

COLUMBIA RIVER BASIN

SNAKE RIVER BASIN

13010065 SNAKE RIVER ABOVE JACKSON LAKE, AT FLAGG RANCH, WY

LOCATION.--Lat 44°05'21", long 110° 41'38", in Hydrologic Unit 17040101, Grand Teton National Park, on left bank 50 ft upstream from State Highway 89 bridge, 2 mi downstream from the south boundary of Yellowstone National Park, 600 ft downstream from the confluence with Sheffield Creek.

DRAINAGE AREA.--486 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to current year. Prior to 1988 water year, published as station 13010200.

GAGE.--Water-stage recorder. Datum of the gage is 6,801.61 ft above NGVD of 1929, (levels by U.S. Coast and Geodetic Survey). A nonrecording cantilever chain gage was used from 1913-18 at a site 2.5 mi upstream at a different datum. In 1918, an auxiliary chain gage was installed at the current site and read periodically. Water-stage recorder installed July 1921 at the current site at a different datum and operated until July 1925. Records probably not comparable. Station equipment includes satellite telemetry.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Station operated and record provided by the Idaho District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268	238	267	344	428	304	377	1,100	5,700	840	305	250
2	269	236	279	338	438	299	382	1,000	4,720	787	302	244
3	271	229	269	338	404	300	377	1,140	4,050	739	299	254
4	279	234	272	336	393	303	373	1,190	3,680	698	316	246
5	328	234	268	338	387	300	353	1,150	3,380	662	312	243
6	319	240	266	e320	e370	316	362	1,030	3,140	631	299	254
7	301	235	248	e310	e330	308	344	997	2,820	604	286	259
8	292	246	240	e300	e340	323	341	1,110	2,880	576	279	260
9	283	269	237	e290	353	332	357	1,190	2,970	554	279	264
10	273	278	240	e280	351	348	395	1,150	2,930	533	290	290
11	281	279	262	e300	346	365	445	1,220	2,870	518	288	303
12	278	285	267	310	344	367	513	1,280	2,620	501	278	278
13	267	284	269	314	331	378	638	1,870	2,380	479	274	271
14	265	280	275	321	335	397	760	2,310	2,170	461	270	255
15	261	275	288	322	331	386	895	2,750	2,160	449	271	246
16	260	260	291	e310	327	383	752	3,260	2,200	437	269	239
17	257	267	306	e300	340	370	671	3,670	2,010	427	265	241
18	253	258	298	e290	336	357	663	3,510	1,860	419	271	235
19	249	266	293	e300	338	341	603	2,600	1,720	409	262	229
20	248	266	290	e300	336	340	669	2,570	1,600	403	253	228
21	249	270	298	305	333	334	854	2,980	1,650	394	249	223
22	258	266	299	311	339	327	1,010	3,830	1,380	382	260	218
23	272	288	e270	317	334	355	1,090	4,890	1,240	374	275	214
24	281	286	e260	318	e320	358	1,000	6,020	1,140	365	258	212
25	268	256	e250	315	e300	343	1,270	6,460	1,060	363	246	210
26	254	261	e270	319	e310	368	1,510	6,510	1,020	365	240	208
27	260	273	290	345	318	367	1,090	5,900	976	356	238	208
28	264	283	307	369	308	360	1,010	6,620	945	345	239	208
29	252	282	325	362	---	353	991	7,010	925	334	236	208
30	254	274	334	378	---	353	1,130	6,910	875	323	280	208
31	243	---	348	363	---	358	---	6,460	---	312	272	---
TOTAL	8,357	7,898	8,676	9,963	9,720	10,693	21,225	99,687	69,071	15,040	8,461	7,206
MEAN	270	263	280	321	347	345	708	3,216	2,302	485	273	240
MAX	328	288	348	378	438	397	1,510	7,010	5,700	840	316	303
MIN	243	229	237	280	300	299	341	997	875	312	236	208
AC-FT	16,580	15,670	17,210	19,760	19,280	21,210	42,100	197,700	137,000	29,830	16,780	14,290

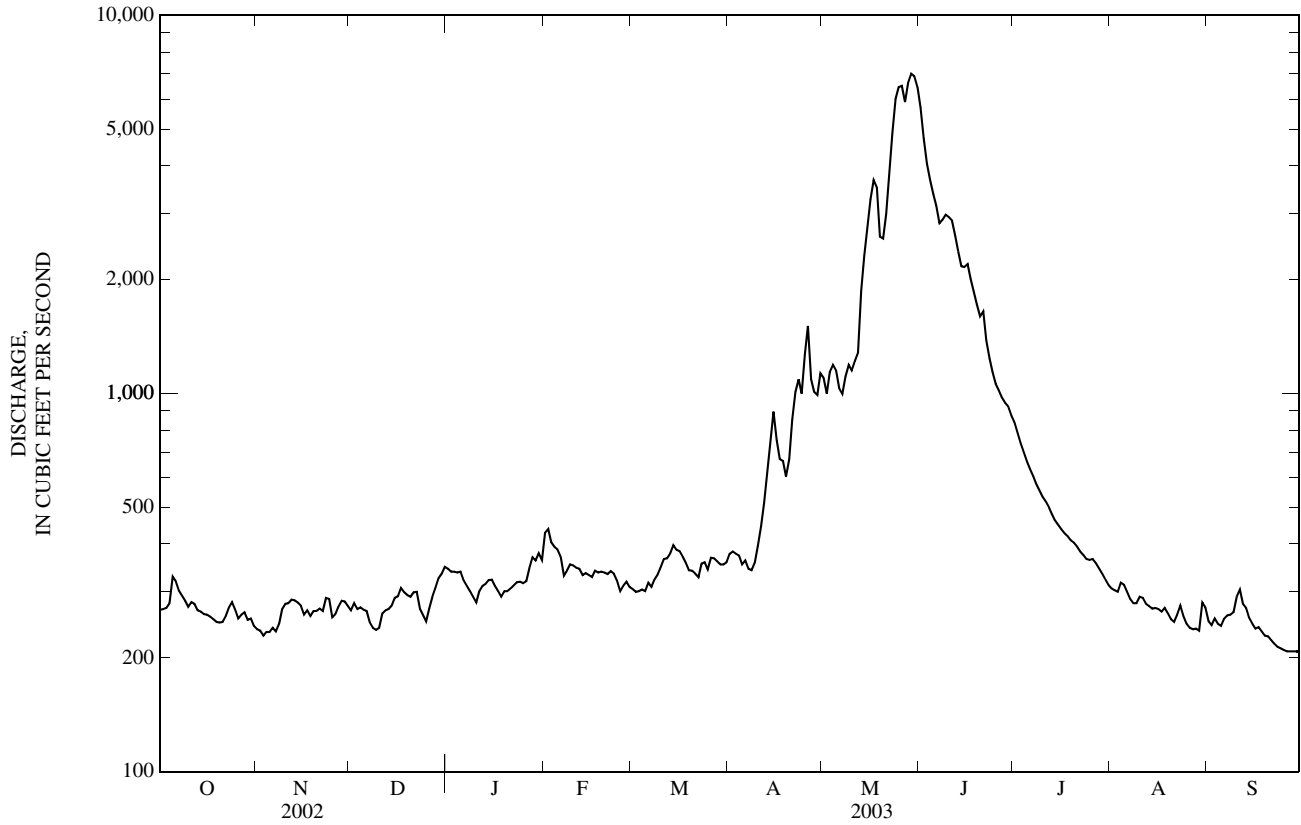
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2003, BY WATER YEAR (WY)

MEAN	351	353	359	356	350	357	721	3,054	3,119	878	420	342
MAX	679	607	531	720	469	506	1,509	5,484	6,701	1,633	861	644
(WY)	(1984)	(1985)	(1997)	(1997)	(1999)	(1986)	(1990)	(1997)	(1996)	(1995)	(1997)	(1997)
MIN	185	213	247	261	267	279	424	1,818	768	328	196	168
(WY)	(1989)	(1988)	(1988)	(2001)	(1989)	(1988)	(1993)	(1987)	(2001)	(2001)	(2001)	(1994)

13010065 SNAKE RIVER ABOVE JACKSON LAKE, AT FLAGG RANCH, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1984 - 2003
ANNUAL TOTAL	297,500	275,997	--
ANNUAL MEAN	815	756	890
HIGHEST ANNUAL MEAN	--	--	1,538 1997
LOWEST ANNUAL MEAN	--	--	526 1988
HIGHEST DAILY MEAN	7,590 May 31	7,010 May 29	11,300 Jun 5, 1996
LOWEST DAILY MEAN	220 ^e Feb 26	208 Sep 26-30	161 Sep 6, 1994
ANNUAL SEVEN-DAY MINIMUM	235 Nov 1	209 Sep 24	163 Sep 4, 1994
ANNUAL RUNOFF (AC-FT)	590,300	547,400	644,600
10 PERCENT EXCEEDS	2,340	1,860	2,390
50 PERCENT EXCEEDS	300	322	393
90 PERCENT EXCEEDS	253	247	260

e Estimated.



13010065 SNAKE RIVER ABOVE JACKSON LAKE AT FLAGG RANCH, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1986 to 1999, 2001 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June to September 1994, June to September 1995, May to September 1996, June to November 2002 (discontinued).

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 23.3°C, July 13, 2002.

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

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end field, mg/L as CaCO3 (00418)	
Date		Bicarbonate, wat flt fixed end pt, field, mg/L (29804)	Carbonate, wat flt fixed end pt, field, mg/L (29807)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)
OCT 25...	1030	268	297	7.9	1.0	4.9	10.7	92	19.1	3.43	4.85	35.1	76	
NOV 19...	1130	268	298	8.1	3.0	3.6	12.0	115	19.1	3.48	4.39	36.0	83	
DEC 20...	1215	272	303	7.5	-7.0	0.2	12.0	107	18.4	3.35	4.71	35.8	65	
JAN 24...	1215	319	272	8.3	2.3	3.3	12.0	115	16.3	2.95	4.73	35.5	60	
FEB 20...	1515	351	260	8.1	0.2	3.2	10.2	98	15.2	2.75	4.55	33.3	56	
MAR 21...	1200	333	273	8.1	5.8	4.8	11.7	117	17.1	3.04	4.51	32.1	61	
APR 18...	1235	659	215	8.0	3.6	4.1	11.9	118	18.1	3.47	3.07	22.8	54	
MAY 22...	1000	3,330	99	6.9	15.8	4.4	10.3	101	10.1	2.04	1.28	7.06	36	
JUL 15...	1030	452	230	8.2	24.4	15.3	9.4	--	17.8	3.26	3.74	23.6	62	
SEP 10...	1315	297	313	8.3	12.1	11.8	8.7	103	22.5	4.15	5.04	33.7	79	
OCT 25...	93	--	18.6	2.2	35.0	33.1	210	E.06	<0.04	<0.06	<0.008	<0.02	--	
NOV 19...	101	0.0	21.4	2.3	37.2	32.0	203	E.09	<0.04	E.04	<0.008	<0.02	0.03	
DEC 20...	79	0.0	19.4	2.44	39.2	32.0	216	E.10	<0.04	E.03	<0.008	<0.02	--	
JAN 24...	73	0.0	17.8	2.58	39.3	29.1	188	E.10	<0.04	E.05	<0.008	E.01	<0.02	
FEB 20...	68	0.0	17.7	2.52	38.4	27.0	190	E.09	<0.04	<0.06	<0.008	E.01	--	
MAR 21...	74	0.0	18.4	2.47	37.0	29.0	192	0.11	<0.04	<0.06	<0.008	E.01	0.03	
APR 18...	66	0.0	11.0	1.43	25.7	20.4	147	0.15	<0.04	E.03	<0.008	E.01	--	
MAY 22...	44	0.0	3.39	0.6	14.1	6.0	69	0.22	<0.04	<0.06	<0.008	E.01	0.05	
JUL 15...	76	0.0	12.0	1.7	30.3	24.7	164	E.06	<0.04	<0.06	<0.008	<0.02	<0.02	
SEP 10...	94	1.4	18.8	2.0	32.6	34.2	210	0.10	<0.04	0.01	<0.008	<0.02	0.03	

13010065 SNAKE RIVER ABOVE JACKSON LAKE AT FLAGG RANCH, WY—Continued

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

		Date	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd total, mg/L (00694)	Organic carbon, water, fltrd, mg/L (00681)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)					
		OCT 25...	0.007	--	--	15	3.3	1	0.72					
		NOV 19...	0.008	<0.1	1.1	13	E2.8	1	0.72					
		DEC 20...	0.009	--	--	12	3.9	1	0.73					
		JAN 24...	0.009	0.1	1.3	15	2.6	2	1.7					
		FEB 20...	0.015	--	--	14	1.6	2	1.9					
		MAR 21...	0.009	0.1	1.8	15	3.6	1	0.90					
		APR 18...	0.022	--	--	29	6.9	6	11					
		MAY 22...	0.41	0.5	3.4	25	4.2	--	--					
		JUL 15...	0.007	0.2	1.7	13	3.0	1	1.2					
		SEP 10...	0.006	0.2	1.5	19	3.8	1	0.80					
Date	Time	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyri-fos water, fltrd, ug/L (38933)	
NOV 19...	1130	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	
MAY 22...	1000	<0.006	<0.006	<0.006	<0.004	<0.005	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	
Date		cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Desulf-nyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Desulf-nyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)
NOV 19...		<.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
MAY 22...		<.006	<0.018	<0.003	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005
Date		Fipro-nil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water, fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)
NOV 19...		<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004
MAY 22...		<0.007	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004

13010065 SNAKE RIVER ABOVE JACKSON LAKE AT FLAGG RANCH, WY—Continued

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

Date	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Pron- amide, water, fltrd 0.7u GF ug/L (82676)	Pro- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Pro- par- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)
NOV 19...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002
MAY 22...	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002

Tri-
flur-
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water,
fltrd
Date 0 0.7u GF
(ug/L
(82661)

NOV
19... 0.. <.009
MAY
22... 0.. <.009

E -- Estimated value

13011000 SNAKE RIVER NEAR MORAN, WY

LOCATION.--Lat 43° 51' 30", long 110° 35' 09"(revised), in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T.45 N., R.114 W., Teton County, Grand Teton National Park, Hydrologic Unit 17040101, on left bank 1,000 ft downstream from Jackson Lake Dam, 4.1 mi west of Moran, and at mile 988.7.

DRAINAGE AREA.--807 mi². Mean elevation, 8,040 ft.

PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "South Fork Snake River at Moran" prior to October 1910 and as "Snake River at Moran" October 1910 to September 1968.

REVISED RECORDS.--WSP 1217: 1944(m). WSP 1347: 1906-10. WDR Idaho 1974: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,727.84 ft above NGVD of 1929 (levels by U.S. Bureau of Reclamation). Prior to June 13, 1917, nonrecording gage, and June 14, 1917 to May 20, 1940, water-stage recorder, at site 1.5 mi downstream at different datums.

REMARKS.--Records good. Station operated and record provided by the Idaho District.

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

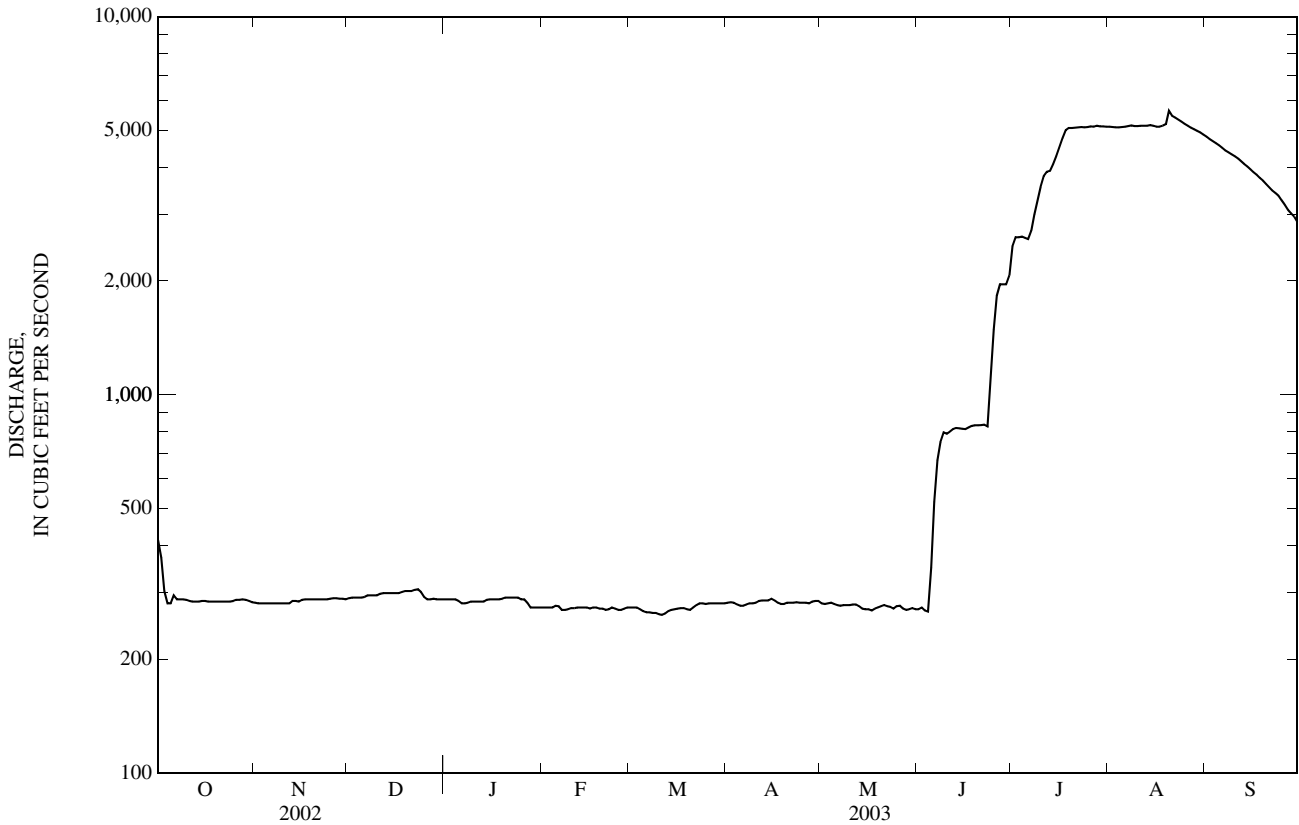
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	413	282	290	288	274	274	282	281	271	2,470	5,120	4,820
2	371	281	291	288	274	274	283	280	274	2,610	5,110	4,750
3	303	281	291	288	274	274	282	281	269	2,610	5,100	4,690
4	281	281	291	288	274	271	279	282	267	2,620	5,100	4,630
5	281	281	291	285	277	268	277	280	349	2,600	5,110	4,570
6	295	281	292	281	276	266	277	278	521	2,580	5,120	4,500
7	288	281	295	281	270	266	279	277	671	2,720	5,140	4,430
8	288	281	295	282	270	265	281	278	750	3,000	5,160	4,380
9	288	281	295	284	271	265	281	278	795	3,280	5,140	4,330
10	287	281	295	284	273	263	282	278	789	3,550	5,140	4,280
11	285	281	298	284	273	262	285	279	799	3,790	5,150	4,220
12	284	281	299	284	274	264	286	279	812	3,890	5,150	4,150
13	284	285	299	284	274	268	286	276	817	3,910	5,150	4,080
14	284	285	299	287	274	270	286	272	816	4,070	5,170	4,020
15	285	284	299	288	274	271	289	271	813	4,280	5,150	3,950
16	285	287	299	288	272	272	286	271	812	4,530	5,120	3,880
17	284	288	299	288	274	273	282	269	820	4,770	5,120	3,820
18	284	288	301	288	274	273	280	272	828	5,010	5,150	3,750
19	284	288	303	289	272	271	280	274	831	5,080	5,200	3,690
20	284	288	303	291	272	270	282	276	831	5,080	5,640	3,610
21	284	288	303	291	270	274	282	278	832	5,090	5,470	3,540
22	284	288	305	291	271	278	282	276	834	5,100	5,410	3,470
23	284	288	306	291	274	281	283	275	825	5,110	5,340	3,420
24	284	288	301	291	272	281	282	272	1,070	5,100	5,280	3,360
25	285	289	292	288	270	280	282	276	1,490	5,110	5,210	3,270
26	287	290	288	288	270	281	282	277	1,830	5,130	5,150	3,180
27	287	290	288	282	272	281	281	272	1,960	5,120	5,090	3,090
28	288	289	289	274	274	281	284	270	1,960	5,150	5,040	3,020
29	287	289	288	274	---	281	285	271	1,960	5,130	4,990	2,960
30	285	288	288	274	---	281	285	273	2,070	5,130	4,940	2,870
31	283	---	288	274	---	281	---	271	---	5,120	4,880	---
TOTAL	9,076	8,553	9,161	8,838	7,639	8,460	8,473	8,543	27,966	128,740	160,040	116,730
MEAN	293	285	296	285	273	273	282	276	932	4,153	5,163	3,891
MAX	413	290	306	291	277	281	289	282	2,070	5,150	5,640	4,820
MIN	281	281	288	274	270	262	277	269	267	2,470	4,880	2,870
AC-FT	18,000	16,960	18,170	17,530	15,150	16,780	16,810	16,950	55,470	255,400	317,400	231,500

