06043500 GALLATIN RIVER NEAR GALLATIN GATEWAY, MT

LOCATION.--Lat 45°29'51", long 111°16'11" (NAD 27), in $SE^1/_4$ $SE^1/_4$ $SE^1/_4$ sec.7, T.4 S., R.4 E., Gallatin County, Hydrologic Unit 10020008, on left bank 0.3 mi downstream from Spanish Creek, 7.3 mi south of Gallatin Gateway and at river mile 47.7.

DRAINAGE AREA.--825 mi^2.

PERIOD OF RECORD.--August 1889 to September 1894, June 1930 to September 1969, annual maximum, water years 1970-71, October 1971 to September 1981, October 1984 to current year. Monthly discharge only for some periods, published in WSP 1309. Published as West Gallatin River near Bozeman 1889-94.

REVISED RECORDS.--WSP 1389: 1892(M), 1893-94. WSP 1559: Drainage area. WDR -85-1 (M), WDR -02-1: 1970-71 (M).

GAGE.--Water-stage recorder. Elevation of gage is 5,167.67 ft (NGVD 29). Prior to Oct. 20, 1932, nonrecording gages at several different sites and elevations within 0.8 mi of present site.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversions for irrigation of about 1,400 acres upstream from station. U.S. Geological Survey satellite telemeter at station. Several unpublished observations of water temperature and conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	416	323	259	260	255	255	248	449	2,360	1,930	657	441
2	410	333	261	264	254	257	264	453	2,200	1,880	656	427
3	404	353	260	262	247	255	275	468	2,040	1,780	733	417
4	401	350	238	269	255	251	283	516	2,040	1,600	642	411
5	395	349	247	242	265	255	281	590	2,120	1,500	603	408
6	389	355	249	223	244	258	274	744	2,620	1,450	582	405
7	391	346	266	e230	252	263	311	889	2,440	1,420	570	397
8	399	352	278	e240	256	262	360	986	2,390	1,410	578	390
9	382	365	287	e250	249	272	340	1,140	2,230	1,340	591	384
10	399	372	289	e250	242	284	305	1,230	2,100	1,340	588	409
11	401	358	311	264	235	276	285	1,150	2,060	1,410	586	420
12	395	345	312	266	244	281	298	988	2,360	1,200	558	405
13	389	325	266	e240	263	258	342	890	2,390	1,120	580	405
14	382	317	278	e230	267	255	404	925	2,310	1,080	552	400
15	382	326	313	e220	242	259	345	1,110	2,710	1,010	528	391
16	379	344	295	e230	210	262	340	1,480	3,240	974	511	388
17	372	339	286	e250	227	264	378	2,080	3,570	934	506	395
18	378	314	289	e270	234	249	485	1,690	3,650	884	539	413
19	380	335	299	e280	245	263	428	2,150	3,240	842	567	394
20	381	315	295	282	257	272	386	2,950	3,230	810	509	375
21	388	234	277	279	265	274	371	3,390	3,440	779	487	369
22	378	282	265	268	256	267	356	3,110	3,820	759	481	371
23	381	327	220	260	248	265	408	3,630	3,850	751	512	388
24	381	325	234	257	239	247	468	3,380	3,370	725	485	460
25	339	323	231	246	245	235	588	2,700	3,040	724	465	426
26	364	326	281	249	247	255	639	2,320	2,770	729	458	392
27	382	261	280	257	246	260	613	2,270	2,500	691	447	381
28	381	286	275	266	248	280	534	2,390	2,340	666	441	372
29	415	219	285	270	---	269	489	2,630	2,220	654	431	367
30	382	223	300	272	---	260	473	2,490	2,000	646	443	363
31	372	---	279	260	---	244	---	2,290	---	635	461	---
TOTAL	11,988	9,622	8,505	7,906	6,937	8,107	11,571	53,478	80,650	33,673	16,747	11,964
MEAN	387	321	274	255	248	262	386	1,725	2,688	1,086	540	399
MAX	416	372	313	282	267	284	639	3,630	3,850	1,930	733	460
MIN	339	219	220	220	210	235	248	449	2,000	635	431	363
AC-FT	23,780	19,090	16,870	15,680	13,760	16,080	22,950	106,100	160,000	66,790	33,220	23,730

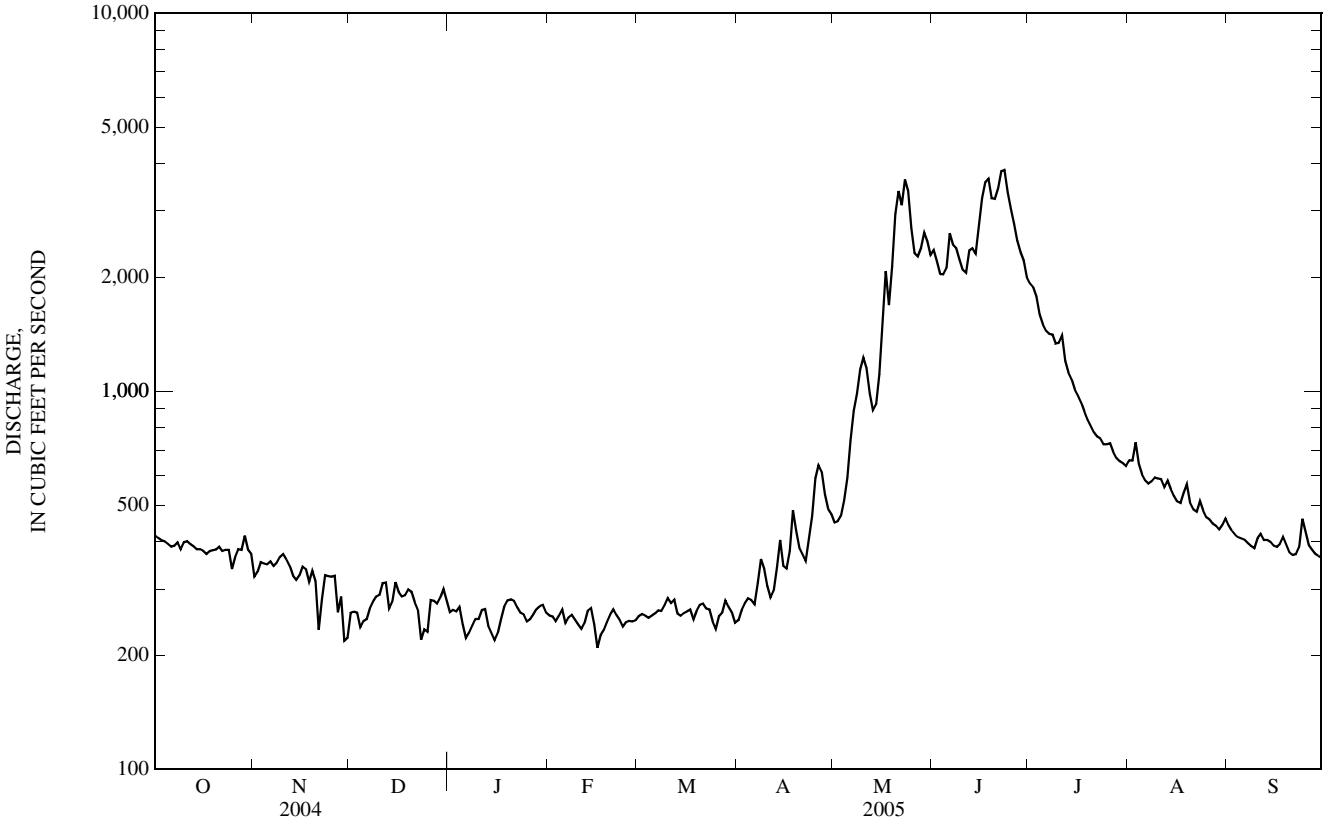
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 2005, BY WATER YEAR (WY)*

MEAN	452	380	319	306	302	310	500	1,793	2,923	1,280	606	488
MAX	743	589	549	468	430	465	899	3,135	5,110	3,669	1,162	788
(WY)	(1893)	(1960)	(1893)	(1893)	(1893)	(1960)	(1990)	(1976)	(1997)	(1975)	(1993)	(1968)
MIN	238	247	214	200	220	206	263	873	643	345	269	233
(WY)	(1932)	(1937)	(1935)	(1931)	(1935)	(1935)	(1937)	(1953)	(1934)	(1934)	(1934)	(1931)

06043500 GALLATIN RIVER NEAR GALLATIN GATEWAY, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1889 - 2005*	
ANNUAL TOTAL	228,285		261,148			
ANNUAL MEAN	624		715		807	
HIGHEST ANNUAL MEAN					1,184	1976
LOWEST ANNUAL MEAN					408	1934
HIGHEST DAILY MEAN	3,330	Jun 10	3,850	Jun 23	8,970	Jun 17, 1974
LOWEST DAILY MEAN	180	Jan 5	210	Feb 16	153	Dec 25, 2002
ANNUAL SEVEN-DAY MINIMUM	223	Jan 2	240	Feb 15	182	Jan 18, 1931
MAXIMUM PEAK FLOW			4,220	Jun 23	b9,160	Jun 2, 1997
MAXIMUM PEAK STAGE			4.52	Jun 23	7.38	Jun 17, 1974
INSTANTANEOUS LOW FLOW			a171	Feb 17	c117	Jan 19, 1935
ANNUAL RUNOFF (AC-FT)	452,800		518,000		584,800	
10 PERCENT EXCEEDS	1,540		2,170		2,030	
50 PERCENT EXCEEDS	400		380		428	
90 PERCENT EXCEEDS	243		248		266	

*--During periods of operation (August 1889 to September 1894, June 1930 to September 1969, October 1971 to September 1981, October 1984 to current year).
a--Gage height, 1.00 ft, result of freezeup.
b--Gage height, 6.71 ft.
c--Gage height, 0.68 ft, result of freezeup.
e--Estimated.



06048700 EAST GALLATIN RIVER BELOW BRIDGER CREEK, NEAR BOZEMAN, MT

LOCATION.--Lat 45°43'30", long 111°04'08" (NAD 27), in $NE^1/_4$ $SW^1/_4$ $NE^1/_4$ sec.26, T.1 S., R.5 E., Gallatin County, Hydrologic Unit 10020008, on left bank 600 ft downstream from Bozeman Wastewater Treatment Plant, 0.2 mi downstream from bridge on Montana Secondary Highway 411, 3.2 mi downstream from Bridger Creek, 2.0 mi northwest of Bozeman, and at river mile 33.0.

DRAINAGE AREA.--226 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 4,610 ft (NGVD 29).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation or diurnal effect from wastewater treatment plant upstream. Numerous diversions for irrigation upstream from station. U.S. Geological Survey satellite telemeter at station. Several unpublished observations of water temperature and conductance were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Measurement made May 12, 1976 was at a stage of 5.15 ft, 1,240 ft^3/s, site and datum then in use.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	50	36	26	38	38	55	137	184	121	33	29
2	37	48	41	e26	38	37	61	127	250	113	33	23
3	36	50	41	e28	38	38	73	123	421	108	46	18
4	34	49	39	e25	38	38	84	128	431	103	43	16
5	34	47	39	e23	40	38	99	147	345	96	33	18
6	36	47	38	e24	34	39	96	174	338	87	29	17
7	36	46	37	e25	31	41	101	203	386	78	29	17
8	37	45	37	e26	38	44	116	219	361	72	32	16
9	37	45	38	e25	37	54	111	226	342	64	36	17
10	41	44	38	e26	36	62	94	264	305	67	37	18
11	41	44	43	e26	34	55	84	389	280	92	35	23
12	40	41	49	e27	36	55	86	339	327	78	33	24
13	40	40	39	e25	37	46	93	278	413	66	40	24
14	40	39	42	e23	37	43	119	284	325	65	e37	23
15	42	40	45	e22	34	42	100	306	283	58	e33	24
16	45	42	41	e25	30	44	89	321	253	51	e30	22
17	44	42	39	e30	34	44	94	338	242	54	28	26
18	50	40	40	40	35	41	146	315	226	55	40	37
19	53	42	41	95	35	42	130	293	211	48	39	33
20	49	43	39	102	34	45	114	316	190	43	31	30
21	49	32	34	80	37	47	106	381	169	41	29	25
22	45	36	e30	64	34	50	105	342	168	39	26	26
23	44	39	e25	55	33	49	135	328	156	43	26	32
24	48	41	e30	51	33	43	158	283	159	38	24	55
25	45	44	e35	46	34	39	190	253	158	45	24	48
26	42	49	41	44	36	43	194	214	157	58	23	40
27	43	39	38	43	36	47	195	195	170	46	20	35
28	44	38	35	43	36	63	173	178	164	39	19	31
29	69	29	38	42	---	70	156	167	146	35	17	30
30	59	32	39	41	---	65	149	157	140	33	21	e29
31	54	---	32	38	---	56	---	150	---	31	32	---
TOTAL	1,351	1,263	1,179	1,216	993	1,458	3,506	7,575	7,700	1,967	958	806
MEAN	43.6	42.1	38.0	39.2	35.5	47.0	117	244	257	63.5	30.9	26.9
MAX	69	50	49	102	40	70	195	389	431	121	46	55
MIN	34	29	25	22	30	37	55	123	140	31	17	16
AC-FT	2,680	2,510	2,340	2,410	1,970	2,890	6,950	15,030	15,270	3,900	1,900	1,600

