

Figure 14. Schematic showing gaging stations in Mud Lake-Lost River Basins.

MUD LAKE-LOST RIVER BASINS  
13112000 CAMAS CREEK AT CAMAS, ID

LOCATION.--Lat 44°00'10", long 112°13'15", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.21, T.8 N., R.36 E., Jefferson County, Hydrologic Unit 17040214, on left bank 150 ft upstream from county road bridge, 250 ft upstream from Union Pacific Railroad bridge at Camas, and about 1.1 mi upstream from Beaver Creek.

DRAINAGE AREA.--400 mi<sup>2</sup>, approximately. Mean elevation, 6,450 ft.

PERIOD OF RECORD.--April 1925 to October 1970, April 1971 to September 1982, May 1983 to September 1986, April to May 1987, (discharge measurements only November, December, March and June 1987). April to June 1988 (discharge measurement only March 1988), April to June 1989, March 1990 to current year.

REVISED RECORDS.--WSP 813: 1935. WSP 1123: 1947. WSP 1567: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,806.84 ft above NGVD of 1929. Prior to Aug. 21, 1925, nonrecording gage at site 0.1 mi downstream at different datum. Aug. 21, 1925 to Mar. 25, 1927, nonrecording gage, and Mar. 26, 1927 to Sept. 14, 1938, water-stage recorder at site 250 ft upstream at datum 2.01 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Diversions above station for irrigation of about 8,100 acres (1966 determination), which may dry up channel at gaging station prior to normal seasonal cessation of flows.

COOPERATION.--Water-stage recorder inspected by employees of Water District 31.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft<sup>3</sup>/s May 16, 1998, gage height, 7.49 ft; maximum gage height, 7.61 ft, May 16, 1984; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 167 ft<sup>3</sup>/s Apr. 16; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39	59	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66	67	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54	92	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41	115	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37	88	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38	50	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55	40	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46	30	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43	35	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33	39	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29	38	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25	36	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26	30	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.99	32	20	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	111	47	17	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	167	74	18	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	83	63	14	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	76	54	10	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	37	56	11	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	35	65	8.9	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	38	84	7.9	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	43	120	8.5	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	53	133	8.2	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	138	106	3.2	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	128	82	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	93	65	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	82	53	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	70	51	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	51	52	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	41	55	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	58	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	1246.99	1782	845.70	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	41.57	57.48	28.19	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	167	133	115	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	2470	3530	1680	0.00	0.00	0.00
CAL YR 2001	TOTAL 3320.60	MEAN 9.098	MAX 148	MIN 0.00	AC-FT 6590							
WTR YR 2002	TOTAL 3874.69	MEAN 10.62	MAX 167	MIN 0.00	AC-FT 7690							

MUD LAKE-LOST RIVER BASINS

13115000 MUD LAKE NEAR TERRETON, ID

LOCATION.--Lat 43°53'26", long 112°21'34", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.32, T.7 N., R.35 E., Jefferson County, Hydrologic Unit 17040215, at mouth of Camas Creek, 4.4 mi northeast of First Owsley pumphouse, and 5.5 mi northeast of Terreton.

DRAINAGE AREA.--1,130 mi<sup>2</sup>, approximately, not including Medicine Lodge Creek.

PERIOD OF RECORD.--April 1921 to current year.

REVISED RECORDS.--WSP 1567: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,774.99 ft above NGVD of 1929. Prior to Oct. 31, 1931, nonrecording gages at or near pumphouse (now used as a supplementary gage) at same datum. Oct. 31, 1931 to Sept. 30, 1954, water-stage recorder at site 2.7 mi southwest and 2 mi north of First Owsley pumphouse at same datum; Oct. 1, 1954 to Sept. 8, 1978, water-stage recorder at site 670 ft north of mouth of Camas Creek at same datum.

REMARKS.--Mud Lake is a perched body of water confined by earth dikes and fed by ground water and surface tributaries augmented by well flows and surface inflow from North Lake. Water for irrigation is diverted from the lake by pumping. Other irrigation diversions are made by various means from adjacent lakes and wells and from Camas Creek above the lake. Area of Mud Lake varies from time to time by changes in dikes. Figures given herein represent contents above gage height -4.0 ft. Capacity table prepared from surveys made by U.S. Geological Survey and adjusted for changes in dikes. Stage at recorder during frequent high winds does not usually represent the mean for the lake. For complete description of Mud Lake region, see WSP 818.

COOPERATION.--Water-stage recorder inspected by employees of Water District 31.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 61,660 acre-ft May 5, 1923, gage height, 9.20 ft, at site then in use; practically no contents Oct. 1 to Nov. 15, 1937, due to bypassing Camas Creek (see Remarks).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 37,800 acre-ft June 26, 27, gage height, 7.98 ft; minimum contents, 7,040 acre-ft Feb. 16-20, gage height, 1.62 ft.

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

1.0	5,460	5.0	20,500
2.0	8,150	6.0	25,700
3.0	11,600	7.0	31,600
4.0	15,800	8.0	37,900

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15300	9080	7840	7430	e7120	7120	e13700	33700	e34400	35600	25300	20100
2	15100	8890	7880	7430	e7120	7150	14600	32900	34800	34700	25600	20200
3	15000	8860	7840	e7430	e7120	7150	15300	31900	34600	33400	25700	20300
4	14400	8860	7810	e7430	e7120	7150	16200	31300	34500	33000	25800	20400
5	14300	8790	7840	e7430	e7120	7180	17100	30500	34400	32100	25800	20200
6	14200	8690	7810	e7430	7120	7180	17800	29600	34300	31300	25700	20300
7	13800	8600	7780	7460	e7060	7200	18800	29200	34300	30400	e25500	20400
8	13400	e8530	7780	7460	e7060	7180	19900	29100	34300	29200	25100	20200
9	13100	8500	7720	7430	7060	7200	20700	29400	34400	28400	25100	20200
10	12800	8500	7760	7430	7060	7200	21300	29400	34500	27600	25100	20200
11	12200	8430	7720	7380	7060	7230	22400	29500	34900	26900	25000	20100
12	11900	8370	7700	7400	7060	7230	23300	29500	35100	26400	24800	20100
13	11500	e8370	7700	7380	7060	7230	24200	29600	35300	26000	24600	19900
14	11300	8340	e7700	7350	7060	e7230	25100	29500	35500	e25500	24200	19600
15	11100	8240	e7700	7320	7060	e7230	26400	29400	35900	25100	23800	19400
16	10900	8150	e7700	7320	7040	7260	27000	29400	36400	24900	23200	19200
17	10700	8150	7700	7290	7040	7260	28100	29400	36600	24700	22900	e19300
18	10400	8150	7670	7260	7040	7290	28700	29400	36200	24400	22400	19200
19	10100	8090	7670	7290	7040	7290	29500	29500	36400	24300	22000	19200
20	9970	8000	7670	7260	7040	7290	30400	29900	36700	24200	21600	19200
21	9860	7970	7640	7260	7060	7430	31400	30400	36800	23900	21000	19000
22	e9790	7940	7610	7230	7060	7580	32300	30800	37200	24100	20600	18900
23	e9720	e7880	7580	7180	7060	7940	33000	31600	37300	24200	20200	18700
24	9660	7840	7580	7180	7090	8240	33800	32200	37700	24100	20100	18600
25	9420	7880	7550	7200	7090	8560	34800	32600	37800	24400	20200	18200
26	9320	7840	7520	7150	7120	9120	35500	33100	37800	24700	20200	18200
27	e9320	7810	7520	7120	7120	9690	35200	33400	37700	24800	20000	18000
28	9320	7780	7490	7150	7120	10400	35000	e33800	37300	24900	19900	17900
29	9280	7840	7490	7120	---	11200	34600	34100	36800	25000	19900	e17800
30	9280	7810	7490	e7120	---	12200	34300	e34300	36300	25300	19900	17600
31	e9180	---	7460	e7120	---	13000	---	34400	---	25200	20000	---
MAX	15300	9080	7880	7460	7120	13000	35500	34400	37800	35600	25800	20400
MIN	9180	7780	7460	7120	7040	7120	13700	29100	34300	23900	19900	17600
†	---	1.89	1.77	---	1.65	3.35	7.43	7.46	7.75	5.90	4.89	4.39
‡	-6220	-1370	-350	-340	0	5879	21300	100	1900	-11100	-5200	-2400
CAL YR 2001	MAX 35700	MIN 7460	‡ -1620									
WTR YR 2002	MAX 37800	MIN 7040	‡ 2200									

† Gage height, in feet, at end of month.  
‡ Change in contents, in acre-feet.  
e Estimated

MUD LAKE-LOST RIVER BASINS

13116500 MEDICINE LODGE CREEK NEAR SMALL, ID

LOCATION.--Lat 44°15'32", long 112°24'36", in SW¼NE¼ sec.25, T.11 N., R.34 E., Clark County, Hydrologic Unit 17040215, on right bank 400 ft west of H.W. Small's ranch house, 0.4 mi downstream from Indian Creek, 4 mi northwest of Small, and 11 mi northwest of Dubois.

DRAINAGE AREA.--270 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--April 1921 to December 1923, October 1941 to January 1949, May 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,440 ft above NGVD of 1929, from topographic map. Nonrecording gage, Apr. 19, 1921 to Dec. 19, 1923 at a site 100 ft upstream at different datum, 1941-49, water-stage recorder at site 200 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Many small diversions above station for irrigation. Water also diverted by ranches above station during winter months.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 481 ft<sup>3</sup>/s June 19, 1995, gage height, 9.09 ft; minimum observed, 8.0 ft<sup>3</sup>/s Dec. 14, 1949, from discharge measurement.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 76 ft<sup>3</sup>/s June 2; minimum daily, 21 ft<sup>3</sup>/s Nov. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	36	e22	e38	e38	e32	50	43	54	40	31	29
2	33	36	e24	e42	e36	e32	49	42	76	40	32	29
3	36	35	e22	e40	e34	e32	47	52	73	39	34	29
4	37	33	e22	e40	e34	e34	47	51	66	38	33	28
5	38	33	e22	e40	e36	e34	49	48	64	39	32	29
6	38	35	e22	e42	e38	e36	48	46	59	38	30	31
7	40	34	e22	e42	e38	e34	47	45	55	40	29	33
8	39	33	e24	e42	e36	e32	43	46	60	41	28	33
9	39	33	e22	e42	e36	e34	41	44	61	39	28	32
10	40	34	e22	e42	e36	e36	40	43	64	40	28	31
11	42	33	e22	e40	e34	36	39	44	61	39	27	31
12	41	29	e24	e38	e34	36	38	41	58	36	26	31
13	40	29	e28	e38	e36	35	38	41	56	35	26	30
14	40	29	e26	e40	e34	e34	40	41	52	36	26	30
15	41	29	e26	e36	e34	e34	44	43	52	35	26	30
16	40	29	e28	e36	e36	36	42	39	53	37	26	30
17	40	29	e30	e34	e38	35	44	37	53	38	25	31
18	40	31	e32	e34	e38	e34	44	36	54	36	26	33
19	40	30	e34	e36	e36	35	42	36	54	36	26	32
20	39	29	e34	e38	e36	34	39	36	53	36	26	32
21	39	25	e34	e36	38	35	39	48	51	35	26	32
22	39	26	e32	e34	37	36	38	56	53	35	27	33
23	41	25	e30	e36	37	37	37	47	57	35	28	34
24	39	25	e30	e36	37	38	36	46	52	33	28	33
25	37	25	e30	e38	e32	37	37	40	52	34	28	33
26	37	24	e30	e40	e32	37	37	39	46	36	28	33
27	37	e21	e34	e36	e34	38	38	40	44	36	29	34
28	37	e22	e40	e32	e34	41	38	41	43	34	29	34
29	37	e22	e38	e32	---	41	37	40	43	33	29	32
30	37	e22	e38	e32	---	44	36	39	41	33	29	31
31	38	---	e38	e36	---	47	---	39	---	32	29	---
TOTAL	1193	876	882	1168	999	1116	1244	1329	1660	1134	875	943
MEAN	38.48	29.20	28.45	37.68	35.68	36.00	41.47	42.87	55.33	36.58	28.23	31.43
MAX	42	36	40	42	38	47	50	56	76	41	34	34
MIN	32	21	22	32	32	32	36	36	41	32	25	28
AC-FT	2370	1740	1750	2320	1980	2210	2470	2640	3290	2250	1740	1870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2002, BY WATER YEAR (WY)

MEAN	52.84	50.50	42.72	42.11	46.65	54.39	58.27	85.25	108.6	79.97	61.54	52.09
MAX	92.5	86.0	74.3	72.6	70.8	73.2	90.8	215	383	237	124	98.7
(WY)	1996	1999	2000	1999	2000	2000	1999	1998	1995	1995	1995	1995
MIN	30.1	27.2	17.3	18.5	33.4	36.0	37.6	42.9	39.3	32.0	28.2	28.7
(WY)	1993	1993	1993	1949	1990	2002	1991	2002	1992	1994	2002	1992

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1921 - 2002
ANNUAL TOTAL	16275	13419	
ANNUAL MEAN	44.59	36.76	61.70
HIGHEST ANNUAL MEAN			109
LOWEST ANNUAL MEAN			36.8
HIGHEST DAILY MEAN	83	76	470
LOWEST DAILY MEAN	21	21	10
ANNUAL SEVEN-DAY MINIMUM	22	22	13
ANNUAL RUNOFF (AC-FT)	32280	26620	44700
10 PERCENT EXCEEDS	65	47	90
50 PERCENT EXCEEDS	42	36	53
90 PERCENT EXCEEDS	30	28	34

e Estimated

MUD LAKE-LOST RIVER BASINS

13118700 LITTLE LOST RIVER BELOW WET CREEK, NEAR HOWE, ID

LOCATION.--Lat 44°00'00", long 113°54'22", in NW¼SE¼ sec.4, T.9 N., R.27 E., Butte County, Hydrologic Unit 17040217, U.S. Bureau of Land Management lands, on right bank at Clyde School, 0.25 mi downstream from Wet Creek, and 27 mi northwest of Howe.

DRAINAGE AREA.--440 mi<sup>2</sup>, approximately.

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

REVISIONS.--WDR-ID-1: 1991 (m).

GAGE.--Water-stage recorder. Elevation of gage is 5,880 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 3,800 acres, of which about 2,000 acres are irrigated by withdrawals from ground water (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 509 ft<sup>3</sup>/s June 16, 1975, gage height, 3.19 ft, but may have been more during period of doubtful gage-height record in 1958; maximum gage height recorded, 5.99 ft, Feb. 8, 1979, backwater from ice; minimum recorded, 2.8 ft<sup>3</sup>/s Dec. 13, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 178 ft<sup>3</sup>/s June 3, gage height, 2.14 ft; minimum daily, 12 ft<sup>3</sup>/s Feb. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	34	17	e14	e13	e14	17	25	154	65	21	19
2	23	34	17	e15	e14	e14	16	25	160	60	21	18
3	24	34	17	e16	e14	e14	16	26	157	57	22	17
4	24	34	e16	e15	e14	e13	16	29	148	55	22	17
5	25	35	e16	e15	e14	e14	16	34	139	50	22	18
6	25	35	e17	e16	e13	e14	16	37	135	47	21	20
7	25	33	e17	e17	e14	15	16	39	132	46	20	22
8	25	30	e17	e16	e15	e14	16	40	130	44	20	23
9	25	28	e17	e15	e14	e14	16	40	123	41	21	21
10	26	31	e17	e16	e14	15	15	40	115	37	19	21
11	28	32	e16	e16	e14	15	15	41	106	34	18	20
12	28	35	e16	16	e13	15	15	37	95	33	19	20
13	28	36	e18	16	e14	15	15	39	89	33	19	19
14	28	35	e20	e15	e14	14	16	41	88	31	18	19
15	28	35	e17	e15	e13	14	21	49	85	29	18	19
16	28	33	e17	e15	e13	14	22	55	87	33	17	19
17	28	36	e18	e16	e13	14	23	57	88	34	17	20
18	28	37	e19	e13	e14	15	22	62	88	31	17	21
19	28	35	e18	e14	e15	14	22	73	85	30	18	20
20	28	33	e17	e15	e14	15	20	93	79	32	18	20
21	28	35	e16	e17	e14	16	21	114	73	28	18	20
22	29	35	e17	e15	15	17	21	119	87	26	19	20
23	30	34	e15	e13	15	19	20	107	125	25	18	20
24	28	26	e14	e14	15	20	19	97	107	24	19	20
25	27	25	e14	e14	e14	20	20	90	97	24	19	20
26	28	e20	e14	e15	e12	20	20	88	92	25	18	20
27	31	e17	e15	e16	e13	20	21	91	88	23	19	20
28	35	e18	e15	e15	e14	19	21	98	84	22	20	21
29	34	e19	e16	e14	---	19	21	111	76	22	20	21
30	33	e16	e16	e13	---	17	22	128	71	21	20	21
31	35	---	e15	e13	---	17	---	147	---	21	20	---
TOTAL	864	920	511	465	388	490	557	2072	3183	1083	598	596
MEAN	27.87	30.67	16.48	15.00	13.86	15.81	18.57	66.84	106.1	34.94	19.29	19.87
MAX	35	37	20	17	15	20	23	147	160	65	22	23
MIN	23	16	14	13	12	13	15	25	71	21	17	17
AC-FT	1710	1820	1010	922	770	972	1100	4110	6310	2150	1190	1180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2002, BY WATER YEAR (WY)

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002		
MEAN	56.27	39.14	21.87	22.17	24.84	35.11	61.51	144.0	191.0	95.54	59.28	55.70																																			
MAX	101	70.0	47.2	52.7	45.3	58.2	162	261	365	208	141	128																																			
(WY)	1985	1985	1985	1985	1985	1986	1969	1969	1995	1975	1984	1984																																			
MIN	27.9	16.6	8.00	3.50	9.00	14.1	18.6	53.3	51.8	33.3	19.3	19.9																																			
(WY)	2002	1962	1964	1964	1964	1993	2002	1961	1992	1994	2002	2002																																			

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR
ANNUAL TOTAL	13756	11727				
ANNUAL MEAN	37.69	32.13				
HIGHEST ANNUAL MEAN			115	66.98	1984	
LOWEST ANNUAL MEAN			32.1		2002	
HIGHEST DAILY MEAN	154	160	486		1975	
LOWEST DAILY MEAN	14	12	3.5		1964	
ANNUAL SEVEN-DAY MINIMUM	15	13	3.5		1964	
ANNUAL RUNOFF (AC-FT)	27290	23260	48520			
10 PERCENT EXCEEDS	88	85	145			
50 PERCENT EXCEEDS	25	20	46			
90 PERCENT EXCEEDS	18	14	18			

e Estimated

## MUD LAKE-LOST RIVER BASINS

## 13120000 NORTH FORK BIG LOST RIVER AT WILD HORSE, NEAR CHILLY, ID

LOCATION.--Lat 43°56'01", long 114°06'45", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.17, T.7 N., R.20 E., Custer County, Hydrologic Unit 17040218, in Challis National Forest, on right bank 0.2 mi upstream from East Fork, 2 mi downstream from Wild Horse damsite, and 16 mi southwest of Chilly.

DRAINAGE AREA.--114 mi<sup>2</sup>. Mean elevation, 8,540 ft.

PERIOD OF RECORD.--March 1944 to current year. Prior to October 1967, published as "Big Lost River at Wild Horse, near Chilly".