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

MEAN	357	296	332	310	372	474	744	1,484	3,452	3,930	3,516	2,022
MAX	1,605	3,009	4,280	1,362	2,489	3,053	3,828	5,658	8,594	8,182	7,370	5,265
(WY)	(1913)	(1957)	(1957)	(1912)	(1961)	(1951)	(1974)	(1971)	(1918)	(1921)	(1918)	(1984)
MIN	5.06	3.00	2.00	2.00	2.00	2.00	2.53	6.48	51.7	983	987	146
(WY)	(1948)	(1949)	(1945)	(1945)	(1945)	(1945)	(1945)	(1945)	(1932)	(1989)	(1919)	(1910)

13011000 SNAKE RIVER NEAR MORAN, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1904 - 2003	
ANNUAL TOTAL	405,271		502,219		--	
ANNUAL MEAN	1,110		1,376		1,447	
HIGHEST ANNUAL MEAN	--		--		2,548 1997	
LOWEST ANNUAL MEAN	--		--		687 1989	
HIGHEST DAILY MEAN	3,850	Sep 18	5,640	Aug 20	14,700	Jun 13, 1918
LOWEST DAILY MEAN	275	Jan 13	262	Mar 11	0.30	Oct 28, 1969
ANNUAL SEVEN-DAY MINIMUM	277	Jan 7	264	Mar 6	1.4	Oct 24, 1969
ANNUAL RUNOFF (AC-FT)	803,900		996,200		1,048,000	
10 PERCENT EXCEEDS	3,510		5,090		4,270	
50 PERCENT EXCEEDS	288		288		491	
90 PERCENT EXCEEDS	281		272		18	



13011500 PACIFIC CREEK AT MORAN, WY

LOCATION.--Lat 43° 51'01", long 110° 31'04"(revised), in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.23, T.45 N., R.114 W., Teton County, Grand Teton National Park, Hydrologic Unit 17040101, on left bank 40 ft upstream from bridge on U.S. Highway 287, at Moran, and at mile 0.5.

DRAINAGE AREA.--169 mi². Mean elevation, 8,160 ft.

PERIOD OF RECORD.--July to November 1906 (gage heights only), July 1917 to September 1918 (no winter records), September 1944 to September 1975, July 1978 to current year. Published as "near Moran" prior to October 1968.

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft above NGVD of 1929, from topographic map. July 31 to November 11, 1906, nonrecording gage at site 0.4 mi downstream at different datum. July 20, 1917 to September 30, 1918, nonrecording gage at site 0.1 mi downstream at different datum. September 23, 1944 to November 13, 1959, at site 100 ft upstream at same datum. November 14, 1959 to September 24, 1975, at site 35 ft downstream at same datum. Station equipment includes satellite telemetry.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No diversion or regulation. Station operated and record provided by the Idaho District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	e36	e26	e38	e70	e40	46	424	2,260	204	76	57
2	62	e38	e26	e36	e65	e40	47	402	1,870	192	73	54
3	60	e36	e28	e42	e60	e40	47	504	1,570	182	72	59
4	59	e36	e34	e42	e65	e50	46	475	1,380	172	74	55
5	64	e36	e30	e42	e60	e40	43	531	1,240	166	73	53
6	65	e38	e28	e40	e50	e50	43	443	1,100	160	71	53
7	61	e40	e26	e40	e40	e40	42	429	865	152	68	58
8	59	e36	e24	e40	e45	e35	42	460	821	147	67	58
9	57	e30	e22	e40	e50	e35	46	468	850	142	66	61
10	56	e28	e26	e38	e55	e40	56	488	870	135	65	64
11	55	e24	e28	e40	e50	e45	88	512	853	131	63	67
12	53	e24	e26	e46	e45	e40	147	582	756	127	62	62
13	50	e28	e26	e48	e45	e50	190	829	670	121	61	61
14	49	e26	e36	e50	e50	e60	219	1,120	573	117	59	58
15	49	e24	e32	e50	e55	e50	264	1,490	576	115	61	56
16	48	e22	e32	e48	e45	43	226	1,750	590	112	61	53
17	48	e28	e32	e46	e45	42	217	1,890	559	110	59	53
18	48	e26	e30	e44	e50	40	222	1,880	514	106	59	53
19	47	e30	e28	e42	e50	39	231	1,490	455	104	56	52
20	47	e36	e22	e42	e40	42	266	1,370	422	103	54	51
21	47	e40	e26	e44	e50	43	324	1,480	491	98	53	51
22	47	e36	e30	e48	e50	42	377	1,770	362	95	54	50
23	48	e36	e28	e52	e40	45	413	2,190	314	93	56	49
24	50	e30	e24	e46	e35	44	409	2,610	282	90	54	48
25	49	e34	e20	e50	e30	42	479	2,960	260	103	53	48
26	45	e30	e26	e52	e35	43	613	3,000	245	98	51	47
27	45	e30	e30	e56	e45	43	444	2,880	236	92	51	47
28	45	e36	e38	e52	e40	44	399	2,880	228	88	52	47
29	e42	e30	e36	e50	---	42	372	3,060	220	84	52	47
30	e40	e26	e38	e60	---	41	405	2,840	212	80	63	46
31	e40	---	e40	e70	---	43	---	2,620	---	78	63	---
TOTAL	1,600	950	898	1,434	1,360	1,333	6,763	45,827	21,644	3,797	1,902	1,618
MEAN	51.6	31.7	29.0	46.3	48.6	43.0	225	1,478	721	122	61.4	53.9
MAX	65	40	40	70	70	60	613	3,060	2,260	204	76	67
MIN	40	22	20	36	30	35	42	402	212	78	51	46
AC-FT	3,170	1,880	1,780	2,840	2,700	2,640	13,410	90,900	42,930	7,530	3,770	3,210
CFSM	0.31	0.19	0.17	0.27	0.29	0.25	1.33	8.75	4.27	0.72	0.36	0.32
IN.	0.35	0.21	0.20	0.32	0.30	0.29	1.49	10.09	4.76	0.84	0.42	0.36

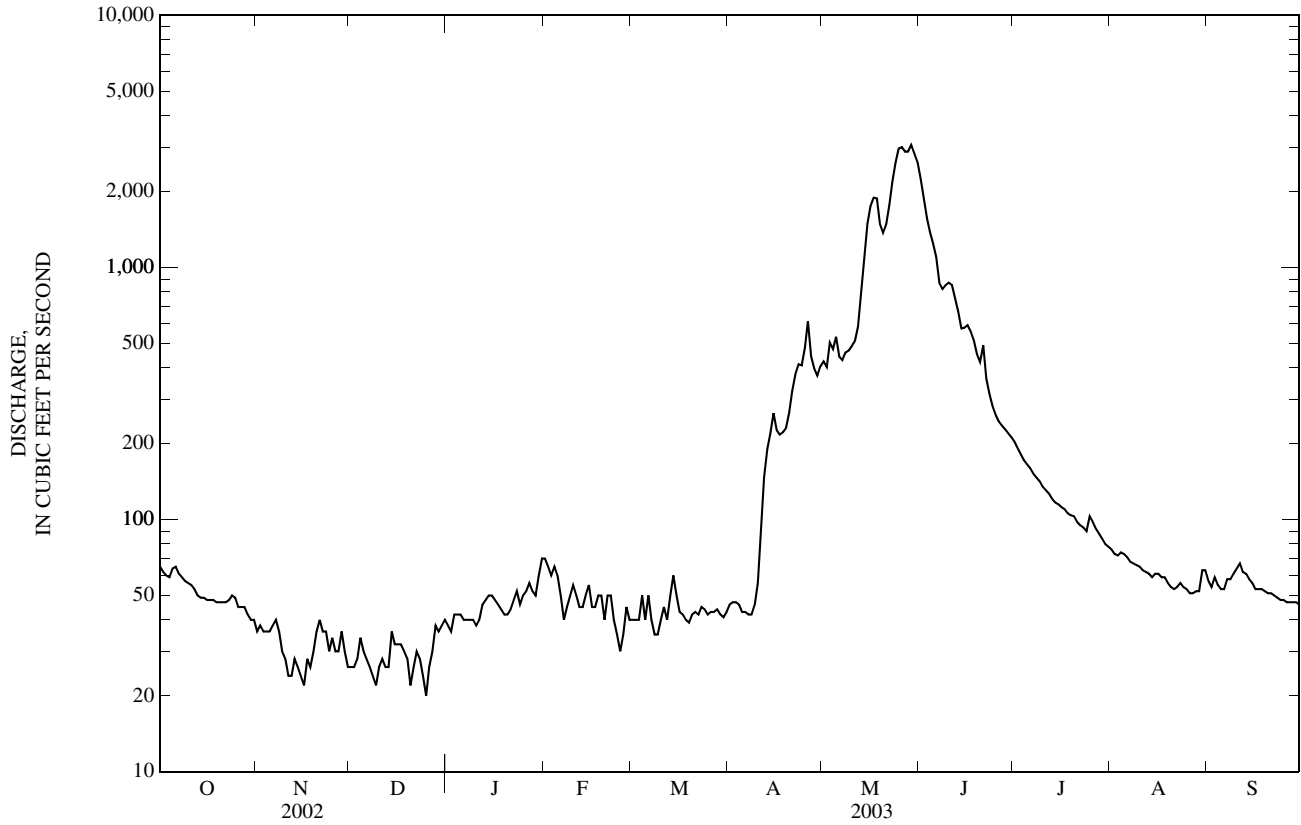
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2003, BY WATER YEAR (WY)

MEAN	64.5	54.1	48.1	44.3	45.7	52.2	157	988	1,249	338	96.7	70.7
MAX	142	105	93.5	70.7	72.2	94.5	418	2,314	2,884	1,527	191	127
(WY)	(1973)	(1973)	(1984)	(1951)	(1995)	(1972)	(1946)	(1997)	(1997)	(1982)	(1982)	(1972)
MIN	34.6	31.7	29.0	25.3	26.4	32.3	53.3	345	238	70.0	39.3	37.2
(WY)	(1988)	(2003)	(2003)	(1979)	(2002)	(2002)	(1970)	(1975)	(1994)	(1994)	(2001)	(1994)

13011500 PACIFIC CREEK AT MORAN, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1917 - 2003	
ANNUAL TOTAL	75,880		89,126		--	
ANNUAL MEAN	208		244		268	
HIGHEST ANNUAL MEAN	--		--		560 1997	
LOWEST ANNUAL MEAN	--		--		132 1994	
HIGHEST DAILY MEAN	2,400	May 21	3,060	May 29	4,170	Jun 1, 1997
LOWEST DAILY MEAN	18 ^e	Feb 27	20 ^e	Dec 25	18	Feb 27, 2002
ANNUAL SEVEN-DAY MINIMUM	20	Feb 25	25	Nov 10	20	Feb 25, 2002
ANNUAL RUNOFF (AC-FT)	150,500		176,800		193,800	
10 PERCENT EXCEEDS	625		574		911	
50 PERCENT EXCEEDS	54		52		65	
90 PERCENT EXCEEDS	26		30		38	

e Estimated.



13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY

LOCATION.--Lat 43° 50'17", long 110° 26'28"(revised), in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.29, T.45 N., R.113 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, on right bank below bridge on U.S. Highway 26/287, about 2 mi upstream from Lava Creek, 3.5 mi east of Moran, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--323 mi².

PERIOD OF RECORD.--September 1965 to current year. July to November 1906, July 1917 to September 1918, and September 1944 to September 1960 at sites about 3 mi downstream.

REVISED RECORDS.--WDR Idaho 1974: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,772.78 ft above NGVD of 1929 (Federal Highway Administration bench mark). Station equipment includes satellite telemetry.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Station operated and record provided by the Idaho District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	e135	e110	e95	e120	e80	144	307	4,360	1,930	354	230
2	195	e145	e110	e90	e115	e80	145	290	3,560	1,770	341	220
3	195	e140	e110	e100	e110	e80	138	317	2,850	1,620	329	223
4	199	e145	e115	e100	e110	e90	129	315	2,520	1,480	332	211
5	204	e145	e110	e100	e110	e85	120	331	2,340	1,380	320	207
6	202	e150	e100	e90	e105	e100	125	302	2,220	1,320	310	217
7	199	e155	e95	e90	e100	e95	119	287	1,790	1,230	300	222
8	198	e150	e90	e90	e105	e100	123	298	1,790	1,190	290	216
9	194	e145	e90	e85	e105	e110	139	295	2,030	1,110	293	231
10	191	e140	e90	e80	e110	e115	166	289	2,290	1,010	288	240
11	190	e135	e100	e85	e105	e125	196	293	2,660	955	294	255
12	183	e130	e100	e95	e100	e125	219	319	2,520	933	283	243
13	174	e135	e100	e100	e105	e135	255	369	2,340	894	274	239
14	179	e130	e110	e110	e110	e160	276	446	2,080	831	263	226
15	176	e125	e105	e105	e115	e150	296	584	2,340	756	275	216
16	178	e120	e100	e100	e110	e150	259	740	2,470	692	267	209
17	176	e125	e100	e100	e115	e140	236	930	2,580	648	259	205
18	173	e120	e95	e90	e115	e130	227	1,010	2,650	624	252	204
19	169	e125	e90	e90	e110	e130	214	802	2,700	612	245	201
20	169	e130	e85	e95	e100	e130	222	754	2,440	566	237	199
21	172	e135	e90	e100	e110	e130	249	826	2,340	553	231	195
22	171	e130	e95	e105	e105	e120	290	1,030	1,860	529	231	192
23	167	e130	e80	e110	e90	e130	308	1,460	1,470	502	243	189
24	e155	e110	e75	e100	e80	e140	301	1,930	1,230	484	232	186
25	e150	e120	e60	e100	e70	e130	331	2,200	1,080	510	226	184
26	e145	e115	e70	e105	e80	e140	376	2,250	979	489	219	182
27	e150	e120	e80	e110	e90	e130	330	2,640	1,030	458	216	180
28	e150	e125	e100	e105	e85	e130	311	3,080	1,320	427	219	179
29	e145	e120	e95	e90	---	e130	293	3,730	1,550	403	214	177
30	e140	e115	e90	e100	---	125	311	4,180	1,650	382	255	176
31	e135	---	e95	e110	---	127	---	4,760	---	368	276	---
TOTAL	5,428	3,945	2,935	3,025	2,885	3,742	6,848	37,364	65,039	26,656	8,368	6,254
MEAN	175	132	94.7	97.6	103	121	228	1,205	2,168	860	270	208
MAX	204	155	115	110	120	160	376	4,760	4,360	1,930	354	255
MIN	135	110	60	80	70	80	119	287	979	368	214	176
AC-FT	10,770	7,820	5,820	6,000	5,720	7,420	13,580	74,110	129,000	52,870	16,600	12,400
CFSM	0.54	0.41	0.29	0.30	0.32	0.37	0.71	3.73	671	2.66	0.84	0.65
IN.	0.63	0.45	0.34	0.36	0.33	0.43	0.79	4.30	7.49	3.07	0.96	0.72

