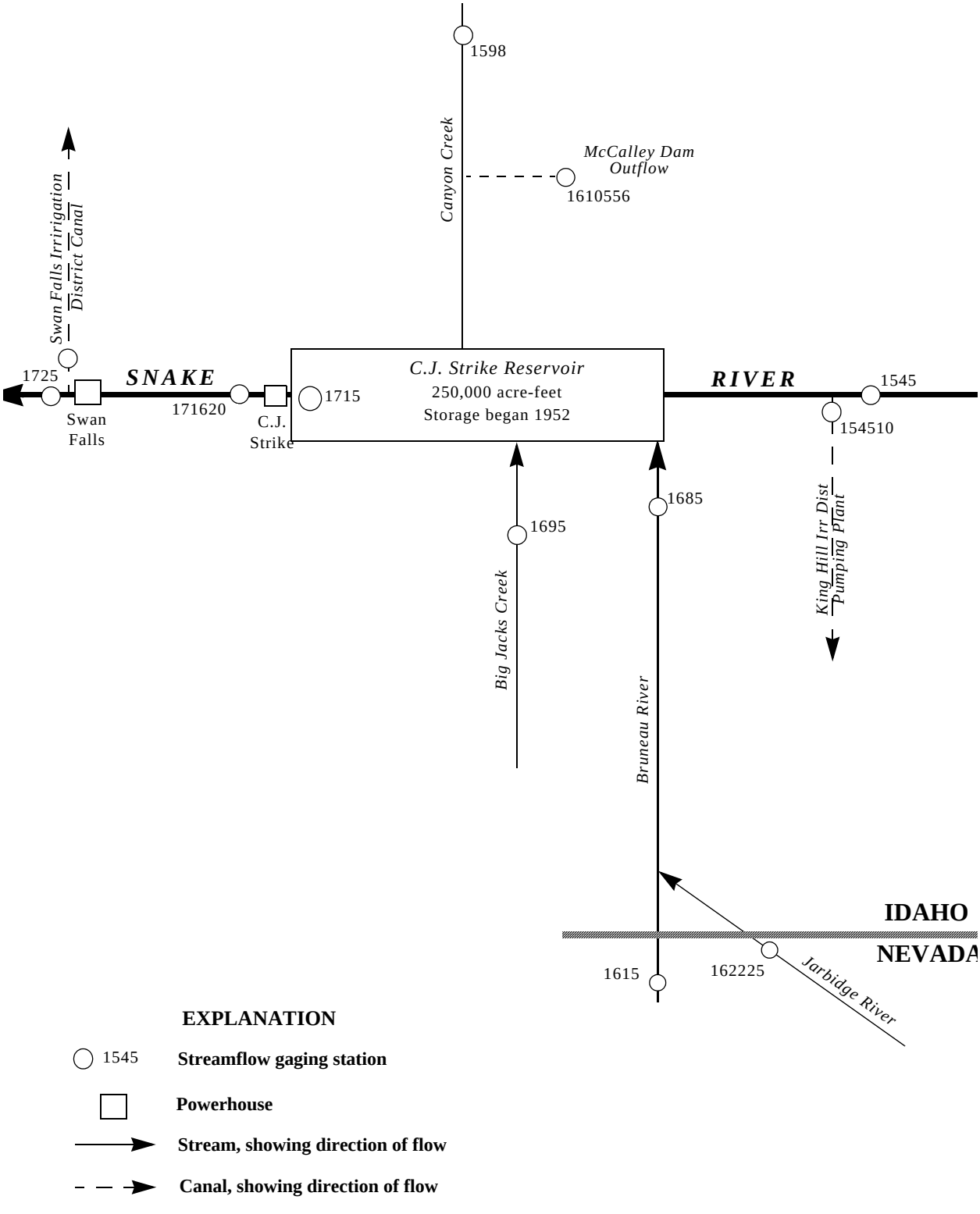

Figure 13. Schematic diagram showing gaging stations in the Snake River basin between King Hill and Murphy and in the Bruneau River basin.

DIVERSIONS FROM SNAKE RIVER
BETWEEN SNAKE RIVER AT KING HILL AND SNAKE RIVER BELOW C.J. STRIKE DAM

13154510 KING HILL IRRIGATION DISTRICT PUMPING PLANT AT KING HILL, ID

LOCATION.--Lat 43°00'04", long 115°12'30", in NW¼SE¼ sec.12, T.5 S., R.10 E., Elmore County, Hydrologic Unit 17050101, on left bank of Snake River, 0.25 mi southwest of King Hill.

PERIOD OF RECORD.--April 1988 to current year (irrigation seasons only).

GAGE.--In-line flow sensor with datalogger. Temporarily moved to right bank from April 1999 to April 2001, due to bridge construction.

REMARKS.--Records good except for estimated daily discharges, which are fair. In-line flow sensor rated by ultrasonic flowmeter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 24 ft³/s Aug. 30 to Sept. 1, 1995; no flow for long periods each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	---	---	---	---	---	---	14	16	e16	23	21
2	11	---	---	---	---	---	---	13	15	e16	23	21
3	11	---	---	---	---	---	---	15	10	e16	22	21
4	11	---	---	---	---	---	---	18	4.6	e16	20	21
5	4.5	---	---	---	---	---	---	17	10	e16	18	21
6	0.00	---	---	---	---	---	---	e20	14	e16	18	21
7	0.00	---	---	---	---	---	---	e11	e15	e16	18	19
8	0.00	---	---	---	---	---	---	e20	e16	e16	20	16
9	0.00	---	---	---	---	---	0.00	16	e16	e15	22	14
10	0.00	---	---	---	---	---	0.00	16	e15	16	22	14
11	0.00	---	---	---	---	---	3.5	16	17	17	21	13
12	0.00	---	---	---	---	---	8.1	15	15	16	22	13
13	0.00	---	---	---	---	---	11	13	19	19	22	13
14	0.00	---	---	---	---	---	9.8	18	20	20	22	11
15	0.00	---	---	---	---	---	15	16	22	20	21	8.8
16	0.00	---	---	---	---	---	17	17	21	22	20	12
17	0.00	---	---	---	---	---	21	16	21	22	19	12
18	---	---	---	---	---	---	20	16	21	22	19	12
19	---	---	---	---	---	---	19	14	21	22	19	12
20	---	---	---	---	---	---	19	12	20	22	19	12
21	---	---	---	---	---	---	18	10	21	21	19	11
22	---	---	---	---	---	---	19	9.2	20	21	18	9.9
23	---	---	---	---	---	---	18	8.6	21	22	21	8.7
24	---	---	---	---	---	---	17	7.5	21	22	22	13
25	---	---	---	---	---	---	17	7.2	20	23	22	15
26	---	---	---	---	---	---	18	6.7	16	23	22	14
27	---	---	---	---	---	---	19	7.7	17	22	21	14
28	---	---	---	---	---	---	21	11	17	21	21	14
29	---	---	---	---	---	---	21	11	17	21	21	13
30	---	---	---	---	---	---	17	10	17	22	21	11
31	---	---	---	---	---	---	---	12	---	23	21	---
TOTAL	---	---	---	---	---	---	---	413.9	515.6	602	639	431.4
MEAN	---	---	---	---	---	---	---	13.35	17.19	19.42	20.61	14.38
MAX	---	---	---	---	---	---	---	20	22	23	23	21
MIN	---	---	---	---	---	---	---	6.7	4.6	15	18	8.7
AC-FT	---	---	---	---	---	---	---	821	1020	1190	1270	856

e Estimated

CANYON CREEK BASIN

13159800 CANYON CREEK AT OREGON TRAIL CROSSING NEAR MOUNTAIN HOME, ID

LOCATION.--Lat 43°15'39", long 115°42'06", in SE¼NW¼SE¼ sec.11, T.2 S., R.6 E., Hydrologic Unit 17050101, on right bank, 31 mi upstream from mouth, 3 mi downstream from confluence of Syrup Creek and Long Tom Creek, and 8.5 mi north of Mountain Home.

DRAINAGE AREA.--70.5 mi^2.

PERIOD OF RECORD.--March 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,540 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Flow partly regulated by Long Tom Reservoir which receives water by inter-basin transfer from South Fork Boise River drainage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,420 ft^3/s Feb. 23, 1986, gage height, 5.09 ft; no flow Sept. 29 to Oct. 28, 1991, July 21 to Nov. 9, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 163 ft^3/s Apr. 1, gage height, 2.52 ft; minimum daily, 0.10 ft^3/s Oct. 3.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.13	0.42	1.0	3.3	10	23	115	56	89	44	42	45
2	0.12	0.37	1.2	3.3	9.7	21	120	45	90	50	41	44
3	0.10	0.36	1.4	3.7	8.6	20	98	43	84	51	40	44
4	0.11	0.36	1.3	3.5	8.1	19	89	38	82	54	40	44
5	0.13	0.37	1.3	3.4	e8.0	18	90	35	82	55	41	43
6	0.17	0.39	1.4	4.1	e7.5	18	98	42	82	55	41	43
7	0.21	0.40	1.7	7.4	7.3	33	108	55	80	55	26	43
8	0.16	0.45	1.5	28	7.5	37	87	55	78	54	25	42
9	0.17	0.44	1.8	39	7.0	35	80	55	78	54	25	40
10	0.19	0.48	1.9	39	7.0	33	77	48	85	54	25	39
11	0.28	0.45	e1.5	36	7.1	31	72	46	84	53	31	39
12	0.32	0.49	1.8	32	7.0	40	69	45	83	54	31	39
13	0.27	0.42	2.0	28	6.9	48	68	45	82	57	26	40
14	0.24	0.48	3.3	27	7.4	46	74	51	80	60	25	42
15	0.22	0.51	3.8	24	7.2	44	75	51	77	60	25	42
16	0.18	0.59	4.3	21	7.3	41	65	50	72	64	25	41
17	0.16	0.58	4.4	20	7.6	38	63	49	66	68	25	41
18	0.18	0.61	4.3	19	7.9	34	60	45	68	67	24	42
19	0.19	0.60	4.5	17	8.8	33	56	37	67	67	23	40
20	0.19	0.62	4.5	16	11	31	54	37	64	54	24	36
21	0.20	0.67	4.4	14	12	36	51	39	46	44	37	35
22	0.21	1.1	3.7	14	14	59	50	38	45	36	38	34
23	0.28	1.4	3.5	13	24	97	48	38	54	35	35	35
24	0.31	1.2	3.5	12	31	92	46	38	54	34	35	33
25	0.29	1.1	e3.0	12	33	86	50	38	47	42	34	29
26	0.30	1.2	e2.5	12	30	84	60	40	46	42	34	26
27	0.28	0.98	e3.0	13	26	84	61	40	46	42	27	16
28	0.28	1.0	3.7	11	25	81	59	41	46	41	26	4.4
29	0.29	1.1	3.5	e11	---	80	58	49	46	42	35	3.4
30	0.32	0.95	3.4	e10	---	86	58	49	45	43	40	3.1
31	0.45	---	3.4	e11	---	100	---	61	---	43	45	---
TOTAL	6.93	20.09	86.5	507.7	353.9	1528	2159	1399	2048	1574	991	1047.9
MEAN	0.224	0.670	2.790	16.38	12.64	49.29	71.97	45.13	68.27	50.77	31.97	34.93
MAX	0.45	1.4	4.5	39	33	100	120	61	90	68	45	45
MIN	0.10	0.36	1.0	3.3	6.9	18	46	35	45	34	23	3.1
AC-FT	14	40	172	1010	702	3030	4280	2770	4060	3120	1970	2080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

MEAN	3.542	2.780	5.930	15.26	36.68	66.34	62.39	56.30	56.80	50.33	37.61	23.56
MAX	9.21	8.06	32.3	114	261	196	170	105	79.4	88.9	70.5	52.8
(WY)	1996	1986	1997	1997	1986	1989	1984	1984	1989	1999	1999	1999
MIN	0.000	0.59	1.08	1.69	3.03	5.12	3.38	7.17	5.73	2.16	0.000	0.000
(WY)	1993	1995	1991	1992	2001	1992	1992	1992	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1984 - 2002	
ANNUAL TOTAL	3803.83		11722.02			
ANNUAL MEAN	10.42		32.12		33.37	
HIGHEST ANNUAL MEAN					69.6	1986
LOWEST ANNUAL MEAN					2.63	1992
HIGHEST DAILY MEAN	54	May 20	120	Apr 2	997	Feb 24 1986
LOWEST DAILY MEAN	0.08	Sep 4	0.10	Oct 3	0.00	Sep 28 1991
ANNUAL SEVEN-DAY MINIMUM	0.11	Aug 30	0.14	Oct 1	0.00	Sep 28 1991
ANNUAL RUNOFF (AC-FT)	7540		23250		24170	
10 PERCENT EXCEEDS	35		73		75	
50 PERCENT EXCEEDS	3.5		34		19	
90 PERCENT EXCEEDS	0.19		0.41		1.2	

e Estimated

CANYON CREEK BASIN

131610556 MCCALLEY DAM OUTFLOW AT MOUNTAIN HOME AIR FORCE BASE, ID

LOCATION.--Lat 43°03'00", long 115°53'07", in SW¼SW¼NW¼ sec.29, T.4 S., R.5 E., Elmore County, Crater Rings SW Quad., Hydrologic Unit 17050101, on right bank at McCalley Dam, 125 ft upstream from Liberator Street, on Mountain Home Air Force Base.

PERIOD OF RECORD.--December 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,980 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

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

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

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

CAL YR 2001 TOTAL 0.00 MEAN 0.000 MAX 0.00 MIN 0.00 AC-FT 0.00
WTR YR 2002 TOTAL 0.00 MEAN 0.000 MAX 0.00 MIN 0.00 AC-FT 0.00

BRUNEAU RIVER BASIN

13161500 BRUNEAU RIVER AT ROWLAND, NV

LOCATION.--Lat 41°56'00", long 115°40'25", in NW¼SE¼ sec.29, T.47 N., R.56 E., Elko County, Nevada, Hydrologic Unit 17050102, Humboldt National Forest, on left bank 2 mi upstream from McDonald Creek, and 0.5 mi south of Rowland.

DRAINAGE AREA.--382 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1913 to September 1918 (published as "near Rowland"), water years 1962-66 (annual maximum), October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,500 ft above NGVD of 1929, from topographic map. June 1913 to September 1918, nonrecording gage at different site and datum. October 1961 to September 1966, crest-stage gage at site 3 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,140 ft^3/s May 14, 1984, gage height, 12.01 ft; minimum daily, 2.5 ft^3/s Sept. 18, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 6	1545	*684	*5.80	May 1	1645	561	5.19
				June 1	2315	366	4.43

Minimum daily, 3.8 ft^3/s Aug. 17-19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	10	21	e14	e14	e28	406	485	296	47	6.9	4.9
2	5.5	9.7	17	e14	e12	e27	481	512	340	44	6.6	4.5
3	5.5	9.5	17	e13	e11	e26	505	519	288	40	6.3	4.2
4	5.9	9.3	15	e14	e10	e30	513	474	250	38	6.6	3.9
5	5.8	9.5	16	e16	e14	e34	578	450	228	36	6.2	4.3
6	5.9	9.4	21	e16	e17	e34	621	437	218	34	5.9	5.6
7	6.2	8.9	17	e16	e14	e35	557	430	209	32	5.8	7.4
8	6.7	8.8	18	e16	e13	e32	467	381	197	28	5.9	7.9
9	7.0	8.6	20	e16	e13	e39	420	349	185	26	5.8	6.9
10	7.1	9.1	17	e15	e14	e42	397	322	174	24	5.6	6.2
11	7.9	9.3	16	e15	e15	e43	368	296	157	21	5.2	5.8
12	8.4	10	e16	e15	e14	e45	373	281	142	19	4.8	5.5
13	7.5	10	e16	e15	e13	e47	401	285	130	18	4.6	5.3
14	7.2	11	e16	e15	e14	e48	485	297	122	18	4.4	5.0
15	7.0	11	e16	e16	e14	46	521	299	118	17	4.1	4.6
16	7.0	10	e15	e16	e14	46	374	297	112	17	3.9	4.7
17	7.1	11	e15	e16	e13	45	328	290	106	17	3.8	7.0
18	7.3	11	e15	e15	e14	43	286	296	103	18	3.8	9.8
19	8.1	11	e15	e12	e16	44	259	316	98	17	3.8	8.2
20	8.2	11	e15	e14	e19	45	239	330	94	15	3.9	7.0
21	8.1	13	e15	e14	e20	56	222	326	93	14	4.2	6.3
22	8.3	23	e14	e14	e22	82	221	303	94	12	4.7	6.2
23	8.7	18	e13	e14	e24	105	228	261	90	11	5.1	6.2
24	8.8	14	e13	e14	e28	101	227	231	76	9.6	6.0	6.0
25	8.7	14	e13	e13	e26	95	239	208	71	9.0	5.5	5.8
26	8.8	14	e14	e13	e28	95	269	196	66	8.7	5.0	6.0
27	8.8	12	e14	e13	e24	119	283	191	63	8.6	5.0	6.2
28	8.8	12	e14	e14	e28	171	265	195	59	8.3	5.4	6.6
29	8.7	17	e14	e13	---	233	272	213	54	7.9	5.5	7.1
30	9.3	17	e14	e12	---	279	317	240	51	7.3	5.2	7.3
31	11	---	e14	e14	---	357	---	262	---	6.8	5.2	---
TOTAL	234.8	352.1	486	447	478	2472	11122	9972	4284	629.2	160.7	182.4
MEAN	7.574	11.74	15.68	14.42	17.07	79.74	370.7	321.7	142.8	20.30	5.184	6.080
MAX	11	23	21	16	28	357	621	519	340	47	6.9	9.8
MIN	5.5	8.6	13	12	10	26	221	191	51	6.8	3.8	3.9
AC-FT	466	698	964	887	948	4900	22060	19780	8500	1250	319	362

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2002, BY WATER YEAR (WY)

MEAN	21.58	27.48	28.33	38.54	54.48	159.3	315.1	384.1	212.5	52.19	16.72	14.54
MAX	52.2	58.5	56.3	137	276	608	666	1256	744	257	86.5	39.8
(WY)	1985	1985	1976	1971	1986	1972	1914	1984	1984	1984	1984	1984
MIN	7.57	11.7	11.9	12.0	16.0	37.4	55.0	50.4	14.7	5.60	2.59	3.87
(WY)	2002	2002	1993	1992	2001	1981	1968	1992	1992	1992	2001	1981

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1913 - 2002	
ANNUAL TOTAL	13087.9		30820.2			
ANNUAL MEAN	35.86		84.44		110.4	
HIGHEST ANNUAL MEAN					290	1984
LOWEST ANNUAL MEAN					24.2	1992
HIGHEST DAILY MEAN	224	Apr 28	621	Apr 6	2070	May 14 1984
LOWEST DAILY MEAN	1.7	Aug 28	3.8	Aug 17	1.7	Aug 28 2001
ANNUAL SEVEN-DAY MINIMUM	1.9	Aug 26	3.9	Aug 15	1.9	Aug 26 2001
ANNUAL RUNOFF (AC-FT)	25960		61130		79990	
10 PERCENT EXCEEDS	129		297		338	
50 PERCENT EXCEEDS	14		15		35	
90 PERCENT EXCEEDS	3.5		5.8		10	

e Estimated

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977-84, April 1998 to April 2000, April, 2002.

REMARKS.--In April 1998, station was established in cooperation with the U.S. Forest Service to collect sediment data.

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

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)
APR													
01...	1200	382	--	--	--	--	--	--	--	--	--	--	--
01...	1224	382	22	.250	0	0	1	22	53	72	78	79	79
02...	0950	448	--	--	--	--	--	--	--	--	--	--	--
02...	1100	448	22	.250	0	0	1	19	47	66	78	89	95
03...	1017	476	--	--	--	--	--	--	--	--	--	--	--
08...	1130	451	22	.250	0	0	1	22	55	74	82	90	96
09...	1000	418	--	--	--	--	--	--	--	--	--	--	--
09...	1014	418	22	.250	0	0	0	13	32	49	71	90	97

Date	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR					
01...	--	--	133	137	88
01...	79	100	--	--	--
02...	--	--	198	240	87
02...	100	--	--	--	--
03...	--	--	139	179	81
08...	100	--	62	75.5	77
09...	--	--	51	57.6	79
09...	100	--	--	--	--

BRUNEAU RIVER BASIN

13162225 JARBIDGE RIVER BELOW JARBIDGE, NV

LOCATION.--Lat 41°53'26", long 115°25'40", in SW¼NW¼ sec.9, T.46 N., R.58 E., Elko County, Nevada, Hydrologic Unit 17050102, Humboldt National Forest, on right bank, 1.0 mi north of Jarbidge.

DRAINAGE AREA.--30.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,050 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.-Maximum discharge, 824 ft^3/s May 24, 1999, gage height, 5.50 ft; minimum daily, 2.5 ft^3/s Aug. 23, 26, 29, 30, Sept. 16, 2000, Sept. 11, 2001.