GAGE.--Water-stage recorder. Elevation of gage is 6,820 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. There are several small ranch diversions upstream for local irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,560 ft<sup>3</sup>/s June 5, 1997, gage height, 5.65 ft; minimum, 4.9 ft<sup>3</sup>/s Feb. 17, 1988, gage height, 0.92 ft, result of freezeup; minimum gage height, 0.91 ft, Mar. 15, 18, 2002, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 20	0430	324	3.25	June 1	0100	*577	*3.94

Minimum daily, 10 ft<sup>3</sup>/s Feb. 26; minimum gage height, 0.91 ft, Mar. 15, 18, result of freezeup.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	22	15	14	17	14	15	70	530	153	39	25
2	23	22	16	14	16	14	17	75	503	135	38	23
3	23	22	16	14	16	e12	17	84	386	125	37	22
4	22	21	16	14	16	e12	18	89	332	123	39	22
5	22	21	15	14	16	14	21	96	301	113	38	24
6	22	21	16	14	16	15	23	90	317	104	35	24
7	22	21	16	14	17	15	26	87	311	99	34	26
8	22	20	15	15	17	13	27	79	290	96	34	26
9	22	19	16	16	17	13	29	76	247	89	33	25
10	22	19	16	15	16	15	33	72	206	82	32	24
11	22	20	15	17	16	14	34	68	173	79	30	24
12	22	20	16	17	15	14	34	66	152	75	29	23
13	22	19	16	17	15	13	38	74	146	74	28	23
14	22	19	17	17	16	12	78	96	172	71	27	22
15	22	19	17	18	15	13	122	125	198	70	27	22
16	22	19	17	16	15	13	86	125	229	71	26	22
17	22	19	17	18	16	e12	74	136	256	69	25	22
18	22	20	16	17	16	e12	63	164	266	65	25	23
19	21	19	17	17	15	14	57	231	231	63	25	22
20	21	19	17	17	16	14	50	298	201	61	24	22
21	21	19	17	18	14	13	48	282	194	59	24	21
22	21	20	16	17	15	12	46	226	212	55	25	22
23	22	19	15	17	15	12	46	183	193	53	25	21
24	21	16	15	18	14	12	44	153	191	49	25	21
25	21	18	15	18	12	12	46	140	200	48	24	21
26	21	17	15	18	e10	12	51	138	196	56	24	21
27	20	17	15	18	e12	12	52	153	193	51	25	21
28	20	14	15	16	14	12	51	203	186	47	26	21
29	21	16	15	e14	---	12	55	277	180	45	26	21
30	21	15	14	e15	---	13	64	378	170	43	26	21
31	22	---	14	e16	---	14	---	492	---	41	26	---
TOTAL	672	572	488	500	425	404	1365	4826	7362	2364	901	677
MEAN	21.68	19.07	15.74	16.13	15.18	13.03	45.50	155.7	245.4	76.26	29.06	22.57
MAX	23	22	17	18	17	15	122	492	530	153	39	26
MIN	20	14	14	14	10	12	15	66	146	41	24	21
AC-FT	1330	1130	968	992	843	801	2710	9570	14600	4690	1790	1340
CFSM	0.19	0.17	0.14	0.14	0.13	0.11	0.40	1.37	2.15	0.67	0.25	0.20
IN.	0.22	0.19	0.16	0.16	0.14	0.13	0.45	1.57	2.40	0.77	0.29	0.22

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2002, BY WATER YEAR (WY)

	MEAN	38.45	31.48	25.72	24.16	21.80	22.53	61.82	276.5	411.5	197.7	71.16	46.79
MAX	63.5	117	88.2	79.6	70.9	62.1	153	584	848	602	178	122	
(WY)	1984	1984	1984	1984	1984	1984	1969	1958	1965	1995	1965	1985	
MIN	21.5	18.6	14.1	14.1	14.7	13.0	17.2	66.2	115	52.5	25.5	21.4	
(WY)	1989	1993	1993	1991	1961	2002	1955	1977	2001	1994	2001	1992	

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1944 - 2002
ANNUAL TOTAL	17061	20556	
ANNUAL MEAN	46.74	56.32	102.6
HIGHEST ANNUAL MEAN			184
LOWEST ANNUAL MEAN			48.9
HIGHEST DAILY MEAN	294	530	1410
LOWEST DAILY MEAN	12	10	9.5
ANNUAL SEVEN-DAY MINIMUM	14	12	11
ANNUAL RUNOFF (AC-FT)	33840	40770	74360
ANNUAL RUNOFF (CFSM)	0.41	0.49	0.90
ANNUAL RUNOFF (INCHES)	5.57	6.71	12.23
10 PERCENT EXCEEDS	107	171	298
50 PERCENT EXCEEDS	22	22	36
90 PERCENT EXCEEDS	16	14	19

e Estimated

MUD LAKE-LOST RIVER BASINS

13120500 BIG LOST RIVER AT HOWELL RANCH, NEAR CHILLY, ID

LOCATION.--Lat 43°59'54", long 114°01'16", in NE¼NW¼ sec.30, T.8 N., R.21 E., Custer County, Hydrologic Unit 17040218, on left bank at Howell Ranch, 2.1 mi downstream from Burnt Creek, 7.7 mi downstream from East Fork, 9 mi southwest of Chilly, and 21 mi northwest of Mackay.

DRAINAGE AREA.--450 mi<sup>2</sup>. Mean elevation, 8,590 ft.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to November 1914, May 1920 to current year (no winter records 1904, 1906-14, 1920-48).

REVISED RECORDS.--WSP 1287: Drainage area. WSP 1317: 1905.

GAGE.--Water-stage recorder. Datum of gage is 6,621.95 ft above NGVD of 1929. See WSP 1737 for history of changes prior to June 11, 1920.

REMARKS.--Records good except for estimated daily discharges, which are poor. Station equipment includes satellite telemetry. No regulation. Diversions above station for irrigation of about 3,000 acres (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft<sup>3</sup>/s May 25, 1967, gage height, 6.02 ft; minimum observed, 19 ft<sup>3</sup>/s Dec. 12, 1939, from discharge measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
June 1	0200	*1,730	*3.62	June 18	1030	912	2.74

Minimum daily, 40 ft<sup>3</sup>/s Feb. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	81	e48	e50	e55	e55	e50	187	1600	429	100	70
2	73	79	e50	e50	e55	e55	e55	194	1510	374	96	67
3	72	78	e55	e50	e55	e55	e55	217	1090	349	94	64
4	72	76	e55	e50	e55	e55	e60	235	886	356	100	62
5	73	76	e50	e50	e55	e55	e65	255	800	326	98	65
6	73	76	e55	e50	e55	e55	e75	247	881	299	91	68
7	74	76	e60	e55	e60	e48	e85	243	871	285	88	78
8	74	69	e55	e55	e55	e46	e90	223	812	279	87	81
9	73	72	e55	e55	e55	e46	e95	215	663	256	85	75
10	73	87	e60	e55	e55	e50	e100	205	566	230	83	72
11	75	75	e55	e60	e55	e48	e100	197	486	223	79	69
12	77	74	e60	e60	e50	e48	e110	189	437	213	76	68
13	76	72	e60	e60	e55	e46	115	204	423	205	75	67
14	76	72	e65	e60	e50	e46	174	257	511	195	73	65
15	76	71	e60	e55	e50	e46	298	331	591	188	70	63
16	76	72	e60	e60	e50	e46	220	330	654	187	69	62
17	75	72	e65	e60	e55	e46	190	354	724	186	68	64
18	76	73	e60	e60	e55	e48	164	419	830	197	67	69
19	75	70	e65	e60	e50	e48	155	579	691	185	67	68
20	75	70	e65	e60	e50	e50	137	764	575	173	66	67
21	74	75	e60	e65	e46	e46	132	709	548	170	66	66
22	74	74	e55	e60	e50	e44	131	600	628	154	68	66
23	76	70	e55	e60	e50	e42	135	496	590	147	68	66
24	73	e60	e55	e60	e48	e42	129	433	576	134	70	65
25	72	e65	e55	e60	e44	e42	136	395	605	128	68	64
26	73	e55	e55	e60	e40	e42	145	387	596	140	66	65
27	75	e50	e55	e60	e48	e42	150	417	557	131	71	66
28	75	e44	e55	e60	e55	e42	147	517	537	122	77	68
29	75	e48	e55	e50	---	e46	151	712	505	114	73	67
30	75	e48	e50	e55	---	e46	171	1100	477	109	74	68
31	82	---	e50	e60	---	e48	---	1530	---	104	74	---
TOTAL	2312	2080	1758	1765	1456	1474	3820	13141	21220	6588	2407	2025
MEAN	74.58	69.33	56.71	56.94	52.00	47.55	127.3	423.9	707.3	212.5	77.65	67.50
MAX	82	87	65	65	60	55	298	1530	1600	429	100	81
MIN	72	44	48	50	40	42	50	187	423	104	66	62
AC-FT	4590	4130	3490	3500	2890	2920	7580	26070	42090	13070	4770	4020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2002, BY WATER YEAR (WY)

MEAN	125.9	106.3	87.12	82.20	77.29	80.89	183.5	764.4	1202	591.4	218.0	144.5
MAX	235	373	278	245	218	194	485	1880	2389	1754	631	378
(WY)	1909	1984	1984	1984	1984	1984	1943	1969	1911	1995	1907	1985
MIN	58.0	57.5	40.8	39.2	44.5	46.5	41.2	200	221	93.5	54.2	47.7
(WY)	1934	1995	1993	1991	1991	2002	1912	1977	1934	1934	1934	1934

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1904 - 2002
ANNUAL TOTAL	55067	60046	
ANNUAL MEAN	150.9	164.5	314.3
HIGHEST ANNUAL MEAN			538
LOWEST ANNUAL MEAN			154
HIGHEST DAILY MEAN	893	1600	3820
LOWEST DAILY MEAN	44	40	27
ANNUAL SEVEN-DAY MINIMUM	49	42	32
ANNUAL RUNOFF (AC-FT)	109200	119100	227700
10 PERCENT EXCEEDS	351	481	874
50 PERCENT EXCEEDS	76	72	120
90 PERCENT EXCEEDS	60	50	65

e Estimated

MUD LAKE-LOST RIVER BASINS

13120500 BIG LOST RIVER AT HOWELL RANCH, NEAR CHILLY, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to September 1984, April 1993 to September 1996, December 2001 to November 2002 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June to September 1993, June to September 1996, December 2001 to November 2002 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 20.0°C July 11, 2002; minimum, 0.0 °C many days during winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 20.0 °C July 11; minimum, 0.0 °C many days during winter months.

WATER-QUALITY DATA, APRIL TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
APR 22...	1140	133	181	8.1	11.8	6.8	1.2	9.6	101	S2
MAY 14...	1130	271	160	8.1	16.4	8.5	13	9.8	107	S13
JUN 24...	1000	599	117	8.1	19.6	8.7	1.6	9.5	103	26

Date	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR 22...	<.015	.13	<.013	<.007	.008	2.0	.72
MAY 14...	<.015	.19	<.013	<.007	.029	12	8.8
JUN 24...	<.015	E.09	.020	<.007	.015	10	16.2

< Less than  
E Estimated value  
S Most probable value

WATER TEMPERATURE, DEGREES CELSIUS, DECEMBER 2001 TO NOVEMBER 2002

DAY	DECEMBER			JANUARY			FEBRUARY			MARCH		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	0.3	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0
2	0.3	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0
3	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0
4	0.4	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0
5	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0
6	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.1
7	0.3	0.0	0.0	0.3	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0
8	0.3	0.0	0.0	0.3	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0
9	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
10	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0
11	0.3	0.0	0.0	0.3	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.0
12	0.3	0.0	0.0	0.3	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.1
13	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0
14	0.3	0.0	0.1	0.3	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.1
15	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0
16	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0
17	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0
18	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0
19	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.8	0.0	0.1
20	0.1	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	1.7	0.0	0.6
21	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	5.0	0.0	2.1
22	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	5.6	0.1	2.7
23	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	5.6	0.9	3.0
24	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	5.9	1.1	3.1
25	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	7.2	0.4	3.4
26	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	5.0	0.0	2.7
27	0.1	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	7.8	1.1	3.9
28	0.1	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	7.0	0.1	3.5
29	0.1	0.0	0.0	0.1	0.0	0.0	---	---	---	7.0	0.3	3.5
30	0.1	0.0	0.0	0.1	0.0	0.0	---	---	---	9.0	1.9	5.0
31	0.1	0.0	0.0	0.1	0.0	0.0	---	---	---	8.9	1.2	4.9
MONTH	0.4	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	9.0	0.0	1.3



MUD LAKE-LOST RIVER BASINS

13120500 BIG LOST RIVER AT HOWELL RANCH, NEAR CHILLY, ID--Continued

WATER TEMPERATURE, DEGREES CELSIUS, DECEMBER 2001 TO NOVEMBER 2002

DAY	APRIL			MAY			JUNE			JULY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.9	1.5	5.1	11.4	6.0	8.4	11.6	6.8	8.7	16.8	8.8	12.9
2	8.3	1.5	4.9	11.8	4.5	8.3	9.6	6.2	7.5	16.9	8.7	13.0
3	9.5	1.9	5.5	11.9	5.9	9.0	10.8	4.8	7.5	17.7	11.0	14.6
4	9.7	1.7	5.6	11.3	3.7	7.7	9.9	5.6	7.9	17.6	10.2	14.2
5	8.4	2.2	5.5	9.7	5.3	7.5	13.8	5.9	9.2	17.9	9.6	13.9
6	9.3	3.3	6.3	11.1	4.6	7.9	13.5	6.5	9.9	17.4	10.8	14.5
7	10.0	2.5	5.8	10.1	5.7	7.7	12.5	6.2	9.4	17.1	11.6	14.4
8	9.8	2.0	5.7	8.0	2.0	4.9	11.3	6.3	8.8	17.9	11.4	14.9
9	7.8	3.4	5.7	7.6	2.8	5.3	9.4	5.3	6.5	17.9	9.3	13.9
10	9.7	3.3	6.2	6.8	2.6	5.2	7.0	3.8	5.5	19.3	11.0	15.4
11	9.0	2.8	5.8	11.6	2.9	6.8	11.3	4.3	7.3	20.0	11.4	16.0
12	11.0	3.9	7.0	13.0	4.6	8.9	11.9	5.4	8.7	19.2	12.2	16.4
13	9.8	4.4	7.4	13.0	5.9	9.9	14.9	6.5	10.4	18.4	12.2	15.7
14	8.6	5.3	7.0	13.5	7.0	10.4	13.8	7.6	10.9	19.5	12.8	16.3
15	5.3	2.7	3.7	11.4	4.8	8.0	13.8	8.4	11.0	18.5	14.1	16.6
16	6.7	1.1	3.6	12.5	4.9	8.7	15.0	7.3	10.9	17.2	12.5	14.4
17	5.9	2.2	4.1	12.5	5.4	9.0	14.1	7.7	10.9	17.4	10.8	14.2
18	5.6	1.1	3.0	12.7	6.5	9.7	12.7	8.7	10.6	16.4	12.4	14.5
19	7.8	1.5	4.7	13.8	6.7	10.3	12.8	5.3	8.9	17.2	12.2	14.5
20	9.3	1.1	4.9	12.2	6.0	8.1	13.9	6.3	10.1	17.4	12.2	15.1
21	8.6	1.7	5.4	7.7	4.6	5.7	15.2	9.3	12.1	18.5	11.0	14.9
22	11.6	3.4	7.5	7.9	3.1	5.2	13.6	8.2	9.8	17.4	11.4	13.8
23	10.4	5.6	8.0	7.4	4.5	6.0	13.9	7.7	10.5	18.4	10.4	14.2
24	9.6	1.3	5.6	12.4	4.5	8.0	14.4	8.0	11.4	18.7	11.4	15.4
25	10.7	3.2	7.2	11.6	6.2	9.1	16.1	9.7	12.9	17.2	12.4	14.6
26	10.4	4.5	7.5	10.8	6.8	8.9	14.9	9.3	12.3	17.6	11.0	14.3
27	9.3	4.6	7.1	12.7	6.7	9.5	16.1	9.3	12.7	17.7	10.5	14.4
28	11.0	4.0	7.5	13.2	7.1	10.2	15.6	9.3	12.4	18.4	10.5	14.6
29	12.1	4.0	8.1	13.9	6.8	9.9	17.1	9.7	13.3	19.0	11.4	15.5
30	10.4	6.3	8.4	13.3	7.0	9.9	16.9	9.0	13.1	17.2	10.5	14.3
31	---	---	---	13.5	6.3	9.5	---	---	---	17.7	11.1	14.7
MONTH	12.1	1.1	6.0	13.9	2.0	8.2	17.1	3.8	10.0	20.0	8.7	14.7

DAY	AUGUST			SEPTEMBER			OCTOBER			NOVEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.9	9.3	13.4	15.3	8.5	12.1	6.3	1.6	4.0	0.2	0.0	0.0
2	17.9	10.8	14.2	16.1	9.3	13.0	7.4	1.5	4.3	0.0	0.0	0.0
3	17.1	10.4	13.8	16.6	10.1	13.4	6.3	2.4	4.5	0.0	0.0	0.0
4	17.7	11.3	14.3	16.4	10.7	13.5	9.9	4.8	6.6	0.0	0.0	0.0
5	17.2	10.2	13.9	14.4	10.8	12.4	10.2	5.9	8.0	0.0	0.0	0.0
6	17.4	10.8	14.3	13.8	9.9	11.5	10.2	4.5	7.6	0.0	0.0	0.0
7	15.3	10.7	13.3	12.4	9.7	11.0	9.7	4.2	7.3	0.0	0.0	0.0
8	16.6	9.4	13.0	13.3	6.0	9.8	9.1	3.5	6.7	0.0	0.0	0.0
9	16.8	8.7	12.8	13.6	6.0	10.0	8.7	3.1	6.3	0.0	0.0	0.0
10	17.9	9.4	13.8	14.2	6.8	10.6	7.9	3.1	5.7	0.0	0.0	0.0
11	17.9	10.4	14.4	14.1	7.4	11.0	7.7	3.5	5.8	0.0	0.0	0.0
12	17.9	10.2	14.3	14.2	7.6	11.2	5.4	0.0	3.1	0.0	0.0	0.0
13	18.0	9.9	14.1	14.9	7.7	11.6	6.3	0.0	3.2	1.0	0.0	0.2
14	18.4	9.9	14.4	14.4	7.3	11.2	6.5	0.5	3.7	0.8	0.0	0.3
15	18.8	10.5	14.8	14.5	8.4	11.6	7.3	0.8	4.1	0.2	0.0	0.0
16	18.2	10.8	14.8	13.5	8.5	11.3	7.6	2.1	5.1	0.2	0.0	0.0
17	16.9	9.0	13.4	12.1	9.4	10.7	7.3	1.6	4.8	1.0	0.0	0.2
18	17.1	9.0	13.2	13.2	7.9	10.2	6.7	0.8	4.0	0.2	0.0	0.0
19	16.8	9.0	13.1	13.3	6.2	9.9	6.0	0.4	3.5	0.5	0.0	0.0
20	14.5	9.0	12.2	12.8	6.5	10.0	6.3	1.0	3.9	3.4	0.5	1.9
21	14.5	9.1	11.7	11.1	5.3	8.7	6.5	1.8	4.3	---	---	---
22	15.3	6.7	11.0	11.8	4.6	8.3	5.4	2.3	4.1	---	---	---
23	13.5	9.7	11.6	12.7	5.6	9.3	6.0	3.1	4.5	---	---	---
24	14.7	8.2	11.2	11.9	5.7	9.1	7.0	3.1	4.8	---	---	---
25	15.5	8.2	12.0	12.1	6.3	9.5	4.6	0.0	2.5	---	---	---
26	14.4	9.3	11.5	10.1	4.3	7.7	3.7	0.0	1.9	---	---	---
27	13.3	8.2	10.8	8.8	6.5	7.7	3.8	0.0	1.9	---	---	---
28	12.5	7.3	10.3	10.8	4.8	7.6	3.2	0.8	2.2	---	---	---
29	13.0	8.8	11.2	9.3	4.9	7.2	2.4	0.4	1.4	---	---	---
30	12.8	8.0	10.8	9.3	3.5	6.4	1.2	0.0	0.3	---	---	---
31	15.6	9.3	12.4	---	---	---	0.8	0.0	0.1	---	---	---
MONTH	18.8	6.7	12.9	16.6	3.5	10.2	10.2	0.0	4.2	---	---	---

## MUD LAKE-LOST RIVER BASINS

## 13126000 MACKAY RESERVOIR NEAR MACKAY, ID

LOCATION.--Lat 43°57'05", long 113°40'30", in NW¼NE¼SW¼ sec.12, T.7 N., R.23 E., Custer County, Hydrologic Unit 17040218, on gate-control tower of Mackay Dam on Big Lost River, and 4 mi northwest of Mackay.

