398,620	491,510	362,900	347,590	228,310	1,828,930
N. Minidoka	47,640	27,549	51,510	44,260	25,797	196,756
S. Minidoka	35,092	19,132	40,090	38,180	25,335	157,829
Minidoka	314,560	447,550	268,850	261,830	174,490	1,467,280
Total Use	397,292	494,231	360,450	344,270	225,622	1,821,865
Tot.diff.s.f.	-1,328	2,721	-2,450	-3,320	-2,688	- 7,065
Mean diff.s.f.	- 43	91	- 79	- 107	- 90	- 46
Mean diff.ac.f.	-2,634	5,397	-4,860	-6,585	-5,332	-14,014

A loss occurred each month except June. Lake Walcott was not drawn down during September as has been customary in many past years, hence there was no return flow from bank storage such as usually occurs in September.

Gain in Snake River, Minidoka to Milner, 1947
(Milner dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Minidoka	314,710	447,240	268,760	261,890	177,270	1,469,870
P. A.	1,876	1,669	1,895	1,862	1,403	8,705
Milner Low Lift	5,280	2,449	6,092	6,160	4,399	24,380
Gooding	68,950	63,870	74,970	70,390	56,430	334,610
North Side	75,080	58,410	82,440	79,430	52,340	347,700
South Side	106,700	85,890	111,060	111,010	71,020	485,680
Milner	63,695	247,151	1,334	7,130	9,966	329,276
Total Use	321,581	459,439	277,791	275,982	195,558	1,530,351
Tot.gain s.f.	6,871	12,199	9,031	14,092	18,288	60,481
Mean gain s.f.	222	407	291	455	610	395
Tot.gain ac.ft.	13,629	24,197	17,912	27,951	36,273	119,962

The gain for the season was about 22,000 acre-ft. greater than a year ago, mostly due to greater gain during May and June. The gain July to Sept. was about 4,000 acre-ft. greater than during the same months in 1946.

The net gain from Neeley to Milner during the period of storage use July 1 to Sept. 19 amounted to 51,680 acre-ft., which was credited to the Minidoka Project as part of its storage allotment.

MISCELLANEOUS MEASUREMENTS

<u>Stream</u>	<u>Location</u>	<u>Date</u>	<u>Discharge</u> (Sec.-ft.)
SNAKE RIVER	Calamity Point	May 9, 1947	18,120
Bear Creek	Calamity Point	May 9, 1947	300 (est.)
SNAKE RIVER	Calamity Point	Oct. 13, 1947	3,009
SNAKE RIVER	Swan Valley bridge	Oct. 13, 1947	3,164
SNAKE RIVER	Heise station	Oct. 13, 1947	3,233

DISTRIBUTION ON HENRYS FORK

Melvin Luke was again in immediate charge of water distribution on Henrys Fork and tributaries, except Teton Basin, with headquarters at St. Anthony. All the reservoirs filled and overflowed. Storage draft from Island Park began on July 12 and from Henrys Lake on July 31. There was no stored water used from Grassy Lake in 1947, but about 2,000 acre-ft. were spilled by the Government late in September as a safety measure.

The segregation of flow at the outlets of Island Park and Henrys Lake reservoirs was made on the same basis as in past years, which has been described in detail in previous annual reports. Thirty sec.-ft. was charged as Island Park reservoir loss July 12-27 inclusive, which was recovered for the reservoir rights by crediting 30 sec.-ft. bank storage return Sept. 1-16.

The following regulation schedule was in effect on Henrys Fork and Fall River on the dates indicated. At other times regulation was according to the Snake River schedule given on page 11.

July 12	Cut to 1902 rights
" 13	Cut to 1900 rights
" 16	Cut to 1897 rights
" 17	Cut to 1896 rights
" 20	Cut to 1895 rights
" 23	Restored 1895 rights
" 24	Restored 40% of Apr. 1, 1896 rights
" 25	Restored all 1896 rights.

Teton River was regulated according to the Snake River schedule thruout the season. The flow of Teton River was adequate to fill all demands on that stream and it was unnecessary to deliver any water to Teton River thru the Cross Cut Canal. Stored water used by Teton River canals was diverted from the natural flow of that stream and stored water from Island Park delivered in exchange to downstream rights of earlier priority that would have received the water diverted by the Teton Canals in excess of the decrees being filled.

Users in the Island Park region used 512 acre-ft. of stored water. Several of these users have joined the Fremont-Madison Irrigation District and were allotted 150 acre-ft. of its storage. Two users are located in Clark County, on which account it was considered impractical for them to come into the District and they

were rented 362 acre-ft. of Henrys Lake water.

Stored water allotments on Henrys Fork during 1947 were as follows:

Henrys Lake Allotment, 1947

Contents July 27	70,575 acre-ft.
Estimate dead storage & loss	<u>3,000</u> "

Net available	67,575 acre-ft.
---------------	-----------------

Allotted as follows:

Dewey	1.43%	966 acre-ft.
Last Chance	13.87	9,373 "
St. Anthony Union	6.8	4,595 "
Salem Union	24.2	16,353 "
Egin	6.8	4,595 "
Independent	26.8	18,110 "
Consolidated Farmers	<u>20.1</u>	<u>13,583</u> "
	100.0	67,575 acre-ft.

Henrys Lake filled to capacity during May but the outlet gates were raised on June 12 as the Lake was getting too high. They stuck at the greater opening, however, and it was about three weeks before they could be lowered, by which time about 13,000 acre-ft. of storage had been spilled down the river.

The drop in Henrys Lake contents during period of storage withdrawal from July 31 to Sept. 3 amounted to 15,471 acre-ft. Stored water released as segregated by inflow-outflow measurements amounted to 14,816 acre-ft., leaving 655 acre-ft. as reservoir loss.

Fremont-Madison District Stored Water Supply, 1947

Island Park Reservoir, July 12	134,315 acre-ft.
Grassy Lake, July 12	15,213 "
Sheridan Creek decree July 12 to Sept. 14	<u>1,547</u> "
Total	151,075 acre-ft.

The District has allotted 124,784 acre-ft. of its storage supply to the landowners in the District. A few canals exhausted their original allotments and were allotted an additional 20%, amounting to 645 acre-ft. to cover a pro rata share of the District's water not yet permanently allocated to specific lands. The District has about 25,000 acre-ft. of storage rights still subject to future disposal. These will probably eventually be absorbed either by some of the District landowners increasing their present allotments when future dry years demonstrate that they do not have enough water or by disposal to lands not now in the District. There have been no years of serious water shortage since Island Park Reservoir was built and the users have been reluctant to individually assume the additional heavy cost involved in making payments on more water than they are currently using even when they know that they may need more in future dry years. The District can, however, consider itself fortunate that the Government abandoned the plan to also build a reservoir on Teton River that was originally proposed, as the Fremont-Madison landowners were thereby relieved of making additional heavy payments for stored water that, so far at least, they have not needed.

While the Cross Cut canal was not used in 1947 to deliver any water to Teton River, it was used to divert 18,700 acre-ft. from Henrys Fork for delivery to lands under the Fall River Canal, thereby making it possible for upstream canals on Fall River to divert natural flow in exchange for storage delivered to the Cross Cut Canal. This made it unnecessary to draw any storage from Grassy Lake, leaving a large holdover in that lake for 1948. The Grassy Lake

right is of such late priority, with very little winter flow, that it is desirable to hold over as much water as can safely be retained in that reservoir at the end of each season.

The storage balance for the season at the Rexburg gaging station was -4,260 sec.-ft. or -8,450 acre-ft., meaning a net use of 8,450 acre-ft. of Snake River storage by Henrys Fork canals. The Canyon Creek Irrigation District diverted 1,113 acre-ft. of American Falls storage rented from the Government and the Enterprise Irrigation District was allocated 15,000 acre-ft. of American Falls water which is equivalent to 13,912 acre-ft. headgate diversion. Thus these two canals were entitled to divert 15,025 acre-ft. of American Falls water, exchanged for Jackson Lake water. The difference between this amount and -8,450 acre-ft. seasonal balance at Rexburg, or 6,575 acre-ft., represents an operation overdraft on Island Park reservoir; in other words there was this much Island Park water in American Falls reservoir at the close of the 1947 irrigation season. Inasmuch as the 1947 holdover in these two reservoirs was sufficient to insure their filling by the spring of 1948 this item is only of statistical interest in this instance.

Diversions during 1947 irrigation season on
Henrys Fork, Fall River, and lower Teton River.

Canal	Diversions (acre-ft.)	Area Irrigated (acres)	Acre-ft. per acre
<u>Fall River Canals</u>			
Yellowstone	1,850	1,000	1.8
Marysville	31,400	15,000	2.1
Farmers Own	11,200	4,500	2.5
Enterprise	39,100	5,930	6.6
Bell	1,160	320	3.6
Fall R. & Chester	99,300 (a)	9,950	10.0
McBee	0	-	-
Silkey	4,810	680	7.1
Cur	9,780	1,500	6.5
Total Fall River	198,600	38,880	5.1

Canal	Diversions (acre-ft.)	Area Irrigated (acres)	Acre-ft. per acre
<u>Henry's Fork Canals</u>			
Dewey	5,510	1,000	5.5
Last Chance	20,200	1,840	10.9
St. Anthony Union	117,000	10,000	11.7
Farmers Friend	27,000	2,900	9.3
Twin Groves	34,800	2,500	13.9
Salem Union	48,900	5,200	9.4
Egin	76,500	6,000	12.7
St. Anthony Un. Feeder	15,800	2,000	7.9
Independent	66,500	7,000	9.5
Consolidated Farmers	54,800	6,000	9.1
Total Henry's Fork	467,010	44,440	10.5
<u>Lower Teton Canals</u>			
Siddoway	2,490	500	5.0
Wilford	29,800	2,000	14.9
Teton Irrigation	18,400	2,000	9.2
Good Luck	2,330	360	6.5
Pioneer	2,110	300	7.0
Stewart	3,380	370	9.1
Pincock-Byington	3,250	320	10.1
Pincock-Garner	5,090	400	12.7
Teton Isl. Feeder	73,900	10,400	7.1
North Salem	0	-	-
Roxana	2,430 (b)	720	3.4
Island Ward	11,500	3,000	3.8
Woodmansee-Johnson	6,320 (c)	1,000	6.3
City of Rexburg	9,510	1,200	7.9
Rexburg Irrig.	53,600	5,400	9.9
McCormick Rowe	702	150	4.7
Saurey Sommers	3,940	600	6.6
Gardner	1,840	200	9.2
Eames-Thompson	113	20	5.6
Total lower Teton R.	230,705	28,940	8.0
Total Fall River, Henry's Fork & Lower Teton River	896,315	112,260	8.0

(a) Includes 18,700 acre-feet diverted thru Cross Cut Canal

(b) Used some additional from Henry's Fork thru Consolidated Farmers Canal.

(c) Used some additional from Moody Creek and Teton Irr. Canal waste.

Total diversions were about the same as a year ago. Stored water diverted by the foregoing canals amounted to 76,855 acre-ft. or 8.6% of the total diversions, compared to 11.4% in 1946.

Diversions by some of the more important canals in the head-water areas were as follows for the season May 15 to September 30, 1947:

Canal	Diversions (acre-ft.)	Area (acres)	Acre-feet per acre
String Canal	8,200	2,000	4.1
Trail Cr. Irrig.	25,600	5,000	5.1
Fox Cr. Irrig.	8,800	3,765	2.3
Grand Teton Canal	23,500	6,500	3.6
Canyon Cr. Canal	5,140	2,400	2.1
Conant Cr. Canal	2,930	2,000	1.5
Squirrel Cr. Canal	640	150	4.3
Total	74,810	21,815	3.4

Gain in Henrys Fork Basin, 1947

The following time intervals have been used in preparing the tabulations by river sections:

Lake to Island Park	20 hrs.
Island Park to Warm River	14 "
Warm River to Ashton	5 "
Ashton to St. Anthony	5 "
St. Anthony to Rexburg	12 "
Squirrel to Chester	8 "
Tetonia to St. Anthony	10 "

Gain in Henrys Fork, Lake to Island Park, 1947

(Island Park dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Lake	3,050	7,830	3,894	8,796	1,146	24,716
I. P. release	-164	164	9,925	10,807	9,809	30,541
Total Supply	2,886	7,994	13,819	19,603	10,955	55,257
Island Park	36,794	34,138	27,802	32,393	26,501	157,628
Tot. gain s.f.	33,908	26,144	13,983	12,790	15,546	102,371
Mean gain s.f.	1,094	871	451	413	518	669
Tot. gain a.f.	67,256	51,856	27,735	25,369	30,835	203,051

The total gain for the season was about 14,000 acre-feet more than in 1946, due principally to greater gain during June.

Gain in Henrys Fork, Island Park to Warm River, 1947

(Warm River dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Island Park	37,047	34,124	27,668	32,440	26,819	158,098
Warm River	54,440	49,140	41,300	45,020	38,682	228,582
Tot. gain s.f.	17,393	15,016	13,632	12,580	11,863	70,484
Mean gain s.f.	561	501	440	406	395	460
Tot. gain a.f.	34,499	29,784	27,039	24,952	23,530	139,804

The gain for the season was about 7,000 acre-ft., or an average daily flow of 25 sec.-ft., greater than in 1946.

Gain in Henrys Fork, Warm River to Ashton, 1947

(Ashton dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Warm River	54,546	49,142	41,279	45,018	38,791	228,776
Ashton	77,380	66,620	52,250	57,030	48,430	301,710
Tot. gain s.f.	22,834	17,478	10,971	12,012	9,639	72,934
Mean gain s.f.	737	583	354	387	321	477
Tot. gain a.f.	45,290	34,667	21,761	23,826	19,118	144,662

The gain for the season averaged 7 sec.-ft. less than for the same period a year ago. Practically all the gain comes from the inflow from Warm River and Robinson Creek.

Loss or gain in Henrys Fork, Ashton to St. Anthony, 1947(St. Anthony dates and 24-hr. sec.-ft. except as noted)
- is loss

Station	May	June	July	Aug.	Sept.	Season
Ashton	77,520	66,674	52,235	57,022	48,555	302,006
Chester	63,764	48,961	4,825	6,963	10,424	134,937
Total Supply	141,284	115,635	57,060	63,985	58,979	436,943
Diversions	34,150	28,785	32,663	26,653	15,077	137,328
St. Anthony	104,730	86,720	25,801	36,211	45,600	299,062
Tot. acct. for	138,880	115,505	58,464	62,864	60,677	436,390
Tot. gain s.f.	-2,404	- 130	1,404	-1,121	1,698	- 553
Mean gain s.f.	- 78	- 4	45	- 36	57	- 4
Tot. gain a.f.	-4,768	- 258	2,784	-2,223	3,367	-1,098

The average loss for the season of 4 sec.-ft. compares with an average loss of 26 sec.-ft. a year ago.

Gain in Fall River, Squirrel to Chester, 1947

(Chester dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Squirrel	66,374	62,843	22,513	19,327	18,688	190,459
Diversions	13,248	17,681	16,743	13,809	9,944	71,425
Chester	63,690	48,800	4,709	6,996	10,476	134,671
Tot. acct. for	76,938	66,481	21,452	20,805	20,420	206,096
Tot. gain s.f.	10,564	3,638	-1,061	1,478	1,732	16,351
Mean gain s.f.	341	121	-34	48	58	107
Tot. gain a.f.	20,954	7,215	-2,104	2,931	3,435	32,431

The seasonal gain was 17,000 acre-ft. less than in 1946. The apparent small loss in July may be due to the fact that only staff gage readings are available at the Squirrel station and the one reading per day may not represent the correct daily average flow at that station.

Gain in Teton River, Tetonia to St. Anthony, 1947

(St. Anthony dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Tetonia	16,396	25,316	18,964	13,891	11,210	85,777
St. Anthony	50,778	50,320	31,636	22,341	17,894	172,969
Tot. gain s.f.	34,382	25,004	12,672	8,450	6,684	87,192
Mean gain s.f.	1,109	833	409	273	223	570
Tot. gain a.f.	68,196	49,595	25,135	16,761	13,258	172,945

The total gain for the season was about 10,000 acre-ft., or 34 sec.-ft. average daily flow, more than in 1946.

Gain in Henrys Fork and Teton River, St. Anthony to Rexburg, 1947

(St. Anthony dates and 24-hr. sec.-ft. except as noted)

Station	May	June	July	Aug.	Sept.	Season
Teton River	50,778	50,320	31,636	22,341	17,894	172,969
St. Anthony	104,730	86,720	25,801	36,211	45,600	299,062
Total Supply	155,508	137,040	57,437	58,552	63,494	472,031
H. Fork diver.	29,221	22,543	24,164	20,306	11,509	107,743
Teton diver.	22,841	26,573	31,571	21,750	13,503	116,238
Rexburg	110,385	107,030	26,762	36,417	52,075	332,669
Tot. acct. for	162,447	156,146	82,497	78,473	77,087	556,650
Tot. gain s.f.	6,939	19,106	25,060	19,921	13,593	84,619
Mean gain s.f.	224	637	808	643	453	553
Tot. gain a.f.	13,763	37,896	49,706	39,513	26,961	167,839

The gain for the season was 18,000 acre-ft. less than during the same months in 1946 due to less gain in May and June. The gain during July-September, however, averaged 643 sec.-ft. compared to 540 sec.-ft. during July-September 1946.

Miscellaneous Measurement on Henrys Fork

<u>Date</u>	<u>Stream</u>	<u>Discharge</u>
June 24, 1947	Big Springs at source, Island Park	179 sec.-ft.

TETON BASIN

Mr. Dean Hill was again employed as deputy watermaster in Teton Basin. Run-off in that section was up to normal or slightly above and no more than the usual difficulties were experienced during the regulation period.

The agreement between upper and lower users on Teton River that the upper users storage charges be on the basis of 1.75 acre-ft. diverted for each acre-ft. delivered at the St. Anthony gaging station on Teton River was continued in operation during 1947. No storage water was delivered to lower Teton River users thru the Cross Cut Canal in 1947 and all the Teton Basin storage diversions were offset by storage releases from Island Park Reservoir that went to replace the normal flow diverted from Teton River and tributaries as storage, which otherwise would have gone on down into Henrys Fork and Snake River to fill prior rights.

Teton Basin rights in the Fremont-Madison District were allotted 6,717 acre-ft. of Island Park storage which under the exchange arrangement in effect during 1947 would have entitled them to divert 11,490 acre-ft. of storage. Actually they diverted only 4,043 acre-ft., due to the fact that they were cut only to fill

Snake River priorities rather than the very early priorities on lower Teton River which, when short of water, require cutting off all rights in Teton Basin. Detailed records of storage use and stream flow in Teton Basin are shown on Plates 23 and 24.

Interstate regulation on Teton Creek in accordance with the Wyoming Federal Court decree occurred as follows:

<u>Discharge figures in sec.-ft.</u>							% Wyo. Decrees Filled
Date	Waddel	Central	North	South	Grand Teton	Total	
Aug. 2 before reg.	13.2	19.9	28.1	34.9	50.9	147.0	
Aug. 2 after reg.	7.2	10.8	30.1	29.1	69.8	147.0	100%
Aug. 16 before reg.	4.8	7.4	18.1	19.2	21.0	70.5	
Aug. 16 after reg.	3.3	5.0	13.7	13.3	35.2	70.5	45.7%
Aug. 20 before reg.	3.0	4.7	12.2	11.5	30.0	61.4	
Aug. 20 after reg.	2.8	4.3	12.0	11.6	30.7	61.4	39.8%
Aug. 22 before reg.	3.5	5.2	12.4	12.2	36.0	69.3	
Aug. 22 after reg.	3.2	5.1	13.6	12.8	34.6	69.3	44%*
Aug. 27 before reg.	2.6	3.1	11.6	11.2	18.1	46.6	
Aug. 27 after reg.	2.2	3.4	9.1	8.6	23.3	46.6	30%

* 0.8 s.f. new decree added to each of Central and North Side canals.

The following loss measurements were made on several canal systems:

Loss Test on Hogg Canal System
Made by L. P. Jensen, Aug. 6, 1947

Total in Hogg Canal at head in Matthews ranch 24.25 sec.-ft.

Diversion at farms:

Fullmer ditch	2.41 sec.-ft.
Peacock	.86 "
Poulson	1.50 "
Poulson & Bradley	1.00 "
Bradley	1.83 "
Rammel, P. S.	.50 "

Accounted for 8.10 sec.-ft.

Loss = 16.15 second-feet = 66.6%

Loss Test on Darby Creek System
Made by L. P. Jensen, Aug. 18, 1947

Total at Bridge	21.14 sec.-ft.
Diversions at farms for farm use	13.25 sec.-ft.
Loss	7.89 sec.-ft. = 37.3%

Loss Test on Grand Teton Canal System
Made by L. P. Jensen and J. D. Hill, Aug. 14, 1947

Grand Teton Canal at head	27.00 sec.-ft.
Dry Creek Supply	<u>3.00</u> "
Total Supply	30.00 "

Diversions at farms:

Little Div.	.50 sec.-ft.
Sinsinbaugh	.20 "
Butler, A. V.	.80 "
Butler 2nd	1.20 "
E. L. Casper	.60 "
Wallace Ranch	2.50 "
Hastings	.50 "
Peacocks	1.00 "
Casper	1.00 "
Church	1.00 "

Total accounted for 9.30 sec.-ft.

Loss = 20.70 second-feet = 69%

Large % loss is due to small supply in canal.

Two measurements were made of the loss in Trail Creek during 1947 by the office of the Idaho State Reclamation Engineer. Reports by Mr. Roy W. Thompson who made these measurements are as follows:

"Subject: Measurements in Teton Basin, Trail Creek, June 1947
File: To, Mr. Mark R. Kulp, State Reclamation Engineer,
From, Roy W. Thompson, Supervisor of Water Distribution.

"As per your instructions and in compliance with the agreement between the upper and lower water users on the Teton River and Trail Creek, in Water District No. 36, requesting the State Department of Reclamation to make a series of test measurements to determine the transit loss on the waters of Trail Creek and Upper Teton River.

Loss Test on Darby Creek System
Made by L. P. Jensen, Aug. 18, 1947

Total at Bridge	21.14 sec.-ft.
Diversions at farms for farm use	13.25 sec.-ft.
Loss	7.89 sec.-ft. = 37.3%

Loss Test on Grand Teton Canal System
Made by L. P. Jensen and J. D. Hill, Aug. 14, 1947

Grand Teton Canal at head	27.00 sec.-ft.
Dry Creek Supply	<u>3.00</u> "
Total Supply	30.00 "

Diversions at farms:

Little Div.	.50 sec.-ft.
Sinsinbaugh	.20 "
Butler, A. V.	.80 "
Butler 2nd	1.20 "
E. L. Casper	.60 "
Wallace Ranch	2.50 "
Hastings	.50 "
Peacocks	1.00 "
Casper	1.00 "
Church	1.00 "

Total accounted for 9.30 sec.-ft.

Loss = 20.70 second-feet = 69%

Large % loss is due to small supply in canal.

Two measurements were made of the loss in Trail Creek during 1947 by the office of the Idaho State Reclamation Engineer. Reports by Mr. Roy W. Thompson who made these measurements are as follows:

"Subject: Measurements in Teton Basin, Trail Creek, June 1947
File: To, Mr. Mark R. Kulp, State Reclamation Engineer,
From, Roy W. Thompson, Supervisor of Water Distribution.