EXTREMES FOR CURRENT YEAR.-Maximum discharge, 565 ft^3/s June 1, gage height, 5.11 ft; minimum daily, 2.6 ft^3/s Oct. 1, 2.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	4.5	6.5	5.7	e5.5	e5.4	40	85	467	28	5.0	4.3
2	2.6	4.2	6.1	5.9	e5.6	e5.1	47	85	446	26	4.9	3.9
3	2.8	4.0	5.8	6.1	e5.4	e4.5	51	90	347	22	5.7	3.7
4	3.0	4.0	5.4	5.8	e5.2	e5.2	61	91	276	19	7.0	3.7
5	3.1	4.3	e4.5	6.1	e4.8	e6.0	75	94	256	18	6.8	4.5
6	3.1	4.4	e5.7	7.1	e5.3	e6.1	79	103	263	17	6.7	4.9
7	3.2	4.3	e5.1	9.0	e6.0	e6.0	70	106	253	16	6.9	6.6
8	3.4	4.1	e4.5	8.7	e5.6	e5.6	61	90	209	14	6.8	5.6
9	3.6	4.3	5.6	7.7	e5.1	e5.2	58	82	156	14	6.5	5.3
10	3.6	4.4	5.7	e6.0	e4.3	e6.0	53	70	122	12	6.1	4.8
11	4.2	4.6	5.4	7.1	e5.7	e5.9	49	64	102	12	5.4	4.5
12	4.2	4.5	e4.8	7.0	e5.1	e5.9	57	69	88	11	5.3	4.4
13	4.0	4.7	e5.6	6.8	e4.7	e5.8	74	89	85	11	5.2	3.9
14	3.8	4.7	e5.3	7.5	e6.2	e5.5	110	118	95	10	5.0	3.7
15	3.7	4.6	e4.5	7.0	e4.9	e5.4	112	130	103	10	4.7	3.4
16	3.7	4.3	e5.2	e6.5	e5.8	e5.4	81	117	104	9.8	4.6	3.8
17	3.7	4.4	5.7	e5.5	e5.5	e5.3	60	144	100	9.8	4.4	6.8
18	3.5	4.5	5.6	e7.0	e5.4	e5.5	46	181	92	10	4.7	8.7
19	3.5	4.2	5.7	e5.5	e5.7	e5.9	39	241	82	9.5	4.7	5.4
20	3.5	4.4	5.7	6.5	e5.5	6.6	34	246	72	8.7	4.7	4.9
21	3.5	4.6	e5.4	6.6	e5.3	8.9	32	181	64	8.0	5.0	4.6
22	3.5	6.9	e5.2	e5.0	e5.7	13	41	111	63	7.4	4.8	4.4
23	4.3	5.5	e5.0	e5.0	e6.0	14	50	85	57	6.9	5.0	4.4
24	4.1	5.1	e4.8	6.4	e5.6	13	51	77	51	6.6	5.2	4.0
25	4.0	5.7	e5.1	6.0	e5.7	11	57	75	47	6.3	4.6	4.0
26	4.0	5.5	e5.6	6.1	e5.8	11	68	75	43	6.2	4.4	4.1
27	3.8	5.4	6.1	6.6	e4.9	14	67	81	39	6.0	4.7	4.2
28	3.7	e4.2	5.7	7.3	e5.5	17	57	115	36	5.8	5.1	4.4
29	3.7	e4.6	5.5	e6.0	---	22	60	190	33	5.6	4.9	4.6
30	3.9	e5.2	5.6	e4.5	---	26	71	291	30	5.4	4.6	4.7
31	6.3	---	5.7	e5.5	---	31	---	437	---	5.2	4.6	---
TOTAL	113.6	140.1	168.1	199.5	151.8	293.2	1811	4013	4181	357.2	164.0	140.2
MEAN	3.665	4.670	5.423	6.435	5.421	9.458	60.37	129.5	139.4	11.52	5.290	4.673
MAX	6.3	6.9	6.5	9.0	6.2	31	112	437	467	28	7.0	8.7
MIN	2.6	4.0	4.5	4.5	4.3	4.5	32	64	30	5.2	4.4	3.4
AC-FT	225	278	333	396	301	582	3590	7960	8290	709	325	278

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

MEAN	5.537	6.467	5.963	6.102	7.053	13.41	45.28	129.4	113.0	20.05	5.481	4.560
MAX	8.33	9.66	7.52	6.64	8.47	17.7	60.4	170	189	55.4	9.15	6.86
(WY)	1999	1999	1999	1999	2001	1999	2002	1999	1998	1998	1998	1998
MIN	3.66	4.67	5.42	5.22	5.42	9.46	27.5	105	28.5	6.96	3.02	3.06
(WY)	2002	2002	2002	2001	2002	2002	2001	2000	2001	2000	2000	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1998 - 2002	
ANNUAL TOTAL	6986.2		11732.7			
ANNUAL MEAN	19.14		32.14		27.84	
HIGHEST ANNUAL MEAN					39.1	1999
LOWEST ANNUAL MEAN					19.4	2001
HIGHEST DAILY MEAN	257	May 15	467	Jun 1	541	May 30 1999
LOWEST DAILY MEAN	2.5	Sep 11	2.6	Oct 1	2.5	Aug 23 2000
ANNUAL SEVEN-DAY MINIMUM	2.7	Sep 25	2.9	Oct 1	2.6	Aug 23 2000
ANNUAL RUNOFF (AC-FT)	13860		23270		20170	
10 PERCENT EXCEEDS	50		90		74	
50 PERCENT EXCEEDS	5.7		5.8		7.0	
90 PERCENT EXCEEDS	3.1		4.0		3.9	

e Estimated

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to May 2000, May 2002.

REMARKS.--In April 1998, station was was established in cooperation with the U.S. Forest Service to collect sediment data.

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

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)
MAY													
20...	0836	252	--	--	--	--	--	--	--	--	--	--	--
20...	0842	249	22	.250	0	0	2	10	30	51	69	77	84
20...	1350	231	--	--	--	--	--	--	--	--	--	--	--
20...	1400	242	22	.250	0	0	4	17	36	56	75	87	90
21...	1435	169	--	--	--	--	--	--	--	--	--	--	--
21...	1440	169	22	.250	0	0	3	12	35	61	81	91	97

Date	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAY				
20...	--	24	16.3	44
20...	100	--	--	--
20...	--	36	22.5	48
20...	100	--	--	--
21...	--	28	12.8	65
21...	100	--	--	--

BRUNEAU RIVER BASIN

13168500 BRUNEAU RIVER NEAR HOT SPRING, ID

LOCATION.--Lat 42°46'16", long 115°43'10", in NE¼NE¼SE¼ sec.34, T.7 S., R.6 E., Owyhee County, Hydrologic Unit 17050102, on right bank, 1 mi downstream from Hot Creek, 1.5 mi south of Hot Spring, 9 mi southeast of Bruneau, 16 mi downstream from East Fork, and at mile 22.0.

DRAINAGE AREA.--2,630 mi^2, approximately. Mean elevation, 5,600 ft.

PERIOD OF RECORD.--July 1909 to March 1915, October 1943 to current year.

REVISED RECORDS.--WSP 1063: 1913. WSP 1517: 1910(M). WSP 1567: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,598.5 ft above NGVD of 1929. Prior to Mar. 12, 1910, nonrecording gage at site 0.2 mi upstream at different datum. Mar. 12, 1910 to Mar. 15, 1915, nonrecording gage at present site and datum.

REMARKS.--Records good except for discharges Apr. 18 to June 25 and estimated daily discharges, which are fair. Station equipment includes satellite telemetry. Several small reservoirs on tributaries above station. Diversions above station for irrigation of about 12,900 acres (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,860 ft^3/s May 15, 1984, gage height, 13.03 ft; minimum, 20 ft^3/s Nov. 29, 1979, Jan. 2, 1995, result of freezeup; minimum gage height, 2.98 ft, Nov. 29, 1979, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 920 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 6	2245	999	6.14	May 20	1915	1,060	6.22
Apr. 16	0145	1,030	6.18	June 2	0915	*1,280	*6.53

Minimum, 26 ft^3/s Dec. 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	54	75	103	80	143	504	598	1100	211	53	42
2	34	59	73	103	102	108	608	765	1180	199	51	41
3	35	61	91	104	107	102	752	879	1200	186	49	39
4	34	58	91	108	96	105	779	871	1030	172	50	37
5	34	57	84	99	84	118	803	844	892	161	50	36
6	35	57	77	94	77	142	876	824	853	153	48	35
7	35	56	94	116	94	152	934	838	873	143	47	37
8	37	57	92	144	107	143	862	852	844	134	47	42
9	38	58	79	168	112	143	753	781	763	124	46	46
10	38	58	73	159	91	127	716	724	676	118	46	47
11	40	57	85	142	86	172	691	669	598	111	45	46
12	44	59	83	112	89	148	664	625	532	103	43	44
13	45	60	82	132	92	167	654	596	477	95	42	42
14	46	60	83	120	85	222	701	620	461	89	41	40
15	45	60	96	96	91	192	834	699	477	88	41	39
16	44	61	82	94	94	166	955	727	498	87	39	38
17	43	61	70	99	95	154	747	717	484	86	38	38
18	43	62	98	96	108	139	641	761	468	85	37	39
19	44	63	94	103	112	133	583	849	445	85	37	43
20	44	63	96	91	112	130	535	974	411	84	36	55
21	45	64	92	84	119	130	498	1000	384	81	36	52
22	46	65	81	117	135	141	471	906	370	77	37	48
23	46	70	63	106	155	260	498	833	368	73	37	45
24	45	80	46	84	170	317	566	735	354	69	39	45
25	45	82	69	97	174	305	497	657	329	64	41	44
26	48	73	37	119	139	274	492	599	310	60	42	43
27	50	e70	43	117	115	245	532	564	289	57	41	42
28	50	e65	69	109	124	248	554	594	268	57	41	42
29	52	62	104	84	---	287	528	684	248	56	41	43
30	53	66	98	40	---	359	529	838	225	55	41	44
31	54	---	100	64	---	423	---	993	---	54	42	---
TOTAL	1326	1878	2500	3304	3045	5895	19757	23616	17407	3217	1324	1274
MEAN	42.77	62.60	80.65	106.6	108.8	190.2	658.6	761.8	580.2	103.8	42.71	42.47
MAX	54	82	104	168	174	423	955	1000	1200	211	53	55
MIN	34	54	37	40	77	102	471	564	225	54	36	35
AC-FT	2630	3730	4960	6550	6040	11690	39190	46840	34530	6380	2630	2530

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

MEAN	98.67	120.9	126.3	161.7	212.6	398.6	784.8	1249	982.6	284.6	98.70	79.76
MAX	185	248	425	724	905	1901	1882	4102	3122	1044	334	170
(WY)	1985	1910	1965	1971	1986	1910	1952	1984	1984	1984	1984	1984
MIN	42.8	62.6	58.7	80.2	98.2	119	196	277	97.8	55.3	31.5	34.8
(WY)	2002	2002	1991	1991	1994	1955	1968	1992	1992	1992	2001	1981

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1909 - 2002	
ANNUAL TOTAL	55701		84543			
ANNUAL MEAN	152.6		231.6		383.0	
HIGHEST ANNUAL MEAN					1012	1984
LOWEST ANNUAL MEAN					113	1992
HIGHEST DAILY MEAN	984	May 17	1200	Jun 3	6470	May 15 1984
LOWEST DAILY MEAN	28	Aug 20	34	Oct 1	21	Dec 21 1998
ANNUAL SEVEN-DAY MINIMUM	28	Aug 26	34	Oct 1	28	Aug 26 2001
ANNUAL RUNOFF (AC-FT)	110500		167700		277500	
10 PERCENT EXCEEDS	458		730		1110	
50 PERCENT EXCEEDS	82		94		145	
90 PERCENT EXCEEDS	33		41		66	

e Estimated

13169500 BIG JACKS CREEK NEAR BRUNEAU, ID
(Hydrologic Benchmark station)

LOCATION.--Lat 42°47'06", long 115°59'00", in NW¼SE¼ sec. 28, T. 7 S., R. 4 E., Owyhee County, Hydrologic Unit 17050102, U.S. Bureau of Land Management lands, on left bank, 0.2 mi upstream from confluence with Little Jacks Creek, 11.5 mi southwest of Bruneau, and at mile 12.7.

DRAINAGE AREA.--253 mi^2.

PERIOD OF RECORD.--December 1938 to October 1949, July 1965 to current year. Prior to October 1968, published as “Wickahoney Creek near Bruneau”.

REVISED RECORDS.--WDR Idaho 1967: Drainage area.

GAGE.--Water-stage recorder and a self-cleaning broad-crested concrete weir. Elevation of gage is 2,810 ft above NGVD of 1929, by barometer. December 1938 to October 1949, at site 145 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. No diversion or regulation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,950 ft^3/s Jan. 2, 1997, gage height, 5.82 ft; no flow for long periods most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 107 ft^3/s Apr. 2; no flow for many days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	0.0	0.0	0.0	0.0	65	6.2	0.00	0.00	0.00	0.00
2	0.0	0.0	0.0	0.0	0.0	0.0	107	5.0	0.00	0.00	0.00	0.00
3	0.0	0.0	0.0	0.0	0.0	0.0	85	4.0	0.00	0.00	0.00	0.00
4	0.0	0.0	0.0	0.0	0.0	0.0	68	3.4	0.00	0.00	0.00	0.00
5	0.0	0.0	0.0	0.0	0.0	0.0	58	2.9	0.00	0.00	0.00	0.00
6	0.0	0.0	0.0	0.0	0.0	0.0	67	2.5	0.00	0.00	0.00	0.00
7	0.0	0.0	0.0	0.0	0.0	0.0	40	2.3	0.00	0.00	0.00	0.00
8	0.0	0.0	0.0	0.0	0.0	0.0	26	2.7	0.00	0.00	0.00	0.00
9	0.0	0.0	0.0	0.0	0.0	0.0	20	2.6	0.00	0.00	0.00	0.00
10	0.0	0.0	0.0	0.0	0.0	0.0	19	2.5	0.00	0.00	0.00	0.00
11	0.0	0.0	0.0	0.0	0.0	0.0	19	2.2	0.00	0.00	0.00	0.00
12	0.0	0.0	0.0	0.0	0.0	0.0	16	1.7	0.00	0.00	0.00	0.00
13	0.0	0.0	0.0	0.0	0.0	0.0	14	1.2	0.00	0.00	0.00	0.00
14	0.0	0.0	0.0	0.0	0.0	0.0	13	0.86	0.00	0.00	0.00	0.00
15	0.0	0.0	0.0	0.0	0.0	0.00	14	0.75	0.00	0.00	0.00	0.00
16	0.0	0.0	0.0	0.0	0.0	0.00	15	0.55	0.00	0.00	0.00	0.00
17	0.0	0.0	0.0	0.0	0.0	0.00	14	0.29	0.00	0.00	0.00	0.00
18	0.0	0.0	0.0	0.0	0.0	0.00	14	0.07	0.00	0.00	0.00	0.00
19	0.0	0.0	0.0	0.0	0.0	0.00	13	0.00	0.00	0.00	0.00	0.00
20	0.0	0.0	0.0	0.0	0.0	0.00	11	0.00	0.00	0.00	0.00	0.00
21	0.0	0.0	0.0	0.0	0.0	0.00	9.7	0.26	0.00	0.00	0.00	0.00
22	0.0	0.0	0.0	0.0	0.0	0.00	8.4	0.95	0.00	0.00	0.00	0.00
23	0.0	0.0	0.0	0.0	0.0	0.74	7.0	0.74	0.00	0.00	0.00	0.00
24	0.0	0.0	0.0	0.0	0.0	14	6.4	0.48	0.00	0.00	0.00	0.00
25	0.0	0.0	0.0	0.0	0.0	15	6.0	0.00	0.00	0.00	0.00	0.00
26	0.0	0.0	0.0	0.0	0.0	9.4	5.6	0.00	0.00	0.00	0.00	0.00
27	0.0	0.0	0.0	0.0	0.0	8.3	5.1	0.00	0.00	0.00	0.00	0.00
28	0.0	0.0	0.0	0.0	0.0	9.0	5.3	0.00	0.00	0.00	0.00	0.00
29	0.0	0.0	0.0	0.0	---	9.1	5.1	0.00	0.00	0.00	0.00	0.00
30	0.0	0.0	0.0	0.0	---	12	5.9	0.00	0.00	0.00	0.00	0.00
31	0.0	---	0.0	0.0	---	21	---	0.00	---	0.00	0.00	---
TOTAL	0.0	0.0	0.0	0.0	0.0	98.54	762.5	44.15	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	3.179	25.42	1.424	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	21	107	6.2	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	5.1	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	195	1510	88	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2002, BY WATER YEAR (WY)

MEAN	1.112	1.086	0.633	5.443	7.111	18.17	13.31	6.493	3.364	1.386	0.995	1.016
MAX	13.6	13.1	8.07	80.4	69.8	110	115	89.4	54.6	18.0	15.3	13.9
(WY)	1985	1985	1984	1997	1986	1972	1984	1984	1984	1984	1984	1984
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1940	1940	1940	1940	1942	1942	1940	1940	1939	1939	1939	1939

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1939 - 2002	
ANNUAL TOTAL	13.73		905.19			
ANNUAL MEAN	0.038		2.480		5.072	
HIGHEST ANNUAL MEAN					32.6	1984
LOWEST ANNUAL MEAN					0.000	1966
HIGHEST DAILY MEAN	9.2	Mar 22	107	Apr 2	1210	Jan 2 1997
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	May 16 1939
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	May 16 1939
ANNUAL RUNOFF (AC-FT)	27		1800		3670	
10 PERCENT EXCEEDS	0.00		5.4		12	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

13171500 C. J. STRIKE RESERVOIR NEAR GRAND VIEW, ID

LOCATION.--Lat 42°56'38", long 115°58'28", in SW¼NW¼SW¼ sec.34, T.5 S., R.4 E., Owyhee County, Hydrologic Unit 17050103, on left bank near the dam on Snake River, 7 mi southeast of Grand View, at mile 494.0.

DRAINAGE AREA.--40,800 mi^2, approximately.

PERIOD OF RECORD.--March 1952 to September 1967 (month-end contents only), July 1986 to current year.

REVISED RECORDS.--WDR ID-87-1: 1986 (M, m).

GAGE.--Water-stage recorder. Datum of gage is set to NGVD of 1929.

REMARKS.--Station includes satellite telemetry. Reservoir is formed by earthfill, rock-faced dam. Storage began in February 1952. Total capacity, 250,000 acre-ft at elevation 2,455 ft (top of spillway gates), of which about 50,000 acre-ft is controlled storage. Water is used for power generation by Idaho Power Co. Figures given herein represent total contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 253,700 acre-ft Mar. 31, 1956, elevation, 2,455.49 ft; minimum since first filling, 215,600 acre-ft Mar. 3-10, 1991, elevation, 2,450.14 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 250,700 acre-ft Sept. 9, elevation, 2,455.09 ft; minimum, 245,400 acre-ft June 16, elevation, 2,454.39 ft.

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

2,554.0	242,600
2,555.0	250,000
2,556.0	257,600

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248700	248100	248200	248000	247500	248300	247600	247600	247600	249400	248700	249100
2	248400	248700	248100	248100	247600	248300	248000	247900	247900	249300	248700	249000
3	248800	248000	248800	247800	248000	248400	248400	248700	248800	249100	248900	248900
4	248700	247900	248200	248300	247900	248000	248000	248300	249100	249000	247900	249200
5	248100	248300	247900	247900	247900	247900	247600	248300	248600	248800	249000	248700
6	248300	247800	248100	247700	247900	248200	248400	248400	248000	248900	248600	248400
7	248800	248700	247900	247700	247400	248700	247600	248500	246600	248800	249000	248700
8	249000	248700	248400	248000	249100	248600	247800	248400	248100	248700	249400	248700
9	249100	248400	248400	248400	248500	247300	247000	248600	247600	248700	249200	249300
10	248600	248600	248200	247700	248000	248300	247900	248000	248000	248800	249600	249000
11	248900	248700	248200	248400	247700	248100	247600	248700	248100	249100	249400	248600
12	249400	248000	248300	247600	248500	247600	247900	248400	248300	248800	249100	248500
13	249100	248400	248100	248200	248100	248900	247400	248000	247800	248200	249300	248700
14	249100	248800	247500	248200	248600	248700	246600	247000	246900	248900	249000	248700
15	248700	248200	248300	248200	248100	248800	247800	247200	246400	249100	249100	248400
16	248600	247200	247600	247700	247900	248500	248200	247000	246000	249500	248700	248400
17	248500	248100	247200	247700	248700	248100	247900	247200	246500	249600	249000	248500
18	247900	248500	247200	248200	248400	248200	247700	246900	246700	249500	248900	248000
19	247600	247900	247800	247900	248500	248200	247900	247200	247900	249400	248800	248700
20	248200	247500	247000	247700	249200	248000	247500	247900	248900	249400	248100	248800
21	247600	247800	247800	248400	248400	248000	247400	248100	249400	249100	248700	249100
22	248200	247900	247900	248400	247900	248100	247200	249400	249100	249400	248500	249100
23	248400	248500	247900	248400	247700	248200	247300	248700	249100	248900	248500	249100
24	248300	247800	248400	248200	247700	248400	247900	249000	248800	249100	249000	249100
25	247900	248300	248000	248200	249000	247100	247800	248600	248700	248900	249100	248600
26	247800	248100	247400	248300	247900	247900	247600	248600	249000	249100	249300	248600
27	247500	248200	247000	248400	248200	247900	248300	248000	248800	248200	248700	249000
28	248400	247900	248400	248300	247100	247800	247500	247900	249000	248600	249000	248800
29	248000	248100	247900	247700	---	248200	247600	247600	249100	249100	248700	249000
30	248200	247900	248200	248200	---	248000	247700	248100	249200	249400	248800	249300
31	248000	---	247800	247800	---	248200	---	247900	---	248800	249300	---
MAX	249400	248800	248800	248400	249200	248900	248400	249400	249400	249600	249600	249300
MIN	247500	247200	247000	247600	247100	247100	246600	246900	246000	248200	247900	248000
†	2454.73	2454.71	2454.70	2454.70	2454.61	2454.76	2454.69	2454.71	2454.89	2454.84	2454.90	2454.90
‡	-100	-100	-100	0	-700	1100	-500	200	1300	-400	500	0

CAL YR 2000 ‡ 300
WTR YR 2002 MAX 249600 MIN 246000 ‡ 1200

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

SNAKE RIVER MAIN STEM

13171620 SNAKE RIVER BELOW C.J. STRIKE DAM NEAR GRAND VIEW, ID

LOCATION.--Lat 42°56'50", long 115°58'49", in SW¼SE¼NE¼ sec.33, T.5 S., R.4 E., Owyhee County, Hydrologic Unit 17050103, on downstream left bank end of bridge about 0.25 mi below dam, 10 mi northwest of Bruneau, 6.5 mi southeast of Grand View, and at mile 493.8.

