

Figure 11. Schematic showing gaging stations in Snake River Basin between Snake River at Neeley and Snake River near Buhl.

## RAFT RIVER BASIN

## 13078000 RAFT RIVER ABOVE ONEMILE CREEK NEAR MALTA, ID

LOCATION.--Lat 42°03'49", long 113°27'05", (NAD83), in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.5, T.16 S., R.26 E., Cassia County, Chokecherry Canyon quad., Hydrologic Unit 17040210, U.S. Bureau of Land Management lands, on right bank 0.9 mi upstream from county road crossing, 0.2 mi upstream from Onemile Creek, and 17 mi southwest of Malta.

DRAINAGE AREA.--412 mi<sup>2</sup>. Mean elevation, 6,300 ft.

PERIOD OF RECORD.--September 1946 to December 1953, May 1955 to June 1971, published as "at Peterson Ranch, near Bridge"; October 1975 to May 1984, equivalent records (except for unusually heavy rainstorm runoff from Onemile Creek drainage), published as "below Onemile Creek" (sta 13078205), December 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,940 ft above NGVD of 1929, from topographic map. From October 1975 to May 1984, at site 0.9 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 16,000 acres (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft<sup>3</sup>/s Jan. 14, 1980, gage height, 8.20 ft, from rating curve extended above 70 ft<sup>3</sup>/s on basis of slope area measurement; no flow part of each day, Sept. 5, 6, 1988, May 5, Aug. 13, 14, Sept. 26, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 11 ft<sup>3</sup>/s Mar. 27; minimum daily, 2.0 ft<sup>3</sup>/s Aug. 4, 5, 9-12, 15, 25-28, Sept. 2, 3.

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	3.3	4.3	5.0	5.0	7.2	9.6	9.0	5.0	4.4	3.8	e3.0	e2.5
2	3.2	4.3	5.0	4.9	7.5	8.5	8.8	5.0	4.0	3.5	e3.0	e2.0
3	3.1	4.4	5.0	5.1	6.8	8.7	8.8	6.5	3.8	3.5	e2.5	e2.0
4	3.1	4.5	4.9	5.0	6.4	9.1	9.4	5.9	4.1	3.4	e2.0	e2.5
5	3.3	4.3	5.0	4.9	6.3	8.3	9.4	5.1	4.0	3.7	e2.0	e3.0
6	3.2	4.3	4.9	4.8	5.7	9.9	9.6	5.1	3.8	3.3	e2.5	e3.5
7	3.9	4.5	5.0	4.9	e5.5	9.5	9.4	5.5	3.8	3.6	e2.5	e3.5
8	3.1	4.8	4.9	5.1	5.5	8.8	9.1	6.1	3.7	3.7	e2.5	e3.5
9	2.9	4.8	4.9	e5.0	5.4	8.5	9.0	5.4	3.6	3.5	e2.0	e4.0
10	2.8	4.5	5.1	5.2	5.5	8.6	8.5	4.9	3.6	3.5	e2.0	e4.0
11	2.9	4.5	5.0	5.2	6.1	8.6	7.8	4.7	3.6	3.6	e2.0	e4.5
12	2.9	4.4	5.1	5.1	6.2	8.8	7.6	4.5	3.6	3.5	e2.0	e5.0
13	3.1	4.6	5.1	5.4	8.0	8.5	7.9	4.4	4.1	3.3	e2.5	e5.0
14	3.2	4.5	5.2	5.7	9.5	8.4	7.9	4.4	3.8	3.2	e2.5	e4.5
15	3.3	4.6	5.2	e5.5	8.7	8.6	8.8	5.0	3.6	3.2	e2.0	e4.5
16	3.4	4.7	5.3	e5.5	8.2	9.1	8.9	4.9	3.2	3.0	e2.5	e4.5
17	3.5	4.7	5.4	5.3	8.0	9.3	9.1	4.5	3.1	3.3	e2.5	e5.0
18	3.5	4.6	5.1	5.2	7.7	9.1	9.0	4.5	2.9	3.6	e2.5	e5.5
19	3.6	4.6	5.0	5.1	7.1	9.0	8.6	4.4	2.8	3.9	e2.5	e6.0
20	3.7	4.8	5.4	5.3	7.2	8.8	8.1	4.6	3.4	4.5	e2.5	e6.0
21	3.8	4.7	5.4	5.4	8.8	8.8	6.7	4.4	3.7	4.4	e3.0	e5.5
22	3.9	4.7	5.3	e5.5	8.5	8.8	6.9	4.1	3.7	4.3	e3.0	e5.5
23	4.1	4.8	5.4	e5.5	7.9	8.7	6.3	4.1	3.9	e4.0	e2.5	e5.5
24	4.1	4.8	e5.5	e6.0	6.9	9.0	4.5	4.5	4.2	e4.5	e2.5	e5.5
25	4.0	4.6	5.3	e6.0	7.1	8.9	4.6	4.4	4.3	e5.0	e2.0	e5.5
26	4.2	4.7	e5.0	6.3	7.3	10	4.9	4.1	3.9	e5.5	e2.0	e6.0
27	4.0	4.7	5.0	6.4	7.1	11	4.6	3.7	3.7	e5.5	e2.0	e6.0
28	4.0	4.9	5.2	6.3	7.8	10	4.9	3.7	3.6	e5.0	e2.0	e6.0
29	4.2	5.0	5.1	6.3	---	9.5	5.6	3.6	3.4	e4.5	e2.5	e6.0
30	4.3	4.9	5.0	6.8	---	9.3	5.6	4.0	3.9	e4.0	e2.5	e5.50
31	4.3	---	5.2	6.8	---	9.2	---	4.3	---	e3.5	e2.5	---
TOTAL	109.9	138.5	158.9	170.5	199.9	280.9	229.3	145.3	111.2	120.8	74.0	138.00
MEAN	3.55	4.62	5.13	5.50	7.14	9.06	7.64	4.69	3.71	3.90	2.39	4.60
MAX	4.3	5.0	5.5	6.8	9.5	11	9.6	6.5	4.4	5.5	3.0	6.0
MIN	2.8	4.3	4.9	4.8	5.4	8.3	4.5	3.6	2.8	3.0	2.0	2.0
AC-FT	218	275	315	338	397	557	455	288	221	240	147	274

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2003, BY WATER YEAR (WY)												
MEAN	8.11	10.3	11.4	16.8	23.3	27.1	37.4	43.8	32.8	8.46	6.39	6.27
MAX	19.9	25.2	27.8	99.7	82.5	100	146	152	147	36.1	16.3	13.3
(WY)	1987	1984	1984	1971	1986	1984	1984	1998	1983	1983	1983	1986
MIN	2.16	3.46	3.77	4.17	3.61	5.01	7.26	3.99	3.10	2.48	2.12	1.45
(WY)	1995	1995	1995	1993	1993	1961	1995	1994	1994	1994	1992	1992

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR			FOR 2003 WATER YEAR			WATER YEARS 1947 - 2003		
ANNUAL TOTAL	2546.0			1877.20					
ANNUAL MEAN	6.98			5.14			18.2		
HIGHEST ANNUAL MEAN							47.9		
LOWEST ANNUAL MEAN							5.14		
HIGHEST DAILY MEAN	29	Apr	3	11	Mar	27	1210		Jan 14 1980
LOWEST DAILY MEAN	2.0	Sep	5	2.0	Aug	4	0.11		Aug 14 1992
ANNUAL SEVEN-DAY MINIMUM	2.5	Sep	3	2.1	Aug	9	0.33		Aug 13 1992
ANNUAL RUNOFF (AC-FT)	5050			3720			13210		
10 PERCENT EXCEEDS	16			8.7			37		
50 PERCENT EXCEEDS	5.0			4.8			9.9		
90 PERCENT EXCEEDS	3.0			2.9			4.1		

e Estimated

SNAKE RIVER MAIN STEM

13081500 SNAKE RIVER NEAR MINIDOKA, ID

LOCATION.--Lat 42°40'23", long 113°30'01", in SW¼NE¼ sec.2, T.9 S., R.25 E., Minidoka County, Lake Walcott West quad., Hydrologic Unit 17040209, on right bank 1 mi downstream from Minidoka Dam, 6 mi south of Minidoka, and at mile 673.5.

DRAINAGE AREA.--15,700 mi<sup>2</sup>, approximately, excluding indeterminate nontributary area on Snake River Plain.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 21, 1910 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "below Minidoka Dam, at Howell's Ferry", 1911. Records for August 1895 to Apr. 20, 1910, at site 6 mi downstream "at Montgomery Ferry near Minidoka" are not equivalent.

REVISED RECORDS.--WSP 1347: 1911.

GAGE.--Water-stage recorder. Datum of gage is 4,132.2 ft above NGVD of 1929 (river-profile survey). Prior to Apr. 21, 1910, nonrecording gage at site 6 mi downstream at different datum. Apr. 21, 1910 to Aug. 28, 1911, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry. Flow regulated by Lake Walcott (1906), American Falls Reservoir (1927), and other reservoirs, having a combined usable capacity of about 4,700,000 acre-ft. Diversions above station for irrigation of about 128,000 acres below and about 1,200,000 acres above station, of which about 304,000 acres are irrigated by withdrawals from ground water (1966 determination). Considerable water leaks into the Snake River Plain aquifer above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (1910-26), 45,900 ft<sup>3</sup>/s June 21, 1918, gage height, 16.02 ft; minimum daily, 1,700 ft<sup>3</sup>/s Aug. 2, 1919.

Maximum discharge since regulation began in 1927, 42,900 ft<sup>3</sup>/s June 21, 1997, gage height, 15.49 ft; minimum, 37 ft<sup>3</sup>/s Jan. 28, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge of 47,500 ft<sup>3</sup>/s May 29, 30, 1897, at site 6 miles downstream at Montgomery Ferry near Minidoka, gage height, 12.6 ft (datum at that site).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9,090 ft<sup>3</sup>/s Aug. 1; minimum, 475 ft<sup>3</sup>/s Jan. 14, gage height, 2.73 ft.

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	5160	576	555	524	535	583	660	4690	8200	8970	9090	7390
2	5060	580	553	510	550	589	857	4910	8530	8950	8590	6530
3	5030	621	555	510	545	602	904	5120	8760	8780	8490	6770
4	4460	591	555	505	530	613	879	5000	8650	8600	8560	6730
5	4020	584	558	523	525	632	883	5130	8320	8820	8240	6730
6	3980	592	560	511	536	730	878	5170	7970	8970	7770	6730
7	3950	582	564	508	519	621	870	5460	8010	8820	7750	6710
8	3730	568	562	523	515	619	851	5790	8110	8920	7980	6820
9	3640	555	584	543	522	598	846	6010	8360	8830	8240	6670
10	3460	550	567	532	525	594	1150	5730	8590	8780	8460	6610
11	2010	549	567	506	519	594	1390	5850	8530	8730	8340	6360
12	1790	550	562	506	527	593	1710	5630	8530	8690	8330	6630
13	1400	553	563	505	598	595	2060	5260	8620	8790	8310	6110
14	840	573	562	499	700	587	2380	5220	8570	8910	8340	5770
15	522	552	571	537	668	585	2240	6090	8620	8850	8410	5620
16	512	548	558	523	734	601	2270	6570	8760	8910	8180	5600
17	511	593	541	541	671	595	2220	6840	8820	8760	8170	5610
18	513	560	548	512	677	620	2410	7120	8800	8680	8250	5290
19	513	555	525	491	683	595	2420	6990	8950	8600	8270	5160
20	509	549	532	509	680	589	2580	6810	9000	8550	8300	5080
21	510	553	517	513	696	550	2730	6470	8930	8590	8310	4840
22	515	545	518	514	755	539	2790	7140	8910	8540	8290	4740
23	520	563	515	517	643	579	3050	7560	8620	8430	8150	4770
24	526	563	516	520	641	545	3100	7900	8460	8550	7910	4760
25	528	564	516	520	591	534	3270	8020	8520	8700	7600	3890
26	531	595	523	519	585	567	3880	7990	8670	8770	7620	3900
27	537	558	515	523	585	594	3990	7910	8810	8670	7720	3810
28	545	555	512	538	598	538	4090	7800	9080	8020	7640	3950
29	540	559	544	516	---	529	4350	7980	9040	8000	7660	4230
30	559	555	526	543	---	537	4350	8110	8950	8220	7670	4280
31	567	---	525	530	---	562	---	8110	---	8810	7650	---
TOTAL	57488	16991	16869	16071	16853	18209	66058	200380	258690	269210	252290	168090
MEAN	1854	566	544	518	602	587	2202	6464	8623	8684	8138	5603
MAX	5160	621	584	543	755	730	4350	8110	9080	8970	9090	7390
MIN	509	545	512	491	515	529	660	4690	7970	8000	7600	3810
AC-FT	114000	33700	33460	31880	33430	36120	131000	397500	513100	534000	500400	333400

SNAKE RIVER MAIN STEM  
13081500 SNAKE RIVER NEAR MINIDOKA, ID--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1926, BY WATER YEAR (WY) (UNREGULATED)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5941	6683	6047	5740	6081	6342	8108	14000	16910	8233	4800	4732
MAX	10390	9138	7279	7226	7657	7790	11820	19940	30430	18490	8725	11820
(WY)	1913	1913	1918	1912	1911	1911	1914	1921	1918	1917	1912	1912
MIN	2154	4805	4350	3813	5014	4632	4599	4320	3371	2986	2067	2151
(WY)	1925	1920	1920	1925	1920	1920	1924	1924	1924	1919	1919	1919

SUMMARY STATISTICS <sup>a</sup> WATER YEARS 1910 - 1926

ANNUAL MEAN	7841
HIGHEST ANNUAL MEAN	10830
LOWEST ANNUAL MEAN	4562
HIGHEST DAILY MEAN	45800
LOWEST DAILY MEAN	1700
ANNUAL SEVEN-DAY MINIMUM	1820
ANNUAL RUNOFF (AC-FT)	5681000
10 PERCENT EXCEEDS	14500
50 PERCENT EXCEEDS	6260
90 PERCENT EXCEEDS	3450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2003, BY WATER YEAR (WY) (REGULATED)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3444	3045	3420	3859	3909	4363	7562	11120	11660	9568	8586	6213
MAX	11900	12620	11400	13250	18120	20020	22130	23390	32370	14670	11640	12870
(WY)	1985	1985	1984	1984	1997	1997	1971	1971	1997	1983	1997	1997
MIN	714	306	294	398	287	251	1015	4503	5959	5982	5192	2774
(WY)	1962	1962	1962	1967	1961	1961	1935	1930	1934	1934	1934	1977

SUMMARY STATISTICS <sup>b</sup> WATER YEARS 1927 - 2003

	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	
ANNUAL TOTAL	1344504	1357199	
ANNUAL MEAN	3684	3718	6406
HIGHEST ANNUAL MEAN			13020
LOWEST ANNUAL MEAN			3330
HIGHEST DAILY MEAN	9070	9090	42700
LOWEST DAILY MEAN	507	491	37
ANNUAL SEVEN-DAY MINIMUM	512	511	111
ANNUAL RUNOFF (AC-FT)	2667000	2692000	4641000
10 PERCENT EXCEEDS	8600	8630	11200
50 PERCENT EXCEEDS	753	1790	6240
90 PERCENT EXCEEDS	527	520	998

<sup>a</sup> Prior to regulation by American Falls Dam.

<sup>b</sup> Since regulation by American Falls Dam.

SNAKE RIVER MAIN STEM

13081500 SNAKE RIVER NEAR MINIDOKA, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to 1996, February to September 1998, April to September 2000, April to June 2002, July to September 2003 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June to September 1993, June to September 1994, July to September 1996, February to September 1998, May to September 2000, June to September 2003 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 25.1 °C July 30, 2003; minimum, 13.1 °C Sept. 25, 2003.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 25.1 °C July 30; minimum, 13.1 °C Sept. 25.