"As per your instructions and in compliance with the agreement between the upper and lower water users on the Teton River and Trail Creek, in Water District No. 36, requesting the State Department of Reclamation to make a series of test measurements to determine the transit loss on the waters of Trail Creek and Upper Teton River.

"Arrived at Victor Saturday evening June 7th, on June 8th, adjusted canal headings, to comply with the requirements of the Lower Teton water users, that water should run in section of lower Trail Creek 48 hours without appreciable change in head before measurements are taken. On account of the high water in Trail Creek, a full head of water had to be left flowing in nearly all the canals diverting from Trail Creek, in order not to overflow the channel below.

"On June 10th, the measurements were made by the writer, assisted by Mr. Eagle, Engineer from Mr. Crandall's office, and accompanied by Mr. Nave, Mr. Ricks and Mr. _____ representing the Lower Teton Water users and Mr. Tonks representing the water users on Trail Creek. Measurements were taken in the same places and in conformity with previous measurements made for the same purpose, Trail Creek being divided into two sections and Teton River as far as the Tetonia gaging station as the third section.

"The results are as follows,

Stream loss by sections - Computations in cubic feet per second.

Section 1, Trail Creek

Supply, Trail Creek above Game Creek - - - - -	239.70
Game Creek at Highway - - - - -	82.90
Total supply - - - - -	322.60
Diversions, String Canal - - - - -	3.90
Kimball Canal - - - - -	45.93
Town Canal - - - - -	40.61
Ricks-Kersely - - - - -	23.20
Spencer Canal - - - - -	25.00
Humble Canal - - - - -	13.76
Tonks Canal - - - - -	23.56
Porter Canal - - - - -	3.67
Total diversion in section - - - - -	179.63
Trail Creek at Porter Bridge - - - - -	100.90
Total accounted for in section - - - - -	280.53
Transit loss in section - - - - -	40.07
Percentage of loss in section - - - - -	13.04

Section 2, Trail Creek

Supply, Trail Creek at Porter Bridge - - - - -	100.90
Diversions, Johnson Ditch - - - - -	4.00
Trail Creek at Live water - - - - -	68.60
Total accounted for - - - - -	72.60
Transit loss in section - - - - -	28.30
Percent loss in section - - - - -	28.05

Total transit loss, Trail Creek

Total loss sections 1 & 2 - - - - -	70.37
Percent loss - - - - -	21.81

Section 3, Teton River

"Section, Mouth of Trail Creek to Tetonia gaging station.

"No measurements were made in Teton River to determine transit loss for the reason that heavy rains prior and during the three days spent on Trail Creek, the flow of Teton River measured at Tetonia gaging station increased from 581 second feet at noon on June 8th, to 1304 second feet on June 10th, an increase of 723 second feet.

Remarks, Weather conditions unfavorable."

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Memorandum

"Subject: Water measurements in Teton Basin, Trail Creek and Teton River.

To: Mark R. Kulp, State Reclamation Engineer.

From: Roy W. Thompson, Supervisor of Water Distribution.

"As per your instructions, and in compliance with the agreement between the upper and lower water users of Teton River and Trail Creek, in Water District No. 36, requesting the State Department of Reclamation to make a series of test measurements to determine the transit loss on the waters of Trail Creek and Upper Teton River:

"The diversions from Trail Creek were closed off, except for leakage through and around faulty headgates, from eight to ten o'clock on the morning of August 31, 1947, to allow for a flow of water through the dry section of Trail Creek for a period of 48 hours before measurements were taken. Gates were closed by the writer, assisted by Mr. Hill, Deputy Watermaster of Water District No. 36, and Mr. McBride, local watermaster on Trail Creek. Water was turned back into the canals diverting from Trail Creek in the late afternoon of September 2nd, estimating the run of water from Trail Creek into the Teton River as of approximately 60 hours duration.

"On September 2nd, the measurements were made by the writer, assisted by Mr. Hill, and accompanied by Mr. Nave and Mr. Ricks, representing the Lower Teton water users, and Mr. Tonks representing the water users of Trail Creek and the upper Teton water users, also Mr. McBride, local watermaster in Trail Creek. Measurements were taken in the same places in conformity with previous measurements taken, Trail Creek being divided into two sections and the Teton River as the third section.

"The results are as follows, showing losses and percentages of losses by sections, as well as overall losses.

Computations are in cubic feet per second.

TRAIL CREEK - Section 1

SUPPLY-	Trail Creek above String Canal	- - - -	64.13	
	Game Creek	- - - -	16.78	
	Total Supply	- - - -		80.91

DIVERSIONS-

String Canal	- -	0.80	
Kimball	- -	3.00	
Town	- -	2.00	
Ricks-Kersley	- -	1.00	
Spencer	- -	1.20	
Humble	- -	1.20	
Tonks	- -	3.07	
Porter	- -	1.86	
Total diversions in section		14.13	
Trail Creek at Porter Bridge		49.54	
Total accounted for in section	- -	63.67	
Total loss in section	- -	17.24	80.91
Percentage loss in section	- -	21.30	

TRAIL CREEK - Section 2

SUPPLY -	at Porter Bridge	- - - -	49.54
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DIVERSIONS -

Johnson Ditch	3.00	
Trail Creek at Live water	37.39	
Total accounted for in section	40.39	
Total loss in section	9.15	49.54
Percentage loss in section	18.44	

Total Transit loss in Trail Creek to live water - 26.39 cubic feet per second

Total percentage loss in Trail Creek - - - - 32.61

TETON RIVER - Section 3

From Live water in Trail Creek to Tetonia Gaging Station

Trail Creek at Live water - - 37.39 cubic feet per second

Duration of flow of Trail Creek approximately 60 hours, which produced an increased flow in Teton River at Tetonia gaging station of 81- 24 hr. second feet during a period of four days.

Supply- $37.39 \times 2\frac{1}{3} = 87.24$ -24 hr. second feet.

Increased flow at

Tetonia gaging station- 81.00-24 hr. second-feet

Transit loss in stream- 6.24-24 hr. second feet.

" " in per cent- 7.10

Teton River - Section 3 (cont'd)

Overall Carriage loss in Trail Creek and Teton River- 32.63 cubic feet
 Total overall percent loss - - - 40.32 per second.

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The following is a recapitulation of all test measurements taken by the Department of Reclamation to determine transportation losses of water on Trail Creek and Teton River, and also those made under the direction of Mr. Crandall.

Trail Creek carriage losses as measured under the supervision of Mr. Crandall

<u>Date</u>	<u>Total Flow (Sec. ft.)</u>	<u>Loss (Sec. ft.)</u>	<u>Loss Percentage</u>
May 2, 1934	94.4	45.1	48 %
May 18	176.9	51.5	29 %
May 31	107.9	34.4	32 %
June 9	80.8	13.1	16 %
June 16	81.3	20.3	25 %
June 24	70.5	21.4	30 %
July 2	60.7	23.1	38 %
July 10	52.5	21.5	41 %
Aug. 1, 1935	106.8	49.7	47 %
Aug. 17	81.1	37.1	46 %
Aug. 22	78.9	43.6	55 %
Aug. 28	66.9	29.1	44%
Sept. 5	60.4	25.8	43 %
Sept. 11	54.8	25.1	46 %
Aug. 7, 1936	88.4	12.4	14 %
June 20, 1939	181.0	9.	5 Raining
July 1	252.	42.	17 Water
			all being
July 20	128.	20.	16 diverted
May 28, 1940	346.	27.2	8 " "
Aug. 28, 1941	72.2	26.4	36
Aug. 24, 1942	67.7	33.2	<u>49</u>
	Average		33 %

Trail Creek losses as measured by Department of Reclamation.

<u>Date</u>	<u>Total flow (second feet)</u>	<u>Loss (Second feet)</u>	<u>Loss Percentage</u>
Aug. 6, 1943	160	53.21	33.26 %
June, 1944	No measurements made		
Sept., 1944	"	"	"
June 7, 1945	282.48	79.31	28.30 %
Sept. 7, 1945	89.54	32.30	36.07 %
June 7, 1946	415.2	85.2	20.52 %
Sept. 9, 1946	73.55	39.69	53.96 %
June 10, 1947	322.60	70.37	21.81 %
Sept. 2, 1947	80.91	26.39	<u>32.61 %</u>
Average			32.36 %

Losses thru Swamps between live water on Trail Creek and Tetonia Station (as measured under the supervision of Mr. Crandall)

<u>Date</u>	<u>Raise at live water on Trail Cr. (Sec. ft.)</u>	<u>Raise reaching Tetonia Station (Sec. ft.)</u>	<u>Loss (Sec. ft.)</u>	<u>Loss (S %)</u>
May 18, 1934	105.	74	31	30 %
May 31, "	67.6	30	37.6	56 %
June 9, "	62.	35	27	43 %
June 16, "	55.	37	18	33 %
June 24, "	41.2	28	13.2	32 %
July 2, "	29.8	16	13.8	46 %
July 10, "	22.6	10	12.6	<u>56 %</u>
Average				42 %

As measured by Department of Reclamation.

<u>Date</u>	<u>Percentage of loss</u>	
Aug. 6, 1943	No loss	Due to rains
June, 1944		No measurements made.
Sept., 1944		" " "
June 7, 1945		Not able to obtain
Sept. 7, 1945	23.6 %	
June 7, 1946		Not determined- high water
Sept. 9, 1946	31.27 %	
June 10, 1947		" " " "
Sept. 2, 1947	<u>7.10 %</u>	
Average	20.66 %	

" It has been requested that this Department submit a statement giving its opinion as to a fair exchange of water rights, based upon the above listed measurements and studies made by the Department."

Boise, Idaho
October 24, 1947

"Mr. Howard Tonks, Chairman,
Upper Teton Water Users,
Victor, Idaho
and
Mr. F. L. Davis, Secretary,
Lower Teton Water Users,
Rexburg, Idaho

Gentlemen:

"From the summary of water measurements taken by the Department of Reclamation during the past five years, it is evident from the measurements taken on Trail Creek that there is considerable difference in the percentage of loss in measurements taken in June and on the measurements taken in September.

"It is also evident that during most years in the Teton Basin vicinity the maximum runoff period is around the first of June, and the runoff does not recede to where it would be necessary to cut the upper Teton River water rights to satisfy prior rights of the lower users until August or the first of September.

"With this in mind, it does not seem justifiable to take into account the measurements taken in June when the water table is high and a minimum carriage loss is maintained in Trail Creek and the upper reaches of the Teton River; therefore, to arrive at a fair basis for exchange of water rights, the Trail Creek and Upper Teton River carriage losses should be considered during the time of year when actual cuts on water delivery would have to be made on the upper rights to augment prior rights of the lower users.

"For comparison, the percentage of losses taken from the summary are segregated in accordance with the measurements made in June and those made in September.

Loss in Percent on Trail Creek

		Aug. 6, 1943	33.26
June 7, 1945	28.30	Sept. 7, 1945	36.07
June 7, 1946	20.52	Sept. 9, 1946	53.96
June 10, 1947	<u>21.81</u>	Sept. 2, 1947	<u>32.61</u>
Average loss	23.54		38.97

"While the average loss from live water on Lower Trail Creek to gaging station at lower end of Teton Basin was 20.66 %.

"Making an average overall loss from head of Trail Creek to Tetonia gaging station of approximately 50 per cent by measurements

taken in September against an average Trail Creek loss of 23.54 per cent for measurements taken in June, at a time when there was no actual Teton River losses, or the losses could not be determined on account of high water.

It is apparent that the losses on Trail Creek as determined by all past measurements, are more or less constant; during good runoff years the transportation losses are at a minimum, and during dry years the losses are at a maximum. The same proves true on the Upper Teton River, where the losses vary due to the rising and falling of the underground water table and to the amount of flow in the river.

It is obvious as to the distribution of water rights as decreed, that the upper users' water rights do not have to be cut to satisfy prior water rights only in years of low runoff and during the late summer months when the flow recedes to make it necessary, or when the flow of Trail Creek and Teton River is at or around minimum.

Average of both June and September measurements-

Loss on Trail Creek - 32.36 %

Loss on Teton River - 20.66 %

Flow based upon 100 cubic feet per second at head of Trail Creek-
Loss of 32.36 % leaves 67.64 cubic feet per second of live water
at mouth of Trail Creek.

$67.64 \text{ c.f.s.} \times 20.66 \% \text{ loss in river} = 13.97 \text{ c.f.s. river loss.}$

$32.36 \div 13.97 \text{ c.f.s.} = 46.33 \text{ c.f.s., or } 46.33 \% \text{ loss to Lower}$
Teton gaging station.

Leaving 53.67 c.f.s. out of 100 c.f.s., at gaging station

This would give a ratio of $\frac{100}{53.67}$ or 1.86 to 1.

"Individual late season ratios show that 1.51 to 1.86 acre-feet would be available in the upper basin for every acre foot that would reach the lower users.

"There is a loss between the reservoir and the Teton River, but the flexibility of the stored water is a definite advantage.

"I, therefore, recommend that the basis of exchange be 1.75 acre feet to the upper basin for each acre foot of storage water measured at the reservoir outlet.

"I will be pleased to meet with either group, but preferably with both groups jointly, should occasion arise for further discussion.

"We are enclosing a copy of the report on the 1947 fall measurements.

Very truly yours,
(Signed) Mark R. Kulp
State Reclamation Engineer."

One miscellaneous measurement was made on Mahogany Creek just above upper diversion on June 26, discharge 17.1 sec.-ft. No water reaching Carrington diversion.

The Bureau of Reclamation secured a number of stream flow records in Teton Basin during the summer of 1947 that are not included in this report.

DISTRIBUTION IN SWAN VALLEY SECTION

Mr. Lloyd Brown was again appointed Deputy Watermaster in this region and he also acted as watermaster on the local canals. For the latter service the local users were charged with \$2.00 per day of his salary, the balance being charged as part of District No. 36 general expense.

Swan Valley users rented 1,457 acre-feet of storage from the Government, slightly less than was used the year previous. The users in this section seemed to get along fairly well with each other during 1947, more so than in most previous years, and no unusual difficulties were reported in administering the local streams.

PRECIPITATION IN INCHES

(Actual and normal for year ending September 30, 1947)

Month	Snake River, Wyo.		Moran, Wyo.		Jackson, Wyo.		Bedford, Wyo.		Irwin, Ida.	
	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.
Oct.	4.01	2.01	3.65	1.58	2.75	1.19	4.24	1.56	3.36	1.25
Nov.	2.75	2.69	1.53	1.78	.94	1.04	1.39	1.43	1.68	1.15
Dec.	5.09	3.01	2.42	1.95	1.80	1.53	2.33	1.69	1.36	1.25
Jan.	2.96	4.10	2.01	2.31	1.03	1.62	1.02	1.97	.70	1.42
Feb.	1.46	2.90	.98	2.23	.46	1.57	1.19	1.77	.60	1.15
Mar.	4.57	3.29	2.48	2.08	.75	1.32	.98	1.74	.57	1.14
Apr.	2.28	2.19	1.13	1.77	.89	1.35	1.21	1.61	.33	1.06
May	3.67	2.37	2.26	1.87	1.25	1.76	3.87	2.01	2.13	1.67
June	4.25	2.45	2.27	1.83	2.39	1.35	3.00	1.72	3.18	1.53
July	.62	1.48	.48	1.21	.52	.92	.85	.97	.79	.97
Aug.	2.13	1.58	1.83	1.40	2.98	1.43	3.19	1.16	1.60	.87
Sept.	2.07	1.69	2.33	1.65	1.32	1.48	1.25	1.26	.88	1.18
Year	35.86	29.76	23.37	21.66	17.08	16.56	24.52	18.89	17.18	14.64

Month	<u>Ashton</u>		<u>Idaho Falls</u>		<u>Pocatello</u>		<u>Twin Falls</u>		<u>Av. 9 Stas.</u>	
	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.
Oct.	2.56	1.28	1.30	.98	2.16	1.68	2.07	.93	2.90	1.39
Nov.	1.61	1.30	1.03	.79	1.43	1.03	.95	1.08	1.48	1.37
Dec.	1.01	1.64	.41	1.06	.78	1.15	.64	.90	1.76	1.58
Jan.	.82	1.88	.15	1.31	.42	1.34	.33	1.10	1.05	1.90
Feb.	.95	1.52	.16	.97	.26	1.20	.21	.88	.70	1.58
Mar.	.96	1.21	.57	1.08	1.31	1.28	1.30	.85	1.50	1.55
Apr.	1.25	1.16	.20	.94	.72	1.47	.54	1.11	.95	1.41
May	1.46	1.71	1.34	1.24	1.30	1.73	1.29	1.03	2.06	1.71
June	2.55	1.66	.93	1.21	1.70	1.09	2.04	.81	2.48	1.52
July	.62	.94	.04	.62	.09	.77	.10	.35	0.46	.91
Aug.	1.04	.79	.30	.59	.59	.50	.04	.22	1.52	.95
Sept.	1.44	1.12	1.26	.82	.99	.74	.24	.57	1.31	1.17
Year	16.27	16.21	7.69	11.61	11.75	13.98	9.75	9.83	18.17	17.04

Annual precipitation was above normal in the headwater areas and below normal in the valley areas. It ranged from 130% of normal at Bedford in Salt River Valley, Wyoming, to 66% of normal at Idaho Falls. May and June were months of heavy precipitation which was favorable from a water supply standpoint as a larger per cent of the precipitation in those months appears as streamflow than is the case in the later summer when the dry soil retains much of the precipitation.

EXPENDITURES DURING YEAR ENDING DECEMBER 31, 1947

Engineers and Hydrographers

Lynn Crandall	Salary 1 year	\$7,070.84
Henry C. Eagle	" 1 year	4,544.88
Melvin Luke	" 5 months @ \$260.00	1,300.00
Oleen Dummer	" 3.72 " @ \$210.00	788.51
A. H. Bush	" 3.42 " @ \$210.00	718.29
J. Dean Hill	" 2.80 " @ \$210.00	588.00

Clerk

Charlotte M. Elg	Salary 1 year	2,538.58
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River Riders

D. R. Anthony	80 days @ \$8.00 incl. mileage	\$640.00
H. M. Bramwell	80 " @ \$8.00 " "	640.00
D. W. Dick	34 " @ \$9.00 " "	306.00
Eugene Liljenquist	80 " @ \$7.50 " "	600.00
Lloyd Brown	71 " @ \$8.00 " "	568.00
Norbert Lenz	2.44 mo. @ \$60. mo. " "	146.38
Joe Bohi	75 days @ \$8.50 " "	637.50
Don Riggs	73 " @ \$2.00 " "	584.00
Seth Hansen	21 hrs. @ \$2.00 hr. " "	42.00

Miscellaneous

John Lee, Sec'y, Com. of Nine, Salary & Expense	465.58
Transportation, 34,430 miles @ 6¢ a mile	2,065.80
Telephone and Telegraph	303.69
Supplies and Equipment	1,172.58
Gage Readers	721.27
Bond Premium and Insurance	139.01
Miscellaneous	426.30

Total	\$27,007.21
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Expenditures from various funds

Water-users funds	\$16,950.06
State of Idaho Stream Gaging Fund	2,500.00
U. S. Geological Survey	7,557.15

Total	\$27,007.21
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In addition to the foregoing, upper valley members of the Committee of Nine were paid \$551.35 for services at \$5.00 per day and expenses, which was pro-rated among upper valley canals.

Funds on hand January 1, 1948

District No. 36 Water Distribution Fund	\$10,405.73
State of Idaho Stream Gaging Fund	1,250.00
U. S. Geological Survey	1,508.54