DRAINAGE AREA.--40,800 mi^2, approximately.

PERIOD OF RECORD.--April 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,350 ft above NGVD of 1929, from topographic map.

REMARKS.--Station equipment includes radio telemetry.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,000 ft^3/s June 20, 21, 1997, gage height, 14.88 ft; minimum, 2,000 ft^3/s Mar. 4, 1988, gage height, 3.28 ft; minimum daily, 3,880 ft^3/s June 12, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9,050 ft^3/s Mar. 25; minimum daily, 4,000 ft^3/s July 10.

REVISIONS.--The maximum daily discharge for water year 2001 has been revised to 11,200 ft^3/s, December 12, 2000, superseding the figure published in the report for 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7290	7090	6830	6630	6600	6750	7660	6140	5580	4010	5070	5320
2	7020	7070	6560	6840	6660	7250	7850	6100	5700	4270	5300	5250
3	7070	7230	6710	6840	6290	6850	7830	6060	5770	4020	5130	5460
4	7090	7310	7000	6680	6740	7420	7840	6660	6180	4030	5190	5290
5	7490	7070	7100	6900	6810	7010	7360	6280	6320	4040	4840	5410
6	7040	7260	6860	6870	6650	6940	6460	6170	5750	4030	5280	5250
7	6970	6930	6820	6830	6540	7560	7360	5870	5570	4030	5060	5250
8	7550	7330	7040	6970	5910	8780	7160	6190	5150	4100	5290	5470
9	7040	7260	6660	6760	7090	8770	7110	6190	5680	4050	4990	5790
10	7500	7060	6840	7220	7110	6760	6390	6580	5560	4000	5390	5730
11	7230	7290	6890	6970	6550	7590	6650	6430	5560	4070	5050	5810
12	7530	7440	6790	6920	6530	7440	6360	6370	5340	4330	5010	5540
13	7470	7040	6870	6620	6910	7130	6360	6160	5580	4160	5420	5440
14	7580	7180	7410	6680	6340	8270	6540	6130	5610	4090	5210	5290
15	8070	7250	6560	6600	7280	7840	5920	5800	5110	4080	5180	5560
16	7890	7460	7110	7170	6690	7570	6510	5790	4940	4230	4680	5330
17	7310	6720	6770	6530	6440	7490	6310	5930	4190	4470	4710	5230
18	7470	6820	6880	6310	6900	7290	6430	5640	4170	4690	4860	5470
19	7260	7200	6450	6750	6940	7400	6550	5740	4130	5030	5270	5410
20	7010	7040	7110	6660	6930	7350	6510	5660	4080	4880	4840	5600
21	7270	6910	6410	6230	7670	7450	6100	5810	4300	4790	4460	5620
22	6750	6940	6890	6720	7650	7590	5740	5830	4680	5190	5020	6010
23	6740	6800	6670	6660	7600	7600	5630	6500	4670	5250	4990	5520
24	7240	7610	6250	6720	7340	8430	6030	6170	4670	5190	5010	5990
25	7120	6710	7050	6730	7740	9050	6030	6180	4470	5020	5010	6250
26	6950	6650	6860	6350	7760	7720	5930	6110	4470	4880	4850	6030
27	7060	6970	6820	6700	7140	7670	5870	6200	4090	4950	5080	5980
28	6720	7100	6110	6620	7250	7530	6380	5810	4030	4780	5170	5970
29	7280	7140	6860	7190	---	7500	5840	5620	4040	4730	5260	6160
30	7050	6910	6640	6350	---	7560	5900	5250	4040	5190	4830	6670
31	7100	---	6820	6730	---	7500	---	6190	---	5140	4990	---
TOTAL	224160	212790	210640	208750	194060	235060	196610	187560	149430	139720	156440	169100
MEAN	7231	7093	6795	6734	6931	7583	6554	6050	4981	4507	5046	5637
MAX	8070	7610	7410	7220	7760	9050	7850	6660	6320	5250	5420	6670
MIN	6720	6650	6110	6230	5910	6750	5630	5250	4030	4000	4460	5230
AC-FT	444600	422100	417800	414100	384900	466200	390000	372000	296400	277100	310300	335400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2002, BY WATER YEAR (WY)

MEAN	9838	9997	10290	10820	11200	12330	12230	11330	11560	6853	7101	8507
MAX	18320	16300	18090	18390	27560	29390	26950	25470	34180	10510	10450	14800
(WY)	1987	1987	1987	1997	1997	1997	1986	1986	1997	1997	1997	1997
MIN	7231	7093	4910	6734	6931	6781	6049	5090	4580	4507	5046	5637
(WY)	2002	2002	1990	2002	2002	1991	1992	1992	1992	2002	2002	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1985 - 2002	
ANNUAL TOTAL	2426770		2284320			
ANNUAL MEAN	6649		6258		10120	
HIGHEST ANNUAL MEAN					18090	1997
LOWEST ANNUAL MEAN					6258	2002
HIGHEST DAILY MEAN	8830	May 18	9050	Mar 25	44000	Jun 16 1997
LOWEST DAILY MEAN	4580	Jun 18	4000	Jul 10	3880	Jun 12 1992
ANNUAL SEVEN-DAY MINIMUM	4950	Jun 18	4040	Jul 4	4040	Jul 4 2002
ANNUAL RUNOFF (AC-FT)	4813000		4531000		7328000	
10 PERCENT EXCEEDS	7670		7470		17500	
50 PERCENT EXCEEDS	6870		6530		8180	
90 PERCENT EXCEEDS	5260		4760		5940	

SNAKE RIVER MAIN STEM

13172500 SNAKE RIVER NEAR MURPHY, ID

LOCATION.--Lat 43°17'31", long 116°25'12", in NW¼NE¼SE¼ sec.35, T.1 S., R.1 W., Ada County, Hydrologic Unit 17050103, on right bank, 4.2 mi downstream from Swan Falls powerplant, 7.5 mi northeast of Murphy, and at mile 453.5.

DRAINAGE AREA.--41,900 mi^2, approximately.

PERIOD OF RECORD.--August to October 1912, August 1913 to current year.

REVISED RECORDS.--WSP 1737: 1933(M).

GAGE.--Water-stage recorder. Datum of gage is 2,271.17 ft above NGVD of 1929. Prior to Sept. 7, 1914, nonrecording gage, and Sept. 7, 1914 to Sept. 30, 1935, water-stage recorder at site 3.5 mi upstream at datum 9.79 ft higher.

REMARKS.--Station equipment includes satellite telemetry. Major regulation by American Falls Reservoir, 260.5 mi upstream. Diurnal fluctuation caused by hydroelectric plants upstream. Diversions above station for irrigation of about 2,590,000 acres, of which about 701,000 acres are irrigated by withdrawals from ground water (1966 determination).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,300 ft^3/s June 22, 1918, gage height, 13.95 ft, site and datum then in use; minimum, 3,650 ft^3/s July 7, 1981, gage height, 2.22 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,790 ft^3/s Mar. 9, gage height, 4.45 ft; minimum, 4,170 ft^3/s July 4, gage height, 2.41 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7200	7570	7580	7140	7250	7260	7570	6560	5940	4660	5250	5520
2	7030	7410	7320	7490	7110	7060	7940	6070	5810	4780	5230	5680
3	7110	7440	6980	7350	7030	7530	7970	5840	5820	4840	5430	5770
4	7080	7590	7520	7220	6860	7010	7960	6110	5920	4710	5140	5720
5	7390	7850	7590	7370	7240	7590	7950	6830	6570	4680	5150	5430
6	7080	7350	7630	7470	7170	7310	7110	6470	6000	4730	5270	5640
7	7280	7440	7160	7430	7050	7170	6890	5890	5900	4700	5280	5600
8	7500	7360	7760	7450	6770	8540	7600	6020	5820	4670	5300	5630
9	7240	7770	7330	7310	6660	9310	7140	6360	5760	4690	5430	6170
10	7180	7750	7170	7480	7620	7950	7110	6210	5940	4620	5280	6250
11	7720	7540	7510	7720	7130	7060	6440	6710	5980	4650	5230	6300
12	7470	7790	7230	7470	7070	7730	6630	6660	5980	4770	5190	6340
13	7650	7910	7780	7230	7100	7530	6240	6090	5920	4800	5390	5840
14	7720	7410	7400	7020	7280	7950	6920	6130	6000	4710	5440	5920
15	8060	7740	7260	7690	7020	8240	6250	6120	5810	4660	5340	6400
16	8250	7880	7390	7150	7050	8020	6160	5810	5670	4690	5130	6040
17	7700	7790	7670	7330	7180	7460	6720	5800	5080	4920	4890	6150
18	7680	6920	7250	6860	6800	8010	6230	6100	4680	5060	4870	6300
19	7580	7620	7170	7060	7430	7400	6920	5900	4710	5300	5470	6260
20	7550	7510	7120	7390	7240	7720	6450	5790	4690	5320	5280	6110
21	7470	7710	7800	6940	7610	7630	6500	5990	4840	5200	4780	6210
22	7440	7460	6810	6840	7830	7760	6290	6070	5220	5520	4970	6500
23	6910	7290	7670	7230	7940	8070	5860	6440	5230	5640	5310	6210
24	7670	8100	6790	7170	7730	8550	5930	6270	5130	5560	5360	6510
25	7750	7550	7340	7150	7400	9150	6380	6400	5340	5300	5440	6690
26	7300	7300	7390	7240	8760	8860	6240	6270	5060	5240	5200	6360
27	7440	7310	7430	6940	7370	7380	6230	6490	4970	5190	5370	6270
28	7380	7920	6960	7330	7170	7780	6220	6010	4740	5220	5570	6290
29	7260	7710	6710	7050	---	7940	6240	5930	4610	5110	5830	6160
30	7670	7220	7650	7580	---	7740	6040	5870	4770	5220	5430	6690
31	7480	---	7130	7000	---	7960	---	5900	---	5260	5430	---
TOTAL	231240	227210	227500	225100	203870	242670	202130	191110	163910	154420	163680	182960
MEAN	7459	7574	7339	7261	7281	7828	6738	6165	5464	4981	5280	6099
MAX	8250	8100	7800	7720	8760	9310	7970	6830	6570	5640	5830	6690
MIN	6910	6920	6710	6840	6660	7010	5860	5790	4610	4620	4780	5430
AC-FT	458700	450700	451200	446500	404400	481300	400900	379100	325100	306300	324700	362900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2002, BY WATER YEAR (WY)

MEAN	10520	11310	11450	11650	11900	12280	13460	12970	12980	7998	7425	8496
MAX	18500	21370	21020	23250	26540	28350	28950	31250	31980	21230	10480	14870
(WY)	1972	1985	1984	1984	1997	1997	1971	1984	1997	1917	1997	1997
MIN	7086	7513	7339	7261	7281	7005	6093	5285	4971	4981	5266	6055
(WY)	1993	1935	2002	2002	2002	1991	1992	1992	1992	2002	1992	1915

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1914 - 2002	
ANNUAL TOTAL	2526070		2415800			
ANNUAL MEAN	6921		6619		11020	
HIGHEST ANNUAL MEAN					19180	1984
LOWEST ANNUAL MEAN					6619	2002
HIGHEST DAILY MEAN	8940	May 19	9310	Mar 9	46100	Jun 22 1918
LOWEST DAILY MEAN	5000	Jun 19	4610	Jun 29	4370	Jun 5 1992
ANNUAL SEVEN-DAY MINIMUM	5280	Jun 18	4680	Jul 5	4620	Jun 28 1981
ANNUAL RUNOFF (AC-FT)	5010000		4792000		7986000	
10 PERCENT EXCEEDS	7920		7750		17600	
50 PERCENT EXCEEDS	7170		6920		9300	
90 PERCENT EXCEEDS	5600		5150		6880	

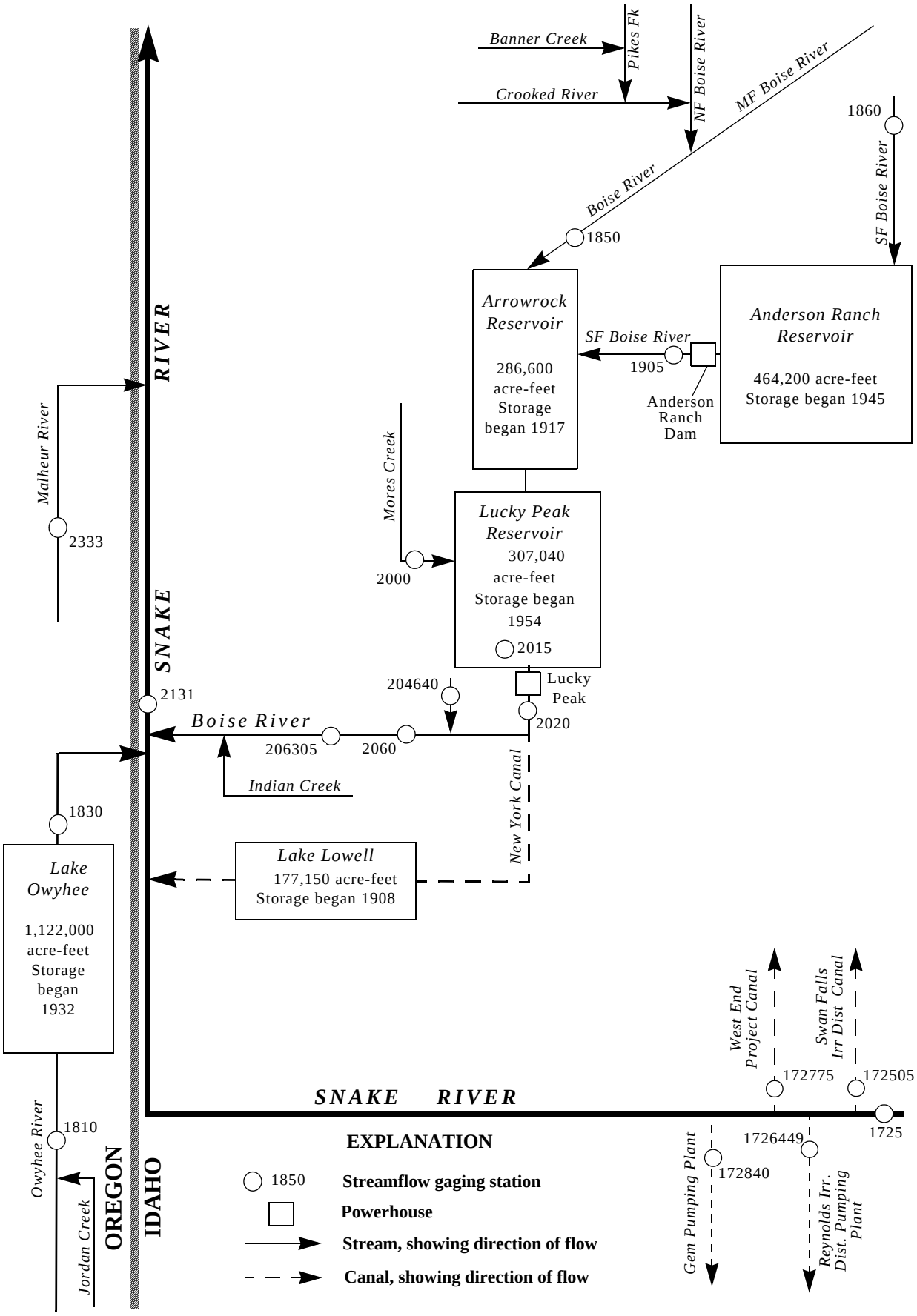

Figure 14. Schematic diagram showing gaging stations in Boise, Owyhee, Malheur and middle Snake River basins.

DIVERSIONS FROM SNAKE RIVER
BETWEEN SNAKE RIVER NEAR MURPHY AND SNAKE RIVER AT NYSSA

13172505 SWAN FALLS IRRIGATION DISTRICT CANAL NEAR MURPHY, ID

LOCATION.--Lat 43°17'44", long 116°24'55", in NE¼SE¼NE¼ sec.35, T.1 S., R.1 W., Ada County, Hydrologic Unit 17050103, on rim above right bank of Snake River, 0.7 mi west of Swan Falls road, and 14 mi south of Kuna.

PERIOD OF RECORD.--April to September 2000, April to September 2002 (irrigation seasons only) (discontinued).

REVISED RECORDS.--WSP 1737: 1933(M).

GAGE.--Water-stage recorder. Elevation of gage is 2,820 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 28 ft³/s June 4 to July 20, 2000; no flow for long periods.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	13	4.1	11	12	0.00
2	---	---	---	---	---	---	---	11	6.4	11	15	5.5
3	---	---	---	---	---	---	---	11	5.1	10	14	8.4
4	---	---	---	---	---	---	---	11	4.0	10	12	7.7
5	---	---	---	---	---	---	---	11	3.6	10	15	7.4
6	---	---	---	---	---	---	---	11	2.2	10	14	9.2
7	---	---	---	---	---	---	---	9.0	3.3	11	13	11
8	---	---	---	---	---	---	---	10	3.9	11	14	10
9	---	---	---	---	---	---	---	13	3.8	12	15	11
10	---	---	---	---	---	---	e5.5	10	3.8	12	14	14
11	---	---	---	---	---	---	6.8	11	3.7	15	13	13
12	---	---	---	---	---	---	6.4	11	3.7	9.2	14	11
13	---	---	---	---	---	---	6.1	11	3.1	5.9	14	11
14	---	---	---	---	---	---	7.7	11	3.9	5.0	13	11
15	---	---	---	---	---	---	7.8	11	7.5	6.1	13	11
16	---	---	---	---	---	---	7.7	11	9.4	4.2	14	10
17	---	---	---	---	---	---	7.7	11	10	4.2	13	8.8
18	---	---	---	---	---	---	7.8	11	11	6.1	14	9.6
19	---	---	---	---	---	---	3.7	11	12	6.5	14	9.8
20	---	---	---	---	---	---	4.8	11	12	5.4	14	9.8
21	---	---	---	---	---	---	9.3	11	12	4.8	13	9.8
22	---	---	---	---	---	---	10	11	11	7.4	14	9.8
23	---	---	---	---	---	---	10	9.7	10	9.6	12	11
24	---	---	---	---	---	---	10	8.5	10	10	9.0	10
25	---	---	---	---	---	---	10	10	10	14	7.8	9.8
26	---	---	---	---	---	---	11	10	11	13	7.6	10
27	---	---	---	---	---	---	10	10	11	13	8.4	10
28	---	---	---	---	---	---	10	12	12	14	8.4	11
29	---	---	---	---	---	---	11	13	12	14	7.9	10
30	---	---	---	---	---	---	12	11	12	15	7.9	6.2
31	---	---	---	---	---	---	---	7.5	---	13	2.1	---
TOTAL	---	---	---	---	---	---	---	333.7	227.5	303.4	372.1	286.80
MEAN	---	---	---	---	---	---	---	10.76	7.583	9.787	12.00	9.560
MAX	---	---	---	---	---	---	---	13	12	15	15	14
MIN	---	---	---	---	---	---	---	7.5	2.2	4.2	2.1	0.00
AC-FT	---	---	---	---	---	---	---	662	451	602	738	569

e Estimated

DIVERSIONS FROM SNAKE RIVER
BETWEEN SNAKE RIVER NEAR MURPHY AND SNAKE RIVER AT NYSSA

131726449 REYNOLDS IRRIGATION DISTRICT PUMPING PLANT NEAR WALTERS FERRY, ID

LOCATION.--Lat 43°20'02", long 116°37'02", in NW¼SW¼ sec.18, T.1 S., R.2 W., Owyhee County, Hydrologic Unit 17050103, on left bank of Snake River, approximately 1 mi southwest of Walters Ferry.

PERIOD OF RECORD.--April 2000 to current year (irrigation seasons only).

