

EXPLANATION

- 0685 **Streamflow gaging station**
- **Stream, showing direction of flow**
- - -→ **Canal, showing direction of flow**

Figure 7. Schematic diagram showing gaging stations in Bear River Basin

BEAR RIVER BASIN

10039500 BEAR RIVER AT BORDER, WY

LOCATION.--Lat 42°12'40", long 111°03'11", in NE¹/₄NE¹/₄NE¹/₄ sec.15, T.14 S., R.46 E., Bear Lake County, Border quad., Hydrologic Unit 16010102, on left bank 0.2 mi west of Wyoming-Idaho State line, 0.5 mi west of Border, and 2.1 mi upstream from Thomas Fork.

DRAINAGE AREA.--2,486 mi².

PERIOD OF RECORD.--October 1937 to September 1996, October 1996 to September 2000 (seasonal), October 2000 to current year.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,051.63 ft above NGVD of 1929, unadjusted.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by regulation of upstream reservoirs, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft³/s June 7, 1983, gage height, 9.69 ft; minimum, 24 ft³/s Apr. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 507 ft³/s May 30, gage height, 3.05 ft; minimum, 37 ft³/s Oct. 1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	78	120	e80	e97	e82	95	92	494	246	91	78
2	49	81	101	e85	e92	e85	95	134	465	242	96	71
3	47	72	109	e86	e87	e87	87	135	393	207	98	71
4	45	72	111	e88	e80	e90	77	134	337	186	111	70
5	46	80	118	e85	e76	e92	71	139	298	174	108	75
6	60	80	107	e83	e73	e94	71	138	267	162	102	73
7	95	76	101	e82	e71	e100	70	133	247	151	98	79
8	87	85	97	e77	e68	e110	66	137	229	138	107	80
9	82	94	96	e81	e70	e116	67	164	234	128	113	77
10	79	95	e105	e86	e73	e140	72	189	215	126	110	82
11	77	91	e101	e89	e77	153	77	177	211	125	104	87
12	78	86	e102	e95	e80	210	75	166	188	124	103	83
13	78	95	e98	e93	e86	240	84	164	180	119	102	74
14	79	97	e102	e91	e90	292	96	165	178	115	103	70
15	79	96	e102	e86	e94	228	111	184	165	125	102	63
16	78	106	e97	e84	e102	216	117	212	154	189	105	62
17	77	110	e98	e83	e101	227	98	220	158	190	86	64
18	80	109	e98	e82	e98	186	91	234	182	174	79	70
19	80	106	e94	e83	e98	162	89	227	203	152	75	68
20	79	105	e88	e85	e90	150	91	224	201	139	72	67
21	78	102	e86	e85	e89	143	103	215	226	134	71	64
22	78	106	e84	e88	e87	138	116	216	255	135	76	63
23	80	127	e83	e86	e85	152	127	230	235	129	82	61
24	85	119	e82	e85	e86	144	114	245	233	106	82	62
25	82	113	e84	e91	e84	127	109	282	289	106	78	61
26	79	95	e88	e96	e83	130	117	324	288	111	75	60
27	78	108	e96	e98	e79	121	124	390	309	111	72	58
28	80	109	e98	e100	e80	105	116	405	304	103	70	56
29	83	111	e94	e110	---	e103	104	438	286	99	69	55
30	76	109	e90	e108	---	e98	78	484	268	95	72	52
31	75	---	e82	e104	---	96	---	485	---	88	81	---
TOTAL	2292	2913	3012	2755	2376	4417	2808	7082	7692	4429	2793	2056
MEAN	73.9	97.1	97.2	88.9	84.9	142	93.6	228	256	143	90.1	68.5
MAX	95	127	120	110	102	292	127	485	494	246	113	87
MIN	43	72	82	77	68	82	66	92	154	88	69	52
AC-FT	4550	5780	5970	5460	4710	8760	5570	14050	15260	8780	5540	4080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

	208	224	196	181	206	376	734	1006	1150	526	224	178
MEAN	208	224	196	181	206	376	734	1006	1150	526	224	178
MAX	751	693	563	381	479	1294	1979	3158	3829	1670	752	671
(WY)	1983	1983	1983	1985	1986	1986	1985	1952	1983	1983	1983	1983
MIN	43.5	74.6	97.2	77.6	75.2	105	71.2	74.4	62.2	54.2	42.3	38.5
(WY)	2002	2002	2002	1993	1993	1988	1977	1977	1977	1977	1940	1940

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1938 - 2003
ANNUAL TOTAL	39101	44625	
ANNUAL MEAN	107	122	423
HIGHEST ANNUAL MEAN			1068
LOWEST ANNUAL MEAN			103
HIGHEST DAILY MEAN	336	494	4840
LOWEST DAILY MEAN	29	43	25
ANNUAL SEVEN-DAY MINIMUM	33	55	29
ANNUAL RUNOFF (AC-FT)	77560	88510	306500
10 PERCENT EXCEEDS	185	225	1090
50 PERCENT EXCEEDS	95	96	218
90 PERCENT EXCEEDS	42	71	104

e Estimated

BEAR RIVER BASIN

10046000 RAINBOW INLET CANAL NEAR DINGLE, ID

LOCATION.--Lat 42°13'48", long 111°17'43", in NW¼SW¼SE¼ sec.3, T.14 S., R.44 E., Bear Lake County, Dingle quad., Hydrologic Unit 16010201, on right bank 1.5 mi west of Dingle and 1.8 mi downstream from headworks at Stewart Dam.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only prior to October 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage datum is 5,922.0 ft above NGVD of 1929, (by topographic survey). Prior to Oct. 1, 1923, at site 300 ft downstream at different datum; Oct. 1, 1923 to Oct. 27, 1944, at site 0.5 mi downstream at different datum.

REMARKS.--Canal diverts from Bear River at Stewart Dam in NE¼ sec.34, T.13 S., R.44 E., for storage in Bear Lake. At times flow in canal is augmented by surplus water from Black Otter Slough entering at the station and by seepage and surplus water from irrigation.

COOPERATION.--Records collected by PacifiCorp, under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--81 years, 361 ft³/s, 261,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,950 ft³/s May 27, 1984; no flow Apr. 28, 1977, Oct. 1, 1979.

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	e3.9	69	e93	e98	e116	e110	195	e4.1	65	210	26	e5.7
2	e8.3	71	e93	e98	e120	e110	204	e4.1	65	195	27	e5.2
3	11	73	e96	e101	e120	e113	151	e4.1	103	186	27	e5.7
4	15	69	e96	e98	e120	e116	140	e4.1	103	159	26	e6.2
5	18	71	e90	e101	e120	e116	116	e4.1	e10	159	25	e5.7
6	24	71	e96	e104	e116	e116	107	e4.1	e10	163	26	e5.7
7	27	75	e98	e101	e120	e113	96	e4.1	e10	126	26	e5.2
8	32	85	e96	e98	e116	e116	83	e4.1	e10	107	27	e6.2
9	41	80	e90	e101	e116	e116	80	e4.1	e10	96	26	e6.2
10	48	83	e90	e104	e120	113	83	e4.1	e10	73	28	e5.7
11	49	85	e93	e107	e113	113	83	e4.1	e10	64	27	e6.2
12	51	85	e96	e104	e110	155	80	e4.1	e10	58	26	e6.2
13	53	83	e96	e101	e110	220	78	e4.1	e10	51	28	e6.2
14	51	80	e98	e104	e113	256	75	e4.1	e10	51	29	e6.2
15	55	88	e98	e104	e113	278	73	e4.1	e6.0	51	28	e6.2
16	48	85	e96	e107	e110	249	71	e4.1	e6.0	51	24	e6.2
17	49	78	e93	e110	e107	229	e4.0	e4.1	e6.0	51	20	e5.7
18	48	80	e96	e110	e113	243	e4.0	e4.1	e6.0	69	17	e5.2
19	49	80	e96	e113	e113	233	e4.0	e4.1	e6.0	98	15	e5.2
20	48	85	e98	e113	e110	213	e4.0	e4.1	e6.0	140	12	e5.2
21	48	90	e96	e110	e113	198	e4.0	e4.1	e6.0	116	e10	e5.2
22	49	88	e96	e104	e113	192	e4.0	e4.1	e6.0	96	e8.7	e5.7
23	56	88	e98	e104	e104	186	e4.0	e4.1	e6.0	85	e8.0	e5.7
24	60	90	e96	e104	e113	192	e4.0	e4.1	e6.0	75	e7.4	e5.7
25	64	93	e93	e110	e110	198	e4.0	e4.1	e6.0	26	e7.4	e5.2
26	64	90	e98	e113	e110	198	e4.0	e4.1	e6.0	26	e7.4	e5.7
27	62	98	e98	e113	e110	192	e4.0	e4.1	e6.0	26	e7.4	e6.2
28	64	88	e96	e116	e110	201	e4.0	e4.1	e6.0	26	e7.4	e5.7
29	80	88	e96	e116	---	192	e4.1	e4.1	e6.0	26	e7.4	e5.7
30	75	93	e98	e120	---	189	e4.1	65	e6.0	26	e7.4	e5.7
31	60	---	e98	e120	---	192	---	65	---	26	e7.4	---
TOTAL	1411.2	2482	2961	3307	3179	5458	1771.2	248.9	532.0	2712	575.9	172.5
MEAN	45.5	82.7	95.5	107	114	176	59.0	8.03	17.7	87.5	18.6	5.75
MAX	80	98	98	120	120	278	204	65	103	210	29	6.2
MIN	3.9	69	90	98	104	110	4.0	4.1	6.0	26	7.4	5.2
AC-FT	2800	4920	5870	6560	6310	10830	3510	494	1060	5380	1140	342

CAL YR 2002 TOTAL 18614.0 MEAN 51.0 MAX 253 MIN 2.4 AC-FT 36920
WTR YR 2003 TOTAL 24810.7 MEAN 68.0 MAX 278 MIN 3.9 AC-FT 49210

e Estimated

BEAR RIVER BASIN

10055500 BEAR LAKE AT LIFTON, NEAR ST. CHARLES, ID

LOCATION.--Lat 42°07'16", long 111°18'52", in NE¹/₄ sec.16, T.15 S., R.44 E., Bear Lake County, Bear Lake North quad., Hydrologic Unit 16010201, in Lifton pumping plant of Utah Power & Light Co., 3.5 mi east of St. Charles.

DRAINAGE AREA.--435 mi², approximately (does not include Mud Lake drainage).

PERIOD OF RECORD.--October 1903 to June 1906, elevations only, published as "at Fish Haven," January 1921 to current year. Monthly contents only January 1921 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 5,900 ft, PacificCorp datum.

REMARKS.--Outflow regulated by gates and pumps at the north end of Bear Lake and by gates in dike at north end of Mud Lake, a shallow interconnected lake. Principal inflow to Bear Lake is from Bear River through Rainbow Inlet Canal (sta 10046000) and Dingle Inlet Canals into Mud Lake, from which the inflow can enter into Bear Lake either through the pumping plant or an opening in the dividing causeway. The inflow can be routed directly into the Outlet Canal (sta 10059500). Usable capacity of Bear Lake is 1,421,000 acre-ft between elevation 5,902.00 ft, lower limit of pumps, and 5,923.65 ft, upper limit of storage with existing facilities. Water is used for irrigation and power development. Figures herein given represent usable contents.

COOPERATION.--Records provided by PacifiCorp. under general supervision of U.S. Geological Survey, in connection with a Federal Energy Regulatory Commission project.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,423,000 acre-ft June 10, 1923, elevation, 5,923.68 ft; no usable contents Nov. 9-19, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 413,000 acre-ft May 28, elevation, 5,908.75 ft; minimum, 149,000 acre-ft Sept. 30, elevation, 5,904.50 ft.

RESERVOIR STORAGE, IN THOUSANDS OF ACRE FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	356	339	344	352	358	373	390	397	410	330	253	189
2	356	339	344	352	359	373	390	397	409	326	250	187
3	355	339	344	353	359	373	390	397	409	323	247	186
4	354	339	344	353	360	374	390	397	409	321	244	184
5	353	339	344	353	361	375	391	397	408	319	241	184
6	353	339	344	353	361	375	391	397	407	318	239	183
7	352	339	344	353	362	376	392	397	407	316	236	182
8	351	339	344	354	363	376	392	397	406	315	235	181
9	351	339	344	354	363	377	392	399	406	313	233	179
10	350	339	345	354	364	378	392	400	404	312	231	178
11	349	338	345	354	365	378	392	402	402	310	229	178
12	349	338	346	354	365	379	392	405	400	308	227	177
13	348	339	346	354	365	380	392	406	399	305	224	176
14	348	339	346	354	366	380	393	407	395	303	222	175
15	347	339	346	354	366	381	393	408	392	300	219	173
16	346	340	347	355	366	381	394	409	389	299	216	172
17	346	340	348	355	367	382	394	409	386	296	213	171
18	345	341	348	355	368	383	394	409	382	293	211	169
19	344	341	348	356	368	383	395	409	378	290	208	168
20	344	341	349	356	369	384	395	409	375	287	206	166
21	343	341	349	356	370	385	396	409	372	284	205	164
22	343	341	349	356	370	385	396	409	369	281	203	161
23	342	341	349	356	371	386	397	410	365	278	202	160
24	342	341	349	356	371	387	397	411	362	275	201	158
25	341	342	349	357	371	387	397	411	358	272	200	156
26	341	342	350	357	372	387	397	411	354	269	198	154
27	341	343	350	357	372	388	397	412	349	267	197	153
28	341	343	351	358	373	388	397	413	344	264	195	152
29	340	343	351	358	---	388	397	412	340	262	194	150
30	340	343	351	358	---	389	397	411	335	259	192	149
31	339	---	352	358	---	389	---	411	---	256	191	---
MAX	356	343	352	358	373	389	397	413	410	330	253	189
MIN	339	338	344	352	358	373	390	397	335	256	191	149
†	5907.59	5907.65	5907.79	5907.89	5908.12	5908.38	5908.50	5908.72	5907.52	5906.25	5905.19	5904.50
‡	-19	+4	+9	+6	+15	+16	+8	+14	-76	-79	-65	-42

CAL YR 2002 ‡ -223

WTR YR 2003 ‡ -209

† Elevation, in feet, at end of month.

