06090300 Missouri River near Great Falls, Mont.
Site Number 70

LOCATION.--Lat 47°35'04", long 111°03'35" (NAD 27), in SW¼SE¼SW¼ sec.11, T.21 N., R.5 E., Cascade County, Hydrologic Unit 10030102, on left bank 700 ft downstream from Morony Dam, 12.6 mi northeast of Great Falls, and at river mile 2,105.4.

DRAINAGE AREA.--23,292 mi^2.

PERIOD OF RECORD.--May to July 1953 (in WSP 1320-B), October 1956 to current year (2002).

GAGE.--Water-stage recorder. Altitude of gage is 2,807.21 ft (NGVD 29). Prior to July 27, 1977, nonrecording gage at same site at datum 2.00 ft higher. July 27, 1977, to May 26, 1987, at site 600 ft upstream at datum 2.00 ft higher. October 1971 to July 27, 1977, discharges were obtained from the Montana Power Company at Rainbow Dam 7.05 mi upstream. Prior to October 1971, Foxboro meters were used for determining discharge through powerplant. Water-stage recorder on Morony Reservoir was used for determining head on taintor gates with altitude of gage at sea level (levels by Montana Power Company).

REMARKS.--Flow regulated by 18 smaller irrigation reservoirs and powerplants upstream, Clark Canyon Reservoir (station number 06015300), and Canyon Ferry Lake (station number 06058500). Diversion for irrigation of about 750,400 acres upstream from station. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow
based on 45 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,200	2,540	2,230	1,990	1,750	--
3	3,820	3,150	2,820	2,560	2,290	--
7	4,360	3,610	3,250	2,960	2,660	--
14	4,600	3,870	3,530	3,270	2,990	--
30	4,810	4,050	3,700	3,440	3,180	--
60	5,050	4,230	3,860	3,570	3,280	--
90	5,270	4,400	4,010	3,720	3,420	--
120	5,440	4,550	4,160	3,860	3,560	--
183	5,790	4,830	4,380	4,040	3,670	--

Magnitude and probability of seasonal low flow from
March-June based on 46 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,710	3,310	2,710	2,280	1,850	--
3	5,110	3,880	3,330	2,940	2,540	--
7	5,470	4,280	3,770	3,390	3,010	--
14	5,790	4,540	3,990	3,590	3,190	--
30	6,150	4,820	4,240	3,800	3,370	--

Magnitude and probability of seasonal low flow from
November-February based on 46 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,530	2,860	2,520	2,260	1,980	--
3	4,170	3,480	3,120	2,820	2,500	--
7	4,890	4,130	3,730	3,410	3,050	--
14	5,220	4,450	4,060	3,750	3,410	--
30	5,500	4,670	4,270	3,950	3,600	--

Duration of daily mean flows based on 46 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
3,140	3,270	3,630	4,240	4,800	5,320	5,850	6,490
40%	30%	20%	15%	10%	5%	2%	1%
7,240	7,990	8,850	10,500	12,200	16,800	23,100	26,100

Magnitude and probability of annual high flow
based on 46 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	18,500	28,600	35,800	45,400	52,800	--
3	18,100	27,500	33,700	41,300	46,900	--
7	17,300	25,800	31,100	37,400	41,800	--
15	16,000	23,900	28,800	34,700	38,800	--
30	14,600	21,500	25,900	31,200	35,000	--
60	12,700	17,900	21,100	24,900	27,500	--
90	11,200	15,500	18,100	21,200	23,300	--

Magnitude and probability of seasonal low flow from
July-October based on 45 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,090	3,100	2,660	2,320	1,990	--
3	4,410	3,550	3,180	2,900	2,630	--
7	4,700	3,830	3,450	3,160	2,870	--
14	4,860	4,010	3,630	3,350	3,070	--
30	5,040	4,150	3,760	3,470	3,180	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	11,900	3,830	5,840	1,570	46
November	10,400	3,950	6,190	1,610	46
December	11,500	3,770	6,170	1,350	46
January	8,230	3,870	6,330	1,100	46
February	9,250	4,030	6,530	1,280	46
March	10,800	4,020	6,830	1,760	46
April	13,200	3,530	7,500	2,410	46
May	24,800	4,450	11,000	4,530	47
June	30,200	3,760	14,100	7,270	47
July	23,600	3,820	8,660	4,130	47
August	9,950	3,720	5,960	1,520	46
September	9,990	3,110	5,590	1,510	46
Annual	11,500	4,350	7,540	1,800	46

06090500 Belt Creek near Monarch, Mont.
Site Number 71

LOCATION.--Lat 47°12'27", long 110°55'53" (NAD 27), in NW¼SE¼NW¼ sec.26, T.17 N., R.6 E., Cascade County, Hydrologic Unit 10030105, on left bank 0.4 mi south of Riceville, 8.9 mi northwest of Monarch, and at river mile 52.0.
DRAINAGE AREA.--368 mi^2.
PERIOD OF RECORD.--April 1951 to September 30, 1982 (discontinued).
GAGE.--Water-stage recorder. Altitude of gage is 3,962.25 ft (NGVD 29, levels by U.S. Army Corps of Engineers).
REMARKS.--No known regulation or diversion upstream from station.

Magnitude and probability of annual low flow based on 30 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	14	5.6	3.1	1.8	0.90	--
3	14	7.0	4.4	3.0	1.8	--
7	16	8.3	5.4	3.6	2.2	--
14	19	9.7	6.3	4.2	2.6	--
30	23	13	9.2	6.6	4.4	--
60	27	17	13	10	7.4	--
90	29	20	16	13	10	--
120	33	23	19	16	13	--
183	42	29	25	22	19	--

Magnitude and probability of seasonal low flow from March-June based on 31 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	20	11	7.9	5.7	3.9	--
3	22	12	8.5	6.2	4.3	--
7	24	14	9.7	7.1	4.9	--
14	26	15	11	8.4	6.0	--
30	32	20	15	12	8.9	--

Magnitude and probability of seasonal low flow from November-February based on 31 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	15	6.2	3.4	1.9	0.92	--
3	16	7.7	4.9	3.2	1.9	--
7	19	9.7	6.4	4.3	2.7	--
14	22	12	7.5	5.1	3.0	--
30	25	15	10	7.4	5.0	--

Duration of daily mean flows based on 31 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
6.6	11	17	22	30	39	47	60
40%	30%	20%	15%	10%	5%	2%	1%
79	119	228	347	528	891	1,460	1,960

Magnitude and probability of annual high flow based on 31 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,500	2,780	4,010	6,160	8,290	--
3	1,410	2,470	3,420	4,950	6,380	--
7	1,270	2,090	2,760	3,770	4,650	--
15	1,110	1,750	2,240	2,950	3,530	--
30	935	1,470	1,870	2,410	2,840	--
60	706	1,090	1,350	1,690	1,950	--
90	549	832	1,020	1,250	1,420	--

Magnitude and probability of seasonal low flow from July-October based on 32 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	47	32	26	22	18	--
3	48	33	27	23	19	--
7	50	35	29	25	20	--
14	51	36	30	26	22	--
30	54	38	32	28	24	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	264	29	68	46	32
November	120	21	50	22	31
December	73	8.8	35	16	31
January	53	4.7	29	12	31
February	55	9.4	31	13	31
March	106	6.7	36	20	31
April	385	30	127	87	31
May	1,570	226	697	348	32
June	2,210	189	819	539	32
July	576	50	226	127	32
August	174	24	91	39	32
September	221	28	74	43	32
Annual	344	62	192	83	31

06090800 Missouri River at Fort Benton, Mont.
Site Number 72

LOCATION.--Lat 47°49'03", long 110°39'59" (NAD 27), in NW¼SE¼SE¼ sec.23, T.24 N., R.8 E., Chouteau County, Hydrologic Unit 10030102, on left bank at downstream side of Old Fort Benton Bridge at Fort Benton, 3.8 mi upstream from Shonkin Creek, and at river mile 2,073.2.

DRAINAGE AREA.--24,749 mi^2.

PERIOD OF RECORD.--October 1890 to current year (2002). Records for June 1881 to September 1890, published in WSP 546 and 761, have been found to be unreliable and were not used in analysis.

REVISED RECORDS.--WSP 746: 1932. WSP 1146: 1891-1907, 1908(M), 1909-18, 1937-38. WSP 1209: 1948(P). WSP 1309: 1929(M). WSP 1629: Drainage area. Also see PERIOD OF RECORD.

GAGE.--Water-stage recorder. Altitude of gage is 2,614.05 ft (NGVD 1929). Prior to Oct. 11, 1920, nonrecording gages, and Oct. 11, 1920, to Apr. 25, 1924, water-stage recorder, all at present site at datum 1.00 ft higher.

REMARKS.--Flow regulated by 18 smaller irrigation reservoirs and powerplants, Clark Canyon Reservoir (station number 06015300), and Canyon Ferry Lake (station number 06058500). Diversions for irrigation of about 751,000 acres upstream from station. Extreme diurnal fluctuation caused by powerplant at Morony Dam. Bureau of Reclamation satellite telemeter at station.

Unregulated streamflow period

Magnitude and probability of annual low flow
based on 52 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2,660	1,880	1,460	1,140	829	653
3	2,960	2,270	1,900	1,600	1,290	1,100
7	3,170	2,440	2,060	1,760	1,450	1,260
14	3,350	2,570	2,180	1,860	1,530	1,330
30	3,460	2,710	2,340	2,040	1,740	1,540
60	3,720	2,960	2,570	2,260	1,940	1,740
90	3,980	3,200	2,800	2,480	2,150	1,940
120	4,220	3,390	2,970	2,640	2,290	2,070
183	4,380	3,540	3,130	2,810	2,460	2,240

Magnitude and probability of seasonal low flow from
March-June based on 53 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,070	3,070	2,610	2,270	1,910	1,700
3	4,290	3,420	3,020	2,720	2,410	2,220
7	4,490	3,620	3,220	2,930	2,620	2,440
14	4,780	3,910	3,540	3,280	3,010	2,840
30	5,580	4,490	4,030	3,690	3,350	3,150

Magnitude and probability of seasonal low flow from
November-February based on 52 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2,910	2,140	1,710	1,370	1,030	826
3	3,260	2,540	2,110	1,750	1,380	1,150
7	3,560	2,830	2,410	2,060	1,690	1,450
14	3,800	3,020	2,570	2,200	1,790	1,540
30	3,950	3,210	2,800	2,460	2,090	1,860

Duration of daily mean flows based on 53 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
2,040	2,280	2,620	3,130	3,660	4,190	4,730	5,280
40%	30%	20%	15%	10%	5%	2%	1%
5,820	7,020	9,170	11,500	15,600	22,700	31,300	35,400

Magnitude and probability of annual high flow
based on 53 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	26,200	39,000	47,600	58,600	66,700	74,900
3	25,800	38,200	46,300	56,300	63,500	70,500
7	25,400	37,000	43,900	51,800	57,000	61,800
15	24,000	34,700	40,700	47,300	51,600	55,400
30	21,400	31,200	36,900	43,200	47,400	51,100
60	17,700	25,000	29,200	33,700	36,600	39,200
90	14,800	20,600	23,800	27,500	29,900	32,000

Magnitude and probability of seasonal low flow from
July-October based on 52 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,050	2,110	1,660	1,330	1,000	818
3	3,200	2,420	2,070	1,810	1,540	1,380
7	3,400	2,600	2,230	1,950	1,670	1,500
14	3,510	2,690	2,320	2,040	1,760	1,580
30	3,650	2,810	2,430	2,150	1,860	1,690

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	8,320	2,440	4,910	1,410	53
November	7,670	2,790	5,040	1,230	53
December	6,320	2,450	4,490	889	53
January	5,840	2,380	4,180	789	53
February	6,670	2,490	4,520	986	53
March	11,800	2,990	6,000	1,690	53
April	15,500	4,130	8,590	2,870	53
May	27,600	4,140	14,800	5,790	53
June	53,600	4,590	20,000	10,700	53
July	26,600	2,430	8,340	4,970	53
August	8,050	1,580	4,240	1,450	53
September	7,180	1,890	4,220	1,200	53
Annual	11,500	3,620	7,440	2,100	53

06090800 Missouri River at Fort Benton, Mont.—Continued
Site Number 72

Regulated streamflow period

Magnitude and probability of annual low flow based on 49 years of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,290	2,550	2,210	1,960	1,690	--
3	3,840	3,140	2,810	2,550	2,280	--
7	4,330	3,560	3,180	2,890	2,580	--
14	4,560	3,770	3,390	3,100	2,790	--
30	4,760	3,940	3,560	3,280	2,990	--
60	4,990	4,120	3,740	3,450	3,150	--
90	5,200	4,280	3,880	3,580	3,270	--
120	5,360	4,450	4,050	3,760	3,460	--
183	5,690	4,710	4,270	3,940	3,600	--

Magnitude and probability of seasonal low flow from March-June based on 50 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,700	3,480	2,950	2,560	2,180	1,950
3	5,120	3,940	3,430	3,050	2,670	2,440
7	5,440	4,310	3,820	3,460	3,100	2,880
14	5,730	4,550	4,030	3,660	3,270	3,040
30	6,080	4,820	4,280	3,890	3,490	3,250

Magnitude and probability of seasonal low flow from November-February based on 49 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,670	2,960	2,630	2,380	2,120	--
3	4,210	3,520	3,180	2,920	2,640	--
7	4,840	4,080	3,700	3,410	3,090	--
14	5,190	4,380	3,990	3,690	3,360	--
30	5,460	4,600	4,190	3,860	3,520	--

Duration of daily mean flows based on 50 years of record

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
3,140	3,250	3,570	4,110	4,730	5,250	5,770	6,390
40%	30%	20%	15%	10%	5%	2%	1%
7,170	7,940	8,810	10,500	12,600	17,800	23,800	28,400

Magnitude and probability of annual high flow based on 50 years of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	19,900	32,000	41,100	53,800	64,100	75,000
3	19,400	30,800	39,000	49,900	58,400	67,100
7	18,500	28,700	35,400	44,000	50,200	56,300
15	17,000	25,900	31,800	38,900	44,100	49,100
30	15,400	23,100	28,100	34,300	38,600	42,800
60	13,200	19,000	22,700	27,000	30,100	33,000
90	11,600	16,200	19,100	22,600	25,100	27,500

Magnitude and probability of seasonal low flow from July-October based on 49 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,030	2,980	2,510	2,160	1,800	--
3	4,370	3,430	3,020	2,710	2,400	--
7	4,620	3,700	3,280	2,980	2,670	--
14	4,760	3,850	3,440	3,150	2,840	--
30	4,930	3,990	3,590	3,290	2,990	--

Monthly and annual mean discharges

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Years of record
October	12,600	3,580	5,780	1,700	50
November	10,800	3,670	6,090	1,640	50
December	11,600	3,690	6,130	1,420	50
January	8,380	3,790	6,320	1,190	50
February	9,330	4,030	6,550	1,380	50
March	11,000	3,930	6,770	1,830	50
April	13,800	3,570	7,480	2,440	50
May	25,400	4,540	11,500	4,780	50
June	31,400	4,060	14,800	7,880	50
July	23,200	3,680	8,750	4,340	50
August	10,600	3,470	5,820	1,540	50
September	10,200	3,130	5,520	1,590	50
Annual	11,800	4,460	7,620	1,920	50

06091700 Two Medicine River below South Fork, near Browning, Mont.
Site Number 73

LOCATION.--Lat 48°25'36", long 112°59'20" (NAD 27), in SE¼SE¼SE¼ sec.23, T.31 N., R.11 W., Glacier County, Hydrologic Unit 10030201, Blackfeet Indian Reservation, on left bank 15 ft downstream from bridge on Blackfeet Secondary Highway No. 1, 9.7 mi south of Browning, and 12.3 mi northwest of Heart Butte.

DRAINAGE AREA.--250 mi^2.

PERIOD OF RECORD.--May 1977 to current year (2002).

GAGE.--Water-stage recorder. Altitude of gage is 4,180 ft (NGVD 29). May 1977 to September 1997 at datum 1.00 ft higher.

REMARKS.--Flow regulated by Lower Two Medicine Lake (station number 06090900). Diversions for irrigation of about 64 acres upstream from station. Bureau of Reclamation satellite telemeter at station.

Magnitude and probability of annual low flow
based on 24 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	22	14	12	9.8	--	--
3	23	16	13	11	--	--
7	26	18	15	13	--	--
14	29	20	17	15	--	--
30	35	24	20	17	--	--
60	44	29	23	19	--	--
90	49	32	26	22	--	--
120	56	34	26	22	--	--
183	71	44	36	31	--	--

Magnitude and probability of seasonal low flow from
March-June based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	54	34	28	24	21	--
3	58	37	31	26	23	--
7	69	43	34	29	24	--
14	78	49	39	33	27	--
30	115	69	53	42	33	--

Magnitude and probability of seasonal low flow from
November-February based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	25	15	12	9.9	7.6	--
3	26	16	13	11	8.6	--
7	30	19	15	13	11	--
14	35	22	18	15	13	--
30	41	27	22	18	15	--

Duration of daily mean flows based on 25 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
17	20	26	33	46	63	91	128
40%	30%	20%	15%	10%	5%	2%	1%
191	282	516	712	984	1,420	2,030	2,440

Magnitude and probability of annual high flow
based on 25 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	2,400	3,730	4,920	6,850	8,660	--
3	2,190	3,170	3,930	5,030	5,960	--
7	1,900	2,650	3,190	3,910	4,480	--
15	1,610	2,190	2,590	3,120	3,540	--
30	1,380	1,870	2,210	2,670	3,030	--
60	1,150	1,520	1,760	2,080	2,310	--
90	936	1,210	1,390	1,620	1,790	--

Magnitude and probability of seasonal low flow from
July-October based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	35	23	19	17	15	--
3	36	24	20	17	15	--
7	39	26	21	18	15	--
14	44	28	22	19	16	--
30	52	33	26	21	17	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	533	25	97	104	25
November	558	19	131	162	25
December	394	20	80	79	25
January	180	18	62	38	25
February	394	26	92	88	25
March	474	40	144	97	25
April	923	140	494	194	25
May	2,040	439	1,180	376	26
June	2,920	282	1,070	588	26
July	656	173	366	131	26
August	264	41	161	50	26
September	240	24	104	54	26
Annual	542	199	338	97	25

06092000 Two Medicine River near Browning, Mont.
Site Number 74

LOCATION.--Lat 48°28'25", long 112°48'06" (NAD 27), in NW¼ SW¼ SE¼ sec.5, T.31 N., R.9 W., Glacier County, Hydrologic Unit 10030201, on right bank 1,000 ft upstream from bridge on U.S. Highway 89, 11 mi southeast of Browning, and 15 mi upstream from Badger Creek.

DRAINAGE AREA.--317 mi^2.

PERIOD OF RECORD.--43 years. April 1907 to October 1924, May 1951 to September 1977 (discontinued). Monthly discharge only for some periods, published in WSP 1309. Published as "Two Medicine River at Family," 1907-24. October 1957 to September 1964, published as "Two Medicine Creek near Browning."

REVISED RECORDS.--WSP 1309: 1908, 1910, 1913, 1916, 1918. WSP 1559: 1915(M), 1917-18(M), 1921-24. WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 3,930 ft (NGVD 29, from topographic map). Prior to Nov. 1, 1924, nonrecording gage at several sites within 3 mi of present site at various datums. May 1, 1951, to Sept. 30, 1964, and Oct. 1, 1964, to Sept. 27, 1967, water-stage recorder at site 150 ft downstream at datums 2.00 ft higher and present datum, respectively.

REMARKS.--Flow partly regulated by Lower Two Medicine Lake. Diversions upstream from station into Two Medicine Canal for irrigation of about 10,000 acres downstream from station.

Magnitude and probability of annual low flow
based on 41 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	14	5.1	2.9	1.8	1.0	--
3	15	5.5	3.1	1.9	1.1	--
7	18	6.7	3.9	2.4	1.3	--
14	23	9.4	5.4	3.3	1.8	--
30	35	15	9.0	5.5	2.9	--
60	46	23	14	8.9	4.9	--
90	60	33	21	14	8.0	--
120	72	42	28	19	12	--
183	81	51	40	33	26	--

Magnitude and probability of seasonal low flow from
March-June based on 43 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	59	35	27	22	17	--
3	60	38	29	24	19	--
7	64	41	33	28	23	--
14	69	45	38	34	30	--
30	97	60	48	41	34	--

Magnitude and probability of seasonal low flow from
November-February based on 43 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	35	17	11	7.5	4.5	--
3	39	20	13	8.7	5.2	--
7	41	24	18	14	10	--
14	46	30	25	21	17	--
30	52	36	30	25	21	--

Duration of daily mean flows based on 43 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
4.6	8.8	22	35	52	69	87	117
40%	30%	20%	15%	10%	5%	2%	1%
167	270	557	838	1,210	1,780	2,530	3,100

Magnitude and probability of annual high flow
based on 43 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	2,610	5,010	7,890	14,000	21,400	--
3	2,430	4,350	6,360	10,100	14,100	--
7	2,250	3,640	4,780	6,470	7,940	--
15	2,010	3,030	3,740	4,670	5,380	--
30	1,800	2,590	3,040	3,540	3,860	--
60	1,510	1,990	2,190	2,360	2,440	--
90	1,230	1,550	1,650	1,720	1,750	--

Magnitude and probability of seasonal low flow from
July-October based on 44 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	20	6.2	3.2	2.0	1.2	--
3	22	6.6	3.4	2.1	1.3	--
7	25	7.8	4.1	2.5	1.5	--
14	31	11	5.7	3.4	2.1	--
30	45	17	9.4	5.5	3.2	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	474	2.4	131	100	44
November	332	24	114	70	43
December	378	21	91	64	43
January	440	30	85	67	43
February	280	34	90	51	43
March	592	27	134	113	43
April	940	109	481	230	44
May	2,240	286	1,400	415	45
June	4,820	91	1,500	924	45
July	1,130	20	382	266	45
August	283	5.4	92	73	45
September	596	3.4	102	106	45
Annual	624	71	377	113	43

06092500 Badger Creek near Browning, Mont.
Site Number 75

LOCATION.--Lat 48°21'03", long 112°50'27" (NAD 27), in NE¼ sec.24, T.30 N., R.10 W., Glacier County, on right bank just upstream from point of diversion to Four Horns Canal, 15 mi upstream from mouth, and 17 mi southeast of Browning.
DRAINAGE AREA.--133 mi^2 .
PERIOD OF RECORD.--May 1951 to September 1973. Some monthly discharges in 1980.
REVISED RECORDS.--WSP 1729: 1951(M)
GAGE.--Water-stage recorder and control consisting of concrete diversion dam and two taintor gates (regularly closed). Altitude of gage is 4,179.20 ft (NGVD 29, Bureau of Reclamation bench mark).
REMARKS.--Water diverted into Four Horns Canal at station for irrigation of about 6,000 acres downstream from station.

Magnitude and probability of annual low flow
based on 21 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	47	37	32	29	--	--
3	50	39	34	30	--	--
7	54	42	36	32	--	--
14	60	48	42	37	--	--
30	72	58	51	46	--	--
60	79	68	63	59	--	--
90	87	76	70	66	--	--
120	94	82	76	72	--	--
183	104	92	87	83	--	--

Magnitude and probability of seasonal low flow from
March-June based on 22 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	66	51	43	37	--	--
3	68	52	45	39	--	--
7	73	57	49	43	--	--
14	78	63	56	50	--	--
30	88	74	68	65	--	--

Magnitude and probability of seasonal low flow from
November-February based on 22 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	51	39	34	30	--	--
3	54	41	35	31	--	--
7	58	44	38	33	--	--
14	64	49	43	38	--	--
30	74	59	52	46	--	--

Duration of daily mean flows based on 22 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
42	49	65	73	89	102	115	127
40%	30%	20%	15%	10%	5%	2%	1%
155	187	285	406	590	854	1,160	1,390

Magnitude and probability of annual high flow
based on 22 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,230	2,240	3,600	6,840	--	--
3	1,170	1,920	2,730	4,270	--	--
7	1,060	1,570	2,030	2,790	--	--
15	980	1,380	1,680	2,130	--	--
30	864	1,160	1,370	1,660	--	--
60	687	882	1,010	1,180	--	--
90	553	696	786	896	--	--

Magnitude and probability of seasonal low flow from
July-October based on 22 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	103	88	81	76	--	--
3	104	89	83	78	--	--
7	107	92	85	80	--	--
14	110	94	87	82	--	--
30	115	101	96	93	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	206	91	132	32	22
November	156	79	112	21	22
December	139	57	95	22	22
January	125	55	83	18	22
February	184	63	92	23	22
March	176	58	96	26	22
April	302	78	179	71	22
May	915	466	651	129	22
June	1,740	318	753	344	23
July	653	139	287	112	23
August	244	94	158	33	23
September	194	101	128	24	23
Annual	298	159	229	38	22

06093200 Badger Creek below Four Horns Canal, near Browning, Mont.
Site Number 76

LOCATION.--Lat 48°22'12", long 112°48'07" (NAD 27), in NW¼SW¼SE¼ sec.8, T.30 N., R.9 W., Glacier County, Hydrologic Unit 10030201, Blackfeet Indian Reservation, on left bank, 3.4 mi downstream from point of diversion to Four Horns Canal, 15.5 mi southeast of Browning, and at river mile 11.6.

DRAINAGE AREA.--152 mi^2.

PERIOD OF RECORD.--October 1973 to current year (2002). Records equivalent to those published as "Badger Creek near Browning" (station number 06092500) if diversion to Four Horns Canal is added to flow at station.

GAGE.--Water-stage recorder. Altitude of gage is 4,140 ft (NGVD 29). May 1951 to September 1973, water-stage recorder at site 3.4 mi upstream (station number 06092500) at different datum.

REMARKS.--Four Horns Canal diverts water from right bank in NE¼ sec.24, T.30 N., R.10 W., at diversion dam 3.4 mi upstream for irrigation of about 6,000 acres downstream from station. Bureau of Reclamation satellite telemeter at station.