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 34 ft³/s June 7, 2000; no flow for long periods.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	---	---	---	---	---	e0.00	e24	26	30	e32	31
2	0.0	---	---	---	---	---	e0.00	e24	27	30	e32	31
3	0.0	---	---	---	---	---	e0.00	e24	27	30	e32	31
4	0.0	---	---	---	---	---	e0.00	e24	27	30	e32	31
5	0.0	---	---	---	---	---	e0.00	e24	27	30	e32	31
6	0.0	---	---	---	---	---	0.00	e24	27	30	e32	31
7	0.0	---	---	---	---	---	0.00	e24	27	30	e32	27
8	0.0	---	---	---	---	---	0.00	e26	27	e30	e32	29
9	0.0	---	---	---	---	---	0.00	26	27	29	e32	27
10	0.0	---	---	---	---	---	0.00	26	26	30	e32	27
11	0.0	---	---	---	---	---	0.00	26	26	28	e32	27
12	---	---	---	---	---	---	0.00	e26	27	28	e32	27
13	---	---	---	---	---	---	0.00	e26	27	29	e32	27
14	---	---	---	---	---	---	0.00	e26	27	25	e32	27
15	---	---	---	---	---	---	0.04	e26	27	31	e32	27
16	---	---	---	---	---	---	1.3	e26	27	32	e32	27
17	---	---	---	---	---	---	8.9	e26	27	31	31	28
18	---	---	---	---	---	---	14	26	27	32	30	28
19	---	---	---	---	---	---	13	26	27	32	32	28
20	---	---	---	---	---	---	14	e26	27	e32	32	27
21	---	---	---	---	---	---	e14	e26	27	e32	29	25
22	---	---	---	---	---	---	e16	e26	26	e32	32	25
23	---	---	---	---	---	---	e24	e26	27	e32	32	22
24	---	---	---	---	---	---	e24	e26	27	e32	32	20
25	---	---	---	---	---	---	e24	e26	27	e32	33	19
26	---	---	---	---	---	---	e24	e26	27	e32	32	19
27	---	---	---	---	---	---	e24	e28	29	e32	32	19
28	---	---	---	---	---	---	e24	e28	29	e32	32	19
29	---	---	---	---	---	---	e24	e28	29	e32	31	19
30	---	---	---	---	---	---	e24	27	30	e32	31	20
31	---	---	---	---	---	---	---	27	---	e32	31	---
TOTAL	---	---	---	---	---	---	273.24	800	815	951	984	776
MEAN	---	---	---	---	---	---	9.11	25.81	27.17	30.68	31.74	25.87
MAX	---	---	---	---	---	---	24	28	30	32	33	31
MIN	---	---	---	---	---	---	0.00	24	26	25	29	19
AC-FT	---	---	---	---	---	---	542	1590	1620	1890	1950	1540

e Estimated

DIVERSIONS FROM SNAKE RIVER
BETWEEN SNAKE RIVER NEAR MURPHY AND SNAKE RIVER AT NYSSA

13172775 WEST END PROJECT CANAL NEAR MELBA, ID

LOCATION.--Lat 43°25'45", long 116°42'19", in NE¼NW¼ sec.16, T.1 N., R.3 W., Canyon County, Givens Hot Springs Quad., Hydrologic Unit 17050103, on right bank of Snake River, approximately 1 mi north of Givens Hot Springs.

PERIOD OF RECORD.--April 2000 to current year (irrigation season only).

GAGE.--Water-stage recorder. Elevation of gage is 2,720 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for discharges Oct. 1 to Nov. 8, which are poor. Canal carries water pumped from the Snake River.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 81 ft³/s June 30, 2000; no flow for long periods.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	7.1	---	---	---	---	e0.00	48	59	57	67	37
2	18	9.0	---	---	---	---	e3.5	53	60	59	67	41
3	20	4.7	---	---	---	---	e9.5	48	59	64	66	45
4	19	8.4	---	---	---	---	e16	40	56	66	64	44
5	18	3.5	---	---	---	---	e18	28	58	68	64	52
6	8.3	3.7	---	---	---	---	16	47	61	65	66	50
7	0.38	1.7	---	---	---	---	9.8	53	57	61	60	51
8	9.6	2.5	---	---	---	---	18	52	59	66	61	45
9	10	0.00	---	---	---	---	26	56	54	70	60	43
10	14	0.00	---	---	---	---	23	53	59	70	59	46
11	22	0.00	---	---	---	---	24	32	65	67	50	46
12	14	0.00	---	---	---	---	24	11	59	66	51	47
13	9.8	0.00	---	---	---	---	15	38	64	69	57	47
14	8.0	0.00	---	---	---	---	3.8	43	68	64	56	29
15	9.6	0.00	---	---	---	---	12	45	63	61	57	13
16	8.4	0.00	---	---	---	---	12	43	61	65	55	35
17	5.3	0.00	---	---	---	---	13	52	62	65	54	39
18	5.0	0.00	---	---	---	---	12	54	61	67	51	26
19	1.3	0.00	---	---	---	---	13	52	61	71	50	31
20	3.8	0.00	---	---	---	---	17	56	64	70	53	22
21	3.6	0.00	---	---	---	---	13	56	69	64	53	11
22	1.5	0.00	---	---	---	---	20	43	69	64	53	0.00
23	3.1	e0.00	---	---	---	---	33	39	57	66	54	14
24	5.1	e0.00	---	---	---	---	45	40	57	70	58	23
25	5.7	e0.00	---	---	---	---	44	32	61	71	49	22
26	5.9	e0.00	---	---	---	---	44	25	63	68	57	20
27	2.2	e0.00	---	---	---	---	33	40	67	63	51	22
28	0.00	e0.00	---	---	---	---	19	58	68	64	54	14
29	7.0	e0.00	---	---	---	---	41	56	69	69	58	12
30	6.4	e0.00	---	---	---	---	54	61	60	68	51	15
31	8.9	---	---	---	---	---	---	63	---	63	43	---
TOTAL	265.88	40.60	---	---	---	---	631.60	1417	1850	2041	1749	942.00
MEAN	8.577	1.353	---	---	---	---	21.05	45.71	61.67	65.84	56.42	31.40
MAX	22	9.0	---	---	---	---	54	63	69	71	67	52
MIN	0.00	0.00	---	---	---	---	0.00	11	54	57	43	0.00
AC-FT	527	81	---	---	---	---	1250	2810	3670	4050	3470	1870

e Estimated

DIVERSIONS FROM SNAKE RIVER
BETWEEN SNAKE RIVER NEAR MURPHY AND SNAKE RIVER AT NYSSA

13172840 GEM PUMPING PLANT NEAR MARSING, ID

LOCATION.--Lat 43°30'56", long 116°47'08", in NW¼NW¼ sec.14, T.2 S., R.4 W., Owyhee County, Hydrologic Unit 17050103, on left bank of Snake River, approximately 2 mi southeast of Marsing.

PERIOD OF RECORD.--April 1989 to current year (irrigation seasons only).

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

REMARKS.--Records fair except for estimated daily discharges, which are poor. In-line flow sensor rated by ultrasonic flowmeter and current meter measurements.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 355 ft³/s June 23, 2002; no flow for long periods each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e171	0.00	---	---	---	---	e0.00	e284	282	344	e344	e290
2	e156	0.00	---	---	---	---	e0.00	e283	285	343	e345	e291
3	e161	0.00	---	---	---	---	e0.00	e282	287	341	e345	e293
4	e162	0.00	---	---	---	---	e0.00	e280	289	340	e348	e291
5	e163	0.00	---	---	---	---	e0.00	e280	287	341	e349	e294
6	e164	0.00	---	---	---	---	0.00	e280	286	340	e348	e284
7	e164	0.00	---	---	---	---	0.00	e279	283	339	e351	e257
8	e164	0.00	---	---	---	---	41.7	e279	287	343	e350	e233
9	e166	0.00	---	---	---	---	60.8	276	291	343	e348	e234
10	e165	0.00	---	---	---	---	83.4	276	289	342	e344	e198
11	e165	0.00	---	---	---	---	114	e277	290	341	e346	e195
12	e165	0.00	---	---	---	---	148	e280	291	339	e345	e194
13	e146	0.00	---	---	---	---	156	e280	290	339	e331	e194
14	e135	0.00	---	---	---	---	156	e280	305	339	e322	e201
15	e112	0.00	---	---	---	---	e154	e281	313	341	e323	e202
16	e103	0.00	---	---	---	---	e154	e283	311	341	e326	e199
17	e102	0.00	---	---	---	---	e154	283	341	342	e325	e195
18	e63	0.00	---	---	---	---	e190	285	353	344	e326	e197
19	1.12	0.00	---	---	---	---	198	287	351	345	e327	197
20	0.00	0.00	---	---	---	---	196	288	350	346	e327	194
21	0.01	0.00	---	---	---	---	e193	298	350	e348	e328	188
22	0.00	0.00	---	---	---	---	e179	298	351	e346	e328	186
23	0.00	---	---	---	---	---	e191	274	355	e346	e321	189
24	0.00	---	---	---	---	---	e221	260	353	e345	e302	189
25	0.00	---	---	---	---	---	e232	260	352	e345	e292	189
26	0.00	---	---	---	---	---	e232	260	349	e345	e293	e191
27	0.00	---	---	---	---	---	e233	255	345	e346	285	e190
28	0.00	---	---	---	---	---	e236	243	344	e346	e284	e190
29	0.00	---	---	---	---	---	e237	267	343	e345	e286	e191
30	0.00	---	---	---	---	---	e266	282	342	e345	e288	e188
31	0.00	---	---	---	---	---	---	285	---	e345	e289	---
TOTAL	2628.13	---	---	---	---	---	4025.90	8605	9545	10635	10066	6524
MEAN	84.78	---	---	---	---	---	134.2	277.6	318.2	343.1	324.7	217.5
MAX	171	---	---	---	---	---	266	298	355	348	351	294
MIN	0.00	---	---	---	---	---	0.00	243	282	339	284	186
AC-FT	5210	---	---	---	---	---	7990	17070	18930	21090	19970	12940

e Estimated

13181000 OWYHEE RIVER NEAR ROME, OR

LOCATION.--Lat 42°52'02", long 117°38'52", in SE¼NE¼ sec.14, T.31 S., R.41 E., Malheur County, Oregon, Hydrologic Unit 17050107, on right bank 0.5 mi downstream from Jordan Creek, 2.6 mi north of Rome, and at mile 122.4.

DRAINAGE AREA.--8,000 mi^2, approximately.

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,344.20 ft above NGVD of 1929. Prior to Feb. 10, 1960, at datum 0.24 ft lower.

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry. Flow regulated by Antelope Reservoir, capacity, 70,000 acre-ft, increased in 1970, and Wild Horse Reservoir, capacity, 32,690 acre-ft, and numerous small reservoirs. Diversions upstream from station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,700 ft^3/s Mar. 18, 1993, gage height, 20.11 ft; minimum, 42 ft^3/s Aug. 12, 1954, July 28, Aug. 5, 1961, July 31, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 2	1800	*11,300	*9.61	No other peak greater than base discharge.			

Minimum daily, 69 ft^3/s Aug. 23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	105	161	179	184	533	6870	871	371	190	139	80
2	86	105	143	191	197	450	8150	868	357	186	136	79
3	91	103	146	207	197	382	7560	897	404	180	132	82
4	90	103	159	282	188	351	6510	1110	400	179	134	81
5	84	104	154	301	177	315	6390	1060	387	171	130	77
6	81	106	156	305	175	306	6520	929	470	160	130	75
7	81	110	165	539	178	365	5940	869	440	159	126	75
8	81	108	165	826	184	1350	4540	812	393	159	126	78
9	82	107	160	775	191	1120	3400	779	351	136	125	78
10	82	105	170	881	183	800	2930	747	362	127	132	82
11	77	105	163	838	185	682	2980	715	355	119	136	83
12	79	108	165	704	188	889	2770	676	331	110	120	85
13	80	111	164	603	182	1610	2380	650	322	105	107	90
14	83	112	167	514	183	2280	2280	624	326	112	100	92
15	98	112	174	438	189	1680	2460	584	327	120	94	90
16	90	113	146	384	182	1230	2760	551	307	123	86	87
17	85	117	164	312	193	966	2250	489	290	115	83	90
18	86	119	175	302	192	776	1920	458	274	109	83	92
19	93	118	168	282	202	662	1760	442	251	113	81	89
20	93	114	174	226	216	595	1640	422	236	125	75	91
21	92	111	175	241	410	598	1550	428	227	134	72	94
22	94	110	173	252	745	1210	1380	504	213	166	71	94
23	97	117	161	224	1130	2730	1240	490	205	160	69	94
24	101	130	193	215	1390	3770	1070	524	204	157	77	97
25	101	142	175	215	1460	3870	1010	628	194	159	95	108
26	101	142	136	222	1160	3440	888	621	189	148	86	109
27	101	142	132	234	849	3950	783	554	192	143	84	110
28	102	149	147	221	653	4730	766	488	192	138	83	113
29	103	148	174	193	---	5530	748	450	190	135	85	110
30	104	118	171	153	---	6140	806	415	188	135	86	106
31	105	---	168	181	---	6480	---	395	---	145	89	---
TOTAL	2810	3494	5044	11440	11563	59790	92251	20050	8948	4418	3172	2711
MEAN	90.65	116.5	162.7	369.0	413.0	1929	3075	646.8	298.3	142.5	102.3	90.37
MAX	105	149	193	881	1460	6480	8150	1110	470	190	139	113
MIN	77	103	132	153	175	306	748	395	188	105	69	75
AC-FT	5570	6930	10000	22690	22940	118600	183000	39770	17750	8760	6290	5380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

MEAN	162.0	213.1	379.0	674.3	1222	2494	2876	1964	878.5	254.2	151.5	137.5
MAX	442	593	2898	4461	8820	9404	16960	10470	4870	1035	452	361
(WY)	1976	1971	1965	1971	1986	1972	1952	1984	1984	1984	1984	1984
MIN	85.3	107	104	114	129	233	144	86.5	89.6	61.2	56.0	62.5
(WY)	1955	1955	1955	1955	1955	1977	1992	1992	1992	1968	1992	1955

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002	
ANNUAL TOTAL	147957		225691			
ANNUAL MEAN	405.4		618.3		947.7	
HIGHEST ANNUAL MEAN					3400	1984
LOWEST ANNUAL MEAN					162	1992
HIGHEST DAILY MEAN	7050	Mar 22	8150	Apr 2	46900	Mar 18 1993
LOWEST DAILY MEAN	57	Aug 30	69	Aug 23	44	Aug 1 1968
ANNUAL SEVEN-DAY MINIMUM	60	Aug 25	75	Aug 18	47	Jul 26 1968
ANNUAL RUNOFF (AC-FT)	293500		447700		686600	
10 PERCENT EXCEEDS	1120		1360		2510	
50 PERCENT EXCEEDS	165		178		233	
90 PERCENT EXCEEDS	77		86		108	

13183000 OWYHEE RIVER BELOW OWYHEE DAM, OR

LOCATION.--Lat 43°39'17", long 117°15'16", in SE¼ sec.18, T.22 S., R.45 E., Malheur County, Oregon, Hydrologic Unit 17050110, on left bank 0.8 mi downstream from Owyhee Dam, 20 mi southwest of Nyssa, and at mile 27.3.

DRAINAGE AREA.--11,160 mi^2, approximately.

PERIOD OF RECORD.--February 1929 to current year.

REVISED RECORDS.--WSP 983: 1941-42. WSP 1397: 1930, 1933, 1946.

GAGE.--Water-stage recorder. Datum of gage is 2,343.67 ft above NGVD of 1929 (levels by Bureau of Reclamation).

REMARKS.--Records good. Station equipment includes satellite telemetry. Flow regulated since October 1932 by Lake Owyhee (sta 13182500), and by many smaller reservoirs. Diversion of up to 457,000 acre-ft from Lake Owyhee during the year for irrigation of lands downstream from station and outside the basin. Many smaller diversions upstream from Lake Owyhee for irrigation upstream from station. Computation of monthly and annual adjusted flows discontinued in 1991.

AVERAGE DISCHARGE.--70 years (water years 1933-2002), 412 ft^3/s, 298,500 acre-ft/yr, not adjusted for storage or diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,900 ft^3/s Apr. 15, 1952, gage height, 15.70 ft; no flow for part of Aug. 8, 9, 1932, when temporary diversion tunnel at Owyhee Dam was closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 211 ft^3/s Apr. 9; minimum daily, 7.7 ft^3/s Oct. 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	192	8.2	11	13	13	13	10	198	188	191	198	197
2	191	8.4	11	12	12	13	10	198	188	191	199	194
3	189	8.6	11	12	13	13	11	195	188	192	198	189
4	188	8.8	11	12	12	13	11	195	188	192	198	192
5	187	9.3	11	13	12	13	11	197	188	192	198	193
6	186	9.7	11	13	12	14	12	197	188	192	197	194
7	186	9.0	11	12	12	14	13	197	188	192	197	183
8	186	8.2	11	13	12	13	160	193	188	192	197	191
9	186	8.6	11	13	12	13	211	194	188	192	196	190
10	186	9.1	11	13	12	13	208	194	188	192	197	189
11	187	9.4	11	13	12	11	206	194	188	192	198	189
12	186	9.2	11	13	11	11	206	195	188	192	198	190
13	186	8.2	12	11	11	11	206	194	188	192	197	189
14	186	8.8	12	13	11	11	204	194	188	193	197	189
15	185	8.8	12	14	11	11	204	195	188	192	198	189
16	185	9.1	12	14	11	11	202	197	189	192	199	188
17	186	9.4	12	14	11	11	201	194	189	192	200	189
18	183	9.4	13	14	11	11	200	194	188	192	201	189
19	74	9.6	12	14	e11	11	199	193	189	192	200	188
20	7.7	9.6	12	14	e11	11	199	192	189	192	199	188
21	8.2	9.8	12	14	e11	12	199	192	190	192	199	188
22	8.7	9.6	12	14	e11	12	199	191	189	187	198	188
23	8.5	9.5	12	14	e12	12	200	191	190	192	197	184
24	8.5	9.8	12	15	e12	11	199	192	190	192	197	188
25	8.7	9.1	12	15	12	11	199	192	190	193	197	188
26	8.8	9.2	13	15	12	11	198	192	190	196	197	188
27	8.9	9.6	14	14	13	11	199	192	190	197	197	188
28	8.6	10	14	15	13	10	198	192	190	199	197	188
29	8.4	10	13	14	---	11	198	192	190	198	197	188
30	8.5	10	13	13	---	11	197	191	191	198	197	188
31	8.1	---	13	13	---	11	---	189	---	198	197	---
TOTAL	3536.6	276.0	369	416	329	365	4670	6006	5664	5981	6132	5676
MEAN	114.1	9.200	11.90	13.42	11.75	11.77	155.7	193.7	188.8	192.9	197.8	189.2
MAX	192	10	14	15	13	14	211	198	191	199	201	197
MIN	7.7	8.2	11	11	11	10	10	189	188	187	196	183
AC-FT	7010	547	732	825	653	724	9260	11910	11230	11860	12160	11260

CAL YR 2001 TOTAL 39400.6 MEAN 107.9 MAX 204 MIN 7.7 AC-FT 78150
WTR YR 2002 TOTAL 39420.6 MEAN 108.0 MAX 211 MIN 7.7 AC-FT 78190

e Estimated

BOISE RIVER BASIN

13185000 BOISE RIVER NEAR TWIN SPRINGS, ID

LOCATION.--Lat 43°39'33", long 115°43'34", in NW¼NE¼ sec.27, T.4 N., R.6 E., Boise County, Hydrologic Unit 17050112, Boise National Forest, on right bank 0.7 mi upstream from Birch Creek, 1.8 mi upstream from maximum flow line of Arrowrock Reservoir, 3.2 mi downstream from Twin Springs, 13 mi upstream from Arrowrock Dam, and at mile 88.5.

DRAINAGE AREA.--830 mi^2, approximately. Mean elevation, 6,350 ft.

