WATER DISTRIBUTION

AND HYDROMETRIC WORK

DISTRICT NO. 01

SNAKE RIVER, IDAHO

1975

CONTENTS

P L A T E S

(All Plates will be found at the end of the report following the text)

PLATE NO.	TITLE
1	Map showing Gaging Stations in District No. 01
2	Jackson Lake Hydrographs
2A	Palisades Hydrographs
3	American Falls Reservoir Hydrographs
4	Annual Runoff, Snake River at Moran, Wyoming
5	Annual Runoff, Snake River at Neeley, Idaho
6	Daily Discharge of Snake River Canals, May, 1975
7	Daily Discharge of Snake River Canals, June, 1975
8	Daily Discharge of Snake River Canals, July, 1975
9	Daily Discharge of Snake River Canals, August, 1975
10	Daily Discharge of Snake River Canals, September, 1975
10A	Daily Discharge of Snake River Canals, October, 1975
11	Daily Inflow to American Falls Reservoir, May, 1975
11A	Daily Inflow to American Falls Reservoir, June, 1975
11B	Daily Inflow to American Falls Reservoir, July, 1975
11C	Daily Inflow to American Falls Reservoir, August, 1975
11D	Daily Inflow to American Falls Reservoir, September, 1975
12 & 13	Daily Summary of Data at and between Snake River Gaging Stations, 1975
14 & 14A	Daily Storage Diversions by Snake River Canals, 1975
15	Time Intervals between Gaging Stations on Snake River
16	Daily Discharge of Henrys Fork Canals, May, 1975
17	Daily Discharge of Henrys Fork Canals, June, 1975
18	Daily Discharge of Henrys Fork Canals, July, 1975
19	Daily Discharge of Henrys Fork Canals, August, 1975
20	Daily Discharge of Henrys Fork Canals, September, 1975
20A	Daily Discharge of Henrys Fork Canals, October, 1975
21 & 21A	Daily Segregation of Flow, Henrys Fork Stations, 1975
22	Daily Storage Diversions on Henrys Fork, 1975
23	Daily Storage Diversions on Teton River, 1975
23A	Operation of Cross Cut Canal
24	Miscellaneous Stream Flow Records
25	Jackson Lake at Moran, Wyoming
26	Snake River near Moran, Wyoming
27	~~Pacific~~ Creek at Moran, Wyoming
28	Buffalo Fork near Moran, Wyoming
29	Snake River near Wilson, Wyoming
30	Snake River near Alpine, Wyoming
31	Greys River near Alpine, Wyoming
32	Salt River near Etna, Wyoming
33	Palisades Reservoir near Irwin, Idaho
34	Snake River near Irwin, Idaho

PLATE NO.	TITLE
35	Snake River near Heise, Idaho
35A	Snake River near Heise, Idaho (Adjusted for storage in Reservoirs)
36	Henrys Lake near Lake, Idaho
37	Henrys Fork near Lake, Idaho
38	Island Park Reservoir near Island Park, Idaho
39	Henrys Fork near Island Park, Idaho
40	Henrys Fork near Ashton, Idaho
41	Grassy Lake near Moran, Wyoming
42	Falls River near Squirrel, Idaho
43	Falls River near Chester, Idaho
44	Henrys Fork at St. Anthony, Idaho
45	Teton River near Driggs, Idaho
46	Teton River below Badger Creek near Lamont, Idaho
47	Bitch Creek near Lamont, Idaho
48	Canyon Creek near Newdale, Idaho
49	Teton River below Teton Dam near Newdale, Idaho
50	Teton River near St. Anthony, Idaho
51	Henrys Fork near Rexburg, Idaho
52	Willow Creek near Ririe, Idaho
53	Snake River near Shelley, Idaho
54	Blackfoot River By-Pass near Blackfoot, Idaho
55	Blackfoot River near Blackfoot, Idaho
56	Snake River near Blackfoot, Idaho
57	Portneuf River at Pocatello, Idaho
58	Fort Hall Michaud Canal near Pocatello, Idaho
59	Michaud Canal at American Falls, Idaho
60	American Falls Reservoir at American Falls, Idaho
61	Snake River at Neeley, Idaho
62	North Side Minidoka Canal near Minidoka, Idaho
63	South Side Minidoka Canal near Minidoka, Idaho
64	Lake Walcott near Minidoka, Idaho
65	Snake River near Minidoka, Idaho
66	Minidoka North Side Pump near Burley, Idaho
67	Lake Milner at Milner, Idaho
68	P.A. Lateral near Milner, Idaho
69	Milner Low Lift Canal near Milner, Idaho
70	Gooding Canal at Milner
71	Gooding Project in Gooding Canal near Milner, Idaho
72	North Side Canal Project in Gooding Canal near Milner, Idaho
73	Gooding Canal Below North Side Diversion near Milner, Idaho
74	North Side Twin Falls Canal at Milner, Idaho
75	South Side Twin Falls Canal at Milner, Idaho
76	Snake River at Milner, Idaho

WATER DISTRIBUTION
AND HYDROMETRIC WORK

DISTRICT NO. 01
SNAKE RIVER, IDAHO

1975

INTRODUCTION

The annual meeting of Water District No. 01 was held at Idaho Falls on March 3, 1975. Arthur L. Larson was elected as Watermaster for the ensuing year.

The following were elected as members of the Committee of Nine:

Leonard Graham, Chairman; Alfred Peters, Vice-Chairman; Clifford Scoresby, Secretary; Reed Murdock, R. Willis Walker, Lester Saunders, Kenneth Anderson, Clyde Greenwell, and Lynn Loosli.

Alternate: Burdell Curtis

Advisory Members: Carlos Randolph, representing the Bureau of Reclamation; William Kerner, representing the Gooding Project; and Merle Kunz, representing Teton Basin.

Principal resolutions adopted at the annual meeting were as follows:

1. That the following transmission losses be charged on stored water: 1.7% Moran to Palisades; 0.8% Palisades to Heise; 4.4% Heise to Lorenzo; 0.5% Lorenzo to Woodville; 6% Woodville to Blackfoot; 4% Henrys Lake to Island Park; 2% Island Park to Warm River; 0.5% Warm River to Ashton.

2. Adopted a budget of $91,070 to cover the expense of operating the District during the coming year.

3. Recommended the continuation of a pool committee to obtain and allocate rental water.

4. Reaffirmed support of an integrated multipurpose Lynn Crandall Project, the Salmon Falls Division of the Upper Snake River Project, and the Lower Teton Project.

5. Opposed any legislation which would include any portion of the Snake River in a National Recreation or Scenic Area or any plans that would establish minimum flows that would demand the waters of Idaho.

Precipitation and runoff for 1975 was again above normal. The average precipitation for the nine representative weather stations for the water year ending September 30, 1975, was 18.87 inches, compared to a normal of 15.28 inches. The months of February through May were all about 150% of normal, contributing to the above normal water supply and supplementing the apparent deficient water supply of 80% of normal on January 1.

Snow surveys on April 1 indicated an accumulated snow pack of about 120% of normal, compared to 140% in 1974. Flood space was made in the upper reservoirs, and the late, cold spring caused the flood flows to last well into the summer, with the reservoirs all being declared full on July 19. The river above Heise peaked June 8th at 35,000 cfs and was controlled to an observed flow at Heise on that date of 15,600 cfs. The maximum observed flow was 21,700 cfs on July 8.

The Jackson Hole area received maximum flood protection when the discharge from Jackson Lake was held to about 400 cfs at the time the inflow was peaking at about 8,000 cfs, holding the discharge at Wilson to a maximum of 11,800 cfs on June 8.

With the late, cold spring, diversions were at record low levels during May and June, with the seasonal totals well below normal. For instance, the Milner North Side diverted only 88% of normal for the season.

Stored water use began on July 22 in the lower valley and on July 26 above American Falls, and ceased October 1 in the upper valley and October 10 in the lower valley. Total usable contents in the reservoir system on September 30 was 2,363,800 acre-feet, 144,000 acre-feet over the past ten-year average.

Construction of both the Teton and Ririe Dams was almost complete with storage beginning in Teton Reservoir on October 5, 1975, and in Ririe Lake early in December of 1975.

Mean daily discharge at the Minidoka Dam was not cut below the 2,700 cfs power right at any time during the year except briefly on December 23 when it dropped to 1,140 cfs when ice jammed the gates.

PERSONNEL

People engaged in water distribution in Water District No. 01 during 1975 were as follows:

Arthur L. Larson	Watermaster
C. Michael Bennett	Deputy Watermaster
L. C. Anderson	Deputy Watermaster & Hydrographer, St. Anthony
Harold W. Blauer	Hydrographer at Burley
Lee Wright	Hydrographer at Idaho Falls
Lola Dunn	Clerk
Arthur W. Wilson	Deputy Watermaster & Hydrographer, Teton Basin
Reed Brower	Deputy Watermaster, Teton Basin
Val L. Richards	Deputy Watermaster, Lower Teton River
Sam B. Garrett	Deputy Watermaster, Henrys Fork
Elmer Lenz	Deputy Watermaster, Upper Falls River
Wilbur Brown	Deputy Watermaster, Heise Division
Russell Taylor	Deputy Watermaster, Rigby Division
Verall Smith	Deputy Watermaster, Blackfoot Division
Howard Hatfield	Deputy Watermaster, Swan Valley Division
Dennis Hughes	Summer temporary, part-time.
Carlos Randolph	Supt., Minidoka Project, Bureau of Reclamation
Allan Templeton	Supt., American Falls Res., Bureau of Reclamation
Tom Gates	Asst. Supt., Am. Falls Res., Bureau of Reclamation
Keith Ebersole	Supt., Jackson Lake, Bureau of Reclamation
John Williams	Supt., Island Park Res., Bureau of Reclamation

Gage readers: Foster Randall, Blanche Zollinger, R. E. Wagner, Rogers Livingston, R. H. Seymour, Mario M. Purin, Roy Flavel, and Jess Jackson.

SNOW SURVEYS

The results of snow surveys for the past ten years are shown in the following tabulations. The figures for earlier years are shown in previous annual reports of the District. Normals are those computed by the Soil Conservation Service and are mostly for period 1958-72.

Depths in Inches (S-Snow; W-Water)

Year	Jan 1 S	Jan 1 W	Feb 1 S	Feb 1 W	Mar 1 S	Mar 1 W	Apr 1 S	Apr 1 W
Moran (Snake River)								
1966	24	4.1	32	8.1	38	9.6	34	10.4
1967	22	4.6	37	10.3	41	12.4	40	12.9
1968	21	3.3	35	7.3	35	9.9	33	9.9
1969	28	5.5	44	11.4	49	13.6	44	14.0
1970	21	3.8	42	11.2	40	13.0	42	13.7
1971	33	7.8	41	13.0	47	14.8	51	17.9
1972	34	8.0	50	15.5	52	18.3	38	16.9
1973	24	4.6	30	7.2	36	9.4	35	10.0
1974	37	7.2	36	10.2	44	12.6	46	16.3
1975	21	3.9	36	8.0	47	12.9	52	15.4
Normal		5.3		9.6		11.9		12.6
Moran Bay (Snake River)								
1966			46	12.9	54	16.0	49	17.8
1967			49	14.2	58	18.3	55	20.5
1968			42	10.4	56	16.3	51	17.8
1969			56	16.2	63	19.0	55	20.0
1970			66	18.8	60	21.4	63	23.6
1971			62	21.9	69	25.0	81	32.1
1972			68	21.5	78	28.8	67	30.0
1973			45	12.5	60	16.7	55	18.7
1974				---	72	23.8	82	30.4
1975			49	13.3	63	18.7	83	25.3
Normal				14.7		19.2		21.9
Arizona Station (Snake River)								
1966	35	6.3	39	11.4	45	13.6	51	17.0
1967	32	8.8	53	15.4	59	18.8	62	21.5
1968	24	4.7	41	9.6	47	13.7	50	16.1
1969	34	8.4	67	18.6	70	21.9	63	22.5
1970	28	5.3	58	14.8	51	16.3	57	19.8
1971	50	12.6	62	19.8	66	22.6	79	29.0
1972	44	11.2	55	16.6	64	21.7	57	23.0
1973	31	6.7	37	9.9	47	13.3	50	15.8
1974	45	10.3	56	15.8	65	20.0	50	26.1
1975	24	4.3	41	10.2	58	16.2	70	20.6
Normal		7.8		12.8		16.5		19.4