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 100 mL (31625)	Hardness, water, unfltrd, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	
JUL	14...	1000	9180	450	8.4	23.5	21.5	2.1	7.3	96	--	--	--	
AUG	11...	1015	8360	414	8.4	26.0	23.5	3.3	7.0	95	<1	--	--	
SEP	10...	1000	6660	383	8.3	9.5	18.4	9.7	7.2	89	S9	170	43.4	14.0

Date	Time	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	14...	--	--	--	--	--	--	--	--	--	--	.037	.41	.090
AUG	11...	--	--	--	--	--	--	--	--	--	--	.058	.51	.066
SEP	10...	16.2	17	3.08	166	.0	136	35.1	16.1	.7	21.3	.054	.55	.101

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	14...	.056	.087	4	99
AUG	11...	.104	.139	5	113
SEP	10...	.024	.079	12	216

< Less than  
S Most probable value

SNAKE RIVER MAIN STEM  
13081500 SNAKE RIVER NEAR MINIDOKA, ID--Continued

Temperature, water, degrees Celsius WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.8	17.1	17.6	19.9	19.3	19.7	24.3	23.6	24.0	21.7	21.2	21.5
2	18.3	17.7	17.9	20.4	19.9	20.1	24.8	24.1	24.3	21.9	20.9	21.3
3	17.8	17.4	17.6	20.6	20.2	20.4	24.4	24.0	24.2	21.9	20.9	21.4
4	17.7	17.0	17.4	20.9	20.4	20.5	24.3	23.9	24.0	21.9	21.1	21.6
5	18.1	17.0	17.5	20.9	20.4	20.6	24.4	23.6	24.0	21.2	20.6	20.9
6	18.0	16.7	17.4	20.9	20.4	20.5	24.1	23.8	23.9	21.2	20.6	20.8
7	17.5	16.9	17.2	20.9	20.2	20.6	24.1	23.6	23.8	21.1	20.2	20.6
8	17.4	16.2	16.9	20.9	20.2	20.7	23.9	23.4	23.6	20.6	19.7	20.2
9	16.6	16.2	16.4	21.2	20.6	20.8	23.8	23.2	23.4	19.8	19.2	19.5
10	17.4	16.6	17.0	21.9	20.7	21.3	23.6	23.2	23.4	19.2	18.2	18.7
11	18.0	17.2	17.6	21.6	21.1	21.3	23.6	23.2	23.4	18.3	17.7	18.0
12	18.1	17.7	17.9	21.9	20.9	21.4	23.6	23.1	23.3	17.7	16.9	17.4
13	18.6	17.8	18.1	21.6	20.9	21.3	23.8	23.2	23.4	17.2	16.4	16.8
14	19.1	18.3	18.6	22.1	21.6	21.8	23.9	23.2	23.5	17.2	16.1	16.5
15	19.1	18.5	18.8	22.6	21.9	22.3	24.6	23.2	23.8	16.9	15.9	16.3
16	19.1	18.5	18.8	22.7	22.4	22.5	23.8	23.2	23.7	16.1	15.6	15.9
17	19.9	18.8	19.4	23.2	22.4	22.8	23.2	22.6	23.0	15.6	14.7	15.1
18	21.1	19.6	20.4	23.8	22.7	23.1	22.9	22.2	22.5	15.3	14.2	14.7
19	21.1	20.1	20.5	23.6	23.1	23.3	22.7	21.9	22.2	15.0	14.0	14.3
20	20.6	19.8	20.2	23.9	23.1	23.4	22.2	21.7	22.0	14.7	13.7	14.1
21	20.2	19.8	20.0	23.2	22.7	23.0	22.2	21.7	22.0	14.3	13.6	13.8
22	19.8	19.1	19.5	24.1	23.1	23.6	22.4	21.7	22.0	14.5	13.4	13.8
23	19.3	18.8	19.1	24.8	23.8	24.2	22.4	21.7	22.0	14.2	13.3	13.6
24	18.8	18.3	18.5	24.4	23.9	24.2	22.4	21.6	21.9	14.2	13.3	13.5
25	18.8	17.8	18.3	24.6	23.9	24.3	22.6	21.4	21.8	14.3	13.1	13.6
26	18.1	17.4	17.8	24.4	24.1	24.3	22.6	21.4	22.1	14.5	13.4	13.9
27	18.0	17.4	17.7	24.6	23.9	24.2	21.9	21.4	21.6	15.3	13.6	14.1
28	18.6	17.7	18.2	24.3	23.8	24.0	22.1	21.4	21.7	15.6	13.9	14.5
29	19.5	18.3	18.9	25.0	23.6	24.1	21.7	21.2	21.4	15.6	14.0	14.7
30	19.8	19.1	19.4	25.1	24.3	24.6	21.6	21.1	21.3	15.9	14.8	15.2
31	---	---	---	24.4	23.8	24.2	21.9	20.9	21.3	---	---	---
MONTH	21.1	16.2	18.4	25.1	19.3	22.4	24.8	20.9	22.9	21.9	13.1	16.9



GOOSE CREEK BASIN

13083000 TRAPPER CREEK NEAR OAKLEY, ID

LOCATION.--Lat 42°10'10", long 113°58'20", in NW¼SE¼NW¼ sec.34, T.14 S., R.21 E., Cassia County, Oakley quad., Hydrologic Unit 17040211, on left bank 4 mi upstream from Oakley Dam, 7 mi southwest of Oakley, and at mile 3.0.

DRAINAGE AREA.--53.7 mi<sup>2</sup>. Mean elevation, 6,360 ft.

PERIOD OF RECORD.--May 1911 to September 1916, March 1919 to current year. Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1063: 1941, 1943. WSP 1567: Drainage area.

GAGE.--Water-stage recorder and broadcrested concrete weir. Elevation of gage is 4,820 ft above NGVD of 1929, by barometer. Prior to Sept. 1, 1912, water-stage recorder at approximately present site at different datum. Apr. 8, 1913 to Sept. 30, 1916, and Mar. 28, 1919 to Aug. 15, 1931, at site 1 mi upstream at different datum. Sept. 1, 1912 to Apr. 7, 1913, nonrecording gage at site 0.8 mi downstream at different datum.

REMARKS.--Records good. Small diversions above station for irrigation. Flow of artesian well, completed in 1936, enters above. Practically entire flow passing station is stored in Oakley Reservoir (see sta 13083500).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 270 ft<sup>3</sup>/s Aug. 17, 1941, gage height, 6.99 ft, during cloudburst, from rating curve extended above 100 ft<sup>3</sup>/s on basis of velocity-area studies and peak flow over weir (a higher flow may have occurred during cloudburst Aug. 15, 1931); maximum gage height, 8.64 ft, Jan. 31, 1995, affected by backwater from beaver dam; minimum daily, 0.90 ft<sup>3</sup>/s July 19, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 16 ft<sup>3</sup>/s May 4, 9; minimum daily, 7.7 ft<sup>3</sup>/s Aug. 10.

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	9.1	9.8	11	11	11	11	12	14	11	8.2	8.4	9.0
2	9.1	10	11	11	11	10	13	14	11	8.1	8.7	9.1
3	9.3	10	11	11	11	11	12	15	10	8.1	11	9.2
4	9.4	10	11	11	11	11	12	16	10	8.1	10	9.0
5	9.4	10	11	11	10	11	12	15	10	8.1	8.3	9.7
6	9.1	10	11	10	10	11	12	15	10	8.0	8.0	9.7
7	9.2	10	11	10	e8.5	11	11	15	9.9	8.0	7.9	9.6
8	9.0	11	10	10	10	11	11	15	9.8	7.9	7.8	9.3
9	8.9	11	11	10	11	11	12	16	9.6	8.0	7.8	9.4
10	8.9	11	11	11	11	11	12	15	9.5	7.8	7.7	9.6
11	8.9	11	11	11	10	11	12	15	9.3	7.8	7.8	9.6
12	8.9	11	11	10	10	11	12	15	9.2	7.8	7.9	9.4
13	9.3	11	11	10	11	11	12	15	9.2	7.8	8.1	9.3
14	9.2	11	11	11	11	11	13	15	9.2	7.9	8.0	9.4
15	9.3	10	11	10	11	11	13	15	9.0	8.0	8.0	9.3
16	9.7	11	11	10	11	12	12	14	8.8	7.9	8.1	9.6
17	10	11	11	10	11	11	12	14	8.6	7.9	8.0	9.8
18	9.9	10	11	10	11	11	12	14	8.6	8.0	8.1	9.9
19	10	10	11	10	10	11	12	14	8.6	8.1	8.1	9.9
20	9.8	11	11	10	11	11	12	13	8.8	8.2	8.0	9.7
21	10	11	11	10	11	11	13	13	9.4	8.2	8.6	9.6
22	10	11	11	10	11	11	13	13	9.2	8.0	9.7	9.6
23	10	11	11	11	10	11	13	13	9.2	8.0	9.6	9.6
24	10	11	10	11	10	11	13	12	9.3	8.1	8.8	9.8
25	10	10	11	11	e10	11	13	12	9.3	8.5	8.6	9.8
26	10	10	11	11	e9.5	13	14	12	9.0	9.2	8.5	9.6
27	10	10	11	11	10	12	14	12	8.8	8.8	8.6	9.8
28	10	10	11	11	11	11	14	11	8.6	8.5	8.5	9.9
29	10	11	11	10	---	11	14	11	8.4	8.4	9.2	9.9
30	11	11	11	11	---	11	14	11	8.3	8.4	9.2	9.9
31	10	---	11	12	---	11	---	11	---	8.3	9.0	---
TOTAL	297.4	315.8	339	327	294.0	344	376	425	279.6	252.1	264.0	287.0
MEAN	9.59	10.5	10.9	10.5	10.5	11.1	12.5	13.7	9.32	8.13	8.52	9.57
MAX	11	11	11	12	11	13	14	16	11	9.2	11	9.9
MIN	8.9	9.8	10	10	8.5	10	11	11	8.3	7.8	7.7	9.0
AC-FT	590	626	672	649	583	682	746	843	555	500	524	569

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2003, BY WATER YEAR (WY)

	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	10.9	11.3	11.4	11.5	12.8	15.2	21.6	31.5	21.9	12.3	10.1	10.0																																																																																	
MAX	14.7	16.2	16.2	20.5	30.5	60.0	70.0	100	73.1	36.1	21.9	14.8																																																																																	
(WY)	1985	1985	1981	1943	1943	1921	1921	1984	1984	1984	1984	1921																																																																																	
MIN	8.01	7.80	7.62	6.00	8.00	9.66	10.6	9.20	6.35	3.95	6.45	6.80																																																																																	
(WY)	1931	1931	1912	1915	1915	1933	1934	1934	1994	1992	1991	1931																																																																																	

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1911 - 2003

ANNUAL TOTAL	4979.1	3800.9	
ANNUAL MEAN	13.6	10.4	15.1
HIGHEST ANNUAL MEAN			33.9
LOWEST ANNUAL MEAN			8.65
HIGHEST DAILY MEAN	31	May 1	16
LOWEST DAILY MEAN	7.6	Jan 29	7.7
ANNUAL SEVEN-DAY MINIMUM	8.1	Aug 30	7.8
ANNUAL RUNOFF (AC-FT)	9880	7540	10920
10 PERCENT EXCEEDS	25	13	26
50 PERCENT EXCEEDS	11	10	12
90 PERCENT EXCEEDS	8.8	8.2	8.8

e Estimated



GOOSE CREEK BASIN

13083500 OAKLEY RESERVOIR NEAR OAKLEY, ID

LOCATION.--Lat 42°11'50", long 113°54'50", in sec.19, T.14 S., R.22 E., Cassia County, Oakley quad., Hydrologic Unit 17040211, just upstream from right abutment of Oakley Dam on Goose Creek, 4 mi southwest of Oakley, and at mile 29.9.

DRAINAGE AREA.--729 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1912 to current year.

REVISED RECORDS.--WSP 1567: Drainage area.

GAGE.--Nonrecording gage. Supplemental recording gage from May 17 to June 2, 1984. Elevation of gage is 4,630 ft, by barometer.

REMARKS.--Reservoir is formed by earthen dam constructed in 1911-13; storage began in 1911. Usable capacity, 77,400 acre-ft between gage heights 0.0 ft, bottom of diversion tunnel, and 138.4 ft, crest of spillway. Silt deposition at the dam has decreased storage capacity, affecting the reliability of the capacity table particularly at the lower elevations. Crest raised in May 1984 from 136.0 ft. Dead storage negligible. Water is used for irrigation of lands along Goose Creek in Oakley Canal Co. project. Figures given herein represent usable contents. Reservoir is known locally as Lower Goose Creek Reservoir.

COOPERATION.--Gage readings and capacity table furnished by Oakley Canal Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 75,600 acre-ft May 22, 1984, gage height, 137.0 ft; reservoir drained at close of irrigation season in 1915, 1919-20, 1926, 1933, 1950, 1959, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 19,500 acre-ft May 12, gage height, 70.3 ft; minimum contents, 1,920 acre-ft Sept. 30.

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	17100	---	---	---	---	3200
2	---	---	9160	11100	---	---	---	---	17400	---	---	---
3	---	---	---	---	13400	15200	---	---	---	---	---	---
4	7220	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	19200	---	---	5780	---
6	---	---	9450	---	---	---	---	---	---	---	---	---
7	6000	---	---	---	---	---	---	---	---	8780	---	---
8	---	---	---	---	---	---	---	---	---	---	---	2920
9	---	---	---	---	---	---	---	---	16100	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	4900	---
12	---	---	---	---	---	---	---	19500	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	8020	---	---	---	---	18200	---	---	---	---	2570
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	14100	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	13400	---	4080	---
19	---	---	---	---	---	---	---	19300	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	6810	---	---
22	---	---	---	---	---	---	---	---	---	---	---	2320
23	---	---	---	---	---	---	---	---	11800	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	3550	---
26	---	---	---	---	---	16900	---	---	---	---	---	---
27	---	---	---	---	---	---	---	18500	---	---	---	---
28	---	---	---	---	e15000	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	1980
30	---	e9030	---	---	---	---	e19000	---	e10300	---	---	e1920
31	7010	---	e11000	e13200	---	e17100	---	e17800	---	e6120	e3250	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
‡	1040	2020	1970	2200	1800	2100	1900	-1200	-7500	-4180	-2870	-1330

CAL YR 2002 ‡ 1290  
WTR YR 2003 ‡ -4050

‡ Change in contents, in acre-feet.  
e Estimated

SNAKE RIVER BASIN

13087505 LOWER MILNER POWER PLANT AT MILNER, ID

LOCATION.--Lat 42°31'29", long 114°01'46", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.30, T.10 S., R.21 E., Twin Falls County, Milner quad., Hydrologic Unit 17040209, 1.1 mi below Milner Dam.

PERIOD OF RECORD.--November 1992 to current year.

GAGE.--Six ultrasonic flow meters on two pipes connected to data collection platform.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,680 ft<sup>3</sup>/s May 2, 1999; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 559 ft<sup>3</sup>/s Nov. 30; 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	12	0.00	557	363	327	399	71	0.00	0.00	0.00	0.00	0.00
2	12	0.00	449	361	326	399	0.00	0.00	0.00	0.00	0.00	0.00
3	12	0.00	276	361	345	398	0.00	0.00	0.00	0.00	0.00	0.00
4	12	0.76	304	361	346	361	0.00	0.00	0.00	0.00	0.00	0.00
5	12	94	305	360	347	324	0.00	0.00	0.00	0.00	0.00	0.00
6	12	213	306	346	348	318	0.00	0.00	0.00	0.00	0.00	0.00
7	12	213	307	339	348	372	0.00	0.00	0.00	0.00	0.00	0.00
8	12	214	308	339	346	375	0.00	0.00	0.00	0.00	0.00	0.00
9	8.1	214	308	337	343	376	0.00	0.00	0.00	0.00	0.00	0.00
10	1.7	214	306	326	340	403	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	214	306	322	342	391	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	276	306	321	342	390	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	274	306	305	455	396	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	308	305	294	501	403	0.00	0.00	0.00	0.00	0.00	0.00
15	215	326	306	291	506	404	0.00	0.00	0.00	0.00	0.00	0.00
16	288	326	334	293	503	403	0.00	0.00	0.00	0.00	0.00	0.00
17	295	325	351	292	504	424	0.00	0.00	0.00	0.00	0.00	0.00
18	296	269	351	293	504	432	0.00	0.00	0.00	0.00	0.00	0.00
19	296	359	359	294	509	433	0.00	0.00	0.00	0.00	0.00	0.00
20	296	359	407	293	506	461	0.00	0.00	0.00	0.00	0.00	0.00
21	329	359	433	292	504	472	0.00	0.00	0.00	0.00	0.00	0.00
22	340	360	433	303	496	475	0.00	0.00	0.00	0.00	0.00	0.00
23	283	359	438	306	492	470	0.00	0.00	0.00	0.00	0.00	0.00
24	250	359	436	307	504	423	0.00	0.00	0.00	0.00	0.00	0.00
25	389	360	432	306	503	373	0.00	0.00	0.00	0.00	0.00	0.00
26	384	401	431	308	463	376	0.00	0.00	0.00	0.00	0.00	0.00
27	430	444	434	316	400	379	0.00	0.00	0.00	0.00	0.00	0.00
28	112	459	430	320	398	313	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	518	390	321	---	297	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	559	383	321	---	265	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	367	324	---	247	---	0.00	---	0.00	0.00	---
TOTAL	4308.80	8376.76	11364	9915	11848	11952	71.00	0.00	0.00	0.00	0.00	0.00
MEAN	139	279	367	320	423	386	2.37	0.000	0.000	0.000	0.000	0.000
MAX	430	559	557	363	509	475	71	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	276	291	326	247	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	8550	16620	22540	19670	23500	23710	141	0.00	0.00	0.00	0.00	0.00
CAL YR 2002	TOTAL	82087.19	MEAN	225	MAX	711	MIN	0.00	AC-FT	162800		
WTR YR 2003	TOTAL	57835.56	MEAN	158	MAX	559	MIN	0.00	AC-FT	114700		

## SNAKE RIVER BASIN

## 13087900 MILNER LAKE AT MILNER DAM, ID

LOCATION.--Lat 42°31'25", long 114°00'47", (NAD27), in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.29, T.10 S., R.21 E., Twin Falls County, Milner quad., Hydrologic Unit 17040209, near left end of Milner Dam on Snake River at Milner, at mile 639.1.

