WATER DISTRIBUTION

AND HYDROMETRIC WORK

DISTRICT No. 01

SNAKE RIVER, IDAHO

1972

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INTRODUCTION

The annual meeting of Water District No. 01 was held at Idaho Falls on March 6, 1972. A. 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; C. N. Scoresby, Secretary; Leo Murdock, R. Willis Walker, Lester Saunders, Kenneth Anderson, Burdell Curtis, Lynn Loosli.

Alternate: Joe Studer.

Advisory Members: Glen Simmons, succeeded by Carlos Randolph, representing the Bureau of Reclamation; William Kerner, representing the Gooding Project; F. C. Gillette, 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 $72,015 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.

Precipitation for 1972 was 128% of normal. The average precipitation for nine representative stations for the water year ending September 30, 1972, was 19.33" compared to a normal of 15.15". Precipitation was above normal for every month except February, March, April, and May which were near normal or below. October, 1971, and September, 1972, were the high months with 177% and 203% of normal, respectively. River regulation was discontinued on September 27 in the upper valley and September 30 in the lower valley.

With the above normal snow pack, there was ample normal flow to supply all needs for water through July 7.

The Milner spill was cut off on July 3. 5,472,000 acre-feet spilled past Milner October 1 to September 30. All reservoir allotments were 100% filled except Palisades which filled 88%.

Storage deliveries started in the lower valley on July 8. The 1916 "floodwater" rights were cut off on July 17. The lowest cut in rights was on August 12 and 13 when the October 11, 1900, rights were being partly filled.

Total usable contents in the reservoir system on September 30 was 2,891,000 acre-feet. This is 71% of active capacity and the third highest of record.

Discharge at the Minidoka Dam was not cut below the 2,700 cfs power right at any time during the year from October 1 to September 30.

The Bureau of Reclamation began construction of the Teton Dam in December. Some minor work was done on the Ririe Dam by the Corps of Engineers, with the awarding of the main contract in

January, 1973. American Falls Dam was determined to be weakened to the point that it is no longer considered safe to fill the reservoir to capacity, and beginning with the 1973 season, fill will be limited to an elevation of 4,343.2, or a total capacity of 1,125,000 acre-feet--62% of capacity.

PERSONNEL

The persons engaged in water distribution during 1972 were as follows:

Arthur L. Larson	Watermaster
C. Michael Bennett	Deputy Watermaster
L. C. Anderson	Deputy Watermaster & Hydrographer at St. Anthony
Harold W. Blauer	Hydrographer at Burley
Wayne Blauer	Hydrographer at Burley
Keith Blauer	Hydrographer at Burley
Lee Wright	Hydrographer at Idaho Falls
Judith R. Zavala	Clerk
Lola Dunn	Clerk
Arthur W. Wilson	Deputy Watermaster & Hydrographer, Teton Basin
Seth L. Hansen	Deputy Watermaster, Teton Basin
Val L. Richards	Deputy Watermaster, Lower Teton River
S. B. Garrett	Deputy Watermaster, Henrys Fork
Elmer Lenz	Deputy Watermaster, Upper Fall River
Bruce Cole	Deputy Watermaster, Heise Division
J. M. Brown	Deputy Watermaster, Rigby Division
Al Smith	Deputy Watermaster, Blackfoot Division
Howard Hatfield	Deputy Watermaster, Swan Valley Division
Glen Simmons	Supt. Minidoka Project, Bur. of Reclamation
Carlos Randolph	Supt. Minidoka Project, Bur. of Reclamation
Allan Templeton	Supt. Am. Falls Res., Bureau of Reclamation
Tom Gates	Asst. Supt. Am. Falls Res., Bureau of Reclamation
James L. Braman	Supt. Jackson Lake, Bureau of Reclamation
John Williams	Supt. Island Park Res., Bureau of Reclamation

Gage Readers: Blaine Randall, Bruce Cole, Florence Siepert, Blanche Zollinger, R. E. Wagner, Rogers Livingston, R. H. Seymour, Mario M. Purin, Roy Flavel, 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 Soil Conservation Service and are mostly for period 1953-67.

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
Moran (Snake River)								
1963	11	1.8	27	5.2	29	8.6	25	8.2
1964	21	3.8	40	9.1	38	10.1	43	12.7
1965	37	10.3	52	14.1	48	15.8	50	17.6
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
Normal		5.4		8.8		11.4		12.4
Moran Canyon (Snake River)								
1963			-	-	45	13.1	39	13.9
1964			54	13.7	49	16.7	66	20.4
1965			74	20.9	69	23.7	72	26.2
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
Normal				13.8		18.7		21.5
Arizona Station (Snake River)								
1963	15	3.0	30	5.7	36	9.8	33	10.3
1964	28	6.6	50	12.5	62	18.3	60	18.7
1965	48	13.7	67	19.8	63	22.2	66	25.0
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
Normal		7.4		12.0		16.3		19.2

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
Huckleberry Divide (Snake River)								
1963	16	3.5	35	6.6	42	10.7	38	11.6
1964	29	6.7	52	12.9	49	14.5	63	19.7
1965	46	12.7	66	18.9	64	22.7	65	24.1
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
Normal		7.8		12.6		16.8		19.4
Snake River Station (Snake River)								
1963	19	4.8	41	8.3	49	13.2	44	14.6
1964	28	6.2	52	12.5	52	15.0	65	20.3
1965	46	12.8	66	18.6	71	23.8	70	25.7
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
Normal		8.1		13.2		17.9		20.9
Lewis Lake Divide (Snake River)								
1963	31	9.7	59	14.8	75	23.6	71	26.3
1964	45	12.8	79	22.8	79	26.8	112	37.3
1965	87	28.8	121	39.5	126	48.8	130	52.1
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
Normal		17.5		26.7		36.0		42.7
Aster Creek (Snake River)								
1963	28	8.0	48	10.9	61	17.7	56	19.2
1964	32	8.0	65	16.5	62	18.3	81	25.4
1965	78	24.7	102	33.9	99	37.9	107	41.9
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
Normal		12.9		20.0		26.5		31.4

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
Colter Creek (Snake River)								
1963			38	8.4	49	14.0	47	15.7
1964			57	12.8	52	16.4	74	22.4
1965			-	-	74	25.3	78	26.9
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
Normal			-	-		19.6		22.7
Glade Creek (Snake River)								
1963	16	3.9	37	9.0	44	11.8	44	13.0
1964	29	6.5	52	12.9	50	15.1	67	20.6
1965	47	13.9	69	20.6	71	25.0	74	27.0
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
Normal		8.6		14.1		18.7		22.1
Base Camp (Snake River)								
1963	17	4.0	42	8.6	42	12.0	37	12.4
1964	28	6.5	52	12.8	51	15.2	64	19.7
1965	52	16.0	81	23.8	71	26.9	75	29.9
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
Normal		7.4		12.7		16.8		19.1
Average water content of ten Jackson Lake courses								
1963				7.7		13.4		14.5
1964				13.8		16.2		21.7
1965				23.3		27.2		29.6
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
Normal				14.8		19.9		23.1

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
Turpin Meadows (Buffalo River)						
1963	27	4.9	31	7.1	22	6.4
1964	35	7.9	38	9.6	43	12.5
1965	48	10.6	40	12.4	42	12.9
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
Normal		7.2		9.5		10.3
Four Mile Meadows (Buffalo River)						
1963	35	6.3	42	10.0	36	10.5
1964	42	9.5	45	11.8	51	15.1
1965	50	12.3	44	14.0	48	16.1
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
Normal		8.5		11.0		13.1
Black Rock (Buffalo River)						
1963	48	9.1	60	15.8	52	17.3
1964	56	13.5	57	16.8	68	22.3
1965	77	20.3	68	24.5	76	28.2
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
Normal		13.4		17.6		21.6
Togwotee Pass (Buffalo River)						
1963	64	13.6	77	22.0	60	24.4
1964	70	18.3	70	22.1	85	30.3
1965	99	28.1	86	33.5	99	39.4
1966	49	14.6	57	17.5	58	21.2
1967	74	20.1	81	26.9	86	31.6
1968	62	18.3	77	25.0	78	27.8
1969	80	23.8	81	27.4	79	29.8
1970	82	21.5	72	23.9	82	29.9
1971	87	27.6	97	33.5	118	43.6
1972	84	27.1	107	34.9	97	40.8
Normal		18.6		24.4		29.8