‡ Change in contents, in thousands of acre-feet.

BEAR RIVER BASIN

10059500 BEAR LAKE OUTLET CANAL NEAR PARIS, ID

LOCATION.--Lat 42°13'00", long 111°20'35", in SW¹/₄NW¹/₄SW¹/₄ sec.8, T.14 S., R.44 E., Bear Lake County, Dingle quad., Hydrologic Unit 16010201, on right bank 2,000 ft downstream from headgates (at dike), and 3 mi southeast of Paris.

PERIOD OF RECORD.--January 1922 to current year. Monthly discharge only January 1922 to September 1945, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 5,912.6 ft above NGVD of 1929, unadjusted.

REMARKS.--Flow regulated by Bear Lake (sta 10055500).

COOPERATION.--Records collected by PacifiCorp, under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--81 years, 416 ft³/s, 301,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,080 ft³/s June 19-21, 1986; minimum daily, 1.0 ft³/s for many days in 1937, 1954, 1959, 1961, 1964, 1977-78.

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	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	340	1150	990	647
2	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	282	1120	986	591
3	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	284	1020	986	463
4	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	346	760	982	459
5	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	441	772	978	456
6	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	604	793	978	454
7	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	608	737	974	452
8	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	614	602	966	460
9	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	617	602	962	349
10	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	655	753	955	218
11	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	736	907	948	210
12	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	844	1050	944	216
13	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1050	1230	944	208
14	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1420	1220	943	206
15	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1420	1210	949	206
16	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1420	1210	962	168
17	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1380	1220	976	101
18	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1310	1310	982	95
19	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1290	1300	988	97
20	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1310	1300	984	98
21	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1360	1290	977	98
22	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1350	1280	973	e5.0
23	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1350	1250	966	e5.0
24	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1340	1220	962	e5.0
25	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1340	1210	839	e5.0
26	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1220	1190	712	e5.0
27	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1180	1160	794	e5.0
28	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	e5.0	1230	1090	787	e5.0
29	e5.0	e5.0	e5.0	e5.0	---	e5.0	e5.0	504	1220	1010	780	e5.0
30	e5.0	e5.0	e5.0	e5.0	---	e5.0	e5.0	509	1220	1010	703	e5.0
31	e5.0	---	e5.0	e5.0	---	e5.0	---	460	---	999	641	---
TOTAL	155.0	150.0	155.0	155.0	140.0	155.0	150.0	1613.0	29781	32975	28511	6297.0
MEAN	5.00	5.00	5.00	5.00	5.00	5.00	5.00	52.0	993	1064	920	210
MAX	5.0	5.0	5.0	5.0	5.0	5.0	5.0	509	1420	1310	990	647
MIN	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	282	602	641	5.0
AC-FT	307	298	307	307	278	307	298	3200	59070	65410	56550	12490
CAL YR 2002	TOTAL	109059.0	MEAN	299	MAX	1660	MIN	5.0	AC-FT	216300		
WTR YR 2003	TOTAL	100237.0	MEAN	275	MAX	1420	MIN	5.0	AC-FT	198800		

e Estimated

BEAR RIVER BASIN

10068500 BEAR RIVER AT PESCADERO, ID

LOCATION.--Lat 42°24'06", long 111°21'22", in SW¼SW¼SE¼ sec.6, T.12 S., R.44 E., Bear Lake County, Georgetown quad., Hydrologic Unit 16010202, on left bank at Pescadero, 400 ft downstream from road bridge, 2 mi downstream from Bennington Creek, and 6.5 mi northwest of Montpelier.

DRAINAGE AREA.--3,705 mi².

PERIOD OF RECORD.--October 1921 to September 1954, June 1969 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Elevation of gage is 5,900 ft above NGVD of 1929, from topographic map. Prior to Oct. 1, 1988 at datum 0.35 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Bear Lake (sta 10055500) and diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,280 ft³/s June 21, 1986; minimum daily, 23 ft³/s Mar. 14-17, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,520 ft³/s June 26, gage height, 5.54 ft; minimum daily, 28 ft³/s Sept. 30.

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	42	39	51	e83	126	e84	93	49	491	1400	1030	685
2	44	40	52	e82	180	e84	82	49	421	1350	1030	681
3	55	42	50	e79	237	e82	78	51	400	1210	1050	567
4	44	43	57	e79	165	e83	76	51	411	945	1030	496
5	47	45	54	e78	156	e84	76	54	512	870	1020	486
6	50	45	52	e77	124	e81	74	58	648	878	1020	485
7	50	44	47	e79	106	e81	e75	59	718	864	1020	487
8	51	49	56	e80	e95	80	76	55	721	700	1010	481
9	48	52	58	e81	e86	89	76	67	711	647	1010	480
10	45	51	61	e77	e82	77	76	78	716	660	1000	333
11	42	52	59	e73	e78	93	80	79	781	923	1000	266
12	37	57	51	e74	e72	140	82	e83	871	976	994	257
13	35	52	55	e77	e72	236	80	85	e1100	1190	989	253
14	37	52	55	e79	e74	274	78	85	1320	1240	986	252
15	36	49	54	e79	e75	259	74	105	1440	1240	991	252
16	37	49	58	e76	e78	235	67	89	1460	1230	1010	251
17	37	56	58	e73	e83	221	55	69	1440	1230	1020	194
18	36	57	e58	e69	e84	173	48	68	1370	1310	1030	159
19	37	61	e58	e70	e82	169	51	79	1340	1340	1040	153
20	37	55	e56	e73	e82	145	55	76	1340	1340	1050	152
21	37	55	e56	e77	e82	120	53	73	1410	1340	1040	148
22	37	57	e56	e76	e82	108	49	72	1420	1340	1050	147
23	41	56	e58	e75	e86	103	47	72	1410	1330	1040	91
24	43	57	60	e72	e85	101	42	77	1420	1300	1020	49
25	41	68	58	e74	e82	90	43	77	1430	1280	1010	40
26	40	66	61	e76	e84	93	45	70	1490	1270	794	37
27	38	71	63	e77	e84	118	52	66	1400	1240	803	36
28	38	65	84	e80	e84	127	53	70	1410	1210	828	e32
29	46	57	99	e83	---	126	49	384	1420	1080	823	e30
30	46	53	79	e86	---	116	49	583	1420	1060	811	e28
31	40	---	78	e95	---	112	---	585	---	1050	704	---
TOTAL	1294	1595	1852	2409	2806	3984	1934	3518	32441	35043	30253	8008
MEAN	41.7	53.2	59.7	77.7	100	129	64.5	113	1081	1130	976	267
MAX	55	71	99	95	237	274	93	585	1490	1400	1050	685
MIN	35	39	47	69	72	77	42	49	400	647	704	28
AC-FT	2570	3160	3670	4780	5570	7900	3840	6980	64350	69510	60010	15880

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923-54, 1970-2003, BY WATER YEAR (WY)

	1923-54	1970-2003	1923-54	1970-2003	1923-54	1970-2003	1923-54	1970-2003
MEAN	456	466	469	428	386	395	430	566
MAX	2039	2134	1788	1340	1710	1707	1678	2106
(WY)	1984	1984	1985	1924	1985	1985	1986	1986
MIN	35.7	53.2	53.9	36.4	29.8	25.4	64.5	113
(WY)	1978	2003	2002	1936	1936	1936	2003	2003

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1923-54, 1970-03
ANNUAL TOTAL	128803	125137	
ANNUAL MEAN	353	343	622
HIGHEST ANNUAL MEAN			1733
LOWEST ANNUAL MEAN			266
HIGHEST DAILY MEAN	1770	1490	4280
LOWEST DAILY MEAN	35	28	23
ANNUAL SEVEN-DAY MINIMUM	36	36	23
ANNUAL RUNOFF (AC-FT)	255500	248200	450500
10 PERCENT EXCEEDS	1260	1140	1340
50 PERCENT EXCEEDS	66	81	504
90 PERCENT EXCEEDS	40	45	75

e Estimated

BEAR RIVER BASIN

10075000 BEAR RIVER AT SODA SPRINGS, ID

LOCATION.--Lat 42°36'50", long 111°34'58", in NW¹/₄SW¹/₄NW¹/₄ sec.29, T.9 S., R.42 E., Caribou County, Soda Peak quad., Hydrologic Unit 16010202, on left bank 800 ft upstream from Bailey Creek road bridge, and 2 mi south of Soda Springs.

DRAINAGE AREA.--3,972 mi².

PERIOD OF RECORD.--May to September 1896, May, June 1898, October 1953 to current year in reports of Geological Survey. Irrigation season only during 1944-49, 1951-53 in reports of Bear River Hydrometric Data (Geological Survey open-file report).

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,760 ft above NGVD of 1929, from topographic map. May 25 to Oct. 2, 1896, May 22 to July 1, 1898, staff gage at different datum. During irrigation season 1944-49, 1950-53, water-stage recorder at site 800 ft downstream at different datum.

REMARKS.--Natural flow of stream affected by upstream reservoirs, diversions for irrigation and return flow from irrigated areas.

COOPERATION.--Records collected by PacifiCorp, under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--50 years, 710 ft³/s, 514,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,380 ft³/s June 9, 15, 1896, gage height, 8.40 ft, datum then in use; minimum daily, 37 ft³/s Sept. 30, Oct. 1, 2, 2001.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	e95	e109	e99	e103	e114	194	165	678	1390	1030	723
2	108	e95	e107	e99	e103	e116	177	154	573	1350	1020	731
3	106	e97	e105	e101	e107	e116	174	150	519	1260	1050	683
4	108	e95	e103	e101	e107	e114	166	160	488	1050	1070	556
5	106	e95	e103	e103	e109	e118	161	164	526	887	1040	530
6	106	e97	e101	e103	e109	e118	158	159	640	871	1040	531
7	106	e103	e101	e99	e111	120	155	159	785	869	1030	549
8	106	e107	e99	e103	e113	118	155	157	806	772	1030	534
9	106	e112	e99	e103	e113	129	150	168	793	651	1020	524
10	104	e107	e97	e101	e115	146	150	206	788	631	1020	508
11	96	e112	e97	e101	e117	173	153	197	819	759	1020	338
12	90	e109	e99	e99	e115	230	164	186	892	934	1010	313
13	90	e112	e101	e101	e115	339	169	201	997	1060	1010	300
14	90	e109	e101	e103	e115	458	172	187	1210	1200	1000	304
15	92	e109	e99	e103	e115	383	183	190	1490	1210	1000	307
16	92	e107	e97	e101	e115	369	175	218	1530	1210	1020	307
17	92	e107	e101	e101	e117	344	161	203	1480	1210	1030	303
18	93	e112	e101	e103	e114	280	148	186	1420	1250	1040	230
19	93	e112	e103	e99	e117	241	134	183	1370	1320	1060	207
20	93	e109	e103	e103	e114	262	125	195	1360	1310	1070	204
21	93	e109	e101	e101	e112	234	125	193	1400	1300	1070	201
22	93	e109	e99	e99	e114	209	127	184	1430	1280	1100	194
23	101	e114	e97	e101	e114	206	127	179	1420	1290	1090	191
24	105	e116	e101	e103	e116	200	123	177	1430	1260	1070	135
25	105	e116	e101	e103	e114	188	130	191	1440	1250	1060	104
26	105	e116	e99	e100	e112	188	130	198	1470	1240	943	92
27	101	e116	e101	e102	e114	209	153	192	1450	1230	787	86
28	97	e114	e103	e102	e116	209	158	187	1380	1200	856	82
29	97	e116	e99	e100	---	212	159	205	1410	1120	864	80
30	97	e114	e101	e102	---	203	164	694	1400	1050	887	77
31	103	---	e99	e102	---	197	---	720	---	1050	806	---
TOTAL	3083	3241	3127	3141	3156	6543	4620	6708	33394	34464	31143	9924
MEAN	99.5	108	101	101	113	211	154	216	1113	1112	1005	331
MAX	109	116	109	103	117	458	194	720	1530	1390	1100	731
MIN	90	95	97	99	103	114	123	150	488	631	787	77
AC-FT	6120	6430	6200	6230	6260	12980	9160	13310	66240	68360	61770	19680
CAL YR 2002	TOTAL	147561	MEAN	404	MAX	1720	MIN	65	AC-FT	292700		
WTR YR 2003	TOTAL	142544	MEAN	391	MAX	1530	MIN	77	AC-FT	282700		

e Estimated

BEAR RIVER BASIN

10079500 BEAR RIVER AT ALEXANDER, ID

LOCATION.--Lat 42°38'42", long 111°41'51", in NE¹/₄SW¹/₄NW¹/₄ sec.17, T.9 S., R.41 E., Caribou County, Alexander quad., Hydrologic Unit 16010202, on right bank 600 ft downstream from Soda hydroelectric plant of Utah Power & Light Co., 0.5 mi southeast of Alexander, and 5 mi downstream from Soda Creek.