Depth in inches (S-Snow; W-Water)

Year	Jan 1 S	Jan 1 W	Feb 1 S	Feb 1 W	Mar 1 S	Mar 1 W	Apr 1 S	Apr 1 W
Huckelberry Divide (Snake River)								
1966	35	6.5	44	12.7	48	15.5	53	17.7
1967	29	7.4	52	14 6	56	17.3	58	19.5
1968	31	6.5	49	11.4	57	16.4	53	17.7
1969	36	8.6	66	17.8	70	21.7	60	21.9
1970	28	5.5	60	13.7	49	15.6	57	19.6
1971	50	12.2	59	18.6	64	21.3	76	26.4
1972	42	10.7	55	16.9	66	20.9	54	22.0
1973	32	7.5	39	10.6	48	13.8	53	16.1
1974	45	10.3	58	15.6	63	19.0	77	25.6
1975	30	5.7	48	12.3	56	15.7	77	22.1
Normal		7.9		13.1		16.9		19.3
Snake River Station (Snake River)								
1966	35	6.3	44	12.3	48	15.1	51	17.8
1967	25	6.6	51	14.5	58	18.0	59	20.4
1968	29	5.8	47	10.7	57	17.0	56	19.2
1969	40	9.1	59	17.3	63	20.1	59	21.2
1970	32	6.2	69	16.8	58	19.4	63	23.2
1971	55	12.7	66	21.4	71	24.8	79	30.3
1972	44	11.0	63	19.6	77	26.1	65	27.4
1973	32	8.2	40	11.3	48	14.6	52	16.8
1974	45	9.8	61	16.8	65	21.0	74	26.5
1975	29	6.1	49	12.7	59	16.9	71	21.5
Normal		8.2		13.8		18.3		21.0
Lewis Lake Divide (Snake River)								
1966	66	14.8	77	25.4	81	30.1	89	34.9
1967	48	15.9	103	32.1	107	39.0	122	45.6
1968	45	11.6	82	21.4	90	28.3	94	33.0
1969	59	15.4	110	34.4	117	42.0	104	42.4
1970	52	12.2	109	28.7	97	35.1	109	42.6
1971	111	29.3	124	44.7	135	53.5	156	65.6
1972	78	20.1	114	40.6	150	49.8	133	57.7
1973	52	14.7	68	21.4	82	28.1	88	32.4
1974	84	23.0	119	37.3	125	45.0	150	60.8
1975	46	9.4	75	21.1	104	32.2	125	43.6
Normal		17.0		27.5		35.9		42.1
Aster Creek (Snake River)								
1966	62	12.4	63	20.5	66	23.5	76	29.1
1967	40	12.8	91	26.6	89	31.2	100	36.2
1968	33	7.9	69	16.3	66	20.3	67	22.5
1969	47	10.7	106	30.6	107	36.3	94	36.1
1970	34	7.6	84	20.6	69	23.0	79	28.8
1971	85	21.2	99	33.8	104	38.2	126	49.6
1972	62	15.1	92	30.3	119	39.9	100	42.7
1973	39	10.1	51	14.2	61	18.9	65	21.9
1974	66	17.5	88	24.9	94	26.4	116	44.0
1975	36	7.0	52	13.2	74	21.3	95	29.1
Normal		12.7		21.1		26.6		31.0

Depth in inches (S-Snow; W-Water)

Year	Jan 1 S	Jan 1 W	Feb 1 S	Feb 1 W	Mar 1 S	Mar 1 W	Apr 1 S	Apr 1 W
Colter Creek (Snake River)								
1966			-	-	55	16.3	43	16.4
1967			-	-	60	20.6	61	22.5
1968			-	-	56	18.6	55	19.6
1969			62	18.7	64	21.5	57	20.9
1970			-	-	64	22.8	66	25.0
1971			-	-	76	25.6	84	32.6
1972			-	-	82	26.0	61	23.7
1973			-	-	51	14.5	54	18.4
1974			-	-	-	-	88	31.3
1975			-	-	63	19.6	73	24.4
Normal			-	-		19.7		22.2
Glade Creek (Snake River)								
1966	37	6.8	46	13.3	57	16.3	54	19.1
1967	29	7.3	52	14.8	61	18.9	63	22.0
1968	29	5.9	50	11.8	59	18.1	57	19.3
1969	36	9.1	64	18.1	67	21.0	63	23.0
1970	32	6.6	68	17.1	59	19.6	64	22.8
1971	61	15.1	71	24.0	75	26.8	89	34.8
1972	45	11.4	66	20.3	79	26.9	69	28.6
1973	36	9.1	44	12.5	56	16.9	58	19.5
1974	51	12.4	67	20.0	75	25.5	83	32.9
1975	32	6.2	51	13.7	68	20.4	79	25.1
Normal		8.6		14.7		19.0		22.2
Base Camp (Snake River)								
1966	31	6.4	42	12.4	46	14.6	49	16.9
1967	30	7.5	56	15.9	59	19.7	60	22.0
1968	31	6.6	42	10.5	55	16.1	53	17.5
1969	42	9.0	61	16.7	62	20.4	58	20.3
1970	29	5.7	64	16.7	55	18.9	57	21.9
1971	54	14.0	69	22.7	74	25.0	86	32.2
1972	43	10.8	68	21.0	80	28.3	69	29.9
1973	37	7.8	37	11.1	45	13.3	45	15.1
1974	50	11.7	67	18.5	69	22.4	85	29.2
1975	24	4.7	44	10.7	57	16.0	68	20.5
Normal		8.1		13.9		17.8		20.1
Average water content of ten Jackson Lake courses								
1966				14.3(9)		17.1		19.7
1967				17.6(9)		21.4		24.3
1968				12.9(9)		17.5		19.3
1969				20.0(9)		23.8		24.2
1970				17.6(9)		20.5		24.1
1971				24.4(9)		27.8		35.0
1972				22.5(9)		28.7		30.2
1973				12.3(9)		16.0		18.5
1974				19.9(8)		24.0(9)		32.3
1975				12.8(9)		19.0		24.8
Normal				15.7(9)		20.2		23.2

Depth in inches (S-Snow; W-Water)

Year	Feb 1 S	Feb 1 W	Mar 1 S	Mar 1 W	Apr 1 S	Apr 1 W	May 1 S	May 1 W
Turpin Meadows (Buffalo River)								
1966	25	5.8	28	6.8	24	7.0		
1967	30	7.1	35	9.6	29	9.8		
1968	29	6.3	33	9.5	36	10.4		
1969	35	8.5	36	9.5	35	10.1		
1970	40	9.1	34	10.5	34	11.3		
1971	35	9.3	41	11.3	44	13.9		
1972	37	10.0	41	12.6	30	12.0		
1973	23	5.1	27	5.8	24	6.6		
1974	39	10.0	42	12.5	46	14.3		
1975	31	6.9	36	9.0	41	11.1		
Normal		7.4		9.6		10.3		
Four Mile Meadows (Buffalo River)								
1966	29	6.9	35	8.6	34	9.4		
1967	35	8.0	39	10.4	41	12.6		
1968	41	9.5	47	12.3	52	14.9		
1969	42	10.3	43	11.9	44	13.1		
1970	44	10.3	39	11.9	43	13.4		
1971	42	11.5	49	14.0	57	17.8		
1972	45	12.4	52	14.8	48	17.3		
1973	28	6.4	34	7.8	39	9.1		
1974	45	11.9	48	13.9	59	18.0		
1975	37	8.3	41	10.6	52	13.5		
Normal		9.0		11.6		13.6		
Black Rock (Buffalo River)								
1966	40	10.8	37	12.7	48	15.8		
1967	53	13.8	60	18.2	64	21.3		
1968	59	15.3	67	20.3	69	22.6		
1969	60	16.8	62	19.8	65	21.9		
1970	64	16.6	59	18.9	64	22.0		
1971	69	20.6	76	24.8	94	31.1		
1972	63	18.8	80	24.1	76	28.6		
1973	39	9.8	46	11.8	49	13.4		
1974	67	17.7	67	21.6	85	28.3		
1975	52	13.7	61	17.7	72	21.5		
Normal		14.5		18.6		22.3		
Togwotee Pass (Buffalo River)								
1966	49	14.6	57	17.5	58	21.2	60	23.9
1967	74	20.1	81	26.9	86	31.6	90	35.9
1968	62	18.3	77	25.0	78	27.8	73	29.1
1969	80	23.8	81	27.4	79	29.8	62	28.6
1970	82	21.5	72	23.9	82	29.9	106	37.1
1971	87	27.6	97	33.5	118	43.6	116	48.9
1972	84	27.1	107	34.9	97	40.8	96	44.0
1973	50	14.0	59	17.0	68	20.1	71	24.7
1974	83	23.1	81	26.9	108	38.3	90	41.1
1975	66	18.4	78	24.4	97	31.0	103	39.2
Normal		20.0		25.4		30.6		33.9

Depths in inches (S-Snow: W-Water)

Year	Jan 1 S	Jan 1 W	Feb 1 S	Feb 1 W	Mar 1 S	Mar 1 W	Apr 1 S	Apr 1 W
Valley View Ranch (Henrys Fork)								
1966	22	3.4	34	8.4	37	10.6	39	13.0
1967	33	7.0	62	18.2	61	22.2	69	25.2
1968	37	8.0	54	13.6	51	16.9	50	17.8
1969	33	6.3	75	22.4	83	28.1	69	28.1
1970	23	3.2	40	8.6	35	10.1	51	16.4
1971	47	12.2	55	17.9	65	22.2	69	26.1
1972	47	10.8	54	16.9	51	19.1	46	17.6
1973	24	4.1	33	6.3	32	8.0	39	10.8
1974	34	7.0	38	10.2	44	14.1	55	19.7
1975	24	3.5	33	7.7	47	12.8	61	19.2
Normal		6.3		12.3		15.4		17.7
Big Springs (Henrys Fork								
1966	23	3.3	41	10.5	46	13.9	44	16.8
1967	37	9.4	69	19.4	68	23.1	74	26.7
1968	32	5.9	55	12.1	51	16.8	50	17.9
1969	41	8.4	69	21.3	85	26.0	68	27.2
1970	30	5.4	62	16.3	55	18.6	67	23.2
1971	51	14.6	68	22.3	75	26.2	80	30.8
1972	59	12.4	67	20.7	70	25.6	62	27.1
1973	32	7.6	45	11.1	49	14.7	53	18.1
1974	51	10.6	62	18.2	69	22.3	80	30.0
1975	32	5.0	42	10.5	61	18.0	71	22.6
Normal		7.8		14.4		18.6		21.3
Island Park (Henrys Fork)								
1966	19	2.5	56	8.4	40	11.2	34	11.5
1967	32	6.4	59	15.8	54	17.2	56	19.6
1968	26	4.4	46	8.9	44	12.9	30	13.5
1969	36	6.4	64	19.4	77	23.5	52	23.4
1970	27	4.6	54	12.6	48	15.1	58	19.4
1971	58	11.3	60	18.2	66	20.7	68	25.2
1972	51	10.6	54	15.9	51	17.6	45	16.3
1973	28	5.2	40	8.6	44	12.0	43	13.2
1974	43	8.8	51	13.3	59	17.7	63	22.3
1975	30	4.4	41	9.0	56	15.6	68	20.8
Normal		6.1		11.6		14.7		16.4
Grassy Lake (Falls River)								
1966	48	10.8	65	19.1	79	25.4	75	28.8
1967	47	13.0	79	23.9	86	29.8	98	34.8
1968	55	12.9	81	22.4	91	30.2	89	33.8
1969	59	15.9	84	27.6	97	32.5	86	34.1
1970	54	12.4	102	27.4	91	33.2	101	33.8
1971	75	22.1	98	34.7	110	41.1	125	51.0
1972	76	18.9	99	33.1	116	43.3	108	45.9
1973	51	14.5	64	20.1	76	25.9	83	29.8
1974	73	18.8	96	30.8	106	33.4	119	48.8
1975	49	11.1	74	21.8	93	29.8	109	37.2
Normal		14.1		23.2		30.1		35.0

