

Figure 13. 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, Camas quad., 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 good. 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, 172 ft<sup>3</sup>/s May 5; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
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	54	109	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16	101	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.4	83	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21	53	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	172	29	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	130	56	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	107	50	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	92	38	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46	24	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25	22	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16	29	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14	34	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	9.6	34	31	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	50	80	29	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	61	91	28	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	62	107	25	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	20	123	18	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	15	110	15	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	17	110	9.9	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	24	87	8.4	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	28	62	7.9	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	49	57	2.5	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	49	51	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	90	70	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	79	103	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	41	135	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	54	160	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	29	135	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	52	114	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	94	117	0.00	0.00	0.00	0.00
31	0.00	---	0.00	---	---	0.00	---	117	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	823.60	2562.4	802.70	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	27.5	82.7	26.8	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	94	172	109	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.4	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	1630	5080	1590	0.00	0.00	0.00

CAL YR 2002 TOTAL 3874.69 MEAN 10.6 MAX 167 MIN 0.00 AC-FT 7690  
WTR YR 2003 TOTAL 4188.70 MEAN 11.5 MAX 172 MIN 0.00 AC-FT 8310

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, Rays Lake quad., Hydrologic Unit 17040215, at mouth of Camas Creek, 4.4 mi northeast of First Owsley pumphouse, and 5.5 mi northeast of Terretton.

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 diversion of flow from Camas Creek into Camas Creek diversion canal (see Remarks).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 37,400 acre-ft Apr. 30, gage height, 7.92 ft; minimum contents, 6,430 acre-ft Mar. 13, 14, gage height, 1.39 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 2002 TO SEPTEMBER 2003  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17300	9900	9150	8370	e7670	6770	12900	37000	27700	23000	15400	15500
2	17000	9940	9120	8340	e7640	6710	e14100	36600	27200	22300	16100	15900
3	16800	9940	9080	8310	e7610	6690	14900	36600	26600	21800	16400	16200
4	e16600	9900	9050	8280	e7580	6690	15700	36200	26200	21400	16400	16400
5	16400	9860	9020	8240	e7550	6660	16700	36000	26100	21200	16700	16700
6	16300	9830	8990	8210	e7520	6580	17700	35600	25800	20900	16800	16800
7	15900	9790	8950	8210	e7490	6580	18600	35200	26000	20300	16800	17200
8	15700	9790	8920	8180	e7460	6530	19400	34400	26000	19800	16800	17400
9	15300	9790	8890	8150	e7430	6530	20400	34200	26200	19200	16800	17600
10	14800	9790	8860	8150	e7400	6510	21000	33700	26100	18700	16800	17300
11	14200	9760	8820	8120	e7380	6530	21800	33300	25700	18300	16900	17300
12	13800	9720	8790	8090	e7350	6480	22600	33100	25800	18000	16900	16800
13	13600	9690	8760	8060	e7350	6430	23400	32900	26000	17500	16600	16800
14	13200	9660	8760	8060	e7320	6610	24300	33000	26200	17000	16400	16700
15	13000	9620	e8730	8030	e7290	6710	25100	e32900	26400	16700	16200	16600
16	12600	9590	e8730	8000	e7290	6820	25800	32800	26500	16300	15900	16300
17	12400	9550	8690	e7970	e7260	6960	26900	32700	26500	15800	15500	16200
18	12200	9520	8630	e7970	e7200	6980	27700	32200	26500	15400	15300	15900
19	12000	9520	8600	e7940	e7180	7090	28500	31900	26200	15000	15000	15800
20	11800	9450	8560	e7900	e7120	7150	29100	31900	26100	14500	14900	15700
21	11600	9450	8560	e7900	7090	7260	30000	31700	26000	14000	14700	15500
22	11300	9420	8530	e7880	7040	e7400	30700	31600	25500	13900	14800	15400
23	11000	9450	8500	e7840	7010	e7550	31800	31400	25100	13900	14700	15300
24	10700	9420	8500	e7810	6930	e7700	32600	31200	25200	14100	14700	15000
25	10400	9350	8470	e7780	6880	e7940	33400	31000	25100	14200	14800	14700
26	10200	9350	8430	e7780	6850	e8210	34300	30700	25000	14300	14800	14400
27	10100	9320	8430	e7760	6820	e8790	35000	30300	24600	14400	15000	14200
28	10000	9250	8400	e7720	6790	e9450	36100	29900	24200	14500	15000	13800
29	9940	9250	8370	e7700	---	e10200	36800	29500	23700	14700	14800	13400
30	9940	9180	8340	e7700	---	e10900	37300	28800	23400	14800	15000	13100
31	9900	---	8370	7700	---	12000	---	28200	---	15200	15300	---
MAX	17300	9940	9150	8370	7670	12000	37300	37000	27700	23000	16900	17600
MIN	9900	9180	8340	7700	6790	6430	12900	28200	23400	13900	14700	13100
†	2.53	2.32	2.07	1.85	1.53	3.09	7.90	6.43	5.56	3.87	3.88	3.37
‡	-7700	-720	-810	-670	-910	5210	25300	-9100	-4800	-8200	100	-2200
CAL YR 2002	MAX 37800	MIN 7040	† 910									
WTR YR 2003	MAX 37300	MIN 6430	† -4500									

† 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, Indian Creek quad., 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 fair. 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, 82 ft<sup>3</sup>/s May 27; minimum daily, 27 ft<sup>3</sup>/s Feb. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	e28	36	e30	34	e34	33	52	74	40	33	30
2	35	e30	36	e30	33	e34	37	49	70	40	33	30
3	35	e32	35	e30	e32	e36	35	54	68	40	33	30
4	35	e34	36	e30	e32	e34	32	54	66	38	33	29
5	35	e34	35	e30	e32	e34	33	51	64	38	32	30
6	35	e34	35	e28	e32	e36	36	51	62	36	31	31
7	35	e34	35	e28	e30	37	34	49	61	36	30	31
8	35	e34	e32	e30	e30	37	35	46	59	36	30	31
9	35	e32	e32	e30	e30	35	35	46	59	36	28	31
10	36	e32	e32	e30	e32	33	35	45	58	35	28	33
11	36	e32	e32	e32	e32	34	34	45	56	35	28	32
12	36	e32	33	e32	e32	35	31	46	56	35	28	32
13	36	e34	33	e32	e32	36	32	45	57	34	29	31
14	36	e34	33	e32	e33	38	34	45	56	34	28	31
15	36	e34	32	e32	e33	36	40	44	55	34	28	31
16	36	e34	e32	e30	e33	42	35	44	55	34	28	31
17	36	e36	e32	e30	e32	35	37	43	50	33	30	32
18	36	e34	e30	e30	e32	32	42	41	48	33	30	32
19	36	e34	e32	e30	e32	33	38	42	47	34	29	32
20	36	e34	e30	e30	e32	33	39	42	48	35	29	31
21	36	e36	e30	e30	e32	33	39	41	50	34	29	31
22	36	e34	e30	e32	e34	33	44	43	50	33	30	31
23	36	e34	e32	e32	e32	34	48	46	49	33	30	31
24	36	e34	e28	34	e27	32	48	50	53	33	30	31
25	35	e34	e30	34	e32	33	49	57	51	34	30	31
26	35	e34	e30	34	e34	35	53	74	47	36	29	30
27	35	e34	e30	34	e34	30	50	82	45	36	30	30
28	35	36	e34	34	e34	32	50	67	43	34	30	31
29	35	36	e32	34	---	33	56	63	42	34	30	31
30	e34	36	e30	34	---	33	57	64	41	33	30	31
31	e30	---	e30	34	---	32	---	67	---	33	30	---
TOTAL	1093	1010	999	972	899	1064	1201	1588	1640	1089	926	929
MEAN	35.3	33.7	32.2	31.4	32.1	34.3	40.0	51.2	54.7	35.1	29.9	31.0
MAX	36	36	36	34	34	42	57	82	74	40	33	33
MIN	30	28	28	28	27	30	31	41	41	33	28	29
AC-FT	2170	2000	1980	1930	1780	2110	2380	3150	3250	2160	1840	1840

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2003, BY WATER YEAR (WY)

MEAN	52.2	49.9	42.4	41.7	46.1	53.7	57.6	84.1	107	78.5	60.5	51.4
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	32.1	34.3	37.6	42.9	39.3	32.0	28.2	28.7
(WY)	1993	1993	1993	1949	2003	2003	1991	2002	1992	1994	2002	1992

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1921 - 2003
ANNUAL TOTAL	13570	13410	
ANNUAL MEAN	37.2	36.7	60.8
HIGHEST ANNUAL MEAN			109
LOWEST ANNUAL MEAN			36.7
HIGHEST DAILY MEAN	76	82	470
LOWEST DAILY MEAN	25	27	10
ANNUAL SEVEN-DAY MINIMUM	26	28	13
ANNUAL RUNOFF (AC-FT)	26920	26600	44030
10 PERCENT EXCEEDS	47	50	90
50 PERCENT EXCEEDS	36	34	52
90 PERCENT EXCEEDS	30	30	32

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 NE¼SE¼ sec.17, T.7 N., R.20 E., Custer County, Harry Canyon quad., 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 except for discharges May 16-22, June 24 to July 16 and estimated daily discharges, which are fair. 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.

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 31	0045	*1,410	*5.45	No other peak greater than base discharge.			