DRAINAGE AREA.--17,180 mi<sup>2</sup>, approximately, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--October 1974 to current year. Prior to October 1989, published as "Lake Milner."

GAGE.--Water-stage recorder. Datum of gage is 4,122.51 ft above NGVD of 1929. October 1974 to May 1978, nonrecording gage at same site and datum.

REMARKS.--Station equipment includes satellite telemetry. Reservoir is formed by a concrete gravity dam constructed in 1904 with first diversions in 1905. The dam is primarily a diversion dam. Capacity is a function of the riverflow and the lake elevation at the dam. No precise limits on capacity can be set, but computations indicate 50,200 acre-ft of usable storage at a lake gage of 11.5 ft and a riverflow of 30,000 ft<sup>3</sup>/s, and 11,200 acre-ft at a gage of 1.5 ft and a riverflow of 500 ft<sup>3</sup>/s. The capacity table was revised in 1984 and extended in 2001. Dead storage is 8,000 acre-ft. Water is used for irrigation by canals diverting at the dam and by pumps from the reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 54,500 acre-ft June 25, 1997; maximum gage height, 11.55 ft, Apr. 2, 1999; minimum contents, 10,800 acre-ft Dec. 15, 1988, Mar. 3, 1992; minimum gage height, 1.24 ft, Dec. 26, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 38,000 acre-ft June 22; maximum gage height, 11.25 ft, May 20; minimum contents, 22,900 acre-ft Oct. 19; minimum gage height, 7.28 ft, Oct. 28.

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	35600	27100	32200	32300	31800	33000	33100	34400	36200	37500	37100	37100
2	35400	27900	32100	32200	33200	32900	33400	34800	36100	37500	37100	36200
3	35000	28900	32200	32300	33000	32500	33500	35000	36800	37000	37000	36000
4	35100	29300	32400	32000	33300	32400	33600	34400	37700	36600	37400	35700
5	34500	29900	32500	32100	33300	32700	33400	34300	37700	36700	37400	35700
6	34900	30400	32700	32400	33300	32800	33600	34300	37300	36900	36500	35800
7	34900	30500	32800	32400	33300	33000	33700	34000	36800	37100	35800	35900
8	34900	30900	33100	32100	33300	33600	33400	34600	36400	37000	35800	35800
9	34800	31100	33100	32100	33300	33500	32800	35300	36400	37000	36000	35900
10	33800	31500	33000	32100	33300	33500	32700	35800	36900	37000	36600	36000
11	33000	32000	33300	32100	33300	33600	32600	36500	36900	36700	36600	36300
12	34000	32100	33400	32200	33600	33600	33200	36600	37000	36600	36800	36100
13	33500	32100	33400	32300	33500	33500	33200	36200	37200	36500	36800	36500
14	32100	32000	33800	31600	33400	33700	34600	35100	37100	36800	37000	36400
15	29100	32600	33800	32500	33800	33800	34300	35000	37100	36900	37300	36200
16	25700	32300	33800	32600	33500	33900	34500	35400	37300	37200	36800	35900
17	24000	32500	33200	32700	33700	33400	34000	35500	37400	37300	36500	36000
18	23500	32800	33600	32900	33800	33700	34000	36100	37300	37200	36500	36200
19	22900	32900	34000	32900	33800	33800	34300	37100	37400	37100	36600	36100
20	23000	33100	33600	33000	33700	33300	34500	37200	37700	36900	36400	36000
21	23000	33100	33500	33100	33500	33300	34500	36000	37900	36700	36800	35700
22	23500	33100	33400	33100	33200	33000	34600	36100	38000	36700	37100	35300
23	23400	33000	33200	33200	33900	32500	34800	36100	37800	36600	37400	35100
24	23500	33300	33100	33400	33300	32500	33900	36600	37200	36300	37100	34900
25	23500	33200	33000	33400	33000	32100	34200	37100	36700	36900	36700	34100
26	23600	33300	32700	33300	33000	31700	34400	37300	36500	37400	35700	34300
27	23400	33200	32500	32400	33000	32300	35000	37500	36400	37800	36200	34100
28	24000	33100	32600	33400	32800	32700	35200	37000	36900	36900	35900	33900
29	24900	32900	32200	33400	---	32700	34900	36800	37600	36300	36200	34400
30	25400	32500	32100	33300	---	32900	34100	36600	37600	35800	36500	34700
31	26200	---	31100	33400	---	33100	---	36500	---	36200	37000	---
MAX	35600	33300	34000	33400	33900	33900	35200	37500	38000	37800	37400	37100
MIN	22900	27100	31100	31600	31800	31700	32600	34000	36100	35800	35700	33900
†	8.66	10.52	10.14	10.76	10.60	10.68	10.50	10.74	11.00	10.55	11.01	10.69
‡	-9500	6300	-1400	2300	-600	300	1000	2400	1100	-1400	800	-2300
CAL YR 2002	MAX 38100	MIN 22900	‡ -1400									
WTR YR 2003	MAX 38000	MIN 22900	‡ -1000									

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

SNAKE RIVER MAIN STEM

13087995 SNAKE RIVER GAGING STATION AT MILNER, ID

LOCATION.--Lat 42°31'41", long 114°01'04", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.29, T.10 S., R.21 E., Twin Falls County, Milner quad., Hydrologic Unit 17040212, on left bank 200 ft downstream from highway bridge at Milner, 0.4 mi downstream from Milner Dam, and at mile 638.7.

PERIOD OF RECORD.--November 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,062.9 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry. Flow regulated by American Falls Reservoir, Lake Walcott, Milner Lake, and other reservoirs having a combined usable capacity of about 4,700,000 acre-ft. The flow at this site represents discharge to Snake River passing through Milner Dam. Former station number for this gaging station, 13088000, represents combined flow to Snake River from this site and from 13087505 Lower Milner Power Plant, which began operation November 1992. Considerable water leaks into the Snake River Plain aquifer above station. Diversions above station for irrigation of about 1,990,000 acres, of which about 504,000 acres are irrigated by withdrawals from ground water, and about 436,000 acres are irrigated below station. Return flow in large part enters Snake River between Milner and King Hill stations. Prior to 1993 water year, at times, practically entire flow was diverted during irrigation season.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,300 ft<sup>3</sup>/s June 22, 1997, gage height, 21.14 ft; minimum daily, 0.28 ft<sup>3</sup>/s Aug. 1, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,660 ft<sup>3</sup>/s Sept. 2, gage height, 6.11 ft; minimum daily, 0.28 ft<sup>3</sup>/s Aug. 1.

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	237	238	239	238	233	230	227	232	229	232	0.28	0.43
2	237	238	239	238	234	230	230	231	229	231	0.30	361
3	237	238	239	238	233	230	230	232	228	231	0.35	0.81
4	238	238	239	238	234	230	229	233	228	7.2	0.37	0.50
5	237	238	240	238	234	230	230	232	228	0.61	0.41	0.52
6	237	237	240	238	233	230	230	232	228	0.53	0.41	0.58
7	236	236	240	238	233	230	230	232	227	0.54	0.35	0.58
8	236	237	240	238	234	229	228	233	227	0.52	0.33	0.58
9	236	238	240	238	233	229	227	235	226	0.51	0.36	0.59
10	235	238	240	238	232	230	227	234	227	0.64	0.33	0.64
11	235	239	240	236	234	229	226	234	227	0.69	0.35	0.62
12	235	238	240	235	231	229	226	235	227	0.61	0.39	0.64
13	235	238	240	235	230	228	227	235	228	0.50	0.41	0.65
14	239	239	240	235	231	228	229	234	227	0.48	0.40	0.76
15	244	239	238	235	231	229	230	234	227	0.69	0.41	0.72
16	234	238	238	235	231	230	228	233	227	0.79	0.39	0.70
17	234	238	240	235	231	230	230	234	226	0.66	0.37	0.68
18	233	238	240	235	230	229	230	234	235	0.58	0.40	0.73
19	233	238	240	235	231	229	229	235	228	0.56	0.42	0.75
20	233	238	240	236	249	228	228	234	230	0.50	0.40	0.71
21	234	238	240	235	262	228	228	234	231	0.39	0.46	0.67
22	235	238	240	235	238	228	229	233	231	0.39	0.49	0.70
23	235	239	240	235	238	228	230	232	232	0.38	0.46	0.70
24	235	240	240	235	239	228	229	232	233	0.36	0.48	0.74
25	235	240	240	236	237	228	230	233	232	0.41	0.47	0.70
26	235	239	239	235	232	229	231	232	232	0.42	0.44	0.68
27	235	239	238	244	238	229	230	231	231	0.34	0.43	0.71
28	235	239	236	271	230	229	231	230	231	0.38	0.43	0.72
29	236	239	237	233	---	228	232	229	231	0.37	0.44	0.70
30	238	240	237	233	---	232	232	229	231	0.37	0.47	0.66
31	238	---	238	233	---	229	---	230	---	0.31	0.42	---
TOTAL	7312	7150	7417	7357	6576	7103	6873	7213	6874	714.73	12.42	380.17
MEAN	236	238	239	237	235	229	229	233	229	23.1	0.40	12.7
MAX	244	240	240	271	262	232	232	235	235	232	0.49	361
MIN	233	236	236	233	230	228	226	229	226	0.31	0.28	0.43
AC-FT	14500	14180	14710	14590	13040	14090	13630	14310	13630	1420	25	754
CAL YR 2002	TOTAL 40345.32	MEAN 111	MAX 251	MIN 0.34	AC-FT 80020							
WTR YR 2003	TOTAL 64982.32	MEAN 178	MAX 361	MIN 0.28	AC-FT 128900							

SNAKE RIVER MAIN STEM  
13088000 SNAKE RIVER AT MILNER, ID

(COMBINATION SNAKE RIVER AT MILNER GAGING STATION AND LOWER MILNER POWER PLANT AT MILNER)

LOCATION.--Lat 42°31'41", long 114°01'04", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.29, T.10 S., R.21 E., Twin Falls County, Milner quad., Hydrologic Unit 17040212, on left bank 200 ft downstream from highway bridge at Milner, 0.4 mi downstream from Milner Dam, and at mile 638.7.

DRAINAGE AREA.--17,180 mi<sup>2</sup>, approximately, excluding indeterminate nontributary area on Snake River Plain.

PERIOD OF RECORD.--May 1909 to current year. Monthly discharge only for some periods, published in WSP 1317.

REVISED RECORDS.--WSP 1347: 1909-12, 1915-16, 1942-44, 1946-48.

GAGE.--Water-stage recorder. Datum of gage is 4,062.9 ft above NGVD of 1929. Prior to May 28, 1919, nonrecording gages at slightly different sites and datums.

REMARKS.--Flow regulated by American Falls Reservoir, Lake Walcott, Milner Lake, and other reservoirs having a combined usable capacity of about 4,700,000 acre-ft. The flow at this site represents combined flow to Snake River from 13087995 Snake River Gaging Station at Milner and 13087505 Lower Milner Power Plant, which began operation November 1992. Considerable water leaks into the Snake River Plain aquifer above station. Diversions above station for irrigation of about 1,990,000 acres, of which about 504,000 acres are irrigated by withdrawals from ground water, and about 436,000 acres are irrigated below station. Return flow in large part enters Snake River between Milner and King Hill stations. Prior to 1993 water year, at times, practically entire flow was diverted during irrigation season.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (1909-1926), 40,000 ft<sup>3</sup>/s June 21, 1918, gage height, 19.9 ft, site and datum then in use; minimum daily, 8.0 ft<sup>3</sup>/s Aug. 22, 1924.

Maximum daily discharge since regulation began in 1927, 31,200 ft<sup>3</sup>/s June 21, 1997; minimum daily, 0.28 ft<sup>3</sup>/s Aug. 1, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 799 ft<sup>3</sup>/s Nov. 30; minimum daily, 0.28 ft<sup>3</sup>/s Aug. 1.

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	249	238	796	601	560	629	298	232	229	232	0.28	0.43	
2	249	238	688	599	560	629	230	231	229	231	0.30	361	
3	249	238	515	599	578	628	230	232	228	231	0.35	0.81	
4	250	239	543	599	580	591	229	233	228	7.2	0.37	0.50	
5	249	332	545	598	581	554	230	232	228	0.61	0.41	0.52	
6	249	450	546	584	581	548	230	232	228	0.53	0.41	0.58	
7	248	449	547	577	581	602	230	232	227	0.54	0.35	0.58	
8	248	451	548	577	580	604	228	233	227	0.52	0.33	0.58	
9	244	452	548	575	576	605	227	235	226	0.51	0.36	0.59	
10	237	452	546	564	572	633	227	234	227	0.64	0.33	0.64	
11	235	453	546	558	576	620	226	234	227	0.69	0.35	0.62	
12	235	514	546	556	573	619	226	235	227	0.61	0.39	0.64	
13	235	512	546	540	685	624	227	235	228	0.50	0.41	0.65	
14	239	547	545	529	732	631	229	234	227	0.48	0.40	0.76	
15	459	565	544	526	737	633	230	234	227	0.69	0.41	0.72	
16	522	564	572	528	734	633	228	233	227	0.79	0.39	0.70	
17	529	563	591	527	735	654	230	234	226	0.66	0.37	0.68	
18	529	507	591	528	734	661	230	234	235	0.58	0.40	0.73	
19	529	597	599	529	740	662	229	235	228	0.56	0.42	0.75	
20	529	597	647	529	755	689	228	234	230	0.50	0.40	0.71	
21	563	597	673	527	766	700	228	234	231	0.39	0.46	0.67	
22	575	598	673	538	734	703	229	233	231	0.39	0.49	0.70	
23	518	598	678	541	730	698	230	232	232	0.38	0.46	0.70	
24	485	599	676	542	743	651	229	232	233	0.36	0.48	0.74	
25	624	600	672	542	740	601	230	233	232	0.41	0.47	0.70	
26	619	640	670	543	695	605	231	232	232	0.42	0.44	0.68	
27	665	683	672	560	638	608	230	231	231	0.34	0.43	0.71	
28	347	698	666	591	628	542	231	230	231	0.38	0.43	0.72	
29	236	757	627	554	---	525	232	229	231	0.37	0.44	0.70	
30	238	799	620	554	---	497	232	229	231	0.37	0.47	0.66	
31	238	---	605	557	---	476	---	230	---	0.31	0.42	---	
TOTAL	11621	15527	18781	17272	18424	19055	6944	7213	6874	714.73	12.42	380.17	
MEAN	375	518	606	557	658	615	231	233	229	23.1	0.40	12.7	
MAX	665	799	796	601	766	703	298	235	235	232	0.49	361	
MIN	235	238	515	526	560	476	226	229	226	0.31	0.28	0.43	
AC-FT	23050	30800	37250	34260	36540	37800	13770	14310	13630	1420	25	754	

SNAKE RIVER MAIN STEM

13088000 SNAKE RIVER AT MILNER, ID--Continued

(COMBINATION SNAKE RIVER AT MILNER GAGING STATION AND LOWER MILNER POWER PLANT AT MILNER)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1926, BY WATER YEAR (WY) (UNREGULATED)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4553	5806	4968	4620	5090	5336	6204	9891	12300	3849	743	1736
MAX	9500	8147	6978	5721	6306	10970	14650	17920	29230	15650	4899	8457
(WY)	1913	1913	1910	1910	1911	1910	1910	1910	1909	1909	1909	1912
MIN	9.45	3711	3326	2924	3737	3238	857	13.5	12.0	11.4	9.97	10.1
(WY)	1925	1920	1920	1917	1917	1920	1924	1924	1924	1915	1924	1924

SUMMARY STATISTICS

<sup>a</sup> WATER YEARS 1909 - 1926

ANNUAL MEAN	5206
HIGHEST ANNUAL MEAN	8042
LOWEST ANNUAL MEAN	2424
HIGHEST DAILY MEAN	39800
LOWEST DAILY MEAN	8.0
ANNUAL SEVEN-DAY MINIMUM	8.3
ANNUAL RUNOFF (AC-FT)	3772000
10 PERCENT EXCEEDS	11200
50 PERCENT EXCEEDS	4700
90 PERCENT EXCEEDS	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2003, BY WATER YEAR (WY) (REGULATED)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1702	2475	3104	3586	3656	3908	4824	4013	3963	875	451	538
MAX	9887	12660	11450	13960	18740	19930	19380	16770	23580	6069	3899	6778
(WY)	1985	1985	1984	1984	1997	1997	1971	1984	1997	1927	1997	1997
MIN	2.39	142	281	360	213	87.0	3.95	2.81	1.65	0.75	0.40	0.97
(WY)	1991	1935	1937	1938	1938	1934	1990	1990	1992	2001	2003	2001

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

<sup>b</sup> WATER YEARS 1927 - 2003

ANNUAL TOTAL	122438.57	122818.32	
ANNUAL MEAN	335	336	2749
HIGHEST ANNUAL MEAN			9432
LOWEST ANNUAL MEAN			156
HIGHEST DAILY MEAN	799	Nov 30	799
LOWEST DAILY MEAN	0.61	Apr 9	0.28
ANNUAL SEVEN-DAY MINIMUM	0.64	Apr 9	0.34
ANNUAL RUNOFF (AC-FT)	242900	243600	1992000
10 PERCENT EXCEEDS	649	652	8700
50 PERCENT EXCEEDS	260	235	743
90 PERCENT EXCEEDS	7.7	0.44	13

<sup>a</sup> Prior to regulation by American Falls Dam.

