

12342500 WEST FORK BITTERROOT RIVER NEAR CONNER, MT

LOCATION.--Lat 45°43'30", long 114°16'50" (NAD 27), in SE¼NE¼NW¼ sec.26, T.1 S., R.22 W., Ravalli County, Hydrologic Unit 17010205, on right bank 0.6 mi downstream from Painted Rocks Lake, 6.4 mi upstream from Nez Perce Creek, 16.1 mi southwest of Conner, and at river mile 19.2.

DRAINAGE AREA.--317 mi².

PERIOD OF RECORD.--April 1941 to current year.

REVISED RECORDS.--WSP 1246: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,581.36 ft (NGVD 29) (U.S. Forest Service bench mark).

REMARKS.--Records good. Flow regulated by Painted Rocks Lake (station 12342000). Diversions for irrigation of about 200 acres upstream from station. Bureau of Reclamation satellite telemeter at station. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	64	63	63	61	60	132	211	594	237	295	295
2	66	64	63	63	61	60	132	211	584	239	294	292
3	66	64	63	63	61	60	132	212	591	226	291	290
4	66	64	63	63	61	60	134	214	613	215	291	287
5	66	64	63	63	61	60	135	216	651	198	291	283
6	66	64	63	63	61	60	135	218	686	186	290	282
7	67	64	63	63	61	60	137	221	666	176	291	279
8	66	64	63	63	61	60	137	223	619	169	289	276
9	66	64	63	63	61	60	139	287	594	166	287	250
10	66	64	63	63	61	60	140	585	570	161	286	228
11	66	64	63	63	61	60	141	645	550	155	283	227
12	66	64	63	62	60	60	143	592	507	149	315	226
13	67	64	63	62	60	61	143	524	479	144	338	225
14	67	64	63	61	60	61	169	472	455	140	334	225
15	67	63	63	61	60	61	198	439	421	176	333	223
16	67	63	63	61	60	62	200	441	393	187	333	247
17	67	63	63	61	60	63	200	431	369	187	330	272
18	67	63	63	61	60	63	200	452	354	187	328	270
19	67	63	63	61	60	63	201	594	349	187	325	267
20	67	63	63	61	60	64	203	649	342	187	323	266
21	67	63	63	61	60	64	204	676	316	187	320	216
22	66	63	63	61	60	64	204	699	293	215	319	194
23	66	63	63	61	60	65	204	701	274	236	316	191
24	66	63	63	61	60	66	204	665	262	235	316	190
25	66	63	63	61	60	67	204	616	258	232	313	191
26	64	63	63	61	60	67	204	589	251	232	311	190
27	64	63	63	61	60	68	205	594	245	232	307	190
28	64	63	63	61	60	69	207	614	236	232	305	187
29	64	63	63	61	60	69	209	637	220	269	303	110
30	64	63	63	61	---	106	211	619	228	298	299	67
31	64	---	63	61	---	131	---	618	---	295	298	---
TOTAL	2,044	1,904	1,953	1,915	1,751	2,054	5,207	14,865	12,970	6,335	9,554	6,936
MEAN	65.9	63.5	63.0	61.8	60.4	66.3	174	480	432	204	308	231
MAX	67	64	63	63	61	131	211	701	686	298	338	295
MIN	64	63	63	61	60	60	132	211	220	140	283	67
AC-FT	4,050	3,780	3,870	3,800	3,470	4,070	10,330	29,480	25,730	12,570	18,950	13,760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2004, BY WATER YEAR (WY)

MEAN	155	111	90.4	83.3	79.8	93.3	204	806	909	265	204	178
MAX	484	416	270	243	215	277	719	2,011	1,960	633	439	385
(WY)	(1943)	(1945)	(1960)	(1957)	(1957)	(1952)	(1956)	(1947)	(1964)	(1975)	(1995)	(1973)
MIN	52.3	53.3	27.8	21.4	6.80	7.85	8.65	119	118	127	84.5	62.4
(WY)	(1999)	(1988)	(1958)	(1977)	(1944)	(1944)	(1944)	(1977)	(1987)	(1973)	(1945)	(1944)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

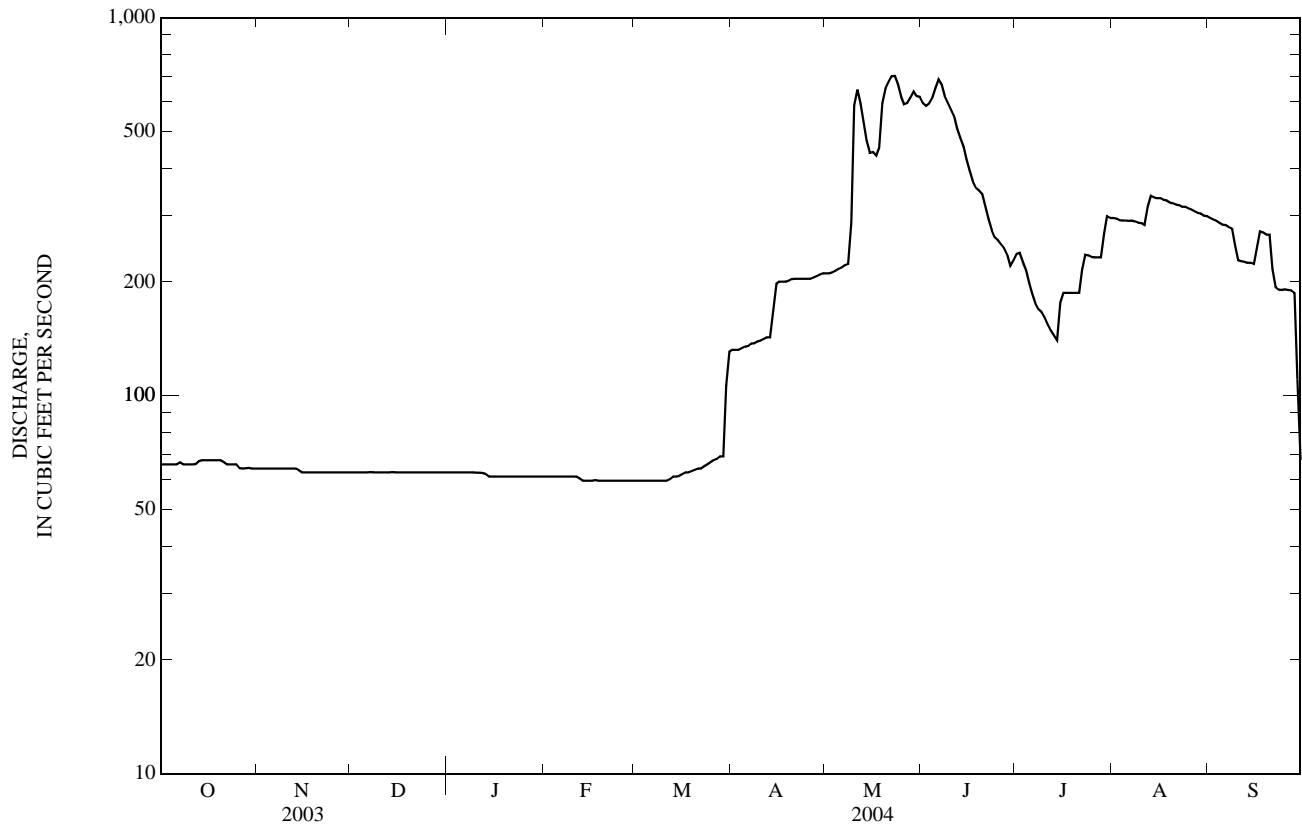
WATER YEARS 1941 - 2004

ANNUAL TOTAL	100,880	67,488	
ANNUAL MEAN	276	184	267
HIGHEST ANNUAL MEAN			457
LOWEST ANNUAL MEAN			120
HIGHEST DAILY MEAN	2,810	701	3,900
LOWEST DAILY MEAN	61	a60	b0.60
ANNUAL SEVEN-DAY MINIMUM	61	60	0.66
MAXIMUM PEAK FLOW		712	4,060
MAXIMUM PEAK STAGE		2.80	6.18
INSTANTANEOUS LOW FLOW			c0.20
ANNUAL RUNOFF (AC-FT)	200,100	133,900	193,100
10 PERCENT EXCEEDS	596	424	630
50 PERCENT EXCEEDS	73	108	116
90 PERCENT EXCEEDS	63	61	58

a--February 12 to March 12.

b--May 3-7, 1954.

c--Dam shut down.



12343400 EAST FORK BITTERROOT RIVER NEAR CONNER, MT

LOCATION.--Lat 45°53'00", long 114°03'53" (NAD 27), in NE¼SW¼NE¼ sec.34, T.2 N., R.20 W., Ravalli County, Hydrologic Unit 17010205, on right bank 10 ft downstream from private bridge, 4.3 mi southwest of Conner, and at river mile 6.1.

DRAINAGE AREA.--381 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1956 to September 1972, October 2000 to September 30, 2004 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 4,191.81 ft (NGVD 29).

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 2,200 acres above station. U.S. Geological Survey satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	e75	87	e77	e75	67	237	403	601	272	116	107
2	72	e90	90	e80	e63	72	213	456	589	261	117	115
3	72	e87	90	e70	e70	61	198	553	604	252	114	114
4	72	85	72	e57	e75	73	221	661	645	277	112	108
5	72	e70	81	e50	74	68	264	763	715	243	109	104
6	73	e65	96	e53	70	69	305	808	776	226	133	102
7	73	e73	95	e60	71	67	343	766	700	220	116	101
8	74	e77	90	e67	70	76	385	779	637	213	108	97
9	73	e85	76	e75	67	90	385	731	586	204	104	95
10	74	e95	96	e77	71	107	348	669	714	202	101	93
11	75	105	91	e73	65	98	327	691	702	204	98	90
12	82	94	85	e67	60	103	337	598	592	189	95	146
13	83	91	87	e70	e57	114	374	516	550	178	93	215
14	83	e83	91	e70	e65	105	432	472	517	172	89	161
15	85	e85	82	e67	e70	100	428	455	477	168	86	154
16	88	91	70	e73	e67	108	385	470	443	164	80	144
17	88	90	e85	e67	69	110	367	496	424	156	97	136
18	86	86	e67	e67	75	121	347	541	448	156	110	138
19	83	93	e60	e70	78	147	323	698	442	186	106	214
20	79	103	e85	e70	73	136	312	653	404	227	101	217
21	78	88	e95	e67	67	135	290	660	367	185	98	198
22	77	e70	e80	e65	63	154	270	693	343	163	103	177
23	76	e75	e65	e70	72	186	264	774	326	155	121	178
24	75	e90	e85	e75	78	230	283	714	308	147	134	179
25	75	e85	e90	e70	79	230	279	646	299	144	162	166
26	78	e87	e80	e70	74	217	304	627	293	142	191	159
27	74	e85	e70	e73	73	190	362	658	324	134	164	154
28	75	e80	e65	e75	72	174	479	710	312	132	140	150
29	127	91	e75	e77	71	163	419	735	296	126	127	147
30	100	89	e73	e85	---	178	396	670	301	122	117	143
31	e63	---	e70	e80	---	215	---	641	---	119	111	---
TOTAL	2,458	2,563	2,524	2,167	2,034	3,964	9,877	19,707	14,735	5,739	3,553	4,302
MEAN	79.3	85.4	81.4	69.9	70.1	128	329	636	491	185	115	143
MAX	127	105	96	85	79	230	479	808	776	277	191	217
MIN	63	65	60	50	57	61	198	403	293	119	80	90
AC-FT	4,880	5,080	5,010	4,300	4,030	7,860	19,590	39,090	29,230	11,380	7,050	8,530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2004, BY WATER YEAR (WY)*

	113	102	88.6	83.8	89.1	112	257	940	1,077	293	127	113
MEAN	113	102	88.6	83.8	89.1	112	257	940	1,077	293	127	113
MAX	206	137	168	115	170	215	476	1,482	1,962	520	203	187
(WY)	(2001)	(1960)	(1965)	(1969)	(1963)	(1972)	(1969)	(1971)	(1972)	(1964)	(1965)	(1965)
MIN	79.3	78.5	39.4	56.8	51.6	74.4	109	520	355	126	72.6	81.1
(WY)	(2004)	(1967)	(1961)	(1961)	(2001)	(2002)	(1970)	(1966)	(1966)	(1966)	(1961)	(2001)