DRAINAGE AREA.--788 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1919 to current year.

REVISED RECORDS.--WDR ID-87-1: 1985-86 (M).

GAGE.--Water-stage recorder. Datum of gage is 6,000 ft, Utah Construction Co. datum, or 6,000.4 ft above NGVD of 1929. Prior to Oct. 15, 1959, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earth- and rock-fill dam, which was reconstructed in 1917-18; storage impounded by original dam not recorded. Crest of spillway was raised 5 ft in September 1956. Capacity is 44,370 acre-ft between gage heights 7.0 and 66.5 ft, crest of spillway. Dead storage reported to be about 125 acre-ft. Water is used for irrigation of about 33,000 acres in Big Lost River irrigation district. About 12,700 acres irrigated from Big Lost River and tributaries above reservoir by surface diversions, and about 10,200 acres irrigated by subirrigation. Considerable seepage around dam because of its porous foundation, but the greater part of this water returns to Big Lost River between reservoir and station below reservoir, near Mackay. Prior to Oct. 1, 1959, contents below 1,000 acre-ft may be in error at times, as readings at gage were too low because of fall in outlet channel. Figures given herein represent usable contents.

COOPERATION.--Capacity table furnished by Water District 34.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 46,070 acre-ft May 14, 1976, gage height, 67.73 ft; no available contents during periods in 1919-20, 1924, 1926, 1929, 1931-35, 1974; minimum gage height observed, 6.3 ft, Aug. 5, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 27,800 acre-ft May 13, gage height 53.01 ft; minimum observed contents, 260 acre-ft Aug. 7, gage height, 8.48 ft; no useable contents Oct. 1-16 when natural flow was passing through the reservoir.

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	3850	9760	15300	19600	22600	25500	27400	15400	12200	---	---
2	---	4050	10000	15400	19700	22700	25600	27500	15900	11900	---	---
3	---	4240	10200	15600	19800	22800	25700	27500	16400	11500	---	---
4	---	4430	10400	15700	19900	23000	25700	27600	16600	11000	---	---
5	---	4610	10600	15900	20000	23000	25800	27600	16800	10500	---	---
6	---	4800	10800	16000	20200	23200	25800	27600	16800	10100	---	---
7	---	4970	11000	16200	20300	23300	25900	27700	16800	9570	260	---
8	---	5160	11200	16300	20400	23400	26000	27700	16800	9080	---	---
9	---	5340	11400	16500	20500	23400	26000	27700	16800	8580	---	---
10	---	5530	11600	16600	20600	23600	26100	27800	16700	8110	---	---
11	---	5720	11800	16700	20800	23600	26200	27800	16500	7620	---	---
12	---	5930	11800	16900	20900	23800	26200	27800	16300	7100	---	---
13	---	6140	12100	17000	21000	23800	26300	27400	16000	6590	---	---
14	---	6340	12300	17100	21100	23900	26400	26800	15600	6060	---	---
15	---	6540	12500	17300	21200	24000	26500	26100	15200	5540	---	---
16	---	6740	12700	17400	21300	24100	26500	25500	14900	5040	---	---
17	980	6950	12900	17600	21400	24200	26600	24800	14600	4560	---	---
18	1120	7150	13000	17700	21500	24300	26700	24000	14300	4090	---	---
19	1260	7340	13200	17800	21600	24400	26700	23100	14100	3640	---	---
20	1440	7540	13400	18000	21700	24500	26800	22300	13900	3150	---	---
21	1630	7740	13600	18100	21800	24600	26900	21600	13600	2700	---	---
22	1860	7940	13700	18300	21900	24700	26900	20900	13500	2280	---	---
23	2070	8140	13900	18400	22000	24800	27000	20200	13400	1920	---	---
24	2260	8330	14000	18500	22200	24900	27000	19600	13300	1580	---	---
25	2450	8530	14200	18700	22200	25000	27100	18900	13200	1260	---	---
26	2640	8730	14400	18800	22300	25000	27100	18200	13100	970	---	---
27	2840	8930	14500	18900	22400	25100	27200	17400	13000	670	---	---
28	3050	9150	14700	19100	22600	25200	27300	16700	12800	350	---	---
29	3250	9340	14800	19200	---	25300	27300	15900	12700	---	---	---
30	3450	9550	15000	19300	---	25400	27400	15300	12400	---	---	270
31	3640	---	15100	19400	---	25400	---	15200	---	300	270	---
MAX	---	9550	15100	19400	22600	25400	27400	27800	16800	---	---	---
MIN	---	3850	9760	15300	19600	22600	25500	15200	12400	---	---	---
†	19.76	31.32	39.18	44.42	47.84	50.73	52.61	39.23	35.58	8.67	8.54	8.53
‡	3250	5910	5550	4300	3200	2800	2000	-12200	-2800	-12100	-30	0
CAL YR 2001	† 1200											
WTR YR 2002	† -120											

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

MUD LAKE-LOST RIVER BASINS

13127000 BIG LOST RIVER BELOW MACKAY RESERVOIR, NEAR MACKAY, ID

LOCATION.--Lat 43°56'21", long 113°38'54", in SW<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> sec.18, T.7 N., R.24 E., Custer County, Hydrologic Unit 17040218, on left bank 1.4 mi downstream from head of Sharp ditch, 1.6 mi downstream from Mackay Reservoir, and 2.5 mi northwest of Mackay.

DRAINAGE AREA.--813 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1903 to August 1906, and May 1912 to March 1915 (published as "near Mackay"), January 1919 to current year.

REVISED RECORDS.--WSP 1347: 1904-6.

GAGE.--Water-stage recorder. Datum of gage is 5,946.39 ft above NGVD of 1929. Nonrecording gage prior to May 12, 1912, and June 5, 1912 to Apr. 28, 1913, at sites within 1 mi upstream at different datums; May 12 to June 4, 1912, at site 1.5 mi upstream (above Sharp ditch) at different datum; Apr. 29, 1913 to Mar. 15, 1915, at site 1 mi downstream (below Streeter ditch) at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station equipment includes satellite telemetry. Flow completely regulated by Mackay Reservoir (see sta 13126000). Sharp ditch is only diversion between station and reservoir; about 12,700 acres of land are irrigated by diversions from river and tributaries above reservoir by surface diversions, and 10,200 acres irrigated by subirrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,990 ft<sup>3</sup>/s June 10, 1921, June 6, 1986; maximum gage height, 6.08 ft, June 6, 1986; minimum, 16 ft<sup>3</sup>/s Oct. 27, 1967, gage height, 1.11 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 554 ft<sup>3</sup>/s May 18, 19, gage height, 2.80 ft; minimum, 39 ft<sup>3</sup>/s Nov. 12, 13, gage height, 1.37 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	59	48	58	78	88	93	92	479	464	144	150
2	159	60	47	58	78	88	93	84	464	460	148	146
3	160	62	47	58	78	88	94	85	441	457	148	145
4	162	64	49	58	79	88	98	85	439	452	149	143
5	163	65	54	58	81	88	98	85	473	446	149	143
6	169	66	55	e60	81	88	98	87	516	441	145	148
7	170	68	55	e65	81	88	98	88	534	436	143	150
8	172	63	55	e70	83	88	98	88	534	430	143	150
9	172	59	56	e70	83	89	98	88	523	419	143	147
10	170	59	56	70	83	90	97	88	509	414	143	146
11	175	60	56	72	83	90	95	88	479	417	143	146
12	175	50	56	72	83	90	95	88	462	421	141	145
13	175	49	56	72	83	90	95	271	465	427	140	145
14	121	55	56	73	83	90	96	430	497	422	137	143
15	92	51	55	74	83	90	95	427	497	422	134	142
16	111	52	55	74	83	91	95	395	509	416	133	138
17	109	53	55	74	83	93	95	406	522	403	132	140
18	108	52	55	74	83	93	95	510	519	395	136	137
19	106	53	55	74	83	93	95	532	513	396	136	134
20	91	54	56	74	84	93	95	474	500	395	132	132
21	78	55	62	75	85	93	95	466	492	389	130	131
22	63	55	62	76	85	93	95	468	498	371	130	135
23	67	56	62	76	85	93	95	457	497	341	130	137
24	69	56	62	76	85	93	95	452	480	315	131	139
25	71	56	61	76	85	93	95	456	468	304	139	140
26	69	53	60	77	85	93	95	466	465	284	143	141
27	64	48	60	78	85	93	95	474	462	262	144	144
28	59	48	60	78	87	93	95	481	466	229	149	146
29	62	48	60	78	---	93	95	484	470	197	149	146
30	65	48	59	78	---	93	95	460	467	177	150	149
31	62	---	58	78	---	93	---	462	---	153	152	---
TOTAL	3647	1677	1743	2204	2318	2819	2866	9617	14640	11555	4366	4278
MEAN	117.6	55.90	56.23	71.10	82.79	90.94	95.53	310.2	488.0	372.7	140.8	142.6
MAX	175	68	62	78	87	93	98	532	534	464	152	150
MIN	59	48	47	58	78	88	93	84	439	153	130	131
AC-FT	7230	3330	3460	4370	4600	5590	5680	19080	29040	22920	8660	8490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2002, BY WATER YEAR (WY)												
MEAN	169.4	106.5	110.6	121.5	129.0	146.9	158.8	479.5	947.7	671.6	409.6	228.0
MAX	487	660	476	292	304	544	516	1193	2011	1652	895	635
(WY)	1924	1984	1984	1984	1984	1969	1984	1958	1965	1995	1984	1965
MIN	59.5	45.1	56.2	71.1	82.2	90.9	93.2	116	203	127	113	99.8
(WY)	1951	1955	2002	2002	1938	2002	1989	1933	1934	1934	1934	1940

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1904 - 2002	
ANNUAL TOTAL	63032		61730			
ANNUAL MEAN	172.7		169.1		307.2	
HIGHEST ANNUAL MEAN					658	
LOWEST ANNUAL MEAN					128	
HIGHEST DAILY MEAN	620		534		2990	
LOWEST DAILY MEAN	47		47		22	
ANNUAL SEVEN-DAY MINIMUM	48		48		23	
ANNUAL RUNOFF (AC-FT)	125000		122400		222600	
10 PERCENT EXCEEDS	484		463		745	
50 PERCENT EXCEEDS	101		95		158	
90 PERCENT EXCEEDS	56		56		80	

e Estimated

MUD LAKE-LOST RIVER BASINS

13132500 BIG LOST RIVER NEAR ARCO, ID

LOCATION.--Lat 43°34'56", long 113°16'14", in SW¼SE¼SW¼ sec.17, T.3 N., R.27 E., Arco South quadrangle, Butte County, Hydrologic Unit 17040218, on right bank 0.4 mi downstream from slough entering from left bank, and 4 mi southeast of Arco.

DRAINAGE AREA.--1,410 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--August 1946 to September 1961, May 1966 to September 1980, March to September 1981, May 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,240 ft above NGVD of 1929, by barometer. Prior to Oct. 14, 1952, at site 800 ft upstream at datum 3.08 ft higher.

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry. Flow regulated by Mackay Reservoir (see sta 13126000). Station is below all large diversions for irrigation in Big Lost River valley. About 57,500 acres of land irrigated by diversions from river and tributaries and by ground-water withdrawals above station. About 10,200 acres irrigated by subirrigation above Mackay Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft<sup>3</sup>/s July 5, 1967, gage height, 7.68 ft; no flow for long periods many years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1965, reached a stage of 8.03 ft, from floodmarks, discharge, 2,500 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--No flow for entire year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

MEAN	79.06	85.43	72.87	59.37	61.99	83.04	95.05	129.6	250.2	140.6	48.52	69.77
MAX	371	759	614	347	314	390	653	841	1118	918	502	395
(WY)	1985	1984	1984	1984	1984	1984	1969	1984	1983	1967	1984	1984
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1961	1961	1989	1961	1961	1989	1961	1961	1960	1961	1960	1960

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1946 - 2002
ANNUAL TOTAL	0.00	0.00	
ANNUAL MEAN	0.000	0.000	97.21
HIGHEST ANNUAL MEAN			546 1984
LOWEST ANNUAL MEAN			0.000 1989
HIGHEST DAILY MEAN	0.00	0.00	1840 Oct 1 1967
LOWEST DAILY MEAN	0.00	0.00	0.00 May 14 1960
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	0.00 May 14 1960
ANNUAL RUNOFF (AC-FT)	0.00	0.00	70420
10 PERCENT EXCEEDS	0.00	0.00	248
50 PERCENT EXCEEDS	0.00	0.00	32
90 PERCENT EXCEEDS	0.00	0.00	0.00

MUD LAKE-LOST RIVER BASINS

13132513 INEEL DIVERSION AT HEAD NEAR ARCO, ID

LOCATION.--Lat 43°30'50", long 113°05'01", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.11, T.2 N., R.28 E., Butte County, Hydrologic Unit 17040218, on left bank, 0.05 mi south of head of INEEL diversion, 0.4 mi north of intersection of gravel road from highway 20-26 with road on top of dike, and 13.2 mi southeast of Arco.

PERIOD OF RECORD.--1965-68 (discharge measurements only); July 1984 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,000.00 ft above NGVD of 1929 (levels by USGS).

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry. Flow is regulated by Mackay Reservoir (see sta 13126000) and is diverted from the Big Lost River for purposes of flood control at the Idaho National Engineering & Environmental Laboratory facilities.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,290 ft<sup>3</sup>/s June 9, 1986; no flow on many days.

EXTREMES FOR CURRENT YEAR.--No flow for entire year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
CAL YR 2001	TOTAL 0.00	MEAN .000	MAX .00	MIN .00	AC-FT .00								
WTR YR 2002	TOTAL 0.00	MEAN .000	MAX .00	MIN .00	AC-FT .00								

MUD LAKE-LOST RIVER BASINS

13132515 INEEL DIVERSION AT OUTLET OF SPREADING AREA A NEAR ARCO, ID

LOCATION.--Lat 43°29'44", long 113°04'20", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.13, T.2 N., R.28 E., Butte County, Hydrologic Unit 17040218, on left bank, 1.4 mi south of head of INEEL diversion, 0.05 mi south of outlet of spreading area A, and 14.5 mi southeast of Arco.

PERIOD OF RECORD.--1965-68 (discharge measurements only); June 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,000.00 ft above NGVD of 1929 (levels by USGS).

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry. Flow is regulated by Mackay Reservoir (see sta 13126000) and is diverted from the Big Lost River at the INEEL Diversion at Head (see sta 13132513) for purposes of flood control at the Idaho National Engineering & Environmental Laboratory site.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 989 ft<sup>3</sup>/s June 9, 1986; no flow on many days.

EXTREMES FOR CURRENT YEAR.--No flow for entire year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CAL YR 2001	TOTAL 0.00	MEAN .000	MAX .00	MIN .00	AC-FT .00							
WTR YR 2002	TOTAL 0.00	MEAN .000	MAX .00	MIN .00	AC-FT .00							

MUD LAKE-LOST RIVER BASINS

13132520 BIG LOST RIVER BELOW INEEL DIVERSION NEAR ARCO, ID

LOCATION.--Lat 43°30'57", long 113°04'55", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.11, T.2 N., R.28 E., Butte County, Hydrologic Unit 17040218, on right bank, 0.2 mi north of the head of the INEEL diversion, 4.5 mi south of State Highway 20-26 bridge over the Big Lost River, and 13.2 mi southeast of Arco.

PERIOD OF RECORD.--1965-68 (discharge measurements only); June 1984 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,000.00 ft above NGVD of 1929 (levels by U.S. Geological Survey).

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry. Flow regulated by Mackay Reservoir (see sta 13126000) and INEEL diversion (see sta 13132513). Station is below all diversions for irrigation in the Big Lost River Valley and is below the Idaho National Engineering & Environmental Laboratory diversion for flood control.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 468 ft<sup>3</sup>/s June 13, 1997; no flow on many days.

EXTREMES FOR CURRENT YEAR.--No flow for entire year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CAL YR 2001	TOTAL 0.00	MEAN 0.000	MAX 0.00	MIN 0.00	AC-FT 0.00							
WTR YR 2002	TOTAL 0.00	MEAN 0.000	MAX 0.00	MIN 0.00	AC-FT 0.00							

## MUD LAKE-LOST RIVER BASINS

## 13132535 BIG LOST RIVER AT LINCOLN BOULEVARD BRIDGE NEAR ATOMIC CITY, ID

LOCATION.--Lat 43°34'26", long 112°56'36", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.24, T.3 N., R.29 E., Butte County, Hydrologic Unit 17040218, on left bank, 2.6 mi north of Lincoln Boulevard-Portland Avenue intersection, and 18.5 mi southeast of Arco.

PERIOD OF RECORD.--1951-53, 1957, 1965-68 (discharge measurements only); July 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,900.00 ft above NGVD of 1929 (levels by USGS).

REMARKS.--Records good. Station equipment includes satellite telemetry. Flow regulated by Mackay Reservoir (see sta 13126000) and INEEL diversion (see sta 13132513). Station is below all diversions for irrigation in the Big Lost River Valley and is below the Idaho National Engineering Laboratory diversion for flood control. In 1992, the bridge below the gage was replaced by three (3) culverts, significantly changing the control for the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 434 ft<sup>3</sup>/s June 17, 1997; no flow on many days.

EXTREMES FOR CURRENT YEAR.--No flow for entire year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CAL YR 2001	TOTAL 0.00	MEAN 0.000	MAX 0.00	MIN 0.00	AC-FT 0.00							
WTR YR 2002	TOTAL 0.00	MEAN 0.000	MAX 0.00	MIN 0.00	AC-FT 0.00							

e Estimated



MUD LAKE-LOST RIVER BASINS

13132565 BIG LOST RIVER ABOVE BIG LOST RIVER SINKS NEAR HOWE, ID

LOCATION.--Lat 43°43'24", long 112°52'32", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.27, T.5 N., R.30 E., Butte County, Hydrologic Unit 17040218, on right bank 3.0 mi northwest of Lincoln Boulevard, and 6.5 mi southeast of Howe.

PERIOD OF RECORD.--1972-85 (discharge measurements only); March 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,805 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow is regulated by Mackay Reservoir (see sta 13126000) and INEEL diversion (see sta 13132513). Station is below all diversions for irrigation in the Big Lost River Valley and is below the Idaho National Engineering & Environmental Laboratory diversion for flood control.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 442 ft<sup>3</sup>/s June 19, 1997; no flow on many days.