Minimum daily, 11 ft<sup>3</sup>/s Dec. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	e15	19	e16	18	e15	21	46	736	170	48	31
2	21	e15	19	e16	e16	e14	21	45	561	157	47	30
3	21	16	18	e16	e14	e15	19	47	484	144	50	30
4	21	16	e18	e16	e14	e14	18	48	431	136	52	29
5	21	16	e17	17	e14	e15	19	47	408	129	48	29
6	21	17	e15	e15	e14	17	19	46	402	126	45	33
7	21	17	e15	e14	e13	17	18	45	406	119	43	32
8	21	18	e15	e14	e14	16	19	47	408	114	41	31
9	21	18	e15	e14	e14	15	20	47	431	108	39	31
10	21	18	e16	e16	16	14	23	46	429	102	38	32
11	20	17	17	e16	e14	14	27	48	385	99	36	31
12	19	e16	18	17	e14	17	32	49	349	96	35	30
13	19	e16	17	17	16	22	33	50	332	93	34	29
14	19	e16	17	17	17	30	35	55	336	90	33	29
15	19	16	17	e16	16	21	33	73	336	86	33	29
16	19	18	17	e15	17	19	32	115	309	82	34	28
17	19	e16	16	e15	e15	18	34	126	329	78	33	29
18	19	e15	e13	e15	e14	17	32	127	331	77	33	29
19	19	19	e12	e14	e14	17	31	107	333	73	32	28
20	19	19	e14	e15	e15	17	33	102	337	73	31	27
21	19	18	e14	e16	e16	17	34	113	266	70	31	27
22	19	18	e14	e16	17	18	38	177	216	68	33	26
23	21	20	e14	17	e14	19	43	309	186	65	42	25
24	20	e16	e13	e15	e13	18	48	466	166	64	38	25
25	20	e15	e12	e15	e13	18	60	545	146	65	35	24
26	19	18	e11	16	e14	18	55	613	130	69	33	24
27	19	e17	e13	17	e15	17	49	635	130	65	34	23
28	19	19	e15	e15	e15	16	48	702	148	59	33	23
29	19	19	e16	e14	---	16	48	987	155	56	33	23
30	19	19	e15	16	---	17	48	1150	168	53	35	23
31	e15	---	e16	16	---	19	---	1130	---	50	32	---
TOTAL	610	513	478	484	416	537	990	8143	9784	2836	1164	840
MEAN	19.7	17.1	15.4	15.6	14.9	17.3	33.0	263	326	91.5	37.5	28.0
MAX	21	20	19	17	18	30	60	1150	736	170	52	33
MIN	15	15	11	14	13	14	18	45	130	50	31	23
AC-FT	1210	1020	948	960	825	1070	1960	16150	19410	5630	2310	1670
CFSM	0.17	0.15	0.14	0.14	0.13	0.15	0.29	2.30	2.86	0.80	0.33	0.25
IN.	0.20	0.17	0.16	0.16	0.14	0.18	0.32	2.66	3.19	0.93	0.38	0.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2003, BY WATER YEAR (WY)

MEAN	38.1	31.2	25.5	24.0	21.7	22.4	61.3	276	410	196	70.6	46.5
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	19.7	17.1	14.1	14.1	14.7	13.0	17.2	66.2	115	52.5	25.5	21.4
(WY)	2003	2003	1993	1991	1961	2002	1955	1977	2001	1994	2001	1992

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1944 - 2003
ANNUAL TOTAL	20425	26795	
ANNUAL MEAN	56.0	73.4	102
HIGHEST ANNUAL MEAN			184
LOWEST ANNUAL MEAN			48.9
HIGHEST DAILY MEAN	530	Jun 1	1150
LOWEST DAILY MEAN	10	Feb 26	11
ANNUAL SEVEN-DAY MINIMUM	12	Mar 22	13
ANNUAL RUNOFF (AC-FT)	40510	53150	74000
ANNUAL RUNOFF (CFSM)	0.49	0.64	0.90
ANNUAL RUNOFF (INCHES)	6.66	8.74	12.17
10 PERCENT EXCEEDS	171	161	297
50 PERCENT EXCEEDS	21	21	36
90 PERCENT EXCEEDS	14	15	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, Harry Canyon quad., 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 fair 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)
May 31	unknown	a*3,100	unknown	No other peak greater than base discharge.			

(a) Maximum daily discharge.

Minimum daily, 30 ft<sup>3</sup>/s Feb. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	e60	e65	e55	e44	e36	73	122	e2100	475	122	91
2	68	e60	e65	e50	e40	e34	70	121	e1700	431	117	88
3	68	e60	e65	e55	e36	e36	60	126	e1500	398	124	87
4	68	e60	e65	e55	e38	e36	58	133	e1300	376	129	86
5	67	e65	e65	e48	e36	e38	61	127	e1200	354	120	87
6	67	e65	e60	e46	e36	e40	60	124	e1200	345	114	101
7	66	e65	e60	e44	e34	e38	57	121	e1200	326	109	106
8	66	e70	e60	e46	e36	e38	58	123	e1200	312	105	98
9	66	e70	e60	e46	e38	e38	63	e130	e1200	298	102	94
10	66	e70	e60	e46	e40	e36	73	e130	e1200	279	97	97
11	65	e70	e65	e48	e36	e36	86	e140	e1100	269	94	94
12	62	e65	e65	e48	e38	e42	100	e160	e1000	265	92	89
13	62	e65	e65	e48	e38	e55	106	e180	e950	256	91	87
14	62	e60	e65	e48	e40	e65	104	e210	e950	246	89	86
15	62	e60	e65	e46	e38	e55	97	e250	e1000	233	89	85
16	62	e60	e65	e46	e36	e55	88	e270	e900	221	97	85
17	61	e65	e60	e46	e32	e50	91	294	e900	211	93	85
18	61	e60	e60	e46	e32	e50	87	308	924	206	91	87
19	60	e65	e55	e46	e32	e50	85	276	909	198	90	85
20	61	e65	e55	e48	e32	e50	86	268	902	195	87	83
21	61	e65	e60	e48	e34	e55	90	286	703	190	85	80
22	62	e65	e60	e48	e34	58	99	389	571	179	96	78
23	70	e65	e60	e50	e32	65	117	627	501	170	145	76
24	68	e65	e55	e48	e30	58	130	1050	460	167	121	75
25	63	e60	e55	e46	e32	57	164	1360	420	167	107	74
26	61	e60	e50	e46	e32	60	153	e1700	374	174	98	73
27	62	e65	e55	e48	e34	54	131	e1900	380	168	99	72
28	65	e65	e60	e46	e36	52	128	e2000	443	151	100	72
29	63	e65	e60	e44	---	54	128	e2700	464	142	95	72
30	64	e65	e55	e46	---	58	128	e3000	483	136	104	71
31	e60	---	e55	e46	---	62	---	e3100	---	129	97	---
TOTAL	1987	1920	1870	1477	996	1511	2831	21725	28134	7667	3199	2544
MEAN	64.1	64.0	60.3	47.6	35.6	48.7	94.4	701	938	247	103	84.8
MAX	70	70	65	55	44	65	164	3100	2100	475	145	106
MIN	60	60	50	44	30	34	57	121	374	129	85	71
AC-FT	3940	3810	3710	2930	1980	3000	5620	43090	55800	15210	6350	5050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2003, BY WATER YEAR (WY)

MEAN	125	106	86.6	81.6	76.6	80.3	182	764	1199	588	217	144
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	35.6	47.1	41.2	200	221	93.5	54.2	47.7
(WY)	1934	1995	1993	1991	2003	1961	1912	1977	1934	1934	1934	1934

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1904 - 2003
ANNUAL TOTAL	59673	75861	
ANNUAL MEAN	163	208	312
HIGHEST ANNUAL MEAN			538
LOWEST ANNUAL MEAN			154
HIGHEST DAILY MEAN	1600	Jun 1	3100
LOWEST DAILY MEAN	40	Feb 26	30
ANNUAL SEVEN-DAY MINIMUM	42	Mar 22	32
ANNUAL RUNOFF (AC-FT)	118400		150500
10 PERCENT EXCEEDS	481		450
50 PERCENT EXCEEDS	66		68
90 PERCENT EXCEEDS	50		40

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, July to September 2003 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June to September 1993, June to September 1996, December 2001 to November 2002, June to September 2003 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 20.5 °C July 12-13, 2003; minimum, 0.0 °C many days during winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 20.5 °C July 12-13; minimum, 3.1 °C Sept. 18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Turbidity, wat unfltrd, lab, Hach 2100AN NTU (99872)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Hardness, water, unfltrd, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
JUL 18...	1150	213	150	7.9	30.0	13.2	<1.0	11.4	126	41	--	--	--
AUG 18...	1310	93	193	8.6	23.4	12.6	<1.0	8.4	100	S4	--	--	--
SEP 12...	1210	89	194	8.3	14.4	10.1	2.0	10.1	114	--	86	24.7	5.90

Date	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat unfltrd, fixed end pt, field, mg/L (00440)	Carbonate, wat unfltrd, fixed end pt, field, mg/L (00445)	ANC, wat unfltrd, fixed end pt, field, mg/L as CaCO3 (00410)	Sulfate, water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Ammonia, water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)
JUL 18...	--	--	--	--	--	--	--	--	--	--	<.015	E.08	<.022
AUG 18...	--	--	--	--	--	--	--	--	--	--	<.015	E.06	<.022
SEP 12...	2.87	7	.73	102	1	86	15.5	1.35	.2	9.0	<.015	<.10	<.022

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd, mg/L (00665)	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)
JUL 18...	<.007	.006	1	.58
AUG 18...	<.007	.006	<1	--
SEP 12...	<.007	.005	1	.24

< Less than  
 E Estimated value  
 S Most probable value



MUD LAKE-LOST RIVER BASINS

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

Temperature, water, degrees Celsius  
 WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.3	4.4	7.6	15.6	8.0	12.0	---	---	---	16.0	9.6	13.1
2	11.8	4.8	8.2	15.4	8.0	11.8	---	---	---	17.1	10.3	13.9
3	11.7	4.4	7.9	15.4	7.8	11.8	---	---	---	16.3	10.6	13.9
4	11.5	4.8	8.1	15.9	8.1	12.0	---	---	---	15.2	10.6	13.1
5	12.0	5.0	8.5	16.5	8.7	12.7	---	---	---	13.8	10.6	12.4
6	12.6	5.6	9.1	16.3	8.7	12.7	---	---	---	13.8	10.1	11.8
7	12.6	6.2	9.3	16.8	8.9	12.9	---	---	---	13.4	8.4	11.0
8	12.9	5.9	9.3	16.8	10.0	13.3	16.8	10.0	13.7	14.3	10.0	12.0
9	13.1	6.2	9.5	17.1	9.5	13.1	17.0	9.8	13.7	11.3	6.7	8.9
10	12.6	5.6	9.1	18.4	10.0	13.8	18.4	10.3	14.4	10.6	7.8	9.2
11	12.9	5.6	9.1	19.4	10.7	14.9	18.4	11.0	14.9	13.4	6.9	9.9
12	11.8	5.9	9.0	20.5	10.4	15.1	16.8	11.7	14.5	12.6	8.9	11.0
13	11.2	6.4	8.7	20.5	10.7	15.6	19.2	11.5	15.3	11.5	5.0	8.5
14	13.7	6.1	9.6	---	---	---	19.6	11.3	15.3	12.0	4.7	8.5
15	12.5	6.6	9.2	---	---	---	17.6	13.2	15.4	10.2	5.8	7.7
16	14.9	6.9	10.3	---	---	---	19.6	13.8	16.2	10.3	5.9	7.9
17	13.9	8.0	11.1	---	---	---	16.7	10.3	13.8	8.6	4.8	6.8
18	14.8	7.3	10.6	---	---	---	17.3	10.4	14.0	9.2	3.1	6.1
19	14.3	8.9	11.7	---	---	---	17.5	11.0	14.7	10.9	4.5	7.5
20	13.3	7.8	9.9	---	---	---	18.7	12.1	15.6	11.3	4.8	8.3
21	12.4	6.1	9.2	---	---	---	17.3	12.3	14.2	11.5	4.7	8.3
22	11.3	6.2	8.8	---	---	---	15.7	12.9	14.2	12.1	5.0	8.7
23	10.4	5.6	7.8	---	---	---	17.0	10.3	13.5	12.0	5.3	9.0
24	8.6	6.1	7.3	---	---	---	17.1	10.4	14.1	11.7	4.7	8.5
25	12.0	5.5	8.3	---	---	---	17.3	9.8	13.8	11.7	5.0	8.6
26	14.6	6.2	10.2	---	---	---	15.9	10.4	13.7	13.1	6.6	10.0
27	16.0	8.6	12.2	---	---	---	17.5	12.3	14.9	13.4	7.2	10.5
28	15.7	9.0	12.6	---	---	---	16.5	10.6	14.0	13.2	7.2	10.4
29	16.5	8.6	12.3	---	---	---	15.6	10.6	12.6	12.3	7.2	10.1
30	16.3	9.0	12.8	---	---	---	16.0	8.6	12.2	11.8	6.7	9.6
31	---	---	---	---	---	---	16.5	9.5	13.2	---	---	---
MONTH	16.5	4.4	9.6	---	---	---	---	---	---	17.1	3.1	9.8

## MUD LAKE-LOST RIVER BASINS

## 13126000 MACKAY RESERVOIR NEAR MACKAY, ID

LOCATION.--Lat 43°57'05", long 113°40'30", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.12, T.7 N., R.23 E., Custer County, Mackay Reservoir quad., 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, 27,800 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, 31,400 acre-ft June 5, 6, gage height 56.20 ft; minimum observed contents, 270 acre-ft Oct. 31, gage height, 8.52 ft; no useable contents Oct. 1 to Nov. 7, Aug. 1 to Sept. 30, when natural flow was passing through the reservoir.