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1956 - 2004*

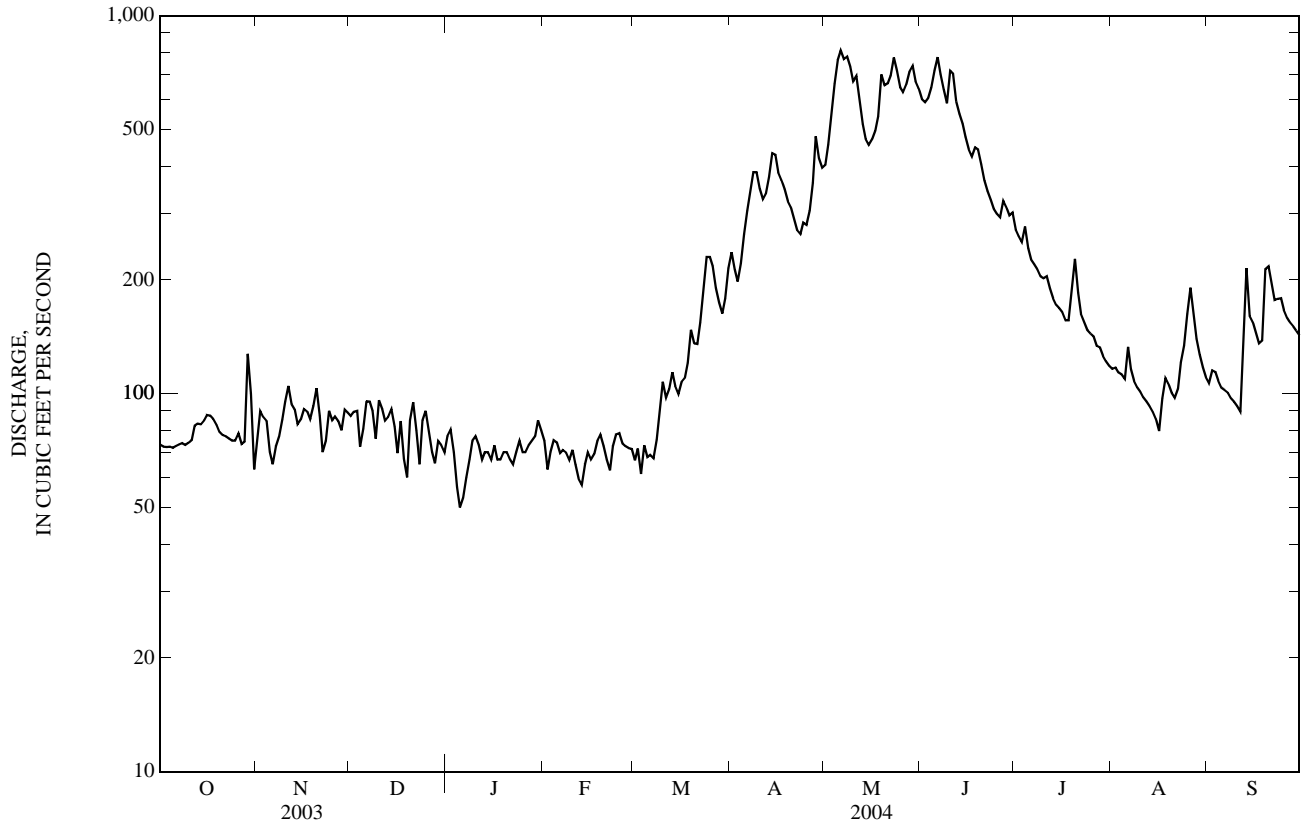
ANNUAL TOTAL	109,231	73,623	
ANNUAL MEAN	299	201	281
HIGHEST ANNUAL MEAN			400
LOWEST ANNUAL MEAN			170
HIGHEST DAILY MEAN	3,320	May 31	808
LOWEST DAILY MEAN	40	Feb 24	50
ANNUAL SEVEN-DAY MINIMUM	60	Feb 19	62
MAXIMUM PEAK FLOW			887
MAXIMUM PEAK STAGE			4.68
INSTANTANEOUS LOW FLOW			a46
ANNUAL RUNOFF (AC-FT)	216,700	146,000	203,600
10 PERCENT EXCEEDS	741	544	766
50 PERCENT EXCEEDS	96	106	115
90 PERCENT EXCEEDS	73	70	72

*--During period of operation (April 1956 to September 1972, and October 2000 to September 2004).

a--Gage height, 2.66 ft.

b--Discharge measurement, result of freezeup.

e--Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 2001 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Total nitrogen, wat unfltrd mg/L (62855)
MAR 15...	1400	98	8.5	126	10.5	6.5	E.009	E.001	.03	.14
MAY 25...	1040	653	8.0	70	16.0	5.0	.062	E.001	.05	.20
JUN 23...	1400	330	8.0	79	30.5	15.0	<.016	<.002	.07	.19
AUG 16...	1130	80	8.2	113	30.0	16.5	<.016	<.002	<.02	.05

E--Estimated.

12343400 EAST FORK BITTERROOT RIVER NEAR CONNER, MT—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR 15...	.007	.021	.4	2.3	85	3	.79
MAY 25...	.007	.033	.9	3.5	53	8	14
JUN 23...	.007	.024	.9	2.6	62	5	4.5
AUG 16...	.006	.005	.5	2.4	85	2	.43

Date	Time	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	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)
MAR 15...	1400	51	16.3	2.55	1.23	.3	4.64	57	2.26	.2	14.9
JUN 23...	1400	35	11.5	1.52	.92	.2	2.82	39	.76	<.2	11.8

Date	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)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recover-able, ug/L (01034)
MAR 15...	4.6	81	.11	21.4	.3	<2	<.04	<.04	<.8	<.8
JUN 23...	1.6	54	.07	48.2	.3	<2	<.04	<.04	<.8	<.8

Date	Copper, water, unfltrd recover-able, ug/L (01040)	Copper, water, fltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
MAR 15...	.4	E.4	<.08	E.05	.38	.36	E.4	<2
JUN 23...	.5	E.5	<.08	.10	.17	.26	E.4	<2

E--Estimated.

12344000 BITTERROOT RIVER NEAR DARBY, MT

LOCATION.--Lat 45°58'20", long 114°08'26" (NAD 27), in SW¹/₄SE¹/₄NE¹/₄ sec.36, T.3 N., R.21 W., Ravalli County, Hydrologic Unit 17010205, on left bank 50 ft upstream from bridge on U.S. Highway 93, 0.3 mi downstream from Chaffin Creek, 4.1 mi southeast of Darby, and at river mile 77.2.

DRAINAGE AREA.--1,049 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1937 to current year. Monthly discharge only for April 1937, published in WSP 1316.

REVISED RECORDS.--WSP 1246: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,942.14 ft (NGVD 29). Prior to Oct. 1, 1987, at elevation 1.00 ft higher. Prior to Aug. 2, 1939, nonrecording gage at highway bridge 45 ft upstream at same elevation.

REMARKS.--Water-discharge records good, which are fair. Some regulation by Painted Rocks Lake (station number 12342000). Diversions for irrigation of about 5,000 acres upstream from station. Ditch bypassing station irrigates about 500 acres downstream from station. U.S. Geological Survey satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	215	235	206	198	196	855	1,260	1,960	1,020	481	493
2	183	253	237	214	166	206	786	1,480	1,990	965	479	499
3	181	252	242	182	184	187	734	1,860	2,130	897	476	492
4	181	239	215	e150	202	205	781	2,180	2,400	891	472	478
5	180	180	219	e130	197	198	990	2,440	2,700	804	469	469
6	180	172	249	e140	173	199	1,170	2,460	2,770	745	481	459
7	181	191	254	e160	195	197	1,240	2,270	2,330	713	468	449
8	181	206	247	e180	192	208	1,330	2,300	2,100	682	453	438
9	181	230	210	e200	186	237	1,290	2,130	2,000	629	445	421
10	182	247	228	207	184	292	1,140	2,140	2,160	611	437	383
11	183	277	235	198	183	306	1,050	2,180	2,130	605	428	374
12	194	255	228	184	155	318	1,070	1,920	1,880	569	432	545
13	199	229	236	190	153	360	1,190	1,660	1,800	530	464	773
14	200	220	257	186	176	356	1,360	1,490	1,730	510	458	627
15	204	225	235	183	191	342	1,350	1,390	1,610	510	453	605
16	214	235	181	195	184	351	1,210	1,390	1,430	e540	447	615
17	210	240	225	184	194	360	1,120	1,430	1,370	e520	476	622
18	218	230	180	183	207	382	1,050	1,530	1,420	e530	498	598
19	216	240	166	193	211	467	988	2,000	1,450	e600	490	711
20	208	261	226	192	199	460	953	2,060	1,440	e700	479	746
21	204	234	257	178	189	447	895	2,160	1,340	e600	467	687
22	202	187	218	176	181	512	836	2,240	1,280	e550	474	598
23	200	202	175	188	188	647	800	2,290	1,310	e520	525	600
24	196	239	229	201	210	859	850	2,110	1,310	e510	552	604
25	195	222	244	190	215	834	851	1,900	1,310	e500	643	568
26	197	229	216	185	210	749	917	1,840	1,240	e510	799	538
27	195	222	190	187	208	654	1,140	2,260	1,250	471	691	514
28	198	216	175	193	207	591	1,570	2,530	1,140	459	608	497
29	549	242	207	202	205	550	1,380	2,400	1,090	454	561	459
30	369	249	194	225	---	593	1,250	2,150	1,080	494	530	362
31	229	---	192	210	---	768	---	2,070	---	488	507	---
TOTAL	6,595	6,839	6,802	5,792	5,543	13,031	32,146	61,520	51,150	19,127	15,643	16,224
MEAN	213	228	219	187	191	420	1,072	1,985	1,705	617	505	541
MAX	549	277	257	225	215	859	1,570	2,530	2,770	1,020	799	773
MIN	180	172	166	130	153	187	734	1,260	1,080	454	428	362
AC-FT	13,080	13,570	13,490	11,490	10,990	25,850	63,760	122,000	101,500	37,940	31,030	32,180

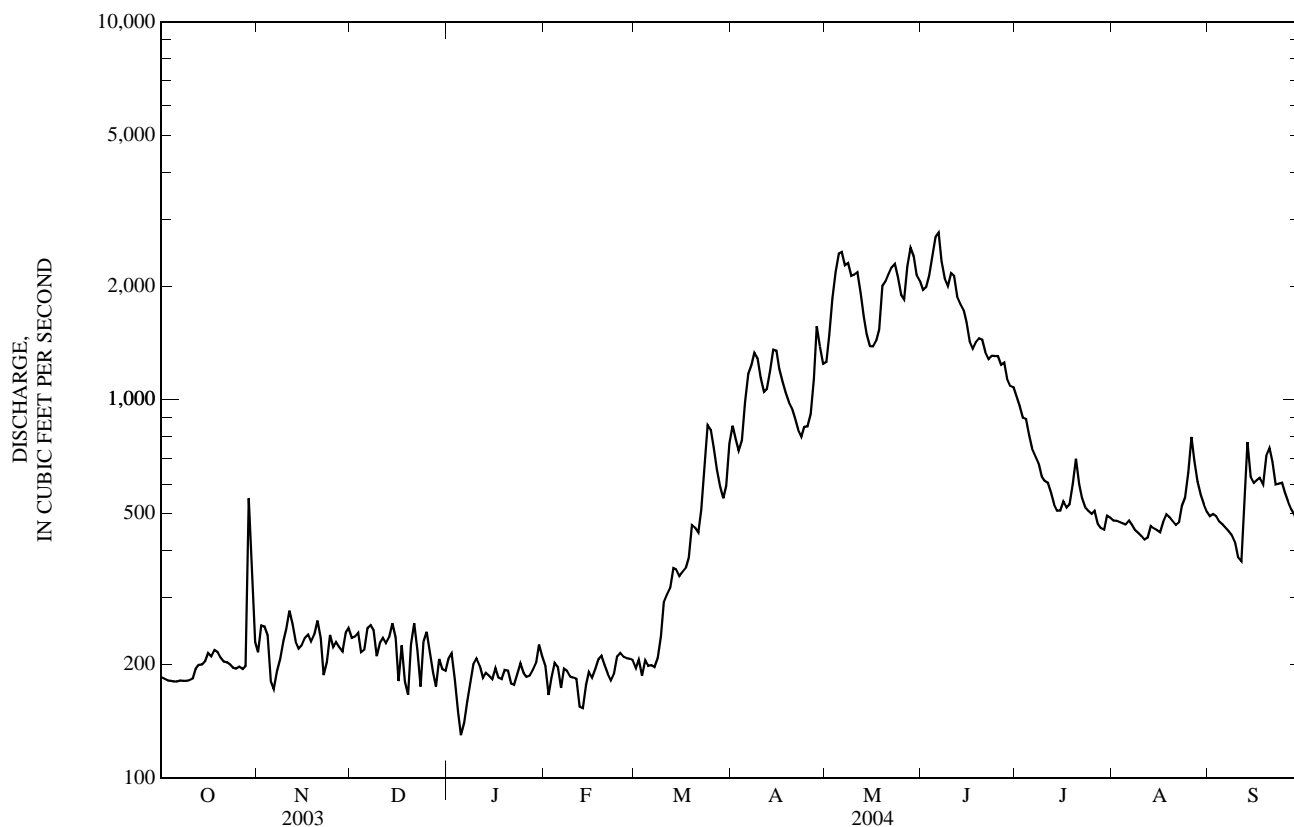
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2004, BY WATER YEAR (WY)

MEAN	354	313	279	250	269	355	974	2,864	3,047	973	410	351
MAX	1,020	788	765	421	791	1,011	2,530	5,995	6,235	2,608	751	634
(WY)	(1947)	(1947)	(1947)	(1947)	(1996)	(1972)	(1943)	(1947)	(1964)	(1975)	(1975)	(1941)
MIN	143	144	138	125	125	139	306	1,110	678	210	141	129
(WY)	(1938)	(1988)	(1988)	(1988)	(1941)	(1944)	(1937)	(1977)	(1987)	(1940)	(1940)	(1937)

12344000 BITTERROOT RIVER NEAR DARBY, MT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1937 - 2004	
ANNUAL TOTAL	340,740		240,412			
ANNUAL MEAN	934		657		876	
HIGHEST ANNUAL MEAN					1,423	1976
LOWEST ANNUAL MEAN					454	1987
HIGHEST DAILY MEAN	9,280	May 31	2,770	Jun 6	11,000	May 9, 1947
LOWEST DAILY MEAN	140	Feb 24	130	Jan 5	80	Feb 9, 1939
ANNUAL SEVEN-DAY MINIMUM	181	Oct 3	163	Jan 3	98	Jan 1, 1988
MAXIMUM PEAK FLOW			2,950	Jun 6	a11,500	May 9, 1947
MAXIMUM PEAK STAGE			4.51	Jun 6	8.45	May 31, 2003
INSTANTANEOUS LOW FLOW			110	Feb 13	b71	Feb 9, 1939
ANNUAL RUNOFF (AC-FT)	675,900		476,900		635,000	
10 PERCENT EXCEEDS	2,330		1,750		2,360	
50 PERCENT EXCEEDS	381		454		369	
90 PERCENT EXCEEDS	192		184		195	

a--Gage height, 8.18 ft, datum then in use.
 b--Observed.
 e--Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1997-98, October 2000 to to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 2001 to current year(seasonal records from April 2001 to September 2003).