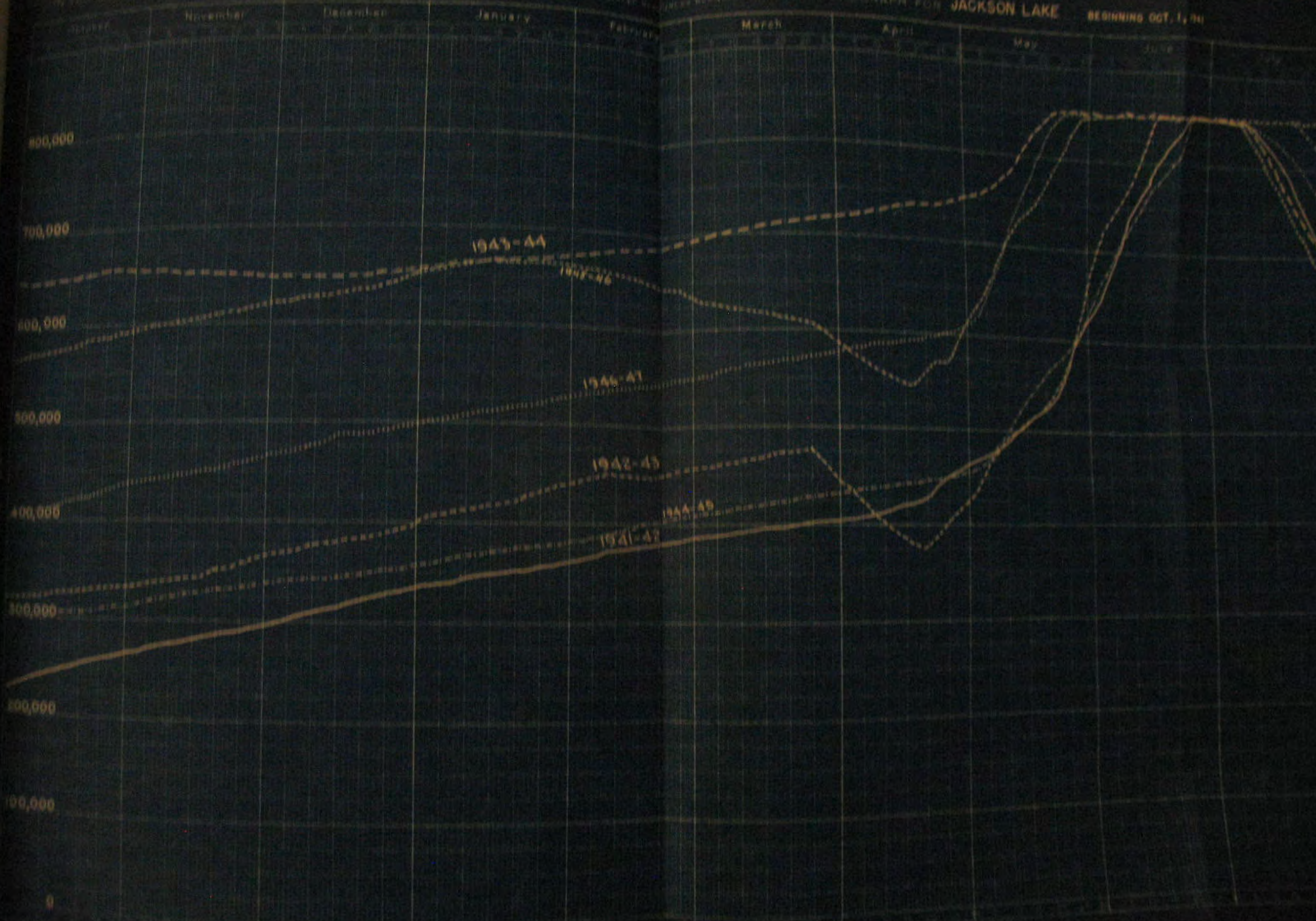
Total	\$13,164.27
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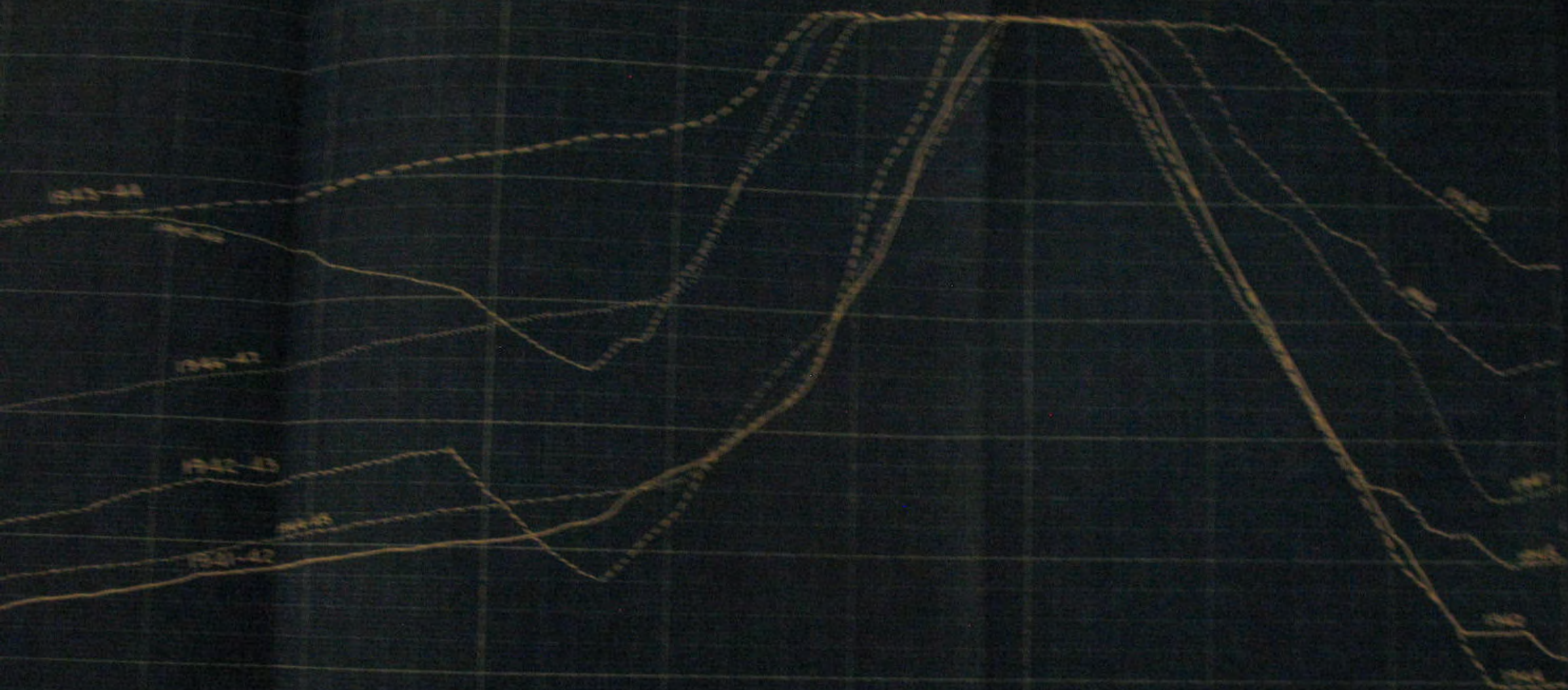
PRINCIPAL STREAMS AND GAGING STATIONS WATER DISTRICT NO. 36

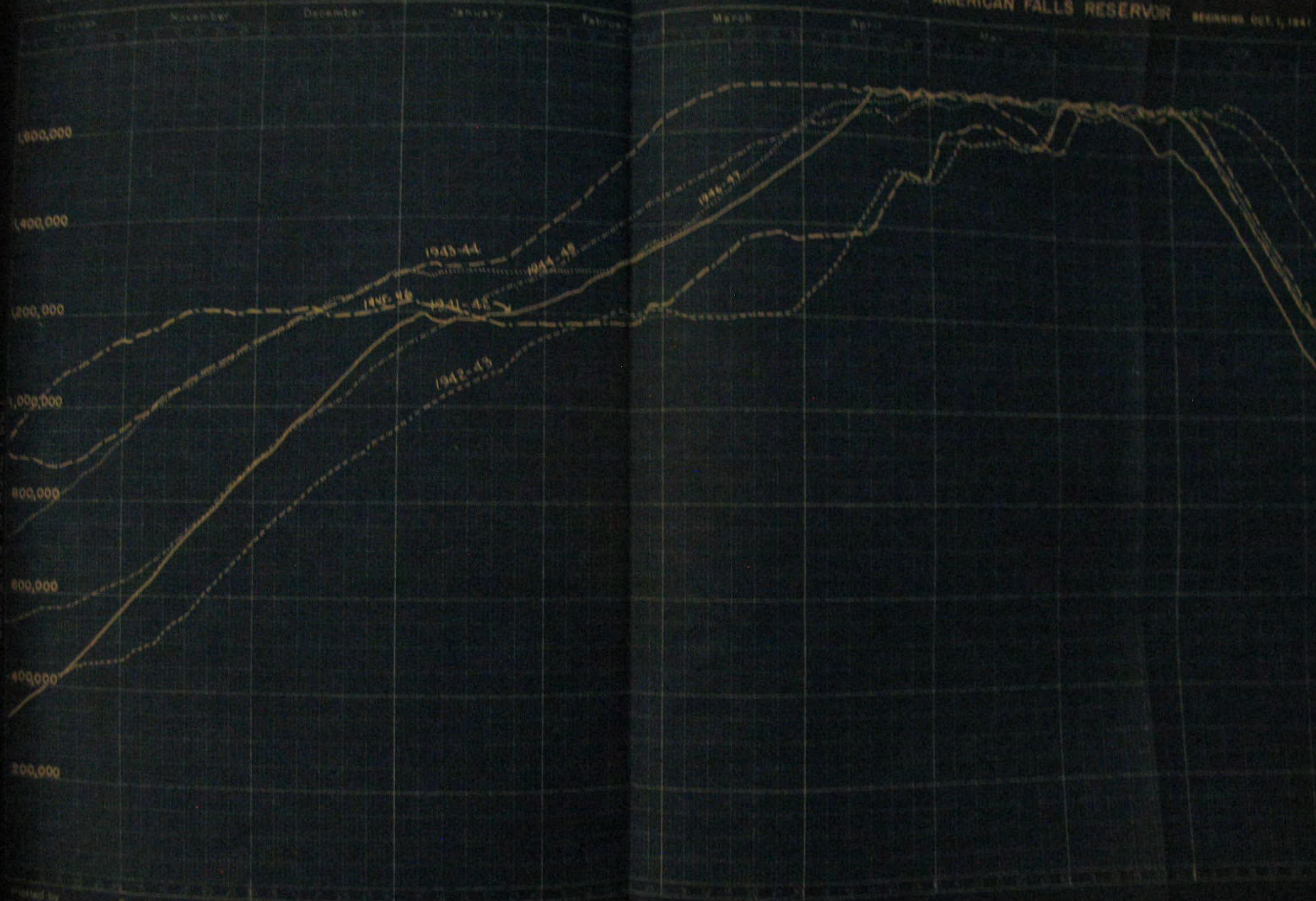


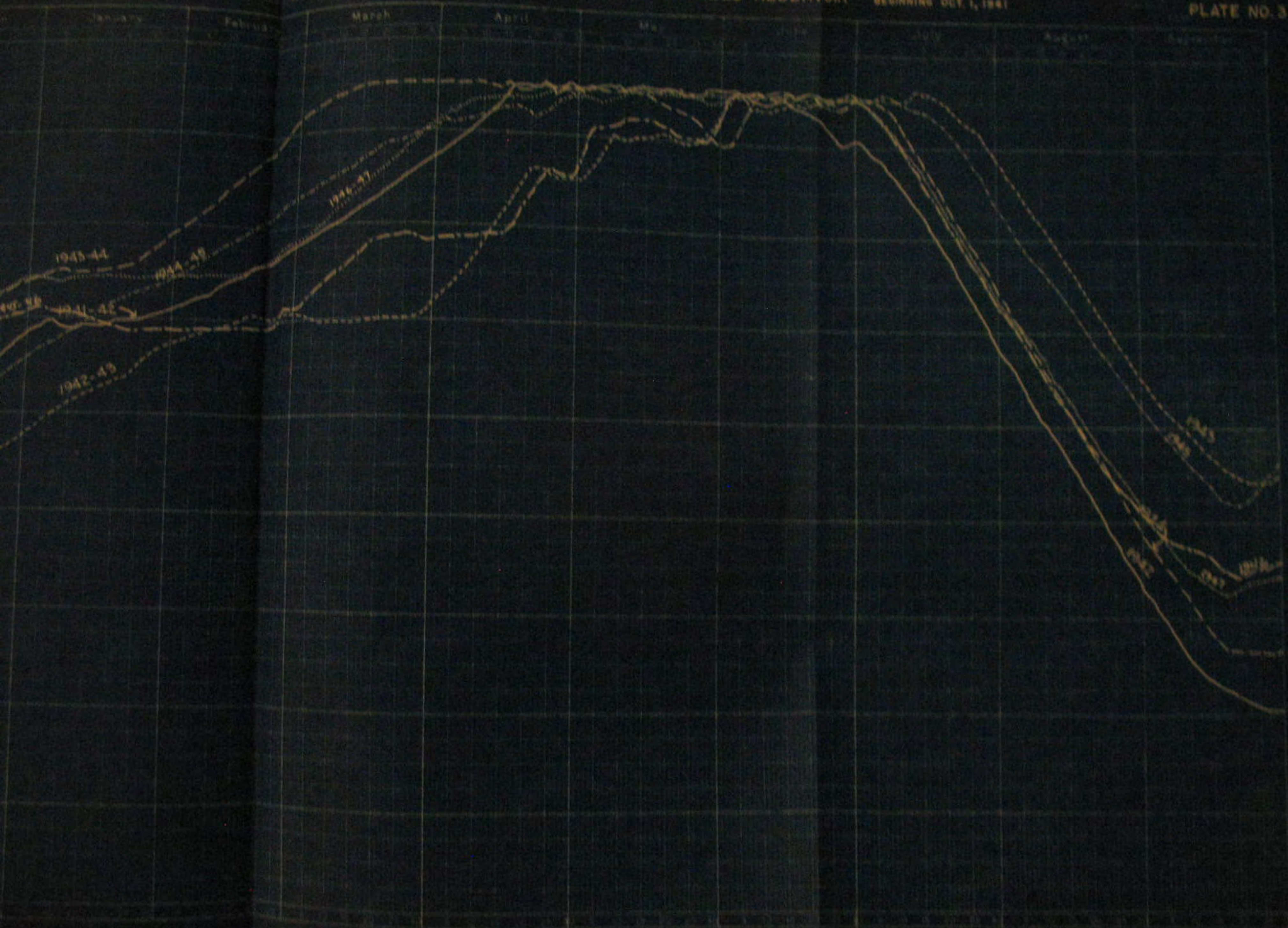
- | NO. | STATION |
|-----|---|
| 1 | JACKSON LAKE AT MORAN |
| 2 | SNAKE RIVER AT MORAN |
| 3 | SNAKE RIVER NEAR HEISE |
| 4 | SNAKE RIVER NEAR SHELLEY |
| 5 | SNAKE RIVER AT CLOUGH RANCH, NEAR BLACKFOOT |
| 6 | AMERICAN FALLS RESERVOIR AT AMERICAN FALLS |
| 7 | SNAKE RIVER AT NEELY |
| 8 | LAKE WALCOTT NEAR MINIDOKA |
| 9 | NORTH SIDE CANAL NEAR MINIDOKA |
| 10 | SOUTH SIDE CANAL NEAR MINIDOKA |
| 11 | SNAKE RIVER NEAR MINIDOKA |
| 12 | P.A. LATERAL NEAR MILNER |
| 13 | GOODING CANAL AT MILNER |
| 14 | NORTH SIDE CANAL AT MILNER |
| 15 | SOUTH SIDE CANAL AT MILNER |
| 16 | MILNER LOW LIFT CANAL AT MILNER |
| 17 | SNAKE RIVER AT MILNER |
| 18 | HENRY'S LAKE NEAR LAKE |
| 19 | HENRY'S FORK NEAR LAKE |
| 20 | ISLAND PARK RESERVOIR NEAR ISLAND PARK |
| 21 | HENRY'S FORK NEAR ISLAND PARK |
| 22 | HENRY'S FORK AT WARM RIVER |
| 23 | HENRY'S FORK NEAR ASHTON |
| 24 | GRASSY LAKE NEAR MORAN |
| 25 | FALL RIVER NEAR SQUIRREL |
| 26 | FALL RIVER NEAR CHESTER |
| 27 | HENRY'S FORK AT ST. ANTHONY |
| 28 | TETON RIVER NEAR TETONIA |
| 29 | TETON RIVER NEAR ST. ANTHONY |
| 30 | HENRY'S FORK NEAR REXBURG |
| 31 | BLACKFOOT RIVER NEAR BLACKFOOT |





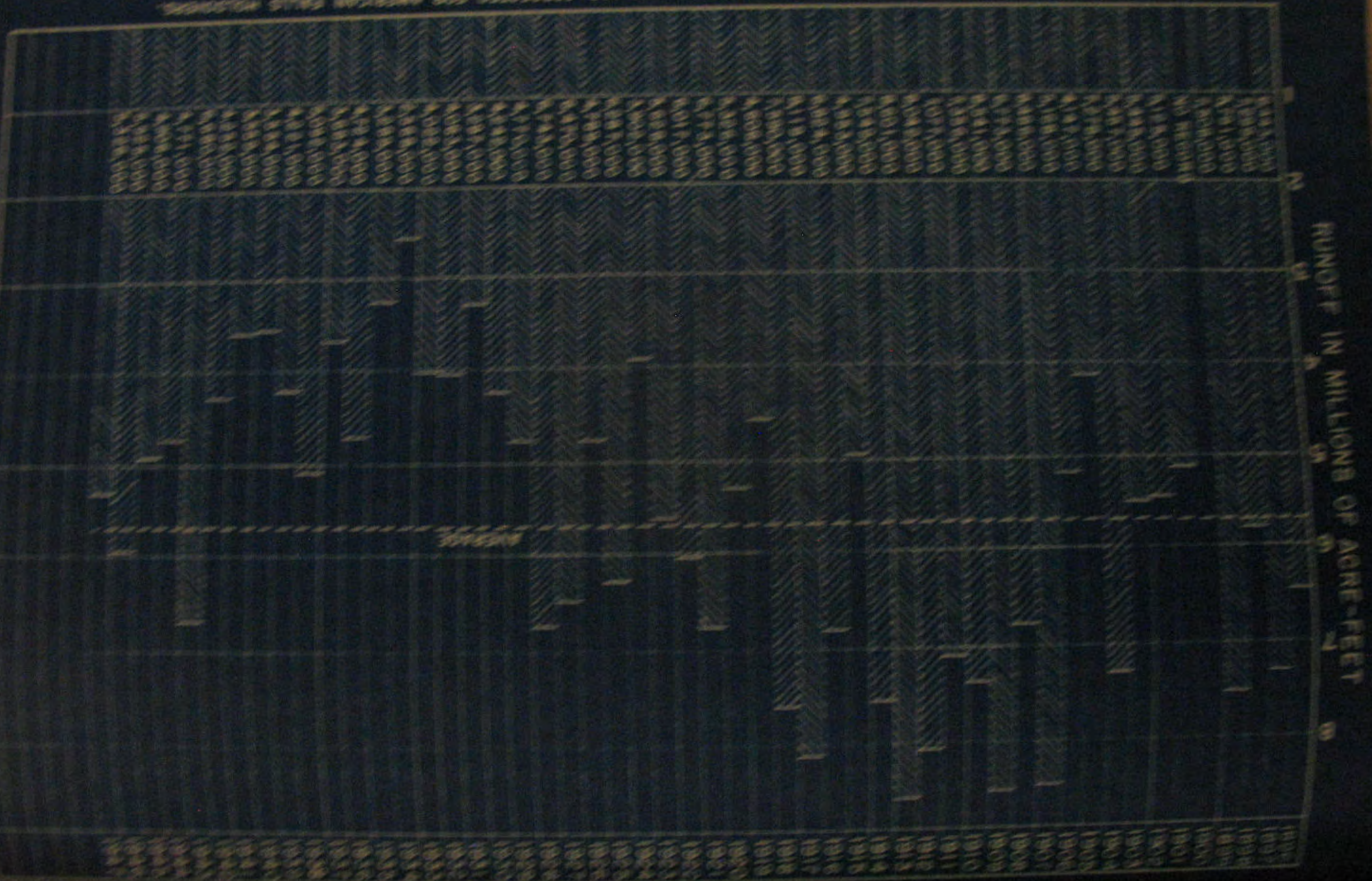




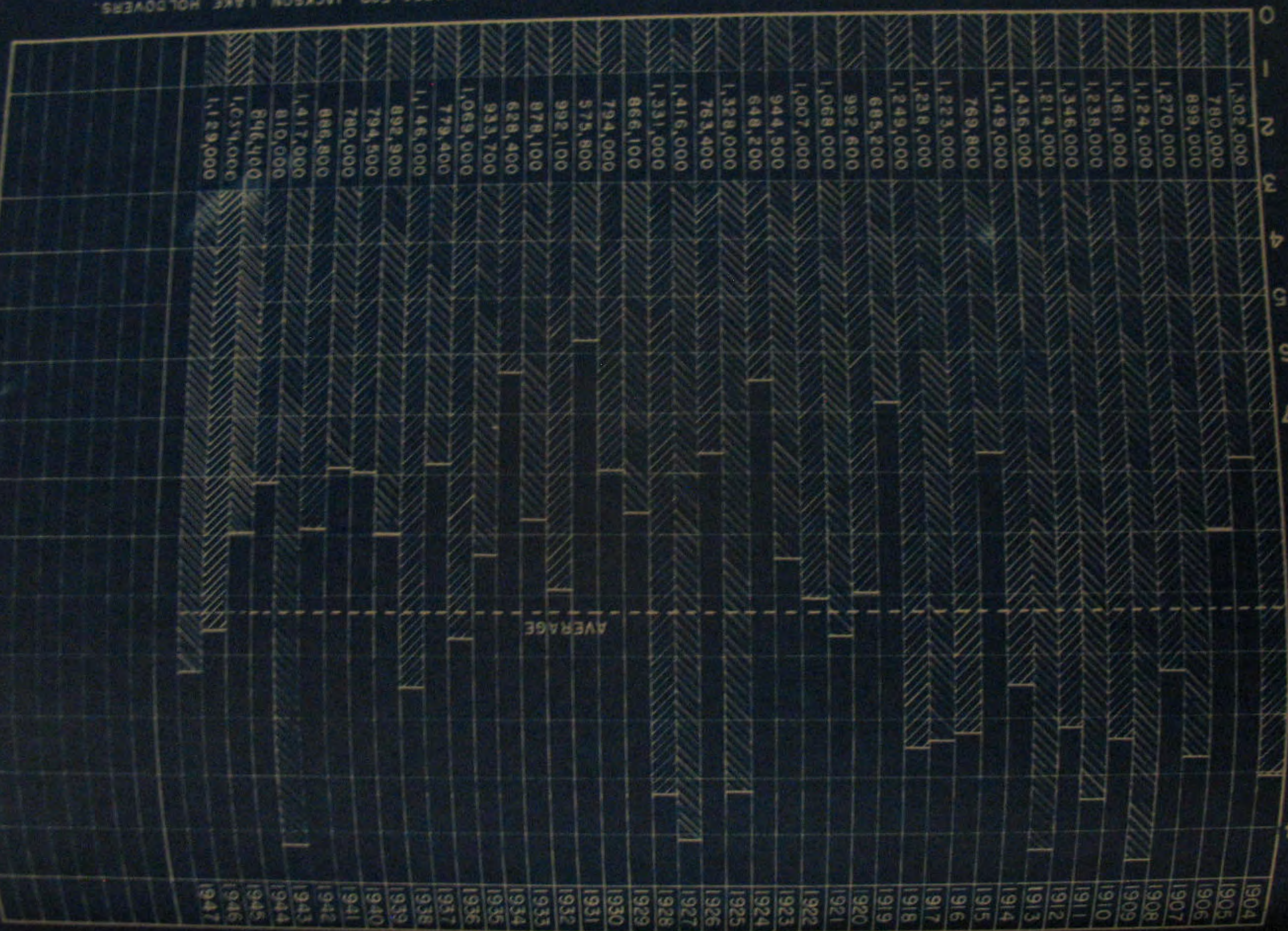


NOTE: RUNOFF TOTALS ARE FOR WATER YEAR ENDING DEPT. 31 AND ARE CORRECTED FOR AVERAGE FALLS MEASUREMENT RECORDS AT MONTICALLY FROM 1902 TO 1907

ANNUAL RUNOFF OF SNAKE RIVER AT NEELY, IDAHO



RUNOFF IN HUNDREDS OF THOUSANDS OF ACRE-FEET



NOTE: RUNOFF TOTALS ARE FOR WATER YEAR ENDING SEPT. 30 AND ARE CORRECTED FOR JACKSON LAKE HOLDOVERS.