<sup>b</sup> Since regulation by American Falls Dam.

## DEVILS WASHBOWL SPRING BASIN

## 13089500 DEVILS WASHBOWL SPRING NEAR KIMBERLY, ID

LOCATION.--Lat 42°35'23", long 114°20'46", in SE<sup>1</sup>/<sub>4</sub> sec.4, T.10 S., R.18 E., Jerome County, Kimberly quad., Hydrologic Unit 17040212, on right bank, 400 ft downstream from Devils Washbowl Spring, 0.5 mi upstream from mouth, which is 0.5 mi upstream from the Twin Falls of the Snake River, and 3.5 mi north of Kimberly.

PERIOD OF RECORD.--April 1950 to September 1959; April 1985 to current year. Records for April 1950 to September 1959 may not be comparable due to changes in inflow.

REVISED RECORDS.--WDR-ID-2001-1; 2000.

GAGE.--Water-stage recorder. Elevation of gage is 3,540 ft above NGVD of 1929, from topographic map. Datum of gage prior to May 16, 1953 was 0.82 ft lower.

REMARKS.--No estimated daily discharges. Records fair. Irrigation return bypass channel is located downstream from the gage on the right bank.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge (1950-59), 27.5 ft<sup>3</sup>/s Oct. 3, 4, 1951; minimum daily, 18 ft<sup>3</sup>/s Apr. 29, 1958. Maximum daily discharge since 1985, 19 ft<sup>3</sup>/s Sept. 26, 1986, Sept. 21-24, 2000; minimum daily, 6.5 ft<sup>3</sup>/s Mar. 20, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 18.0 ft<sup>3</sup>/s Dec. 1-7; minimum daily, 8.6 ft<sup>3</sup>/s May 28, 29, June 5.

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	14	15	18	14	11	11	11	12	8.7	12	11	11
2	14	15	18	14	11	11	11	12	8.7	12	11	12
3	14	15	18	14	11	11	12	12	8.7	12	12	11
4	14	15	18	14	11	11	14	12	8.9	12	12	12
5	14	15	18	13	11	11	14	12	8.6	12	12	11
6	14	15	18	13	11	11	14	12	8.7	12	12	11
7	14	16	18	13	11	11	14	12	8.9	11	12	11
8	14	16	16	13	11	11	14	12	11	11	12	12
9	15	16	16	13	10	11	14	11	13	11	12	12
10	15	16	16	13	10	11	14	11	13	11	12	12
11	15	16	16	13	10	11	14	10	13	11	12	12
12	15	16	16	13	10	11	13	10	13	11	13	12
13	15	16	16	13	11	11	13	9.8	13	11	13	12
14	15	16	16	13	11	11	13	9.8	13	11	13	12
15	15	16	16	13	11	12	13	9.8	14	11	13	12
16	15	16	16	13	11	11	13	9.5	14	11	12	12
17	15	16	16	13	11	11	13	9.2	14	11	12	12
18	15	16	16	13	11	11	13	8.9	14	10	12	13
19	14	16	16	13	11	12	13	8.7	14	11	12	13
20	14	16	16	13	11	11	13	8.7	14	11	12	13
21	14	16	16	13	11	11	13	8.7	14	11	12	13
22	15	16	15	13	11	11	13	8.7	14	11	12	13
23	15	17	15	13	11	11	12	8.7	14	11	12	13
24	15	17	15	13	12	11	11	8.7	14	11	12	12
25	15	17	15	12	12	11	12	8.7	14	11	12	12
26	15	17	15	11	12	11	13	8.7	13	11	12	12
27	15	17	15	11	11	11	12	8.7	13	11	12	12
28	15	17	15	11	11	11	12	8.6	12	11	12	12
29	15	17	14	11	---	11	12	8.6	12	11	12	12
30	15	17	14	11	---	12	12	8.7	11	11	12	12
31	15	---	14	11	---	11	---	8.7	---	11	12	---
TOTAL	454	482	497	394	307	344	385	307.9	365.2	346	374	361
MEAN	14.6	16.1	16.0	12.7	11.0	11.1	12.8	9.93	12.2	11.2	12.1	12.0
MAX	15	17	18	14	12	12	14	12	14	12	13	13
MIN	14	15	14	11	10	11	11	8.6	8.6	10	11	11
AC-FT	901	956	986	781	609	682	764	611	724	686	742	716

DEVILS WASHBOWL SPRING BASIN  
 13089500 DEVILS WASHBOWL SPRING NEAR KIMBERLY, ID--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1959, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	24.7	24.1	22.7	22.2	21.9	21.2	20.6	20.1	21.1	21.9	23.0	24.3
MAX	25.9	26.1	24.6	24.0	23.2	22.2	22.0	21.8	22.8	25.2	24.9	25.8
(WY)	1953	1953	1958	1958	1958	1952	1954	1953	1954	1957	1957	1957
MIN	22.8	22.2	20.9	20.1	20.5	19.2	19.1	18.0	19.0	19.6	20.8	22.4
(WY)	1956	1957	1957	1956	1956	1957	1956	1958	1958	1959	1959	1959

SUMMARY STATISTICS

<sup>a</sup> WATER YEARS 1950 - 1959

ANNUAL MEAN	22.3
HIGHEST ANNUAL MEAN	23.2 1954
LOWEST ANNUAL MEAN	21.1 1956
HIGHEST DAILY MEAN	27.5 Oct 3 1951
LOWEST DAILY MEAN	18 Apr 29 1958
ANNUAL SEVEN-DAY MINIMUM	18 Apr 29 1958
ANNUAL RUNOFF (AC-FT)	16160
10 PERCENT EXCEEDS	25
50 PERCENT EXCEEDS	22
90 PERCENT EXCEEDS	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2003, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	15.1	14.6	13.6	12.6	12.0	11.9	12.0	11.6	12.3	12.9	13.9	14.7
MAX	17.5	17.8	16.9	16.2	13.9	14.1	14.1	13.8	15.2	16.7	16.7	17.9
(WY)	1987	2001	2000	2000	2000	1992	1986	1999	1999	1999	1999	1986
MIN	12.9	11.2	9.15	8.19	7.97	8.92	9.96	9.77	9.46	9.65	11.8	12.0
(WY)	1993	1995	1993	1993	1995	1993	1998	1996	1995	1995	1995	2003

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1986 - 2003

ANNUAL TOTAL	4733.5	4617.1	
ANNUAL MEAN	13.0	12.6	13.1
HIGHEST ANNUAL MEAN			14.7 1987
LOWEST ANNUAL MEAN			10.6 1995
HIGHEST DAILY MEAN	18 Dec 1	18 Dec 1	19 Sep 26 1986
LOWEST DAILY MEAN	9.3 Feb 25	8.6 May 28	6.5 Mar 20 1993
ANNUAL SEVEN-DAY MINIMUM	9.6 Feb 24	8.7 May 23	7.0 Mar 18 1993
ANNUAL RUNOFF (AC-FT)	9390	9160	9490
10 PERCENT EXCEEDS	16	16	16
50 PERCENT EXCEEDS	13	12	13
90 PERCENT EXCEEDS	11	11	10

<sup>a</sup> Statistics for this period may not be comparable due to changes in inflow.





BLUE LAKES SPRING BASIN

13090999 BLUE LAKES SPRING BELOW PUMPING PLANT NEAR TWIN FALLS, ID

LOCATION.--Lat 42°36'53", long 114°28'06", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.28, T.9 S., R.17 E., Jerome County, Twin Falls quad., Hydrologic Unit 17040212, on left bank at outlet of upper Blue Lake, 1,000 ft downstream from head of spring, 0.6 mi upstream from mouth, 1.2 mi northwest of Perrine Memorial Bridge, 3.5 mi north of Twin Falls, and 610.5 mi upstream from mouth of Snake River.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,292 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records fair. Discharge record at this site represents flows remaining after diversion at head of spring for Twin Falls City water supply (Blue Lakes Spring Pumping Plant - station 13090998), which began July 1994. Combined flows of daily discharge continue to be published as 13091000 Blue Lakes Spring near Twin Falls, ID.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 188 ft<sup>3</sup>/s Oct. 29, 1998; minimum, 108 ft<sup>3</sup>/s July 14, 1995, from current meter measurement.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 172 ft<sup>3</sup>/s Nov. 17; minimum daily, 108 ft<sup>3</sup>/s July 14, 16.

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	161	170	164	163	155	153	146	144	122	112	113	135	
2	160	171	166	162	156	153	146	143	118	113	115	142	
3	161	170	165	162	154	152	146	144	121	119	123	142	
4	161	169	164	162	154	152	146	144	115	119	128	140	
5	160	168	158	163	154	151	146	143	119	120	126	134	
6	160	168	158	162	158	152	147	142	116	117	123	142	
7	161	168	158	164	153	152	146	141	120	115	121	143	
8	161	169	156	161	155	152	146	141	120	113	120	142	
9	161	169	157	162	155	152	145	144	115	115	121	145	
10	161	167	162	162	154	151	142	144	114	112	124	148	
11	162	168	166	162	155	151	141	144	115	110	121	146	
12	163	168	166	161	154	150	142	144	115	113	122	144	
13	163	168	166	161	153	151	142	142	114	114	120	147	
14	162	170	165	160	154	153	145	140	121	108	119	147	
15	161	169	166	161	154	145	146	138	121	111	122	145	
16	162	169	167	160	157	135	145	136	115	108	127	147	
17	162	172	168	160	155	153	146	136	115	112	126	148	
18	164	171	168	158	153	151	146	139	117	112	125	147	
19	162	170	168	159	152	151	145	133	120	111	125	146	
20	163	169	167	158	155	150	144	132	125	113	123	148	
21	163	170	166	158	154	147	144	127	127	110	128	151	
22	162	169	166	159	155	150	143	127	128	111	131	148	
23	163	168	165	157	156	146	144	124	119	111	136	150	
24	163	168	166	157	154	146	144	129	123	111	135	150	
25	162	168	165	158	154	146	143	134	122	116	133	151	
26	163	168	167	158	153	146	144	132	119	123	134	149	
27	164	168	165	157	153	147	144	126	118	120	137	150	
28	165	164	165	156	152	148	144	121	118	120	137	151	
29	165	164	164	154	---	146	143	116	117	115	140	150	
30	165	164	163	155	---	146	144	122	115	115	140	150	
31	165	---	163	155	---	146	---	122	---	115	138	---	
TOTAL	5031	5054	5090	4947	4321	4624	4335	4194	3564	3534	3933	4378	
MEAN	162	168	164	160	154	149	144	135	119	114	127	146	
MAX	165	172	168	164	158	153	147	144	128	123	140	151	
MIN	160	164	156	154	152	135	141	116	114	108	113	134	
AC-FT	9980	10020	10100	9810	8570	9170	8600	8320	7070	7010	7800	8680	
CAL YR 2002	TOTAL 55163	MEAN 151	MAX 175	MIN 123	AC-FT 109400								
WTR YR 2003	TOTAL 53005	MEAN 145	MAX 172	MIN 108	AC-FT 105100								

BLUE LAKES SPRING BASIN

13090999 BLUE LAKES SPRING BELOW PUMPING PLANT NEAR TWIN FALLS, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-1950, 1952-1958, 1962-1980, 1984 to 2002, July to September 2003 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May to August 1994, June to September 1996, May to September 1999, December 2001 to November 2002, June to September 2003 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 17.8 °C Aug. 24, 26, 1999; minimum, 15.1 °C Feb. 25, 2002.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 17.0 °C July 22.

REMARKS.--Water quality data prior to 2000 published as Blue Lakes Spring near Twin Falls, ID (sta. 13091000). Missing data due to equipment malfunction.

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

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, uS/cm (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, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
JUL 22...	1300	116	587	7.7	37.0	16.2	<1.0	9.1	105	S2	--	--	--
AUG 13...	1215	135	591	7.9	30.0	16.0	4.7	9.2	106	<1	--	--	--
SEP 12...	1245	137	600	7.8	19.0	15.7	<1.0	9.3	106	<1	210	52.3	19.0

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 22...	--	--	--	--	--	--	--	--	--	--	<.015	<.10	1.93
AUG 13...	--	--	--	--	--	--	--	--	--	--	E.010	E.07	1.86
SEP 12...	30.8	24	5.73	225	.0	184	54.2	42.9	.4	39.8	<.015	<.10	1.89

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd, mg/L (00665)
JUL 22...	.013	.013
AUG 13...	.013	.014
SEP 12...	.012	.014

< Less than  
 E Estimated value  
 S Most probable value

## BLUE LAKES SPRING BASIN

## 13090999 BLUE LAKES SPRING BELOW PUMP PLANT NEAR TWIN FALLS, ID--Continued

Temperature, water, degrees Celsius												
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	16.5	15.6	15.9	16.4	15.6	15.9	16.5	15.6	15.9	16.1	15.6	15.8
2	16.5	15.6	15.9	16.4	15.6	15.9	16.4	15.6	15.9	16.2	15.6	15.8
3	16.4	15.4	15.8	16.4	15.6	15.9	16.5	15.6	15.9	16.2	15.6	15.8
4	16.4	15.4	15.8	16.4	15.6	15.9	16.5	15.6	15.9	16.1	15.6	15.8
5	16.4	15.4	15.9	16.4	15.6	15.9	16.4	15.6	15.9	16.1	15.6	15.9
6	16.4	15.6	15.9	16.4	15.6	15.9	16.5	15.6	15.9	16.2	15.6	15.8
7	16.4	15.4	15.8	16.4	15.6	15.9	16.5	15.6	15.9	16.1	15.6	15.8
8	16.4	15.4	15.9	16.4	15.6	15.9	16.4	15.6	15.9	16.1	15.6	15.7
9	16.4	15.6	15.9	16.5	15.6	15.9	16.5	15.6	15.9	16.1	15.4	15.7
10	16.4	15.6	15.9	16.5	15.6	15.9	16.4	15.6	15.9	16.1	15.4	15.7
11	16.2	15.6	15.8	16.5	15.6	15.9	16.4	15.6	15.9	16.1	15.4	15.8
12	16.4	15.6	15.9	16.5	15.6	15.9	16.2	15.6	15.8	16.4	15.4	15.7
13	16.2	15.6	15.8	16.4	15.6	15.9	16.7	15.6	15.9	16.2	15.4	15.7
14	16.4	15.6	15.9	16.5	15.6	15.9	16.7	15.6	15.9	16.2	15.4	15.7
15	16.4	15.6	15.9	16.5	15.6	15.9	16.4	15.6	15.9	16.1	15.4	15.7
16	16.4	15.6	15.9	16.5	15.6	15.9	16.2	15.6	15.9	15.9	15.5	15.7
17	16.4	15.6	15.9	16.5	15.6	15.9	16.2	15.6	15.8	16.1	15.4	15.6
18	16.5	15.6	15.9	16.5	15.6	15.9	16.4	15.6	15.8	16.2	15.4	15.6
19	16.4	15.6	15.9	16.4	15.8	15.9	16.4	15.6	15.9	16.2	15.4	15.7
20	15.9	15.6	15.7	16.4	15.6	16.0	16.4	15.6	15.9	16.2	15.4	15.7
21	16.2	15.4	15.8	16.5	15.6	16.0	16.4	15.6	15.8	16.2	15.4	15.7
22	16.1	15.4	15.7	17.0	15.6	16.1	16.4	15.6	15.9	16.2	15.4	15.7
23	16.4	15.4	15.8	16.9	15.6	16.0	16.4	15.6	15.9	16.2	15.4	15.7
24	16.2	15.4	15.8	16.7	15.8	16.0	16.2	15.6	15.8	16.1	15.4	15.7
25	16.4	15.6	15.9	16.7	15.8	16.0	16.4	15.6	15.8	16.1	15.4	15.7
26	16.4	15.4	15.9	16.5	15.6	16.0	16.2	15.6	15.8	16.4	15.6	15.8
27	16.4	15.6	15.9	16.7	15.6	16.0	16.2	15.6	15.8	16.2	15.6	15.8
28	16.4	15.6	15.9	16.5	15.6	15.9	16.2	15.6	15.8	16.2	15.6	15.8
29	16.5	15.6	15.9	16.7	15.6	16.0	16.2	15.6	15.7	16.1	15.4	15.7
30	16.4	15.6	15.9	16.5	15.6	16.0	16.2	15.6	15.8	16.1	15.4	15.7
31	---	---	---	16.7	15.6	16.0	16.4	15.4	15.8	---	---	---
MONTH	16.5	15.4	15.9	17.0	15.6	15.9	16.7	15.4	15.9	16.4	15.4	15.7

## BLUE LAKES SPRING BASIN

## 13091000 BLUE LAKES SPRING NEAR TWIN FALLS, ID

LOCATION.--Lat 42°36'53", long 114°28'06", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.28, T.9 S., R.17 E., Jerome County, Twin Falls quad., Hydrologic Unit 17040212, on left bank at outlet of upper Blue Lake, 1,000 ft downstream from head of spring, 0.6 mi upstream from mouth, 1.2 mi northwest of Perrine Memorial Bridge, 3.5 mi north of Twin Falls, and 610.5 mi upstream from mouth of Snake River.