INSTRUMENTATION.--Temperature probe installed Mar. 27, 2001.

REMARKS.--Daily water temperature records rated excellent.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 24.5°C, Aug. 8, 2001; minimum,0.0°C, many days during winter period.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 20.0°C, July 16; minimum,0.0°C, many days during winter period..

PEND OREILLE RIVER BASIN

12344000 BITTERROOT RIVER NEAR DARBY, MT—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Total nitrogen, wat unf by anal ysis, mg/L (62855)
MAR 15...	1200	341	7.9	86	12.5	5.0	.033	E.001	<.02	.12
MAY 25...	1245	1,930	7.8	50	18.0	7.0	.025	E.001	.03	.12
JUN 23...	1600	1,230	7.6	45	33.0	15.0	<.016	<.002	.04	.14
AUG 16...	1230	448	7.8	65	31.0	17.0	<.016	<.002	.03	.06

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, suspnd sediment total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR 15...	E.004	.014	.3	2.2	83	3	2.8
MAY 25...	<.006	.012	.5	2.9	54	7	36
JUN 23...	E.003	.012	.5	2.2	56	4	13
AUG 16...	<.006	E.002	.6	2.5	29	7	8.5

Date	Time	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, water, fltrd 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)
MAR 15...	1200	34	10.8	1.78	.89	.3	3.50	39	1.45	.2	12.5
JUN 23...	1600	17	5.62	.834	.56	.2	1.91	22	.43	<.2	8.4

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recoverable, ug/L (01034)
MAR 15...	3.4	58	.08	53.3	E.2	<2	<.04	<.04	<.8	<.8
JUN 23...	1.0	32	.04	105	E.1	<2	<.04	<.04	<.8	<.8

E--Estimated.

12344000 BITTERROOT RIVER NEAR DARBY, MT—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
MAR 15...	1.5	1.9	<.08	.11	.27	.34	E.5	<2
JUN 23...	.7	.9	<.08	.10	.15	.40	E.5	<2

E--Estimated.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.0	9.5	11.5	2.0	0.0	1.0	4.0	2.0	3.0	0.5	0.0	0.0
2	13.5	9.5	11.5	2.0	1.0	1.5	4.0	2.5	3.0	0.5	0.0	0.5
3	13.0	8.5	11.0	2.5	1.0	1.5	4.5	2.0	3.5	0.5	0.0	0.0
4	13.5	8.5	11.0	2.5	0.5	1.0	2.0	0.0	1.0	0.5	0.0	0.0
5	13.5	9.0	11.0	1.0	0.0	0.5	2.5	0.5	1.5	0.5	0.0	0.0
6	14.0	9.5	12.0	1.5	0.0	0.5	3.5	2.5	3.0	0.5	0.0	0.0
7	12.5	10.0	11.5	1.5	0.0	0.5	3.0	1.5	2.5	0.0	0.0	0.0
8	14.0	10.5	12.0	2.0	0.0	0.5	2.0	1.0	1.5	0.5	0.0	0.0
9	12.5	10.0	11.0	2.0	0.5	1.0	1.0	0.0	0.5	0.5	0.0	0.5
10	10.0	8.0	9.0	3.0	1.0	2.0	1.5	0.5	1.0	1.0	0.0	0.5
11	9.0	6.0	7.5	2.5	2.0	2.5	1.5	0.5	0.5	1.0	0.0	0.5
12	11.0	7.5	9.0	3.5	1.5	2.5	1.5	0.5	1.0	1.0	0.0	0.5
13	10.5	8.0	9.0	3.0	0.5	1.5	2.5	1.5	2.0	1.5	0.0	0.5
14	8.5	6.5	7.5	2.5	0.5	1.0	2.5	1.5	2.0	1.0	0.0	0.5
15	8.5	7.0	8.0	2.5	0.5	1.5	2.0	0.0	1.0	1.0	0.0	0.5
16	9.0	6.0	7.5	4.0	2.0	2.5	1.0	0.0	0.5	1.5	0.0	0.5
17	11.5	7.5	9.5	3.0	2.0	2.5	2.0	0.0	1.0	1.0	0.0	0.5
18	11.5	7.5	9.5	4.0	2.5	3.0	1.0	0.0	0.5	0.5	0.0	0.5
19	12.0	7.5	9.5	4.5	3.5	4.0	1.0	0.0	0.5	1.5	0.0	0.5
20	12.0	8.0	10.0	3.5	1.0	2.5	1.0	0.5	0.5	1.0	0.0	0.5
21	12.5	9.0	10.5	2.0	0.5	1.0	1.5	0.5	0.5	1.0	0.0	0.5
22	12.0	8.0	10.0	0.5	0.0	0.0	1.0	0.0	0.5	1.5	0.0	0.5
23	10.5	7.5	9.0	1.0	0.0	0.5	1.0	0.0	0.5	1.5	0.0	0.5
24	7.5	5.0	6.5	1.5	0.0	0.5	1.0	0.5	0.5	1.0	0.0	0.5
25	7.0	3.5	5.5	1.5	0.0	0.5	1.5	0.5	1.0	1.0	0.0	0.5
26	8.0	4.0	6.0	1.5	0.5	1.0	0.5	0.0	0.5	1.5	0.0	0.5
27	8.5	6.0	7.5	1.5	0.0	0.5	0.5	0.0	0.0	1.5	0.5	0.5
28	10.0	8.0	9.0	2.0	0.5	1.0	0.5	0.0	0.0	1.5	0.5	1.0
29	10.0	5.0	7.0	2.5	1.0	2.0	0.0	0.0	0.0	1.5	0.5	1.0
30	5.0	1.0	3.0	3.0	1.5	2.0	0.5	0.0	0.0	1.0	0.0	0.5
31	2.5	0.5	1.0	---	---	---	0.5	0.0	0.0	1.5	0.0	0.5
MONTH	14.0	0.5	9.0	4.5	0.0	1.5	4.5	0.0	1.0	1.5	0.0	0.5

PEND OREILLE RIVER BASIN

12344000 BITTERROOT RIVER NEAR DARBY, MT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1.5	0.0	0.5	4.5	0.0	2.0	5.5	3.5	4.5	11.0	5.0	8.0
2	1.0	0.0	0.5	3.5	1.0	2.0	4.5	3.0	4.0	10.5	5.5	8.5
3	1.0	0.0	0.5	3.0	0.0	1.5	8.5	3.0	6.0	10.5	6.0	8.0
4	1.5	0.5	0.5	4.0	1.0	2.5	9.0	5.5	7.0	10.0	5.5	7.5
5	1.5	0.0	0.5	4.0	1.0	2.5	8.5	4.0	6.5	10.0	6.0	8.0
6	1.0	0.0	0.5	4.0	0.5	2.0	7.5	4.5	6.0	9.5	5.5	7.5
7	1.5	0.5	0.5	4.0	0.5	2.5	8.5	4.5	6.5	10.5	6.0	8.0
8	1.5	0.5	0.5	7.0	1.5	4.0	7.5	4.0	6.0	9.5	5.5	7.5
9	2.5	0.0	0.5	6.0	2.0	4.0	6.5	4.5	5.5	10.0	5.5	7.5
10	1.5	0.0	0.5	6.0	2.0	4.0	7.5	3.0	5.0	8.0	5.5	6.5
11	2.5	0.0	1.0	5.5	1.0	3.0	8.5	3.0	5.5	7.0	5.5	6.5
12	1.5	0.0	0.5	6.0	1.5	4.0	9.0	3.5	6.5	7.5	5.0	6.0
13	1.5	0.0	0.5	5.0	2.5	4.0	8.0	4.5	6.5	8.5	4.5	6.5
14	1.5	0.0	0.5	5.0	2.0	3.5	7.0	5.0	6.5	9.5	5.0	7.0
15	1.5	0.0	0.5	6.5	2.0	4.5	7.0	4.0	5.5	10.0	5.5	8.0
16	1.5	0.0	0.5	5.5	3.5	5.0	7.0	3.0	5.0	9.0	7.5	8.0
17	1.0	0.5	0.5	5.5	3.5	4.5	7.0	4.0	5.5	12.0	7.0	9.0
18	2.0	0.5	1.0	7.0	3.0	5.0	7.5	4.5	6.0	10.0	7.5	8.0
19	2.5	0.5	1.5	6.5	4.0	5.0	7.0	4.5	5.5	10.0	6.5	8.0
20	3.5	0.5	1.5	6.0	2.0	4.0	7.0	4.0	5.5	12.0	7.0	9.5
21	3.5	0.0	1.5	7.5	2.5	5.0	8.5	3.5	5.5	10.5	8.0	9.0
22	3.0	0.0	1.0	8.5	4.0	6.0	9.5	3.5	6.5	9.5	7.5	8.5
23	3.5	0.0	1.0	8.0	4.0	6.0	10.5	4.5	7.5	8.5	6.5	7.5
24	3.0	0.0	1.5	6.0	3.0	4.5	10.0	6.0	8.0	9.0	5.5	7.0
25	3.5	1.0	2.0	6.5	3.5	5.0	10.5	4.5	7.5	10.0	5.5	7.5
26	3.5	1.5	2.5	6.0	4.0	5.0	11.5	5.5	8.5	10.0	7.5	8.5
27	4.5	1.0	2.5	5.0	2.5	3.5	10.0	6.0	8.0	10.5	7.5	9.0
28	4.0	1.5	2.5	7.5	3.0	5.0	8.0	4.5	5.5	9.0	7.5	8.0
29	4.0	1.5	2.5	8.0	2.5	5.5	8.0	2.5	5.5	9.0	6.5	7.5
30	---	---	---	9.0	3.5	6.0	9.5	4.0	6.5	9.5	6.0	7.5
31	---	---	---	6.5	4.0	5.5	---	---	---	10.5	7.0	8.5
MONTH	4.5	0.0	1.0	9.0	0.0	4.0	11.5	2.5	6.0	12.0	4.5	8.0
	JUNE			JULY			AUGUST			SEPTEMBER		
1	13.0	7.5	10.0	16.5	11.5	13.5	18.0	13.0	15.5	17.0	13.5	15.5
2	13.5	7.5	10.5	16.5	11.5	14.0	16.0	13.0	14.5	15.5	13.0	14.5
3	13.0	8.0	10.5	15.0	11.5	13.5	18.0	13.0	15.5	14.5	10.5	13.0
4	13.5	8.5	11.0	16.0	11.5	14.0	19.0	13.0	16.0	16.0	12.5	14.5
5	12.5	9.0	10.5	16.5	11.0	14.0	17.5	13.0	15.5	16.0	12.5	14.0
6	12.0	9.0	10.0	16.0	11.5	14.5	17.5	13.0	15.5	16.0	10.5	13.5
7	12.0	7.5	9.5	16.0	12.0	14.0	17.5	13.0	15.0	16.5	11.5	14.0
8	10.5	8.0	9.0	16.0	10.0	13.0	17.5	11.5	15.0	16.5	11.5	14.0
9	12.0	8.0	10.0	16.5	11.0	14.0	18.0	12.0	15.5	16.0	12.5	14.5
10	11.0	9.0	10.0	16.5	12.5	14.5	18.0	12.0	15.5	17.5	13.0	15.0
11	12.0	8.5	10.0	18.0	12.5	15.5	18.5	12.5	15.5	17.0	12.5	15.0
12	11.5	7.5	9.5	18.5	12.0	15.5	18.5	12.5	16.0	15.5	12.0	13.5
13	12.0	9.0	10.5	18.5	13.0	16.0	18.5	12.5	15.5	12.5	10.5	12.0
14	13.0	8.5	10.5	18.5	13.5	16.5	18.5	12.5	16.0	12.5	10.5	11.5
15	11.5	8.5	9.5	19.5	14.0	16.5	17.0	13.5	15.5	12.0	10.0	11.0
16	13.5	7.0	10.0	20.0	14.0	17.0	18.0	14.0	16.0	13.0	10.5	11.5
17	13.5	8.0	10.5	19.5	14.5	17.0	17.5	14.5	16.0	13.0	9.5	11.5
18	11.5	9.0	10.5	18.0	15.5	16.5	18.5	14.5	16.5	12.0	10.5	11.0
19	11.5	9.0	10.0	19.0	14.5	16.5	18.5	13.5	16.5	10.5	9.0	9.5
20	13.5	8.0	10.5	19.0	15.0	17.0	19.0	13.5	16.0	11.0	8.5	9.5
21	14.5	9.0	11.5	19.0	14.0	16.5	17.5	14.0	16.0	9.5	8.0	9.0
22	15.0	9.5	12.5	19.0	13.5	16.5	16.5	14.5	15.5	10.5	8.5	9.5
23	16.0	10.5	13.0	19.0	13.5	16.5	16.0	13.0	14.5	11.5	9.0	10.5
24	16.5	11.0	13.5	19.5	13.5	16.5	14.5	12.0	13.5	12.5	9.0	11.0
25	16.0	11.5	14.0	17.0	13.5	15.5	14.5	13.0	13.5	13.0	9.0	11.0
26	16.0	11.5	13.5	19.0	12.5	15.5	14.5	11.5	13.0	13.0	9.0	11.0
27	14.0	11.5	13.0	18.0	13.0	16.0	15.5	11.5	13.5	13.0	9.0	11.0
28	14.5	11.0	13.0	18.5	13.0	15.5	16.0	11.5	14.0	12.5	9.0	11.0
29	14.0	11.0	12.5	18.5	12.5	15.5	17.5	12.0	15.0	12.5	8.5	10.5
30	15.5	11.0	13.0	18.5	12.0	15.5	18.0	12.5	15.5	12.0	8.5	10.5
31	---	---	---	18.5	12.5	16.0	18.5	13.0	16.0	---	---	---
MONTH	16.5	7.0	11.1	20.0	10.0	15.4	19.0	11.5	15.3	17.5	8.0	12.1

12350250 BITTERROOT RIVER AT BELL CROSSING, NEAR VICTOR, MT

LOCATION.--Lat 46°26'36", long 114°07'22" (NAD 27), in NW¼NW¼NE¼ sec. 20, T.8 N., R.20 W., Ravalli County, Hydrologic Unit 17010205, on right bank 20 ft downstream from highway bridge at Bell Crossing, 1.5 mi northeast of Victor, 2.0 mi upstream from Big Creek, and at river mile 38.3.