1958-72 Normal

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
Valley View Ranch (Henry's Fork)								
~~1963~~	~~21~~	~~4.7~~	~~31~~	~~7.6~~	~~32~~	~~8.4~~	~~35~~	~~9.0~~
1964	22	4.6	45	11.5	50	14.8	58	19.4
1965	45	11.2	76	23.5	64	24.0	65	25.9
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 1973	47	10.8 4.1	54	16.9 6.3	51	19.1 8.0	46	17.6 10.8
Normal	24 ~~24~~	~~5.3~~ 6.3	33	~~10.3~~ 12.3	32	~~13.3~~ 15.4	39	~~15.9~~ 17.7
Big Springs (Henrys Fork)								
~~1963~~	~~15~~	~~3.2~~	~~28~~	~~6.2~~	~~35~~	~~9.2~~	~~32~~	~~10.4~~
1964	26	5.8	49	11.4	53	14.9	65	21.8
1965	58	13.3	81	22.2	69	24.6	68	26.3
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 1973	59	12.4 7.6	67	20.7 11.1	70	25.6 14.7	62	27.1 18.1
Normal	32	7.28	45	~~13.1~~ 14.4	49	~~17.9~~ 18.6	53	~~20.8~~ 24.3
Island Park (Henrys Fork)								
~~1963~~	~~14~~	~~3.0~~	~~25~~	~~4.9~~	~~31~~	~~7.8~~	~~30~~	~~8.8~~
1964	23	4.5	42	8.7	43	11.1	51	15.9
1965	55	11.5	73	19.4	60	20.4	55	20.8
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 1973	51	10.6 5.2	54	15.9 8.6	51	17.6 12.0	45	16.3 13.2
Normal	28	~~5.6~~ 6.1	40	~~10.6~~ 11.6	44	~~13.9~~ 14.7	43	~~15.6~~ 16.4
Grassy Lake (Falls River)								
~~1963~~	~~26~~	~~7.1~~	~~54~~	~~14.3~~	~~63~~	~~19.0~~	~~69~~	~~22.3~~
1964	40	10.1	74	19.7	78	24.4	97	33.1
1965	71	22.6	103	32.8	102	38.5	103	42.6
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 1973	76	18.9 14.5	99	33.1 20.1	116	43.3 25.9	108	45.9 23.8
Normal	51	~~13.4~~ 14.1	64	~~21.9~~ 23.2	76	~~29.1~~ 30.1	83	~~34.3~~ 35.0

42.1
11.9
30.4

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
State Line (Teton River)								
1963	9	1.9	19	4.0	21	5.9	23	6.5
1964	21	4.0	38	9.8	41	12.2	50	16.8
1965	32	9.0	48	13.0	51	16.1	59	17.7
1966	16	3.5	25	6.4	29	7.8	33	11.1
1967	23	6.2	41	11.8	49	15.3	47	16.7
1968	22	4.7	33	7.4	34	10.1	40	11.6
1969	32	6.4	44	11.3	53	15.1	46	16.4
1970	24	4.3	47	11.7	40	13.1	51	16.8
1971	31	7.1	41	12.3	48	14.1	51	18.1
1972	31	8.3	53	16.2	54	19.1	42	18.2
Normal		5.4		9.0		12.2		14.7
Grover Park Divide (Salt River)								
1963	7	1.0	23	5.1	30	7.4	25	8.1
1964	18	3.9	30	6.7	33	9.0	42	13.1
1965	31	7.9	51	12.4	41	13.6	40	13.4
1966	22	4.1	25	5.9	30	7.8	26	8.5
1967	17	3.8	31	8.0	38	11.3	39	12.8
1968	23	4.3	30	6.8	33	10.1	37	11.9
1969	32	6.1	39	9.8	43	13.4	40	14.0
1970	19	3.0	43	10.1	36	12.4	43	14.9
1971	29	6.8	43	13.4	51	15.1	54	20.5
1972	27	5.9	44	11.4	47	16.2	40	15.4
Normal		4.8		7.3		10.2		11.6
CCC Camp FF12 (Salt River)								
1963	8	1.6	22	5.0	28	7.8	27	8.5
1964	20	4.0	36	8.0	38	9.6	45	13.5
1965	38	8.8	49	13.4	48	16.3	50	16.6
1966	16	3.5	28	5.4	32	8.1	28	7.6
1967			32	8.4	42	12.5	39	12.6
1968	22	4.1	25	5.3	31	8.4	30	10.0
1969	30	5.4	39	9.6	48	13.5	42	14.0
1970	19.7	2.9	38	8.6	33	9.1	41	12.5
1971	33	7.9	46	14.1	56	17.3	58	21.7
1972	27	6.4	49	12.1	48	15.8	40	14.7
Normal		4.8		7.5		10.2		11.4
Salt River Summit (Salt River)								
1963	11	2.0	29	5.6	41	10.4	38	11.8
1964	24	5.4	45	10.3	43	12.5	54	16.6
1965	50	12.4	60	16.6	60	22.1	56	19.6
1966	23	5.9	35	8.5	41	12.0	38	11.5
1967	20	4.0	41	11.2	49	16.1	54	17.6
1968	25	4.8	31	7.1	40	10.4	39	12.6
1969	38	6.6	53	13.6	60	17.8	51	18.1
1970	23	3.5	50	11.3	43	12.7	46	15.6
1971	43	10.6	62	19.1	66	21.6	72	26.2
1972	37	7.9	61	16.0	63	21.4	54	22.1
Normal		6.2		9.7		13.3		15.2

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
Greys Boundary (Grays River)								
1963	T	0	20	4.5	12	3.3	T	0
1964	24	4.2	39	9.8	40	11.6	51	15.1
1965	19	4.4	41	9.1	35	10.8	35	11.9
1966	14	3.3	25	4.9	32	8.1	26	7.4
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
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
1971	27	4.8	39	10.9	41	13.1	41	15.2
1972	28	7.4	36	9.5	40	13.3	30	11.4
Normal		4.2		7.3		9.7		10.4

On April 1, 1972, the snow (water content) was the following average percent of normal: above Jackson Lake, 133%; Moran to Heise, 132%; Island Park, 131%; Falls River, 134%; Teton River, 125%.

Comparable figures for run-off during the year ending September 30, 1972, as percent of normal were: Snake River at Moran, 131%; Snake River near Heise, 139%; Henrys Fork near Ashton, 138%; Falls River near Squirrel 138%; Teton River near St. Anthony 138%.

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

Forecasts by Soil Conservation Service - April 1, 1972

Station	Runoff in Acre-feet - April thru Sept. Forecast	Observed	% difference
Snake River at Moran	1,140,000	1,131,000*	+ 0.8
Snake River near Heise	5,000,000	5,309,000*	- 5.8
Salt River near Etna	465,000	575,000	-19.2
Henrys Fork near Ashton	685,000	858,200*	-20.2
Teton River nr St. Anthony	480,000	542,000**	-11.4

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

Forecasts by National Weather Service - April 1, 1972

Station	Runoff in acre-feet - April thru July		
	Forecast	Observed	% difference
Snake River at Moran	947,000	992,000*	- 1.8
Snake River near Heise	4,470,000	4,551,000*	- 1.8
Salt River near Etna	361,000	478,900	-24.6
Henrys Fork near Ashton	573,000	588,100*	- 2.6
Henrys Fork near Rexburg**	1,270,000	1,616,700*	-21.4
Falls River near Squirrel	417,000	464,200*	-11.3
Teton River nr. St. Anthony	404,000	454,200†	-11.0

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

Precipitation for the period April through September was generally about normal except May, which was much below normal at valley locations, and September, which was about twice normal for most of the area.