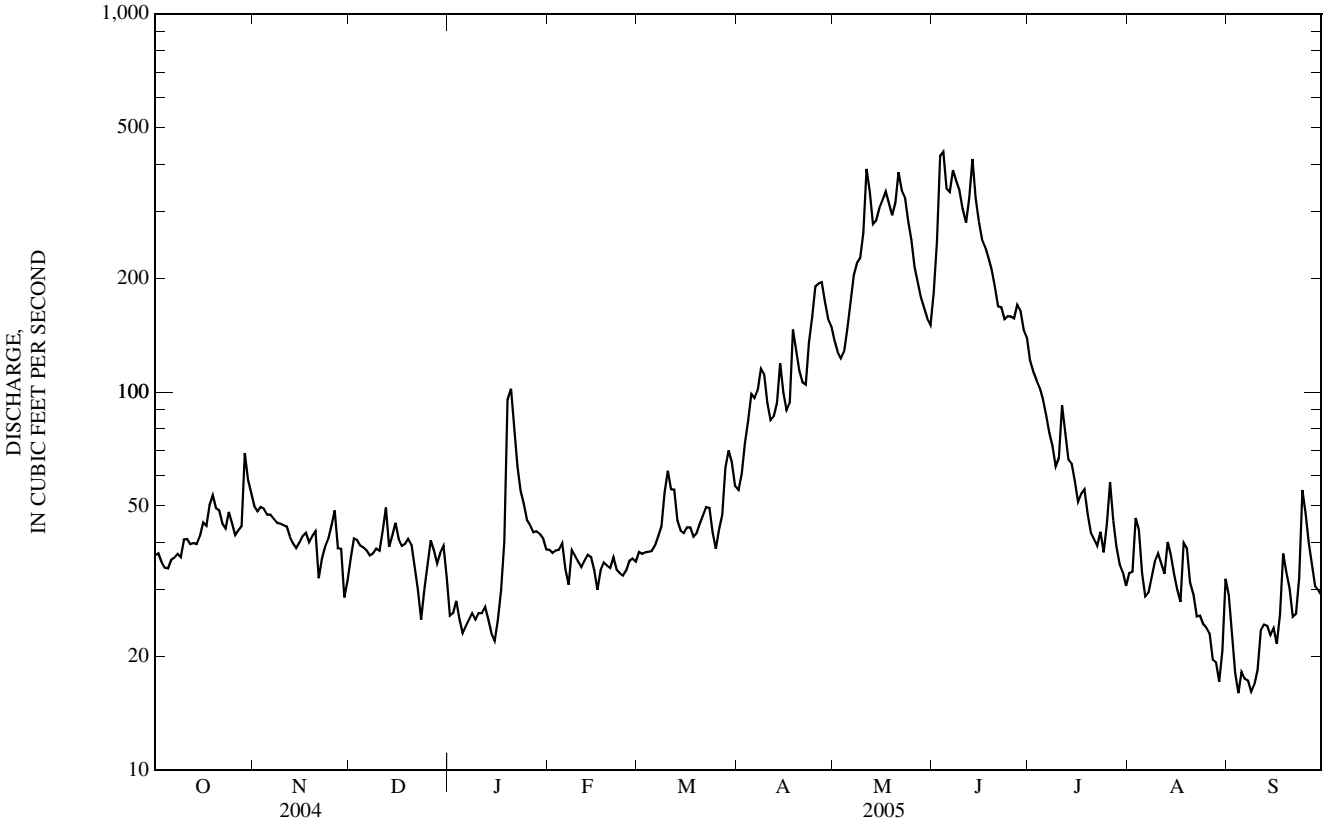
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

MEAN	38.4	37.8	33.5	34.7	35.0	57.3	135	223	229	62.2	30.2	28.9
MAX	43.6	42.1	38.0	39.2	37.4	73.4	224	328	265	70.6	37.5	36.5
(WY)	(2005)	(2005)	(2005)	(2005)	(2003)	(2004)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)
MIN	30.2	32.1	30.4	30.2	33.4	37.0	99.8	109	165	46.5	21.7	19.9
(WY)	(2004)	(2004)	(2003)	(2004)	(2004)	(2002)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)

06048700 EAST GALLATIN RIVER BELOW BRIDGER CREEK, NEAR BOZEMAN, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005	
ANNUAL TOTAL	25,274		29,972			
ANNUAL MEAN	69.1		82.1		78.8	
HIGHEST ANNUAL MEAN					87.9	2003
LOWEST ANNUAL MEAN					66.6	2004
HIGHEST DAILY MEAN	834	Jun 11	431	Jun 4	834	Jun 11, 2004
LOWEST DAILY MEAN	17	Jan 5	16	Sep 4	15	Sep 5, 2003
ANNUAL SEVEN-DAY MINIMUM	21	Aug 11	17	Sep 3	17	Sep 3, 2005
MAXIMUM PEAK FLOW			492	Jun 3	1,100	Jun 11, 2004
MAXIMUM PEAK STAGE			3.73	Jun 3	5.60	Jun 11, 2004
INSTANTANEOUS LOW FLOW					a6.5	Feb 12, 2004
ANNUAL RUNOFF (AC-FT)	50,130		59,450		57,090	
10 PERCENT EXCEEDS	128		212		195	
50 PERCENT EXCEEDS	42		42		39	
90 PERCENT EXCEEDS	30		26		26	

a--Gage height, 1.38 ft, result of freezeup.
e--Estimated.



06052500 GALLATIN RIVER AT LOGAN, MT

LOCATION.--Lat 45°53'07", long 111°26'15" (NAD 27), in $SE^1/_4$ $NW^1/_4$ $NE^1/_4$ sec.35, T.2 N., R.2 E., Gallatin County, Hydrologic Unit 10020008, on right bank at former county road bridge site, 0.2 mi upstream from present county bridge, 0.5 mi west of Logan, and at river mile 6.3.

DRAINAGE AREA.--1,795 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1893 to December 1905, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1389: 1898-99, 1903, 1905, 1929(M), 1935-36(M), 1938-39(M), 1941(M). WSP 1559: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,086.42 ft (NGVD 29). Prior to Aug. 10, 1928, nonrecording gages at several sites within 0.5 mi of present site at various elevations. Aug. 10, 1928, to Oct. 7, 1941, nonrecording gage at present site and elevation.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Some regulation by Middle Creek Reservoir (station number 06049500). Diversions for irrigation of about 110,000 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	568	735	e620	e570	572	562	569	653	1,870	1,700	329	402
2	570	710	655	e550	574	566	572	621	2,070	1,590	343	390
3	552	739	676	e550	568	562	583	588	2,000	1,480	404	370
4	542	746	656	e570	572	558	614	587	2,100	1,320	429	347
5	503	735	642	e550	583	559	693	604	1,970	1,160	380	366
6	494	739	648	e530	576	561	641	667	2,220	1,010	343	366
7	495	731	657	e570	551	567	619	777	2,540	907	339	357
8	506	725	674	e550	569	576	633	904	2,410	805	343	366
9	503	733	680	e550	568	581	654	1,070	2,360	724	360	347
10	496	738	684	e550	563	591	618	1,210	2,230	715	363	352
11	532	741	705	e560	549	597	588	1,350	2,080	795	384	408
12	529	733	729	e580	559	595	568	1,370	2,290	682	364	424
13	527	713	689	e550	569	594	560	1,220	2,900	541	391	429
14	525	699	664	e520	578	570	594	1,080	2,580	473	407	428
15	518	695	704	e500	562	576	626	1,110	2,630	413	392	425
16	531	710	708	e520	e520	577	549	1,310	3,180	354	363	421
17	533	711	680	e550	e530	574	510	1,820	3,490	347	355	422
18	565	709	676	e580	e540	569	649	1,910	3,840	352	371	465
19	599	710	684	e600	553	556	789	1,770	3,550	368	394	475
20	590	722	689	e630	568	575	714	2,710	3,270	364	392	443
21	587	668	660	e650	570	593	664	3,320	3,230	337	358	432
22	583	624	e620	e640	563	588	632	3,310	3,410	315	361	433
23	590	711	e570	630	558	588	597	3,510	3,660	328	355	447
24	658	742	e550	621	548	580	616	3,600	3,350	321	366	555
25	655	752	e580	597	552	552	676	2,960	2,920	326	344	575
26	637	759	615	585	554	569	761	2,420	2,610	388	340	532
27	677	710	628	584	555	578	803	2,190	2,440	373	322	496
28	679	679	e600	597	556	594	815	2,090	2,250	340	330	468
29	771	e650	e630	603	---	634	738	2,160	2,040	330	329	455
30	754	e600	660	596	---	619	687	2,140	1,860	312	322	448
31	763	---	e600	586	---	598	---	1,900	---	305	393	---
TOTAL	18,032	21,369	20,233	17,819	15,680	17,959	19,332	52,931	79,350	19,775	11,266	12,844
MEAN	582	712	653	575	560	579	644	1,707	2,645	638	363	428
MAX	771	759	729	650	583	634	815	3,600	3,840	1,700	429	575
MIN	494	600	550	500	520	552	510	587	1,860	305	322	347
AC-FT	35,770	42,390	40,130	35,340	31,100	35,620	38,350	105,000	157,400	39,220	22,350	25,480

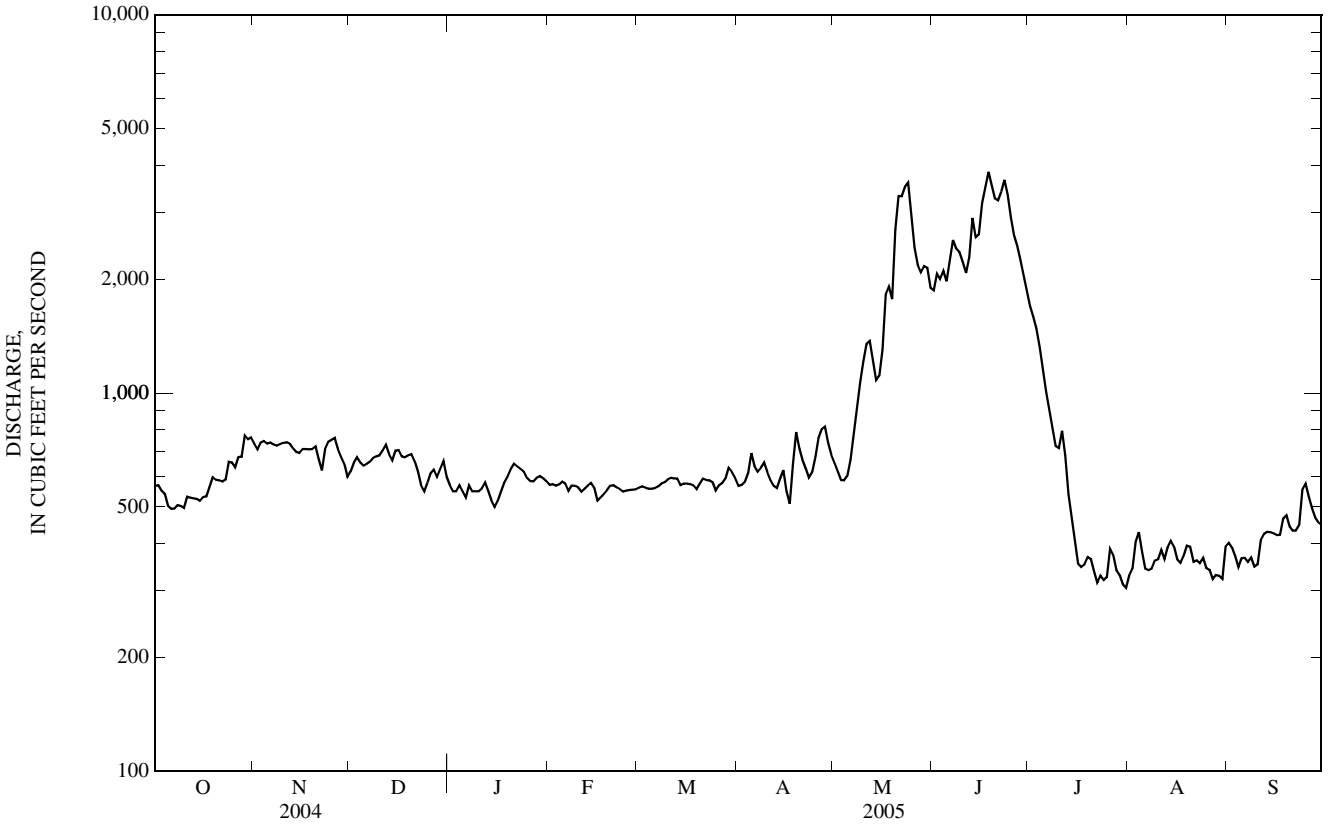
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1894 - 2005, BY WATER YEAR (WY)*