DRAINAGE AREA.--1,963 mi².

PERIOD OF RECORD.--April 1987 to current year (seasonal records only).

GAGE.--Water-stage recorder. Elevation of gage is 3,330 ft (NGVD 29).

REMARKS.--Seasonal records good. Some regulation by Painted Rocks Lake (station number 12342000). Diversions for irrigation of about 80,000 acres upstream from station. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, CALENDAR YEAR JANUARY TO DECEMBER 2004
DAILY MEAN VALUES

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1							1,900	337	611			
2							1,700	335	635			
3							1,510	333	e670			
4							1,400	341	e650			
5							1,310	332	e620			
6							1,170	331	e580			
7							1,080	339	e560			
8							1,050	329	534			
9							925	323	516			
10							833	318	495			
11							784	313	462			
12							721	312	573			
13							629	316	1,050			
14							577	311	1,110			
15							530	299	1,110			
16							491	301	1,120			
17							451	311	1,130			
18							438	376	1,070			
19							502	398	1,220			
20							572	400	1,370			
21							596	391	1,320			
22							485	409	1,200			
23							440	466	1,180			
24							409	555	1,190			
25							390	618	1,100			
26							403	1,080	1,020			
27							385	1,120	966			
28							371	912	921			
29							349	787	886			
30							327	707	824			
31							338	644	---			
TOTAL							23,066	14,344	26,693			
MEAN							744	463	890			
MAX							1,900	1,120	1,370			
MIN							327	299	462			
AC-FT							45,750	28,450	52,950			

STATISTICS OF MONTHLY MEAN DATA FOR SEASONS 1987 - 2004

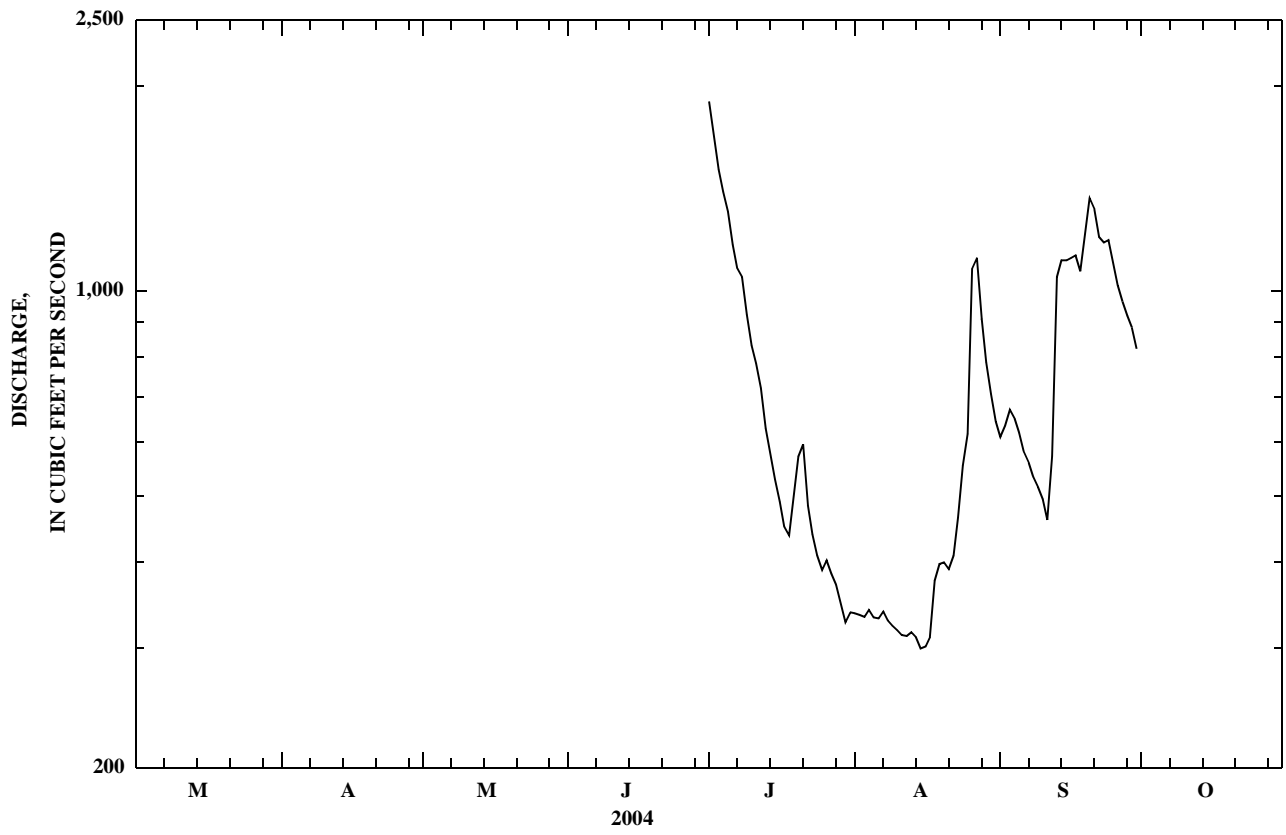
MEAN		1,713	3,769	5,158	1,198	386	404	541	1,798
MAX		3,052	5,177	11,060	2,665	670	890	947	1,798
(WY)		(1990)	(2003)	(1996)	(1996)	(1993)	(2004)	(1996)	(1996)
MIN		747	3,092	1,372	207	95.8	145	397	1,798
(WY)		(1991)	(1987)	(1987)	(1987)	(1988)	(1987)	(1989)	(1996)

SUMMARY STATISTICS

	FOR 2004 SEASON		FOR SEASONS 1987 - 2004	
HIGHEST DAILY MEAN	1,900	Jul 1	17,500	Jun 9, 1996
LOWEST DAILY MEAN	299	Aug 15	63	Jul 16, 1987
MAXIMUM PEAK FLOW			a18,700	Jun 9, 1996
MAXIMUM PEAK STAGE			10.82	May 31, 2003
INSTANTANEOUS LOW FLOW			60	Jul 16, 1987

a--Gage height, 10.07 ft.

e--Estimated.



12351200 BITTERROOT RIVER NEAR FLORENCE, MT

LOCATION.--Lat 46°38'00", long 114°03'00" (NAD 27), in SW¼SE¼SE¼ sec. 12, T.10 N., R.20 W., Ravalli County, Hydrologic Unit 17010205, on right bank 85 ft upstream from bridge on State secondary Highway 203, 1.3 mi east of Florence, 240 ft upstream from Eightmile Creek, and at river mile 22.7.
DRAINAGE AREA.--2,354 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1957 to December 1965, October 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,200 ft (NGVD 29). Prior to Jan. 1, 1966, nonrecording gage at different datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are fair. Some regulation by Painted Rocks Lake (station number 12342000). Diversions for irrigation of about 105,000 acres upstream from station. U.S. Geological Survey satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	470	874	724	553	684	624	2,050	2,590	4,780	2,990	581	1,010
2	500	826	712	600	631	616	2,090	2,950	4,500	2,750	578	1,060
3	500	852	718	610	577	621	1,930	3,850	4,740	2,480	579	1,130
4	500	817	706	e500	603	606	1,880	4,880	5,370	2,270	589	1,120
5	498	748	671	e370	610	615	2,210	5,690	6,570	2,140	567	1,060
6	492	649	705	e330	586	633	2,720	6,290	7,580	1,950	544	1,020
7	492	623	767	e300	569	629	3,240	5,790	6,910	1,800	576	1,010
8	500	632	774	e400	590	629	3,470	5,860	5,550	1,750	592	950
9	494	670	749	e500	581	658	3,460	5,510	5,070	1,540	563	898
10	490	703	711	e600	572	738	3,140	4,780	5,430	1,420	540	860
11	494	771	707	629	565	827	2,820	4,780	5,790	1,330	523	813
12	508	830	706	613	549	870	2,750	4,350	5,360	1,240	513	928
13	519	775	729	584	496	908	2,970	3,640	4,790	1,100	514	1,460
14	525	721	787	585	497	958	3,370	3,150	4,840	1,000	520	1,750
15	542	697	805	577	555	965	3,540	2,820	4,410	952	505	1,740
16	566	696	741	578	562	944	3,170	2,670	3,870	875	504	1,790
17	575	715	685	579	574	947	2,790	2,880	3,530	823	503	1,840
18	577	716	688	561	649	981	2,560	2,950	3,500	798	615	1,800
19	596	714	606	568	724	1,080	2,350	3,770	4,030	877	659	1,940
20	595	742	593	586	701	1,210	2,190	4,230	4,180	1,010	674	2,130
21	589	752	671	574	658	1,180	2,060	4,420	3,920	1,050	684	2,070
22	581	698	700	556	622	1,200	1,900	4,740	3,770	911	722	1,910
23	563	619	629	570	600	1,380	1,760	5,180	3,870	811	828	1,830
24	545	654	569	589	622	1,840	1,800	4,870	3,910	766	956	1,860
25	544	688	688	599	652	2,210	1,850	4,220	3,970	738	1,050	1,740
26	552	677	697	580	652	2,110	1,870	3,870	4,030	735	1,590	1,620
27	550	677	644	572	646	1,950	2,130	5,240	3,790	696	1,930	1,530
28	546	663	572	586	639	1,780	3,080	7,270	3,670	655	1,570	1,460
29	1,340	676	580	637	630	1,630	3,420	6,790	3,290	637	1,350	1,400
30	1,610	717	578	753	---	1,570	2,760	5,610	3,130	589	1,200	1,330
31	1,110	---	526	752	---	1,730	---	5,120	---	582	1,080	---
TOTAL	18,963	21,592	21,138	17,391	17,596	34,639	77,330	140,760	138,150	39,265	24,199	43,059
MEAN	612	720	682	561	607	1,117	2,578	4,541	4,605	1,267	781	1,435
MAX	1,610	874	805	753	724	2,210	3,540	7,270	7,580	2,990	1,930	2,130
MIN	470	619	526	300	496	606	1,760	2,590	3,130	582	503	813
AC-FT	37,610	42,830	41,930	34,500	34,900	68,710	153,400	279,200	274,000	77,880	48,000	85,410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2004, BY WATER YEAR (WY)*

MEAN	1,181	1,068	961	799	963	1,025	2,371	6,093	8,595	2,126	743	1,024
MAX	3,025	2,019	1,604	1,365	1,795	1,450	3,599	9,886	13,180	4,060	1,288	2,012
(WY)	(1960)	(1960)	(1959)	(1965)	(1963)	(2003)	(1965)	(1958)	(1964)	(1964)	(1965)	(1965)
MIN	566	585	561	561	607	644	1,279	4,321	4,605	935	399	573
(WY)	(1961)	(2003)	(2003)	(2004)	(2004)	(1964)	(1964)	(1960)	(2004)	(1961)	(1961)	(2003)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1957 - 2004*

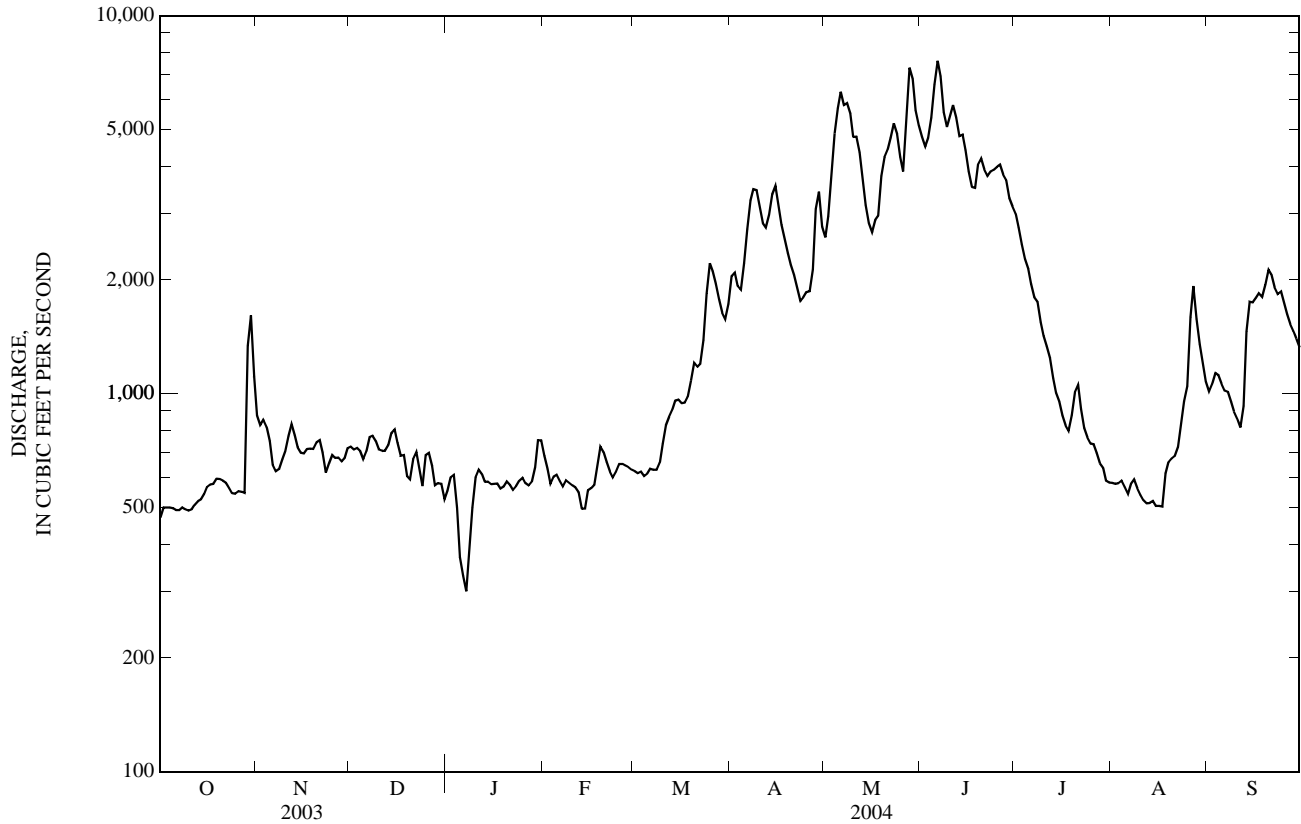
ANNUAL TOTAL	761,030	594,082	
ANNUAL MEAN	2,085	1,623	2,238
HIGHEST ANNUAL MEAN			3,070
LOWEST ANNUAL MEAN			1,623
HIGHEST DAILY MEAN	18,400	May 31	7,580
LOWEST DAILY MEAN	438	Jan 11	300
ANNUAL SEVEN-DAY MINIMUM	481	Sep 26	429
MAXIMUM PEAK FLOW			8,100
MAXIMUM PEAK STAGE			9.91
INSTANTANEOUS LOW FLOW			13.43
ANNUAL RUNOFF (AC-FT)	1,510,000	1,178,000	1,621,000
10 PERCENT EXCEEDS	4,980	4,080	6,030
50 PERCENT EXCEEDS	750	792	1,020
90 PERCENT EXCEEDS	546	548	580