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	4660	10400	15300	18600	21500	24000	29500	20000	---	---
2	---	---	4830	10600	15400	18600	21600	24000	30400	19300	---	---
3	---	---	5000	10800	15500	18800	21700	24200	31000	18600	---	---
4	---	---	5170	11000	15700	18900	21800	24200	31300	18000	---	---
5	---	---	5340	11200	15800	19000	21800	24300	31400	17400	---	---
6	---	---	5510	11300	15900	19100	21900	24400	31300	16700	---	---
7	---	---	5690	11500	16000	19200	22000	24400	31100	16100	300	---
8	---	330	5870	11700	16100	19300	22100	24500	30800	15500	---	---
9	---	550	6040	11800	16300	19400	22200	24500	30600	14800	---	---
10	---	800	6220	12000	16400	19500	22200	24600	30400	14100	---	300
11	---	1030	6400	12100	16500	19600	22300	24600	30100	13400	---	---
12	---	1230	6580	12300	16600	19700	22400	24700	29600	e12600	---	---
13	---	1420	6760	12500	16700	19800	22500	24800	29100	e11800	---	---
14	---	1620	6940	12600	16900	19900	22600	24800	28500	e11100	---	---
15	270	1810	7140	12800	17000	20000	22700	24800	27900	10400	---	---
16	---	1990	7360	12900	17100	20100	22700	24800	27400	9620	---	---
17	---	2180	7560	13100	17200	20200	22800	24900	26900	8890	---	---
18	---	2340	7750	13200	17300	20300	22900	24900	26400	8160	---	---
19	---	2520	7940	13400	17500	20400	23000	24900	26100	7420	---	---
20	---	2700	8150	13500	17600	20500	23000	24900	25900	6710	---	---
21	---	2880	8350	13700	17700	20600	23100	24900	25600	6030	---	---
22	---	3040	8550	13800	17800	20600	23200	24900	25200	5340	---	---
23	---	3240	8740	14000	17900	20700	23300	24900	24600	4680	---	---
24	---	3410	8940	14100	18000	20800	23400	24600	24100	4030	---	---
25	---	3570	9130	14300	18100	20900	23500	24100	23600	3410	---	---
26	---	3760	9320	14400	18200	21000	23600	24000	23100	2850	---	---
27	---	3940	9520	14600	18300	21100	23700	24200	22600	2350	---	---
28	---	4130	9700	14700	18400	21200	23700	24300	21900	1880	---	---
29	---	4310	9890	14800	---	21200	23800	24800	21200	1470	---	---
30	---	4480	10100	15000	---	21300	23900	26000	20600	1120	---	940
31	270	---	10300	15100	---	21400	---	27800	---	790	300	---
MAX	---	---	10300	15100	18400	21400	23900	27800	31400	20000	---	---
MIN	---	---	4660	10400	15300	18600	21500	24000	20600	790	---	---
†	8.52	21.74	32.43	39.18	43.29	46.60	49.21	53.02	46.73	10.88	8.70	11.49
‡	0	4210	5820	4800	3300	3000	2500	3900	-7200	-19810	-490	640

CAL YR 2002 ‡ -4800

WTR YR 2003 ‡ 670

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

e Estimated

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, Mackay Reservoir quad., 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. 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 daily discharge, 870 ft<sup>3</sup>/s June 12; minimum, 33 ft<sup>3</sup>/s Oct. 16, gage height, 1.33 ft; minimum daily, 47 ft<sup>3</sup>/s Dec. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	170	58	56	72	81	84	e85	656	576	246	149
2	153	168	57	56	72	81	84	86	683	562	212	147
3	157	163	57	58	72	81	83	88	702	560	190	145
4	160	164	58	58	72	81	84	88	705	546	176	142
5	163	166	56	58	72	81	85	83	719	527	169	140
6	161	165	55	60	72	81	85	81	748	518	165	142
7	163	165	56	60	73	82	85	81	787	512	157	146
8	163	168	56	60	74	83	85	81	854	512	160	146
9	163	109	58	60	74	83	e85	81	853	515	166	143
10	163	72	58	61	74	83	e85	81	862	511	163	148
11	163	61	55	62	75	83	e85	82	867	514	160	148
12	163	64	54	63	76	83	85	81	870	522	153	143
13	163	67	55	64	76	83	85	81	864	534	151	140
14	163	67	56	64	76	83	87	81	840	534	150	144
15	163	58	57	64	76	84	87	81	821	523	150	139
16	153	59	56	64	76	85	87	81	807	511	150	139
17	131	61	51	64	76	85	88	81	784	505	151	145
18	173	64	51	65	77	85	88	81	743	502	153	149
19	170	63	50	66	78	85	85	81	710	500	153	150
20	170	57	47	66	78	85	e85	e80	700	495	156	156
21	167	60	48	67	78	85	e85	81	689	489	156	156
22	167	62	48	68	78	85	e85	81	678	480	161	156
23	169	65	49	68	79	85	e85	81	676	470	166	159
24	171	67	49	68	79	85	e85	243	637	458	163	160
25	182	63	49	68	80	85	e85	378	591	442	158	124
26	175	55	51	68	81	86	e85	379	572	416	156	108
27	170	55	53	69	81	87	e85	379	578	389	156	118
28	170	56	54	70	81	86	e85	526	587	367	155	129
29	167	56	55	70	---	85	e85	590	596	339	153	137
30	167	57	55	72	---	86	e85	580	594	306	152	142
31	168	---	56	72	---	86	---	629	---	276	152	---
TOTAL	5081	2727	1668	1989	2128	2599	2557	5592	21773	14911	5059	4290
MEAN	164	90.9	53.8	64.2	76.0	83.8	85.2	180	726	481	163	143
MAX	182	170	58	72	81	87	88	629	870	576	246	160
MIN	131	55	47	56	72	81	83	80	572	276	150	108
AC-FT	10080	5410	3310	3950	4220	5160	5070	11090	43190	29580	10030	8510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2003, BY WATER YEAR (WY)

MEAN	169	106	110	121	128	146	158	476	945	669	407	227
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	53.8	64.2	76.0	83.8	85.2	116	203	127	113	99.8
(WY)	1951	1955	2003	2003	2003	2003	2003	1933	1934	1934	1934	1940

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1904 - 2003
ANNUAL TOTAL	64139	70374	
ANNUAL MEAN	176	193	306
HIGHEST ANNUAL MEAN			658
LOWEST ANNUAL MEAN			128
HIGHEST DAILY MEAN	534	Jun 7	870
LOWEST DAILY MEAN	47	Dec 20	47
ANNUAL SEVEN-DAY MINIMUM	49	Dec 19	49
ANNUAL RUNOFF (AC-FT)	127200	139600	221600
10 PERCENT EXCEEDS	463	552	745
50 PERCENT EXCEEDS	98	86	157
90 PERCENT EXCEEDS	58	58	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 SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> 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.--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 2002 TO SEPTEMBER 2003  
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	e0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	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	---	e0.00	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 - 2003, BY WATER YEAR (WY)

MEAN	77.5	83.7	71.4	58.2	60.8	81.4	93.2	127	245	138	47.6	68.5
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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946 - 2003	
ANNUAL TOTAL	0.00		0.00			
ANNUAL MEAN	0.000		0.000		95.3	
HIGHEST ANNUAL MEAN					546	
LOWEST ANNUAL MEAN					0.000	
HIGHEST DAILY MEAN	0.00		Jan 1	0.00	Oct 1	1840
LOWEST DAILY MEAN	0.00		Jan 1	0.00	Oct 1	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00		Jan 1	0.00	Oct 1	0.00
ANNUAL RUNOFF (AC-FT)	0.00				69020	
10 PERCENT EXCEEDS	0.00				244	
50 PERCENT EXCEEDS	0.00				30	
90 PERCENT EXCEEDS	0.00				0.00	

e Estimated

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, Arco Hills SE quad.,

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 2002 TO SEPTEMBER 2003  
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
CAL YR 2002	TOTAL	0.00	MEAN	0.000	MAX	0.00	MIN	0.00	AC-FT	0.00		
WTR YR 2003	TOTAL	0.00	MEAN	0.000	MAX	0.00	MIN	0.00	AC-FT	0.00		

MUD LAKE-LOST RIVER BASINS

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

LOCATION.--Lat 43°29'44", long 113°04'24"(revised), 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, Big Southern Butte quad., 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 2002 TO SEPTEMBER 2003  
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
CAL YR 2002	TOTAL	0.00	MEAN	0.000	MAX	0.00	MIN	0.00	AC-FT	0.00		
WTR YR 2003	TOTAL	0.00	MEAN	0.000	MAX	0.00	MIN	0.00	AC-FT	0.00		

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.28 N., R.28 E., Butte County, Arco Hills SE quad., 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 2002 TO SEPTEMBER 2003  
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	---	---
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
CAL YR 2002	TOTAL 0.00	MEAN 0.000	MAX 0.00	MIN 0.00	AC-FT 0.00							
WTR YR 2003	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<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.24, T.3 N., R.29 E., Butte County, North of Scoville quad., 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.--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 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 2002 TO SEPTEMBER 2003  
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	---	---
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
CAL YR 2002	TOTAL	0.00	MEAN	0.000	MAX	0.00	MIN	0.00	AC-FT	0.00		
WTR YR 2003	TOTAL	0.00	MEAN	0.000	MAX	0.00	MIN	0.00	AC-FT	0.00		



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, East of Howe Peak quad., 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.