Magnitude and probability of annual low flow
based on 28 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	31	17	12	8.4	5.6	--
3	33	18	12	9.0	6.0	--
7	34	19	13	9.4	6.3	--
14	37	20	14	10	7.0	--
30	41	23	16	12	8.0	--
60	48	28	21	16	12	--
90	59	37	28	23	17	--
120	71	45	34	26	19	--
183	78	55	46	39	33	--

Magnitude and probability of seasonal low flow from
March-June based on 29 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	69	49	37	29	20	--
3	74	53	41	31	22	--
7	80	57	44	34	24	--
14	86	62	49	39	29	--
30	88	67	58	52	45	--

Magnitude and probability of seasonal low flow from
November-February based on 28 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	53	36	28	22	17	--
3	57	41	33	27	22	--
7	62	44	36	30	24	--
14	68	51	43	37	32	--
30	75	60	53	47	42	--

Duration of daily mean flows based on 29 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
14	18	28	42	62	75	86	99
40%	30%	20%	15%	10%	5%	2%	1%
117	145	213	279	409	677	1,030	1,290

Magnitude and probability of annual high flow
based on 29 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,120	2,130	3,240	5,410	7,840	--
3	1,030	1,850	2,650	4,040	5,440	--
7	933	1,550	2,040	2,740	3,320	--
15	814	1,280	1,600	2,000	2,290	--
30	681	1,040	1,280	1,560	1,760	--
60	536	794	948	1,120	1,230	--
90	429	621	729	847	922	--

Magnitude and probability of seasonal low flow from
July-October based on 28 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	33	17	12	8.7	5.6	--
3	34	18	13	9.2	6.3	--
7	36	19	13	9.7	6.5	--
14	38	21	14	11	7.3	--
30	42	23	16	12	8.2	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	316	9.1	83	58	29
November	295	41	112	53	29
December	184	43	97	31	29
January	160	57	89	25	29
February	198	52	90	31	29
March	206	45	94	30	29
April	321	62	172	69	29
May	899	140	503	174	29
June	2,240	59	586	451	29
July	568	18	170	122	29
August	184	16	76	45	29
September	199	16	69	44	29
Annual	350	68	179	60	29

06093500 Badger Creek near Family, Mont.
Site Number 77

LOCATION.--Lat 48°26'10", long 112°42'00" (NAD 27), in NE¼ sec.19, T.31 N., R.8 W., Glacier County, at highway bridge, 4 mi southeast of Family.
DRAINAGE AREA.--239 mi^2.
PERIOD OF RECORD.--17 years (1907-24).
GAGE.--Chain gage. Altitude of gage is 3,900 ft (NGVD 29, from topographic map). Prior to June 4, 1908, staff gages 700 ft downstream and July 21, 1908, to May 24, 1909, chain gage 300 ft downstream from described site at unknown datums.
REMARKS.--Bureau of Reclamation canal began to divert water in 1915 for irrigation upstream from station.

Magnitude and probability of annual low flow
based on 16 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	48	17	7.9	3.7	--	--
3	49	19	9.3	4.6	--	--
7	51	25	15	8.9	--	--
14	53	30	20	13	--	--
30	59	37	27	19	--	--
60	69	48	38	31	--	--
90	77	59	51	45	--	--
120	93	72	63	55	--	--
183	109	84	73	65	--	--

Magnitude and probability of seasonal low flow from
March-June based on 17 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	72	44	33	26	--	--
3	73	45	35	29	--	--
7	73	48	39	33	--	--
14	73	51	43	38	--	--
30	76	54	46	41	--	--

Magnitude and probability of seasonal low flow from
November-February based on 17 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	67	50	40	33	--	--
3	67	50	40	33	--	--
7	67	50	40	33	--	--
14	67	50	40	33	--	--
30	68	51	41	34	--	--

Duration of daily mean flows based on 17 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
25	34	49	61	77	91	113	138
40%	30%	20%	15%	10%	5%	2%	1%
173	225	333	450	618	895	1,290	1,460

Magnitude and probability of annual high flow
based on 17 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,250	1,710	1,980	2,280	--	--
3	1,160	1,560	1,790	2,040	--	--
7	1,060	1,430	1,660	1,920	--	--
15	932	1,300	1,540	1,850	--	--
30	826	1,180	1,420	1,750	--	--
60	685	916	1,060	1,240	--	--
90	558	738	852	991	--	--

Magnitude and probability of seasonal low flow from
July-October based on 18 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	110	34	13	5.2	--	--
3	111	37	15	6.3	--	--
7	113	46	23	12	--	--
14	118	55	31	17	--	--
30	132	73	46	29	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	356	66	153	69	18
November	231	80	140	44	18
December	130	65	95	21	18
January	190	30	77	33	17
February	160	25	73	29	17
March	242	35	89	49	17
April	378	70	225	90	17
May	1,100	319	645	182	18
June	2,000	179	765	439	18
July	696	32	291	183	18
August	380	25	159	85	18
September	493	58	161	97	18
Annual	354	120	237	68	17

06098000 Dupuyer Creek near Valier, Mont.
Site Number 78

LOCATION.--Lat 48°14'10", long 112°23'50" (NAD 27), in NW¼ sec.33, T.29 N., R.6 W., Pondera County, 6 mi downstream from Sheep Creek and 8 mi (revised) southwest of Valier.
DRAINAGE AREA.--137 mi^2.
PERIOD OF RECORD.--25 years (1912-37).
GAGE.--Water-stage recorder. Altitude of gage is 3,920 ft (NGVD 29, from topographic map). Prior to Apr. 20, 1925, staff or chain gage at same site and datum.
REMARKS.--Several small diversions for irrigation upstream from station.

Magnitude and probability of annual low flow
based on 24 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4.2	0.86	0.00	0.00	--	--
3	4.5	.91	.00	.00	--	--
7	5.5	1.4	.00	.00	--	--
14	6.5	2.2	.00	.00	--	--
30	9.9	2.3	.46	.03	--	--
60	12	3.2	.98	.09	--	--
90	15	4.2	1.3	.12	--	--
120	18	5.2	1.6	.17	--	--
183	19	6.5	3.1	1.5	--	--

Magnitude and probability of seasonal low flow from
March-June based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	14	3.4	0.67	0.00	0.00	--
3	14	3.6	.70	.00	.00	--
7	16	3.8	.93	.09	.00	--
14	17	5.3	2.3	1.0	.35	--
30	28	11	5.6	3.1	1.4	--

Magnitude and probability of seasonal low flow from
November-February based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	9.6	4.9	3.3	2.0	0.00	--
3	9.9	5.1	3.4	2.0	.00	--
7	10	5.3	3.5	2.1	.00	--
14	11	5.8	4.0	2.1	.00	--
30	15	6.6	4.6	2.1	.85	--

Duration of daily mean flows based on 25 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.26	0.51	2.3	5.6	9.8	14	19	26
40%	30%	20%	15%	10%	5%	2%	1%
34	46	65	82	107	164	266	375

Magnitude and probability of annual high flow
based on 25 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	288	738	1,200	2,020	2,830	--
3	244	599	956	1,570	2,170	--
7	205	470	718	1,120	1,490	--
15	172	384	576	878	1,150	--
30	138	293	429	639	823	--
60	109	219	310	443	553	--
90	93	181	252	353	434	--

Magnitude and probability of seasonal low flow from
July-October based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	6.3	1.1	0.00	0.00	0.00	--
3	6.8	1.2	.00	.00	.00	--
7	8.1	1.7	.00	.00	.00	--
14	9.2	2.3	.00	.00	.00	--
30	13	2.5	.49	.04	.00	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	78	0.00	28	22	25
November	61	.43	27	16	25
December	52	5.3	20	13	25
January	62	5.3	22	16	25
February	90	4.2	26	20	25
March	127	14	37	26	25
April	147	11	67	39	25
May	436	4.0	115	99	25
June	707	1.4	152	178	25
July	265	.00	50	59	26
August	125	.00	27	30	26
September	91	.00	22	22	26
Annual	150	8.4	49	36	25

06098500 Cut Bank Creek near Browning, Mont.
Site Number 79

LOCATION.--Lat 48°37'00", long 113°02'06" (NAD 27), in NE¼NW¼SW¼ sec.15, T.33 N., R.11 W., Glacier County, Hydrologic Unit 10030202, Blackfeet Indian Reservation, on right bank 20 ft downstream from bridge on Montana Secondary Highway 464, 4.0 mi north of Browning, and at river mile 73.3.
DRAINAGE AREA.--123 mi^2.
PERIOD OF RECORD.--April 1918 to October 1925 (seasonal records only), April 1991 to current year (2002).
REVISED RECORDS.--WDR MT-93-1: 1992(M).
GAGE.--Water-stage recorder. Altitude of gage is 4,380 ft (NGVD 29). April 1918 to October 1925, water-stage recorder at site about 120 ft upstream at different datum. April 1991 to September 1995 at datum 1.00 ft higher.
REMARKS.--Diversions for irrigation of about 1,200 acres upstream from station. Bureau of Reclamation satellite telemeter at station.

Magnitude and probability of annual low flow
based on 10 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	16	12	10	9.0	--	--
3	17	13	11	9.5	--	--
7	19	14	12	10	--	--
14	20	15	12	11	--	--
30	23	16	14	12	--	--
60	25	17	14	13	--	--
90	27	18	16	14	--	--
120	31	21	18	17	--	--
183	37	25	21	19	--	--

Magnitude and probability of seasonal low flow from
March-June based on 13 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	26	18	14	12	--	--
3	27	19	15	13	--	--
7	29	21	17	14	--	--
14	32	22	19	17	--	--
30	43	27	21	17	--	--

Magnitude and probability of seasonal low flow from
November-February based on 11 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	17	13	11	9.4	--	--
3	19	14	12	10	--	--
7	20	15	14	13	--	--
14	22	16	15	14	--	--
30	24	18	17	16	--	--

Duration of daily mean flows based on 11 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
12	14	18	23	30	39	50	67
40%	30%	20%	15%	10%	5%	2%	1%
98	157	255	335	448	634	826	1,010

Magnitude and probability of annual high flow
based on 11 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	864	1,420	1,970	--	--	--
3	801	1,220	1,560	--	--	--
7	711	1,000	1,200	--	--	--
15	619	869	1,030	--	--	--
30	542	753	887	--	--	--
60	438	595	694	--	--	--
90	355	469	539	--	--	--

Magnitude and probability of seasonal low flow from
July-October based on 16 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	27	17	14	11	--	--
3	28	18	14	11	--	--
7	29	19	15	12	--	--
14	32	21	16	13	--	--
30	36	24	18	15	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	136	15	55	31	16
November	216	25	63	58	12
December	157	17	42	39	11
January	74	18	32	16	11
February	139	15	40	36	11
March	110	18	53	31	13
April	217	57	134	45	18
May	740	248	421	110	19
June	955	184	512	215	19
July	344	58	190	78	19
August	140	16	68	32	18
September	82	12	43	19	18
Annual	201	69	133	41	11

06099000 Cut Bank Creek at Cut Bank, Mont.
Site Number 80

LOCATION.--Lat 48°38'00", long 112°20'46" (NAD 27), in SW¼SE¼NE¼ sec.11, T.33 N., R.6 W., Glacier County, Hydrologic Unit 10030202, Blackfeet Indian Reservation, on right bank, 0.1 mi downstream from bridge on U.S. Highway 2, 0.7 mi west of Cut Bank, 0.8 mi downstream from Old Maids Coulee, and at river mile 17.7.

DRAINAGE AREA.--1,041 mi^2.

PERIOD OF RECORD.--August 1905 to October 1919, May to July 1920, May 1922 to October 1924, May 1951 to September 1973, October 1981 to current year (2002). Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1309; 1907-8, 1910-11, 1924-25. WSP 1509: 1911, 1916(M). WSP 1559: 1905(M), 1908(M). WSP 1709: 1959. WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 3,561.42 ft (NGVD 29). Prior to May 12, 1922, nonrecording gage at several sites 0.5 mi upstream at various datums. May 12, 1922, to Nov. 1, 1924, nonrecording gage at present site and different datum.

REMARKS.--Few minor diversions for irrigation upstream from station. Natural flow of stream may be affected by return flow from Two Medicine Canal which irrigates lands upstream from station. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow based on 55 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	13	6.8	4.5	3.1	2.0	1.5
3	14	7.5	5.1	3.7	2.4	1.8
7	16	8.8	6.1	4.4	3.0	2.2
14	19	10	7.3	5.3	3.6	2.8
30	23	13	9.7	7.3	5.2	4.1
60	29	18	13	10	7.8	6.3
90	35	22	17	14	11	9.1
120	43	29	24	20	17	15
183	56	38	31	26	21	19

Magnitude and probability of seasonal low flow from March-June based on 59 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	42	21	14	10	6.6	4.9
3	44	22	15	11	7.0	5.3
7	48	26	18	13	9.0	7.0
14	59	31	22	16	11	8.7
30	95	47	31	21	13	9.8

Magnitude and probability of seasonal low flow from November-February based on 59 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	17	8.6	5.5	3.7	2.2	1.6
3	19	9.5	6.1	4.1	2.5	1.9
7	22	11	7.3	4.8	3.0	2.3
14	24	13	8.6	5.7	3.7	3.0
30	29	16	10	7.5	5.3	4.3

Duration of daily mean flows based on 59 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
6.6	9.9	17	24	34	46	61	84
40%	30%	20%	15%	10%	5%	2%	1%
118	177	290	376	504	715	1,010	1,240

Magnitude and probability of annual high flow based on 59 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,390	2,650	3,910	6,130	8,380	11,300
3	1,160	2,050	2,900	4,340	5,750	7,510
7	938	1,530	2,060	2,880	3,640	4,540
15	772	1,190	1,520	2,000	2,410	2,880
30	658	956	1,170	1,460	1,690	1,930
60	541	760	905	1,090	1,230	1,360
90	455	630	744	885	988	1,090

Magnitude and probability of seasonal low flow from July-October based on 59 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	32	14	7.9	4.7	2.4	1.6
3	34	15	8.7	5.3	2.8	1.9
7	37	17	10	6.5	3.6	2.4
14	40	20	12	8.0	4.7	3.2
30	47	25	17	12	7.5	5.5

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	268	11	84	50	61
November	271	19	77	49	59
December	185	15	47	32	59
January	115	1.6	35	20	59
February	414	11	57	61	59
March	1,050	6.9	149	158	59
April	664	79	241	139	59
May	894	198	485	167	62
June	1,780	174	635	342	62
July	605	17	244	134	62
August	234	5.6	90	52	62
September	298	5.9	76	61	62
Annual	317	74	184	60	59

06099500 Marias River near Shelby, Mont.
Site Number 81

LOCATION.--Lat 48°25'38", long 111°53'20" (NAD 27), in SE¼NW¼SE¼ sec.20, T.31 N., R.2 W., Toole County, Hydrologic Unit 10030203, on left bank 20 ft downstream from bridge on old U.S. Highway 91, 5.1 mi south of Shelby, 24 mi downstream from Cut Bank Creek, and at river mile 140.6.

DRAINAGE AREA.--3,242 mi^2, of which 518 mi^2 is probably noncontributing.

PERIOD OF RECORD.--April 1902 to December 1904, May 1905 to December 1906, May 1907 to January 1908, April 1911 to current year (2002). Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1309: 1903-4, 1918, 1921, 1933, 1935, 1947. WSP 1509: 1902, 1912(M), 1916, 1943(M). WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 3,087.72 ft (NGVD 29). Prior to Dec. 23, 1947, nonrecording gage or water-stage recorder at several sites within 1,000 ft of present site at approximately the same datum. Dec. 23, 1947, to Apr. 6, 1976, water-stage recorder at site 150 ft downstream at same datum.

REMARKS.--Some regulation by Lower Two Medicine Lake (station number 06090900), Four Horns Reservoir (station number 06093000), Swift Reservoir (station number 06094000), and Lake Frances (station number 06095500), having a combined capacity of 172,630 acre-ft. Diversions for irrigation of about 50,000 acres upstream from station and about 15,000 acres downstream from station. Bureau of Reclamation satellite telemeter at station.

Magnitude and probability of annual low flow based on 91 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	119	70	50	37	25	19
3	122	76	57	44	32	26
7	133	84	63	49	36	29
14	147	94	70	54	40	32
30	170	111	85	67	50	40
60	196	134	109	91	74	64
90	226	156	128	108	89	77
120	256	176	144	122	101	89
183	287	194	158	133	110	97

Magnitude and probability of seasonal low flow from March-June based on 94 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	254	152	116	93	72	61
3	264	161	125	102	80	69
7	286	180	142	117	95	83
14	327	211	170	143	119	106
30	439	276	219	181	147	129

Magnitude and probability of seasonal low flow from November-February based on 94 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	138	88	68	54	42	35
3	146	93	72	57	44	37
7	160	102	78	62	46	38
14	176	113	86	68	51	41
30	199	130	101	80	61	50

Duration of daily mean flows based on 94 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
73	92	126	159	214	262	329	414
40%	30%	20%	15%	10%	5%	2%	1%
543	776	1,350	1,810	2,450	3,630	5,300	6,320

Magnitude and probability of annual high flow based on 94 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	4,860	9,280	14,300	24,200	35,500	51,600
3	4,660	8,340	12,000	18,400	24,900	33,200
7	4,270	7,110	9,490	13,100	16,400	20,100
15	3,820	6,000	7,600	9,780	11,500	13,300
30	3,330	5,090	6,300	7,860	9,030	10,200
60	2,750	4,070	4,920	5,950	6,670	7,380
90	2,270	3,300	3,940	4,700	5,230	5,730

Magnitude and probability of seasonal low flow from July-October based on 97 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	183	96	65	45	29	22
3	184	102	73	54	38	30
7	193	110	80	61	44	35
14	207	120	88	68	50	41
30	230	137	104	83	64	53

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	1,450	74	405	248	97
November	1,480	116	394	246	97
December	1,140	103	304	174	97
January	700	42	255	130	94
February	1,170	59	318	206	94
March	2,300	139	579	411	94
April	3,150	280	1,140	563	96
May	5,300	711	2,720	1,040	98
June	10,200	409	3,090	2,070	98
July	3,980	147	1,060	764	98
August	1,100	67	389	233	98
September	1,850	66	358	272	98
Annual	1,930	302	906	351	94

06101500 Marias River near Chester, Mont.
Site Number 82

LOCATION.--Lat 48°18'23", long 111°04'47" (NAD 27), in SW¼SW¼SW¼ sec.34, T.30 N., R.5 E., Liberty County, Hydrologic Unit 10030203, on left bank 2.0 mi downstream from Tiber Dam, 4.4 mi upstream from Pondera Coulee, 15 mi southwest of Chester, and at river mile 78.3.

DRAINAGE AREA.--4,927 mi^2, of which 518 mi^2 is probably noncontributing.

PERIOD OF RECORD.--April to September 1921, October 1945 to September 1947, October 1955 to current year (2002). Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1629: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,814.03 ft (NGVD, Bureau of Reclamation bench mark). Prior to Oct. 1, 1921, nonrecording gage at bridge 2.5 mi downstream at different datum. Oct. 4, 1945, to Sept. 30, 1946, nonrecording gage at site 3 mi downstream at different datum.

REMARKS.--Flow completely regulated by Lake Elwell after Oct. 28, 1955. Bureau of Reclamation satellite telemeter at station.

Magnitude and probability of annual low flow
based on 46 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	270	137	84	52	28	--
3	287	149	91	56	29	--
7	291	151	98	64	38	--
14	294	157	111	81	54	--
30	300	175	126	93	64	--
60	345	208	148	108	72	--
90	390	237	169	123	82	--
120	449	270	190	136	89	--
183	572	343	242	173	112	--

Magnitude and probability of seasonal low flow from
March-June based on 47 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	357	202	142	103	69	--
3	360	206	145	106	72	--
7	378	216	151	109	73	--
14	385	219	155	114	78	--
30	446	242	170	124	85	--

Magnitude and probability of seasonal low flow from
November-February based on 46 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	275	141	87	54	29	--
3	296	152	94	58	30	--
7	298	158	102	66	39	--
14	302	165	117	83	56	--
30	306	179	132	96	65	--

Duration of daily mean flows based on 47 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
49	81	160	220	309	397	476	579
40%	30%	20%	15%	10%	5%	2%	1%
738	943	1,200	1,380	1,690	2,280	3,090	4,020

Magnitude and probability of annual high flow
based on 47 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	2,180	3,710	4,810	6,250	7,350	--
3	2,160	3,690	4,800	6,250	7,350	--
7	2,110	3,620	4,710	6,170	7,290	--
15	2,020	3,460	4,500	5,880	6,920	--
30	1,850	3,120	4,020	5,180	6,040	--
60	1,620	2,570	3,150	3,820	4,260	--
90	1,460	2,260	2,710	3,200	3,500	--

Magnitude and probability of seasonal low flow from
July-October based on 46 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	417	180	102	59	30	--
3	447	197	111	64	31	--
7	453	205	122	75	41	--
14	457	223	144	97	59	--
30	513	273	188	135	91	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	2,760	208	748	458	47
November	1,730	.40	600	369	47
December	1,050	16	448	225	47
January	1,080	35	407	222	47
February	1,070	35	440	245	47
March	2,030	48	571	385	47
April	2,340	46	789	557	47
May	2,610	51	1,140	657	47
June	6,250	59	1,690	1,220	47
July	5,320	58	1,280	971	47
August	2,910	82	976	641	47
September	3,060	192	892	513	47
Annual	1,490	98	832	328	47

06102000 Marias River near Brinkman, Mont.
Site Number 83

LOCATION.--Lat 48°16', long 110°42' (NAD 27), in SE¼ SE¼ sec.17, T.29 N., R.8 E., Hill County, on left bank 4 mi southwest of Brinkman Post Office, 14 mi downstream from Cottonwood Creek, and 30 mi north of Fort Benton.

DRAINAGE AREA.--6,425 mi^2 (revised), of which 518 mi^2 is probably noncontributing.

PERIOD OF RECORD.--35 years. October 1921 to September 1956 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 2,677.25 ft (NGVD 29). Prior to Oct. 6, 1931, cantilever gage at site 2,800 ft downstream at datum 0.64 ft higher. Oct. 6, 1931, to July 1, 1939, water-stage recorder at site 1,600 ft downstream at present datum.

REMARKS.--Diversions for irrigation of about 65,000 acres upstream from station. Flow regulated by Tiber Reservoir after Oct 28, 1955, and four other reservoirs having a combined capacity of 177,870 acre-ft.

Magnitude and probability of annual low flow
based on 33 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	106	63	46	36	27	--
3	112	66	49	38	28	--
7	119	71	52	40	29	--
14	130	79	59	45	33	--
30	152	95	71	55	40	--
60	182	120	95	78	61	--
90	209	142	116	97	80	--
120	247	164	131	109	87	--
183	281	180	143	118	94	--

Magnitude and probability of seasonal low flow from
March-June based on 34 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	201	131	109	96	85	--
3	209	136	112	98	85	--
7	226	152	128	114	102	--
14	272	189	162	145	131	--
30	436	273	220	187	158	--

Magnitude and probability of seasonal low flow from
November-February based on 33 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	126	67	48	36	27	--
3	131	71	51	39	29	--
7	139	76	55	41	31	--
14	150	85	61	46	34	--
30	171	99	72	55	40	--

Duration of daily mean flows based on 34 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
57	72	99	140	199	248	312	393
40%	30%	20%	15%	10%	5%	2%	1%
526	826	1,410	1,900	2,580	3,770	5,420	6,790

Magnitude and probability of annual high flow
based on 34 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	4,940	9,650	14,600	24,000	34,000	--
3	4,710	8,830	12,900	20,100	27,300	--
7	4,340	7,730	10,700	15,600	20,100	--
15	3,840	6,460	8,520	11,500	14,000	--
30	3,310	5,390	6,970	9,160	10,900	--
60	2,810	4,390	5,470	6,840	7,870	--
90	2,340	3,620	4,470	5,550	6,340	--

Magnitude and probability of seasonal low flow from
July-October based on 33 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	165	93	70	56	44	--
3	169	96	73	59	46	--
7	175	100	76	61	48	--
14	185	108	83	68	55	--
30	208	123	96	80	65	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	1,470	85	413	291	34
November	1,600	120	405	300	34
December	803	94	304	168	34
January	700	40	231	130	34
February	1,000	52	307	240	34
March	2,400	165	627	498	34
April	3,210	291	1,260	743	34
May	5,360	691	2,680	1,110	34
June	11,300	727	3,260	2,500	34
July	3,460	182	1,170	843	34
August	1,110	88	399	276	34
September	1,370	87	348	268	34
Annual	1,990	338	952	447	34

6102050 Marias River near Loma, Mont.
Site Number 84

LOCATION.--Lat 47°55'59", long 111°31'02" (NAD 27), in SW¼NE¼SE¼ sec.12, T.25 N., R.9 E., Choteau County, Hydrologic Unit 10030203, on left bank 600 ft upstream from Teton River, 800 ft upstream from highway bridge, 0.2 mi southwest of Loma, and at river mile 2.5.
DRAINAGE AREA.--7,137 mi^2, of which 518 mi^2 is probably noncontributing.
PERIOD OF RECORD.--October 1959 to September 1972, June 2001 to current year (2002; seasonal records only).
GAGE.--Water-stage recorder. Altitude of gage is 2,570 ft (NGVD 29). Prior to June 2001, water-stage recorder at site 4.5 mi upstream at different datum.
REMARKS.--Flow completely regulated by Lake Elwell. Numerous diversions for irrigation upstream from station.

Magnitude and probability of annual low flow based on 12 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	140	89	67	52	--	--
3	154	94	70	54	--	--
7	171	101	73	55	--	--
14	190	109	78	57	--	--
30	210	120	86	64	--	--
60	275	155	110	81	--	--
90	341	204	148	110	--	--
120	458	272	194	141	--	--
183	616	409	325	266	--	--

Magnitude and probability of seasonal low flow from March-June based on 13 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	243	161	131	112	--	--
3	249	166	136	116	--	--
7	263	173	141	119	--	--
14	280	180	144	121	--	--
30	395	215	154	124	--	--

Magnitude and probability of seasonal low flow from November-February based on 12 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	166	93	67	53	--	--
3	176	99	71	54	--	--
7	192	107	75	55	--	--
14	225	126	87	62	--	--
30	251	142	99	71	--	--

Duration of daily mean flows based on 13 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
80	96	126	187	303	393	499	768
40%	30%	20%	15%	10%	5%	2%	1%
975	1,190	1,410	1,580	2,000	2,770	3,950	5,090

Magnitude and probability of annual high flow based on 13 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	2,850	4,540	6,050	8,540	--	--
3	2,750	4,470	6,000	8,480	--	--
7	2,620	4,290	5,800	8,290	--	--
15	2,460	4,020	5,390	7,610	--	--
30	2,230	3,520	4,620	6,340	--	--
60	1,930	2,750	3,390	4,290	--	--
90	1,730	2,460	3,000	3,740	--	--

Magnitude and probability of seasonal low flow from July-October based on 12 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	289	132	91	68	--	--
3	340	149	97	68	--	--
7	378	166	108	76	--	--
14	456	221	151	111	--	--
30	505	255	179	134	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	2,750	292	942	608	13
November	1,580	78	723	450	13
December	908	106	402	207	13
January	517	105	298	126	13
February	910	110	434	245	13
March	1,290	117	568	366	13
April	2,180	180	878	549	14
May	2,180	441	1,320	445	14
June	6,020	693	2,260	1,360	14
July	2,990	250	1,400	839	15
August	3,040	138	1,200	892	15
September	3,260	296	1,110	725	15
Annual	1,330	522	977	281	13

06106000 Deep Creek near Choteau, Mont.
Site Number 85

LOCATION.--Lat 47°45'07", long 112°14'22" (NAD 27), in SW¼NW¼ sec.15, T.23 N., R.5 W., Teton County, 2 mi downstream from Willow Creek and 5 mi southwest of Choteau.
DRAINAGE AREA.--223 mi^2.
PERIOD OF RECORD.--13 years (1911-25).
GAGE.--Chain gage. Altitude of gage is 3,860 ft (NGVD 29, by barometer).
REMARKS.--Several small diversions for irrigation upstream from station.