Depth in inches (S-Snow; W-Water)

Year	Jan 1 S	Jan 1 W	Feb 1 S	Feb 1 W	Mar 1 S	Mar 1 W	Apr 1 S	Apr 1 W	May 1 S	May 1 W
State Line (Teton River)										
1966	16	3.5	25	6.4	29	7.8	33	11.1	0	0
1967	23	6.2	41	11.8	49	15.3	47	16.7	40	16.0
1968	22	4.7	33	7.4	34	10.1	40	11.6	0	0
1969	32	6.4	44	11.3	53	15.1	46	16.4	10	4.2
1970	24	4.3	47	11.7	40	13.1	51	16.8	57	20.3
1971	31	7.1	41	12.3	48	14.1	51	18.1	37	15.7
1972	31	8.3	53	16.2	54	19.1	42	18.2	22	10.7
1973	22	5.0	32	8.3	37	10.8	49	13.9	33	12.2
1974	34	6.7	45	11.1	49	13.5	52	17.0	31	13.0
1975	--	---	36	8.3	49	14.1	57	17.5	58	20.2
Normal		5.6		9.7		12.6		15.7		8.7
Grover Park Divide (Salt River)										
1966	22	4.1	25	5.9	30	7.8	26	8.5	8	3.3
1967	17	3.8	31	8.0	38	11.3	39	12.8	32	13.1
1968	23	4.3	30	6.8	33	10.1	37	11.9	27	11.1
1969	32	6.1	39	9.8	43	13.4	40	14.0	14	5.3
1970	19	3.0	43	10.1	36	12.4	43	14.9	43	14.9
1971	29	6.8	43	13.4	51	15.1	54	20.5	42	17.6
1972	27	5.9	44	11.4	47	16.2	40	15.4	28	13.9
1973	28	6.0	33	8.5	36	9.9	38	12.0	31	11.6
1974	--	---	45	8.5	38	11.1	38	14.2	24	10.2
1975	--	---	36	8.6	43	12.6	52	15.8	47	17.4
Normal		5.1		8.2		11.3		12.8		9.6
CCC Camp FF12 (Salt River)										
1966	16	3.5	28	5.4	32	8.1	28	7.6	9	3.2
1967	--	---	32	8.4	42	12.5	39	12.6	26	11.0
1968	22	4.1	25	5.3	31	8.4	30	10.0	22	8.9
1969	30	5.4	39	9.6	48	13.5	42	14.0	11	4.7
1970	20	2.9	38	8.6	33	9.1	41	12.5	40	14.2
1971	33	7.9	46	14.1	56	17.3	58	21.7	44	18.2
1972	27	6.4	49	12.1	48	15.8	40	14.7	27	13.2
1973	25	5.1	29	7.7	32	8.3	39	11.2	33	12.0
1974	--	---	36	8.4	38	11.2	43	14.8	23	9.5
1975	--	---	38	8.3	43	11.4	52	15.6	44	16.1
Normal		4.9		8.2		11.1		12.2		8.2
Salt River Summit (Salt River)										
1966	23	5.9	35	8.5	41	12.0	38	11.5	20	7.4
1967	20	4.0	41	11.2	49	16.1	54	17.6	43	17.8
1968	25	4.8	31	7.1	40	10.4	39	12.6	29	11.3
1969	38	6.6	53	13.6	60	17.8	51	18.1	23	9.4
1970	23	3.5	50	11.3	43	12.7	46	15.6	47	16.0
1971	43	10.6	62	19.1	66	21.6	72	26.2	59	26.3
1972	37	7.9	61	16.0	63	21.4	54	22.1	44	21.4
1973	29	5.6	35	8.1	41	12.0	49	13.9	41	7.4
1974	--	---	48	13.0	48	15.1	55	18.4	36	14.6
1975	--	---	43	11.0	51	14.2	63	19.8	58	22.0
Normal		6.4		10.8		14.6		16.2		13.9

Depth in inches (S-Snow; W-Water)

Year	Jan 1 S	Jan 1 W	Feb 1 S	Feb 1 W	Mar 1 S	Mar 1 W	Apr 1 S	Apr 1 W	May 1 S	May 1 W
Greys Boundary										
1966	14	3.3	25	4.9	32	8.1	26	7.4	0	0
1967	13	1.9	28	8.3	35	10.3	29	9.2		
1968	24	4.3	35	8.4	34	10.6	28	10.4	0	0
1969	32	5.5	31	8.2	32	11.9	32	11.9		
1970	19	2.9	33	10.0	36	11.7	37	13.3	31	10.5
1971	27	4.8	39	10.9	41	13.1	41	15.2	16	7.0
1972	28	7.4	36	9.5	40	13.3	30	11.4		
1973	22	5.3	31	6.6	40	10.6	36	11.4	10	3.9
1974	--	---	41	10.9	45	13.7	38	15.6	8	3.2
1975			25	6.6	46	12.0	46	16.2	38	14.7
Normal		4.4		7.9		10.4		10.9		2.1

On April 1, 1975, the snow (water content) was the following average percent of normal: Above Jackson Lake 107%; Moran to Heise 120%; Island Park 114%; Falls River 106%; Teton River 102%.

Comparable figures for run-off during the year ending September 30, 1975, as percent of normal were: Snake River at Moran 108%; Snake River near Heise 115%; Henrys Fork near Ashton 136%; Falls River near Squirrel 128%; Teton River near St. Anthony 131%.

The following tables show forecasts of streamflow made last spring compared to observed run-off:

Forecasts by Soil Conservation Service - April 1, 1975

Station	Run-off in acre-feet - April through Sept. Forecast	Observed	% Difference
Snake River at Moran	840,000	938,020*	-10.4
Snake River near Heise	4,000,000	4,262,100*	- 6.2
Salt River near Etna	375,000	524,080	-28
Henrys Fork near Ashton	720,000	857,900*	-16
Teton River near St. Anthony	480,000	558,900**	-14

*Corrected for storage in upstream reservoirs.
**Corrected for inflow from Cross Cut Canal.

FORECASTS BY NATIONAL WEATHER SERVICE - APRIL 1, 1975

Station	Runoff in Acre-feet - April thru July Forecast	Observed	% Difference
Snake River at Moran	810,000	826,200*	- 2.0
Snake River near Heise	3,570,000	3,764,500*	- 5.2
Salt River near Etna	321,000	421,630	-23.9
Henrys Fork near Ashton	527,000	655,200*	-19.6
Henrys Fork near Rexburg**	1,120,000	1,763,000*	-36.5
Falls River near Squirrel	357,000	443,900*	-19.6
Teton River near St. Anthony	368,000	459,100***	-19.8

* Corrected for storage in upstream reservoirs.
** Corrected for diversions.
*** Corrected for Cross Cut Canal.

Precipitation for August and September was below normal, with September again being extremely dry, 12% of normal for the nine representative weather stations.

1975 REGULATION SCHEDULE

July	23	Filling	Apr.	1, 1939,	priority.
	24	Filling	Mar.	30, 1921,	priority.
	25	Filling	Aug.	6, 1920,	priority.
	26	Filling	Dec.	22, 1915,	priority.
	27	Filling	Aug.	6, 1908,	priority.
	28	Filling	Oct.	7, 1905,	priority.
	30	Filling	Aug.	6, 1908,	priority.
	31	Filling	Oct.	7, 1905,	priority.
Aug.	2	Filling	Nov.	14, 1916,	priority.
	3	Filling	Mar.	30, 1921,	priority.
	4	Filling	Apr.	1, 1939,	priority.
	5	Filling	Mar.	30, 1931,	priority.
	6	Filling	Dec.	22, 1915,	priority.
	7	Filling	Aug.	6, 1908,	priority.
	8	Filling	Mar.	26, 1903,	priority.
	9	Filling	Oct.	11, 1900,	priority.
	10	Filling	Mar.	26, 1903,	priority.
	15	Filling	Oct.	11, 1900,	priority.
	17	Filling	Mar.	26, 1903,	priority.
	21	Filling	Oct.	7, 1905,	priority.
	22	Filling	Mar.	26, 1903,	priority.
	25	Filling	Oct.	11, 1900,	priority.
	27	Filling	Mar.	26, 1903,	priority.
Sept.	5	Filling	Oct.	11, 1900,	priority.
	8	Filling	Mar.	26, 1903,	priority.
Oct.	5	Filling	Oct.	7, 1905,	priority.

October 1, regulation was discontinued in the upper valley.
October 10, regulation was discontinued in the lower valley.

WATER SUPPLY

Runoff in acre-feet at various gaging stations during the year ending September 30, 1975, was as follows:

Station	1975 Runoff	Average Runoff Past Years	Years of Record	1975 % of Average
Snake River at Moran	1,131,300	1,054,000	72	107
Snake River nr Heise	5,788,300	5,030,000	65	115
Snake River at Neeley	7,156,800	5,204.000	49	138
Falls River nr Squirrel	720,000	564,000	61	128
Teton River nr St. Anthony	747,000	570,700	42	131
Henrys Fork nr Ashton	1,422,000	1,046,800	55	136
Henrys Fork nr Rexburg	2,223,600	1,451,000	66	153

The runoff at Moran has been corrected for Jackson Lake holdovers; near Heise for Jackson Lake and Palisades holdovers; at Neeley for Palisades and American Falls holdovers; at Squirrel for Grassy Lake holdovers; at Ashton for Island Park and Henrys Lake holdovers; at Rexburg for Grassy Lake, Island Park, and Henrys Lake holdovers; at St. Anthony for Cross Cut Canal discharge into Teton River.

Maximum mean daily discharges were as follows:

Snake River at Moran	5,360 cfs on June 9, 10
Snake River nr Heise	21,700 cfs on July 8
Snake River nr Blackfoot	19,300 cfs on May 21, 22
Henrys Fork nr Rexburg	10,900 cfs on June 5
Teton River nr St. Anthony	4,160 cfs on July 7
Blackfoot River nr Blackfoot	2,110 cfs* on May 21
Snake River at Milner	16,700 cfs on April 14

*Includes 1,450 cfs in bypass channel.

Flooding of lowlands along the Henrys Fork between St. Anthony and its confluence with the North Fork was tempered by the partially completed Teton Dam, the flood waters being limited somewhat by the capacity of the bypass tunnel in the dam.

Unregulated flow at Heise would have been 35,000 cfs on June 8.

Annual reservoir holdovers in thousands of acre-feet on September 30, during the past ten years are shown in the following tabulation:

Year	Jackson Lake	Palisades	American Falls	Lake Walcott	Henrys Lake	Island Park	Grassy Lake	Total
1966	516.8	271	9	49.7	56.3	5.5	6.6	914.9
1967	558.8	828	494	95.8	75.6	80.8	9.6	2,142.6
1968	585.5	1,094	751	94.0	77.8	90.2	9.2	2,701.7
1969	569.7	648	239	92.3	72.6	52.1	7.0	1,680.7
1970	573.9	918	811	93.8	73.7	72.2	11.4	2,554.0
1971	598.3	1,066	1,285	93.7	83.5	93.7	12.8	3,233.0
1972	584.8	1,047	984	96.4	82.5	86.7	9.5	2,890.9
1973	607.4	629	82	82.4	79.9	71.8	9.7	1,562.2
1974	586.7	1,018	251	93.9	82.0	109.3	10.3	2,151.2
1975	577.0	1,070	428	97.6	76.8	104.5	9.9	2,363.8
Avg.	575.9	859	533	88.9	76.0	76.7	9.6	2,219.5

The Palisades figures are after deducting 201,000 acre-feet dead storage. The usable capacities of the above reservoirs total 4,082,000 acre-feet when American Falls is at its unrestricted capacity of 1,700,000. The 1975 holdover is slightly above the average for the past ten years.