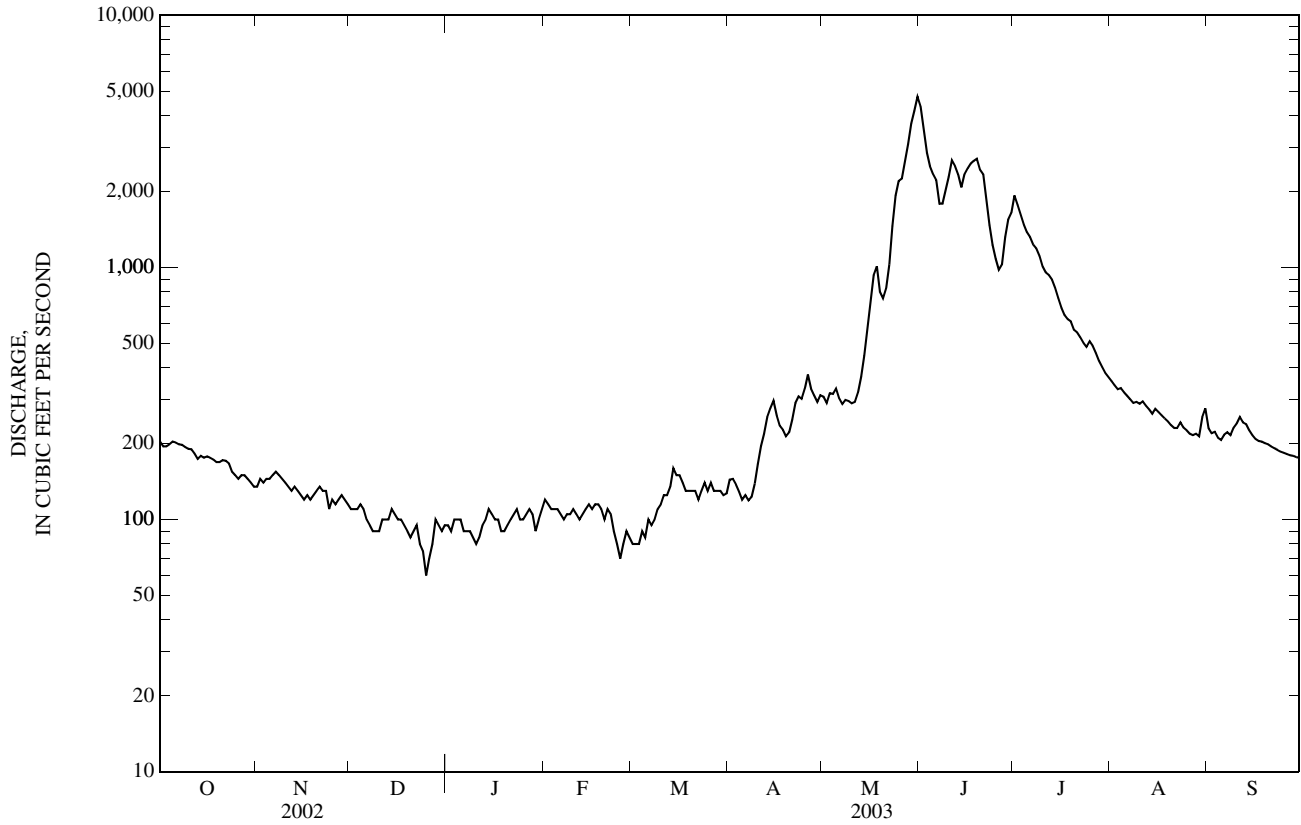
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2003, BY WATER YEAR (WY)

MEAN	213	170	138	121	117	126	218	1,026	2,289	1,330	413	258
MAX	304	229	180	145	191	175	367	1,768	4,533	3,056	946	428
(WY)	(1973)	(1984)	(1985)	(1994)	(1984)	(1984)	(1987)	(1969)	(1997)	(1975)	(1982)	(1982)
MIN	128	122	94.7	87.3	93.1	98.5	124	397	845	230	163	135
(WY)	(1988)	(1988)	(2003)	(1989)	(1969)	(1995)	(1967)	(1975)	(2001)	(1977)	(1977)	(1994)

13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1966 - 2003	
ANNUAL TOTAL	150,825		172,489		--	
ANNUAL MEAN	413		473		536	
HIGHEST ANNUAL MEAN	--		--		890 1997	
LOWEST ANNUAL MEAN	--		--		286 1977	
HIGHEST DAILY MEAN	2,950	Jun 1	4,760	May 31	5,880	Jun 9, 1981
LOWEST DAILY MEAN	60 ^e	Dec 25	60 ^e	Dec 25	60	Dec 25, 2002
ANNUAL SEVEN-DAY MINIMUM	79	Dec 21	79	Dec 21	79	Dec 21, 2002
ANNUAL RUNOFF (AC-FT)	299,200		342,100		388,100	
10 PERCENT EXCEEDS	1,250		1,470		1,630	
50 PERCENT EXCEEDS	184		179		192	
90 PERCENT EXCEEDS	100		95		110	

e Estimated.



13013650 SNAKE RIVER AT MOOSE, WY

LOCATION.--Lat 43° 39'14", long 110° 42'52", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.36, T.43 N., R.116 W., Teton County, Hydrologic Unit 17040101, Grand Teton National Park, on right bank at downstream side of bridge on Teton Park Road, 0.2 miles east of Grand Teton National Park Headquarters visitor Center at Moose, and 0.3 miles west of U.S. Highway 191.

DRAINAGE AREA.--1,677 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,431.12 ft above NGVD of 1929, by survey. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for May 20 to September 30 which are fair and those for estimated daily discharges, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,250	787	792	734	800	718	806	1,410	8,370	5,340	5,840	5,250
2	1,140	801	818	730	802	718	830	1,380	7,550	5,520	5,820	5,130
3	1,060	775	829	738	747	710	827	1,450	6,420	5,300	5,790	5,100
4	994	764	818	742	723	710	781	1,460	5,720	5,110	5,770	5,010
5	994	784	819	749	699	688	740	1,500	5,430	4,960	5,770	4,920
6	993	808	814	708	690	697	757	1,440	5,270	4,860	5,770	4,890
7	977	813	769	689	678	681	744	1,380	4,810	4,800	5,750	4,800
8	967	845	714	e690	683	664	743	1,390	4,690	4,980	5,750	4,760
9	958	868	724	e680	723	666	770	1,410	4,880	5,160	5,760	4,690
10	944	856	721	e680	706	692	836	1,400	4,990	5,440	5,870	4,780
11	936	845	745	687	e680	719	906	1,400	5,430	5,620	5,780	4,680
12	930	837	762	706	e690	747	1,020	1,500	5,520	5,420	5,760	4,600
13	911	856	771	722	e700	792	1,110	1,660	5,290	5,240	5,760	4,520
14	907	847	797	732	719	834	1,180	1,890	4,900	5,270	5,730	4,440
15	902	837	807	730	729	821	1,300	2,260	5,060	5,570	5,770	4,340
16	902	802	782	e700	729	826	1,240	2,660	5,150	5,610	5,700	4,240
17	900	822	784	685	718	813	1,160	3,180	5,280	5,740	5,670	4,200
18	897	815	778	e690	718	782	1,140	3,530	5,350	5,950	5,720	4,130
19	890	817	745	e700	713	759	1,110	2,940	5,490	6,140	5,690	4,030
20	888	847	791	700	710	782	1,150	2,640	5,140	6,050	6,080	3,970
21	887	857	745	712	728	789	1,230	2,760	5,240	6,020	5,990	3,900
22	900	837	758	715	739	811	1,350	3,090	3,930	6,080	5,910	3,850
23	894	871	e750	722	718	864	1,410	4,010	3,960	5,970	5,820	3,790
24	921	859	e720	714	e630	839	1,410	5,050	3,600	6,000	5,780	3,740
25	916	775	710	715	e600	812	1,450	5,780	3,720	6,190	5,710	3,660
26	887	743	705	725	e630	843	1,620	5,970	3,940	6,140	5,580	3,560
27	872	766	712	768	e690	775	1,520	6,380	4,120	6,110	5,460	3,470
28	879	826	742	766	700	740	1,440	6,930	4,390	6,080	5,410	3,380
29	867	836	729	723	---	737	1,380	7,690	4,530	5,900	5,330	3,360
30	813	824	719	748	---	739	1,400	8,070	4,650	5,840	5,480	3,260
31	811	---	733	746	---	753	---	8,740	---	5,870	5,400	---
TOTAL	28,987	24,620	23,603	22,246	19,792	23,521	33,360	102,350	152,820	174,280	177,420	128,450
MEAN	935	821	761	718	707	759	1,112	3,302	5,094	5,622	5,723	4,282
MAX	1,250	871	829	768	802	864	1,620	8,740	8,370	6,190	6,080	5,250
MIN	811	743	705	680	600	664	740	1,380	3,600	4,800	5,330	3,260
AC-FT	57,500	48,830	46,820	44,120	39,260	46,650	66,170	203,000	303,100	345,700	351,900	254,800

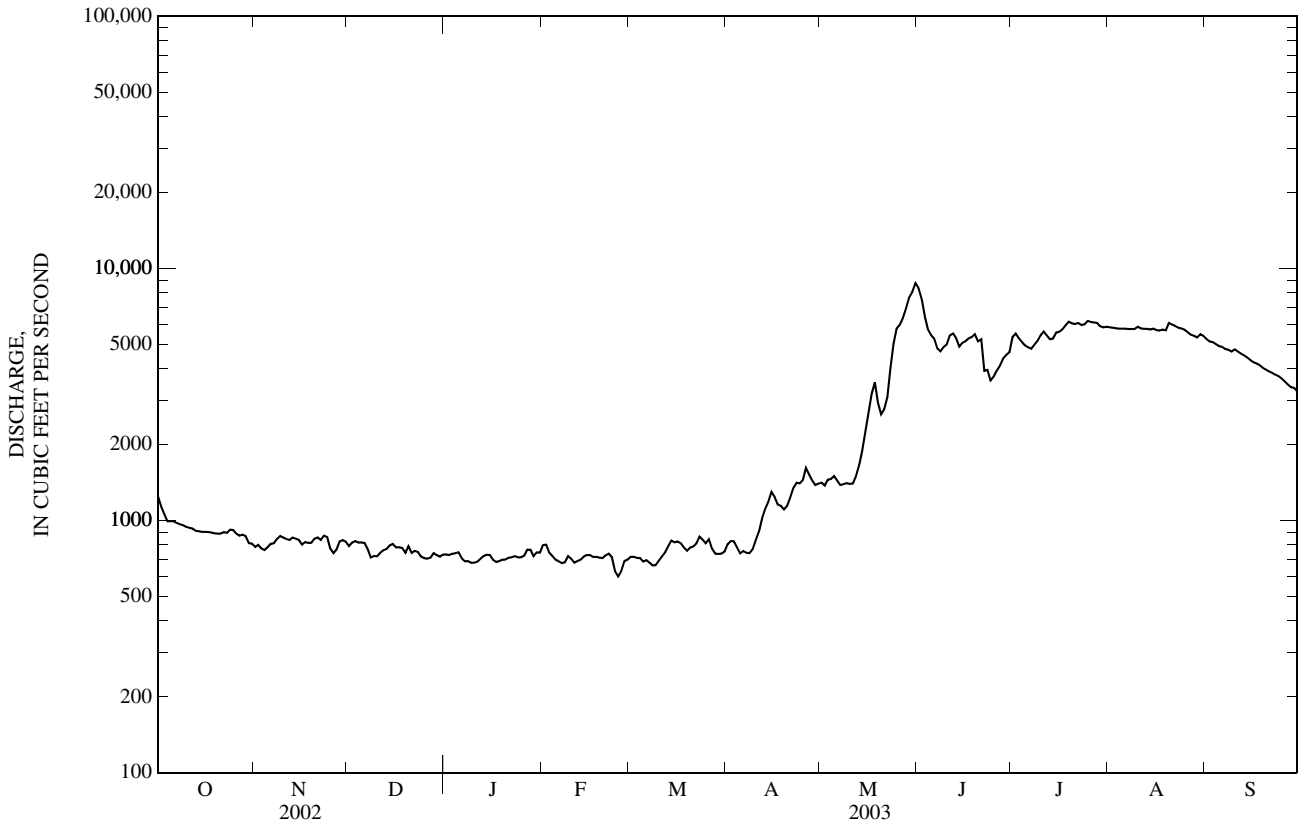
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

MEAN	1,387	1,054	982	1,009	1,088	1,365	2,232	5,506	9,860	5,958	4,338	3,746
MAX	2,124	1,382	1,315	1,615	2,083	3,205	4,600	8,620	18,150	7,574	5,723	5,089
(WY)	(1998)	(1998)	(1998)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(2003)	(1998)
MIN	935	789	726	684	667	659	990	2,531	4,753	3,439	2,433	2,063
(WY)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(1995)	(2001)	(2000)	(2000)	(2000)

13013650 SNAKE RIVER AT MOOSE, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1995 - 2003	
ANNUAL TOTAL	817,045		911,449		--	
ANNUAL MEAN	2,238		2,497		3,252	
HIGHEST ANNUAL MEAN	--		--		4,874 1997	
LOWEST ANNUAL MEAN	--		--		2,236 2002	
HIGHEST DAILY MEAN	7,640	Jun 1	8,740	May 31	24,500	Jun 11, 1997
LOWEST DAILY MEAN	629	Mar 17	600 ^e	Feb 25	0.00	Jul 15, 1995
ANNUAL SEVEN-DAY MINIMUM	635	Mar 15	669	Feb 23	635	Mar 15, 2002
MAXIMUM PEAK FLOW	--		9,020	May 31	25,300	Jun 11, 1997
MAXIMUM PEAK STAGE	--		11.80	May 31	15.25	Jun 11, 1997
ANNUAL RUNOFF (AC-FT)	1,621,000		1,808,000		2,356,000	
10 PERCENT EXCEEDS	4,870		5,770		6,660	
50 PERCENT EXCEEDS	944		936		1,640	
90 PERCENT EXCEEDS	661		711		807	

e Estimated.



13013650 SNAKE RIVER AT MOOSE, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1995 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 2002 to current year (no winter records).

PH: April to current year (no winter records).

WATER TEMPERATURE: April 2002 to current year (no winter records).

DISSOLVED OXYGEN: April 2002 to current year (no winter records).

INSTRUMENTATION: Water-quality monitor.

REMARKS.--Specific conductance records good. pH records good October 1 to November 13, April 9 to September 30; poor November 14-26. Water temperature record is good. Dissolved oxygen records good April 9-26, June 12-16, July 9-17, and August 12 to September 3; fair May 7-29, June 5-8, 12-16, and September 9-30; poor June 9-11. Water-temperature records represent water temperature at sensor within 0.2°C.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 235 microsiemens/cm, April 10-14, 2002; minimum recorded, 84 microsiemens/cm, June 18, 19, 25, 26, July 1, 2002.

PH: Maximum recorded, 9.5 units, October 29-31, November 2-7, 11, 12, 2002; minimum recorded 7.7 units, June 20, 2003.

WATER TEMPERATURE: Maximum recorded, 21.6°C, July 30, August 1, 2003; minimum recorded, 0.0°C, Nov. 25, 26, 2002.

DISSOLVED OXYGEN: Maximum recorded 13.4 mg/L, May 22, 2002; minimum recorded, 5.7 mg/L, August 13, 14, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 228 microsiemens/cm, April 5; minimum recorded, 94 microsiemens/cm, June 19.

PH: Maximum recorded, 9.5 units, October 29-31, November 2-7, 11, 12; minimum recorded, 7.7 units, June 20.

WATER TEMPERATURE: Maximum recorded, 21.6°C, July 30, August 1; minimum recorded, 0.0°C, November 25, 26.

DISSOLVED OXYGEN: Maximum recorded, 12.2 mg/L, May 19; minimum recorded, 5.7 mg/L, August 13, 14.

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

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT 23...	1600		880	E87	3.52	0.50	16.2	10.8	--	--	--	124	E.09	<0.04
NOV 13...	1400		855	89	4.72	0.48	16.7	10.8	127	0.17	293	127	E.06	<0.04
JAN 13...	1310		732	91	2.93	0.52	16.3	11.3	127	0.18	257	130	E.06	<0.04
FEB 24...	1515		629	119	3.65	0.57	17.0	13.1	150	0.20	246	145	0.11	<0.04
MAR 18...	1330		831	92	4.68	0.46	15.4	11.7	128	0.18	300	134	E.08	<0.04
APR 23...	1440		1,450	92	2.91	0.32	13.6	11.0	122	0.17	493	126	0.17	<0.04
MAY 20...	1430		2,880	78	1.67	0.2	12.4	7.2	101	0.15	868	112	0.26	<0.04
JUL 08...	1500		4,800	52	3.16	0.5	14.9	7.2	83	0.04	343	26	E.07	<0.04
SEP 09...	1215		4,770	63	5.71	0.8	14.6	10.6	102	0.13	1,230	96	E.09	<0.04

13013650 SNAKE RIVER AT MOOSE, WY—Continued

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

Date	Methyl para- thion, water, fltrd 0.7u GF (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF (82671)	Naprop- amide, water, fltrd 0.7u GF (82684)	p,p-' DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF (82669)	Pendi- meth- alin, water, fltrd 0.7u GF (82683)	Phorate water fltrd 0.7u GF (82664)	Prome- ton, water, fltrd, ug/L (04037)	Pron- amide, water, fltrd 0.7u GF (82676)	Propa- chlor, water, fltrd, ug/L (04024)
OCT 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 13...	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010
JAN 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 20...	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 09...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Pro- panil, water, fltrd 0.7u GF (82679)	Propar- gite, water, fltrd 0.7u GF (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF (82670)	Terba- cil, water, fltrd 0.7u GF (82665)	Terbu- fos, water, fltrd 0.7u GF (82675)	Thio- bencarb water fltrd 0.7u GF (82681)	Tri- allate, water, fltrd 0.7u GF (82678)	Tri- flur- alin, water, fltrd 0.7u GF (82661)	Sus- pended sediment concentration mg/L (80154)	Sus- pended sediment load, tons/d (80155)
OCT 23...	--	--	--	--	--	--	--	--	--	1	2.4
NOV 13...	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	1	2.3
JAN 13...	--	--	--	--	--	--	--	--	--	2	4.0
FEB 24...	--	--	--	--	--	--	--	--	--	3	5.1
MAR 18...	--	--	--	--	--	--	--	--	--	5	11
APR 23...	--	--	--	--	--	--	--	--	--	22	86
MAY 20...	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	61	474
JUL 08...	--	--	--	--	--	--	--	--	--	44	570
SEP 09...	--	--	--	--	--	--	--	--	--	14	180