DRAINAGE AREA.--4,099 mi².

PERIOD OF RECORD.--March 1911 to current year. Monthly discharge only for some periods, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,650 ft above NGVD of 1929 from topographic map.

REMARKS.--Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by PacifiCorp, under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--91 years, 800 ft³/s, 579,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 4,740 ft³/s Mar. 31, 1911; maximum gage height, 15.95 ft, Dec. 11, 1919 (backwater from ice); minimum, 14 ft³/s Oct. 22, 1990.

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	158	158	193	168	281	192	297	187	692	1450	1050	854
2	159	158	193	167	323	193	298	187	668	1470	1040	770
3	161	158	193	167	339	194	298	186	591	1440	1010	651
4	162	158	193	167	290	194	299	190	540	1400	852	592
5	159	157	193	166	269	195	299	190	532	1170	935	572
6	160	157	193	166	268	200	294	189	589	1070	937	559
7	161	192	193	165	268	201	295	189	703	1020	939	561
8	154	201	192	165	268	201	295	188	743	977	950	562
9	160	226	192	165	267	201	296	170	836	982	952	448
10	165	236	192	164	267	206	291	165	971	959	954	292
11	166	236	192	164	266	207	286	156	1080	1150	985	308
12	163	236	192	163	266	283	297	156	1070	1220	1020	314
13	165	235	192	163	266	326	297	160	1060	1410	998	315
14	166	235	192	167	267	452	282	190	1210	1480	1000	315
15	163	235	191	167	268	520	277	208	1350	1480	1000	316
16	164	235	191	166	268	527	293	208	1390	1450	1010	316
17	164	235	191	166	213	521	289	289	1390	1390	1020	317
18	160	235	191	161	185	522	274	314	1390	1350	1010	318
19	164	234	191	161	186	417	284	257	1390	1310	1020	251
20	164	234	190	160	187	369	228	216	1550	1290	1040	220
21	164	234	185	164	187	370	195	215	1640	1340	1050	221
22	159	234	185	164	188	370	195	235	1660	1340	1050	217
23	159	239	185	163	189	320	191	239	1650	1310	1050	217
24	159	239	184	163	189	299	190	239	1560	1310	937	171
25	159	228	184	163	190	299	190	238	1530	1290	885	135
26	159	223	183	167	190	300	189	238	1400	1300	887	135
27	159	203	174	166	191	300	189	268	1310	1300	844	136
28	158	199	169	162	192	296	188	293	1300	1190	829	132
29	158	198	173	243	---	296	188	292	1310	1100	831	129
30	158	198	169	282	---	296	187	418	1390	1080	841	129
31	158	---	168	281	---	297	---	608	---	1080	852	---
TOTAL	4988	6346	5799	5416	6728	9564	7671	7278	34495	39108	29778	10473
MEAN	161	212	187	175	240	309	256	235	1150	1262	961	349
MAX	166	239	193	282	339	527	299	608	1660	1480	1050	854
MIN	154	157	168	160	185	192	187	156	532	959	829	129
AC-FT	9890	12590	11500	10740	13340	18970	15220	14440	68420	77570	59060	20770
CAL YR 2002	TOTAL 177993	MEAN 488	MAX 2000	MIN 150	AC-FT 353000							
WTR YR 2003	TOTAL 167644	MEAN 459	MAX 1660	MIN 129	AC-FT 332500							

BEAR RIVER BASIN

10086500 BEAR RIVER BELOW UTAH POWER & LIGHT CO.'S TAILRACE, AT ONEIDA, ID

LOCATION.--Lat 42°16'00", long 111°45'04", in NE¹/₄SE¹/₄NW¹/₄ sec.26, T.13 S., R.40 E., Franklin County, Treasureton quad., Hydrologic Unit 16010202, on right bank 200 ft downstream from tailrace of Oneida plant, and 6 mi south of Cleveland.

DRAINAGE AREA.--4,456 mi².

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only October 1921 to September 1945, published in WSP 1314.

REVISED RECORDS.--WRD UT-74-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,800 ft above NGVD of 1929, from topographic map.

REMARKS.--Natural flow of stream affected by upstream reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

COOPERATION.--Records collected by PacifiCorp, under general supervision of Geological Survey, in connection with a Federal Energy Regulatory Commission project.

AVERAGE DISCHARGE.--82 years, 877 ft³/s, 635,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 5,480 ft³/s May 8, 1922; minimum, 3.0 ft³/s June 13, 1978.

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	177	262	310	285	489	308	390	288	428	1180	974	862
2	227	235	316	285	480	312	390	264	489	1170	933	919
3	250	235	320	285	467	326	386	240	456	1150	1030	884
4	251	253	316	282	446	320	394	235	412	998	1090	735
5	230	233	316	279	363	310	378	278	425	1040	965	619
6	285	233	313	276	342	307	374	313	318	986	886	622
7	277	237	290	276	318	305	409	303	261	982	762	615
8	256	242	269	270	299	312	374	269	345	769	745	613
9	265	266	281	273	336	312	359	250	623	765	890	630
10	254	316	303	261	389	278	366	255	848	820	888	624
11	256	347	316	264	374	307	366	269	898	728	897	390
12	279	343	316	297	345	338	362	244	933	695	846	294
13	288	325	316	323	364	314	369	260	934	841	865	299
14	282	305	306	320	407	374	448	260	855	1020	923	297
15	261	302	299	287	404	523	504	257	636	1070	943	312
16	250	298	309	258	389	640	452	254	1110	1170	769	311
17	253	298	309	261	382	654	269	254	1280	1120	772	363
18	255	305	309	261	364	694	357	241	1280	1110	1020	440
19	264	308	308	278	332	644	399	277	1280	962	1030	380
20	263	308	308	293	309	478	368	298	1230	992	976	350
21	260	311	308	284	303	392	426	269	994	1130	968	315
22	260	291	308	293	304	392	406	226	1130	1190	971	248
23	272	279	308	299	304	392	342	190	1360	1210	903	219
24	296	301	280	296	283	388	315	178	1350	1070	945	221
25	312	304	257	296	284	395	257	178	1350	1280	931	250
26	305	304	265	283	306	403	246	179	1190	1000	811	249
27	289	304	283	272	307	403	295	180	1310	957	767	220
28	268	304	311	269	307	399	307	178	1060	1140	770	200
29	262	300	324	268	---	364	298	182	1020	1140	773	192
30	268	304	321	289	---	372	291	182	1280	1100	861	166
31	282	---	301	391	---	390	---	255	---	1010	891	---
TOTAL	8197	8653	9396	8854	9997	12346	10897	7506	27085	31795	27795	12839
MEAN	264	288	303	286	357	398	363	242	903	1026	897	428
MAX	312	347	324	391	489	694	504	313	1360	1280	1090	919
MIN	177	233	257	258	283	278	246	178	261	695	745	166
AC-FT	16260	17160	18640	17560	19830	24490	21610	14890	53720	63070	55130	25470
CAL YR 2002	TOTAL	178452	MEAN	489	MAX	1600	MIN	151	AC-FT	354000		
WTR YR 2003	TOTAL	175360	MEAN	480	MAX	1360	MIN	166	AC-FT	347800		

BEAR RIVER BASIN

10092700 BEAR RIVER AT IDAHO-UTAH STATE LINE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1971 to June 1973, November 1990 to September 1991, October 1993 to September 1994, April to September 1996, April to October 1999, December 2001 to June 2002, July to September 2003 (discontinued).

PERIOD OF DAILY RECORD.--

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

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 25.1 °C July 31, Aug. 15, 1996; minimum, 0.0 °C Feb. 16-18, 2002.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 25.1 °C July 23; minimum, 12.4 °C Sept. 18.

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

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unfltrd, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Turbidity, wat unfltrd lab, Hach 2100AN NTU (99872)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Fecal coliform, M-FC col/100 mL (31625)	Hardness, water, mg/L as CaCO3 (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	
JUL	16...	1120	473	870	8.5	34.2	21.6	11	7.7	103	153	--	--	--
AUG	14...	1345	421	904	8.5	35.8	23.4	10	6.7	93	300	--	--	--
SEP	18...	1650	480	1000	8.8	17.2	14.6	5.0	10.1	116	S51	340	52.8	49.8

Date	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat unfltrd fixed end pt, mg/L (00440)	Carbonate, wat unfltrd fixed end pt, mg/L (00445)	ANC, wat unfltrd fixed end pt, mg/L as CaCO3 (00410)	Sulfate, water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Ammonia, water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	
JUL	16...	--	--	--	--	--	--	--	--	--	.033	.73	.036	
AUG	14...	--	--	--	--	--	--	--	--	--	<.015	.62	<.022	
SEP	18...	84.0	34	13.0	287	23	274	75.7	109	.4	13.6	<.015	.41	E.020

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd, mg/L (00665)	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)	
JUL	16...	.012	.094	68	87
AUG	14...	.008	.065	26	30
SEP	18...	<.007	.033	14	18

< Less than
E Estimated value
S Most probable value

BEAR RIVER BASIN

10092700 BEAR RIVER AT IDAHO-UTAH STATELINE--Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.7	21.0	22.1	21.2	19.4	20.4	24.2	23.2	23.6	21.7	20.2	20.7
2	21.4	17.9	19.8	21.1	19.6	20.4	24.2	23.2	23.7	20.8	19.9	20.4
3	21.3	17.3	19.5	21.2	19.7	20.5	24.2	22.7	23.3	21.2	19.6	20.2
4	21.0	17.5	19.5	21.5	20.0	20.7	23.5	21.8	22.6	21.5	20.7	21.1
5	21.7	17.0	19.6	21.8	20.0	21.0	23.7	22.3	23.1	21.7	20.7	21.1
6	22.2	18.4	20.6	22.2	20.4	21.3	23.5	22.2	22.7	21.4	20.0	20.7
7	23.2	18.4	20.8	22.7	21.3	22.0	22.7	21.7	22.2	21.2	19.4	20.3
8	24.0	18.7	21.3	22.5	21.5	22.1	22.5	21.5	22.0	21.0	19.0	20.0
9	22.0	19.1	20.6	22.8	21.0	22.0	24.0	22.0	22.7	19.0	17.0	17.7
10	21.2	18.7	19.8	23.7	21.3	22.6	24.3	22.2	23.1	17.5	16.3	16.9
11	21.8	18.6	20.0	24.0	22.3	23.1	24.4	22.8	23.4	17.6	15.4	16.3
12	21.7	19.1	20.3	24.6	22.5	23.5	24.0	22.7	23.3	18.3	16.8	17.6
13	21.0	19.2	20.1	24.3	22.8	23.6	23.5	21.8	22.5	18.1	15.9	17.0
14	22.1	18.6	20.0	24.0	22.0	23.0	24.0	22.8	23.4	17.5	15.1	16.4
15	22.3	19.7	21.1	23.9	22.7	23.2	23.9	23.0	23.4	17.1	14.9	16.1
16	22.5	20.5	21.3	23.3	21.8	22.5	23.1	21.7	22.3	17.1	16.1	16.6
17	22.3	20.0	21.3	24.0	22.0	22.8	23.0	21.8	22.4	16.1	13.8	14.6
18	22.8	20.4	21.5	24.4	22.8	23.6	23.0	21.5	22.2	14.9	12.4	13.6
19	22.8	20.7	21.6	24.8	23.0	23.8	22.7	21.2	22.0	15.9	13.8	14.8
20	21.7	20.0	20.8	24.9	23.2	23.8	22.6	21.3	21.9	16.5	14.1	15.3
21	20.5	19.4	20.0	24.6	22.8	23.7	22.8	22.2	22.5	16.5	14.6	15.6
22	20.5	18.9	19.7	24.7	23.0	24.0	22.8	22.2	22.5	16.5	14.6	15.7
23	19.9	17.8	18.7	25.1	23.2	24.2	23.5	21.3	22.1	16.5	14.9	15.9
24	18.4	17.8	18.1	24.7	23.3	24.2	23.5	21.7	22.5	16.7	15.1	16.0
25	18.9	17.3	18.0	24.9	23.7	24.3	23.2	21.5	22.3	16.7	15.1	16.0
26	19.6	17.6	18.5	24.5	23.2	23.9	22.8	22.0	22.4	16.8	15.1	16.0
27	19.9	18.6	19.2	24.7	23.2	23.9	22.7	21.8	22.3	17.5	15.6	16.6
28	20.6	18.3	19.4	24.7	23.2	23.9	22.5	21.3	21.8	17.6	16.3	17.1
29	20.8	18.9	20.0	24.7	23.3	24.1	21.8	20.2	21.0	17.6	16.3	17.2
30	21.5	19.6	20.5	24.7	23.0	24.0	20.5	19.4	20.0	17.8	16.5	17.3
31	---	---	---	24.7	23.3	24.0	21.3	19.6	20.3	---	---	---
MONTH	24.0	17.0	20.1	25.1	19.4	22.9	24.4	19.4	22.4	21.7	12.4	17.4