PERIOD OF RECORD.--April 1950 to current year.

REVISED RECORDS.--WDR-ID-00-1: 1999

REMARKS.--Records good except for discharges Oct. 1 to Dec. 20, which are fair. Discharge record at this site represents combined flow for Blue Lakes Spring Pumping Plant (station 13090998), which provides water to the City of Twin Falls beginning July 1994, and Blue Lakes Spring below Pumping Plant near Twin Falls (station 13090999).

COOPERATION.--City of Twin Falls.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 256 ft<sup>3</sup>/s Nov. 10, 11, 1951, Oct. 24 to Nov. 13, 1952, Sept. 29, 30, 1953, Oct. 23, 24, 1957; minimum daily, 139 ft<sup>3</sup>/s July 21, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 175 ft<sup>3</sup>/s Oct. 12; minimum daily, 139 ft<sup>3</sup>/s July 21.

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	174	172	169	164	158	156	154	152	146	142	142	155
2	173	172	170	163	158	157	154	152	145	142	141	156
3	173	173	169	163	157	156	154	153	146	143	143	157
4	173	172	168	163	157	156	154	153	144	144	145	157
5	172	172	167	164	157	155	154	153	146	145	145	157
6	171	171	167	165	158	156	155	153	144	143	145	156
7	172	172	166	165	158	156	154	152	145	143	144	158
8	171	172	165	164	158	155	154	152	147	143	142	158
9	172	173	166	164	157	156	154	152	144	142	143	160
10	174	172	166	164	157	155	153	152	144	142	144	161
11	173	171	168	164	158	156	152	152	143	142	144	160
12	175	171	168	163	157	155	153	152	143	141	144	161
13	174	171	168	163	158	156	153	153	144	141	144	161
14	174	172	167	162	157	156	154	151	146	140	143	161
15	174	172	168	163	157	156	154	150	145	141	144	160
16	173	172	169	162	157	152	154	150	146	140	146	161
17	173	174	170	162	157	156	154	149	145	140	147	161
18	173	174	169	160	156	156	154	150	145	142	148	161
19	171	172	169	161	156	155	155	149	146	140	148	161
20	171	172	168	160	157	156	152	149	146	140	148	161
21	172	172	167	160	157	154	152	148	148	139	148	164
22	171	172	167	160	157	155	152	147	148	140	150	163
23	171	171	168	160	157	154	152	148	146	140	153	164
24	172	171	167	159	158	154	152	147	147	140	153	165
25	171	171	167	160	157	154	152	150	147	141	152	164
26	172	171	167	160	157	154	152	151	146	141	153	164
27	172	171	167	159	156	155	152	149	146	144	154	164
28	174	171	166	158	155	155	152	148	144	145	154	164
29	174	170	166	158	---	154	152	146	143	143	157	164
30	174	171	164	158	---	154	152	147	143	143	158	163
31	174	---	164	158	---	154	---	148	---	142	157	---
TOTAL	5353	5153	5187	5009	4399	4809	4595	4658	4358	4394	4579	4822
MEAN	173	172	167	162	157	155	153	150	145	142	148	161
MAX	175	174	170	165	158	157	155	153	148	145	158	165
MIN	171	170	164	158	155	152	152	146	143	139	141	155
AC-FT	10620	10220	10290	9940	8730	9540	9110	9240	8640	8720	9080	9560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	210	208	202	196	192	190	188	187	187	192	198	205
MAX	252	251	243	237	235	235	231	227	229	231	240	249
(WY)	1953	1953	1951	1952	1953	1953	1953	1951	1954	1954	1953	1953
MIN	161	159	155	152	146	144	144	148	145	142	148	161
(WY)	1993	1993	1993	1994	1994	1994	1994	1992	2003	2003	2003	2003

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003	
ANNUAL TOTAL	59425		57316			
ANNUAL MEAN	163		157		195	
HIGHEST ANNUAL MEAN					1953	
LOWEST ANNUAL MEAN					2003	
HIGHEST DAILY MEAN	175	Jan 1	175	Oct 12	256	Nov 10 1951
LOWEST DAILY MEAN	148	May 14	139	Jul 21	139	Jul 21 2003
ANNUAL SEVEN-DAY MINIMUM	150	May 12	140	Jul 19	140	Jul 19 2003
ANNUAL RUNOFF (AC-FT)	117900		113700		141600	
10 PERCENT EXCEEDS	172		172		228	
50 PERCENT EXCEEDS	162		156		196	
90 PERCENT EXCEEDS	153		143		160	

ROCK CREEK BASIN

13092747 ROCK CREEK ABOVE HIGHWAY 30/93 CROSSING AT TWIN FALLS, ID

LOCATION.--Lat 42°33'47", long 114°29'42", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.17, T.10 S., R.17 E., Twin Falls County, Twin Falls quad., Hydrologic Unit 17040212, on right bank 40 ft above private road bridge, 0.2 mi south of Highway 30/93 in Twin Falls.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,630 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Flow partially regulated by many diversions upstream for irrigation and irrigation-return flows.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 529 ft<sup>3</sup>/s June 2, 1999; minimum daily, 26 ft<sup>3</sup>/s Apr. 2, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 229 ft<sup>3</sup>/s Oct. 16; minimum daily, 34 ft<sup>3</sup>/s Mar. 20-21.

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	139	76	49	45	41	37	37	47	59	54	82	126
2	142	75	48	44	42	37	43	47	60	51	86	138
3	145	74	48	44	41	37	43	46	65	53	124	132
4	143	73	48	44	41	37	41	47	68	55	123	125
5	135	70	47	44	41	37	41	47	68	54	107	122
6	137	69	47	43	40	37	41	47	71	52	104	120
7	136	69	47	43	39	37	40	47	69	52	99	123
8	132	73	47	43	38	36	39	47	69	53	94	126
9	130	72	47	43	38	36	64	65	71	50	97	129
10	123	69	47	42	40	36	41	58	71	49	101	127
11	121	65	46	43	41	36	41	56	70	50	101	123
12	128	64	46	42	41	36	42	57	72	52	102	118
13	133	63	46	43	43	36	43	58	76	50	104	118
14	137	62	46	43	42	36	44	57	76	49	102	121
15	144	60	46	42	40	42	51	54	75	49	99	120
16	229	60	46	42	40	42	46	57	74	51	99	117
17	199	59	47	42	40	38	46	57	71	56	100	117
18	192	57	46	42	39	37	46	60	68	59	103	118
19	184	56	45	42	39	36	46	60	67	61	104	118
20	171	54	46	42	38	34	45	56	66	63	102	114
21	119	55	46	41	38	34	45	50	69	64	101	111
22	120	55	46	41	38	35	44	47	70	62	107	113
23	102	55	46	42	38	35	43	45	69	64	111	111
24	94	53	45	41	37	36	40	46	64	65	113	110
25	92	51	45	41	37	36	41	51	60	66	112	109
26	90	51	45	41	37	41	45	51	59	91	108	115
27	85	50	45	41	37	40	45	52	60	88	111	116
28	83	49	46	40	37	38	45	52	59	84	111	115
29	82	49	45	40	---	38	45	53	58	83	117	117
30	80	49	45	40	---	37	46	55	57	85	127	115
31	77	---	46	40	---	36	---	56	---	81	121	---
TOTAL	4024	1837	1435	1306	1103	1146	1319	1628	2011	1896	3272	3584
MEAN	130	61.2	46.3	42.1	39.4	37.0	44.0	52.5	67.0	61.2	106	119
MAX	229	76	49	45	43	42	64	65	76	91	127	138
MIN	77	49	45	40	37	34	37	45	57	49	82	109
AC-FT	7980	3640	2850	2590	2190	2270	2620	3230	3990	3760	6490	7110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2003, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
MEAN	148	87.4	62.2	59.2	71.8	114	143	187	133	115	137	160
MAX	211	142	85.5	132	130	228	282	319	234	151	167	188
(WY)	1996	1998	1997	1997	1998	1997	1997	1999	1995	1997	1997	1993
MIN	114	61.2	46.3	42.1	39.1	37.0	44.0	52.5	67.0	61.2	94.4	117
(WY)	2002	2003	2003	2003	2002	2003	2003	2003	2003	2003	2001	2001

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1993 - 2003	
ANNUAL TOTAL	28777		24561			
ANNUAL MEAN	78.8		67.3		118	
HIGHEST ANNUAL MEAN					175	
LOWEST ANNUAL MEAN					67.3	
HIGHEST DAILY MEAN	229	Oct 16	229	Oct 16	487	May 17 1998
LOWEST DAILY MEAN	37	Feb 16	34	Mar 20	26	Apr 2 1994
ANNUAL SEVEN-DAY MINIMUM	38	Feb 10	35	Mar 19	30	Mar 27 1994
ANNUAL RUNOFF (AC-FT)	57080		48720		85700	
10 PERCENT EXCEEDS	129		120		203	
50 PERCENT EXCEEDS	77		52		109	
90 PERCENT EXCEEDS	41		38		45	

ROCK CREEK BASIN

13092747 ROCK CREEK ABOVE HIGHWAY 30/93 CROSSING AT TWIN FALLS, ID--Continued  
(National water-quality assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1993 to September 1994 (discontinued).

WATER TEMPERATURE: April 1993 to September 1994, July to September 1996, June to September 1997, June to August 1998, June to September 2002 (discontinued).

INSTRUMENTATION.--Water-quality monitor and data logger from April 1993 to September 1994. Temperature recording data logger from July to September 1996, June to September 1997, June to August 1998, June to September 2002.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1880 microsiemens March 29, 1994; minimum, 236 microsiemens May 15, 1993.

WATER TEMPERATURE: Maximum, 22.9 °C July 19, 1998; minimum, 1.0 °C Feb. 13, 1994.

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)	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, field, mg/L (29804)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
OCT	25...	1000	92	8.2	3.5	10.1	8.9	90	254	306	36.0	96.0	.33
NOV	12...	0945	67	8.3	4.0	9.2	9.5	93	289	353	38.4	103	.34
DEC	18...	0945	44	8.3	-1.0	6.7	9.9	93	254	306	39.4	104	.28
JAN	14...	0930	40	8.2	4.0	8.3	9.6	93	249	301	39.3	101	.29
FEB	19...	0915	37	8.3	-1.0	5.7	10.5	95	222	271	35.8	92.7	.31
MAR	17...	0930	39	8.2	4.5	7.7	10.1	98	209	255	37.2	90.5	.41
APR	21...	0900	46	8.0	11.0	10.9	8.7	90	171	208	31.7	66.7	.49
MAY	14...	0945	62	8.1	15.0	12.5	9.1	98	167	204	28.1	60.5	.50
JUN	13...	0900	76	8.0	21.0	16.5	7.7	90	207	252	34.3	73.3	.40
JUL	17...	0845	75	7.9	20.0	16.6	7.1	83	224	273	37.3	84.4	.46
SEP	23...	0915	110	8.1	11.0	12.3	8.2	87	247	298	36.2	88.5	.40

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Nitrite, water, fltrd, mg/L as N (00613)	Orthophosphate, 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)	Ben-flur-alin, water, fltrd 0.7u GF (82673)	
OCT	25...	.04	2.52	.019	.04	.062	<.006	E.010	<.006	<.004	<.005	<.008	<.050	<.010
NOV	12...	.05	2.68	.026	.05	.059	<.006	E.008	<.006	<.004	<.005	<.010	<.050	<.010
DEC	18...	.05	2.70	.033	.04	.061	<.006	E.009	<.006	<.004	<.005	<.010	<.050	<.010
JAN	14...	E.03	2.63	.029	.05	.063	<.006	E.007	<.006	<.004	<.005	E.007	<.050	<.010
FEB	19...	.04	2.19	.032	.04	.060	<.006	<.010	<.006	<.004	<.005	<.010	<.050	<.010
MAR	17...	.05	2.02	.031	.08	.086	<.006	<.010	<.006	<.004	<.005	<.010	<.050	<.010
APR	21...	<.04	1.04	.028	.03	.089	<.006	E.006	<.006	<.004	<.005	E.005	<.050	<.010
MAY	14...	<.04	.66	.020	.03	.096	<.006	E.006	<.006	<.004	<.005	E.005	<.050	<.010
JUN	13...	<.04	.94	.021	.04	.082	<.006	E.007	<.006	<.007	<.005	.008	<.050	<.010
JUL	17...	<.04	1.77	.045	.06	.097	<.006	E.009	<.006	<.004	<.005	E.007	E.021	<.010
SEP	23...	E.03	1.98	.019	.04	.070	<.006	E.007	<.006	<.004	<.005	.008	<.050	<.010

ROCK CREEK BASIN

13092747 ROCK CREEK ABOVE HIGHWAY 30/93 CROSSING AT TWIN FALLS, ID--Continued

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

Date	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (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 ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)
OCT 25...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002	<.009
NOV 12...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002	<.009
DEC 18...	<.002	<.041	<.030	<.005	<.006	<.018	E.002	<.004	<.005	<.005	<.02	<.050	<.009
JAN 14...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002	<.009
FEB 19...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002	<.009
MAR 17...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002	<.009
APR 21...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002	<.009
MAY 14...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	.050	<.005	<.02	.002	<.009
JUN 13...	<.002	<.041	<.020	<.005	<.006	<.018	E.002	<.004	.010	<.005	<.02	.070	<.009
JUL 17...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	.009	<.009
SEP 23...	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002	<.009

Date	Etho- prop, water, fltrd 0.7u GF ug/L (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 ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)
OCT 25...	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	E.004	<.006	<.002
NOV 12...	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002
DEC 18...	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.010
JAN 14...	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002
FEB 19...	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002
MAR 17...	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002
APR 21...	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002
MAY 14...	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.004
JUN 13...	<.005	<.009	<.005	<.005	<.007	<.003	<.007	<.035	<.027	<.006	E.004	<.006	<.015
JUL 17...	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002
SEP 23...	<.005	<.009	<.005	<.005	<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002



## ROCK CREEK BASIN

## 13092747 ROCK CREEK ABOVE HIGHWAY 30/93 CROSSING AT TWIN FALLS, ID--Continued

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

Date	Naprop- amide, water, fltrd 0.7u GF (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF (82669)	Pendi- meth- alin, water, fltrd 0.7u GF (82683)	Phorate water fltrd 0.7u GF (82664)	Prome- ton, water, fltrd, ug/L (04037)	Pron- amide, water, fltrd 0.7u GF (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF (82679)	Propar- gite, water, fltrd 0.7u GF (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF (82670)
OCT 25...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02
NOV 12...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02
DEC 18...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02
JAN 14...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02
FEB 19...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02
MAR 17...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02
APR 21...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02
MAY 14...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02
JUN 13...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02
JUL 17...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02
SEP 23...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02