1972 REGULATION SCHEDULE

July 7	Filling part of March 30, 1921, rights.
July 9	" " " Nov. 14, 1916, rights.
July 10	" " " Aug. 6, 1908, rights.
July 11	" " " Oct. 7, 1905, rights.
July 23	" " " Dec. 23, 1915, rights.
July 24	" " " Aug. 6, 1920, rights.
July 26	" " " Oct. 7, 1905, rights.
Aug. 3	" " " Mar. 26, 1903, rights.
Aug. 11	" " " Oct. 11, 1900, rights.
Aug. 14	" " " Mar. 26, 1903, rights.
Aug. 17	" " " Oct. 7, 1905, rights.
Aug. 28	" " " Mar. 26, 1903, rights.
Sept. 8	" " " Oct. 7, 1905, rights.
Sept. 13	" " " Nov. 14, 1916, rights.
Sept. 15	" " " Mar. 20, 1921, rights.
Sept. 17	" " " Oct. 7, 1905, rights.
Sept. 27	All rights restored.

WATER SUPPLY

Runoff in acre-feet at various gaging stations during the year ending September 30, 1972, was as follows:

Station	1971 Runoff	Average Runoff Past Years	Years of Record	1972 % of Average
Snake River at Moran	1,378,000	1,050,000	69	131
Snake River near Heise	6,899,000	4,965,000	62	139
Snake River at Neeley	8,335,000	5,112,000	46	163
Falls River near Squirrel	769,600	557,100	58	138
Teton River near St. Anthony	774,800	562,100	39	138
Henrys Fork near Ashton	1,420,000	1,029,000	52	138
Henrys Fork near Rexburg	2,298,000	1,423,000	63	161

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	5,170 cfs on May 29
Snake River near Heise	20,500 cfs on June 7
Snake River near Blackfoot	20,500 cfs on June 12
Henrys Fork near Rexburg	7,710 cfs on June 11
Teton River near St. Anthony	4,110 cfs on June 10
Blackfoot River nr. Blackfoot	1,220 cfs* on April 13
Snake River at Milner	20,000 cfs on April 15

*Includes 748 cfs in Bypass channel

Flooding of lowlands along the Henrys Fork occurred between St. Anthony and its confluence with the North Fork. Some farmlands in the Menan-Roberts area were flooded by seepage from the river. Unregulated flow at Heise would have been 45,500 cfs on June 9.

Annual reservoir holdovers 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
1963	611.9	696	353	87.0	64.1	33.5	6.3	1,851.8
1964	588.4	849	475	89.8	62.8	68.7	10.4	2,144.1
1965	631.6	1,161	1,023	95.3	70.4	102.8	11.3	3,095.4
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
Avg	581.9	858	643	88.8	71.9	68.6	9.4	2,321.6

The Palisades figures are after deducting 201,000 acre-feet dead storage. The useable capacity of the above reservoirs is 4,082,000 acre-feet. The 1972 holdover is the third highest of average for the past ten years.

LITIGATIONS

None.

CANAL DELIVERIES

Daily diversions from Snake River by canals above American Falls reservoir during the 1972 irrigation season are shown on Plates 5A-10B, 15A-20B, 52, and 53. Daily diversions for canals below American Falls are shown on Plates 57-69. Miscellaneous measurements of various canals and streams in the headwater areas are shown on Plate 24.

Total Canal diversions during 1972 irrigation season by all canals in the district, including headwater areas, as tabulated in the annual watermaster bill, amounted to 8,414,600 acre feet. This is 474,000 acre-feet above 1971 and only 67,000 acre-feet less than 1969, the greatest of record.

DIVERSIONS DURING 1972 IRRIGATION SEASON BY SNAKE RIVER CANALS
DOWNSTREAM ORDER FROM HEISE

(May thru September for upper valley canals; April 15 to Sept. 30 for lower valley canals)

Canal	Diversions (Acre-feet)	Acres Irrigated	Acre-feet Per Acre
Riley	7,800	900	8.7
Progressive Irrigation District	221,600 (a)	33,000	6.7
Farmers Friend	117,500	10,500	11.2
Enterprise Canal	50,510 (b)	5,200	9.7
Nelson	1,170	55	21.3
Mattson Craig & Arnsberger	6,380	485	13.2
Ross & Rand	1,130	145	7.8
Butler Island	15,230	1,100	13.8
Harrison	158,900	13,000	12.2
Cheney (Includes Steele)	4,230	323	13.1
Rudy Irrigation Co.	86,460	5,000	17.3
Kite and Nord	2,450	210	11.7
Burgess	283,100	22,000	12.9
Clark and Edwards	26,232	1,940	13.5
Lowder	17,100	1,000	17.1
East Labelle	39,550	3,000	13.2
Sunnydell	55,730	3,780	14.7
Lenroot	43,080	3,100	13.9
Reid	59,630	5,500	10.8
Texas Feeder	87,830	10,000	8.8
Nelson Corey	3,450	270	12.8
Hill Pettinger	1,330	200	6.6
Rigby	55,140	4,000	13.8
Dilts	7,750	580	13.4
Island	57,250	5,500	10.4
W. Labelle & Long Island	160,200	10,500	15.3
Parks & Lewisville	98,860	7,000	14.1
North Rigby	15,930	1,400	11.4
White	1,480	110	13.4
Ellis	400	70	5.7
Bramwell	2,624	470	5.6
Butte & Market Lake	87,740	20,000	4.4
Osgood	13,460	6,210 (c)	2.2
Bear Island & Smith	1,300	330	3.9
Idaho	287,900 (a)	35,850	8.0
Kennedy	10,900	2,700	4.0
Great Western & Porter	238,600	30,220 (d)	7.9
Woodville	27,170	2,350	11.6
Snake River Valley	223,500	20,790	10.8
Reservation	39,940 (e)	54,773	0.7
Blackfoot	94,220	15,000	6.3
New Lava Side	41,640	6,000	6.9
Peoples	126,250	20,000	6.3
Aberdeen	348,500	63,000	5.5
Corbett	53,180	6,000	8.9

Diversions by Snake River Canals, 1972 - continued

Canal	Diversions (acre-feet)	Acres Irrigated	Acre-feet per acre
Nielsen-Hansen	3,310	460	7.2
Riverside	36,990	5,000	7.4
Danskin	76,540	6,000	12.8
Trego	17,580	1,620	10.8
Wearyrick	18,000	1,600	11.2
Watson	34,950	3,000	11.6
Parsons	14,920	930	16.0
Fort Hall Michaud Canal	25,410 (f)	8,693 (f)	2.9
Falls Irrig. District	22,400 (g)	7,995 (g)	2.8
Minidoka Irrig. District	520,200	72,000	7.2
Burley Irrigation District	277,000	48,000	5.8
A & B Irrigation District	50,460	14,520	3.5
Twin Falls Canal Co.	1,083,000	202,700	5.3
North Side Canal Co.	1,133,800	160,000	7.1
Milner Low Lift	64,450	13,470 (h)	4.8
Gooding	477,200	63,700	7.5
TOTAL	7,158,076	1,042,759	6.9

(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) Includes 7,680 acres outside New Sweden District to which water was delivered.
(e) Received additional water from Sand Creek and Blackfoot River.
(f) An additional 1,155 acre-feet was pumped from wells for irrigation of another 1,007 acres.
(g) Acreage includes 235 acres of non-project land supplied from canal. An additional 209 acres supplied from wells by private users and 3,597 acres of project land were irrigated by pumping 6,713 acre-feet from wells.
(h) Also delivered water to 645 acres outside the district.