MEAN	761	811	741	684	697	785	1,032	2,104	2,957	998	485	637
MAX	1,265	1,186	1,049	971	1,249	1,290	1,993	4,686	5,957	3,899	1,658	1,269
(WY)	(1983)	(1976)	(1976)	(1976)	(1963)	(1960)	(1952)	(1901)	(1997)	(1975)	(1993)	(1968)
MIN	333	328	450	400	385	478	429	176	280	162	167	238
(WY)	(1935)	(1935)	(1894)	(1894)	(1936)	(1904)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)

06052500 GALLATIN RIVER AT LOGAN, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1894 - 2005*	
ANNUAL TOTAL	239,631		306,590			
ANNUAL MEAN	655		840		1,057	
HIGHEST ANNUAL MEAN					1,673	1997
LOWEST ANNUAL MEAN					454	1934
HIGHEST DAILY MEAN	3,580	Jun 11	3,840	Jun 18	9,840	Jun 21, 1899
LOWEST DAILY MEAN	273	May 18	305	Jul 31	130	Jul 19, 1939
ANNUAL SEVEN-DAY MINIMUM	288	May 15	333	Jul 27	147	Jul 16, 1934
MAXIMUM PEAK FLOW			a4,050	Jun 18	d9,840	Jun 21, 1899
MAXIMUM PEAK STAGE			b8.47	Jan 7	f11.88	Feb 5, 1963
INSTANTANEOUS LOW FLOW			c287	Jul 31	g130	Jul 19, 1939
ANNUAL RUNOFF (AC-FT)	475,300		608,100		766,100	
10 PERCENT EXCEEDS	966		2,050		2,100	
50 PERCENT EXCEEDS	562		588		750	
90 PERCENT EXCEEDS	354		365		415	

*--During periods of operation (October 1893 to December 1905, August 1928 to current year).
a--Gage height, 7.14 ft.
b--Backwater from ice.
c--Gage height, 3.59 ft.
d--Observed, gage height, 6.25 ft, site and datum then in use.
e--Estimated.
f--From floodmark, backwater from ice.
g--Observed, gage height, 2.04 ft.



06052500 GALLATIN RIVER AT LOGAN, MT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949, 1951, 1957, 1965, 1979-86, 1999 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: August 1979 to September 1985, October 1999 to current year (seasonal records).

INSTRUMENTATION.--Temperature probe installed Sept. 14, 1999.

REMARKS--Daily water temperature records are rated good. Mercury concentrations are in nanograms per unit volume or mass. Several unpublished observations of specific conductance and water temperature were made during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 28.5°C, July 19-21, 2003; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE (seasonal records): Maximum, 25.0°C, July 15; minimum, 3.5°C, Apr. 29.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Mercury water fltrd, **ng/L** (50287)	Mercury water unfltrd **ng/L** (50286)	Mercury solids, total, **ng/g** (62978)	Bed sed dry wt, percent of wet wt (64177)	Loss on ignition, bed sed percent (64178)
SEP												
12...	1245	429	8.8	376	11.0	1.4	1.8	.22	.33	21.1	.46	.04

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		APRIL			MAY			JUNE			JULY	
1	8.5	5.0	7.0	12.5	6.0	9.0	12.0	9.5	10.5	18.0	13.5	16.0
2	10.0	6.0	8.0	13.5	7.5	10.5	10.5	8.5	9.5	19.0	14.0	16.5
3	9.5	6.5	8.0	13.0	8.5	11.0	11.5	8.5	10.0	18.5	13.0	16.0
4	8.0	6.5	7.0	14.0	10.0	12.0	16.0	9.5	12.5	19.5	13.0	16.5
5	10.5	5.5	8.0	15.0	11.0	13.0	16.5	11.5	14.0	21.0	14.5	17.5
6	12.0	6.0	9.0	15.5	11.0	13.5	15.0	11.0	12.5	21.0	16.0	18.5
7	11.0	8.0	9.5	14.5	12.0	13.0	13.5	9.0	11.0	22.5	16.5	19.5
8	11.0	8.0	9.5	13.5	10.5	12.5	11.5	9.0	10.5	22.0	17.0	20.0
9	9.5	6.5	8.0	13.0	10.5	11.5	11.5	8.0	10.0	21.0	17.5	19.0
10	10.0	5.5	7.5	11.5	9.5	10.5	12.5	9.0	11.0	19.5	16.5	17.5
11	10.5	5.5	8.0	9.5	8.0	8.5	14.0	10.0	12.5	22.0	15.5	18.5
12	12.5	7.0	10.0	8.0	6.0	7.0	13.0	9.5	11.0	23.5	17.0	20.0
13	13.0	8.0	10.5	11.5	6.0	8.5	14.0	8.0	10.5	23.5	18.5	21.0
14	11.0	6.5	8.5	16.0	9.5	12.5	17.0	10.5	13.5	24.0	17.5	20.5
15	11.0	4.5	7.5	15.5	13.0	14.5	17.5	12.5	15.0	25.0	17.5	21.5
16	13.0	6.5	10.0	14.0	12.5	13.5	16.0	12.5	14.0	23.5	19.0	21.5
17	11.5	8.5	10.0	13.0	10.0	11.0	15.5	12.0	14.0	22.5	16.5	19.5
18	10.0	7.0	8.0	13.0	8.0	10.0	15.0	11.5	13.5	24.0	16.5	20.0
19	7.0	6.0	6.5	13.5	10.5	12.0	16.5	10.5	13.5	23.5	17.5	20.5
20	7.5	5.5	6.5	12.5	10.0	11.5	18.0	11.5	14.5	24.0	17.0	20.5
21	8.0	5.5	6.5	13.5	9.0	11.0	17.0	13.0	15.0	24.5	17.0	21.0
22	13.0	6.5	9.5	15.0	9.5	12.0	18.5	13.0	15.5	22.5	18.5	20.5
23	13.5	8.5	11.0	14.5	10.5	12.5	18.0	13.5	15.5	24.5	17.5	20.5
24	15.0	9.5	12.0	12.0	9.5	11.0	17.5	11.5	14.5	24.0	17.0	20.5
25	15.0	10.0	12.5	12.5	7.5	10.0	16.0	12.5	14.5	20.5	16.5	18.0
26	13.0	9.5	11.0	14.0	8.0	11.0	14.5	12.0	13.5	21.0	14.0	17.5
27	9.5	6.5	8.0	15.5	9.0	12.0	15.5	11.0	13.5	22.5	15.0	19.0
28	8.0	4.5	6.0	16.0	10.0	13.0	15.0	12.0	13.5	20.0	16.0	18.5
29	10.0	3.5	7.0	14.5	10.5	13.0	14.5	12.0	13.0	21.5	14.5	18.0
30	10.5	6.0	8.5	13.5	9.5	11.5	18.5	11.5	15.0	24.0	16.5	20.0
31	---	---	---	13.5	9.5	11.5	---	---	---	21.5	17.5	19.5
MONTH	15.0	3.5	8.6	16.0	6.0	11.5	18.5	8.0	13.0	25.0	13.0	19.0

06052500 GALLATIN RIVER AT LOGAN, MT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		AUGUST			SEPTEMBER							
1	22.5	16.5	19.5	18.5	12.0	15.0						
2	21.5	17.0	19.5	19.0	12.5	16.0						
3	22.5	16.5	19.5	18.5	14.0	16.5						
4	23.5	16.5	20.0	18.5	14.0	16.0						
5	23.5	17.0	20.5	18.0	12.5	15.5						
6	24.0	17.5	21.0	19.0	13.5	16.5						
7	24.0	18.0	20.5	19.5	13.5	16.5						
8	21.0	18.5	19.5	19.5	13.0	16.5						
9	22.0	16.0	18.5	19.0	13.5	16.5						
10	20.5	16.5	18.5	16.0	12.5	13.5						
11	22.5	16.0	19.0	15.0	10.5	12.5						
12	19.5	15.5	17.5	13.5	10.0	11.5						
13	16.5	13.5	15.0	15.0	9.5	12.0						
14	19.0	12.0	15.5	15.0	10.0	12.0						
15	20.5	13.0	17.0	16.0	10.5	13.5						
16	20.5	15.0	17.5	16.5	12.0	14.0						
17	20.0	15.0	18.0	14.0	12.0	12.5						
18	20.5	15.0	17.5	13.5	10.5	12.0						
19	21.0	15.0	18.0	15.5	10.0	12.5						
20	21.5	14.5	18.0	16.0	10.5	13.0						
21	22.0	15.0	18.5	14.5	12.0	13.0						
22	20.0	16.0	18.0	14.5	10.0	12.5						
23	21.0	15.5	18.0	13.0	10.0	11.5						
24	19.5	14.5	17.0	10.0	9.0	9.5						
25	19.0	12.5	16.0	12.5	9.0	10.5						
26	19.5	12.5	16.0	13.5	8.5	11.0						
27	20.0	13.0	16.5	14.5	11.0	12.5						
28	20.5	14.0	17.5	13.0	9.0	11.0						
29	20.0	14.0	17.0	13.0	8.5	11.0						
30	17.0	12.5	14.0	13.5	11.0	12.0						
31	17.5	10.5	13.5	---	---	---						
MONTH	24.0	10.5	18.0	19.5	8.5	13.5						

460719111243201 LOWER TOSTON RESERVOIR NEAR TOSTON, MT

LOCATION.--Lat 46°07'19", long 111°24'32" (NAD 27), in $SE^1/_4SE^1/_4SE^1/_4$ sec.6, T.4 N., R.3 E., Broadwater County, Hydrologic Unit 10030101.

PERIOD OF RECORD.--September 2004, discontinued.

GAGE.--None, elevation at site, 3,950 ft (NGVD 27).

REMARKS.--Mercury data for 2004 that was unavailable to publish last year are provided in this 2005 volume; concentrations are in nanograms per unit volume or mass.

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

Date	Time	Mercury solids, total, **ng/g** (62978)	Methyl-mercury solids, total, **ng/g** (62979)	Bed sed dry wt, percent of wet wt (64177)	Loss on ig-nition, bed sed percent (64178)
SEP 2004 30...	1600	50.8	.21	.48	.05

06054500 MISSOURI RIVER AT TOSTON, MT

LOCATION.--Lat 46°08'46", long 111°25'11" (NAD 27), in NW$^1/_4$ SE$^1/_4$ NW$^1/_4$ sec.36, T.5 N., R.2 E., Broadwater County, Hydrologic Unit 10030101, on left bank 2.2 mi southeast of Toston, 4.8 mi upstream from Crow Creek, 7.8 mi downstream from Sixteenmile Creek, and at river mile 2,296.1.

DRAINAGE AREA.--14,669 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1890 to February 1891, April 1910 to December 1916, April 1941 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Elevation of gage is 3,905.68 ft (NGVD 29). Prior to Dec. 20, 1916, nonrecording gages at site 2.5 mi downstream at different elevations.