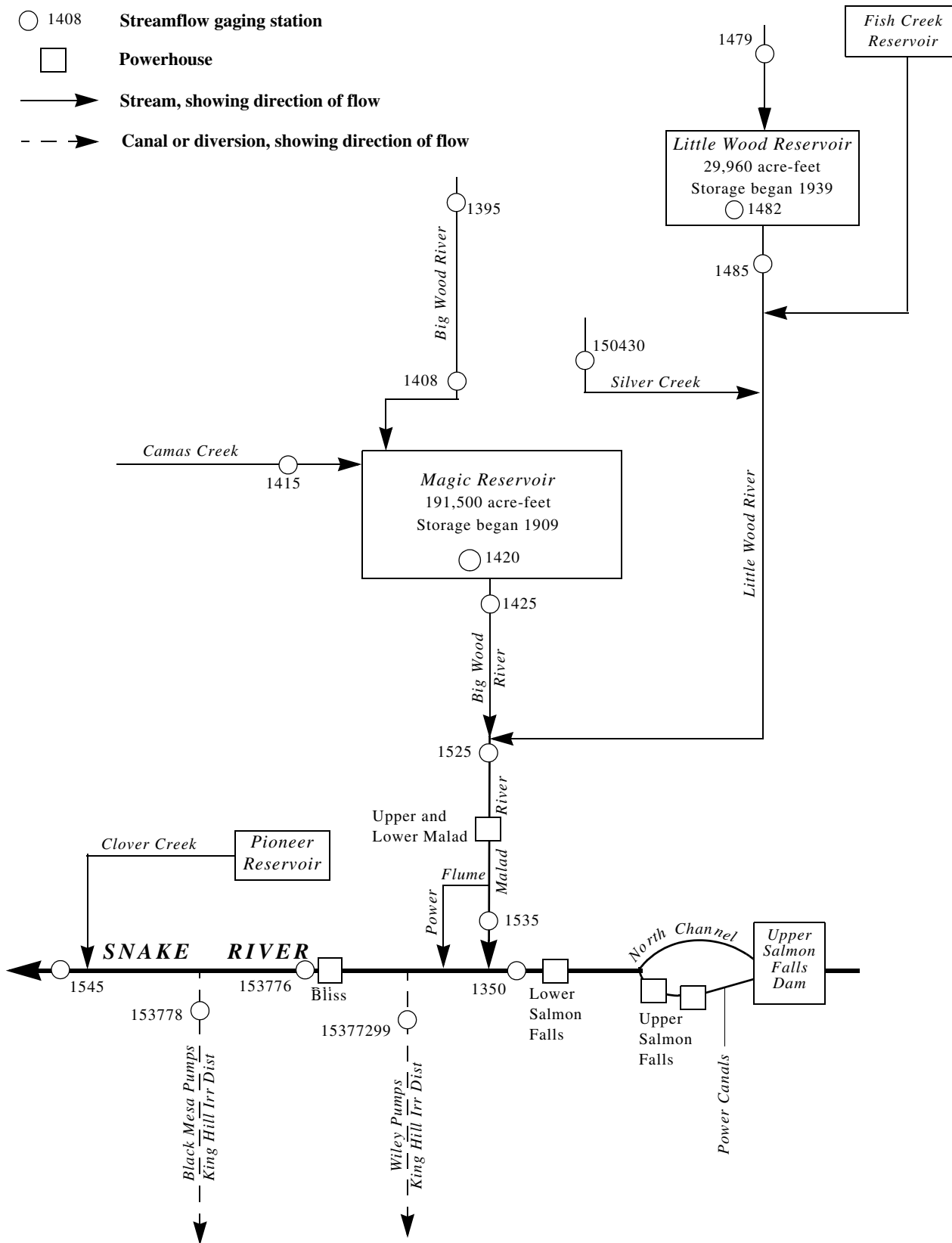
EXTREMES FOR CURRENT YEAR.--No flow for entire year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
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
CAL YR 2002	TOTAL 0.00	MEAN 0.000	MAX 0.00	MIN 0.00	AC-FT 0.00							
WTR YR 2003	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 14.** Schematic showing gaging stations in Snake River Basin between Upper Salmon Falls and King Hill.



## MALAD RIVER BASIN

## 13139500 BIG WOOD RIVER AT HAILEY, ID

LOCATION.--Lat 43°31'02", long 114°19'14", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.9, T.2 N., R.18 E., Blaine County, Hailey quad., 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, 4,220 ft<sup>3</sup>/s May 31, gage height, 6.17 ft; minimum daily, 70 ft<sup>3</sup>/s Dec. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	e95	135	122	153	118	251	437	2910	692	201	147
2	114	e100	132	123	153	112	271	423	2470	648	199	142
3	116	e105	133	130	130	123	255	459	2250	611	219	140
4	116	e110	132	134	132	115	239	489	2040	581	221	139
5	114	125	132	135	114	113	232	483	1920	548	204	141
6	113	129	123	128	e110	125	224	478	1880	527	197	167
7	112	119	115	118	e100	123	209	464	1910	503	189	169
8	112	139	105	120	e110	123	211	461	1940	463	184	159
9	113	140	98	116	117	122	219	457	1950	427	177	162
10	114	140	104	124	123	123	258	446	1900	406	167	170
11	115	134	117	130	119	126	338	467	1770	387	163	165
12	116	129	120	134	116	131	442	468	1620	371	159	156
13	119	139	124	136	126	141	456	474	1500	359	155	152
14	121	143	133	140	132	168	469	511	1420	345	148	152
15	120	135	140	138	133	194	425	634	1430	327	148	152
16	120	134	144	125	141	204	397	823	1340	317	151	152
17	121	138	e120	123	134	196	394	851	1370	304	147	152
18	121	127	e100	120	128	192	373	839	1370	296	146	156
19	121	137	81	120	119	190	353	746	1340	287	143	158
20	122	135	81	125	129	196	352	696	1340	282	140	151
21	124	135	82	131	134	198	373	712	1140	268	137	147
22	134	137	82	135	134	203	411	860	989	255	155	144
23	148	147	e75	139	120	227	468	1180	877	250	205	141
24	142	148	e70	134	121	226	569	1660	809	246	175	132
25	138	130	e75	135	125	227	685	2000	742	250	160	129
26	139	126	e85	138	e100	235	611	2280	689	269	153	126
27	137	128	109	150	118	217	531	2430	685	270	153	124
28	137	139	118	158	116	205	487	2590	721	246	151	124
29	140	136	119	140	---	206	464	3100	724	232	151	124
30	139	135	118	152	---	214	456	3560	723	223	161	123
31	115	---	129	149	---	223	---	3730	---	210	152	---
TOTAL	3826	3914	3431	4102	3462	5316	11423	35208	43769	11400	5211	4396
MEAN	123	130	111	132	124	171	381	1136	1459	368	168	147
MAX	148	148	144	158	153	235	685	3730	2910	692	221	170
MIN	112	95	70	116	100	112	209	423	685	210	137	123
AC-FT	7590	7760	6810	8140	6870	10540	22660	69840	86820	22610	10340	8720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2003, BY WATER YEAR (WY)

	203	188	160	155	151	188	521	1270	1464	651	263	204
MEAN	203	188	160	155	151	188	521	1270	1464	651	263	204
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	82.4	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 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1916 - 2003
ANNUAL TOTAL	99088	135458	
ANNUAL MEAN	271	371	452
HIGHEST ANNUAL MEAN			842
LOWEST ANNUAL MEAN			170
HIGHEST DAILY MEAN	1760	Jun 1	3730
LOWEST DAILY MEAN	70	Dec 24	70
ANNUAL SEVEN-DAY MINIMUM	78	Dec 19	78
ANNUAL RUNOFF (AC-FT)	196500	268700	327600
10 PERCENT EXCEEDS	680	815	1170
50 PERCENT EXCEEDS	129	151	208
90 PERCENT EXCEEDS	103	115	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, Magic Reservoir East quad., 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.--Records good except for estimated daily discharges, which are fair. 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, 6.6 ft<sup>3</sup>/s Mar. 4-6, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,220 ft<sup>3</sup>/s May 31, gage height, 8.66 ft; minimum daily, 6.6 ft<sup>3</sup>/s Mar. 4-6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	e9.4	11	9.8	14	7.0	43	158	3100	144	29	25
2	16	9.6	11	9.8	14	6.8	59	145	2510	124	29	26
3	15	9.2	11	10	13	6.7	62	156	2210	79	30	26
4	15	9.4	11	10	12	6.6	61	175	1990	67	30	26
5	14	12	11	11	e10	6.6	57	168	1790	64	29	25
6	14	11	e11	10	e9.0	6.6	51	160	1670	60	28	26
7	14	10	e10	10	e8.0	6.8	50	154	1690	50	29	26
8	13	12	e11	11	e9.0	6.9	48	143	1720	32	28	26
9	13	12	11	11	9.2	7.1	42	142	1730	31	28	26
10	13	12	11	11	8.3	7.2	41	134	1700	30	27	26
11	12	11	10	11	8.1	7.3	49	138	1550	31	26	26
12	12	11	10	11	7.9	7.4	97	146	1340	32	27	26
13	12	11	10	12	8.7	6.8	154	144	1180	33	28	25
14	12	11	11	13	9.8	6.9	180	150	1070	34	26	25
15	12	11	11	13	9.4	7.0	180	204	1060	34	25	25
16	12	10	11	12	9.7	7.5	157	344	968	32	24	25
17	12	11	10	12	9.6	7.2	161	496	967	34	24	24
18	12	12	9.7	e11	9.0	7.1	152	517	955	36	24	24
19	12	12	9.3	e10	8.6	7.4	129	466	928	38	24	25
20	12	11	9.4	e11	8.2	7.4	112	384	947	40	23	25
21	12	12	e9.2	12	8.4	7.8	113	338	779	40	23	25
22	12	11	e9.2	12	8.7	8.3	129	393	591	38	24	25
23	12	e10	e9.2	12	8.1	8.5	158	643	480	36	27	25
24	12	e10	e9.0	12	7.9	8.6	228	1280	386	36	27	25
25	12	11	e8.5	12	7.5	8.3	335	1800	309	36	26	23
26	11	11	e9.0	12	e7.2	8.8	344	2320	241	38	25	23
27	11	11	9.9	13	e7.0	11	270	2540	182	35	25	24
28	11	11	10	14	e6.8	20	218	2660	170	32	24	24
29	e10	11	9.9	13	---	26	188	3090	172	31	24	25
30	e9.0	11	9.5	13	---	28	168	3560	162	30	25	26
31	e9.0	---	10	16	---	33	---	3870	---	30	25	---
TOTAL	384.0	326.6	313.8	360.6	257.1	308.6	4036	27018	34547	1407	813	753
MEAN	12.4	10.9	10.1	11.6	9.18	9.95	135	872	1152	45.4	26.2	25.1
MAX	16	12	11	16	14	33	344	3870	3100	144	30	26
MIN	9.0	9.2	8.5	9.8	6.8	6.6	41	134	162	30	23	23
AC-FT	762	648	622	715	510	612	8010	53590	68520	2790	1610	1490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	65.3	73.4	32.7	51.9	53.9	101	386	1142	1377	346	67.3	47.7
MAX	176	164	62.2	202	118	250	865	2842	3208	1105	206	135
(WY)	1998	1998	1999	1997	1997	1997	1997	1997	1997	1998	1997	1997
MIN	10.0	10.2	9.87	7.99	8.24	9.95	79.5	166	60.3	17.8	10.4	12.3
(WY)	2002	2002	2002	2002	2002	2003	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	36308.3		70524.7			
ANNUAL MEAN	99.5		193		312	
HIGHEST ANNUAL MEAN					723	
LOWEST ANNUAL MEAN					46.7	
HIGHEST DAILY MEAN	1820	Jun 2	3870	May 31	4670	Jun 5 1997
LOWEST DAILY MEAN	7.6	Jan 18	6.6	Mar 4	6.6	Mar 4 2003
ANNUAL SEVEN-DAY MINIMUM	7.8	Jan 17	6.7	Mar 2	6.7	Mar 2 2003
ANNUAL RUNOFF (AC-FT)	72020		139900		226200	
10 PERCENT EXCEEDS	278		389		932	
50 PERCENT EXCEEDS	15		23		63	
90 PERCENT EXCEEDS	8.1		8.5		10	