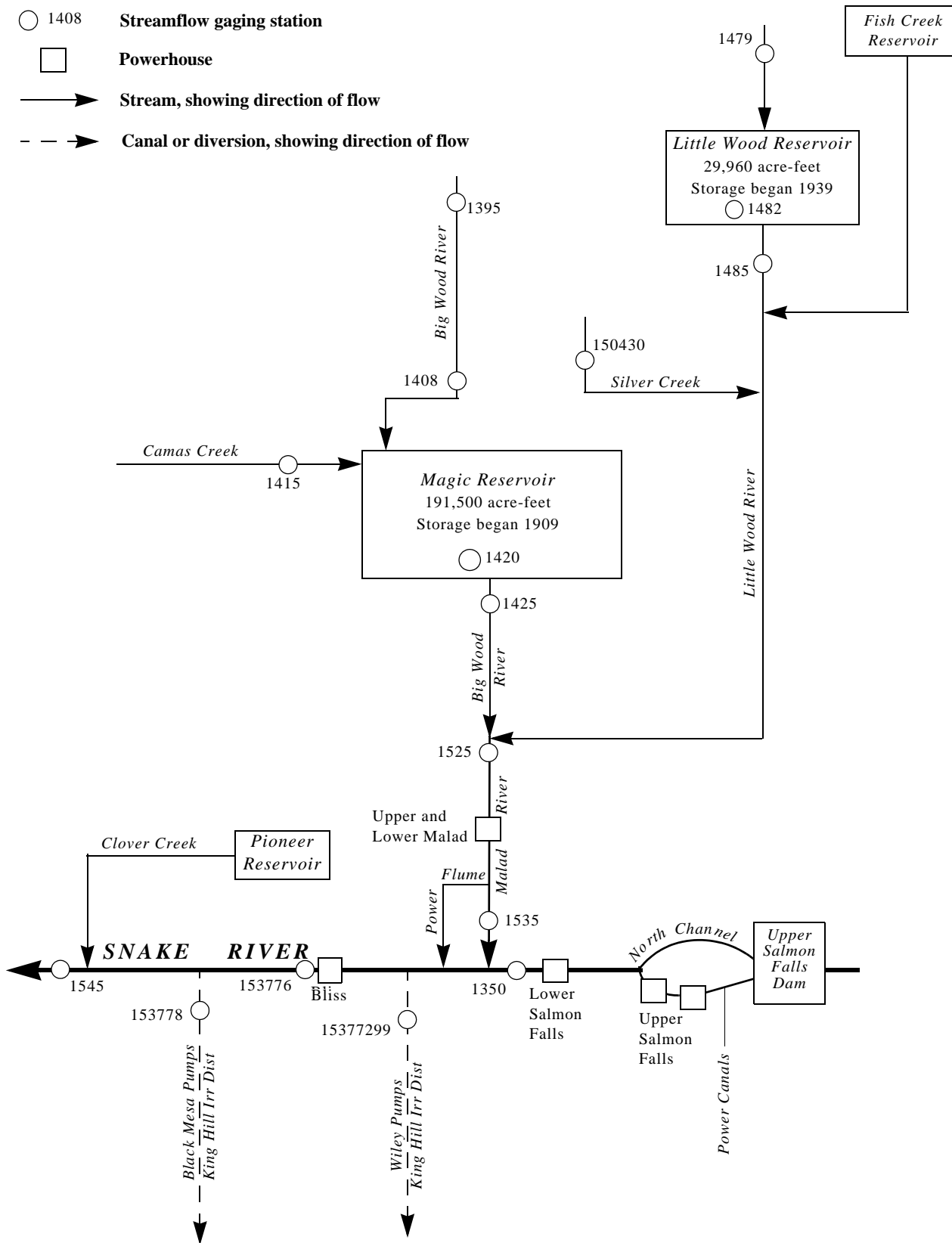
EXTREMES FOR CURRENT YEAR.--No flow for entire year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00	
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00	
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---	
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	
CAL YR 2001	TOTAL 0.00	MEAN 0.000	MAX 0.00	MIN 0.00	AC-FT 0.00								
WTR YR 2002	TOTAL 0.00	MEAN 0.000	MAX 0.00	MIN 0.00	AC-FT 0.00								

**EXPLANATION**

- 1408     **Streamflow gaging station**
- **Powerhouse**
- **Stream, showing direction of flow**
- - - →   **Canal or diversion, showing direction of flow**



**Figure 15.** Schematic showing gaging stations in Snake River Basin between Upper Salmon Falls and King Hill.

SNAKE RIVER MAIN STEM

13135000 SNAKE RIVER BELOW LOWER SALMON FALLS, NEAR HAGERMAN, ID

LOCATION.--Lat 42°50'55", long 114°54'02", in NW<sup>1</sup>/<sub>4</sub> sec.2, T.7 S., R.13 E., Gooding County, Hydrologic Unit 17040212, on right bank, 0.5 mi downstream from Lower Salmon Falls powerplant, 1 mi upstream from Malad River, 2.2 mi north of Hagerman, and at mile 572.5.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for October 1937, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 2,727.7 ft above NGVD of 1929 (stadia levels). Prior to Jan. 3, 1950, at site 340 ft upstream.

REMARKS.--Flow regulated by American Falls Reservoir, 141.6 mi upstream. Diurnal fluctuation caused by hydroelectric plants upstream. At times, practically entire flow is diverted at Milner during the irrigation season; only minor diversions below Milner. Most of the percolation upstream into the Snake River Plain aquifer returns above station, including some water diverted from the Malad River. Diversions above station for irrigation of about 2,330,000 acres, of which about 665,000 acres are irrigated by withdrawals from ground water. There are about 83,000 acres irrigated below station.

COOPERATION.--Discharge records furnished by Idaho Power and reviewed by U.S. Geological Survey beginning April 2001.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,500 ft<sup>3</sup>/s June 21, 1997, gage height, 18.81 ft; minimum, probably less than 100 ft<sup>3</sup>/s Jan. 10, 11, 1950, when river was below intake pipes; minimum daily, 3,970 ft<sup>3</sup>/s Jan. 8, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6,410 ft<sup>3</sup>/s Sept. 30; minimum daily, 4,300 ft<sup>3</sup>/s June 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5930	5980	5790	5680	5600	5310	5170	4930	4560	4400	5070	5360
2	5970	6030	5930	5740	5400	5230	5160	4990	4800	4430	4770	5420
3	5820	5950	5900	5700	5600	5220	5100	4940	4870	4430	4840	5400
4	6230	6050	5680	5610	5420	5220	4710	4840	4910	4410	4730	5320
5	5620	5910	5830	5730	5380	5240	4680	4690	4840	4310	4910	5320
6	6000	6220	5900	5700	5380	5260	4350	4800	4650	4500	4810	5200
7	6140	5910	5810	5750	5400	5570	4560	4730	4670	4400	5190	5620
8	5980	6230	5840	5600	5440	5300	4650	4910	4580	4380	4880	5990
9	6020	5990	5690	5760	5410	5360	4620	5040	4780	4470	5070	5710
10	6120	6210	5780	5790	5400	5260	4550	5050	5110	4430	4690	5460
11	6170	6190	5800	5680	5360	5280	4570	4870	4860	4510	4770	5650
12	6290	6170	5790	5610	5470	5260	4480	4870	4920	4330	5320	5910
13	6220	6180	5710	5660	5260	5210	4540	4840	4640	4590	4840	5650
14	6240	6080	5880	5710	5380	5280	4510	4460	4620	4310	4970	5580
15	6360	6030	5830	5560	5400	5270	4540	4570	4460	4540	4700	5500
16	6350	6000	5800	5610	5360	5260	4430	4720	4530	4440	4780	5040
17	6010	6040	5790	5500	5260	5320	4630	4580	4380	4950	4920	5720
18	6090	5920	5680	5650	5360	5400	4800	4610	4460	4970	4980	5770
19	6010	6030	5860	5500	5430	5310	4900	4570	4550	4940	4990	5660
20	6210	5950	5790	5470	5330	5280	4710	4620	4460	4810	4860	6250
21	6000	5970	5740	5590	5790	5330	4560	4820	4630	5030	5180	5790
22	5870	6010	5800	5570	5510	5290	4680	4810	4570	5070	4950	5760
23	5820	5880	5720	5570	5420	5230	4790	4920	4510	5110	5310	5800
24	5950	5940	5680	5640	5580	5390	4890	4750	4640	4840	5130	6210
25	5780	5920	5680	5520	5380	5330	5030	4690	4530	4800	4990	5940
26	5940	5830	5620	5520	5280	5440	4850	4750	4460	5130	5160	5670
27	5860	5920	5760	5540	5340	5160	5070	4710	4350	4730	5280	5820
28	5980	6100	5690	5670	5110	5280	4830	4520	4540	4570	5190	5980
29	5900	6130	5700	5470	---	5220	4940	4630	4300	5360	5290	5930
30	6000	5490	5610	5520	---	5140	4780	4620	4550	4620	5400	6410
31	5990	---	5710	5460	---	5170	---	4410	---	4990	5040	---
TOTAL	186870	180260	178790	174080	151450	163820	142080	147260	138730	144800	155010	170840
MEAN	6028	6009	5767	5615	5409	5285	4736	4750	4624	4671	5000	5695
MAX	6360	6230	5930	5790	5790	5570	5170	5050	5110	5360	5400	6410
MIN	5620	5490	5610	5460	5110	5140	4350	4410	4300	4310	4690	5040
AC-FT	370700	357500	354600	345300	300400	324900	281800	292100	275200	287200	307500	338900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2002, BY WATER YEAR (WY)

MEAN	8681	9016	9332	9679	9720	9863	11060	10120	10370	6709	6643	7403
MAX	16610	18910	17490	19770	23680	25260	25250	24090	29800	11620	9373	13060
(WY)	1985	1985	1984	1984	1997	1997	1971	1984	1997	1983	1997	1997
MIN	5785	5791	5648	5448	5304	4881	4736	4459	4467	4671	4716	5192
(WY)	1993	1995	1995	2001	1995	1992	2002	1992	1992	2002	1992	1992

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1938 - 2002	
ANNUAL TOTAL	2016760		1933990			
ANNUAL MEAN	5255		5299		9040	
HIGHEST ANNUAL MEAN					15660	1984
LOWEST ANNUAL MEAN					5299	2002
HIGHEST DAILY MEAN	7050	May 14	6410	Sep 30	38000	Jun 21 1997
LOWEST DAILY MEAN	4470	Aug 11	4300	Jun 29	3970	Jul 8 1951
ANNUAL SEVEN-DAY MINIMUM	4820	Jun 20	4400	Jun 29	4330	Jun 6 1992
ANNUAL RUNOFF (AC-FT)	4000000		3836000		6549000	
10 PERCENT EXCEEDS	6010		5990		15300	
50 PERCENT EXCEEDS	5490		5320		7360	
90 PERCENT EXCEEDS	5040		4550		5630	

MALAD RIVER BASIN

13139500 BIG WOOD RIVER AT HAILEY, ID

LOCATION.--Lat 43°31'02", long 114°19'14", in SW¼NE¼SW¼ sec.9, T.2 N., R.18 E., Blaine County, Hydrologic Unit 17040219, on left bank, 15 ft upstream from county road crossing, 0.2 mi southwest of Hailey, 0.4 mi upstream from Croy Creek, and at mile 91.0.

DRAINAGE AREA.--640 mi<sup>2</sup>, approximately. Mean elevation, 7,620 ft.

PERIOD OF RECORD.--July to December 1889, June 1915 to current year. Published as "Wood River at Hailey" in 1889. Previously published as "Big Wood River and Big Wood Slough combined discharge at Hailey, Idaho".

REVISED RECORDS.--WDR ID-81-1: 1974-80 average discharge.

GAGE.--Water-stage recorder. Datum of gage is 5,295.42 ft above NGVD of 1929. July to December 1889, nonrecording gage at nearby site at different datum. June 11, 1915 to Nov. 15, 1934, nonrecording gages at present site at different datum. Nov. 16, 1934 to Oct. 15, 1970, at datum 2.00 ft higher. Nov. 10, 1971 to Sept. 30, 1972, nonrecording gages at different sites at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Station equipment includes telemetry. Diversions above station for irrigation of about 10,000 acres (1966 determination), of which about 1,200 acres are below station. Storage above station is negligible.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6,150 ft<sup>3</sup>/s May 30, 1983, gage height, 7.93 ft; maximum gage height, 10.66 ft, June 12, 1921, present datum; minimum daily, 15 ft<sup>3</sup>/s Dec. 27, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,880 ft<sup>3</sup>/s June 1, 2, gage height, 3.97 ft; minimum daily, 84 ft<sup>3</sup>/s Nov. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	146	103	118	e110	120	231	531	1760	499	146	104
2	93	140	111	116	e110	120	272	547	1710	453	140	100
3	94	138	112	119	e110	120	279	580	1420	413	139	97
4	94	136	108	116	e110	120	298	593	1240	402	144	95
5	96	135	102	111	e110	118	329	610	1130	379	148	101
6	99	134	105	119	e110	122	356	591	1180	358	142	109
7	102	132	107	121	118	127	405	576	1160	338	138	123
8	101	126	104	121	117	122	414	541	1090	322	137	119
9	104	119	107	122	113	e110	419	514	953	302	134	114
10	109	125	104	108	e110	123	397	490	843	287	130	109
11	118	128	e100	113	117	124	387	460	755	278	126	105
12	124	128	e95	123	e110	130	373	443	681	266	122	103
13	123	127	101	120	e110	130	408	471	638	257	118	98
14	123	127	114	112	e110	120	551	541	689	248	114	96
15	124	127	109	112	e120	116	867	628	749	242	108	94
16	122	125	109	e110	117	124	675	647	827	238	105	95
17	123	124	116	104	123	119	585	659	884	242	104	98
18	127	128	110	e100	126	112	511	703	928	234	104	102
19	125	125	115	e110	122	122	463	838	835	235	103	101
20	124	124	117	e110	123	122	429	1100	744	229	103	97
21	124	130	115	117	114	124	408	1060	708	218	105	97
22	123	132	104	115	123	130	398	939	773	206	106	98
23	130	127	e95	e110	126	139	424	820	712	203	106	96
24	132	118	e95	e110	126	147	421	734	694	189	110	95
25	128	114	e100	114	114	153	424	680	699	186	107	96
26	131	111	e110	118	e110	152	440	663	676	187	104	99
27	130	100	116	113	e110	152	451	679	639	179	111	101
28	130	84	119	e110	e120	158	449	757	613	174	115	103
29	132	93	118	e100	---	168	458	920	576	168	109	105
30	133	99	117	e100	---	180	495	1190	544	158	109	110
31	149	---	118	e110	---	203	---	1680	---	153	107	---
TOTAL	3661	3702	3356	3502	3239	4127	13017	22185	26850	8243	3694	3060
MEAN	118.1	123.4	108.3	113.0	115.7	133.1	433.9	715.6	895.0	265.9	119.2	102.0
MAX	149	146	119	123	126	203	867	1680	1760	499	148	123
MIN	93	84	95	100	110	110	231	443	544	153	103	94
AC-FT	7260	7340	6660	6950	6420	8190	25820	44000	53260	16350	7330	6070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2002, BY WATER YEAR (WY)

	203.8	188.3	160.6	155.1	151.7	187.8	523.1	1271	1464	654.2	264.3	204.6
MEAN	203.8	188.3	160.6	155.1	151.7	187.8	523.1	1271	1464	654.2	264.3	204.6
MAX	427	430	324	307	275	475	1418	3039	3272	2196	685	446
(WY)	1984	1984	1984	1997	1984	1986	1943	1969	1983	1995	1965	1965
MIN	84.2	92.4	95.1	79.4	95.4	108	151	201	235	111	74.9	63.4
(WY)	1935	1932	1932	1932	1932	1932	1977	1977	1934	1931	1934	1994

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1916 - 2002
ANNUAL TOTAL	78108	98636	
ANNUAL MEAN	214.0	270.2	453.1
HIGHEST ANNUAL MEAN			842
LOWEST ANNUAL MEAN			170
HIGHEST DAILY MEAN	883	1760	5450
LOWEST DAILY MEAN	76	84	15
ANNUAL SEVEN-DAY MINIMUM	79	96	57
ANNUAL RUNOFF (AC-FT)	154900	195600	328300
10 PERCENT EXCEEDS	457	680	1170
50 PERCENT EXCEEDS	149	124	208
90 PERCENT EXCEEDS	95	101	121

e Estimated

MALAD RIVER BASIN

13140800 BIG WOOD RIVER AT STANTON CROSSING NEAR BELLEVUE, ID

LOCATION.--Lat 43°19'50", long 114°19'06", in NW¼NE¼NE¼ sec.21, T.1 S., R.18 E., Blaine County, Hydrologic Unit 17040219, on right bank, at upstream end of Mahoney Flat, 2.8 mi upstream from maximum flow line of Magic Reservoir, 4.1 mi upstream from Camas Creek, 9.5 mi southwest of Bellevue, and at mile 77.0.

DRAINAGE AREA.--820 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--September 1996 to current year. Records from July 1911 to Sept. 1996, (no winter records prior to Oct. 1943, except water years 1916, 1921-22, 1940-41) at downstream site published as "near Bellevue" (sta 13141000) are not equivalent because of inflow between sites.

GAGE.--Water-stage recorder. Elevation of gage is 4,830 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Diversions above station for irrigation of about 21,800 acres, of which about 400 acres are irrigated by withdrawals from ground water (1966 determination). Storage above station is negligible.

COOPERATION.--Idaho Department of Water Resources and Water District 37.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge 4,670 ft<sup>3</sup>/s June 5, 1997; minimum daily, 7.6 ft<sup>3</sup>/s Jan. 18-20, 25, Feb. 1, 2, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,820 ft<sup>3</sup>/s June 2; minimum daily, 7.6 ft<sup>3</sup>/s Jan. 18-20, 25, Feb. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	9.8	11	8.1	7.6	8.6	12	216	1710	107	32	18
2	10	9.8	12	8.1	7.6	8.7	11	230	1820	72	27	18
3	10	9.9	12	8.7	7.7	8.8	11	241	1450	58	27	18
4	10	9.9	11	8.2	8.1	8.8	24	255	1150	45	25	19
5	10	9.9	11	8.1	8.0	9.0	61	261	989	40	25	20
6	11	9.8	11	8.2	7.9	9.3	94	258	960	36	24	21
7	11	9.5	11	8.1	7.7	9.5	139	239	948	33	23	22
8	11	9.3	10	8.1	8.3	9.4	184	173	875	32	22	22
9	11	9.3	10	8.1	8.1	9.4	200	118	744	30	21	22
10	10	9.5	10	8.1	8.1	9.4	205	88	618	29	22	22
11	10	9.9	10	8.1	8.4	9.4	193	66	467	27	19	20
12	10	9.9	10	8.1	8.6	9.9	184	52	338	28	20	18
13	10	9.9	10	8.1	8.3	9.9	191	45	260	29	20	22
14	9.9	9.7	11	8.1	8.1	9.9	237	52	252	34	18	23
15	9.9	9.8	10	8.1	8.2	9.9	665	68	295	39	18	23
16	9.6	9.9	9.9	8.1	8.3	9.9	579	83	362	39	19	24
17	9.7	10	10	7.7	8.4	9.9	470	82	416	40	19	24
18	9.4	10	9.7	7.6	8.1	9.9	405	89	460	42	19	23
19	9.5	9.9	9.5	7.6	8.6	9.9	370	155	442	43	18	23
20	9.9	9.9	9.3	7.6	9.2	10	325	368	358	42	18	22
21	9.7	10	9.3	8.0	8.5	11	295	556	301	42	18	21
22	9.5	12	9.3	8.0	8.2	12	267	481	326	41	19	21
23	10	11	9.2	7.9	8.4	13	265	361	315	40	20	20
24	9.9	11	8.8	7.7	8.7	13	274	284	273	38	19	20
25	9.9	11	8.9	7.6	8.4	14	275	218	258	36	19	19
26	9.9	11	8.8	7.9	8.4	14	282	185	240	36	19	18
27	9.9	11	8.7	8.0	8.5	14	274	167	201	36	18	18
28	9.8	10	8.7	7.9	8.2	14	238	191	184	35	18	18
29	9.7	11	8.7	8.1	---	14	215	268	159	34	18	17
30	9.8	11	8.7	8.0	---	14	193	457	133	33	18	17
31	9.9	---	8.5	7.8	---	13	---	1220	---	32	18	---
TOTAL	309.9	304.6	306.0	247.8	230.6	335.5	7138	7527	17304	1248	640	613
MEAN	9.997	10.15	9.871	7.994	8.236	10.82	237.9	242.8	576.8	40.26	20.65	20.43
MAX	11	12	12	8.7	9.2	14	665	1220	1820	107	32	24
MIN	9.4	9.3	8.5	7.6	7.6	8.6	11	45	133	27	18	17
AC-FT	615	604	607	492	457	665	14160	14930	34320	2480	1270	1220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001	2002
MEAN	74.18	83.84	36.42	58.66	61.26	115.7	427.6
MAX	176	164	62.2	202	118	250	865
(WY)	1998	1998	1999	1997	1997	1997	1997
MIN	10.0	10.2	9.87	7.99	8.24	10.8	79.5
(WY)	2002	2002	2002	2002	2002	2001	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1996 - 2002
ANNUAL TOTAL	15369.7	36204.4	
ANNUAL MEAN	42.11	99.19	332.1
HIGHEST ANNUAL MEAN			723
LOWEST ANNUAL MEAN			46.7
HIGHEST DAILY MEAN	287	1820	4670
LOWEST DAILY MEAN	8.5	7.6	7.6
ANNUAL SEVEN-DAY MINIMUM	8.7	7.8	7.8
ANNUAL RUNOFF (AC-FT)	30490	71810	240600
10 PERCENT EXCEEDS	107	278	968
50 PERCENT EXCEEDS	19	14	72
90 PERCENT EXCEEDS	9.8	8.1	12

MALAD RIVER BASIN

13141500 CAMAS CREEK NEAR BLAINE, ID

LOCATION.--43°19'59", long 114°32'27", in NW¼SE¼ sec.15, T.1 S., R.16 E., Camas County, Hydrologic Unit 17040220, 0.2 mi downstream from Willow Creek, 2.6 mi upstream from maximum flow line of Magic Reservoir, 4 mi southeast of Blaine, and at mile 7.0.