REMARKS.--Water-discharge records good. Some regulation by six reservoirs on tributaries and Clark Canyon Reservoir (station 06015300). Diversions for irrigation of about 555,400 acres of which 12,000 acres lies downstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,640	3,620	2,680	2,000	3,310	2,720	2,860	2,960	6,160	7,630	1,610	1,750
2	2,630	3,490	2,780	1,680	3,230	2,730	2,840	2,860	7,590	6,590	1,660	1,720
3	2,630	3,480	3,090	1,750	3,190	2,730	2,810	2,730	8,520	6,150	1,760	1,700
4	2,730	3,430	3,120	1,970	3,160	2,720	2,860	2,660	8,690	5,770	1,830	1,670
5	2,660	3,390	2,890	2,010	3,180	2,770	2,990	2,620	8,470	5,390	1,710	1,700
6	2,640	3,370	2,910	2,040	2,990	2,830	2,970	2,630	8,380	4,790	1,690	1,690
7	2,660	3,330	2,990	2,140	2,880	2,840	2,910	2,650	8,880	4,160	1,750	1,690
8	2,730	3,330	3,120	2,400	2,840	2,890	2,990	2,790	9,760	3,860	1,750	1,710
9	2,730	3,330	3,090	2,350	2,870	2,820	3,040	3,080	10,100	3,580	1,740	1,690
10	2,750	3,380	3,140	2,420	2,850	2,820	3,070	3,660	9,410	3,440	1,750	1,570
11	2,850	3,460	3,230	2,410	2,800	2,910	3,060	4,600	8,730	3,550	1,780	1,610
12	2,820	3,470	3,240	2,590	2,840	2,970	3,010	5,610	8,670	3,510	1,770	1,680
13	2,810	3,460	3,360	2,750	2,880	2,980	2,850	5,880	9,590	3,480	1,850	1,750
14	2,820	3,400	3,200	2,370	2,970	2,990	2,850	5,340	9,830	3,110	1,870	1,720
15	2,820	3,370	3,310	2,290	2,840	2,980	2,790	5,050	10,300	2,800	1,930	1,720
16	2,850	3,340	3,300	2,240	2,750	2,930	2,700	5,090	10,200	2,580	1,900	1,740
17	2,870	3,340	3,230	2,660	2,730	2,900	2,670	5,550	10,800	2,330	1,870	1,840
18	2,940	3,340	3,200	2,990	2,750	2,830	2,880	6,670	12,000	2,170	1,890	1,930
19	3,010	3,350	3,190	3,360	2,790	2,790	3,130	7,500	12,300	2,110	1,960	1,960
20	3,040	3,370	3,210	3,940	2,870	2,740	3,260	8,480	11,800	1,890	1,950	1,940
21	3,080	3,290	3,100	3,930	2,810	2,830	3,200	9,870	10,700	1,790	1,900	1,990
22	3,150	3,110	3,010	3,870	2,760	2,830	3,130	10,800	10,700	1,830	1,870	2,020
23	3,180	3,250	2,460	3,690	2,870	2,850	2,980	11,100	11,100	1,750	1,710	2,070
24	3,230	3,270	2,220	3,690	2,910	2,830	2,950	11,100	11,300	1,650	1,610	2,340
25	3,290	3,340	2,550	3,650	2,860	2,800	2,970	10,300	10,300	1,590	1,590	2,520
26	3,320	3,400	2,680	3,480	2,830	2,800	3,080	8,870	8,920	1,580	1,590	2,580
27	3,510	3,340	2,630	3,370	2,760	2,750	3,100	7,430	8,790	1,590	1,570	2,660
28	3,550	3,080	2,540	3,390	2,720	2,830	3,190	6,750	8,770	1,530	1,530	2,650
29	3,590	2,790	2,710	3,560	---	2,940	3,160	6,410	8,100	1,660	1,530	2,570
30	3,680	2,530	3,120	3,450	---	2,970	3,070	6,340	8,110	1,630	1,540	2,540
31	3,740	---	2,740	3,420	---	3,010	---	6,110	---	1,540	1,700	---
TOTAL	92,950	99,450	92,040	87,860	81,240	88,330	89,370	183,490	286,970	97,030	54,160	58,720
MEAN	2,998	3,315	2,969	2,834	2,901	2,849	2,979	5,919	9,566	3,130	1,747	1,957
MAX	3,740	3,620	3,360	3,940	3,310	3,010	3,260	11,100	12,300	7,630	1,960	2,660
MIN	2,630	2,530	2,220	1,680	2,720	2,720	2,670	2,620	6,160	1,530	1,530	1,570
AC-FT	184,400	197,300	182,600	174,300	161,100	175,200	177,300	364,000	569,200	192,500	107,400	116,500

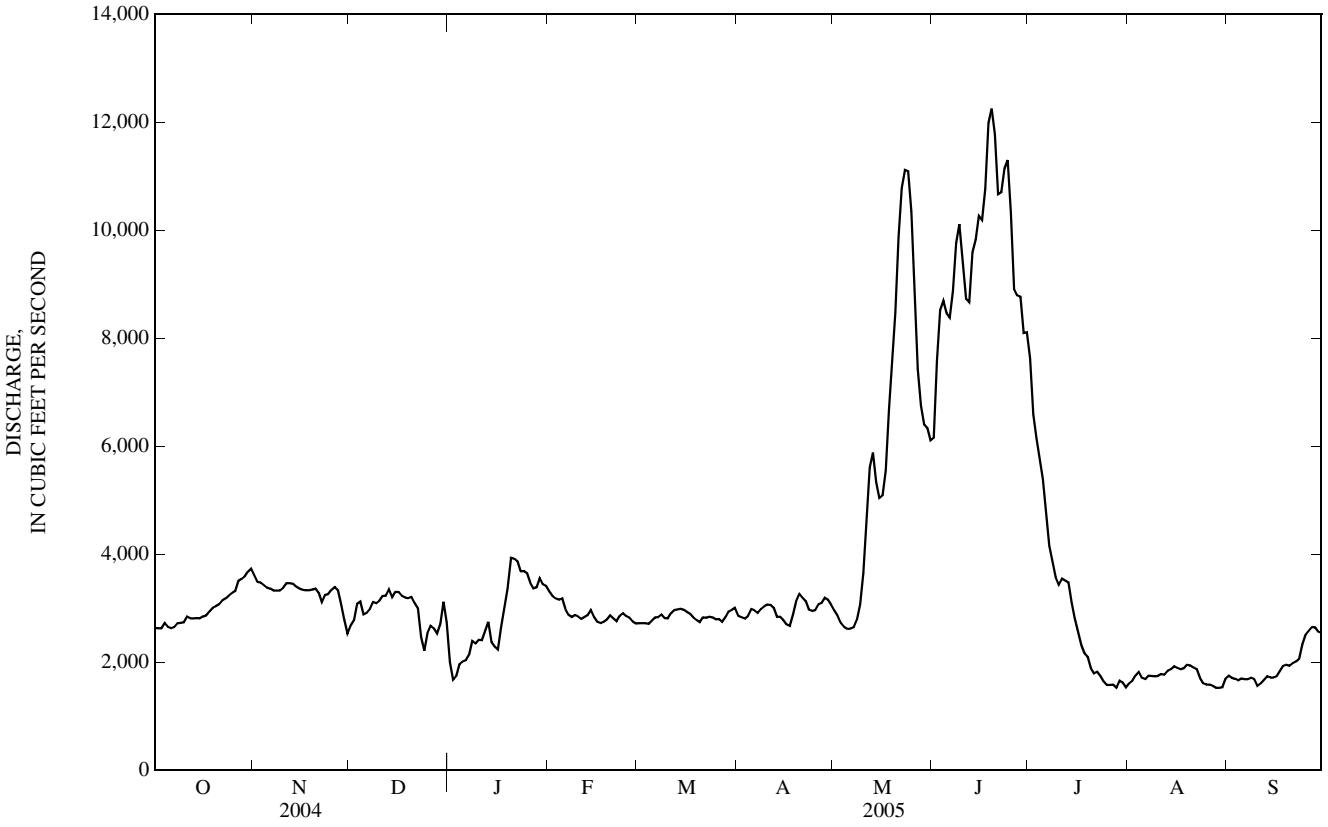
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1890 - 2005, BY WATER YEAR (WY)*

MEAN	4,342	4,650	3,723	3,351	3,673	4,085	5,523	8,662	12,240	5,104	2,697	3,350
MAX	6,778	7,028	5,968	4,893	5,217	6,900	10,090	18,400	24,520	14,240	5,729	5,813
(WY)	(1977)	(1984)	(1960)	(1984)	(1915)	(1916)	(1969)	(1976)	(1997)	(1975)	(1975)	(1984)
MIN	2,242	2,815	2,569	2,165	2,268	2,835	2,388	2,850	3,175	1,243	896	1,448
(WY)	(2004)	(1891)	(1891)	(1891)	(1989)	(1955)	(1961)	(2004)	(1987)	(1988)	(1988)	(1994)

06054500 MISSOURI RIVER AT TOSTON, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1890 - 2005*	
ANNUAL TOTAL	1,077,090		1,311,610			
ANNUAL MEAN	2,943		3,593		5,135	
HIGHEST ANNUAL MEAN					7,742	1997
LOWEST ANNUAL MEAN					2,830	2004
HIGHEST DAILY MEAN	9,220	Jun 12	12,300	Jun 19	33,400	Jun 12, 1997
LOWEST DAILY MEAN	1,240	Aug 16	1,530	Jul 28	700	Jan 12, 1963
ANNUAL SEVEN-DAY MINIMUM	1,290	Aug 11	1,570	Aug 24	811	Jul 31, 1961
MAXIMUM PEAK FLOW			12,500	Jun 18	34,000	Jun 12, 1997
MAXIMUM PEAK STAGE			7.67	Jun 18	12.22	Jun 12, 1997
INSTANTANEOUS LOW FLOW			a958	Aug 2	b450	Jul 31, 1989
ANNUAL RUNOFF (AC-FT)	2,136,000		2,602,000		3,720,000	
10 PERCENT EXCEEDS	4,000		7,610		9,240	
50 PERCENT EXCEEDS	2,920		2,890		4,050	
90 PERCENT EXCEEDS	1,760		1,740		2,320	

*--During periods of operation (1911-16, 1942 to current year).
a--Gage height, 2.37 ft, result of regulation.
b--Gage height, 1.68 ft, result of regulation.



06054500 MISSOURI RIVER AT TOSTON, MT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-53, 1965, 1972 to current year. Sampling location moved in October 1978, from old bridge on U.S. Highway 287 at Toston, to cableway 2.4 miles upstream.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1973 to September 1981.
WATER TEMPERATURE: May 1949 to June 1953, April 1973 to current year.
SUSPENDED-SEDIMENT DISCHARGE: March 1949 to June 1953.

INSTRUMENTATION.--Temperature recorder since July 6, 1977.

REMARKS.--Daily water temperature records are rated good. Missing daily water temperature data for Nov. 24, 25, and 28-30 due to equipment problems. Mercury data for 2004 that was unavailable to publish last year are provided in this 2005 volume; concentrations are in nanograms per unit volume or mass. Several unpublished observations of specific conductance and water temperature were made during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE : Maximum daily, 524 microsiemens per centimeter (µS/cm) at 25°C, Mar. 4, 1978; minimum daily, 159 µS/cm at 25°C, May 28, 1979.
WATER TEMPERATURE: Maximum, 29.0°C, July 31, 1988, July 20, 1989; minimum, 0.0°C on many days during winter.
SEDIMENT CONCENTRATION: Maximum daily mean, 670 mg/L, Mar. 22, 25, 1951; minimum daily mean, 5 mg/L, Jul. 12, 1951.
SEDIMENT LOAD: Maximum daily, 16,100 tons, May 5, 1952; minimum daily, 51 tons Feb. 1, 1951.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 24.5°C, July 16 and Aug. 6; minimum, 0.0°C, many days December through February.