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 2000

INFLOW TO AMERICAN

BETWEEN CLOUGH AND

24 HOUR SECOND

JUNE

JUNE																																																									
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31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31											
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2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1										
37	34	39	44	71	75	86	100	140	170	172	162	146	120	115	116	106	98	88	84	74	67	56	41	35	45	53	51	55	62	51	44	42	26	20	15	27	31	21	18	30	28	1	5	9	8	8											
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31	31	30	29	29	30	32	34	36	38	40	42	44	46	48	50	51	53	54	54	54	54	54	54	55	55	55	55	55	55	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56									
47	46	46	46	46	46	47	47	48	48	49	50	50	51	51	52	52	53	53	53	52	52	51	50	50	49	48	47	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46									
4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3										
12	12	13	13	13	13	13	13	13	13	13	13	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10										
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10	10	10	15	16	20	20	35	45	24	35	34	53	48	38	27	21	0	14	24	24	25	25	0	0	10	10	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10									
5	5	5	5	5	5	5	5	4	4	4	4	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2										
12	16	13	24	24	30	30	45	62	62	62	73	75	81	52	50	55	50	64	70	70	40	25	14	11	14	22	21	15	2	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
34	34	34	34	34	34	33	33	33	32	32	32	31	31	31	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30										
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130	1415	1428	1436	1452	1453	1514	1547	1541	1515	1560	1545	1585	1545	1585	1566	1573	1491	1585	1580	1543	1482	1442	1371	1353	1389	1402	1393	1394	1375	1361	1342	1336	1317	1313	1314	1328	1308	1302	1301	1304	1307	1307	1307	1307	1307	1307	1307										
1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330										
2711	2716	2758	2761	2792	2825	2844	2877	2881	2945	2990	2973	3016	2975	2986	2986	2982	2982	2982	2982	2982	2982	2982	2982	2982	2982	2982	2982	2982	2982	2982	2982																										

1947

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28	28	28	28	28	28	28	28	28	28	28	28	30	30	31	31	31	31	31	31	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32						
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57	57	57	57	57	57	57	57	57	57	57	57	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58							
16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16							
29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29							
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6							
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2							
3	86	86	79	82	83	86	86	83	82	87	89	93	100	101	101	80	75	74	72	71	72	68	66	66	65	65	60	59	72	91	129	139	142	152	123	139	136	142	145	144	151	156							
0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
38	38	38	38	38	38	38	38	38	38	38	38	38	40	41	41	41	42	42	42	43	43	43	43	44	44	44	43	43	45	46	46	46	47	47	47	47	47	47	47	47	47	47							
70	71	71	71	71	71	71	71	71	71	70	70	70	70	70	69	69	69	69	69	69	69	68	68	68	68	68	68	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67							
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3							
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9							
1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3							
16	26	26	26	26	26	26	26	26	26	26	26	26	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20								
4	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14								
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2							
1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
16	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27								
3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4								
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5								
25	25	25	25	25	25	25	25	25	25	25	25	25	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24								
15	1417	1417	1410	1412	1415	1432	1424	1418	1419	1426	1429	1434	1438	1443	1443	1423	1420	1430	1426	1423	1424	1421	1423	1426	1427	1447	1441	1430	1437	1486	1495	1548	1515	1543	1545	1551	1582	1557	1522	1594	1527	1507							
30	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530								
45	2747	2747	2740	2742	2745	2762	2754	2748	2749	2756	2759	2764	2768	2772	2773	2753	2750	2760	2756	2753	2754	2751	2753	2756	2757	2777	2771	2760	2767	2806	2835	2882	2835	2853	2856	2901	2922	2937	2929	2934	2937	2947							
84,648																																																	

DAILY SEGREGATION OF

DATE	JACKSON LAKE CONTENTS ACRE-Feet	SNAKE RIVER AT MORAN			MORAN TO HEISE		DATE	HEISE & RILEY			STORAGE INFLOW HEISE TO SHELLEY		STORAGE LOSS HEISE TO SHELLEY	DIVERSIONS HEISE TO SHELLEY			DATE	SNAKE RIVER NEAR SHELLEY		
		STORED	NORMAL	TOTAL	STORED LOSS	STORED DIVERSION		STORED	NORMAL	TOTAL	MARKET LAKE	HEWES FOR NEW DIVISION		STORED	NORMAL	TOTAL		STORED	NORMAL	TOTAL
JUNE 27	838,680						JUNE 28										JUNE 29			
28	833,840						29										30			
29	830,820																			
30	828,320						JULY 1			12,717										
JULY 1	820,380						2			11,717										
2	820,100						3			11,718	0									
3	823,380						4			13,022	7									
4	823,100						5			13,022	7									
5	821,380						6			13,012	7									
6	821,840						7			13,324	7									
7	823,100						8			14,424	7									
8	820,820						9			13,024	7									
9	848,000	1291	3269	4560	30		10	1000	14,685	13,928	7	-2								
10	845,840	514	2946	3460	13		11	961	14,123	14,624	7	-4								
11	844,420	252	2378	2630	6		12	246	12,779	13,024	7	-63								
12	843,800	287	2353	2640	6		13	881	12,177	12,428	7	-288								
13	843,410	356	2324	2680	14		14	842	11,485	12,027	7	-119								
14	841,630	1288	2186	3474	32		15	1228	11,121	12,329	7	7								
15	838,230	1512	2018	3530	36		16	1251	10,888	12,429	7	-12								
16	832,280	1594	1894	3488	40		17	1224	10,218	12,349	7	-11								
17	833,880	1687	1863	3550	42		18	1243	10,485	12,128	7	6								
18	829,880	1969	1842	3811	48		19	1217	9,611	12,028	7	30								
19	828,300	2181	1819	4000	55		20	2124	9,842	12,115	8	80								
20	821,780	2685	1655	4340	55		21	2227	9,170	12,627	8	4								
21	816,780	2528	1682	4210	53		22	2261	8,984	12,028	8	4								
22	812,340	2575	1682	4257	54		23	2512	8,812	12,028	8	2								
23	808,620	2559	1621	4180	54		24	2812	8,812	11,828	8	2								
24	801,320	3082	1620	4702	74		25	2882	8,884	11,824	8	2								
25	795,380	3582	1680	5262	77		26	3028	8,912	12,428	8	2								
26	788,740	3540	1650	5190	81		27	3155	8,228	12,423	9	2								
27	788,180	3688	1622	5310	86		28	3424	7,788	12,022	9	2								
28	774,840	3888	1532	5420	88		29	3888	7,788	11,423	10	2								
29	767,420	4024	1514	5538	102		30	3882	7,812	11,423	10	2								
30	758,380	4356	1484	5840	110		31	4081	7,842	11,423	10	2								
JULY 1	750,770	4346	1464	5810	120		1	4225	7,842	11,423	10	2								
2	748,380	3741	1388	5129	122		2	3822	8,228	11,728	9	2								
3	735,180	4012	1310	5322	128		3	3882	8,228	11,728	9	2								
4	728,720	3941	1288	5229	132		4	3882	8,228	11,728	9	2								
5	718,720	3262	1287	4549	135		5	3882	8,228	12,423	9	2								
6	706,720	1735	1228	2963	140		6	3882	8,228	12,423	9	2								
7	708,720	1888	1124	3012	142		7	3882	8,228	12,423	9	2								
8	701,670	1831	1023	2854	141		8	3882	8,228	12,423	9	2								
9	698,710	1881	1023	2904	140		9	3882	8,228	12,423	9	2								
10	688,280	982	1048	2030	140		10	3882	8,228	12,423	9	2								
11	698,180	1030	1048	2078	140		11	3882	8,228	12,423	9	2								
12	691,120	1030	1048	2078	140		12	3882	8,228	12,423	9	2								
13	688,720	1742	918	2660	140		13	3882	8,228	12,423	9	2								
14	688,780	1742	918	2660	140		14	3882	8,228	12,423	9	2								
15	681,180	1742	918	2660	140		15	3882	8,228	12,423	9	2								

ATION OF DATA AT AND BETWEEN SNAK

24 HOUR SECOND-FOOT EXCEPT AS NOTED

IS SHELLEY	DATE	SNAKE RIVER NEAR SHELLEY			DIVERSIONS SHELLEY TO BLACKFOOT			STORAGE LOSS SHELLEY TO BLACKFOOT	THEORETICAL BALANCE OF STORAGE AT BLACKFOOT	DATE	BLACKFOOT RIVER	SNAKE RIVER AT CLOUGH			CALCULATED INFLOW CLOUGH TO NEELEY	DATE	AMERICAN FALLS RESERVOIR CONTENT ACRE-FOOT	SNAKE RIVER AT NEELEY			DATE
		TOTAL	STORED	NORMAL	TOTAL	STORED	NORMAL	TOTAL				STORED	NORMAL	TOTAL				STORED	NORMAL	TOTAL	
	JUNE 29									JUNE 30		0	13000	13000	2723	JULY 1	1,700,000	1100	10400	11500	
	30									JULY 1		0	9480	9480	2721		1,687,750	3000	8000	11000	
	JULY 1											0	5030	5030	2705		1,687,570	3685	7735	11400	
	2				114	3498	3612	-7	-107	2	2	-107	3267	3160	2691		1,677,000	3542	5958	11600	
7884	3	-321	6341	6020	167	3409	3576	-29	-459	3	2	-459	2849	2390	2672		1,664,790	6079	9321	11600	
8285	4	-507	6397	5890	212	3439	3651	-43	-676	4	5	-676	3516	2880	2666		1,651,320	5379	6222	11100	
8103	5	-539	7469	6930	161	3530	3691	-42	-658	5	26	-658	4448	3790	2647		1,640,120	4405	7085	11500	
8765	6	-775	8575	7800	185	3693	3888	-58	-902	6	16	-902	4912	4010	2649		1,630,320	3436	7561	11400	
8624	7	-764	8024	7260	123	3665	3788	-53	-834	7	11	-834	3534	2700	2644		1,618,390	3422	8178	11600	
8844	8	-839	6629	5790	126	3541	3667	-58	-907	8	7	-907	3067	2180	2667		1,603,640	5744	5796	11500	
8991	9	-913	7513	6600	179	3672	3851	-86	-1026	9	27	-1026	4586	3560	2668		1,588,390	4048	7254	11300	
9312	10	-1153	8923	7770	195	3714	3909	-81	-1267	10	42	-1267	5257	3990	2653		1,572,570	3480	7910	11400	
9161	11	128	7302	7430	179	3662	3841	-3	-48	11	43	-48	3298	3250	2641		1,558,590	5791	5899	11700	
9232	12	-716	7156	6440	152	3647	3799	-52	-816	12	44	-816	3126	2310	2644		1,544,370	6130	5770	11900	
9088	13	-851	5911	5060	113	3461	3574	-58	-906	13	33	-906	2436	1530	2648		1,534,900	6916	5094	12000	
9154	14	-1115	5755	4640	116	3489	3605	-74	-1157	14	16	-1157	2247	1090	2647		1,521,500	7008	4894	11900	
9045	15	-806	4926	4120	139	3338	3477	-57	-888	15	8	-888	1688	800	2642		1,508,900	7570	4330	11900	
9121	16	-113	4443	4330	181	3401	3582	-19	-276	16	15	-276	1048	772	2627		1,499,220	8125	3479	11800	
9268	17	78	4252	4330	191	3501	3692	-7	-106	17	24	-106	815	709	2622		1,471,420	8385	3437	11800	
9285	18	-45	4185	4140	181	3515	3696	-14	-212	18	25	-212	776	584	2622		1,458,190	8395	3405	11900	
9246	19	70	3900	3970	172	3503	3675	-6	-96	19	24	-96	556	480	2633		1,446,190	8711	3189	11900	
9248	20	471	3529	4000	198	3502	3700	16	257	20	40	257	289	546	2637		1,435,740	8874	2985	11800	
9200	21	739	3511	4250	204	3524	3728	32	503	21	53	503	321	824	2639		1,423,210	8840	2940	11800	
9025	22	925	3515	4440	173	3582	3755	45	707	22	56	557	236	793	2637		1,386,170	8827	2873	11700	
9147	23	918	3282	4200	171	3519	3690	45	702	23	50	549	230	779	2635		1,368,030	8835	2893	11900	
9114	24	988	3422	4410	192	3566	3758	48	748	24	60	592	240	832	2637		1,354,910	9023	2877	11900	
9003	25	995	3275	4270	166	3544	3710	50	779	25	57	472	237	709	2631		1,338,390	9032	2868	11900	
9009	26	1371	2849	4220	163	3511	3674	72	1136	26	48	467	228	695	2629		1,318,770	9143	2857	12000	
8974	27	1266	2754	4020	160	3491	3651	66	1040	27	41	367	221	588	2625		1,302,490	8994	2848	11800	
8968	28	1003	2797	3800	164	3437	3601	50	789	28	21	239	201	440	2627		1,285,990	8872	2805	11500	
8971	29	1157	2413	3570	777	2672	3449	23	357	29	18	142	196	340	2632		1,269,380	8570	2830	11400	
9023	30	1295	2435	3730	797	2786	3583	30	468	30	10	160	190	350	2631		1,252,870	8578	2881	11400	
8987	31	896	2974	3870	794	2822	3616	6	96	AUG. 1	12	342	192	534	2638		1,236,940	8470	2830	11200	
8844	AUG. 1	1402	2898	4300	755	2727	3482	39	608	2	66	1214	246	1460	2657		1,221,340	8387	2903	11200	
8652	2	1431	3149	4580	629	2518	3147	48	754	3	74	1876	254	1930	2645		1,211,370	8301	2899	10900	
8552	3	1187	3963	5150	68	2950	3018	67	1052	4	104	2516	284	2800	2644		1,202,330	7972	2859	10800	
8284	4	1983	3847	5830	70	2886	2956	115	1798	5	207	2803	387	3190	2653		1,193,890	7887	3003	10700	
7880	5	2960	3190	6150	59	2861	2920	174	2727	6	159	3151	339	3490	2654		1,185,790	8078	2921	11000	
7682	6	2862	3478	6340	82	2838	2920	167	2613	7	72	2628	252	2880	2659		1,175,360	8303	2897	11800	
7408	7	1684	3696	5380	85	3062	3147	96	1503	8	34	1596	214	1810	2683		1,168,890	8495	2915	11600	
7410	8	1558	3022	4580	62	3160	3222	90	1406	9	34	1576	214	1790	2701		1,163,290	8758	2945	11700	
7399	9	1356	2894	4250	0	2726	2726	61	1275	10	72	1508	252	1760	2693		1,158,940	8989	3111	11700	
7809	10	1070	3050	4120	0	2594	2594	64	1006	11	221	1799	401	2100	2710		1,152,570	9289	3219	11800	
7356	11	1356	2964	4300	0	2338	2338	80	1256	12	418	1852	598	2450	2718		1,147,600	9302	3166	11900	
7037	12	515	4035	4550	80	2544	2624	26	409	13	299	1871	479	2380	2719		1,142,980	9447	2993	11400	
6953	13	884	3526	4410	80	2577	2657	48	756	14	57	1323	237	1980	2716		1,138,910	8303	2947	11300	
6864	14	961	2909	3870	80	2774	2854	63	628	15	46	761	226	987	2721		1,134,980	8537	2943	11300	
6705	15	1145	2225	3370	70	2806	2876	79	1011	16	43	407	223	630	2740		1,128,210	8158	2944	11100	
6669	16	1379	1636	3010	62	2765	2827	74	1233	17	25	195	205	400	2738		1,124,000	8047	2933	11000	
6935	17	1457	1573	3030	232	2552	2784		1151	18	11	158	191	350	2742		1119,890				

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EXCEPT AS NOTED

GAAGING STATIONS 1947

PLATE NO. 12

SHAKE RIVER NEAR MINIDOKA			DATE	MILNER LAKE GAGE FEET	GOODING PROJECT			NORTH SIDE CANAL COMPANY					TRIN FALLS CANAL COMPANY			MILNER LOW LIFT			SHAKE RIVER AT MILNER			
STORED	NORMAL	TOTAL			STORED	NORMAL	TOTAL	P.A.	GOODING	MAIN	TOTAL	STORED	NORMAL	STORED	NORMAL	TOTAL	STORED	NORMAL	TOTAL	STORED	NORMAL	TOTAL
090	7520	8210	JULY 2	10.98	808	914	1320	62	930	2390	3382	0	3382	0	3370	3370	0	178	178	0	76	76
090	8000	8090	3	10.98	1320	0	1320	62	930	2440	3432	432	3000	430	3000	3430	192	0	192	76	0	76
110	8000	8150	4	10.92	1380	0	1380	62	930	2480	3472	472	3000	490	3000	3490	200	0	200	76	0	76
128	4232	8360	5	10.98	1420	0	1420	62	950	2540	3552	2320	1232	550	3000	3560	200	0	200	74	0	74
188	3795	8450	6	11.00	1420	0	1420	62	950	2580	3592	2727	795	545	3000	3545	199	0	199	67	0	67
184	4458	8480	7	11.00	1420	0	1420	62	950	2620	3622	2136	1496	585	3000	3580	199	0	199	27	0	27
231	5369	8500	8	10.90	1410	0	1410	62	940	2620	3622	1253	2369	575	3000	3575	198	0	198	22	0	22
645	5835	8480	9	11.02	1420	0	1420	62	960	2760	3782	947	2835	605	3000	3550	198	0	198	22	0	22
856	4452	9110	10	11.11	1430	0	1430	62	980	2800	3842	2390	1452	680	3000	3680	197	0	197	178	0	178
720	4030	8750	11	10.81	1410	0	1410	62	940	2700	3702	2672	1030	550	3000	3550	197	0	197	21	0	21
042	3528	8570	12	10.94	1410	0	1410	60	930	2740	3730	1202	2528	500	3000	3600	197	0	197	16	0	16
660	6000	8650	13	10.87	1400	0	1400	62	1000	2720	3782	782	3000	630	3000	3630	197	0	197	16	0	16
627	4213	8840	14	10.94	1410	0	1410	62	1000	2750	3812	2599	1212	550	3000	3450	197	0	197	16	0	16
036	4044	9080	15	10.90	1410	0	1410	61	1010	2740	3811	2767	1044	630	3000	3630	197	0	197	15	0	15
520	3400	9020	16	11.02	1430	0	1430	61	1010	2760	3831	3431	400	620	3000	3620	197	0	197	16	0	16
440	3400	8840	17	11.05	1460	0	1460	61	1030	2720	3811	3411	400	580	3000	3580	198	0	198	14	0	14
40	3400	8540	18	10.90	1450	0	1450	61	1030	2690	3781	3381	400	580	3000	3580	198	0	198	12	0	12
700	3400	8600	19	10.81	1450	0	1450	60	1020	2710	3790	3320	400	580	3000	3580	199	0	199	12	0	12
000	3400	8900	20	10.94	1460	0	1460	61	1020	2720	3801	3401	400	580	3000	3580	199	0	199	12	0	12
10	3400	8900	21	11.00	1480	0	1480	60	1040	2730	3830	3430	400	580	3000	3580	199	0	199	12	0	12
81	3189	8670	22	11.04	1470	0	1470	60	1030	2720	3810	3435	375	784	2814	3500	199	0	199	12	0	12
54	2925	8780	23	10.98	1470	0	1470	60	1010	2700	3770	3424	344	1028	2562	3510	199	0	199	12	0	12
00	2960	8650	24	10.90	1470	0	1470	60	1000	2700	3750	3412	344	1004	2612	3520	199	0	199	12	0	12
37	2873	8810	25	10.91	1470	0	1470	60	1000	2720	3780	3442	339	1115	2535	3450	199	0	199	12	0	12
65	2865	8930	26	10.98	1470	0	1470	59	1010	2720	3789	3452	337	1112	2528	3440	198	0	198	12	0	12
68	2877	8840	27	10.94	1470	0	1470	60	1030	2700	3790	3452	338	1091	2539	3430	198	0	198	11	0	11
72	2868	8840	28	10.92	1470	0	1470	60	1010	2680	3750	3412	338	1110	2530	3440	198	0	198	11	0	11
82	2857	8840	29	10.99	1470	0	1470	62	1010	2670	3742	3406	336	1109	2521	3430	197	0	197	11	0	11
84	2846	8870	30	11.00	1480	0	1480	62	1010	2650	3722	3386	336	1120	2510	3430	197	0	197	11	0	11
12	2828	8540	31	10.94	1470	0	1470	61	1020	2650	3731	3397	334	1136	2494	3430	197	0	197	11	0	11
80	2830	8510	AUG. 1	10.84	1460	0	1460	61	1020	2640	3741	3407	334	1124	2486	3420	197	0	197	10	0	10
79	2821	8600	2	10.88	1470	0	1470	60	1030	2660	3750	3418	332	1101	2489	3490	197	0	197	25	0	25
90	2830	8720	3	10.96	1460	0	1460	61	1030	2680	3791	3457	324	1091	2494	3490	197	0	197	19	0	19
7	2903	8720	4	11.07	1460	0	1460	60	1040	2680	3780	3438	342	1049	2561	3410	198	0	198	18	0	18
51	2899	8540	5	11.10	1450	0	1450	60	1060	2680	3770	3429	341	1027	2558	3480	198	0	198	17	0	17
22	2928	8150	6	10.97	1400	0	1400	60	1070	2600	3730	3385	345	937	2585	3300	198	0	198	14	0	14
60	3040	7870	7	10.82	1380	0	1380	60	1030	2600	3690	3332	358	854	2602	3540	199	0	199	14	0	14
7	3003	8150	8	10.87	1380	0	1380	60	1010	2580	3650	3297	303	900	2640	3550	199	0	199	97	0	97
99	2927	8910	9	10.81	1380	0	1380	60	1010	2580	3650	3306	344	1023	2577	3400	199	0	199	162	0	162
09	2897	8720	10	10.70	1380	0	1380	60	1010	2560	3620	3289	341	1044	2566	3400	199	0	199	209	0	209
75	2915	8990	11	11.10	1400	0	1400	60	1010	2600	3670	3327	343	1054	2572	3430	199	0	199	297	0	297
05	2945	8990	12	10.91	1330	0	1330	60	1000	2580	3640	3294	346	1011	2599	3410	199	0	199	281	0	281
29	3111	8750	13	11.01	1230	0	1230	60	990	2600	3650	3284	346	836	2745	3400	199	0	199	273	0	273
38	3105	8600	14	11.08	1210	0	1210	60	1000	2570	3630	3260	340	834	2726	3400	199	0	199	273	0	273
6	3198	8360	15	11.08	1180	0	1180	60	1010	2530	3600	3224	376	798	2822	3380	199	0	199	273	0	273
97	2959	8920	16	10.94	1170	0	1170	60	1000	2540	3600	3202	348	975	2605	3380	199	0	199	255	0	255
26	2947	8930	17	10.85	1160	0	1160	60	1020	2540	3620	3273	347	1000	2600	3400	199	0	199	252	0	252
37	2953	8930	18	10.90	1170	0	1170	60	1010	2560	3620	3272	348	985	2615	3400	199	0	199	248	0	248
45	2944	8920	19	10.84	1170	0	1170	60	1020	2540	3620	3272	348	1000	2598	3400	199	0	199	250	0	250
7	2955	8920	20	10.84	1170	0	1170	60	1010	2540	3610	3260	347	1023	2589	3400	199	0	199	250	0	250