PERMITS

The following permits to appropriate the public water of the State of Idaho were approved by the Idaho Department of Water Resources:

21-7052
Harshbarger, Merle & Son, 5.0 cfs from Squirrel Creek , a priority of Aug. 7, 1974, with the point of diversion in NW¼SW¼ sec. 17, T. 8N., R. 44E., B.M.

21-7055
Henry's Fork Ranch, 2.7 cfs from Henry's Fork, a priority of Sept. 20, 1974, with the point of diversion in SE¼NE¼ sec. 13, T. 9N., R. 42E., B.M.

21-7063
Harrigfeld, John A. &/or William E., 10.0 cfs from Fall River, a priority of Dec. 13, 1974, with the point of diversion in NW¼SW¼ sec. 31, T. 9N., R. 44E., B.M.

21-7065
Griffel, Henry, 1.0 cfs from Falls River, a priority of Jan. 14, 1975, with the point of diversion in NE¼SE¼ sec. 35, T. 9N., R. 43E., B.M.

22-7091
Leatham, Spence W., 2.0 cfs from Lyons Creek, a priority of April 18, 1974, to be diverted from the SW¼NW¼ and NE¼SW¼ sec. 5, T. 4N., R. 41E., B.M.

22-7101
Rudd, G. Lynn &/or Lucille L., 4.84 cfs from Pole Creek, a priority of Aug. 6, 1974, to be diverted from the SE¼NW¼ sec. 15, T. 7N., R. 45E., B.M.

22-7114
Stevens, J. Wayne, 20.0 cfs from Canyon Creek, a priority of Nov. 20, 1974, to be diverted from two points in the SE¼SE¼ sec. 13, T. 6N., R. 43E., B.M.

22-7115
Leatham, Spence W., 100 acre-feet storage from Lyons Creek, a priority of Nov. 27, 1974, to be diverted from the SE¼NE¼ sec. 6, T. 4N., R. 41E., B.M.

22-7117
Parkinson, Edmond S., 4.8 cfs from Milk Creek, a priority of Dec. 3, 1974, to be diverted from SW¼SW¼ sec. 26, T. 7N., R. 43E., B.M.

22-7118
Neeley, O. J., Ranch, Inc., 8.0 cfs from Canyon Creek, a priority of Dec. 5, 1974, to be diverted from SW¼NW¼ sec. 19, T. 6N., R. 43E., B.M.

22-7120
Hoopes, J. Clint, 5.0 cfs from Teton River, a priority of Dec. 17, 1974, to be diverted from SE¼SE¼ sec. 15, T. 6N., R. 44E., B.M.

22-7121
Hoopes, J. Clint, 8.0 cfs from Teton River, a priority of Dec. 17, 1974, to be diverted from NW¼SE¼ sec 3, T. 6N., R. 44E., B.M.

22-7122
Rammell, Max & Merrill, 12.0 cfs from Teton River, a priority of Dec. 31, 1974, to be diverted from NW¼SE¼ sec. 3, T. 6N., R. 44E., B.M.

22-7124
Edstrom, Delbert, 0.4 cfs to be diverted from Cedar Point Drain, a priority of Jan. 20, 1975, NE¼NW¼ sec. 11, T. 5N., R. 39E., B.M.

22-7125
Rudd, G. Lynn &/or Lucille, 200 acre-feet storage from ~~Bitch~~ Teppee Creek, a priority of Feb. 18, 1975, to be diverted from NW¼SW¼ sec. 22, T. 7N., R. 45E., B.M.

22-7126
Baker, Ciryl J. &/or Berthie S. &/or Blanchard, Harold D. &/or Georgia L., 6.4 cfs from Teton River, a priority of Feb. 21, 1975, to be diverted from SE¼SE¼ sec. 13, T. 5N., R. 44E., B.M.

22-7130
Morrison, Fred D. & Bud, 7.1 cfs from Bitch Creek, a priority of May 5, 1975, SW¼NW¼ sec. 11, T. 7N., R. 44E., B.M.

22-7135
Nef, Norman E., 1.58 cfs from Cedar Point Drain (Texas Slough), a priority of June 18, 1975, to be diverted from NE¼SW¼ sec. 2, T. 5N., R. 39E., B.M.

22-7148
Bott, DeMar, 7.0 cfs from Teton River, a priority date of July 23, 1975, to be diverted from NW¼SE¼ sec. 3, T. 6N., R. 44E., B.M.

22-7150
Hoopes, Hugh, 2.0 cfs from Teton River, a priority of July 23, 1975, to be diverted from SE¼SE¼ sec. 15, T. 6N., R. 44E., B.M.

22-7151
Hoopes, Horace, 5.0 cfs from Teton River, a priority of July 23, 1975, to be diverted from SE¼SE¼ sec. 15, T. 6N., R. 44E., B.M.

22-7152
Hoopes, Horace, 10 cfs from Teton River, a priority of July 23, 1975, to be diverted from SW¼NW¼ sec. 26, T. 6N., R. 44E., B.M.

22-7155
Ard, Darrell, 12.8 cfs from Teton River, a priority of Aug. 4, 1975, to be diverted from NW¼NW¼ sec. 35, T. 6N., R. 44E., B.M.

22-7157
Teton Georgic, Inc., 4.5 cfs from Teton River, a priority of Aug. 6, 1975, to be diverted from NW¼NE¼ sec. 3, T. 6N., R. 44E., B.M.

22-7158
Smith, Lyle R. Farms, 8.0 cfs from Teton River, a priority of Aug. 15, 1975, to be diverted from SE¼NW¼ sec. 28 and/or SW¼NE¼ sec. 29, all in T. 7N., R. 44E., B.M.

22-7159
Ehco Ranch, Inc., 2.4 cfs from Teton River, a priority of Aug. 18, 1975, to be diverted from SW¼NW¼ sec. 26, T. 6N., R. 44E., B.M.

22-7160
Ehco Ranch, Inc., 2.4 cfs from Teton River, a priority of Aug. 18, 1975, to be diverted from NW¼NW¼ sec. 35, T. 6N., R. 44E., B.M.

22-7161
Keith Arnold & Sons, Inc., 9.2 cfs from Teton River, a priority of Aug. 22, 1975, to be diverted from SW¼SW¼ sec. 16, T. 7N., R. 43E., B.M.

TRANSFERS

21-0148
Boom Creek Canal Co. transfers part of its right to new point of diversion in NW¼SW¼ sec. 17, T. 8N., R. 44E., B.M.

22-0193
Vernal Kay and Muriel Kay transfer 1.0 of 3.2 cfs of their Packsaddle Creek right to other lands in an exchange agreement with Don Jardine.

22-0326
Donald W. Jardine and Belle Jardine transfer 1.0 of 5.6 cfs of their Packsaddle Creek right to other lands in an exchange agreement with Vernal Kay.

22-0502
Wayne H. Atchley transfers part of his North Leigh or Spring Creek right downstream about one-quarter mile for more efficient use.

LITIGATIONS

On September 10, 1975, the District Court of the Twelfth Judicial District in Fremont County entered a decree adjudicating to Edward R. Bowman and Florence N. Bowman 500 inches, and to Ivy May Moon 500 inches of the waters of the West Lake and the East Lake "Lower Sand Creek or Spring Creek", with a priority date of August 19, 1891.

Also adjudicated to Ivy May Moon was 200 inches of the waters of "Lower Sand Creek or Spring Creek", a priority date of May 23, 1889.

CANAL DELIVERIES

Daily diversions from Snake River by canals above American Falls Reservoir during the 1975 irrigation season are shown on Plates 6-10A, 16-20A, 58 and 59. Daily diversions for canals below American Falls are included on Plates 62, 63, 66, and 68-74. Miscellaneous measurements of various canals and streams in the headwater areas are shown on Plate 24.

Total canal diversions during 1975 irrigation season by all canals in the district, including headwater areas, as tabulated in the annual billing for District No. 01, amounted to 7,600,183 acre-feet. This is 780,082 acre-feet less than 1974.

DIVERSIONS DURING 1975 IRRIGATION SEASON BY SNAKE RIVER CANALS

May thru September for upper valley canals; April 15 thru September for lower valley canals.

(Canals in downstream order from Heise)

Canal	Diversions (Acre-feet)	Acres Irrigated	Acre-feet Per Acre
Riley	6,390	900	7.1
Progressive Irrig. District	215,000(a)	33,000	6.5
Farmers Friend	106,800	10,500	10.2
Enterprise Canal	51,610(b)	5,200	9.9
Nelson	549	55	10.0
Mattson-Craig & Arnsberger	5,820	485	12.0
Ross and Rand	734	145	5.1
Butler Island	9,250	1,100	8.4
Harrison	165,800	13,000	12.8
Cheney (Includes Steele)	3,730	323	11.5
Rudy Irrigation Co.	85,230	5,000	17.0
Kite and Nord	2,510	210	12.0
Burgess	262,000	22,000	11.9
Clark and Edwards	23,510	1,940	12.1
Lowder	15,970	1,000	16.0
East Labelle	34,260	3,000	11.4
Sunnydell	53,800	3,780	14.2
Lenroot	44,730	3,100	14.4
Reid	52,080	5,500	9.5
Texas Feeder	59,910	10,000	6.0
Nelson-Corey	2,560	270	9.5
Hill-Pettinger	1,370	200	6.8
Rigby	51,550	4,000	12.9
Dilts	8,690	620	14.0
Island	51,390	5,500	9.3
W. LaBelle & Long Island	151,860	10,500	14.5
Parks and Lewisville	93,670	8,500	11.0
North Rigby	14,490	1,400	10.4
White	986	110	9.0
Ellis	748	70	10.7
Bramwell	1,390	470	3.0
Butte and Market Lake	73,370	20,000	3.7
Osgood	12,110	6,210(c)	2.0
Bear Island and Smith	948	330	2.9
Idaho	253,200	35,850	7.1
Kennedy	4,910	2,200	2.2
Great Western and Porter	215,200(d)	30,220(e)	7.1
Woodville	23,950	2,350	10.2
Snake River Valley	207,600	20,790	10.0
Reservation	30,770(f)	54,773	0.6
Blackfoot	94,420	15,000	6.3
New Lava Side	35,630	6,000	5.9
Peoples	113,000	20,000	5.6
Aberdeen	314,200	63,000	5.0
Corbett	52,730	6,000	8.8

Diversions by Snake River Canals, 1975

Canal	Diversions (Acre-feet)	Acres Irrigated	Acre-feet Per Acre
Nielsen-Hansen	2,610	460	5.7
Riverside	36,650(g)	5,000	8.0
Danskin	56,640	8,000	7.1
Trego	17,440	1,620	10.8
Wearyrick	17,350	1,600	10.8
Watson	33,000	3,000	11.0
Parsons	14,770	930	15.9
Ft. Hall Michaud Canal	39,312(h)	14,819	2.7
Falls Irrigation District	23,740(i)	7,995(i)	3.0
Minidoka Irrigation District	443,600	72,000	6.2
Burley Irrigation District	224,500	48,000	4.7
A & B Irrigation District	46,310	14,520	3.2
Twin Falls Canal Co.	960,600	202,700	4.7
North Side Canal	988,800	160,000	6.2
Milner Low Lift	51,910	13,470(j)	3.9
Gooding	423,500	63,700	6.6
TOTAL	6,391,337	1,052,415	6.1

(a) Received additional water from Willow and Sand Creeks
(b) Used additional water from Willow Creek early in season.
(c) Water pumped from wells for about 600 acres of this land.
(d) In cooperation with the New Sweden District their major return flow spilling back to the river near the end of the Oakland Drain was gaged by a continuous recorder and the following data collected:

Month	Acre-feet	Month	Acre-feet	Month	Acre-feet
May 16-31	5,330	July	3,850	Sept.	5,600
June	7,270	Aug.	6,740	Oct. 1-18	3,260

For the months May through September 28,800 acre-feet were returned to the river. There are several other small spills which were not measured.
(e) Includes 7,680 acres outside New Sweden District to which water was delivered.
(f) Supplements main supply from the Blackfoot River.
(g) Observed return flow was about 417 acre-feet for August and 336 acre-feet for September.
(h) Includes 8,072 acre-feet pumped from wells.
(i) Acreage includes 235 acres of non-project land supplied from canal. An additional 209 acres is supplied from wells by private users and 3,597 acres of project land were irrigated by pumping 7,150 acre-feet from wells.
(j) Also delivered water to 645 acres outside the district.