E -- Estimated value

SNAKE RIVER BASIN

13013650 SNAKE RIVER AT MOOSE, WY—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	187	182	185	202	199	201	---	---	---	---	---	---
2	190	187	188	204	199	201	---	---	---	---	---	---
3	192	188	190	204	200	202	---	---	---	---	---	---
4	194	190	192	205	198	201	---	---	---	---	---	---
5	195	191	193	205	199	202	---	---	---	---	---	---
6	194	189	192	205	198	201	---	---	---	---	---	---
7	195	190	193	202	195	199	---	---	---	---	---	---
8	195	190	193	200	193	197	---	---	---	---	---	---
9	195	190	193	198	192	195	---	---	---	---	---	---
10	195	190	193	196	190	194	---	---	---	---	---	---
11	195	191	194	198	192	195	---	---	---	---	---	---
12	196	191	194	198	194	197	---	---	---	---	---	---
13	196	191	194	199	192	196	---	---	---	---	---	---
14	197	192	195	197	194	196	---	---	---	---	---	---
15	198	192	195	198	194	197	---	---	---	---	---	---
16	197	192	195	200	196	198	---	---	---	---	---	---
17	197	192	195	202	197	200	---	---	---	---	---	---
18	197	192	195	203	198	201	---	---	---	---	---	---
19	197	192	195	202	197	200	---	---	---	---	---	---
20	198	192	195	202	197	200	---	---	---	---	---	---
21	198	192	195	200	195	198	---	---	---	---	---	---
22	198	193	196	200	196	198	---	---	---	---	---	---
23	197	192	195	201	197	199	---	---	---	---	---	---
24	197	190	194	201	196	199	---	---	---	---	---	---
25	197	192	195	204	200	202	---	---	---	---	---	---
26	197	193	196	214	209	210	---	---	---	---	---	---
27	199	194	196	---	---	---	---	---	---	---	---	---
28	201	196	198	---	---	---	---	---	---	---	---	---
29	200	194	197	---	---	---	---	---	---	---	---	---
30	202	196	198	---	---	---	---	---	---	---	---	---
31	201	197	199	---	---	---	---	---	---	---	---	---
MONTH	202	182	194	214	190	199	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	217	212	214	205	199	202
2	---	---	---	---	---	---	217	212	215	206	202	204
3	---	---	---	---	---	---	220	212	215	---	---	---
4	---	---	---	---	---	---	218	213	216	203	199	201
5	---	---	---	---	---	---	228	213	219	204	199	201
6	---	---	---	---	---	---	216	209	213	204	200	202
7	---	---	---	---	---	---	219	209	214	207	202	204
8	---	---	---	---	---	---	217	210	213	206	201	204
9	---	---	---	---	---	---	218	213	216	205	201	203
10	---	---	---	---	---	---	218	213	216	205	201	203
11	---	---	---	---	---	---	218	213	215	204	199	202
12	---	---	---	---	---	---	216	210	213	203	197	200
13	---	---	---	---	---	---	212	207	210	201	196	199
14	---	---	---	---	---	---	209	204	206	200	192	196
15	---	---	---	---	---	---	206	201	203	197	183	188
16	---	---	---	---	---	---	207	202	204	185	169	174
17	---	---	---	---	---	---	211	207	209	169	157	160
18	---	---	---	---	---	---	212	207	210	161	151	154
19	---	---	---	---	---	---	212	208	210	168	156	164
20	---	---	---	---	---	---	212	206	210	172	167	169
21	---	---	---	---	---	---	---	---	---	171	161	164
22	---	---	---	---	---	---	---	---	---	164	154	157
23	---	---	---	---	---	---	203	198	201	154	137	142
24	---	---	---	---	---	---	204	200	202	141	126	131
25	---	---	---	---	---	---	205	200	203	132	121	125
26	---	---	---	---	---	---	205	194	199	126	119	122
27	---	---	---	---	---	---	201	196	198	124	114	117
28	---	---	---	---	---	---	203	199	201	120	108	113
29	---	---	---	222	213	217	206	201	203	114	105	109
30	---	---	---	219	212	216	207	201	204	109	102	104
31	---	---	---	217	210	214	---	---	---	105	101	102
MONTH	---	---	---	222	210	216	228	194	209	207	101	167

13013650 SNAKE RIVER AT MOOSE, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.2	7.2	7.9	4.1	1.2	2.8	---	---	---	---	---	---
2	9.2	6.6	7.6	4.5	1.9	3.0	---	---	---	---	---	---
3	10.2	7.2	8.5	4.1	1.3	2.6	---	---	---	---	---	---
4	9.7	7.7	8.6	3.7	0.8	2.3	---	---	---	---	---	---
5	8.6	7.6	8.1	4.1	0.9	2.6	---	---	---	---	---	---
6	11.1	6.9	8.7	4.9	1.5	3.3	---	---	---	---	---	---
7	11.1	6.8	8.9	4.9	1.8	3.4	---	---	---	---	---	---
8	11.0	7.0	9.0	3.8	2.0	3.1	---	---	---	---	---	---
9	10.7	6.7	8.7	3.3	2.2	2.7	---	---	---	---	---	---
10	9.4	6.6	8.1	3.0	1.1	2.3	---	---	---	---	---	---
11	9.3	7.2	8.0	4.6	2.4	3.3	---	---	---	---	---	---
12	9.2	5.3	7.2	4.3	2.2	3.4	---	---	---	---	---	---
13	8.8	4.7	6.7	5.0	3.4	4.1	---	---	---	---	---	---
14	9.0	4.8	6.9	4.1	2.9	3.5	---	---	---	---	---	---
15	8.8	4.8	6.8	4.1	1.8	2.9	---	---	---	---	---	---
16	9.1	5.2	7.1	3.2	0.8	2.1	---	---	---	---	---	---
17	9.2	5.1	7.1	3.5	1.9	2.6	---	---	---	---	---	---
18	8.9	4.9	6.8	3.4	1.0	2.2	---	---	---	---	---	---
19	8.5	4.5	6.5	3.6	1.1	2.4	---	---	---	---	---	---
20	8.5	4.6	6.5	4.8	1.9	3.3	---	---	---	---	---	---
21	8.4	4.8	6.6	5.9	3.7	4.5	---	---	---	---	---	---
22	6.7	5.2	5.6	4.5	2.8	3.6	---	---	---	---	---	---
23	7.9	5.0	6.1	3.7	2.2	3.2	---	---	---	---	---	---
24	7.5	4.3	6.1	3.4	1.3	2.4	---	---	---	---	---	---
25	7.5	4.8	5.9	2.1	0.0	1.0	---	---	---	---	---	---
26	7.0	3.5	5.2	1.9	0.0	0.8	---	---	---	---	---	---
27	7.0	3.8	5.4	---	---	---	---	---	---	---	---	---
28	5.3	4.0	4.6	---	---	---	---	---	---	---	---	---
29	5.1	3.4	4.0	---	---	---	---	---	---	---	---	---
30	4.0	2.4	3.2	---	---	---	---	---	---	---	---	---
31	4.6	1.7	3.1	---	---	---	---	---	---	---	---	---
MONTH	11.1	1.7	6.8	5.9	0.0	2.8	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	6.2	4.7	5.4	8.5	5.5	6.8
2	---	---	---	---	---	---	6.6	3.8	5.1	9.2	5.0	7.1
3	---	---	---	---	---	---	5.5	2.5	3.9	8.3	6.4	7.2
4	---	---	---	---	---	---	6.3	1.5	3.7	9.0	5.6	6.9
5	---	---	---	---	---	---	6.1	1.3	3.8	8.6	5.0	6.7
6	---	---	---	---	---	---	6.8	1.8	4.2	8.4	4.4	6.4
7	---	---	---	---	---	---	8.4	2.6	5.2	9.3	5.3	7.1
8	---	---	---	---	---	---	9.2	2.8	5.7	9.9	6.4	7.7
9	---	---	---	---	---	---	9.8	3.6	6.7	6.8	5.3	6.1
10	---	---	---	---	---	---	10.5	4.5	7.4	8.2	4.4	6.3
11	---	---	---	---	---	---	10.6	5.0	7.7	8.9	4.9	6.9
12	---	---	---	---	---	---	10.0	5.2	7.5	8.5	6.1	7.0
13	---	---	---	---	---	---	8.9	5.2	7.0	10.5	5.7	8.0
14	---	---	---	---	---	---	7.9	5.1	6.5	11.1	6.6	8.9
15	---	---	---	---	---	---	6.7	4.8	5.9	10.1	7.3	8.9
16	---	---	---	---	---	---	8.2	2.9	5.3	10.1	6.7	8.6
17	---	---	---	---	---	---	8.2	4.6	6.3	9.4	5.4	7.8
18	---	---	---	---	---	---	7.7	5.1	6.3	8.8	4.9	6.7
19	---	---	---	---	---	---	9.7	4.1	6.7	8.6	3.9	6.3
20	---	---	---	---	---	---	10.5	4.9	7.5	9.5	5.0	7.4
21	---	---	---	---	---	---	9.3	5.4	7.4	9.4	6.3	8.0
22	---	---	---	---	---	---	7.8	6.2	6.8	11.2	6.9	9.2
23	---	---	---	---	---	---	7.5	5.1	6.2	11.1	6.8	9.3
24	---	---	---	---	---	---	8.4	5.6	6.8	10.7	6.6	9.0
25	---	---	---	---	---	---	9.4	5.2	7.2	10.3	6.5	8.8
26	---	---	---	---	---	---	7.8	4.2	6.2	10.4	6.4	8.6
27	---	---	---	---	---	---	7.4	3.0	4.8	11.0	6.8	9.1
28	---	---	---	---	---	---	7.3	4.1	5.6	11.4	7.3	9.6
29	---	---	---	7.1	1.4	4.3	9.5	5.0	6.9	11.3	7.7	9.8
30	---	---	---	7.8	2.5	5.2	8.5	5.3	6.8	10.9	8.1	9.4
31	---	---	---	8.1	3.5	5.8	---	---	---	10.6	7.7	9.3
MONTH	---	---	---	8.1	1.4	5.1	10.6	1.3	6.1	11.4	3.9	7.9

SNAKE RIVER BASIN

13015000 GROS VENTRE RIVER AT ZENITH, WY

LOCATION.--Lat 43° 33' 26", long 110° 45' 46"(revised), in SW¹/₄ NW¹/₄ SW¹/₄ sec.34., T.42 N., R.116 W., Teton County, Wyoming, Hydrologic Unit 17040102, on left bank, 20 ft upstream from county road bridge, 0.5 mi southwest of Jackson Hole Country Club, and 5.5 mi north of Jackson, Wyoming.

DRAINAGE AREA.--683 mi².

PERIOD OF RECORD.--July to September 1917, July to September 1918 (monthly discharge only, published in WSP 1317), October 1987 to current year (no winter records).

GAGE.--Water-stage recorder with satellite telemetry at station. Elevation of gage is 6,260 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Diversions of about 300 ft³/s for irrigation above station. No regulation. Station operated and record provided by the Idaho District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	49	66	1,610	82	42	0.95
2	---	---	---	---	---	---	53	66	1,520	81	26	0.96
3	---	---	---	---	---	---	53	70	1,420	73	22	0.88
4	---	---	---	---	---	---	50	75	1,290	62	22	0.88
5	---	---	---	---	---	---	47	78	1,160	53	20	0.99
6	---	---	---	---	---	---	45	77	1,070	46	18	1.0
7	---	---	---	---	---	---	45	71	953	43	15	1.1
8	---	---	---	---	---	---	45	72	850	42	14	1.1
9	---	---	---	---	---	---	46	74	838	40	13	0.95
10	---	---	---	---	---	---	51	73	877	39	12	1.1
11	---	---	---	---	---	---	58	67	924	36	11	1.3
12	---	---	---	---	---	---	72	63	938	35	9.7	1.5
13	---	---	---	---	---	---	81	67	876	34	8.9	1.5
14	---	---	---	---	---	---	87	76	775	32	8.2	1.6
15	---	---	---	---	---	---	88	87	710	32	7.6	1.9
16	---	---	---	---	---	---	78	121	755	30	6.8	2.0
17	---	---	---	---	---	---	71	182	754	33	5.8	1.9
18	---	---	---	---	---	---	65	245	704	38	5.0	1.8
19	---	---	---	---	---	---	57	224	689	39	4.5	1.7
20	---	---	---	---	---	---	55	190	700	37	4.2	1.7
21	---	---	---	---	---	---	55	156	668	32	3.7	1.5
22	---	---	---	---	---	---	55	154	578	30	3.4	1.3
23	---	---	---	---	---	---	58	250	466	28	3.1	1.1
24	---	---	---	---	---	---	57	476	363	26	2.6	0.92
25	---	---	---	---	---	---	59	704	254	26	2.2	0.73
26	---	---	---	---	---	---	70	838	120	28	1.7	0.57
27	---	---	---	---	---	---	74	966	68	30	1.3	0.59
28	---	---	---	---	---	---	70	1,100	59	31	1.0	0.76
29	---	---	---	---	---	---	67	1,280	62	42	0.84	0.88
30	---	---	---	---	---	---	64	1,500	70	61	1.0	0.88
31	---	---	---	---	---	---	---	1,610	---	55	0.95	---
TOTAL	---	---	---	---	---	---	1,825	11,078	22,121	1,296	297.49	36.04
MEAN	---	---	---	---	---	---	60.8	357	737	41.8	9.60	1.20
MAX	---	---	---	---	---	---	88	1,610	1,610	82	42	2.0
MIN	---	---	---	---	---	---	45	63	59	26	0.84	0.57
AC-FT	---	---	---	---	---	---	3,620	21,970	43,880	2,570	590	71

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2003, BY WATER YEAR (WY)*

MEAN	64.9	64.4	29.5	---	---	---	131	802	1,151	454	140	63.8
MAX	89.4	81.3	29.5	---	---	---	231	2,954	3,189	1,410	406	215
(WY)	(1990)	(1990)	(1988)	---	---	---	(2000)	(1997)	(1997)	(1995)	(1917)	(1997)
MIN	50.3	49.2	29.5	---	---	---	41.1	291	50.3	4.90	0.001	0.000
(WY)	(1988)	(1988)	(1988)	---	---	---	(1993)	(2002)	(2001)	(2001)	(2001)	(1994)

13015000 GROS VENTRE RIVER AT ZENITH, WY—Continued

SUMMARY STATISTICS

FOR 2003 WATER YEAR*

WATER YEARS 1917 - 2003*

HIGHEST DAILY MEAN
LOWEST DAILY MEAN

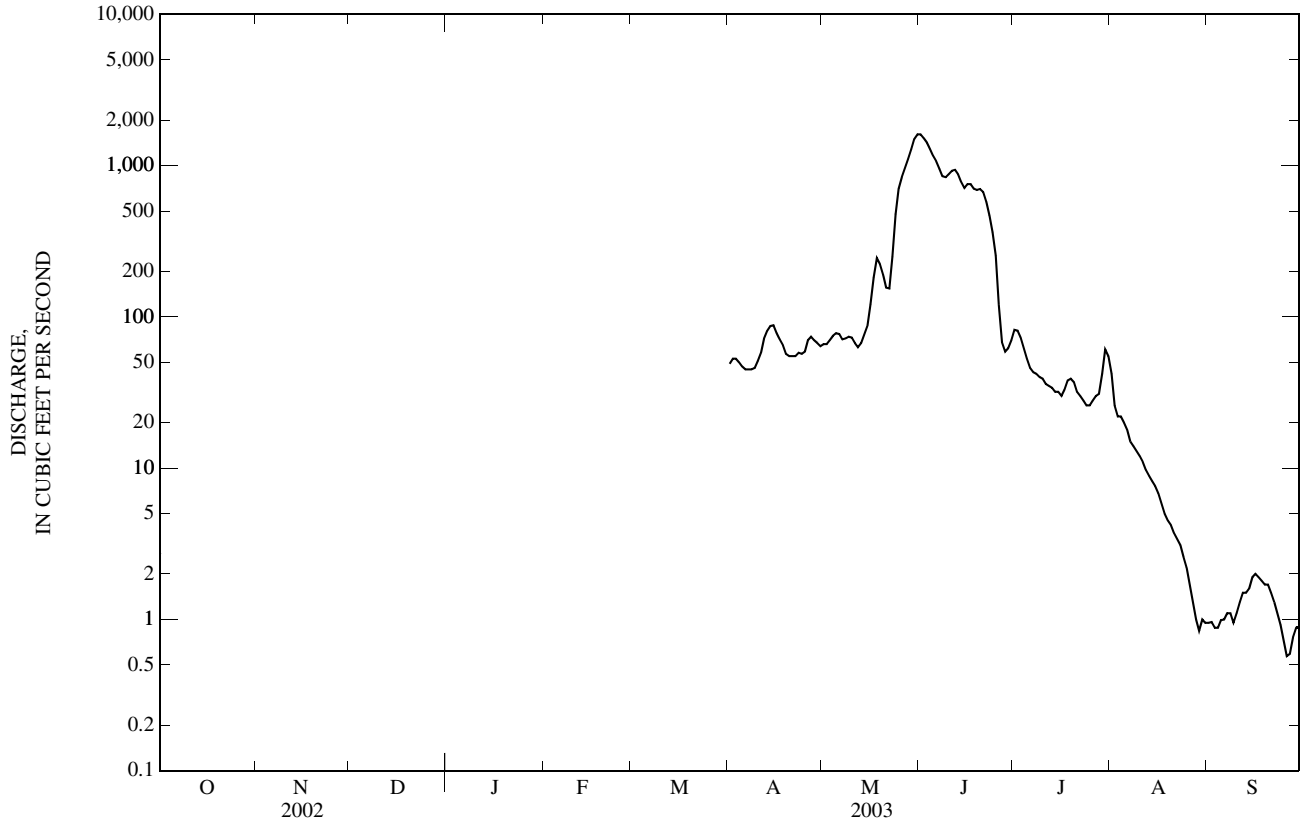
1,610 May 31, Jun 1
0.57 Sep 26

6,710 Jun 6, 1997
0.00 Many days,
some years
2,227 Jun 10, 1991

MAXIMUM PEAK STAGE

--

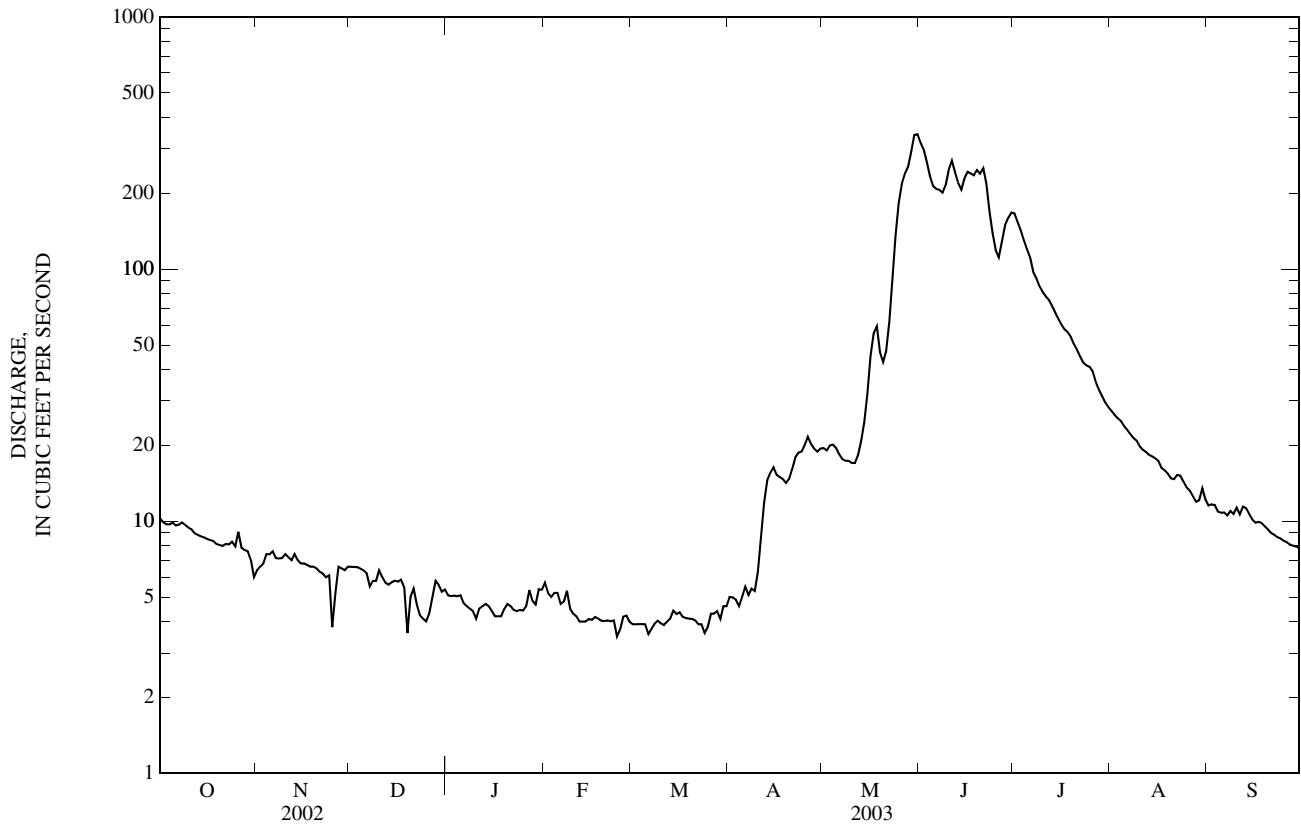
* For period of operation.