DAILY SEGREGATION OF

DATE	JACKSON LAKE CONTENTS ACRE-Feet	SNAKE RIVER AT MORAN			MORAN TO HEISE		DATE	HEISE & RILEY			STORAGE INFLOW HEISE TO SHELLEY		STORAGE LOSS HEISE TO SHELLEY	DIVERSIONS HEISE TO SHELLEY			DATE	SNAKE RIVER NEAR SHELLEY			ST
		STORED	NORMAL	TOTAL	STORED LOSS	STORED DIVERSION		STORED	NORMAL	TOTAL	MARKET LAKE	HENRY'S FORK NEAR REXBURG		STORED	NORMAL	TOTAL		STORED	NORMAL	TOTAL	
AUG. 16	877,500	2522	818	3340	63	15	AUG. 17	2444	5808	8252	9	- 32	119	920	6191	7111	AUG. 18	1382	1628	3210	9
17	672,620	2792	818	3610	70	15	18	2707	5665	8372	9	- 346	132	956	6006	6962	19	1282	1968	3250	11
18	666,810	3282	818	4100	82	15	19	3185	5368	8553	9	- 319	155	954	6244	7198	20	1764	1504	3270	12
19	660,510	3912	818	4730	98	15	20	3799	5338	9137	9	- 288	185	991	6234	7225	21	2344	1246	3590	16
20	653,000	3892	1028	4920	97	15	21	3780	5659	9439	9	- 287	184	1017	6355	7372	22	2301	1919	4220	16
21	645,280	3277	1683	4960	82	15	22	3180	6743	9923	9	- 249	154	949	6095	7042	23	1837	3193	5030	11
22	638,780	3393	1227	4620	85	15	23	3293	6529	9822	9	- 159	160	913	6047	6960	24	2070	3120	5190	5
23	632,050	3150	910	4060	79	15	24	3056	5818	8874	9	- 154	149	617	5951	6948	25	2145	2605	4750	4
24	625,800	3169	851	4020	79	15	25	3075	5637	8712	8	- 156	149	770	5990	6760	26	2008	2352	4360	5
25	619,340	3099	851	3950	77	15	26	3007	5585	8592	8	- 109	146	765	5951	6716	27	1995	2075	4070	5
26	613,370	2929	851	3780	73	15	27	2841	5500	8341	8	- 110	138	762	5952	6714	28	1839	1911	3750	13
27	607,400	2919	851	3770	73	15	28	2831	5419	8250	8	- 104	138	737	5999	6736	29	1840	1710	3550	13
28	601,660	2919	851	3770	73	15	29	2831	5288	8119	8	- 48	138	724	5937	6661	30	1929	1421	3350	13
29	596,200	2509	851	3360	63	15	30	2431	5568	7999	8	- 60	118	821	6088	6909	31	1440	1670	3110	6
30	591,690	1049	851	1900	26	15	31	1008	5757	6765	8	- 68	49	834	5862	6696	SEPT. 1	65	2395	2460	
31	589,080	1439	851	2290	36	15	SEPT. 1	1388	5035	6423	8	- 44	68	889	6041	6930	2	395	1285	1680	
SEPT. 1	585,760	2250	850	3100	56	15	2	2179	4505	6684	8	- 4	106	939	6199	7138	3	1138	482	1620	
2	580,310	3810	850	4660	95	15	3	3700	4270	7970	8	- 14	180	1105	6382	7487	4	2409	- 99	2310	13
3	572,740	4309	851	5160	108	15	4	4186	4528	8714	8	- 46	203	1301	6402	7703	5	2644	296	2940	18
4	564,500	4669	851	5520	117	15	5	4537	4440	8977	8	100	220	1482	6308	7790	6	2943	287	3230	17
5	555,070	5449	851	6300	136	20	6	5293	4147	9440	8	- 381	257	1888	5770	7658	7	2775	905	3680	17
6	545,000	5689	851	6540	142	20	7	5527	4297	9824	8	- 396	268	1936	5728	7664	8	2935	1205	4140	
7	534,000	5619	851	6470	141	20	8	5458	4466	9924	8	- 331	265	1912	5754	7666	9	2958	1312	4270	1
8	523,280	5449	851	6300	136	20	9	5293	4591	9884	8	- 108	257	1891	5514	7405	10	3043	1985	5030	1
9	512,820	4939	851	5790	124	20	10	4795	4716	9511	8	- 121	233	1070	5640	6710	11	3379	1741	5120	
10	501,930	4659	851	5510	116	20	11	4523	4645	9168	8	- 85	220	831	5647	6478	12	3395	1665	5060	
11	494,320	4109	851	4960	103	10	12	3996	4881	8877	8	256	194	814	5625	6439	13	3632	1588	4840	
12	486,700	3689	851	4540	92	10	13	3587	4564	8151	8	292	174	711	5440	6151	14	3002	1488	4490	
13	478,890	3469	851	4320	87	5	14	3377	4503	7880	8	244	164	600	5259	5919	15	2805	1525	4330	
14	471,780	3229	851	4080	81	0	15	3148	4380	7528	8	89	153	636	5308	5944	16	2456	1514	3970	
15	465,370	2999	851	3850	75		16	2924	4543	7467	0	103	142	756	5300	6056	17	2129	1891	4020	
16	458,740	2499	851	3350	62		17	2437	4618	7055		114	118	596	5356	5952	18	1837	3003	4840	
17	453,500	1260	1540	2800	31		18	1229	6157	7386		157	60	0	4533	4533	19	1326	5074	6400	
18	451,460	0	1100	1100	0		19	0	6380	6320			0	0	3354	3354	20	0	6310	6310	
19	451,000						20			5020											
20	451,910						21			4270											
21	452,600						22			4030											
22	453,730						23			3920											
23	454,870						24			3630											
24	455,560						25			3750											
25	456,460						26			3730											
TOTAL		200,155			5,003	681		194,471			610	- 4,260	9,452	82,275				99,094			

ION OF DATA AT AND BETWEEN SNAKE

24 HOUR SECOND-FOOT EXCEPT AS NOTED

24 HOUR SECOND-FEET EXCEPT AS NOTED																							
DATE	SNAKE RIVER NEAR SHELLEY			DIVERSIONS SHELLEY TO BLACKFOOT			STORAGE LOSS SHELLEY TO BLACKFOOT	THEORETICAL BALANCE OF STORAGE AT BLACKFOOT	DATE	BLACKFOOT RIVER	SNAKE RIVER AT CLOUGHS			CALCULATED INFLOW CLOUGH TO NEELEY	DATE	AMERICAN FALLS RESERVOIR CONTENTS ACRE-Feet	SNAKE RIVER AT NEELEY			L WALL CON ACR			
	STORED	NORMAL	TOTAL	STORED	NORMAL	TOTAL					STORED	NORMAL	TOTAL				STORED	NORMAL	TOTAL				
AUG. 18	1382	1828	3210																				
19	1282	1968	3250	989	1936	2925																	
20	1766	1504	3270	1152	1845	2997	24	309	AUG. 19	7	228	187	415	2743	AUG. 20	983,530	8170	2930	11100				
21	2344	1246	3590	1212	1778	2990	8	122	20	8	192	188	380	2747	21	966,840	8265	2935	11200				
22	2301	1919	4220	1615	1546	3161	33	521	21	7	198	187	385	2747	22	948,890	7946	2934	10900				
23	1837	3193	5030	1608	1687	3295	44	605	22	12	608	192	800	2740	23	938,160	8158	2932	11100				
24	2070	3120	5190	1170	1817	2987	42	651	23	25	1415	205	1620	2742	24	925,620	8155	2947	11100				
25	2145	2605	4750	505	2644	3149	40	627	24	26	1874	206	2080	2745	25	913,090	8149	2951	11100				
26	2008	2352	4360	485	2645	3130	94	1471	25	26	1654	206	1860	2762	26	900,180	8132	2968	11100				
27	1995	2075	4070	537	2533	3070	100	1560	26	18	1342	198	1540	2754	27	886,850	8148	2952	11100				
28	1839	1911	3750	594	2632	3226	88	1363	27	12	998	192	1190	2748	28	874,300	8040	2940	11000				
29	1860	1710	3570	1311	1951	3262	84	1317	28	9	627	189	816	2749	29	859,470	7962	2936	10900				
30	1929	1421	3350	1352	1940	3292	32	496	29	6	314	186	510	2756	30	844,230	7658	2942	10800				
31	1440	1670	3110	1354	1856	3210	31	477	30	4	276	184	460	2759	31	832,030	7757	2943	10700				
SEPT. 1	65	2395	2460	890	1911	2801	35	540	31	4	134	184	318	2764	SEPT. 1	818,100	7752	2948	10700				
2	395	1285	1680	0	1472	1472	33	517	SEPT. 1	9	527	189	716	2768	2	803,650	7743	2957	10700				
3	1138	482	1620	0	1164	1164	4	61	2	5	482	185	667	2773	3	787,340	7742	2958	10600				
4	2409	-99	2310	188	1107	1295	24	371	3	3	297	183	480	2773	4	776,150	7744	2956	10600				
5	2644	296	2940	188	1107	1295	57	883	4	3	143	183	326	2753	5	760,650	7564	2938	10500				
6	2943	287	3230	1371	938	2309	62	976	5	4	78	184	262	2750	6	747,410	7566	2934	10300				
7	2775	905	3680	1866	676	2542	47	731	6	19	19	199	218	2762	7	731,960	7139	2961	10100				
8	2935	1205	4140	1709	888	2597	74	1160	7	12	203	192	395	2756	8	721,430	6702	2948	9650				
9	2958	1312	4270	1731	1122	2853	63	981	8	12	795	192	987	2753	9	708,980	6285	2945	9230				
10	3045	1205	4140	1776	1084	2860	70	1089	9	14	1226	194	1420	2754	10	699,410	6232	2948	9180				
11	3045	1985	5030	1723	1056	2779	74	1161	10	19	1621	199	1820	2751	11	692,920	6050	2950	9000				
12	3379	1741	5120	1670	1077	2747	82	1293	11	32	2288	212	2500	2753	12	685,410	5625	2965	8590				
13	3395	1665	5060	108	2537	2645	196	3075	12	33	2357	213	2570	2756	13	674,350	5491	2969	8460				
14	3252	1588	4840	129	2526	2655	196	3070	13	29	2311	209	2520	2757	14	673,680	5394	2966	8360				
15	3002	1588	4840	455	2494	2949	168	2829	14	24	1656	204	1860	2777	15	664,050	5119	2981	8100				
16	3002	1488	4490	455	2494	2949	158	2480	15	40	1580	220	1800	2771	16	658,080	4839	2991	7830				
17	2805	1525	4330	364	2677	3041	148	2310	16	40	1700	220	1920	2760	17	652,430	4180	2980	7560				
18	2456	1514	3970	347	2326	2673	71	1108	17	52	1378	232	1610	2767	18	649,450	3401	2999	6400				
19	2129	1891	4020	1277	1423	2700	53	839	18	165	2175	345	2520	2806	19	650,110	2359	3151	5610				
20	1837	3003	4840	1237	1515	2752	110	1727	19	249	3971	469	4440	2835	20	655,090	1746	3304	5050				
21	1326	5074	6400	0	1930	1930	80	1846	20	236	555	4775	5330	2882	21	661,730	0	4740	4740				
22	0	6310	6310	0	1425	1425	0	0	21	194	0				22	667,370			4770				
23				0	1353	1353			22						23	672,350			4770				
24									23						24	676,340			4880				
25									24						25	678,990			5160				
26									25						26	679,990			5390				
27									26						27	681,990			5390				
28									27						28	684,380			5390				
29									28						29	684,040			4770				
								3,547	55,563									55,563					

N SNAKE RIVER GAGING STATIONS

1947

AS NOTED

STATION	SNAKE RIVER AT WEELEY			LAKE WILCOTT CONTENTS ACRE-Feet	MINIDOKA CANALS				SNAKE RIVER NEAR MINIDOKA				DATE	WILMER LAKE GAGE FEET	GOODING PROJECT			NORTH SIDE CANAL COMPANY					
	STORED	NORMAL	TOTAL		NORTH	SOUTH	TOTAL	STORED	NORMAL	STORED	NORMAL	TOTAL			STORED	NORMAL	TOTAL	P.A.	GOODING	MAIN	TOTAL	STORED	NORMAL
6170	2930	11100	96,990	1580	1250	2830	2830	0	5460	2930	8390	AUG 21	10.94	1170	0	1170	60	380	2580	3670	3225	34	34
6265	2935	11200	96,270	1520	1220	2740	2740	0	5515	2935	8450	22	10.80	1170	0	1170	60	380	2530	3670	3225	34	34
7966	2934	10900	95,180	1450	1070	2520	2520	0	5546	2934	8480	23	11.04	1180	0	1180	60	380	2540	3600	3235	34	34
8168	2932	11100	95,910	1370	1180	2550	2550	0	5546	2932	8480	24	11.00	1180	0	1180	60	380	2530	3560	3235	34	34
8153	2947	11100	95,790	1330	1260	2590	2590	0	5503	2947	8450	25	11.05	1170	0	1170	60	380	2510	3570	3215	34	34
8149	2951	11100	95,910	1330	1240	2570	2570	0	5499	2951	8450	26	11.00	1170	0	1170	60	380	2510	3570	3215	34	34
8132	2958	11100	95,670	1330	1250	2580	2580	0	5452	2958	8420	27	11.05	1170	0	1170	60	380	2510	3550	3208	34	34
8148	2952	11100	95,670	1330	1270	2600	2600	0	5408	2952	8360	28	10.98	1170	0	1170	60	380	2500	3530	3181	34	34
8060	2940	11000	95,670	1300	1250	2550	2550	0	5180	2940	8120	29	10.88	1160	0	1160	60	380	2480	3480	3143	34	34
7962	2938	10900	96,270	1280	1240	2520	2520	0	5122	2938	8060	30	10.78	1160	0	1160	60	380	2480	3480	3143	34	34
7858	2942	10800	95,310	1280	1220	2500	2500	0	5388	2942	8330	31	10.92	1160	0	1160	60	380	2480	3480	3143	34	34
7757	2943	10700	95,430	1260	1210	2490	2490	0	5447	2943	8380	SEPT. 1	11.04	1160	0	1160	60	380	2510	3540	3184	34	34
7752	2948	10700	95,430	1230	1210	2440	2440	0	5292	2948	8240	2	10.93	1160	0	1160	60	380	2500	3540	3184	34	34
7743	2957	10700	95,910	1180	1220	2400	2400	0	5073	2957	8030	3	10.74	1150	0	1150	60	380	2480	3510	3153	34	34
7642	2958	10600	95,430	1180	1230	2410	2410	0	5132	2958	8090	4	10.84	1150	0	1150	60	380	2480	3470	3122	34	34
7644	2956	10600	95,910	1190	1250	2440	2440	0	5074	2956	8030	5	10.81	1150	0	1150	60	380	2440	3460	3112	34	34
7564	2936	10500	95,910	1190	1260	2450	2450	0	5084	2936	8000	6	10.88	1150	0	1150	60	380	2380	3380	3042	34	34
7366	2934	10500	96,150	1190	1260	2450	2450	0	4826	2934	7760	7	10.88	1150	0	1150	60	380	2340	3360	3015	34	34
7139	2961	10100	95,550	1180	1260	2440	2440	0	4719	2961	7680	8	11.01	1160	0	1160	60	380	2280	3300	2955	34	34
6702	2948	9650	95,790	1110	1240	2350	2350	0	4582	2948	7530	9	10.85	1140	0	1140	60	380	2240	3270	2901	34	34
6285	2945	9230	94,850	1050	1190	2240	2240	0	4235	2945	7180	10	10.73	1110	0	1110	60	380	2120	3140	2794	34	34
5232	2948	9180	94,250	990	1190	2180	2180	0	4072	2948	7020	11	10.89	1120	0	1120	60	380	2070	3100	2753	34	34
6090	2950	9000	95,310	974	1110	2084	2084	0	3730	2950	6680	12	10.83	1120	0	1120	60	380	1870	2900	2553	34	34
5625	2965	8590	95,670	917	1090	2007	2007	0	3445	2965	6410	13	10.58	1110	0	1110	60	380	1700	2720	2371	34	34
5491	2969	8460	93,520	866	1040	1906	1906	0	3471	2969	6440	14	10.90	1090	0	1090	60	380	1700	2730	2381	34	34
5394	2966	8360	95,790	875	989	1864	1864	16	3150	2950	6100	15	10.80	1060	0	1060	60	380	1690	2710	2310	34	34
5119	2981	8100	96,270	831	916	1747	1747	191	3060	2790	5850	16	10.79	1060	0	1060	60	380	1650	2680	2280	34	34
4839	2991	7830	97,590	807	869	1676	1676	361	3010	2630	5640	17	10.72	1040	0	1040	60	380	1620	2630	2230	34	34
4580	2980	7560	98,080	809	798	1607	1607	500	3010	2480	5490	18	10.86	1010	0	1010	60	380	1590	2560	2160	34	34
3401	2999	6400	99,760	744	524	1268	1268	729	3080	2270	5350	19	10.82	1010	0	1010	60	380	1480	2450	2000	34	34
2356	3151	5510	98,560	648	461	1109	1109	971	3010	2180	5190	20	10.62	980	0	980	43	300	1340	2283	1883	34	34
1746	3304	5050	97,350	644	458	1102	1102	1102	2628	2202	4830	21	10.47	940	0	940	43	300	1280	2223	1771	34	34
0	4740	4740	95,670	640	437	1077	1077				4410	22	10.32	0	940	940	52	890	1280	2222	0	34	34
		4770	94,490	638	412	1050	1050				4300	23	10.23	0	930	930	52	890	1300	2242	0	34	34
		4770	93,550	600	412	1012	1012				4150	24	10.14			910	50	860	1290	2220	0	34	34
		4880	93,090	582	424	1006	1006				4020	25	9.99			900	23	860	1280	2153	0	34	34
		5160	93,090	580	450	1030	1030				4000	26	9.83			900	0	850	1140	1990	0	34	34
		5590	92,590	578	480	1058	1058				4210	27	9.94			900	0	860	1090	1950	0	34	34
		5590	93,090	602	503	1105	1105				4060	28	10.00			910	0	860	1090	1950	0	34	34
		5990	93,900	626	538	1164	1164				3950	29	9.88			450	0	380	1410	1800	0	34	34
		4770	94,720	664	557	1221	1221				3010	30	9.93			0	0	0	1120	1120	0	34	34
578,951								180,130	394,731						104,816			233,981					

DA

STORAGE DIVERSIONS — MAIN

25	26	27	28	29	30	NO.	TOTAL		JACKSON LAKE EQUIVALENT ACRE-FEET	JACKSON LAKE RIGHT ACRE-FEET	AMERICAN FALLS RIGHT		OTHER RIGHTS ACRE-FEET	RENTALS AND EXCHANGES ACRE-FEET	TOTAL RIGHTS ACRE-FEET
							SECOND- FEET	ACRE- FEET			OWNED ACRE- FEET	LEASED ACRE- FEET			
						1	681	1,351	1,457					① 1,457	1,457
						2	971	1,926	2,077	1,200	793	350		② 8,750	2,343
						3	11,096	22,008	23,732		14,609	6,110			23,465
						4	566	1,123	1,211	2,000					2,000
						5	4,617	9,158	9,875	6,100	10,509	4,800		③ - 8,169	13,240
						6	30	60	64					④ 350	350
						7	23	46	50					⑤ 50	50
						8	1,938	3,843	4,143	5,000	11,994	6,084		⑥ 300	23,378
						9	4,539	9,003	9,708	2,000	2,000	3,735		⑦ 2,529	10,264
						10	4	8	8					⑧ 8	8
						11	9,235	18,317	19,752	5,120	7,496	10,300		⑨ 35	22,951
						12	57	113	122	1,040				⑩ 90	1,040
						13	1,580	3,135	3,378	4,000					4,090
						14	2,326	4,614	4,975	3,000	4,504	2,200			9,704
						15	423	839	905		3,002	1,520		⑪ 475	4,322
						16	222	441	475					⑫ 1,265	1,265
						17	591	1,173	1,265					⑬ 125	1,466
						18	74	147	158		1,034	432		⑭ 255	14,413
						19	56	111	120						24,452
						20	368	730	797		3,002	11,156			330
						21	4,580	9,084	9,795		15,852	8,600			111
						22	117	232	250		225	105			2,815
						23	27	54	58		79	32	⑮ 1,210	① 1,250	36,896
						24	808	1,603	1,728	355					5,010
						25	6,760	13,408	14,460		26,986	9,910			50,363
						26	2,160	4,284	4,619	1,500	2,250	1,260		① 2,835	52
						27	12,167	24,133	26,023	5,000	26,528	14,000		② 52	9,740
						28	24	48	52						55,643
						29	559	1,109	1,196		9,000	740			326,365
						30	16,357	32,444	34,984	15,000	27,643	13,000			
						31	82,275	163,192	175,970	51,315	169,506	94,134	1,210	10,200	
						32	611	1,212	1,307		15,033	6,600			21,633
						33	10,320	20,470	22,070	8,000	22,519	14,710		① 425	45,229
						34	199	394	425					② 10,000	161,438
						35	28,659	56,844	61,289	42,685	41,333	67,420			5,540
						36	177	351	378		4,000	1,540			2,025
						37	18	36	39		1,462	563			
						38	39,984	79,307	85,508	50,685	84,347	90,833	0	10,425	236,290
						39	180,130	357,283		325,810	50,000	45,000	③ 151,440	④ - 10,000	562,250
						40	15,508	30,760		97,183	34,113	15,000			49,113
						41	58,769	116,566		322,007	151,185	172,033			248,368
						42	233,981	464,095			320,256				814,296
						43	104,816	207,900			400,000				400,000
						44	13,374	26,527			45,000				45,000
						45						13,593		-13,282	311
											⑩	⑩		⑩	
										847,000	1,254,407	430,893	152,650	-1,200	2,683,450
GRAND TOTAL							729,518	1,446,981							

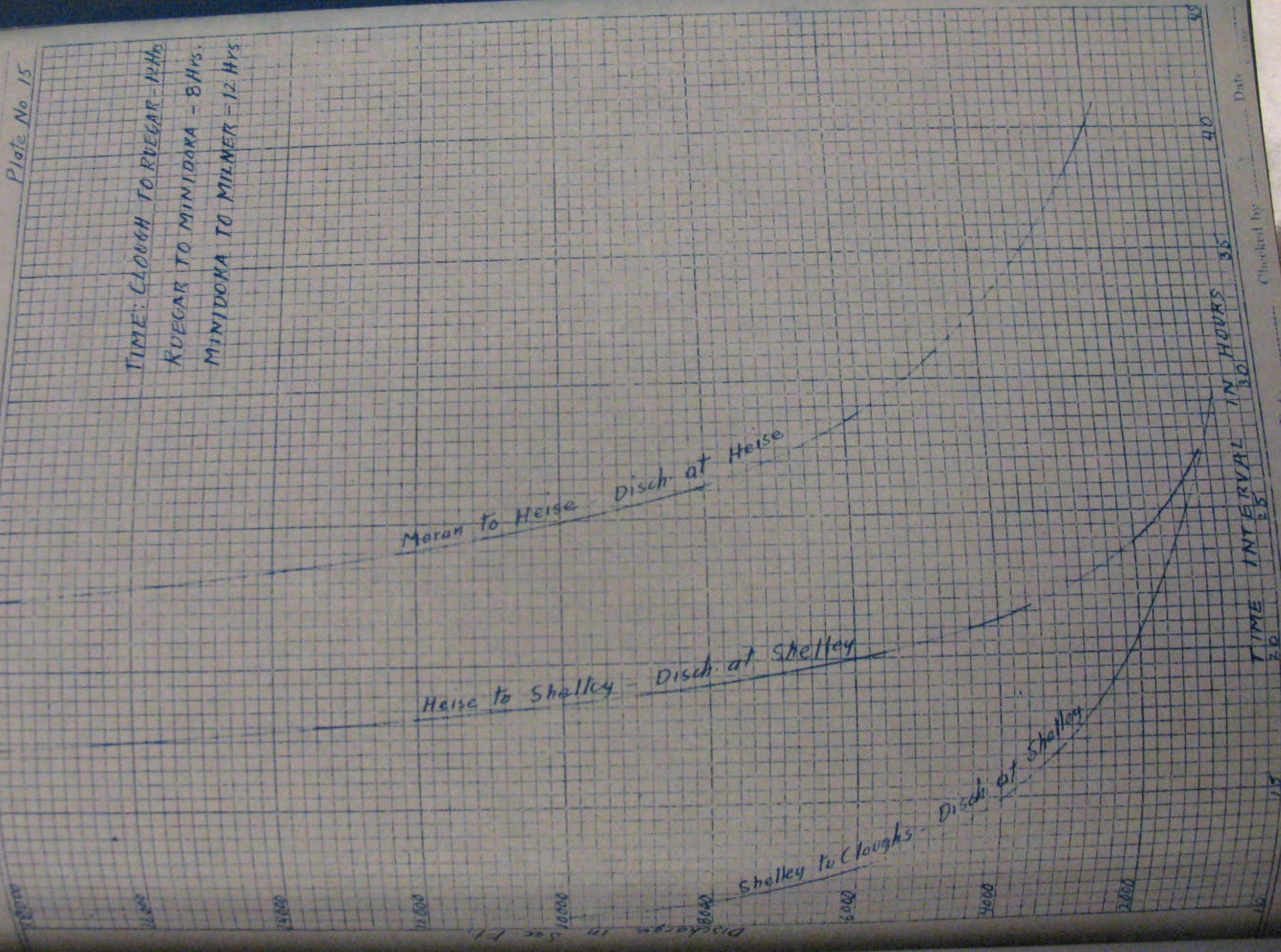
NOTES

- ① RENTED FROM GOVERNMENT.
- ② 8,250 A.F. FROM ENTERPRISE FOR USE ON ENTERPRISE LANDS, 500 A.F. RENTED FROM GOVERNMENT.
- ③ 8,250 TO PROGRESSIVE, 81 A.F. FROM GOVERNMENT.
- ④ RADFORD, QUINN, CHENEY, NELSON DITCH, JACKSON, ROTH & WHITE.
- ⑤ INCLUDES KRUSE & DAVID PUMPS.
- ⑥ FROM MARKET LAKE SPRINGS.
- ⑦ FROM MINIDOKA IRRIGATION DISTRICT.
- ⑧ TRANSFERRED TO ABERDEEN.
- ⑨ 51,680 A.F. GAIN NEELEY TO WILNER PLUS 39,760 A.F. LAKE WALCOTT.
- ⑩ SEE PLATES 22 & 23 FOR AMERICAN FALLS WATER USED ON HENRY'S FORK.