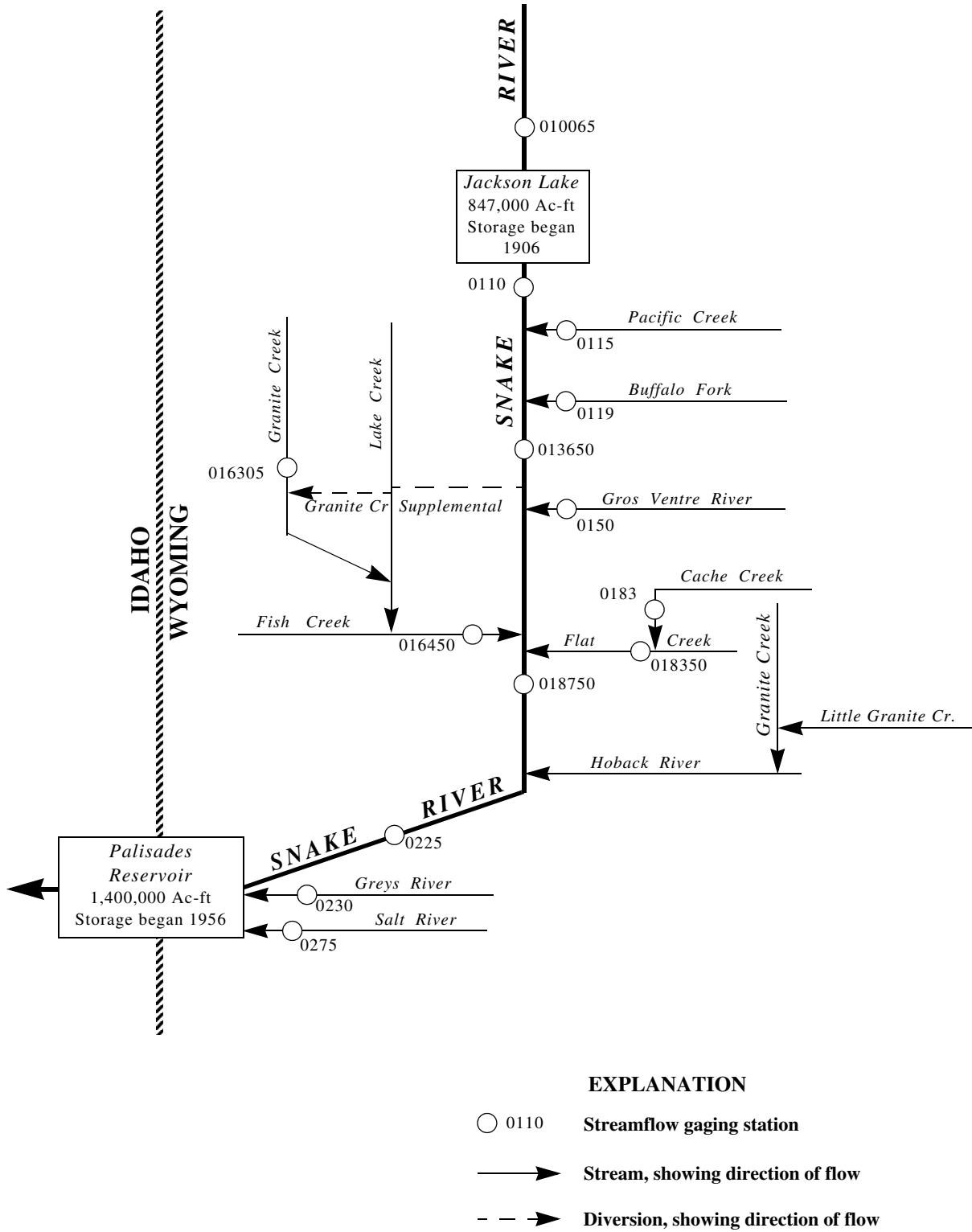


Figure 8. Schematic diagram showing gaging stations in Snake River Basin between Flag Ranch and Palisades Reservoir

SNAKE RIVER MAIN STEM

13010065 SNAKE RIVER ABOVE JACKSON LAKE AT FLAGG RANCH, WY

LOCATION.--Lat 44°05'56", long 110°40'03", in Teton County, Wyoming, Flagg Ranch quad., 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.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 11,300 ft³/s June 5, 1996; maximum gage height, 10.75 ft, June 5, 1996, from backwater; minimum, 158 ft³/s Aug. 30, Sept. 3, 2001, gage height, 2.04 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 29	2300	*9,260	*8.46	No other peak greater than base discharge.			

Minimum daily, 208 ft³/s Sept. 26-30.

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	1100	5700	840	305	250
2	269	236	279	338	438	299	382	1000	4720	787	302	244
3	271	229	269	338	404	300	377	1140	4050	739	299	254
4	279	234	272	336	393	303	373	1190	3680	698	316	246
5	328	234	268	338	387	300	353	1150	3380	662	312	243
6	319	240	266	e320	e370	316	362	1030	3140	631	299	254
7	301	235	248	e310	e330	308	344	997	2820	604	286	259
8	292	246	240	e300	e340	323	341	1110	2880	576	279	260
9	283	269	237	e290	353	332	357	1190	2970	554	279	264
10	273	278	240	e280	351	348	395	1150	2930	533	290	290
11	281	279	262	e300	346	365	445	1220	2870	518	288	303
12	278	285	267	310	344	367	513	1280	2620	501	278	278
13	267	284	269	314	331	378	638	1870	2380	479	274	271
14	265	280	275	321	335	397	760	2310	2170	461	270	255
15	261	275	288	322	331	386	895	2750	2160	449	271	246
16	260	260	291	e310	327	383	752	3260	2200	437	269	239
17	257	267	306	e300	340	370	671	3670	2010	427	265	241
18	253	258	298	e290	336	357	663	3510	1860	419	271	235
19	249	266	293	e300	338	341	603	2600	1720	409	262	229
20	248	266	290	e300	336	340	669	2570	1600	403	253	228
21	249	270	298	305	333	334	854	2980	1650	394	249	223
22	258	266	299	311	339	327	1010	3830	1380	382	260	218
23	272	288	e270	317	334	355	1090	4890	1240	374	275	214
24	281	286	e260	318	e320	358	1000	6020	1140	365	258	212
25	268	256	e250	315	e300	343	1270	6460	1060	363	246	210
26	254	261	e270	319	e310	368	1510	6510	1020	365	240	208
27	260	273	290	345	318	367	1090	5900	976	356	238	208
28	264	283	307	369	308	360	1010	6620	945	345	239	208
29	252	282	325	362	---	353	991	7010	925	334	236	208
30	254	274	334	378	---	353	1130	6910	875	323	280	208
31	243	---	348	363	---	358	---	6460	---	312	272	---
TOTAL	8357	7898	8676	9963	9720	10693	21225	99687	69071	15040	8461	7206
MEAN	270	263	280	321	347	345	708	3216	2302	485	273	240
MAX	328	288	348	378	438	397	1510	7010	5700	840	316	303
MIN	243	229	237	280	300	299	341	997	875	312	236	208
AC-FT	16580	15670	17210	19760	19280	21210	42100	197700	137000	29830	16780	14290
CFSM	0.55	0.54	0.58	0.66	0.71	0.71	1.46	6.62	4.74	1.00	0.56	0.49
IN.	0.64	0.60	0.66	0.76	0.74	0.82	1.62	7.63	5.29	1.15	0.65	0.55

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

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
MEAN	351	353	359	356	350	357	721	3054	3119	878	420	342									
MAX	679	607	531	720	469	506	1509	5484	6701	1633	861	644									
(WY)	1984	1984	1997	1997	1999	1986	1990	1997	1996	1995	1997	1997									
MIN	185	213	247	261	267	279	424	1818	768	328	196	168									
(WY)	1989	1988	1988	2001	1989	1988	1993	1987	2001	2001	2001	1994									

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1984 - 2003

ANNUAL TOTAL				297590				275997													
ANNUAL MEAN				815				756													
HIGHEST ANNUAL MEAN																					890
LOWEST ANNUAL MEAN																					15381997
HIGHEST DAILY MEAN				7590			May 31	7010		May 29	11300	Jun 5 1996									5261988
LOWEST DAILY MEAN				220			Feb 26	208		Sep 26	161	Sep 6 1994									6 1994
ANNUAL SEVEN-DAY MINIMUM				235			Nov 1	209		Sep 24	163	Sep 4 1994									4 1994
ANNUAL RUNOFF (AC-FT)				590300				547400													644600
ANNUAL RUNOFF (CFSM)						1.68		1.56													1.83
ANNUAL RUNOFF (INCHES)						22.78		21.13													24.88
10 PERCENT EXCEEDS				2340				1860													2390
50 PERCENT EXCEEDS				300				322													393
90 PERCENT EXCEEDS				253				247													260

e Estimated

SNAKE RIVER MAIN STEM

13010065 SNAKE RIVER ABOVE JACKSON LAKE AT FLAGG RANCH, WY--Continued
(National water-quality assessment station)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1983 to September 1985, 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 unfltrd, uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	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)
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	.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	.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	3330	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

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...	93	--	18.6	2.2	35.0	33.1	210	E.06	<.04	<.06	<.008	<.02	--
NOV 19...	101	.0	21.4	2.3	37.2	32.0	203	E.09	<.04	E.04	<.008	<.02	.03
DEC 20...	79	.0	19.4	2.44	39.2	32.0	216	E.10	<.04	E.03	<.008	<.02	--
JAN 24...	73	.0	17.8	2.58	39.3	29.1	188	E.10	<.04	E.05	<.008	E.01	<.02
FEB 20...	68	.0	17.7	2.52	38.4	27.0	190	E.09	<.04	<.06	<.008	E.01	--
MAR 21...	74	.0	18.4	2.47	37.0	29.0	192	.11	<.04	<.06	<.008	E.01	.03
APR 18...	66	.0	11.0	1.43	25.7	20.4	147	.15	<.04	E.03	<.008	E.01	--
MAY 22...	44	.0	3.39	.6	14.1	6.0	69	.22	<.04	<.06	<.008	E.01	.05
JUL 15...	76	.0	12.0	1.7	30.3	24.7	164	E.06	<.04	<.06	<.008	<.02	<.02
SEP 10...	94	1.4	18.8	2.0	32.6	34.2	210	.10	<.04	.01	<.008	<.02	.03

Date	Phosphorus, water, unfltrd, mg/L (00665)	Total carbon, suspended sediment, 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...	.007	--	--	15	3.3	1	.72
NOV 19...	.008	<.1	1.1	13	E2.8	1	.72
DEC 20...	.009	--	--	12	3.9	1	.73
JAN 24...	.009	.1	1.3	15	2.6	2	1.7
FEB 20...	.015	--	--	14	1.6	2	1.9
MAR 21...	.009	.1	1.8	15	3.6	1	.90
APR 18...	.022	--	--	29	6.9	6	11
MAY 22...	.41	.5	3.4	25	4.2	--	--
JUL 15...	.007	.2	1.7	13	3.0	1	1.2
SEP 10...	.006	.2	1.5	19	3.8	1	.80

SNAKE RIVER MAIN STEM

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

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

Date	Time	2,6-Diethyl-aniline water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF (82686)	Ben-flur-alin, water, fltrd 0.7u GF (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF (82680)	Carbo-furan, water, fltrd 0.7u GF (82674)	Chlor-pyrifos water, fltrd, ug/L (38933)	
NOV 19...	1130	<.006	<.006	<.006	<.004	<.005	<.007	<.050	<.010	<.002	<.041	<.020	<.005	
MAY 22...	1000	<.006	<.006	<.006	<.004	<.005	<.007	<.050	<.010	<.002	<.041	<.020	<.005	
Date	Time	cis-Per-methrin water, fltrd 0.7u GF (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF (82677)	EPTC, water, fltrd 0.7u GF (82668)	Ethal-flur-alin, water, fltrd 0.7u GF (82663)	Etho-prop, water, fltrd 0.7u GF (82672)	Desulf-inyl fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)
NOV 19...		<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005
MAY 22...		<.006	<.018	<.003	<.004	<.005	<.005	<.02	<.002	<.009	<.005	<.009	<.005	<.005
Date	Time	Fipro-nil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water, fltrd 0.7u GF (82666)	Mala-thion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd 0.7u GF (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	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)
NOV 19...		<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004
MAY 22...		<.007	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004
Date	Time	Pendi-meth-alin, water, fltrd 0.7u GF (82683)	Phorate water, fltrd 0.7u GF (82664)	Prome-ton, water, fltrd, ug/L (04037)	Pron-amide, water, fltrd 0.7u GF (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF (82679)	Propar-gite, water, fltrd 0.7u GF (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water, fltrd 0.7u GF (82670)	Terba-cil, water, fltrd 0.7u GF (82665)	Terbu-fos, water, fltrd 0.7u GF (82675)		
NOV 19...		<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02		
MAY 22...		<.022	<.011	<.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02		
Date	Time					Thio-bencarb water, fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)						
NOV 19...						<.005	<.002	<.009						
MAY 22...						<.005	<.002	<.009						

< Less than
E Estimated value

SNAKE RIVER MAIN STEM

13011000 SNAKE RIVER NEAR MORAN, WY

LOCATION.--Lat 43°51'30", long 110°35'09", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.45 N., R.114 W., Teton County, Wyoming, Moran quad., Hydrologic Unit 17040101, Grand Teton National Park, 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. 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.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry.