*--During period of record, September 1957 to December 1965, October 2002 to current year.

a--Gage height, 10.82 ft, from graph based on gage readings, datum then in use.

b--Observed.

e--Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1997 to September 1997, March 2004 through August 2004.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd 25 degC uS/cm (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Particulate nitrogen, susp, water, mg/L (49570)	Total nitrogen, wat unfltrd, mg/L (62855)
MAR	15...	962	8.1	107	16.0	6.5	.031	E.001	.05	.91
MAY	26...	3,850	7.7	69	14.5	10.0	.034	<.002	.08	.16
JUN	23...	3,910	7.6	57	25.0	13.5	E.011	<.002	.03	.17
AUG	16...	510	8.1	161	33.0	19.0	.024	<.002	.04	.14

E--Estimated.

12351200 BITTERROOT RIVER NEAR FLORENCE, MT—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, suspnd sediment total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR 15...	E.003	.019	.6	1.8	75	7	18
MAY 26...	<.006	.017	.8	2.9	44	18	187
JUN 23...	<.006	.017	.5	2.1	64	10	106
AUG 16...	E.003	.006	.6	2.6	86	2	2.8

Date	Time	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	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)
MAR 15...	1630	42	12.6	2.54	1.14	.3	4.18	49	1.81	<.2
JUN 23...	1030	21	6.45	1.30	.83	.2	2.34	27	.73	<.2

Date	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)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recover-able, ug/L (01034)
MAR 15...	11.8	3.4	67	.09	174	.3	<2	<.04	<.04	<.8	<.8
JUN 23...	8.2	1.0	37	.05	393	.2	<2	<.04	<.04	<.8	<.8

Date	Copper, water, fltrd, ug/L (01040)	Copper, unfltrd recover-able, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
MAR 15...	1.0	1.0	<.08	.08	.30	.35	E.4	<2
JUN 23...	1.1	.9	<.08	.16	.19	.35	.8	E2

E--Estimated.

PEND OREILLE RIVER BASIN

12352500 BITTERROOT RIVER NEAR MISSOULA, MT

LOCATION--Lat 46°49'55", long 114°03'11" (NAD 27), in SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T.12 N., R.20 W., Missoula County, Hydrologic Unit 17010205, on right bank 40 ft downstream from bridge on U.S. Highway 93, 0.5 mi south of Fort Missoula, and at river mile 5.7.

DRAINAGE AREA--2,814 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD--July 1898 to November 1901, May 1903 to December 1904, July 1989 to current year.

GAGE--Water-stage recorder. Elevation of gage is 3,110 ft (NGVD 29). Prior to Jan. 1, 1905, nonrecording gage at site 1.5 mi upstream at different elevation.

REMARKS--Water-discharge records excellent except those for estimated discharges, which are poor. Some regulation by Painted Rocks Lake (station number 12342000). Diversions for irrigation of about 111,000 acres upstream from station. U.S. Geological Survey satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	521	1,010	825	624	781	714	2,240	3,060	5,720	3,360	678	1,100
2	539	924	813	647	725	708	2,370	3,310	5,310	3,110	668	1,120
3	548	952	815	661	667	703	2,220	4,220	5,390	2,820	668	1,200
4	547	931	799	e530	666	698	2,120	5,460	5,930	2,560	673	1,200
5	547	861	769	e400	685	695	2,390	6,360	7,060	2,410	658	1,150
6	550	765	801	e350	667	712	2,940	7,110	8,140	2,220	633	1,090
7	557	718	875	e320	642	711	3,550	6,720	8,120	2,020	639	1,060
8	567	720	879	e430	666	715	3,880	6,590	6,510	1,970	671	1,020
9	563	749	851	e550	662	736	4,000	6,360	5,870	1,790	649	966
10	557	794	810	e650	654	814	3,700	5,630	6,000	1,620	620	928
11	561	864	799	e700	638	914	3,340	5,470	6,430	1,510	603	889
12	580	925	799	714	623	963	3,180	5,190	6,190	1,420	590	924
13	593	896	807	681	572	996	3,360	4,370	5,490	1,290	585	1,290
14	603	838	857	651	557	1,050	3,800	3,800	5,470	1,170	587	1,700
15	618	801	898	653	595	1,070	4,130	3,410	5,070	1,110	575	1,730
16	643	794	843	662	636	1,060	3,790	3,200	4,530	1,030	571	1,760
17	660	811	788	650	643	1,050	3,340	3,340	4,030	973	568	1,850
18	663	819	769	638	720	1,090	3,060	3,420	3,910	936	647	1,890
19	674	821	700	639	825	1,200	2,820	4,100	4,390	996	703	2,030
20	679	852	648	664	852	1,340	2,620	4,800	4,780	1,120	714	2,170
21	675	863	718	655	790	1,340	2,470	4,980	4,460	1,180	726	2,150
22	664	815	782	620	739	1,320	2,280	5,340	4,240	1,070	748	2,030
23	652	734	730	633	705	1,490	2,120	5,820	4,280	961	851	1,900
24	633	733	650	645	710	1,930	2,100	5,700	4,360	902	970	1,930
25	625	786	722	654	739	2,410	2,190	5,000	4,380	868	1,050	1,840
26	632	780	776	646	749	2,380	2,200	4,510	4,530	848	1,390	1,730
27	638	773	737	636	743	2,220	2,390	5,410	4,270	825	1,980	1,620
28	633	760	659	643	732	2,040	3,320	7,960	4,160	779	1,690	1,560
29	1,040	765	634	680	723	1,880	4,100	7,870	3,740	754	1,460	1,490
30	1,810	808	635	784	---	1,790	3,380	6,740	3,510	713	1,310	1,430
31	1,310	---	582	840	---	1,890	---	6,060	---	684	1,180	---
TOTAL	21,082	24,662	23,770	19,250	20,106	38,629	89,400	161,310	156,270	45,019	26,055	44,747
MEAN	680	822	767	621	693	1,246	2,980	5,204	5,209	1,452	840	1,492
MAX	1,810	1,010	898	840	852	2,410	4,130	7,960	8,140	3,360	1,980	2,170
MIN	521	718	582	320	557	695	2,100	3,060	3,510	684	568	889
AC-FT	41,820	48,920	47,150	38,180	39,880	76,620	177,300	320,000	310,000	89,300	51,680	88,760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2004, BY WATER YEAR (WY)*

MEAN	987	1,056	975	880	986	1,274	2,815	6,659	8,367	3,096	1,019	904
MAX	1,570	2,211	3,141	1,791	3,030	2,021	4,944	13,430	21,880	14,510	3,412	1,623
(WY)	(1904)	(1996)	(1996)	(1997)	(1996)	(1997)	(1996)	(1997)	(1899)	(1899)	(1899)	(1899)
MIN	568	614	530	542	477	801	1,336	4,039	2,397	980	503	455
(WY)	(1905)	(1905)	(1905)	(1993)	(1994)	(2002)	(2001)	(1990)	(1992)	(1994)	(2000)	(1904)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1898 - 2004*

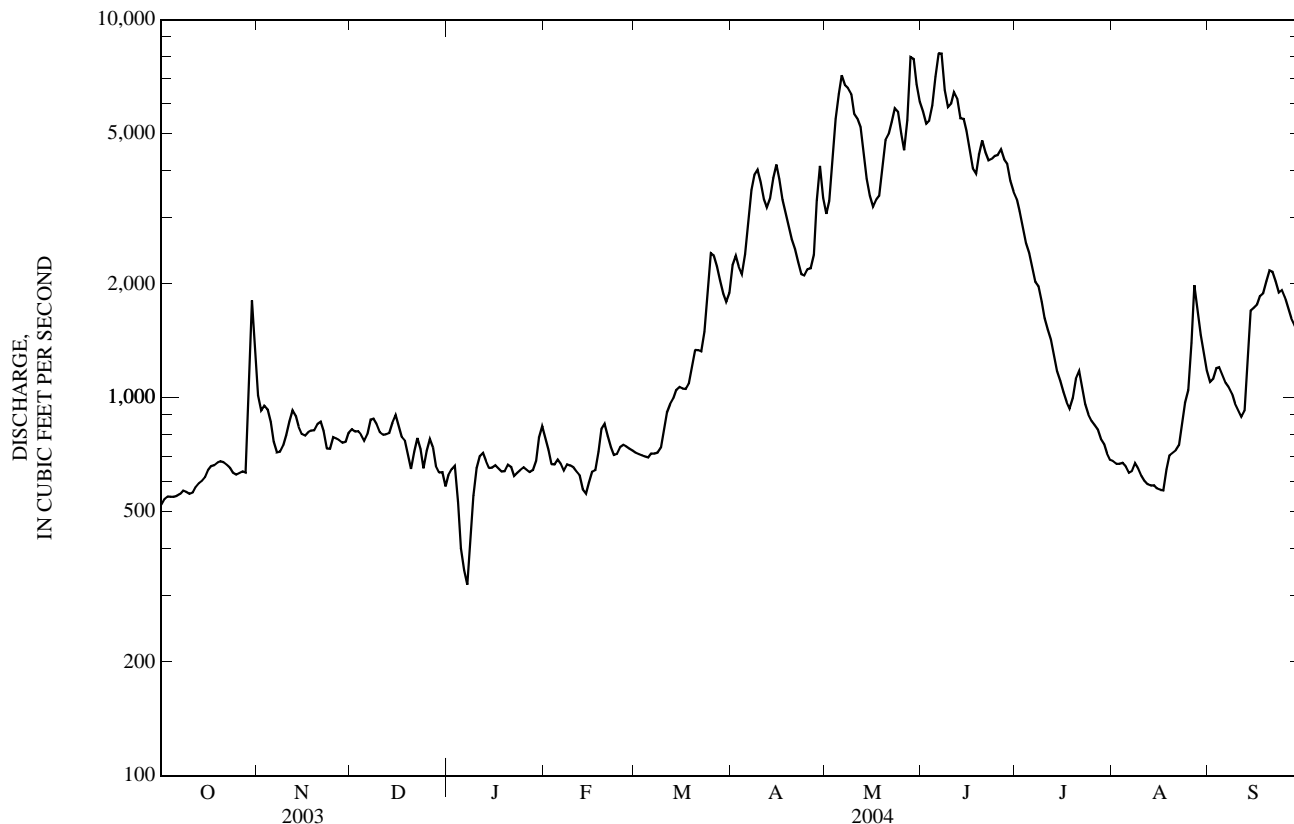
ANNUAL TOTAL	872,309	670,300	
ANNUAL MEAN	2,390	1,831	2,412
HIGHEST ANNUAL MEAN			4,864
LOWEST ANNUAL MEAN			1,366
HIGHEST DAILY MEAN	21,300	Jun 1	8,140
LOWEST DAILY MEAN	465	Jan 11	320
ANNUAL SEVEN-DAY MINIMUM	528	Sep 26	461
MAXIMUM PEAK FLOW			8,830
MAXIMUM PEAK STAGE			7.92
INSTANTANEOUS LOW FLOW			315
ANNUAL RUNOFF (AC-FT)	1,730,000	1,330,000	1,748,000
10 PERCENT EXCEEDS	5,910	4,600	6,120
50 PERCENT EXCEEDS	838	892	1,100
90 PERCENT EXCEEDS	609	625	636

*--During period of operation (July 1898 to November 1901, May 1903 to December 1904, and July 1989 to current year).

a--Observed gage height, 11.55 ft, site and datum then in use.

e--Estimated.

12352500 BITTERROOT RIVER NEAR MISSOULA, MT—Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1999 to current year (only seasonal records for 2003).