TIME INTERVAL BETWEEN GAGING STATIONS ON SNAKE RIVER

Plate No. 15

TIME: CLOUGH TO RUEGAR - 12 HRS.
RUEGAR TO MINIDOKA - 8 HRS.
MINIDOKA TO MILNER - 12 HRS.



Date

Checked by

Date

Prepared by

Sheets

of

Sheet No.

1. NAME
 2. ADDRESS
 3. CITY
 4. STATE
 5. ZIP
 6. PHONE
 7. FAX
 8. E-MAIL
 9. OCCUPATION
 10. INTERESTS
 11. COMMENTS

FULTON RIVER CANALS

1. NAME
 2. ADDRESS
 3. CITY
 4. STATE
 5. ZIP
 6. PHONE
 7. FAX
 8. E-MAIL
 9. OCCUPATION
 10. INTERESTS
 11. COMMENTS

HENRY'S FORK CANALS

1. NAME
 2. ADDRESS
 3. CITY
 4. STATE
 5. ZIP
 6. PHONE
 7. FAX
 8. E-MAIL
 9. OCCUPATION
 10. INTERESTS
 11. COMMENTS

FALT RIVER CANALS

1. NAME
 2. ADDRESS
 3. CITY
 4. STATE
 5. ZIP
 6. PHONE
 7. FAX
 8. E-MAIL
 9. OCCUPATION
 10. INTERESTS
 11. COMMENTS

JUNE 1992

JULY 1947

FALL RIVER CANALS

HENRY'S FORK CANALS

TETON RIVER CANALS

SIDOWAY	1	8	9	10	11	12	12	15	17	17	17	12	11	12	15	12	19	17	17	13	13	14	14	10	11	14	13	13	13	8	328			
WILFORD	111	116	105	105	106	165	159	176	175	171	157	153	147	142	156	136	136	106	102	113	99	91	90	86	86	87	98	90	92	87	94	3,957		
TETON IRRIGATION	88	90	90	92	94	96	100	105	106	107	108	96	68	100	100	106	102	113	99	91	90	86	86	87	87	98	90	92	87	94	2,930			
GOOD LUCK	0	0	5	5	10	15	18	18	18	26	26	0	20	20	19	27	27	26	25	25	23	22	20	18	18	13	8	9	9	9	514			
PIONEER	10	11	12	12	13	14	14	14	14	16	17	18	18	17	19	20	19	19	19	25	25	23	22	20	18	18	13	8	9	9	496			
STEWART	18	21	24	24	24	26	26	26	26	27	27	34	34	31	27	27	28	27	25	25	25	24	24	24	24	24	23	14	14	12	13	175		
PINCOCK-BYNGTON	20	22	22	24	24	26	26	26	26	27	27	21	21	21	20	19	19	19	18	17	16	15	14	14	14	14	14	14	6	12	594			
PINCOCK-GARNER	20	24	24	24	25	27	27	27	27	27	27	28	26	26	24	24	23	21	20	20	19	18	17	16	15	11	10	9	10	10	611			
GARDNER	10	10	7	7	7	7	7	7	7	7	7	6	4	2	0	0	0	0	0	0	0	0	1	2	2	2	2	2	2	2	103			
TETON ISLAND FEEDER	380	380	380	382	382	384	384	386	376	371	368	360	355	352	344	350	328	299	306	320	322	312	299	307	326	294	347	365	299	304	10,417			
NORTH SALEM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
ROXANA	10	10	11	11	12	12	12	12	12	12	12	12	12	11	6	15	16	15	15	14	12	9	7	6	5	5	4	0	17	343				
ISLAND WARD	32	32	30	28	28	26	26	32	37	41	41	51	76	80	76	48	56	57	57	35	52	36	26	26	26	25	35	45	46	48	1,202			
WOODMANSEE-JOHNSON	30	31	31	32	32	33	33	36	38	38	38	37	37	37	23	23	23	28	29	29	28	26	26	26	23	21	18	7	13	18	874			
JAMES-THOMPSON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	3	3	3	3	3	3	2	2	1	2	2	42			
MCCORMICK-ROWE	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	43			
CITY OF REXBURG	52	51	50	48	47	46	45	43	39	41	39	37	38	37	37	46	49	46	45	42	54	53	50	44	41	41	28	25	28	28	1,321			
REXBURG IRRIGATION	130	217	215	206	200	196	196	210	238	244	244	244	224	222	220	205	170	186	177	201	204	216	206	210	213	219	203	176	158	140	143	6,243		
SAURY-SOMMERS	19	20	20	19	18	16	15	14	14	13	13	14	14	14	11	9	8	7	6	18	17	18	17	16	15	15	15	15	17	17	470			
TOTAL	1040	1043	1037	1050	1037	1101	1100	1151	1179	1193	1193	1164	1115	1126	1084	1065	1007	1046	947	1017	1032	1035	1009	976	968	946	950	901	795	806	787	831	31	571

DAILY DISCHARGE IN SECOND-FEET OF HENRY'S FORK CANALS

CANAL

AUGUST 1947

FALL RIVER CANALS

YELLOWSTONE	MARYSVILLE	TOTAL ABOVE SQUIREL	FARMERS OWN	ENTERPRISE	BELL	FALL RIVER	MCBEE	CHESTER	SILKEY	CURR	TOTAL SQUIREL TO CHESTER
16	16	250	70	168	1	185	0	0	29	39	492
16	16	252	68	160	1	186	0	0	39	39	476
17	17	253	64	162	1	191	0	0	21	39	478
16	16	181	41	161	3	191	0	0	23	44	463
16	16	179	44	159	3	191	0	0	22	43	465
17	17	177	49	160	4	196	0	0	22	44	468
16	16	180	51	161	4	196	0	0	24	44	468
17	17	182	51	160	4	196	0	0	24	44	450
18	18	185	44	160	4	196	0	0	43	44	425
18	18	185	44	160	4	166	0	0	43	44	420
16	16	156	40	162	4	207	0	0	43	43	422
16	16	156	36	161	2	207	0	0	3	43	457
9	9	152	36	161	2	207	0	0	3	34	443
16	16	137	36	159	2	207	0	0	16	36	456
3	3	129	36	157	2	207	0	0	15	34	451
6	6	134	36	154	2	204	0	0	15	34	444
14	14	129	36	154	2	204	0	0	15	34	446
12	12	127	36	153	2	204	0	0	15	34	451
8	8	108	35	155	2	209	0	0	14	30	445
8	8	100	35	155	2	209	0	0	14	30	445
4	4	103	34	154	2	207	0	0	14	30	443
4	4	103	34	153	2	207	0	0	14	30	435
4	4	101	28	152	2	209	0	0	14	30	429
4	4	101	26	151	2	186	0	0	14	30	410
4	4	101	26	148	2	186	0	0	14	30	411
4	4	97	29	148	2	186	0	0	14	30	408
0	0	47	46	48	2	1009	0	0	14	30	409
352	4306	4652	1262	4880	76		0	0	473	1115	13809

HENRYS FORK CANALS

[illegible]

TEETON RIVER CANALS

[illegible]



HENRYS FORK — DAILY SEGREGATION OF FLOW

24 HOUR SECOND-FEET EXCEPT AS NOTED

DRK TON	GRASSY LAKE STORAGE RELEASE (A)	STORAGE DIVERSIONS ASHTON TO ST. ANTHONY (B)	HENRYS FORK AT ST. ANTHONY			STORAGE DIVERSIONS ST. ANTHONY TO REXBURG	STORAGE DIVERSIONS TETON RIVER	DATE	HENRYS FORK NEAR REXBURG		
			STORED	NORMAL	TOTAL				STORED	NORMAL	TOTAL
							2	JULY 10	- 2	822	820
							4	11	- 4	802	798
1560		189	-189	806	617		63	12	- 63	793	730
1880		268	- 31	673	642		99	13	- 288	968	680
1700		270	136	783	919		88	14	- 119	779	660
1500		303	60	766	826		62	15	74	702	776
1720		333	- 80	714	634		41	16	19	795	814
1770		374	- 38	796	758		31	17	-111	887	776
1770		388	65	702	767		46	18	- 84	839	755
1790		372	81	677	758		33	19	32	723	755
1790		421	42	697	739		22	20	59	676	735
1770		428	40	690	730		40	21	2	718	720
1790		362	101	638	739		64	22	- 24	739	715
1790		470	- 11	807	796		62	23	39	661	700
1790		444	15	851	866		52	24	- 63	763	700
1770		359	95	792	887		48	25	- 33	768	735
1770		403	51	716	767		230	26	-135	911	776
1770		518	- 64	822	758		201	27	-150	905	755
1790		505	- 55	785	730	0	160	28	- 224	934	710
1770		703	- 249	925	676	289	99	29	-154	834	680
1770		714	- 264	940	676	267	125	30	- 663	1333	670
1770		699	- 260	981	721	293	120	31	- 651	1311	660
1980		653	- 63	1035	972	269	158	AUG. 1	- 706	1356	650
2080		636	142	1048	1190	180	159	2	- 490	1215	725
2140		616	201	1079	1280	183	151	3	- 197	1217	1020
2120		354	463	847	1310	0	148	4	- 133	1413	1280
2140		306	502	928	1430		159	5	315	1125	1440
2140		317	500	990	1490		103	6	343	1157	1500
2160		319	498	932	1430		102	7	397	1113	1510
2160		329	479	921	1400		103	8	396	1014	1410
2040		332	436	874	1310		108	9	376	974	1350
1810		281	283	827	1110		123	10	328	912	1240
1810		275	212	968	1180		131	11	160	1000	1160
1770		274	214	896	1110		106	12	81	1229	1310
1530		259	116	824	940		75	13	108	1182	1290
1500		246	43	844	887		66	14	41	1069	1110
1500		272	17	859	876		66	15	- 23	993	970
1610		319	37	925	962	0	69	16	- 49	967	918
1600		444	- 35	975	940	247	64	17	- 32	969	937
1630		424	- 15	966	951	218	86	18	- 346	1257	911
1630		397	12	928	940	230	70	19	- 319	1269	950
1720		398	15	968	983	214	88	20	- 288	1199	911
1860		399	136	1064	1200	278	107	21	- 287	1337	1050
1830		399	136	1114	1250	202	93	22	- 249	1489	1240
								23	- 159	1389	1230

DATE	HENRYS LAKE CONTENTS ACRE- FEET	HENRYS FORK NEAR LAKE			STORED LOSS LAKE TO ISLAND PARK	STORAGE DIVERSIONS ABOVE ISLAND PARK	F.M.DIS SHERID GREEN RIGHT
		STORED	NORMAL	TOTAL			
AUG. 21		271	50	321	11	8	12
22	57,565	182	50	232	7	8	12
23		130	50	180	5	8	12
24		130	50	180	5	8	12
25		133	50	183	5	8	12
26		133	50	183	5	8	12
27		134	50	184	5	8	12
28		139	45	184	6	8	12
29		138	45	183	6	8	12
30		137	45	182	5	8	12
31		135	45	180	5	8	12
SEPT. 1		138	40	178	5	5	12
2		72	40	112	3	5	12
3	54,237	0	35	35	0	0	12
4							12
5							12
6							12
7							12
8							12
9							12
10							12
11							12
12							12
13							12
14							12
15							12
16							12
17	54,471						12
TOTAL		7,470			299	258	

(A) LISTED HERE ONE DAY LATER THAN

(B) INCLUDES STORAGE DIVERSIONS FROM

FLOW 1947

PLATE

STED HERE ONE DAY LATER THAN AT DAM.

STORAGE DIVERS

STORAGE DIVERSIONS ON HEI

24 HOUR SEC

					NO.	TOTAL		RESERVOIR RIGHTS IN ACRE-FEET						HEADWATER EQUIVALENT	
14	15	16	17	18		WYOMING 1927	ALASKA 1927	REGULAR WYOMING	REGULAR ALASKA	WYOMING LAKE	ALASKA LAKE	WYOMING LAKE	ALASKA LAKE	WYOMING LAKE	ALASKA LAKE
					1	288	812	180						10 300	812
4	4	4	4	0	2	767	1,521	① 2,108						10 300	2,084
					3	139	278	100	20					10 100	278
					4	8	16							10 17	16
					5	208	416	1,847						10 17	1,847
71	71	70	68	0	6	4,464	8,928	18,437							18,437
					7	2,474	4,947	8,387							8,387
117	117	118	108	0	8	10,273	20,546	10,248			10,000	3,500			20,748
					9	365	724	8,447							8,447
					10	0	0	80							80
					11	0	0	80							80
					12	102	202	804							804
					13	0	0	80							80
					14	1,087	2,087	818	124	308				10 480	2,097
32	47	48	48	0	15	3,758	7,458	1,773		3,375					11,146
					16	0	0	3,484		4,088					8,088
16	16	16	16	0	17	1,741	3,483	8,701							8,701
					18	887	1,784	6,183							6,183
					19	818	1,624	7,888		16,383				10 376	23,863
260	265	258	245	0	20	26,774	53,104	78,075	144	31,287	10,000	3,000		281	124,767
					21	0	0	2,371		4,888					6,988
158	158	134	97	0	22	7,338	14,586	8,062		16,110					27,172
					23	833	1,087	4,880		13,883					18,843
158	158	134	97	0	24	7,872	15,613	16,393		36,288					50,881

1- FEET.

NION.

- ① IF A.R. TO BOOM CREEK CANAL, 362 A.R. TO USERS
IN ISLAND PARK, FROM HENRY'S LAKE.
- ② HENRY'S LAKE WATER FROM SALTWATER UNION

DAILY STORAGE DI

AGE DIVERSIONS FROM TETON RIVER

1947

24 HOUR SECOND-FOOT EXCEPT AS NOTED

AUGUST

SEPTEMBER

SEPTEMBER																																												
5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14				
0											0	27	28	27	40	38	39	38	39	42	41	39	37	37	37	0																		
14	10	10	8	12	0																																							
		1						1																																				
14	10	11	8	12	0	0	0	1	0	0	0	27	28	27	40	38	39	38	39	42	43	39	37	37	37	0																		
43	8	6	6	9	7	0	0	0	1	0	0	0	16	16	15	23	22	23	22	22	24	25	22	21	21	21	0																	
11	11	11	11	11	11	11	11	11	11	10	10	10	10	10	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
16	20	20	5	5	7	12	12	7	5	5	5	0	0	5	4	11	0	8	7	5	0						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	2	1	1	3	5	3	1	2	1	2	0			0	0	2	2	0							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	0									0	2	1	0																											
5	0																																											
6	5	6	4	4	3	6	0																																					
0			0	4	6	8	5	2	2	3	4	4	4	3	5	5	0	4	3	2	1	3	2	5	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	4	0																																										
25	22	24	36	38	40	40	46	26	22	19	17	20	20	19	15	21	19	20	23	20	25	22	22	20	24	20	9	12	11	20	25	31	35	25	29	29	19	19	41	39				
47	50	52	55	42	44	44	22	25	20	26	29	30	32	18	39	35	31	25	27	28	31	38	38	26	15	14	11	8	13	2	1	27	15	5	4	0								
115	95	95	97	105	115	131	108	75	65	66	69	64	71	64	73	84	71	68	69	71	86	86	70	65	66	69	38	42	60	45	44	72	58	51	43	46	55	57	53					
159	105	102	103	108	123	131	106	75	66	66	69	64	66	70	88	107	93	90	91	93	110	111	98	63	69	70	37	42	60	46	48	72	58	51	43	46	55	57	53					

ER

0	11	12	13	14	15	16	17	NO.	TOTAL		FREMONT MADISON RIGHT		AMERICAN FALLS RENTALS ACRE-FEET	RENTALS AND EXCHANGES ACRE- FEET	TOTAL RIGHTS IN RESERVOIR ACRE- FEET	HEADGATE EQUIVALENT ACRE- FEET
									SECOND- FEET	ACRE- FEET	REGULAR ACRE- FEET	SUPPLEMENT ACRE- FEET				
								1	1,106	2,194	3,144				3,144	5,576
								2	240	476	1,319				1,319	2,755
								3	330	655	③ 880				880	1,507
								4	256	508	857				857	1,468
								5	99	196	372				372	636
								6	7	14	145				145	246
								7	2,038	4,043	6,717				6,717	11,490
								8	1,164	2,309	6,717				6,717	6,565
8	8	8	8	8	4			9	561	1,113			1,200		1,200	1,113
								10	0	0	490				490	478
2	5	5	3	3	3	5	8	11	510	1,012	2,083				2,083	2,031
								12	0	0	1,443				1,443	1,407
								13	75	148	152				152	148
								14	56	111	120				120	117
								15	49	97	337				337	329
5	0							16	74	146	150				150	146
2	3	3	3	2	2	3	3	17	180	357	452				452	441
								18	58	115	230				230	224
								19	117	232	432				432	421
								20	0	0	9,116			5 - 90	9,026	8,801
								21	16	32	699				699	682
29	39	41	39	29	27	35	39	22	1,689	3,350	3,744				3,744	3,651
								23	0	0	1,390				1,390	1,355
								24	0	0	103				103	100
0								25	1,280	2,538	2,508	501			3,009	2,934
46	55	57	53	42	36	43	50	26	4,665	9,251	23,449	501	1,200	- 90	25,060	24,378
46	55	57	53	42	36	43	50	27	5,829	11,560	30,166	501	1,200	- 90	31,777	30,543

NOTES

- ① DIVERSIONS DIVIDED BY 125
- ② LISTED ONE DAY LATER THAN ACTUAL DIVERSION
- ③ 124 A.F. OF THIS TRANSFERRED TO USERS UNDER NORTH & SOUTH LEIGH CREEKS
- ④ RENTED FROM BUREAU OF RECLAMATION
- ⑤ TRANSFERRED TO DEWEY CANAL

MISCELLANEOUS STREAM

STREAM

MAY

JUNE

24 HOUR

- UPPER TETON RIVER**
- TRAIL CREEK ABOVE STRING CANAL
 - TRAIL CREEK AT MOUTH
 - STRING CANAL
 - KIMBALL CANAL
 - RICKS-KIRSLEY
 - TOWN CANAL
 - SPENCER CANAL
 - HUMBLE
 - TOWNS CANAL
 - TRAIL CREEK ABOVE DIVERSIONS
 - NORTH CANAL
 - TRAIL CREEK ABOVE DIVERSIONS
 - HILL CANAL
 - TODD
 - CANYON
 - CHERRY GROVE
 - GRAND TETON CANAL
 - TETON CREEK BELOW GRAND TETON CANAL
 - CENTRAL TETON CANAL
 - SOUTH LEIGH CREEK AT STATE LINE
 - BIG HOGG CANAL
 - LITTLE HOGG
 - KILPACK
 - DESERT
 - NORTH LEIGH CREEK AT FOREST BOUNDARY
 - SPRING CREEK AT HIGHWAY
 - TETONIA CANAL
 - TRAIL CREEK 2 MILES EAST OF HONEYDALE SCHOOL
 - CANYON CREEK CANAL

SWAN VALLEY

- NORTH FORK INDIAN CREEK
- SOUTH FORK INDIAN CREEK
- PALISADE CANAL
- PALISADE CREEK BELOW PALISADE CANAL
- RIVER CREEK ABOVE DIVERSIONS

UPPER FALL RIVER

- TRAIL CREEK CANAL
- TRAIL CREEK CANAL
- TRAIL CREEK CANAL

UPPER HENRYS FORK

- TRAIL CREEK ABOVE DIVERSIONS
- TRAIL CREEK

① INCLUDES DIVERSION FROM WARM CREEK

US STREAMFLOW RECORDS
24 HOUR SECOND-FEET

24 HOUR SECOND-FEET

1947

JULY

AUGUST

AUGUST

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4034.10	438040	466280	499630	529790	550620	579120	613610	854150	850560	742580	585760
2	4047.50	440090	468580	500320	5314.30	551080	580540	6174.30	853640	852100	735160	580310
3	4060.90	440540	469260	5014.70	533070	553900	582680	6315.70	851580	853120	729720	572740
4	4069.90	440540	469260	5014.70	533070	553900	582680	6315.70	851580	853120	719350	564500
5	4078.80	4414.50	4701.80	5026.30	533530	555310		6423.90	850560	851580	712720	555070
6	4083.30	4419.10	4717.80	5037.80	534000	556020	584810	6527.60	850560	851840	708790	545000
7	4092.20	4425.90	4729.30	5044.70	534700	556960	586000	6641.40	850820	853120	705350	534000
8	4105.60	4432.70	4749.90	5056.30	535410	557900	586710	6755.50	851580	850820	701670	523280
9	4116.80	4446.40	4763.70	5065.50	536110	558840	587420	6877.40	854150	848000	699210	512820
10	4125.80	4450.90	4775.10	5077.10	536580	560020	587900	7016.70	853640	845440	695300	501930
11	4130.20	4455.50	4786.60	5093.40	5372.80	5616.70	588610	7166.50	850820	8444.20	693590	494320
12	4136.90	4462.30	4798.00	5105.00	5379.80	5626.10	589320	7277.40	8497.90	8439.20	6911.50	486700
13	4148.10	4471.40	4821.00	5114.30	5391.50	5633.20	589800	7388.70	8497.90	8434.10	688710	478890
14	4152.60	4485.00	4843.90	5121.30	5403.20	5637.90	590510	7500.20	850300	8416.30	685790	471780
15	4166.10	4496.10	4864.70	5128.20	5410.20	5645.00	5914.60	7597.30	8515.80	8388.30	681890	465370
16	4190.90	4498.70	4869.30	5139.90	5419.60	5652.00	5919.30	7677.00	8526.10	8362.80	677500	458740
17	4197.70	4505.50	4873.90	5149.20	5426.60	5659.10	5928.80	7782.10	8528.70	8334.80	672620	453500
18	4206.70	4510.00	4876.20	5156.10	5431.30	5668.50	5938.30	7917.50	8526.10	8299.20	666810	451460
19	4215.80	4514.60	4878.60	5167.80	5440.60	5678.00	5947.80	8018.20	8521.00	8261.00	660510	451000
20	4222.50	4532.80	4883.20	5177.00	5447.70	5682.70	5959.60	8121.80	8523.50	8217.80	653000	451910
21	4231.50	4548.70	4887.80	5184.00	5454.70	5687.40	5969.10	8228.00	8528.70	8167.20	645280	452600
22	4242.80	4553.20	4897.00	5188.70	5459.40	5694.50	5981.00	8342.50	8508.20	8129.40	638780	453730
23	4256.40	4576.00	4903.90	5193.30	5468.70	5706.20	5997.60	8393.40	8500.50	8066.20	632050	454870
24	4271.40	4589.60	4910.90	5200.30	5475.70	5715.70	6004.70	8444.20	8505.60	8013.20	625800	455550
25	4290.20	4594.20	4920.10	5209.60	5482.80	5729.80	6016.60	8482.50	8513.30	7952.60	619340	456460
26	4303.70	4603.30	4933.90	5237.50	5487.40	5736.90	6026.20	8495.30	8521.00	7887.40	613370	457370
27	4319.50	4612.40	4950.10	5249.10	5494.50	5743.90	6040.50	8508.20	8546.60	7822.20	607400	459420
28	4339.80	4635.30	4963.90	5258.40	5499.10	5751.00	6059.60	8521.00	8536.40	7744.40	601660	460550
29	4351.10	4646.80	4970.90	5265.40	5506.40	5760.40	6083.50	8508.20	8508.20	7674.50	596200	462390
30	4357.80		4975.50	5277.00	5517.00	5769.90	6112.20	8500.50	8495.30	7597.40	591690	463990
31	4369.10		4984.70	5286.30	5529.70	5779.40		8503.00		7507.00		