Magnitude and probability of annual low flow
based on 12 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	12	7.6	5.4	4.0	--	--
3	13	7.7	5.5	4.0	--	--
7	13	8.2	6.3	4.9	--	--
14	13	8.8	7.3	6.2	--	--
30	16	11	9.1	7.8	--	--
60	18	12	10	8.5	--	--
90	20	14	11	9.7	--	--
120	25	17	13	11	--	--
183	28	20	17	15	--	--

Magnitude and probability of seasonal low flow from
March-June based on 13 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	18	11	7.9	6.3	--	--
3	18	11	8.1	6.4	--	--
7	19	11	8.4	6.6	--	--
14	21	12	8.7	6.7	--	--
30	34	21	16	12	--	--

Magnitude and probability of seasonal low flow from
November-February based on 13 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	15	13	12	11	--	--
3	16	13	12	11	--	--
7	16	13	12	11	--	--
14	16	13	12	11	--	--
30	16	13	12	11	--	--

Duration of daily mean flows based on 13 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
6.7	8.2	12	14	18	23	30	37
40%	30%	20%	15%	10%	5%	2%	1%
44	61	89	116	157	240	397	643

Magnitude and probability of annual high flow
based on 13 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	504	1,160	1,820	2,990	--	--
3	415	916	1,400	2,240	--	--
7	337	734	1,130	1,810	--	--
15	275	581	887	1,430	--	--
30	225	451	665	1,030	--	--
60	178	332	465	671	--	--
90	147	260	356	504	--	--

Magnitude and probability of seasonal low flow from
July-October based on 14 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	20	9.9	6.5	4.4	--	--
3	21	11	6.8	4.5	--	--
7	22	11	7.7	5.4	--	--
14	22	13	9.1	6.8	--	--
30	24	14	10	8.1	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	89	11	36	21	14
November	67	14	35	13	14
December	87	15	31	19	14
January	75	13	23	17	13
February	51	12	22	11	13
March	86	13	39	20	13
April	149	30	71	35	14
May	584	50	190	130	14
June	752	24	225	205	14
July	529	11	100	129	14
August	112	8.4	42	28	14
September	77	8.6	33	21	14
Annual	165	28	72	41	13

06108000 Teton River near Dutton, Mont.
Site Number 86

LOCATION.--Lat 47°55'49", long 111°33'07" (NAD 27), in SE¼SW¼SW¼ sec.12, T.25 N., R.1 E., Teton County, Hydrologic Unit 10030205, on right bank 150 ft upstream from Kerr Bridge, 0.9 mi downstream from Hunt Coulee, 9.5 mi northeast of Dutton, and at river mile 100.9.

DRAINAGE AREA.--1,307 mi^2. Area at site used prior to July 17, 1965, 1,308 mi^2.

PERIOD OF RECORD.--August 1954 to current year (2002).

GAGE.--Water-stage recorder. Altitude of gage is 3,235 ft (NGVD 29). Prior to July 17, 1965, water-stage recorder at site 1,800 ft downstream at datum 1.97 ft lower.

REMARKS.--Water is diverted on left bank in sec.34, T.25 N., R.7 W., for storage in Bynum Reservoir (usable capacity, 75,000 acre-ft). Diversions for irrigation of about 44,000 acres upstream from station. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow based on 47 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	22	9.2	0.00	0.00	0.00	--
3	23	9.9	.00	.00	.00	--
7	32	11	3.0	.94	.00	--
14	36	11	3.5	1.1	.00	--
30	36	11	3.8	1.2	.00	--
60	40	16	8.0	4.2	1.9	--
90	44	21	13	8.3	4.8	--
120	48	25	17	12	7.3	--
183	54	30	21	16	11	--

Magnitude and probability of seasonal low flow from March-June based on 48 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	41	21	14	9.8	6.5	--
3	43	22	15	11	7.3	--
7	48	24	17	12	8.4	--
14	58	30	21	15	11	--
30	79	40	28	20	13	--

Magnitude and probability of seasonal low flow from November-February based on 48 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	27	17	13	10	8.2	--
3	29	18	14	11	8.5	--
7	33	20	15	12	9.3	--
14	37	23	17	13	10	--
30	42	26	20	16	12	--

Duration of daily mean flows based on 48 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
2.5	8.2	16	23	36	48	59	72
40%	30%	20%	15%	10%	5%	2%	1%
90	118	167	206	271	454	747	1,080

Magnitude and probability of annual high flow based on 48 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	858	2,360	4,080	7,450	11,100	--
3	748	1,940	3,210	5,510	7,840	--
7	599	1,440	2,270	3,660	4,980	--
15	464	1,040	1,590	2,470	3,280	--
30	367	778	1,150	1,720	2,230	--
60	273	554	800	1,180	1,520	--
90	232	455	643	929	1,180	--

Magnitude and probability of seasonal low flow from July-October based on 47 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	29	9.9	0.00	0.00	0.00	--
3	31	10	.00	.00	.00	--
7	40	11	4.0	1.2	.00	--
14	43	11	4.2	1.4	.00	--
30	44	11	4.3	1.5	.00	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	223	15	70	48	48
November	176	18	71	37	48
December	208	15	65	40	48
January	167	13	56	30	48
February	388	15	87	73	48
March	819	29	184	174	48
April	495	47	160	105	48
May	957	20	248	219	48
June	2,730	17	392	495	48
July	551	1.3	160	147	48
August	263	.00	74	59	49
September	211	7.4	66	49	49
Annual	350	27	136	79	48

06109000 Missouri River at Loma, Mont.
Site Number 87

LOCATION.--Lat 47°56'04", long 110°28'02" (NAD 27), in NW¼SE¼ sec.8, T.25 N., R.10 E., Chouteau County, 1.5 mi (revised) east of Loma and 0.5 mi downstream from Marias River.
DRAINAGE AREA.--34,221 mi^2.
PERIOD OF RECORD.--15 years (1935-50).
GAGE.--Water-stage recorder. Altitude of gage is 2,543.40 ft (NGVD 29).
REMARKS.--Diversions for irrigation of about 830,000 acres upstream from station. Flow regulated by 22 smaller irrigation reservoirs and powerplants.

Magnitude and probability of annual low flow based on 15 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,550	2,940	2,660	2,450	--	--
3	3,610	3,030	2,760	2,550	--	--
7	3,620	3,040	2,780	2,570	--	--
14	3,630	3,060	2,780	2,580	--	--
30	3,640	3,060	2,790	2,590	--	--
60	3,830	3,200	2,900	2,670	--	--
90	4,050	3,360	3,050	2,810	--	--
120	4,280	3,540	3,190	2,910	--	--
183	4,440	3,690	3,340	3,060	--	--

Magnitude and probability of seasonal low flow from March-June based on 16 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,570	4,330	3,810	3,430	--	--
3	5,610	4,540	4,120	3,820	--	--
7	5,640	4,560	4,140	3,830	--	--
14	5,690	4,590	4,140	3,840	--	--
30	5,710	4,600	4,150	3,850	--	--

Magnitude and probability of seasonal low flow from November-February based on 15 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,090	3,230	2,810	2,490	--	--
3	4,130	3,290	2,880	2,570	--	--
7	4,140	3,300	2,880	2,580	--	--
14	4,150	3,310	2,890	2,590	--	--
30	4,160	3,320	2,900	2,600	--	--

Duration of daily mean flows based on 15 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
2,480	2,750	3,180	3,410	3,870	4,330	4,860	5,400
40%	30%	20%	15%	10%	5%	2%	1%
5,930	7,390	10,100	12,600	15,500	21,100	29,100	36,500

Magnitude and probability of annual high flow based on 15 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	18,200	29,100	37,500	49,300	--	--
3	18,100	28,900	37,200	49,000	--	--
7	18,100	28,900	37,100	48,900	--	--
15	18,000	28,800	37,100	48,800	--	--
30	18,000	28,800	37,100	48,800	--	--
60	15,400	23,400	29,100	36,700	--	--
90	13,600	20,100	24,700	30,700	--	--

Magnitude and probability of seasonal low flow from July-October based on 15 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,720	3,200	2,990	2,850	--	--
3	3,760	3,270	3,080	2,950	--	--
7	3,770	3,290	3,100	2,970	--	--
14	3,780	3,300	3,110	2,990	--	--
30	3,790	3,300	3,120	3,000	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	7,230	3,530	4,920	1,120	15
November	6,730	3,210	5,020	1,170	15
December	6,830	3,220	4,720	1,100	15
January	5,810	2,720	4,280	991	15
February	6,840	2,600	4,550	1,210	15
March	10,200	3,780	6,070	1,730	16
April	17,700	4,800	8,740	3,960	16
May	27,200	4,860	13,500	5,930	16
June	52,000	7,540	20,000	12,200	16
July	15,900	3,700	8,220	4,370	16
August	7,780	2,820	4,390	1,490	16
September	6,240	2,820	4,330	956	16
Annual	13,300	4,150	7,500	2,640	15

06109500 Missouri River at Virgelle, Mont.
Site Number 88

LOCATION.--Lat 48°00'18", long 110°15'25" (NAD 27), in SW¼SW¼SE¼ sec.13, T.26 N., R.11 E., Chouteau County, Hydrologic Unit 10040101, on left bank 0.2 mi upstream from Virgelle ferry, 0.6 mi southwest of Virgelle, 1.8 mi downstream from Spring Coulee, and at river mile 2,034.2.
DRAINAGE AREA.--34,379 mi^2.
PERIOD OF RECORD.--February 1935 to current year (2002). Prior to October 1953, published as "at Loma."
REVISED RECORDS.--WSP 1729: Drainage area.
GAGE.--Water-stage recorder. Altitude of gage is 2,507.50 ft (NGVD 29). Prior to Sept. 30, 1953, water-stage recorder at Loma, 18 mi upstream, 2,543.40 ft.
REMARKS.--Flow regulated by 23 smaller irrigation reservoirs and powerplants, Clark Canyon Reservoir (station number 06015300), Canyon Ferry Lake (station number 06058500), and Lake Elwell (station number 06101300). Diversions for irrigation of about 850,400 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

Unregulated streamflow period

Magnitude and probability of annual low flow based on 17 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2,740	1,830	1,360	1,010	--	--
3	3,050	2,450	2,170	1,950	--	--
7	3,430	2,740	2,400	2,140	--	--
14	3,580	2,880	2,540	2,280	--	--
30	3,670	3,000	2,690	2,460	--	--
60	3,890	3,200	2,890	2,650	--	--
90	4,180	3,410	3,060	2,790	--	--
120	4,450	3,620	3,230	2,930	--	--
183	4,620	3,780	3,390	3,080	--	--

Magnitude and probability of seasonal low flow from March-June based on 18 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,080	3,300	2,950	2,690	--	--
3	4,390	3,660	3,320	3,070	--	--
7	4,690	3,940	3,590	3,320	--	--
14	5,010	4,210	3,850	3,560	--	--
30	5,950	4,690	4,160	3,780	--	--

Magnitude and probability of seasonal low flow from November-February based on 17 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2,870	2,200	1,870	1,610	--	--
3	3,260	2,570	2,240	1,970	--	--
7	3,750	2,940	2,520	2,180	--	--
14	3,970	3,130	2,700	2,350	--	--
30	4,210	3,340	2,890	2,540	--	--

Duration of daily mean flows based on 17 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
2,300	2,480	3,010	3,340	3,890	4,430	4,980	5,530
40%	30%	20%	15%	10%	5%	2%	1%
6,070	7,450	9,330	11,900	16,100	22,900	31,300	36,600

Magnitude and probability of annual high flow based on 17 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	25,900	40,000	51,300	67,900	--	--
3	25,500	38,400	48,000	61,200	--	--
7	24,800	37,100	45,700	57,100	--	--
15	22,900	34,700	42,700	53,100	--	--
30	20,400	31,100	38,400	47,700	--	--
60	17,300	25,600	30,800	37,200	--	--
90	14,600	21,400	25,900	31,400	--	--

Magnitude and probability of seasonal low flow from July-October based on 17 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,170	2,010	1,460	1,070	--	--
3	3,350	2,730	2,490	2,330	--	--
7	3,650	3,030	2,790	2,610	--	--
14	3,770	3,140	2,880	2,710	--	--
30	3,850	3,220	2,970	2,800	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	7,640	3,530	5,210	1,330	17
November	7,090	3,210	5,260	1,290	17
December	7,040	3,220	4,910	1,180	17
January	5,810	2,720	4,400	997	17
February	6,970	2,600	4,740	1,280	17
March	10,200	3,780	6,410	1,910	18
April	17,700	4,970	9,300	4,100	18
May	27,200	4,860	14,800	6,670	18
June	52,000	7,540	20,000	11,500	18
July	15,900	3,700	8,490	4,250	18
August	7,780	2,820	4,510	1,450	18
September	6,760	2,820	4,470	1,060	18
Annual	13,300	4,150	7,810	2,620	17

06109500 Missouri River at Virgelle, Mont.—Continued
Site Number 88

Regulated streamflow period

Magnitude and probability of annual low flow based on 49 years of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,940	3,200	2,850	2,580	2,300	--
3	4,400	3,690	3,360	3,100	2,830	--
7	4,890	4,130	3,780	3,510	3,220	--
14	5,130	4,350	3,980	3,710	3,420	--
30	5,360	4,510	4,130	3,830	3,530	--
60	5,580	4,680	4,270	3,970	3,650	--
90	5,830	4,850	4,410	4,080	3,740	--
120	6,030	5,020	4,560	4,200	3,840	--
183	6,390	5,280	4,770	4,380	3,970	--

Magnitude and probability of seasonal low flow from March-June based on 50 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,440	4,140	3,570	3,140	2,710	2,450
3	5,860	4,560	3,980	3,550	3,110	2,840
7	6,230	4,910	4,320	3,880	3,430	3,160
14	6,520	5,160	4,560	4,120	3,670	3,390
30	6,900	5,430	4,810	4,370	3,920	3,660

Magnitude and probability of seasonal low flow from November-February based on 49 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,230	3,460	3,100	2,820	2,520	--
3	4,720	3,930	3,550	3,260	2,940	--
7	5,350	4,520	4,100	3,770	3,420	--
14	5,720	4,860	4,430	4,100	3,730	--
30	6,020	5,100	4,660	4,310	3,930	--

Duration of daily mean flows based on 50 years of record

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
3,320	3,580	4,310	4,630	5,280	5,930	6,610	7,290
40%	30%	20%	15%	10%	5%	2%	1%
7,970	8,660	10,700	11,800	14,900	20,600	27,400	32,700

Magnitude and probability of annual high flow based on 50 years of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	22,100	36,900	49,000	67,000	82,600	100,000
3	21,600	35,700	46,700	62,500	75,800	90,300
7	20,700	33,100	42,000	54,000	63,400	73,100
15	19,300	30,100	37,400	46,900	54,000	61,100
30	17,700	26,700	32,700	40,200	45,600	51,000
60	15,200	21,900	26,100	31,000	34,400	37,600
90	13,300	18,700	22,000	25,900	28,700	31,300

Magnitude and probability of seasonal low flow from July-October based on 49 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,740	3,710	3,270	2,950	2,630	--
3	5,020	4,060	3,660	3,370	3,090	--
7	5,270	4,290	3,890	3,590	3,310	--
14	5,420	4,420	4,010	3,720	3,430	--
30	5,610	4,570	4,140	3,840	3,540	--

Monthly and annual mean discharges

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Years of record
October	15,300	3,870	6,510	1,970	50
November	12,500	4,050	6,720	1,740	50
December	12,200	3,870	6,730	1,500	50
January	9,000	3,990	6,900	1,260	50
February	10,200	4,140	7,230	1,490	50
March	14,500	4,210	7,700	2,320	50
April	15,200	4,060	8,490	2,750	50
May	28,300	4,820	12,900	5,240	50
June	44,800	4,650	17,200	9,540	50
July	29,700	4,030	10,300	5,160	50
August	12,000	4,020	6,760	1,960	50
September	11,600	3,820	6,350	1,930	50
Annual	13,700	4,560	8,650	2,150	50

06109800 South Fork Judith River near Utica, Mont.
Site Number 89

LOCATION.--Lat 46°45'00", long 110°18'54" (NAD 27), in SE¼NE¼SW¼ sec.34, T.12 N., R.ll E., Judith Basin County, Hydrologic Unit 10040103, Lewis and Clark National Forest, on right bank just downstream from Trask Gulch, 8 mi upstream from confluence with Middle Fork, and 18 mi southwest of Utica.
DRAINAGE AREA.--58.7 mi^2.
PERIOD OF RECORD.--20 years. August 1958 to September 1979 (discontinued).
GAGE.--Water-stage recorder. Altitude of gage is 5,420 ft (NGVD 29, from topographic map).
REMARKS.--Minor diversions for irrigation upstream from station.

Magnitude and probability of annual low flow based on 20 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2.5	1.9	1.6	1.4	--	--
3	2.7	2.1	1.8	1.6	--	--
7	2.9	2.3	2.0	1.8	--	--
14	3.2	2.6	2.4	2.2	--	--
30	3.5	3.0	2.8	2.6	--	--
60	3.9	3.3	3.1	2.9	--	--
90	4.1	3.5	3.3	3.1	--	--
120	4.4	3.8	3.5	3.3	--	--
183	5.5	4.6	4.1	3.7	--	--

Magnitude and probability of seasonal low flow from March-June based on 21 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3.4	2.7	2.3	2.0	--	--
3	3.5	2.8	2.4	2.0	--	--
7	3.6	2.9	2.5	2.2	--	--
14	3.8	3.0	2.6	2.3	--	--
30	4.4	3.4	3.1	2.9	--	--

Magnitude and probability of seasonal low flow from November-February based on 21 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2.6	1.9	1.7	1.5	--	--
3	2.8	2.1	1.8	1.6	--	--
7	3.0	2.3	2.1	1.8	--	--
14	3.3	2.7	2.4	2.2	--	--
30	3.6	3.1	2.8	2.6	--	--

Duration of daily mean flows based on 21 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
2.2	2.5	3.0	3.4	4.1	4.8	5.6	7.0
40%	30%	20%	15%	10%	5%	2%	1%
9.2	14	25	36	58	104	177	244

Magnitude and probability of annual high flow based on 21 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	221	453	658	976	--	--
3	200	365	485	644	--	--
7	175	294	369	458	--	--
15	143	235	292	359	--	--
30	112	183	227	280	--	--
60	83	135	168	207	--	--
90	66	102	124	147	--	--

Magnitude and probability of seasonal low flow from July-October based on 20 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5.1	3.9	3.3	2.9	--	--
3	5.4	4.4	3.9	3.6	--	--
7	5.8	4.7	4.2	3.9	--	--
14	6.2	5.0	4.4	4.0	--	--
30	6.6	5.3	4.7	4.2	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	12	3.8	6.8	1.8	21
November	9.2	2.9	5.3	1.4	21
December	6.5	2.3	4.4	1.1	21
January	6.0	2.6	3.9	.99	21
February	4.9	2.8	4.0	.57	21
March	13	2.4	5.1	2.3	21
April	47	5.3	21	14	21
May	194	24	104	52	21
June	234	13	73	59	21
July	52	5.3	23	12	21
August	19	3.7	12	3.9	21
September	15	4.0	8.4	2.6	22
Annual	42	6.5	23	9.4	21

06110000 Judith River near Utica, Mont.
Site Number 90

LOCATION.--Lat 46°53'30", long 110°13'54" (NAD 27), in NW¼ sec.17, T.13 N., R.12 E., Judith Basin County, on left bank at Noel Ranch, 4 mi downstream from confluence of South and Middle Forks, 9 mi southwest of Utica, and at river mile 99.3.
DRAINAGE AREA.--328 mi^2 .
PERIOD OF RECORD.--56 years. October 1919 to September 1975 (discontinued). Monthly discharge only for some periods, published in WSP 1309.
REVISED RECORDS (WATER YEARS)--WSP 896: 1939. WSP 1309: 1920, 1922(M), 1925, 1927(M), 1929-30, 1931(M), 1936(M), 1938(M).
GAGE.--Water-stage recorder. Concrete control after October 1938. Altitude of gage is 4,790 ft (NGVD 29, by barometer). Prior to June 6, 1937, nonrecording gage at present site and datum.
REMARKS.--Minor diversions for irrigation upstream from station.

Magnitude and probability of annual low flow
based on 55 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.1	0.45	0.26	0.15	0.04	0.00
3	1.1	.47	.28	.17	.04	.00
7	1.2	.50	.32	.21	.13	.09
14	1.2	.56	.36	.24	.16	.12
30	1.4	.69	.46	.32	.21	.16
60	2.1	1.0	.69	.48	.32	.24
90	3.7	2.0	1.4	1.1	.75	.59
120	4.8	2.6	1.8	1.3	.87	.66
183	7.4	3.9	2.6	1.9	1.3	.95

Magnitude and probability of seasonal low flow from
March-June based on 56 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.3	0.51	0.31	0.20	0.07	0.00
3	1.3	.53	.33	.22	.08	.00
7	1.4	.56	.36	.25	.17	.13
14	1.4	.61	.40	.29	.20	.16
30	1.8	.75	.49	.35	.25	.20

Magnitude and probability of seasonal low flow from
November-February based on 55 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.7	0.76	0.48	0.33	0.20	0.15
3	1.8	.80	.50	.34	.21	.15
7	1.9	.86	.54	.36	.22	.16
14	2.0	.94	.60	.41	.25	.18
30	2.2	1.1	.73	.51	.34	.25

Duration of daily mean flows based on 56 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.20	0.40	1.0	1.5	2.4	3.9	6.1	9.6
40%	30%	20%	15%	10%	5%	2%	1%
15	27	64	106	175	310	471	611

Magnitude and probability of annual high flow
based on 56 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	438	719	890	1,080	1,200	1,310
3	422	686	842	1,010	1,120	1,220
7	388	624	760	908	1,000	1,080
15	344	552	675	810	896	972
30	300	482	589	706	781	846
60	231	367	442	520	567	605
90	177	281	339	398	433	462

Magnitude and probability of seasonal low flow from
July-October based on 55 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	8.1	3.8	2.4	1.6	0.98	0.68
3	8.4	4.0	2.6	1.7	1.0	.73
7	8.8	4.2	2.7	1.8	1.1	.76
14	9.2	4.5	2.9	2.0	1.2	.88
30	10	4.9	3.2	2.2	1.4	.97

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	50	1.1	13	9.4	56
November	33	.75	9.3	6.6	56
December	25	.50	6.0	4.1	56
January	18	.40	3.7	2.8	56
February	30	.30	3.3	4.2	56
March	51	.21	3.9	7.1	56
April	129	.25	22	32	56
May	475	8.9	194	108	56
June	835	33	271	184	56
July	286	9.6	85	61	56
August	97	4.4	29	20	56
September	51	1.5	16	11	56
Annual	141	8.8	55	29	56

06111000 Ross Fork Creek near Hobson, Mont.
Site Number 91

LOCATION.--Lat 46°59'34", long 109°48'42" (NAD 27), in NW¼ sec.11, T.14 N., R.15 E., Judith Basin County, on left bank 1 mi downstream from Hauck Coulee, 3.5 mi east of Hobson, and 7 mi upstream from mouth.

DRAINAGE AREA.--337 mi^2.

PERIOD OF RECORD.--14 years. June 1946 to December 1953 and March 1955 to September 1962 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 3,860 ft (NGVD 29, by barometer).

REMARKS.--Minor diversions for irrigation upstream from station. Flow may be augmented by operation of Ackley Lake, which receives water from Judith River.

Magnitude and probability of annual low flow
based on 12 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.02	.00	.00	.00	--	--
60	.19	.00	.00	.00	--	--
90	.42	.07	.00	.00	--	--
120	.76	.29	.10	.00	--	--
183	1.2	.73	.51	.00	--	--

Magnitude and probability of seasonal low flow from
March-June based on 14 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.8	0.47	0.11	0.00	--	--
3	2.2	.51	.13	.00	--	--
7	2.4	.77	.26	.00	--	--
14	3.0	1.0	.48	.24	--	--
30	5.4	2.0	1.1	.66	--	--

Magnitude and probability of seasonal low flow from
November-February based on 14 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.55	0.00	0.00	0.00	--	--
3	.67	.00	.00	.00	--	--
7	.79	.00	.00	.00	--	--
14	.88	.43	.24	.00	--	--
30	1.2	.70	.52	.00	--	--

Duration of daily mean flows based on 14 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.04	0.08	0.19	0.38	0.76	1.2	1.8	2.6
40%	30%	20%	15%	10%	5%	2%	1%
3.6	5.5	11	17	28	52	139	271

Magnitude and probability of annual high flow
based on 14 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	341	987	1,480	2,080	--	--
3	275	780	1,150	1,560	--	--
7	196	516	735	972	--	--
15	129	309	424	546	--	--
30	86	197	271	351	--	--
60	56	115	150	184	--	--
90	42	82	104	126	--	--

Magnitude and probability of seasonal low flow from
July-October based on 15 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.05	.00	.00	.00	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	3.4	0.00	0.97	0.98	15
November	6.1	.00	2.1	1.5	15
December	8.9	.00	2.7	2.0	15
January	4.9	.70	2.1	1.3	14
February	12	.98	4.9	3.1	14
March	175	2.9	63	57	14
April	219	2.0	49	63	15
May	133	2.6	27	35	15
June	125	.71	24	31	15
July	11	.00	3.9	2.7	16
August	4.8	.00	1.1	1.3	16
September	2.5	.00	.44	.64	16
Annual	26	1.4	14	8.2	14

06111500 Big Spring Creek near Lewistown, Mont.
Site Number 92

LOCATION.--Lat 47°00'20", long 109°21'00" (NAD 27), SW¼ NW¼ sec.5, T.14 N., R.19 E., Fergus County, on upstream side of left wingwall of old highway bridge, 0.5 mi downstream from Big Springs and 5 mi southeast of Lewistown.
DRAINAGE AREA.--20.9 mi^2 (revised).
PERIOD OF RECORD.--25 years. June 1932 to September 1957 (discontinued).
GAGE.--Water-stage recorder. Altitude of gage is 4,130 ft (NGVD 29, by barometer). Prior to Apr. 27, 1955, staff gage on downstream left wingwall.
REMARKS.--Water diversion upstream from station.

Magnitude and probability of annual low flow
based on 24 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	94	86	82	79	--	--
3	95	86	82	79	--	--
7	95	87	83	79	--	--
14	96	88	83	80	--	--
30	97	89	84	80	--	--
60	99	91	87	83	--	--
90	100	92	88	85	--	--
120	101	93	89	86	--	--
183	102	94	91	88	--	--

Magnitude and probability of seasonal low flow from
March-June based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	98	90	86	82	78	--
3	99	90	86	82	78	--
7	100	91	86	83	78	--
14	100	92	87	83	79	--
30	102	93	88	84	80	--

Magnitude and probability of seasonal low flow from
November-February based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	99	90	86	82	79	--
3	100	90	86	82	79	--
7	100	90	86	83	79	--
14	101	91	87	83	80	--
30	102	92	88	84	81	--

Duration of daily mean flows based on 25 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
69	71	79	93	97	102	106	110
40%	30%	20%	15%	10%	5%	2%	1%
115	119	123	125	128	130	164	177

Magnitude and probability of annual high flow
based on 25 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	127	158	181	214	242	--
3	123	148	167	195	217	--
7	121	141	156	177	193	--
15	118	134	145	161	173	--
30	115	128	138	150	160	--
60	112	124	133	145	154	--
90	111	123	132	144	153	--

Magnitude and probability of seasonal low flow from
July-October based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	98	91	88	87	85	--
3	99	92	89	87	85	--
7	99	92	89	87	85	--
14	100	93	90	87	85	--
30	101	94	91	89	86	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	154	90	109	13	25
November	157	88	108	13	25
December	157	88	108	14	25
January	155	84	106	14	25
February	145	77	106	13	25
March	136	80	108	13	25
April	128	81	107	11	25
May	156	82	106	14	25
June	144	83	109	14	26
July	143	84	106	11	26
August	140	86	106	11	26
September	145	90	109	11	26
Annual	134	87	107	10	25

06115200 Missouri River near Landusky, Mont.
Site Number 93

LOCATION.--Lat 47°37'51", long 108°41'13" (NAD 27), in NW¼NE¼ sec.31, T.22 N., R.24 E., Fergus County, Hydrologic Unit 10040104, Charles M. Russell National Wildlife Refuge, on right bank 380 ft upstream from bridge on U.S. Highway 191, 0.9 mi upstream from Armells Creek, 20 mi south of Landusky, and at river mile 1,921.61.