REMARKS.--Daily water temperature record rated good. Missing daily temperature data for Dec. 7 to Feb. 4 due to buried probe.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE : Maximum, 24.5°C, Aug. 1, 2000; July 20, 22 and Aug. 1, 2003; minimum, 0.0°C, many days during winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE : Maximum, 24.0°C, July 16; minimum, not determined, but probably 0.0°C, during periods of ice cover.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, water, unfltrd uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unfltrd, mg/L (62855)
MAR 16...	0800	1,060	8.2	115	9.0	5.5	.043	E.001	.27
MAY 25...	0725	5,040	7.7	68	6.5	9.5	.025	<.002	.16
JUN 24...	0700	4,340	7.6	59	17.0	16.0	E.012	<.002	.19
AUG 17...	0730	566	7.9	186	17.0	16.0	.072	E.001	.18

E--Estimated.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date		Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, suspnd total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Suspended sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)					
MAR	16...	E.004	.034	1.2	1.9	81	14	40					
MAY	25...	<.006	.020	.7	3.2	43	25	340					
JUN	24...	E.003	.017	.5	2.2	41	13	152					
AUG	17...	<.006	.005	.5	2.5	90	2	3.1					
Date	Time	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	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)
MAR	16...	48	13.9	3.18	1.20	.3	4.51	17	54	2.21	<.2	12.0	3.6
JUN	24...	24	7.07	1.51	.84	.2	2.44	18	28	.79	<.2	8.3	1.1
Date		Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recover-able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	
MAR	16...	73	.10	210	.3	<2	E.03	E.03	<.8	<.8	3.1	13.7	
JUN	24...	39	.05	458	.3	<2	<.04	<.04	E.6	<.8	.9	1.0	
Date		Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Lead, water, unfltrd recover-able, ug/L (01051)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)					
MAR	16...	.16	.97	.39	.56	.9	2						
JUN	24...	E.04	.14	.19	.21	.7	E1						

E--Estimated.

12352500 BITTERROOT RIVER NEAR MISSOULA, MT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.0	12.0	13.5	3.5	1.5	2.5	4.5	4.0	4.5	---	---	---
2	15.0	12.0	13.5	3.5	2.5	3.0	5.0	4.5	5.0	---	---	---
3	15.0	11.5	13.0	4.0	3.0	3.5	6.0	4.5	5.0	---	---	---
4	15.0	11.5	13.0	4.0	2.5	3.0	4.5	3.0	3.5	---	---	---
5	15.0	11.5	13.0	3.5	1.5	2.5	4.0	3.0	3.5	---	---	---
6	15.5	12.5	13.5	2.5	1.0	2.0	4.5	3.5	4.0	---	---	---
7	14.0	12.5	13.0	2.5	0.5	1.5	5.5	4.0	---	---	---	---
8	14.5	12.0	13.0	2.5	1.0	1.5	---	---	---	---	---	---
9	13.0	12.0	12.5	3.0	1.5	2.5	---	---	---	---	---	---
10	12.5	10.5	11.5	4.5	3.0	4.0	---	---	---	---	---	---
11	11.0	9.5	10.0	5.5	4.5	5.0	---	---	---	---	---	---
12	11.0	9.5	10.5	5.5	4.0	5.0	---	---	---	---	---	---
13	11.5	10.0	10.5	5.0	4.0	4.5	---	---	---	---	---	---
14	10.5	9.0	9.5	4.5	3.5	4.0	---	---	---	---	---	---
15	10.0	9.0	9.5	4.5	3.5	4.0	---	---	---	---	---	---
16	10.0	9.0	9.5	4.5	3.5	4.0	---	---	---	---	---	---
17	12.5	9.0	10.5	5.5	4.0	4.5	---	---	---	---	---	---
18	12.5	10.0	11.5	6.0	4.5	5.5	---	---	---	---	---	---
19	12.5	10.0	11.5	7.0	6.0	6.5	---	---	---	---	---	---
20	13.0	10.5	11.5	6.0	4.5	5.0	---	---	---	---	---	---
21	14.5	11.5	13.0	5.0	3.0	4.0	---	---	---	---	---	---
22	13.5	11.5	12.5	3.0	1.5	2.5	---	---	---	---	---	---
23	12.5	10.5	11.5	2.5	1.5	1.5	---	---	---	---	---	---
24	10.5	9.0	9.5	3.0	1.5	2.0	---	---	---	---	---	---
25	9.5	7.5	8.5	3.5	2.0	2.5	---	---	---	---	---	---
26	9.5	7.0	8.5	3.5	2.5	3.0	---	---	---	---	---	---
27	9.0	8.0	8.5	4.0	2.5	3.0	---	---	---	---	---	---
28	10.5	8.5	9.5	4.0	2.5	3.5	---	---	---	---	---	---
29	10.5	6.5	8.5	4.5	3.5	4.0	---	---	---	---	---	---
30	6.5	3.5	5.0	5.0	4.5	4.5	---	---	---	---	---	---
31	3.5	2.0	2.5	---	---	---	---	---	---	---	---	---
MONTH	15.5	2.0	10.5	7.0	0.5	3.5	6.0	3.0	4.0	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	6.5	4.0	5.0	9.5	7.5	8.0	12.5	9.5	11.0
2	---	---	---	5.5	4.5	5.0	8.0	6.0	7.0	13.0	11.0	12.0
3	---	---	---	5.5	3.5	4.5	9.5	6.5	8.0	12.5	11.5	12.0
4	3.0	---	---	6.0	4.0	5.0	11.0	9.0	9.5	12.0	10.5	11.5
5	3.5	2.5	3.0	6.0	4.0	5.0	10.5	8.5	10.0	12.0	10.5	11.5
6	2.5	1.0	2.0	5.5	3.0	4.5	11.5	9.5	10.5	12.0	10.0	11.0
7	3.0	1.5	2.0	5.5	4.0	4.5	10.5	8.5	9.5	12.0	10.0	11.0
8	3.5	2.5	3.0	9.0	5.0	7.0	9.5	8.5	9.0	12.0	10.5	11.0
9	4.5	2.5	3.5	7.5	6.5	7.0	9.0	7.5	8.0	11.5	9.5	10.5
10	3.5	3.0	3.0	9.0	5.5	7.0	9.0	7.0	8.0	11.0	9.0	9.5
11	4.5	2.0	3.0	8.0	6.0	7.0	10.0	7.5	8.5	9.0	8.0	8.5
12	3.5	1.5	2.5	8.5	5.5	7.0	11.0	8.5	9.5	8.5	7.5	8.0
13	3.0	0.5	2.0	8.0	6.0	7.0	10.5	9.0	10.0	9.0	7.5	8.5
14	2.5	1.0	1.5	7.0	6.0	6.5	10.5	9.0	9.5	11.0	8.0	9.5
15	3.0	1.5	2.0	8.0	5.0	6.5	9.5	8.0	8.5	11.5	9.5	10.5
16	3.5	1.5	2.5	9.0	7.0	7.5	9.0	7.0	8.0	11.0	10.5	10.5
17	3.5	3.0	3.5	8.0	6.5	7.5	8.5	7.5	8.0	12.5	9.5	11.0
18	4.5	3.0	3.5	9.0	6.0	7.5	9.5	7.0	8.5	12.0	10.0	11.0
19	5.0	3.5	4.0	8.5	6.5	7.5	9.5	8.0	9.0	11.5	9.5	10.5
20	4.5	3.5	3.5	8.0	5.5	7.0	9.5	8.0	8.5	13.0	10.5	11.5
21	5.0	3.0	4.0	9.5	6.0	7.5	10.5	7.5	9.0	13.0	12.0	12.5
22	5.0	2.5	3.5	10.5	7.5	9.0	11.5	8.0	9.5	12.0	11.0	11.5
23	5.5	2.5	3.5	11.0	8.5	9.5	12.5	9.0	10.5	11.0	9.5	10.0
24	5.0	3.0	4.0	9.5	8.0	9.0	13.0	10.0	11.5	11.0	8.5	9.5
25	6.0	4.0	5.0	8.5	7.0	8.0	12.5	9.5	11.0	11.5	9.5	10.5
26	6.5	5.0	5.5	8.5	7.5	8.0	13.5	10.0	12.0	12.0	11.0	11.5
27	6.5	4.5	5.5	7.5	6.0	6.5	13.5	11.0	12.5	12.5	11.0	11.5
28	6.5	4.0	5.0	9.0	6.0	7.5	12.5	8.5	10.5	12.5	10.5	11.0
29	6.0	4.0	5.0	9.5	6.5	8.0	9.5	6.5	8.0	10.5	9.0	9.5
30	---	---	---	11.0	7.5	9.0	11.5	8.0	9.5	11.0	8.5	9.5
31	---	---	---	10.0	8.5	9.5	---	---	---	12.5	10.5	11.0
MONTH	6.5	0.5	3.5	11.0	3.0	7.0	13.5	6.0	9.5	13.0	7.5	10.5

PEND OREILLE RIVER BASIN

12352500 BITTERROOT RIVER NEAR MISSOULA, MT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.5	10.5	12.0	18.5	16.0	17.0	23.0	18.0	20.5	19.0	17.0	18.0
2	14.5	12.0	13.5	19.5	17.0	18.0	21.5	19.0	20.0	17.5	15.0	16.0
3	15.0	13.0	14.0	18.5	16.5	17.5	22.5	18.5	20.0	15.0	13.0	14.0
4	16.0	13.5	14.5	17.5	15.5	16.5	22.5	18.0	20.5	16.0	13.5	14.5
5	15.5	13.5	14.5	18.0	15.0	16.5	23.0	18.5	21.0	16.5	14.0	15.5
6	14.5	12.5	13.0	19.0	16.0	17.5	22.5	18.5	20.5	17.0	13.5	15.5
7	13.5	11.0	12.5	19.0	17.0	18.0	20.5	17.5	19.0	17.5	14.5	16.0
8	13.5	11.5	12.0	17.5	15.0	16.5	21.0	16.0	18.5	17.5	14.5	16.0
9	13.0	10.5	11.5	19.0	14.5	16.5	22.0	17.0	19.0	17.0	15.0	16.0
10	13.0	12.0	12.5	20.5	16.5	18.5	22.5	17.5	20.0	18.0	14.5	16.0
11	12.5	11.0	12.0	20.0	17.0	18.5	22.5	17.5	20.0	16.5	15.0	16.0
12	13.5	11.5	12.5	20.5	16.5	18.5	22.5	17.5	20.0	16.5	15.0	15.5
13	14.5	12.5	13.0	21.5	17.0	19.5	22.5	17.5	20.0	16.0	14.0	15.0
14	14.5	12.0	13.5	22.0	18.0	20.0	22.5	18.0	20.5	15.5	14.0	14.5
15	14.0	12.5	13.0	23.0	19.0	21.0	22.5	18.0	20.5	14.0	13.0	13.5
16	14.5	11.0	12.5	24.0	19.5	21.5	21.5	19.0	20.0	14.0	12.5	13.5
17	15.5	13.0	14.0	23.5	19.5	21.5	21.5	18.0	20.0	13.5	12.5	13.0
18	14.5	13.0	13.5	22.0	20.0	20.5	21.0	19.0	19.5	12.5	12.0	12.5
19	13.0	11.5	12.5	23.0	18.5	20.5	21.5	18.0	19.5	12.0	11.0	11.5
20	14.5	11.5	13.0	22.0	19.5	20.5	21.5	17.5	19.5	12.0	10.5	11.0
21	16.5	13.5	15.0	22.0	18.5	20.5	22.5	18.0	20.0	11.5	10.5	11.0
22	17.0	14.5	16.0	22.0	18.5	20.0	20.5	18.0	19.0	12.0	10.5	11.0
23	18.0	15.5	16.5	23.0	18.5	20.5	18.0	15.0	16.5	13.0	12.0	12.5
24	18.0	16.0	17.0	23.5	18.5	21.0	15.0	14.5	15.0	14.5	12.0	13.0
25	17.5	16.0	16.5	23.5	19.5	21.0	16.0	14.5	15.0	15.0	12.5	13.5
26	17.0	15.5	16.5	23.0	18.0	20.5	15.0	14.0	14.5	15.5	13.0	14.0
27	17.0	16.0	16.5	22.0	18.5	20.0	16.0	14.0	15.0	15.5	13.0	14.0
28	17.5	15.0	16.5	22.5	17.5	20.0	16.0	14.5	15.0	15.0	13.0	14.0
29	18.0	16.0	17.0	22.5	18.0	20.5	17.5	14.5	15.5	15.0	12.5	13.5
30	18.0	15.5	16.5	22.5	18.5	20.5	19.0	15.5	17.0	14.0	12.0	13.0
31	---	---	---	21.5	18.0	20.0	19.5	16.0	18.0	---	---	---
MONTH	18.0	10.5	14.0	24.0	14.5	19.5	23.0	14.0	18.5	19.0	10.5	14.0

12353000 CLARK FORK BELOW MISSOULA, MT

LOCATION.--Lat 46°52'09", long 114°07'33" (NAD 27), in NW¼NE¼SE¼ sec.21, T.13 N., R.20 W., Missoula County, Hydrologic Unit 17010204, on right bank 1.0 mi downstream from Bitterroot River, 4.5 mi west of Missoula, and at river mile 349.5.

DRAINAGE AREA.--9,003 mi².

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

REVISED RECORDS.--WSP 1042: 1931. WSP 1246: Drainage area. WSP 1316: 1932(M), 1935(M), 1946(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,083.88 ft (NGVD 29) (levels by U.S. Army Corps of Engineers).