These main river canals diverted about 12½% less water than in 1974. Of the 3,172,700 acre-feet diverted by lower valley canals (below Neeley), 952,555 acre-feet, or 30%, was stored water. Upper valley main canals diverted ~~4,160,700~~ acre-feet of which 209,681 acre-feet, or 5.0%, was stored water.

The following tabulation shows the monthly diversions in various sections of the District during the past ten years:

Diversions in Thousands of Acre-feet

Year	May	June	July	Aug.	Sept.	Season
Heise to Blackfoot						
1966	623	783	810	642	485	3,343
1967	384	620	822	742	640	3,208
1968	541	720	871	534	492	3,158
1969	649	679	838	741	547	3,454
1970	287	780	840	760	475	3,142
1971	383	748	817	720	462	3,130
1972	673	752	840	662	543	3,470
1973	564	876	831	747	460	3,478
1974	539	874	903	720	639	3,675
1975	134	759	924	756	625	3,198
Average	478	759	849	702	537	3,326
Henrys Fork and Tributaries (excluding headwater areas)						
1966	225	240	215	169	117	966
1967	190	243	234	204	149	1,020
1968	207	217	246	154	124	948
1969	238	223	248	194	135	1,038
1970	146	259	248	215	109	977
1971	179	239	250	208	109	985
1972	240	236	251	199	114	1,040
1973	186	267	233	208	129	1,023
1974	217	263	248	190	164	1,082
1975	84	239	264	207	145	939
Average	191	242	244	195	129	1,001

Minidoka Project

Year	April	May	June	July	Aug.	Sept.	Season
1966	76	172	150	191	155	86	830
1967	27	124	124	201	176	115	767
1968	45	169	146	199	101	97	757
1969	63	192	138	197	179	95	864
1970	36	124	135	192	175	83	745
1971	21	120	150	201	180	97	769
1972	52	172	142	190	162	82	800
1973	24	154	155	182	155	80	750
1974	31	169	163	186	152	102	803
1975	53	68	153	188	146	107	715
Average	43	146	146	193	158	94	780

Diversions in Thousands of acre-feet - continued

Year	April	May	June	July	Aug.	Sept.	Season
North Side Canal Co. Project							
1966	109	217	212	243	229	172	1,182
1967	104	198	202	254	242	202	1,202
1968	98	200	208	249	202	163	1,120
1969	89	214	212	236	237	172	1,160
1970	71	183	202	234	231	153	1,074
1971	111	189	202	241	240	172	1,155
1972	81	208	212	240	231	162	1,134
1973	63	203	213	243	227	147	1,096
1974	57	204	220	246	222	165	1,114
1975	26	130	206	240	223	169	994
Average	81	195	209	243	228	168	1,124
Twin Falls Project							
1966	140	220	190	226	219	164	1,159
1967	101	202	191	237	234	186	1,150
1968	106	220	204	239	193	157	1,112
1969	125	225	197	227	220	157	1,158
1970	80	194	194	228	231	144	1,071
1971	62	186	196	240	238	164	1,086
1972	86	210	196	236	223	150	1,101
1973	60	207	197	228	216	149	1,057
1974	63	213	203	228	216	154	1,077
1975	29	102	194	240	232	176	973
Average	85	198	196	233	222	160	1,094
Gooding Project							
1966	27	88	88	94	82	67	446
1967	21	84	85	102	98	80	470
1968	30	91	94	100	84	74	473
1969	16	77	73	95	95	76	432
1970	17	85	89	97	93	77	458
1971	22	76	88	100	97	82	465
1972	31	89	91	98	99	79	487
1973	41	85	88	95	90	70	469
1974	18	83	93	98	90	80	462
1975	11	57	85	96	96	79	424
Average	24	82	87	98	92	77	459

RIVER DATA

The usual methods of segregating stored water and normal flow at the reservoir outlets was continued in use during 1975. Palisades reservoir was operated on the same basis as Jackson Lake, namely, convert the daily drop in lake level to second-feet and call it storage from Palisades. For some time after storage draft started, a lag of several days was maintained in making normal flow cuts to avoid any possible natural flow losses at the high lake levels existing at Palisades and Jackson Lake. Later on in the season when dropping lake and river levels resulted in bank storage return, this water was gradually recovered for credit as stored water so that it balanced out by the end of the irrigation season.

Daily figures showing segregation of flow at the various river gaging stations and storage diversions by canals are shown in Plates 12 and 13 for Snake River and Plates 21 and 21A for Henrys Fork.

Storage use started on July 23 in the lower valley and July 26 in the upper valley and continued through October 9th and October 1st, respectively.

Total storage passing the Blackfoot station during the season amounted to 214,500 acre-feet.

Blackfoot River Reservoir holdover on September 30 was 227,000 acre-feet. The Indian Service 1891 decree was not cut off.

STORED WATER DELIVERIES

Reservoir Allotments

Jackson Lake filled 100%, American Falls filled 66.2% (restricted capacity), and Palisades filled 100%. Allotments were made as follows:

American Falls	1,125,000 acre-feet
Jackson Lake	847,000 acre-feet
Palisades	1,200,000 acre-feet

1975 Storage Allotments in Acre-feet
(Downstream order from Heise)

Canal	Am. Falls	Jackson Lake	Palisades	Total
Poplar Irrigation Dist.	445	1,589	1,550	3,584
Progressive Irr. Dist.	8,262	7,209	29,147	43,971
Farmers Friend		2,000	9,400	11,400
Enterprise Canal Co.	5,905	11,252	19,600	36,757
Mattson-Craig			1,440	1,440
Butler Island			250	250
Harrison	7,958	11,943	23,500	43,401
Rudy	1,753	3,530	15,700	20,983
Burgess	6,284	10,603	31,400	48,287
Clark and Edwards			800	800
Lowder		1,040	1,600	2,640
East Labelle			800	800
Sunnydell		4,000	6,300	10,300
Lenroot	2,560	5,234	7,850	15,644
Reid	1,687	1,472	3,150	6,309
Texas and Liberty Park			4,700	4,700
Enterprise Irr. Dist. (N.F.)	6,737	5,883		12,620
Fremont-Madison Irr. Dist			1,000	1,000
Rigby			6,300	6,300
Island			4,700	4,700
Dilts	586	511	1,200	2,297
West Labelle			1,000	1,000
Long Island			5,000	5,000
Parks and Lewisville			5,500	5,500
North Rigby			1,200	1,200
Butte and Market Lake	3,088	2,695	44,000	49,783
Osgood (U&I Sugar Co)	8,907	7,771	15,250	31,928
Bear Island	126	110		236
Sakaguchi (Smith & Kennedy)	47	91		138
Clement Bros. (Kennedy)		105		105
Owners Mutual		200	290	490
Idaho	15,162	13,230	58,800	87,192
Martin	1,328	2,659	5,600	9,587
New Sweden Irr. Dist	17,028	19,857	31,400	68,285
West Side Mutual			2,350	2,350
Woodville	4,002	3,491	6,000	13,493

1975 Storage allotments in acre-feet - continued
(downstream order)

Canal	Am. Falls	Jackson Lake	Palisades	Total
Snake River Valley	17,449	30,225	35,300	82,974
Palisades Water Users			53,483	54,130
Blackfoot	8,446	7,370	4,050	19,866
New Lava Side			11,750	11,750 18,080
Peoples	14,172	20,365	35,000	69,537
Aberdeen	36,788	74,626	152,800	264,214
Corbett	2,247	1,961	6,300	10,508
Riverside			1,500	1,500
Danskin			2,350	2,350
Trego	870	758	3,200	4,828
Wearyrick			600	600
Watson			2,350	2,350
Parsons			700	700
Total above Blackfoot	171,837	251,780	656,160	1,079,777
Michaud (Indian Service)	31,566		83,900	115,466
Falls Irrig. Dist.	15,419		40,900	56,319
Minidoka Irrig. Dist.	55,300	186,030	35,000	276,330
Burley Irrigation Dist. 145,000	104,520		39,200	143,720
Minidoka N. S. Pump 43,800	31,495		90,800	122,295
Milner Low Lift 40,600	30,234		44,500	74,734
Twin Falls Canal Co. 611,000	100,049	97,183		197,232
Hillsdale	27,229			27,229
North Side Canal Co. 482,000	262,862	312,007	116,600	691,469
Gooding 192,000	264,710		1,000	265,710
Idaho Power Co.	29,779			29,779
City of Pocatello			50,000	50,000
Westvaco			5,000	5,000
J. R. Simplot			2,500	2,500
U. S.			34,440*	34,440
Total below Blackfoot	953,163	595,220	543,840	2,092,223
GRAND TOTAL	1,125,000	847,000	1,200,000	3,172,000

*Wyoming, 33,000 acre-feet; other 1,440 acre-feet.

The storage rental committee, consisting of John Walker, Leonard Graham, and Art Larson, supervised water rentals.

No computations were made of individual holdovers, as excellent carryovers and about normal snowpack in January assured all reservoirs would fill easily, and any holdovers would be voided.

SUMMARY OF WATER DISTRICT NO. 01 RENTALS - 1975

Supplier	Ac-ft	Area of Use	Ac-ft
Falls Irrig. District	4,167	Swan Valley	170
Mrs. Ward Hittson	500	Heise to Blackfoot	5,577
U.S. Indian Service	750	Milner Low Lift	1,450
Neil Erickson	500	Lower Valley	940
Mrs. Mabel Winterfield	100		
M. J. Danielson	120		
Enterprise Canal	2,000		
Total	8,137	Total	8,137

All rentals were at the rate of fifty cents per acre-foot.

SUPPLY AND DISPOSAL OF STORED WATER - 1975

SUPPLY

		Ac-ft
Jackson Lake Contents	July 17	848,500
Palisades (usable)	July 18	1,201,000
American Falls	July 11	1,090,000
Lake Walcott	July 11	96,800
Henrys Lake	July 22	88,300
Island Park	July 25	135,500
Grassy Lake	July 26	14,800
Indian & Bergman Reservoir Yield		907
Sheridan Creek Right		1,642*
Gain - Neeley to Milner		98,500
Total		3,575,949

*Special natural flow rights considered as storage for convenience in tabulation.

DISPOSAL

		Ac-ft
Used by Snake River Rights		1,149,290
Used by Henrys Fork Rights		32,032
Storage transmission loss, Snake River		42,994
Storage transmission loss, Henrys Fork		1,513
Storage transmission loss, Cross Cut		1,476
River operation waste past Milner		2,074
Henrys Lake Loss		2,000
Holdovers:		
Jackson	Oct. 1	577,000
Palisades (usable)	Oct. 2	1,058,000
American Falls	Oct. 10	408,800
Lake Walcott	Oct. 10	95,180
Henrys Lake	Sept. 30	76,800
Island Park	Sept. 30	104,500
Grassy Lake	Sept. 30	9,900
Total		3,561,559

The computed supply exceeds the disposal by 14,390 acre-feet, or 0.4 of one percent.

MICHAUD PROJECT USE OF STORED WATER

The annual reports since 1958 have contained a detailed analysis of the water used on the Michaud Project by the Falls Irrigation District. Tabulated below is a summary of this data for the past five years.