Date	Terba- cil, water, fltrd 0.7u GF (82665)	Terbu- fos, water, fltrd 0.7u GF (82675)	Thio- bencarb water fltrd 0.7u GF (82681)	Tri- allate, water, fltrd 0.7u GF (82678)	Tri- flur- alin, water, fltrd 0.7u GF (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment load, tons/d (80155)
OCT 25...	<.034	<.02	<.005	<.002	<.009	12	3.0
NOV 12...	<.034	<.02	<.005	<.002	<.009	3	.54
DEC 18...	<.034	<.02	<.005	<.002	<.009	11	1.3
JAN 14...	<.034	<.02	<.005	<.002	<.009	15	1.6
FEB 19...	<.034	<.02	<.005	<.002	<.009	10	1.0
MAR 17...	<.034	<.02	<.005	<.002	<.009	14	1.5
APR 21...	<.034	<.02	<.005	<.002	<.009	17	2.1
MAY 14...	<.034	<.02	<.005	<.002	<.009	20	3.3
JUN 13...	<.034	<.02	<.005	<.002	<.009	4	.82
JUL 17...	<.034	<.02	<.005	<.002	<.009	18	3.6
SEP 23...	<.034	<.02	<.005	<.002	<.009	78	23

< Less than  
E Estimated value

SNAKE RIVER MAIN STEM

13094000 SNAKE RIVER NEAR BUHL, ID

LOCATION.--Lat 42°39'58", long 114°42'41", in NW¼NW¼ sec.9, T.9 S., R.15 E., Twin Falls County, Niagara Springs quad., Hydrologic Unit 17040212, on left bank 2 mi downstream from Niagara Springs, 3.8 mi upstream from outlet of Clear Lakes, 6 mi northeast of Buhl, and at mile 596.8.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,951.9 ft above NGVD of 1929 (stadia levels). Dec. 12, 1946 to July 13, 1965 at datum 1.00 ft higher. Prior to Jan. 17, 1947, nonrecording gage 40 ft upstream.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by American Falls Reservoir 116.8 mi upstream. Diurnal fluctuation caused by hydroelectric plants upstream. No diversions except by small ranch ditches between this station and station at Milner, where at times practically entire flow is diverted during irrigation seasons. Diversions above station for irrigation of about 2,030,000 acres, of which about 542,000 acres are irrigated by withdrawals from ground water; about 230,000 acres are irrigated below station. In addition, about 26,000 acres are irrigated above station by diversions from Salmon Falls Creek. Considerable water leaks into the Snake River Plain aquifer upstream, some of which returns above the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft³/s June 22, 1997, gage height, 14.65 ft; minimum, 1,370 ft³/s Apr. 14, 2002, gage height, 0.83 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,630 ft³/s Oct. 17; minimum daily, 1,500 ft³/s Apr. 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	2450	1890	2350	2090	1950	1970	1770	1890	1740	1750	1740	2060
2	2440	1890	2360	2050	1960	1950	1780	1870	1760	1730	1750	2130
3	2460	1890	2410	2050	1960	1940	1610	1860	1790	1760	1860	2230
4	2450	1890	2040	2040	1960	1940	1550	1900	1810	1760	1980	2230
5	2390	1890	2040	2040	1980	1920	1520	1910	1790	1740	1920	2080
6	2380	1910	2070	2040	1950	1890	1530	1920	1750	1680	1840	2060
7	2370	2040	2070	1990	1940	1870	1520	1870	1730	1640	1790	2090
8	2380	2150	2070	2000	1950	1890	1500	1870	1730	1610	1810	2150
9	2360	2160	2050	2020	1940	1900	1530	2130	1780	1610	1810	2140
10	2320	2140	2060	2020	1940	1900	1530	2020	1770	1610	1850	2140
11	2330	2100	2070	2000	1930	1910	1540	1900	1710	1610	1870	2100
12	2340	2080	2060	1990	1920	1930	1600	1880	1710	1610	1860	2060
13	2320	2090	2070	2000	1920	1920	1590	1780	1760	1630	1840	2080
14	2320	2140	2070	1980	1960	1920	1600	1780	1740	1640	1850	2090
15	2300	2140	2050	1950	2070	1940	1640	1780	1720	1650	1840	2140
16	2470	2170	2050	1920	2070	1980	1690	1770	1740	1660	1850	2050
17	2630	2170	2070	1920	2080	1920	1680	1780	1750	1650	1870	2030
18	2610	2170	2090	1920	2070	1920	1750	1830	1750	1680	1920	2060
19	2580	2130	2080	1910	2060	1960	1790	1870	1770	1690	1950	2040
20	2480	2140	2070	1920	2060	1950	1810	1850	1770	1720	1930	2030
21	2360	2180	2100	1930	2070	1990	1790	1760	1780	1740	1910	2010
22	2330	2180	2160	1910	2100	1990	1770	1730	1800	1700	1940	2000
23	2310	2190	2160	1900	2080	1990	1810	1710	1840	1690	2000	1980
24	2310	2180	2150	1960	2040	1980	1810	1710	1830	1690	2020	1970
25	2310	2160	2140	1940	2050	1970	1820	1820	1800	1690	2050	1950
26	2310	2160	2130	1940	2060	1960	1840	1720	1770	1790	2010	1960
27	2320	2190	2140	1950	2050	1930	1900	1730	1740	1820	2020	1950
28	2330	2220	2150	1960	1990	1910	1910	1720	1730	1820	2020	1950
29	2250	2250	2150	1960	---	1850	1850	1730	1730	1780	2010	1970
30	1980	2280	2120	1960	---	1800	1820	1730	1750	1750	2040	1950
31	1910	---	2130	1960	---	1790	---	1750	---	1740	2040	---
TOTAL	73100	63170	65730	61220	56110	59680	50850	56570	52840	52640	59190	61680
MEAN	2358	2106	2120	1975	2004	1925	1695	1825	1761	1698	1909	2056
MAX	2630	2280	2410	2090	2100	1990	1910	2130	1840	1820	2050	2230
MIN	1910	1890	2040	1900	1920	1790	1500	1710	1710	1610	1740	1950
AC-FT	145000	125300	130400	121400	111300	118400	100900	112200	104800	104400	117400	122300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2003, BY WATER YEAR (WY)

MEAN	4288	4752	5345	5859	5950	6132	7161	6624	6467	2994	2819	3120
MAX	12260	14760	13350	15950	19570	21110	20570	19590	26480	7917	5811	8770
(WY)	1985	1985	1984	1984	1997	1997	1971	1984	1997	1983	1997	1997
MIN	2125	2106	2120	1975	1884	1545	1550	1633	1623	1698	1807	1876
(WY)	1978	2003	2003	2003	1993	1991	1990	1992	2002	2003	1992	1992

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1947 - 2003
ANNUAL TOTAL	729100	712780	
ANNUAL MEAN	1998	1953	5126
HIGHEST ANNUAL MEAN			11620
LOWEST ANNUAL MEAN			1953
HIGHEST DAILY MEAN	2630	Oct 17	36100
LOWEST DAILY MEAN	1400	Apr 12	1370
ANNUAL SEVEN-DAY MINIMUM	1410	Apr 8	1370
ANNUAL RUNOFF (AC-FT)	1446000	1414000	3714000
10 PERCENT EXCEEDS	2340	2220	11400
50 PERCENT EXCEEDS	2060	1940	3180
90 PERCENT EXCEEDS	1570	1710	2030

SNAKE RIVER MAIN STEM

13094000 SNAKE RIVER NEAR BUHL, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1965, March 1976, November 1990 to September 1991, August 1992 to November 2002, July to September 2003 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June to September 1993, June to September 1994, July to November 1996, June to September 1997, February to October 1998, May to September 1999, May to September 2000, December 2001 to November 2002, June to September 2003 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 23.2 °C July 19, 21-23, 26, 28, 1998; minimum, 4.0 °C Mar. 7, 2002.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 22.1 °C July 22-23; minimum, 13.3 °C Sept. 18-19.

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 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 21...	1300	1810	648	8.2	35.0	20.3	5.2	7.9	101	52	--	--	--
AUG 14...	1000	1850	657	8.1	26.5	18.5	4.6	7.1	85	S13	--	--	--
SEP 11...	0845	2120	648	8.0	14.5	15.0	6.0	7.5	83	60	250	59.0	24.0

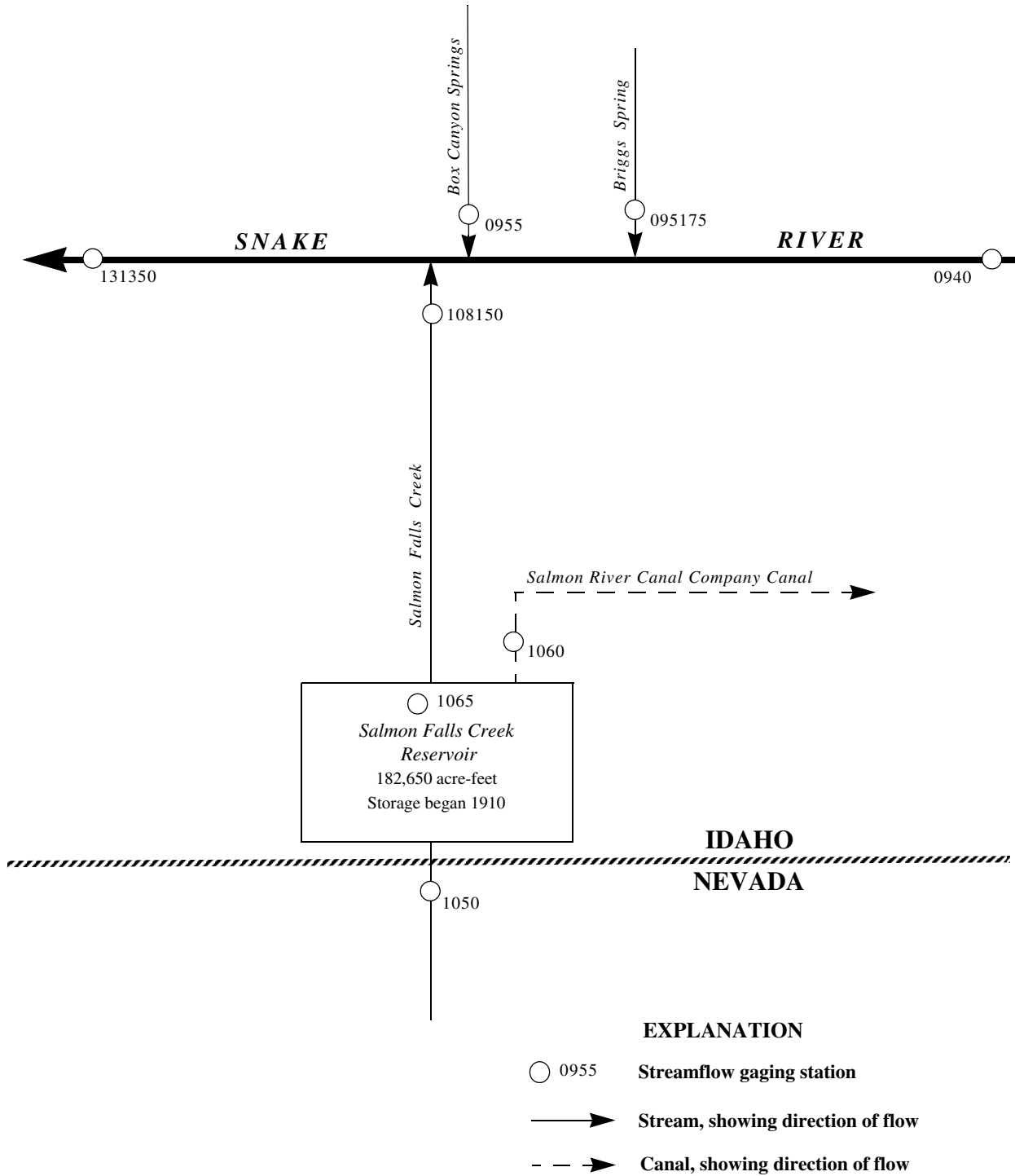
Date	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat unfltrd fixed end pt, mg/L (00440)	Carbonate, wat unfltrd fixed end pt, mg/L (00445)	ANC, wat unfltrd fixed end pt, mg/L as CaCO3 (00410)	Sulfate, water, fltrd, mg/L (00945)	Chloride, 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, unfltrd, mg/L as N (00625)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)
JUL 21...	--	--	--	--	--	--	--	--	--	--	.035	.43	1.97
AUG 14...	--	--	--	--	--	--	--	--	--	--	.044	.37	2.02
SEP 11...	42.8	27	6.23	239	.0	196	65.2	40.8	.8	34.2	.037	.39	2.04

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 21...	.109	.159	7	34
AUG 14...	.061	.101	7	35
SEP 11...	.097	.139	6	34

S Most probable value

SNAKE RIVER MAIN STEM  
13094000 SNAKE RIVER NEAR BUHL, ID--Continued

Temperature, water, degrees Celsius WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.0	17.7	18.4	20.0	18.1	19.0	21.3	19.5	20.4	18.9	17.6	18.1
2	18.8	17.3	18.0	19.8	18.1	19.0	21.2	19.8	20.3	19.2	17.7	18.3
3	18.0	16.6	17.3	20.0	18.1	19.0	20.5	19.2	19.9	19.4	17.7	18.6
4	17.9	16.5	17.2	20.0	18.4	19.1	21.0	19.0	19.9	19.3	18.1	18.6
5	18.1	16.6	17.3	20.2	18.4	19.2	21.0	19.4	20.3	19.0	18.1	18.5
6	18.1	16.8	17.5	20.2	18.4	19.2	21.0	19.4	20.2	18.9	17.6	18.2
7	18.2	16.9	17.5	20.3	18.4	19.3	20.8	19.0	19.9	18.9	17.6	18.1
8	18.5	17.1	17.7	20.1	18.5	19.3	20.5	18.9	19.7	18.4	16.9	17.4
9	18.5	17.4	18.1	20.2	18.4	19.3	20.5	18.5	19.5	17.3	16.1	16.5
10	18.5	17.4	18.0	20.5	18.7	19.6	20.3	18.7	19.6	16.4	15.2	15.7
11	18.4	17.1	17.9	21.0	19.2	20.0	20.5	18.9	19.6	16.6	15.0	15.7
12	18.7	16.9	17.7	21.3	19.2	20.2	20.2	18.7	19.3	16.6	15.5	15.9
13	18.5	17.4	18.0	21.2	19.4	20.3	20.0	18.5	19.2	16.0	14.4	15.2
14	18.9	17.4	18.1	21.0	19.4	20.2	20.0	18.4	19.2	16.0	14.4	15.2
15	18.9	17.7	18.3	21.3	19.4	20.3	20.2	18.9	19.6	16.0	14.6	15.3
16	19.0	17.7	18.4	21.3	19.5	20.4	20.2	19.0	19.6	15.7	14.9	15.2
17	19.4	17.9	18.6	21.5	19.5	20.5	19.5	18.1	18.9	15.3	13.6	14.3
18	19.4	18.4	18.9	21.3	19.5	20.5	19.4	17.9	18.7	14.6	13.3	13.9
19	19.5	18.2	18.9	21.3	20.0	20.7	19.4	17.7	18.6	15.1	13.3	14.1
20	19.3	18.1	18.5	21.5	19.8	20.7	19.7	18.2	19.0	15.2	13.9	14.6
21	18.3	17.1	17.8	21.5	20.2	20.9	19.6	18.4	19.0	15.4	13.9	14.7
22	18.1	16.6	17.3	22.1	20.2	21.1	19.4	18.5	19.0	15.5	14.1	14.8
23	17.6	16.3	16.9	22.1	20.3	21.2	19.7	18.1	18.8	15.8	14.1	14.9
24	17.6	16.3	17.0	21.9	20.5	21.1	19.8	18.2	19.0	15.8	14.2	15.1
25	18.1	16.5	17.2	21.1	20.0	20.7	19.8	18.1	19.1	15.8	14.6	15.2
26	18.4	16.8	17.6	21.1	19.8	20.4	19.8	18.4	19.1	16.1	14.7	15.4
27	18.9	17.1	18.0	21.6	19.8	20.7	19.8	18.1	18.9	16.5	15.0	15.7
28	19.2	17.6	18.3	21.8	19.8	20.9	19.7	18.2	18.9	16.5	15.2	15.8
29	19.7	17.7	18.6	21.8	19.8	20.8	19.3	18.1	18.6	16.6	15.2	15.9
30	19.7	18.4	19.1	21.8	20.0	20.9	19.0	17.4	18.3	16.6	15.4	16.0
31	---	---	---	21.6	19.7	20.7	18.9	17.4	18.2	---	---	---
MONTH	19.7	16.3	17.9	22.1	18.1	20.2	21.3	17.4	19.3	19.4	13.3	16.0



**Figure 12.** Schematic diagram showing gaging stations in Snake River Basin between Snake River near Buhl and Salmon Falls Creek.