REMARKS.--Records excellent. Some diurnal fluctuation at low flow caused by powerplant at Milltown 14.9 mi upstream. Diversions for irrigation of about 235,000 acres upstream from station. U.S. Geological Survey satellite telemeter at station. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,520	2,140	2,090	1,390	1,990	1,940	4,830	7,290	11,600	6,510	1,810	2,300
2	1,560	2,070	2,070	1,500	1,870	1,920	5,150	7,470	10,800	6,090	1,780	2,300
3	1,580	2,170	2,080	1,620	1,780	1,900	5,020	8,740	10,700	5,590	1,760	2,410
4	1,580	2,160	2,080	1,360	1,760	1,890	4,860	10,600	11,200	5,240	1,760	2,370
5	1,610	2,050	2,030	1,000	1,810	1,880	5,190	12,100	12,800	5,090	1,760	2,350
6	1,620	1,810	2,060	868	1,790	1,880	5,940	13,400	14,500	4,860	1,730	2,270
7	1,620	1,740	2,140	796	1,750	1,890	6,890	13,200	14,900	4,560	1,750	2,230
8	1,620	1,760	2,160	1,030	1,770	1,910	7,670	13,000	12,700	4,450	1,770	2,170
9	1,600	1,910	2,130	1,360	1,780	2,590	8,160	12,900	11,500	4,130	1,740	2,110
10	1,600	2,140	2,030	1,650	1,790	3,110	7,910	11,900	11,400	3,900	1,680	2,070
11	1,610	2,300	1,970	1,790	1,750	3,450	7,370	11,400	12,800	3,730	1,600	1,980
12	1,670	2,340	2,030	1,820	1,720	3,170	7,080	10,600	12,600	3,610	1,570	2,040
13	1,710	2,200	2,050	1,770	1,590	3,070	7,260	9,260	11,300	3,360	1,530	2,490
14	1,710	2,130	2,070	1,740	1,410	3,230	8,060	8,210	10,800	3,160	1,490	3,180
15	1,770	2,020	2,130	1,750	1,530	3,020	8,740	7,450	10,000	2,980	1,440	3,210
16	1,810	2,020	2,040	1,770	1,760	2,940	8,420	6,930	9,170	2,840	1,390	3,220
17	1,840	2,060	1,920	1,770	1,750	2,930	7,790	7,020	8,300	2,780	1,370	3,260
18	1,810	2,110	1,920	1,760	1,840	3,030	7,220	7,050	7,900	2,660	1,460	3,340
19	1,810	2,090	1,750	1,740	1,980	3,370	6,720	7,950	8,260	2,680	1,520	3,560
20	1,770	2,090	1,530	1,800	2,060	3,630	6,300	8,980	8,650	2,800	1,620	3,880
21	1,800	2,180	1,720	1,830	2,020	3,480	6,010	9,180	8,080	2,870	1,700	4,050
22	1,740	2,090	2,000	1,800	1,940	3,340	5,670	10,000	7,720	2,700	1,650	3,870
23	1,740	1,890	1,820	1,800	1,870	3,560	5,280	11,300	7,630	2,500	1,890	3,660
24	1,740	1,800	1,580	1,820	1,860	4,120	5,250	11,500	7,590	2,370	2,150	3,710
25	1,730	1,990	1,820	1,850	1,920	4,810	5,410	10,400	7,600	2,290	2,320	3,630
26	1,740	2,000	2,010	1,810	2,000	4,910	5,440	9,560	7,790	2,230	2,630	3,480
27	1,760	2,000	1,880	1,780	2,030	4,800	5,820	10,300	7,620	2,160	3,320	3,330
28	1,760	1,960	1,690	1,760	2,010	4,580	7,330	13,500	7,630	2,080	3,080	3,210
29	2,210	1,950	1,560	1,850	1,950	4,340	8,740	14,100	7,200	1,980	2,820	3,120
30	3,110	2,130	1,500	1,990	---	4,200	7,920	13,200	6,850	1,900	2,600	3,070
31	2,640	---	1,340	2,050	---	4,260	---	12,200	---	1,840	2,420	---
TOTAL	55,390	61,300	59,200	50,624	53,080	99,150	199,450	320,690	297,590	105,940	59,110	87,870
MEAN	1,787	2,043	1,910	1,633	1,830	3,198	6,648	10,340	9,920	3,417	1,907	2,929
MAX	3,110	2,340	2,160	2,050	2,060	4,910	8,740	14,100	14,900	6,510	3,320	4,050
MIN	1,520	1,740	1,340	796	1,410	1,880	4,830	6,930	6,850	1,840	1,370	1,980
AC-FT	109,900	121,600	117,400	100,400	105,300	196,700	395,600	636,100	590,300	210,100	117,200	174,300

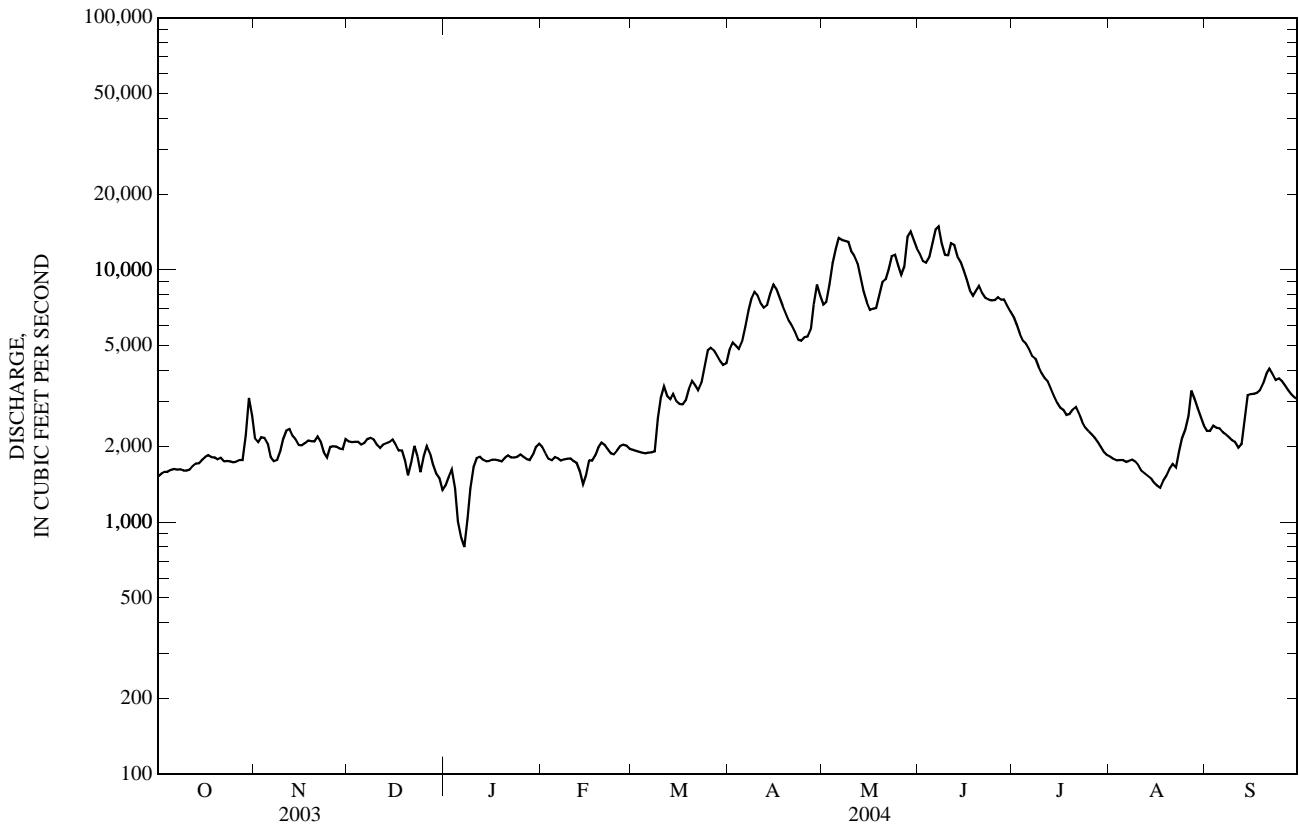
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2004, BY WATER YEAR (WY)

MEAN	2,703	2,719	2,465	2,236	2,485	3,098	6,404	14,730	16,640	5,798	2,291	2,290
MAX	6,617	5,110	6,064	4,401	6,697	7,012	16,500	30,440	33,970	16,320	5,530	5,160
(WY)	(1960)	(1960)	(1996)	(1934)	(1996)	(1972)	(1934)	(1997)	(1972)	(1975)	(1975)	(1965)
MIN	1,393	1,471	1,414	871	1,108	1,743	2,302	5,113	4,619	1,361	810	909
(WY)	(1938)	(1938)	(1988)	(1937)	(1933)	(1937)	(1941)	(1941)	(1987)	(1931)	(1931)	(1937)

12353000 CLARK FORK BELOW MISSOULA, MT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1930 - 2004	
ANNUAL TOTAL	1,848,860		1,449,394			
ANNUAL MEAN	5,065		3,960		5,324	
HIGHEST ANNUAL MEAN					8,832	
LOWEST ANNUAL MEAN					2,582	
HIGHEST DAILY MEAN	38,300	Jun 1	14,900	Jun 7	54,100	May 18, 1997
LOWEST DAILY MEAN	1,190	Jan 11	796	Jan 7	580	Jan 19, 1933
ANNUAL SEVEN-DAY MINIMUM	1,510	Jan 7	1,150	Jan 3	660	Dec 8, 1932
MAXIMUM PEAK FLOW			15,600		55,100	
MAXIMUM PEAK STAGE			6.25		12.18	
INSTANTANEOUS LOW FLOW			a707		b388	
ANNUAL RUNOFF (AC-FT)	3,667,000		2,875,000		3,857,000	
10 PERCENT EXCEEDS	12,300		9,170		13,200	
50 PERCENT EXCEEDS	2,110		2,160		2,780	
90 PERCENT EXCEEDS	1,590		1,620		1,620	

a--Gage height, 0.14 ft, result of freezeup.
 b--Gage height, 0.58 ft, result of freezeup.



12354000 ST. REGIS RIVER NEAR ST. REGIS, MT

LOCATION.--Lat 47°17'49", long 115°07'18", (NAD 27) near center of NW¼NE¼ sec.26, T.18 N., R.28 W., Mineral County, on left bank 50 ft downstream from road bridge, 500 ft upstream from Little Joe Creek, 1.2 mi west of St. Regis, and at river mile 1.7.

DRAINAGE AREA.--303 mi².

PERIOD OF RECORD.--September 1910 to September 1917 (no winter records), annual maximum, water year 1948, published in WSP 1080, September 1958 to September 1975, February 2002 to current year. Monthly discharge only for some periods, published in WSP 1316, 1736.

REVISED RECORDS.--WSP 1246: water year 1912; WSP 1316: drainage area, 1911.

GAGE.--Water-stage recorder. Elevation of gage is 2,645.00 ft (NGVD 29). September 1910 to September 1917, non-recording gage at site 2 mi upstream at different elevation.

REMARKS.--Records good. Minor diversions for irrigation of hay meadows above station. Bureau of Reclamation satellite telemeter at station. Several observations of water temperature and specific conductance were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood on or about Dec. 20, 1933, reached a stage of about 14.5 ft, from information by local residents (discharge unknown). Flood of May 19, 1954, reached a discharge of about 11,000 ft³/s, gage height, 9.4 ft, from rating curve extended above 5,100 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	86	125	e75	149	145	807	1,030	1,130	397	145	136
2	71	90	119	e73	135	146	761	1,130	1,080	366	140	138
3	70	91	122	e72	128	143	766	1,330	1,060	341	146	138
4	69	89	132	e72	124	143	837	1,450	1,080	328	152	134
5	68	82	124	e68	120	142	1,000	1,450	1,110	325	143	129
6	68	e68	145	e64	113	141	1,120	1,360	1,170	303	138	123
7	67	e70	171	e72	117	137	1,220	1,260	1,060	287	151	120
8	68	73	148	e75	112	140	1,290	1,270	967	276	148	117
9	71	74	138	e80	110	168	1,240	1,230	897	264	138	115
10	71	80	131	91	108	198	1,150	1,160	863	253	133	114
11	70	109	125	91	107	223	1,100	1,200	842	248	130	113
12	77	118	120	88	98	238	1,100	1,080	787	235	126	121
13	93	102	120	87	92	272	1,180	972	759	227	123	122
14	96	96	124	87	95	283	1,420	898	734	218	120	130
15	89	92	117	90	103	288	1,450	846	685	211	117	147
16	98	91	111	93	108	318	1,280	864	638	204	115	174
17	115	95	112	92	109	350	1,130	896	603	198	114	163
18	102	118	108	89	134	444	1,020	911	584	196	115	158
19	92	212	97	88	167	691	937	932	566	201	122	168
20	87	188	83	88	156	648	889	1,030	543	204	123	153
21	83	149	101	86	147	580	844	1,130	519	192	123	146
22	81	126	106	85	142	581	797	1,320	502	184	117	140
23	81	113	101	88	140	677	782	1,350	487	179	127	136
24	81	112	98	89	148	793	822	1,250	468	173	137	133
25	80	109	99	89	145	779	816	1,160	463	169	176	130
26	79	107	100	87	145	733	846	1,160	486	163	356	126
27	78	102	97	87	145	699	970	1,320	468	159	234	123
28	82	99	93	90	146	662	1,160	1,350	420	157	189	120
29	156	115	86	100	146	633	1,100	1,300	469	154	167	117
30	123	133	76	154	---	658	1,040	1,200	408	150	152	115
31	101	---	76	174	---	777	---	1,210	---	147	141	---
TOTAL	2,637	3,189	3,505	2,764	3,689	12,830	30,874	36,049	21,848	7,109	4,558	3,999
MEAN	85.1	106	113	89.2	127	414	1,029	1,163	728	229	147	133
MAX	156	212	171	174	167	793	1,450	1,450	1,170	397	356	174
MIN	67	68	76	64	92	137	761	846	408	147	114	113
AC-FT	5,230	6,330	6,950	5,480	7,320	25,450	61,240	71,500	43,340	14,100	9,040	7,930
CFSM	0.28	0.35	0.37	0.29	0.42	1.37	3.40	3.84	2.40	0.76	0.49	0.44
IN.	0.32	0.39	0.43	0.34	0.45	1.58	3.79	4.43	2.68	0.87	0.56	0.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2004, BY WATER YEAR (WY)*