These main river canals diverted about 7% more water than in 1971.

Of the 3,606,110 acre-feet diverted by lower valley canals (below Neeley), 948,500 acre-feet, or 26%, was stored water. Upper valley main canals diverted 3,552,000 acre-feet, of which 145,804 acre feet, or 4.1%, 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

Heise to Blackfoot

Year	May	June	July	Aug.	Sept.	Season
1963	303	553	907	668	476	2,907
1964	277	560	869	717	556	2,979
1965	389	721	806	661	468	3,045
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
Average	451	691	843	685	515	8,183

Henrys Fork and Tributaries (excluding headwater areas)

Year	May	June	July	Aug.	Sept.	Season
1963	174	207	250	189	115	935
1964	163	212	256	203	144	978
1965	188	249	248	197	124	1,006
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
Average	195	232	245	193	124	989

Minidoka Project

Year	April	May	June	July	Aug.	Sept.	Season
1963	18	116	114	191	160	89	688
1964	5	133	97	200	178	112	725
1965	27	136	158	187	139	111	758
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
Average	37	146	135	195	161	87	770

Diversions in Thousands of Acre-feet - continued

North Side Canal Co. Project

Year	April	May	June	July	Aug.	Sept.	Season
1963	71	183	193	246	230	168	1,091
1964	42	186	201	247	244	192	1,112
1965	86	195	209	237	224	166	1,117
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	66	189	202	241	240	172	1,155
1972	81	208	212	240	231	162	1,134
Average	82	197	205	243	231	172	1,135

Twin Falls Project

Year	April	May	June	July	Aug.	Sept.	Season
1963	76	193	186	238	220	162	1,075
1964	41	197	185	239	233	178	1,073
1965	98	209	203	232	219	159	1,120
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	228	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
Average	92	205	194	234	224	162	1,110

Gooding Project

Year	April	May	June	July	Aug.	Sept.	Season
1963	15	75	82	101	94	81	448
1964	2	76	90	102	97	79	446
1965	16	75	82	95	85	71	424
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
Average	20	82	86	98	92	77	455

Diversions were generally about average except for May when they were near or above record high, especially in the Upper Valley.

RIVER DATA

The usual methods of segregating stored water and normal flow at the reservoir outlets was continued in use during 1972. 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 released 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 on Plates 12 and 13 for Snake River and Plates 21 and 21A for Henrys Fork.

Storage use started on July 7 in the lower valley and July 17 in the upper valley and continued through September 28.

Total storage passing the Blackfoot station during the season amounted to 178,700 acre-feet.

Blackfoot River Reservoir holdover on September 30 was 221,000 acre-feet. The Indian Service 1891 decree was not cut off in 1972.

STORED WATER DELIVERIES

Reservoir Allotments

Jackson Lake and American Falls filled 100% and Palisades filled 88%.

Allotments were made as follows:

American Falls	1,700,000 acre-feet
Jackson Lake	847,000 acre-feet
Palisades	1,056,000 acre-feet

1972 Storage Allotments in Acre-feet
(Downstream order from Heise)

Canal	Am. Falls	Jackson Lake	Palisades	Total
Poplar Irrigation Dist.	673	1,589	1,364	3,626
Progressive Irr. District	12,485	7,209	25,080	44,774
Farmers Friend		2,000	8,272	10,272
Enterprise Canal Co.	8,923	11,252	17,248	37,423
Mattson Craig			1,267	1,267
Butler Island			220	220
Harrison	12,025	11,943	20,680	44,648
Rudy	2,649	3,530	13,816	19,995
Burgess	9,496	10,603	27,632	47,731
Clark and Edwards			704	704
Lowder		1,040	1,408	2,448
East Labelle			704	704
Sunnydell		4,000	5,544	9,544
Lenroot	3,868	5,234	6,908	16,010
Reid	2,549	1,472	2,772	6,793
Texas and Liberty Park			4,136	4,136
Enterprise Irr. Dist (N.F.)	10,180	5,883		16,071
Fremont-Madison Irr. Dist.			880	880
Rigby			5,544	5,544
Island			4,136	4,136
Dilts	886	511	1,056	2,453
West Labelle			880	880
Long Island			4,400	4,400
Parks and Lewisville			4,840	4,840
North Rigby			1,056	1,056
Butte & Market Lake	4,666	2,695	38,720	43,201
Osgood (U.I.S. Co.)	13,459	7,771	13,420	32,484
Bear Island	191	110		301
Sakaguchi (Smith & Kennedy)	71	91		162
Clement Bros. (Kennedy)	0	105	0	105
Owners Mutual	0	200	255	455
Shattuck Irrigation	0	0	3,432	3,432
Idaho	22,911	13,230	51,744	87,885
Martin	2,006	2,659	4,928	9,593
New Sweden Irr. District	25,731	19,857	27,632	73,220
West Side Mutual			2,068	2,068
Woodville	6,047	3,491	5,280	14,818

1972 storage allotments in acre-feet - continued
(Downstream order)

Canal	Am. Falls	Jackson Lake	Palisades	Total
Snake River Valley	26,367	30,225	31,064	87,656
Palisades Water Users			44,202	44,202
Blackfoot	12,763	7,370	3,564	23,697
New Lava Side			10,340	10,340
Peoples	21,415	20,365	30,800	72,580
Aberdeen	55,591	74,626	134,464	264,681
Corbett	3,396	1,961	5,544	10,901
Riverside			1,320	1,320
Danskin			2,068	2,068
Trego	1,314	758	2,816	2,816
Wearyrick			528	528
Watson			2,068	2,068
Parsons			616	616
Total above Blackfoot	259,670	251,780	577,120	1,088,870
Michaud (Indian Service)	47,700		73,832	121,532
Falls Irrig. Dist.	23,300		35,992	59,292
Minidoka Irrig. Dist.	83,563	186,030	30,800	300,393
Burley Irrigation Dist.	157,942		34,496	192,438
Minidoka N. S. Pump	47,593		79,904	127,497
Milner Low Lift	45,687		39,160	84,847
Twin Falls Canal Co.	151,185	97,183		248,368
Hillsdale	41,146			41,146
North Side Canal Co.	397,214	312,007	102,609	811,830
Gooding	400,000		880	400,880
Idaho Power Co.	45,000			45,000
City of Pocatello			44,000	44,000
Westvaco			4,400	4,400
J. R. Simplot			2,200	2,200
U. S.			*30,307	30,307
Total below Blackfoot	1,440,330	595,220	478,580	2,514,130
GRAND TOTAL	1,700,000	847,000	1,056,000	3,603,000

*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.

The large holdovers at the end of the season indicate that water will be spilled prior to the 1973 irrigation season. For this reason, no computations were made of individual holdovers.

SUMMARY OF WATER DISTRICT NO. 01 RENTALS - 1972
(acre-feet)

Supplier		Area of Use	
Falls Irrig. District	1,753	Swan Valley	195
Paul Traughber	240	Heise to Shelley	1,691
Vance Koon	500	Milner Low Lift	820
M. J. Danielsen	120	Other	2,864
Mrs. Ward Hittson	640		
U.S. Indian Service	750	TOTAL	5,570
Neil Erickson	1,100		
Mrs. Mabel Winterfield	100		
Ray Andrus, Jr.	367		
TOTAL	5,570		

All rentals were at the rate of 50¢ per acre-foot.