BRIGGS SPRING BASIN

13095175 BRIGGS SPRING AT HEAD, NEAR BUHL, ID

LOCATION.--Lat 42°40'26", long 114°48'30", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.3, T.9 S., R.14 E., Gooding County, Thousand Springs quad., Hydrologic Unit 17040212, on right bank at road crossing, <sup>1</sup>/<sub>8</sub> mi downstream from head of spring, and 6 mi northwest of Buhl.

PERIOD OF RECORD.--April 1989 to current year. Miscellaneous measurements made in previous years may not be equivalent. (See sta 13095200)

GAGE.--Water-stage recorder. Elevation of gage is 3,000 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Small diversion above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 118 ft<sup>3</sup>/s Oct. 8-10, 14, 15, 17-28, 31, Nov. 1, 3-12, 1989; minimum daily, 94 ft<sup>3</sup>/s July 14-22, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 106 ft<sup>3</sup>/s Oct. 21-26, 28-30, Nov. 7-14; minimum daily, 94 ft<sup>3</sup>/s July 14-22.

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	102	105	104	102	100	99	98	97	96	96	95	99
2	103	105	104	102	100	99	98	97	96	96	95	99
3	103	105	103	102	100	99	98	97	96	96	95	99
4	103	105	103	102	100	99	98	97	96	96	95	99
5	103	105	103	102	100	99	98	97	96	95	96	99
6	103	105	103	102	100	99	98	98	95	95	96	99
7	103	106	103	102	100	99	98	98	95	95	95	99
8	104	106	103	101	100	99	98	98	95	95	95	99
9	104	106	103	101	100	98	98	98	96	95	95	100
10	104	106	103	101	100	98	98	98	96	95	95	100
11	105	106	103	101	100	98	98	98	96	95	96	101
12	105	106	103	101	100	99	98	98	96	95	96	101
13	105	106	103	101	100	99	98	98	96	95	96	101
14	104	106	103	101	100	99	98	98	96	94	96	101
15	105	105	103	101	100	99	98	98	96	94	96	101
16	105	105	103	101	100	99	98	98	96	94	96	101
17	105	105	103	101	100	99	98	98	96	94	96	101
18	105	105	102	101	100	99	98	98	96	94	96	101
19	105	105	102	101	100	99	98	98	95	94	96	101
20	105	105	102	101	100	99	98	98	95	94	96	101
21	106	105	102	101	100	99	98	97	95	94	96	101
22	106	105	102	101	100	99	98	97	95	94	97	102
23	106	104	102	101	99	99	98	96	96	95	97	102
24	106	104	103	101	99	99	98	96	96	95	98	102
25	106	104	102	101	99	99	98	96	97	95	98	102
26	106	104	102	101	99	99	98	96	97	95	99	102
27	105	104	102	101	99	98	97	96	96	95	99	102
28	106	104	102	100	99	98	97	96	96	95	98	102
29	106	104	102	100	---	98	97	96	96	95	98	102
30	106	104	102	100	---	98	97	96	96	95	98	102
31	105	---	102	100	---	98	---	96	---	95	98	---
TOTAL	3245	3150	3182	3134	2794	3061	2936	3013	2875	2940	2988	3021
MEAN	105	105	103	101	99.8	98.7	97.9	97.2	95.8	94.8	96.4	101
MAX	106	106	104	102	100	99	98	98	97	96	99	102
MIN	102	104	102	100	99	98	97	96	95	94	95	99
AC-FT	6440	6250	6310	6220	5540	6070	5820	5980	5700	5830	5930	5990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2003, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	111	111	109	107	105	104	101	99.8	99.5	99.4	102	107			
MAX	118	117	114	111	109	107	105	102	104	104	106	113			
(WY)	1990	1990	1990	1990	1998	1998	1998	1990	1990	1997	1990	1989			
MIN	105	105	103	101	99.8	98.7	97.9	96.8	95.8	94.8	96.4	101			
(WY)	2003	2003	2003	2003	2003	2003	2003	1993	2003	2003	2003	2003			

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1989 - 2003
ANNUAL TOTAL	36823	36339	
ANNUAL MEAN	101	99.6	105
HIGHEST ANNUAL MEAN			108
LOWEST ANNUAL MEAN			99.6
HIGHEST DAILY MEAN	107	106	118
LOWEST DAILY MEAN	95	94	94
ANNUAL SEVEN-DAY MINIMUM	95	94	94
ANNUAL RUNOFF (AC-FT)	73040	72080	75790
10 PERCENT EXCEEDS	105	105	112
50 PERCENT EXCEEDS	102	99	104
90 PERCENT EXCEEDS	96	95	98



BOX CANYON SPRINGS BASIN

13095500 BOX CANYON SPRINGS NEAR WENDELL, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979-81, 1984 to 2002, July to September 2003 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July to September 1994, May to September 1999, June to November 2002, August to September 2003 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 15.4 °C June 14-15, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 14.9 °C Aug. 15, 29.

REMARKS.--Intermittent water chemistry June 1949 to March 1976.

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, 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 22...	1000	311	400	8.1	19.0	14.5	<1.0	9.1	101	S3	--	--	--
AUG 13...	0900	318	403	8.0	18.5	14.3	4.3	9.2	101	S3	--	--	--
SEP 12...	0900	333	402	8.2	16.0	14.2	<1.0	9.2	100	S3	150	33.1	15.8

Date	Time	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 22...	--	--	--	--	--	--	--	--	--	--	--	<.015	<.10	.912
AUG 13...	--	--	--	--	--	--	--	--	--	--	--	<.015	<.10	.964
SEP 12...	17.5	20	3.21	152	.0	124	34.2	21.9	.6	34.2	<.015	<.10	1.04	

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd, mg/L (00665)
JUL 22...	.014	.016
AUG 13...	.012	.013
SEP 12...	.013	.015

< Less than  
S Most probable value



BOX CANYON SPRINGS BASIN  
13095500 BOX CANYON SPRINGS NEAR WENDELL, ID--Continued

Temperature, water, degrees Celsius												
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	14.7	14.4	14.5
2	---	---	---	---	---	---	---	---	---	14.7	14.6	14.6
3	---	---	---	---	---	---	---	---	---	14.7	14.4	14.6
4	---	---	---	---	---	---	---	---	---	14.7	14.4	14.6
5	---	---	---	---	---	---	---	---	---	14.7	14.4	14.6
6	---	---	---	---	---	---	---	---	---	14.7	14.4	14.6
7	---	---	---	---	---	---	---	---	---	14.6	14.4	14.5
8	---	---	---	---	---	---	---	---	---	14.6	14.4	14.5
9	---	---	---	---	---	---	---	---	---	14.6	14.4	14.4
10	---	---	---	---	---	---	---	---	---	14.6	14.2	14.4
11	---	---	---	---	---	---	---	---	---	14.7	14.4	14.5
12	---	---	---	---	---	---	---	---	---	14.6	14.2	14.4
13	---	---	---	---	---	---	---	---	---	14.6	14.2	14.4
14	---	---	---	---	---	---	14.7	14.4	14.5	14.7	14.2	14.4
15	---	---	---	---	---	---	14.9	14.4	14.6	14.6	14.2	14.4
16	---	---	---	---	---	---	14.7	14.4	14.6	14.6	14.4	14.4
17	---	---	---	---	---	---	14.7	14.4	14.5	14.6	14.2	14.3
18	---	---	---	---	---	---	14.7	14.4	14.5	14.6	14.2	14.4
19	---	---	---	---	---	---	14.7	14.4	14.5	14.6	14.2	14.4
20	---	---	---	---	---	---	14.7	14.4	14.6	14.6	14.2	14.4
21	---	---	---	---	---	---	14.7	14.4	14.6	14.6	14.2	14.4
22	---	---	---	---	---	---	14.7	14.6	14.6	14.6	14.2	14.4
23	---	---	---	---	---	---	14.7	14.4	14.6	14.7	14.2	14.4
24	---	---	---	---	---	---	14.7	14.4	14.6	14.7	14.2	14.4
25	---	---	---	---	---	---	14.7	14.4	14.6	14.6	14.2	14.4
26	---	---	---	---	---	---	14.7	14.4	14.6	14.7	14.4	14.5
27	---	---	---	---	---	---	14.7	14.6	14.6	14.7	14.4	14.5
28	---	---	---	---	---	---	14.7	14.4	14.6	14.7	14.4	14.5
29	---	---	---	---	---	---	14.9	14.4	14.6	14.7	14.4	14.5
30	---	---	---	---	---	---	14.7	14.4	14.5	14.7	14.4	14.5
31	---	---	---	---	---	---	14.7	14.4	14.5	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	14.7	14.2	14.5

SALMON FALLS CREEK BASIN

13105000 SALMON FALLS CREEK NEAR SAN JACINTO, NV

LOCATION.--Lat 41°56'40", long 114°41'15", in NE¼SW¼ sec.23, T.47 N., R.64 E., Elko County, Nevada, Jackpot quad., Hydrologic Unit 17040213, on right bank in canyon, 630 ft downstream from bridge on U.S. Highway 93, 550 ft downstream from Shoshone Creek, and 5 mi north of San Jacinto.

DRAINAGE AREA.--1,450 mi<sup>2</sup>, approximately. Mean elevation, 6,350 ft.

PERIOD OF RECORD.--September 1909 to June 1910 (gage heights only), June 1910 to September 1916, October 1918 to current year. Monthly discharge only for some periods published in WSP 1317. Prior to October 1910, published as "Salmon Falls River".

REVISED RECORDS.--WSP 1934: 1943(M).

GAGE.--Water-stage recorder. Elevation of gage is 5,120 ft above NGVD of 1929, by barometer. Prior to June 6, 1910, nonrecording gage at nearby site at different datum. June 6, 1910 to Sept. 30, 1916, Oct. 1, 1918 to Aug. 28, 1964, water-stage recorder at site 35 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Station equipment includes satellite telemetry. Diversions above station for irrigation of about 18,200 acres (1966 determination). Salmon Dam of Salmon River Canal Co. is 15 mi downstream (see sta 13106500).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,860 ft<sup>3</sup>/s May 16, 1984, gage height, 14.27 ft; minimum, 2.6 ft<sup>3</sup>/s Sept. 4, 1961, gage height, 3.37 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 321 ft<sup>3</sup>/s May 31; minimum daily, 10 ft<sup>3</sup>/s Aug. 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	37	43	55	61	63	63	68	194	304	25	16	12
2	38	41	55	58	65	60	72	192	277	24	17	12
3	39	43	56	59	64	62	78	194	235	22	22	17
4	42	47	55	61	62	63	72	219	200	23	20	19
5	42	47	56	61	63	62	72	250	178	26	19	21
6	42	48	55	59	60	61	78	262	160	25	17	22
7	41	49	54	56	52	61	77	250	145	25	16	23
8	40	52	51	55	50	60	74	241	127	23	15	23
9	40	58	52	56	60	59	75	262	115	22	15	23
10	41	57	56	59	67	59	85	270	107	20	15	25
11	41	54	56	61	64	60	91	249	91	19	14	31
12	41	53	56	61	66	61	90	236	81	18	14	34
13	41	52	56	71	64	63	89	227	76	18	14	33
14	41	52	58	72	66	67	95	219	70	17	14	32
15	42	52	58	72	67	79	103	222	63	17	13	32
16	42	51	59	72	67	89	105	229	57	16	15	32
17	42	51	60	71	68	91	105	241	51	16	14	33
18	42	51	57	70	67	87	110	252	44	17	14	36
19	42	50	50	70	66	81	109	250	40	18	15	37
20	42	50	56	70	64	78	102	235	39	19	14	37
21	42	51	60	71	64	77	97	230	40	19	13	36
22	43	52	60	72	67	74	98	211	40	17	14	36
23	44	52	59	72	65	71	119	182	40	17	13	36
24	46	53	55	75	61	67	156	200	39	17	13	36
25	46	53	54	63	62	65	174	234	39	20	11	36
26	44	51	50	59	60	71	183	269	36	22	11	37
27	44	50	63	59	61	80	193	287	31	24	11	37
28	44	52	61	58	61	80	195	290	29	21	10	37
29	45	54	61	59	---	72	191	293	28	19	11	37
30	46	55	59	58	---	69	193	309	26	18	12	38
31	46	---	61	61	---	69	---	321	---	17	13	---
TOTAL	1308	1524	1754	1982	1766	2161	3349	7520	2808	621	445	900
MEAN	42.2	50.8	56.6	63.9	63.1	69.7	112	243	93.6	20.0	14.4	30.0
MAX	46	58	63	75	68	91	195	321	304	26	22	38
MIN	37	41	50	55	50	59	68	182	26	16	10	12
AC-FT	2590	3020	3480	3930	3500	4290	6640	14920	5570	1230	883	1790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2003, BY WATER YEAR (WY)

MEAN	49.3	58.5	58.6	68.6	97.2	163	345	456	272	62.6	27.5	32.3
MAX	92.0	105	130	201	377	588	865	2033	1209	344	127	77.6
(WY)	1985	1985	1965	1971	1943	1972	1942	1984	1984	1984	1984	1984
MIN	18.1	34.6	36.9	38.0	44.4	55.5	77.4	52.0	23.0	12.5	8.16	9.79
(WY)	1916	1916	1932	1955	1955	1955	1934	1934	1992	1931	1940	1947

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1910 - 2003
ANNUAL TOTAL	38827	26138	
ANNUAL MEAN	106	71.6	141
HIGHEST ANNUAL MEAN			439
LOWEST ANNUAL MEAN			45.4
HIGHEST DAILY MEAN	555	321	3620
LOWEST DAILY MEAN	12	10	3.2
ANNUAL SEVEN-DAY MINIMUM	12	11	5.7
ANNUAL RUNOFF (AC-FT)	77010	51840	101900
10 PERCENT EXCEEDS	328	192	390
50 PERCENT EXCEEDS	54	56	63
90 PERCENT EXCEEDS	21	17	25

## SALMON FALLS CREEK BASIN

13106000 SALMON RIVER CANAL CO. CANAL NEAR ROGERSON, ID

LOCATION.--Lat 42°13'10", long 114°44'20", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.7, T.14 S., R.15 E., Twin Falls County, Salmon Butte quad., Hydrologic Unit 17040213, U.S. Bureau of Land Management lands, on left bank 0.5 mi downstream from Salmon River Canal Co. reservoir, and 7 mi west of Rogerson.

PERIOD OF RECORD.--April 1937 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,940 ft above NGVD of 1929, by barometer. Oct. 1, 1953 to Sept. 30, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good. Canal diverts from Salmon River Canal Co. reservoir (see sta 13106500) for irrigation of land in the Salmon River Canal Co. project.

AVERAGE DISCHARGE.--66 years, 104 ft<sup>3</sup>/s, 75,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 660 ft<sup>3</sup>/s July 21-24, 1944; 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	---	---	---	---	---	---	---	e0.00	221	258	0.00	---
2	---	---	---	---	---	---	---	e0.00	223	253	0.00	---
3	---	---	---	---	---	---	---	e0.00	226	244	0.00	---
4	---	---	---	---	---	---	---	e0.00	222	240	0.00	---
5	---	---	---	---	---	---	---	e0.00	199	249	0.00	---
6	---	---	---	---	---	---	---	e0.00	197	251	0.00	---
7	---	---	---	---	---	---	---	0.00	195	253	0.00	---
8	---	---	---	---	---	---	---	0.00	195	256	0.00	---
9	---	---	---	---	---	---	---	0.00	195	257	0.00	---
10	---	---	---	---	---	---	---	0.00	203	260	0.00	---
11	---	---	---	---	---	---	---	0.00	222	269	0.00	---
12	---	---	---	---	---	---	---	0.00	222	261	0.00	---
13	---	---	---	---	---	---	---	189	226	248	0.00	---
14	---	---	---	---	---	---	---	196	230	171	0.00	---
15	---	---	---	---	---	---	---	182	250	0.00	0.00	---
16	---	---	---	---	---	---	---	172	250	0.00	0.00	---
17	---	---	---	---	---	---	---	180	247	0.00	0.00	---
18	---	---	---	---	---	---	---	192	250	0.00	0.00	---
19	---	---	---	---	---	---	---	195	257	0.00	0.00	---
20	---	---	---	---	---	---	---	206	257	0.00	0.00	---
21	---	---	---	---	---	---	---	210	261	0.00	0.00	---
22	---	---	---	---	---	---	---	222	257	0.00	0.00	---
23	---	---	---	---	---	---	---	230	259	0.00	0.00	---
24	---	---	---	---	---	---	---	242	258	0.00	0.00	---
25	---	---	---	---	---	---	---	248	254	0.00	0.00	---
26	---	---	---	---	---	---	---	255	255	0.00	0.00	---
27	---	---	---	---	---	---	---	252	255	0.00	0.00	---
28	---	---	---	---	---	---	---	243	262	0.00	0.00	---
29	---	---	---	---	---	---	---	245	272	0.00	0.00	---
30	---	---	---	---	---	---	---	241	269	0.00	0.00	---
31	---	---	---	---	---	---	---	232	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	4132.00	7089	3470.00	0.00	---
MEAN	---	---	---	---	---	---	---	133	236	112	0.000	---
MAX	---	---	---	---	---	---	---	255	272	269	0.00	---
MIN	---	---	---	---	---	---	---	0.00	195	0.00	0.00	---
AC-FT	---	---	---	---	---	---	---	8200	14060	6880	0.00	---

e Estimated

SALMON FALLS CREEK BASIN

13106500 SALMON RIVER CANAL CO. RESERVOIR NEAR ROGERSON, ID

LOCATION.--Lat 42°12'40", long 114°44'00", in NE<sup>1</sup>/<sub>4</sub> sec.18, T.14 S., R.15 E., Twin Falls County, Salmon Butte quad., Hydrologic Unit 17040213, U.S. Bureau of Land Management lands, at Salmon Falls Dam on Salmon Falls Creek, 7.5 mi west of Rogerson, and at mile 46.0.