e Estimated

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, Macon quad., 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)
Mar. 15	2100	*392	*4.99	No peaks greater than base discharge.			

Minimum daily, 1.9 ft<sup>3</sup>/s Aug. 30 to Sept. 5, Sept. 8-9, 11-13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	4.0	6.4	9.1	27	19	181	140	199	5.1	2.3	1.9
2	3.1	4.0	6.6	9.2	38	20	182	136	190	4.8	2.3	1.9
3	2.9	4.3	6.6	9.1	41	21	192	148	162	4.4	2.3	1.9
4	3.0	4.2	6.7	9.1	49	19	191	170	139	4.0	2.3	1.9
5	3.0	4.0	6.6	9.1	39	19	178	179	119	4.2	2.3	1.9
6	3.1	3.7	6.7	8.1	30	20	166	165	105	3.8	2.3	2.0
7	3.0	3.8	6.6	7.8	24	25	159	156	96	4.0	2.3	2.0
8	3.1	4.7	6.6	8.0	22	41	142	147	92	3.5	2.3	1.9
9	3.1	5.3	6.4	8.3	20	41	128	142	88	3.4	2.2	1.9
10	3.1	5.6	6.8	9.5	20	67	121	142	82	3.0	2.1	2.0
11	3.2	5.0	7.0	9.0	19	79	136	147	76	2.8	2.1	1.9
12	3.4	4.7	7.0	8.9	19	133	157	151	62	2.7	2.1	1.9
13	3.6	4.4	7.1	9.2	23	255	170	156	49	2.6	2.1	1.9
14	3.6	4.2	8.5	11	26	338	176	147	35	2.6	2.1	2.0
15	3.6	3.8	9.1	11	27	356	175	143	28	2.6	2.1	2.0
16	3.6	3.8	9.5	9.5	36	280	156	143	23	2.5	2.1	2.0
17	3.6	3.9	9.9	8.6	33	278	153	144	20	2.5	2.1	2.0
18	3.8	4.1	8.3	8.6	34	312	157	141	16	2.4	2.1	2.0
19	3.8	5.2	7.3	8.5	26	329	145	136	14	2.4	2.0	2.0
20	3.8	4.9	8.1	8.8	25	282	133	128	13	2.3	2.0	2.0
21	3.9	4.8	8.4	9.1	27	229	128	119	12	2.3	2.0	2.0
22	3.9	5.2	8.4	9.5	28	203	135	111	10	2.3	2.3	2.0
23	4.0	5.7	7.5	10	24	199	145	113	9.6	2.4	2.2	2.0
24	3.9	5.9	7.1	11	22	209	152	129	9.6	2.4	2.1	2.0
25	4.3	6.1	7.8	10	19	202	169	149	9.8	2.4	2.0	2.0
26	4.0	5.7	7.5	10	19	232	177	168	8.5	2.4	2.1	2.0
27	3.8	5.9	8.8	13	19	286	167	180	7.5	2.3	2.0	2.0
28	4.7	6.0	10	15	19	259	157	184	6.3	2.3	2.0	2.0
29	4.5	6.2	11	13	---	258	150	190	5.2	2.2	2.0	2.0
30	4.3	6.3	9.7	15	---	233	147	195	5.2	2.2	1.9	2.0
31	4.0	---	10	17	---	202	---	198	---	2.2	1.9	---
TOTAL	111.7	145.4	244.0	313.0	755	5446	4725	4697	1691.7	91.0	66.0	59.0
MEAN	3.60	4.85	7.87	10.1	27.0	176	158	152	56.4	2.94	2.13	1.97
MAX	4.7	6.3	11	17	49	356	192	198	199	5.1	2.3	2.0
MIN	2.9	3.7	6.4	7.8	19	19	121	111	5.2	2.2	1.9	1.9
AC-FT	222	288	484	621	1500	10800	9370	9320	3360	180	131	117

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	11.3	21.0	22.2	31.1	51.2	342	895	448	171	32.8	6.50	6.13
MAX	39.7	82.7	57.1	301	315	1806	2734	1552	621	165	27.7	16.5
(WY)	1984	1984	1971	1997	1986	1986	1971	1983	1983	1983	1983	1983
MIN	1.63	2.40	2.91	5.25	6.81	28.9	19.0	3.42	1.27	1.32	1.39	1.54
(WY)	1993	1993	1993	1993	1993	1991	1977	1992	1992	1992	1992	1991

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1971 - 2003
ANNUAL TOTAL	25370.9	18344.8	
ANNUAL MEAN	69.5	50.3	170
HIGHEST ANNUAL MEAN			449
LOWEST ANNUAL MEAN			13.2
HIGHEST DAILY MEAN	1440	356	5800
LOWEST DAILY MEAN	2.8	1.9	1.2
ANNUAL SEVEN-DAY MINIMUM	2.8	1.9	1.2
ANNUAL RUNOFF (AC-FT)	50320	36390	122900
10 PERCENT EXCEEDS	173	170	490
50 PERCENT EXCEEDS	8.7	8.4	21
90 PERCENT EXCEEDS	3.0	2.0	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, Magic Reservoir East quad., 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, 92,100 acre-ft June 12-14, elevation, 4,901.9 ft; minimum contents observed, 6,490 acre-ft Oct. 1, elevation, 4,845.9 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	4,905	99,400

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6490	8830	11600	14800	18300	22700	36800	57600	82200	77800	23300	14200
2	6540	8980	11700	14800	18400	22800	37200	58400	83500	76300	21700	14300
3	6600	9050	11800	15000	18600	23000	37900	59100	85300	74700	19700	14400
4	6660	9120	11900	15100	18800	23000	38700	59900	86600	73000	18300	14500
5	6790	9190	12000	15200	18900	23100	39400	60700	87700	71400	16500	14600
6	6850	9270	12100	15300	19100	23200	39900	61700	88400	69600	14800	14700
7	6910	9340	12200	15400	19300	23500	40400	62400	88900	68000	12900	14800
8	6970	9490	12300	15500	19400	23700	40700	63200	89500	66200	11100	14900
9	7030	9640	12300	15600	19500	23800	41200	64000	90200	64400	11200	14900
10	7150	9800	12400	15700	19700	24100	41700	64800	90900	62600	11300	15000
11	7220	9870	12500	15800	19700	24300	42200	65600	91600	60900	11500	15100
12	7280	9950	12600	15900	19800	24500	42800	66200	92100	58900	11600	15200
13	7340	10000	12700	15900	20100	25000	43300	67000	92100	57200	11700	15200
14	7410	10100	12800	16100	20200	25500	43800	67800	92100	55300	11900	15300
15	7470	10200	12900	16200	20400	26300	44500	68400	91800	53800	12100	14300
16	7540	10300	13000	16400	20700	27000	45200	68000	91600	51900	12200	12900
17	7670	10300	13100	16500	20900	27500	45900	67600	91400	50100	12300	11600
18	7800	10400	13100	16600	21100	28200	46800	67200	90900	48200	12400	10200
19	7930	10600	13200	16700	21400	28900	47300	67000	90700	46400	12500	8900
20	8000	10700	13300	16800	21500	29600	47900	66400	90200	44700	12600	7600
21	8070	10700	13500	16900	21600	30200	48600	65400	89800	42800	12700	7730
22	8140	10800	13700	17000	21900	31100	49300	64600	89100	41200	12800	7860
23	8200	10900	13800	17100	22000	31800	49900	63600	88400	39400	12900	8000
24	8270	11000	13900	17200	22100	32400	50800	63200	87300	37600	13100	8140
25	8340	11100	14100	17300	22200	33000	51500	63800	86200	36000	13200	8270
26	8410	11100	14200	17400	22300	33600	52500	64400	84800	34600	13400	8340
27	8480	11200	14300	17500	22500	34100	53600	66200	83500	32700	13600	8410
28	8550	11400	14400	17700	22600	34900	54900	68000	82200	30700	13700	8480
29	8620	11500	14500	17800	---	35500	55900	70400	80700	28700	13800	8620
30	8690	11600	14600	17900	---	35800	56600	73200	79500	27300	13900	8690
31	8760	---	14800	18100	---	36100	---	76700	---	25700	14100	---
MAX	8760	11600	14800	18100	22600	36100	56600	76700	92100	77800	23300	15300
MIN	6490	8830	11600	14800	18300	22700	36800	57600	79500	25700	11100	7600
†	4849.4	4853.0	4856.5	4859.7	4863.6	4873.2	4884.8	4894.9	4896.2	4866.0	4855.8	4849.3
‡	2390	2840	3220	3300	4500	13500	20500	20100	2800	-53800	-11600	-5410
CAL YR 2002	MAX 84800	MIN 5040	† 1300									
WTR YR 2003	MAX 92100	MIN 6490	† 2320									