DRAINAGE AREA.--40,987 mi^2. Area at site used prior to Dec. 13, 1968, 40,763 mi^2.

PERIOD OF RECORD.--February 1934 to current year (2002). Prior to October 1968, published as "at powerplant ferry, near Zortman."

REVISED RECORDS.--WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,239.96 ft (NGVD 29, State Highway bench mark). Prior to Feb. 7, 1935, nonrecording gage, and Feb. 7, 1935, to Dec. 12, 1968, water-stage recorder, at site 16.5 mi upstream at datum 33.06 ft higher.

REMARKS.--Flow regulated by 24 smaller irrigation reservoirs and powerplants, Clark Canyon Reservoir (station number 06015300), Canyon Ferry Lake (station number 06058500), and Lake Elwell (station number 06101300). Diversions for irrigation of about 870,400 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

Unregulated streamflow period

Magnitude and probability of annual low flow based on 18 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2,630	1,880	1,560	1,320	--	--
3	2,950	2,120	1,730	1,450	--	--
7	3,420	2,550	2,120	1,800	--	--
14	3,680	2,820	2,410	2,090	--	--
30	3,880	3,000	2,570	2,240	--	--
60	4,150	3,240	2,800	2,470	--	--
90	4,440	3,460	3,000	2,650	--	--
120	4,730	3,720	3,250	2,900	--	--
183	4,900	3,910	3,450	3,100	--	--

Magnitude and probability of seasonal low flow from March-June based on 19 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,430	3,490	3,070	2,750	--	--
3	4,740	3,770	3,320	2,970	--	--
7	5,130	4,150	3,680	3,310	--	--
14	5,560	4,590	4,140	3,790	--	--
30	6,790	5,440	4,910	4,550	--	--

Magnitude and probability of seasonal low flow from November-February based on 18 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2,730	1,970	1,630	1,380	--	--
3	3,050	2,200	1,810	1,520	--	--
7	3,590	2,680	2,240	1,910	--	--
14	3,930	3,050	2,630	2,300	--	--
30	4,330	3,340	2,860	2,490	--	--

Duration of daily mean flows based on 18 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
2,210	2,470	3,140	3,440	4,040	4,670	5,310	5,950
40%	30%	20%	15%	10%	5%	2%	1%
6,950	8,070	10,400	12,800	16,800	24,100	33,600	42,600

Magnitude and probability of annual high flow based on 18 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	28,200	44,600	57,500	76,100	--	--
3	27,400	42,400	53,800	69,600	--	--
7	26,100	39,700	49,300	62,200	--	--
15	23,700	36,300	45,300	57,500	--	--
30	21,100	32,500	40,500	51,200	--	--
60	17,800	26,600	32,400	39,600	--	--
90	15,200	22,400	27,300	33,600	--	--

Magnitude and probability of seasonal low flow from July-October based on 18 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,400	2,340	1,890	1,560	--	--
3	3,780	2,760	2,310	1,970	--	--
7	4,010	3,010	2,560	2,220	--	--
14	4,100	3,110	2,670	2,330	--	--
30	4,180	3,210	2,790	2,480	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	8,440	3,270	5,530	1,530	18
November	7,980	3,580	5,720	1,400	18
December	7,610	3,120	5,130	1,350	18
January	6,490	2,800	4,690	1,150	18
February	8,450	2,510	5,120	1,630	18
March	13,400	4,880	7,520	2,340	19
April	19,200	5,360	10,300	4,480	19
May	27,200	5,260	15,100	6,850	19
June	55,300	8,170	21,100	12,300	19
July	17,700	3,960	9,320	4,830	19
August	8,250	2,080	4,840	1,720	19
September	7,640	2,500	4,770	1,290	19
Annual	14,200	4,440	8,350	2,860	18

06115200 Missouri River near Landusky, Mont.—Continued
Site Number 93

Regulated streamflow period

Magnitude and probability of annual low flow based on 49 years of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,220	3,360	2,980	2,690	2,400	--
3	4,630	3,690	3,260	2,930	2,580	--
7	5,080	4,170	3,740	3,410	3,070	--
14	5,390	4,510	4,100	3,780	3,450	--
30	5,690	4,770	4,340	4,010	3,670	--
60	5,950	4,980	4,530	4,180	3,820	--
90	6,230	5,170	4,670	4,290	3,890	--
120	6,440	5,330	4,810	4,420	4,000	--
183	6,810	5,610	5,040	4,610	4,160	--

Magnitude and probability of seasonal low flow from March-June based on 50 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,960	4,570	3,950	3,490	3,020	2,740
3	6,350	4,950	4,320	3,830	3,340	3,040
7	6,700	5,290	4,650	4,160	3,670	3,370
14	7,090	5,580	4,910	4,410	3,900	3,590
30	7,750	5,980	5,230	4,680	4,140	3,810

Magnitude and probability of seasonal low flow from November-February based on 49 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,590	3,580	3,120	2,770	2,410	--
3	4,960	3,890	3,380	2,990	2,590	--
7	5,560	4,490	3,970	3,560	3,130	--
14	5,980	4,960	4,470	4,080	3,670	--
30	6,340	5,330	4,850	4,460	4,050	--

Duration of daily mean flows based on 50 years of record

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
3,450	3,830	4,450	4,870	5,700	6,450	7,130	7,810
40%	30%	20%	15%	10%	5%	2%	1%
8,480	9,810	11,400	13,000	16,200	22,500	30,300	34,600

Magnitude and probability of annual high flow based on 50 years of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	24,800	42,400	56,800	78,400	97,000	118,000
3	24,000	40,500	53,700	72,900	89,200	107,000
7	23,000	37,400	47,900	62,300	73,600	85,400
15	21,400	33,700	42,200	53,200	61,500	69,900
30	19,300	29,500	36,300	44,900	51,100	57,300
60	16,600	24,100	28,800	34,400	38,300	42,100
90	14,600	20,600	24,400	28,800	31,900	34,800

Magnitude and probability of seasonal low flow from July-October based on 49 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,100	4,010	3,550	3,220	2,900	--
3	5,370	4,320	3,890	3,570	3,270	--
7	5,620	4,540	4,080	3,740	3,410	--
14	5,780	4,670	4,200	3,860	3,520	--
30	6,000	4,860	4,370	4,020	3,680	--

Monthly and annual mean discharges

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Years of record
October	16,500	3,930	6,910	2,060	50
November	13,900	4,140	7,130	1,850	50
December	13,200	4,000	7,170	1,600	50
January	10,800	4,170	7,310	1,400	50
February	11,400	4,330	7,870	1,680	50
March	19,700	4,310	8,930	3,060	50
April	16,400	4,340	9,280	3,110	50
May	30,500	4,860	14,000	5,910	50
June	53,700	4,940	18,900	10,900	50
July	33,600	4,150	11,300	5,780	50
August	12,600	3,900	7,270	2,110	50
September	12,300	3,780	6,770	1,990	50
Annual	15,300	4,600	9,410	2,370	50

06115500 North Fork Musselshell River near Delpine, Mont.
Site Number 94

LOCATION.--Lat 46°36'36", long 110°34'30" (NAD 27), in SW¼ SE¼ sec.22, T.10 N., R.9 E., Meagher County, Hydrologic Unit 10040201, on right bank 0.5 mi upstream from high-water line of Bair Reservoir at elevation 5,330 ft, 3 mi downstream from Lion Creek, and northwest of Delpine.
DRAINAGE AREA.--31.4 mi^2 .
PERIOD OF RECORD.--36 years (1940-80).
REVISED RECORDS.--WSP 1559: Drainage area.
GAGE.--Water-stage recorder. Altitude of gage is 5,380 ft (NGVD 29, by barometer).
REMARKS.--Minor diversions for irrigation upstream from station.

Magnitude and probability of annual low flow
based on 35 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3.2	2.5	2.2	2.0	1.7	--
3	3.4	2.7	2.4	2.1	1.9	--
7	3.7	2.9	2.6	2.2	1.9	--
14	4.0	3.2	2.8	2.4	2.1	--
30	4.4	3.5	3.1	2.7	2.4	--
60	4.9	3.9	3.5	3.1	2.8	--
90	5.4	4.3	3.8	3.4	3.0	--
120	5.8	4.7	4.2	3.8	3.4	--
183	6.4	5.2	4.7	4.3	3.9	--

Magnitude and probability of seasonal low flow from
March-June based on 36 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4.4	3.4	3.0	2.7	2.5	--
3	4.6	3.5	3.1	2.8	2.6	--
7	4.8	3.7	3.3	3.0	2.7	--
14	5.2	4.0	3.6	3.3	3.0	--
30	7.4	5.1	4.3	3.7	3.3	--

Magnitude and probability of seasonal low flow from
November-February based on 36 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3.5	2.8	2.5	2.3	2.1	--
3	3.7	3.1	2.8	2.6	2.4	--
7	4.2	3.4	3.1	2.9	2.6	--
14	4.5	3.7	3.3	3.0	2.8	--
30	4.9	4.1	3.8	3.5	3.2	--

Duration of daily mean flows based on 36 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
2.8	3.0	3.6	4.3	5.1	6.0	6.9	7.9
40%	30%	20%	15%	10%	5%	2%	1%
9.9	13	18	22	29	40	53	62

Magnitude and probability of annual high flow
based on 36 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	54	86	109	137	159	--
3	47	72	88	107	120	--
7	43	63	75	89	97	--
15	39	55	64	72	78	--
30	35	48	55	62	66	--
60	29	40	46	52	55	--
90	26	35	40	45	48	--

Magnitude and probability of seasonal low flow from
July-October based on 39 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4.7	3.1	2.5	2.1	1.8	--
3	4.8	3.2	2.6	2.2	1.9	--
7	4.9	3.3	2.7	2.3	1.9	--
14	5.1	3.5	2.8	2.4	2.1	--
30	5.5	3.8	3.2	2.7	2.4	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	16	2.9	7.0	2.9	39
November	13	3.9	7.4	1.9	36
December	12	4.2	6.4	1.7	36
January	8.9	3.6	5.7	1.3	36
February	15	3.0	6.3	2.2	36
March	29	2.4	9.2	5.3	36
April	41	5.6	19	9.5	38
May	50	5.2	27	13	39
June	65	5.3	29	14	40
July	29	3.2	14	6.5	40
August	17	2.6	9.0	3.9	40
September	16	3.0	7.3	3.2	40
Annual	20	5.8	12	3.6	36

06118500 South Fork Musselshell River above Martinsdale, Mont.
Site Number 95

LOCATION.--Lat 46°27'21", long 110°22'54" (NAD 27), in SW¼ NW¼ sec.17, T.8 N., R.11 E., Meagher County, Hydrologic Unit 10040201, on left bank 2 mi downstream from Cottonwood Creek, 3 mi west of Martinsdale, and 6 mi upstream from confluence with North Fork.
DRAINAGE AREA.--287 mi^2.
PERIOD OF RECORD.--38 years. October 1941 to Sept. 30, 1979 (discontinued). Monthly discharge only November 1941 to May 1942, published in WSP 1309.
REVISED RECORDS.--WSP 1309: 1942(M), 1944 (M). WSP 1729: Drainage area. WDR MT-75-1: 1948, 1964(M), 1967.
GAGE.--Water-stage recorder. Altitude of gage is 4,900 ft (NGVD 29, by barometer). Prior to May 15, 1942, nonrecording gage at same site and datum.
REMARKS.--Diversions for irrigation of about 6,600 acres of which 250 acres lie downstream from station.

Magnitude and probability of annual low flow
based on 37 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	6.5	2.1	0.98	0.46	0.17	--
3	7.0	2.4	1.1	.52	.19	--
7	8.1	3.0	1.4	.68	.25	--
14	9.4	3.6	1.8	.85	.32	--
30	12	5.2	2.8	1.5	.62	--
60	14	8.3	5.7	4.0	2.5	--
90	17	11	8.1	6.3	4.6	--
120	19	13	10	8.4	6.4	--
183	21	15	12	10	8.2	--

Magnitude and probability of seasonal low flow from
March-June based on 38 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	15	8.8	5.7	3.7	2.1	--
3	15	9.2	6.4	4.4	2.7	--
7	17	9.9	6.9	4.8	3.1	--
14	18	11	8.0	6.2	4.5	--
30	29	16	12	9.0	6.5	--

Magnitude and probability of seasonal low flow from
November-February based on 37 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	11	7.1	5.7	4.6	3.6	--
3	11	7.6	6.1	5.1	4.1	--
7	12	8.3	6.9	5.8	4.8	--
14	13	9.4	7.8	6.7	5.5	--
30	15	11	9.3	7.9	6.5	--

Duration of daily mean flows based on 38 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
2.4	4.7	8.1	11	15	19	23	29
40%	30%	20%	15%	10%	5%	2%	1%
37	56	111	166	262	450	686	855

Magnitude and probability of annual high flow
based on 38 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	694	1,220	1,680	2,430	3,110	--
3	650	1,080	1,420	1,920	2,350	--
7	586	927	1,160	1,460	1,680	--
15	513	796	980	1,200	1,360	--
30	449	687	831	995	1,100	--
60	345	516	611	711	773	--
90	269	400	473	550	597	--

Magnitude and probability of seasonal low flow from
July-October based on 37 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	9.5	2.7	1.1	0.49	0.20	--
3	10	2.9	1.2	.54	.23	--
7	12	3.6	1.6	.71	.29	--
14	13	4.3	1.9	.92	.36	--
30	16	5.8	2.9	1.5	.67	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	95	4.1	31	19	38
November	60	13	28	11	38
December	58	9.4	23	11	38
January	51	7.3	18	8.1	38
February	41	7.8	21	7.3	38
March	106	4.6	35	22	38
April	370	15	113	73	38
May	783	40	334	170	38
June	1,320	67	365	248	38
July	370	5.0	80	67	38
August	82	.91	25	18	38
September	105	.44	23	18	38
Annual	212	23	91	40	38

06120500 Musselshell River at Harlowton, Mont.
Site Number 96

LOCATION.--Lat 46°25'48", long 109°50'24" (NAD 27), in NE¼ sec.28, T.8 N., R.15 E., Wheatland County, Hydrologic Unit 10040201, on left bank 350 ft downstream from bridge on U.S. Highway 191, 1.0 mi southwest of Harlowton, 6 mi upstream from American Fork, and at river mile 327.8.

DRAINAGE AREA.--1,125 mi^2.

PERIOD OF RECORD.--July 1907 to November 1929, March 1930 to December 1932, April to August 1933, February 1934 to current year (2002). Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1309: 1912, 1915(M), 1918, 1925. WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,171.46 ft (NGVD 29, levels by Morrison and Maierle, Inc.). Prior to Dec. 8, 1937, nonrecording gages at site 1.2 mi downstream at different datums. Dec. 8, 1937, to Aug. 26, 1955, nonrecording gage at bridge 300 ft upstream at different datums.

REMARKS.--Some regulation by Bair (station number 06116500) and Martinsdale (station number 06119000) Reservoirs. Diversions for irrigation of about 21,900 acres upstream from station of which about 21,400 acres are flood irrigated. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow based on 90 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	26	4.5	0.00	0.00	0.00	0.00
3	26	4.9	.00	.00	.00	.00
7	30	5.6	.00	.00	.00	.00
14	31	6.4	.30	.00	.00	.00
30	38	7.0	.77	.00	.00	.00
60	45	12	3.3	.15	.00	.00
90	56	15	4.8	1.3	.10	.00
120	62	25	11	4.4	.78	.00
183	63	33	21	14	6.1	.00

Magnitude and probability of seasonal low flow from March-June based on 93 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	46	19	10	5.7	2.7	1.5
3	49	22	13	7.8	4.1	2.6
7	55	26	16	9.8	5.4	3.4
14	62	31	20	13	7.5	5.1
30	74	41	30	23	17	13

Magnitude and probability of seasonal low flow from November-February based on 92 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	36	18	10	6.0	2.2	0.00
3	39	20	12	6.9	2.5	.00
7	41	22	14	8.8	3.8	.00
14	42	25	18	13	7.2	.00
30	47	31	24	19	13	.00

Duration of daily mean flows based on 92 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.35	0.70	7.9	24	39	51	62	76
40%	30%	20%	15%	10%	5%	2%	1%
92	120	175	238	362	642	1,030	1,360

Magnitude and probability of annual high flow based on 92 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	982	1,860	2,500	3,310	3,920	4,510
3	904	1,700	2,250	2,930	3,420	3,870
7	786	1,480	1,950	2,520	2,920	3,300
15	658	1,250	1,660	2,170	2,520	2,850
30	540	1,040	1,400	1,840	2,150	2,440
60	406	773	1,030	1,370	1,610	1,840
90	332	613	808	1,050	1,230	1,390

Magnitude and probability of seasonal low flow from July-October based on 93 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	33	4.7	0.00	0.00	0.00	0.00
3	35	5.2	.00	.00	.00	.00
7	36	5.8	.00	.00	.00	.00
14	37	6.8	.43	.00	.00	.00
30	42	7.4	.96	.00	.00	.00

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	226	0.00	74	46	94
November	176	.00	78	36	94
December	206	.00	67	33	92
January	250	.00	59	31	92
February	190	10	66	32	93
March	500	20	113	84	93
April	632	22	176	130	95
May	1,960	12	406	334	95
June	2,470	28	507	452	95
July	751	.84	161	143	95
August	292	.00	76	66	95
September	290	.00	63	55	95
Annual	483	21	156	86	92

06122000 American Fork below Lebo Creek, near Harlowton, Mont.
Site Number 97

LOCATION.--Lat 46°23'34", long 109°45'49" (NAD 27), in SE¼ sec.6, T.7 N., R.16 E., Wheatland County, on left bank 2 mi upstream from mouth, 2 mi downstream from Lebo Creek, 5 mi southeast of Harlowton.

DRAINAGE AREA.--166 mi^2.

PERIOD OF RECORD.--21 years. July 1946 to September 1967 (discontinued). Monthly discharge only for July 1946, published in WSP 1309.

REVISED RECORDS.--WSP 1116: 1947. WSP 1309: 1948(M), 1950(M). WSP 1629: 1948(P). WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,170 ft (NGVD 29, by barometer).

REMARKS.--Diversions for irrigation of about 7,500 acres, of which 300 acres downstream from station. During irrigation season, natural flow is supplemented by release from Lake Lebo (capacity, about 3,000 acre-ft). Diversions from headwaters in T.5 N., R.12 E., to irrigate about 300 acres in Sweet Grass Creek drainage in Yellowstone River basin.

Magnitude and probability of annual low flow
based on 20 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.2	0.22	0.00	0.00	--	--
3	1.6	.35	.00	.00	--	--
7	2.0	.55	.26	.13	--	--
14	2.9	1.0	.56	.33	--	--
30	4.8	2.3	1.6	1.1	--	--
60	6.2	3.7	2.8	2.3	--	--
90	7.7	4.4	3.2	2.4	--	--
120	8.8	5.5	4.2	3.4	--	--
183	11	7.2	6.0	5.2	--	--

Magnitude and probability of seasonal low flow from
March-June based on 21 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5.8	1.8	0.82	0.39	--	--
3	7.0	2.4	1.1	.54	--	--
7	8.9	3.0	1.4	.68	--	--
14	12	4.1	2.0	.95	--	--
30	17	7.6	4.4	2.6	--	--

Magnitude and probability of seasonal low flow from
November-February based on 21 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	6.4	3.5	2.4	1.8	--	--
3	6.9	4.0	2.9	2.2	--	--
7	7.7	4.6	3.5	2.7	--	--
14	8.5	5.4	4.2	3.4	--	--
30	9.9	6.7	5.4	4.6	--	--

Duration of daily mean flows based on 21 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.57	1.2	3.1	4.8	7.4	10	13	16
40%	30%	20%	15%	10%	5%	2%	1%
19	23	30	38	58	121	242	348

Magnitude and probability of annual high flow
based on 21 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	315	572	714	852	--	--
3	276	507	638	770	--	--
7	218	412	532	664	--	--
15	168	325	429	549	--	--
30	125	242	325	428	--	--
60	88	163	219	292	--	--
90	68	120	159	211	--	--

Magnitude and probability of seasonal low flow from
July-October based on 21 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.7	0.31	0.02	0.00	--	--
3	2.3	.55	.06	.00	--	--
7	2.8	.79	.36	.17	--	--
14	4.0	1.5	.81	.48	--	--
30	5.6	2.8	1.9	1.3	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	39	2.7	13	9.9	21
November	30	5.3	15	6.9	21
December	32	7.5	15	6.4	21
January	24	4.9	13	5.3	21
February	39	5.2	17	7.8	21
March	59	10	23	12	21
April	62	7.7	23	13	21
May	163	4.8	70	48	21
June	548	7.5	130	134	21
July	139	4.3	30	30	22
August	28	2.0	10	7.0	22
September	52	1.7	12	11	22
Annual	71	8.4	31	16	21

06123500 Musselshell River near Ryegate, Mont.
Site Number 98

LOCATION.--Lat 46°18'02", long 109°12'20" (NAD 27), in center of S½ sec.3, T.6 N., R.20 E., Golden Valley County, Hydrologic Unit 10040201, on downstream side of county bridge 2 mi upstream from Careless Creek and 2 mi east of Ryegate.

DRAINAGE AREA.--1,979 mi^2.

PERIOD OF RECORD.--33 years. July 1946 to Sept. 30, 1979 (discontinued). Monthly discharge only for July 1946, published in WSP 1309.

REVISED RECORDS.--WSP 1729: Drainage area

GAGE.--Nonrecording and crest-stage gage. Altitude of gage is 3,585.26 ft (NGVD 29, levels by U.S. Army Corps of Engineers). Prior to June 23, 1967, water-stage recorder at site 1 mi downstream at different datum.

REMARKS.--Some regulation by Bair (station number 06116500) and Martinsdale (station number 06119000) Reservoirs. Water is diverted on left bank in sec. 8, T.7 N., R.17 E., for storage in Deadmans Basin (station number 06122500) Reservoir, and can be returned to the stream by canal at a point about 9 mi upstream from station or through Careless Creek 2 mi downstream from station. Diversions for irrigation of about 45,000 acres upstream from station, of which 2,700 acres is flood irrigated.

Magnitude and probability of annual low flow based on 32 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	13	6.5	4.4	3.2	2.2	--
3	15	7.3	4.9	3.5	2.3	--
7	17	8.2	5.4	3.8	2.5	--
14	19	9.1	6.0	4.1	2.7	--
30	25	12	7.4	5.0	3.2	--
60	33	16	11	7.8	5.3	--
90	40	20	14	10	7.2	--
120	44	24	17	13	9.1	--
183	58	31	22	16	11	--

Magnitude and probability of seasonal low flow from March-June based on 33 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	35	17	11	8.0	5.4	--
3	38	18	12	9.0	6.2	--
7	42	21	14	10	7.1	--
14	49	24	16	12	8.9	--
30	71	32	21	15	10	--

Magnitude and probability of seasonal low flow from November-February based on 33 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	16	7.5	5.1	3.8	2.7	--
3	18	8.4	5.8	4.3	3.1	--
7	20	9.5	6.5	4.8	3.4	--
14	23	11	7.6	5.5	3.8	--
30	33	16	11	7.9	5.4	--

Duration of daily mean flows based on 33 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
5.8	7.9	13	20	33	45	63	87
40%	30%	20%	15%	10%	5%	2%	1%
116	153	208	269	433	744	1,290	1,810

Magnitude and probability of annual high flow based on 33 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,210	2,700	4,040	6,110	7,930	--
3	1,100	2,370	3,470	5,130	6,540	--
7	943	2,000	2,890	4,170	5,230	--
15	772	1,620	2,310	3,320	4,150	--
30	628	1,280	1,810	2,580	3,220	--
60	458	910	1,290	1,850	2,330	--
90	376	716	995	1,410	1,750	--

Magnitude and probability of seasonal low flow from July-October based on 33 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	23	9.3	5.1	3.4	2.3	--
3	24	9.9	5.4	3.8	2.5	--
7	26	11	5.8	4.1	2.6	--
14	38	11	6.4	4.5	2.8	--
30	40	16	8.6	5.7	4.0	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	193	3.1	60	47	33
November	189	11	67	45	33
December	255	8.7	67	57	33
January	175	6.6	56	38	33
February	217	8.8	76	49	33
March	620	17	162	155	33
April	626	18	175	172	33
May	1,820	46	442	404	33
June	3,430	76	673	725	33
July	1,390	70	252	258	34
August	346	4.0	128	67	34
September	288	5.2	87	64	34
Annual	568	35	188	119	33

06125700 Big Coulee near Lavina, Mont.
Site Number 99

LOCATION.--Lat 46°15'53", long 108°56'50" (NAD 27), SE¼ sec.15, T.6 N., R.22 E., Golden Valley County, on left bank 2 mi upstream from mouth and 2 mi southwest of Lavina.
DRAINAGE AREA.--232 mi^2.
PERIOD OF RECORD.--14 years. August 1957 to June 1972 (discontinued).
GAGE.--Water-stage recorder. Altitude of gage is 3,480 ft (NGVD 29, from topographic map).
REMARKS.--Minor flood irrigation in headwaters.