WATER-QUALITY DATA, SEPTEMBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)
SEP 2004							
16...	1030	2,240	8.7	368	13.0	--	--
SEP 2005							
13...	1130	1,690	9.0	339	13.5	2.2	3.2

Date	Mercury water fltrd, **ng/L** (50287)	Mercury water unfltrd **ng/L** (50286)	Mercury solids, total, **ng/g** (62978)	Methylmercury water unfltrd **ng/L** (50284)	Methylmercury solids, total, **ng/g** (62979)	Bed sed dry wt, percent of wet wt (64177)	Loss on ignition, bed sed percent (64178)
SEP 2004							
16...	.48	1.42	6.42	--	.15	.66	.01
SEP 2005							
13...	.35	.86	12.1	.09	--	.56	.02

06054500 MISSOURI RIVER AT TOSTON, MT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.5	12.0	12.5	4.5	3.5	4.0	0.5	0.5	0.5	0.5	0.0	0.0
2	13.0	12.0	12.5	4.5	3.5	4.0	1.0	0.5	0.5	0.5	0.0	0.0
3	13.0	12.0	12.5	4.5	4.0	4.5	1.0	0.0	0.5	0.5	0.0	0.0
4	13.0	12.5	12.5	4.0	4.0	4.0	1.0	0.5	0.5	0.5	0.0	0.5
5	13.5	12.5	13.0	4.0	3.5	4.0	1.0	0.0	0.5	0.5	0.0	0.0
6	13.0	12.0	12.5	5.0	4.0	4.5	0.5	0.5	0.5	0.5	0.0	0.5
7	13.5	12.5	13.0	6.0	5.0	5.5	0.5	0.5	0.5	0.5	0.0	0.5
8	13.5	12.5	13.0	6.5	5.5	6.0	1.0	0.5	0.5	0.5	0.0	0.0
9	13.5	12.5	13.0	6.0	5.0	5.5	0.5	0.0	0.5	0.5	0.0	0.0
10	12.5	11.0	12.0	6.5	5.5	6.0	1.0	0.5	0.5	0.5	0.0	0.5
11	11.5	10.5	11.0	5.5	4.0	4.5	1.0	0.5	1.0	0.5	0.0	0.5
12	11.0	10.0	10.5	4.0	3.5	3.5	3.0	1.0	2.0	0.5	0.0	0.5
13	11.0	10.0	10.5	3.5	3.0	3.0	2.5	0.5	1.5	0.5	0.0	0.0
14	11.0	10.0	10.5	3.5	2.5	3.0	0.5	0.5	0.5	0.5	0.0	0.0
15	11.5	11.0	11.0	3.5	2.5	3.0	2.0	0.5	1.0	0.5	0.0	0.0
16	11.0	10.5	11.0	4.0	3.0	3.5	2.0	1.0	1.5	0.5	0.0	0.5
17	10.5	8.5	9.5	3.5	3.0	3.5	1.5	1.0	1.0	0.5	0.0	0.5
18	8.5	7.0	7.5	3.5	3.0	3.0	1.5	1.0	1.5	1.0	0.5	0.5
19	8.0	7.0	7.5	3.0	2.5	3.0	2.5	1.5	2.0	1.0	0.5	0.5
20	8.0	7.0	7.5	3.0	2.5	2.5	2.5	1.5	2.0	0.5	0.5	0.5
21	8.5	7.5	8.0	2.5	0.5	1.5	1.5	0.5	0.5	0.5	0.5	0.5
22	8.5	8.0	8.5	1.0	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5
23	8.5	8.0	8.0	1.5	0.5	1.0	0.5	0.0	0.0	1.0	0.5	0.5
24	8.0	6.5	7.0	---	---	---	0.5	0.0	0.5	1.0	0.0	0.5
25	6.5	5.0	5.5	---	---	---	1.0	0.5	0.5	1.0	0.0	0.5
26	5.5	5.0	5.5	3.5	2.5	3.0	1.0	0.0	0.5	1.0	0.5	0.5
27	6.5	5.0	6.0	2.5	0.5	1.0	0.5	0.0	0.5	1.0	0.5	0.5
28	6.5	6.0	6.0	---	---	---	1.0	0.0	0.5	1.0	0.5	0.5
29	6.5	6.0	6.0	---	---	---	1.0	0.5	0.5	1.0	0.5	0.5
30	6.0	5.5	6.0	---	---	---	0.5	0.0	0.5	0.5	0.5	0.5
31	5.5	4.5	5.0	---	---	---	0.5	0.0	0.0	1.0	0.0	0.5
MONTH	13.5	4.5	9.5	6.5	0.5	3.5	3.0	0.0	1.0	1.0	0.0	0.5
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	0.0	0.5	5.0	3.5	4.5	6.5	5.5	6.0	10.0	8.5	9.5
2	1.0	0.5	0.5	5.5	4.5	5.0	7.5	6.0	7.0	11.0	9.5	10.5
3	1.0	0.5	0.5	5.5	4.5	5.0	8.5	7.5	8.0	12.0	10.5	11.0
4	1.0	0.5	0.5	6.0	4.5	5.5	8.5	7.5	8.0	12.5	11.0	11.5
5	1.0	0.5	0.5	6.0	5.0	5.5	8.0	7.0	7.5	14.0	12.5	13.0
6	1.0	0.0	0.5	6.5	5.5	6.0	9.5	7.5	8.5	14.5	13.5	14.0
7	1.0	0.0	0.5	6.5	5.5	6.0	11.0	9.5	10.0	15.0	14.5	14.5
8	1.0	0.0	0.5	6.5	5.0	5.5	10.5	10.0	10.0	14.5	13.5	14.0
9	1.0	0.0	0.5	8.0	6.5	7.0	10.0	8.0	9.0	14.0	13.5	14.0
10	1.0	0.5	0.5	9.0	8.0	8.5	8.5	7.5	8.0	13.5	11.0	12.5
11	1.5	0.5	0.5	8.5	7.5	8.0	9.0	8.0	8.5	11.0	9.0	10.0
12	1.5	0.5	1.0	7.5	6.0	7.0	10.0	8.5	9.5	9.0	8.5	8.5
13	1.5	1.0	1.5	6.0	4.0	5.0	11.5	10.0	10.5	10.5	8.5	9.0
14	2.0	1.5	1.5	4.5	3.5	4.0	11.0	9.5	10.5	14.0	10.5	12.0
15	1.5	0.5	1.0	4.0	3.5	3.5	9.5	8.0	8.5	15.0	14.0	14.5
16	1.0	0.5	0.5	4.5	4.0	4.0	10.5	8.0	9.5	15.0	14.5	15.0
17	1.5	0.0	0.5	4.5	3.5	4.0	11.0	10.5	11.0	14.5	12.5	14.0
18	1.5	0.0	0.5	4.0	3.0	3.5	11.0	9.5	10.0	12.5	11.5	12.0
19	1.0	0.5	1.0	4.5	3.0	4.0	9.5	7.5	8.0	14.0	12.5	13.5
20	1.5	1.0	1.0	4.5	4.0	4.0	7.5	6.5	7.0	14.0	13.5	13.5
21	2.5	1.5	2.0	6.0	4.0	5.0	7.0	6.0	6.5	14.5	13.0	13.5
22	3.0	2.0	2.5	6.5	5.5	6.0	9.5	6.5	8.0	15.0	13.5	14.0
23	3.0	2.0	2.5	6.0	2.5	4.5	12.0	9.5	11.0	15.5	14.0	14.5
24	3.5	2.0	3.0	2.5	1.0	1.5	13.0	11.5	12.0	15.5	13.5	14.0
25	3.5	2.5	3.0	3.5	1.0	2.0	13.5	12.0	13.0	14.0	12.0	12.5
26	4.0	3.0	3.5	5.0	3.5	4.0	13.0	12.5	12.5	14.5	12.5	13.5
27	4.5	3.0	3.5	6.0	4.5	5.0	12.5	9.0	10.5	15.5	14.0	14.5
28	4.5	3.5	4.0	7.0	6.0	6.5	9.0	6.5	7.5	16.0	15.5	15.5
29	---	---	---	6.5	5.5	6.0	7.5	6.5	7.0	16.5	15.5	16.0
30	---	---	---	5.5	5.0	5.0	9.0	7.5	8.0	15.5	14.0	15.0
31	---	---	---	5.5	4.0	5.0	---	---	---	15.0	14.0	14.5
MONTH	4.5	0.0	1.5	9.0	1.0	5.0	13.5	5.5	9.0	16.5	8.5	13.0

06054500 MISSOURI RIVER AT TOSTON, MT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.0	12.0	13.5	19.5	18.5	18.5	23.5	21.0	22.0	18.0	15.0	16.5
2	12.0	11.5	12.0	19.5	18.5	19.0	23.5	20.5	22.0	19.0	16.5	18.0
3	12.5	11.5	11.5	19.0	18.0	18.5	22.5	20.5	21.5	20.0	17.5	18.5
4	15.0	12.0	13.0	19.5	18.0	19.0	23.0	20.5	22.0	20.0	17.5	18.5
5	16.5	15.0	15.5	20.5	19.5	20.0	24.0	21.5	22.5	18.5	17.0	18.0
6	16.5	14.0	15.5	21.5	20.5	21.0	24.5	22.0	23.0	18.0	17.0	17.5
7	14.0	12.5	13.0	22.0	21.0	21.5	24.0	22.5	23.0	19.5	17.0	18.0
8	13.5	12.0	12.5	23.0	22.0	22.5	23.0	22.0	22.5	19.5	17.5	18.5
9	13.0	11.5	12.0	23.0	21.0	22.0	22.0	20.0	21.0	19.5	17.5	18.5
10	13.5	12.5	13.0	21.0	19.5	20.0	21.5	20.0	20.5	17.5	15.5	17.0
11	15.5	13.5	14.0	21.0	19.0	20.0	22.0	20.0	21.0	15.5	13.5	15.0
12	15.5	12.5	14.0	22.5	21.0	22.0	21.0	18.5	20.0	15.0	13.0	14.0
13	14.5	11.5	12.5	24.0	22.5	23.0	18.5	16.5	18.0	14.5	13.0	14.0
14	17.0	14.5	15.0	23.0	21.5	22.5	18.0	16.0	17.0	14.5	13.0	14.0
15	18.0	16.0	17.0	23.5	22.0	23.0	19.5	16.5	18.0	15.0	13.5	14.0
16	18.5	16.5	17.5	24.5	22.5	23.5	20.5	18.5	19.5	16.5	14.0	15.0
17	17.5	16.5	17.0	22.5	20.5	21.5	21.0	19.5	20.0	15.5	14.5	15.0
18	17.0	15.0	16.0	22.0	20.5	21.0	20.0	18.5	19.5	14.5	13.5	14.0
19	17.5	14.5	16.0	23.5	21.5	22.5	20.0	18.0	19.0	15.0	13.5	14.0
20	19.0	16.0	17.0	23.5	21.5	22.5	20.5	19.0	19.5	15.5	13.5	14.5
21	19.0	17.5	18.5	24.0	21.5	22.5	21.0	19.0	20.0	15.0	14.0	14.5
22	20.0	17.5	18.5	24.0	22.0	23.0	21.5	20.0	20.5	14.5	13.0	14.0
23	20.0	17.5	18.5	23.5	21.5	22.5	21.0	19.0	20.0	13.0	12.0	13.0
24	19.5	17.0	18.5	24.0	21.5	23.0	20.5	18.0	19.5	12.0	10.0	10.5
25	19.5	17.5	18.5	22.5	20.0	21.5	19.5	17.5	18.5	10.5	9.5	10.0
26	18.5	16.0	17.0	21.0	18.5	20.0	19.5	17.0	18.0	12.5	10.5	11.5
27	17.5	16.0	16.5	22.0	18.5	20.0	20.0	17.0	18.5	13.0	12.0	12.5
28	17.5	16.5	17.0	22.5	20.0	21.0	20.5	18.0	19.0	12.5	11.5	12.0
29	17.0	15.5	16.0	22.0	20.0	21.0	21.5	18.5	19.5	12.5	11.5	12.0
30	18.5	16.0	17.0	22.5	20.0	21.0	19.0	16.5	18.0	13.5	12.0	13.0
31	---	---	---	24.0	21.0	22.0	17.0	15.0	16.0	---	---	---
MONTH	20.0	11.5	15.5	24.5	18.0	21.5	24.5	15.0	20.0	20.0	9.5	15.0

462334111311701 UPPER CANYON FERRY LAKE NEAR TOWNSEND, MT

LOCATION.--Lat 46°23'34", long 111°31'17" (NAD 27), in $SW^1/_4SW^1/_4NE^1/_4$ sec.6, T.7 N., R.2 E., Broadwater County, Hydrologic Unit 10030101.

PERIOD OF RECORD.--September 2004, discontinued.

GAGE.--None, elevation at site, 3,797 ft (NGVD 27).

REMARKS.-Mercury data for 2004 that was unavailable to publish last year are provided in this 2005 volume; concentrations are in nanograms per unit volume or mass.

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

Date	Time	Mercury solids, total, **ng/g** (62978)	Methyl-mercury solids, total, **ng/g** (62979)	Bed sed dry wt, percent of wet wt (64177)	Loss on ig-nition, bed sed percent (64178)
SEP 2004					
27...	1100	20.3	.15	.69	.02

463811111420001 LOWER CANYON FERRY LAKE NEAR TOWNSEND, MT

LOCATION.--Lat 46°38'11", long 111°14'20" (NAD 27), in $SE^1/_4NW^1/_4SW^1/_4$ sec.11, T.10 N., R.1 W., Lewis and Clark County, Hydrologic Unit 10030101.

PERIOD OF RECORD.--September 2004, discontinued.

GAGE.--None, elevation at site, 3,797 ft (NGVD 27).