SUPPLY AND DISPOSAL OF STORED WATER - 1972
(acre-feet)

SUPPLY

Jackson Lake Contents	July 14	847,500
Palisades (usable)	4	1,121,000
American Falls	7	1,633,000
Lake Walcott	7	96,900
Henrys Lake	Aug. 11	88,000
Island Park	July 14	134,100
Grassy Lake	14	15,200
Indian and Bergman Reservoir yield		600
Sheridan Creek Right		804*
Gain - Neeley to Milner		106,000*
TOTAL		4,043,104

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

Supply and Disposal of Stored Water (acre-feet) - continued

DISPOSAL

Used by Snake River Rights		1,094,859
Used by Henrys Fork rights		11,213
Storage transmission loss, Snake River		31,394
Storage transmission loss, Henrys Fork		1,386
Storage transmission loss, Cross Cut		0
River operation waste past Milner		2,380
Henrys Lake loss		2,500
Holdovers:		
Jackson	Sept 25	592,900
Palisades (usable)	330	1,068,000
American Falls	30	972,700
Lake Walcott	30	98,200
Henrys Lake	26	82,500
Island Park	30	87,900
Grassy Lake	25	9,490
TOTAL		4,055,422

The disposal exceeds the supply by 12,318 acre-feet. The use by Westvaco and Simplot is not included in the above totals, and if included, would increase the difference by 2,027 acre-feet.

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
1968	†2,968	4,441	5,350	‡5,105	14,355	9,200	5,155	-195
1969	†2,968	5,024	5,350	‡5,481	16,380	9,870	6,510	1,160
1970	†2,968	4,189	5,350	‡5,481	15,470	9,870	5,600	250
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

†Project land 2,759
‡Project land 4,564

AREA NO. 2
TRIBUTARY BELOW AMERICAN FALLS

	From Wells			From Am. Falls Res.				
Year	Acres	Pumped	Consumed	Acres	Del'd	Consumed	Excess	Contr. to Gr. Water
1968	778	2,124	1,400	†2,106	5,973	3,790	2,183	783
1969	838	2,463	1,510	†2,514	7,586	4,525	3,061	1,464
1970	838	1,821	1,510	†2,514	7,422	4,525	2,897	1,387
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

†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 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 Company, J. R. Simplot, and Fort Hall Michaud Project. Palisades contracts for Westvaco and Simplot provide that storage charges be made on one-half of 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 Fort 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 July 1 to September 30, 1972:

User	Acre - Feet Pumped	Acre - Feet Storage Charge
City of Pocatello (Including Alameda)	4,243	* 0
FMC Corporation *	2,526	1,263
Fort Hall Michaud Project (Wells)		0
J. R. Simplot Co.**	1,527	764

*Reported 2,526 acre-feet pumped and 39% of this used consumptively

**Reported 1,527 acre-feet pumped and 70% 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 - 1972
(Alpine dates and 24-hr. cfs, except as noted)

Station	May	June	July	Aug.	Sept.	Total
Snake nr Moran	154,920	68,510	95,030	97,310	88,220	503,990
Snake nr Alpine	419,090	553,100	298,360	189,670	155,950	1,616,170
Total gain cfs	264,170	484,590	203,330	92,360	67,730	1,112,180
Mean gain cfs	8,522	16,153	6,559	2,979	2,258	7,269
Total gain A.F.	524,000	961,200	403,300	183,200	134,300	2,206,000

GAIN IN SNAKE RIVER, ALPINE GAGING STATION TO STATE LINE - 1972
(24-hr. cfs, except as noted)

Station	May	June	July	Aug.	Sept.	Total
Greys River	79,440	98,090	41,502	19,863	14,558	253,453
Salt River	87,440	75,370	35,416	24,259	24,162	246,647
Total gain cfs	166,880	173,460	76,918	44,122	38,720	500,100
Mean gain cfs	5,383	5,782	2,481	1,423	1,291	3,269
Total gain A.F.	331,100	344,000	152,600	87,510	76,810	992,020

GAIN IN SNAKE RIVER, STATE LINE TO HEISE - 1972
(No correction for time of flow, 24-hr cfs, except as noted)

Station	May	June	July	Aug.	Sept.	Total
Palisades release	-160,400	-278,600	-60,980	+21,170	+51,410	-427,400
Total Supply	*425,570	447,960	314,298	254,962	246,080	1,688,870
Heise	541,400	532,600	345,700	288,490	280,240	1,988,430
Riley Canal	910	942	1,024	743	322	3,941
Total Acct for	542,310	533,542	346,724	289,233	280,562	1,992,371
Total gain cfs	116,740	85,582	32,426	34,271	34,482	303,501
Mean gain cfs	3,766	2,853	1,046	1,106	1,149	1,984
Total gain A.F.	231,600	170,000	64,300	68,000	68,400	602,000

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

The mean gain in the above three river reaches is less than the record year of 1971, but is still well above most years.

River Losses and Gains - continued

GAIN IN SNAKE RIVER, HEISE TO SHELLEY - 1972
(Heise dates & 24-hr cfs, except as noted)

Station	May	June	July	Aug.	Sept.	Total
Rexburg	167,620	186,070	73,990	59,010	80,390	567,080
Total Supply**	709,930	719,612	420,714	348,243	360,952	2,559,451
Diversions	239,091	279,600	317,650	252,640	212,930	1,301,911
Shelley	526,500	526,000	177,350	159,450	204,170	1,593,470
Total Acct For	765,591	805,600	495,000	412,090	417,100	2,895,381
Total gain cfs	55,661	85,988	74,286	63,847	56,148	335,930
Mean gain cfs	1,795	2,866	2,396	2,060	1,872	2,196
Total gain A.F.	110,400	170,600	147,300	126,600	111,400	666,300

**Rexburg plus Heise and Riley from previous table.

The mean gain was 2,196 cfs compared to 1,496 cfs in 1971, and about half this amount in previous years. This gain includes inflow from Market Lake Springs, which is credited to Owners Mutual Canal Co.

GAIN OR LOSS IN SNAKE RIVER, SHELLEY TO BLACKFOOT - 1972
(Shelley dates and 24-hr cfs, except as noted)

Station	May	June	July	Aug.	Sept.	Total
Shelley	520,600	523,900	170,940	159,960	207,320	1,582,720
Blackfoot River	22,140	17,370	14,390	16,060	10,120	80,080
Total Supply	542,740	541,270	185,330	176,020	217,440	1,662,800
Diversions	100,020	98,830	106,220	81,170	60,860	447,100
Snake nr Blackfoot	454,000	464,370	102,886	109,426	162,280	1,292,962
Total Acct For	554,020	563,200	209,106	190,596	223,140	1,740,062
Total Diff cfs	11,280	21,930	23,776	14,576	5,700	77,262
Mean Diff cfs	364	731	767	470	190	505
Total Diff A.F.	22,370	43,500	47,160	28,910	11,310	153,200

Every month shows a gain with June and July the highest. The average gain of 505 cfs, compared to the highest of record in 1971 of 541 cfs, and 285 cfs in 1970 and 1969. This gain includes 180 cfs of spring inflow above the Snake River near Blackfoot gage.

River Losses and Gains - continued

GAIN OR LOSS IN SNAKE RIVER, BLACKFOOT TO NEELEY - 1972
(Neeley dates and 24-hr cfs, except as noted)

Station	May	June	July	Aug.	Sept	Total
Blackfoot	446,800	464,280	94,430	110,060	168,350	1,283,920
*Inflow	118,370	95,800	85,480	88,360	93,450	481,460
A.F. Reserv. Draft	-19,160	-3,020	+210,200	+165,600	-17,650	335,970
Total Supply	546,010	557,060	390,110	364,020	244,150	2,101,350
Diversions	1,640	2,930	3,220	2,170	1,280	11,240
Neeley	514,200	534,300	374,000	359,300	228,470	2,010,270
Total Use	515,840	537,230	377,220	361,470	229,750	2,021,510
Total Diff cfs	-30,170	-19,830	-12,890	-2,550	-14,400	-79,840
Mean Diff cfs	-973	-661	-416	-82	-480	-522
Total Diff A.F.	-59,840	-39,330	-25,570	-5,060	-28,560	-158,400

The average loss of 522 cfs is considerably higher than usual, and is probably a contributing factor to the large gain Neeley to Milner.