13016305 GRANITE CREEK ABOVE GRANITE CREEK SUPPLEMENTAL, NEAR MOOSE, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1995 - 2003	
ANNUAL TOTAL	13,005.0		13,645.1		--	
ANNUAL MEAN	35.6		37.4		40.2	
HIGHEST ANNUAL MEAN	--		--		63.2 1997	
LOWEST ANNUAL MEAN	--		--		26.7 2001	
HIGHEST DAILY MEAN	305	Jun 8	343	May 31	490	Jun 9, 1997
LOWEST DAILY MEAN	2.3 ^c	Feb 28	3.5	Feb 24	1.2	Jan 9, 1996
ANNUAL SEVEN-DAY MINIMUM	2.7	Feb 27	3.8	Mar 1	1.3	Jan 5, 1996
MAXIMUM PEAK FLOW	--		393	May 30	599 ^{a,b}	May 16, 2001
MAXIMUM PEAK STAGE	--		5.53	May 30	6.58 ^b	Jun 9, 1997
ANNUAL RUNOFF (AC-FT)	25,800		27,070		29,150	
10 PERCENT EXCEEDS	117		141		138	
50 PERCENT EXCEEDS	9.7		8.5		9.1	
90 PERCENT EXCEEDS	4.2		4.1		4.1	

a Gage height, 5.02 ft.
 b At datum then in use.
 c Estimated.



SNAKE RIVER BASIN

13016450 FISH CREEK AT WILSON, WY

LOCATION.--Lat 43° 30'03", long 110° 52'15", in NW¹/₄ NW¹/₄ SE¹/₄ sec.22, T.41 N., R.117 W., Teton County, Hydrologic Unit 17040103, on left bank 20 ft downstream from bridge on Fish Creek Road (County Road 3) in Wilson.

DRAINAGE AREA.--71.1 mi².

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,150 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversion from Snake River through Granite Creek Supplemental for irrigation in Fish Creek Basin and by additional diversions upstream from station within Fish Creek Basin. See station 13016305.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	45	e38	e34	48	32	60	46	980	508	361	289
2	82	44	e38	e35	49	32	59	47	947	551	360	275
3	78	41	e38	e34	46	32	58	47	862	557	363	277
4	76	41	e38	e33	44	32	57	49	765	539	369	273
5	74	41	e38	e33	43	32	56	49	679	522	364	275
6	72	40	e39	e32	42	32	54	50	632	500	360	288
7	70	40	e38	e31	42	32	53	51	596	472	351	244
8	69	41	e38	e31	41	31	52	52	603	467	348	221
9	e68	41	e38	e31	41	32	52	53	637	469	346	213
10	e65	41	e37	e29	41	32	52	54	731	479	338	211
11	63	41	e38	e31	40	34	52	54	793	479	337	198
12	61	40	e39	e32	39	35	51	56	838	480	332	191
13	60	41	e40	e33	38	38	50	57	809	478	329	186
14	59	41	e40	e32	38	42	50	58	760	471	327	178
15	57	40	e39	31	37	43	51	59	722	463	326	176
16	55	40	e39	31	37	46	50	61	754	450	319	176
17	54	40	e38	31	36	46	50	77	763	453	315	175
18	53	40	e38	31	36	45	48	108	762	458	315	166
19	53	39	e37	31	35	45	48	116	776	461	310	157
20	52	39	e37	31	35	47	47	108	785	460	305	146
21	51	39	e37	31	35	49	47	99	789	453	308	138
22	50	e38	e36	30	35	51	48	141	703	443	314	132
23	49	e38	e36	31	34	57	47	184	586	434	315	126
24	49	e38	e36	31	35	55	47	249	502	430	312	118
25	48	e37	e36	31	34	55	47	353	450	434	309	113
26	48	e38	e37	31	34	59	47	476	400	438	301	105
27	46	e37	e38	34	34	57	47	585	386	428	301	98
28	46	e36	e38	37	33	55	48	654	382	414	296	93
29	46	e36	e37	36	---	54	46	735	419	399	294	89
30	46	e37	e36	37	---	54	46	856	461	388	324	80
31	45	---	e35	41	---	57	---	961	---	377	307	---
TOTAL	1,830	1,190	1,167	1,007	1,082	1,343	1,520	6,545	20,272	14,355	10,156	5,407
MEAN	59.0	39.7	37.6	32.5	38.6	43.3	50.7	211	676	463	328	180
MAX	85	45	40	41	49	59	60	961	980	557	369	289
MIN	45	36	35	29	33	31	46	46	382	377	294	80
AC-FT	3,630	2,360	2,310	2,000	2,150	2,660	3,010	12,980	40,210	28,470	20,140	10,720

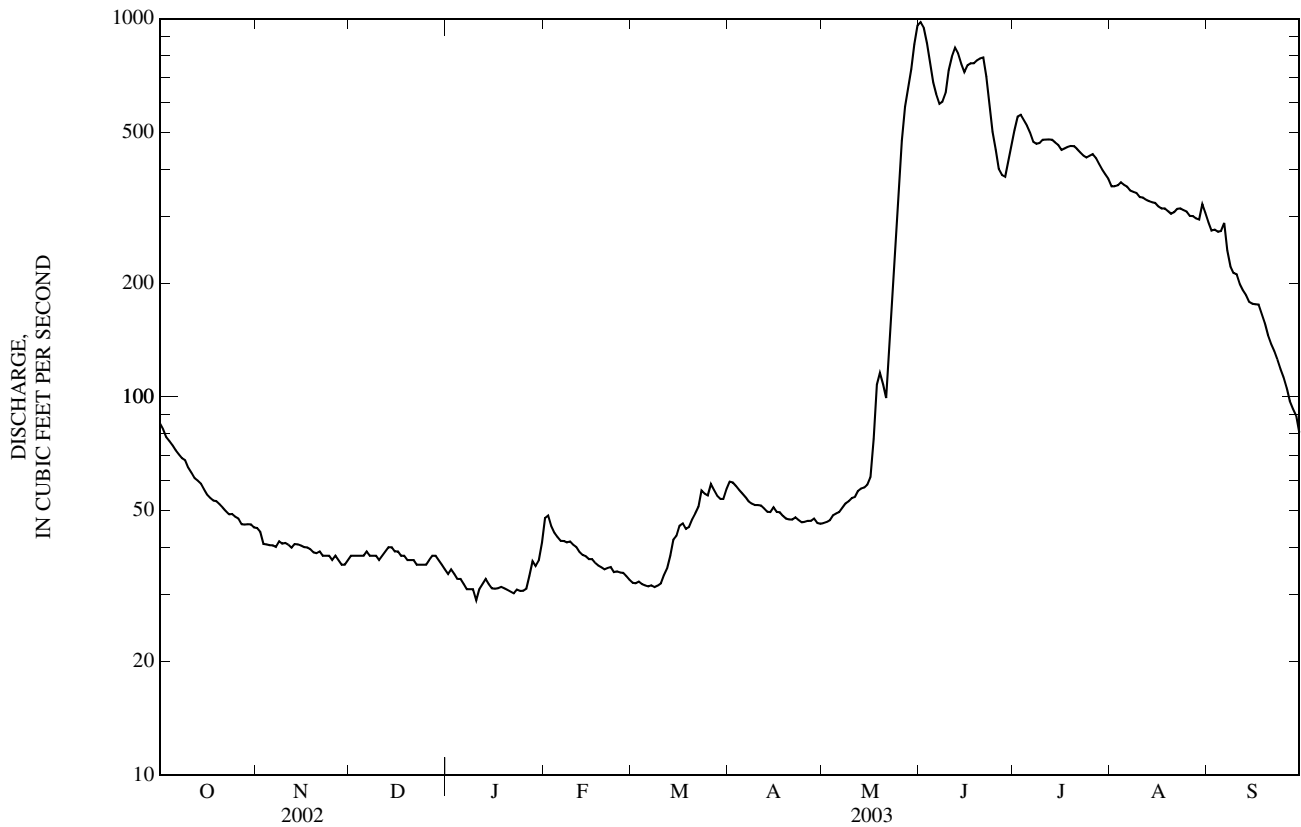
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2003, BY WATER YEAR (WY)

MEAN	88.6	53.4	43.8	40.2	38.8	43.3	70.8	231	583	433	279	201
MAX	130	71.1	57.3	57.3	45.0	51.1	102	377	962	559	332	288
(WY)	(2001)	(2001)	(1996)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1999)	(2001)	(1998)
MIN	59.0	39.7	34.2	31.8	31.8	36.6	49.5	139	351	280	224	137
(WY)	(2003)	(2003)	(2002)	(2002)	(2001)	(2002)	(2001)	(1995)	(1994)	(1994)	(1996)	(1994)

13016450 FISH CREEK AT WILSON, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1994 - 2003	
ANNUAL TOTAL	60,919		65,874		--	
ANNUAL MEAN	167		180		180	
HIGHEST ANNUAL MEAN	--		--		222 1997	
LOWEST ANNUAL MEAN	--		--		161 1995	
HIGHEST DAILY MEAN	798	Jun 3	980	Jun 1	1,350	Jun 9, 1997
LOWEST DAILY MEAN	31	Many days	29 ^e	Jan 10	29 ^e	Jan 10, 2003
ANNUAL SEVEN-DAY MINIMUM	31	Jan 22	31	Jan 16	31	Some years
MAXIMUM PEAK FLOW	--		1,010	Jun 1	1,430	Jun 8, 1997
MAXIMUM PEAK STAGE	--		4.45	Jun 1	5.41	Jun 8, 1997
INSTANTANEOUS LOW FLOW	--		--		34	Jan 31, 1998
ANNUAL RUNOFF (AC-FT)	120,800		130,700		130,500	
10 PERCENT EXCEEDS	435		479		460	
50 PERCENT EXCEEDS	61		52		71	
90 PERCENT EXCEEDS	32		34		37	

e Estimated.



SNAKE RIVER BASIN

13018300 CACHE CREEK NEAR JACKSON, WY
(Hydrologic Benchmark Station)

LOCATION.--Lat 43° 27'08", long 110° 42'12", in SW¹/₄ SW¹/₄ SE¹/₄ sec.1, T.40 N., R.116 W., Teton County, Hydrologic Unit 17040103, Teton National Forest, on right bank 0.7 mi upstream from Salt Lick Draw, 2.4 mi southeast of Jackson, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--10.6 mi².

PERIOD OF RECORD.--June 1962 to current year.

REVISED RECORDS.--WDR WY-76-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,750 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	e4.0	e4.2	e3.4	3.7	e2.8	3.3	6.0	52	16	7.9	6.0
2	5.3	e4.4	e4.1	e3.6	3.6	e2.8	3.3	6.2	46	15	7.8	5.8
3	5.3	e4.7	e4.1	e3.7	e3.3	e2.8	3.2	6.8	40	15	7.9	5.8
4	5.3	e4.8	e4.0	e3.6	e3.2	e2.8	e3.0	7.1	36	15	8.0	5.8
5	5.3	e5.0	e3.9	e3.5	e3.0	e2.7	e3.1	7.0	34	14	7.8	5.7
6	5.1	e4.9	e3.6	e3.5	e2.8	2.8	e3.1	6.9	32	14	7.8	5.7
7	5.1	e4.7	e3.5	e3.4	e2.9	2.8	e3.2	6.8	30	13	7.6	5.6
8	5.2	4.7	e3.5	e3.2	e3.0	2.8	e3.4	7.1	28	13	7.6	5.8
9	5.1	4.7	e3.5	e3.1	e3.0	2.8	3.4	7.1	27	13	7.5	5.6
10	5.0	4.6	e3.4	e2.9	e3.1	2.8	3.7	7.2	26	13	7.4	6.5
11	4.9	4.6	e3.5	e3.0	e3.2	2.8	3.9	7.4	26	12	7.3	5.8
12	5.0	4.6	e3.7	e3.2	e3.3	2.9	4.2	8.3	27	12	7.4	5.7
13	5.1	4.6	e3.8	e3.4	3.3	3.1	4.3	10	26	12	7.4	5.6
14	5.0	4.5	e3.9	e3.5	3.3	3.4	4.4	11	25	12	7.4	5.3
15	5.0	4.5	e3.8	e3.4	3.2	3.2	4.5	13	24	11	7.3	5.2
16	4.9	e4.5	e3.7	e3.2	e3.2	3.3	4.4	15	24	11	7.0	5.1
17	4.9	4.5	e3.6	e3.1	e3.0	3.1	4.3	16	24	11	6.9	5.3
18	4.9	4.4	e3.5	e3.2	e2.8	3.0	4.3	16	23	11	6.7	5.3
19	4.9	4.4	e3.0	3.4	e2.6	3.0	4.3	15	22	11	6.7	5.2
20	4.9	4.4	e3.2	3.4	e2.8	3.0	4.4	15	22	10	6.7	5.1
21	4.9	4.4	e3.1	3.5	e2.9	2.9	4.7	16	22	10	6.6	5.1
22	4.9	4.4	e3.1	3.4	e2.9	3.0	5.1	19	21	9.6	7.5	5.0
23	4.9	4.4	e3.0	3.4	e2.7	e3.0	5.1	25	20	9.3	7.0	5.0
24	4.9	4.4	e3.0	3.4	e2.2	e2.8	5.2	33	20	9.3	6.6	4.9
25	4.9	e3.0	e3.1	3.4	e2.4	e2.9	5.8	40	19	9.3	6.3	4.9
26	5.1	e2.7	e3.4	3.4	e2.8	3.0	6.0	48	18	9.1	6.2	4.9
27	5.1	e3.6	e3.7	3.5	e2.9	2.9	5.5	51	18	8.7	6.2	4.8
28	4.9	e4.1	e4.0	3.5	e2.8	e2.9	5.5	56	17	8.5	6.1	4.7
29	4.9	e4.2	e3.6	3.3	---	e2.7	5.8	61	17	8.3	6.3	4.7
30	e4.9	4.3	e3.4	3.5	---	2.9	6.0	62	16	8.0	7.5	4.7
31	e4.7	---	e3.5	3.6	---	3.1	---	58	---	8.0	6.3	---
TOTAL	155.7	131.0	110.4	104.6	83.9	90.8	130.4	663.9	782	352.1	220.7	160.6
MEAN	5.02	4.37	3.56	3.37	3.00	2.93	4.35	21.4	26.1	11.4	7.12	5.35
MAX	5.4	5.0	4.2	3.7	3.7	3.4	6.0	62	52	16	8.0	6.5
MIN	4.7	2.7	3.0	2.9	2.2	2.7	3.0	6.0	16	8.0	6.1	4.7
AC-FT	309	260	219	207	166	180	259	1,320	1,550	698	438	319