REMARKS.--Mercury data for 2004 that was unavailable to publish last year are provided in this 2005 volume; concentrations are in nanograms per unit volume or mass.

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

Date	Time	Mercury solids, total, **ng/g** (62978)	Methyl-mercury solids, total, **ng/g** (62979)	Bed sed dry wt, percent of wet wt (64177)	Loss on ig-nition, bed sed percent (64178)
SEP 2004					
27...	1300	95.6	<.14	.59	.04

06058500 CANYON FERRY LAKE NEAR HELENA, MT

LOCATION.--Lat 46°38'57", long 111°43'39" (NAD 27), in $SE^1/_4$ $SE^1/_4$ sec.4, T.10 N., R.1 W., Lewis and Clark County, Hydrologic Unit 10030101, in block 17 of Canyon Ferry Dam, 15 mi east of Helena, and at river mile 2,252.8.

DRAINAGE AREA.--15,904 mi^2.

PERIOD OF RECORD.--April 1953 to current year (monthend contents only). Prior to October 1981, published as Canyon Ferry Reservoir near Helena. Records of monthend contents in Lake Sewell, submerged by present reservoir Apr. 8, 1953, available January 1936 to March 1953. Scattered daily elevations and contents for April to July 1953, published in WSP 1320-B. Daily elevations and contents for May to June 1964, published in WSP 1840-B. Records of daily elevations and contents are in files of the USGS Water Science Center located in Helena, Montana.

REVISED RECORDS.--WSP 1559: Drainage area.

GAGE.--Water-stage recorder in powerhouse control room. Elevation of gage is 3,650.0 ft (NGVD 29).

REMARKS.--Reservoir is formed by concrete dam; construction began in 1949, completed in 1953. Storage began in March 1953. All elevations are referenced to the National Geodetic Vertical Datum of 1929. Usable capacity, 1,993,000 acre-ft between elevation 3,650.00 ft, contents at dead storage (1,060 acre-ft) and 3,800.00 ft, controlled spillway elevation. Minimum operating level, 396,000 acre-ft, at elevation 3,728.00 ft, for on-site power generation. Figures given herein represent usable contents. Water is used for power production, flood control, irrigation, and recreation.

COOPERATION.--Elevations and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 2,043,000 acre-ft, July 15-29, 31, 1955, July 2, 5, 6, 8, 1956, July 16, 17, 1962, June 23, 1964, elevation, 3,800.0 ft; minimum since first filling, 1,017,000 acre-ft, Apr. 11, 1967, elevation, 3,764.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,941,000 acre-ft, July 2, 3, elevation, 3,798.51 ft; minimum, 1,354,000 acre-ft, Jan. 18, 19, elevation, 3,779.85 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, SEPTEMBER 2004 TO SEPTEMBER 2005

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
September 30	3,781.39	1,398,000	--
October 31	3,781.21	1,393,000	-5,000
November 30	3,781.78	1,409,000	+16,000
December 31	3,781.61	1,404,000	-5,000
Calendar year 2004	--	--	-67,000
January 31	3,780.40	1,369,000	-35,000
February 28	3,780.67	1,377,000	+8,000
March 31	3,780.79	1,381,000	+4,000
April 30	3,781.06	1,388,000	+7,000
May 31	3,787.50	1,583,000	+195,000
June 30	3,798.37	1,937,000	+354,000
July 31	3,794.71	1,815,000	-122,000
August 31	3,790.18	1,668,000	-147,000
September 30	3,786.42	1,550,000	-118,000
Water year 2005	--	--	+152,000

462522112172401 08N06W24DDCD01 (LUTTRELL WELL EPA-3)

LOCATION.--Lat 46°25'22", long 112°17'24" (NAD 83), in $SW^1/_4SE^1/_4SE^1/_4$ sec.24, T.8 N., R.6 W., Lewis and Clark County, Hydrologic Unit 10030101.

HYDROGEOLOGIC UNIT.--Boulder batholith quartz monzonite.

WELL CHARACTERISTICS.--Drilled in June 1999, casing diameter 4 in., depth 227 ft.

DATUM.--Measuring point, top of PVC casing, 1.70 ft above land surface datum. Elevation of land-surface datum is 7,579.8 ft (NGVD 29).

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

REMARKS.--All water levels are reported as distance, in feet below land-surface datum.

MEASURED WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR 2005

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 7	127.19	Aug. 15	115.40
Nov. 9	128.26	Aug. 17	R160.48
June 17	122.78	Sept. 30	125.35
July 18	116.51		

R--Recently pumped.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)
JUN 17...	1300	220	1.0	6.8	307	9.0	15	4.72	.784	4.14
AUG 17...	1000	--	.2	7.2	391	9.0	4	1.43	.192	5.20

Date	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)
JUN 17...	6	51.7	85	79	78	1.53	.3	22.0	54.1	186	.25
AUG 17...	17	83.7	94	144	113	1.75	.3	18.7	51.2	231	.31

Date	Alum-inum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Cadmium water, fltrd, ug/L (01025)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Zinc, water, fltrd, ug/L (01090)
JUN 17...	2	.6	.11	1.4	81	.13	149	11.3
AUG 17...	2	2.2	<.04	.6	12	E.07	37.2	1.3

E--Estimated.

462522112172402 08N06W24DDCD02 (LUTTRELL WELL EPA-3S)

LOCATION.--Lat 46°25'22", long 112°17'24", (NAD 83), in $SW^1/_4SE^1/_4SE^1/_4$ sec.24, T.8 N., R.6 W., Lewis and Clark County, Hydrologic Unit 10030101.

HYDROGEOLOGIC UNIT.--Tertiary volcanics.

WELL CHARACTERISTICS.--Drilled in June 2000, casing diameter 2 in., depth 84 ft.

DATUM.--Measuring point, top of PVC casing, 3.10 ft above land surface datum. Elevation of land-surface datum is 7,579.6 ft (NGVD 29).

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

REMARKS.--All water levels are reported as distance, in feet below land-surface datum.

MEASURED WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR 2005

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 7	53.51	July 18	32.23
Nov. 9	61.31	Aug. 15	46.18
May 25	33.44	Aug. 17	46.52
June 16	24.27	Sept. 30	60.24

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)
MAY 25...	1400	6.7	--	5.7	58	5.0	20	6.00	1.12	2.07
JUN 16...	1000	27	8.7	5.8	86	8.0	28	8.79	1.54	2.32
AUG 17...	1100	--	4.3	4.1	79	9.0	10	3.08	.609	2.31

Date	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alka-linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)
MAY 25...	.1	.80	7	10	8	.63	<.1	4.12	11.9	32	.04
JUN 16...	.1	1.57	10	14	11	.74	<.1	5.28	17.6	45	.06
AUG 17...	.1	.85	12	--	<2	.99	<.1	10.6	21.5	E41	E.06

Date	Alum-inum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Cadmium water, fltrd, ug/L (01025)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Zinc, water, fltrd, ug/L (01090)
MAY 25...	62	.4	.05	1.5	20	.46	6.3	5.1
JUN 16...	48	.3	.11	1.7	31	.40	25.2	8.2
AUG 17...	638	<.2	.14	4.6	296	7.20	7.5	41.5

E--Estimated.

462720112165101 TENMILE CREEK ABOVE MONITOR CREEK, NEAR RIMINI, MT

LOCATION.--Lat 46°27'19", long 112°16'52" (NAD 27), $SW^1/_4NE^1/_4SW^1/_4$ sec.7, T.8 N., R.5 W., Lewis and Clark County, Hydrologic Unit 10030101, 30 ft above confluence with Monitor Creek and 2.9 mi south of Rimini.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 2003 to current year.

GAGE.--None. Elevation at sampling site is 6,230 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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)
JUN													
14...	1130	13	6.8	23	15.0	5.5	7	2.15	.434	.69	.3	1.70	31
AUG													
25...	0930	.10	7.3	42	13.0	7.0	12	3.50	.741	.80	.4	3.03	34

Date	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)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
JUN										
14...	8	E.14	E.1	13.1	2.5	149	2.0	2	.04	.04
AUG										
25...	17	<.20	E.1	14.5	4.4	23	1.3	1.1	E.02	E.02

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
JUN										
14...	2.4	2.7	114	140	.27	.44	1.5	3	6.4	6
AUG										
25...	1.0	.9	62	70	E.08	.10	10.6	10	4.0	4

E--Estimated.

462542112173101 MONITOR CREEK SS 12 NEAR RIMINI, MT

LOCATION.--Lat 46°25'42", long 112°17'31" (NAD 27), in $NW^1/_4NE^1/_4SE^1/_4$ sec.24, T.8 N., R.6 W., Lewis and Clark County, Hydrologic Unit 10030101, 1.95 mi upstream of confluence with Tenmile Creek, 5.4 mi south of Rimini.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 2003 to current year.

GAGE.--None. Elevation at sampling site is 7,230 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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)
JUN											
15...	0930	.93	4.1	225	6.0	5.0	54	16.4	3.31	5.11	.1
JUL											
29...	1000	.07	3.7	299	17.0	9.0	65	19.0	4.27	7.63	.1
AUG											
22...	1400	.06	3.7	280	25.0	11.5	55	16.1	3.71	7.54	.1

Date	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
JUN											
15...	1.05	4	.36	.2	15.6	102	5,070	.8	<2	6.58	6.36
JUL											
29...	2.00	5	.30	.2	30.0	129	6,510	.4	<2	9.35	9.32
AUG											
22...	2.03	6	.48	.2	33.4	111	6,600	.5	.85	7.91	7.93

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)
JUN										
15...	23.0	24.6	160	190	18.9	18.9	485	479	442	397
JUL										
29...	34.1	33.2	460	450	39.6	37.0	722	733	697	683
AUG										
22...	29.8	30.5	583	580	41.8	38.5	699	691	610	652

462721112164801 MONITOR CREEK AT MOUTH (MCM), NEAR RIMINI, MT

LOCATION.--Lat 46°27'21", long 112°16'48" (NAD 27), in $SW^1/_4NE^1/_4SW^1/_4$ sec.7, T.8 N., R.5 W., Lewis and Clark County, Hydrologic Unit 10020006, 20 ft upstream from mouth and 4.0 mi southwest of Rimini.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July and October 1997, July 2003 to current year.

GAGE.--None. Elevation at sampling site is 6,220 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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)
JUN 14...	1100	8.2	6.5	49	15.0	4.5	15	4.21	1.04	1.32	.2	1.58	17
JUL 29...	0800	.37	6.6	93	17.0	9.5	28	8.02	2.05	2.27	.2	2.38	14
AUG 25...	1000	.19	6.7	117	13.0	6.0	40	11.5	2.69	2.68	.2	2.74	12

Date	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)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)
JUN 14...	5	E.18	.1	14.7	14.2	365	1.2	E1	.81	.82	4.4	5.6
JUL 29...	8	<.20	.2	19.2	30.9	84	.5	<2	1.47	1.48	2.5	2.9
AUG 25...	7	<.20	.2	21.2	41.8	45	.4	.41	1.43	1.37	1.6	1.6

Date	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)
JUN 14...	74	110	1.39	2.34	55.4	53	64.2	60
JUL 29...	25	50	.43	.85	52.6	52	130	134
AUG 25...	16	30	.13	.22	34.8	33	150	153

E--Estimated.

462544112162001 RUBY CREEK RC2A ABOVE SCOTT RESERVOIR, NEAR RIMINI, MT

LOCATION.--Lat 46°25'44", long 112°16'20" (NAD 27), in NE$^1/_4$ NW$^1/_4$ SE$^1/_4$ sec.19, T.8 N., R.5 W., Lewis and Clark County, Hydrologic Unit 10020006, 200 ft above confluence with unnamed tributary, 0.3 mi upstream from Scott Reservoir, and 0.45 mi south of Rimini.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 2003 to current year.

GAGE.--None. Elevation at sampling site is 7,380 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	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)
JUN 14...	1330	2.0	6.3	16	11.0	5.0	6	1.77	.275	.48	.2	.82	23

Date	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)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)
JUN 14...	6	E.12	<.1	6.14	1.9	145	1.6	E1	<.04	E.03	2.2	2.2	55

Date	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)
JUN 14...	60	.21	.25	1.2	2	4.2	2

E--Estimated.

462657112143501 BANNER CREEK AT BRIDGE, 0.5 MILE ABOVE CITY DIVERSION, NEAR RIMINI, MT

LOCATION.--Lat 46°23'57", long 112°15'25" (NAD 27), in $NW^1/_4$ $NW^1/_4$ $SW^1/_4$ sec.16, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, at bridge near the downstream edge of meadow, about 0.5 mi upstream from city diversion, and 2.5 mi south of Rimini.