Magnitude and probability of annual low flow based on 14 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.29	0.00	0.00	0.00	--	--
3	.32	.00	.00	.00	--	--
7	.37	.00	.00	.00	--	--
14	.45	.00	.00	.00	--	--
30	.58	.16	.08	.04	--	--
60	.94	.34	.20	.12	--	--
90	1.2	.44	.27	.18	--	--
120	1.3	.52	.34	.24	--	--
183	1.4	.62	.41	.29	--	--

Magnitude and probability of seasonal low flow from March-June based on 15 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.4	0.55	0.31	0.18	--	--
3	1.6	.60	.33	.19	--	--
7	1.7	.68	.40	.25	--	--
14	1.9	.76	.45	.28	--	--
30	2.4	1.3	.91	.69	--	--

Magnitude and probability of seasonal low flow from November-February based on 15 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.40	0.00	0.00	0.00	--	--
3	.43	.00	.00	.00	--	--
7	.49	.00	.00	.00	--	--
14	.62	.00	.00	.00	--	--
30	.73	.19	.09	.04	--	--

Duration of daily mean flows based on 14 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.04	0.08	0.20	0.40	0.80	1.2	1.7	2.5
40%	30%	20%	15%	10%	5%	2%	1%
3.6	5.2	8.0	10	13	21	45	81

Magnitude and probability of annual high flow based on 14 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	55	195	383	795	--	--
3	42	153	295	584	--	--
7	34	118	217	401	--	--
15	24	84	157	302	--	--
30	17	57	105	202	--	--
60	12	37	65	118	--	--
90	9.9	28	48	85	--	--

Magnitude and probability of seasonal low flow from July-October based on 14 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.1	0.46	0.30	0.21	--	--
3	1.2	.47	.30	.21	--	--
7	1.2	.50	.33	.23	--	--
14	1.2	.54	.37	.28	--	--
30	1.3	.59	.41	.32	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	9.7	0.51	3.1	3.2	15
November	9.0	.22	3.1	3.0	15
December	7.2	.30	2.4	2.4	15
January	6.4	.07	1.9	2.0	15
February	17	.12	4.2	5.3	15
March	54	.76	12	14	15
April	14	.66	6.4	4.2	15
May	63	.79	9.7	15	15
June	297	.75	31	75	15
July	32	.65	7.9	9.6	14
August	14	.41	3.8	4.4	15
September	9.0	.41	3.0	3.1	15
Annual	31	.57	7.4	8.1	14

06126470 Halfbreed Creek near Klein, Mont.
Site Number 100

LOCATION.--Lat 46°23'14", long 108°32'29" (NAD 27), in SW¼NE¼SW¼ sec.1, T.7 N., R.25 E., Musselshell County, Hydrologic Unit 10040201, on left bank, 800 ft upstream from private road bridge, 1.2 mi south of Klein, 3.2 mi upstream from mouth, and 4.1 mi south of Roundup.
DRAINAGE AREA.--53.2 mi^2.
PERIOD OF RECORD.--October 1977 to September 1986, July 1987 to 1991 (discontinued).
REVISED RECORDS.--The maximum discharge for water year 1990 has been revised to 37 ft^3/s, Aug. 20, 1990, gage height, 5.57 ft.
GAGE.--Water-stage recorder. Altitude of gage is 3,330 ft (NGVD 29, from topographic map).

Magnitude and probability of annual low flow based on 11 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.16	0.01	0.00	0.00	--	--
3	.19	.01	.00	.00	--	--
7	.19	.03	.00	.00	--	--
14	.20	.03	.01	.00	--	--
30	.27	.08	.04	.02	--	--
60	.34	.13	.08	.05	--	--
90	.41	.19	.12	.09	--	--
120	.51	.25	.18	.13	--	--
183	.54	.28	.20	.15	--	--

Magnitude and probability of seasonal low flow from March-June based on 13 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.38	0.18	0.12	0.09	--	--
3	.41	.20	.14	.10	--	--
7	.49	.26	.19	.15	--	--
14	.59	.34	.25	.20	--	--
30	.71	.44	.33	.26	--	--

Magnitude and probability of seasonal low flow from November-February based on 12 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.22	0.07	0.00	0.00	--	--
3	.26	.09	.00	.00	--	--
7	.33	.10	.01	.00	--	--
14	.34	.11	.01	.00	--	--
30	.41	.14	.07	.04	--	--

Duration of daily mean flows based on 13 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.02	0.03	0.08	0.16	0.31	0.47	0.63	0.79
40%	30%	20%	15%	10%	5%	2%	1%
0.94	1.1	1.4	1.6	1.8	2.0	2.6	3.3

Magnitude and probability of annual high flow based on 13 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	6.4	17	30	60	--	--
3	4.5	9.7	16	27	--	--
7	3.1	5.6	8.1	12	--	--
15	2.1	3.5	4.8	7.0	--	--
30	1.6	2.6	3.4	4.7	--	--
60	1.4	2.1	2.6	3.4	--	--
90	1.3	1.9	2.3	2.8	--	--

Magnitude and probability of seasonal low flow from July-October based on 12 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.20	0.06	0.03	0.02	--	--
3	.22	.07	.04	.02	--	--
7	.24	.08	.05	.03	--	--
14	.28	.10	.06	.04	--	--
30	.31	.12	.07	.05	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	1.5	0.29	0.87	0.44	13
November	1.6	.22	.78	.49	13
December	1.6	.13	.72	.53	13
January	1.4	.05	.69	.44	13
February	2.0	.16	.96	.54	13
March	2.5	.58	1.3	.57	13
April	2.1	.61	1.1	.44	13
May	4.9	.47	1.4	1.2	13
June	1.9	.27	1.0	.61	13
July	2.0	.12	.72	.61	14
August	1.4	.06	.58	.43	14
September	1.5	.16	.62	.48	14
Annual	1.6	.36	.91	.46	13

06126500 Musselshell River near Roundup, Mont.
Site Number 101

LOCATION.--Lat 46°25'41", long 108°34'19" (NAD 27), in NW¼SE¼SE¼ sec.22, T.8 N., R.25 E., Musselshell County, Hydrologic Unit 10040202, on left bank 20 ft downstream from Halfbreed Creek, 0.1 mi upstream from bridge on U.S. Highway 87, 2.0 mi southwest of Roundup, and at river mile 211.6.
DRAINAGE AREA.--4,023 mi^2.
PERIOD OF RECORD.--May 1946 to current year (2002). Monthly discharge only from October 1947 to September 1949, published in WSP 1309.
REVISED RECORDS.--WSP 1086: 1946. WSP 1729: Drainage area.
GAGE.--Water-stage recorder. Altitude of gage is 3,188.15 ft (NGVD 29, levels by U.S. Army Corps of Engineers). Prior to Sept. 26, 1949, nonrecording gage at present site and datum.
REMARKS.--Some regulation by Bair (station number 06116500), Martinsdale (station number 06119000) and Deadmans Basin (station number 06122500) Reservoirs. Diversions for irrigation of about 39,100 acres upstream from station, of which about 35,900 acres are flood irrigated. U.S. Army Corps of Engineers satellite telemeter at station.

Magnitude and probability of annual low flow
based on 55 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	16	4.3	1.8	0.77	0.27	0.12
3	19	5.3	2.2	1.0	.35	.17
7	22	6.8	3.2	1.6	.64	.33
14	26	9.1	4.7	2.6	1.2	.69
30	35	13	6.8	3.7	1.7	.95
60	43	17	9.5	5.4	2.6	1.5
90	50	21	12	7.2	3.7	2.3
120	55	24	14	8.8	4.8	3.1
183	75	33	19	11	5.9	3.7

Magnitude and probability of seasonal low flow from
March-June based on 56 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	36	8.5	3.3	1.3	0.43	0.19
3	41	10	4.1	1.7	.56	.25
7	47	13	5.7	2.6	.95	.46
14	61	20	9.8	5.0	2.2	1.2
30	87	31	16	9.1	4.5	2.7

Magnitude and probability of seasonal low flow from
November-February based on 56 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	21	7.7	4.1	2.3	1.1	0.66
3	23	8.8	4.8	2.8	1.4	.87
7	26	10	5.8	3.5	1.9	1.2
14	30	12	7.2	4.4	2.5	1.6
30	37	16	9.6	6.2	3.6	2.5

Duration of daily mean flows based on 56 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
2.2	4.1	9.7	21	36	52	73	101
40%	30%	20%	15%	10%	5%	2%	1%
138	181	250	315	450	755	1,400	1,940

Magnitude and probability of annual high flow
based on 56 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,180	2,580	3,860	5,890	7,720	9,820
3	1,030	2,290	3,470	5,400	7,170	9,250
7	865	1,930	2,940	4,620	6,180	8,040
15	690	1,540	2,380	3,820	5,200	6,890
30	556	1,230	1,880	2,980	4,030	5,310
60	426	898	1,330	2,040	2,680	3,440
90	368	749	1,080	1,590	2,030	2,530

Magnitude and probability of seasonal low flow from
July-October based on 56 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	37	9.4	3.4	1.3	0.36	0.14
3	40	11	4.1	1.6	.47	.19
7	43	13	5.3	2.3	.78	.35
14	47	15	6.9	3.3	1.3	.68
30	62	22	11	5.2	2.1	1.0

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	335	1.4	79	64	56
November	242	4.0	75	53	56
December	283	3.7	68	57	56
January	222	5.3	65	51	56
February	414	5.8	96	80	56
March	1,280	6.8	198	241	56
April	788	1.8	184	195	56
May	1,810	30	421	407	56
June	4,320	37	665	783	57
July	1,310	14	296	270	57
August	563	2.1	189	114	57
September	504	.01	127	97	57
Annual	608	18	207	140	56

06127500 Musselshell River at Musselshell, Mont.
Site Number 102

LOCATION.--Lat 46°31'23", long 108°06'30" (NAD 27), in SE¼SW¼SW¼ sec.20, T.9 N., R.29 E., Musselshell County, Hydrologic Unit 10040202, on left bank 0.9 mi upstream from Hawk Creek, 1 mi west of Musselshell, and at river mile 164.5.

DRAINAGE AREA.--4,568 mi^2.

PERIOD OF RECORD.--August 1928 to September 1932 (no records December to February for the water years 1930-31), August 1945 to September 1979, October 1982 to September 1983, October 1983 to current season (2002, seasonal records only). Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,984.72 ft (NGVD 29, levels by U.S. Army Corps of Engineers). Prior to Oct. 8, 1949, nonrecording gage at site 1 mi downstream at different datums.

REMARKS.--Some regulation by Bair (station number 06116500), Martinsdale (station number 06119000), and Deadmans Basin (station number 06122500) Reservoirs. Diversions for irrigation of about 44,600 acres upstream from station, of which about 39,400 acres is flood irrigated. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow
based on 34 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	16	4.5	0.84	0.00	0.00	--
3	18	5.1	.99	.00	.00	--
7	20	5.9	1.2	.00	.00	--
14	24	7.3	1.6	.00	.00	--
30	32	11	3.7	.00	.00	--
60	42	20	13	6.7	.00	--
90	49	25	17	11	.00	--
120	54	28	19	13	.00	--
183	71	37	24	15	.00	--

Magnitude and probability of seasonal low flow from
March-June based on 39 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	58	13	2.6	0.00	0.00	--
3	63	14	2.9	.00	.00	--
7	75	14	3.0	.44	.00	--
14	93	15	3.4	.70	.08	--
30	144	32	9.3	2.6	.44	--

Magnitude and probability of seasonal low flow from
November-February based on 37 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	22	10	6.8	4.4	0.00	--
3	24	12	7.7	5.0	.00	--
7	27	13	8.5	5.5	.00	--
14	32	15	9.8	6.2	.00	--
30	41	21	14	9.1	.00	--

Duration of daily mean flows based on 37 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.25	0.50	2.7	15	35	52	73	99
40%	30%	20%	15%	10%	5%	2%	1%
130	172	240	305	445	769	1,390	1,960

Magnitude and probability of annual high flow
based on 37 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,430	3,030	4,430	6,570	8,430	--
3	1,220	2,630	3,900	5,890	7,660	--
7	1,030	2,230	3,280	4,900	6,320	--
15	820	1,750	2,560	3,810	4,910	--
30	634	1,310	1,890	2,780	3,550	--
60	468	938	1,340	1,960	2,500	--
90	394	771	1,090	1,570	1,980	--

Magnitude and probability of seasonal low flow from
July-October based on 55 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	25	4.7	0.94	0.00	0.00	0.00
3	28	5.5	1.1	.00	.00	.00
7	31	6.3	1.4	.00	.00	.00
14	35	7.7	1.8	.00	.00	.00
30	61	12	4.0	.00	.00	.00

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	328	0.00	77	67	58
November	236	.00	76	55	39
December	268	.00	77	60	37
January	222	.00	71	49	37
February	460	.04	108	87	37
March	1,360	13	273	306	39
April	859	1.2	191	206	58
May	1,670	.36	356	374	58
June	4,220	.49	579	759	58
July	1,380	.00	238	276	58
August	534	.00	140	106	59
September	478	.00	107	94	60
Annual	609	34	215	138	37

06127900 Flatwillow Creek near Flatwillow, Mont.
Site Number 103

LOCATION.--Lat 46°47',28" long 108°36'51" (NAD 27), in NE¼ sec.19, T.12 N., R.25 E., Petroleum County, 10 mi southwest of Flatwillow and 14 mi upstream from Pike Creek.

DRAINAGE AREA.--188 mi^2 (revised).

PERIOD OF RECORD.--19 years (1911-30). May 1911 to September 1932, February 1934 to September 1956 (discontinued). Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Wire-weight gage and masonry control. Altitude of gage is 3,560 ft (NGVD 29, by barometer). Prior to Apr. 17, 1918, staff gage at site 5 mi downstream at different datum. Apr. 17, 1918, to Apr. 15, 1925, staff gage at present site at different datum. Apr. 16, 1925, to Sept. 30, 1932, wire-weight gage at site 300 ft upstream at different datum.

REMARKS.--Diversions for irrigation of 9,000 acres upstream from station.

Magnitude and probability of annual low flow
based on 42 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	--
3	.00	.00	.00	.00	.00	--
7	.00	.00	.00	.00	.00	--
14	.00	.00	.00	.00	.00	--
30	.42	.00	.00	.00	.00	--
60	1.3	.00	.00	.00	.00	--
90	2.0	.00	.00	.00	.00	--
120	4.6	.14	.00	.00	.00	--
183	6.4	.96	.00	.00	.00	--

Magnitude and probability of seasonal low flow from
March-June based on 44 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4.1	0.00	0.00	0.00	0.00	--
3	4.9	.00	.00	.00	.00	--
7	6.1	.00	.00	.00	.00	--
14	7.4	.40	.00	.00	.00	--
30	14	.56	.00	.00	.00	--

Magnitude and probability of seasonal low flow from
November-February based on 43 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5.0	0.00	0.00	0.00	0.00	--
3	5.3	.00	.00	.00	.00	--
7	5.4	.00	.00	.00	.00	--
14	6.7	.11	.00	.00	.00	--
30	7.1	.98	.00	.00	.00	--

Duration of daily mean flows based on 43 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.04	0.09	0.22	0.43	0.87	3.4	7.1	13
40%	30%	20%	15%	10%	5%	2%	1%
19	27	40	51	66	114	185	257

Magnitude and probability of annual high flow
based on 43 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	141	289	414	599	758	--
3	119	254	376	570	746	--
7	102	229	347	540	720	--
15	90	205	310	476	625	--
30	73	172	263	406	531	--
60	57	135	204	307	396	--
90	48	113	168	250	317	--

Magnitude and probability of seasonal low flow from
July-October based on 43 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	--
3	.00	.00	.00	.00	.00	--
7	.28	.00	.00	.00	.00	--
14	.57	.00	.00	.00	.00	--
30	.89	.00	.00	.00	.00	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	52	0.00	14	15	43
November	51	.00	15	15	43
December	45	.00	13	13	43
January	41	.00	12	11	43
February	53	.00	14	13	44
March	79	.00	24	20	44
April	163	.00	44	43	44
May	495	.00	63	90	45
June	674	.00	81	115	45
July	130	.00	34	36	45
August	122	.00	14	22	45
September	58	.00	10	14	45
Annual	134	.00	28	26	43

06128200 Flatwillow Creek near Winnett, Mont.
Site Number 104

LOCATION.--Lat 46°56'18", long 108°11'52" (NAD 27), in NW¼NE¼ sec.32, T.14 N., R.28 E., Petroleum County, 8 mi upstream from Box Elder Creek and 8.5 mi southeast of Winnett.

DRAINAGE AREA.--642 mi^2 (revised). At site used 1921-32 (at Petrolia) 660 mi^2.

PERIOD OF RECORD.--11 years. June 1921 to November 1929, March to December 1930, February to December 1931, March to September 1932, April 1948 to October 1951 (discontinued). Monthly discharge only for some periods, published in WSP 1309. Published as "at Petrolia" 1931-32.

GAGE.--Water-stage recorder. Altitude of gage is 2,790 ft (NGVD 29, by barometer). June 11, 1921, to September 1932, staff or chain gage at site 6 mi downstream at datum about 90 ft lower.

REMARKS.--Diversions for irrigation of about 13,000 acres upstream from station. Storage in Petrolia Reservoir, 3 mi upstream, began in July 1951.

Magnitude and probability of annual low flow
based on 5 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	--	--	--	--	--	--
3	--	--	--	--	--	--
7	--	--	--	--	--	--
14	--	--	--	--	--	--
30	--	--	--	--	--	--
60	--	--	--	--	--	--
90	--	--	--	--	--	--
120	--	--	--	--	--	--
183	--	--	--	--	--	--

Magnitude and probability of seasonal low flow from
March-June based on 11 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.94	0.00	0.00	0.00	--	--
3	1.3	.00	.00	.00	--	--
7	1.7	.00	.00	.00	--	--
14	2.8	.00	.00	.00	--	--
30	6.4	.00	.00	.00	--	--

Magnitude and probability of seasonal low flow from
November-February based on 10 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	6.1	0.00	0.00	0.00	--	--
3	8.4	.00	.00	.00	--	--
7	9.2	.00	.00	.00	--	--
14	9.8	.00	.00	.00	--	--
30	9.9	.60	.01	.00	--	--

Duration of daily mean flows based on 11 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.03	0.06	0.15	0.31	0.62	0.93	4.2	8.8
40%	30%	20%	15%	10%	5%	2%	1%
17	28	47	62	85	156	261	474

Magnitude and probability of annual high flow
based on 11 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	340	1,050	1,990	--	--	--
3	249	845	1,720	--	--	--
7	175	573	1,130	--	--	--
15	138	442	854	--	--	--
30	113	336	610	--	--	--
60	82	234	412	--	--	--
90	67	188	325	--	--	--

Magnitude and probability of seasonal low flow from
July-October based on 6 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	--	--	--	--	--	--
3	--	--	--	--	--	--
7	--	--	--	--	--	--
14	--	--	--	--	--	--
30	--	--	--	--	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	193	0.52	39	59	11
November	70	.15	20	19	12
December	50	2.5	19	15	11
January	41	3.1	17	13	11
February	35	1.5	16	11	11
March	145	8.0	59	41	13
April	203	1.5	46	51	14
May	448	.69	88	129	14
June	480	2.6	157	168	14
July	510	.30	71	127	15
August	126	.28	21	38	11
September	66	.60	16	20	11
Annual	117	8.8	49	42	11

06129000 Box Elder Creek near Winnett, Mont.
Site Number 105

LOCATION.--Lat 47°00'45", long 108°09'30" (NAD 27), SW¼ sec.34, T.15 N., R.28 E., Petroleum County, on right bank 500 ft upstream from bridge on State Highway 20, 0.4 mi upstream from McDonald Creek, 7 mi upstream from mouth, and 9 mi east of Winnett.

DRAINAGE AREA.--684 mi^2.

PERIOD OF RECORD.--17 years. June 1930 to December 1932, February 1934 to September 1936, April to August 1937, March to September 1938, August 1958 to June 1972 (discontinued). Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 2,720 ft (NGVD 29, by barometer). Prior to Aug. 22, 1958, nonrecording gages 1,500 ft downstream at different datums.

REMARKS.--Minor diversions for storage and irrigation.

Magnitude and probability of annual low flow
based on 16 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--
60	.00	.00	.00	.00	--	--
90	.00	.00	.00	.00	--	--
120	.00	.00	.00	.00	--	--
183	.06	.00	.00	.00	--	--

Magnitude and probability of seasonal low flow from
March-June based on 19 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.44	.00	.00	.00	--	--

Magnitude and probability of seasonal low flow from
November-February based on 18 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--

Duration of daily mean flows based on 17 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.01	0.03	0.07	0.14	0.29	0.43	0.58	0.72
40%	30%	20%	15%	10%	5%	2%	1%
0.87	1.1	4.6	9.6	25	81	282	517

Magnitude and probability of annual high flow
based on 17 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	976	2,350	3,040	3,570	--	--
3	722	1,740	2,260	2,680	--	--
7	469	1,120	1,450	1,730	--	--
15	273	663	881	1,080	--	--
30	166	382	493	585	--	--
60	101	227	287	332	--	--
90	71	159	201	232	--	--

Magnitude and probability of seasonal low flow from
July-October based on 19 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	7.0	0.00	0.42	1.6	19
November	1.1	.00	.16	.27	19
December	1.9	.00	.24	.46	19
January	2.5	.00	.34	.70	18
February	206	.00	20	51	18
March	184	.00	51	61	19
April	134	.00	14	29	20
May	513	.00	57	119	21
June	624	.00	100	171	22
July	170	.00	23	45	21
August	19	.00	3.2	5.9	20
September	12	.00	.83	2.7	20
Annual	60	.18	23	19	17

06129500 McDonald Creek at Winnett, Mont.
Site Number 106

LOCATION.--Lat 47°00'00", long 108°21'00" (NAD 27), in NE¼ sec.6, T.14 N., R.27 E., Petroleum County, at Winnett, about 12 mi upstream from mouth.
DRAINAGE AREA.--421 mi^2 (revised).
PERIOD OF RECORD.--15 years. April 1930 to December 1931, March to December 1932, February 1934 to September 1945, February 1953 to September 1956, water years 1957-58 (annual maximum). Monthly discharge only for some periods, published in WSP 1309.
GAGE.--Crest-stage gage since Oct. 1, 1956. Altitude of gage is 2,930 ft (NGVD 29, by barometer). Apr. 18, 1930, to Dec. 5, 1932, and Feb. 4, 1934, to Sept. 30, 1945, wire-weight gage at sites within 1 mi of present site at different datums. Feb. 1, 1953, to Sept. 30, 1956, wire-weight gage at same site and datum.
REMARKS.--Small reservoirs in headwaters. Diversions for irrigation of several thousand acres upstream from station.

Magnitude and probability of annual low flow
based on 14 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--
60	.01	.00	.00	.00	--	--
90	.03	.00	.00	.00	--	--
120	.19	.01	.00	.00	--	--
183	.29	.02	.00	.00	--	--

Magnitude and probability of seasonal low flow from
March-June based on 17 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.04	.00	.00	.00	--	--
14	.12	.00	.00	.00	--	--
30	.28	.02	.00	.00	--	--

Magnitude and probability of seasonal low flow from
November-February based on 15 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.01	.00	.00	.00	--	--
30	.03	.00	.00	.00	--	--

Duration of daily mean flows based on 15 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.02	0.03	0.08	0.15	0.31	0.46	0.61	0.77
40%	30%	20%	15%	10%	5%	2%	1%
0.92	2.5	8.5	13	21	56	159	278

Magnitude and probability of annual high flow
based on 15 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	169	421	609	839	--	--
3	124	346	545	837	--	--
7	77	245	434	781	--	--
15	46	168	339	732	--	--
30	28	108	233	552	--	--
60	17	64	142	347	--	--
90	12	46	101	253	--	--

Magnitude and probability of seasonal low flow from
July-October based on 17 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	9.1	0.00	1.8	3.2	17
November	15	.00	2.6	4.7	17
December	11	.00	2.5	4.4	16
January	10	.00	2.2	3.8	15
February	65	.00	6.6	16	16
March	45	.01	10	13	17
April	52	.01	11	17	18
May	227	.01	19	52	19
June	306	.00	67	104	19
July	104	.00	19	31	19
August	29	.00	3.5	7.8	19
September	12	.00	2.2	4.4	19
Annual	57	.57	13	20	15

06130500 Musselshell River at Mosby, Mont.
Site Number 107

LOCATION.--Lat 46°59'41", long 107°53'18" (NAD 27), in SW¼NW¼NW¼ sec.11, T.14 N., R.30 E., Petroleum County, Hydrologic Unit 10040205, on right bank, downstream side of bridge on State Highway 20, 0.3 mi west of Mosby, 10.9 mi downstream from Flatwillow Creek, and at river mile 60.0.

DRAINAGE AREA.--7,846 mi^2.

PERIOD OF RECORD.--May to November 1929, March 1930 to September 1932, February 1934 to current year (2002). Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1559: 1935-36. WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,493.23 ft (NGVD 29). Dec. 6, 1962, to Mar. 14, 1966, water-stage recorder at site 900 ft downstream at different datum. Mar. 15, 1966, to Dec. 11, 1973, water-stage recorder and nonrecording gages at site 400 ft downstream at same datum. Dec. 12, 1973, to Oct. 1, 1981, nonrecording gage at site 400 ft downstream at same datum. Oct. 1, 1981, to July 25, 1995, water-stage recorder at site 400 ft upstream from bridge at datum 2.67 ft higher. See WSP 2116 for history of changes prior to 1962.

REMARKS.--Some regulation by Bair (station number 06116500), Martinsdale (station number 06119000) and Deadmans Basin (station number 06122500) Reservoirs. Diversions for irrigation of about 47,000 acres upstream from station. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow
based on 70 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.8	0.00	0.00	0.00	0.00	0.00
3	2.3	.00	.00	.00	.00	.00
7	3.6	.00	.00	.00	.00	.00
14	6.2	.00	.00	.00	.00	.00
30	19	.11	.00	.00	.00	.00
60	45	6.3	.31	.00	.00	.00
90	45	6.3	.31	.00	.00	.00
120	67	8.4	.43	.00	.00	.00
183	84	10	.79	.00	.00	.00

Magnitude and probability of seasonal low flow from
March-June based on 72 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	25	0.51	0.00	0.00	0.00	0.00
3	30	1.3	.00	.00	.00	.00
7	36	2.6	.00	.00	.00	.00
14	62	4.6	.19	.00	.00	.00
30	91	14	2.8	.15	.00	.00

Magnitude and probability of seasonal low flow from
November-February based on 70 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	18	1.6	0.00	0.00	0.00	0.00
3	21	1.9	.00	.00	.00	.00
7	25	2.8	.00	.00	.00	.00
14	37	2.9	.00	.00	.00	.00
30	51	5.7	.00	.00	.00	.00

Duration of daily mean flows based on 70 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.08	0.17	0.42	0.84	17	38	59	84
40%	30%	20%	15%	10%	5%	2%	1%
118	169	262	365	585	1,130	2,210	3,390

Magnitude and probability of annual high flow
based on 70 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	2,890	6,530	9,490	13,600	16,800	20,100
3	2,240	5,200	7,660	11,100	13,900	16,700
7	1,690	4,060	6,050	8,900	11,200	13,500
15	1,250	3,070	4,620	6,840	8,630	10,500
30	893	2,190	3,310	4,950	6,280	7,680
60	605	1,490	2,270	3,440	4,400	5,420
90	481	1,180	1,790	2,690	3,420	4,200

Magnitude and probability of seasonal low flow from
July-October based on 71 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2.1	0.00	0.00	0.00	0.00	0.00
3	2.7	.00	.00	.00	.00	.00
7	4.2	.00	.00	.00	.00	.00
14	7.2	.00	.00	.00	.00	.00
30	24	.15	.00	.00	.00	.00

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	478	0.00	80	85	71
November	337	.00	79	70	71
December	278	.00	72	63	70
January	376	.00	78	79	70
February	1,860	.00	175	282	71
March	4,660	.00	458	785	72
April	1,920	3.1	290	357	72
May	3,770	.00	522	703	73
June	4,970	1.9	863	1,030	73
July	2,150	.00	316	473	73
August	870	.00	113	136	73
September	787	.00	111	151	73
Annual	1,090	8.1	268	231	70

06131000 Big Dry Creek near Van Norman, Mont.
Site Number 108

LOCATION.--Lat 47°20'58", long 106°21'26" (NAD 27), in NE¼SW¼NW¼ sec.3, T.18 N., R.42 E., Garfield County, Hydrologic Unit 10040105, on left bank 900 ft downstream from Little Dry Creek, 3.2 mi northeast of Van Norman Post Office, 26 mi east of Jordan, and at river mile 55.1.
DRAINAGE AREA.--2,554 mi^2.
PERIOD OF RECORD.--October 1939 to July 1969, July 1970 to current year (2002; discharge measurements only, October 1947 to March 1949). Prior to July 1970, published as "Dry Creek near Van Norman."
REVISED RECORDS.--WSP 1309: 1947(M). WSP 1559: 1944(M), 1947. WSP 1729: Drainage area.
GAGE.--Water-stage recorder. Altitude of gage is 2,330 ft (NGVD 29). Prior to July 24, 1978, at site 400 ft upstream at same datum.
REMARKS.--Minor diversions for irrigation upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

Magnitude and probability of annual low flow based on 57 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	0.00
3	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00
60	.27	.01	.00	.00	.00	.00
90	1.0	.17	.04	.00	.00	.00
120	1.3	.45	.22	.09	.00	.00
183	2.3	.61	.27	.12	.05	.03

Magnitude and probability of seasonal low flow from March-June based on 60 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.31	0.00	0.00	0.00	0.00	0.00
3	.49	.00	.00	.00	.00	.00
7	.88	.00	.00	.00	.00	.00
14	1.5	.25	.06	.00	.00	.00
30	3.4	1.1	.58	.32	.16	.10

Magnitude and probability of seasonal low flow from November-February based on 59 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	0.00
3	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00
30	.01	.00	.00	.00	.00	.00

Duration of daily mean flows based on 59 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.03	0.06	0.15	0.31	0.61	0.92	1.6	2.6
40%	30%	20%	15%	10%	5%	2%	1%
4.1	6.9	14	22	44	122	444	940

Magnitude and probability of annual high flow based on 59 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,360	4,760	8,510	15,000	21,100	28,100
3	942	3,350	6,100	11,100	15,900	21,600
7	567	1,970	3,560	6,430	9,210	12,500
15	332	1,100	1,950	3,440	4,850	6,530
30	198	638	1,120	1,970	2,780	3,740
60	115	363	633	1,110	1,570	2,110
90	83	254	437	757	1,060	1,430

Magnitude and probability of seasonal low flow from July-October based on 59 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.03	0.00	0.00	0.00	0.00	0.00
3	.08	.00	.00	.00	.00	.00
7	.11	.00	.00	.00	.00	.00
14	.16	.00	.00	.00	.00	.00
30	.31	.00	.00	.00	.00	.00

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	98	0.00	6.4	14	60
November	14	.00	3.0	3.1	60
December	34	.00	2.7	4.9	60
January	192	.00	6.5	26	60
February	1,000	.00	74	174	60
March	1,760	2.8	256	459	60
April	2,040	1.0	85	292	61
May	300	.21	29	59	61
June	552	.07	59	102	61
July	458	.00	44	84	62
August	367	.00	16	51	61
September	390	.00	17	59	61
Annual	243	1.2	50	57	59

06132000 Missouri River below Fort Peck Dam, at Fort Peck
Site Number 109

LOCATION.--Lat 48°02'39" (NAD 27), long 106°21'21", in NW¼ sec.6, T.26 N., R.42 E., McCone County, Hydrologic Unit 10060001, on right bank 2 mi upstream from Milk River, 6 mi south of Nashua, 8 mi downstream from Fort Peck Dam, and at river mile 1,763.5.