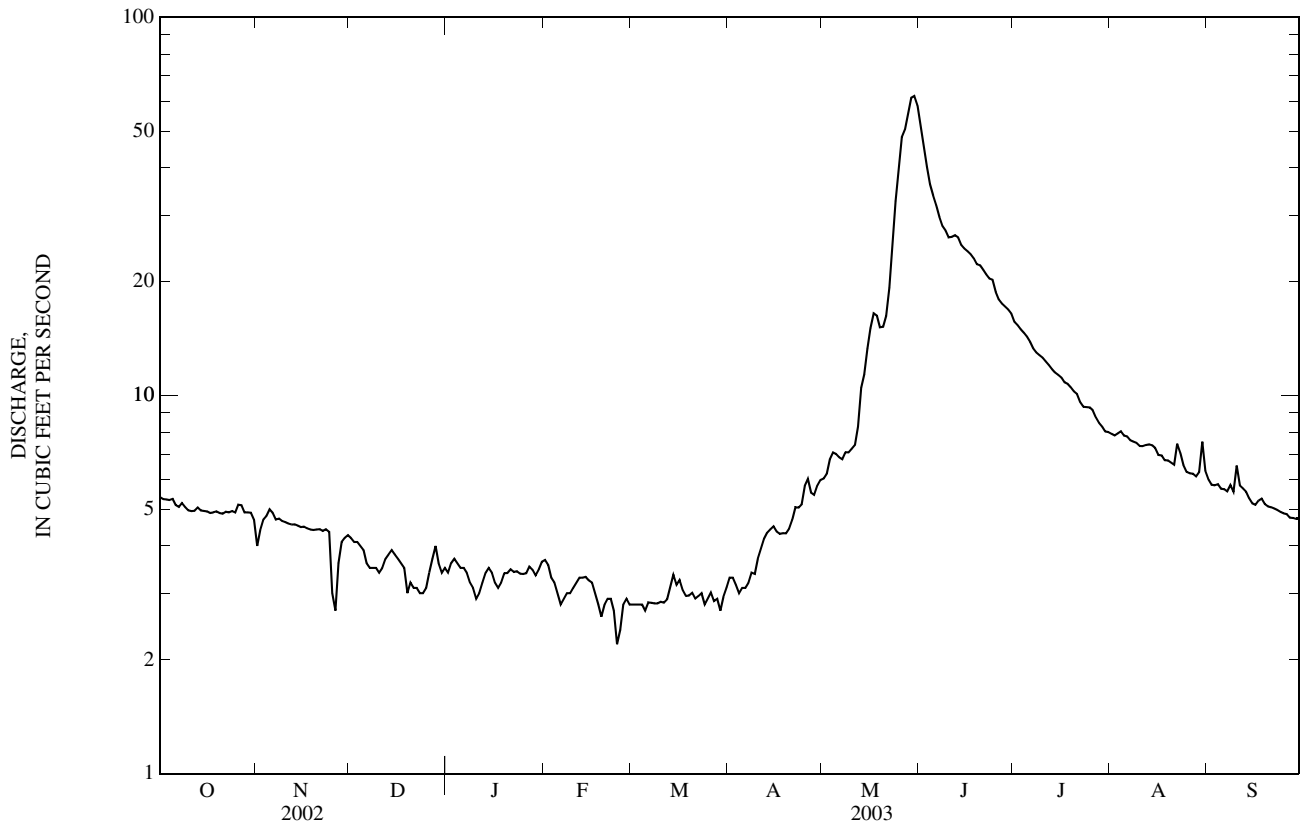
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2003, BY WATER YEAR (WY)

MEAN	6.71	5.65	4.96	4.31	3.97	4.00	6.41	25.5	48.4	23.5	11.8	8.19
MAX	9.43	7.57	6.85	5.91	6.09	7.25	14.2	52.1	103	42.0	18.5	12.3
(WY)	(1972)	(1997)	(1999)	(1981)	(1984)	(1984)	(1987)	(1997)	(1971)	(1965)	(1971)	(1971)
MIN	3.83	3.14	1.53	2.42	2.06	2.23	3.21	5.86	10.6	6.51	4.19	3.83
(WY)	(1993)	(1978)	(1991)	(1978)	(1992)	(1991)	(1991)	(1977)	(1992)	(1977)	(1992)	(1992)

13018300 CACHE CREEK NEAR JACKSON, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1962 - 2003	
ANNUAL TOTAL	2,797.4		2,986.1		--	
ANNUAL MEAN	7.66		8.18		12.8	
HIGHEST ANNUAL MEAN	--		--		20.5 1997	
LOWEST ANNUAL MEAN	--		--		5.64 1992	
HIGHEST DAILY MEAN	48	Jun 1	62	May 30	161	Jun 24, 1971
LOWEST DAILY MEAN	1.6 ^c	Feb 28	2.2 ^c	Feb 24	1.1	Dec 23, 1990
ANNUAL SEVEN-DAY MINIMUM	1.8	Feb 24	2.6	Feb 19	1.3	Dec 20, 1990
MAXIMUM PEAK FLOW	--	--	72 ^a	May 28	225 ^b	Jun 24, 1971
MAXIMUM PEAK STAGE	--	--	5.16 ^c	Oct 31	5.16 ^c	Oct 31, 2002
ANNUAL RUNOFF (AC-FT)	5,550		5,920		9,270	
10 PERCENT EXCEEDS	20		18		32	
50 PERCENT EXCEEDS	4.8		4.9		6.4	
90 PERCENT EXCEEDS	2.5		3.0		3.6	

- a Gage height, 4.16 ft.
- b Gage height, 3.90 ft, site and datum then in use.
- c Backwater from ice.
- e Estimated.



13018350 FLAT CREEK BELOW CACHE CREEK, NEAR JACKSON, WY

LOCATION.--Lat 43° 27'30", long 110° 47'46", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T.40 N., R.116 W., Teton County, Hydrologic Unit 17040103, on left bank 8 ft upstream from county bridge on High School Road, 2.1 mi southwest of Post Office in Jackson, and 3.0 mi downstream from Cache Creek.

DRAINAGE AREA.--129 mi².

PERIOD OF RECORD.--April 1989 to September 1996 (no winter records), October 1999 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,130 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	e60	62	e58	e69	51	46	77	205	64	42	34
2	78	e62	63	59	e61	52	46	70	209	81	42	33
3	74	e66	62	59	e60	48	48	64	215	97	43	32
4	72	e68	62	58	e57	47	47	67	213	104	44	31
5	72	e70	60	58	e54	51	49	68	193	105	46	32
6	71	64	61	58	e50	56	48	64	174	104	44	32
7	69	62	62	e58	e45	57	46	65	157	101	38	32
8	69	65	e62	e57	e48	49	46	68	148	96	35	35
9	68	64	e62	e56	e50	47	46	65	147	94	34	35
10	67	63	e61	e54	e52	52	46	60	143	85	34	43
11	67	63	e60	e58	e54	58	47	58	140	73	29	41
12	66	62	60	e62	e52	74	48	61	140	68	25	41
13	64	63	60	63	49	59	48	65	138	68	25	41
14	64	63	59	69	50	51	49	67	139	68	25	39
15	64	62	58	66	52	48	57	74	132	66	26	38
16	64	e62	58	67	51	55	96	82	120	65	25	36
17	64	61	57	59	60	48	96	88	110	63	25	35
18	63	e60	57	e60	56	46	94	99	106	63	25	34
19	63	e59	e57	e60	55	46	91	100	103	62	25	35
20	63	60	e56	e57	52	47	88	93	110	62	25	35
21	63	59	e55	56	50	46	79	90	110	62	25	34
22	66	59	e54	54	53	48	76	96	110	65	27	33
23	68	e59	e54	62	57	46	82	111	99	64	27	34
24	68	e59	e54	62	57	44	83	134	89	63	27	34
25	65	66	e56	57	e51	43	77	152	78	65	27	34
26	63	e71	e58	59	e44	54	69	163	68	65	26	33
27	63	e72	e60	e65	e46	50	76	167	57	66	26	33
28	64	e64	e63	e68	e49	47	79	163	52	71	26	34
29	65	63	e62	e61	---	46	75	163	54	71	28	34
30	64	62	e62	e64	---	46	77	172	59	70	40	34
31	63	---	e61	e66	---	45	---	192	---	61	36	---
TOTAL	2,072	1,893	1,838	1,870	1,484	1,557	1,955	3,058	3,818	2,312	972	1,051
MEAN	66.8	63.1	59.3	60.3	53.0	50.2	65.2	98.6	127	74.6	31.4	35.0
MAX	78	72	63	69	69	74	96	192	215	105	46	43
MIN	63	59	54	54	44	43	46	58	52	61	25	31
AC-FT	4,110	3,750	3,650	3,710	2,940	3,090	3,880	6,070	7,570	4,590	1,930	2,080

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

	77.0	72.7	68.1	60.1	60.1	63.7	62.7	97.9	130	110	76.8	54.1
MEAN	77.0	72.7	68.1	60.1	60.1	63.7	62.7	97.9	130	110	76.8	54.1
MAX	111	97.7	98.2	85.3	80.4	78.9	70.1	123	218	189	162	84.2
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(1990)	(1993)	(1996)	(1995)	(1993)	(1991)
MIN	52.1	61.5	53.9	43.1	45.6	50.2	55.3	82.1	57.1	58.3	31.4	25.7
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2003)	(1993)	(1989)	(1992)	(1992)	(2003)	(2001)

13018350 FLAT CREEK BELOW CACHE CREEK, NEAR JACKSON, WY—Continued

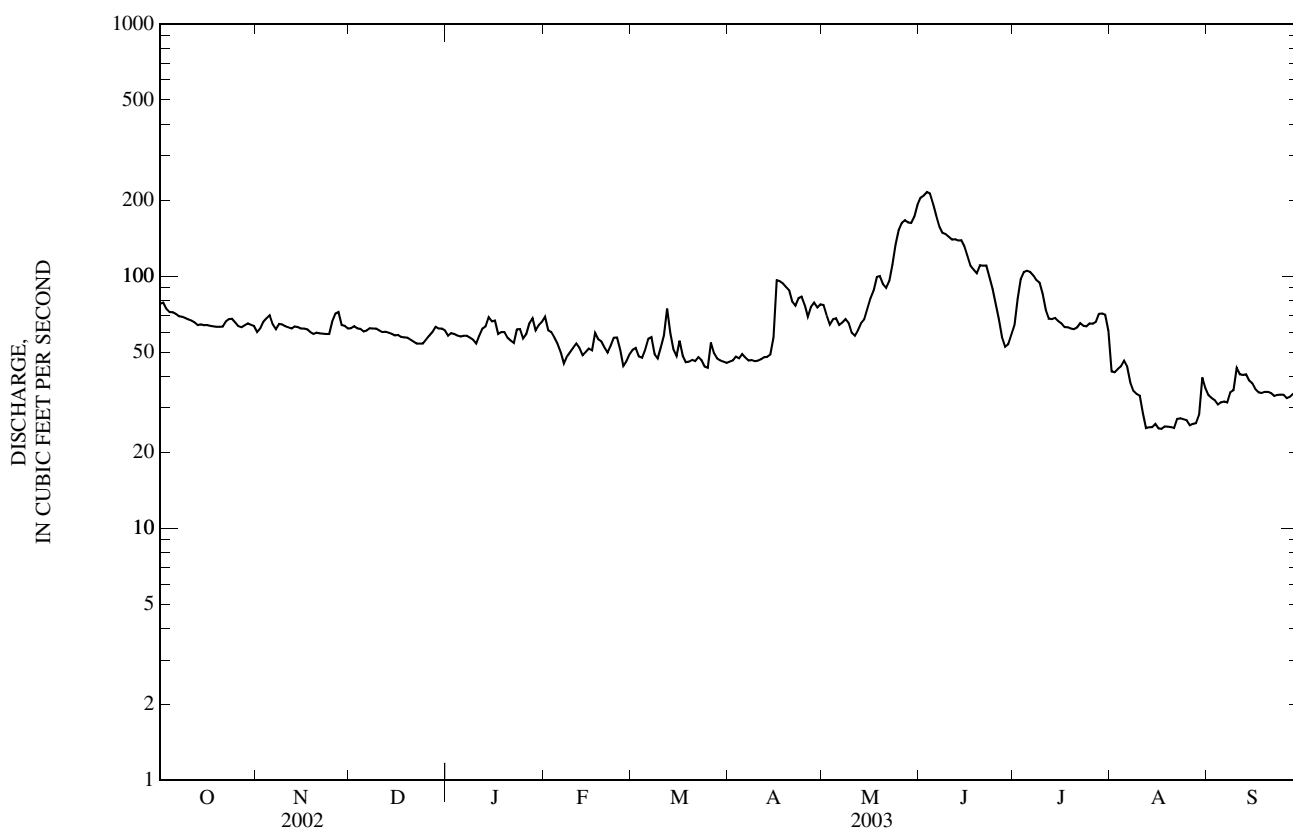
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1989 - 2003*	
ANNUAL TOTAL	23,780		23,880		--	
ANNUAL MEAN	65.2		65.4		70.3	
HIGHEST ANNUAL MEAN	--		--		89.8	2000
LOWEST ANNUAL MEAN	--		--		62.7	2001
HIGHEST DAILY MEAN	154	Jun 2	215	Jun 3	256	Jul 13, 1995
LOWEST DAILY MEAN	35 ^e	Jan 30, Feb 5	25	Aug 12	14	Sep 22, 2001
ANNUAL SEVEN-DAY MINIMUM	36	Jan 30	25	Aug 12-14, 16-21	15	Sep 19, 2001
MAXIMUM PEAK FLOW	--		223	Jun 3	277 ^a	Jul 12, 1995
MAXIMUM PEAK STAGE	--		2.64	Jun 3	4.18 ^b	Dec 8, 2001
INSTANTANEOUS LOW FLOW	--		--		23	Aug 30, 1990
ANNUAL RUNOFF (AC-FT)	47,170		47,370		50,950	
10 PERCENT EXCEEDS	96		99		108	
50 PERCENT EXCEEDS	60		60		64	
90 PERCENT EXCEEDS	43		34		42	

* For period of operation.

a Gage height, 2.95 ft.

b Backwater from ice.

e Estimated.



13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY

LOCATION.--Lat 43° 22'20", long 110° 44'19"(revised), in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.39 N., R.116 W., Teton County, Wyoming, Hydrologic Unit 17040103, on left bank 20 ft upstream from county road bridge, about 1 mi downstream from Flat Creek, 4.8 mi upstream from Hoback River, 7.0 mi south of Jackson, and at mile 938.9.

DRAINAGE AREA.--2,627 mi².

PERIOD OF RECORD.--November 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,950 ft above NGVD of 1929, from topographic map. Station equipment includes satellite telemetry.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Station operated and record provided by the Idaho District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,170	1,280	1,160	1,070	1,380	1,010	1,320	2,000	12,400	6,020	6,600	6,190
2	1,970	1,270	1,160	1,070	1,390	997	1,360	1,970	11,200	6,410	6,550	6,080
3	1,840	1,260	1,180	1,090	e1,300	1,020	1,350	2,000	9,610	6,320	6,540	6,050
4	1,730	1,250	1,170	1,090	1,220	1,020	1,310	2,090	8,400	6,150	6,550	5,990
5	1,690	1,250	1,170	1,090	1,150	999	1,260	2,100	7,680	6,040	6,520	5,920
6	1,670	1,260	1,170	1,070	e1,100	995	1,220	2,080	7,360	5,910	6,520	5,910
7	1,630	1,260	1,150	e1,000	e1,050	1,010	1,210	1,990	6,850	5,780	6,470	5,860
8	1,600	1,310	e1,050	e1,000	e1,100	986	1,200	1,970	6,520	5,890	6,460	5,810
9	1,590	1,340	e1,050	e950	e1,100	979	1,220	1,980	6,590	6,040	6,460	5,750
10	1,560	1,350	e1,050	e900	1,100	1,010	1,290	1,970	6,860	6,200	6,420	5,910
11	1,530	1,320	1,080	e1,000	e1,050	1,070	1,380	1,970	7,290	6,340	6,420	5,770
12	1,520	1,300	1,090	e1,060	e1,050	1,180	1,530	2,040	7,390	6,460	6,400	5,640
13	1,500	1,310	1,090	1,070	1,070	1,260	1,660	2,220	7,110	6,430	6,400	5,550
14	1,490	1,300	1,110	1,090	1,090	1,340	1,790	2,440	6,760	e6,400	e6,400	5,460
15	1,480	1,290	1,150	e1,050	1,070	1,350	1,930	2,810	6,570	6,520	6,380	5,370
16	1,480	1,270	1,130	e1,000	1,080	1,400	1,960	3,330	6,740	6,570	e6,380	5,270
17	1,480	1,240	1,140	e1,000	1,070	1,400	1,850	4,050	6,890	6,730	6,320	5,200
18	1,470	1,240	1,120	e950	1,070	1,330	1,800	4,580	6,870	6,900	6,330	5,110
19	1,450	1,230	1,110	e950	1,050	1,280	1,750	4,230	6,940	7,070	6,310	5,030
20	1,440	1,240	1,110	e950	1,040	1,280	1,750	3,770	6,820	7,030	6,550	4,950
21	1,420	1,240	1,100	e1,000	1,050	1,290	1,820	3,720	6,910	6,970	6,610	4,860
22	1,440	1,240	1,090	1,050	1,070	1,320	1,940	3,940	6,350	6,950	6,630	4,770
23	1,440	1,260	e1,050	1,080	1,050	1,390	2,040	4,940	5,740	6,910	6,600	4,680
24	1,450	1,280	e1,000	1,080	e1,000	1,400	2,050	6,230	5,220	e6,850	6,530	4,600
25	1,440	1,210	e1,000	1,060	e1,000	1,350	2,070	7,400	5,140	e6,850	6,430	4,530
26	1,410	1,150	e1,050	1,070	e1,000	1,500	2,170	8,060	5,060	e6,800	6,340	4,430
27	1,370	1,150	e1,100	1,190	e1,000	1,440	2,220	8,660	5,130	e6,800	6,270	4,330
28	1,380	1,180	1,110	1,340	1,030	1,330	2,090	9,390	5,200	e6,750	6,220	4,220
29	1,380	1,200	1,080	1,180	---	1,280	2,020	10,400	5,410	e6,750	6,190	4,170
30	1,350	1,180	1,050	1,240	---	1,270	1,990	11,500	5,590	6,730	6,420	4,060
31	1,310	---	1,080	1,310	---	1,280	---	12,100	---	6,680	6,330	---
TOTAL	47,680	37,660	34,150	33,050	30,730	37,766	50,550	137,930	208,600	202,250	199,550	157,470
MEAN	1,538	1,255	1,102	1,066	1,098	1,218	1,685	4,449	6,953	6,524	6,437	5,249
MAX	2,170	1,350	1,180	1,340	1,390	1,500	2,220	12,100	12,400	7,070	6,630	6,190
MIN	1,310	1,150	1,000	900	1,000	979	1,200	1,970	5,060	5,780	6,190	4,060
AC-FT	94,570	74,700	67,740	65,550	60,950	74,910	100,300	273,600	413,800	401,200	395,800	312,300