DRAINAGE AREA.--648 mi<sup>2</sup>. Mean elevation, 5,600 ft.

PERIOD OF RECORD.--May 1912 to September 1921 and April 1923 to October 1925 (fragmentary), March 1926 to September 1944 (no winter records), October 1944 to current year. Published as "Malad River near Blaine", 1912-14.

REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,870 ft above NGVD of 1929, by barometer. Prior to June 22, 1966, at site 600 ft downstream at datum 0.66 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Mormon Reservoir on McKinney Creek, capacity, 31,240 acre-feet, and three minor reservoirs, combined capacity, 580 acre-feet. Diversions above station for irrigation of about 9,400 acres, of which about 1,500 acres are irrigated by withdrawals from ground water (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 9,780 ft<sup>3</sup>/s Apr. 8, 1943; maximum gage height, 16.2 ft, Feb. 3, 1963, from floodmark, site and datum then in use; minimum, 1.0 ft<sup>3</sup>/s June 6, 1992.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Apr. 2	0200	1,140	6.81	Apr. 7	1115	*1,570	*7.74
Minimum daily, 2.5 ft <sup>3</sup> /s Oct. 8.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	4.9	5.0	9.1	9.1	9.8	667	187	95	6.5	2.8	3.0
2	3.0	4.3	6.0	9.1	9.4	9.5	832	189	115	6.3	3.0	2.9
3	2.8	3.7	6.6	9.4	8.9	9.1	675	186	125	6.1	3.0	2.9
4	2.8	3.2	6.3	8.8	8.8	9.4	685	175	113	5.6	3.0	2.9
5	2.7	3.2	6.2	8.7	8.9	10	769	172	97	6.9	3.0	3.0
6	2.7	3.1	7.1	9.8	8.8	12	1130	159	83	7.6	3.0	3.0
7	2.6	3.1	7.4	9.7	9.4	12	1440	153	74	8.0	3.0	3.1
8	2.5	3.1	7.1	9.8	9.3	11	1080	147	64	6.8	2.9	3.1
9	2.8	3.1	7.6	10	9.2	11	833	135	58	5.7	2.9	3.1
10	2.7	3.3	7.6	8.9	8.9	13	763	134	54	5.3	3.0	3.0
11	2.7	3.3	7.4	9.4	9.6	13	789	129	50	4.4	2.9	3.0
12	2.9	3.2	6.9	9.8	9.2	14	704	119	40	3.9	2.9	3.0
13	3.0	3.2	7.2	9.0	9.3	19	670	109	34	3.6	3.0	3.1
14	3.2	3.1	7.6	9.1	9.5	17	634	106	28	3.5	2.9	3.0
15	3.5	3.2	8.0	8.9	9.1	16	676	100	23	3.4	3.0	3.1
16	3.5	3.2	8.3	8.4	9.4	16	721	97	18	3.4	3.0	3.2
17	3.4	3.3	8.6	9.6	10	15	666	94	16	3.2	3.0	3.2
18	3.4	3.7	8.4	9.1	10	14	563	93	14	3.1	3.0	3.3
19	3.2	3.8	8.7	9.2	9.9	15	492	93	13	3.1	3.0	3.2
20	3.0	3.3	8.8	9.3	10	15	408	91	12	3.1	2.9	3.8
21	3.3	3.9	8.0	9.8	9.4	16	363	103	12	3.1	2.9	4.4
22	3.4	5.0	7.7	9.3	10	18	311	114	13	3.0	2.9	4.5
23	3.5	5.2	7.8	9.2	11	21	266	110	18	3.0	3.0	4.8
24	3.6	4.3	7.7	9.6	11	26	245	107	12	3.0	2.9	5.3
25	3.9	4.3	7.9	9.9	9.4	54	227	100	11	3.0	3.0	5.4
26	3.6	4.2	7.8	10	8.8	63	206	91	10	2.8	3.0	5.6
27	3.6	3.4	8.4	10	9.5	91	204	81	9.1	2.8	3.0	5.2
28	3.6	3.2	9.0	8.7	11	100	192	75	8.3	2.8	3.0	5.3
29	3.6	3.7	8.8	8.8	---	162	186	71	8.0	2.8	3.0	5.4
30	3.8	3.9	8.8	8.7	---	212	184	71	7.4	2.8	3.0	5.4
31	4.4	---	8.9	8.7	---	467	---	81	---	2.9	3.0	---
TOTAL	99.7	109.4	237.6	287.8	266.8	1490.8	17581	3672	1234.8	131.5	91.9	113.2
MEAN	3.216	3.647	7.665	9.284	9.529	48.09	586.0	118.5	41.16	4.242	2.965	3.773
MAX	4.4	5.2	9.0	10	11	467	1440	189	125	8.0	3.0	5.6
MIN	2.5	3.1	5.0	8.4	8.8	9.1	184	71	7.4	2.8	2.8	2.9
AC-FT	198	217	471	571	529	2960	34870	7280	2450	261	182	225

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2002, BY WATER YEAR (WY)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	11.53	21.55	22.62	31.74	51.97	346.9	918.0	457.7	174.5	33.73	6.639	6.255																				
MAX (WY)	39.7	82.7	57.1	301	315	1806	2734	1552	621	165	27.7	16.5																				
MIN (WY)	1.63	2.40	2.91	5.25	6.81	28.9	19.0	3.42	1.27	1.32	1.39	1.54																				

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1971 - 2002
ANNUAL TOTAL	8511.2	25316.5	
ANNUAL MEAN	23.32	69.36	173.3
HIGHEST ANNUAL MEAN			449
LOWEST ANNUAL MEAN			13.2
HIGHEST DAILY MEAN	243	1440	5800
LOWEST DAILY MEAN	2.0	2.5	1.2
ANNUAL SEVEN-DAY MINIMUM	2.1	2.7	1.2
ANNUAL RUNOFF (AC-FT)	16880	50220	125600
10 PERCENT EXCEEDS	73	173	510
50 PERCENT EXCEEDS	6.8	8.7	22
90 PERCENT EXCEEDS	2.6	3.0	2.9

MALAD RIVER BASIN

13142000 MAGIC RESERVOIR NEAR RICHFIELD, ID

LOCATION.--Lat 43°15'19", long 114°21'25", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.18, T.2 S., R.18 E., Blaine County, Hydrologic Unit 17040219, at Magic Dam on Big Wood River, 18 mi northwest of Richfield, and at mile 67.5.

DRAINAGE AREA.--1,600 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--February 1909 to current year. Month-end contents only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1217: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is Idaho Irrigation Co. datum, which is reported to be about 137 ft below NGVD of 1929. Datum of gages prior to Oct. 1, 1942 was 4,000 ft lower. Datum of gages Oct. 1, 1942 to Sept. 30, 1974, was 800 ft higher; Oct. 1, 1974 to Sept. 30, 1988 was 4,000 ft lower.

REMARKS.--Reservoir is formed by earth and rock-fill dam completed in 1909 and raised 5 ft in 1917. Capacity is 191,500 acre-ft between gage heights 4,821.4 ft, 2.9 ft above bottom of outlet pipe, and 4,935.0 ft, top of 5-ft flashboards. Dead storage unknown. Water is used for power generation and irrigation of about 68,000 acres of land in Carey Act project of Big Wood Canal Co. Powerhouse was installed Dec. 1988. Diversions above station for irrigation of about 32,600 acres, of which about 1,900 acres are irrigated by withdrawals from ground water (1966 determination). Figures given herein represent usable contents, including bank storage.

COOPERATION.--Stage readings and capacity table provided by Water District 37.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 195,400 acre-ft May 11-13, 1969, elevation, 4,936.0 ft, present datum; no storage for several days in 1909, 1919-20, 1924, 1928, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 84,800 acre-ft May 5, elevation, 4,898.7 ft; minimum contents observed, 5,040 acre-ft Sept. 14, elevation, 4,843.2 ft.

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

4,843	4,940	4,865	24,300
4,848	7,800	4,880	46,700
4,854	12,400	4,900	87,700

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6200	8410	10800	13600	16400	18800	27700	81400	59900	33600	7470	9950
2	6320	8550	11000	13700	16500	18900	29900	82200	60700	32000	7540	10000
3	6370	8620	11100	13800	16600	19100	31700	83100	61500	30100	7600	10100
4	6430	8690	11100	13900	16700	19300	33500	84000	61900	28400	7730	10200
5	6490	8760	11200	14100	16800	19400	36900	84800	61700	27000	7860	10300
6	6540	8830	11300	14200	16900	19500	37900	84400	61500	25400	8000	10300
7	6660	8900	11400	14300	17000	19600	41900	83800	61300	23500	8140	10300
8	6720	8900	11500	14400	17100	19700	44700	83100	60900	21500	8200	10400
9	6790	8980	11600	14500	17200	19800	47200	82200	60500	19700	8270	9420
10	6850	9050	11600	14600	17200	20000	49300	81400	59900	18100	8410	8270
11	6910	9120	11600	14700	17300	20100	51500	80500	59100	16100	8480	7030
12	7030	9270	11700	14800	17300	20100	53600	79500	58000	14500	8550	5760
13	7090	9340	11800	14800	17400	20200	55700	78400	57200	12600	8620	5190
14	7150	9420	11900	14900	17500	20300	57600	77100	55500	10900	8690	5040
15	7220	9490	12100	15000	17600	20400	59500	75900	54300	8980	8760	5190
16	7280	9570	12200	15100	17700	20500	61500	74500	53000	7280	8830	5290
17	7340	9640	12300	15200	17700	20700	64800	73000	51700	5340	8900	5390
18	7410	9720	12300	15200	17800	20800	66800	71800	51000	5440	8980	5440
19	7470	9800	12400	15300	17900	20900	68800	70400	49900	5650	9050	5550
20	7540	9870	12400	15300	18100	21000	70400	69200	48800	5810	9120	5650
21	7600	9950	12500	15400	18200	21100	72000	68600	47700	5980	9190	5760
22	7670	10100	12600	15500	18300	21300	73000	68000	46600	6150	9270	5870
23	7730	10200	12700	15600	18400	21400	74300	67200	45400	6320	9340	5920
24	7800	10300	12800	15700	18500	21600	75300	66600	44100	6490	9420	5980
25	7860	10300	12900	15800	18500	22000	76300	66000	42800	6600	9490	6030
26	7860	10400	13000	15900	18600	22200	77100	65000	41600	6720	9570	6090
27	7930	10500	13100	16000	18700	22700	78200	63600	39900	6850	9640	6150
28	8070	10600	13200	16100	18700	23100	79000	62600	38500	6970	9720	6200
29	8200	10700	13300	16100	---	23600	79900	61300	36800	7090	9800	6320
30	8270	10700	13400	16200	---	24100	80700	60300	35200	7220	9870	6370
31	8340	---	13500	16200	---	26100	---	59700	---	7340	9950	---
MAX	8340	10700	13500	16200	18700	26100	80700	84800	61900	33600	9950	10400
MIN	6200	8410	10800	13600	16400	18800	27700	59700	35200	5340	7470	5040
†	4848.8	4852.0	4855.2	4858.0	4860.3	4866.3	4897.0	4886.6	4872.8	4847.3	4851.0	4845.7
‡	2190	2360	2800	2700	2500	7400	54600	-21000	-24500	-27860	2610	-3580

CAL YR 2001 ‡ -24700  
WTR YR 2002 ‡ 220

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

MALAD RIVER BASIN

13142500 BIG WOOD RIVER BELOW MAGIC DAM, NEAR RICHFIELD, ID

LOCATION.--Lat 43°15'00", long 114°21'30", in NE¼SE¼ sec.18, T.2 S., R.18 E., Blaine County, Hydrologic Unit 17040219, U.S. Bureau of Land Management lands, on right bank, 0.5 mi downstream from Magic Dam, 18 mi northwest of Richfield, and at mile 67.0.

DRAINAGE AREA.--1,600 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--April 1911 to current year (no winter records 1912).

GAGE.--Water-stage recorder. Datum of gage is 4,661.6 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges and discharges below 20 ft<sup>3</sup>/s, which are poor. Flow regulated by Magic Reservoir 0.5 mi upstream (see sta 13142000), Mormon Reservoir on tributary of Camas Creek (capacity, 31,240 acre-ft), and smaller reservoirs having combined capacity of about 680 acre-ft. Diversions above station for irrigation of about 32,600 acres, of which about 1,900 acres are irrigated by withdrawals from ground water (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft<sup>3</sup>/s Apr. 26, 1952, gage height, 15.68 ft, from floodmark; no flow Feb. 3, 1915, Dec. 21-23, 1988, Nov. 18-21, Dec. 9, 10, 1992, Oct. 19-22, 26, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 997 ft<sup>3</sup>/s July 11, gage height, 4.80 ft; minimum daily, 0.57 ft<sup>3</sup>/s Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.8	1.5	e1.0	e1.0	e1.0	3.0	8.0	974	935	4.8	1.9
2	1.4	1.8	1.5	1.3	e1.0	e1.0	2.9	9.9	979	950	4.8	1.8
3	1.4	1.7	1.4	1.3	e1.0	e1.0	3.1	12	980	952	4.7	1.8
4	1.3	1.8	1.4	e1.0	e1.0	e1.0	3.1	12	979	943	4.4	2.0
5	1.4	1.8	e1.3	e1.0	e1.0	1.3	3.1	430	978	945	4.5	2.0
6	1.4	1.8	e1.3	1.3	e1.0	1.3	3.2	737	968	938	4.1	1.7
7	1.4	1.8	1.3	1.3	1.4	1.3	3.4	738	969	947	3.7	1.7
8	1.5	1.8	e1.3	1.3	1.4	e1.0	3.2	717	969	935	3.4	432
9	1.5	1.9	e1.0	1.3	1.4	e1.0	3.3	723	971	956	2.9	649
10	1.5	1.9	e1.0	e1.0	1.4	1.3	3.4	780	969	974	2.7	689
11	1.6	1.9	e1.0	e1.0	e1.0	1.3	3.3	802	967	978	2.5	709
12	1.5	1.8	e1.0	1.3	e1.0	1.3	3.5	798	934	979	2.1	489
13	1.4	1.8	1.3	e1.0	e1.0	1.3	3.5	839	930	975	2.0	135
14	1.4	1.8	1.4	1.3	e1.0	1.4	3.8	899	953	976	1.9	1.1
15	1.4	1.8	e1.3	e1.0	1.4	e1.0	3.5	919	963	977	1.9	1.1
16	1.5	1.8	e1.3	e1.0	1.4	e1.0	3.5	920	961	969	1.7	1.0
17	1.6	1.8	1.3	e1.0	1.4	e1.0	3.5	916	968	309	1.7	1.0
18	1.6	1.8	1.3	e1.0	1.4	e1.0	3.6	914	964	2.2	1.5	0.93
19	1.5	1.8	1.3	e1.0	1.4	1.4	3.9	913	959	2.3	1.4	0.89
20	1.5	1.7	1.3	e1.0	1.4	1.4	4.3	912	948	2.7	1.4	0.88
21	1.6	1.7	e1.0	e1.0	1.4	1.4	4.7	913	937	2.8	1.4	0.81
22	1.6	1.8	e1.0	e1.0	1.4	1.5	4.9	896	953	2.8	1.6	0.78
23	1.6	1.7	e1.0	e1.0	1.4	2.3	4.8	872	947	3.8	1.7	0.76
24	1.7	1.7	e1.0	e1.0	1.4	2.5	4.6	865	961	4.3	1.7	0.74
25	1.7	1.7	e1.0	1.3	e1.0	2.4	5.0	867	950	5.4	1.8	0.72
26	1.7	1.6	e1.0	1.3	e1.0	2.4	5.4	869	939	9.1	1.8	0.65
27	1.7	1.6	e1.0	e1.0	e1.0	2.7	5.7	871	930	8.3	1.8	0.61
28	1.7	1.6	e1.0	e1.0	e1.0	3.0	5.9	896	931	7.4	1.8	0.63
29	1.7	1.6	e1.0	e1.0	---	2.9	6.2	916	949	5.9	1.9	0.63
30	1.7	1.5	e1.0	e1.0	---	2.8	6.6	927	939	5.7	1.8	0.57
31	1.8	---	e1.0	e1.0	---	2.8	---	959	---	5.4	1.8	---
TOTAL	47.7	52.6	36.5	34.0	33.6	50.0	121.9	22849.9	28719	15706.1	77.2	3129.70
MEAN	1.539	1.753	1.177	1.097	1.200	1.613	4.063	737.1	957.3	506.6	2.490	104.3
MAX	1.8	1.9	1.5	1.3	1.4	3.0	6.6	959	980	979	4.8	709
MIN	1.3	1.5	1.0	1.0	1.0	1.0	2.9	8.0	930	2.2	1.4	0.57
AC-FT	95	104	72	67	67	99	242	45320	56960	31150	153	6210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2002, BY WATER YEAR (WY)

MEAN	63.87	61.48	31.78	36.81	71.91	206.9	594.1	1271	1324	900.8	660.7	448.2
MAX	1053	165	591	767	1130	1970	3918	3806	3579	1916	1314	826
(WY)	1912	1914	1984	1965	1997	1986	1943	1952	1911	1995	1923	1916
MIN	0.37	0.47	0.52	0.75	0.56	1.42	2.50	242	88.5	10.1	2.49	0.63
(WY)	1992	1993	1993	1992	1995	1995	1991	1991	1992	2001	2002	1992

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1911 - 2002
ANNUAL TOTAL	49675.1	70858.20	
ANNUAL MEAN	136.1	194.1	472.4
HIGHEST ANNUAL MEAN			1215
LOWEST ANNUAL MEAN			76.2
HIGHEST DAILY MEAN	884	980	9800
LOWEST DAILY MEAN	1.0	0.57	0.00
ANNUAL SEVEN-DAY MINIMUM	1.0	0.65	0.03
ANNUAL RUNOFF (AC-FT)	98530	140500	342200
10 PERCENT EXCEEDS	841	944	1240
50 PERCENT EXCEEDS	2.5	1.8	50
90 PERCENT EXCEEDS	1.4	1.0	3.2

e Estimated



MALAD RIVER BASIN

13147900 LITTLE WOOD RIVER ABOVE HIGH FIVE CREEK, NEAR CAREY, ID

LOCATION.--Lat 43°29'30", long 114°03'30", about center of sec.22, T.2 N., R.20 E., Blaine County, Hydrologic Unit 17040221, on left bank above maximum flow line of Little Wood Reservoir, 0.4 mi downstream from Muldoon Creek, 0.6 mi upstream from High Five Creek, 13.5 mi northwest of Carey, and at mile 83.0.

DRAINAGE AREA.--248 mi<sup>2</sup>. Mean elevation, 7,220 ft.

PERIOD OF RECORD.--October 1958 to September 1974, October 1979 to current year (no winter record in water year 1982).