DRAINAGE AREA.--57,556 mi^2.

PERIOD OF RECORD.--March 1934 to current year (2002).

REVISED RECORDS.--WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,018 ft (NGVD 29, U.S. Army Corps of Engineers bench mark). Prior to Apr. 14, 1938, at site 0.7 mi upstream at different datum; Apr. 14, 1938, to Sept. 30, 1963, at present site at datum 2.00 ft higher, all water-stage recorders. Since Oct. 1, 1969, published discharge is determined by flow meters and spillway discharge at Fort Peck Dam.

REMARKS.--Flow completely regulated by Fort Peck Lake. Diversions for irrigation of about 880,400 acres upstream from station. Operational level in Fort Peck Lake was reached beginning 1944 water year.

Magnitude and probability of annual low flow
based on 57 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,190	1,760	1,230	888	599	452
3	3,620	2,070	1,470	1,070	730	554
7	4,110	2,450	1,760	1,290	877	663
14	4,540	2,810	2,040	1,510	1,040	786
30	5,020	3,170	2,320	1,730	1,190	908
60	5,880	3,850	2,870	2,160	1,500	1,150
90	6,680	4,430	3,310	2,480	1,710	1,300
120	7,230	4,770	3,540	2,640	1,810	1,370
183	8,180	5,920	4,860	4,070	3,290	2,820

Magnitude and probability of seasonal low flow from
March-June based on 58 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3,880	2,090	1,420	994	642	468
3	4,260	2,410	1,680	1,200	790	583
7	4,740	2,810	1,980	1,420	939	692
14	5,170	3,130	2,230	1,620	1,070	793
30	5,730	3,500	2,510	1,840	1,230	918

Magnitude and probability of seasonal low flow from
November-February based on 58 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,550	3,090	2,080	1,420	881	618
3	5,780	3,280	2,260	1,590	1,020	733
7	6,070	3,500	2,450	1,750	1,150	851
14	6,410	3,770	2,670	1,930	1,280	953
30	7,210	4,450	3,200	2,340	1,570	1,160

Duration of daily mean flows based on 58 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
1,120	1,710	3,190	4,280	5,690	6,760	7,690	8,630
40%	30%	20%	15%	10%	5%	2%	1%
10,000	11,500	13,600	14,800	16,000	19,100	26,800	31,300

Magnitude and probability of annual high flow
based on 58 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	15,700	22,200	26,700	32,700	37,300	42,100
3	15,500	21,900	26,400	32,400	37,000	41,800
7	15,300	21,700	26,100	32,000	36,600	41,400
15	15,000	21,300	25,700	31,600	36,300	41,100
30	14,500	20,400	24,700	30,300	34,700	39,300
60	13,600	18,600	22,200	26,800	30,400	34,200
90	12,600	16,700	19,500	23,200	26,000	28,800

Magnitude and probability of seasonal low flow from
July-October based on 57 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,190	3,080	2,310	1,810	1,370	1,130
3	5,640	3,360	2,510	1,960	1,460	1,200
7	6,010	3,590	2,700	2,100	1,580	1,290
14	6,400	3,890	2,940	2,320	1,750	1,440
30	7,460	4,590	3,460	2,700	2,010	1,630

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	28,800	3,020	11,100	7,010	58
November	21,200	2,080	8,970	3,980	58
December	12,200	1,490	9,100	2,330	58
January	14,000	1,390	9,880	3,060	58
February	15,200	1,180	9,870	3,910	58
March	13,400	1,060	7,520	3,160	58
April	17,200	856	7,300	3,150	58
May	18,800	1,030	8,570	3,490	58
June	26,200	1,060	8,800	4,300	58
July	35,000	1,160	10,000	5,350	58
August	26,200	3,450	11,800	5,650	58
September	27,100	3,000	11,500	6,540	58
Annual	14,900	5,340	9,530	2,530	58

06134500 Milk River at Milk River, Alberta
(International gaging station)
Site Number 110

LOCATION.--Lat 49°08'37", long 112°04'44" (NAD 27), in NE¼ sec.21, T.2, R.16 W., fourth meridian, in Alberta, Hydrologic Unit 10050002, on right bank 5 ft downstream from highway bridge at Milk River, Alberta, 22 mi downstream from North Fork Milk River, and at river mile 613.4.

DRAINAGE AREA.--1,050 mi^2.

PERIOD OF RECORD.--June 1909 to October 1910 (no winter records), April 1911 to current year (2002). Monthly discharge only for June 1909, published in WSP 1309.

REVISED RECORDS.--WSP 1309: 1912. WSP 1559: 1916, 1927(M), 1947(M). WDR-MT-83: Drainage area. WDR-MT-84: 1983 (M).

GAGE.--Water-stage recorder. Altitude of gage is 3,402.78 ft (Canadian Geodetic Vertical Datum 1928). Prior to June 17, 1919, nonrecording gages, and June 17, 1919, to Nov. 2, 1921, water-stage recorder at several sites 300 ft upstream at datum 0.61 ft higher. Nov. 3, 1921, to Aug. 28, 1947, water-stage recorder at site 60 ft upstream at present datum. Aug. 29, 1947, to Nov. 10, 1976, water-stage recorder located 700 ft downstream on left bank at present datum.

REMARKS.--Since 1917, flow increased during irrigation season by water from St. Mary Canal (station number 05018500). Several diversions for irrigation upstream from station. Environment Canada satellite telemeter at station.

Magnitude and probability of annual low flow
based on 83 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4.9	1.0	0.00	0.00	0.00	0.00
3	5.5	1.2	.12	.00	.00	.00
7	6.7	1.4	.40	.00	.00	.00
14	8.0	2.2	.89	.10	.00	.00
30	12	4.1	2.0	.95	.00	.00
60	18	6.5	3.4	1.8	.62	.00
90	24	10	5.9	3.6	2.0	1.3
120	31	16	11	8.1	5.7	4.4
183	99	46	28	17	9.5	6.1

Magnitude and probability of seasonal low flow from
March-June based on 86 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	31	10	4.6	2.0	0.00	0.00
3	34	11	5.3	2.4	.00	.00
7	40	15	8.3	4.3	.00	.00
14	69	24	12	5.5	1.4	.00
30	161	68	37	21	10	5.8

Magnitude and probability of seasonal low flow from
November-February based on 83 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	6.1	1.3	0.00	0.00	0.00	0.00
3	6.7	1.4	.30	.00	.00	.00
7	7.7	1.6	.51	.03	.00	.00
14	8.7	2.4	1.0	.33	.00	.00
30	12	4.1	2.0	.96	.00	.00

Duration of daily mean flows based on 86 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
1.0	2.2	6.3	13	28	45	76	162
40%	30%	20%	15%	10%	5%	2%	1%
369	553	650	698	747	944	1,090	1,440

Magnitude and probability of annual high flow
based on 86 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,640	2,920	4,070	5,920	7,640	9,700
3	1,420	2,360	3,160	4,410	5,530	6,820
7	1,160	1,760	2,240	2,940	3,550	4,220
15	970	1,340	1,620	1,990	2,290	2,610
30	833	1,070	1,220	1,430	1,590	1,750
60	751	919	1,020	1,140	1,230	1,310
90	715	849	917	988	1,030	1,070

Magnitude and probability of seasonal low flow from
July-October based on 85 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	33	15	9.3	6.3	3.9	2.8
3	35	16	11	7.4	4.8	3.6
7	39	18	12	8.3	5.5	4.1
14	43	20	13	9.2	6.1	4.7
30	61	25	16	10	6.6	4.8

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	555	7.8	101	103	86
November	216	8.7	56	42	86
December	133	2.2	34	25	86
January	268	1.0	31	41	85
February	616	.90	63	90	84
March	1,020	4.6	228	195	86
April	1,380	94	496	245	86
May	1,180	236	660	219	86
June	1,630	162	720	231	86
July	965	192	616	138	86
August	795	29	552	161	86
September	713	3.7	353	225	86
Annual	489	157	328	77	86

06137400 Big Sandy Creek at reservation boundary, near Rocky Boy, Mont.
Site Number 111

LOCATION.--Lat 48°10'27", long 109°49'23" (NAD 27), in SW¼NW¼NE¼ sec.20, T.28 N., R.15 E., Chouteau County, Hydrologic Unit 10050005, on left bank 0.9 mi downstream from Muddy Creek, 6.0 mi south of Rocky Boy Agency, and at river mile 90.6.
DRAINAGE AREA.--24.7 mi^2.
PERIOD OF RECORD.--May 1982 to current year (2002).
GAGE.--Water-stage recorder. Altitude of gage is 3,830 ft (NGVD 29). Prior to Sept. 6, 2001, water-stage recorder at site 0.1 mi downstream at different datum.
REMARKS.--No known regulation or diversions upstream from station. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow
based on 19 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.2	0.65	0.49	0.39	--	--
3	1.3	.73	.53	.41	--	--
7	1.5	.83	.61	.47	--	--
14	1.9	1.0	.74	.54	--	--
30	2.3	1.2	.86	.62	--	--
60	2.8	1.5	1.0	.73	--	--
90	3.1	1.7	1.2	.87	--	--
120	3.3	1.8	1.3	.98	--	--
183	3.8	2.0	1.4	1.1	--	--

Magnitude and probability of seasonal low flow from
March-June based on 20 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2.1	1.0	0.70	0.51	--	--
3	2.4	1.2	.80	.58	--	--
7	2.6	1.3	.92	.68	--	--
14	3.2	1.8	1.3	1.0	--	--
30	4.1	2.2	1.5	1.2	--	--

Magnitude and probability of seasonal low flow from
November-February based on 20 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.8	1.0	0.77	0.62	--	--
3	1.9	1.1	.83	.66	--	--
7	2.2	1.2	.92	.72	--	--
14	2.4	1.4	1.0	.77	--	--
30	2.7	1.5	1.1	.89	--	--

Duration of daily mean flows based on 20 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.19	0.37	0.93	1.6	2.4	3.2	4.0	4.9
40%	30%	20%	15%	10%	5%	2%	1%
5.9	7.9	11	14	17	26	40	58

Magnitude and probability of annual high flow
based on 20 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	40	107	184	336	--	--
3	34	85	139	240	--	--
7	29	67	105	174	--	--
15	23	51	77	121	--	--
30	19	39	58	86	--	--
60	16	30	42	59	--	--
90	14	26	35	47	--	--

Magnitude and probability of seasonal low flow from
July-October based on 20 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2.5	1.0	0.60	0.39	--	--
3	2.6	1.1	.66	.43	--	--
7	2.9	1.3	.77	.49	--	--
14	3.2	1.4	.84	.54	--	--
30	3.5	1.6	.99	.64	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	14	0.66	5.5	4.0	20
November	11	.92	4.8	3.2	20
December	12	.81	4.3	2.9	20
January	9.4	.71	3.6	2.2	20
February	22	.76	4.4	4.5	20
March	28	.89	6.4	5.9	20
April	33	3.7	11	8.5	20
May	68	1.8	14	15	21
June	50	1.4	17	14	21
July	54	1.0	13	14	21
August	29	.50	6.6	6.2	21
September	19	.65	5.5	4.5	21
Annual	18	1.8	7.9	4.6	20

06137570 Boxelder Creek near Rocky Boy, Mont.
Site Number 112

LOCATION.--Lat 48°18'07", long 109°50'37" (NAD 27), in SW¼SW¼NW¼ sec.6, T.29 N., R.15 E., Hill County, Hydrologic Unit 10050005, on Rocky Boys Indian Reservation, on right bank 1,000 ft upstream from Bonneau Reservoir, 4,000 ft downstream from Wolf Creek, 4.1 mi northwest of Rocky Boy Agency, and at river mile 14.0.

DRAINAGE AREA.--48.2 mi^2.

PERIOD OF RECORD.--22 years. October 1975 to September 1997 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 3,225 ft (NGVD 29, from topographic map).

REMARKS.--Other than beaver dams, no known regulation or diversions upstream from station.

Magnitude and probability of annual low flow based on 21 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.3	0.19	0.00	0.00	--	--
3	1.3	.20	.00	.00	--	--
7	1.4	.22	.03	.00	--	--
14	1.5	.25	.06	.00	--	--
30	1.8	.42	.12	.00	--	--
60	2.5	.69	.23	.01	--	--
90	3.4	.84	.28	.03	--	--
120	3.5	1.2	.54	.25	--	--
183	3.7	1.7	1.0	.66	--	--

Magnitude and probability of seasonal low flow from March-June based on 22 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3.3	1.3	0.73	0.41	--	--
3	3.5	1.5	.81	.46	--	--
7	4.1	1.8	1.1	.64	--	--
14	4.7	2.4	1.6	1.1	--	--
30	6.1	3.0	1.9	1.4	--	--

Magnitude and probability of seasonal low flow from November-February based on 21 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2.1	1.1	0.73	0.52	--	--
3	2.2	1.2	.79	.56	--	--
7	2.5	1.3	.89	.62	--	--
14	2.9	1.5	1.0	.73	--	--
30	3.3	1.8	1.3	.95	--	--

Duration of daily mean flows based on 22 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.16	0.31	0.78	1.5	2.6	3.4	4.2	5.2
40%	30%	20%	15%	10%	5%	2%	1%
6.6	8.6	13	16	22	33	54	72

Magnitude and probability of annual high flow based on 22 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	61	165	286	520	--	--
3	48	118	190	321	--	--
7	38	87	137	223	--	--
15	30	66	100	158	--	--
30	24	50	75	114	--	--
60	20	38	55	80	--	--
90	17	32	45	64	--	--

Magnitude and probability of seasonal low flow from July-October based on 21 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.5	0.19	0.00	0.00	--	--
3	1.6	.22	.00	.00	--	--
7	1.7	.23	.04	.00	--	--
14	1.7	.27	.07	.00	--	--
30	2.1	.43	.14	.01	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	26	0.05	6.1	6.1	22
November	20	.51	5.6	4.4	22
December	15	.93	5.0	3.4	22
January	12	1.6	4.3	2.6	22
February	9.6	1.8	5.4	2.1	22
March	29	3.4	11	8.1	22
April	37	3.9	13	9.9	22
May	100	2.4	22	24	22
June	81	.90	19	19	22
July	78	.43	12	17	22
August	34	.00	5.4	7.1	22
September	22	.00	4.8	6.0	22
Annual	22	2.7	9.5	5.6	22

06137580 Sage Creek near Whitlash, Mont.
Site Number 113

LOCATION.--Lat 48°53'30", long 111°01'47" (NAD 27), in NW¼NW¼SW¼ sec.12, T.36 N., R.5 E., Liberty County, Hydrologic Unit 10050006, on left bank, 0.2 mi downstream from bridge on Black Jack Road, 10 mi southeast of Whitlash.
DRAINAGE AREA.--7.26 mi^2.
PERIOD OF RECORD.--October 1976 to September 1982, October 1984 to September 1990 (discontinued).
GAGE.--Water-stage recorder, Parshall flume, and V-notch sharp-crested weir. Altitude of gage is 3,900 ft (NGVD 29, from topographic map).
REMARKS.--Diversions for irrigation of about 40 acres upstream from station.

Magnitude and probability of annual low flow
based on 11 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.13	0.05	0.03	0.01	--	--
3	.16	.07	.04	.03	--	--
7	.24	.12	.08	.05	--	--
14	.31	.16	.11	.08	--	--
30	.39	.23	.17	.13	--	--
60	.48	.28	.20	.16	--	--
90	.60	.36	.27	.21	--	--
120	.71	.43	.33	.27	--	--
183	.90	.50	.38	.31	--	--

Magnitude and probability of seasonal low flow from
March-June based on 12 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.42	0.21	0.14	0.10	--	--
3	.52	.26	.17	.12	--	--
7	.63	.32	.22	.16	--	--
14	.95	.52	.36	.25	--	--
30	1.5	.81	.56	.39	--	--

Magnitude and probability of seasonal low flow from
November-February based on 11 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.23	0.09	0.05	0.03	--	--
3	.25	.12	.08	.05	--	--
7	.29	.18	.14	.11	--	--
14	.34	.23	.19	.17	--	--
30	.43	.30	.26	.23	--	--

Duration of daily mean flows based on 12 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.02	0.04	0.10	0.21	0.41	0.62	0.83	1.1
40%	30%	20%	15%	10%	5%	2%	1%
1.5	2.1	3.4	4.5	6.8	12	19	23

Magnitude and probability of annual high flow
based on 12 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	26	47	60	--	--	--
3	22	41	53	--	--	--
7	18	33	42	--	--	--
15	14	26	32	--	--	--
30	11	20	25	--	--	--
60	8.2	14	17	--	--	--
90	6.5	11	13	--	--	--

Magnitude and probability of seasonal low flow from
July-October based on 11 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.40	0.15	0.07	0.04	--	--
3	.44	.18	.10	.05	--	--
7	.50	.22	.12	.07	--	--
14	.54	.25	.15	.09	--	--
30	.63	.31	.20	.14	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	9.3	0.49	1.9	2.7	12
November	2.6	.52	1.1	.67	12
December	1.6	.36	.79	.40	12
January	1.5	.29	.66	.40	12
February	2.3	.31	.86	.51	12
March	3.4	.67	1.8	.91	12
April	7.3	1.3	4.0	1.9	12
May	20	.69	9.3	6.9	12
June	20	.34	6.8	6.2	12
July	3.6	.30	1.7	1.1	12
August	4.6	.14	1.2	1.2	12
September	7.1	.27	1.9	2.1	12
Annual	4.4	.67	2.7	1.2	12

06138500 Big Sandy Creek near Box Elder, Mont.
Site Number 114

LOCATION.--Lat 48°21'36", long 109°59'32" (NAD 27, revised), in NE¼ sec.13, T.30 N., R.13 E., Hill County, just downstream from mouth of Sage Creek at Cowan ranch and 3 mi north of Box Elder.

DRAINAGE AREA.--1,629 mi^2.

PERIOD OF RECORD.--11 years (1927-38).

GAGE.--Staff gage. Altitude of gage is 2,620 ft (NGVD 29, from topographic map). Prior to Mar. 7, 1928, several staff gages 0.5 mi upstream at different datum on spillways of Cowan dam.

REMARKS.--Flow regulated by small storage dam and some diversions for irrigation upstream from station.

Magnitude and probability of annual low flow based on 11 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.07	0.00	0.00	0.00	--	--
3	.13	.00	.00	.00	--	--
7	.16	.00	.00	.00	--	--
14	.19	.00	.00	.00	--	--
30	.22	.00	.00	.00	--	--
60	.24	.04	.01	.00	--	--
90	.34	.07	.03	.01	--	--
120	.42	.12	.06	.04	--	--
183	.66	.17	.08	.05	--	--

Magnitude and probability of seasonal low flow from March-June based on 12 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.19	0.00	0.00	0.00	--	--
3	.26	.10	.04	.00	--	--
7	.34	.12	.06	.00	--	--
14	.38	.17	.13	.10	--	--
30	.48	.22	.18	.16	--	--

Magnitude and probability of seasonal low flow from November-February based on 11 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.17	0.00	0.00	0.00	--	--
3	.18	.00	.00	.00	--	--
7	.19	.00	.00	.00	--	--
14	.23	.00	.00	.00	--	--
30	.25	.01	.00	.00	--	--

Duration of daily mean flows based on 11 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.02	0.04	0.09	0.18	0.36	0.54	0.71	0.89
40%	30%	20%	15%	10%	5%	2%	1%
1.2	2.9	4.8	9.5	25	53	122	222

Magnitude and probability of annual high flow based on 11 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	104	283	382	--	--	--
3	90	240	323	--	--	--
7	64	169	230	--	--	--
15	39	108	154	--	--	--
30	24	70	106	--	--	--
60	14	42	67	--	--	--
90	11	33	53	--	--	--

Magnitude and probability of seasonal low flow from July-October based on 12 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.29	0.00	0.00	0.00	--	--
3	.29	.00	.00	.00	--	--
7	.30	.02	.00	.00	--	--
14	.30	.04	.00	.00	--	--
30	.33	.07	.00	.00	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	10	0.01	2.0	3.1	12
November	9.1	.10	2.4	2.8	12
December	3.5	.10	1.1	1.2	12
January	8.0	.00	1.6	2.4	11
February	25	.00	3.5	7.2	11
March	75	.40	13	21	12
April	55	.30	14	19	12
May	485	.21	50	138	12
June	482	.27	60	136	12
July	60	.19	11	20	12
August	36	.03	7.4	13	12
September	20	.00	3.0	5.8	12
Annual	21	.27	6.6	7.4	11

06140500 Milk River at Havre, Mont.
Site Number 115

LOCATION.--Lat 48°33'50", long 109°41'42" (NAD 27), in SE¼NE¼NE¼ sec.6, T.32 N., R.16 E., Hill County, Hydrologic Unit 10050004, on left bank, 1.25 mi upstream from Bullhook Creek and 7th Avenue East highway bridge in Havre, 8.2 mi downstream from Big Sandy Creek, 15.8 mi downstream from Fresno Dam, and at river mile 419.2.

DRAINAGE AREA.--5,785 mi^2, of which 670 mi^2 is probably noncontributing.

PERIOD OF RECORD.--May to November 1898, April 1899 to November 1922, March, April 1923, March, April 1952 (gage heights only, in WSP 1260-B), June 1953 (in WSP 1320-B), September 1954 to current year (2002). Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1309: 1899-1900, 1902-04, 1907-08, 1909(M), 1912, 1917(M), 1920(M). WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,465.24 ft (NGVD 29). Prior to Nov. 4, 1902, nonrecording gage at site 0.75 mi downstream at different datum. Nov. 4, 1902, to Aug. 6, 1980, nonrecording gages 1.25 mi downstream on 7th Avenue East highway bridges, all at datums then in use.

REMARKS.--Diversions for irrigation of about 6,000 acres upstream from station. Since 1917, flow increased during irrigation season by water from St. Mary Canal (station number 05018500). Since 1939, flow regulated by Fresno Reservoir (station number 06136500). U.S. Geological Survey satellite telemeter at station.