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







## MALAD RIVER BASIN

## 13148200 LITTLE WOOD RESERVOIR NEAR CAREY, ID

LOCATION.--Lat 43°25'30", long 114°01'30", in SW¼ sec.12, T.1 N., R.20 E., Blaine County, Little Wood Reservoir quad., 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 contents, 30,000 acre-ft June 4, 5; maximum elevation, 5,237.29 ft, June 4; minimum contents, 1,180 acre-ft Oct. 2,3, elevation, 5,148.77 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 2002 TO SEPTEMBER 2003  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	e2150	4840	7360	10200	12500	18800	26300	29600	26100	13600	6470
2	1180	2200	4930	7450	10300	12500	19200	26000	29800	25700	13300	6330
3	1180	2270	5020	7550	10300	12600	19400	25800	29900	25300	13100	6190
4	1190	2360	5110	7640	10400	12700	19600	26000	30000	25000	12800	6050
5	1200	2450	5190	7740	10500	12800	19800	26500	30000	24600	12500	5900
6	1210	2540	5270	7800	10600	12900	20000	26900	29900	24200	12300	5770
7	1220	2640	5350	7860	10600	12900	20100	26900	29900	23800	12000	5640
8	1230	2760	5410	7930	10700	13000	20300	26600	29900	23400	11800	5490
9	1250	2860	5470	7990	10800	13100	20500	26300	29800	23000	11500	5340
10	1260	2980	5550	8080	10900	13200	20700	26000	29800	22600	11300	5210
11	1260	3060	5620	8170	11000	13300	20900	25700	29700	22100	11000	5090
12	1260	3160	5700	8270	11000	13500	21200	25400	29500	21700	10800	4970
13	1270	3260	5780	8370	11100	13600	21600	25100	29400	21200	10500	4860
14	1280	3350	5880	8490	11200	13900	21900	24800	29200	20800	10200	4740
15	1300	3440	5980	8580	11300	14200	22200	24600	29100	20300	9980	4630
16	1310	3520	6090	8650	11400	14600	22500	24600	29000	19800	9730	4520
17	1350	3610	6170	8720	11500	14900	22800	24700	28900	19400	9470	4430
18	1380	3690	6220	8780	11600	15100	23000	24800	28800	18900	9230	4340
19	1430	3780	6260	8840	11700	15400	23300	24800	28700	18400	8990	4260
20	1480	3870	6330	8920	11800	15600	23500	24700	28600	18000	8750	4170
21	1530	3960	6420	9010	11900	15900	23700	24600	28400	17500	8530	4030
22	1590	4100	6500	9110	11900	16200	24000	24700	28200	17100	8330	3940
23	1660	4200	6560	9210	12000	16600	24300	24800	28000	16700	8130	3850
24	1720	4300	6610	9300	12100	16900	24700	25100	27800	16300	7910	3760
25	1780	4370	6680	9380	12100	17200	25200	25600	27600	15900	7690	3680
26	1820	4450	6750	9480	12200	17500	25600	26200	27400	15500	7480	3580
27	1880	4530	6850	9600	12300	17700	26000	26800	27100	15200	7270	3480
28	1940	4610	6960	9710	12400	18000	26400	27300	26900	14900	7070	3380
29	2000	4680	7060	9810	---	18200	26800	28000	26700	14600	6890	3300
30	e2050	4750	7160	9920	---	18400	26700	28700	26400	14300	6740	3210
31	2100	---	7270	10000	---	18600	---	29400	---	13900	6600	---
MAX	2100	4750	7270	10000	12400	18600	26800	29400	30000	26100	13600	6470
MIN	1180	2150	4840	7360	10200	12500	18800	24600	26400	13900	6600	3210
†	5156.85	5173.00	5183.46	5192.80	5199.74	5215.06	5231.43	5236.23	5230.95	5203.94	5180.93	5164.70
‡	900	2650	2520	2730	2400	6200	8100	2700	-3000	-12500	-7300	-3390
CAL YR 2002	MAX 28700	MIN 1180	‡ 760									
WTR YR 2003	MAX 30000	MIN 1180	‡ 2010									

† Elevation, in feet, at end of month.

‡ Change in contents, in acre-feet.

e Estimated



MALAD RIVER BASIN

13150430 SILVER CREEK AT SPORTSMAN ACCESS, NEAR PICABO, ID

LOCATION.--Lat 43°19'22", long 114°06'29", in SE¼NW¼ sec.20, T.1 S., R.20 E., Blaine County, Picabo quad., 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, 167 ft<sup>3</sup>/s Feb. 1; minimum daily, 59 ft<sup>3</sup>/s Oct. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	e108	110	e115	167	124	116	130	89	80	103	85
2	77	108	109	115	159	124	123	130	80	70	100	88
3	78	107	110	116	146	124	126	139	80	72	106	92
4	81	107	109	116	138	124	126	150	78	72	108	99
5	80	103	111	116	132	125	125	145	75	68	107	103
6	80	102	110	115	128	125	122	139	79	65	104	106
7	71	102	110	e110	126	125	118	133	79	66	108	113
8	59	113	112	e115	122	125	117	130	75	67	106	103
9	61	120	e110	e110	119	128	117	135	74	65	98	98
10	64	115	113	113	119	129	115	133	74	62	92	99
11	68	113	112	114	118	131	113	136	79	68	86	92
12	70	111	112	115	118	130	112	137	83	85	79	92
13	77	113	115	117	123	131	113	127	77	86	85	87
14	80	110	118	120	132	134	113	122	74	84	85	88
15	81	112	119	119	142	138	112	114	73	81	81	88
16	79	110	119	117	149	143	110	111	75	81	74	91
17	84	110	123	117	154	138	114	112	76	80	65	87
18	110	108	120	116	145	133	116	109	76	81	65	86
19	110	110	e120	115	138	130	115	106	71	81	66	86
20	105	110	117	116	135	126	116	107	76	81	65	95
21	106	110	117	117	136	123	116	98	81	84	61	94
22	105	109	117	116	141	123	117	102	77	88	70	89
23	107	110	117	120	138	124	120	99	79	91	87	90
24	108	110	e105	119	136	123	120	99	86	97	96	92
25	108	110	e105	118	130	120	128	95	88	111	93	94
26	108	108	e120	119	126	123	130	95	87	112	88	93
27	108	107	e120	127	122	121	129	103	87	114	88	89
28	108	107	122	131	122	117	128	104	85	105	89	91
29	108	112	120	128	---	115	130	94	83	105	85	85
30	111	114	e115	131	---	115	131	89	86	103	83	76
31	109	---	e115	157	---	116	---	86	---	106	85	---
TOTAL	2778	3289	3552	3690	3761	3907	3588	3609	2382	2611	2708	2771
MEAN	89.6	110	115	119	134	126	120	116	79.4	84.2	87.4	92.4
MAX	111	120	123	157	167	143	131	150	89	114	108	113
MIN	59	102	105	110	118	115	110	86	71	62	61	76
AC-FT	5510	6520	7050	7320	7460	7750	7120	7160	4720	5180	5370	5500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2003, 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	2003
MEAN	165	168	158	151	158	190	169	132	125	121	142	145																	
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	126	95.6	83.1	70.1	73.6	65.9	62.2																	
(WY)	2002	1993	1995	1995	1993	2003	1992	1992	1992	1992	1994	1994																	

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1975 - 2003
ANNUAL TOTAL	40274	38646	
ANNUAL MEAN	110	106	152
HIGHEST ANNUAL MEAN			222
LOWEST ANNUAL MEAN			106
HIGHEST DAILY MEAN	225	Mar 30	167
LOWEST DAILY MEAN	59	Oct 8	59
ANNUAL SEVEN-DAY MINIMUM	67	Oct 7	66
ANNUAL RUNOFF (AC-FT)	79880	76650	110100
10 PERCENT EXCEEDS	130		130
50 PERCENT EXCEEDS	110		110
90 PERCENT EXCEEDS	89		77

e Estimated



## MALAD RIVER BASIN

## 13153500 MALAD RIVER NEAR BLISS, ID

LOCATION.--Lat 42°51'48", long 114°54'04", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.34, T.6 S., R.13 E., Gooding County, Hagerman quad., 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, 1,150 ft<sup>3</sup>/s June 4; minimum daily, 75 ft<sup>3</sup>/s June 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	96	92	84	88	84	84	112	100	88	86	98
2	117	96	103	83	88	84	83	107	840	88	86	99
3	120	95	86	82	88	84	83	105	1140	88	90	96
4	118	95	85	82	88	84	82	110	1150	88	97	95
5	121	95	85	81	87	93	82	117	806	88	100	91
6	118	95	160	137	87	84	83	117	139	87	97	90
7	107	98	85	146	87	84	84	112	111	87	93	89
8	102	97	85	91	86	84	83	106	108	88	90	89
9	103	96	222	90	85	83	84	105	107	88	93	92
10	107	95	84	89	85	83	82	108	107	88	92	97
11	105	94	84	89	85	83	83	111	106	87	93	98
12	106	93	84	89	85	82	83	110	105	87	89	100
13	103	94	85	89	86	82	84	107	104	87	92	101
14	99	94	85	89	85	82	83	104	101	86	92	107
15	99	94	84	88	85	82	84	99	100	87	91	108
16	99	97	84	88	85	82	84	98	91	87	94	108
17	98	98	84	88	85	81	86	98	83	87	94	127
18	98	95	84	88	85	81	109	100	80	87	96	102
19	99	90	84	88	85	81	113	113	78	87	99	105
20	100	91	84	87	84	81	180	113	77	88	94	106
21	100	91	84	87	83	82	196	105	77	87	91	105
22	100	91	83	87	83	82	147	105	77	86	91	98
23	103	91	82	87	83	81	135	103	79	86	103	96
24	104	92	82	86	83	119	133	98	80	86	107	95
25	103	91	82	87	84	84	130	99	81	86	102	94
26	105	92	82	87	84	82	118	102	80	86	100	93
27	105	92	82	87	84	83	120	103	77	87	95	92
28	103	92	81	88	84	110	118	99	75	91	95	90
29	101	92	81	129	---	84	107	98	84	89	92	90
30	101	93	83	88	---	83	108	100	89	89	94	89
31	101	---	84	88	---	83	---	100	---	104	97	---
TOTAL	3254	2815	2835	2849	2387	2637	3131	3264	6332	2725	2925	2940
MEAN	105	93.8	91.5	91.9	85.2	85.1	104	105	211	87.9	94.4	98.0
MAX	121	98	222	146	88	119	196	117	1150	104	107	127
MIN	98	90	81	81	83	81	82	98	75	86	86	89
AC-FT	6450	5580	5620	5650	4730	5230	6210	6470	12560	5410	5800	5830
CAL YR 2002	TOTAL 39351	MEAN 108	MAX 1140	MIN 76	AC-FT 78050							
WTR YR 2003	TOTAL 38094	MEAN 104	MAX 1150	MIN 75	AC-FT 75560							