*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 at bottom of Plate 11. Monthly totals in above table are actual inflow. Inflow figures shown on Plates 12 and 13 are theoretical inflow computed by adding pump diversion figures to actual inflow. These are shown on last line of Plate 11. 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. Jake Isaak, Manager. Unmeasured inflow as computed from the "Newell" formula varied from 1,300 to 1,420 cfs.

The following measurements of the flow of Reugar Springs were obtained:

Date	Discharge in cfs
May 12, 1972	21.1
June 10	*21
July 21	*21
Aug. 11	18.8
Sept. 2	*19
Oct. 3	19.1

*Estimate

River Losses and Gains - Continued

GAIN OR LOSS IN SNAKE RIVER, NEELEY TO MINIDOKA - 1972
(Minidoka dates and 24-hr cfs, except as noted)

Station	May	June	July	Aug.	Sept.	Total
Neeley	516,130	533,370	375,170	359,470	230,370	2,014,510
Walcott Release	+855	-1,310	-202	-454	+252	-859
Total Supply	516,985	532,060	374,968	359,016	230,622	2,013,651
N. Minidoka	49,080	39,282	53,930	44,600	21,640	208,532
S. Minidoka	37,554	32,701	41,660	37,040	19,490	168,445
Snake at Minidoka	459,200	479,720	293,560	282,520	199,470	1,714,470
Total Acct for	545,834	551,703	389,150	364,160	240,600	2,091,447
Total Diff cfs	+28,849	+19,643	+14,182	+6,144	+9,978	78,796
Mean Diff cfs	931	655	457	198	333	515
Total Diff A.F.	+57,220	+38,960	+28,130	+12,190	+19,790	156,300

The average gain of 515 cfs is the highest of record, and compares with small gains or losses in years past.

GAIN IN SNAKE RIVER, MINIDOKA TO MILNER - 1972
(Milner dates and 24-hr cfs, except as noted)

Station	May	June	July	Aug.	Sept.	Total
Snake at Minidoka	462,770	477,970	295,720	282,630	201,390	1,720,480
Minidoka NS Pump	4,869	4,895	7,114	5,660	2,410	24,948
PA Lateral	1,850	1,698	2,159	2,026	1,225	8,958
Milner Low Lift	6,838	5,057	8,206	7,983	3,600	31,684
Milner North Side	77,090	79,700	92,290	87,940	55,380	392,400
Gooding	72,550	73,170	76,190	78,020	66,690	366,620
Twin Falls	106,080	99,060	119,130	112,460	75,680	512,410
L. Milner Stored	+1,960	+444	+106	-45	-60	2,405
Snake at Milner	211,160	235,092	4,922	9,982	15,736	476,892
Total Acct for	482,397	499,116	310,117	304,026	220,661	1,816,317
Total gain, cfs	19,627	21,146	14,397	21,396	19,271	95,837
Mean gain, cfs	633	705	464	690	642	626
Total gain A.F.	38,930	41,940	28,560	42,440	38,220	190,090

The average gain of 626 cfs is the highest of record, but compares to 584 cfs in 1970 and 513 cfs in 1969.

NEELEY TO MILNER

	May	June	July	Aug.	Sept.	Total
Total Gain A.F.	96,150	80,900	56,690	54,630	58,010	346,390

The total gain Neeley to Milner for period May through September was 346,390 acre-feet. This appears to be the highest of record, and can probably be attributed to the record high flows and reservoir levels during the past two years.

For the period July 7 to September 29, this gain was 106,000 acre-feet computed by using the stored figures on Plates 12 and 13. The Minidoka Project

River Losses and Gains
Neeley to Milner - continued

was credited with this gain when this project was drawing storage. Sustained high flows in the river and unusually high American Falls reservoir levels for the past two seasons are probably contributing factors to this increase.

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, and Val L. Richards on the Teton River.

Holdovers in Henrys Fork reservoirs at the end of the season were about 75% of capacity.

Releases from Grassy Lake were discontinued on September 25. Releases from Henrys Lake and Island Park were allowed to gradually decrease until they equaled inflow.

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 1972. During the period July 21 - 31, stored water was charged a daily loss of 30 cfs. During period of August 21-31, 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.

1972 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 1972 are shown on Plate 23A. It delivered 21,980 acre-feet to the Fall River Canal and 26,070 acre-feet to Teton River.

Occasional measurements of Big Springs near Island Park were tabulated on page 33 of the 1965 report. Recent measurements are tabulated below:

September 14, 1964	184
August 5, 1965	202
November 8, 1965	194
September 15, 1967	183
September 5, 1968	182
November 4, 1969	190
September 28, 1970	178
October 19, 1971	198

CANAL DELIVERIES IN HENRYS FORK BASIN

Diversions During the 1972 Irrigation Season, May to September, from Falls River, Henrys Fork and Lower Teton River

	Diversions (acre-feet)	Area Irrigated (acres)	Acre-feet Per Acre
Falls River Canals			
Yellowstone	2,440	2,100	1.2
Marysville	33,560	16,000	2.1
Farmers Own	16,310	5,800	2.8
Enterprise	22,770	5,890	3.9
Bell	14,301	110	13.0
Falls River	100,000 (a)	9,000	11.1
McBee	853	125	6.8
Chester	20,270	1,400	14.5
Silkey	4,800	1,080	4.4
Curr	10,680	1,300	8.2
TOTAL FALLS RIVER	213,113	42,935	5.0

(a) Includes 23,330 diverted through Cross Cut.

Canal Deliveries in Henrys Fork Basin - continued

	Diversions (acre-feet)		Area Irrigated (acres)	Acre-Feet Per Acre
Henrys Fork Canals				
Dewey	7,210		1,200	6.0
Last Chance	26,980		1,860	14.5
St. Anthony Union	116,970		9,700	12.1
Farmers Friend	35,370		3,025	11.7
Twin Groves	31,210		2,500	12.5
Salem Union	53,160		5,500	9.7
Egin	76,860		7,000	11.0
St. Anthony U. Feeder	14,240		2,300	6.2
Independent	78,180		6,000	13.0
Consolidated Farmers	64,110		6,000	10.7
TOTAL HENRYS FORK	504,290		45,085	11.2
Lower Teton Canals				
Siddoway	2,500		500	5.0
Wilford	42,870		2,300	18.6
Teton Irrigation	25,000		2,000	12.5
Good Luck	4,500		330	13.6
Pioneer	2,610		300	8.7
Stewart	6,200		478	13.0
Pincock Byington	3,310		260	12.7
Pincock Garner	4,870		480	10.2
Teton Island Feeder	108,500		10,400	10.4
Roxana	5,660		880	6.4
Island Ward	7,380		3,300	2.2
North Salem	1,290	(b)	450	2.9
Bigler Slough	2,960		240	12.3
Woodmansee-Johnson	5,340	(c)	1,320	4.0
City of Rexburg	5,260		950	5.5
Rexburg Irrigation	66,930		5,280	12.7
McCormick-Rowe	682		160	4.3
Saurey Sommers	5,060		275	18.4
Eames Thompson	111		70	1.6
TOTAL LOWER TETON	301,033		29,893	10.1
TOTAL FALLS RIVER, HENRYS FORK AND LOWER TETON	1,018,426		117,913	8.6

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

Due to an unrestricted water supply until mid-July, some diversions were greater than usual. The total diversions in this area were slightly more than in 1971. Of the total diversions of 1,018,000 acre-feet, 35,000 acre-feet or 3.5% was stored water.