PERIOD OF RECORD.--March 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,255.70 ft above NGVD of 1929. March 1911 to Apr. 3, 1915, nonrecording gage, and Apr. 4, 1915 to Sept. 30, 1965, water-stage recorder at site 0.3 mi downstream at datum 5.26 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station equipment includes satellite telemetry.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,800 ft^3/s Dec. 23, 1964, gage height, 12.20 ft, from floodmark (site and datum then in use); minimum, 105 ft^3/s Nov. 28, 1976, gage height, 2.64 ft; minimum gage height, 1.48 ft, Dec. 6, 7, 1960 (site and datum then in use).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 14	2315	*8,960	*9.61	May 20	0900	5,630	7.69
				May 31	0715	5,790	7.79

Minimum daily, 212 ft^3/s Dec. 25, Jan. 29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	253	612	381	e420	437	460	1850	2940	5110	1090	427	337
2	250	518	400	e400	402	421	2090	3160	4520	999	423	330
3	250	468	419	e420	351	415	1920	3310	3870	918	417	325
4	248	441	389	e380	336	450	2040	3220	3420	865	423	317
5	248	413	390	328	324	489	2320	3130	3120	822	414	325
6	251	402	403	386	336	513	2770	2900	3160	779	409	329
7	253	390	395	461	454	567	3110	2730	3060	749	402	361
8	249	372	349	468	425	523	2660	2490	2800	721	403	370
9	253	348	368	465	372	491	2640	2300	2460	679	400	345
10	259	356	390	415	333	536	2620	2140	2200	648	392	336
11	322	355	360	416	380	514	2570	2060	1970	620	381	327
12	343	353	367	440	374	631	2530	2120	1820	603	370	320
13	302	350	408	409	363	739	2980	2390	1780	588	363	314
14	326	346	406	374	394	642	5400	2850	1890	581	357	309
15	308	341	367	398	369	601	7100	3290	2130	584	351	306
16	297	336	364	307	388	593	4420	3240	2340	580	346	302
17	294	337	441	321	436	549	3470	3250	2380	576	341	315
18	303	368	391	e340	453	542	2790	3430	2350	563	339	364
19	293	343	406	e360	469	533	2400	4230	2190	598	339	344
20	290	337	435	392	476	525	2210	5350	1900	593	336	328
21	286	395	416	406	456	543	2080	4650	1770	559	336	321
22	288	470	319	375	470	647	2010	3800	1950	535	347	320
23	427	460	258	376	537	885	2190	3140	1900	530	344	317
24	427	387	234	379	592	963	2100	2720	1740	500	347	314
25	351	377	212	386	518	1030	2110	2480	1690	484	343	311
26	337	380	e240	397	451	1130	2250	2420	1620	474	340	310
27	334	310	e280	392	476	1190	2280	2570	1520	467	363	312
28	330	235	e320	295	524	1210	2290	3030	1400	459	375	318
29	360	373	e380	212	---	1210	2360	3570	1310	453	358	320
30	372	419	e380	301	---	1330	2690	4320	1200	444	353	328
31	535	---	e380	417	---	1600	---	5300	---	436	356	---
TOTAL	9639	11592	11248	11836	11896	22472	82250	98530	70570	19497	11495	9775
MEAN	310.9	386.4	362.8	381.8	424.9	724.9	2742	3178	2352	628.9	370.8	325.8
MAX	535	612	441	468	592	1600	7100	5350	5110	1090	427	370
MIN	248	235	212	212	324	415	1850	2060	1200	436	336	302
AC-FT	19120	22990	22310	23480	23600	44570	163100	195400	140000	38670	22800	19390
CFSM	0.37	0.47	0.44	0.46	0.51	0.87	3.30	3.83	2.83	0.76	0.45	0.39
IN.	0.43	0.52	0.50	0.53	0.53	1.01	3.69	4.42	3.16	0.87	0.52	0.44

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

MEAN	388.6	441.0	476.3	460.8	521.1	857.8	2141	3731	3303	1199	464.8	368.9
MAX	699	1099	1748	2076	1474	2627	5658	6737	6804	2975	892	584
(WY)	1960	1928	1965	1997	1986	1986	1943	1958	1974	1943	1965	1965
MIN	246	263	265	265	283	326	717	782	672	321	224	223
(WY)	1989	1937	1936	1919	1920	1977	1977	1977	1992	1924	1934	1934

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1911 - 2002	
ANNUAL TOTAL	215139		370800			
ANNUAL MEAN	589.4		1016		1195	
HIGHEST ANNUAL MEAN					2091	1997
LOWEST ANNUAL MEAN					442	1977
HIGHEST DAILY MEAN	3510	May 16	7100	Apr 15	15400	Dec 23 1964
LOWEST DAILY MEAN	212	Dec 25	212	Dec 25	123	Nov 28 1976
ANNUAL SEVEN-DAY MINIMUM	246	Aug 29	250	Oct 2	183	Dec 8 1932
ANNUAL RUNOFF (AC-FT)	426700		735500		865900	
ANNUAL RUNOFF (CFSM)	0.71		1.22		1.44	
ANNUAL RUNOFF (INCHES)	9.64		16.62		19.57	
10 PERCENT EXCEEDS	1240		2750		3260	
50 PERCENT EXCEEDS	390		423		509	
90 PERCENT EXCEEDS	259		313		300	

e Estimated

13186000 SOUTH FORK BOISE RIVER NEAR FEATHERVILLE, ID

LOCATION.--Lat 43°29'40", long 115°18'20", in lot 6, NE¼ sec.19, T.2 N., R.10 E., Elmore County, Hydrologic Unit 17050113, on right bank, 2.5 mi upstream from Deer Creek, 8 mi southwest of Featherville, and at mile 59.0.

DRAINAGE AREA.--635 mi^2. Mean elevation, 6,840 ft.

PERIOD OF RECORD.--April 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,218.56 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station equipment includes satellite telemetry. No regulation. Diversions above station for irrigation of about 450 acres (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,030 ft^3/s May 17, 1997, gage height, 7.74 ft; maximum gage height, 7.87 ft, May 30, 1983; minimum discharge, 30 ft^3/s Feb. 10, 1949, gage height, 0.60 ft, result of snowslide upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 15	0145	3,140	5.06	May 20	1115	3,190	5.10
				June 1	0445	*3,580	*5.37

Minimum daily, 109 ft^3/s Nov. 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	262	201	208	e180	e180	736	1510	3430	607	229	160
2	126	223	204	203	e180	e180	858	1590	3110	565	228	155
3	126	204	204	205	e160	e170	826	1690	2650	532	223	151
4	138	194	194	e190	e150	e170	889	1690	2310	509	223	148
5	141	188	195	e180	e160	e190	1000	1680	2060	483	225	155
6	142	186	195	188	e170	225	1170	1600	2050	464	223	160
7	143	183	183	205	203	237	1360	1530	1940	449	219	185
8	142	176	158	210	203	217	1250	1390	1760	427	216	198
9	141	164	158	209	e180	196	1230	1280	1560	408	216	184
10	143	175	164	191	e170	202	1200	1190	1360	390	215	177
11	171	183	161	171	e170	230	1170	1130	1200	372	211	171
12	181	179	153	195	e170	271	1160	1140	1110	356	200	167
13	173	176	172	207	e170	276	1320	1260	1060	346	191	161
14	178	176	203	188	e180	253	1980	1530	1100	332	186	156
15	170	176	201	177	e180	229	2700	1800	1190	331	180	153
16	164	174	197	e160	e180	222	1870	1810	1300	331	169	151
17	171	175	217	e150	e190	225	1500	1830	1320	341	163	155
18	181	180	206	e160	206	203	1250	1950	1380	324	158	164
19	167	174	205	e160	205	211	1080	2380	1270	317	158	162
20	163	174	212	e180	205	234	1000	3090	1090	317	157	157
21	160	204	196	204	198	235	957	2790	1000	293	159	154
22	162	223	176	194	193	263	952	2280	1030	281	162	154
23	218	210	e150	195	218	304	1040	1850	1030	273	162	153
24	210	180	e130	196	229	324	1020	1590	938	262	168	153
25	181	170	e110	200	e200	357	1040	1450	888	258	166	150
26	175	193	e130	205	e170	380	1120	1420	841	255	163	148
27	173	144	e150	e190	e150	377	1170	1530	791	254	176	148
28	174	109	e170	e160	e180	399	1180	1790	733	244	188	151
29	177	144	e180	e140	---	445	1230	2130	694	240	174	153
30	182	251	e190	e150	---	518	1400	2620	651	236	166	160
31	263	---	e200	e170	---	635	---	3360	---	232	166	---
TOTAL	5163	5550	5565	5741	5150	8558	36658	55880	42846	11029	5840	4794
MEAN	166.5	185.0	179.5	185.2	183.9	276.1	1222	1803	1428	355.8	188.4	159.8
MAX	263	262	217	210	229	635	2700	3360	3430	607	229	198
MIN	126	109	110	140	150	170	736	1130	651	232	157	148
AC-FT	10240	11010	11040	11390	10220	16970	72710	110800	84990	21880	11580	9510
CFSM	0.26	0.29	0.28	0.29	0.29	0.43	1.92	2.84	2.25	0.56	0.30	0.25
IN.	0.30	0.33	0.33	0.34	0.30	0.50	2.15	3.27	2.51	0.65	0.34	0.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2002, BY WATER YEAR (WY)

MEAN	239.3	250.1	243.2	245.2	257.0	402.1	1257	2592	2340	777.1	291.4	229.1
MAX	366	433	682	751	443	1244	2594	4875	4801	1951	643	396
(WY)	1984	1984	1965	1997	1986	1986	1969	1958	1965	1975	1965	1965
MIN	140	140	142	133	159	192	345	420	329	160	106	104
(WY)	1993	1995	1993	1993	1993	1955	1977	1977	1992	1992	1992	1994

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1945 - 2002	
ANNUAL TOTAL	112508		192774			
ANNUAL MEAN	308.2		528.1		763.1	
HIGHEST ANNUAL MEAN					1369	1965
LOWEST ANNUAL MEAN					254	1977
HIGHEST DAILY MEAN	1770	May 16	3430	Jun 1	7870	May 17 1997
LOWEST DAILY MEAN	100	Sep 2	109	Nov 28	80	Jan 1 1995
ANNUAL SEVEN-DAY MINIMUM	101	Aug 29	135	Oct 1	95	Aug 28 1994
ANNUAL RUNOFF (AC-FT)	223200		382400		552900	
ANNUAL RUNOFF (CFSM)	0.49		0.83		1.20	
ANNUAL RUNOFF (INCHES)	6.59		11.29		16.33	
10 PERCENT EXCEEDS	712		1470		2220	
50 PERCENT EXCEEDS	201		204		290	
90 PERCENT EXCEEDS	127		154		179	

e Estimated

13190500 SOUTH FORK BOISE RIVER AT ANDERSON RANCH DAM, ID

LOCATION.--Lat 43°20'30", long 115°28'40", in NW¼ sec.14, T.1 S., R.8 E., Elmore County, Hydrologic Unit 17050113, Boise National Forest, on right bank 600 ft upstream from Dixie Creek, 1.8 mi downstream from Anderson Ranch, 2.2 mi northwest of Bennett, and at mile 41.5.

DRAINAGE AREA.--982 mi^2.

PERIOD OF RECORD.--April 1943 to current year (includes flow of Dixie Creek prior to October 1946).

GAGE.--Water-stage recorder. Datum of gage is 3,830.0 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry. Flow regulated by Anderson Ranch Reservoir, 1.8 mi upstream (see sta 13190000) beginning Dec. 15, 1945. Flow of Little Camas Creek is stored in Little Camas Reservoir, capacity, 22,300 acre-ft, no spill most years, and diverted out of basin through Little Camas Canal for irrigation of about 5,000 acres (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,850 ft^3/s May 25, 1956, gage height, 10.56 ft; minimum, 0.10 ft^3/s Nov. 13, 1959; minimum gage height, 0.99 ft, Feb. 16, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,470 ft^3/s July 2, 9; minimum daily, 269 ft^3/s Oct. 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	318	331	332	301	297	302	305	625	1370	1450	1430
2	283	317	330	331	301	300	301	306	625	1470	1450	1420
3	282	317	329	332	297	303	307	307	625	1460	1450	1420
4	273	315	330	333	299	303	306	600	624	1460	1450	1440
5	273	315	331	337	299	302	306	615	626	1460	1440	1440
6	272	314	332	337	299	302	306	613	604	1460	1430	1440
7	273	315	331	335	298	302	306	624	578	1460	1430	1460
8	281	313	334	335	298	300	307	627	582	1460	1450	1460
9	278	314	334	334	298	300	309	628	585	1470	1440	1250
10	272	312	334	340	299	300	311	629	578	1460	1440	1060
11	271	313	334	341	298	296	301	629	578	1460	1440	850
12	269	314	332	342	298	293	305	628	577	1460	1440	739
13	274	314	328	342	301	295	303	628	575	1460	1430	561
14	282	317	328	339	303	296	304	628	574	1460	1430	560
15	280	317	326	322	301	297	310	626	571	1460	1430	560
16	293	315	326	305	300	297	308	625	571	1460	1430	595
17	320	315	328	301	297	298	305	624	581	1460	1430	669
18	317	316	327	299	297	299	307	626	587	1460	1430	679
19	324	318	320	297	297	303	306	624	588	1450	1430	679
20	322	320	325	297	298	303	306	625	569	1450	1430	678
21	314	321	325	299	298	300	305	629	578	1450	1420	678
22	311	320	326	298	298	302	309	630	580	1450	1420	679
23	308	319	327	295	298	307	305	633	580	1450	1420	677
24	308	319	328	295	297	306	305	640	580	1440	1420	673
25	307	320	330	300	297	304	305	632	576	1450	1420	675
26	311	320	331	299	298	300	305	630	574	1440	1410	678
27	309	325	331	299	302	302	306	630	577	1450	1420	680
28	310	327	329	306	301	301	306	632	773	1460	1420	684
29	310	325	327	308	---	302	306	635	937	1450	1430	684
30	310	325	327	307	---	302	304	626	1180	1460	1430	520
31	315	---	331	303	---	302	---	624	---	1450	1430	---
TOTAL	9132	9530	10202	9840	8368	9314	9172	18458	18758	45060	44390	27018
MEAN	294.6	317.7	329.1	317.4	298.9	300.5	305.7	595.4	625.3	1454	1432	900.6
MAX	324	327	334	342	303	307	311	640	1180	1470	1450	1460
MIN	269	312	320	295	297	293	301	305	569	1370	1410	520
AC-FT	18110	18900	20240	19520	16600	18470	18190	36610	37210	89380	88050	53590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2002, BY WATER YEAR (WY)

MEAN	387.3	403.5	514.4	544.9	598.2	684.8	1108	2092	2325	1508	1048	612.6
MAX	1183	1504	1556	1531	3002	2996	3795	4820	5171	2546	1862	1741
(WY)	1953	1984	1984	1984	1997	1997	1946	1943	1983	1950	1948	1952
MIN	1.46	1.32	1.26	1.30	1.57	3.19	5.84	3.37	572	628	62.6	41.7
(WY)	1949	1949	1950	1949	1950	1950	1962	1962	1955	1944	1950	1949

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1943 - 2002	
ANNUAL TOTAL	244072		219242			
ANNUAL MEAN	668.7		600.7		981.2	
HIGHEST ANNUAL MEAN					1735	1997
LOWEST ANNUAL MEAN					411	1992
HIGHEST DAILY MEAN	1620	May 29	1470	Jul 2	9770	May 25 1956
LOWEST DAILY MEAN	269	Oct 12	269	Oct 12	0.70	Sep 21 1950
ANNUAL SEVEN-DAY MINIMUM	274	Oct 6	274	Oct 6	0.76	Sep 18 1950
ANNUAL RUNOFF (AC-FT)	484100		434900		710800	
10 PERCENT EXCEEDS	1600		1440		2180	
50 PERCENT EXCEEDS	330		328		604	
90 PERCENT EXCEEDS	297		298		185	

13200000 MORES CREEK ABOVE ROBIE CREEK, NEAR ARROWROCK DAM, ID

LOCATION.--Lat 43°38'53", long 115°59'20", in SE¼SW¼ sec.28, T.4 N., R.4 E., Boise County, Hydrologic Unit 17050112, on left bank, 1.7 mi upstream from Robie Creek, 5.0 mi northwest of Arrowrock Dam, and at mile 5.8.

DRAINAGE AREA.--399 mi^2.

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1958, published as "Moore Creek above Robie Creek, near Arrowrock", and October 1958 to September 1962, published as "near Arrowrock".

GAGE.--Water-stage recorder. Elevation of gage is 3,120 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Station equipment includes satellite telemetry. Small diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,440 ft^3/s Dec. 23, 1955, gage height, 9.55 ft; minimum, 3.5 ft^3/s Aug. 29, 30, 1994, gage height, 1.80 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 7	0130	1,360	5.52	Apr. 14	2345	*2,800	*7.41

Minimum daily, 15 ft^3/s Aug. 20-23.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	71	e80	e85	e80	126	865	679	463	92	23	22
2	20	63	e80	e95	e85	112	939	705	451	87	22	20
3	20	55	e80	e95	e90	e110	861	709	414	83	22	19
4	20	51	e70	e95	e85	e120	906	671	381	78	21	19
5	20	49	e70	e85	e85	e120	1000	642	355	73	20	17
6	20	47	e75	e95	e90	142	1170	593	338	70	20	17
7	20	46	e70	e100	e110	192	1240	561	321	65	20	20
8	20	45	e60	e100	158	181	1060	513	301	62	20	25
9	22	43	e60	e100	146	167	1040	474	286	60	20	26
10	23	43	e60	103	137	177	1120	443	281	57	20	24
11	34	45	e60	105	140	165	1090	426	261	53	20	23
12	41	45	e55	100	e120	192	1060	431	242	50	19	21
13	36	45	e60	95	e130	235	1190	453	229	44	19	20
14	33	45	e60	96	e130	207	1910	493	217	43	17	19
15	34	46	e55	95	e130	196	2250	516	209	44	17	18
16	33	46	e60	e85	e130	198	1410	513	201	41	16	18
17	32	50	e60	e80	137	177	1100	504	194	39	16	18
18	31	62	e55	e85	126	166	917	510	195	38	16	22
19	32	55	e60	e85	120	169	800	552	193	41	16	24
20	33	51	e60	e85	116	162	729	605	176	39	15	24
21	33	66	e60	e85	117	178	678	590	163	36	15	23
22	34	106	e50	e80	115	228	648	539	162	34	15	23
23	45	118	e40	e80	134	311	672	472	159	34	15	23
24	55	90	e38	e80	164	367	631	428	146	33	16	22
25	46	84	e40	86	e140	418	616	402	133	30	17	22
26	42	74	e48	88	e130	482	627	391	123	28	17	21
27	41	55	e50	e85	e130	553	627	389	115	27	16	22
28	41	e44	e60	e65	e140	568	610	402	109	27	18	22
29	43	e70	e70	e60	---	571	605	419	106	26	20	24
30	48	e80	e75	e65	---	634	660	445	99	25	21	25
31	62	---	e80	e70	---	760	---	463	---	24	22	---
TOTAL	1035	1790	1901	2708	3415	8384	29031	15933	7023	1483	571	643
MEAN	33.39	59.67	61.32	87.35	122.0	270.5	967.7	514.0	234.1	47.84	18.42	21.43
MAX	62	118	80	105	164	760	2250	709	463	92	23	26
MIN	20	43	38	60	80	110	605	389	99	24	15	17
AC-FT	2050	3550	3770	5370	6770	16630	57580	31600	13930	2940	1130	1280
CFSM	0.08	0.15	0.15	0.22	0.31	0.68	2.43	1.29	0.59	0.12	0.05	0.05
IN.	0.10	0.17	0.18	0.25	0.32	0.78	2.71	1.49	0.65	0.14	0.05	0.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2002, BY WATER YEAR (WY)

MEAN	60.73	89.55	132.5	158.7	235.7	484.3	905.2	767.7	411.8	108.9	41.21	41.16
MAX	108	169	676	833	912	1481	2183	1486	845	251	92.0	86.6
(WY)	1952	1971	1965	1997	1986	1986	1952	1983	1975	1983	1983	1986
MIN	25.5	37.9	42.4	45.1	57.8	88.8	127	125	49.9	18.7	5.66	8.83
(WY)	1995	1995	1995	1977	1993	1977	1977	1977	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1951 - 2002	
ANNUAL TOTAL	35678.8		73917			
ANNUAL MEAN	97.75		202.5		286.0	
HIGHEST ANNUAL MEAN					560	1965
LOWEST ANNUAL MEAN					66.2	1977
HIGHEST DAILY MEAN	433	Mar 26	2250	Apr 15	4520	Dec 23 1964
LOWEST DAILY MEAN	9.3	Sep 1	15	Aug 20	4.1	Aug 30 1994
ANNUAL SEVEN-DAY MINIMUM	9.7	Aug 29	15	Aug 17	4.4	Aug 16 1994
ANNUAL RUNOFF (AC-FT)	70770		146600		207200	
ANNUAL RUNOFF (CFSM)	0.24		0.51		0.72	
ANNUAL RUNOFF (INCHES)	3.33		6.89		9.74	
10 PERCENT EXCEEDS	259		607		825	
50 PERCENT EXCEEDS	65		80		109	
90 PERCENT EXCEEDS	15		20		34	

e Estimated

Bell Rapids Canal near Hagerman, Idaho (1985)

13201500 LUCKY PEAK LAKE NEAR BOISE, ID

LOCATION.--Lat 43°31'31", long 116°03'15", in SW¼NW¼ sec.12, T.2 N., R.3 E., Ada County, Hydrologic Unit 17050112, at outlet control tower at Lucky Peak Dam on Boise River, 2 mi upstream from diversion dam for New York Canal, 7 mi downstream from Mores Creek, 9 mi southeast of Boise, and at mile 63.8.

DRAINAGE AREA.--2,680 mi^2, approximately.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level, (levels by U.S. Corps of Engineers). Prior to May 13, 1955, nonrecording gage at same site and datum.

REMARKS.--Station equipment includes satellite telemetry. Reservoir is formed by earthfill dam. Storage began Oct. 16, 1954. Dam completed in February 1955. Capacity, 307,040 acre-ft between elevations 2,827.0 ft, sill of outlet gates, and 3,060.0 ft, spillway crest. Minimum proposed operating level, 2,905.0 ft, 28,770 acre-ft, but all storage can be released. Water is stored for flood control, irrigation of lands in Boise Valley, and hydro-electric power.

COOPERATION.--Gage-height record and capacity table provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 305,130 acre-ft June 25, 1955, elevation, 3,059.32 ft; minimum since near-full capacity was attained on June 25, 1955, 28,630 acre-ft Dec. 21, 1961, elevation, 2,904.83 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 294,100 acre-ft July 24, elevation, 3,055.35 ft; minimum contents, 66,500 acre-ft Sept. 30, elevation, 2,941.52 ft.