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, Bliss quad., 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 September 2003 (irrigation seasons only) (discontinued). 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 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	0.00	---	---	---	---	0.00	17	17	25	25	e20
2	21	0.00	---	---	---	---	0.00	13	14	25	22	e21
3	19	0.00	---	---	---	---	0.00	e11	15	25	26	e21
4	17	0.00	---	---	---	---	0.00	e13	19	26	24	e21
5	3.6	0.00	---	---	---	---	0.00	12	22	25	22	e22
6	0.00	0.00	---	---	---	---	0.00	15	25	22	20	e24
7	0.00	0.00	---	---	---	---	0.00	18	22	20	16	e22
8	0.00	---	---	---	---	---	0.00	e16	24	19	14	e21
9	0.00	---	---	---	---	---	0.00	e12	27	22	18	e21
10	0.00	---	---	---	---	---	0.00	e9.5	27	22	19	e22
11	0.00	---	---	---	---	---	0.00	e14	27	21	16	e24
12	0.00	---	---	---	---	---	0.00	e19	27	22	15	e22
13	0.00	---	---	---	---	---	0.00	23	27	26	21	e20
14	0.00	---	---	---	---	---	3.5	26	28	25	22	e20
15	0.00	---	---	---	---	---	18	25	27	23	21	e16
16	0.00	---	---	---	---	---	22	19	28	22	21	e14
17	0.00	---	---	---	---	---	13	14	28	23	21	e16
18	0.00	---	---	---	---	---	11	21	26	24	23	e16
19	0.00	---	---	---	---	---	18	25	23	22	24	e12
20	0.00	---	---	---	---	---	25	22	23	22	24	e10
21	0.00	---	---	---	---	---	25	17	24	23	23	e10
22	0.00	---	---	---	---	---	23	21	23	25	e22	e10
23	0.00	---	---	---	---	---	23	22	22	26	e24	8.8
24	0.00	---	---	---	---	---	19	20	20	25	e22	7.8
25	0.00	---	---	---	---	0.00	14	16	21	24	e22	15
26	0.00	---	---	---	---	0.00	18	20	22	22	e22	13
27	0.00	---	---	---	---	0.00	19	22	25	23	e20	9.2
28	0.00	---	---	---	---	0.00	20	21	24	24	e21	10
29	0.00	---	---	---	---	0.00	21	16	23	24	e22	12
30	0.00	---	---	---	---	0.00	19	14	25	24	e21	16
31	0.00	---	---	---	---	0.00	---	17	---	25	e20	---
TOTAL	82.60	---	---	---	---	---	311.50	550.5	705	726	653	496.8
MEAN	2.66	---	---	---	---	---	10.4	17.8	23.5	23.4	21.1	16.6
MAX	22	---	---	---	---	---	25	26	28	26	26	24
MIN	0.00	---	---	---	---	---	0.00	9.5	14	19	14	7.8
AC-FT	164	---	---	---	---	---	618	1090	1400	1440	1300	985

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 NW¼SE¼ sec.12, T.6 S., R.11 E., Elmore County, Ticeska quad., 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 ft³/s June 21, 1997, gage height, 23.93 ft; minimum daily, 4,960 ft³/s Aug. 30, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,940 ft³/s Oct. 1; minimum daily, 5,680 ft³/s July 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7940	6700	7430	6960	6770	6720	6460	6530	6040	6040	5880	6540
2	6900	7050	7240	7070	6720	6600	6260	6500	6090	5700	5950	6630
3	7670	6710	7110	6850	6740	6720	6110	6480	6220	5880	5960	6660
4	7820	6840	7250	6940	6730	6890	6550	6480	6350	5940	6320	6870
5	6570	7180	6930	6740	6840	6310	5970	6830	6160	6040	6230	6550
6	6810	6730	6910	7070	6640	6940	6030	6860	6240	5780	6280	6510
7	6540	7040	7180	6570	6880	6530	6250	6800	6160	5790	6160	6440
8	7410	7090	6840	6980	6690	6340	5840	6500	6010	5730	6000	6650
9	7510	7140	7040	6910	6590	6590	6040	6810	5930	5680	6090	6780
10	7360	7170	6650	6350	6940	6620	6110	7060	6070	5820	6120	6810
11	7480	7090	6900	7040	6470	6600	6100	6990	5920	5870	6240	6830
12	7580	7090	7160	6870	6750	6730	6000	6950	6040	5730	6030	6680
13	7700	7020	6860	6560	6890	6610	6310	6710	5840	5740	6160	6860
14	7530	7230	6890	6880	6640	6380	6060	6560	5780	5740	6140	6930
15	7310	7010	6960	6800	6690	6540	6080	6420	5990	5950	6140	7020
16	6990	7100	6900	6830	6960	6630	6510	6270	5880	5770	6040	6930
17	6760	7100	6940	6810	6650	6980	6350	6240	5950	5750	6150	6870
18	7590	7200	7140	6470	6980	6400	6450	6250	5940	5770	6170	6880
19	7850	7180	6820	6920	6630	6490	6720	6610	5940	5860	6340	7040
20	7860	6960	6840	6760	6760	6770	7090	6710	5810	5840	6140	7070
21	7730	7110	6970	6590	6860	6350	6990	6400	5900	5930	6230	6880
22	6980	7170	7110	6630	6760	6570	6780	6270	6020	5780	6260	6820
23	7350	7100	6970	6700	6880	6490	6680	6300	6150	5760	6720	6880
24	7810	7090	7070	6750	6590	6790	6990	6170	6070	5910	6710	6610
25	7650	7140	6810	6930	6770	6610	6420	6170	6080	5920	6710	6700
26	7320	6970	7040	6620	6830	6750	6610	6410	6160	5870	6740	6510
27	7110	7200	7080	6680	6730	6190	6800	6400	6010	6010	6420	6700
28	7390	7250	7010	6750	6640	6560	6670	6350	5970	6090	6450	6650
29	6600	6910	6950	6860	---	6600	6670	6460	5870	5990	6270	6640
30	6990	7160	6960	6710	---	6430	6370	5890	5940	5980	6430	6630
31	6890	---	7010	6700	---	6410	---	6170	---	5920	6600	---
TOTAL	227000	211730	216970	210300	189020	204140	192270	201550	180530	181580	194080	202570
MEAN	7323	7058	6999	6784	6751	6585	6409	6502	6018	5857	6261	6752
MAX	7940	7250	7430	7070	6980	6980	7090	7060	6350	6090	6740	7070
MIN	6540	6700	6650	6350	6470	6190	5840	5890	5780	5680	5880	6440
AC-FT	450300	420000	430400	417100	374900	404900	381400	399800	358100	360200	385000	401800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2003, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	9140	9188	9780	10290	10660	11440	11340	10890	12620	7889	7962	8628
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	7058	6999	6784	6751	6585	6153	6168	5989	5857	6261	6752
(WY)	2002	2003	2003	2003	2003	2003	2002	2002	2002	2003	2003	2003

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1992 - 2003
ANNUAL TOTAL	2422140	2411740	
ANNUAL MEAN	6636	6608	9975
HIGHEST ANNUAL MEAN			16590
LOWEST ANNUAL MEAN			6608
HIGHEST DAILY MEAN	7940	7940	39900
LOWEST DAILY MEAN	4960	5680	4960
ANNUAL SEVEN-DAY MINIMUM	5750	5760	5750
ANNUAL RUNOFF (AC-FT)	4804000	4784000	7227000
10 PERCENT EXCEEDS	7200	7140	15400
50 PERCENT EXCEEDS	6720	6650	8350
90 PERCENT EXCEEDS	5900	5940	6500



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 NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.9, T.6 S., R.11 E., Elmore County, Pasadena Valley quad., Hydrologic Unit 17040212, about 6.5 mi south of King Hill.

PERIOD OF RECORD.--April 1986 to September 2003 (discontinued) (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.--No estimated daily discharges. Records good. In-line flow sensor rated by current meter measurements from canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 107 ft<sup>3</sup>/s June 10, 11, 2001; no flow for long periods each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	0.00	---	---	---	---	0.00	67	74	76	60	66
2	71	0.00	---	---	---	---	0.00	69	74	79	62	66
3	71	0.00	---	---	---	---	0.00	62	81	84	58	62
4	61	0.00	---	---	---	---	0.00	57	83	84	60	66
5	19	0.00	---	---	---	---	0.00	60	82	86	60	70
6	0.09	0.00	---	---	---	---	0.00	59	84	90	63	70
7	0.00	0.00	---	---	---	---	0.00	58	87	94	65	67
8	0.00	---	---	---	---	---	0.00	57	87	97	69	64
9	0.00	---	---	---	---	---	0.00	54	87	98	74	62
10	0.00	---	---	---	---	---	0.00	51	92	97	79	64
11	0.00	---	---	---	---	---	0.00	50	94	97	82	64
12	0.00	---	---	---	---	---	0.00	51	94	97	82	64
13	0.00	---	---	---	---	---	45	50	93	97	81	64
14	0.00	---	---	---	---	---	44	49	86	96	79	65
15	0.00	---	---	---	---	---	51	56	83	91	77	67
16	0.00	---	---	---	---	---	61	63	80	88	78	68
17	0.00	---	---	---	---	---	62	65	77	87	78	65
18	0.00	---	---	---	---	---	67	68	70	88	76	67
19	0.00	---	---	---	---	---	68	55	72	86	72	68
20	0.00	---	---	---	---	---	69	43	69	82	67	68
21	0.00	---	---	---	---	---	72	43	60	78	63	64
22	0.00	---	---	---	---	---	73	47	49	78	59	63
23	0.00	---	---	---	---	---	72	60	57	79	58	62
24	0.00	---	---	---	---	---	68	68	67	79	58	62
25	0.00	---	---	---	---	0.00	75	69	64	75	60	65
26	0.00	---	---	---	---	0.00	77	58	65	73	60	65
27	0.00	---	---	---	---	0.00	76	56	69	60	60	64
28	0.00	---	---	---	---	0.00	73	67	70	53	61	59
29	0.00	---	---	---	---	0.00	71	72	70	55	61	67
30	0.00	---	---	---	---	0.00	68	78	73	57	62	70
31	0.00	---	---	---	---	0.00	---	76	---	56	64	---
TOTAL	296.09	---	---	---	---	---	1192.00	1838	2293	2537	2088	1958
MEAN	9.55	---	---	---	---	---	39.7	59.3	76.4	81.8	67.4	65.3
MAX	74	---	---	---	---	---	77	78	94	98	82	70
MIN	0.00	---	---	---	---	---	0.00	43	49	53	58	59
AC-FT	587	---	---	---	---	---	2360	3650	4550	5030	4140	3880