AREA NO. 1
TRIBUTARY TO AMERICAN FALLS
(Figures in Acre-feet)

	FROM WELLS			FROM AM. FALLS RES.				
Year	Acres	Pumped	Consumed	Acres	Del'd	Consumed	Excess	Contr. to Gr. Water
1971	2,968*	6,403	5,350	5,481**	15,640	9,870	5,770	420
1972	2,968*	4,480	5,350	5,481**	16,548	9,870	6,678	1,328
1973	2,968*	4,884	5,350	5,481**	16,332	9,870	6,462	1,112
1974	2,968*	5,468	5,350	5,481**	17,493	9,870	7,623	2,273
1975	2,968*	4,725	5,350	5,481**	18,568	9,870	8,698	3,348

* Project land 2,759
** Project land 4,564

AREA NO. 2
TRIBUTARY BELOW AMERICAN FALLS
(Figures in Acre-feet)

	FROM WELLS			FROM AM. FALLS RES.				
Year	Acres	Pumped	Consumed	Acres	Del'd	Consumed	Excess	Contr. to Gr. Water
1971	838	1,926	1,510	2,514*	6,833	4,525	2,308	798
1972	838	2,233	1,510	2,514*	7,912	4,525	3,387	1,877
1973	838	2,188	1,510	2,514*	8,173	4,525	3,648	2,138
1974	838	2,555	1,510	2,514*	8,807	4,525	4,282	2,772
1975	838	2,424	1,510	2,514*	7,796	4,525	3,271	1,761

*Project land 1,623

The above data is computed assuming a consumptive use of 1.8 acre-feet per acre. Deliveries to East Branch Canal are reduced by 4% for estimated canal loss in the 1½ miles which is non-tributary to American Falls Reservoir. No account is taken of this 4% loss in the contribution to ground water in Area No. 2.

In the tabulations in this report, the Falls Irrigation District was charged only with the water pumped from American Falls Reservoir.

GROUND WATER PUMPING

An additional credit to American Falls Reservoir is water now pumped from wells by the City of Pocatello, Westvaco Co., J. R. Simplot Co., and Fort Hall Michaud Project. Palisades contracts for Westvaco and Simplot provide that storage charges be made on one-half of the water pumped. The City of Pocatello (including Alameda) is permitted to pump 10,000 acre-feet each season before there is any charge. In the case of the Ft. Hall Michaud Project, 22,400 acre-feet of pumping from wells is permitted before there is any charge against their reservoir storage.

Tabulated below is a summary of above pumping for the period May 1 to September 30, 1975:

User	Acre-feet Pumped	Acre-feet Storage Charge
City of Pocatello (including Alameda)	7,336	0
FMC Corporation*	2,073	1,036
Ft. Hall Michaud Project (wells)	8,072	0
J. R. Simplot Co**	2,815	1,408

*Reported 2073 acre-feet pumped and 47% of this used consumptively.
**Reported 2,815 acre-feet pumped and 84% used consumptively.

RIVER LOSSES AND GAINS

Gains and losses between river stations for the months of May through September (using time intervals shown on Plate 15) are shown in the following tabulations:

GAIN IN SNAKE RIVER, MORAN TO ALPINE GAGING STATION - 1975

(Alpine dates and 24-hr. cfs except as noted)

Station	May	June	July	Aug.	Sept.	Total
Snake nr Moran	138,670	100,960	61,120	119,780	63,790	484,320
Snake nr Alpine	248,810	423,470	397,370	214,670	118,320	1,402,640
Total gain cfs	110,140	322,510	336,250	94,890	54,530	918,320
Mean gain cfs	3,550	10,750	10,850	3,060	1,820	6,000
Total gain ac-ft.	218,300	639,600	667,300	188,200	108,300	1,821,000

GAIN IN SNAKE RIVER, ALPINE GAGING STATION TO STATE LINE - 1975

(24-hr. cfs except as noted)

Station	May	June	July	Aug.	Sept.	Total
Greys River	32,960	80,480	59,010	20,880	13,550	206,880
Salt River	56,900	81,560	56,080	27,770	23,880	246,190
Total gain cfs	89,860	162,040	115,090	48,650	37,430	453,070
Mean gain cfs	2,900	5,400	3,710	1,570	1,250	2,960
Total gain ac-ft.	178,200	321,400	228,300	96,500	74,240	898,700

GAIN IN SNAKE RIVER, STATE LINE TO HEISE - 1975

(No correction for time of flow, 24-hr. cfs except as noted)

Station	May	June	July	Aug.	Sept.	Total
Palisades release	-38,350	-303,660	-90,220	+11,090	+49,900	-371,240
Total Supply*	300,320	281,850	422,240	274,410	205,650	1,484,470
Heise	379,030	406,790	486,600	316,880	235,860	1,825,160
Riley Canal	22	714	989	910	588	3,223
Total acc't for	379,052	407,504	487,589	317,790	236,448	1,828,383
Total gain cfs	78,732	125,654	65,349	43,380	30,798	343,913
Mean gain cfs	2,540	4,190	2,110	1,400	1,030	2,248
Total gain ac-ft.	156,200	249,200	129,600	86,040	61,090	682,200

*Sum of Snake river near Alpine, Greys and Salt River plus Palisades releases.

The gains in the above three reaches is consistent with other years of comparable snowpack.

GAIN IN SNAKE RIVER, HEISE TO SHELLEY - 1975

(Heise dates and 24-hr. cfs except as noted)

Station	May	June	July	Aug.	Sept.	Total
Rexburg	138,800	228,700	141,240	58,930	49,720	617,390
Total Supply*	517,900	636,200	628,800	376,720	286,170	2,445,790
Diversions	37,890	276,510	355,700	289,580	237,520	1,197,200
Shelley	479,000	397,000	350,200	163,260	117,980	1,507,440
Total acc't for	516,890	673,510	705,900	452,840	355,500	2,704,640
Total gain cfs	-1,010	37,310	77,100	76,120	69,330	258,850
Mean gain cfs	-33	1,244	2,487	2,455	2,311	1,692
Total gain ac-ft.	-2,000	74,000	152,900	898,200	13,750	513,430

* Rexburg plus Heise and Riley from previous table.

The mean gain was 1,692 cfs compared to 1,954 cfs in 1974. This gain included inflow from Market Lake Springs, which is credited to Owners Mutual Canal Co.

GAIN OR LOSS IN SNAKE RIVER, SHELLEY TO BLACKFOOT - 1975

(Shelley dates and 24-hr. cfs except as noted)

Station	May	June	July	Aug.	Sept.	Total
Shelley	476,700	405,900	350,690	165,510	118,900	1,517,700
Blackfoot River*	32,910	25,900	9,810	10,120	6,200	84,940
Total Supply	509,610	431,800	360,500	175,630	125,100	1,602,640
Diversions	29,640	106,170	110,550	91,450	77,410	415,220
Snake River nr Blackfoot	454,300	326,460	247,040	99,050	60,200	1,187,050
Total acc't for	483,940	432,630	357,590	190,500	137,610	1,602,270
Total diff cfs	-25,670	+830	-2,910	+14,870	+12,510	-370
Mean diff cfs	-828	+28	-94	+480	+417	-2
Total diff ac-ft.	-50,920	+1,650	-5,770	+29,490	+24,810	-734

* Includes by-pass.

May shows an extraordinarily high loss, about the same as in 1974. The other months are comparable to other years, and for the season total up to a 2 cfs loss compared to a usually small gain. In 1974 the gain was 58 cfs.

GAIN OR LOSS IN SNAKE RIVER, BLACKFOOT TO NEELEY - 1975

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

Station	May	June	July	Aug.	Sept.	Total
Blackfoot	452,870	326,460	248,800	100,000	61,140	1,189,270
Inflow*	118,070	111,150	90,520	87,130	91,020	497,890
Am Falls Res Draft	-25,700	+19,660	+61,490	+164,300	122,470	+342,220
Total Supply	545,240	457,270	400,810	351,430	274,630	2,029,380
Diversions	330	2,584	4,329	2,666	2,061	11,970
Neeley	539,300	433,900	375,100	347,480	274,000	1,969,780
Total Use	539,630	436,484	379,429	350,146	276,061	1,981,650
Total diff cfs	-5,610	-20,786	-21,381	-1,284	+1,431	-47,730
Mean diff cfs	-189	-693	-690	-41	+48	-312**
Total diff ac-ft.	-11,130	-41,230	-42,410	-2,550	+2,840	-94,670

* A tabulation of inflow data is shown on Plate 11. Seven sets of measurements were obtained for the period and figures interpolated between measurements. Portneuf River inflow was depleted by pumping for Indian Service Michaud Canal. Amount pumped each day is shown on Plate 53, and included in Portneuf River inflow below Pocatello on Plates 11-11D. Monthly totals in above table are actual inflow. Inflow figures shown on Plates 12 and 13 are theoretical inflow including pump diversion figures in actual inflow. These are shown on last line of Plate 11 series. The above computations fulfill requirements of Section 8(b) of Fort Hall Michaud Division, Palisades Contract. Daily figures of waste from the Aberdeen Project were furnished by Mr. Myron Dance, Manager. Unmeasured inflow as computed from the "Newell" formula varied from 1,330 to 1,400 cfs.

**The average loss of 312 cfs from Blackfoot to Neeley for 1975 compares to an average loss of 291 cfs in 1974.

Reugar Springs

The following measurements of Reugar Springs flows were obtained:

Date	Discharge in cfs
May 3, 1975	25
June 7, 1975	16
June 27, 1975	21
July 18, 1975	21
Aug. 8, 1975	18
Aug. 29, 1975	18
Sept. 20, 1975	21

GAIN OR LOSS IN SNAKE RIVER, NEELEY TO MINIDOKA - 1975

(Minidoka dates and 24-hr cfs except as noted)

Station	May	June	July	Aug.	Sept.	Total
Neeley	538,900	436,500	375,000	347,400	275,400	1,973,200
Walcott	+100	-1,010	+500	+1,210	-1,610	-810
Total Supply	539,000	435,490	375,500	348,610	273,790	1,972,390
N. Minidoka	23,290	42,190	53,630	39,170	28,960	187,240
S. Minidoka	11,170	34,960	41,250	34,530	24,980	146,890
Snake at Minidoka	544,400	389,620	292,850	271,960	214,960	1,713,790
Total acc't for	578,860	466,770	387,730	345,660	268,900	2,047,920
Total diff cfs	39,860	31,280	12,230	-2,950	-4,890	+75,530
Mean diff cfs	1,286	1,043	396	-95	-163	+494
Total diff ac-ft.	79,060	62,040	24,260	-5,850	-9,700	+149,800

The average gain of 494 cfs is higher than usual but less than the 515 cfs in 1972. 1974 showed a gain of 47 cfs. Some years show small losses.

GAIN IN SNAKE RIVER, MINIDOKA TO MILNER - 1975

(Milner dates and 24-hr cfs except as noted)

Station	May	June	July	Aug.	Sept.	Total
Snake at Minidoka	544,300	394,500	292,400	272,100	216,500	1,719,800
Minidoka NS Pump	814	4,656	8,103	6,000	3,902	23,475
PA Lateral	487	1,879	2,232	1,917	1,550	8,065
Milner Low Lift	667	6,087	8,485	6,074	4,028	25,341
Milner North Side	57,530	77,910	90,000	81,300	59,190	365,930
Gooding	36,740	67,150	77,080	77,570	64,190	322,730
Twin Falls	51,409	97,650	120,820	117,060	88,830	475,769
L. Milner stored	-2,130	-330	-370	+1,000	+30	-1,800
Snake at Milner	393,300	138,380	784	2,390	15,715	550,569
Total acc't for	538,817	393,382	307,134	293,311	237,435	1,770,079
Total gain, cfs	-5,483	-1,118	+14,734	+21,211	+20,935	+50,279
Mean gain, cfs	-177	-37	+475	+684	+698	+329
Total gain ac-ft.	-10,880	-2,218	+29,220	+42,070	+41,520	+99,730

The average gain of 329 cfs compares to 593 cfs in 1974.

TOTAL GAIN IN SNAKE RIVER NEELEY TO MILNER - 1975

	May	June	July	Aug.	Sept.	Total
Total gain, ac-ft.	68,180	59,820	53,480	36,220	31,820	249,520

The total gain Neeley to Milner for period May through September was 249,520. For the period July 21 to October 9, this gain was 96,500 acre-feet, computed by using the above figures, and this gain is credited to the Minidoka Project.

DISTRIBUTION ON HENRYS FORK

Mr. L. C. Anderson served as Deputy Watermaster at St. Anthony in charge of water distribution on Henrys Fork, Falls River, and lower Teton River.