Canal Deliveries in Henrys Fork Basin - continued

Diversions by some of the principal canals in the headwater areas for the 1972 irrigation season (May 15 to Sept. 30, except as noted) are shown below:

	Diversions (acre-feet)	Area Irrigated (acres)	Acre-feet Per Acre
String Canal	15,200*	2,300	6.6
Trail Creek Irrig. Co.	31,100*	5,220	6.0
Fox Creek Canals	11,750**	3,760	3.1
Darby Creek Canals	12,200**	4,800	2.5
Grand Teton Canal	30,400***	7,000	4.3
Canyon Creek Canal	7,400	2,200	3.4
Conant Creek Canal	3,410	1,680	2.0
Squirrel Creek Canal	1,830	1,000	1.8
Boom Creek Canal	1,190	2,180	0.5

*June 1 to Sept. 23
**June 1 to Aug. 31
***June 1 to Sept. 27

STORED WATER DELIVERIES ON HENRYS FORK

Water available for Fremont-Madison allotments was as follows:

Island Park Reservoir	(July 21)	133,100	a.f.
Grassy Lake Reservoir	(July 24)	15,200	a.f.
Sheridan Creek Right		1,090	a.f.
TOTAL		149,390	a.f.

The District allotted 133,100 acre-feet for the 1972 season. Only 196 acre-feet was rented to Henrys Fork users.

HENRYS LAKE ALLOTMENTS - 1972

Henrys Lake contents on Aug. 1 was 88,000 acre-feet. From this, a figure of 2,500 acre-feet was deducted for dead storage and loss, instead of the usual 3,000 acre-feet. The short storage season did not justify the full deduction.

Allotments

Canal	Percent	Allotment acre-feet
Independent	26.90	23,161
Salem Union	24.21	20,845
Consolidated Farmers	20.17	17,366
Last Chance	13.85	11,925
St. Anthony Union	6.72	5,786
Egin	6.72	5,786
Dewey	1.43	1,231
TOTAL	100.00	86,100

Henrys Fork near Rexburg gage showed 21,920 acre-feet that passed down river in excess of requirements to balance storage deliveries to the Main River. This exceeds a similar balance in 1965 of 10,300 acre-feet, and is less than the balance in 1971 of 36,090 acre-feet.

RIVER GAINS IN HENRYS FORK BASIN - 1972

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

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

Gain in Henrys Fork, Lake to Island Park - 1972

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

Station	May	June	July	Aug.	Sept.	Total
H. F. nr. Lake	3,130	5,715	4,593	3,153	3,062	19,653
I.P. release	-857	+1,058	+5,746	+13,200	+5,900	25,047
Total Supply	2,273	6,773	10,339	16,353	8,962	44,700
H.F. @ Is. Park	45,440	36,860	26,260	35,500	28,500	172,560
Total Gain cfs	43,167	30,087	15,921	19,147	19,538	127,860
Mean gain cfs	1,392	1,003	514	618	651	836
Total gain a.f.	85,620	59,680	31,580	37,980	38,750	253,600

The average gain is 836 cfs compared to 868 in 1969, 958 in 1971, and 868 in 1969.

Gain in Henrys Fork, Island Park to Ashton,- 1972

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

Station	May	June	July	Aug.	Sept.	Total
Island Park	45,270	37,160	26,360	35,150	28,810	172,750
Ashton	114,270	77,060	57,060	63,330	56,440	368,160
Total gain cfs	69,000	39,900	30,700	28,180	27,630	195,410
Mean gain cfs	2,226	1,330	850	909	921	1,277
Total gain a.f.	136,900	79,140	60,890	55,900	54,800	387,600

The mean gain is 1,277 cfs compared to 1,514 for 1971 and 1,325 for 1970.

Gain in Henrys Fork, Ashton to St. Anthony - 1972

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

Station	May	June	July	Aug.	Sept.	Total
Ashton	114,290	77,270	57,680	62,430	56,520	368,190
Chester	76,290	81,550	30,230	13,212	17,850	219,132
Total Supply	190,580	158,820	87,910	75,642	74,370	587,322
Diversions	39,590	34,705	39,850	31,506	15,317	160,968
St. Anthony	150,620	127,830	57,360	53,030	63,620	452,460
Total Acct. For	190,210	162,535	97,210	84,536	78,937	613,428
Total gain cfs	-370	3,715	9,300	8,894	4,567	26,106
Mean gain cfs	-12	124	300	287	152	171
Total gain a.f.	-734	7,370	18,450	17,640	9,060	51,780

The average gain of 171 cfs is the highest of recent years and compares to 76 in 1971.

Gain in Falls River, Squirrel to Chester - 1972

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

Station	May	June	July	Aug.	Sept.	Total
Squirrel	76,400	90,000	44,660	25,090	23,170	259,320
Diversions	12,684	19,130	18,981	16,723	10,012	77,530
Chester	76,290	81,550	30,230	13,212	17,850	219,132
Total Acct. For	88,974	100,680	49,211	29,935	27,862	296,662
Total Gain cfs	12,574	10,680	4,551	4,845	4,692	37,342
Mean Gain cfs	406	356	147	156	156	244
Total Gain a.f.	24,940	21,180	9,030	9,610	9,310	74,070

The average gain of 244 cfs compares to 285 cfs in 1971 and 267 in 1970.

Gain in Henrys Fork and Teton River, St. Anthony to Rexburg - 1972

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

Station	May	June	July	Aug.	Sept.	Total
Teton River	67,960	98,950	46,121	26,977	22,088	262,096
H.F. @ St Anth'y	150,620	127,830	57,360	53,030	63,620	452,460
Total Supply	218,580	226,780	103,481	80,007	85,708	714,556
H.Fk Diversions	33,391	25,099	25,092	21,708	12,381	117,671
Teton Diversions	34,740	36,211	36,237	25,439	17,677	150,304
H.Fk nr Rexburg	167,100	186,400	75,320	58,790	80,120	567,730
Total Acct For	235,231	247,710	136,649	105,937	110,178	835,705
Total Gain cfs	16,651	20,930	33,168	25,930	24,470	121,149
Mean gain cfs	537	698	1,070	836	816	792
Total gain a.f.	33,030	41,510	65,790	51,430	48,540	240,300

The total gain is nearly twice the 399 cfs noted in 1971 and can probably be attributed to increased return flow from the larger than usual

diversions early in the season. The gain is near, if not the largest of record, exceeding the 746 in 1965 which appears to be the maximum to date. The 240,300 acre-feet is 23.6% of the 1,018,000 acre-feet diverted by canals above Rexburg, and is fairly consistent with most past years except 1971, which was only 12.8%.

TETON BASIN

Mr. Arthur Wilson, with summer office at Driggs, continued as Deputy Watermaster in Teton Basin during 1972.

The water content of snow on April 1 on the Teton watershed was 130% of normal. April to September precipitation at Driggs was 10.28" compared to the normal of 8.08". The yearly runoff of Teton River near St. Anthony was 138% of the 38 year average.

Seasonal diversions for most canals in this area were about average. except for the month of May when they were near a record amount.

Again, this year, canal diversions were started early and water spread to build up the groundwater 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 on 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 the 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 Teton River in 1949.

Canals in Teton Basin used only part 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. Continuation is in progress for the conversion of a large part of the String Canal System to sprinklers, and a pipeline diversion was begun from Game Creek.

Mr. Seth Hansen 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 of the cost of Mr. Hansen's services, amounting to $509.50 was charged as a special item to the local users, and a similar amount was charged as general District 01 expense.

SWAN VALLEY

Mr. Howard Hatfield served as Deputy Watermaster and also as watermaster on several canals. The local users were charged $5.00 a day or $152.50 total, as a special charge, and the balance of the cost of watermaster's services, amounting to $260.50 was charged as general expense to District 01.

There was little demand for stored water by individuals not owning space in Palisades Reservoir. Swan Valley users rented 195 acre-feet from Water District 01 during 1972.