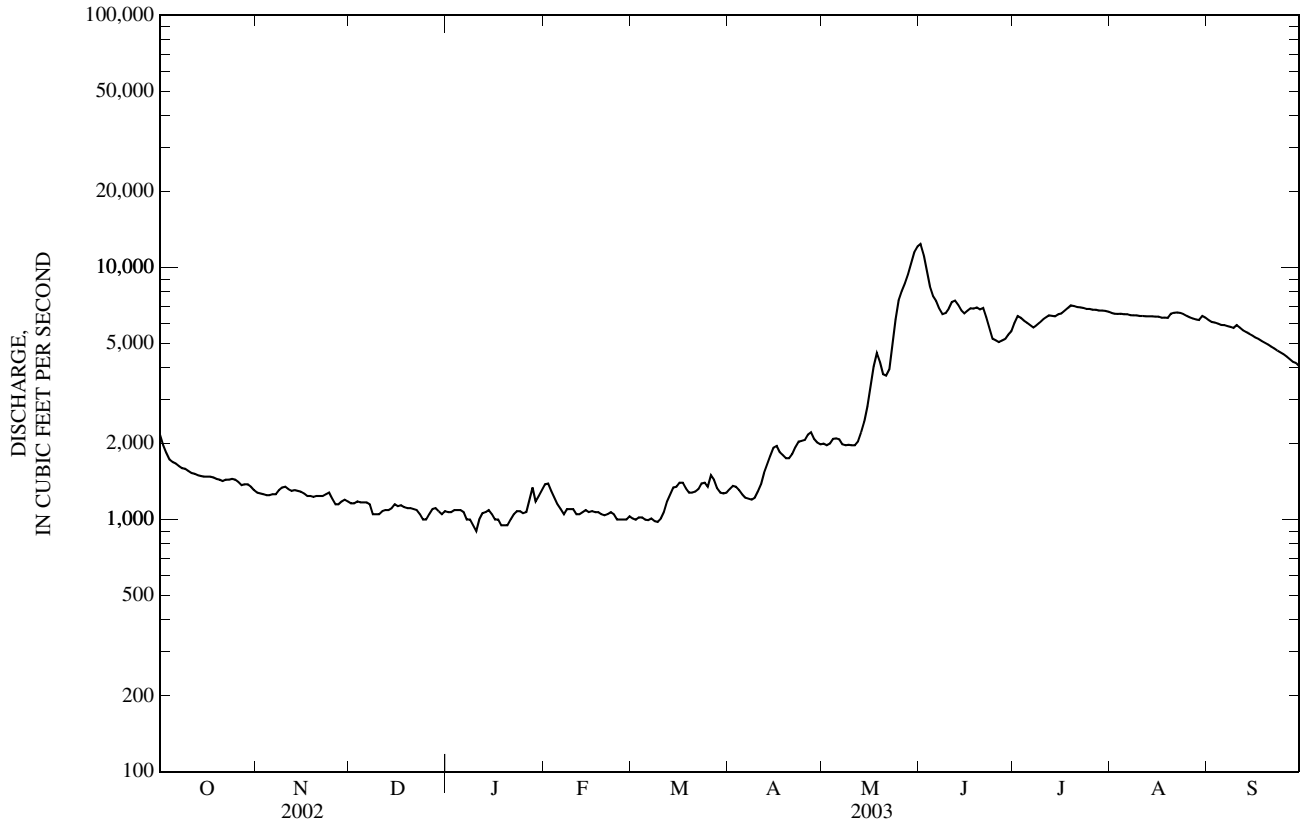
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2003, BY WATER YEAR (WY)

MEAN	1,854	1,544	1,391	1,308	1,337	1,590	2,623	6,680	10,930	6,733	4,424	3,568
MAX	3,093	2,747	1,998	2,345	2,491	3,686	5,435	12,060	22,180	14,090	7,253	6,464
(WY)	(1983)	(1984)	(1984)	(1997)	(1997)	(1997)	(1985)	(1997)	(1997)	(1982)	(1976)	(1984)
MIN	977	967	846	879	825	910	1,292	2,570	5,233	3,245	2,305	1,801
(WY)	(1989)	(1988)	(1988)	(1988)	(1989)	(1977)	(1977)	(1977)	(2001)	(1988)	(1981)	(1979)

13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1976 - 2003	
ANNUAL TOTAL	1,030,900		1,177,386		--	
ANNUAL MEAN	2,824		3,226		3,635	
HIGHEST ANNUAL MEAN	--		--		6,110 1997	
LOWEST ANNUAL MEAN	--		--		2,469 1977	
HIGHEST DAILY MEAN	9,380	Jun 2	12,400	Jun 1	30,200	Jun 11, 1997
LOWEST DAILY MEAN	800 ^e	Jan 30	900 ^e	Jan 10	690	Jan 19, 1988
ANNUAL SEVEN-DAY MINIMUM	921	Jan 26	986	Jan 15	785	Feb 4, 1989
ANNUAL RUNOFF (AC-FT)	2,045,000		2,335,000		2,633,000	
10 PERCENT EXCEEDS	5,580		6,740		8,000	
50 PERCENT EXCEEDS	1,580		1,530		2,060	
90 PERCENT EXCEEDS	1,000		1,050		1,110	

e Estimated.



13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2002 to September 2003.

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

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
OCT 24...	1150	1,460	610	10.8	109	7.8	265	3.5	6.0	120	34.7	8.18	1.64	
NOV 12...	1635	1,290	622	10.8	97	8.7	260	1.0	2.5	120	34.5	8.33	1.71	
JAN 14...	0945	1,080	620	11.3	101	7.8	264	4.0	2.0	120	34.3	8.20	1.76	
FEB 25...	1245	1,140	610	12.6	--	7.6	--	-25.0	0.0	130	38.7	9.14	1.92	
MAR 19...	0930	1,280	610	11.8	107	7.7	269	3.0	2.0	130	36.1	8.51	1.62	
APR 24...	0930	2,040	607	9.7	99	7.3	252	8.0	6.5	110	33.0	7.44	1.76	
MAY 21...	0915	3,690	615	9.8	103	7.4	224	18.5	8.0	100	29.9	6.75	1.41	
JUL 09...	0845	5,960	615	9.6	113	7.3	181	22.5	13.0	77	22.5	5.06	1.61	
SEP 10...	0910	5,960	610	7.7	90	8.1	187	9.5	12.0	74	21.9	4.62	1.92	
Date		Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT 24...	0.3	7.46	E115	3.27	0.43	13.8	18.2	--	--	--	152	E.05	<0.04	
NOV 12...	0.3	7.53	114	4.48	0.42	13.7	19.5	158	0.22	559	161	E.05	<0.04	
JAN 14...	0.3	7.72	114	2.71	0.43	13.4	19.0	156	0.22	475	163	E.09	<0.04	
FEB 25...	0.3	8.43	E109	28.8	0.47	15.0	21.5	--	--	--	176	0.19	<0.04	
MAR 19...	0.3	7.48	114	4.68	0.38	13.3	20.4	161	0.22	553	160	0.13	<0.04	
APR 24...	0.3	6.97	108	3.04	0.30	11.7	18.2	147	0.20	821	149	0.18	<0.04	
MAY 21...	0.2	5.66	96	2.18	0.2	11.3	15.7	131	0.19	1,380	139	0.24	<0.04	
JUL 09...	0.3	6.87	74	3.29	0.5	13.8	10.8	109	0.12	1,360	85	E.08	<0.04	
SEP 10...	0.4	8.79	75	5.38	0.7	13.9	12.2	114	0.15	1,810	113	E.09	<0.04	

13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY—Continued

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

Date	Pro- panil, water, fltrd 0.7u GF (82679)	Propar- gite, water, fltrd 0.7u GF (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF (82670)	Terba- cil, water, fltrd 0.7u GF (82665)	Terbu- fos, water, fltrd 0.7u GF (82675)	Thio- bencarb water fltrd 0.7u GF (82681)	Tri- allate, water, fltrd 0.7u GF (82678)	Tri- flur- alin, water, fltrd 0.7u GF (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment load, tons/d (80155)
OCT 24...	--	--	--	--	--	--	--	--	--	1	3.9
NOV 12...	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	3	10
JAN 14...	--	--	--	--	--	--	--	--	--	10	29
FEB 25...	--	--	--	--	--	--	--	--	--	10	31
MAR 19...	--	--	--	--	--	--	--	--	--	7	24
APR 24...	--	--	--	--	--	--	--	--	--	9	50
MAY 21...	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	30	299
JUL 09...	--	--	--	--	--	--	--	--	--	17	274
SEP 10...	--	--	--	--	--	--	--	--	--	10	161

E -- Estimated value

13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

LOCATION.--Lat 43° 11'46", long 110° 53'22"(revised), Lincoln County, Wyoming, Hydrologic Unit 17040103, on right bank 0.3 mi downstream from Wolf Creek, 6.4 mi upstream from Greys River, 7.4 mi east of Alpine, 16.1 mi upstream from Palisades Dam, and at mile 917.5.

DRAINAGE AREA.--3,465 mi².

PERIOD OF RECORD.--March 1937 to March 1939 (published as "above Greys River, near Alpine"), July 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,683.90 ft above NGVD of 1929, unadjusted. March 16, 1937 to March 31, 1939 at site 6.0 mi downstream at different datum. Station equipment includes satellite telemetry.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Station operated and record provided by the Idaho District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,470	1,500	1,460	1,400	1,710	1,330	1,740	2,890	16,000	6,890	6,860	6,530
2	2,280	1,510	1,440	1,380	1,740	1,280	1,850	2,870	14,500	7,240	6,800	6,410
3	2,140	1,480	1,480	1,390	1,570	1,310	1,850	2,940	12,500	7,180	6,770	6,360
4	2,010	1,460	1,480	1,410	1,530	1,310	1,760	3,080	10,800	6,950	6,810	6,280
5	1,950	1,470	1,470	1,410	1,450	1,280	1,680	3,060	9,880	6,770	6,780	6,210
6	1,930	1,490	1,470	1,370	e1,450	1,280	1,650	2,960	9,390	6,610	6,780	6,220
7	1,880	1,500	1,430	e1,350	e1,400	1,300	1,610	2,820	8,700	6,440	6,720	6,180
8	1,850	1,560	e1,350	e1,350	e1,450	1,280	1,610	2,770	8,190	e6,500	6,710	6,100
9	1,830	1,620	e1,300	e1,300	e1,450	1,270	1,680	2,810	8,280	e6,700	6,720	6,050
10	1,800	1,620	e1,250	e1,350	e1,450	1,300	1,860	2,780	8,620	e6,900	6,690	6,230
11	1,780	1,600	e1,300	e1,350	e1,400	1,360	2,090	2,770	9,130	e7,000	6,720	6,100
12	1,770	1,560	e1,350	e1,350	e1,400	1,460	2,330	2,880	9,240	e7,200	6,710	5,950
13	1,740	1,570	1,410	e1,350	e1,400	1,570	2,520	3,330	8,800	e7,000	6,710	5,850
14	1,720	1,570	1,430	e1,350	e1,400	1,670	2,730	3,620	8,380	e7,000	6,690	5,740
15	1,710	1,550	1,470	e1,300	1,370	1,690	2,870	4,110	8,110	e7,000	6,730	5,640
16	1,700	1,510	1,460	e1,250	1,370	1,750	2,820	4,820	8,320	e7,100	6,720	5,520
17	1,700	1,500	1,470	e1,200	1,360	1,770	2,660	5,630	8,460	e7,200	6,670	5,450
18	1,680	1,520	1,450	e1,150	1,360	1,710	2,590	6,070	8,350	7,300	6,660	5,390
19	1,670	1,500	e1,400	e1,200	1,340	1,640	2,540	5,690	8,440	7,460	6,640	5,300
20	1,650	1,510	e1,400	e1,200	1,320	1,650	2,590	5,090	8,360	7,440	6,810	5,180
21	1,650	1,520	e1,400	e1,250	1,340	1,670	2,720	5,030	8,340	7,370	6,920	5,080
22	1,650	1,520	e1,400	e1,300	1,350	1,690	2,930	5,300	7,680	7,300	6,960	4,990
23	1,690	1,530	e1,350	e1,350	1,320	1,780	3,120	6,560	6,880	7,250	6,940	4,890
24	1,690	1,580	e1,300	e1,350	e1,300	1,800	3,090	8,290	6,260	7,240	6,830	4,790
25	1,680	1,480	e1,300	e1,350	e1,300	1,740	3,240	9,910	6,100	7,360	6,760	4,720
26	1,640	1,470	e1,350	e1,350	e1,300	1,890	3,350	10,800	5,890	7,380	6,630	4,610
27	1,620	e1,450	e1,400	1,450	e1,300	1,840	3,220	11,600	5,870	7,310	6,560	4,520
28	1,610	e1,450	e1,450	1,650	e1,300	1,700	3,000	12,500	5,950	7,210	6,520	4,400
29	1,630	1,470	e1,450	1,490	---	1,630	2,900	13,800	6,250	7,090	6,490	4,340
30	1,610	1,480	1,440	1,550	---	1,610	2,890	15,200	6,510	7,030	6,800	4,250
31	1,560	---	1,420	1,660	---	1,650	---	15,900	---	6,960	6,710	---
TOTAL	55,290	45,550	43,530	42,160	39,430	48,210	73,490	187,880	258,180	219,380	208,820	165,280
MEAN	1,784	1,518	1,404	1,360	1,408	1,555	2,450	6,061	8,606	7,077	6,736	5,509
MAX	2,470	1,620	1,480	1,660	1,740	1,890	3,350	15,900	16,000	7,460	6,960	6,530
MIN	1,560	1,450	1,250	1,150	1,300	1,270	1,610	2,770	5,870	6,440	6,490	4,250
AC-FT	109,700	90,350	86,340	83,620	78,210	95,620	145,800	372,700	512,100	435,100	414,200	327,800

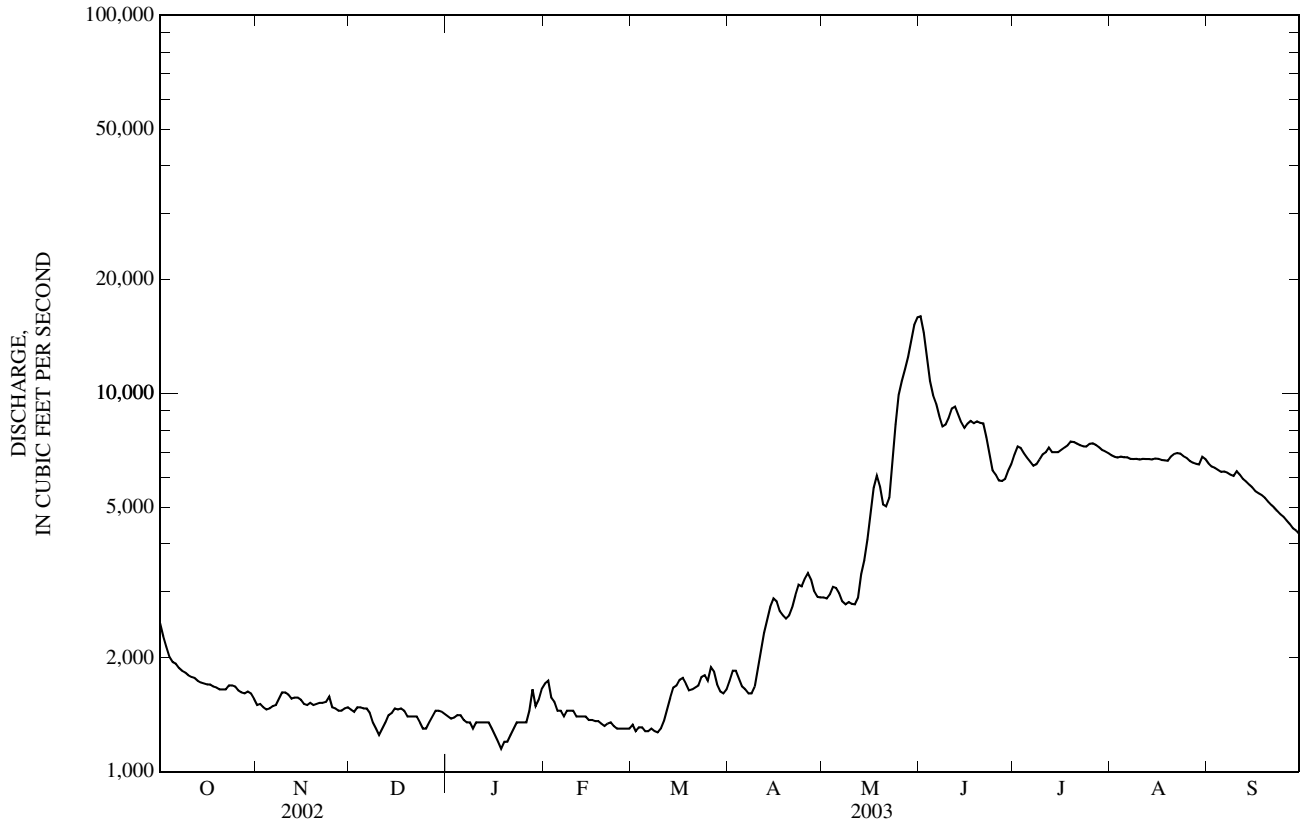
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2003, BY WATER YEAR (WY)

MEAN	2,177	1,848	1,685	1,511	1,595	1,831	3,333	8,843	13,320	8,476	5,374	4,101
MAX	3,605	4,244	5,795	2,694	3,381	4,116	6,820	15,890	28,180	15,790	7,541	7,595
(WY)	(1983)	(1957)	(1957)	(1997)	(1961)	(1997)	(1985)	(1997)	(1997)	(1982)	(1956)	(1984)
MIN	1,325	1,225	1,101	1,069	1,071	1,099	1,506	2,995	6,249	3,802	2,494	2,241
(WY)	(1978)	(1978)	(1988)	(1964)	(1938)	(1955)	(1955)	(1977)	(2001)	(1988)	(1981)	(1977)

13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1937 - 2003	
ANNUAL TOTAL	1,201,460		1,387,200		--	
ANNUAL MEAN	3,292		3,801		4,532	
HIGHEST ANNUAL MEAN	--		--		7,525 1997	
LOWEST ANNUAL MEAN	--		--		2,726 1977	
HIGHEST DAILY MEAN	12,500	Jun 2	16,000	Jun 1	38,100	Jun 11, 1997
LOWEST DAILY MEAN	950 ^e	Jan 30	1,150 ^e	Jan 18	900	Dec 31, 1978
ANNUAL SEVEN-DAY MINIMUM	1,060	Jan 26	1,220	Jan 15	957	Jan 9, 1964
ANNUAL RUNOFF (AC-FT)	2,383,000		2,752,000		3,283,000	
10 PERCENT EXCEEDS	6,720		7,300		10,700	
50 PERCENT EXCEEDS	1,950		1,850		2,460	
90 PERCENT EXCEEDS	1,140		1,350		1,330	

e Estimated.