Unregulated streamflow period

Magnitude and probability of annual low flow
based on 13 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	13	0.00	0.00	0.00	--	--
3	15	.00	.00	.00	--	--
7	16	.00	.00	.00	--	--
14	17	.00	.00	.00	--	--
30	19	.09	.00	.00	--	--
60	24	2.2	.00	.00	--	--
90	41	3.9	.27	.00	--	--
120	57	9.6	1.2	.00	--	--
183	70	16	3.3	.00	--	--

Magnitude and probability of seasonal low flow from
March-June based on 17 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	70	20	9.4	4.8	--	--
3	80	24	12	6.0	--	--
7	93	30	15	7.7	--	--
14	110	36	17	8.6	--	--
30	165	81	52	34	--	--

Magnitude and probability of seasonal low flow from
November-February based on 14 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	26	7.0	0.00	0.00	--	--
3	27	7.5	.00	.00	--	--
7	27	7.9	.00	.00	--	--
14	27	8.3	.00	.00	--	--
30	28	9.0	.00	.00	--	--

Duration of daily mean flows based on 17 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.17	0.35	0.87	5.2	29	53	77	107
40%	30%	20%	15%	10%	5%	2%	1%
155	225	360	482	670	1,090	1,920	2,710

Magnitude and probability of annual high flow
based on 17 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	2,970	5,490	7,120	9,000	--	--
3	2,670	4,730	5,930	7,180	--	--
7	2,220	3,720	4,480	5,200	--	--
15	1,710	2,770	3,300	3,790	--	--
30	1,250	2,030	2,430	2,820	--	--
60	878	1,340	1,560	1,750	--	--
90	703	1,070	1,240	1,390	--	--

Magnitude and probability of seasonal low flow from
July-October based on 14 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	25	0.00	0.00	0.00	--	--
3	25	.00	.00	.00	--	--
7	26	.08	.00	.00	--	--
14	28	.26	.00	.00	--	--
30	30	1.3	.00	.00	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	281	1.5	115	76	16
November	250	1.0	100	64	16
December	160	25	72	44	15
January	150	5.0	54	47	15
February	1,400	1.4	153	332	17
March	1,600	30	469	431	17
April	1,740	59	593	532	17
May	1,620	61	511	408	17
June	2,190	35	631	561	17
July	2,040	18	372	514	17
August	414	5.0	136	138	16
September	664	2.8	130	166	16
Annual	571	45	286	141	17

06140500 Milk River at Havre, Mont.—Continued
Site Number 115

Regulated streamflow period

Magnitude and probability of annual low flow based on 51 years of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	23	10	5.5	2.8	0.22	0.00
3	25	12	6.9	3.8	.39	.00
7	27	15	9.8	6.4	1.4	.00
14	32	18	12	7.5	1.6	.00
30	38	21	13	7.8	1.7	.00
60	45	25	14	8.1	2.8	1.0
90	50	27	15	8.5	3.3	1.7
120	54	28	18	11	6.0	3.8
183	133	68	43	28	16	11

Magnitude and probability of seasonal low flow from March-June based on 54 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	39	19	12	8.6	5.5	4.1
3	44	22	15	11	7.5	5.8
7	50	26	18	13	9.3	7.3
14	63	32	22	16	11	8.6
30	97	40	25	17	11	8.8

Magnitude and probability of seasonal low flow from November-February based on 52 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	24	13	8.2	5.1	1.2	0.00
3	27	15	9.9	6.5	1.8	.00
7	30	17	11	7.6	2.1	.00
14	34	19	13	8.2	2.1	.00
30	39	21	14	8.7	2.3	.00

Duration of daily mean flows based on 54 years of record

Discharge, in ft³/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
5.1	10	23	30	42	55	81	170
40%	30%	20%	15%	10%	5%	2%	1%
363	595	847	970	1,090	1,340	1,490	2,010

Magnitude and probability of annual high flow based on 54 years of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,650	2,800	3,990	6,210	8,570	11,700
3	1,560	2,570	3,610	5,530	7,540	10,200
7	1,470	2,320	3,130	4,500	5,850	7,550
15	1,370	1,970	2,460	3,180	3,810	4,520
30	1,240	1,640	1,890	2,210	2,430	2,660
60	1,080	1,340	1,480	1,620	1,710	1,790
90	1,020	1,240	1,340	1,430	1,480	1,520

Magnitude and probability of seasonal low flow from July-October based on 53 seasons of record

Period of consecutive days	Discharge, in ft³/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	48	19	10	5.7	2.7	1.6
3	53	21	12	7.1	3.7	2.3
7	56	25	16	11	6.9	5.0
14	70	34	23	17	12	9.0
30	101	46	30	20	13	9.9

Monthly and annual mean discharges

Month	Maximum (ft³/s)	Minimum (ft³/s)	Mean (ft³/s)	Standard deviation (ft³/s)	Years of record
October	628	9.0	158	127	55
November	325	5.0	71	56	55
December	144	2.0	50	28	54
January	780	5.0	61	104	53
February	691	5.0	74	103	53
March	2,110	5.0	274	447	55
April	2,570	25	462	508	55
May	2,190	261	894	342	54
June	1,570	233	877	270	54
July	1,580	252	918	303	54
August	1,300	51	716	293	54
September	956	33	397	212	55
Annual	728	160	416	127	54

06154100 Milk River near Harlem, Mont.
Site Number 116

LOCATION.--Lat 48°29'22", long 108°45'28" (NAD 27), in NE¼SE¼NE¼ sec.32, T.32 N., R.23 E., Blaine County, Hydrologic Unit 10050004, Fort Belknap Indian Reservation, on right bank 30 ft downstream from U.S. Highway 2 bridge, 0.6 mi northeast of unincorporated community of Fort Belknap Agency, 3.5 mi southeast of Harlem, and at river mile 332.2.

DRAINAGE AREA.--9,822 mi^2.

PERIOD OF RECORD.--October 1959 to September 1969, October 1982 to current year (2002; seasonal record beginning 1994 water year). Gage heights only for period Apr. 3-25, 1952, published as "at Fort Belknap" in WSP 1260-B.

REVISED RECORDS.--WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,319.48 ft (NGVD 29). Apr. 3-25, 1952, nonrecording gage on old bridge 200 ft downstream at different datum. Nov. 1, 1959, to Mar. 12, 1968, nonrecording gage or water-stage recorder at several sites within 0.5 mi of present site at different datum.

REMARKS.--Flow increased during irrigation season by water from St. Mary Canal (station number 05018500). Flow mainly regulated by Fresno Reservoir (station number 06136500) since 1939. Diversions for irrigation of about 60,000 acres of which about 13,000 acres lie downstream from station. Bureau of Reclamation satellite telemeter at station.

Magnitude and probability of annual low flow
based on 20 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	23	5.3	1.5	0.00	--	--
3	30	8.9	3.1	.00	--	--
7	33	10	3.7	.00	--	--
14	36	17	9.8	.00	--	--
30	48	25	13	6.2	--	--
60	53	31	24	18	--	--
90	59	37	29	23	--	--
120	64	40	32	27	--	--
183	112	67	53	44	--	--

Magnitude and probability of seasonal low flow from
March-June based on 30 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	49	16	8.2	4.6	2.3	--
3	62	20	10	5.8	2.9	--
7	70	25	13	7.9	4.2	--
14	89	43	31	24	18	--
30	150	67	45	32	22	--

Magnitude and probability of seasonal low flow from
November-February based on 20 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	32	19	15	12	--	--
3	35	21	16	13	--	--
7	39	23	18	14	--	--
14	43	26	20	16	--	--
30	57	32	25	20	--	--

Duration of daily mean flows based on 21 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
14	20	31	41	65	89	130	244
40%	30%	20%	15%	10%	5%	2%	1%
350	451	567	652	736	1,050	1,930	2,910

Magnitude and probability of annual high flow
based on 21 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,450	3,450	5,810	10,700	--	--
3	1,320	3,060	5,080	9,240	--	--
7	1,160	2,560	4,150	7,320	--	--
15	957	1,940	2,990	4,980	--	--
30	799	1,480	2,170	3,470	--	--
60	650	1,110	1,560	2,360	--	--
90	595	1,000	1,390	2,080	--	--

Magnitude and probability of seasonal low flow from
July-October based on 29 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	71	16	4.5	0.62	0.00	--
3	78	21	7.4	1.4	.00	--
7	87	25	8.7	1.8	.00	--
14	94	34	17	6.4	.00	--
30	145	49	22	10	3.9	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	949	37	209	194	30
November	289	31	94	67	21
December	198	26	72	43	21
January	139	19	69	32	21
February	200	26	85	44	21
March	2,290	37	436	555	30
April	2,940	54	576	762	30
May	3,510	129	669	590	30
June	1,510	232	596	268	30
July	2,480	138	576	396	30
August	726	19	399	177	30
September	1,910	32	354	338	30
Annual	857	139	350	201	21

06154400 Peoples Creek near Hays, Mont.
Site Number 117

LOCATION.--Lat 48°13'25", long 108°42'48" (NAD 27), in SW¼ sec.35, T.29 N., R.23 E., Blaine County, Hydrologic Unit 10050009, on right bank 45 ft downstream from bridge on State Highway 66, 2.5 mi downstream from Myrtle Creek, 16.4 mi north of Hays, and at river mile 47.2.
DRAINAGE AREA.--220 mi^2.
PERIOD OF RECORD.--December 1966 to current year (2002).
GAGE.--Water-stage recorder. Altitude of gage is 2,714.10 ft (NGVD 29).
REMARKS.--Some storage in numerous stock and beaver ponds and diversions for irrigation of about 1,300 acres upstream from station. Bureau of Indian Affairs satellite telemeter at station.

Magnitude and probability of annual low flow
based on 35 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	--
3	.00	.00	.00	.00	.00	--
7	.00	.00	.00	.00	.00	--
14	.00	.00	.00	.00	.00	--
30	.01	.00	.00	.00	.00	--
60	.05	.00	.00	.00	.00	--
90	.13	.01	.00	.00	.00	--
120	.20	.01	.00	.00	.00	--
183	.41	.03	.00	.00	.00	--

Magnitude and probability of seasonal low flow from
March-June based on 36 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.12	0.00	0.00	0.00	0.00	--
3	.19	.00	.00	.00	.00	--
7	.32	.02	.00	.00	.00	--
14	.77	.07	.01	.00	.00	--
30	2.6	.25	.05	.01	.00	--

Magnitude and probability of seasonal low flow from
November-February based on 35 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	--
3	.00	.00	.00	.00	.00	--
7	.00	.00	.00	.00	.00	--
14	.04	.00	.00	.00	.00	--
30	.14	.00	.00	.00	.00	--

Duration of daily mean flows based on 35 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.02	0.04	0.10	0.21	0.42	0.63	0.84	1.3
40%	30%	20%	15%	10%	5%	2%	1%
3.7	6.5	11	15	23	47	106	175

Magnitude and probability of annual high flow
based on 35 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	88	325	630	1,260	1,950	--
3	75	275	527	1,030	1,560	--
7	58	205	383	724	1,080	--
15	40	139	252	461	668	--
30	29	95	165	286	398	--
60	21	67	112	185	247	--
90	18	55	90	141	182	--

Magnitude and probability of seasonal low flow from
July-October based on 35 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	--
3	.00	.00	.00	.00	.00	--
7	.00	.00	.00	.00	.00	--
14	.00	.00	.00	.00	.00	--
30	.02	.00	.00	.00	.00	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	37	0.00	3.5	7.1	35
November	20	.00	3.4	4.7	35
December	13	.00	2.8	3.6	36
January	30	.00	3.6	6.3	36
February	75	.00	9.2	18	36
March	285	.00	29	54	36
April	122	.05	18	25	36
May	190	.01	31	51	36
June	123	.03	21	31	36
July	52	.00	8.4	13	36
August	21	.00	2.4	5.3	36
September	58	.00	3.7	10	36
Annual	48	.10	11	13	35

06154410 Little Peoples Creek near Hays, Mont.
Site Number 118

LOCATION.--Lat 47°57'58", long 108°39'36" (NAD 27), in SE¼SE¼NW¼ sec.32, T.26 N., R.24 E., Blaine County, Hydrologic Unit 10050009, on right bank 0.5 mi upstream from west entrance to Mission Canyon, 2 mi southeast of Hays, and at river mile 23.1.
DRAINAGE AREA.--13.0 mi^2.
PERIOD OF RECORD.--August 1972 to current year (2002).
REVISED RECORDS.--WDR MT-81-1: Drainage area.
GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 3,769.72 ft (NGVD 29). August 1972 to June 24, 1976, gage at former site at datum 10.00 ft higher. Prior to Apr. 22, 1987, gage located 330 ft downstream.
REMARKS.--No known regulation or diversion upstream from station.

Magnitude and probability of annual low flow
based on 29 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.3	1.0	0.88	0.78	0.68	--
3	1.3	1.0	.90	.81	.71	--
7	1.3	1.1	.93	.83	.74	--
14	1.4	1.1	.98	.89	.80	--
30	1.5	1.2	1.0	.93	.84	--
60	1.7	1.3	1.1	1.0	.88	--
90	1.8	1.3	1.2	1.0	.91	--
120	1.8	1.4	1.2	1.1	.96	--
183	1.9	1.4	1.3	1.1	1.0	--

Magnitude and probability of seasonal low flow from
March-June based on 30 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.5	1.1	0.97	0.85	0.74	--
3	1.6	1.2	1.0	.89	.78	--
7	1.6	1.2	1.0	.93	.81	--
14	1.7	1.3	1.1	1.0	.90	--
30	1.9	1.4	1.2	1.1	.96	--

Magnitude and probability of seasonal low flow from
November-February based on 30 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.4	1.1	0.98	0.89	0.80	--
3	1.5	1.1	.99	.89	.80	--
7	1.5	1.2	1.0	.91	.81	--
14	1.5	1.2	1.0	.92	.82	--
30	1.6	1.2	1.1	.94	.83	--

Duration of daily mean flows based on 30 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.90	1.0	1.2	1.4	1.6	1.8	2.0	2.3
40%	30%	20%	15%	10%	5%	2%	1%
2.7	3.3	4.4	5.3	7.1	12	22	35

Magnitude and probability of annual high flow
based on 30 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	32	84	139	236	331	--
3	25	63	104	177	251	--
7	18	45	74	128	184	--
15	14	32	51	86	122	--
30	11	23	36	57	79	--
60	8.5	17	25	38	50	--
90	7.0	13	19	28	36	--

Magnitude and probability of seasonal low flow from
July-October based on 29 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.7	1.3	1.2	1.1	1.0	--
3	1.7	1.3	1.2	1.1	1.0	--
7	1.7	1.4	1.2	1.1	1.1	--
14	1.8	1.4	1.3	1.2	1.1	--
30	1.8	1.4	1.3	1.2	1.1	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	6.9	1.1	2.4	1.2	30
November	4.6	1.1	2.2	.88	30
December	3.8	.93	2.0	.73	30
January	3.8	.90	1.9	.72	30
February	3.5	.95	1.8	.64	30
March	5.5	1.1	2.3	1.2	30
April	22	1.2	4.6	4.4	30
May	76	1.5	12	16	30
June	27	2.0	8.4	6.4	30
July	33	1.4	5.4	5.8	30
August	8.1	1.2	3.0	1.5	31
September	8.4	1.1	2.6	1.6	31
Annual	12	1.5	4.1	2.4	30

06154430 Lodge Pole Creek at Lodge Pole, Mont.
Site Number 119

LOCATION.--Lat 48°01'52", long 108°31'55" (NAD 27), in SE¼SE¼SW¼ sec.5, T.26 N., R.25 E., Blaine County, Hydrologic Unit 10050009, Fort Belknap Indian Reservation, 10 ft upstream from culvert in county road just south of Lodge Pole and 8 mi northeast of Hays.
DRAINAGE AREA.--19.5 mi^2.
PERIOD OF RECORD.--March 1987 to October 2000 (discontinued).
GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 3,420 ft (NGVD 29, from topographic map).
REMARKS.--No known diversion for irrigation upstream from station.

Magnitude and probability of annual low flow based on 13 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.32	0.12	0.06	0.03	--	--
3	.34	.14	.07	.04	--	--
7	.38	.15	.08	.04	--	--
14	.40	.16	.09	.05	--	--
30	.44	.18	.10	.05	--	--
60	.57	.24	.13	.07	--	--
90	.88	.47	.29	.18	--	--
120	1.1	.65	.41	.25	--	--
183	1.5	.85	.51	.30	--	--

Magnitude and probability of seasonal low flow from March-June based on 14 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.42	0.15	0.08	0.04	--	--
3	.44	.17	.09	.05	--	--
7	.48	.19	.11	.06	--	--
14	.52	.21	.12	.06	--	--
30	.59	.24	.13	.08	--	--

Magnitude and probability of seasonal low flow from November-February based on 13 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.63	0.30	0.17	0.09	--	--
3	.67	.34	.19	.11	--	--
7	.74	.38	.22	.12	--	--
14	.79	.41	.24	.14	--	--
30	.88	.46	.27	.15	--	--

Duration of daily mean flows based on 13 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.03	0.05	0.13	0.26	0.51	0.77	1.0	1.4
40%	30%	20%	15%	10%	5%	2%	1%
1.7	2.2	2.8	3.5	4.8	9.8	20	31

Magnitude and probability of annual high flow based on 13 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	44	94	123	152	--	--
3	30	65	87	111	--	--
7	18	42	61	84	--	--
15	13	30	43	61	--	--
30	9.8	22	32	45	--	--
60	7.2	15	21	29	--	--
90	5.8	11	16	21	--	--

Magnitude and probability of seasonal low flow from July-October based on 14 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.1	0.43	0.23	0.12	--	--
3	1.2	.47	.25	.14	--	--
7	1.2	.50	.27	.14	--	--
14	1.4	.55	.29	.15	--	--
30	1.5	.59	.31	.17	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	2.8	0.23	1.8	0.83	14
November	2.3	.21	1.6	.55	13
December	1.8	.14	1.1	.40	13
January	1.8	.10	1.0	.43	13
February	1.6	.07	.82	.37	13
March	4.6	.07	1.1	1.1	14
April	5.8	.04	1.5	1.8	14
May	18	.32	5.2	5.8	14
June	21	.29	7.4	7.1	14
July	29	.30	5.5	7.4	14
August	8.1	.12	2.5	2.0	14
September	3.6	.18	1.9	1.0	14
Annual	4.6	.55	2.7	1.5	13

06154550 Peoples Creek below Kuhr Coulee, near Dodson, Mont.
Site Number 120

LOCATION.--Lat 48°21'49", long 108°21'16" (NAD 27), in NW¼NW¼NE¼ sec.16, T.30 N., R.26 E., Phillips County, Hydrologic Unit 10050009, on right bank 10 ft downstream from bridge on county highway, 2.4 mi downstream from Kuhr Coulee, 5.5 mi southwest of Dodson, and at river mile 7.8.

DRAINAGE AREA.--675 mi^2.

PERIOD OF RECORD.--April 1918 to November 1921 (fragmentary), June 1951 to September 1973, October 1981 to September 1988, published as "near Dodson," October 1988 to current year (2002). Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Altitude of gage is 2,309.18 ft (NGVD 29, levels by Bureau of Indian Affairs). Prior to June 1951, nonrecording gage at site 0.5 mi upstream at different datum. June 1, 1951, to Sept. 30, 1988, water-stage recorder at sites 2.5 mi upstream at different datum.

REMARKS.--Diversions for irrigation of about 3,300 acres upstream from station. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow
based on 41 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	--
3	.00	.00	.00	.00	.00	--
7	.00	.00	.00	.00	.00	--
14	.00	.00	.00	.00	.00	--
30	.00	.00	.00	.00	.00	--
60	.02	.00	.00	.00	.00	--
90	.42	.00	.00	.00	.00	--
120	1.3	.03	.00	.00	.00	--
183	1.8	.07	.00	.00	.00	--

Magnitude and probability of seasonal low flow from
March-June based on 43 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.25	0.00	0.00	0.00	0.00	--
3	.44	.00	.00	.00	.00	--
7	.98	.00	.00	.00	.00	--
14	2.3	.03	.00	.00	.00	--
30	5.8	.47	.07	.01	.00	--

Magnitude and probability of seasonal low flow from
November-February based on 43 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	--
3	.00	.00	.00	.00	.00	--
7	.00	.00	.00	.00	.00	--
14	.00	.00	.00	.00	.00	--
30	.16	.00	.00	.00	.00	--

Duration of daily mean flows based on 43 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.03	0.05	0.13	0.26	0.51	0.77	1.1	2.9
40%	30%	20%	15%	10%	5%	2%	1%
6.0	11	21	30	46	101	261	473

Magnitude and probability of annual high flow
based on 43 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	411	1,230	2,170	3,960	5,830	--
3	311	953	1,710	3,200	4,780	--
7	222	674	1,190	2,150	3,130	--
15	144	423	726	1,270	1,800	--
30	92	265	445	756	1,050	--
60	61	171	282	466	635	--
90	48	131	210	337	450	--

Magnitude and probability of seasonal low flow from
July-October based on 43 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	--
3	.00	.00	.00	.00	.00	--
7	.00	.00	.00	.00	.00	--
14	.00	.00	.00	.00	.00	--
30	.01	.00	.00	.00	.00	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	195	0.00	8.6	29	44
November	64	.00	5.8	10	44
December	62	.00	4.6	10	43
January	64	.00	5.3	12	43
February	369	.00	31	67	43
March	384	.00	79	102	43
April	520	.57	55	107	46
May	575	.09	54	111	47
June	332	.00	42	66	48
July	128	.00	23	34	48
August	31	.00	3.4	6.1	47
September	480	.00	13	69	48
Annual	131	1.0	27	29	43

06155030 Milk River near Dodson, Mont.
Site Number 121

LOCATION.--Lat 48°24'11", long 108°17'35" (NAD 27), in NE¼SE¼NW¼ sec.36, T.31 N., R.26 E., Phillips County, Hydrologic Unit 10050004, on left bank 30 ft downstream from U.S. Highway 2 bridge, 0.95 mi downstream from Dodson Dam, 1.9 mi west of Dodson, and at river mile 273.2.
DRAINAGE AREA.--11,192 mi^2.
PERIOD OF RECORD.--October 1982 to current year (2002; seasonal record beginning water year 1994).
GAGE.--Water-stage recorder. Altitude of gage is 2,250 ft (NGVD 29).
REMARKS.--Numerous diversions for irrigation upstream from station. Bureau of Reclamation satellite telemeter at station.

Magnitude and probability of annual low flow based on 10 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.29	.00	.00	.00	--	--
14	.96	.07	.00	.00	--	--
30	3.5	.72	.27	.11	--	--
60	14	7.2	5.1	3.8	--	--
90	24	12	8.1	5.9	--	--
120	34	21	18	16	--	--
183	42	28	25	24	--	--

Magnitude and probability of seasonal low flow from March-June based on 20 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3.1	0.53	0.00	0.00	--	--
3	4.0	.96	.41	.00	--	--
7	5.3	1.5	.76	.45	--	--
14	7.8	2.2	1.2	.70	--	--
30	13	4.0	2.3	1.5	--	--

Magnitude and probability of seasonal low flow from November-February based on 11 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	27	7.7	1.5	0.00	--	--
3	37	16	5.5	.00	--	--
7	39	17	5.7	.00	--	--
14	45	19	9.1	.23	--	--
30	49	29	22	17	--	--

Duration of daily mean flows based on 11 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.35	0.70	2.7	5.7	13	21	33	49
40%	30%	20%	15%	10%	5%	2%	1%
69	94	162	232	395	738	1,630	2,850

Magnitude and probability of annual high flow based on 11 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,020	3,610	7,480	--	--	--
3	937	3,270	6,750	--	--	--
7	764	2,580	5,210	--	--	--
15	544	1,620	3,000	--	--	--
30	357	975	1,730	--	--	--
60	249	617	1,050	--	--	--
90	210	511	859	--	--	--

Magnitude and probability of seasonal low flow from July-October based on 19 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2.0	0.00	0.00	0.00	--	--
3	2.8	.00	.00	.00	--	--
7	3.2	.09	.00	.00	--	--
14	4.7	.65	.16	.00	--	--
30	8.5	2.2	1.1	.61	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	2,690	5.1	203	604	20
November	421	25	106	108	11
December	275	17	78	70	11
January	230	18	83	61	11
February	526	20	130	142	11
March	2,250	16	449	693	20
April	1,690	2.3	197	443	20
May	1,680	3.4	190	366	20
June	655	16	244	215	20
July	599	8.7	181	161	20
August	362	6.7	67	78	20
September	1,730	.71	135	396	20
Annual	524	37	163	162	11

06155500 Milk River at Malta, Mont.
Site Number 122

LOCATION.--Lat 48°21'43", long 107°51'46" (NAD 27), in NW¼ sec.17, T.30 N., R.30 E. Phillips County, at the old highway bridge at Malta.
DRAINAGE AREA.--11,762 mi^2.
PERIOD OF RECORD.--14 years (1902-16).
GAGE.--Chain gage. Altitude of gage is 2,221.40 ft (NGVD 29).
REMARKS.--Many large diversions for irrigation upstream from station. Flow has been increased by water from the St. Mary Canal since 1917.

Magnitude and probability of annual low flow
based on 9 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	--	--	--	--	--	--
3	--	--	--	--	--	--
7	--	--	--	--	--	--
14	--	--	--	--	--	--
30	--	--	--	--	--	--
60	--	--	--	--	--	--
90	--	--	--	--	--	--
120	--	--	--	--	--	--
183	--	--	--	--	--	--

Magnitude and probability of seasonal low flow from
March-June based on 13 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	54	6.5	0.84	0.00	--	--
3	61	7.2	.86	.00	--	--
7	74	8.5	.90	.00	--	--
14	80	11	1.6	.00	--	--
30	122	20	5.9	1.8	--	--

Magnitude and probability of seasonal low flow from
November-February based on 11 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	43	13	0.00	0.00	--	--
3	44	14	.00	.00	--	--
7	44	15	.00	.00	--	--
14	47	15	1.3	.00	--	--
30	47	15	3.8	.00	--	--

Duration of daily mean flows based on 11 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.09	0.18	0.44	0.89	23	52	79	114
40%	30%	20%	15%	10%	5%	2%	1%
184	262	501	840	1,260	1,980	4,110	5,830

Magnitude and probability of annual high flow
based on 11 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	4,550	8,140	10,300	--	--	--
3	4,330	7,700	9,650	--	--	--
7	3,880	6,850	8,450	--	--	--
15	3,180	5,470	6,670	--	--	--
30	2,460	3,800	4,330	--	--	--
60	1,690	2,540	2,810	--	--	--
90	1,260	1,950	2,200	--	--	--

Magnitude and probability of seasonal low flow from
July-October based on 9 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	--	--	--	--	--	--
3	--	--	--	--	--	--
7	--	--	--	--	--	--
14	--	--	--	--	--	--
30	--	--	--	--	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	392	82	183	94	10
November	292	21	141	72	11
December	200	15	86	48	11
January	220	5.0	63	55	12
February	1,250	5.0	229	388	12
March	3,980	80	855	1,070	13
April	6,430	10	1,810	2,100	13
May	1,830	5.3	643	643	13
June	2,260	25	855	782	13
July	2,440	1.1	495	655	13
August	423	1.0	183	142	13
September	1,740	12	277	489	11
Annual	983	55	446	260	11

06164510 Milk River at Juneberg Bridge, near Saco, Mont.
Site Number 123

LOCATION.--Lat 48°30'32", long 107°13'02" (NAD 27), in NE¼NE¼ sec.30, T.32 N., R.35 E., Phillips County, Hydrologic Unit 10050014, on left bank 25 ft upstream from Juneberg bridge on Phillips County road, 1.5 mi downstream from Frenchman River, 6.9 mi northeast of Saco, and at river mile 152.3.
DRAINAGE AREA.--17,670 mi^2.
PERIOD OF RECORD.--October 1977 to current year (2002).
GAGE.--Water-stage recorder. Altitude of gage is 2,130 ft (NGVD 29).
REMARKS.--Flow increased during irrigation season by water from St. Mary Canal which diverts from the St. Mary River near Babb (station number 05017500). Flow regulated by Fresno Reservoir (station number 06136500), two reservoirs in Lodge Creek basin in Saskatchewan (station numbers 06144260 and 06144360), and four reservoirs in Frenchman River basin in Saskatchewan. Many small dams are used to divert water for irrigation upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

Magnitude and probability of annual low flow
based on 24 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	51	25	14	7.8	--	--
3	53	27	16	9.1	--	--
7	55	29	18	11	--	--
14	57	31	21	14	--	--
30	67	35	23	16	--	--
60	86	47	32	22	--	--
90	100	59	43	32	--	--
120	107	63	48	37	--	--
183	116	70	56	47	--	--

Magnitude and probability of seasonal low flow from
March-June based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	53	29	22	17	13	--
3	56	32	24	19	15	--
7	59	33	25	21	17	--
14	68	37	28	23	19	--
30	100	47	33	25	19	--

Magnitude and probability of seasonal low flow from
November-February based on 24 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	61	38	31	25	--	--
3	65	41	32	27	--	--
7	70	45	36	30	--	--
14	79	51	40	32	--	--
30	86	56	44	36	--	--

Duration of daily mean flows based on 25 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
20	25	35	49	70	97	124	153
40%	30%	20%	15%	10%	5%	2%	1%
182	233	326	433	721	1,380	3,130	5,510

Magnitude and probability of annual high flow
based on 25 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	2,090	6,060	10,400	18,300	26,300	--
3	1,950	5,710	9,900	17,600	25,500	--
7	1,650	5,020	8,960	16,600	24,700	--
15	1,250	3,910	7,220	14,100	21,800	--
30	897	2,600	4,630	8,730	13,300	--
60	642	1,730	2,960	5,350	7,920	--
90	549	1,420	2,380	4,180	6,080	--

Magnitude and probability of seasonal low flow from
July-October based on 24 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	73	32	17	8.9	--	--
3	75	33	18	10	--	--
7	77	35	20	12	--	--
14	80	37	23	15	--	--
30	92	41	26	17	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	4,040	25	296	798	25
November	597	60	155	108	25
December	406	45	122	77	25
January	271	33	119	62	25
February	1,760	49	223	343	25
March	4,080	47	1,010	1,290	25
April	6,220	38	778	1,470	25
May	2,540	56	470	653	25
June	2,260	103	484	461	25
July	1,840	30	423	367	25
August	693	9.4	240	140	25
September	1,520	23	242	341	25
Annual	1,040	70	381	316	25

06169500 Rock Creek below Horse Creek, near international boundary (hydrologic bench-mark station) Site Number 124

LOCATION.--Lat 48°58'10", long 106°50'20" (NAD 27), in NE¼NW¼ sec.15, T.37 N., R.37 E., Valley County, Hydrologic Unit 10050015, on right bank 2 mi south of international boundary, 3 mi downstream from Horse Creek, 21 mi northwest of Opheim, and at river mile 82.0.