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

2,940.0	64,600	3,000.0	162,800
2,960.0	92,400	3,020.0	205,600
2,980.0	125,100	3,040.0	253,600
		3,060.0	307,000

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86900	89800	94500	100800	107800	113100	150800	240200	288200	292800	285400	170300
2	87200	89800	94800	101000	108100	113200	155300	240700	289300	292900	281800	167800
3	87200	90000	95000	101200	108500	113400	159700	240900	290300	293000	277800	---
4	87200	90200	95200	101400	108700	113600	165200	241900	291100	293100	274000	---
5	87300	90200	95400	101500	108900	113600	170400	243600	291800	293100	270100	---
6	87300	90200	95600	101800	109100	113900	176300	244900	292000	292900	266000	---
7	87300	90300	95800	102100	109300	114200	182900	245900	292100	292600	261500	---
8	87300	90400	95900	102400	109600	115000	189600	246900	292200	292600	257200	---
9	87500	90500	96100	102700	110000	115600	195600	247300	292200	293000	252900	---
10	87500	90800	96200	102900	110400	115700	201400	247300	292200	293100	248600	126500
11	87600	91000	96300	103200	110600	116100	204800	247300	292000	293400	244300	121800
12	87600	91000	96400	103400	110800	116400	207000	247300	291800	293500	240300	118800
13	87700	91100	96700	103700	111300	116700	208900	247300	291600	293400	236500	115800
14	87700	91200	96900	103800	112000	117000	213000	247700	291300	293100	232800	112600
15	87800	91300	97100	104000	112200	118600	227700	248300	291400	292600	228500	109400
16	87800	91400	97400	104000	112300	120600	236900	250200	291500	292600	223900	106100
17	87900	91600	97500	104200	112500	122700	243100	252700	291700	292500	219500	102400
18	88000	91800	97700	104300	112600	123900	245500	255100	291900	292200	215100	98700
19	88000	92000	97900	104700	112700	126400	245400	257600	292000	291500	210500	95100
20	88100	92000	98000	105200	112700	129200	244900	260300	292000	290500	206500	91600
21	88200	92200	98200	105300	112700	131200	244400	263000	292200	290800	203100	88200
22	88300	92600	98500	105500	112800	132200	243600	266600	292100	292000	199900	84800
23	88400	93000	98800	105700	112800	133000	242900	271000	292000	293300	196800	81900
24	88500	93200	99100	105800	112800	134100	242100	274400	292000	294100	193600	79300
25	88700	93500	99400	106100	112900	134000	241700	276600	292200	293600	190500	77100
26	88800	93600	99500	106500	112900	133900	241500	278700	292100	292900	187500	74900
27	89000	93800	99800	107000	112700	133800	241300	280700	292300	292600	183900	72800
28	89100	93900	100000	107100	112900	137000	241100	282800	292600	292000	180700	70700
29	89100	94000	100200	107200	---	140200	240600	284800	292800	291400	178000	68600
30	89300	94200	100400	107400	---	143700	240100	286100	292800	290600	175500	66500
31	89600	---	100500	107600	---	147400	---	287100	---	288400	172800	---
MAX	89600	94200	100500	107600	112900	147400	245500	287100	292800	294100	285400	---
MIN	86900	89800	94500	100800	107800	113100	150800	240200	288200	288400	172800	---
†	2958.16	2961.22	2965.23	2969.67	2972.89	2992.17	3034.60	3052.80	3054.89	3053.27	3004.88	2941.52
‡	3100	4600	6300	7100	5300	34500	92700	47000	5700	-4400	-115600	-106300

CAL YR 2001 ‡ -3200
WTR YR 2002 ‡ -20000

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

13202000 BOISE RIVER NEAR BOISE, ID

LOCATION.--Lat 43°31'40", long 116°03'31", in NE¼ sec.11, T.2 N., R.3 E., Ada County, Hydrologic Unit 17050112, at gate-control house at outlet works of Lucky Peak Lake, 1.8 mi upstream from diversion dam for New York Canal, 7.5 mi downstream from mouth of Mores Creek, 9 mi southeast of Boise, and at mile 63.6.

DRAINAGE AREA.--2,680 mi^2, approximately. Mean elevation, 5,910 ft.

PERIOD OF RECORD.--January 1895 to September 1916 (no winter records 1904-05, 1907), November 1950 to September 1954 (discharge measurements only), October 1954 to current year. Published as "near Highland" 1905-15 and as "below Moore Creek, near Arrowrock" 1916.

REVISED RECORDS.--WSP 1347: 1895-1901, 1904.

GAGE.--None. See WDR ID-87-1 for history of changes prior to October 1, 1987.

REMARKS.--Flow regulated by Lucky Peak Lake, Arrowrock Reservoir, and Anderson Ranch Reservoir. Diversions above station for irrigation of about 2,300 acres in the basin, and about 5,000 acres outside the basin near Mountain Home (1966 determination).

COOPERATION.--Discharge record provided by Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed (1895-1916), prior to regulation, 35,500 ft^3/s June 14, 1896; minimum observed, 432 ft^3/s Nov. 14, 1915.

Maximum discharge since construction of Lucky Peak Dam in 1955, 13,200 ft^3/s June 13-15, 1983; no flow on several days in 1954, 1955, 1957-59, 1961, 1969, 1974, 1978, 1980, 1982, 1984-86, 1989 when gates were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,590 ft^3/s May 7; minimum daily, 151 ft^3/s Oct. 31.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	336	154	153	154	152	1080	1290	4200	4550	4450	4000	3270
2	255	154	154	156	153	1150	1300	4260	4550	4430	4000	3270
3	254	154	156	155	155	1150	1350	4310	4560	4420	4010	3260
4	254	154	155	155	154	1150	1410	4320	4560	4430	3990	3160
5	253	154	154	153	156	1150	1420	4330	4560	4410	4000	3090
6	252	154	157	154	156	1150	1430	4530	4550	4400	3980	3070
7	254	154	157	153	152	1150	1430	4590	4550	4400	3970	3010
8	237	154	154	154	154	1150	1960	4570	4550	4350	3960	2970
9	229	154	157	156	153	1150	2280	4560	4550	4320	3950	2980
10	229	154	154	153	156	1150	2440	4540	4550	4320	3950	2940
11	228	155	154	154	155	1150	2540	4540	4550	4320	3950	2910
12	228	153	156	153	153	1150	2680	4540	4560	4330	3950	2900
13	230	153	155	154	307	1150	2830	4540	4550	4310	3940	2900
14	228	153	155	153	353	1150	2870	4530	4480	4300	3920	2890
15	212	154	156	153	618	510	2970	4520	4450	4300	3940	2870
16	204	154	154	153	756	153	3030	4530	4450	4300	3880	2870
17	203	155	155	154	750	154	3110	4520	4450	4300	3850	2860
18	203	154	154	154	751	153	3310	4530	4460	4310	3850	2780
19	203	155	154	153	751	152	3600	4520	4450	4300	3850	2750
20	203	156	154	153	751	152	3700	4530	4440	4300	3820	2720
21	204	155	152	152	751	800	3700	4520	4450	4300	3730	2700
22	203	154	154	154	752	1150	3770	4530	4450	4280	3650	2700
23	204	154	154	154	750	1150	3800	4530	4440	4260	3630	2440
24	204	155	154	153	751	1150	3800	4520	4450	4250	3620	2280
25	204	155	154	152	751	1150	3860	4520	4450	4240	3620	2170
26	203	154	155	154	753	1150	3930	4520	4440	4250	3540	2120
27	204	154	155	153	888	1150	3960	4530	4450	4250	3480	2110
28	203	153	155	153	953	1150	3950	4530	4450	4250	3450	2090
29	203	152	156	154	---	1150	4040	4520	4440	4180	3430	2070
30	170	155	157	155	---	1150	4130	4540	4450	4080	3400	2070
31	151	---	156	152	---	1150	---	4560	---	4010	3310	---
TOTAL	6848	4623	4800	4763	13235	29604	85890	139330	134840	133350	117620	82220
MEAN	220.9	154.1	154.8	153.6	472.7	955.0	2863	4495	4495	4302	3794	2741
MAX	336	156	157	156	953	1150	4130	4590	4560	4450	4010	3270
MIN	151	152	152	152	152	152	1290	4200	4440	4010	3310	2070
AC-FT	13580	9170	9520	9450	26250	58720	170400	276400	267500	264500	233300	163100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1895 - 1916, BY WATER YEAR (WY) (UNREGULATED)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	969	1151	1111	1238	1299	2951	6377	8150	7913	2992	1185	970
MAX	1349	3343	2309	2590	1979	9144	11220	13360	24400	6218	2655	2094
(WY)	1900	1910	1899	1899	1909	1910	1907	1904	1896	1896	1916	1916
MIN	683	509	539	660	925	1388	2823	2023	3186	1272	643	578
(WY)	1907	1916	1916	1898	1913	1915	1915	1915	1915	1905	1905	1905

SUMMARY STATISTICS	[a] WATER YEARS 1895 - 1916	
ANNUAL MEAN	3038	
HIGHEST ANNUAL MEAN	4510	1896
LOWEST ANNUAL MEAN	1627	1915
HIGHEST DAILY MEAN	35500	Jun 14 1896
LOWEST DAILY MEAN	432	Nov 14 1915
ANNUAL SEVEN-DAY MINIMUM	482	Nov 10 1915
ANNUAL RUNOFF (AC-FT)	2201000	
10 PERCENT EXCEEDS	8150	
50 PERCENT EXCEEDS	1340	
90 PERCENT EXCEEDS	812	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2002, BY WATER YEAR (WY) (REGULATED)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	951.5	206.0	342.9	666.2	1491	2334	4245	6143	5540	4592	4011	2953
MAX	2246	1448	1756	6008	7009	7565	8940	10830	10540	6034	4752	4469
(WY)	1985	1987	1996	1997	1997	1997	1997	1965	1983	1982	1963	1984
MIN	63.0	0.000	0.000	0.000	0.000	90.0	622	2797	3147	2795	1056	403
(WY)	1962	1955	1955	1955	1961	1977	1955	1991	1990	1992	1992	1992

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		[b] WATER YEARS 1955 - 2002	
ANNUAL TOTAL	499002		757123			
ANNUAL MEAN	1367		2074		2795	
HIGHEST ANNUAL MEAN					4914	1997
LOWEST ANNUAL MEAN					1137	1992
HIGHEST DAILY MEAN	3420	Jun 24	4590	May 7	13200	Jun 13 1983
LOWEST DAILY MEAN	151	Oct 31	151	Oct 31	0.00	Oct 17 1954
ANNUAL SEVEN-DAY MINIMUM	154	Oct 31	153	Jan 19	0.00	Oct 17 1954
ANNUAL RUNOFF (AC-FT)	989800		1502000		2025000	
10 PERCENT EXCEEDS	3200		4520		6350	
50 PERCENT EXCEEDS	336		1290		2680	
90 PERCENT EXCEEDS	154		154		100	

a Unregulated, prior to construction of Arrowrock Dam.
b Regulated, unadjusted (since construction of Lucky Peak Dam).

13203510 BOISE RIVER BELOW DIVERSION DAM NEAR BOISE, ID

LOCATION.--Lat 43°32'23", long 116°05'37", in SE¼SE¼NE¼ sec.4, T.2 N., R.3 E., Ada County, Hydrologic Unit 17050114, on right bank, 700 ft downstream from Diversion Dam, and 7.0 mi southeast of Boise.

DRAINAGE AREA.--2,680 mi^2, approximately. Mean elevation, 5,910 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1990 to September 1991, October 1992 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April to September 1997, February to September 1999 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 18.4 °C Sep. 16, 19-20, 1999.

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

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, COLI-LERT QUANTRY WATER (MPN/ 100 ML) (50468)	TOTAL COLI-FORM, COLILRT QNT,WTR (MPN/ 100 ML) (50569)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT													
16...	1215	208	87	8.1	18.0	15.7	9.6	107	S1	3	--	<.04	.13
DEC													
11...	1120	144	92	7.6	.5	6.1	12.2	--	<1	1	--	<.04	.16
FEB													
12...	1035	164	101	7.8	3.5	1.7	14.6	115	<1	<1	98	<.04	.14
APR													
15...	1305	1510	90	7.5	7.0	5.9	12.6	114	<1	1	6	<.04	.17
MAY													
13...	1250	2100	81	7.5	25.5	7.6	12.8	118	S3	1	31	<.04	.15
JUN													
18...	1120	2070	63	7.2	22.0	10.7	12.0	120	560	1	120	<.04	.14
JUL													
09...	1015	2020	58	7.3	25.0	13.0	10.8	112	S2	6	250	<.04	.10
AUG													
13...	1110	1650	71	7.3	23.0	17.5	9.2	107	<1	1	1100	<.04	.10
SEP													
17...	1128	1380	8	7.3	17.0	17.1	9.3	108	S3	2	1600	E.02	.15

Date	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT				
16...	.08	.02	E.04	8.0
DEC				
11...	.13	.02	E.04	5.0
FEB				
12...	.12	E.01	E.04	9.0
APR				
15...	.08	<.02	<.06	19
MAY				
13...	<.05	<.02	<.06	3.0
JUN				
18...	.11	<.02	<.06	6.0
JUL				
09...	.09	E.01	<.06	2.0
AUG				
13...	.11	<.02	<.06	3.0
SEP				
17...	.07	E.01	<.06	3.0

< Less than
E Estimated value
S Most probable value

13204640 COTTONWOOD CREEK BELOW FIVEMILE CREEK NEAR BOISE, ID

LOCATION.--Lat 43°37'43", long 116°06'39", in SW¼NE¼NW¼ sec.4, T.4 N., R.3 E., Ada County, Robie Creek Quad., Hydrologic Unit 17050114, on left bank 500 ft downstream from Fivemile Creek, and 5.0 mi east of Boise.

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,780 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for discharges below 0.2 ft³/s, which are poor. Station equipment includes satellite telemetry.

COOPERATION.--City of Boise.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14 ft³/s Mar. 9, 2002, gage height, 8.18 ft; no flow for long periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14 ft³/s Mar. 9, gage height, 8.18 ft; no flow Oct. 1 to Nov. 4, July 12 to Sept. 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.58	0.44	0.89	3.4	13	5.2	1.1	0.28	0.00	0.00
2	0.00	0.00	0.68	0.46	0.88	3.1	13	5.1	1.3	0.25	0.00	0.00
3	0.00	0.00	0.73	0.47	0.88	2.8	12	5.0	1.3	0.19	0.00	0.00
4	0.00	0.00	0.64	0.47	0.86	2.7	12	4.7	1.1	0.18	0.00	0.00
5	0.00	0.04	0.63	0.47	0.88	2.8	11	4.5	0.96	0.16	0.00	0.00
6	0.00	0.08	0.71	0.78	0.90	3.4	11	3.9	0.87	0.12	0.00	0.00
7	0.00	0.11	0.76	3.4	1.00	4.9	11	3.8	0.86	0.07	0.00	0.00
8	0.00	0.12	0.73	5.3	1.1	4.4	10	3.6	0.86	0.06	0.00	0.00
9	0.00	0.14	0.73	4.8	1.0	4.0	9.7	3.5	0.94	0.05	0.00	0.00
10	0.00	0.15	0.68	3.8	1.1	3.8	9.4	3.1	0.90	0.04	0.00	0.00
11	0.00	0.20	0.64	2.7	1.2	3.9	8.8	3.0	0.82	0.02	0.00	0.00
12	0.00	0.27	0.62	2.3	1.2	4.8	8.3	2.8	0.79	0.00	0.00	0.00
13	0.00	0.27	0.83	1.9	1.2	5.6	8.1	2.7	0.96	0.00	0.00	0.00
14	0.00	0.29	2.5	1.7	1.3	5.6	8.8	2.6	0.84	0.00	0.00	0.00
15	0.00	0.32	1.4	1.4	1.4	5.2	8.2	2.5	0.70	0.00	0.00	0.00
16	0.00	0.34	1.0	1.3	1.4	4.6	7.4	2.3	0.61	0.00	0.00	0.00
17	0.00	0.50	0.85	1.2	1.6	4.5	7.5	2.0	0.57	0.00	0.00	0.00
18	0.00	0.42	0.78	1.1	1.6	3.9	6.7	1.9	0.69	0.00	0.00	0.00
19	0.00	0.40	0.74	1.1	1.9	3.8	6.3	1.8	0.64	0.00	0.00	0.00
20	0.00	0.39	0.74	1.1	2.1	4.1	6.0	2.0	0.59	0.00	0.00	0.00
21	0.00	0.46	0.65	1.1	2.3	5.8	5.6	2.2	0.54	0.00	0.00	0.00
22	0.00	0.95	0.61	1.1	3.0	8.2	5.4	2.0	0.55	0.00	0.00	0.00
23	0.00	0.95	0.59	0.99	5.2	11	5.0	1.9	0.51	0.00	0.00	0.00
24	0.00	0.73	0.57	0.96	6.2	12	4.8	1.8	0.47	0.00	0.00	0.00
25	0.00	0.69	0.56	0.99	5.3	12	4.7	1.6	0.42	0.00	0.00	0.00
26	0.00	0.62	0.54	1.1	4.6	12	6.0	1.5	0.37	0.00	0.00	0.00
27	0.00	0.58	0.55	1.0	4.0	13	4.5	1.3	0.34	0.00	0.00	0.00
28	0.00	0.57	0.53	0.93	3.7	12	5.0	1.4	0.35	0.00	0.00	0.00
29	0.00	0.60	0.46	e1.0	---	13	5.5	1.2	0.32	0.00	0.00	0.00
30	0.00	0.57	0.45	0.90	---	13	5.5	1.1	0.30	0.00	0.00	0.00
31	0.00	---	0.44	0.88	---	13	---	1.0	---	0.00	0.00	---
TOTAL	0.00	10.76	22.92	47.14	58.69	206.3	240.2	83.0	21.57	1.42	0.00	0.00
MEAN	0.000	0.359	0.739	1.521	2.096	6.655	8.007	2.677	0.719	0.046	0.000	0.000
MAX	0.00	0.95	2.5	5.3	6.2	13	13	5.2	1.3	0.28	0.00	0.00
MIN	0.00	0.00	0.44	0.44	0.86	2.7	4.5	1.0	0.30	0.00	0.00	0.00
AC-FT	0.00	21	45	94	116	409	476	165	43	2.8	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

MEAN	0.201	0.525	0.772	1.248	1.871	5.782	5.642	1.882	0.535	0.027	0.000	0.000
MAX	0.40	0.69	0.81	1.52	2.10	6.65	8.01	2.68	0.72	0.046	0.000	0.000
(WY)	2001	2001	2001	2002	2002	2002	2002	2002	2002	2002	2001	2001
MIN	0.000	0.36	0.74	0.97	1.65	4.91	3.28	1.09	0.35	0.008	0.000	0.000
(WY)	2002	2002	2002	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
ANNUAL TOTAL	404.97		692.00			
ANNUAL MEAN	1.110		1.896		1.536	
HIGHEST ANNUAL MEAN					1.90	2002
LOWEST ANNUAL MEAN					1.18	2001
HIGHEST DAILY MEAN	8.0	Mar 14	13	Mar 27	13	Mar 27 2002
LOWEST DAILY MEAN	0.00	Jul 9	0.00	Oct 1	0.00	Jul 9 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 12	0.00	Oct 1	0.00	Jul 12 2001
ANNUAL RUNOFF (AC-FT)	803		1370		1110	
10 PERCENT EXCEEDS	3.3		5.5		4.6	
50 PERCENT EXCEEDS	0.55		0.64		0.68	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

13205995 DIVERSIONS FROM BOISE RIVER BETWEEN GAGING STATIONS NEAR BOISE AND AT GLENWOOD BRIDGE, ID

Between “near Boise” and “at Glenwood Bridge” gaging stations (published as “between Dowling Ranch and at Boise gaging stations” prior to 1955 water year, and as “between near Boise and at Boise gaging stations”, 1955-82), ten canals and several small farm laterals divert water from Boise River for irrigation.

Records of total diversion during April to September for each canal for years 1919-46, combined daily diversion covering period April to September for years 1947-67, combined daily diversions for water years 1968-75, and daily flow of New York Canal, February 1939 to October 1948, are published in reports of Geological Survey. Records of daily diversion for each canal beginning in 1916 are on file in office of the Idaho Department of Water Resources. Prior to October 1967, there was no record of October to March diversions, except for New York Canal.