GAGE.--Water-stage recorder. Elevation of gage is 5,320 ft above NGVD of 1929, by barometer.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Station equipment includes satellite telemetry. Diversions above station for irrigation of about 1,300 acres (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,480 ft<sup>3</sup>/s Apr. 22, 1969, gage height, 7.01 ft; minimum, 12 ft<sup>3</sup>/s Sept. 7-10, 1994, gage height, 0.74 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 660 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
June 1		a*395		No peaks greater than base discharge.			
(a) Maximum daily discharge							

Minimum daily, 17 ft<sup>3</sup>/s Sept. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	27	e30	40	e32	e50	203	153	395	79	24	20
2	20	26	34	e40	e34	e48	215	157	368	72	24	19
3	20	25	e34	38	e34	e48	193	164	292	68	24	18
4	20	25	e32	e40	e34	e50	206	162	245	68	25	17
5	20	25	e36	e40	e36	e48	226	162	213	63	24	18
6	20	25	e38	39	e40	42	257	152	217	59	22	20
7	21	25	e36	38	e40	41	258	147	215	56	22	24
8	21	23	e36	38	38	38	230	136	201	53	22	22
9	21	23	e36	38	e42	e40	216	127	171	50	21	22
10	22	24	e36	e40	e40	42	203	121	151	46	21	22
11	26	24	e34	e40	e40	39	181	114	133	43	20	21
12	25	25	e34	e38	e40	e42	168	110	122	40	22	21
13	23	25	e36	e38	e40	e42	175	116	117	39	22	21
14	23	25	39	e36	e40	40	234	134	131	37	22	20
15	23	25	e40	e34	e42	e38	287	151	141	38	21	19
16	23	25	e42	e34	e42	e40	239	143	150	36	21	20
17	24	25	e40	e36	41	e38	247	139	152	38	21	21
18	24	26	e38	e36	e40	e38	212	152	183	39	21	22
19	24	26	39	e36	38	40	185	183	153	36	21	22
20	24	26	39	e38	39	43	169	209	126	36	20	22
21	24	e28	e40	40	e40	46	158	211	119	36	21	22
22	24	e28	e38	e40	e42	52	149	194	135	33	21	22
23	27	28	e38	e38	41	62	151	161	129	32	21	22
24	25	e26	e36	e38	40	67	145	149	115	30	21	21
25	24	e26	e36	42	e38	71	145	138	113	31	21	21
26	25	e26	e38	39	e38	79	148	133	111	30	20	22
27	24	e26	e42	34	e38	89	147	134	105	28	21	22
28	24	e28	e40	e40	e40	98	138	147	99	27	22	22
29	25	e28	e40	e38	---	109	136	186	92	26	21	22
30	26	e28	e40	e32	---	123	150	258	87	25	21	23
31	31	---	e40	e30	---	153	---	371	---	24	20	---
TOTAL	723	772	1157	1168	1089	1796	5771	5014	4981	1318	670	630
MEAN	23.32	25.73	37.32	37.68	38.89	57.94	192.4	161.7	166.0	42.52	21.61	21.00
MAX	31	28	42	42	42	153	287	371	395	79	25	24
MIN	20	23	30	30	32	38	136	110	87	24	20	17
AC-FT	1430	1530	2290	2320	2160	3560	11450	9950	9880	2610	1330	1250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2002, BY WATER YEAR (WY)

	58.36	63.54	58.57	59.93	61.41	114.2	334.4	424.1	384.3	156.9	63.27	51.02
MEAN	58.36	63.54	58.57	59.93	61.41	114.2	334.4	424.1	384.3	156.9	63.27	51.02
MAX	110	166	146	207	150	374	1108	1151	889	498	177	101
(WY)	1984	1984	1984	1997	1963	1986	1969	1969	1983	1995	1965	1965
MIN	23.3	25.7	36.8	36.0	38.9	47.3	71.7	108	68.1	30.4	17.2	15.0
(WY)	2002	2002	1990	1995	2002	1962	1994	1990	1992	1988	1994	1994

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1959 - 2002
ANNUAL TOTAL	20307	25089	
ANNUAL MEAN	55.64	68.74	151.5
HIGHEST ANNUAL MEAN			325
LOWEST ANNUAL MEAN			58.7
HIGHEST DAILY MEAN	179	May 15	395
LOWEST DAILY MEAN	14	Aug 27	17
ANNUAL SEVEN-DAY MINIMUM	14	Aug 26	19
ANNUAL RUNOFF (AC-FT)	40280	49760	109700
10 PERCENT EXCEEDS	118	168	403
50 PERCENT EXCEEDS	42	38	70
90 PERCENT EXCEEDS	20	21	35

e Estimated

## MALAD RIVER BASIN

## 13148200 LITTLE WOOD RESERVOIR NEAR CAREY, ID

LOCATION.--Lat 43°25'30", long 114°01'30", in SW<sup>1</sup>/<sub>4</sub> sec.12, T.1 N., R.20 E., Blaine County, Hydrologic Unit 17040221, at gate-control structure near right end of Little Wood Dam on Little Wood River, 8.5 mi northwest of Carey, and at mile 78.8.

DRAINAGE AREA.--279 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WDR-ID-92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Bureau of Reclamation). Prior to April 1983, nonrecording gage at same site and datum. Prior to Oct. 1, 1988 at datum 5,100 ft lower.

REMARKS.--Station equipment includes satellite telemetry. Reservoir is formed by earth- and rock-fill dam constructed in 1939 and raised 39.9 ft in 1959. Storage began Feb. 12, 1941. Capacity of reservoir is 29,960 acre-ft between elevations 5,127.4 ft, 0.4 ft below bottom of outlet gates, and 5,237.3 ft, spillway crest. Water is used for power generation and irrigation of land near Carey.

COOPERATION.--Capacity table provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 30,940 acre-ft June 10, 1963, elevation, 5,238.99 ft, present datum; minimum observed, 66 acre-ft Aug. 17, 1959, elevation, 5,130.22 ft, present datum, but may have been less during period Aug. 14 to Sept. 13, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum observed contents, 28,700 acre-ft May 6-10; maximum elevation, 5,235.13 ft, May 8, 9; minimum observed contents, 893 acre-ft Oct. 10, elevation, 5,145.44 ft.

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

5,130.0	61	5,160.0	2,490	5,200.0	12,500
5,140.0	504	5,170.0	4,150	5,220.0	20,900
5,150.0	1,302	5,180.0	6,370	5,240.0	31,500

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	2040	3940	6600	9150	11300	15800	27500	26900	23500	11100	3460
2	1070	2100	4040	6690	9230	11400	16300	27700	27200	23100	10700	3270
3	1070	2160	4130	6800	9300	11500	16700	28000	27200	22700	10400	3070
4	1060	2210	4200	6880	9380	11500	17100	28300	27200	22300	10100	2870
5	1030	2270	4260	6960	9450	11600	17600	28600	27200	21900	9890	2700
6	987	2330	4340	7070	9530	11700	18100	28700	27100	21500	9640	2560
7	969	2390	4420	7160	9610	11800	18700	28700	27000	21100	9380	2430
8	914	2440	4500	7260	9700	11900	19100	28700	26900	20700	9130	2300
9	900	2500	4580	7360	9770	12000	19600	28700	26800	20300	8870	2180
10	894	2550	4670	7420	9850	12100	20000	28700	26700	19900	8610	2080
11	930	2610	4750	7510	9920	12100	20400	28600	26500	19500	8330	2000
12	1000	2670	4820	7600	10000	12300	20700	28400	26400	19000	8060	1930
13	1040	2730	4920	7680	10100	12400	21100	28200	26200	18500	7780	1860
14	1080	2800	5020	7750	10100	12400	21600	28000	26000	18000	7510	1790
15	1130	2860	5110	7820	10200	12500	22200	27800	25900	17500	7240	1740
16	1180	2920	5200	7880	10300	12600	22700	27500	25700	17000	6970	1690
17	1220	2980	5300	7960	10400	12700	23200	27300	25600	16500	6700	1650
18	1270	3050	5390	8030	10500	12800	23600	27100	25500	16100	6430	1600
19	1320	3110	5490	8110	10600	12800	24000	26900	25400	15600	6170	1560
20	1370	3180	5590	8190	10600	12900	24300	26900	25300	15200	5900	1500
21	1420	3250	5670	8300	10700	13000	24600	26900	25200	14800	5650	1450
22	1470	3320	5730	8380	10800	13100	25000	26900	25100	14400	5420	1400
23	1530	3390	5800	8450	10900	13300	25200	26900	25000	14000	5180	1430
24	1580	3460	5870	8530	11000	13400	25500	27000	24900	13700	4970	1390
25	1640	3540	5950	8620	11000	13700	25800	26900	24800	13300	4760	1360
26	1690	3600	6030	8720	11100	13900	26100	26900	24700	13000	4550	1320
27	1740	3640	6130	8800	11200	14200	26400	26800	24500	12700	4350	1290
28	1800	3690	6230	8870	11200	14400	26600	26600	24300	12300	4180	1260
29	1850	3780	6320	8920	---	14700	26900	26500	24100	12000	4010	1220
30	1910	3860	6420	8980	---	15000	27200	26500	23800	11700	3840	1200
31	1980	---	6510	9060	---	15300	---	26700	---	11400	3650	---
MAX	1980	3860	6510	9060	11200	15300	27200	28700	27200	23500	11100	3460
MIN	894	2040	3940	6600	9150	11300	15800	26500	23800	11400	3650	1200
†	5156.07	5168.44	5180.55	5189.69	5196.47	5207.47	5232.29	5231.39	5225.84	5196.86	5167.30	5148.98
‡	930	1880	2650	2550	2140	4100	11900	-500	-2900	-12400	-7750	-2450
CAL YR 2001	MAX 29300	MIN 156	† -4790									
WTR YR 2002	MAX 28700	MIN 894	† 150									

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

MALAD RIVER BASIN

13148500 LITTLE WOOD RIVER NEAR CAREY, ID

LOCATION.--Lat 43°23'20", long 114°00'00", in E<sup>1</sup>/<sub>2</sub> sec.30, T.1 N., R.21 E., Blaine County, Hydrologic Unit 17040221, on right bank, 0.3 mi upstream from West Canal, 1.3 mi upstream from East Canal, 2 mi downstream from Little Fish Creek, 3 mi downstream from Little Wood Reservoir, 6 mi northwest of Carey, and at mile 75.5.

DRAINAGE AREA.--312 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1904 to May 1905 (gage heights and discharge measurements only), September 1926 to November 1942, April 1943 to current year. Monthly discharge only for some periods, published in WSP 1317. Records for February 1920 to September 1926 at site 6 mi upstream not equivalent owing to diversion and inflow.

GAGE.--Water-stage recorder. Datum of gage is 4,990.59 ft above NGVD of 1929 (levels by U.S. Bureau of Reclamation). Apr. 28, 1904 to May 31, 1905, nonrecording gage, Sept. 20, 1926 to Apr. 22, 1938, water-stage recorder, and Apr. 23 to Aug. 17, 1938, nonrecording gage, all at datum 0.74 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Station equipment includes satellite telemetry. Flow regulated by Little Wood Reservoir 3 mi upstream (see sta 13148200). Diversions above station for irrigation of about 1,500 acres (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft<sup>3</sup>/s, due to failure of reservoirs on Little Fish Creek Apr. 24, 1982, gage height, 16.74 ft; maximum discharge prior to Apr. 24, 1982, 6,000 ft<sup>3</sup>/s, due to failure of reservoirs on Little Fish Creek Apr. 20, 1938, gage height, 12.81 ft (present datum, from floodmark), from rating curve extended above 1,800 ft<sup>3</sup>/s; maximum discharge other than dam failures, 2,680 ft<sup>3</sup>/s Apr. 27, 1952, gage height, 8.95 ft. Minimum daily, 0.59 ft<sup>3</sup>/s Oct. 16, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 292 ft<sup>3</sup>/s July 15; minimum daily, 0.59 ft<sup>3</sup>/s Oct. 16.

DAY	DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	2.5	e3.0	e2.0	e3.0	3.7	30	15	242	206	166	106
2	14	2.5	e2.5	e2.5	e3.0	3.7	27	13	253	234	170	107
3	15	2.3	e2.5	e2.5	e3.0	3.7	24	14	244	242	173	108
4	23	2.1	e3.0	e2.0	e3.0	3.6	33	14	218	241	164	107
5	35	2.2	e2.5	e2.5	e3.0	3.9	36	14	206	239	147	98
6	41	2.2	e3.0	e2.5	e3.5	4.0	48	94	221	254	133	88
7	39	2.1	e3.5	e2.0	e3.5	4.4	55	145	246	241	136	84
8	36	2.1	3.4	2.2	e4.0	3.9	49	133	241	239	140	82
9	28	2.2	3.4	2.2	e3.5	e4.0	41	128	234	238	139	77
10	24	2.3	e3.0	2.1	e3.5	4.2	31	136	200	238	145	70
11	17	2.5	e3.0	2.3	e3.0	4.4	18	159	184	247	149	61
12	2.2	2.8	e2.5	2.2	e3.0	5.7	21	192	199	263	148	56
13	1.1	2.6	e3.0	2.2	e3.5	6.1	19	218	199	273	154	53
14	0.65	2.7	e3.0	e2.0	e3.5	5.8	30	231	190	277	152	51
15	0.70	3.0	e3.0	e2.0	e3.5	6.0	e28	234	197	292	146	45
16	0.59	2.4	e3.0	e2.0	e4.0	6.0	e30	251	197	288	146	45
17	0.80	2.4	e2.5	e2.0	e4.5	5.9	39	247	198	277	145	46
18	0.69	e2.5	e3.0	e2.0	e4.0	e6.0	36	244	196	265	145	47
19	0.64	e2.5	e3.0	e2.0	e3.5	5.4	35	232	175	243	143	47
20	0.86	e2.5	e2.5	e2.5	e3.0	6.3	26	225	160	234	141	49
21	1.1	e2.5	e2.5	e2.5	3.3	8.1	22	210	152	233	134	50
22	1.1	e2.5	e2.0	e2.5	3.1	9.8	19	157	151	215	128	50
23	1.3	e2.5	e2.0	e2.0	3.5	12	25	116	149	192	131	16
24	1.4	e2.5	e2.0	e2.5	3.5	21	16	98	123	189	117	34
25	1.3	e2.5	e2.0	e2.5	3.4	23	15	122	125	192	113	40
26	1.5	e2.5	e2.5	e3.0	3.7	24	14	134	153	184	112	41
27	1.9	e2.5	e2.5	e2.5	3.7	25	15	149	168	172	105	42
28	1.9	e2.5	e2.5	e2.0	3.9	25	14	200	178	162	102	45
29	2.1	e2.5	e2.0	e1.5	---	26	15	223	187	160	101	44
30	2.4	e2.5	e2.5	e1.5	---	27	14	238	205	154	102	39
31	2.5	---	e2.5	e2.0	---	27	---	236	---	156	107	---
TOTAL	312.73	73.4	83.3	68.2	96.6	324.6	825	4822	5791	7040	4234	1828
MEAN	10.09	2.447	2.687	2.200	3.450	10.47	27.50	155.5	193.0	227.1	136.6	60.93
MAX	41	3.0	3.5	3.0	4.5	27	55	251	253	292	173	108
MIN	0.59	2.1	2.0	1.5	3.0	3.6	14	13	123	154	101	16
AC-FT	620	146	165	135	192	644	1640	9560	11490	13960	8400	3630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2002, BY WATER YEAR (WY)												
MEAN	46.23	34.25	30.51	32.37	38.95	92.67	313.4	427.0	376.2	244.1	142.8	69.38
MAX	205	290	170	383	316	470	1105	1154	878	492	315	180
(WY)	1966	1984	1984	1997	1997	1983	1969	1969	1995	1995	1975	1984
MIN	3.64	1.05	1.17	1.41	2.00	2.87	7.41	79.0	39.9	13.6	7.17	5.06
(WY)	1983	1992	1992	1991	1955	1955	1988	1934	1934	1931	1934	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1927 - 2002
ANNUAL TOTAL	24990.20	25498.83	
ANNUAL MEAN	68.47	69.86	153.9
HIGHEST ANNUAL MEAN			351
LOWEST ANNUAL MEAN			45.6
HIGHEST DAILY MEAN	317	292	2900
LOWEST DAILY MEAN	0.59	0.59	0.59
ANNUAL SEVEN-DAY MINIMUM	0.70	0.70	0.70
ANNUAL RUNOFF (AC-FT)	49570	50580	111500
10 PERCENT EXCEEDS	240	222	404
50 PERCENT EXCEEDS	8.3	19	65
90 PERCENT EXCEEDS	2.0	2.1	4.0

e Estimated

MALAD RIVER BASIN

13150430 SILVER CREEK AT SPORTSMAN ACCESS, NEAR PICABO, ID

LOCATION.--Lat 43°19'22", long 114°06'29", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.20, T.1 S., R.20 E., Blaine County, Hydrologic Unit 17040221, on right bank, at sportsman access road crossing to campground, 0.6 mi downstream from State Highway 20/23 crossing, 2.3 mi northwest of Picabo, and 4.3 mi southeast of Gannett.

DRAINAGE AREA.--70 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,850 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No regulation. Several diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 566 ft<sup>3</sup>/s Apr. 10, 1985, gage height, 8.82 ft; minimum daily, 43 ft<sup>3</sup>/s Oct. 3, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 225 ft<sup>3</sup>/s Mar. 30; minimum daily, 43 ft<sup>3</sup>/s Oct. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	90	93	e100	e110	118	186	122	127	104	93	83
2	44	91	97	105	e110	116	167	121	130	105	98	83
3	43	90	95	109	e110	115	154	118	137	106	102	85
4	45	86	93	107	e110	116	147	104	133	99	121	80
5	48	87	109	e110	e110	116	143	108	129	97	114	82
6	55	86	156	108	e110	119	141	107	116	98	115	89
7	57	89	153	109	e110	125	139	104	111	95	112	98
8	57	84	121	111	117	123	134	101	104	97	105	99
9	59	78	e110	111	e110	e120	132	103	108	94	104	99
10	65	84	96	109	114	119	133	101	110	94	99	98
11	73	85	95	109	116	116	131	98	110	99	96	100
12	77	88	e100	111	113	121	133	98	108	95	90	99
13	76	87	e110	111	115	124	130	99	107	93	89	97
14	72	92	e110	111	115	124	134	99	105	91	81	97
15	68	86	e110	e110	113	123	136	99	105	92	78	97
16	61	86	e110	e110	112	125	134	99	104	91	77	96
17	63	87	e110	e110	114	128	139	93	104	90	80	96
18	66	88	e110	e110	114	127	140	101	102	91	79	109
19	65	86	e100	e110	114	126	137	105	109	89	79	102
20	64	87	100	e110	116	127	135	109	114	90	84	98
21	60	91	101	e110	114	132	134	113	113	89	86	91
22	65	98	e100	e110	115	143	132	134	111	93	89	94
23	82	95	e100	e110	118	156	130	128	111	91	95	96
24	80	93	e95	e110	119	172	124	129	115	91	93	98
25	75	98	e95	114	118	196	125	132	112	97	91	98
26	74	92	e100	110	120	224	129	125	109	96	93	103
27	85	92	e100	e100	119	212	126	120	106	96	92	101
28	90	93	e100	e100	118	213	124	116	106	93	94	94
29	88	102	e110	e100	---	222	123	119	108	90	95	98
30	90	90	e110	e100	---	225	119	117	103	87	92	90
31	93	---	e100	e110	---	211	---	119	---	88	86	---
TOTAL	2087	2681	3289	3355	3194	4534	4091	3441	3367	2921	2902	2850
MEAN	67.32	89.37	106.1	108.2	114.1	146.3	136.4	111.0	112.2	94.23	93.61	95.00
MAX	93	102	156	114	120	225	186	134	137	106	121	109
MIN	43	78	93	100	110	115	119	93	102	87	77	80
AC-FT	4140	5320	6520	6650	6340	8990	8110	6830	6680	5790	5760	5650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	167.4	170.2	159.9	152.0	159.2	191.9	171.2	132.2	126.8	121.8	143.6	147.3																
MAX	270	248	210	219	241	325	288	190	182	224	255	256																
(WY)	1983	1977	1983	1997	1986	1983	1975	1983	1997	1975	1983	1983																
MIN	67.3	89.0	92.5	95.5	111	135	95.6	83.1	70.1	73.6	65.9	62.2																
(WY)	2002	1993	1995	1995	1993	1991	1992	1992	1992	1992	1994	1994																

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1975 - 2002

ANNUAL TOTAL	40076		38712	
ANNUAL MEAN	109.8		106.1	153.6
HIGHEST ANNUAL MEAN				222
LOWEST ANNUAL MEAN				106
HIGHEST DAILY MEAN	202	Mar 20	225	Mar 30
LOWEST DAILY MEAN	43	Oct 3	43	Oct 3
ANNUAL SEVEN-DAY MINIMUM	48	Sep 30	48	Oct 1
ANNUAL RUNOFF (AC-FT)	79490		76790	111300
10 PERCENT EXCEEDS	145		132	215
50 PERCENT EXCEEDS	101		104	148
90 PERCENT EXCEEDS	74		83	93

e Estimated

MALAD RIVER BASIN

13152500 MALAD RIVER NEAR GOODING, ID

LOCATION.--Lat 42°53'12", long 114°48'08", in NE¼NE¼SW¼ sec.21, T.6 S., R.14 E., Gooding County, Hydrologic Unit 17040219, on right bank, at Hudson Ranch, 3.1 mi downstream from bridge on Bliss-Gooding highway, 4.2 mi downstream from Little Wood River, 6 mi southwest of Gooding, and at mile 7.2.