COOPERATION.--Water District 1.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft³/s June 12, 1918, gage height, 10.41 ft, site and datum then in use; maximum gage height, 10.96 ft, June 11, 1997; minimum daily, 0.30 ft³/s Oct. 28, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood during early June 1894 was considerably higher than that of June 12, 1918.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,640 ft³/s Aug. 20; minimum daily, 262 ft³/s Mar. 11.

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	2470	5120	4820
2	371	281	291	288	274	274	283	280	274	2610	5110	4750
3	303	281	291	288	274	274	282	281	269	2610	5100	4690
4	281	281	291	288	274	271	279	282	267	2620	5100	4630
5	281	281	291	285	277	268	277	280	349	2600	5110	4570
6	295	281	292	281	276	266	277	278	521	2580	5120	4500
7	288	281	295	281	270	266	279	277	671	2720	5140	4430
8	288	281	295	282	270	265	281	278	750	3000	5160	4380
9	288	281	295	284	271	265	281	278	795	3280	5140	4330
10	287	281	295	284	273	263	282	278	789	3550	5140	4280
11	285	281	298	284	273	262	285	279	799	3790	5150	4220
12	284	281	299	284	274	264	286	279	812	3890	5150	4150
13	284	285	299	284	274	268	286	276	817	3910	5150	4080
14	284	285	299	287	274	270	286	272	816	4070	5170	4020
15	285	284	299	288	274	271	289	271	813	4280	5150	3950
16	285	287	299	288	272	272	286	271	812	4530	5120	3880
17	284	288	299	288	274	273	282	269	820	4770	5120	3820
18	284	288	301	288	274	273	280	272	828	5010	5150	3750
19	284	288	303	289	272	271	280	274	831	5080	5200	3690
20	284	288	303	291	272	270	282	276	831	5080	5640	3610
21	284	288	303	291	270	274	282	278	832	5090	5470	3540
22	284	288	305	291	271	278	282	276	834	5100	5410	3470
23	284	288	306	291	274	281	283	275	825	5110	5340	3420
24	284	288	301	291	272	281	282	272	1070	5100	5280	3360
25	285	289	292	288	270	280	282	276	1490	5110	5210	3270
26	287	290	288	288	270	281	282	277	1830	5130	5150	3180
27	287	290	288	282	272	281	281	272	1960	5120	5090	3090
28	288	289	289	274	274	281	284	270	1960	5150	5040	3020
29	287	289	288	274	---	281	285	271	1960	5130	4990	2960
30	285	288	288	274	---	281	285	273	2070	5130	4940	2870
31	283	---	288	274	---	281	---	271	---	5120	4880	---
TOTAL	9076	8553	9161	8838	7639	8460	8473	8543	27966	128740	160040	116730
MEAN	293	285	296	285	273	273	282	276	932	4153	5163	3891
MAX	413	290	306	291	277	281	289	282	2070	5150	5640	4820
MIN	281	281	288	274	270	262	277	269	267	2470	4880	2870
AC-FT	18000	16960	18170	17530	15150	16780	16810	16950	55470	255400	317400	231500

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

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	357	296	332	310	372	474	744	1484	3452	3930	3516	2022																																																																																								
MAX	1605	3009	4280	1362	2489	3053	3828	5658	8594	8182	7370	5265																																																																																								
(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																																																																																								

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1904 - 2003
ANNUAL TOTAL	405271	502219	
ANNUAL MEAN	1110	1376	1447
HIGHEST ANNUAL MEAN			2548
LOWEST ANNUAL MEAN			687
HIGHEST DAILY MEAN	3850	Sep 18	5640
LOWEST DAILY MEAN	275	Jan 13	262
ANNUAL SEVEN-DAY MINIMUM	277	Jan 7	264
ANNUAL RUNOFF (AC-FT)	803900	996200	1048000
10 PERCENT EXCEEDS	3510	5090	4270
50 PERCENT EXCEEDS	288	288	491
90 PERCENT EXCEEDS	281	272	18

PACIFIC CREEK BASIN

13011500 PACIFIC CREEK AT MORAN, WY

LOCATION.--Lat 43°51'01", long 110°31'04", in SW¼NW¼ sec.23, T.45 N., R.114 W., Teton County, Wyoming, Moran quad., Hydrologic Unit 17040101, Grand Teton National Park, 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 Nov. 11, 1906, nonrecording gage at site 0.4 mi downstream at different datum. July 20, 1917 to Sept.30, 1918, nonrecording gage at site 0.1 mi downstream at different datum. Sept. 23, 1944 to Nov. 13, 1959, at site 100 ft upstream at same datum. Nov. 14, 1959 to Sept. 24, 1975, at site 35 ft downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Station equipment includes satellite telemetry. No diversion or regulation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,350 ft³/s May 29, 1983, gage height, 6.33 ft; maximum gage height, 7.20 ft, June 12, 1996, extrapolated from gage height record; minimum daily, 19 ft³/s Dec. 31, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	0045	2,330	6.12	May 29	0515	*3,680	*6.86

Minimum daily, 20 ft³/s Dec. 25.

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	2260	204	76	57
2	62	e38	e26	e36	e65	e40	47	402	1870	192	73	54
3	60	e36	e28	e42	e60	e40	47	504	1570	182	72	59
4	59	e36	e34	e42	e65	e50	46	475	1380	172	74	55
5	64	e36	e30	e42	e60	e40	43	531	1240	166	73	53
6	65	e38	e28	e40	e50	e50	43	443	1100	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	1120	573	117	59	58
15	49	e24	e32	e50	e55	e50	264	1490	576	115	61	56
16	48	e22	e32	e48	e45	43	226	1750	590	112	61	53
17	48	e28	e32	e46	e45	42	217	1890	559	110	59	53
18	48	e26	e30	e44	e50	40	222	1880	514	106	59	53
19	47	e30	e28	e42	e50	39	231	1490	455	104	56	52
20	47	e36	e22	e42	e40	42	266	1370	422	103	54	51
21	47	e40	e26	e44	e50	43	324	1480	491	98	53	51
22	47	e36	e30	e48	e50	42	377	1770	362	95	54	50
23	48	e36	e28	e52	e40	45	413	2190	314	93	56	49
24	50	e30	e24	e46	e35	44	409	2610	282	90	54	48
25	49	e34	e20	e50	e30	42	479	2960	260	103	53	48
26	45	e30	e26	e52	e35	43	613	3000	245	98	51	47
27	45	e30	e30	e56	e45	43	444	2880	236	92	51	47
28	45	e36	e38	e52	e40	44	399	2880	228	88	52	47
29	e42	e30	e36	e50	---	42	372	3060	220	84	52	47
30	e40	e26	e38	e60	---	41	405	2840	212	80	63	44
31	e40	---	e40	e70	---	43	---	2620	---	78	63	---
TOTAL	1600	950	898	1434	1360	1333	6763	45827	21644	3797	1902	1618
MEAN	51.6	31.7	29.0	46.3	48.6	43.0	225	1478	721	122	61.4	53.9
MAX	65	40	40	70	70	60	613	3060	2260	204	76	67
MIN	40	22	20	36	30	35	42	402	212	78	51	46
AC-FT	3170	1880	1780	2840	2700	2640	13410	90900	42930	7530	3770	3210
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)

	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	64.5	54.1	48.1	44.3	45.7	52.2	157	988	1249	338	96.7	70.7																																																																											
MAX	142	105	93.5	70.7	72.2	94.5	418	2314	2884	1527	191	127																																																																											
(WY)	1973	1973	1984	1951	1995	1972	1946	1997	1982	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																																																																											

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1917 - 2003
ANNUAL TOTAL	75880	89126	
ANNUAL MEAN	208	244	268
HIGHEST ANNUAL MEAN			560
LOWEST ANNUAL MEAN			132
HIGHEST DAILY MEAN	2400	3060	4170
LOWEST DAILY MEAN	18	20	18
ANNUAL SEVEN-DAY MINIMUM	20	25	20
ANNUAL RUNOFF (AC-FT)	150500	176800	193800
ANNUAL RUNOFF (CFSM)	1.23	1.44	1.58
ANNUAL RUNOFF (INCHES)	16.70	19.62	21.51
10 PERCENT EXCEEDS	625	574	911
50 PERCENT EXCEEDS	54	52	65
90 PERCENT EXCEEDS	26	30	38

e Estimated

BUFFALO FORK BASIN

13011900 BUFFALO FORK ABOVE LAVA CREEK, NEAR MORAN, WY

LOCATION.--Lat 43°50'17", long 110°26'28", in SE¹/₄NE¹/₄ sec.29, T.45 N., R.113 W., Teton County, Wyoming, Davis Hill quad., 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).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,540 ft³/s June 9, 1981, gage height, 8.61 ft; minimum daily, 60 ft³/s Dec. 25, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 31	1000	*4,980	*6.92	No other peak greater than base discharge.			

Minimum daily, 60 ft³/s Dec. 25.

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	4360	1930	354	230
2	195	e145	e110	e90	e115	e80	145	290	3560	1770	341	220
3	195	e140	e110	e100	e110	e80	138	317	2850	1620	329	223
4	199	e145	e115	e100	e110	e90	129	315	2520	1480	332	211
5	204	e145	e110	e100	e110	e85	120	331	2340	1380	320	207
6	202	e150	e100	e90	e105	e100	125	302	2220	1320	310	217
7	199	e155	e95	e90	e100	e95	119	287	1790	1230	300	222
8	198	e150	e90	e90	e105	e100	123	298	1790	1190	290	216
9	194	e145	e90	e85	e105	e110	139	295	2030	1110	293	231
10	191	e140	e90	e80	e110	e115	166	289	2290	1010	288	240
11	190	e135	e100	e85	e105	e125	196	293	2660	955	294	255
12	183	e130	e100	e95	e100	e125	219	319	2520	933	283	243
13	174	e135	e100	e100	e105	e135	255	369	2340	894	274	239
14	179	e130	e110	e110	e110	e160	276	446	2080	831	263	226
15	176	e125	e105	e105	e115	e150	296	584	2340	756	275	216
16	178	e120	e100	e100	e110	e150	259	740	2470	692	267	209
17	176	e125	e100	e100	e115	e140	236	930	2580	648	259	205
18	173	e120	e95	e90	e115	e130	227	1010	2650	624	252	204
19	169	e125	e90	e90	e110	e130	214	802	2700	612	245	201
20	169	e130	e85	e95	e100	e130	222	754	2440	566	237	199
21	172	e135	e90	e100	e110	e130	249	826	2340	553	231	195
22	171	e130	e95	e105	e105	e120	290	1030	1860	529	231	192
23	167	e130	e80	e110	e90	e130	308	1460	1470	502	243	189
24	e155	e110	e75	e100	e80	e140	301	1930	1230	484	232	186
25	e150	e120	e60	e100	e70	e130	331	2200	1080	510	226	184
26	e145	e115	e70	e105	e80	e140	376	2250	979	489	219	182
27	e150	e120	e80	e110	e90	e130	330	2640	1030	458	216	180
28	e150	e125	e100	e105	e85	e130	311	3080	1320	427	219	179
29	e145	e120	e95	e90	---	e130	293	3730	1550	403	214	177
30	e140	e115	e90	e100	---	125	311	4180	1650	382	255	176
31	e135	---	e95	e110	---	127	---	4760	---	368	276	---
TOTAL	5428	3945	2935	3025	2885	3742	6848	37364	65039	26656	8368	6254
MEAN	175	132	94.7	97.6	103	121	228	1205	2168	860	270	208
MAX	204	155	115	110	120	160	376	4760	4360	1930	354	255
MIN	135	110	60	80	70	80	119	287	979	368	214	176
AC-FT	10770	7820	5820	6000	5720	7420	13580	74110	129000	52870	16600	12400
CFSM	0.54	0.41	0.29	0.30	0.32	0.37	0.71	3.73	6.71	2.66	0.84	0.65
IN.	0.63	0.45	0.34	0.35	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)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003		
MEAN	170	170	138	121	117	126	218	1026	2289	1330	413	258																												
MAX	304	229	180	145	191	175	367	1768	4533	3056	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																												

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1966 - 2003
ANNUAL TOTAL	150825	172489	
ANNUAL MEAN	413	473	536
HIGHEST ANNUAL MEAN			890
LOWEST ANNUAL MEAN			286
HIGHEST DAILY MEAN	2950	4760	5880
LOWEST DAILY MEAN	60	60	60
ANNUAL SEVEN-DAY MINIMUM	79	79	79
ANNUAL RUNOFF (AC-FT)	299200	342100	388100
ANNUAL RUNOFF (CFSM)	1.28	1.46	1.66
ANNUAL RUNOFF (INCHES)	17.37	19.87	22.54
10 PERCENT EXCEEDS	1250	1470	1630
50 PERCENT EXCEEDS	184	179	192
90 PERCENT EXCEEDS	100	95	110

e Estimated

SNAKE RIVER MAIN STEM

13013650 SNAKE RIVER AT MOOSE, WY

LOCATION.--Lat 43°39'14", long 110°42'52", in NW¼NW¼NE¼ sec.36, T.43 N., R.116 W., Teton County, Wyoming, Moose quad., 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.