DRAINAGE AREA.--1,610 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--January 1922 to current year.

GAGE.--Nonrecording gage. Datum of gage is 4,945.8 ft above NGVD of 1929.

REMARKS.--Reservoir is formed by gravity-section concrete-arch dam completed in 1911; storage began in 1910. Usable capacity, 182,650 acre-ft between gage heights 0.0 (bottom of outlet tunnel) and 80.0 ft, maximum operating level. Dead storage, 48,000 acre-ft. Reservoir spilled May 11 to June 29, 1984, and Apr. 22-30, 1985, the first times since construction in 1911. Water is used for irrigation of lands in Salmon River Canal Co. project. Figures given herein represent usable contents.

COOPERATION.--Gage readings and capacity table provided by Salmon River Canal Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 180,600 acre-ft June 20, July 2, 3, 1984, gage height, 79.40 ft; minimum observed, 125 acre-ft Sept. 21 to Oct. 5, 1934, gage height, 0.1 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 29,700 acre-ft May 14-15; maximum gage height, 19.85 ft, May 14; minimum observed, 5,000 acre-ft Oct. 1-3, gage height, 3.85 ft.

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

3.0	3,850	15.0	21,500
10.0	13,800	20.0	30,000

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY AM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5000	6620	8950	11100	14000	16200	19300	24900	27900	15600	7720	6840
2	5000	6700	9020	11300	14000	16300	19600	25200	27900	15100	7720	6620
3	5000	6700	9100	11500	14000	16400	19600	25300	27700	14500	7720	6820
4	5060	6770	9100	11500	14100	16400	19900	26000	27500	14000	7720	6820
5	5060	6840	9320	11500	14200	16500	19900	26300	27400	13400	7720	6820
6	5060	6700	9390	11600	14200	16600	20000	26800	27200	12900	7720	6820
7	5270	6700	9390	11800	14200	16600	20100	27200	26900	12400	7720	6820
8	5340	7140	9460	11900	14200	16700	20200	27600	26700	11800	7650	6550
9	5400	7200	9530	12000	14400	16800	20400	28100	26400	11300	7650	6550
10	5400	7280	9530	12000	14500	16900	20500	28600	26100	10700	7650	6550
11	5470	7430	9600	12100	14600	17000	20500	29200	25800	10000	7650	6480
12	5540	7580	9600	12100	14600	17200	20600	29400	25400	9530	7430	6480
13	5540	7580	9680	12300	14800	17200	20800	29400	25000	8950	7430	6480
14	5600	7650	9820	12400	14800	17300	20900	29700	24600	8300	7360	6480
15	5600	7720	9970	12400	15000	17400	21200	29700	24100	8080	7360	6480
16	5670	7790	10100	12500	15200	17500	21300	29600	23500	8080	7360	6420
17	5740	7860	10100	12600	15200	17600	21500	29600	23100	8080	7360	6420
18	5810	8010	10300	12600	15200	17700	21700	29600	22600	7940	7360	6420
19	5810	8080	10300	12700	15300	17800	21800	29500	22000	7940	7280	6550
20	5880	8300	10400	12800	15400	17900	22000	29500	21400	7940	7280	6550
21	5940	8230	10400	12900	15500	18100	22200	29400	20900	7860	7070	6550
22	6010	8230	10500	13000	15600	18200	22200	29300	20500	7860	7070	6550
23	6080	8370	10600	13000	15700	18200	22600	29200	19900	7860	7070	6620
24	6140	8440	10600	13100	15800	18400	22900	28900	19300	7860	7070	6620
25	6280	8440	10700	13200	15800	18500	23000	28700	18900	7860	7000	6620
26	6280	8520	10700	13200	15900	18700	23400	28500	18300	7860	7000	6620
27	6350	8660	10800	13400	16000	18800	23600	28300	17800	7860	6920	6620
28	6350	8660	10900	13400	16100	18900	23800	28200	17200	7790	6920	6620
29	6350	8660	10900	13600	---	19000	24300	28100	16700	7790	6840	6700
30	6480	8660	11100	13700	---	19100	24600	28000	16300	7790	6840	6700
31	6550	---	11100	13800	---	19300	---	28000	---	7790	6840	---
MAX	6550	8660	11100	13800	16100	19300	24600	29700	27900	15600	7720	6840
MIN	5000	6620	8950	11100	14000	16200	19300	24900	16300	7790	6840	6420
†	5.00	6.45	8.10	10.00	11.55	13.60	16.85	18.80	11.65	5.85	5.20	5.10
‡	1550	2110	2440	2700	2300	3200	5300	3400	-11700	-8510	-950	-140
CAL YR 2002	MAX 44200	MIN 4730	‡ 1280									
WTR YR 2003	MAX 29700	MIN 5000	‡ 1700									

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

SALMON FALLS CREEK BASIN

13108150 SALMON FALLS CREEK NEAR HAGERMAN, ID

LOCATION.--Lat 42°41'47", long 114°51'15", in SW¼SE¼SE¼ sec.30, T.8 S., R.14 E., Twin Falls County, Thousand Springs quad., Hydrologic Unit 17040213, on left bank 25 ft upstream from U.S. Highway 30, at mile 1.9, and 8.5 mi south of Hagerman.

DRAINAGE AREA.--2,120 mi<sup>2</sup>, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,891.06 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records fair. Flow completely regulated by Salmon River Canal Co. reservoir 44 mi upstream (see sta 13106500). Flow below the dam is derived from leakage past the dam and return flow from adjacent land. Several diversions, by pumping from the left bank below the dam, are used for irrigation. Flow past gage is partially regulated during irrigation season by small diversion dam 0.9 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,500 ft<sup>3</sup>/s May 16, 1984, gage height, 18.14 ft, on basis of contracted opening measurement of peak flow, result of roadfill collapse approximately 13 mi upstream, (Salmon River Canal Co. reservoir spilled into Salmon Falls Creek May 11 to June 29, 1984 and Apr. 22-30, 1985, the only times since construction of the dam in 1910). Maximum discharge excluding 1984, 3,390 ft<sup>3</sup>/s Jan. 12, 1979, gage height, 9.60 ft; minimum, 5.8 ft<sup>3</sup>/s July 9, 1977, gage height, 2.51 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 239 ft<sup>3</sup>/s Oct. 18; minimum daily, 20 ft<sup>3</sup>/s July 3.

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	184	160	151	138	124	118	103	132	59	23	28	77
2	192	161	151	136	124	117	104	138	66	25	35	73
3	201	159	150	136	122	115	97	136	58	20	35	77
4	201	162	149	136	121	117	105	166	61	39	37	81
5	208	162	148	134	122	115	98	219	66	36	40	77
6	214	161	148	132	121	114	96	215	71	26	46	79
7	206	163	148	132	120	114	90	172	50	30	45	85
8	195	166	146	133	119	113	80	156	44	35	55	88
9	184	166	146	131	118	113	87	195	41	25	47	92
10	182	162	147	133	118	112	90	228	34	28	42	94
11	189	160	148	133	120	113	88	231	32	45	43	94
12	204	158	146	132	123	112	92	235	26	40	39	83
13	220	159	146	132	125	109	122	217	37	32	48	86
14	223	158	149	132	125	110	122	176	28	32	42	100
15	227	156	146	130	123	110	130	160	24	29	44	101
16	233	157	146	129	123	110	132	129	21	32	47	100
17	227	157	146	128	120	110	150	120	24	37	51	111
18	239	154	143	128	120	109	180	126	21	35	57	117
19	237	153	142	128	120	105	194	143	28	30	63	117
20	210	153	143	128	120	104	190	131	31	33	59	111
21	193	154	144	128	119	102	181	129	29	31	53	106
22	174	154	143	127	119	96	178	115	40	28	66	102
23	178	155	141	128	118	99	178	105	43	39	80	94
24	176	153	140	128	117	95	171	92	28	50	74	78
25	170	151	139	126	116	83	171	99	37	32	81	72
26	168	150	139	125	117	100	196	109	47	43	71	70
27	165	151	139	126	116	106	194	108	37	43	71	84
28	164	150	142	124	115	112	175	95	38	39	67	83
29	164	151	141	124	---	107	141	80	27	49	68	78
30	163	151	139	125	---	102	142	70	28	32	71	82
31	161	---	145	124	---	102	---	63	---	29	81	---
TOTAL	6052	4707	4491	4026	3365	3344	4077	4490	1176	1047	1686	2692
MEAN	195	157	145	130	120	108	136	145	39.2	33.8	54.4	89.7
MAX	239	166	151	138	125	118	196	235	71	50	81	117
MIN	161	150	139	124	115	83	80	63	21	20	28	70
AC-FT	12000	9340	8910	7990	6670	6630	8090	8910	2330	2080	3340	5340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2003, BY WATER YEAR (WY)

	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	238	195	170	163	154	148	168	176	132	69.8	104	191																									
MAX	314	244	202	233	203	243	334	1272	834	130	178	271																									
(WY)	1973	1973	1974	1972	1972	1972	1985	1984	1984	1997	1997	1986																									
MIN	178	153	140	117	118	108	89.7	50.6	36.5	28.4	52.2	89.7																									
(WY)	1993	2002	1984	1993	1993	2003	1977	1992	1992	1977	1988	2003																									

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1970 - 2003

ANNUAL TOTAL	40557	41153		
ANNUAL MEAN	111	113		159
HIGHEST ANNUAL MEAN				314
LOWEST ANNUAL MEAN				110
HIGHEST DAILY MEAN	239	Oct 18	239	Oct 18
LOWEST DAILY MEAN	14	Jun 27	20	Jul 3
ANNUAL SEVEN-DAY MINIMUM	23	Jun 26	25	Jun 14
ANNUAL RUNOFF (AC-FT)	80440		81630	115200
10 PERCENT EXCEEDS	163		178	236
50 PERCENT EXCEEDS	113		118	155
90 PERCENT EXCEEDS	44		35	70

SALMON FALLS CREEK BASIN

13108150 SALMON FALLS CREEK NEAR HAGERMAN, ID--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-1981, 1990, 1992, 1994, 1996, April to September 1998, April to September 2000, December 2001 to November 2002, July to September 2003 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April to September 1998, May to September 2000, December 2001 to November 2002, June to September 2003 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 27.9 °C June 27, 2002; minimum, 4.0 °C Dec. 26, 2001, Jan. 30, 2002.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 27.8 °C July 22; minimum, 11.4 °C Sept. 18.

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)	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 21...	1000	29	819	8.1	31.0	21.9	2.6	7.8	100	142	--	--	--
AUG 14...	1245	39	748	8.7	34.0	20.9	3.1	12.0	153	50	--	--	--
SEP 11...	1230	94	732	8.6	24.0	14.9	4.1	10.8	118	79	270	69.4	24.0

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 21...	--	--	--	--	--	--	--	--	--	--	E.012	.44	2.03
AUG 14...	--	--	--	--	--	--	--	--	--	--	<.015	.44	1.76
SEP 11...	48.5	27	7.52	293	5	247	95.2	42.5	1.0	40.4	<.015	.36	2.23

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 21...	.013	.030	6	.47
AUG 14...	.017	.040	19	2.0
SEP 11...	.020	.051	51	13

< Less than  
E Estimated value

## SALMON FALLS CREEK BASIN

## 13108150 SALMON FALLS CREEK NEAR HAGERMAN, 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	22.4	17.5	20.0	25.5	18.8	22.4	25.1	19.4	22.5	20.2	17.0	18.9
2	21.7	16.4	19.0	24.8	18.6	21.9	24.3	20.4	22.1	22.6	18.3	20.1
3	21.6	15.3	18.3	25.3	18.9	22.3	23.4	19.8	21.7	22.2	17.7	20.1
4	20.6	15.3	17.9	24.9	18.0	21.9	24.6	19.4	22.0	21.4	17.7	19.7
5	21.4	15.8	18.5	24.9	18.5	21.9	25.1	20.2	22.6	21.2	18.3	19.8
6	21.6	16.7	19.2	24.8	18.8	22.0	24.2	20.1	22.2	21.9	17.7	19.7
7	22.0	16.5	19.3	25.8	19.3	22.7	24.1	19.6	21.8	20.8	17.2	19.0
8	22.7	17.0	19.8	24.8	18.9	22.2	22.9	19.4	21.2	19.4	16.5	18.1
9	23.6	18.5	20.7	25.3	19.1	22.4	24.2	18.9	21.5	17.2	14.8	16.0
10	23.4	17.7	20.3	25.8	19.9	22.9	24.2	18.8	21.5	17.3	14.2	15.8
11	22.2	16.7	19.5	26.0	19.8	23.1	23.7	19.6	21.6	18.1	14.0	16.0
12	23.6	15.9	19.7	26.5	19.4	23.2	22.6	19.3	20.9	17.3	15.0	16.2
13	22.7	18.3	20.4	25.3	20.4	23.2	23.0	18.6	20.9	16.9	12.8	14.8
14	24.8	18.0	21.1	25.6	20.1	23.0	24.1	18.6	21.3	16.9	12.5	14.7
15	24.9	18.1	21.6	26.2	20.1	23.3	24.6	19.8	22.1	16.4	12.9	14.8
16	25.6	18.1	22.0	25.8	20.9	23.7	23.7	21.0	22.1	16.4	13.7	14.9
17	25.6	17.7	21.9	26.3	20.4	23.6	21.4	17.2	19.4	15.0	12.2	13.6
18	24.8	18.9	22.1	26.2	20.4	23.6	21.7	17.3	19.4	15.3	11.4	13.2
19	24.6	18.9	21.7	26.2	22.4	24.3	22.6	17.7	20.2	16.1	11.7	13.7
20	22.4	18.3	20.5	27.6	21.4	24.7	22.7	18.8	20.9	16.2	12.3	14.2
21	22.6	16.1	19.2	26.9	21.7	24.6	22.2	19.1	20.6	16.2	12.2	14.0
22	20.5	15.6	18.1	27.8	21.4	24.6	23.0	19.6	21.0	16.5	12.3	14.3
23	20.9	15.1	17.8	27.4	21.6	24.7	22.6	18.3	20.4	16.9	12.6	14.8
24	20.2	15.8	18.3	25.3	22.2	23.3	22.7	18.1	20.6	17.0	12.8	15.1
25	22.4	15.6	19.0	26.0	21.7	23.6	22.6	18.1	20.7	16.9	13.3	15.2
26	22.9	17.0	19.8	25.3	20.9	22.8	22.1	18.5	20.3	17.8	13.6	15.7
27	23.9	17.2	20.5	25.8	20.4	23.0	22.4	18.1	20.2	18.0	14.2	16.2
28	24.2	18.1	21.0	26.5	20.9	23.5	21.7	18.0	20.1	18.0	14.0	16.1
29	25.3	17.8	21.7	25.6	20.9	23.1	22.0	18.1	20.1	18.1	14.2	16.4
30	25.3	18.8	22.4	26.7	20.6	23.6	21.6	17.3	19.6	18.3	14.8	16.6
31	---	---	---	25.8	19.9	23.1	21.0	16.7	19.1	---	---	---
MONTH	25.6	15.1	20.0	27.8	18.0	23.2	25.1	16.7	21.0	22.6	11.4	16.3