SNAKE RIVER MAIN STEM

13154500 SNAKE RIVER AT KING HILL, ID

LOCATION.--Lat 43°00'08", long 115°12'06", in NW¼NW¼SW¼ sec.7, T.5 S., R.11 E., Elmore County, King Hill quad., 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.--No estimated daily discharges. Records fair except for discharges Apr. 22 to May 19, 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, 8,670 ft<sup>3</sup>/s Oct. 1; minimum daily, 5,420 ft<sup>3</sup>/s June 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8670	6900	7360	6790	6870	6520	6410	6850	6040	5710	5830	6790
2	6810	7160	7370	7010	6620	6400	6290	6890	6200	5490	5820	6900
3	7920	6960	7050	6710	6650	6570	6180	6840	6020	5490	6040	6940
4	7990	6960	7390	6730	6440	6610	6610	6910	6350	5730	6260	7180
5	7980	7280	6820	6670	6650	6210	6100	7240	6150	5800	6320	6910
6	7830	7060	6880	6770	6430	6810	6080	7220	6150	5530	6410	6850
7	7970	6990	7180	6490	6570	6220	6330	7220	5960	5470	6170	6820
8	7760	7340	6710	6810	6380	6090	5910	6950	5730	5430	6080	7020
9	7540	7300	7220	6710	6380	6430	6110	7030	5680	5620	6070	7170
10	7750	7360	6590	6200	6730	6490	5990	7210	5880	5490	6160	7180
11	7690	7260	6910	6900	6210	6390	6000	7360	5650	5740	6280	7210
12	7730	7220	7120	6560	6410	6550	5780	7420	5830	5430	6070	7130
13	8090	7220	6850	6400	6580	6380	6330	7310	5590	5570	6220	7090
14	7780	7280	6870	6720	6420	6230	5920	6980	5420	5660	6200	7190
15	7370	7200	6940	6730	6440	6320	6000	6750	5790	5860	6170	7250
16	7700	7240	6830	6600	6750	6550	6320	6570	5620	5590	6040	7320
17	8170	7260	6890	6690	6540	6920	6270	6520	5630	5790	6180	7100
18	7890	7190	7140	6270	6820	6380	6610	6620	5740	5520	6170	7070
19	7970	7250	6730	6610	6370	6300	6760	7040	5650	5770	6410	7230
20	7870	7160	6740	6600	6630	6610	7110	7160	5640	5850	6140	7320
21	7780	7190	6840	6350	6650	6260	7120	6840	5580	5970	6240	7090
22	7440	7160	7040	6470	6590	6390	7050	6590	5870	5760	6220	6990
23	7570	7190	6950	6440	6620	6530	7210	6570	5860	5700	6750	7040
24	7750	7250	6970	6610	6400	6770	7470	6380	5890	5930	6920	6860
25	7620	7130	6700	6650	6530	6570	6550	6290	5780	5900	6730	6880
26	7750	7060	6930	6640	6620	6750	6970	6700	5910	5810	6850	6760
27	7450	7270	7000	6780	6450	6190	7150	6630	5790	6010	6540	6880
28	7690	7280	6900	6990	6410	6560	7150	6600	5700	6120	6630	6780
29	7620	6850	6800	6780	---	6610	7160	6660	5620	6070	6510	6740
30	7390	7200	6850	6740	---	6530	6730	5800	5740	6090	6640	6760
31	7000	---	6920	7000	---	6320	---	6190	---	5840	6850	---
TOTAL	239540	215170	215490	206420	183160	200460	195670	211340	174460	177740	195920	210450
MEAN	7727	7172	6951	6659	6541	6466	6522	6817	5815	5734	6320	7015
MAX	8670	7360	7390	7010	6870	6920	7470	7420	6350	6120	6920	7320
MIN	6810	6850	6590	6200	6210	6090	5780	5800	5420	5430	5820	6740
AC-FT	475100	426800	427400	409400	363300	397600	388100	419200	346000	352500	388600	417400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2003, BY WATER YEAR (WY)

	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	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	2003
MEAN	10450	10960	10970	11160	11290	11620	12660	12430	13120	8424	7784	8784																																																																																			
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	7172	6951	6659	6541	6466	6500	6205	5815	5396	4969	5869																																																																																			
(WY)	1925	2003	2003	2003	2003	2003	2002	1924	2003	1910	1910	1910																																																																																			

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1909 - 2003
ANNUAL TOTAL	2512930	2425820	
ANNUAL MEAN	6885	6646	10760
HIGHEST ANNUAL MEAN			18070
LOWEST ANNUAL MEAN			6646
HIGHEST DAILY MEAN	8670	8670	47200
LOWEST DAILY MEAN	5590	5420	4760
ANNUAL SEVEN-DAY MINIMUM	5760	5530	4880
ANNUAL RUNOFF (AC-FT)	4984000	4812000	7792000
10 PERCENT EXCEEDS	7570	7350	16800
50 PERCENT EXCEEDS	6940	6650	9110
90 PERCENT EXCEEDS	6070	5790	6910

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 (discontinued).

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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Alkalinity, wat flt fxd end field, mg/L as CaCO3 (00418)	Bicarbonate, wat flt fixed end pt, mg/L (29804)	Carbonate, wat flt fixed end pt, mg/L (29807)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	
OCT	29...	0930	6740	506	8.4	4.0	11.8	9.2	93	166	201	--	25.2	47.4
NOV	13...	0945	7220	512	8.2	6.0	11.3	10.1	100	173	210	--	25.6	48.3
DEC	19...	0930	7630	501	8.3	1.0	9.8	9.8	94	164	199	--	25.4	45.5
JAN	16...	0945	6060	489	8.3	.0	10.2	9.7	94	162	199	--	23.9	43.8
FEB	20...	0930	6720	481	8.2	5.0	10.9	10.1	100	152	186	--	24.5	44.2
MAR	18...	0930	6330	485	8.1	6.0	12.0	9.5	96	160	194	--	27.2	44.1
APR	22...	0915	6780	480	8.6	8.5	13.4	9.2	98	153	187	--	27.1	44.2
MAY	15...	0900	6830	465	8.5	17.0	15.9	9.9	110	140	162	2.4	25.7	42.1
JUN	16...	0945	5700	460	8.4	21.0	18.0	8.9	103	147	179	--	24.3	40.7
JUL	15...	1115	6150	470	8.2	30.0	19.3	8.9	106	133	155	4.9	24.4	41.1
SEP	24...	0930	6960	489	8.5	12.0	14.7	9.7	105	167	201	--	26.1	44.9

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	2,6-Diethyl-aniline, water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF (82686)	
OCT	29...	.12	E.03	1.86	.014	.06	.061	<.006	E.004	<.006	<.004	<.005	E.006	<.050
NOV	13...	.15	<.04	1.97	.019	.05	.068	<.006	E.009	<.006	<.004	<.005	E.006	<.050
DEC	19...	.19	<.04	1.73	.026	.07	.038	<.006	E.006	<.006	<.004	<.005	E.007	<.050
JAN	16...	.17	<.04	1.67	.016	.06	.088	<.006	<.006	<.006	<.004	<.005	<.007	<.050
FEB	20...	.22	<.04	1.50	.016	.04	.088	<.006	E.005	<.006	<.004	<.005	<.007	<.050
MAR	18...	E.17	<.04	E1.47	E.014	E.06	E.070	<.006	E.005	<.006	<.004	<.005	E.003	<.050
APR	22...	.48	.07	E.06	<.008	.06	.092	<.006	<.006	<.006	<.004	<.005	<.007	<.050
MAY	15...	.46	<.04	.84	.021	<.02	.078	<.006	E.004	<.006	.004	<.005	E.006	<.050
JUN	16...	.45	<.04	.97	.017	.02	.075	<.006	E.005	<.006	<.004	<.005	E.006	<.050
JUL	15...	.25	<.04	1.08	.027	E.01	.058	<.006	E.005	<.006	<.004	<.005	<.007	<.050
SEP	24...	.32	<.04	1.38	.010	.03	.064	<.006	E.006	<.006	<.004	<.005	.008	<.100

## SNAKE RIVER MAIN STEM

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ben- flur- alin, water, fltrd 0.7u GF (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF (82680)	Carbo- furan, water, fltrd 0.7u GF (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF (82682)	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)	Disul- foton, water, fltrd 0.7u GF (82677)	EPTC, water, fltrd 0.7u GF (82668)
OCT 29...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002
NOV 13...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002
DEC 19...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.007
JAN 16...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002
FEB 20...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002
MAR 18...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002
APR 22...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002
MAY 15...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	.035
JUN 16...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	.010
JUL 15...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002
SEP 24...	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002

Date	Ethal- flur- alin, water, fltrd 0.7u GF (82663)	Etho- prop, water, fltrd 0.7u GF (82672)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipro- nil sulfone water, fltrd, ug/L (62168)	Fipro- nil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)
OCT 29...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	E.004	<.006
NOV 13...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006
DEC 19...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006
JAN 16...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006
FEB 20...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006
MAR 18...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006
APR 22...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006
MAY 15...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006
JUN 16...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006
JUL 15...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006
SEP 24...	<.009	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006

SNAKE RIVER MAIN STEM

13154500 SNAKE RIVER AT KING HILL, ID--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Molinate, water, fltrd 0.7u GF (82671)	Napropamide, water, fltrd 0.7u GF (82684)	p,p'-DDE, water, fltrd ug/L (34653)	Parathion, water, fltrd ug/L (39542)	Pebulate, water, fltrd 0.7u GF (82669)	Pendimethalin, water, fltrd 0.7u GF (82683)	Phorate, water, fltrd 0.7u GF (82664)	Prometon, water, fltrd ug/L (04037)	Pronamide, water, fltrd 0.7u GF (82676)	Propachlor, water, fltrd ug/L (04024)	Propanil, water, fltrd 0.7u GF (82679)	Propargite, water, fltrd 0.7u GF (82685)	Simazine, water, fltrd ug/L (04035)
OCT 29...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005
NOV 13...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005
DEC 19...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005
JAN 16...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005
FEB 20...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005
MAR 18...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005
APR 22...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005
MAY 15...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005
JUN 16...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005
JUL 15...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005
SEP 24...	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005

Date	Tebuthiuron, water, fltrd 0.7u GF (82670)	Terbacil, water, fltrd 0.7u GF (82665)	Terbufos, water, fltrd 0.7u GF (82675)	Thiobencarb, water, fltrd 0.7u GF (82681)	Triallate, water, fltrd 0.7u GF (82678)	Trifluralin, water, fltrd 0.7u GF (82661)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 29...	<.02	<.034	<.02	<.005	<.002	<.009	9	164
NOV 13...	<.02	<.034	<.02	<.005	<.002	<.009	2	39
DEC 19...	<.02	<.034	<.02	<.005	<.002	<.009	5	103
JAN 16...	<.02	<.034	<.02	<.005	<.002	<.009	5	82
FEB 20...	<.02	<.034	<.02	<.005	<.002	<.009	7	127
MAR 18...	<.02	<.034	<.02	<.005	<.002	<.009	18	308
APR 22...	<.02	<.034	<.02	<.005	<.002	<.009	7	128
MAY 15...	<.02	<.034	<.02	<.005	<.002	<.009	11	203
JUN 16...	<.02	<.034	<.02	<.005	<.002	<.009	11	169
JUL 15...	<.02	<.034	<.02	<.005	<.002	<.009	7	116
SEP 24...	<.02	<.034	<.02	<.005	<.002	<.009	5	94

< Less than  
E Estimated value