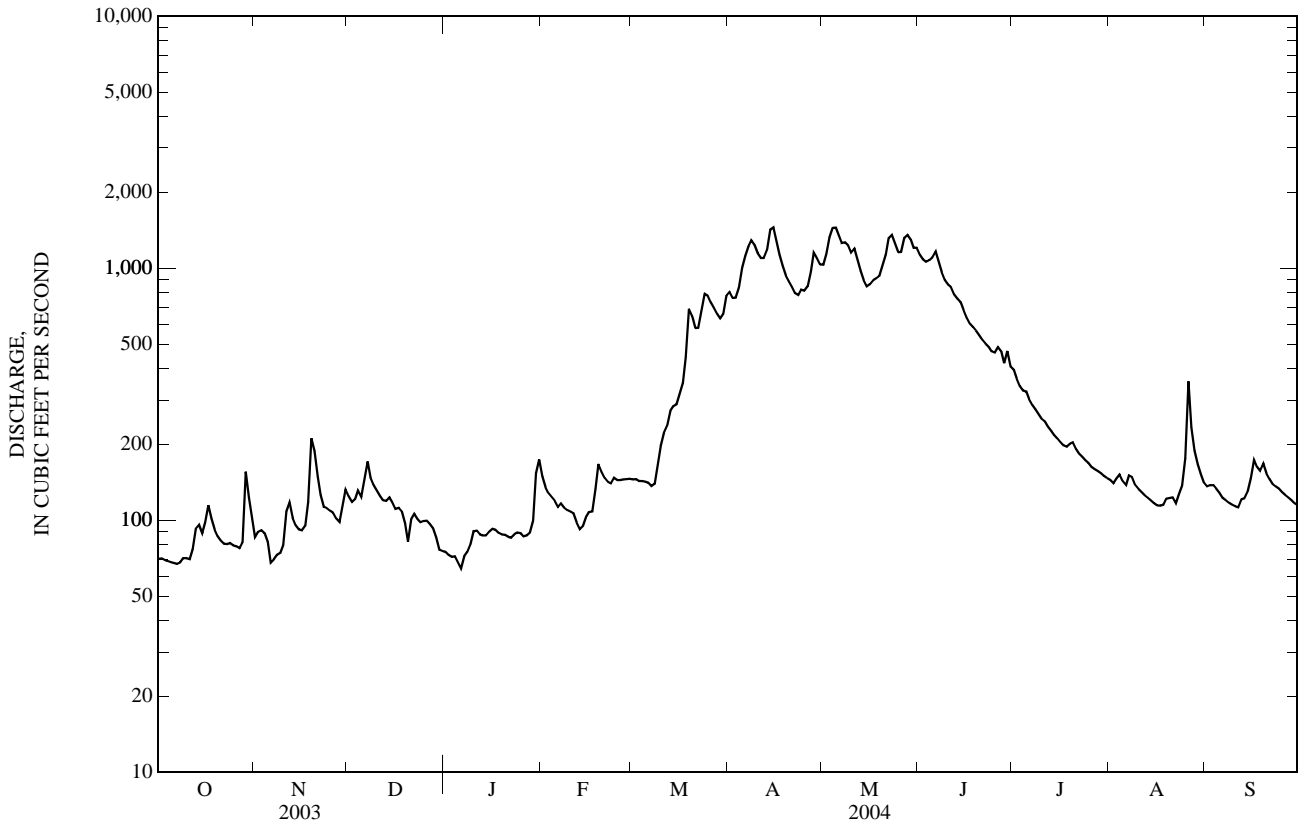
MEAN	138	223	204	264	294	415	1,234	2,136	1,505	391	162	130
MAX	350	590	555	1,363	759	1,366	2,057	4,700	3,367	1,150	313	204
(WY)	(1960)	(1915)	(1959)	(1974)	(1971)	(1972)	(1916)	(1917)	(1974)	(1916)	(1916)	(1914)
MIN	85.1	101	92.4	89.2	86.6	94.2	349	671	388	155	83.1	77.3
(WY)	(2004)	(1962)	(1964)	(2004)	(1964)	(1964)	(1975)	(1915)	(1915)	(1973)	(1973)	(1973)

PEND OREILLE RIVER BASIN

12354000 ST. REGIS RIVER NEAR ST. REGIS, MT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1910 - 2004*	
ANNUAL TOTAL	142,872		133,051			
ANNUAL MEAN	391		364		559	
HIGHEST ANNUAL MEAN					938	1974
LOWEST ANNUAL MEAN					256	1973
HIGHEST DAILY MEAN	1,820	May 26	1,450	Apr 15	8,500	Jan 16, 1974
LOWEST DAILY MEAN	67	Oct 7	64	Jan 6	45	Dec 11, 1961
ANNUAL SEVEN-DAY MINIMUM	69	Oct 2	69	Oct 2	59	Dec 5, 1972
MAXIMUM PEAK FLOW			a1,510	Apr 14	b9,640	Jan 16, 1974
MAXIMUM PEAK STAGE			5.39	Apr 14	7.54	Apr 14, 2002
INSTANTANEOUS LOW FLOW					c41	Dec 30, 2001
ANNUAL RUNOFF (AC-FT)	283,400		263,900		404,900	
ANNUAL RUNOFF (CFSM)	1.29		1.20		1.84	
ANNUAL RUNOFF (INCHES)	17.54		16.33		25.06	
10 PERCENT EXCEEDS	1,100		1,100		1,540	
50 PERCENT EXCEEDS	145		145		211	
90 PERCENT EXCEEDS	78		83		97	

*--During periods of operation [September 1910 to September 1917 (no winter records), September 1958 to September 1975, February 2002 to current year).
 a--Also occurred May 5.
 b--Gage height, 7.38 ft.
 c--Result of freezeup.
 e--Estimated.



12354500 CLARK FORK AT ST. REGIS, MT

LOCATION.--Lat 47°18'07", long 115°05'11" (NAD 27), in NW¼SE¼SW¼ sec.19, T.18 N., R.27 W., Mineral County, Hydrologic Unit 17010204, on left bank at St. Regis, 0.4 mi downstream from St. Regis River, and at river mile 270.3.

DRAINAGE AREA.--10,709 mi².

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods, published in WSP 1316.

REVISED RECORDS.--WSP 1246: Drainage area. WSP 1316: 1916-17, 1920, 1929-31(M), 1933(M).

GAGE.--Water-stage recorder. Elevation of gage is 2,600.37 ft (NGVD 29) (levels by U.S. Army Corps of Engineers). Prior to Nov. 29, 1933, nonrecording gage at same site and elevation.

REMARKS.--Records good. Diversions for irrigation of about 244,000 acres upstream from station. U.S. Geological Survey satellite telemeter at station. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,980	3,120	2,720	e1,800	2,630	2,550	6,230	10,600	16,500	8,440	2,590	3,160
2	1,990	2,730	2,690	e1,850	2,530	2,530	6,750	10,500	15,500	8,020	2,530	3,080
3	2,030	2,670	2,690	e1,900	2,410	2,510	6,900	11,600	14,900	7,520	2,490	3,060
4	2,050	2,760	2,720	e1,800	2,310	2,490	6,820	13,500	15,000	7,030	2,480	3,140
5	2,050	2,700	2,690	1,490	2,280	2,480	7,050	15,600	16,000	6,720	2,450	3,090
6	2,080	2,550	2,700	826	2,310	2,470	7,830	16,800	18,100	6,490	2,430	3,040
7	2,080	2,330	2,780	970	2,290	2,460	8,910	17,400	19,200	6,190	2,430	2,960
8	2,080	2,290	2,810	1,130	2,250	2,460	10,000	17,000	17,700	5,900	2,430	2,900
9	2,090	2,320	2,800	1,420	2,260	2,560	10,700	17,000	15,800	5,730	2,420	2,840
10	2,070	2,450	2,760	1,790	2,270	3,370	10,800	16,300	14,800	5,360	2,380	2,780
11	2,070	2,750	2,650	2,190	2,260	3,950	10,300	15,400	15,200	5,120	2,310	2,730
12	2,100	2,930	2,590	2,420	2,210	4,260	9,850	14,700	15,900	4,930	2,220	2,680
13	2,170	2,890	2,640	2,410	2,160	4,000	9,910	13,200	15,000	4,750	2,160	2,770
14	2,220	2,770	2,690	2,390	2,050	4,060	10,800	11,800	13,900	4,520	2,120	3,220
15	2,230	2,690	2,700	2,320	1,900	4,140	11,800	10,700	13,300	4,240	2,070	3,880
16	2,300	2,590	2,720	2,350	2,000	3,970	11,800	10,100	12,400	4,030	2,010	4,020
17	2,360	2,590	2,640	2,350	2,240	3,970	11,000	9,860	11,400	3,860	1,990	4,040
18	2,380	2,650	2,520	2,360	2,360	4,090	10,200	9,970	10,600	3,740	1,980	4,150
19	2,330	2,810	2,470	2,360	2,490	4,570	9,510	10,200	10,400	3,730	2,070	4,310
20	2,320	2,800	2,300	2,370	2,590	4,970	9,000	11,500	10,800	3,740	2,120	4,470
21	2,290	2,750	2,130	2,450	2,660	5,000	8,520	12,500	10,700	3,770	2,190	4,790
22	2,300	2,780	2,290	2,440	2,600	4,830	8,150	13,600	10,100	3,780	2,250	4,870
23	2,240	2,660	2,530	2,400	2,510	4,880	7,800	15,000	9,770	3,580	2,310	4,690
24	2,260	2,490	2,360	2,380	2,460	5,400	7,540	15,800	9,680	3,370	2,560	4,540
25	2,250	2,410	2,160	2,360	2,450	6,090	7,590	15,000	9,570	3,220	2,860	4,550
26	2,240	2,570	2,360	2,360	2,520	6,600	7,750	14,000	9,660	3,120	3,340	4,440
27	2,250	2,570	2,530	2,310	2,600	6,570	8,110	14,300	9,680	3,030	3,620	4,290
28	2,280	2,540	2,420	2,270	2,620	6,380	9,340	17,000	9,370	2,950	4,040	4,130
29	2,460	2,540	2,230	2,270	2,600	6,090	11,000	19,000	9,360	2,850	3,820	4,010
30	2,830	2,570	2,050	2,440	---	5,900	11,300	18,500	8,770	2,770	3,570	3,920
31	3,530	---	e1,900	2,620	---	5,930	---	17,400	---	2,660	3,350	---
TOTAL	69,910	79,270	78,240	64,796	68,820	131,530	273,260	435,830	389,060	145,160	79,590	110,550
MEAN	2,255	2,642	2,524	2,090	2,373	4,243	9,109	14,060	12,970	4,683	2,567	3,685
MAX	3,530	3,120	2,810	2,620	2,660	6,600	11,800	19,000	19,200	8,440	4,040	4,870
MIN	1,980	2,290	1,900	826	1,900	2,460	6,230	9,860	8,770	2,660	1,980	2,680
MED	2,240	2,650	2,640	2,350	2,360	4,090	9,170	14,300	12,800	4,030	2,430	3,900
AC-FT	138,700	157,200	155,200	128,500	136,500	260,900	542,000	864,500	771,700	287,900	157,900	219,300
CFSM	0.21	0.25	0.24	0.20	0.22	0.40	0.85	1.31	1.21	0.44	0.24	0.34
IN.	0.24	0.28	0.27	0.23	0.24	0.46	0.95	1.51	1.35	0.50	0.28	0.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2004, BY WATER YEAR (WY)*

MEAN	3,390	3,547	3,424	3,099	3,460	4,294	9,248	20,100	21,400	7,616	3,139	2,980
MAX	8,042	7,047	10,710	8,520	10,660	11,490	24,880	42,140	42,410	19,460	6,747	6,252
(WY)	(1960)	(1934)	(1934)	(1934)	(1996)	(1972)	(1934)	(1997)	(1972)	(1975)	(1975)	(1965)
MIN	1,854	1,942	1,909	1,474	1,592	2,199	3,333	7,190	6,021	1,998	1,454	1,351
(WY)	(1938)	(1932)	(1937)	(1937)	(1936)	(1937)	(1937)	(1941)	(1987)	(1931)	(1931)	(1937)

PEND OREILLE RIVER BASIN

12354500 CLARK FORK AT ST. REGIS, MT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1930 - 2004*	
ANNUAL TOTAL	2,388,870		1,926,016			
ANNUAL MEAN	6,545		5,262		7,146	
HIGHEST ANNUAL MEAN					11,560	1997
LOWEST ANNUAL MEAN					3,420	1941
HIGHEST DAILY MEAN	43,700	Jun 1	19,200	Jun 7	68,500	May 18, 1997
LOWEST DAILY MEAN	1,800	Jan 12	826	Jan 6	800	Feb 3, 1989
ANNUAL SEVEN-DAY MINIMUM	1,990	Jan 8	1,350	Jan 4	1,130	Jan 31, 1936
MAXIMUM PEAK FLOW			19,600	Jun 7	68,900	May 18, 1997
MAXIMUM PEAK STAGE			11.42	Jun 7	20.27	May 18, 1997
INSTANTANEOUS LOW FLOW			a702	Jan 6	a702	Jan 6, 2004
ANNUAL RUNOFF (AC-FT)	4,738,000		3,820,000		5,177,000	
ANNUAL RUNOFF (CFSM)	0.611		0.491		0.667	
ANNUAL RUNOFF (INCHES)	8.30		6.69		9.07	
10 PERCENT EXCEEDS	15,600		12,400		17,700	
50 PERCENT EXCEEDS	2,800		2,800		3,670	
90 PERCENT EXCEEDS	2,080		2,160		2,200	

*--Statistics not computed prior to 1930 because the 1924-29 period of record was estimated.

a--Gage height, 3.58 ft, result of upstream freezeup.

b--Also May 24, 1948, gage height, 19.96 ft.

e--Estimated.