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
1	2390	4640	3710	2600	2550	2880	4380	9570	12000	10700	4300	2160
2	2650	4520	3750	2400	2500	3010	4640	9430	14200	7390	4580	1680
3	3190	4410	3660	1700	2500	3070	4940	12800	20200	5890	5150	1620
4	3620	4330	3660	1600	2700	3000	4870	15200	21000	6930	6150	2940
5	3710	4220	3870	1600	2700	3000	4870	15200	21000	6930	6150	2940
6	3620	4250	3970	1700	2800	2980	4640	16300	19700	7800	6340	3230
7	3710	4360	4120	1900	2750	2920	4490	16400	17800	7260	5380	3680
8	3830	4460	4220	2000	2700	2830	4300	16000	17000	5790	4580	4140
9	3920	4460	4040	2200	2600	2830	4170	15800	17700	6600	4250	4270
10	3920	4410	3730	2300	2600	2900	4100	16400	21000	7770	4120	5030
11	3920	4410	3780	2370	2460	3070	4100	17800	25000	7430	4300	5120
12	3950	4300	3830	2300	2650	3090	4000	19100	26600	6440	4550	5060
13	3950	4220	3900	2300	2850	2980	3920	19100	24200	5060	4410	4840
14	3970	4140	4000	2300	3100	2880	3920	17900	20300	4640	3870	4490
15	4000	4100	4040	2200	3300	2880	4170	17000	18400	4120	3370	4330
16	3970	4250	4220	1900	3500	3070	5120	16400	16600	4330	3010	3970
17	4020	4070	3780	1800	3600	3480	5860	15600	15300	4330	3030	4020
18	4100	3750	2830	1800	3800	3780	6150	15400	15800	4440	3210	4840
19	4120	3590	2950	1900	3800	3950	5990	15300	16000	3970	3250	6400
20	4100	3710	3200	2200	3750	3870	6110	14300	15400	4000	3270	6310
21	4020	3830	3350	2400	3700	3850	6600	12800	15800	4250	3590	5470
22	4000	3970	3550	2600	3620	3920	7130	11500	18000	4440	4220	4810
23	4200	3800	2700	2700	3500	4040	7200	11500	18400	4200	5030	4520
24	4330	3900	2800	2800	3500	4140	6860	11800	13100	4270	5190	4200
25	4520	3920	2900	2900	3270	4200	6700	11500	10600	4270	4750	4040
26	4520	3900	3730	3100	3190	3970	6600	11100	9500	4220	4360	3970
27	4460	3850	3900	3000	3000	3640	6770	12000	9720	4020	3750	3920
28	4780	3830	3900	3050	2900	3520	7360	13100	11500	3800	3750	3830
29	4940	3800	3800	2900	2900	3400	8210	14300	15900	3570	3570	3780
30	4810	3800	2940	2700	2700	3330	9120	14800	15500	3730	3350	3710
31	4720	3800	2900	2500	2500	3730	12300	12300	15500	3870	3110	

MEAN	3,999	4,107	3,717	2,326	3,057	3,362	5,574	14,280	17,010	5,335	4,256	4,100
AGRE-PEET	245,900	244,400	228,500	143,000	169,800	206,800	331,700	878,100	1,012,000	328,000	261,700	243,900

Year
Mean
Agre-Feet
5,931
4,293,800

3,570	4,160	3,754	2,037	2,877	3,326	5,000	10,580	16,010	1,966	1,447	2,261
247,500	230,800	125,300	159,800	204,500	297,500	650,800	833,700	122,100	85,950	134,500	

056° 47E° E
625° 7

contents acre AMERICAN FALLS RESERVOIR at AMERICAN FALLS, IDAHO

Plate No. 31

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
1	7214.30	9333.10	11376.90	12859.30	12908.00	13690.30	16283.00	16882.30	16914.00	17000.00	12528.70	8181.00
2	7212.40	9459.70	11473.70	12859.30	12903.10	13735.70	16327.30	16871.10	16983.20	16977.60	12389.60	8036.50
3	7312.10	9559.90	11515.20	12839.80	12908.00	13821.40	16401.70	16848.70	17056.00	16876.70	12255.40	7873.40
4	7314.20	9689.20	11542.80	12839.80	12908.00	13821.40	16401.70	16848.70	17056.00	16876.70	12135.50	7761.50
5	7439.00	9764.40	11579.70	12815.50	12898.30	13887.00	16526.30	16781.40	17197.40	16647.90	12026.30	7606.50
6	7545.20	9852.50	11626.00	12796.00	12903.10	13967.70	16559.40	16792.60	17168.90	16515.20	11936.80	7474.10
7	7606.50	9929.70	11659.00	12786.20	12917.70	14048.40	16636.80	16848.70	17134.70	16421.20	11837.90	7319.60
8	7653.30	10011.30	11720.20	12796.00	12917.70	14130.50	16692.10	16882.30	17061.60	16305.20	11729.60	7214.30
9	7700.20	10054.20	11814.40	12805.70	12922.60	14223.10	16708.70	16887.90	17044.80	16183.50	11588.90	7089.80
10	7779.60	10144.30	11870.90	12825.20	12932.30	14325.90	16697.60	16955.20	17163.20	16036.60	11432.20	6994.10
11	7801.20	10260.20	11852.00	12834.90	12942.10	14397.90	16725.40	17039.20	17208.80	15869.90	11169.40	6929.20
12	7866.10	10321.70	11899.10	12854.40	12947.00	14485.30	16753.40	17117.60	17174.60	15824.70	10975.20	6854.10
13	7951.20	10356.90	11965.10	12859.30	12961.60	14572.80	16759.00	17117.60	17151.80	15688.80	10876.00	6743.50
14	8058.70	10401.00	12031.00	12873.90	12985.90	14640.90	16770.20	17117.60	17112.00	15543.70	10749.80	6736.80
15	8121.70	10418.60	12082.80	12893.40	13010.30	14719.40	16809.40	17084.00	17078.40	15368.00	10599.10	6640.50
16	8169.90	10493.40	12212.20	12898.30	13064.00	14813.70	16787.00	17039.20	17056.00	15219.00	10453.80	6580.80
17	8236.60	10568.20	12265.00	12898.30	13148.10	14913.20	16815.00	17084.00	17095.20	15049.30	10282.10	6524.30
18	8286.00	10665.10	12288.90	12883.60	13237.20	15011.80	16787.00	17123.30	17163.20	14714.20	9989.80	6501.10
19	8350.80	10695.90	12274.50	12883.60	13237.20	15101.80	16787.00	17123.30	17163.20	14714.20	9835.30	6550.90
20	8438.50	10713.70	12317.70	12878.80	13281.80	15181.70	16792.60	17129.00	17123.30	14541.90	9835.30	6550.90
21	8537.60	10794.90	12336.90	12869.00	13316.40	15245.60	16803.80	17028.00	17191.70	14361.90	9668.40	6617.30
22	8602.30	10853.50	12375.30	12859.30	13356.00	15341.40	16871.10	17044.80	17061.60	14197.40	9488.90	6673.70
23	8613.80	10876.00	12485.60	12849.60	13430.30	15400.00	16893.50	17033.60	17067.20	14023.10	9381.60	6723.50
24	8688.10	10939.20	12523.90	12839.80	13524.30	15517.10	16944.00	17005.60	17100.80	13851.70	9256.20	6763.40
25	8746.90	11042.90	12557.50	12844.70	13574.30	15667.10	16977.60	16994.40	17056.00	13690.30	9130.90	6789.90
26	8821.40	11097.00	12586.60	12849.60	13609.60	15732.30	16994.40	16966.40	17016.80	13544.10	9001.80	6799.90
27	8954.80	11160.20	12586.60	12873.90	13634.80	15873.60	17000.00	16977.60	16949.60	13365.90	8868.50	6819.90
28	9062.10	11197.10	12664.50	12888.50	13655.00	15944.20	16994.40	16927.10	16904.70	13187.70	8743.00	6843.80
29	9134.90	11238.60	12761.90	12888.50	13655.00	16020.30	16927.10	16871.10	16887.90	13024.90	8594.70	6840.40
30	9219.80	11293.90	12830.10	12903.10	13655.00	16101.80	16887.90	16893.50	16932.70	12859.30	8442.30	6867.70
31	9292.60		12854.40	12898.30		16172.50		16893.50				

MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN

MEAN
OR
PERIOD
AUGUST-1907

LAKE WALCOTT near MINIDOKA, IDAHO

Contents are being analyzed in terms of

for the year ending September 30, 1947
Plate No. 33

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	80610	69630	70400	67870	74410	68310	68420	92860	96870	99760	98320	95430
2	80830	71280	63590	69300	74070	68090	68420	91460	97960	99520	98560	95910
3	81850	71610	64800	70620	73390	68750	68860	91230	98560	99160	97960	95430
4	81060	66990	66550	71830	73840	69410	68530	90990	98680	99040	97590	95910
5	81280	68090	67870	74290	74070	69850	69410	92390	100010	99640	97840	95910
6	80160	69190	69850	74290	74520	70290	68640	94950	98320	99520	98080	96150
7	76320	69740	70730	73960	74520	71390	68750	94950	97590	99040	97840	95550
8	78130	70290	70950	72490	73840	72050	68750	94950	98320	98800	98080	95790
9	76890	71830	63920	71500	73280	71830	67430	94020	96390	98320	96510	94950
10	79140	72260	65560	70730	72260	70730	66990	94720	99520	97350	94950	94250
11	78690	65890	66330	70730	74290	69410	71060	94950	99040	96150	95910	95310
12	78580	67210	67650	70730	74520	72260	72490	97590	99640	96870	94600	95670
13	78130	68530	69850	70730	73840	73050	73840	98800	99880	96630	96030	93320
14	72260	69630	71170	71060	73620	73390	74520	99040	99640	96750	96510	95790
15	72490	70620	70290	70950	73170	73620	75870	98680	99880	95430	97350	96270
16	72260	72830	63810	70950	73280	72490	77110	97350	97110	96150	97350	97590
17	72940	72720	65890	70950	68750	70730	79480	97840	96390	97110	97110	98080
18	72720	66330	66990	71170	69630	70950	82190	97720	96630	97840	97590	99760
19	73390	68090	67870	72260	69850	71390	85980	97840	96270	97110	97350	98560
20	72940	69410	70070	72260	70510	71610	88780	98080	95550	97350	96990	97350
21	67650	71610	72050	73500	70950	74290	90880	96870	97110	97840	96270	95670
22	68530	72940	70400	74070	71280	73840	93320	97840	96390	96990	95180	94490
23	67430	73620	63920	74290	69740	70840	93320	97350	96150	96390	95910	93550
24	70290	72260	65450	74410	64360	69190	93200	96390	95670	97110	95790	93090
25	71170	66550	66330	74410	65230	70730	92510	96750	97350	96870	95910	93090
26	72490	67980	68090	74070	65670	69630	92270	96630	97350	97350	95670	92390
27	72600	69740	68530	73500	66770	70950	91570	96750	97590	97590	95670	93090
28	67870	70950	70400	74070	67210	71610	91460	95070	97590	97590	95670	93900
29	68530	71940	70510	73840	—	71940	91690	94720	97350	98320	96270	94720
30	69520	72260	63590	74410	—	71170	90290	95910	99280	98680	95310	94950
31	70290											

Mean
Acres

Year
or
Period

Mean
Acres-Feet

069° 01' N
609

[illegible]

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
1	2170	3450	4630	4780	5440	3330	3270	7530	7240	8210	8600	8240
2	2340	3450	4500	4500	5370	3350	3310	7590	7020	8090	8720	8030
3	2100	3410	4520	4610	5240	3350	3290	7910	7100	8150	8720	8090
4	2120	3070	4520	4850	5370	3350	4500	8360	9980	8540	8030	8030
5	2060	2840	4520	4850	5400	2160	4980	8390	17600	8480	8000	8000
6	1970	2840	4520	4920	5400	1660	4940	8330	18700	8480	7970	7660
7	1960	2840	4520	5190	5590	1660	4940	8210	19900	8300	8150	7680
8	2100	3660	4520	4940	5680	1670	4940	8270	19100	8480	8510	7530
9	3680	4560	4520	4720	5400	1700	5080	8420	11800	9110	8750	7180
10	3430	4520	4520	4700	4810	1610	4920	8390	15300	8750	8990	7020
11	3470	4500	4540	4810	4850	1660	4210	8930	21400	8570	8990	6680
12	3490	4540	4560	4650	5050	1730	4980	12700	26400	8660	8750	6410
13	3450	4520	4560	4520	4920	1920	4980	16600	25700	8360	8360	6100
14	3510	4500	4560	4520	4760	1920	4940	17100	24300	8300	8300	5850
15	3560	4590	4560	4520	4670	2020	4940	17100	24300	8330	8330	5640
16	3580	4340	4560	4610	4260	1980	4940	14700	19100	8840	8390	5490
17	3530	4340	4520	4740	4190	1810	5010	11600	13500	8390	8390	5490
18	3580	4520	4520	4760	4190	1800	5140	11700	13300	8600	8330	5350
19	3530	4520	4540	5010	4230	1830	5080	11800	14100	8900	8300	5190
20	3510	4590	4560	4960	4280	1920	5120	13600	15500	8870	8450	4710
21	3490	4560	4540	5080	4340	2170	5140	14400	15900	8780	8480	4300
22	3490	4600	4540	5330	4340	2100	5140	10200	15500	8660	8480	4150
23	3530	4640	4500	5440	4390	1980	5170	7850	14700	8810	8450	4020
24	3560	4640	4500	5420	4170	1850	5170	7910	13800	8810	8450	4000
25	3580	4560	4520	5520	4120	1840	5350	8360	12100	8840	8420	4210
26	3580	4540	4520	5490	4080	1840	5830	8330	8390	8840	8360	4060
27	3470	4540	4560	5140	4170	1900	6230	8930	8570	8840	8120	3950
28	3450	4540	4500	5140	4170	1930	6850	8660	8000	8870	8060	3010
29	3450	4540	4510	5100	3740	1880	7020	8180	8420	8330	8330	2840
30	3450	4630	4390	5100	--	1880	7910	7910	8390	8390	8390	
31	3430					2610		7700				

Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Mean	3,149	4,187	4,519	4,932	4,725	2,070	5,121	10,140	14,920	8,673	8,446	5,316
Range	193,600	249,100	277,900	303,300	262,400	127,300	306,700	623,900	837,700	533,300	519,300	346,100
Total	6,393											

6,393

4,628,600

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
1	0	0	0	0	0	0	0	0	0	61	60
2	0	0	0	0	0	0	0	0	0	62	60
3	0	0	0	0	0	0	0	0	0	62	60
4	0	0	0	0	0	0	0	0	0	62	60
5	0	0	0	0	0	0	0	0	0	62	60
6	0	0	0	0	0	0	0	0	0	62	60
7	0	0	0	0	0	0	0	0	0	62	60
8	0	0	0	0	0	0	0	0	0	62	60
9	0	0	0	0	0	0	0	0	0	62	60
10	0	0	0	0	0	0	0	0	0	62	60
11	0	0	0	0	0	0	0	0	0	62	60
12	0	0	0	0	0	0	0	0	0	60	60
13	0	0	0	0	0	0	0	0	0	62	60
14	0	0	0	0	0	0	0	0	0	62	60
15	0	0	0	0	0	0	0	0	0	61	60
16	0	0	0	0	0	0	0	0	0	61	60
17	0	0	0	0	0	0	0	0	0	61	60
18	0	0	0	0	0	0	0	0	0	61	60
19	5	0	0	0	0	0	0	0	0	61	60
20	20	5	0	0	0	0	0	0	0	61	60
21	5	0	0	0	0	0	0	0	0	60	60
22	0	0	0	0	0	0	0	0	0	53	60
23	0	0	0	0	0	0	0	0	0	57	60
24	0	0	0	0	0	0	0	0	0	59	60
25	0	0	0	0	0	0	0	0	0	62	60
26	0	0	0	0	0	0	0	0	0	59	60
27	0	0	0	0	0	0	0	0	0	60	60
28	0	0	0	0	0	0	0	0	0	60	60
29	0	0	0	0	0	0	0	0	0	62	60
30	0	0	0	0	0	0	0	0	0	62	60
31	0	0	0	0	0	0	0	0	0	61	60

Mean	0	0	0	0	0	0	0	0	0	0	0
Agave	1	0	0	0	0	0	0	0	0	0	0
Agave	60	0	0	0	0	0	0	0	0	0	0
Agave	0	0	0	0	0	0	0	0	0	0	0
Agave	0	0	0	0	0	0	0	0	0	0	0
Agave	0	0	0	0	0	0	0	0	0	0	0
Agave	0	0	0	0	0	0	0	0	0	0	0
Agave	0	0	0	0	0	0	0	0	0	0	0
Agave	0	0	0	0	0	0	0	0	0	0	0
Agave	0	0	0	0	0	0	0	0	0	0	0
Agave	0	0	0	0	0	0	0	0	0	0	0
Agave	0	0	0	0	0	0	0	0	0	0	0

MEAN 24.4
AGAVE 17.641

MILNER LOW LIFT CANAL near MILNER, IDAHO

Read down page, for record-keep, of

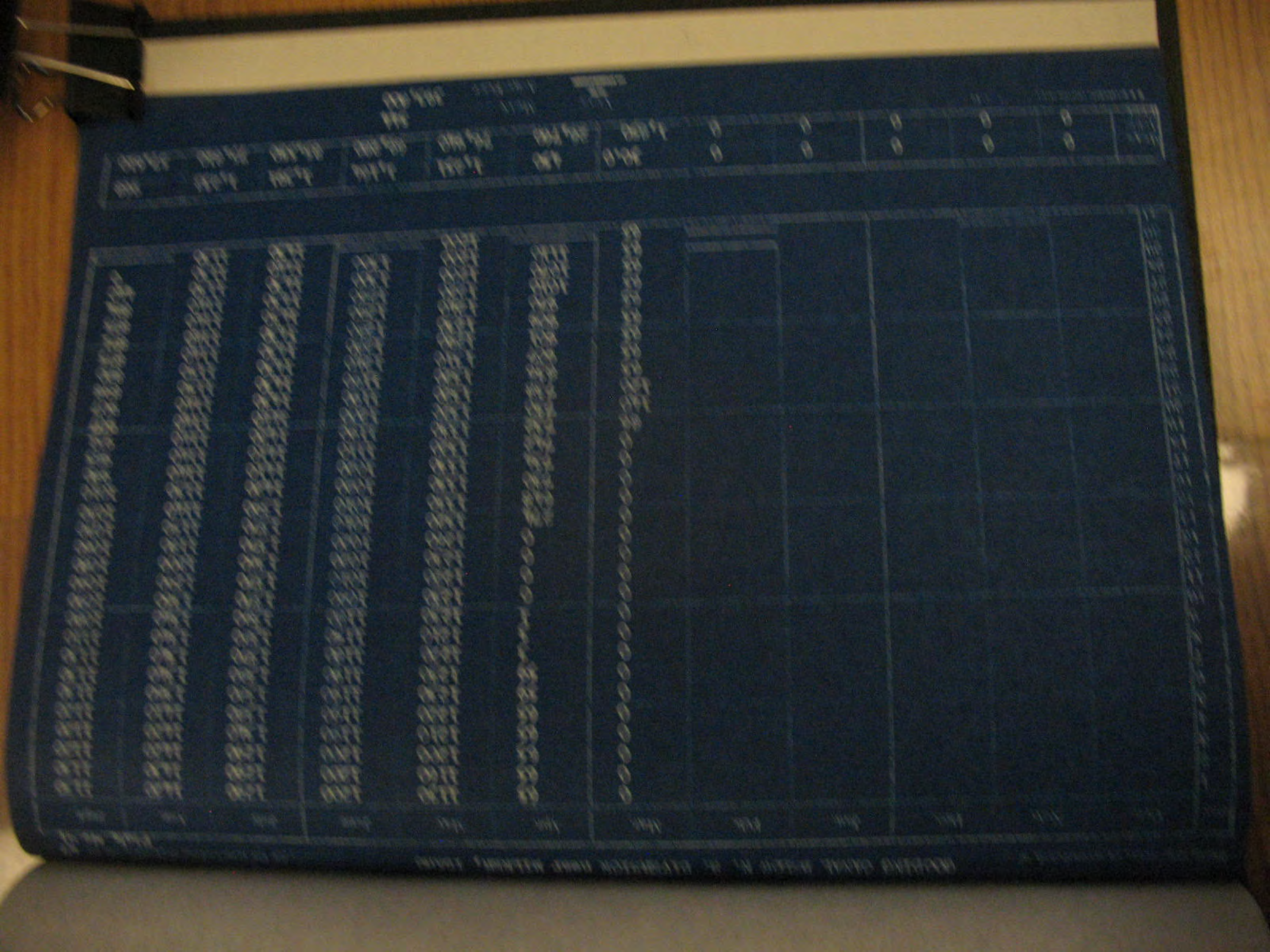
Plate No. 54

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
1	182	0	0	0	0	0	0	182	0	0	175	199
2	182	0	0	0	0	0	0	182	0	0	197	199
3	180	0	0	0	0	0	0	180	0	200	198	185
4	179	0	0	0	0	0	0	179	0	200	198	175
5	178	0	0	0	0	0	0	178	0	199	198	175
6	177	0	0	0	0	0	0	177	0	199	199	175
7	176	0	0	0	0	0	0	176	0	198	199	175
8	175	0	0	0	0	0	0	175	0	198	199	175
9	174	0	0	0	0	0	0	174	48	197	199	175
10	173	0	0	0	0	0	0	173	25	197	199	175
11	173	0	0	0	0	0	0	173	50	197	199	175
12	173	0	0	0	0	0	0	173	50	197	199	175
13	173	0	0	0	0	0	0	173	50	197	199	175
14	173	0	0	0	0	0	0	173	76	197	199	175
15	173	0	0	0	0	0	0	173	100	197	199	172
16	173	0	0	0	0	0	0	173	100	198	199	163
17	173	0	0	0	0	0	0	173	116	199	199	148
18	173	0	0	0	0	0	0	173	131	199	199	148
19	173	0	0	0	0	0	0	173	131	199	199	123
20	173	0	0	0	0	0	0	173	131	199	199	116
21	173	46	82	94	97	121	140	153	174	199	199	83
22	173	82	94	97	121	140	153	174	199	199	199	83
23	173	173	173	173	173	173	173	173	174	199	199	83
24	173	173	173	173	173	173	173	173	174	198	199	83
25	173	173	173	173	173	173	173	173	174	198	199	83
26	171	171	171	171	171	171	171	171	174	198	199	83
27	148	148	148	148	148	148	148	148	174	197	199	83
28	136	136	136	136	136	136	136	136	174	197	199	83
29	113	113	113	113	113	113	113	113	176	197	199	83
30	159	182	182	182	182	182	182	182	176	197	199	83