REMARKS.--Records good except for discharges May 20 to Sept. 30, which are fair, and estimated daily discharges, which are poor. Station equipment includes satellite telemetry.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,300 ft³/s June 11, 1997, gage height, 15.25 ft; minimum daily, 600 ft³/s Feb. 25, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,020 ft³/s May 31, gage height, 11.80 ft; minimum daily, 600 ft³/s Feb. 25.

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	1250	787	792	734	800	718	806	1410	8370	5340	5840	5250
2	1140	801	818	730	802	718	830	1380	7550	5520	5820	5130
3	1060	775	829	738	747	710	827	1450	6420	5300	5790	5100
4	994	764	818	742	723	710	781	1460	5720	5110	5770	5010
5	994	784	819	749	699	688	740	1500	5430	4960	5770	4920
6	993	808	814	708	690	697	757	1440	5270	4860	5770	4890
7	977	813	769	689	689	681	744	1380	4810	4800	5750	4800
8	967	845	714	e690	683	664	743	1390	4690	4980	5750	4760
9	958	868	724	e680	723	666	770	1410	4880	5160	5760	4690
10	944	856	721	e680	706	692	836	1400	4990	5440	5870	4780
11	936	845	745	687	e680	719	906	1400	5430	5620	5780	4680
12	930	837	762	706	e690	747	1020	1500	5520	5420	5760	4600
13	911	856	771	722	e700	792	1110	1660	5290	5240	5760	4520
14	907	847	797	732	719	834	1180	1890	4900	5270	5730	4440
15	902	837	807	730	729	821	1300	2260	5060	5570	5770	4340
16	902	802	782	e700	729	826	1240	2660	5150	5610	5700	4240
17	900	822	784	685	718	813	1160	3180	5280	5740	5670	4200
18	897	815	778	e690	718	782	1140	3530	5350	5950	5720	4130
19	890	817	745	e700	713	759	1110	2940	5490	6140	5690	4030
20	888	847	791	700	710	882	1150	2640	5140	6050	6080	3970
21	887	857	745	712	728	789	1230	2760	5240	6020	5990	3900
22	900	837	758	715	739	811	1350	3090	3930	6080	5910	3850
23	894	871	e750	722	718	864	1410	4010	3960	5970	5820	3790
24	921	859	e720	714	e630	839	1410	5050	3600	6000	5780	3740
25	916	775	710	715	e600	812	1450	5780	3720	6190	5710	3660
26	887	743	705	725	e630	843	1620	5970	3940	6140	5580	3560
27	872	766	712	768	e690	775	1520	6380	4120	6110	5460	3470
28	879	826	742	766	700	740	1440	6930	4390	6080	5410	3380
29	867	836	729	723	---	737	1380	7690	4530	5900	5330	3360
30	813	824	719	748	---	739	1400	8070	4650	5840	5480	3260
31	811	---	733	746	---	753	---	8740	---	5870	5400	---
TOTAL	28987	24620	23603	22246	19792	23521	33360	102350	152820	174280	177420	128450
MEAN	935	821	761	718	707	759	1112	3302	5094	5622	5723	4282
MAX	1250	871	829	768	802	864	1620	8740	8370	6190	6080	5250
MIN	811	743	705	680	600	664	740	1380	3600	4800	5330	3260
AC-FT	57500	48830	46820	44120	39260	46650	66170	203000	303100	345700	351900	254800

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

	1995	1996	1997	1998	1999	2000	2001	2002	2003			
MEAN	1387	1054	982	1009	1088	1365	2232	5506	9860	5958	4338	3746
MAX	2124	1382	1315	1615	2083	3205	4600	8620	18150	7574	5723	5089
(WY)	1998	1998	1998	1997	1997	1997	1997	1997	1997	1997	2003	1998
MIN	935	789	726	684	667	659	990	2531	4753	3439	2433	2063
(WY)	2003	2002	2002	2002	2002	2002	2002	2002	2001	2000	2000	2000

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1995 - 2003
ANNUAL TOTAL	817045	911449	
ANNUAL MEAN	2238	2497	3252
HIGHEST ANNUAL MEAN			4874
LOWEST ANNUAL MEAN			2236
HIGHEST DAILY MEAN	7640	8740	24500
LOWEST DAILY MEAN	629	600	600
ANNUAL SEVEN-DAY MINIMUM	635	669	635
ANNUAL RUNOFF (AC-FT)	1621000	1808000	2356000
10 PERCENT EXCEEDS	4870	5770	6660
50 PERCENT EXCEEDS	944	936	1640
90 PERCENT EXCEEDS	661	711	807

e Estimated

SNAKE RIVER BASIN
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 to current year (no winter records).

DISSOLVED OXYGEN: April 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, unfltrd field, std units (00400)	Specific conductance, wat unf us/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, unfltrd water, mg/L as CaCO3 (00900)	Calcium, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
OCT	23...	1600	880	605	10.8	110	8.9	194	7.5	6.0	84	24.9	5.38	1.81
NOV	13...	1400	855	607	10.7	101	8.9	197	1.5	3.5	86	25.2	5.57	1.79
JAN	13...	1310	732	610	11.2	99	8.4	202	3.5	1.0	87	25.9	5.47	1.87
FEB	24...	1515	629	598	12.7	113	8.0	218	-22.0	.5	93	27.6	5.94	2.08
MAR	18...	1330	831	595	11.2	105	7.7	216	.0	2.5	86	25.4	5.50	1.75
APR	23...	1440	1450	593	10.9	115	8.0	207	14.5	6.6	86	25.5	5.48	1.76
MAY	20...	1430	2880	603	8.3	--	7.3	--	16.0	12.0	75	22.0	4.82	1.39
JUL	08...	1500	4800	603	9.4	121	7.4	123	23.0	16.0	49	14.6	3.08	1.62
SEP	09...	1215	4770	600	8.8	110	8.7	165	17.5	14.5	60	18.1	3.51	1.93

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, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT	23...	.4	7.92	E87	3.52	.50	16.2	10.8	--	--	124	E.09	<.04
NOV	13...	.4	8.26	89	4.72	.48	16.7	10.8	127	.17	293	E.06	<.04
JAN	13...	.4	8.70	91	2.93	.52	16.3	11.3	127	.18	257	E.06	<.04
FEB	24...	.4	9.05	119	3.65	.57	17.0	13.1	150	.20	246	.11	<.04
MAR	18...	.4	7.93	92	4.68	.46	15.4	11.7	128	.18	300	E.08	<.04
APR	23...	.3	6.84	92	2.91	.32	13.6	11.0	122	.17	493	.17	<.04
MAY	20...	.2	4.56	78	1.67	.2	12.4	7.2	101	.15	868	.26	<.04
JUL	08...	.4	6.73	52	3.16	.5	14.9	7.2d	83	.04	343	E.07	<.04
SEP	09...	.5	9.50	63	5.71	.8	14.6	10.6	102	.13	1230	E.09n	<.04

SNAKE RIVER BASIN
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 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)	Feb- ulate, water, fltrd 0.7u GF ug/L (82669)	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)	Propa- chlor, water, fltrd ug/L (04024)
OCT 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 13...	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010
JAN 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 20...	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.010
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 09...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- 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)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment load, tons/d (80155)
OCT 23...	--	--	--	--	--	--	--	--	--	1	2.4
NOV 13...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	1	2.3
JAN 13...	--	--	--	--	--	--	--	--	--	2	4.0
FEB 24...	--	--	--	--	--	--	--	--	--	3	5.1
MAR 18...	--	--	--	--	--	--	--	--	--	5	11
APR 23...	--	--	--	--	--	--	--	--	--	22	86
MAY 20...	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.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	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
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

SNAKE RIVER BASIN
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	---	---	---	---	---	---
DAY	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

GROS VENTRE RIVER BASIN

13015000 GROS VENTRE RIVER AT ZENITH, WY

LOCATION.--Lat 43°33'26", long 110°45'46", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.34., T.42 N., R.116 W., Teton County, Wyoming, Teton Village quad., 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.

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. Elevation of gage is 6,260 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Station equipment includes satellite telemetry. Diversions of about 300 ft³/s for irrigation above station. No regulation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,170 ft³/s June 6, 1997; maximum gage height, 22.77 ft, June 10, 1996; no flow on many days.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 18, 1927, when landslide about 12 mi upstream washed out, released about 60,000 acre-ft of impounded water (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,610 ft³/s May 31, June 1; minimum daily, 0.57 ft³/s Sept. 26.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	49	66	1610	82	42	0.95
2	---	---	---	---	---	---	53	66	1520	81	26	0.96
3	---	---	---	---	---	---	53	70	1420	73	22	0.88
4	---	---	---	---	---	---	50	75	1290	62	22	0.88
5	---	---	---	---	---	---	47	78	1160	53	20	0.99
6	---	---	---	---	---	---	45	77	1070	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	1100	59	31	1.0	0.76
29	---	---	---	---	---	---	67	1280	62	42	0.84	0.88
30	---	---	---	---	---	---	64	1500	70	61	1.0	0.88
31	---	---	---	---	---	---	---	1610	---	55	0.95	---
TOTAL	---	---	---	---	---	---	1825	11078	22121	1296	297.49	36.04
MEAN	---	---	---	---	---	---	60.8	357	737	41.8	9.60	1.20
MAX	---	---	---	---	---	---	88	1610	1610	82	42	2.0
MIN	---	---	---	---	---	---	45	63	59	26	0.84	0.57
AC-FT	---	---	---	---	---	---	3620	21970	43880	2570	590	71

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

MEAN	64.9	64.4	29.5	---	---	---	131	802	1151	454	140	63.8
MAX	89.4	81.3	29.5	---	---	---	231	2954	3189	1410	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

FISH CREEK BASIN

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

LOCATION.--Lat 43°36'14", long 110°48'17", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.18, T.42 N., R.116 W., Teton County, Wyoming, Teton Village quad., Hydrologic Unit 17040103, Grand Teton National Park, on right bank 0.7 mi upstream from Granite Creek Supplemental, and 5.7 mi southwest of Moose.

DRAINAGE AREA.--14.9 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 599 ft³/s May 16, 2001, gage height, 5.02 ft, at datum then in use; maximum gage height, 6.58 ft, June 9, 1997, at datum then in use; minimum daily, 1.2 ft³/s Jan. 9, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 393 ft³/s May 30, gage height, 5.53 ft; minimum daily, 3.5 ft³/s Feb. 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	e6.4	6.6	5.1	5.7	3.9	e5.0	20	318	166	27	12
2	9.9	e6.6	6.6	5.0	5.2	3.9	5.0	19	298	154	26	12
3	9.7	e6.8	6.6	5.1	e5.0	3.9	4.9	20	265	143	26	12
4	9.7	e7.4	6.5	5.0	e5.2	3.9	e4.6	20	234	130	25	11
5	9.9	e7.4	6.4	5.1	e5.2	3.9	e5.0	20	213	120	24	11
6	9.6	e7.6	6.2	4.7	e4.7	3.6	e5.5	18	208	111	23	11
7	9.7	7.1	5.5	e4.6	e4.8	3.7	e5.1	18	206	97	22	11
8	9.9	7.1	e5.8	e4.5	e5.3	3.9	e5.4	17	201	92	21	11
9	9.7	7.1	e5.8	e4.4	e4.5	4.0	5.3	17	215	85	21	11
10	9.4	e7.4	e6.4	e4.1	e4.3	3.9	6.3	17	247	81	20	11
11	9.3	e7.2	e6.0	e4.5	e4.2	3.9	8.8	17	269	78	19	11
12	9.0	e7.0	e5.7	e4.6	e4.0	4.0	12	18	242	76	19	11
13	8.8	e7.4	e5.6	e4.7	e4.0	4.1	15	21	220	71	18	11
14	8.7	e7.0	5.7	e4.6	e4.0	4.4	16	25	207	67	18	11
15	8.6	e6.8	5.8	e4.4	4.1	4.3	16	32	229	63	18	10
16	8.5	e6.8	5.8	e4.2	4.1	4.4	15	45	243	60	17	9.9
17	8.4	e6.7	5.9	e4.2	4.2	4.2	15	56	240	58	16	9.9
18	8.3	e6.6	5.5	e4.2	4.1	4.1	15	59	235	56	16	9.8
19	8.1	e6.6	e3.6	e4.5	4.0	4.1	14	47	247	54	15	9.6
20	8.0	e6.5	e5.0	e4.7	4.0	4.1	15	43	239	50	15	9.3
21	8.0	e6.3	e5.4	e4.6	4.0	4.0	16	47	251	48	15	9.0
22	8.1	e6.2	e4.7	4.4	4.0	e3.9	18	62	219	45	15	8.8
23	8.1	e6.0	4.2	e4.4	4.0	e3.9	19	92	169	42	15	8.6
24	8.3	e6.1	4.1	4.4	3.5	e3.6	19	137	139	41	14	8.5
25	7.9	e3.8	e4.0	4.4	3.7	e3.8	20	182	119	41	14	8.4
26	9.1	e5.2	e4.3	4.6	4.2	e4.3	22	218	111	39	13	8.3
27	7.8	e6.6	e5.0	5.3	4.2	e4.3	20	240	129	36	13	8.1
28	7.7	e6.5	e5.8	4.8	4.0	e4.4	19	255	150	33	12	8.0
29	7.6	e6.4	e5.6	4.7	---	e4.1	19	293	160	31	12	7.9
30	e7.0	6.6	5.3	5.4	---	4.6	19	340	168	30	14	7.8
31	e6.0	---	5.4	5.4	---	e4.6	---	343	---	28	12	---
TOTAL	268.8	199.2	170.8	144.6	122.2	125.7	384.9	2758	6391	2226	555	298.9
MEAN	8.67	6.64	5.51	4.66	4.36	4.05	12.8	89.0	213	71.8	17.9	9.96
MAX	10	7.6	6.6	5.4	5.7	4.6	22	343	318	166	27	12
MIN	6.0	3.8	3.6	4.1	3.5	3.6	4.6	17	111	28	12	7.8
AC-FT	533	395	339	287	242	249	763	5470	12680	4420	1100	593