Holdovers in Henrys Fork reservoirs at the end of the season were about 80 percent of capacity.

Releases from Grassy Lake were discontinued on September 30. Releases from Henrys Lake and Island Park were discontinued on September 7.

The usual methods described in previous reports of segregating stored water and normal flow at the outlets of Henrys Lake and Island Park reservoirs were continued in 1975. During the period July 29 to August 7, stored water was charged a daily loss of 30 cfs. During the period of August 22-31, stored releases were credited with a like amount. This adjustment has been used in past years and presumably corrects the observed normal flow to pre-reservoir conditions. When Island Park reservoir is full there is a loss to ground water which is later recovered when the reservoir level drops. By making the above adjustment, normal flow is more nearly distributed to the rights that would be in effect if Island Park Reservoir were not in the river system.

Mr. C. Michael Bennett made one trip to the Henrys Lake and Island Park areas to regulate. The following measurements were made:

August 15, 1975

Sheridan Creek at County Road	3.67 cfs	
Return flow east of above	5.00	
Total Sheridan Creek		8.7 cfs
Duck Creek at Bootjack Road		8.0
Rock Creek above Magleby Ditch Divers.		6.4

SPECIAL FLOW DATA FOR ISLAND PARK AREA

	July				August						Sept.			
	22	25	27	28	4	5	6	11	19	27	3	4	8	18
Sheridan Creek at Green Canyon Rd.				16										
Sheridan Crk at USFS Rd (Total)			52				44			37				38
Taylor Creek at USFS Road			5				5			4				3
Schneider Creek at USFS Road			9				8				9			8
Willow Creek at USFS Road			12				9				4			3
Myers Creek at USFS Road			4				4				2			2
Icehouse Creek at USFS Road			22				20				22			19
Icehouse Creek at County Road				25										
Sheep Creek at County Road					7							3		
Hotel Creek at County Road					22							12		11
Duck Creek at Bootjack Road		15				12		12						8
Hope Creek above diversions		4						3					2	
Timber Creek at Mouth		4				4		4					4	
Targhee Creek at Hiway 87	44					24		25					10	
Howard Creek at Hiway 87	14					12							12	
West Twin Creek						7			6			4		
East Twin Creek						5			6			7		
Jesse Creek		3						2				3		1

The discharge measurements listed above were extracted from a U. S. Geological Survey study and are presented here as being appropriate to this report.

1975 REGULATION SCHEDULE

With the exception of a few days, the Henrys Fork and Falls River remained on nearly the same regulation schedule as the main Snake River. For most of the season, the upper Teton River was cut to earlier priorities than the main river.

Figures showing the operation of the Cross Cut Canal in 1975 are shown on Plate 23A. It delivered 25,910 acre-feet to the Fall River Canal and 11,300 acre-feet to Teton River.

CANAL DELIVERIES IN HENRYS FORK BASIN

Diversions during the 1975 irrigation season, May to September, from Falls River, Henrys Fork and Lower Teton River

Falls River Canals	Diversions (acre-feet)	Area Irrigated (acres)	Acre-feet Per acre
Yellowstone	2,070	2,100	1.0
Marysville	25,420	16,000	1.6
Farmers Own	13,790	5,800	2.4
Enterprise	20,680	5,890	3.5
Bell	448	110	4.1
Falls River	79,760(a)	9,000	8.9
McBee	660	125	5.3
Chester	13,170	1,400	9.4
Silkey	4,310	1,080	4.0
Curr	10,660	1,300	8.2
TOTAL FALLS RIVER	170,968	42,935	4.0

(a) Includes 25,910 acre-feet diverted through the Cross Cut Canal.

Henrys Fork Canals			
Dewey	4,960	1,200	4.1
Last Chance	33,440	1,860	18.0
St. Anthony Union	127,300	9,700	13.1
Farmers Friend	32,450	3,025	10.7
Twin Groves	30,620	2,500	12.2
Salem Union	44,670	5,500	8.1
Egin	77,380	7,000	11.1
St. Anthony Union Feeder	20,050	2,300	8.7
Independent	69,810	6,000	11.6
Consolidated Farmers	55,060	6,000	9.2
TOTAL HENRYS FORK	495,740	45,085	11.0

Lower Teton Canals	Diversions (acre-feet)	Area Irrigated (acres)	Acre-feet Per acre
Siddoway	1,230	500	2.5
Wilford	37,870	2,300	16.5
Teton Irrigation	19,840	2,000	9.9
Good Luck	3,920	330	11.9
Pioneer	3,540	300	11.8
Stewart	4,040	478	8.5
Pincock-Byington	4,350	260	16.7
Pincock-Gardner	4,210	480	8.8
Teton Island Feeder	91,440	10,400	8.8
Roxana	5,620	880	6.4
Island Ward	7,240	3,300	2.2
North Salem	894(a)	450	2.0
Bigler Slough	1,870	240	7.8
Woodmansee-Johnson	6,640(b)	1,320	5.0
City of Rexburg	7,020	950	7.4
Rexburg Irrigation	56,010	5,280	10.6
McCormick-Rowe	581	160	3.6
Saurey-Sommers	4,230	275	15.4
Eames-Thompson	165	70	2.4
TOTAL LOWER TETON	260,710	29,893	8.7
TOTAL FALLS RIVER, HENRYS FORK & LOWER TETON	927,418	117,913	7.9

(a) Used additional water from Henrys Fork through Salem Union.
(b) Used additional water from Moody Creek.

The total diversions in the above areas were less than in 1974. Of the total diversions of 927,418 acre-feet, 28,608 acre-feet or 3.0% was stored water.

Diversions by some of the principal canals in the headwater areas for the 1975 irrigation season (June 1 to September 30) are shown below:

	Diversions (acre-feet)	Area Irrigated (acres)	Acre-feet Per Acre
Trail Creek Irrig. Co.	28,800	7,520	3.8
Fox Creek Canals	12,500*	3,760	3.3
Darby Creek Canals	11,400*	4,800	2.4
Grand Teton Canal	26,800	7,000	3.8
Canyon Creek Canal	5,945	2,200	2.7
Conant Creek Canal	2,808	1,680	1.7
Squirrel Creek Canal	2,632	1,165	2.3
Boom Creek Canal	1,191	2,180	0.5

*June 1 - August 31.

STORED WATER DELIVERIES ON HENRYS FORK

Water available for Fremont-Madison allotments was as follows:

Island Park Reservoir (July 25)	135,500 ac-ft.
Grassy Lake Reservoir (July 18)	15,300 ac-ft.
Sheridan Creek Right	1,640 ac-ft.
TOTAL	152,440 ac-ft.

The District allotted 132,183 acre-feet for the 1975 season. Henrys Fork users rented 1,143 acre-feet.

HENRYS LAKE ALLOTMENTS - 1975

Henrys Lake contents July 22 was 88,400 acre-feet. From this, a figure of 2,000 acre-feet was deducted for dead storage and loss.

ALLOTMENTS

Canal	Percent	Allotment Acre-feet
Independent	26.90	23,242
Salem Union	24.21	20,917
Consolidated Farmers	20.17	17,427
Last Chance	13.85	11,966
St. Anthony Union	6.72	5,806
Egin	6.72	5,806
Dewey	1.43	1,236
TOTAL	100.00	86,400

Henrys Fork near Rexburg gage showed 14,900 acre-feet of unused stored water from the North Fork Reservoirs that passed down river. This is compared to a deficit of 15,332 acre-feet in 1974.

RIVER GAINS IN HENRYS FORK BASIN - 1975

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

Lake to Island Park	20 hours
Island Park to Ashton	19 hours
Ashton to St. Anthony	5 hours
St. Anthony to Rexburg	12 hours
Squirrel to Chester	8 hours

Gain in Henrys Fork, Lake to Island Park - 1975

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

Station	May	June	July	Aug.	Sept.	Total
H. F. nr Lake	5,163	1,751	4,003	3,949	2,685	17,551
I. P. Release	-3,830	-8,620	+2,420	+12,650	+1,410	+4,030
Total Supply	1,333	-6,869	6,423	16,599	4,095	21,581
H. F. @ Is. Park	35,030	37,350	31,650	37,250	22,680	163,960
Total gain cfs	33,697	44,219	25,227	20,651	18,585	142,379
Mean gain cfs	5,680	1,474	814	666	620	931
Total gain ac-ft.	66,840	87,710	50,040	40,960	36,860	282,410

The average gain is 931 cfs compared to 904 in 1974.

Gain in Henrys Fork, Island Park to Ashton - 1975

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

Station	May	June	July	Aug.	Sept.	Total
Island Park	34,620	37,640	31,540	37,520	22,910	164,230
Ashton	93,710	109,170	70,150	71,800	49,410	394,240
Total gain cfs	59,090	71,530	38,610	34,280	26,500	230,010
Mean gain cfs	1,910	2,380	1,250	1,110	883	1,500
Total gain ac-ft.	117,200	141,880	76,580	67,990	52,560	456,200

The mean gain is 1,500 cfs compared to 1,540 cfs for 1974.

Gain in Henrys Fork, Ashton to St. Anthony - 1975

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

Station	May	June	July	Aug.	Sept.	Total
Ashton	93,140	109,600	70,140	71,960	49,490	394,330
Chester	41,540	100,200	61,100	10,260	8,040	221,140
Total supply	134,680	209,800	131,240	82,220	57,530	615,470
Diversions	18,490	43,280	42,240	33,330	21,120	158,460
St. Anthony	122,820	175,180	93,430	50,780	42,240	484,450
Total acc't for	141,310	218,460	135,670	84,110	63,360	642,910
Total gain cfs	6,630	8,660	4,430	1,890	5,830	27,440
Mean gain cfs	214	289	148	61	194	179
Total gain ac-ft.	13,150	17,180	8,790	3,750	11,560	54,430

The average gain of 179 cfs compares to the 211 cfs in 1974, the greatest of record.

Gain in Falls River, Squirrel to Chester - 1975

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

Station	May	June	July	Aug.	Sept.	Total
Squirrel	36,510	98,610	74,130	24,560	18,600	252,410
Diversions	1,470	10,360	18,650	15,580	13,210	59,270
Chester	41,540	100,200	61,100	10,260	8,040	221,140
Total acc't for	43,010	110,560	79,750	25,840	21,250	280,410
Total gain cfs	6,500	11,950	5,620	1,280	2,650	28,000
Mean gain cfs	210	398	181	41	88	183
Total gain ac-ft.	12,900	23,700	11,150	2,540	5,260	55,540

The average gain of 183 cfs compares to 206 cfs in 1974.

Gain in Henrys Fork and Teton River, St. Anthony to Rexburg - 1975

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

Station	May	June	July	Aug.	Sept.	Total
Teton River	37,170	94,530	89,340	30,130	20,230	271,400
H.F. @ St.Anthony	122,820	175,180	93,430	50,780	42,240	484,450
Total Supply	159,990	269,710	182,770	80,910	62,470	755,850
H.F. Diversions	17,648	32,082	25,875	21,363	15,104	112,072
Teton Diversions	4,986	34,176	40,960	29,490	20,902	130,514
H.F. nr Rexburg	143,040	227,460	138,220	58,020	48,075	614,815
Total acc't for	165,674	293,718	205,055	108,873	84,081	857,401
Total gain cfs	5,684	24,008	22,285	27,963	21,611	101,551
Mean gain cfs	183	800	719	902	720	664
Total gain ac-ft.	11,270	47,620	44,200	55,460	42,870	201,400

The average gain of 664 cfs compares to 532 cfs in 1974. This gain is produced mostly from irrigation return flow. The 201,400 acre-feet is 21.7% of the 927,418 acre-feet diverted by canals above Rexburg, and is consistent with most past years.

TETON BASIN

Mr. Arthur Wilson, with summer office at Driggs, continued as Deputy Watermaster in the Teton Basin during 1975.

The water content of snow on April 1 on the Teton watershed was about 102 percent of normal. April to September precipitation at Driggs was 11.76 inches compared to the normal of 8.08 inches. The yearly runoff of the Teton River near St. Anthony was 131 percent of the 42 year average.