DRAINAGE AREA.--2,990 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--March 1916 to current year (fragmentary from October 1923 to September 1926; no winter records for water years 1923, 1936-37, 1942; irrigation seasons only for water years 1927-35). October 1959 to September 1984, published as "Big Wood River near Gooding".

REVISED RECORDS.--WSP 1347: 1934.

GAGE.--Water-stage recorder. Datum of gage is 3,343.50 ft above NGVD of 1929. Prior to Apr. 13, 1921, nonrecording gage at present site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Magic Reservoir (see sta 13142000) and by several smaller reservoirs on tributaries and affected by deliveries from canals diverting from Snake River at Milner. Diversions above station for irrigation of about 144,000 acres, of which about 4,000 acres are irrigated by withdrawals from ground water (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,860 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 12.15 ft, from floodmarks; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 397 ft<sup>3</sup>/s May 9; no flow Oct. 21 to Nov. 6, Nov. 27 to Dec. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	0.00	0.00	e19	e2	e80	192	e280	35	35	120	110
2	124	0.00	0.00	e20	e2	e80	176	e260	91	19	139	98
3	148	0.00	0.00	e20	e2	e80	125	268	139	11	140	80
4	132	0.00	63	e18	e2	e80	77	251	136	15	128	68
5	82	0.00	45	e10	e2	e80	47	150	147	21	125	66
6	68	0.00	51	e10	e2	e100	57	79	146	36	118	52
7	91	1.0	39	24	e4	e80	50	45	120	56	109	98
8	74	1.3	25	3.6	e4	e80	41	257	95	74	102	166
9	56	1.0	7.2	26	e3	e80	33	397	130	76	113	187
10	75	1.1	10	28	e3	e80	25	271	165	68	101	214
11	95	2.0	e10	26	e4	e65	21	199	187	68	95	237
12	132	1.9	e10	e22	e4	e80	16	160	173	75	104	214
13	154	1.2	e10	e22	e4	e80	11	130	140	85	106	175
14	164	0.84	e11	20	e4	e80	6.9	72	92	90	91	152
15	186	0.74	e11	18	e4	e90	e10	69	42	100	89	135
16	125	1.00	e11	e19	e6	e95	e10	81	39	89	85	121
17	17	1.6	e11	e9.5	e8	93	e22	80	30	90	85	123
18	0.93	1.1	e12	e6.0	e11	85	e40	51	28	96	81	165
19	11	0.92	e15	e5.0	e11	81	e60	50	51	121	67	177
20	0.09	2.0	e15	e5.0	e12	71	e80	55	54	139	52	151
21	0.00	1.1	e12	e4.5	e10	108	e110	70	42	173	46	143
22	0.00	1.5	e11	e2.0	e20	237	e140	105	39	173	64	166
23	0.00	1.2	e10	e3.0	e17	263	e140	158	44	160	61	159
24	0.00	0.56	e7.0	e2.5	e80	225	e140	151	45	139	59	150
25	0.00	1.1	e5.0	e2.0	e70	208	e150	133	50	104	88	138
26	0.00	0.90	5.5	e2.0	e75	160	e180	88	37	102	79	129
27	0.00	0.00	e2.0	e1.5	e80	166	e220	66	41	102	94	105
28	0.00	0.00	e20	e1.0	e80	165	e280	59	30	103	78	93
29	0.00	0.00	e20	e1.0	---	175	e340	57	19	119	82	99
30	0.00	0.00	e20	e2	---	172	e300	44	25	128	103	125
31	0.00	---	e20	e2	---	192	---	32	---	114	101	---
TOTAL	1847.0224.06	488.70	354.6	526	3711	3099.9	4168	2412	2781	2905	4096	
MEAN	59.58	0.802	15.76	11.44	18.79	119.7	103.3	134.5	80.40	89.71	93.71	136.5
MAX	186	2.0	63	28	80	263	340	397	187	173	140	237
MIN	0.00	0.00	0.00	1.0	2.0	65	6.9	32	19	11	46	52
AC-FT	3660	48	969	703	1040	7360	6150	8270	4780	5520	5760	8120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2002, BY WATER YEAR (WY)												
MEAN	152.6	129.3	111.8	126.0	210.1	363.2	608.5	587.1	490.4	126.2	91.14	165.9
MAX	520	523	727	798	910	1920	2948	3060	2709	796	342	547
(WY)	1983	1984	1984	1965	1986	1983	1943	1983	1983	1983	1983	1985
MIN	4.23	0.80	3.42	1.93	3.79	37.1	3.77	7.41	5.50	0.42	0.000	0.060
(WY)	1936	2002	1920	1989	1993	1992	1931	1920	1931	1919	1919	1920

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1916 - 2002	
ANNUAL TOTAL	26358.12		26413.28			
ANNUAL MEAN	72.21		72.37		294.9	
HIGHEST ANNUAL MEAN					1077	
LOWEST ANNUAL MEAN					20.1	
HIGHEST DAILY MEAN	736	Apr 15	397	May 9	6400	Apr 27 1952
LOWEST DAILY MEAN	0.00	Oct 21	0.00	Oct 21	0.00	Jan 17 1917
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 21	0.00	Oct 21	0.00	Sep 5 1918
ANNUAL RUNOFF (AC-FT)	52280		52390		213700	
10 PERCENT EXCEEDS	112		165		759	
50 PERCENT EXCEEDS	63		63		112	
90 PERCENT EXCEEDS	1.0		1.1		18	

e Estimated

## MALAD RIVER BASIN

## 13153500 MALAD RIVER NEAR BLISS, ID

LOCATION.--Lat 42°51'48", long 114°54'04", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec.34, T.6 S., R.13 E., Gooding County, Hydrologic Unit 17040219, on right bank, 700 ft upstream from mouth, and 8 mi southeast of Bliss.

DRAINAGE AREA.--3,000 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--April to September 1899; December 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,750 ft above NGVD of 1929, from topographic map. April to September 1899, nonrecording gage at same site and different datum.

REMARKS.--Station equipment includes telemetry. Diversions from Big Wood, Little Wood, and Malad Rivers for irrigation above station. Major diversion for power generation through Malad Power Flume bypasses station at most times. Records for station 13152940 Malad Power Flume are published in reports for water years 1985-99. Records of combined discharge are published in reports for water years 1986-99 as station 13153501. Numerous springs enter the Malad River canyon within 2 mi upstream.

COOPERATION.--Discharge records furnished by Idaho Power and reviewed by U.S. Geological Survey beginning October 2000.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,390 ft<sup>3</sup>/s Jan. 2, 1997; minimum daily, 66.0 ft<sup>3</sup>/s Jan. 9, 10, 14, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,140 ft<sup>3</sup>/s May 29; minimum daily, 76 ft<sup>3</sup>/s Jan. 16, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	89	93	90	81	91	108	102	92	90	103	107
2	93	90	94	90	83	91	106	111	93	90	104	108
3	94	90	92	90	92	91	102	113	310	90	106	105
4	94	90	92	90	92	91	99	120	220	89	106	103
5	88	91	93	89	92	91	98	108	139	89	104	103
6	87	91	95	90	93	92	98	102	165	89	104	102
7	90	92	96	90	93	131	98	101	119	89	104	106
8	92	91	94	90	93	360	96	116	97	90	105	112
9	87	92	93	90	92	95	97	171	96	90	105	125
10	91	92	93	94	92	84	97	128	98	90	106	120
11	94	92	93	93	92	83	96	109	99	89	106	122
12	98	93	94	83	92	85	96	105	97	89	106	119
13	102	93	95	79	92	260	96	103	95	90	106	116
14	107	93	94	77	92	126	96	100	92	90	104	112
15	114	93	91	77	92	106	96	97	90	91	104	111
16	117	93	90	76	92	104	98	98	89	91	104	139
17	87	93	90	76	92	102	100	98	91	90	106	108
18	88	93	90	77	92	102	100	99	92	91	106	111
19	86	93	89	79	93	101	102	100	92	92	104	112
20	87	93	90	79	93	99	102	101	93	93	102	112
21	86	94	144	79	94	100	102	102	92	97	101	109
22	86	94	95	79	93	109	107	105	92	103	110	110
23	87	94	93	89	95	113	123	108	92	104	108	109
24	89	94	91	88	103	110	108	108	92	105	103	108
25	90	94	90	88	101	113	107	105	92	102	107	107
26	88	94	88	89	97	133	103	103	92	101	108	107
27	88	95	87	88	95	105	100	101	93	100	107	106
28	88	94	87	86	95	106	101	907	91	100	106	105
29	89	94	88	84	---	106	113	1140	90	101	105	106
30	89	93	89	84	---	106	102	738	90	102	105	107
31	89	---	89	84	---	107	---	92	---	102	105	---
TOTAL	2855	2777	2892	2637	2598	3593	3047	5791	3275	2919	3260	3327
MEAN	92.10	92.57	93.29	85.06	92.79	115.9	101.6	186.8	109.2	94.16	105.2	110.9
MAX	117	95	144	94	103	360	123	1140	310	105	110	139
MIN	86	89	87	76	81	83	96	92	89	89	101	102
AC-FT	5660	5510	5740	5230	5150	7130	6040	11490	6500	5790	6470	6600
CAL YR 2001	TOTAL	34854	MEAN	95.49	MAX	464	MIN	74	AC-FT	69130		
WTR YR 2002	TOTAL	38971	MEAN	106.8	MAX	1140	MIN	76	AC-FT	77300		

DIVERSIONS FROM SNAKE RIVER

BETWEEN SNAKE RIVER BELOW LOWER SALMON FALLS NEAR HAGERMAN AND SNAKE RIVER AT KING HILL

1315377299 KING HILL IRRIGATION DISTRICT PUMPING PLANT (WILEY SITE) NEAR BLISS, ID

LOCATION.--Lat 42°54'42", long 114°58'53", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.12, T.6 S., R.12 E., Twin Falls County, Hydrologic Unit 17040212, on left bank of Snake River 2.0 mi southwest of Bliss, and 12.0 mi southeast of King Hill.

PERIOD OF RECORD.--April 1985 to current year (irrigation seasons only). April 1985 to September 1987 published as "King Hill Canal (Wiley site) near Bliss" (13153773); records may not be comparable.

GAGE.--In-line flow sensor with datalogger.

REMARKS.--Records fair. In-line flow sensor rated by ultrasonic flowmeter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 38 ft<sup>3</sup>/s Aug. 8, 1993; no flow for long periods each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	---	---	---	---	---	---	21	21	28	19	21
2	20	---	---	---	---	---	---	21	19	26	18	20
3	22	---	---	---	---	---	---	22	17	24	17	18
4	23	---	---	---	---	---	---	24	21	22	19	17
5	9.7	---	---	---	---	---	---	26	20	25	18	16
6	0.00	---	---	---	---	---	---	28	19	23	19	17
7	0.00	---	---	---	---	---	---	26	20	19	18	18
8	0.00	---	---	---	---	---	---	e24	24	18	20	18
9	0.00	---	---	---	---	---	0.00	e26	23	19	23	16
10	0.00	---	---	---	---	---	0.00	e26	21	21	23	18
11	0.00	---	---	---	---	---	0.00	e26	24	21	20	e20
12	0.00	---	---	---	---	---	0.00	e26	27	24	18	e20
13	0.00	---	---	---	---	---	0.06	e26	29	23	19	e20
14	0.00	---	---	---	---	---	13	e26	33	22	22	e20
15	0.00	---	---	---	---	---	17	e24	32	24	20	e20
16	0.00	---	---	---	---	---	14	21	29	24	18	19
17	0.00	---	---	---	---	---	16	20	31	23	17	19
18	---	---	---	---	---	---	15	19	33	27	17	17
19	---	---	---	---	---	---	14	22	30	29	16	16
20	---	---	---	---	---	---	18	23	32	27	18	20
21	---	---	---	---	---	---	19	24	32	28	21	23
22	---	---	---	---	---	---	22	23	32	26	19	23
23	---	---	---	---	---	---	21	21	31	24	23	22
24	---	---	---	---	---	---	20	19	32	22	25	21
25	---	---	---	---	---	---	19	19	33	24	20	21
26	---	---	---	---	---	---	21	23	31	25	20	20
27	---	---	---	---	---	---	20	23	29	20	18	18
28	---	---	---	---	---	---	19	21	28	20	20	18
29	---	---	---	---	---	---	19	19	29	21	19	20
30	---	---	---	---	---	---	21	19	29	21	19	21
31	---	---	---	---	---	---	---	19	---	20	19	---
TOTAL	---	---	---	---	---	---	---	707	811	720	602	577
MEAN	---	---	---	---	---	---	---	22.81	27.03	23.23	19.42	19.23
MAX	---	---	---	---	---	---	---	28	33	29	25	23
MIN	---	---	---	---	---	---	---	19	17	18	16	16
AC-FT	---	---	---	---	---	---	---	1400	1610	1430	1190	1140

e Estimated

## SNAKE RIVER MAIN STEM

## 13153776 SNAKE RIVER BELOW BLISS DAM NEAR BLISS, ID

LOCATION.--Lat 42°54'52", long 115°05'33", in sec.12, T.6 S., R.12 E., Elmore County, Hydrologic Unit 17040212, on right bank, 1 mi downstream from Bliss Power Plant.

PERIOD OF RECORD.--September 1991 to current year.

REVISED RECORDS.--WDR-ID-97-1: 1996

GAGE.--Water-stage recorder. Elevation of gage is 2,600 ft above NGVD of 1929, from topographic map.

REMARKS.--Flow regulated by American Falls Reservoir and several other smaller reservoirs upstream. Diurnal fluctuation caused by hydroelectric plants upstream. At times, practically entire flow is diverted at Milner during irrigation seasons; only minor diversions below Milner; flow below Bliss Dam is then derived largely from springs and seepage entering below Milner.

COOPERATION.--Discharge records furnished by Idaho Power and reviewed by U.S. Geological Survey beginning April 2001.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,000 ft<sup>3</sup>/s June 21, 1997, gage height, 23.93 ft; minimum daily, 4,960 ft<sup>3</sup>/s Aug. 30, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,820 ft<sup>3</sup>/s Oct. 15; minimum daily, 4,960 ft<sup>3</sup>/s Aug. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7210	7170	7140	7110	6950	6680	6720	6310	5890	5760	6470	6590
2	7280	7270	7300	7120	6730	6650	6720	6460	6100	5770	6360	7000
3	7170	7200	7360	7150	6970	6650	6670	6420	6230	5780	6400	6670
4	7650	7240	7140	7030	6810	6650	6280	6430	6350	5750	6130	6480
5	6890	7180	7320	7120	6690	6730	6000	6220	6280	5670	6490	6870
6	7280	7530	7390	6990	6740	6620	5830	6090	6100	5860	6090	6560
7	7460	7100	7310	7470	6800	7250	6050	6110	6110	5770	6590	6880
8	7360	7480	7310	6640	6750	7300	6090	6330	5980	5770	6350	7360
9	7250	7230	7160	7130	6780	7010	6050	6660	6210	5870	6460	7110
10	7430	7490	7280	7110	6770	6770	5980	6630	6410	5810	6310	7040
11	7490	7470	7210	7050	6710	6740	5910	6360	6400	5890	6070	6580
12	7730	7480	7240	6990	6820	6780	5940	6350	6390	5890	6820	7120
13	7620	7480	7230	7000	6650	7070	5990	6270	6130	5920	6370	7180
14	7610	7370	7400	6620	6720	6930	5900	5890	6020	5670	6190	6100
15	7820	7360	7320	6080	6770	6800	5840	6050	5890	5950	6260	6580
16	7780	7250	7250	6950	6760	6770	5820	6020	5800	5850	6190	7040
17	7300	7360	7190	6800	6660	6800	6000	6000	5600	6420	6370	7090
18	7310	7240	7150	6970	6760	6900	6120	5980	5700	6370	6300	7160
19	7240	7290	7300	6840	6820	6730	6140	5980	5770	6140	6490	7130
20	7450	7290	7250	6520	6700	6720	6320	6010	5790	6180	6160	7600
21	7230	7300	7130	6940	7230	6800	5730	6140	5960	6560	6460	7160
22	7110	7330	7280	6920	6910	6890	6020	6020	5860	6520	6160	7150
23	7040	7250	7150	6860	6870	6870	6340	6310	5870	6540	6730	7360
24	7170	7250	7110	6950	7090	7020	6330	6270	6090	6160	6420	7450
25	6990	7280	7110	6880	6930	6900	6410	5920	5770	6220	6540	7360
26	7200	7200	7030	6840	6720	7030	6210	6130	5830	6630	6260	7020
27	7060	7240	7140	6880	6750	6680	6440	6130	5760	6190	6650	7110
28	7230	7460	7090	7040	6590	6780	6150	5910	5880	5880	6590	6750
29	7130	7530	7100	6760	---	6820	6440	5970	5600	6840	6170	7200
30	7220	6940	7070	6880	---	6630	6140	6010	5900	6100	4960	7640
31	7270	---	7120	6790	---	6730	---	5840	---	6420	6090	---
TOTAL	226980	219260	223580	214430	190450	211700	184580	191220	179670	188150	195900	210340
MEAN	7322	7309	7212	6917	6802	6829	6153	6168	5989	6069	6319	7011
MAX	7820	7530	7400	7470	7230	7300	6720	6660	6410	6840	6820	7640
MIN	6890	6940	7030	6080	6590	6620	5730	5840	5600	5670	4960	6100
AC-FT	450200	434900	443500	425300	377800	419900	366100	379300	356400	373200	388600	417200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	9305	9382	10030	10610	11010	11880	11790	11290	13220	8073	8116	8799
MAX	14710	13110	14780	15930	24620	25870	21020	18830	31390	10450	10960	14420
(WY)	1998	1998	1999	1997	1997	1997	1997	1998	1997	1997	1997	1997
MIN	7322	7309	7212	6917	6802	6829	6153	6168	5989	6069	6319	6883
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1992 - 2002
ANNUAL TOTAL	2512960	2436260	
ANNUAL MEAN	6885	6675	10280
HIGHEST ANNUAL MEAN			16590
LOWEST ANNUAL MEAN			6675
HIGHEST DAILY MEAN	7950	May 14	7820
LOWEST DAILY MEAN	5850	Jun 21	4960
ANNUAL SEVEN-DAY MINIMUM	6020	Jun 20	5750
ANNUAL RUNOFF (AC-FT)	4984000	4832000	7448000
10 PERCENT EXCEEDS	7370	7310	16100
50 PERCENT EXCEEDS	6990	6740	8550
90 PERCENT EXCEEDS	6260	5900	6680



DIVERSIONS FROM SNAKE RIVER

BETWEEN SNAKE RIVER BELOW LOWER SALMON FALLS AND SNAKE RIVER AT KING HILL

13153778 KING HILL IRRIGATION DISTRICT PUMPING PLANT (BLACK MESA SITE) NEAR KING HILL, ID

LOCATION.--Lat 42°54'53", long 115°09'41", in NW¼SW¼ sec.9, T.6 S., R.11 E., Elmore County, Hydrologic Unit 17040212, about 6.5 mi south of King Hill.