13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

LOCATION.--Lat 43° 08'34", long 110° 58'36"(revised), in SW¹/₄ SE¹/₄ sec.34, T.37N., R.118 W. (unsurveyed), Lincoln County, Wyoming, Hydrologic Unit 17040103, on right bank at Bridge Campground, 3.6 mi southeast of Alpine, 3.0 mi upstream from maximum flowline of Palisades Reservoir.

DRAINAGE AREA.--448 mi². Mean elevation, 8,080 ft.

PERIOD OF RECORD.--July to September 1917, June to September 1918, March 1937 to March 1939, October 1953 to current year. Published as "Greys River near Alpine, Idaho", 1917-1918, and as "Greys River near Alpine, Wyo.", 1937-39.

GAGE.--Water-stage recorder. Elevation of gage is 5,729 ft above NGVD of 1929, from topographic map. July 6 to September 30, 1917, and June 4 to September 30, 1918, nonrecording gage, and March 17, 1937 to March 31, 1939, water-stage recorder, at site 1.8 mi downstream, and October 1953 to September 22, 1965, water-stage recorder at site 1 mi downstream at different datums. Station equipment includes satellite telemetry.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Less than 500 acres irrigated by diversions from Greys River and tributaries upstream from station. Station operated and record provided by the Idaho District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	194	e180	e150	e190	e170	288	875	2,660	789	426	311
2	273	205	e180	e140	e180	e160	305	866	2,430	764	416	302
3	265	175	e170	e150	e170	e160	312	937	2,150	737	418	306
4	258	211	e170	e140	e170	e160	285	960	1,980	712	429	297
5	258	233	e170	e140	e170	e160	269	920	1,840	689	408	295
6	252	277	e170	e140	e160	e160	270	828	1,740	e670	398	296
7	245	271	e160	e130	e160	e160	253	775	1,640	e650	388	296
8	242	257	e160	e130	e170	e160	270	764	1,570	e640	380	295
9	239	246	e170	e120	e180	160	351	796	1,570	611	377	298
10	237	225	e170	e130	e170	164	506	758	1,580	594	368	325
11	240	207	e190	e150	e170	167	659	744	1,620	579	365	310
12	235	197	e180	e140	e170	177	796	781	1,550	565	360	293
13	227	203	e180	e140	e170	197	908	1,060	1,460	562	356	286
14	228	205	e180	e140	e180	222	1,030	1,200	1,390	574	351	281
15	226	201	e180	e130	e170	233	1,020	1,370	1,340	539	365	279
16	227	180	e170	e130	e170	248	866	1,530	1,330	524	354	274
17	225	207	e180	e130	e170	261	840	1,650	1,280	517	361	277
18	223	214	e170	e130	e170	241	817	1,470	1,220	504	349	282
19	220	189	e160	e130	e160	223	826	1,320	1,200	510	341	276
20	220	199	e140	e140	e160	228	938	1,270	1,190	494	330	270
21	220	202	e160	e160	e160	228	1,020	1,330	1,180	479	324	263
22	226	203	e160	e150	e160	232	1,090	1,490	1,090	468	348	258
23	236	217	e160	e150	e150	259	1,090	1,850	1,000	458	352	255
24	240	208	e160	e140	e160	240	1,020	2,080	955	463	331	251
25	227	e170	e140	e140	e160	236	1,170	2,220	952	484	327	249
26	221	e160	e160	e140	e150	276	1,190	2,270	853	487	318	247
27	221	e170	e160	e140	e160	243	965	2,380	818	475	314	245
28	218	e180	e160	e160	e170	229	868	2,490	812	466	312	243
29	222	e180	e160	e160	---	220	893	2,640	810	455	316	242
30	206	e180	e150	e180	---	221	898	2,790	799	446	349	239
31	208	---	e150	e200	---	238	---	2,800	---	436	337	---
TOTAL	7,254	6,166	5,150	4,450	4,680	6,433	22,013	45,214	42,009	17,341	11,168	8,341
MEAN	234	206	166	144	167	208	734	1,459	1,400	559	360	278
MAX	273	277	190	200	190	276	1,190	2,800	2,660	789	429	325
MIN	206	160	140	120	150	160	253	744	799	436	312	239
AC-FT	14,390	12,230	10,220	8,830	9,280	12,760	43,660	89,680	83,320	34,400	22,150	16,540
CFSM	0.52	0.46	0.37	0.32	0.37	0.46	1.64	3.26	3.13	1.25	0.80	0.62
IN.	0.60	0.51	0.43	0.37	0.39	0.53	1.83	3.75	3.49	1.44	0.93	0.69

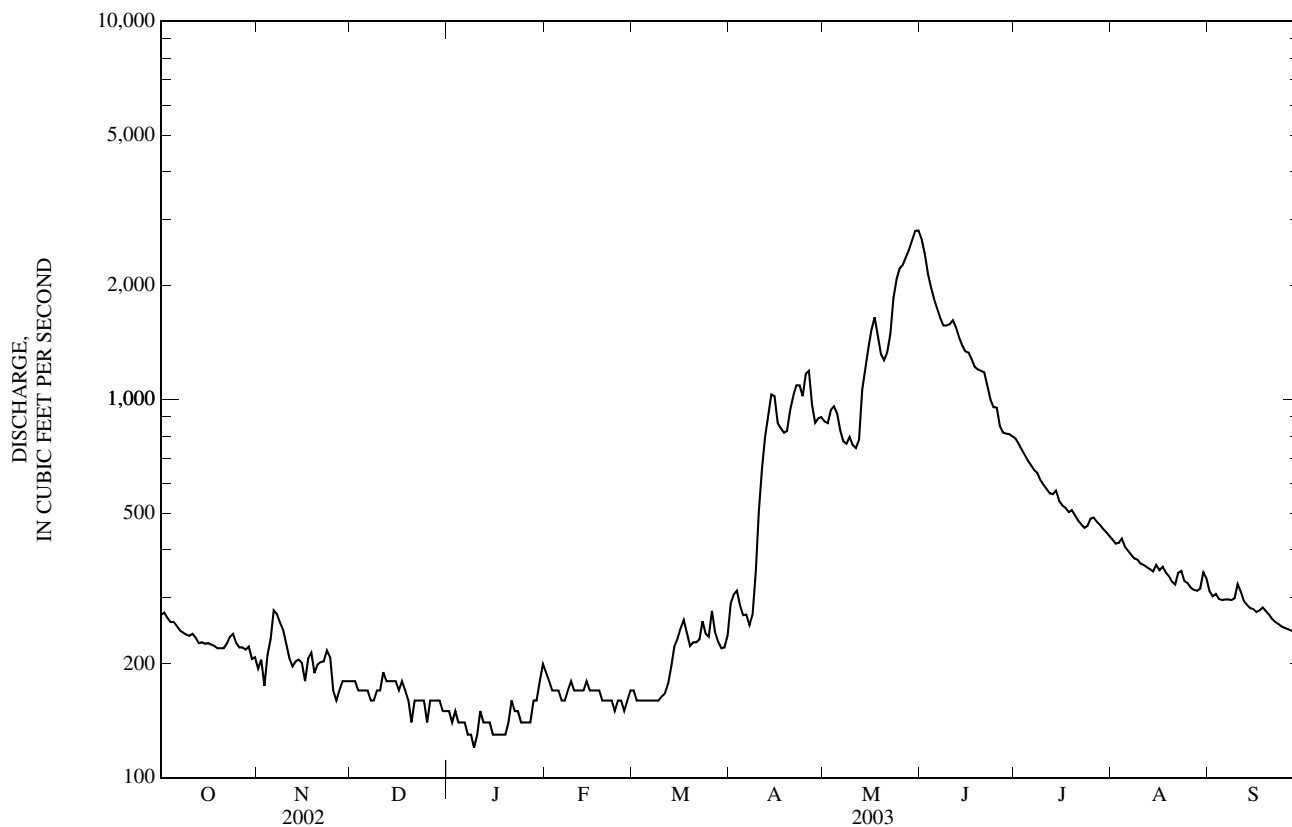
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2003, BY WATER YEAR (WY)

MEAN	314	266	230	211	203	231	638	1,766	1,989	932	480	367
MAX	472	455	366	315	283	406	1,324	3,032	3,998	1,904	809	569
(WY)	(1983)	(1984)	(1984)	(1971)	(1963)	(1986)	(1962)	(1997)	(1971)	(1975)	(1971)	(1997)
MIN	191	150	142	133	132	164	238	333	387	228	205	198
(WY)	(1993)	(1993)	(1993)	(1993)	(1993)	(2002)	(1975)	(1977)	(1977)	(1977)	(1977)	(1977)

13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1972 - 2003
ANNUAL TOTAL	160,206	180,219	--
ANNUAL MEAN	439	494	640
HIGHEST ANNUAL MEAN	--	--	1,022 1971
LOWEST ANNUAL MEAN	--	--	259 1977
HIGHEST DAILY MEAN	2,120 Jun 1	2,800 May 31	6,170 Jun 19, 1971
LOWEST DAILY MEAN	100 ^e Jan 30	120 ^e Jan 9	92 Jan 2, 1978
ANNUAL SEVEN-DAY MINIMUM	121 Jan 29	133 Jan 4	121 Jan 29, 2002
ANNUAL RUNOFF (AC-FT)	317,800	357,500	463,600
10 PERCENT EXCEEDS	1,090	1,200	1,720
50 PERCENT EXCEEDS	256	258	320
90 PERCENT EXCEEDS	150	160	185

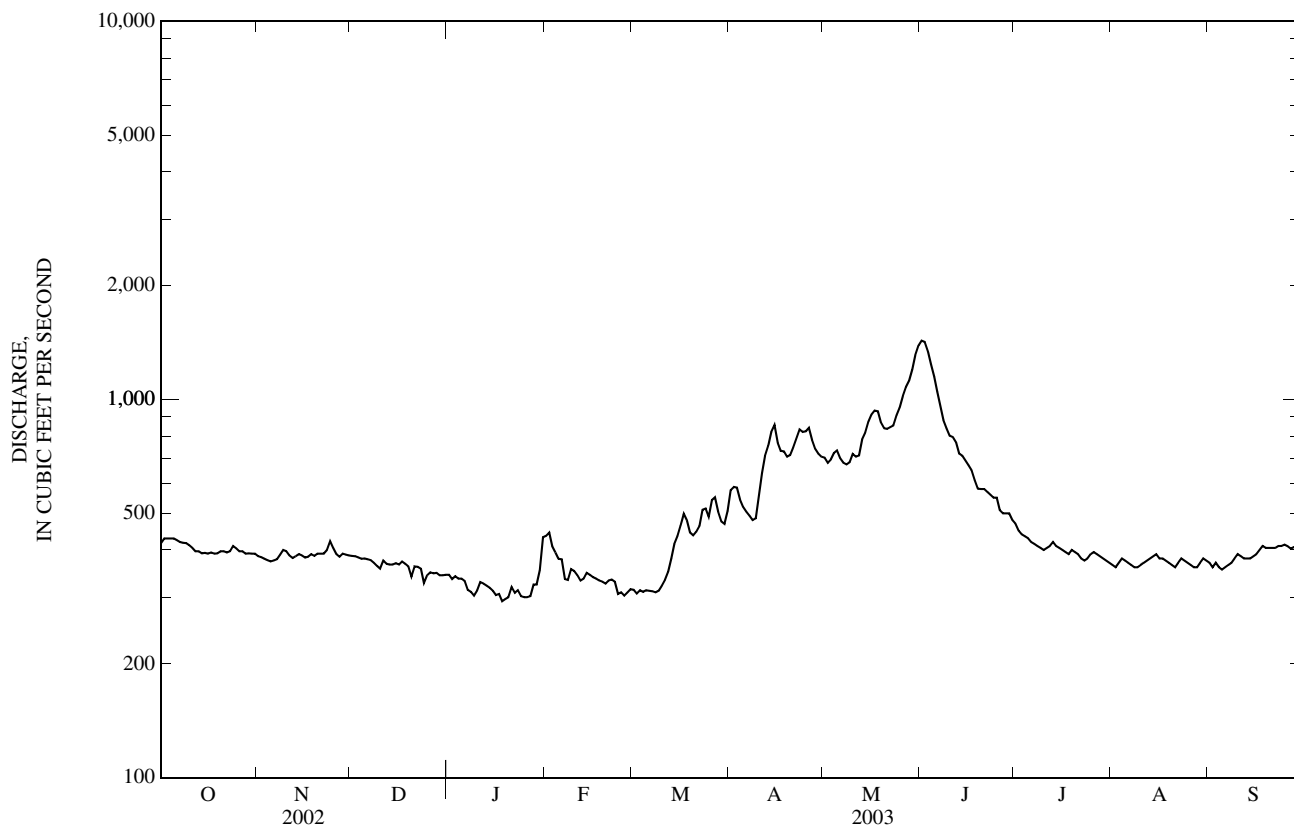
e Estimated.



13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1954 - 2003	
ANNUAL TOTAL	157,630		174,254		--	
ANNUAL MEAN	432		477		769	
HIGHEST ANNUAL MEAN	--		--		1,272	1997
LOWEST ANNUAL MEAN	--		--		397	2001
HIGHEST DAILY MEAN	1,040	Apr 15	1,430	Jun 1	5,030	Jun 2, 1986
LOWEST DAILY MEAN	261	Jan 30	293	Jan 18	180	Jan 7, 1971
ANNUAL SEVEN-DAY MINIMUM	279	Mar 3	304	Jan 16	226	May 10, 1977
ANNUAL RUNOFF (AC-FT)	312,700		345,600		557,200	
10 PERCENT EXCEEDS	695		786		1,490	
50 PERCENT EXCEEDS	389		391		570	
90 PERCENT EXCEEDS	294		325		374	

e Estimated.



13046680 BOUNDARY CREEK NEAR BECHLER RANGER STATION, WY

LOCATION.--Lat 44° 11'07", long 111° 00'28"(revised), T.49 N., R.118 W., Teton County, Yellowstone National Park, Hydrologic Unit 17040203, on right bank 0.4 mi upstream from confluence with the Bechler River, 3.8 mi north of the Bechler Ranger Station, and 28.0 mi northeast of Ashton, Idaho.

DRAINAGE AREA.--86.9 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,360 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for May 15 to June 1 and those for estimated daily discharges, which are fair. No diversion or regulation. Station operated and record provided by the Idaho District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	68	65	65	69	59	67	161	259	86	69	66
2	70	67	65	64	66	59	69	154	255	84	68	66
3	70	67	65	64	63	e60	67	185	244	83	69	66
4	73	67	65	64	e60	60	66	216	233	82	72	66
5	81	67	65	65	e60	60	64	207	226	81	72	66
6	72	67	65	63	e60	60	64	167	223	80	69	68
7	70	67	65	63	e60	60	63	159	214	80	68	68
8	70	68	65	63	62	59	63	169	205	79	68	69
9	69	69	64	63	62	59	65	182	208	78	68	68
10	69	70	65	e60	63	59	71	199	210	77	67	71
11	70	69	66	e60	62	60	78	201	208	77	67	69
12	70	67	65	e60	61	62	86	209	210	76	67	67
13	69	67	65	64	62	67	98	249	213	75	67	67
14	69	67	66	65	e60	69	103	284	223	75	66	66
15	69	67	67	64	61	67	111	278	223	74	66	66
16	68	66	66	63	63	70	99	255	227	74	66	66
17	68	66	68	62	62	65	97	253	207	73	67	66
18	68	66	65	e60	61	63	99	232	167	73	67	66
19	68	66	65	e60	60	62	94	186	154	72	66	66
20	68	66	65	62	60	63	102	170	133	72	66	66
21	68	66	67	63	62	64	122	170	121	72	66	66
22	69	66	66	63	62	64	146	176	110	71	67	66
23	70	71	65	65	61	70	154	184	105	71	68	66
24	71	67	e63	62	e60	66	167	192	100	70	66	65
25	70	66	e60	62	e55	64	195	200	96	71	66	65
26	68	65	65	65	e60	67	201	201	94	71	66	65
27	68	65	68	69	60	64	164	211	92	70	67	65
28	68	65	69	66	59	62	152	223	91	70	67	65
29	69	65	68	63	---	62	146	237	89	69	66	65
30	69	66	67	66	---	62	153	254	87	69	67	65
31	69	---	67	68	---	65	---	259	---	69	66	---
TOTAL	2,160	2,006	2,032	1,966	1,716	1,953	3,226	6,423	5,227	2,324	2,087	1,992
MEAN	69.7	66.9	65.5	63.4	61.3	63.0	108	207	174	75.0	67.3	66.4
MAX	81	71	69	69	69	70	201	284	259	86	72	71
MIN	68	65	60	60	55	59	63	154	87	69	66	65
AC-FT	4,280	3,980	4,030	3,900	3,400	3,870	6,400	12,740	10,370	4,610	4,140	3,950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2003, BY WATER YEAR (WY)

MEAN	80.9	80.4	76.7	72.7	69.3	70.5	123	270	229	102	83.4	80.2
MAX	120	108	101	100	88.5	91.3	215	460	566	179	139	129
(WY)	(1998)	(1998)	(1996)	(1997)	(1998)	(1997)	(1990)	(1997)	(1986)	(1997)	(1997)	(1997)
MIN	61.6	61.9	58.8	58.1	53.8	58.0	68.8	150	83.3	68.1	62.2	59.4
(WY)	(1993)	(1993)	(1993)	(1993)	(1989)	(1993)	(1991)	(1990)	(1987)	(1988)	(1988)	(1988)

13046680 BOUNDARY CREEK NEAR BECHLER RANGER STATION, WY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1984 - 2003
ANNUAL TOTAL	34,221	33,112	--
ANNUAL MEAN	93.8	90.7	112
HIGHEST ANNUAL MEAN	--	--	169 1997
LOWEST ANNUAL MEAN	--	--	82.7 2001
HIGHEST DAILY MEAN	319 Jun 3	284 May 14	810 Jun 2, 1986
LOWEST DAILY MEAN	50 ^e Feb 26	55 ^e Feb 25	50 Feb 26, 2002
ANNUAL SEVEN-DAY MINIMUM	55 Feb 24	59 Feb 24	53 Feb 12, 1989
ANNUAL RUNOFF (AC-FT)	67,880	65,680	80,860
10 PERCENT EXCEEDS	194	197	218
50 PERCENT EXCEEDS	68	67	81
90 PERCENT EXCEEDS	59	62	61

e Estimated.