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

	1995	1996	1997	1998	1999	2000	2001	2002	2003			
MEAN	9.43	8.24	6.25	5.14	4.60	4.63	11.3	93.7	199	110	27.0	13.0
MAX	16.0	14.5	8.73	8.10	6.32	6.12	16.2	149	349	184	48.7	22.5
(WY)	1998	1998	1998	1998	1999	1999	2000	1997	1997	1998	1997	1997
MIN	6.21	5.48	3.77	1.65	1.77	3.46	8.54	52.2	94.0	31.4	11.7	6.92
(WY)	2002	2001	2001	2001	2001	1996	1999	1999	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1995 - 2003
ANNUAL TOTAL	13005.0	13645.1	
ANNUAL MEAN	35.6	37.4	40.2
HIGHEST ANNUAL MEAN			63.2
LOWEST ANNUAL MEAN			26.7
HIGHEST DAILY MEAN	305	343	490
LOWEST DAILY MEAN	2.3	3.5	1.2
ANNUAL SEVEN-DAY MINIMUM	2.7	3.8	1.3
ANNUAL RUNOFF (AC-FT)	25800	27070	29150
10 PERCENT EXCEEDS	117	141	138
50 PERCENT EXCEEDS	9.7	8.5	9.1
90 PERCENT EXCEEDS	4.2	4.1	4.1

e Estimated

FISH CREEK BASIN

13016450 FISH CREEK AT WILSON, WY

LOCATION.--Lat 43°30'03", long 110°52'15", in NW¹/₄NW¹/₄SE¹/₄ sec.22, T.41 N., R.117 W., Teton County, Wyoming, Teton Village quad., 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. Elevation of gage is 6,150 ft above NGVD of 1929, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,430 ft³/s June 8, 1997, gage height, 5.41 ft; minimum daily, 29 ft³/s Jan. 10, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,010 ft³/s June 1, gage height, 4.45 ft; minimum daily, 29 ft³/s Jan. 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	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	1830	1190	1167	1007	1082	1343	1520	6545	20272	14355	10156	5407
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	3630	2360	2310	2000	2150	2660	3010	12980	40210	28470	20140	10720

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

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003		
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

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1994 - 2003
ANNUAL TOTAL	60919	65874	
ANNUAL MEAN	167	180	180
HIGHEST ANNUAL MEAN			222
LOWEST ANNUAL MEAN			161
HIGHEST DAILY MEAN	798	980	1350
LOWEST DAILY MEAN	31	29	29
ANNUAL SEVEN-DAY MINIMUM	31	31	31
ANNUAL RUNOFF (AC-FT)	120800	130700	130500
10 PERCENT EXCEEDS	435	479	460
50 PERCENT EXCEEDS	61	52	71
90 PERCENT EXCEEDS	32	34	37

e Estimated

FLAT CREEK BASIN

13018350 FLAT CREEK BELOW CACHE CREEK NEAR JACKSON, WY

LOCATION.--Lat 43°27'30", long 110°47'46", in SW¼SE¼NE¼ sec.6, T.40 N., R.116 W., Teton County, Wyoming, Jackson quad., 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. Elevation of gage is 6,130 ft above NGVD of 1929, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 277 ft³/s July 12, 1995, gage height, 2.95 ft; maximum gage height, 4.18 ft, Dec. 8, 2001 (backwater from ice); minimum daily, 14 ft³/s Sept. 22, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 223 ft³/s June 3, gage height, 2.64 ft; minimum daily, 25 ft³/s Aug. 12-14, 16-21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	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	2072	1893	1838	1870	1484	1557	1955	3058	3818	2312	972	1051
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	4110	3750	3650	3710	2940	3090	3880	6070	7570	4590	1930	2080

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

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	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			

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1989 - 2003	
ANNUAL TOTAL	23780		23880			
ANNUAL MEAN	65.2		65.4		70.3	
HIGHEST ANNUAL MEAN					89.8	
LOWEST ANNUAL MEAN					62.7	
HIGHEST DAILY MEAN	154	Jun 2	215	Jun 3	256	Jul 13 1995
LOWEST DAILY MEAN	35	Jan 30	25	Aug 12	14	Sep 22 2001
ANNUAL SEVEN-DAY MINIMUM	36	Jan 30	25	Aug 12	15	Sep 19 2001
ANNUAL RUNOFF (AC-FT)	47170		47370		50950	
10 PERCENT EXCEEDS	96		99		108	
50 PERCENT EXCEEDS	60		60		64	
90 PERCENT EXCEEDS	43		34		42	

e Estimated

SNAKE RIVER MAIN STEM

13018750 SNAKE RIVER BELOW FLAT CREEK, NEAR JACKSON, WY

LOCATION.--Lat 43°22'20", long 110°44'19", in NE¹/₄SE¹/₄ sec.3, T.39 N., R.116 W., Teton County, Wyoming, Camp Davis quad., 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.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 30,200 ft³/s June 11, 1997; minimum daily, 690 ft³/s Jan. 19, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 12,400 ft³/s June 1; minimum daily, 900 ft³/s Jan. 10.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2170	1280	1160	1070	1380	1010	1320	2000	12400	6020	6600	6190
2	1970	1270	1160	1070	1390	997	1360	1970	11200	6410	6550	6080
3	1840	1260	1180	1090	e1300	1020	1350	2000	9610	6320	6540	6050
4	1730	1250	1170	1090	1220	1020	1310	2090	8400	6150	6550	5990
5	1690	1250	1170	1090	1150	999	1260	2100	7680	6040	6520	5920
6	1670	1260	1170	1070	e1100	995	1220	2080	7360	5910	6520	5910
7	1630	1260	1150	e1000	e1050	1010	1210	1990	6850	5780	6470	5860
8	1600	1310	e1050	e1000	e1100	986	1200	1970	6520	5890	6460	5810
9	1590	1340	e1050	e950	e1100	979	1220	1980	6590	6040	6460	5750
10	1560	1350	e1050	e900	1100	1010	1290	1970	6860	6200	6420	5910
11	1530	1320	1080	e1000	e1050	1070	1380	1970	7290	6340	6420	5770
12	1520	1300	1090	e1060	e1050	1180	1530	2040	7390	6460	6400	5640
13	1500	1310	1090	1070	1070	1260	1660	2220	7110	6430	6400	5550
14	1490	1300	1110	1090	1090	1340	1790	2440	6760	e6400	e6400	5460
15	1480	1290	1150	e1050	1070	1350	1930	2810	6570	6520	6380	5370
16	1480	1270	1130	e1000	1080	1400	1960	3330	6740	6570	e6380	5270
17	1480	1240	1140	e1000	1070	1400	1850	4050	6890	6730	6320	5200
18	1470	1240	1120	e950	1070	1330	1800	4580	6870	6900	6330	5110
19	1450	1230	1110	e950	1050	1280	1750	4230	6940	7070	6310	5030
20	1440	1240	1110	e950	1040	1280	1750	3770	6820	7030	6550	4950
21	1420	1240	1100	e1000	1050	1290	1820	3720	6910	6970	6610	4860
22	1440	1240	1090	1050	1070	1320	1940	3940	6350	6950	6630	4770
23	1440	1260	e1050	1080	1050	1390	2040	4940	5740	6910	6600	4680
24	1450	1280	e1000	1080	e1000	1400	2050	6230	5220	e6850	6530	4600
25	1440	1210	e1000	1060	e1000	1350	2070	7400	5140	e6850	6430	4530
26	1410	1150	e1050	1070	e1000	1500	2170	8060	5060	e6800	6340	4430
27	1370	1150	e1100	1190	e1000	1440	2220	8660	5130	e6800	6270	4330
28	1380	1180	1110	1340	1030	1330	2090	9390	5200	e6750	6220	4220
29	1380	1200	1080	1180	---	1280	2020	10400	5410	e6750	6190	4170
30	1350	1180	1050	1240	---	1270	1990	11500	5590	6730	6420	4060
31	1310	---	1080	1310	---	1280	---	12100	---	6680	6330	---
TOTAL	47680	37660	34150	33050	30730	37766	50550	137930	208600	202250	199550	157470
MEAN	1538	1255	1102	1066	1098	1218	1685	4449	6953	6524	6437	5249
MAX	2170	1350	1180	1340	1390	1500	2220	12100	12400	7070	6630	6190
MIN	1310	1150	1000	900	1000	979	1200	1970	5060	5780	6190	4060
AC-FT	94570	74700	67740	65550	60950	74910	100300	273600	413800	401200	395800	312300

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

MEAN	1854	1544	1391	1308	1337	1590	2623	6680	10930	6733	4424	3568
MAX	3093	2747	1998	2345	2491	3686	5435	12060	22180	14090	7253	6464
(WY)	1983	1984	1984	1997	1997	1997	1985	1997	1997	1982	1976	1984
MIN	977	967	846	879	825	910	1292	2570	5233	3245	2305	1801
(WY)	1989	1988	1988	1988	1989	1977	1977	1977	2001	1988	1981	1979

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1976 - 2003
ANNUAL TOTAL	1030900	1177386	
ANNUAL MEAN	2824	3226	3635
HIGHEST ANNUAL MEAN			6110
LOWEST ANNUAL MEAN			2469
HIGHEST DAILY MEAN	9380	Jun 2	12400
LOWEST DAILY MEAN	800	Jan 30	900
ANNUAL SEVEN-DAY MINIMUM	921	Jan 26	986
ANNUAL RUNOFF (AC-FT)	2045000	2335000	2633000
10 PERCENT EXCEEDS	5580	6740	8000
50 PERCENT EXCEEDS	1580	1530	2060
90 PERCENT EXCEEDS	1000	1050	1110

e Estimated

SNAKE RIVER MAIN STEM

13022500 SNAKE RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

LOCATION.--Lat 43°11'46", long 110°53'22", in Lincoln County, Wyoming, Ferry Peak quad., 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. Mar. 16, 1937 to Mar. 31, 1939 at site 6.0 mi downstream at different datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,600 ft³/s June 11, 1997, gage height, 14.04 ft; minimum, 740 ft³/s Nov. 16, 1955, gage height, 2.19 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 16,000 ft³/s June 1; minimum daily, 1,150 ft³/s Jan. 18.