PERIOD OF RECORD.--April 1986 to current year (irrigation seasons only). April 1986 to October 1988 published as "King Hill Canal (Black Mesa Site) near King Hill" (13153779). Prior to 1986, miscellaneous measurements only.

GAGE.--In-line flow sensor with datalogger.

REMARKS.--Records good except for estimated daily discharges, which are fair. In-line flow sensor rated by current meter measurements from canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 107 ft³/s June 10, 11, 2001; no flow for long periods each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	---	---	---	---	---	---	77	78	82	77	78
2	78	---	---	---	---	---	---	75	81	84	77	77
3	72	---	---	---	---	---	---	80	81	90	76	80
4	74	---	---	---	---	---	---	81	83	93	75	78
5	26	---	---	---	---	---	---	80	84	92	76	72
6	0.00	---	---	---	---	---	---	80	88	90	75	70
7	0.00	---	---	---	---	---	---	90	91	90	75	71
8	0.00	---	---	---	---	---	---	94	87	92	76	70
9	0.00	---	---	---	---	---	0.04	87	89	92	77	67
10	0.00	---	---	---	---	---	2.5	76	83	93	75	68
11	0.00	---	---	---	---	---	38	68	81	92	74	69
12	0.00	---	---	---	---	---	47	64	85	92	74	69
13	0.00	---	---	---	---	---	62	70	85	92	73	68
14	0.00	---	---	---	---	---	74	73	89	92	74	68
15	0.00	---	---	---	---	---	72	77	90	90	76	65
16	0.00	---	---	---	---	---	75	78	91	88	79	65
17	0.00	---	---	---	---	---	78	77	88	88	81	66
18	---	---	---	---	---	---	80	77	86	89	80	64
19	---	---	---	---	---	---	82	72	84	87	79	66
20	---	---	---	---	---	---	82	62	82	87	79	65
21	---	---	---	---	---	---	84	64	81	89	76	64
22	---	---	---	---	---	---	88	59	83	89	74	66
23	---	---	---	---	---	---	87	56	85	89	73	e75
24	---	---	---	---	---	---	84	50	82	88	68	e80
25	---	---	---	---	---	---	83	49	86	83	63	e80
26	---	---	---	---	---	---	85	57	97	81	68	e80
27	---	---	---	---	---	---	84	64	97	78	72	80
28	---	---	---	---	---	---	80	78	98	79	74	80
29	---	---	---	---	---	---	79	79	95	77	74	78
30	---	---	---	---	---	---	78	74	91	73	77	76
31	---	---	---	---	---	---	---	78	---	78	78	---
TOTAL	---	---	---	---	---	---	---	2246	2601	2699	2325	2155
MEAN	---	---	---	---	---	---	---	72.45	86.70	87.06	75.00	71.83
MAX	---	---	---	---	---	---	---	94	98	93	81	80
MIN	---	---	---	---	---	---	---	49	78	73	63	64
AC-FT	---	---	---	---	---	---	---	4450	5160	5350	4610	4270

e Estimated

SNAKE RIVER MAIN STEM  
13154500 SNAKE RIVER AT KING HILL, ID

LOCATION.--Lat 43°00'08", long 115°12'06", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.7, T.5 S., R.11 E., Elmore County, Hydrologic Unit 17040212, on right bank, 300 ft east of railroad tracks at King Hill, 20 mi downstream from Malad River, and at mile 546.6.

DRAINAGE AREA.--35,800 mi<sup>2</sup>, approximately. Mean elevation, 6,040 ft.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1909 to current year.

REVISED RECORDS.--WSP 1317: 1935(M). WDR ID-76-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 2,492.3 ft above NGVD of 1929 (stadia levels). Nonrecording gage May 13, 1909 to Mar. 1, 1910, on left bank at present site at datum 2.20 ft higher, Mar. 7 to Aug. 16, 1910, 0.8 mi upstream at different datum, and Aug. 17, 1910 to Oct. 7, 1928, at present site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by American Falls Reservoir, 168.4 mi upstream. Diurnal fluctuation caused by hydroelectric plants upstream. At times, practically entire flow is diverted at Milner during irrigation seasons; only minor diversions below Milner; flow at King Hill is then derived largely from springs and seepage entering below Milner. Diversions above station for irrigation of about 2,450,000 acres, of which about 675,000 acres are irrigated by withdrawals from ground water (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 47,200 ft<sup>3</sup>/s June 22, 1918, gage height, 16.3 ft, from rating curve extended above 30,000 ft<sup>3</sup>/s; minimum observed, 1,250 ft<sup>3</sup>/s Jan. 10, 1950, when flow was cut for gage repairs, gage height, 1.75 ft; minimum daily, 4,760 ft<sup>3</sup>/s June 7-9, Aug. 15, 16, 1910.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,990 ft<sup>3</sup>/s Mar. 8; minimum daily, 5,590 ft<sup>3</sup>/s June 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7290	7180	7130	e7100	7070	6860	7460	6720	5940	5820	6540	6990
2	7430	7280	7300	e7200	6910	6870	7420	6730	6240	5760	6810	7350
3	7360	7230	7380	7270	7030	6820	7200	6800	6380	5810	6620	7060
4	7520	7210	7210	7150	7040	6810	6870	6720	6510	5760	6450	6870
5	7080	7260	7330	7230	6780	6920	6440	6560	6420	5660	6720	7300
6	7350	7520	7360	7120	7000	6750	6280	6400	6320	5950	6500	6960
7	7560	7090	7460	7570	6890	7950	6580	6370	6130	5650	7070	7240
8	7510	7360	7300	6970	6880	7990	6500	6550	6000	5900	6730	7470
9	7430	7350	7250	7410	7030	7310	6370	6940	6310	5940	6370	7360
10	7540	7550	7380	7360	6910	6980	6330	6970	6530	5800	6570	7740
11	7670	7510	7210	7290	6910	6950	6210	6660	6560	6030	6580	7490
12	7760	7560	7230	7220	7030	7140	6190	6590	6540	6000	7060	7390
13	7720	7520	7260	7160	6830	7880	6240	6560	6140	5930	6820	7500
14	7720	7440	7520	7210	6880	7380	6070	6120	6070	5700	6310	7330
15	7860	7410	7420	7120	6930	7200	6240	6160	6020	6060	6540	7500
16	7840	7320	7310	7090	6930	7010	5980	6110	5870	5990	6550	7310
17	7420	7410	7190	6960	6860	7020	6210	6100	5680	6390	6630	7460
18	7440	7340	7250	7110	6970	7090	6290	6080	5750	6710	6760	7410
19	7260	7300	7340	7020	7160	6950	6460	6070	5780	6290	7050	7580
20	7500	7320	7320	6940	7060	6930	6600	6180	5870	6370	6570	7500
21	7310	7380	7220	7080	7520	7220	5850	6330	6020	6860	6610	7490
22	7150	7400	7300	7080	7280	7700	6210	6330	5820	6720	6590	7400
23	7170	7430	7240	7020	7410	7820	6670	6630	5900	6630	7140	7690
24	7220	7270	7240	7040	7750	7890	6620	6610	6230	6450	6840	7470
25	7020	7350	7180	7100	7530	7600	6710	6340	5800	6650	7010	7490
26	7260	7310	7120	6990	7050	7650	6590	6340	5940	6850	6520	7470
27	7070	7230	7190	7110	7030	7330	6860	6320	5660	6480	7090	7320
28	7260	7440	e7200	7110	6910	7330	6290	6080	5880	6090	7250	7540
29	7140	7590	e7100	6940	---	7500	6750	6080	5590	7160	6870	7470
30	7190	7100	e7200	6990	---	7230	6500	6120	5940	6520	6860	7740
31	7340	---	e7200	6920	---	7330	---	5980	---	6720	6910	---
TOTAL	229390	220660	225340	220880	197580	225410	194990	198550	181840	192650	208940	221890
MEAN	7400	7355	7269	7125	7056	7271	6500	6405	6061	6215	6740	7396
MAX	7860	7590	7520	7570	7750	7990	7460	6970	6560	7160	7250	7740
MIN	7020	7090	7100	6920	6780	6750	5850	5980	5590	5650	6310	6870
AC-FT	455000	437700	447000	438100	391900	447100	386800	393800	360700	382100	414400	440100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2002, BY WATER YEAR (WY)

MEAN	10480	11000	11010	11210	11340	11670	12720	12490	13190	8453	7800	8803
MAX	18630	20920	19750	21980	25290	26830	28100	27590	36970	21730	10920	14740
(WY)	1985	1985	1984	1984	1997	1997	1971	1984	1909	1909	1997	1912
MIN	6859	7258	7269	7125	7022	6832	6500	6205	6061	5396	4969	5869
(WY)	1925	1935	2002	2002	1935	1935	2002	1924	2002	1910	1910	1910

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1909 - 2002	
ANNUAL TOTAL	2578700		2518120			
ANNUAL MEAN	7065		6899		10800	
HIGHEST ANNUAL MEAN					18070	
LOWEST ANNUAL MEAN					6899	
HIGHEST DAILY MEAN	8280		7990		47200	
LOWEST DAILY MEAN	5510		5590		4760	
ANNUAL SEVEN-DAY MINIMUM	6200		5760		4880	
ANNUAL RUNOFF (AC-FT)	5115000		4995000		7824000	
10 PERCENT EXCEEDS	7500		7500		16900	
50 PERCENT EXCEEDS	7180		7030		9160	
90 PERCENT EXCEEDS	6400		6070		6950	

e Estimated

SNAKE RIVER MAIN STEM

13154500 SNAKE RIVER AT KING HILL, ID--Continued  
(National water-quality assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1951 to September 1980 (discontinued).

WATER TEMPERATURE: March 1951 to September 1980, June to September 1993, June to September 1994, July to September 1995, July to September 1996, May to September 2001, June to September 2002.

INSTRUMENTATION.--Water-quality monitor from March 1951 to September 1980. Temperature recording data logger from June to September 1993, June to September 1994, July to September 1995, July to September 1996, May to September 2001, June to September 2002.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 595 micromho/cm June 19, 1968; minimum, 296 micromho/cm May 15, 1974.

WATER TEMPERATURE: Maximum, 23.0 °C Aug. 2, 1955; minimum, 3.0 °C Dec. 11, 16, 1972.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 21.9 °C July 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	BICAR-BONATE WAT.DIS FET HCO3 (MG/L) (29804)	ALKA-LINITY WAT DIS TOT FET FIELD (MG/L AS CACO3) (00418)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)	
OCT	11...	0915	7930	493	8.3	11.0	12.7	9.0	93	206	169	48.4	26.6	.014
NOV	15...	1000	7430	494	8.4	6.0	12.2	10.1	91	197	163	48.4	26.7	.017
DEC	14...	1015	7430	495	8.4	5.0	9.0	10.1	97	208	172	46.5	26.6	.021
JAN	24...	0945	6940	487	8.4	4.5	9.2	10.4	98	195	161	45.3	26.5	.023
FEB	21...	0930	7750	479	8.4	3.0	10.3	10.0	101	188	156	44.7	26.6	.014
MAR	20...	1030	6890	462	8.6	12.0	11.1	9.9	98	178	147	43.2	24.8	.014
APR	16...	0930	5580	425	8.7	5.0	12.9	9.6	100	172	142	40.7	22.5	.016
MAY	17...	0900	6040	446	8.5	16.0	14.5	10.1	109	176	147	41.0	24.3	.014
JUN	13...	0915	6080	461	8.5	19.5	15.6	9.6	105	185	156	43.7	26.1	.016
JUL	16...	0930	6120	473	8.2	30.0	19.7	7.8	94	183	152	41.7	24.0	.022
SEP	18...	1000	6670	492	8.4	12.0	15.7	10.4	114	193	160	45.9	24.6	.011

Date	NITRO-GEN, AM- MONIA DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AM- MONIA + ORG-ANIC DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM- MONIA + ORG-ANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ORTHO- PHOS- PHATE DIS-SOLVED (MG/L AS P) (00671)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD (UG/L) (82673)	BUTYL- ATE, WATER, FLTRD (UG/L) (04028)	CAR- BARYL WATER, FLTRD (UG/L) (82680)	CARBO- FURAN WATER, FLTRD (UG/L) (82674)	
OCT	11...	1.54	<.04	.19	.046	.03	--	--	--	--	--	--	--	
NOV	15...	1.74	<.04	.16	.051	.03	<.002	E.006	E.005	<.050	<.010	<.002	<.041	<.020
DEC	14...	1.76	<.04	.30	.062	.05	--	--	--	--	--	--	--	
JAN	24...	1.75	E.03	.19	.069	.06	<.004	E.006	E.005	<.050	<.010	<.002	<.041	<.020
FEB	21...	1.69	<.04	.18	.087	.05	--	--	--	--	--	--	--	
MAR	20...	1.49	<.04	.27	.082	.05	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020
APR	16...	1.25	<.04	.29	.076	.05	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020
MAY	17...	.96	<.04	.57	.096	E.01	<.004	E.005	.008	<.050	<.010	<.002	<.041	<.020
JUN	13...	1.11	<.04	.42	.074	.03	<.004	E.004	<.007	<.050	<.010	<.002	<.041	<.020
JUL	16...	1.28	.07	.19	.069	.03	<.004	<.006	<.007	<.050	<.010	<.002	<.041	<.020
SEP	18...	1.50	<.04	.16	.058	.04	<.004	E.007	<.007	<.050	<.010	<.002	<.041	<.020

## SNAKE RIVER MAIN STEM

## 13154500 SNAKE RIVER AT KING HILL, ID--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	P,P' DDE (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U (UG/L) (82677)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)
			GF, REC	DISSOLV	SOLVED	SOLVED	GF, REC	GF, REC	GF, REC	GF, REC	GF, REC	GF, REC	REC
OCT 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 15...	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.02	<.002	<.009	<.005	<.003	<.005
DEC 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 24...	<.005	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005
FEB 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 20...	<.005	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005
APR 16...	<.005	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005
MAY 17...	<.005	<.018	<.003	<.003	<.005	<.005	<.006	<.02	.015	<.009	<.005	<.003	<.005
JUN 13...	<.005	<.018	<.003	<.003	<.005	<.005	<.006	<.02	.012	<.009	<.005	<.003	<.005
JUL 16...	<.005	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005
SEP 18...	<.005	<.018	<.003	<.003	<.005	<.005	<.006	<.02	<.002	<.009	<.005	<.003	<.005
Date	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	METHYL PARA- THION WAT FLT 0.7 U (UG/L) (82667)	FEB- ULATE WATER FILTRD 0.7 U (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 15...	<.004	<.035	<.027	<.013	<.006	<.002	<.007	<.007	<.006	<.002	<.010	<.006	<.011
DEC 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 24...	<.004	<.035	<.027	<.013	<.006	<.002	<.007	<.010	<.006	<.004	<.022	<.006	<.011
FEB 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 20...	<.004	<.035	<.027	<.013	<.006	<.002	<.007	<.010	<.006	<.004	<.022	<.006	<.011
APR 16...	<.004	<.035	<.027	<.013	<.006	<.002	<.007	<.010	<.006	<.004	<.022	<.006	<.011
MAY 17...	<.004	<.035	<.027	<.013	<.006	<.002	<.007	<.010	<.006	<.004	<.022	<.006	<.011
JUN 13...	<.004	<.035	<.027	<.013	<.006	<.002	<.007	<.010	<.006	<.004	<.022	<.006	<.011
JUL 16...	<.004	<.035	<.027	<.013	<.006	<.002	<.007	<.010	<.006	<.004	<.022	<.006	<.011
SEP 18...	<.004	<.035	<.027	<.013	<.006	<.002	<.007	<.010	<.006	<.004	<.022	<.006	<.011

SNAKE RIVER MAIN STEM  
13154500 SNAKE RIVER AT KING HILL, ID--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--	--	6.0
NOV 15...	<.01	<.004	<.010	<.011	<.02	<.011	<.02	<.034	<.02	<.005	<.002	<.009	9.0
DEC 14...	--	--	--	--	--	--	--	--	--	--	--	--	1.0
JAN 24...	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	11
FEB 21...	--	--	--	--	--	--	--	--	--	--	--	--	18
MAR 20...	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	23
APR 16...	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	4.0
MAY 17...	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	23
JUN 13...	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	10
JUL 16...	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	10
SEP 18...	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	6.0

< Less than  
E Estimated value

WATER TEMPERATURE, DEGREES CELSIUS, JUNE TO SEPTEMBER 2002

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	20.7	18.5	19.7	20.1	17.8	18.8	19.0	17.0	18.0
2	---	---	---	20.7	18.3	19.5	20.1	18.0	18.9	19.3	17.2	18.1
3	---	---	---	20.9	18.5	19.6	20.1	17.8	18.8	19.3	17.2	18.1
4	---	---	---	20.6	18.3	19.5	20.4	18.2	19.1	19.0	17.2	18.1
5	---	---	---	20.6	18.3	19.4	20.1	17.5	18.7	19.0	17.7	18.2
6	---	---	---	20.6	18.3	19.5	19.9	17.5	18.5	18.6	17.4	17.9
7	---	---	---	20.7	18.5	19.5	18.8	17.0	17.8	18.3	17.0	17.5
8	---	---	---	20.7	18.6	19.7	19.0	16.6	17.7	18.2	16.4	17.2
9	---	---	---	20.7	18.3	19.5	19.0	16.4	17.5	18.0	16.1	16.9
10	---	---	---	20.9	18.3	19.6	19.3	16.4	17.7	18.2	16.1	16.9
11	---	---	---	21.1	18.5	19.8	19.3	16.9	18.0	18.0	15.9	16.9
12	---	---	---	21.6	19.0	20.2	19.6	17.0	18.2	18.2	16.2	17.0
13	---	---	---	21.4	19.1	20.2	19.6	17.2	18.3	18.3	16.2	17.2
14	19.5	16.4	17.8	21.9	19.5	20.6	19.6	17.0	18.2	18.3	16.4	17.3
15	20.1	17.2	18.6	21.4	19.8	20.5	19.8	17.2	18.5	18.3	16.4	17.2
16	20.6	17.7	19.1	21.4	19.5	20.4	19.5	17.4	18.4	17.8	16.4	17.1
17	19.9	17.7	19.0	21.4	19.5	20.3	19.5	17.0	18.2	17.4	16.4	16.9
18	19.9	18.2	19.0	20.7	19.5	20.0	19.3	17.0	18.1	17.0	15.8	16.3
19	19.6	17.2	18.5	21.1	19.3	20.0	19.3	16.7	17.9	16.7	15.3	16.0
20	19.1	16.9	18.1	21.4	19.0	20.0	19.0	16.4	17.7	16.6	15.0	15.7
21	19.1	17.2	18.1	21.1	18.8	19.9	18.8	16.6	17.6	16.6	14.8	15.5
22	19.6	17.2	18.1	20.7	19.0	19.7	18.5	16.1	17.3	16.6	14.7	15.5
23	19.8	17.2	18.5	21.2	18.8	20.0	18.6	16.4	17.4	16.7	14.5	15.5
24	20.4	17.5	19.0	21.2	19.0	20.0	19.0	16.6	17.6	16.7	14.7	15.6
25	20.6	17.8	19.2	21.2	19.0	20.0	19.1	16.7	17.7	16.7	14.8	15.6
26	20.7	18.3	19.4	21.2	18.8	19.9	19.0	16.9	17.8	16.6	14.7	15.6
27	21.1	18.5	19.7	20.7	18.8	19.7	19.1	16.9	17.9	16.4	15.0	15.5
28	20.7	18.6	19.7	20.4	18.2	19.3	19.0	17.0	17.7	16.6	14.8	15.5
29	20.9	18.8	19.8	20.4	18.2	19.2	19.1	17.0	17.9	15.9	14.7	15.3
30	21.1	18.5	19.7	20.7	18.0	19.1	18.8	17.0	17.8	15.8	14.4	15.1
31	---	---	---	19.9	18.0	18.9	19.1	17.0	17.9	---	---	---
MONTH	---	---	---	21.9	18.0	19.8	20.4	16.1	18.1	19.3	14.4	16.6