Year	197	199	197	199	197	199	197	199	197	199	197	199
197	147	12,220	8,720	12,080	4,860	10,470	2,170	36.4	170	81.6	12,080	12,220
199	147	12,220	8,720	12,080	4,860	10,470	2,170	36.4	170	81.6	12,080	12,220

69.8
50,520
ALBAN
AUGUST-1997
1997-1999

559 707,550



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	12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SOUTH SIDE TWIN FALLS CANAL at MILLNER, IDAHO

Daily discharge, in second-feet, of

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1600	1220	541	544	559	541	691	3300	3300	3330	3620	3560
2	1570	739	538	538	544	541	762	3360	3070	3430	3590	3460
3	1480	661	544	526	541	544	765	3400	2940	3490	3610	3430
4	1410	664	547	502	538	547	765	3420	2860	3560	3580	3370
5	1370	661	547	502	529	538	749	3420	2840	3540	3520	3220
6	1300	604	562	483	535	541	742	3420	2800	3580	3540	3110
7	1240	532	571	477	535	547	771	3460	2730	3570	3550	3060
8	1140	366	571	477	526	544	797	3500	2600	3650	3600	2930
9	1070	493	568	483	535	544	813	3540	2600	3680	3600	2860
10	992	535	568	483	526	529	797	3520	2520	3550	3630	2840
11	913	526	571	497	526	505	765	3470	2470	3600	3610	2770
12	889	505	571	604	535	862	765	3440	2370	3630	3600	2640
13	865	388	568	601	535	926	726	3360	2330	3650	3560	2630
14	810	374	565	601	541	1080	1080	3380	2320	3630	3580	2550
15	778	362	568	604	541	1250	1250	3460	2340	3620	3600	2390
16	781	359	568	613	541	1440	1440	3480	2350	3580	3600	2230
17	739	463	565	613	544	1670	1670	3450	2360	3580	3600	2080
18	698	526	562	613	550	1730	1730	3450	2550	3580	3600	1870
19	655	520	562	616	550	1890	1890	3480	2670	3580	3600	1780
20	634	511	562	622	547	1980	1980	3480	2950	3580	3600	1750
21	491	514	562	625	547	2090	2090	3440	3110	3600	3600	1700
22	408	520	559	625	532	2220	2220	3440	3210	3610	3600	1590
23	637	520	562	622	532	2300	2300	3400	3290	3620	3580	1490
24	475	526	559	619	520	2490	2490	3440	3320	3650	3560	1430
25	60	520	559	607	511	2730	2730	3500	3340	3640	3560	1430
26	60	517	556	607	532	2890	2890	3560	3360	3630	3560	1380
27	60	517	559	604	550	2950	2950	3450	3340	3640	3540	1350
28	60	517	559	595	556	3090	3090	3450	3400	3630	3540	1300
29	60	520	556	589	577	3460	3460	3460	3380	3630	3540	1270
30	287	535	553	574	---	664	3160	3420	3380	3630	3580	1270
31	1120	541	544	544	559	547	691	3300	3300	3330	3620	3560

MEAN	795	540	560	568	539	505	1,533	3,442	2,863	3,583	3,581	2,367
ACRE-Feet	48,900	32,160	34,420	34,950	29,910	31,040	91,200	211,600	170,400	220,300	220,200	140,900
MEAN	795	540	560	568	539	505	1,533	3,442	2,863	3,583	3,581	2,367
ACRE-Feet	48,900	32,160	34,420	34,950	29,910	31,040	91,200	211,600	170,400	220,300	220,200	140,900

MEAN 1,749
ACRE-Feet 1,265,980

2,200	3,323	3,643	4,078	4,020	1,127	1,758	2,055	8,238	43.0	230	332
135,300	197,800	227,000	250,800	223,200	69,300	104,500	126,300	490,200	2,650	16,140	19,770

Year	Jan.	Feb.	Mar.	Apr.	May	June	July
1900	3350	4610	2740	2090	2090	449	10
1901	3910	4910	2640	2100	2100	76	23
1902	3880	4520	2590	2260	2260	76	19
1903	3670	4590	2560	2420	2420	75	18
1904	3530	4630	2200	4470	9500	74	17
1905	3570	4640	973	4450	12100	57	255
1906	3700	4700	456	3530	12500	27	242
1907	3690	4800	374	2710	15300	97	476
1908	3690	4950	553	2280	7600	162	490
1909	3600	4630	564	1210	5950	209	228
1910	3830	4220	663	3170	14800	297	242
1911	3510	4120	663	4430	20000	281	248
1912	3640	4070	692	3650	21200	273	248
1913	3670	4000	816	3250	20600	273	252
1914	3730	4010	1160	2500	19100	273	252
1915	3810	3920	1350	1670	14800	252	252
1916	3830	3580	992	937	8180	252	248
1917	3690	3350	825	850	7700	248	330
1918	2980	3330	830	1570	7280	250	718
1919	3220	3530	835	1100	8460	250	835
1920	3850	3900	3900	6160	8860	252	487
1921	4230	3900	1030	865	9090	252	305
1922	3950	3530	1560	550	7970	329	250
1923	3840	4530	850	141	6360	550	248
1924	3860	4630	1480	71	5430	550	245
1925	3720	4850	731	71	808	447	245
1926	3090	4660	420	70	602	429	248
1927	3240	4360	727	67	162	252	248
1928	3220	4210	587	66	127	252	248
1929	3160	4130	501	65	626	252	650
1930	2810	3600	835	205	205	252	110
1931	1820	3380	4370	835	205	252	110

73.7 53.378

ISLAND PARK RESERVOIR near ISLAND PARK, IDAHO

Plate No. 48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	51465	52685	68665	73860	99615	119835	132470	136095	136420	136095	116410	96975
2	52205	52685	69650	74855	100960	121195	132790	136260	136580	136015	114935	96130
3	52325	52605	69335	75855	101780	122110	132870	135855	136990	135690	113605	93095
4	52365	52605	69075	76470	102525	123095	132790	135285	136990	135690	111520	91365
5	52365	52405	68820	77315	103280	123860	132710	134800	136825	135690	110300	90475
6	52130	52405	69180	79035	104040	124550	132710	135205	136420	135690	108945	88655
7	52165	52285	69180	79035	104735	125320	132630	135450	136420	135610	107950	87100
8	52165	52285	69960	79905	106195	126175	132630	135690	136905	135690	106895	85565
9	52205	52285	70270	80780	106265	127030	132550	135690	137230	135205	105565	84235
10	52165	52130	70375	81665	106265	127030	132550	135690	137230	135205	105565	84235
11	52090	52130	70270	82495	106825	127735	132550	135530	137230	134800	106265	82615
12	52050	52050	70375	83270	107455	128675	132470	135610	137230	134315	105845	81075
13	52050	51970	70325	84050	108090	128985	132470	135530	136745	133830	105705	80080
14	51970	51735	70325	85120	108945	129615	132630	135530	136665	132790	105845	78975
15	51970	51660	71380	85930	110015	130170	132790	135450	136580	132070	105705	78115
16	52090	52805	72395	86730	110800	130325	132870	135365	136420	131590	105495	76865
17	52010	53650	72340	87535	111520	130720	132950	134720	136420	130880	105150	75910
18	52050	54635	72235	88340	112385	130960	133030	134720	136420	130090	104665	75740
19	51930	55720	72070	89090	113110	131195	133190	134720	136175	128985	104525	75350
20	51930	56905	72070	89910	113695	131435	133270	134395	136500	128125	104110	75130
21	52010	58605	72125	90665	114280	131590	133670	134475	136500	126875	103420	75295
22	51930	59630	72180	91430	115080	131670	133750	134395	136175	126175	102940	75295
23	52130	60535	72285	92195	115815	131990	133830	134555	136015	125320	102255	75295
24	52365	61640	72340	93030	116480	131990	133910	134555	135855	124475	101300	75185
25	52365	62665	72340	93870	117220	131990	134075	134555	135690	123630	100625	75130
26	52565	63760	72340	94780	117890	131990	134315	134475	135365	122790	99815	75185
27	52485	64820	72500	95630	118485	132070	134475	134395	135690	121650	99010	75465
28	52765	65700	72720	96420	119160	132070	134720	134800	135770	120440	98275	75520
29	52685	66640	72770	97215		132070	135205	135205	135855	119760	97545	75520
30	52685	67645	72825	97940		132230	135285	135285	136015	118860	96555	75520
31	52685					132390	135450	135450		117740	95760	

MEAS-
ACRE-
FEET

MEAN
OR
PERIOD
AGRE-PORT

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	956	930	422	286	426	409	855	2140	1440	1300	1680
2	1030	917	435	318	448	422	873	2100	1510	1290	1750
3	982	917	924	943	404	434	885	2340	1720	1760	1430
4	962	904	904	904	439	434	879	2660	1800	1290	1750
5	943	904	904	995	408	434	873	2470	1770	1260	1740
6	930	910	910	943	430	404	861	2120	1750	1260	1740
7	936	910	910	891	414	413	855	1970	1720	1260	1740
8	936	924	462	382	372	434	837	1960	1710	1250	1720
9	930	910	769	394	388	434	837	1990	1860	1260	1560
10	930	904	917	417	443	439	837	1970	1890	1210	1390
11	917	904	910	458	443	456	813	1930	1910	1160	1380
12	924	917	924	448	443	434	807	1920	1940	1140	1650
13	930	917	917	412	452	474	813	1950	1830	1280	1410
14	924	917	917	390	452	520	837	1910	1680	1430	1380
15	924	910	910	471	443	568	879	1870	1640	1260	1380
16	924	440	346	378	448	597	909	1810	1610	1200	1390
17	917	404	852	426	448	622	939	1730	1630	1410	1420
18	910	404	930	430	409	653	987	1620	1640	1420	1420
19	910	448	910	453	434	674	1020	1600	1580	1420	1270
20	910	466	930	453	413	695	1090	1570	1650	1430	1090
21	917	358	891	444	426	712	1130	1490	1870	1420	975
22	924	448	859	440	409	733	1120	1440	1720	1420	987
23	982	440	853	440	430	813	1150	1440	1590	1420	987
24	943	435	853	440	426	795	1190	1420	1550	1420	969
25	930	417	853	430	413	784	1260	1420	1500	1420	927
26	936	394	865	430	317	778	1380	1380	1450	1420	957
27	943	485	872	404	413	778	1480	1250	1290	1420	909
28	956	453	829	386	448	784	1590	1180	1290	1420	897
29	924	430	800	430	---	795	1670	1220	1290	1420	897
30	917	430	810	426	---	831	1830	1250	1390	1420	897
31	904	430	820	366	---	861	1320	1320	1310	1420	897

936	672	810	410	425	600	1,050	1,756	1,638	1,332	1,452	1,289
57,520	39,960	49,810	25,180	23,610	36,920	62,450	108,000	97,470	81,920	89,300	76,720

1,034
748,860

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								3960	3530	1400	972	1300
2								4090	3530	1210	1190	1330
3								5130	3830	1140	1280	1330
4								6010	3700	1120	1310	1330
5								5960	3300	1020	1430	1290
6								5300	3150	919	1490	1260
7								4750	3110	866	1430	1340
8								4320	2960	806	1400	1490
9								4370	4110	816	1310	1480
10								3930	5210	796	1110	1560
11								3680	4270	702	1180	1680
12								3660	3830	617	1110	1710
13								3830	3260	642	940	1630
14								4160	2770	919	887	1590
15								3830	2770	826	876	1490
16								3500	2680	634	962	1510
17								3400	2610	758	940	1580
18								3130	2560	767	951	2100
19								2770	2320	758	940	1980
20								2520	2700	739	983	1750
21								2430	3530	730	1200	1540
22								2380	2870	739	1250	1510
23								2340	2170	796	1200	1510
24								2170	1960	866	1210	1490
25								2060	1790	887	1250	1420
26								2040	1640	767	1210	1460
27								2020	1580	758	1200	1540
28								1940	1880	730	1210	1460
29								1660	1610	676	1240	1460
30								1510	1460	676	1250	1480
31								1880	1460	721	1300	

May	1,520	832	1,168	21,820	90,450
June	2,891	832	1,168	21,820	90,450
July	3,378	832	1,168	21,820	90,450
Aug.	172,000	51,180	71,820	207,700	593,150

HENRY'S FORK near REXBURG, IDAHO

Daily discharge, in second-feet, of

For the year ending on January 1, 1921

Plate No. 53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1810	2230	1640	1470	1250	1160	1570	3130	2400	1860	650	1240
2	1980	2230	1620	1300	1300	1220	1630	3540	3620	1590	725	1190
3	2140	2120	1650	1220	1350	1210	1590	4710	4040	1380	1280	1180
4	2090	2080	1900	1120	1350	1220	1570	5720	4640	1250	1440	1170
5	2080	2160	1960	1340	1350	1220	1570	6010	4640	1130	1500	1130
6	2040	2200	2030	1350	1350	1180	1530	5570	4140	1020	1510	1130
7	2020	2220	2050	1400	1350	1210	1480	5170	3920	904	1410	1320
8	2090	2250	1980	1370	1300	1230	1420	4770	4020	843	1350	1360
9	2100	2230	1610	1310	1250	1230	1420	4510	5140	820	1240	1400
10	2080	2220	1800	1260	1200	1290	1380	4510	5140	798	1160	1520
11	2050	2170	1880	1310	1250	1430	1360	4380	6320	798	1160	1520
12	2000	2160	1880	1380	1300	1430	1310	4250	6160	730	1310	1590
13	2020	2080	1920	1350	1450	1320	1280	4550	4790	660	1110	1620
14	2020	2040	1940	1270	1500	1380	1390	4860	4020	776	970	1610
15	2020	2120	1940	1270	1500	1380	1390	4860	4020	814	918	1660
16	2030	2070	1670	1150	1650	1540	1560	4440	3750	776	937	1770
17	2040	2070	1700	1200	1750	1650	1560	4070	3320	776	911	2140
18	2080	1610	1460	1250	1920	1710	1560	3850	2990	755	950	2570
19	2070	1660	1680	1270	1740	1680	1610	3560	2750	755	911	2540
20	2040	1740	1910	1300	1650	1690	1620	3190	2570	720	1050	2360
21	2020	1770	2020	1320	1560	1660	1830	2880	3060	715	2200	2200
22	2080	1690	1980	1350	1550	1670	1910	2620	3590	700	2160	2160
23	2200	1780	2010	1350	1440	1630	1820	2430	3100	700	2140	2140
24	2150	1800	2000	1340	1400	1740	1780	2270	2410	735	2070	2070
25	2340	1760	1920	1340	1350	1580	1810	2040	2060	735	1340	1340
26	2250	1710	1930	1350	1240	1410	1850	1960	1840	776	1290	1960
27	2350	1660	1970	1380	1160	1360	1990	1850	1740	755	1980	2010
28	2390	1660	1990	1300	1180	1320	2220	1800	1980	680	1220	1930
29	2390	1650	1800	1270	—	1250	2420	1710	2260	670	1200	1950
30	2350	1650	1700	1270	—	1360	2420	1710	2260	670	1200	1950
31	2270	1650	1650	1250	—	1520	2790	1440	2110	660	1240	1950

MEAN	1215	1947	1838	1307	1410	1411	1674	3573	3577	883	1165	1724
MEAN	130,700	115,900	113,000	80,390	78,290	86,760	99,590	219,700	212,800	54,280	71,650	102,600

MEAN 1,886
AGRICULTURE 1,365,660

Day	Oct	Nov	Dec	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	12114	12259						12999	15384	15229	15198	15136
2	12114							13057	15275	15229	15198	15136
3	12114						12810	13066	15244	15229	15198	15136
4	12114							13165	15229	15229	15198	15136
5	12114							13205	15244	15229	15198	15136
6	12114							13280	15229	15213	15198	15136
7	12114	12303						13400	15244	15213	15198	15136
8	12114							13505	15244	15213	15198	15136
9	12114						12868	13595	15244	15213	15198	15136
10	12114			12462				13715	15244	15213	15198	15136
11	12114							13835	15244	15213	15198	15136
12	12114							13970	15244	15213	15198	15136
13	12056							14090	15244	15213	15198	15136
14	12056	12143						14210	15244	15213	15198	15136
15	12056							14330	15244	15213	15198	15136
16	12056							14392	15244	15213	15198	15136
17	12056							14593	15244	15213	15198	15136
18	12056							14640	15244	15213	15198	15136
19	12056							14702	15229	15213	15198	15136
20	12056							14779	15229	15213	15198	15136
21	12056							14872	15229	15213	15198	15136
22	12056							14950	15229	15213	15198	15136
23	12056							15012	15229	15213	15198	15136
24	12056							15120	15229	15213	15198	15136
25	12056							15182	15229	15213	15198	15136
26	12100							15291	15229	15213	15198	15136
27								15384	15229	15213	15198	15136
28								15495	15229	15213	15198	15136
29								15598	15229	15213	15198	15136
30								15691	15229	15213	15198	15136
31								15784	15229	15213	15198	15136

* Interpolated



FALL RIVER near SQUIRREL, IDAHO

for the year ending September 30, 1917
Plate No. 55

Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
500	530	505	425	445	403	465	1330	2750	1000	588	588
664	515	500	435	445	403	455	1560	2580	950	579	570
585	546	495	445	455	403	455	2350	2450	942	622	588
560	546	485	455	455	403	455	2900	2320	942	657	570
546	546	515	470	442	403	455	2830	2100	942	657	570
538	538	508	478	440	403	460	2780	2000	940	639	554
530	530	505	484	440	405	460	2750	1980	930	622	554
546	525	503	490	440	406	465	2780	2100	920	675	554
540	520	500	495	435	470	475	2500	3320	840	693	554
530	515	500	498	435	410	475	3500	3500	760	730	588
520	515	500	498	435	412	480	2180	3000	760	693	588
520	495	500	500	435	412	490	2180	2250	760	639	570
515	470	500	495	442	414	500	2370	1900	702	622	570
510	470	520	482	445	415	500	2600	1780	684	604	570
508	485	594	460	416	416	530	1830	1780	613	562	562
510	485	575	400	455	420	550	2120	1890	666	622	562
520	497	555	440	465	424	550	2000	1890	666	622	562
522	500	555	455	430	430	554	2050	1830	648	604	604
517	505	450	460	435	435	560	2030	1780	648	588	870
517	505	450	460	435	435	570	1920	2100	604	790	790
508	530	470	465	442	440	600	1820	2680	588	770	750
500	515	470	470	435	442	655	1940	2400	613	730	730
500	500	475	470	435	436	660	1900	2000	622	720	720
500	500	480	468	435	435	660	1900	2000	622	720	720
540	510	485	465	415	434	655	1920	1540	604	711	711
740	520	488	463	410	432	637	1960	1480	604	690	690
738	530	515	460	400	430	640	2000	1550	604	620	620
680	550	500	460	430	430	750	2050	1870	604	620	620
628	530	500	460	403	403	1010	1900	1600	622	579	579
595	515	450	455	429	440	1100	1650	1250	604	580	580
543	515	400	445	450	470	1200	1630	1150	579		

562	515	493	463	436	423	598	2,149	2,086	720	623	623
34,570	30,660	30,290	28,480	24,190	26,000	35,590	132,109	124,100	44,290	38,320	37,060

809
585,690

868 198

TRITON RIVER near ST. ANTHONY, IDAHO

Plate No. 58

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Dec.	539	587	639	613	587	578	578	582	587	582	563	558	558	554	554	549	573	597	582	563	544	539	549	582	623	592	587	558	544	374	304
Nov.	563	539	498	526	558	554	549	539	539	530	521	489	471	526	549	694	535	507	503	516	602	613	597	573	661	628	558	544	592	634	582
Oct.	650	578	554	535	582	672	597	390	390	390	494	507	526	549	694	535	535	444	444	471	448	448	417	426	430	440	453	444	374	304	324
Jan.	330	335	345	360	375	390	390	390	390	390	390	365	345	325	310	320	330	350	360	375	390	390	390	405	405	405	405	422	430	391	---
Feb.	390	395	400	400	405	410	410	410	410	400	410	420	440	480	503	521	573	535	480	435	426	404	405	399	408	422	422	430	391	---	
Mar.	408	404	391	382	378	369	369	386	435	435	498	458	444	476	558	782	909	852	880	803	769	789	762	712	516	521	503	489	526	639	725
Apr.	597	582	597	582	507	498	480	466	462	462	476	480	444	476	512	512	512	516	526	526	558	558	535	516	516	521	568	666	782	816	
May	852	946	1400	1900	2110	2200	2330	2360	2570	2410	2130	2060	1960	1930	1680	1560	1570	1570	1530	1410	1330	1340	1320	1320	1260	1220	1340	1350	1490	1340	1180
June	1600	1680	1760	1750	1530	1440	1420	1470	2080	2600	2490	2060	1960	1600	1540	1530	1570	1680	1680	1880	2080	1700	1470	1360	1320	1340	1350	1490	1340	1180	1260
July	1190	1150	1190	1270	1280	1230	1200	1220	1230	1210	1170	1120	1070	1030	998	1010	1010	969	954	917	909	902	895	866	866	816	796	756	750	776	776
Aug.	816	810	810	789	789	769	756	769	756	762	873	873	750	725	706	706	689	666	666	666	683	678	666	666	666	666	634	634	628	608	608
Sept.	597	608	613	613	592	582	563	563	563	573	587	592	587	573	563	568	578	661	719	650	613	602	592	587	578	582	608	608	582	597	597

596	721	1,021	1,677	1,638	545	566	433	24,040	34,800	32,420	100,700	99,810	62,750	44,310	35,490
583	554	32,940	30,490	22,870	24,040	34,800	32,420	100,700	99,810	62,750	44,310	35,490			

769
596,450