Again this year, canal diversions were started early and water spread to build up the ground water table. This practice seems to result in a greater sustained flow of the Teton River later in the season. This early water spreading may result in undesirable high sub in the low areas along the river in some years.

The discharge of various streams and canals and storage used in Teton Basin through exchange for natural flow is shown in Plates 23 and 24. Again this year, water formerly diverted by South Fox Canal was diverted by a pipeline from the North Canal and is included in figures for North Canal above pipeline on Plate 24.

Water distribution on Teton Creek between Wyoming and Idaho users was on the basis of 1940 Wyoming Federal Court decree. Stored water diversions by Teton Basin users, through exchange for natural flow belonging to prior downstream rights, was on the basis of diverting 1.625 times the amount of replacement storage delivered to lower Teton River at the St. Anthony gaging station, in accordance with an agreement reached by upper and lower users on the Teton River in 1949.

Canals in Teton Basin used very little of their storage allotments. No water was rented from sources outside the Basin.

There has been an increase in the use of sprinklers in recent years in Teton Basin. Conversion of a large part of the String Canal System to sprinklers has been made.

Mr. Reed Brower of Tetonia served as special deputy on the Leigh and Spring Creeks on an hourly basis for time actually spent. Considerable time is required to keep the headgates on these creeks regulated, and it is impossible for one man to look after the other streams in Teton Basin and still give the necessary attention to the streams in the vicinity of Tetonia. One-half the cost of Mr. Brower's services, amounting to $223.85 was charged as a special item to the local users, and a similar amount was charged as general District No. 01 expense.

SWAN VALLEY

Mr. Howard Hatfield served as Deputy Watermaster and also as watermaster on several canals The local users were charged one-half of the cost, or $395.50, and the other half of the cost of the watermaster's services was charged as a general expense to District No. 01.

There was little demand for stored water by individuals not owning space in Palisades Reservoir. Swan Valley users rented 175 acre-feet from Water District No. 01 during 1975.

CLIMATOLOGICAL DATA

(Precipitation in inches for year ending September 30, 1975)

Month	Alta		Moran		Jackson		Afton		Palisades	
	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.**
Oct.	2.83	1.48	1.97	1.45	0.83	1.11	2.63	1.53	2.39	1.30
Nov.	0.98	1.41	1.40	1.88	0.19	1.11	1.24	1.52	0.77	1.71
Dec.	----	1.51	1.82	2.36	1.13	1.54	1.27	1.59	1.69	1.67
Jan:	2.18	1.60	3.95	2.35	1.05	1.43	1.75	1.53	1.86	1.93
Feb.	2.15	1.48	3.95	2.28	1.70	1.32	1.25	1.51	3.18	1.54
Mar.	1.97	1.51	3.15	2.08	1.46	1.20	1.61	1.55	1.86	1.39
Apr.	3.11	1.48	2.60	1.73	2.46	1.20	----	1.52	2.22	1.75
May	3.69	2.04	1.57	1.85	1.90	1.50	----	1.95	2.68	1.78
June	2.60	2.29	1.69	1.77	2.16	1.51	1.43	1.96	2.99	2.24
July	2.90	0.94	2.87	0.97	1.79	0.75	1.85	1.06	2.02	.93
Aug.	1.36	1.48	1.20	1.45	0.76	1.11	0.57	1.53	1.40	1.21
Sept.	0.08	1.28	0.35	1.28	0.09	1.05	----	1.16	0.38	1.86
YEAR	*25.36	18.50	26.52	21.45	15.52	14.82	*17.07	18.41	23.44	19.31

Month	Ashton		Idaho Falls FAA		Pocatello		Twin Falls 3SE		Average 9 Stations	
	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.
Oct	2.35	1.35	2.77	0.63	1.99	0.89	1.07	0.76	2.09	1.17
Nov.	1.11	1.56	0.40	0.62	0.77	0.99	0.29	0.92	0.79	1.30
Dec.	2.66	1.89	1.32	0.80	0.93	1.00	1.29	0.86	*1.51	1.47
Jan.	2.74	1.82	0.63	0.89	0.65	1.21	0.70	1.04	1.72	1.53
Feb.	2.72	1.77	0.91	0.71	1.51	0.92	1.79	0.70	2.13	1.36
Mar.	1.56	1.39	1.17	0.66	1.71	1.02	1.94	0.84	1.83	1.29
Apr.	2.46	1.04	2.52	0.66	1.51	1.06	1.78	0.93	*2.24	1.26
May	3.22	1.45	1.32	0.98	1.64	1.13	2.44	1.00	*2.27	1.52
June	2.41	1.91	1.58	1.13	0.73	0.96	0.29	0.79	1.76	1.62
July	1.47	0.82	0.81	0.46	1.61	0.51	0.19	0.24	1.72	0.74
Aug.	0.72	0.95	0.14	0.50	0.02	0.55	0.07	0.17	0.69	0.99
Sept.	0.13	0.94	0.00	0.63	0.03	0.61	0.03	0.49	0.12	1.03
YEAR	23.55	16.89	13.57	8.67	13.10	10.85	11.88	8.74	18.87	15.28

*Partly estimated. Normal used for missing record.
**17 year average (U.S. Bureau of Reclamation averages).

On an average for the nine stations, the precipitation for the year ending September 30, 1975, was 123 percent of normal. October, April, and July were excessive, up to 232 percent for July. September again was extremely dry at only 12 percent of normal.

WATER DISTRICT FUNDS

Water District No. 01 collects revenues for delivery of water to users in the District and disburses these funds for expenses incurred in the operation of the District's activities in accordance with Idaho Water Laws and Regulations. Billings to Water users of Water District No. 01 rendered at the close of the 1975 water year totaled 78,277.31 for delivery of 3,831,703 24-hour second-feet of water.

As operating funds are collected from waterusers following the close of each water year, there is always a deficit of operating funds the latter part of each water year. The Watermaster has been authorized by action of the water users in annual meeting to borrow up to $30,000 as funds are needed to meet operating expenses for the District.

When cash on hand derived from water users' payments substantially exceeds current operating needs, the surplus is invested in short term time certificates as authorized by Idaho State Law.

The Watermaster of Water District No. 01 serves on the rental storage committee and the Water District office keeps the records of water rentals and collects and disburses payments pertinent thereto.

WATER DISTRICT NO. 01 OPERATING COSTS

Costs incurred October 1, 1974 to September 30, 1975

SALARIES		
Watermaster, assistant, and clerk		
Oct. 1, 1974, to March 31, 1975 @ $29,600	*$14,800.00	
April 1, 1975, to September 30, 1975 @ $34,500	* 17,250.00	$32,050.00
Substitute Clerk (Adamson)	309.00	
Summer temporary (Hughes)	584.00	893.00
Hydrographers		
Anderson, L. C.	725.00	
Blauer, H. & W.	1,499.11	
Garrett, S.	1,760.00	
Richards, V.	3,186.00	
Wilson, A. W.	2,412.50	
Wright, W. Lee	2,517.68	12,100.29
River Riders		
Brower, Reed	312.00	
Brown, Wilbur	1,241.00	
Hatfield, Howard	565.00	
Lenz, Elmer	256.20	
Smith, Verall	1,185.00	
Taylor, Russell	1,157.00	4,716.20
Gage Readers		
Randall, Seymour, & Zollinger	325.50	325.50
TRANSPORTATION		
Approximately 25,543 miles of travel	3,700.83	
Approximately 658 trips/days for auto at flat rate per day or per trip (river riders)	2,806.00	6,506.83
SUBSISTENCE		
83 days at $3.00 per day plus 6 nights lodging and 36 meals at actual cost	410.33	410.33

*Salaries for Watermaster, assistant, and clerk are paid into Federal-State cooperative repay account to be used to pay that part of the U.S. Geological Survey employees salaries chargeable to the Water District function. The remainder of the salaries of these employees, as determined by Federal Civil Service and USGS regulations, are paid from non-Water District funding sources. The Federal fiscal year does not coincide with the Water District budget year; therefore, an adjustment of this account is required each year.

MISCELLANEOUS		
Telephone and Telemark	$ 797.70	$
Interest on borrowed money	466.90	
Watermaster's performance bond	20.00	
State insurance fund	735.01	
Social Security	1,153.71	
Printing and binding Watermaster Report	437.76	
Postage and Post Office box rent	180.00	
Storage space rental	120.00	
Construction and maintenance	1,000.00	
Snow Pillow at Lewis Lake Divide	350.00	
Miscellaneous office expense	71.21	
Miscellaneous canal gaging supplies	61.13	
Watermaster's expenses, mileage, conference costs	688.49	6,081.91
STREAMGAGING		
Water District proportionate share of streamgaging operations	*12,515.00	12,515.00
GROUNDWATER INVESTIGATIONS ADJACENT TO AMERICAN FALLS RESERVOIR	2,000.00	2,000.00
COMMITTEE OF NINE		
Services at $25 per day and expenses incurred	678.25	678.25
WATER DISTRICT NO. 01 GENERAL AND SPECIAL EXPENSES FOR YEAR ENDING SEPTEMBER 30, 1975		$78,277.31

*Proportionate share of the streamgaging operations and maintenance is paid into the Federal-State cooperative repay account with allowance for streamflow data collected by Water District hydrographers for use in the Federal-State cooperative program.

CASH RECEIPTS AND CASH EXPENDITURES

October 1, 1974, thru September 30, 1975

Bank Balance September 30, 1974			$ -256.74
Cash Receipts Oct. 1, 1974 thru September 30, 1975			
1973 & 74 stored water accounts	$ 924.70		
1975 stored water rental	3,563.00		
1974 water delivery	*67,812.88		
1975 Advance water del. (B'ville County)	506.58		
Am Falls groundwater invest.	1,100.00		
Borrowed money	30,000.00		
Sale of gages	8.20		
Overpayment	.10		
Insurance refund (Workmen's Comp.)	194.00	$104,109.46	
Total cash receipts and deposits		$104,109.46	

*See following page for breakdown of 1974 water delivery payments.

Cash Disbursements Oct. 1, 1974, thru Sept. 30, 1975

Net salaries - hydrographers, river riders, gage readers & two temporaries	$16,979.97
Mileage & auto expense for above	6,506.83
Subsistence, per diem & lodging for abv	410.33
Streamgaging - Mtnc & Const.	1,000.00
Office Telephone	362.14
Shelley Telemark	384.80
Driggs Telephone	50.76
Idaho Falls PO Box and postage	176.00
PO Box - Driggs	4.00
Garage rent for storage	120.00
Misc office expense & supply	71.21
Watermaster (mileage, proffessional mtgs)	688.49
Salaries - Fed-State Co-op fund	30,710.00
Streamgaging - Fed-State Co-op fund	11,845.00
Am Falls groundwater studies	1,300.00
Social Security	2,208.73
State Insurance Fund	929.01
Watermaster's Bond	20.00
Repay loans (1974 operating funds)	26,200.00
Interest on above	466.90
Committee of Nine (1974 expenses)	587.00
Water rentals (1974 WY)	4,395.20
Printing & binding watermaster report	437.76
SCS-Snow Pillow at Lewis Lake Divide	350.00
Misc. streamgaging exp & supply	61.03
Total disbursements	$106,265.16

September 30, 1974, balance plus deposits, less disbursements	-$2,412.44
Adjustment of 70¢ for check No. 630-payment stopped*	-$2,411.74
Bank balance at close of 1975 water year	-$2,411.74

STATUS OF PAYMENTS AGAINST BILLINGS FOR WATER DELIVERY ON OCT. 1, 1975:

No 1973 WY delinquent accounts.

Billing for 1974 Water Year		$69,092.59
Paid to 1974 water delivery	$67,812.88	
Paid to Am Falls groundwater invest.	1,100.00	
*Credit to Conant Creek for '73 over pmt	.70	
Credited to 1974 WY billing	$68,913.58	
Outstanding accounts	178.96	
subtotal	$69,092.54	
Underpayment of acc't	.05	$69,092.59