Records show summation of discharge for the recorded diversions. Staff gages on canals are read daily or several times weekly, and discharge measurements are made weekly. Records provided by watermaster for Boise River.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	61	0.00	---	e0.00	926	1110	2840	3160	3240	3100	2450
2	293	21	---	---	e0.00	984	1140	2860	3190	3240	3100	2440
3	293	21	---	---	e0.00	982	1160	2880	3210	3230	3100	2440
4	292	21	---	---	e0.00	982	1170	2890	3220	3230	3100	2360
5	290	21	---	---	e0.00	982	1190	2900	3190	3220	3100	2310
6	288	21	---	---	e0.00	982	1200	2900	3180	3210	3090	2310
7	286	20	---	---	e0.00	984	1200	2870	3190	3210	3080	2250
8	284	20	---	---	e0.00	982	1580	2860	3200	3200	3070	2230
9	283	17	---	---	e0.00	976	1640	2940	3210	3190	3060	2220
10	282	15	---	---	e0.00	981	1640	3010	3230	3190	3050	2210
11	276	12	---	---	e0.00	978	1680	3010	3240	3190	3040	2210
12	272	8.9	---	---	e0.00	980	1740	3010	3250	3190	3020	2200
13	269	6.0	---	---	e0.00	981	1760	3000	3260	3190	3090	2200
14	269	3.2	---	---	e0.00	981	1780	3010	3260	3200	3090	2200
15	263	0.30	---	---	393	682	1790	3000	3270	3200	3030	2200
16	263	0.00	---	---	405	e0.00	1830	3000	3270	3200	2940	2200
17	263	0.00	---	---	405	e0.00	1890	3010	3280	3200	2910	2200
18	263	0.00	---	---	405	e0.00	1980	3020	3290	3200	2910	2130
19	262	0.00	---	---	401	e0.00	2100	3040	3300	3200	2900	2090
20	261	0.00	---	---	492	e0.00	2140	3060	3300	3200	2890	2090
21	260	0.00	---	---	530	792	2160	3080	3310	3200	2790	2080
22	257	0.00	---	---	551	991	2210	3100	3310	3200	2720	2080
23	252	0.00	---	---	551	992	2340	3120	3310	3200	2720	1820
24	252	0.00	---	---	551	992	2440	3130	3270	3200	2730	1680
25	252	0.00	---	---	551	991	2530	3130	3240	3200	2720	1620
26	201	0.00	---	---	548	988	2600	3140	3240	3200	2650	1590
27	170	0.00	---	---	707	988	2630	3140	3240	3190	2600	1590
28	169	0.00	---	---	823	988	2640	3140	3240	3190	2590	1580
29	169	0.00	---	---	---	985	2720	3140	3240	3160	2590	1580
30	168	0.00	---	---	---	982	2800	3150	3240	3100	2580	1580
31	167	---	---	---	---	982	---	3160	---	3100	2510	---
TOTAL	7862	268.40	---	---	7313.00	25034.00	56790	93540	97340	99070	89870	62140
MEAN	253.6	8.947	---	---	261.2	807.5	1893	3017	3245	3196	2899	2071
MAX	293	61	---	---	823	992	2800	3160	3310	3240	3100	2450
MIN	167	0.00	---	---	0.00	0.00	1110	2840	3160	3100	2510	1580
AC-FT	15590	532	---	---	14510	49650	112600	185500	193100	196500	178300	123300

e Estimated

13206000 BOISE RIVER AT GLENWOOD BRIDGE NEAR BOISE, ID

LOCATION.--Lat 43°39'37", long 116°16'41", in SW¼NE¼NE¼ sec.25, T.4 N., R.1 E., Ada County, Hydrologic Unit 17050114, on left bank 175 ft upstream from Glenwood Bridge, 4.4 mi northwest of Boise, and at mile 47.5.

DRAINAGE AREA.--2,800 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1938 to September 1940 (published as "at Strawberry Glen Bridge near Boise"), March 1982 to current year. February 1940 to October 1982, station13205500 Boise River at Boise at site 5.3 miles upstream, not equivalent due to irrigation diversions between sites.

GAGE.--Water-stage recorder. Datum of gage is 2,600.00 ft above NGVD of 1929. April 1938 to September 1940, 0.30 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. Station equipment includes satellite telemetry. Flow regulated by Anderson Ranch Reservoir, Arrowrock Reservoir and Lucky Peak Lake (see sta 13201500). The New York, Ridenbaugh and eight small canals (see sta 13205995) divert between station "near Boise" (see sta 13202000) and this station. Diversion above station for about 5,000 acres are outside the basin near Mountain Home.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, prior to completion of Lucky Peak Dam in 1955, 13,000 ft^3/s May 2, 1938; minimum observed, 19 ft^3/s Dec. 3, 1939. Maximum discharge since regulation, 9,840 ft^3/s June 13, 1983, gage height, 11.54 ft; minimum, 42 ft^3/s Oct. 26, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 20, 1943 reached a discharge of about 21,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,670 ft^3/s June 26, gage height, 6.97 ft; minimum daily, 159 ft^3/s Feb. 28.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	264	180	180	182	182	170	181	1030	1290	1200	899	807
2	200	179	175	180	182	186	179	1060	1290	1180	935	821
3	203	178	179	185	181	185	178	1070	1290	1180	921	825
4	202	179	180	181	181	185	167	1120	1290	1180	921	808
5	202	179	185	180	181	186	164	1100	1280	1170	925	805
6	201	178	187	186	181	186	165	1220	1310	1160	917	779
7	201	177	192	185	182	204	168	1340	1250	1170	915	780
8	200	180	182	188	185	188	201	1330	1270	1160	903	781
9	192	179	180	188	182	187	347	1320	1280	1170	891	767
10	194	180	180	186	184	191	509	1310	1290	1170	888	742
11	217	175	180	185	182	188	572	1310	1290	1180	891	711
12	203	184	180	184	185	187	638	1310	1290	1180	892	701
13	202	181	193	183	183	190	765	1300	1280	1170	871	704
14	203	179	209	183	191	190	879	1290	1250	1160	862	693
15	210	179	184	182	196	191	914	1300	1200	1120	873	679
16	203	179	184	183	196	182	962	1310	1210	1100	881	678
17	199	199	189	182	200	188	956	1290	1210	1090	879	686
18	201	181	182	181	202	185	1070	1280	1220	1090	884	672
19	203	178	186	181	207	189	1260	1280	1200	1090	891	668
20	203	177	183	184	206	186	1330	1270	1200	1090	888	649
21	205	181	181	192	207	186	1310	1280	1200	1110	896	622
22	206	191	181	188	205	184	1300	1280	1200	1120	905	628
23	209	178	180	185	206	193	1220	1270	1200	1110	886	660
24	208	177	179	183	209	197	1090	1280	1200	1100	875	633
25	206	185	178	183	208	194	1020	1280	1200	1100	877	642
26	207	181	179	190	208	194	1020	1270	1190	1110	878	636
27	208	178	181	189	201	191	1000	1280	1220	1110	872	631
28	209	181	181	184	159	189	1000	1260	1200	1110	866	609
29	209	193	180	183	---	188	1010	1270	1200	1070	850	594
30	202	184	181	183	---	188	1010	1270	1200	992	837	597
31	181	---	182	183	---	191	---	1280	---	923	813	---
TOTAL	6353	5430	5673	5712	5372	5839	22585	38860	37200	34865	27482	21008
MEAN	204.9	181.0	183.0	184.3	191.9	188.4	752.8	1254	1240	1125	886.5	700.3
MAX	264	199	209	192	209	204	1330	1340	1310	1200	935	825
MIN	181	175	175	180	159	170	164	1030	1190	923	813	594
AC-FT	12600	10770	11250	11330	10660	11580	44800	77080	73790	69150	54510	41670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002, BY WATER YEAR (WY)

MEAN	444.3	344.4	501.0	927.2	1187	1966	2657	2820	2267	1254	905.1	648.7
MAX	1559	1516	1685	5903	7059	7037	6850	6780	6749	2689	1443	1893
(WY)	1985	1985	1984	1997	1997	1997	1997	1984	1983	1982	1997	1984
MIN	150	106	106	107	108	111	460	655	620	554	500	266
(WY)	1993	1993	1993	1993	1993	1992	2001	1990	1987	1992	1992	1992

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1982 - 2002	
ANNUAL TOTAL	171617		216379			
ANNUAL MEAN	470.2		592.8		1320	
HIGHEST ANNUAL MEAN					3381	1997
LOWEST ANNUAL MEAN					358	1992
HIGHEST DAILY MEAN	947	May 20	1340	May 7	9560	Jun 13 1983
LOWEST DAILY MEAN	175	Nov 11	159	Feb 28	86	Nov 2 1992
ANNUAL SEVEN-DAY MINIMUM	178	Nov 5	172	Apr 1	99	Nov 1 1992
ANNUAL RUNOFF (AC-FT)	340400		429200		956000	
10 PERCENT EXCEEDS	871		1270		4120	
50 PERCENT EXCEEDS	282		209		684	
90 PERCENT EXCEEDS	181		180		169	

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-73, 1988, 1990 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July to September 1997, March to June 1998, October 1998 to September 1999, April to September 2001, November 2001 to July 2002 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 22.0 °C Sept. 2-3, 2001; minimum, 0.0 °C Dec. 21-22, 1998.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 17.4 °C July 6, 8; minimum, 0.7 °C Jan. 3.

REMARKS.--Missing data due to sensor out of water.

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

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, COLI-LERT QUANTRY WATER (MPN/ 100 ML) (50468)	TOTAL COLI-FORM, COLILRT QNT,WTR (MPN/ 100 ML) (50569)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT													
18...	1140	202	163	8.0	8.0	11.8	11.6	117	88	74	--	<.04	.32
DEC													
11...	1345	183	184	7.9	4.0	5.2	13.8	120	31	15	--	E.03	.35
FEB													
12...	1315	186	197	8.4	5.0	4.4	15.8	132	S4	2	1400	<.04	.38
APR													
16...	1210	969	110	7.7	--	6.5	12.4	111	29	19	770	.04	.34
MAY													
14...	1145	1290	97	8.3	15.0	8.7	13.7	129	28	26	1300	<.04	.47
JUN													
18...	1510	1280	63	7.2	22.0	10.7	12.0	--	S2	150	6500	E.04	.31
JUL													
09...	1435	1170	74	8.3	31.0	16.3	11.1	123	320	26	<2400	<.04	.17
AUG													
13...	1505	882	92	8.8	30.5	20.2	10.9	132	S55	9	4100	<.04	.16
SEP													
17...	1520	678	104	8.4	20.0	18.0	10.3	121	195	38	8200	E.02	.19

Date	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT				
18...	.74	.04	.08	1.0
DEC				
11...	1.11	.16	.22	5.0
FEB				
12...	1.05	.24	.30	3.0
APR				
16...	.26	.06	.07	9.0
MAY				
14...	.22	.03	.12	6.0
JUN				
18...	.33	.07	.09	10
JUL				
09...	.26	.09	.10	4.0
AUG				
13...	.33	.10	.11	3.0
SEP				
17...	.51	.14	.15	3.0

< Less than
E Estimated value
S Most probable value

WATER TEMPERATURE, DEGREES CELSIUS, NOVEMBER 2001 TO JULY 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		NOVEMBER			DECEMBER			JANUARY			FEBRUARY	
1	---	---	---	6.7	5.3	6.1	---	---	---	3.9	2.0	3.1
2	---	---	---	6.7	5.6	6.3	---	---	---	5.0	2.5	3.7
3	---	---	---	8.1	6.2	7.1	5.1	0.7	3.4	4.5	1.7	3.4
4	---	---	---	7.0	5.5	6.3	5.0	4.1	4.6	4.5	2.0	3.5
5	---	---	---	6.4	4.8	5.6	4.8	3.4	4.2	4.2	1.5	3.1
6	---	---	---	7.2	5.1	6.2	5.5	4.1	4.8	4.2	1.5	3.1
7	---	---	---	7.5	5.8	6.8	6.1	4.7	5.5	5.1	3.3	4.3
8	---	---	---	6.7	5.0	6.0	6.2	5.0	5.7	5.5	3.7	4.6
9	---	---	---	6.2	5.0	5.7	6.1	5.0	5.6	5.5	2.3	4.0
10	---	---	---	5.5	3.4	4.7	5.1	3.4	4.5	5.0	2.3	3.9
11	---	---	---	5.3	3.9	4.8	5.1	3.6	4.5	5.5	2.8	4.3
12	---	---	---	5.6	4.2	5.1	5.6	3.6	4.7	5.0	2.0	3.8
13	---	---	---	5.8	4.2	5.2	5.3	3.4	4.5	4.7	2.2	3.7
14	---	---	---	6.9	5.3	5.9	5.3	3.6	4.5	4.8	1.7	3.5
15	---	---	---	5.8	3.7	5.0	5.0	3.4	4.3	5.1	1.8	3.7
16	---	---	---	5.6	4.2	4.9	3.9	2.0	3.2	5.3	2.2	4.0
17	11.3	10.1	10.7	---	---	---	3.7	2.8	3.5	4.8	2.5	3.9
18	11.0	9.0	10.0	---	---	---	4.4	2.5	3.6	5.9	2.5	4.5
19	10.4	8.4	9.7	6.9	2.2	4.3	4.2	3.0	3.7	5.5	3.4	4.7
20	11.0	9.6	10.5	7.5	0.9	3.9	3.9	2.2	2.9	6.5	3.6	5.2
21	11.5	10.1	10.9	---	---	---	4.8	3.0	3.7	6.2	3.1	5.0
22	10.9	9.8	10.3	---	---	---	4.5	2.5	3.7	7.2	3.7	5.7
23	9.9	8.7	9.3	---	---	---	5.0	3.0	4.2	6.7	4.7	5.9
24	8.7	7.3	7.7	---	---	---	5.5	3.6	4.7	6.5	4.7	5.7
25	7.8	6.9	7.3	---	---	---	5.3	4.2	5.0	5.3	1.8	3.9
26	8.2	6.2	7.3	---	---	---	5.9	4.5	5.3	4.8	1.4	3.4
27	7.3	5.3	6.6	---	---	---	5.6	4.1	4.8	5.5	1.2	3.7
28	6.5	4.7	5.4	---	---	---	4.2	1.7	3.2	7.2	3.4	5.2
29	6.9	5.1	6.0	---	---	---	3.4	0.7	2.3	---	---	---
30	6.7	3.7	6.0	---	---	---	3.0	1.1	2.1	---	---	---
31	---	---	---	---	---	---	3.7	1.7	2.8	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	7.2	1.2	4.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		MARCH			APRIL			MAY			JUNE	
1	5.9	2.5	4.3	13.2	9.2	11.3	10.4	6.2	8.3	12.1	9.6	10.5
2	5.6	1.5	3.7	12.1	8.9	10.7	10.9	6.1	8.4	13.5	9.5	11.2
3	5.9	1.8	4.1	12.6	7.8	10.4	10.4	6.2	8.4	13.7	9.0	11.2
4	6.4	2.5	4.8	14.0	9.2	11.6	10.9	5.9	8.3	13.8	9.5	11.5
5	7.0	3.3	5.5	13.3	10.3	11.9	9.5	6.7	8.1	14.1	9.5	11.7
6	7.8	5.6	6.9	14.6	10.7	12.6	10.4	6.7	8.3	13.8	9.6	11.6
7	7.6	4.5	6.1	13.8	10.3	12.1	9.2	6.4	7.7	13.3	9.2	11.2
8	5.3	2.3	4.1	14.1	9.9	12.1	10.3	5.8	7.8	12.6	8.7	10.5
9	5.8	2.5	4.3	12.3	7.9	9.5	10.3	6.5	8.1	11.3	8.7	9.9
10	6.1	3.9	5.1	9.6	6.7	8.1	10.7	6.9	8.5	12.6	9.3	10.8
11	7.0	4.4	5.8	9.9	6.4	8.1	11.2	6.5	8.6	14.1	9.3	11.5
12	7.6	6.1	7.0	11.2	7.2	9.1	11.6	6.7	9.0	14.4	9.6	11.9
13	7.8	5.5	6.8	9.8	6.5	8.0	11.6	7.2	9.2	14.7	9.9	12.1
14	7.9	4.1	6.2	10.1	7.5	8.6	11.5	7.5	9.3	15.2	10.3	12.5
15	6.7	3.9	5.7	8.7	5.9	7.1	11.3	7.0	9.1	15.4	10.7	12.9
16	6.7	4.4	5.6	7.8	5.1	6.4	11.8	7.2	9.3	15.5	10.7	12.9
17	5.8	4.1	5.1	7.8	5.8	6.7	11.5	7.6	9.4	14.3	10.7	12.5
18	7.8	3.3	5.7	7.0	5.1	6.0	12.3	7.9	9.9	13.7	11.2	12.3
19	7.3	5.3	6.5	9.3	5.0	6.9	12.6	8.4	10.2	14.9	10.3	12.4
20	9.3	5.8	7.6	9.5	5.3	7.2	10.7	8.2	9.3	15.5	10.4	12.8
21	11.2	7.2	9.3	9.5	5.1	7.2	9.9	7.8	8.8	15.4	11.5	13.2
22	11.0	8.2	9.9	9.8	5.6	7.6	10.7	7.9	9.2	15.7	11.5	13.3
23	10.4	7.9	8.9	9.3	5.6	7.3	11.2	8.1	9.5	16.2	11.8	13.7
24	8.4	6.7	7.6	9.8	4.8	7.2	12.1	7.9	9.9	16.3	11.6	13.8
25	10.1	6.7	8.2	10.3	5.3	7.7	12.4	8.2	10.2	16.6	11.8	14.1
26	11.5	7.0	9.4	10.1	5.9	7.9	12.4	8.7	10.4	16.5	12.0	14.1
27	11.3	8.6	10.1	9.9	5.9	7.8	13.0	8.7	10.6	16.3	12.1	14.0
28	10.6	7.5	9.3	10.6	5.9	8.1	12.7	9.3	10.9	14.9	12.3	13.6
29	11.5	7.8	9.7	10.6	5.9	8.2	13.8	9.2	11.1	16.5	12.4	14.1
30	12.1	7.9	10.2	9.2	6.7	7.5	14.0	9.6	11.6	16.6	12.1	14.2
31	13.0	8.7	11.0	---	---	---	13.7	9.3	11.4	---	---	---
MONTH	13.0	1.5	6.9	14.6	4.8	8.7	14.0	5.8	9.3	16.6	8.7	12.4

13206000 BOISE RIVER AT GLENWOOD BRIDGE NEAR BOISE, ID--Continued

WATER TEMPERATURE, DEGREES CELSIUS, NOVEMBER 2001 TO JULY 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JULY			AUGUST			SEPTEMBER			OCTOBER	
1	16.5	12.0	14.1	---	---	---	---	---	---	---	---	---
2	16.8	11.8	14.2	---	---	---	---	---	---	---	---	---
3	16.8	12.7	14.6	---	---	---	---	---	---	---	---	---
4	16.6	12.3	14.4	---	---	---	---	---	---	---	---	---
5	16.8	12.3	14.3	---	---	---	---	---	---	---	---	---
6	17.4	12.6	14.7	---	---	---	---	---	---	---	---	---
7	16.8	13.2	14.9	---	---	---	---	---	---	---	---	---
8	17.4	13.3	15.2	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

13206305 BOISE RIVER SOUTH CHANNEL AT EAGLE, ID

LOCATION.--Lat 43°40'31", long 116°21'13", in NE¼SE¼NE¼ sec.20, T.4 N., R.1 W., Ada County, Hydrologic Unit 17050114, on right bank at State Highway 55, 10 ft upstream from bridge, 1.5 mi south of Eagle, and at mile 42.8.

PERIOD OF RECORD.--November 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,560 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,470 ft³/s Apr. 19, 2000, gage height, 4.73 ft; minimum daily, 83 ft³/s Dec. 25, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,160 ft³/s July 9, gage height, 4.34 ft; minimum daily, 83 ft³/s Dec. 25.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	95	93	90	91	91	97	557	686	638	576	511
2	121	95	90	90	91	100	96	558	685	630	584	520
3	121	97	91	94	91	99	95	555	685	616	583	527
4	120	97	91	97	91	98	90	566	684	600	582	517
5	122	94	94	97	90	98	90	562	681	598	582	518
6	123	94	95	98	91	97	90	609	697	594	579	480
7	122	96	98	93	91	108	91	686	656	601	574	476
8	124	94	92	93	93	100	100	676	665	601	569	461
9	119	94	90	94	93	100	155	674	670	675	561	456
10	110	95	88	91	93	102	226	665	673	795	557	444
11	115	93	88	92	93	99	250	667	673	793	561	425
12	108	93	86	91	94	99	271	665	672	796	560	416
13	119	93	90	92	93	100	316	661	674	792	554	418
14	122	92	112	91	96	100	357	653	656	788	552	415
15	124	92	106	90	99	100	362	663	629	769	559	407
16	119	92	101	90	100	98	380	664	633	659	565	410
17	118	99	103	89	102	100	371	662	633	646	560	410
18	117	92	97	90	102	97	399	657	639	649	557	400
19	118	90	92	89	103	99	451	662	633	648	564	399
20	119	89	86	90	104	98	481	657	635	646	564	391
21	120	91	86	94	105	97	483	661	634	644	564	374
22	119	95	87	93	104	97	485	659	635	635	579	378
23	121	89	87	91	105	103	489	656	631	609	571	400
24	121	88	86	91	107	104	536	654	625	601	562	390
25	117	90	83	92	106	101	530	656	627	607	557	394
26	114	92	85	97	105	100	552	647	616	615	554	392
27	114	89	89	97	103	99	544	655	646	614	549	389
28	115	90	90	93	87	98	545	652	634	619	548	378
29	113	96	90	92	---	98	545	662	635	623	541	366
30	109	93	90	92	---	99	550	666	637	617	533	367
31	97	---	90	92	---	101	---	674	---	586	520	---
TOTAL	3679	2789	2846	2865	2723	3080	10027	19961	19579	20304	17421	12829
MEAN	118.7	92.97	91.81	92.42	97.25	99.35	334.2	643.9	652.6	655.0	562.0	427.6
MAX	158	99	112	98	107	108	552	686	697	796	584	527
MIN	97	88	83	89	87	91	90	555	616	586	520	366
AC-FT	7300	5530	5650	5680	5400	6110	19890	39590	38830	40270	34550	25450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

MEAN	237.3	153.0	136.8	133.4	139.0	279.1	534.2	609.3	674.7	633.6	609.1	410.8
MAX	356	223	176	163	164	576	988	644	761	704	747	557
(WY)	2001	2001	2001	2001	2001	2000	2000	2002	2000	2000	2000	2000
MIN	119	93.0	91.8	92.4	97.2	99.4	280	587	611	542	518	248
(WY)	2002	2002	2002	2002	2002	2002	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002	
ANNUAL TOTAL	109149		118103			
ANNUAL MEAN	299.0		323.6		330.3	
HIGHEST ANNUAL MEAN					337	2001
LOWEST ANNUAL MEAN					324	2002
HIGHEST DAILY MEAN	651	Jun 12	796	Jul 12	1270	Apr 19 2000
LOWEST DAILY MEAN	83	Dec 25	83	Dec 25	83	Dec 25 2001
ANNUAL SEVEN-DAY MINIMUM	86	Dec 20	86	Dec 20	86	Dec 20 2001
ANNUAL RUNOFF (AC-FT)	216500		234300		239300	
10 PERCENT EXCEEDS	603		658		631	
50 PERCENT EXCEEDS	166		121		224	
90 PERCENT EXCEEDS	93		90		93	

BOISE RIVER BASIN

13210050 BOISE RIVER NEAR MIDDLETON, ID

LOCATION.--Lat 43°41'06", long 116°34'22", in SE¼SE¼SE¼NE¼ sec.16, T.4 N., R.2 W., Canyon County, Hydrologic Unit 17050114, on right bank, 2.9 mi southeast of Middleton, and at mile 29.1.