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	2470	1500	1460	1400	1710	1330	1740	2890	16000	6890	6860	6530
2	2280	1510	1440	1380	1740	1280	1850	2870	14500	7240	6800	6410
3	2140	1480	1480	1390	1570	1310	1850	2940	12500	7180	6770	6360
4	2010	1460	1480	1410	1530	1310	1760	3080	10800	6950	6810	6280
5	1950	1470	1470	1410	1450	1280	1680	3060	9880	6770	6780	6210
6	1930	1490	1470	1370	e1450	1280	1650	2960	9390	6610	6780	6220
7	1880	1500	1430	e1350	e1400	1300	1610	2820	8700	6440	6720	6180
8	1850	1560	e1350	e1350	e1450	1280	1610	2770	8190	e6500	6710	6100
9	1830	1620	e1300	e1300	e1450	1270	1680	2810	8280	e6700	6720	6050
10	1800	1620	e1250	e1350	e1450	1300	1860	2780	8620	e6900	6690	6230
11	1780	1600	e1300	e1350	e1400	1360	2090	2770	9130	e7000	6720	6100
12	1770	1560	e1350	e1350	e1400	1460	2330	2880	9240	e7200	6710	5950
13	1740	1570	1410	e1350	e1400	1570	2520	3330	8800	e7000	6710	5850
14	1720	1570	1430	e1350	e1400	1670	2730	3620	8380	e7000	6690	5740
15	1710	1550	1470	e1300	1370	1690	2870	4110	8110	e7000	6730	5640
16	1700	1510	1460	e1250	1370	1750	2820	4820	8320	e7100	6720	5520
17	1700	1500	1470	e1200	1360	1770	2660	5630	8460	e7200	6670	5450
18	1680	1520	1450	e1150	1360	1710	2590	6070	8350	7300	6660	5390
19	1670	1500	e1400	e1200	1340	1640	2540	5690	8440	7460	6640	5300
20	1650	1510	e1400	e1200	1320	1650	2590	5090	8360	7440	6810	5180
21	1650	1520	e1400	e1250	1340	1670	2720	5030	8340	7370	6920	5080
22	1650	1520	e1400	e1300	1350	1690	2930	5300	7680	7300	6960	4990
23	1690	1530	e1350	e1350	1320	1780	3120	6560	6880	7250	6940	4890
24	1690	1580	e1300	e1350	e1300	1800	3090	8290	6260	7240	6830	4790
25	1680	1480	e1300	e1350	e1300	1740	3240	9910	6100	7360	6760	4720
26	1640	1470	e1350	e1350	e1300	1890	3350	10800	5890	7380	6630	4610
27	1620	e1450	e1400	1450	e1300	1840	3220	11600	5870	7310	6560	4520
28	1610	e1450	e1450	1650	e1300	1700	3000	12500	5950	7210	6520	4400
29	1630	1470	e1450	1490	---	1630	2900	13800	6250	7090	6490	4340
30	1610	1480	1440	1550	---	1610	2890	15200	6510	7030	6800	4250
31	1560	---	1420	1660	---	1650	---	15900	---	6960	6710	---
TOTAL	55290	45550	43530	42160	39430	48210	73490	187880	258180	219380	208820	165280
MEAN	1784	1518	1404	1360	1408	1555	2450	6061	8606	7077	6736	5509
MAX	2470	1620	1480	1660	1740	1890	3350	15900	16000	7460	6960	6530
MIN	1560	1450	1250	1150	1300	1270	1610	2770	5870	6440	6490	4250
AC-FT	109700	90350	86340	83620	78210	95620	145800	372700	512100	435100	414200	327800

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

MEAN	2177	1848	1685	1511	1595	1831	3333	8843	13320	8476	5374	4101
MAX	3605	4244	5795	2694	3381	4116	6820	15890	28180	15790	7541	7595
(WY)	1983	1957	1957	1997	1961	1997	1985	1997	1997	1982	1956	1984
MIN	1325	1225	1101	1069	1071	1099	1506	2995	6249	3802	2494	2241
(WY)	1978	1978	1988	1964	1938	1955	1955	1977	2001	1988	1981	1977

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1937 - 2003
ANNUAL TOTAL	1201460	1387200	
ANNUAL MEAN	3292	3801	4532
HIGHEST ANNUAL MEAN			7525
LOWEST ANNUAL MEAN			2726
HIGHEST DAILY MEAN	12500	Jun 2	16000
LOWEST DAILY MEAN	950	Jan 30	1150
ANNUAL SEVEN-DAY MINIMUM	1060	Jan 26	1220
ANNUAL RUNOFF (AC-FT)	2383000		2752000
10 PERCENT EXCEEDS	6720		7300
50 PERCENT EXCEEDS	1950		1850
90 PERCENT EXCEEDS	1140		1350

e Estimated

GREYS RIVER BASIN

13023000 GREYS RIVER ABOVE RESERVOIR, NEAR ALPINE, WY

LOCATION.--Lat 43°08'34", long 110°58'36", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.34, T.37 N., R.118 W. (unsurveyed), Lincoln County, Wyoming, Ferry Peak quad., 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 Sept. 30, 1917, and June 4 to Sept. 30, 1918, nonrecording gage, and Mar. 17, 1937 to Mar. 31, 1939, water-stage recorder, at site 1.8 mi downstream, and Oct. 1953 to Sept. 22, 1965, water-stage recorder at site 1 mi downstream at different datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Station equipment includes satellite telemetry. Less than 500 acres irrigated by diversions from Greys River and tributaries above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,230 ft³/s June 19, 1971, gage height, 6.33 ft; maximum gage height observed, 19.1 ft, former site and datum about Dec. 18, 1965, backwater from ice; minimum, 84 ft³/s Feb. 17, 1986, result of current meter measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 31	0200	*3,000	*4.51	No other peak greater than base discharge.			

Minimum daily, 120 ft³/s Jan. 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	194	e180	e150	e190	e170	288	875	2660	789	426	311
2	273	205	e180	e140	e180	e160	305	866	2430	764	416	302
3	265	175	e170	e150	e170	e160	312	937	2150	737	418	306
4	258	211	e170	e140	e170	e160	285	960	1980	712	429	297
5	258	233	e170	e140	e170	e160	269	920	1840	689	408	295
6	252	277	e170	e140	e160	e160	270	828	1740	e670	398	296
7	245	271	e160	e130	e160	e160	253	775	1640	e650	388	296
8	242	257	e160	e130	e170	e160	270	764	1570	e640	380	295
9	239	246	e170	e120	e180	160	351	796	1570	611	377	298
10	237	225	e170	e130	e170	164	506	758	1580	594	368	325
11	240	207	e190	e150	e170	167	659	744	1620	579	365	310
12	235	197	e180	e140	e170	177	796	781	1550	565	360	293
13	227	203	e180	e140	e170	197	908	1060	1460	562	356	286
14	228	205	e180	e140	e180	222	1030	1200	1390	574	351	281
15	226	201	e180	e130	e170	233	1020	1370	1340	539	365	279
16	227	180	e170	e130	e170	248	866	1530	1330	524	354	274
17	225	207	e180	e130	e170	261	840	1650	1280	517	361	277
18	223	214	e170	e130	e170	241	817	1470	1220	504	349	282
19	220	189	e160	e130	e160	223	826	1320	1200	510	341	276
20	220	199	e140	e140	e160	228	938	1270	1190	494	330	270
21	220	202	e160	e160	e160	228	1020	1330	1180	479	324	263
22	226	203	e160	e150	e160	232	1090	1490	1090	468	348	258
23	236	217	e160	e150	e150	259	1090	1850	1000	458	352	255
24	240	208	e160	e140	e160	240	1020	2080	955	463	331	251
25	227	e170	e140	e140	e160	236	1170	2220	952	484	327	249
26	221	e160	e160	e140	e150	276	1190	2270	853	487	318	247
27	221	e170	e160	e140	e160	243	965	2380	818	475	314	245
28	218	e180	e160	e160	e170	229	868	2490	812	466	312	243
29	222	e180	e160	e160	---	220	893	2640	810	455	316	242
30	206	e180	e150	e180	---	221	898	2790	799	446	349	239
31	208	---	e150	e200	---	238	---	2800	---	436	337	---
TOTAL	7254	6166	5150	4450	4680	6433	22013	45214	42009	17341	11168	8341
MEAN	234	206	166	144	167	208	734	1459	1400	559	360	278
MAX	273	277	190	200	190	276	1190	2800	2660	789	429	325
MIN	206	160	140	120	150	160	253	744	799	436	312	239
AC-FT	14390	12230	10220	8830	9280	12760	43660	89680	83320	34400	22150	16540
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)

	314	266	230	211	203	231	638	1766	1989	932	480	367
MEAN	314	266	230	211	203	231	638	1766	1989	932	480	367
MAX	472	455	366	315	293	406	1324	3032	3998	1904	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

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1937 - 2003
ANNUAL TOTAL	160206	180219	
ANNUAL MEAN	439	494	640
HIGHEST ANNUAL MEAN			1022
LOWEST ANNUAL MEAN			259
HIGHEST DAILY MEAN	2120	2800	6170
LOWEST DAILY MEAN	100	120	92
ANNUAL SEVEN-DAY MINIMUM	121	133	121
ANNUAL RUNOFF (AC-FT)	317800	357500	463600
ANNUAL RUNOFF (CFSM)	0.98	1.10	1.43
ANNUAL RUNOFF (INCHES)	13.30	14.96	19.41
10 PERCENT EXCEEDS	1090	1200	1720
50 PERCENT EXCEEDS	256	258	320
90 PERCENT EXCEEDS	150	160	185

e Estimated

SALT RIVER BASIN

13027500 SALT RIVER ABOVE RESERVOIR, NEAR ETNA, WY

LOCATION.--Lat 43°04'47", long 111°02'14", in SW¼NE¼ sec.28, T.36 N., R.119 W., Lincoln County, Wyoming, Etna quad., Hydrologic Unit 17040105, on right bank 3.4 mi northwest of Etna, and 8.0 mi upstream from maximum flowline of Palisades Reservoir.

DRAINAGE AREA.--829 mi².

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,675.78 ft above NGVD of 1929 (levels by U.S. Bureau of Reclamation).

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

Diversions above station for power developments, industry, municipal supply, and irrigation of about 60,500 acres of which about 1,000 acres are below station (1966 determination). For details on adjudication of diversions, see Remarks for this station in WSP 1347.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,090 ft³/s June 2, 1986, gage height, 5.71 ft; minimum, 160 ft³/s Jan. 7, 8, 1971, gage height, 1.53 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,430 ft³/s June 1; minimum, 265 ft³/s Feb. 26, gage height, 1.60 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	417	385	386	344	436	314	576	702	1430	e470	e365	e370
2	429	383	385	335	445	307	587	680	1420	e450	e360	e360
3	429	379	382	341	409	313	585	694	1340	e440	e370	e370
4	429	376	379	336	394	310	543	722	1240	e435	e380	e360
5	429	373	380	336	379	313	520	733	1150	e430	e375	e355
6	425	375	378	331	378	312	505	699	1050	e420	e370	e360
7	420	378	376	314	335	311	493	681	962	e415	e365	e365
8	418	389	370	310	333	309	480	674	882	e410	e360	e370
9	417	400	363	303	356	312	485	683	838	e405	e360	e380
10	412	397	357	313	352	322	553	718	802	e400	e365	e390
11	405	387	375	329	343	333	639	706	795	e405	e370	e385
12	397	381	368	326	332	350	710	711	e770	e410	e375	e380
13	397	385	366	322	336	380	755	785	e720	e420	e380	e380
14	392	390	366	318	348	415	821	817	e710	e410	e385	e380
15	393	387	369	312	344	436	856	874	e690	e405	e390	e385
16	391	382	366	304	339	464	769	912	e670	e400	e380	e390
17	394	384	373	306	336	499	732	935	e650	e395	e380	e400
18	391	390	368	293	332	480	729	931	611	e390	e375	e410
19	392	386	362	297	330	445	706	870	581	e400	e370	e405
20	397	391	340	300	326	437	713	840	e580	e395	e365	e405
21	397	391	362	319	332	447	746	836	e580	e390	e360	e405
22	394	391	361	308	334	463	787	845	e570	e380	e370	e405
23	397	400	357	313	330	511	833	854	e560	e375	e380	e410
24	410	422	327	302	306	515	821	909	e550	e380	e375	e410
25	404	405	343	300	309	490	824	951	e550	e390	e370	413
26	397	390	349	300	303	542	841	1020	e510	e395	e365	409
27	397	384	347	302	309	551	781	1080	e500	e390	e360	403
28	391	391	348	324	315	505	741	1120	e500	e385	e360	407
29	392	389	343	324	---	476	719	1200	e500	e380	e370	407
30	391	387	343	354	---	469	706	1310	e480	e375	e380	412
31	391	---	344	432	---	508	---	1390	---	e370	e375	---
TOTAL	12535	11648	11233	9948	9721	12839	20556	26882	23191	12515	11505	11681
MEAN	404	388	362	321	347	414	685	867	773	404	371	389
MAX	429	422	386	432	445	551	856	1390	1430	470	390	413
MIN	391	373	327	293	303	307	480	674	480	370	360	355
AC-FT	24860	23100	22280	19730	19280	25470	40770	53320	46000	24820	22820	23170
CFSM	0.49	0.47	0.44	0.39	0.42	0.50	0.83	1.05	0.93	0.49	0.45	0.47
IN.	0.56	0.52	0.50	0.45	0.44	0.58	0.92	1.21	1.04	0.56	0.52	0.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2003, BY WATER YEAR (WY)												
MEAN	610	579	508	444	433	473	949	1689	1454	837	614	628
MAX	912	838	712	584	702	1121	2204	3586	3486	1809	997	961
(WY)	1983	1984	1984	1997	1963	1986	1997	1997	1975	1983	1971	1971
MIN	336	347	340	315	294	299	503	306	275	271	266	342
(WY)	1978	1978	2002	2002	2002	2002	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS		FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1954 - 2003	
ANNUAL TOTAL		157630		174254			
ANNUAL MEAN		432		477			
HIGHEST ANNUAL MEAN						1272	1997
LOWEST ANNUAL MEAN						397	2001
HIGHEST DAILY MEAN		1040	Apr 15	1430	Jun 1	5030	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)		312700		345600		557200	
ANNUAL RUNOFF (CFSM)		0.52		0.58		0.93	
ANNUAL RUNOFF (INCHES)		7.07		7.82		12.61	
10 PERCENT EXCEEDS		695		786		1490	
50 PERCENT EXCEEDS		389		391		570	
90 PERCENT EXCEEDS		294		325		374	

e Estimated