DRAINAGE AREA.--2.6 mi^2.

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

GAGE--None. Elevation at site is 6,700 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
MAR													
09...	0900	.17	7.3	88	--	0.0	35	10.7	1.94	.6	<2	.07	.07
MAY													
26...	1240	14	6.9	37	9.5	4.0	14	4.43	.818	1.1	E2	.09	.16
AUG													
01...	0900	.36	7.2	68	9.5	20.5	27	8.36	1.59	.8	<2	.08	.08
SEP													
19...	0915	.24	7.3	80	6.0	3.5	34	10.5	1.86	.6	.83	.08	.08

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR									
09...	.9	2.2	E.07	.14	14.9	16	70	1	<.01
MAY									
26...	3.3	5.4	.18	2.29	15.5	23	54	19	.74
AUG									
01...	1.5	2.0	.10	.23	12.1	14	83	1	<.01
SEP									
19...	--	1.2	--	.12	--	14	69	2	<.01

E--Estimated.

462838112143901 POISON CREEK AT MOUTH, NEAR RIMINI, MT

LOCATION.--Lat 46°28'38", long 112°14'39" (NAD 27), in $SW^1/_4$ $NW^1/_4$ $NW^1/_4$ sec.4, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, at culvert crossing on Rimini Road about 1 mi south of Rimini.

DRAINAGE AREA.--0.32 mi^2.

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

GAGE--None. Elevation at site is 5,500 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)
MAR											
09...	1030	E.01	4.8	232	1.5	0.0	82	24.8	4.88	7.3	17
MAY											
17...	1100	1.6	6.7	75	5.5	4.5	22	6.84	1.29	24.4	296
AUG											
01...	1000	.06	5.9	114	21.0	12.0	38	11.8	2.15	17.0	24
SEP											
19...	1015	.01	6.1	141	6.5	6.0	50	15.2	2.79	12.8	15.4

Date	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	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)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR											
09...	12.9	12.9	42.0	40.6	7.14	13.0	2,500	2,440	42	3	<.01
MAY											
17...	5.81	6.65	25.4	68.5	1.08	153	901	878	52	87	.38
AUG											
01...	9.96	10.3	35.7	38.0	2.37	5.00	1,550	1,610	57	1	<.01
SEP											
19...	11.3	11.8	34.1	32.2	1.48	2.75	1,830	1,880	67	1	<.01

E--Estimated.

462853112144101 TENMILE CREEK ABOVE CITY DIVERSION, NEAR RIMINI, MT

LOCATION.--Lat 46°28'53", long 112°14'10" (NAD 27), in $NW^1/_4$ $NW^1/_4$ $NW^1/_4$ sec.4 , T.8 N., R.5 W., Lewis and Clark County, Hydrologic Unit 10030101, about 0.25 mile upstream from city diversion, about 100 feet west of Rimini road, and 0.125 mi south of Rimini.

DRAINAGE AREA.--15.2 mi^2.

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

GAGE--None. Elevation at site is 5,350 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
MAR													
08...	0900	2.2	7.6	71	4.5	0.0	25	7.49	1.56	4.4	6	1.10	1.19
MAY													
17...	1000	123	7.3	37	7.0	3.0	13	3.92	.835	3.0	9	.49	.75
AUG													
01...	1030	2.4	7.2	74	20.0	13.5	26	7.56	1.68	5.9	7	1.77	1.65
SEP													
19...	1100	3.5	7.4	57	11.5	5.5	21	6.23	1.28	3.9	5.2	.97	1.02

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR									
08...	2.6	3.2	.67	1.43	270	272	77	1	.01
MAY									
17...	4.9	8.7	.99	10.6	74.4	105	50	60	20
AUG									
01...	3.6	4.4	.67	1.36	346	394	85	1	.01
SEP									
19...	2.5	2.7	.42	1.17	208	224	73	2	.02

462758112123001 BEAVER CREEK TRIBUTARY NO. 2 NEAR RIMINI, MT

LOCATION.--Lat 46°27'58", long 112°12'30" (NAD 27), in $SW^1/_4$ $SE^1/_4$ $SE^1/_4$ sec.3, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, about 40 ft upstream from inlet structure to Banner Creek flume, about 100 ft. upstream from Banner Creek flume, and about 2.5 mi southwest of Rimini.

DRAINAGE AREA.--0.67 mi^2.

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

GAGE--None. Elevation at site is 6,330 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)
MAR											
09...	1130	.14	7.1	67	--	1.5	21	6.77	1.09	6.8	7
MAY											
26...	1120	1.5	7.0	46	11.0	3.5	14	4.42	.758	4.5	10
AUG											
04...	1400	.22	7.1	38	25.0	10.0	17	5.43	.950	6.6	7
SEP											
22...	1430	.01	6.4	63	18.0	6.0	20	6.41	1.04	6.7	7.1

Date	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR											
09...	1.81	1.85	4.2	4.3	.10	.14	291	297	57	2	<.01
MAY											
26...	3.14	3.24	16.2	19.8	.55	4.54	464	491	50	1	<.01
AUG											
04...	2.51	2.27	7.7	9.0	.34	1.05	357	398	83	1	<.01
SEP											
22...	2.17	2.21	6.3	6.4	.29	.61	347	348	71	1	<.01

462922112145401 TENMILE CREEK BELOW SPRING CREEK, AT RIMINI, MT

LOCATION.--Lat 46°29'22", long 112°14'54" (NAD 27), in NW$^1/_4$ SW$^1/_4$ SW$^1/_4$ sec.33, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, at bridge crossing on road to private residence in Rimini.

DRAINAGE AREA.--22.8 mi^2.

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

GAGE--None. Elevation at site is 5,220 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)
MAR											
08...	1000	.52	6.9	139	9.0	0.0	50	13.9	3.59	91.2	135
MAY											
17...	1200	120	6.9	25	8.0	4.5	14	4.08	.903	4.2	17
AUG											
01...	1200	.34	7.0	122	24.5	17.0	44	12.3	3.15	45.6	85
SEP											
19...	1130	.70	7.0	120	11.0	9.5	44	12.8	2.94	7.0	50.5

Date	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR											
08...	4.64	4.63	4.1	5.3	1.46	3.29	803	856	82	3	<.01
MAY											
17...	.49	.78	6.6	10.7	.93	12.3	79.6	114	37	69	22
AUG											
01...	4.30	4.01	5.3	7.6	.89	1.92	627	707	71	3	<.01
SEP											
19...	5.74	5.76	5.8	9.3	.90	7.01	833	878	85	2	<.01

462932112145801 MOORES SPRING CREEK AT MOUTH, NEAR RIMINI, MT

LOCATION.--Lat 46°29'32", long 112°14'58" (NAD 27), in NW$^1/_4$ NW$^1/_4$ SW$^1/_4$ sec.33 , T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, at culvert crossing on Rimini Road in Rimini.

DRAINAGE AREA.--0.6 mi^2.

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

GAGE--None. Elevation at site is 5,180 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)
MAR											
08...	1100	.04	7.6	221	9.5	0.0	95	25.5	7.58	70.4	72
MAY											
17...	1230	1.1	7.4	142	9.0	6.0	58	15.7	4.54	49.4	121
AUG											
01...	1230	.04	7.8	248	24.5	13.5	110	29.1	7.95	80.2	81
SEP											
19...	1215	.02	7.6	300	8.0	11.0	130	36.5	10.6	65.9	67.6

Date	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR											
08...	3.15	3.13	4.0	4.6	.08	1.87	488	513	55	2	<.01
MAY											
17...	4.71	5.51	9.9	14.7	.43	19.0	585	708	49	7	.02
AUG											
01...	3.78	4.11	5.8	6.3	.10	.59	586	618	86	1	<.01
SEP											
19...	5.45	5.61	4.7	4.3	E.05	.33	899	918	77	2	<.01

E--Estimated.

462818112171001 MINNEHAHA CREEK ABOVE JUSTICE MINE, NEAR RIMINI, MT

LOCATION.--Lat 46°28'18", long 112°17'10" (NAD 27), in $SW^1/_4$ $SW^1/_4$ $SW^1/_4$ sec.6, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, at culvert 0.10 mi upstream from Justice mine and 2.3 mi southwest of Rimini.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--April 1998 to October 1998, May 2005 to August 2005.

GAGE--None. Elevation at site is 6,320 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
MAY													
18...	0820	1.6	7.5	28	8.5	1.0	8	2.49	.477	1.1	<2	E.03	.05
AUG													
02...	0830	.04	7.4	46	18.0	9.5	13	4.02	.809	.8	<2	.04	E.03

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)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAY									
18...	14.4	17.3	.13	.47	4.5	6	41	4	.02
AUG									
02...	6.9	7.6	E.06	.16	5.2	5	11	9	<.01

E--Estimated.

462844112165401 MINNEHAHA CREEK ABOVE ARMSTRONG MINE, NEAR RIMINI, MT

LOCATION.--Lat 46°28'44", long 112°16'54" (NAD 27), in $NW^1/_4$ $SE^1/_4$ $SW^1/_4$ sec.6, T. 8 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, at Armstrong mine road, 0.40 mi downstream from Justice mine, and 1.8 mi southwest of Rimini.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--April 1998 to October 1998, May 2005 to August 2005.

GAGE--None. Elevation at site is 5,910 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
MAY													
18...	0930	7.7	7.1	32	13.0	3.0	9	2.58	.562	4.7	6	.34	.46
AUG													
02...	0930	.30	7.2	48	17.0	9.5	13	3.93	.808	13.8	14	.86	.81

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)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAY									
18...	6.7	8.9	2.34	6.68	21.5	27	45	4	.08
AUG									
02...	7.5	8.5	2.21	3.66	52.7	59	67	1	<.01

462917112165601 MINNEHAHA CREEK BELOW ARMSTRONG MINE, NEAR RIMINI, MT

LOCATION.--Lat 46°29'17", long 112°16'56" (NAD 27), in $SW^1/_4SW^1/_4NW^1/_4$ sec.31, T. 9 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, 0.6 mi downstream from the Armstrong mine road and 1.4 mi southwest of Rimini.

DRAINAGE AREA.--1.75 mi^2.

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

GAGE--None. Elevation at site is 5,650 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
MAY													
18...	1100	9.7	7.1	43	13.5	--	13	3.62	.893	4.8	7	2.34	2.53
AUG													
02...	1100	.34	7.2	72	16.0	11.0	22	6.03	1.68	9.3	9	5.21	4.93

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAY									
18...	11.8	15.4	1.46	7.02	310	356	34	5	.13
AUG									
02...	16.2	17.9	.53	1.10	742	796	54	2	<.01

462918112170801 BEATTRICE MINE TRIBUTARY AT MOUTH, NEAR RIMINI, MT

LOCATION.--Lat 46°29'18", long 112°17'08" (NAD 27), in $SW^1/_4$ $SW^1/_4$ $SW^1/_4$ sec.31, T. 9 N., R. 5 W., Lewis and Clark County, Hydrologic Unit 10030101, 400 ft upstream from old logging road crossing, about 1,000 ft upstream from confluence with Minnehaha Creek, and 1.5 mi southwest of Rimini.

DRAINAGE AREA.--0.24 mi^2.

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

GAGE--None. Elevation at site is 5,660 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
MAY													
18...	1030	1.4	7.4	45	13.5	2.0	15	4.78	.808	1.4	E2	.05	.11
AUG													
02...	1015	.07	7.4	98	16.0	10.5	30	9.15	1.72	.7	<2	.06	.05

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)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAY									
18...	17.4	25.7	.23	2.44	5.7	10	51	10	.04
AUG									
02...	7.4	8.6	<.08	.07	5.7	6	43	1	<.01

E--Estimated.

463023112153701 MINNEHAHA CREEK ABOVE CITY DIVERSION, NEAR RIMINI, MT

LOCATION.--Lat 46°30'23", long 112°15'37" (NAD 27), in $NW^1/_4$ $NW^1/_4$ $SE^1/_4$ sec.29, T.9 N., R.5 W., Lewis and Clark County, Hydrologic Unit 10030101, about 75 feet upstream from city diversion structure, about 200 feet upstream from mouth and about 3 mi north of Rimini.

DRAINAGE AREA.--5.35 mi^2.