DRAINAGE AREA.--3,050 mi^2, approximately.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1977, November 1991 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April to September 1997, October 1998 to September 1999 (discontinued).

REMARKS.--Due to flow conditions, April and May samples collected upstream at Star Bridge near Star, Id. (sta 13210007).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 22.0 °C Aug. 29, 1999; minimum, 0.2 °C Dec. 21-24, 1998.

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

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, COLI-LERT QUANTRY WATER (MPN/ 100 ML) (50468)	TOTAL COLI-FORM, COLILRT QNT,WTR (MPN/ 100 ML) (50569)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT													
17...	1445	194	231	8.9	20.0	14.1	14.4	153	S18	12	--	<.04	.38
DEC													
12...	1120	267	261	8.3	-.5	4.0	14.2	118	56	36	--	<.04	.30
FEB													
13...	1110	242	272	8.3	-1.0	2.7	14.3	115	60	33	1600	<.04	.64
JUN													
19...	1120	517	121	8.0	15.0	14.1	11.5	121	233	58	5800	<.04	.33
JUL													
10...	1205	465	116	8.6	26.0	18.5	12.6	146	107	21	16000	<.04	.29
AUG													
14...	1100	288	154	7.7	22.5	19.2	9.7	115	81	37	5500	E.02	.29
SEP													
18...	1118	346	169	7.9	15.0	16.0	10.4	114	146	61	1600	<.04	.49

Date	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT				
17...	1.89	.30	.33	5.0
DEC				
12...	3.03	.47	.53	4.0
FEB				
13...	2.87	.47	.57	25
JUN				
19...	.56	.12	.13	5.0
JUL				
10...	.40	<.02	.14	6.0
AUG				
14...	.59	.16	.18	4.0
SEP				
18...	.94	.20	.23	2.0

< Less than
E Estimated value
S Most probable value

13210050 BOISE RIVER NEAR MIDDLETON, ID--Continued

13210007 BOISE RIVER AT STAR BRIDGE NEAR STAR, ID

LOCATION.--Lat 43°40'49", long 116°29'33", in NE¼SE¼SE¼ sec.18, T.4 N., R.2 W., Ada County, Hydrologic Unit 17050114.

REMARKS.--Due to flow conditions, April and May samples collected at Star Bridge site instead of sta 13210050.

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

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, COLI-LERT QUANTRY WATER (MPN/ 100 ML) (50468)	TOTAL COLI-FORM, COLILRT QNT,WTR (MPN/ 100 ML) (50569)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
APR													
17...	1230	670	128	7.6	7.0	7.3	11.8	108	142	42	2700	<.04	.34
MAY													
15...	1340	637	112	8.6	21.0	11.0	14.0	139	158	120	2600	<.04	.33

Date	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
APR				
17...	.42	.08	.13	16
MAY				
15...	.28	.06	.08	9.0

< Less than

13212996 DIVERSIONS FROM BOISE RIVER BETWEEN GAGING STATIONS AT GLENWOOD BRIDGE AND NEAR PARMA, ID

Between “at Glenwood Bridge” and “near Parma” gaging stations (published as “between at Boise and Notus gaging stations” prior to 1974, and “between at Boise and near Parma gaging stations”, 1974-82), 23 canals and several small farm laterals divert water from Boise River for irrigation.

Records of daily diversions for each canal beginning in 1916 are on file in office of the Idaho Department of Water Resources. Prior to October 1967 there was no record of October to March diversions.

Records show summation of discharge for the recorded diversions. Staff gages on canals are read daily or several times weekly, and discharge measurements are made weekly. Records provided by watermaster for Boise River.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1320	769	0.00	---	---	---	---	e0.00	1290	1550	1620	1510
2	1320	718	---	---	---	---	---	0.80	1320	1570	1620	1500
3	1310	715	---	---	---	---	---	0.80	1340	1560	1620	1490
4	1290	710	---	---	---	---	---	0.80	1360	1550	1620	1490
5	1280	703	---	---	---	---	---	0.80	1390	1550	1610	1480
6	1280	695	---	---	---	---	---	0.80	1400	1580	1610	1500
7	1280	685	---	---	---	---	---	0.80	1410	1590	1600	1500
8	1280	675	---	---	---	---	---	0.80	1430	1590	1600	1500
9	1280	641	---	---	---	---	---	60	1450	1600	1600	1490
10	1270	580	---	---	---	---	---	391	1470	1610	1600	1490
11	1260	509	---	---	---	---	---	417	1480	1620	1590	1480
12	1240	439	---	---	---	---	---	465	1470	1620	1580	1480
13	1230	368	---	---	---	---	---	514	1470	1630	1580	1480
14	1220	297	---	---	---	---	---	563	1470	1630	1580	1470
15	1220	204	---	---	---	---	---	611	1480	1640	1580	1460
16	1220	155	---	---	---	---	---	661	1490	1650	1580	1480
17	1210	142	---	---	---	---	---	712	1500	1650	1580	1480
18	1210	122	---	---	---	---	---	737	1500	1660	1570	1480
19	1210	103	---	---	---	---	---	798	1500	1650	1570	1480
20	1210	84	---	---	---	---	---	853	1500	1650	1570	1480
21	1180	65	---	---	---	---	---	898	1500	1650	1570	1470
22	1180	46	---	---	---	---	---	950	1510	1650	1570	1470
23	1170	27	---	---	---	---	---	1040	1510	1650	1580	1470
24	1150	9.0	---	---	---	---	---	1120	1510	1650	1570	1460
25	1080	7.7	---	---	---	---	---	1160	1500	1650	1560	1460
26	1070	6.4	---	---	---	---	---	1180	1500	1660	1550	1440
27	1070	5.1	---	---	---	---	---	1200	1500	1650	1540	1420
28	1070	3.9	---	---	---	---	---	1220	1510	1650	1540	1390
29	1060	2.6	---	---	---	---	---	1230	1520	1640	1530	1370
30	1060	1.3	---	---	---	---	---	1240	1540	1630	1520	1350
31	1030	---	---	---	---	---	---	1260	---	1630	1520	---
TOTAL	37260	9488.0	---	---	---	---	---	19285.60	43820	50260	48930	44020
MEAN	1202	316.3	---	---	---	---	---	622.1	1461	1621	1578	1467
MAX	1320	769	---	---	---	---	---	1260	1540	1660	1620	1510
MIN	1030	1.3	---	---	---	---	---	0.00	1290	1550	1520	1350
AC-FT	73910	18820	---	---	---	---	---	38250	86920	99690	97050	87310

e Estimated

BOISE RIVER BASIN

13213000 BOISE RIVER NEAR PARMA, ID

LOCATION.--Lat 43°46'54", long 116°58'17", in SE¼NE¼SE¼ sec.7, T.5 N., R.5 W., Canyon County, Hydrologic Unit 17050114, on left bank, at county road crossing, 1.2 mi west of Parma, and at mile 3.8.

DRAINAGE AREA.--3,970 mi^2, approximately.

WATER-QUALITY RECORDS

PERIOD OF RECORD--Chemical analyses July 1969 to December 1972, December 1973 to September 1981, October 1986 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: March to September 1973, November 1974 to March 1975, September 1975 to September 1976, October 1986 to September 1995, April to September 1997, October 1998 to September 1999 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 28.5 °C June 27-28, 1973; minimum, 0.0 °C on many days during winter months.

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

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, COLI-LERT QUANTRY WATER (MPN/ 100 ML) (50468)	TOTAL COLI-FORM, COLILRT QNT,WTR (MPN/ 100 ML) (50569)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT													
17...	1110	696	484	8.1	11.5	12.1	9.4	95	120	--	--	<.04	.64
DEC													
12...	1425	716	518	8.6	2.0	5.5	13.8	119	105	71	--	<.04	.42
FEB													
13...	1410	631	543	8.7	6.0	5.2	14.9	127	S44	21	1600	<.04	.72
APR													
18...	1135	1270	264	7.7	8.0	8.7	10.2	95	600	440	6100	E.04	.79
MAY													
16...	1220	886	318	8.0	20.0	14.6	10.3	110	1200	680	8200	<.04	.62
JUN													
19...	1450	795	322	8.3	22.0	18.9	11.1	129	700	130	10000	<.04	.63
JUL													
10...	1520	629	357	8.2	34.0	23.2	10.2	129	320	44	17000	E.02	.61
AUG													
14...	1430	396	435	8.5	31.5	22.0	13.2	165	110	6	4800	<.04	.51
SEP													
18...	1453	1010	381	8.2	21.0	17.4	10.6	120	280	70	20000	<.04	.57

Date	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT				
17...	3.26	.30	.36	37
DEC				
12...	4.33	.37	.43	11
FEB				
13...	4.28	.38	.50	44
APR				
18...	1.30	.18	.36	92
MAY				
16...	1.25	.18	.28	56
JUN				
19...	1.51	.20	.27	47
JUL				
10...	1.44	.25	.33	49
AUG				
14...	1.53	.24	.27	9.0
SEP				
18...	1.82	.25	.31	32

< Less than
E Estimated value
S Most probable value

SNAKE RIVER MAIN STEM

13213100 SNAKE RIVER AT NYSSA, OR

LOCATION.--Lat 43°52'34", long 116°58'53", in NW¼SW¼NE¼ sec.7, T.6 N., R.5 W., Canyon County, Hydrologic Unit 17050115, on right bank, 300 ft upstream from U.S. Highway 20-26 bridge at Nyssa, 2.3 mi downstream from Boise River, and at mile 385.2.

DRAINAGE AREA.--58,700 mi^2, approximately.

PERIOD OF RECORD.--November 1974 to September 1986, February 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,170 ft above NGVD of 1929, from topographic map. Prior to 1989, station located on left bank, in Oregon.

REMARKS.--Records good. Station equipment includes satellite telemetry. Flow regulated by many reservoirs above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,900 ft^3/s Apr. 19, 1984, gage height, 13.34 ft; minimum, 4,110 ft^3/s June 7, 1992, gage height, 4.32 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 10,100 ft^3/s Mar. 26; minimum daily, 5,040 ft^3/s June 30.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8330	8700	8670	8380	8210	8010	8490	6770	7480	5200	6110	7320
2	8420	8780	8960	8360	8250	7940	8200	7190	7720	5260	6040	7610
3	8180	8620	8680	8650	8170	7990	8440	6830	7680	5320	6040	7780
4	8210	8700	8420	8570	8060	8170	8480	6740	7590	5420	6460	7690
5	8210	8820	8840	8460	7940	7930	8420	7060	7480	5340	6330	7550
6	8510	8950	9020	8630	8240	8210	8370	7840	7930	5470	6350	7300
7	8360	8620	9060	8730	8150	8000	7660	7580	7520	5520	6230	7690
8	8500	8600	8640	8750	8030	8090	7490	7370	7450	5610	6470	7770
9	8660	8650	9090	8710	7730	9310	8170	7450	7640	5460	6420	7830
10	8490	8950	8710	8530	7760	9950	8220	7690	7840	5420	6810	8330
11	8490	8890	8610	8740	8460	8490	8360	7550	7790	5440	6580	8590
12	9150	8780	8800	8860	8000	7970	7780	7960	7650	5320	6680	8510
13	8860	9060	8620	8630	8030	8380	8030	8090	7470	5390	6350	8470
14	9100	9240	9240	8380	8010	8140	7900	7400	7270	5610	6440	8010
15	9350	8820	8920	8180	8120	8780	8590	7340	7150	5800	6710	8090
16	9840	8950	8640	8760	8040	8810	8090	7350	6880	5720	6530	8530
17	9860	9260	8830	8340	7930	8640	7920	7090	6690	5710	6470	8380
18	9270	9140	8910	8430	8000	8170	8290	7090	6170	5840	6090	8530
19	9240	8360	8640	8080	7900	8570	7990	7360	5590	6030	6230	8670
20	9000	8970	8560	8250	8300	8240	8600	7230	5540	6460	6740	8720
21	8760	8860	8510	8540	8140	8390	8190	e7400	5530	6620	6550	8500
22	8730	9100	9000	8160	8540	8250	8160	e7600	5760	6580	6150	8560
23	8690	8790	8270	8050	8670	8520	7770	7770	6250	6760	6170	9000
24	8170	8740	8840	8400	8720	8800	7110	8160	6390	6900	6680	8660
25	8850	9650	8150	8400	8540	9490	6990	8120	e5800	6770	6960	8730
26	8910	8840	8690	8340	8420	10100	7210	8170	e5700	6490	7180	8940
27	8540	8600	8620	8340	9480	9510	7020	8140	e5700	6290	6740	8540
28	8690	8870	8620	8200	8100	8170	7040	8190	5570	6290	6940	8440
29	8600	9300	8230	8440	---	8480	7060	7710	5090	6420	7270	8480
30	8630	9040	8100	8200	---	8560	6910	7520	5040	6190	7550	8490
31	8850	---	8760	8530	---	8410	---	7460	---	5940	7300	---
TOTAL	271450	266650	269650	262020	229940	264470	236950	233220	201360	182590	203570	247710
MEAN	8756	8888	8698	8452	8212	8531	7898	7523	6712	5890	6567	8257
MAX	9860	9650	9240	8860	9480	10100	8600	8190	7930	6900	7550	9000
MIN	8170	8360	8100	8050	7730	7930	6910	6740	5040	5200	6040	7300
AC-FT	538400	528900	534900	519700	456100	524600	470000	462600	399400	362200	403800	491300

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

MEAN	12260	12790	13270	14460	15460	17960	20350	19200	16470	8808	8702	10630
MAX	21360	24660	24320	30290	38580	40010	43970	49060	41100	16480	12620	17110
(WY)	1985	1985	1984	1984	1997	1986	1984	1984	1984	1983	1997	1997
MIN	8102	8888	8698	8452	8212	8018	6033	5367	5223	5546	5075	6664
(WY)	1993	2002	2002	2002	2002	1991	1992	1992	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1975 - 2002	
ANNUAL TOTAL	2903000		2869580			
ANNUAL MEAN	7953		7862		14130	
HIGHEST ANNUAL MEAN					26260	1984
LOWEST ANNUAL MEAN					7365	1992
HIGHEST DAILY MEAN	10500	May 19	10100	Mar 26	57400	Apr 20 1984
LOWEST DAILY MEAN	5630	Jun 24	5040	Jun 30	4240	Jun 7 1992
ANNUAL SEVEN-DAY MINIMUM	5750	Jun 19	5240	Jun 29	4520	Jun 6 1992
ANNUAL RUNOFF (AC-FT)	5758000		5692000		10240000	
10 PERCENT EXCEEDS	9040		8910		26100	
50 PERCENT EXCEEDS	8310		8170		10900	
90 PERCENT EXCEEDS	6330		6170		7230	

e Estimated

MALHEUR RIVER BASIN

13233300 MALHEUR RIVER BELOW NEVADA DAM NEAR VALE, OR

LOCATION.--Lat 43°59'20", long 117°13'10", in NE¼SW¼ sec.21, T.18 S., R.45 E., Malheur County, Hydrologic Unit 17050117, on right bank, 510 ft downstream from dam and headgates of Nevada Canal, and 1.5 mi northeast of Vale, Oregon.

DRAINAGE AREA.--3,880 mi^2, approximately.

PERIOD OF RECORD.--June 1926 to September 1934, October 1950 to September 1954, October 1993 to current year. Monthly discharge only for 1936-42, 1944-50, furnished by the State Engineer of Oregon, published in WSP 1317.

GAGE.--Water-stage recorder. Elevation of gage is 2,220 ft above NGVD of 1929, from topographic map. Prior to Nov. 17, 1930, at datum 1.00 ft higher.

REMARKS.--Records good except for Dec. 6 to Feb. 25 and estimated daily discharges, which are fair. Many diversions for irrigation above station. Since March 1930, Vale-Oregon Canal has diverted in sec.31 T.20 S., R.41 E., for irrigation above station and on Willow Creek, a tributary which enters partly above and partly below station. Gillerman-Frohman Canal diverts on left bank in sec.8, T.19 S., R.44 E., for irrigation above and below station. Nevada Canal diverts on right bank 300 ft above station for irrigation below station. Flow regulated by Warmsprings Reservoir and, since December 1935, by Beulah Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,530 ft^3/s Feb. 28, 1940, gage height, 8.88 ft; no flow at times some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 24, 1957 reached a stage of 14.6 ft, discharge 21,000 ft^3/s. Flood of Mar. 19, 1993 reached a stage of 13.31 ft, discharge 16,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 301 ft^3/s Oct. 29, gage height, 1.86 ft; minimum daily, 2.8 ft^3/s Sept. 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	74	70	73	87	85	48	3.2	7.3	14	5.3	4.4
2	10	72	73	76	89	79	56	4.1	5.3	16	12	4.3
3	13	67	78	76	80	76	56	2.9	43	6.7	9.6	5.2
4	14	65	78	76	79	76	31	30	50	11	e13	5.8
5	14	74	76	76	76	76	7.0	63	26	20	e17	6.2
6	15	83	77	77	77	76	7.6	57	20	19	e20	6.2
7	16	79	78	80	93	76	4.8	37	10	25	14	5.8
8	18	79	73	80	107	76	3.6	20	8.1	37	9.5	5.3
9	21	79	73	79	114	82	4.0	3.7	16	19	5.8	5.4
10	20	77	72	80	105	79	25	3.0	25	11	7.0	5.4
11	20	78	73	107	107	77	40	5.1	46	6.6	9.1	4.9
12	17	76	74	128	107	82	39	7.9	16	5.8	9.9	3.2
13	17	78	74	126	102	169	38	7.3	7.9	7.7	6.6	3.0
14	17	85	76	120	103	175	42	3.2	9.2	13	7.9	2.8
15	22	84	74	111	100	133	53	3.8	7.3	13	7.1	3.0
16	29	79	73	101	87	117	66	6.3	8.0	13	5.4	3.2
17	41	76	73	96	83	101	90	4.7	9.5	11	5.3	3.2
18	34	76	73	93	82	92	108	5.8	7.3	4.2	5.3	3.2
19	34	76	72	92	86	90	106	7.1	7.8	6.2	5.4	3.2
20	31	76	72	93	90	90	55	5.4	12	12	4.7	3.2
21	22	76	72	90	90	93	52	20	6.9	32	4.3	3.2
22	20	80	72	86	91	100	53	33	5.3	48	4.2	3.6
23	31	76	73	80	99	152	49	33	16	24	4.0	3.9
24	28	78	73	87	128	150	29	36	31	21	4.0	3.7
25	19	84	72	82	163	142	16	33	15	32	3.9	3.6
26	17	79	72	86	158	121	65	32	7.1	33	3.8	3.5
27	16	77	73	88	118	125	66	23	6.4	31	3.8	3.6
28	15	75	73	83	96	110	31	19	6.7	22	4.3	3.6
29	47	74	73	76	---	98	17	12	10	19	4.4	4.0
30	56	73	73	77	---	92	7.9	9.5	11	13	4.4	4.0
31	71	---	73	84	---	90	---	4.2	---	5.0	4.8	---
TOTAL	752.2	2305	2281	2759	2797	3180	1265.9	535.2	457.1	551.2	225.8	123.6
MEAN	24.26	76.83	73.58	89.00	99.89	102.6	42.20	17.26	15.24	17.78	7.284	4.120
MAX	71	85	78	128	163	175	108	63	50	48	20	6.2
MIN	7.2	65	70	73	76	76	3.6	2.9	5.3	4.2	3.8	2.8
AC-FT	1490	4570	4520	5470	5550	6310	2510	1060	907	1090	448	245

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

MEAN	164.0	143.1	145.7	318.0	483.7	596.3	592.4	288.9	161.6	104.7	102.2	144.8
MAX	228	175	314	1589	1322	1881	1695	988	541	179	220	300
(WY)	2000	2001	1997	1997	1997	1999	1999	1998	1998	1998	1999	1998
MIN	24.3	76.8	73.6	89.0	94.2	65.9	41.5	17.3	15.2	17.8	7.28	2.87
(WY)	2002	2002	2002	2002	1994	1994	1994	2002	2002	2002	2002	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	23346.98		17233.0			
ANNUAL MEAN	63.96		47.21		268.9	
HIGHEST ANNUAL MEAN					535	1999
LOWEST ANNUAL MEAN					47.2	2002
HIGHEST DAILY MEAN	476	Mar 20	175	Mar 14	6230	Jan 3 1997
LOWEST DAILY MEAN	0.53	Sep 13	2.8	Sep 14	0.53	Sep 13 2001
ANNUAL SEVEN-DAY MINIMUM	0.89	Sep 7	3.1	Sep 12	0.89	Sep 7 2001
ANNUAL RUNOFF (AC-FT)	46310		34180		194800	
10 PERCENT EXCEEDS	130		94		654	
50 PERCENT EXCEEDS	54		34		148	
90 PERCENT EXCEEDS	3.7		4.3		21	

e Estimated