CLIMATOLOGICAL DATA

(Precipitation in inches for year ending September 30, 1972)

Month	Alta		Moran		Jackson		Afton		Palisades	
	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.**
Oct.	2.82	1.48	2.08	1.45	2.19	1.11	2.70	1.53	2.23	1.06
Nov.	1.87	1.41	2.70	1.88	1.05	1.11	1.49	1.52	1.23	1.73
Dec.	1.40	1.51	4.57	2.36	2.24	1.54	1.02	1.59	2.20	1.54
Jan.	2.13	1.60	4.82	2.35	2.75	1.43	2.69	1.53	2.03	1.95
Feb.	.50	1.48	3.11	2.28	1.47	1.32	.95	1.51	1.62	1.68
Mar.	2.10	1.51	1.56	2.08	2.03	1.20	1.25	1.55	.88	1.20
Apr.	2.26	1.48	2.29	1.73	1.60	1.20	1.50*	1.52	1.77	1.78
May	2.10	2.04	1.56	1.85	2.03	1.50	1.25	1.95	1.52	1.91
June	3.56	2.29	1.68	1.77	1.83	1.51	1.94	1.96	2.91	2.33
July	1.22	.94	1.47	.97	1.28	.75	.17	1.06	.80	.92
Aug.	1.55	1.19	1.04	1.30	.98	1.12	.87	1.05	1.62	1.18
Sept.	3.15	1.28	3.05	1.28	1.97	1.05	1.68	1.16	3.92	1.68
YEAR	24.66	18.21	29.93	21.30	21.35	14.83	17.51	17.93	22.73	18.96

*Estimated **13 year average (U.S. Bureau of Reclamation Averages)

Month	Ashton		Idaho Falls FAA		Pocatello		Twin Falls 2 NNE		Av. 9 Stas.	
	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.	Act.	Nor.
Oct.	2.01	1.35	1.15	.63	2.29	.89	.73	.76	2.02	1.14
Nov.	2.97	1.56	1.99	.62	1.81	.99	1.82	.92	1.88	1.31
Dec.	5.05	1.89	1.71	.80	1.69	1.00	.86	.86	2.30	1.45
Jan.	2.98	1.82	.56	.89	1.45	1.21	2.64	1.04	2.45	1.54
Feb.	1.30	1.77	.20	.71	.92	.92	1.86	.70	1.33	1.37
Mar.	1.45	1.39	.40	.66	.61	1.02	1.14	.84	1.27	1.27
Apr.	.58	1.04	.59	.66	1.36	1.06	.27	.93	1.14	1.27
May	1.55	1.45	.46	.98	.54	1.13	.29	1.00	1.11	1.53
June	2.27	1.91	1.25	1.13	1.29	.96	.34	.79	1.90	1.63
July	1.04	.82	.48	.46	.56	.51	.16	.24	.80	.74
Aug.	1.13	.95	1.02	.50	1.36	.55	.15	.17	1.08	.89
Sept.	1.72	.94	.52	.63	1.14	.61	1.34	.49	2.05	1.01
YEAR	24.05	16.89	10.33	8.67	15.02	10.85	11.60	8.74	19.33	15.15

On an average for the nine stations, the precipitation for the year ending September 30, 1972 was 128% of normal. Every month was above normal up to a maximum of 203% for September, except February, March, April and May which were all about normal or below.

EXPENDITURES DURING YEAR ENDING SEPTEMBER 30, 1972

WATERMASTER AND STAFF		
October 1, 1971 to March 31, 1972 6 Months @ $22,625/yr	$11,312.00	
April 1, 1972 to September 30, 1972 6 months @ $24,620/yr	12,310.00	$23,622.00 1/*
HYDROGRAPHERS		
Wilson, A. W. Salary, 4 mo. (approx) @ $550.	2,162.99	
Wright, W. Lee " 4 mo. (approx) @ $550	2,416.41	
Blauers, H.,K.,&W." 2 mo. (approx) @ $550	1,078.70	
Richards, Val " 145 days(approx) $23/day(Incl Mi.)	3,345.00	
Garrett, Sam " 58 days(approx) $23/day(Incl Mi.)	1,334.00	
Anderson, L. C. " 38 days(approx) $23/day(Incl Mi.)	868.50	11,205.60
RIVER RIDERS		
Cole, Bruce " 74 days @ $17/day(Incl Mi.)	1,257.00	
Brown, J. M. " 74 days @ $16/day(Incl Mi.)	1,184.00	
Smith, Al " 74 days @ $16/day(Incl Mi.)	1,184.00	
Hatfield, Howard " 32 days @ $13/day(Incl Mi.)	413.00	
Lenz, Elmer " 82 days @ $170/mo.(Incl Mi.)	476.81	
Hansen, Seth " 333 hours @ $3/hr approx(Incl Mi.)	1,019.00	5,533.81
MISCELLANEOUS		
Substitute clerks " 111 hours ($2 to $2.75/hr)	302.50	
Gage Readers (Randall, Seymour, Seipert, & Zollinger)	319.50	
Transportation	2,785.65	
Subsistence	374.59	
Telephone & Telemark	803.41	
Interest on borrowed money	524.59	
Watermasters Performance Bond	10.00	
State Insurance Fund	503.92	
Social Security (Water District Share)	785.52	
Soil Conservation Service (Snow pillow)	250.00	
Printing and Binding Watermaster's Report	365.15	
Postage and P. O. Box rental	218.55	
Storage Space Rental	120.00	
Channel clearing, S. Leigh Creek	343.00	
Ground water investigation	900.00	
Construction and Maintenance	270.06	
Miscellaneous Office expense	70.78	
Miscellaneous Expenses and Supplies (Mtnc)	39.93	8,987.25
STREAMGAGING COSTS		
Water District's proportionate share streamgaging operations	10,644.00	10,644.00 2/*
COMMITTEE OF NINE EXPENSE		
Services at $10/day and actual expenses	411.50	411.50
TOTAL		$60,404.06

*See Footnote on following page.

Expenditures during year ending September 30, 1972 - continued

1/ Paid into Federal-State Cooperative repay account to be used to pay that part of the 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 Geological Survey regulations, are paid from non-Water District funding sources. The Federal fiscal year begins on July 1, therefore, an adjustment of this account will be made on that date each year.

2/ Proportionate share of streamgaging operations and maintenance paid into Federal-State Cooperative repay account with allowance for streamflow data needed in the Federal-State Cooperative Program and collected by Water District hydrographers.

WATER DISTRICT FUNDS

The Water District 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.

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

As a convenience to the public, the Water District, for many years, has sold the U. S. Geological Survey topographical maps. The profits from the sales of these maps are used to help defray District expenses. Map profits for Water Year 1972 were $590.97.

Water District Funds - continued

As the operating funds are collected from waterusers following the close of each water year, there is always a deficit of Water District funds at the end of September. This year the Water District accounts on Sept. 30 were as follows:

Bank Balance	-$87.64	-$87.64
Fees collected and payable for rental water	$ 2,785.00	
Outstanding Loans - Twin Falls Canal Co. (For current operating costs)	21,700.00	
Balance due to Federal State Cooperative repay accounts to Sept. 30, 1972	9,343.00	
Ground water investigations	900.00	
Sept. 1972 Salary (Hatfield..Time submitted Late)	41.98	
Committee of Nine (Expenses submitted late)	73.50	
Sales Tax (Sale of Maps, 7/1-9/30/72)	7.37	
Social Security (Adj. to correct error in filing previous qtr return)	6.55	34,857.40
Deficit, September 30, 1972		$34,945.04

Water District accounts as of January 2, 1973, were as follows:

Cash	Checking Account	$ 4,020.65	
	Time Certificate	5,000.00	$ 9,020.65
Outstanding Accounts Receivable 1972 Water Year Billing*		3,682.80	12,703.45*
Outstanding Accounts Payable 1972 Water Year incurred**		876.50	
Outstanding current operating expenses		-0-	876.50
Balance available operating funds Jan. 2, 1973			$11,826.95*

*Does not include $2.88 delinquent 1971 WY account.
**Paid during month of January, 1973.