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

GAGE--None. Elevation at site is 5,040 ft (NGVD 29).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
MAR													
08...	1200	.74	7.0	82	10.0	0.0	26	7.61	1.78	1.9	E2	1.30	1.38
MAY													
18...	1245	23	7.0	42	17.0	4.5	14	3.96	.937	2.7	3	.93	1.04
AUG													
02...	1200	1.1	7.5	63	18.0	12.0	20	5.79	1.37	3.1	3	1.26	1.25
SEP													
19...	1300	.49	7.7	74	17.0	7.0	24	6.82	1.60	2.6	2.6	1.32	1.33

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR									
08...	6.7	6.3	.17	.29	234	248	63	2	<.01
MAY									
18...	8.5	11.0	.41	2.19	133	154	59	5	.31
AUG									
02...	5.2	6.4	.13	.59	195	212	72	3	.01
SEP									
19...	4.3	4.3	E.05	.17	247	232	77	2	<.01

E--Estimated.

06062500 TENMILE CREEK NEAR RIMINI, MT

LOCATION.--Lat 46°31'27", long 112°15'22" (NAD 27), in NE$^1/_4$SW$^1/_4$NE$^1/_4$ sec.20, T.9 N., R.5 W., Lewis and Clark County, Hydrologic Unit 10030101, Helena National Forest, on left bank at U.S. Forest Service Moose Creek campground, 500 ft upstream from Moose Creek, 2.5 mi north of Rimini, and at river mile 20.4.

DRAINAGE AREA.--30.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1914 to September 1994, May 1997 to current year. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1309: 19417, 1921, 1924-25. WSP 1509: 1915, 1916-17(M), 1920(M), 1927(m), 1928-1930, 1947(m), 1948, 1950(M). WSP 1559: Drainage area. WSP 1709: 1959. WDR--97-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,850 ft (NGVD 29). Prior to Dec. 17, 1934, water-stage recorder at site 40 ft downstream at different elevation and different control.

REMARKS.--Water-discharge records good except those below 1.0 ft^3/s and those for estimated daily discharges, which are poor. Flow regulated by Chessman and Scott Reservoirs on tributaries upstream from station, combined capacity, 2,340 acre-feet. Some small diversions upstream from station. U.S. Geological Survey satellite telemeter at station. Several unpublished observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.52	0.60	e0.56	e0.30	e0.50	0.46	1.4	18	90	29	1.1	0.30
2	0.50	0.67	0.55	e0.26	0.47	0.48	2.3	17	111	26	1.1	0.29
3	0.49	0.83	0.54	e0.26	0.49	0.47	2.4	18	178	23	1.0	0.28
4	0.47	0.69	0.53	e0.27	0.48	0.49	2.5	21	179	21	0.94	0.27
5	0.45	0.74	0.48	e0.27	e0.44	0.52	2.2	30	161	19	0.84	0.31
6	0.43	0.74	0.50	e0.26	e0.38	0.71	2.9	44	154	18	0.75	0.27
7	0.47	0.74	0.52	e0.30	e0.39	0.86	6.8	51	137	16	0.69	0.24
8	0.45	0.80	0.50	e0.28	e0.42	1.3	11	58	115	14	0.73	0.22
9	0.44	0.78	0.50	e0.28	0.46	2.0	7.6	59	102	13	0.67	0.21
10	0.43	0.83	0.48	e0.30	0.49	2.7	6.0	146	90	13	0.62	0.34
11	0.42	0.78	e0.70	e0.32	0.51	2.1	5.1	155	89	12	0.56	0.35
12	0.40	0.61	e0.66	e0.27	0.49	1.5	5.3	127	120	10	0.56	0.32
13	0.40	0.62	0.50	e0.22	0.50	1.4	6.6	122	106	9.1	0.62	0.33
14	0.39	0.61	0.62	e0.20	e0.60	0.98	7.1	123	89	7.9	0.56	0.30
15	0.44	0.60	e0.64	e0.22	e0.44	0.79	5.6	131	96	6.8	0.47	0.28
16	0.44	0.59	0.58	e0.30	e0.40	0.75	5.7	148	89	6.1	0.43	0.27
17	0.45	0.55	0.54	e0.40	e0.44	e0.65	8.3	168	93	5.6	0.43	0.88
18	0.48	0.57	0.51	0.48	e0.40	e0.56	8.5	145	79	5.1	0.44	1.4
19	0.46	0.61	0.57	0.57	e0.40	e0.56	6.9	183	70	4.3	0.41	0.92
20	0.45	0.52	0.53	0.67	e0.44	e0.56	7.1	177	62	3.4	0.37	0.67
21	1.3	0.53	e0.47	e1.2	e0.40	e0.57	6.9	173	56	2.8	0.33	0.51
22	1.3	0.59	e0.36	e1.5	e0.45	e0.54	8.3	147	50	2.7	0.33	0.46
23	0.99	0.88	e0.33	0.88	0.49	e0.54	13	138	45	2.7	0.38	0.47
24	0.88	e0.88	e0.50	e1.6	0.48	e0.50	19	116	41	1.9	0.32	0.95
25	0.67	e1.0	e0.52	0.92	e0.50	e0.54	27	99	40	1.9	0.31	0.96
26	0.63	0.82	e0.46	e1.4	e0.56	e0.56	29	88	45	1.6	0.27	1.2
27	0.63	0.69	e0.40	0.77	e0.60	0.93	27	82	47	1.3	0.24	0.64
28	0.63	e0.70	e0.54	0.64	e0.56	1.8	23	77	45	1.2	0.22	0.50
29	0.66	0.65	e0.50	0.58	---	1.4	21	71	38	1.2	0.21	1.5
30	0.63	0.44	e0.40	0.50	---	1.1	19	63	33	1.1	0.45	1.4
31	0.65	---	e0.30	0.49	---	1.1	---	57	---	1.2	0.34	---
TOTAL	17.95	20.66	15.79	16.91	13.18	29.42	304.5	3,052	2,650	281.9	16.69	17.04
MEAN	0.58	0.69	0.51	0.55	0.47	0.95	10.2	98.5	88.3	9.09	0.54	0.57
MAX	1.3	1.0	0.70	1.6	0.60	2.7	29	183	179	29	1.1	1.5
MIN	0.39	0.44	0.30	0.20	0.38	0.46	1.4	17	33	1.1	0.21	0.21
AC-FT	36	41	31	34	26	58	604	6,050	5,260	559	33	34

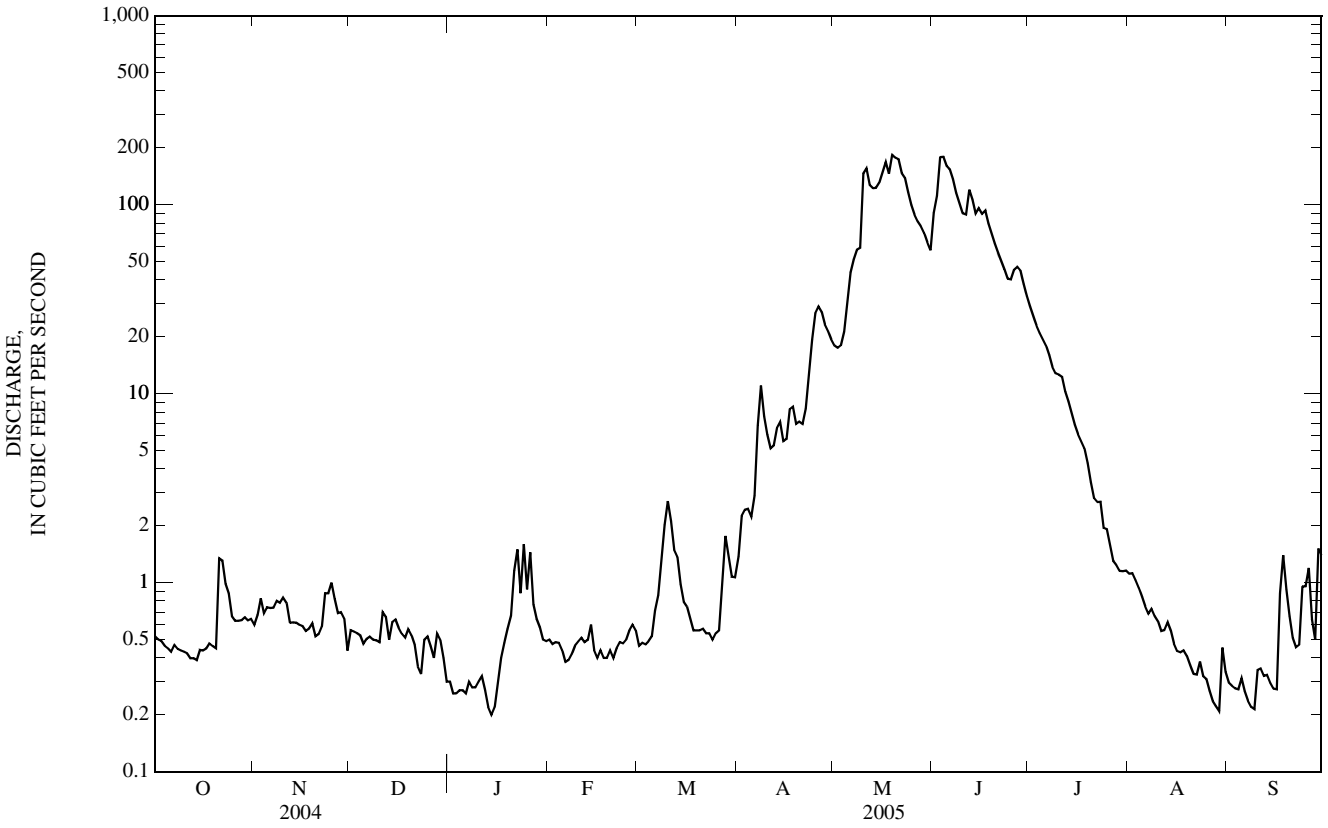
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2005, BY WATER YEAR (WY)*

MEAN	3.01	2.28	1.73	1.43	1.29	2.49	17.9	82.7	71.6	12.1	2.49	2.30
MAX	23.1	13.6	9.64	6.97	5.05	17.5	66.7	300	346	66.4	22.5	22.4
(WY)	(1966)	(1986)	(1918)	(1918)	(1921)	(1986)	(1926)	(1917)	(1975)	(1969)	(1993)	(1993)
MIN	0.19	0.22	0.17	0.14	0.06	0.07	1.50	6.14	3.01	0.34	0.13	0.23
(WY)	(1974)	(1941)	(1941)	(1941)	(2002)	(2002)	(1975)	(2000)	(2000)	(1985)	(2000)	(1935)

06062500 TENMILE CREEK NEAR RIMINI, MT—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1915 - 2005*	
ANNUAL TOTAL	2,887.15		6,436.04			
ANNUAL MEAN	7.89		17.6		16.8	
HIGHEST ANNUAL MEAN					53.1	1917
LOWEST ANNUAL MEAN					1.74	2000
HIGHEST DAILY MEAN	67	May 27	183	May 19	1,880	May 22, 1981
LOWEST DAILY MEAN	0.13	Jan 5	0.20	Jan 14	0.00	Aug 31, 1931
ANNUAL SEVEN-DAY MINIMUM	0.22	Jan 1	0.26	Sep 3	0.00	Aug 31, 1931
MAXIMUM PEAK FLOW			227	Jun 3	3,290	May 22, 1981
MAXIMUM PEAK STAGE			3.33	Jun 3	6.20	May 22, 1981
ANNUAL RUNOFF (AC-FT)	5,730		12,770		12,150	
10 PERCENT EXCEEDS	26		78		50	
50 PERCENT EXCEEDS	0.70		0.67		1.9	
90 PERCENT EXCEEDS	0.36		0.33		0.40	

*--During period of operation (1915-1994, May 1997 to current year).
e--Estimated.



06062500 TENMILE CREEK NEAR RIMINI, MT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1981, 1997-98, March 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)
MAR											
08...	1300	1.1	7.1	193	12.0	2.5	77	21.8	5.40	20.5	24
MAY											
17...	1330	160	7.6	46	12.0	5.0	16	4.70	1.10	6.6	23
AUG											
01...	1300	1.2	7.7	139	27.0	18.5	52	15.3	3.35	26.9	26
SEP											
19...	1330	.89	7.5	174	18.0	13.5	69	20.1	4.58	26.7	27.4

Date	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Suspnd. sediment, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
MAR											
08...	1.32	1.26	1.8	2.6	E.06	.18	282	297	82	1	<.01
MAY											
17...	.63	1.01	7.4	11.6	.74	11.8	106	151	49	40	17
AUG											
01...	1.08	.95	2.7	3.4	.10	.37	175	193	64	2	.01
SEP											
19...	1.00	1.03	1.9	2.2	E.06	.21	210	189	89	1	<.01

E--Estimated.