DRAINAGE AREA.--328 mi^2.

PERIOD OF RECORD.--March 1916 to October 1926, September 1956 to current year (2002; seasonal records only prior to October 1978). Monthly discharge only for some periods, published in WSP 1309. Published as "Rock Creek near Barnard, Mt.", 1916-17. Prior to September 1956, records were collected at both Horse Creek (1914-56) and Rock Creek above Horse Creek (1914-56). Summations are equivalent to records at this site.

REVISED RECORDS.--WSP 1509: 1925(M), WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,530 ft (NGVD 29). March 1916 to October 1926, nonrecording gages at several sites within 500 ft upstream at different datum.

REMARKS.--Several small diversions for irrigation upstream from station. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow based on 24 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--
60	.02	.00	.00	.00	--	--
90	.28	.03	.00	.00	--	--
120	.70	.23	.08	.02	--	--
183	.71	.30	.17	.10	--	--

Magnitude and probability of seasonal low flow from March-June based on 55 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	0.00
3	.00	.00	.00	.00	.00	.00
7	.02	.00	.00	.00	.00	.00
14	.43	.00	.00	.00	.00	.00
30	3.1	.80	.19	.00	.00	.00

Magnitude and probability of seasonal low flow from November-February based on 24 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--

Duration of daily mean flows based on 24 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.03	0.05	0.13	0.26	0.51	0.77	1.1	1.9
40%	30%	20%	15%	10%	5%	2%	1%
3.0	5.2	10	16	30	85	260	550

Magnitude and probability of annual high flow based on 24 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	436	1,090	1,620	2,360	--	--
3	323	864	1,370	2,170	--	--
7	206	550	892	1,460	--	--
15	126	324	522	857	--	--
30	79	197	311	501	--	--
60	46	109	170	271	--	--
90	34	78	119	186	--	--

Magnitude and probability of seasonal low flow from July-October based on 56 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	0.00
3	.01	.00	.00	.00	.00	.00
7	.02	.00	.00	.00	.00	.00
14	.04	.00	.00	.00	.00	.00
30	.11	.00	.00	.00	.00	.00

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	58	0.00	3.4	7.9	57
November	2.8	.10	1.5	.72	24
December	2.2	.03	.75	.57	24
January	1.8	.00	.29	.46	24
February	96	.00	6.2	20	24
March	398	.00	82	107	55
April	487	4.0	102	127	57
May	89	1.5	17	19	57
June	172	.17	17	27	57
July	74	.00	11	18	57
August	15	.00	1.6	2.9	57
September	21	.00	1.8	3.5	57
Annual	37	1.9	14	12	24

06172000 Milk River near Vandalia, Mont.
Site Number 125

LOCATION.--Lat 48°22'21", long 106°58'25" (NAD 27), in SW¼SW¼NE¼ sec.7, T.30 N., R.37 E., Valley County, Hydrologic Unit 10050012, on right bank, just downstream from Vandalia Dam, 3.0 mi upstream from Long Coulee, 3.2 mi northwest of Vandalia, and at river mile 117.3.

DRAINAGE AREA.--20,926 mi^2. Area at site used October 1969 to September 1973, 20,944 mi^2.

PERIOD OF RECORD.--October 1914 to September 1925, August 1928 to September 1939, October 1969 to September 1973, October 1982 to May 31, 1987 (discontinued). April to May 1952, infrequent gage heights, published in WSP 1260-B. Monthly discharge only for some periods, published in WSP 1309. Published as "at Vandalia" October 1969 to September 1973.

REVISED RECORDS.--WSP 1309: 1920(M). WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,090.00 ft (NGVD 29, from topographic map). October 1969 to September 1973, nonrecording gage 7.1 mi downstream at datum 5.00 ft lower.

REMARKS.--Since 1917, flow increased during irrigation season by water from St. Mary Canal which diverts from the St. Mary River near Babb. Flow regulated by Fresno and Nelson Reservoirs, five reservoirs in Lodge Creek basin in Saskatchewan, and four reservoirs in Frenchman River basin in Saskatchewan. Water is diverted at Vandalia Dam by canal, capacity about 300 ft^3/s, for irrigation downstream. Diversions upstream from station for irrigation of about 126,000 acres of which about 18,000 acres lies downstream from station.

Magnitude and probability of annual low flow
based on 27 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2.0	0.00	0.00	0.00	0.00	--
3	3.1	.37	.00	.00	.00	--
7	5.4	.38	.01	.00	.00	--
14	8.5	1.7	.56	.09	.00	--
30	19	4.9	2.1	.93	.35	--
60	38	11	4.9	2.3	.84	--
90	58	24	14	8.0	4.1	--
120	74	29	16	9.6	5.0	--
183	93	39	25	16	10	--

Magnitude and probability of seasonal low flow from
March-June based on 28 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	13	1.2	0.14	0.00	0.00	--
3	15	1.6	.35	.05	.00	--
7	22	2.0	.41	.09	.01	--
14	28	4.1	1.3	.49	.15	--
30	88	12	3.5	1.1	.44	--

Magnitude and probability of seasonal low flow from
November-February based on 28 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	27	7.0	2.8	0.87	0.00	--
3	33	11	5.9	3.4	1.7	--
7	41	18	11	7.3	4.4	--
14	49	26	19	14	10	--
30	56	30	22	17	12	--

Duration of daily mean flows based on 28 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.84	1.6	4.4	12	34	58	82	114
40%	30%	20%	15%	10%	5%	2%	1%
165	250	517	877	1,410	2,970	5,970	9,150

Magnitude and probability of annual high flow
based on 28 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	7,090	16,500	23,100	30,900	36,100	--
3	6,320	15,300	21,600	28,900	33,600	--
7	5,320	13,200	18,900	25,700	30,100	--
15	3,880	9,780	14,300	19,900	23,800	--
30	2,530	6,320	9,240	13,000	15,600	--
60	1,690	4,080	5,890	8,180	9,790	--
90	1,420	3,210	4,450	5,890	6,840	--

Magnitude and probability of seasonal low flow from
July-October based on 27 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5.1	0.94	0.00	0.00	0.00	--
3	6.3	1.5	.42	.00	.00	--
7	7.4	1.8	.56	.00	.00	--
14	12	3.5	1.6	.51	.00	--
30	26	7.6	3.7	2.0	.91	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	4,640	9.5	315	846	29
November	660	47	165	112	29
December	456	26	106	81	29
January	1,440	20	134	258	29
February	2,160	15	287	443	29
March	6,900	43	1,550	1,800	29
April	13,600	1.5	2,190	3,020	29
May	4,120	2.1	884	1,210	29
June	6,570	1.9	1,060	1,380	28
July	4,560	4.4	494	927	28
August	1,100	5.9	178	263	28
September	1,320	5.7	185	264	29
Annual	1,680	39	618	454	28

06174500 Milk River at Nashua, Mont.
Site Number 126

LOCATION.--Lat 48°07'47", long 106°21'50" (NAD 27), in NE¼NE¼ sec.1, T.27 N., R.41 E., Valley County, Hydrologic Unit 10050012, on right bank at downstream side of former highway bridge site, 0.6 mi southwest of Nashua, 2.0 mi upstream from Porcupine Creek, and at river mile 22.7.
DRAINAGE AREA.--22,332 mi^2.
PERIOD OF RECORD.--October 1939 to current year (2002).
REVISED RECORDS.--WSP 1729: Drainage area.
GAGE.--Water-stage recorder. Altitude of gage is 2,027.75 ft (NGVD 29).
REMARKS.--Flow increased during irrigation season by water from St. Mary Canal which diverts from the St. Mary River near Babb. Flow regulated by Fresno Reservoir (station number 06136500), two reservoirs in Lodge Creek basin in Saskatchewan, and four reservoirs in Frenchman River basin in Saskatchewan. Diversions for irrigation of about 140,000 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

Magnitude and probability of annual low flow based on 62 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	44	12	3.1	0.00	0.00	0.00
3	54	15	4.4	.79	.00	.00
7	55	16	5.1	1.1	.00	.00
14	72	22	7.2	2.0	.06	.00
30	88	35	17	8.5	3.4	1.7
60	113	54	31	17	8.0	4.5
90	126	71	48	33	20	14
120	143	81	56	40	26	20
183	158	91	68	53	40	33

Magnitude and probability of seasonal low flow from March-June based on 63 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	61	17	5.9	0.29	0.00	0.00
3	68	19	6.9	1.4	.00	.00
7	76	21	8.2	3.1	.30	.00
14	108	29	11	4.0	1.1	.40
30	165	54	28	15	7.3	4.3

Magnitude and probability of seasonal low flow from November-February based on 62 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	73	48	38	32	26	22
3	77	51	41	34	28	24
7	84	55	44	37	30	26
14	92	61	48	40	32	28
30	105	70	55	45	36	31

Duration of daily mean flows based on 63 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
11	20	37	57	90	119	149	181
40%	30%	20%	15%	10%	5%	2%	1%
235	329	528	756	1,310	3,040	6,310	8,540

Magnitude and probability of annual high flow based on 63 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	5,490	11,700	16,200	21,800	25,600	29,200
3	5,240	11,300	15,700	20,900	24,600	28,000
7	4,600	10,400	14,800	20,300	24,300	28,000
15	3,630	8,610	12,600	17,900	21,900	25,700
30	2,480	5,990	8,910	13,000	16,200	19,500
60	1,580	3,780	5,650	8,370	10,600	12,900
90	1,240	2,900	4,340	6,470	8,240	10,100

Magnitude and probability of seasonal low flow from July-October based on 62 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	62	21	9.6	4.1	0.50	0.00
3	68	24	11	4.9	.64	.00
7	80	29	14	6.1	.82	.00
14	94	38	20	10	2.2	.00
30	142	54	26	13	5.0	2.4

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	6,840	34	307	849	63
November	768	61	213	134	63
December	487	40	158	78	63
January	843	36	147	112	63
February	2,340	39	241	324	63
March	6,680	56	1,270	1,490	63
April	20,900	15	2,220	3,400	63
May	5,210	10	995	1,400	63
June	6,610	28	957	1,100	63
July	3,580	3.6	671	770	63
August	1,750	3.4	310	291	63
September	2,140	13	276	319	63
Annual	2,360	58	647	485	63

06176500 Wolf Creek near Wolf Point, Mont.
Site Number 127

LOCATION.--Lat 48°05'47", long 105°40'41" (NAD 27), in NE¼SE¼NW¼ sec.17, T.27 N., R.47 E., Roosevelt County, Hydrologic Unit 10060001, on right bank 0.5 mi north of U.S. Highway 2, 1.5 mi west of Wolf Point, and at river mile 2.3.

DRAINAGE AREA.--251 mi^2.

PERIOD OF RECORD.--August 1908 to July 1914 (no winter records 1909, 1913-14), March 1950 to September 1953, water years 1954, 1956-73 (annual maximums), October 1981 to September 1992 (discontinued). Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,000 ft (NGVD 29, from topographic map). Prior to July 31, 1914, nonrecording gage at site 0.8 mi upstream at different datum. Aug. 1, 1914, to Sept. 30, 1953, water-stage recorder at same site and datum. May 1955 to September 1973, crest-stage gage at same site and datum.

REMARKS.--Minor diversion for irrigation upstream from station.

Magnitude and probability of annual low flow based on 15 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--
60	.00	.00	.00	.00	--	--
90	.00	.00	.00	.00	--	--
120	.00	.00	.00	.00	--	--
183	.02	.00	.00	.00	--	--

Magnitude and probability of seasonal low flow from March-June based on 17 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.05	.00	.00	.00	--	--
30	.51	.01	.00	.00	--	--

Magnitude and probability of seasonal low flow from November-February based on 17 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--

Duration of daily mean flows based on 17 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.02	0.03	0.08	0.16	0.32	0.48	0.64	0.80
40%	30%	20%	15%	10%	5%	2%	1%
0.96	1.8	4.2	6.3	9.6	21	64	113

Magnitude and probability of annual high flow based on 17 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	89	638	1,630	4,110	--	--
3	70	448	1,060	2,480	--	--
7	52	288	625	1,310	--	--
15	36	181	365	702	--	--
30	25	110	207	367	--	--
60	17	63	108	170	--	--
90	13	45	74	112	--	--

Magnitude and probability of seasonal low flow from July-October based on 19 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	7.1	0.00	0.88	1.7	20
November	6.0	.00	.83	1.4	20
December	2.0	.00	.52	.73	18
January	1.1	.00	.24	.39	17
February	56	.00	4.3	13	17
March	143	.00	23	40	17
April	235	.10	28	55	21
May	20	.08	6.2	6.5	21
June	49	.00	7.1	12	21
July	45	.00	5.6	11	21
August	8.4	.00	.84	2.2	21
September	55	.00	3.0	12	21
Annual	21	.02	6.9	6.7	17

06177000 Missouri River near Wolf Point, Mont.
Site Number 128

LOCATION.--Lat 48°04'00", long 105°31'55" (NAD 27), in SW¼NW¼ sec.28, T.27 N., R.48 E., McCone County, Hydrologic Unit 10060001, on right bank 500 ft downstream from bridge on State Highway 13, 5 mi southeast of Wolf Point, 7.8 mi downstream from Wolf Creek, and at river mile 1,701.4.
DRAINAGE AREA.--82,290 mi^2.
PERIOD OF RECORD.--September 1928 to current year (2002).
REVISED RECORDS.--WSP 1146: 1931. WSP 1729: Drainage area.
GAGE.--Water-stage recorder. Altitude of gage is 1,958.57 ft (NGVD 29). Prior to Apr. 13, 1930, nonrecording gages at Wolf Point ferry landing 5.5 mi upstream at different datum.
REMARKS.--Flow partly regulated by Fort Peck Lake and many other reservoirs upstream from station. Diversion for irrigation of about 1,010,400 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

Magnitude and probability of annual low flow
based on 57 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,370	2,560	1,800	1,300	862	638
3	4,620	2,760	1,970	1,440	970	728
7	4,880	2,980	2,170	1,620	1,120	856
14	5,090	3,240	2,450	1,890	1,380	1,100
30	5,500	3,690	2,880	2,300	1,750	1,440
60	6,430	4,330	3,360	2,650	1,960	1,580
90	7,190	4,860	3,720	2,890	2,100	1,660
120	7,940	5,400	4,110	3,160	2,250	1,740
183	8,820	6,400	5,280	4,450	3,620	3,120

Magnitude and probability of seasonal low flow from
March-June based on 58 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,160	3,060	2,190	1,600	1,090	822
3	5,400	3,230	2,320	1,700	1,160	878
7	5,680	3,430	2,480	1,830	1,260	954
14	5,950	3,680	2,730	2,070	1,480	1,160
30	6,490	4,170	3,180	2,490	1,850	1,490

Magnitude and probability of seasonal low flow from
November-February based on 57 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,570	3,180	2,180	1,530	974	699
3	5,820	3,360	2,340	1,670	1,090	793
7	6,100	3,580	2,530	1,830	1,220	904
14	6,470	3,870	2,770	2,030	1,420	1,130
30	7,200	4,520	3,320	2,470	1,780	1,470

Duration of daily mean flows based on 58 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
1,430	2,260	3,580	4,670	6,190	7,140	8,090	9,220
40%	30%	20%	15%	10%	5%	2%	1%
10,700	12,200	14,300	15,400	16,500	21,400	27,700	31,800

Magnitude and probability of annual high flow
based on 58 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	18,400	25,200	29,900	36,100	40,900	45,900
3	18,000	24,600	29,100	35,200	39,900	44,700
7	17,400	23,800	28,200	33,900	38,400	43,000
15	16,600	22,900	27,200	33,000	37,400	42,100
30	15,600	21,500	25,700	31,300	35,700	40,300
60	14,300	19,400	23,000	27,800	31,500	35,300
90	13,300	17,500	20,400	24,200	27,000	29,900

Magnitude and probability of seasonal low flow from
July-October based on 57 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,840	3,640	2,800	2,230	1,720	1,440
3	6,200	3,870	2,970	2,360	1,810	1,500
7	6,560	4,070	3,110	2,460	1,870	1,540
14	6,860	4,280	3,290	2,610	2,000	1,660
30	7,720	4,810	3,660	2,880	2,160	1,770

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	29,100	3,150	11,400	7,090	58
November	22,200	2,330	9,170	4,130	58
December	12,100	1,500	9,070	2,350	58
January	14,300	1,420	9,880	3,100	58
February	15,800	1,350	10,200	3,960	58
March	16,800	2,300	9,110	3,680	58
April	27,200	1,470	9,720	5,030	58
May	21,800	1,180	9,510	4,120	58
June	26,000	1,270	9,630	4,460	58
July	36,300	1,170	10,600	5,450	58
August	27,100	3,520	12,000	5,790	58
September	27,200	3,270	11,700	6,540	58
Annual	15,800	5,630	10,200	2,790	58

06177500 Redwater River at Circle, Mont.
Site Number 129

LOCATION.--Lat 47°24'51", long 105°34'30" (NAD 27), in SW¼SW¼ sec.11, T.19 N., R.48 E., McCone County, Hydrologic Unit 10060002, on left bank at Circle, 1 mi upstream from Horse Creek, and at river mile 110.2.

DRAINAGE AREA.--547 mi^2.

PERIOD OF RECORD.--April to November 1929, March to November 1930, July 1931 to December 1932, March to June 1933, February to November 1934, April 1935 to December 1936, April 1937 to June 1972, October 1974 to current year (2002). Monthly discharge only for some periods, published in WSP 1309. Prior to October 1967, published as "Redwater Creek at Circle."

REVISED RECORDS.--WSP 1006: 1929-30, 1932-33, 1935-39. WSP 1509: 1929, 1934. WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Sharp-crested weir since Sept. 24, 1938. Altitude of gage is 2,394.32 ft (NGVD 29, levels by U.S. Army Corps of Engineers). Prior to June 1, 1941, and Mar. 23, 1943, to Feb. 16, 1948, nonrecording gage at site 0.3 mi upstream at same datum. June 1, 1941, to Mar. 22, 1943, nonrecording gage at site 200 ft upstream at datum 2.8 ft lower. Feb. 26, 1948, to May 7, 1950, nonrecording gage at site 200 ft upstream at present datum.

REMARKS.--Diversions for irrigation of about 1,200 acres upstream from station. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow based on 61 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	0.00
3	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00
60	.02	.00	.00	.00	.00	.00
90	.04	.00	.00	.00	.00	.00
120	.06	.01	.00	.00	.00	.00
183	.08	.02	.01	.00	.00	.00

Magnitude and probability of seasonal low flow from March-June based on 68 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.05	0.00	0.00	0.00	0.00	0.00
3	.07	.00	.00	.00	.00	.00
7	.14	.02	.00	.00	.00	.00
14	.25	.05	.01	.00	.00	.00
30	.59	.15	.07	.03	.01	.01

Magnitude and probability of seasonal low flow from November-February based on 65 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	0.00
3	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00
30	.02	.00	.00	.00	.00	.00

Duration of daily mean flows based on 64 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.01	0.03	0.07	0.14	0.29	0.43	0.58	0.72
40%	30%	20%	15%	10%	5%	2%	1%
0.87	1.1	2.4	3.9	7.1	20	86	230

Magnitude and probability of annual high flow based on 64 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	252	1,350	2,900	6,070	9,390	13,500
3	184	909	1,870	3,740	5,610	7,870
7	118	526	1,030	1,950	2,820	3,830
15	71	290	545	989	1,400	1,860
30	43	164	295	513	704	913
60	26	93	162	269	359	454
90	19	67	113	185	243	303

Magnitude and probability of seasonal low flow from July-October based on 69 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	0.00
3	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00
30	.02	.00	.00	.00	.00	.00

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	19	0.00	0.52	2.3	70
November	7.1	.00	.37	.94	70
December	8.6	.00	.44	1.2	67
January	6.1	.00	.36	.92	65
February	141	.00	15	32	66
March	476	.05	73	112	68
April	418	.07	17	56	70
May	32	.02	3.7	5.4	71
June	167	.00	15	31	71
July	116	.00	11	26	70
August	37	.00	2.0	6.0	70
September	139	.00	2.4	17	70
Annual	62	.04	12	13	64

06178500 East Poplar River at international boundary (International gaging station) Site Number 130

LOCATION.--Lat 49°00'00", long 105°24'32" (NAD 27), in SW¼SW¼ sec.3, T.1 N., R.26 W., second meridian, in Saskatchewan, Hydrologic Unit 10060003, on left bank 10 ft north of international boundary, 400 ft southwest of Canadian East Poplar Port of Entry, 14 mi north of Scobey, Mont., and at river mile 21.9.
DRAINAGE AREA.--541 mi^2.
PERIOD OF RECORD.--March 1931 to current year (2002; seasonal records only in most seasons prior to October 1974). Prior to March 1962, published as "East Fork Poplar River at international boundary."
REVISED RECORDS.--WSP 1389: 1932, 1939, 1942-43, 1947. WDR-MT-83: Drainage area.
GAGE.--Water-stage recorder and concrete control. Altitude of gage is 2,410.92 ft (International Boundary Commission Survey Datum). Prior to Oct. 5, 1953, water-stage recorder at site 80 ft upstream at same datum.
REMARKS.--U.S. Geological Survey satellite telemeter at station. After September 1975 flow regulated by Morrison Dam at Cookson Reservoir 3.1 mi upstream.

Magnitude and probability of annual low flow based on 27 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.4	1.0	0.85	0.72	0.60	--
3	1.5	1.2	1.0	.87	.75	--
7	1.7	1.3	1.1	.93	.78	--
14	1.8	1.3	1.1	.98	.82	--
30	2.0	1.5	1.3	1.1	.94	--
60	2.0	1.6	1.4	1.3	1.1	--
90	2.1	1.7	1.6	1.5	1.4	--
120	2.1	1.8	1.7	1.6	1.5	--
183	2.3	1.9	1.8	1.6	1.5	--

Magnitude and probability of seasonal low flow from March-June based on 27 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.8	1.4	1.1	0.96	0.77	--
3	2.0	1.5	1.3	1.1	.91	--
7	2.1	1.7	1.4	1.2	1.0	--
14	2.4	1.8	1.6	1.3	1.1	--
30	2.8	2.0	1.8	1.7	1.6	--

Magnitude and probability of seasonal low flow from November-February based on 27 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.6	1.0	0.87	0.73	0.43	--
3	1.7	1.2	1.0	.89	.51	--
7	1.8	1.3	1.1	.95	.58	--
14	1.9	1.4	1.2	1.0	.63	--
30	2.0	1.6	1.3	1.1	.68	--

Duration of daily mean flows based on 27 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.55	1.0	1.5	1.6	2.0	2.2	2.4	2.6
40%	30%	20%	15%	10%	5%	2%	1%
2.8	3.4	3.9	5.1	7.9	21	66	145

Magnitude and probability of annual high flow based on 27 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	23	116	345	1,340	3,610	--
3	20	98	285	1,070	2,810	--
7	18	83	230	809	2,010	--
15	15	63	157	480	1,080	--
30	13	46	105	292	609	--
60	9.4	31	69	180	360	--
90	7.7	24	51	127	248	--

Magnitude and probability of seasonal low flow from July-October based on 27 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.8	1.4	1.2	0.99	0.83	--
3	1.9	1.5	1.4	1.3	1.1	--
7	2.0	1.7	1.5	1.4	1.3	--
14	2.1	1.8	1.6	1.5	1.4	--
30	2.2	1.8	1.7	1.6	1.4	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	4.6	0.76	2.5	0.74	27
November	4.4	.58	2.4	.68	27
December	4.4	.63	2.2	.69	27
January	4.4	1.3	2.2	.69	27
February	8.0	.93	2.8	1.5	27
March	280	1.9	27	60	27
April	306	1.8	30	71	27
May	41	3.0	12	9.4	27
June	101	1.7	8.9	19	27
July	109	1.8	6.8	20	27
August	14	1.6	2.8	2.3	27
September	4.1	1.5	2.5	.57	27
Annual	51	2.1	8.5	12	27

06181000 Poplar River near Poplar, Mont.
Site Number 131

LOCATION.--Lat 48°10'15", long 105°10'42" (NAD 27), in NE¼NE¼ sec.19, T.28 N., R.51 E., Roosevelt County, Hydrologic Unit 10060003, on right bank 4 mi north of Poplar, and at river mile 11.0.

DRAINAGE AREA.---3,174 mi^2.

PERIOD OF RECORD.--August 1908 to October 1924, August 1947 to September 1969, June 1975 to September 1979, October 1981 to current year (2002). Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1176: 1948. WSP 1389: 1911. WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 1,953.16 ft (NGVD 29). Prior to May 1, 1911, nonrecording gage at site 4.2 mi upstream at different datum. May 1, 1911, to Oct. 4, 1913, nonrecording gage at site 14 mi upstream at different datum. Oct. 5, 1913, to Oct. 31, 1924, nonrecording gage at site 2.2 mi upstream at different datum. Aug. 10, 1947, to Sept. 30, 1969, water-stage recorder at present site and datum.

REMARKS.--Diversions for irrigation of about 5,500 acres upstream from station. Flow partially regulated by Coronach Dam, on the East Fork Poplar River, 2 mi north of international boundary. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow based on 60 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.0	0.10	0.00	0.00	0.00	0.00
3	1.1	.13	.00	.00	.00	.00
7	1.3	.16	.00	.00	.00	.00
14	1.8	.24	.03	.00	.00	.00
30	2.9	.41	.10	.02	.00	.00
60	4.8	1.2	.48	.21	.07	.03
90	8.7	3.6	2.1	1.3	.68	.43
120	13	6.5	4.3	3.0	1.9	1.4
183	16	8.2	5.4	3.8	2.4	1.8

Magnitude and probability of seasonal low flow from March-June based on 63 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	6.7	1.2	0.41	0.14	0.01	0.00
3	7.0	1.3	.42	.14	.01	.00
7	8.4	1.5	.53	.20	.06	.03
14	13	2.9	1.1	.45	.15	.07
30	40	12	4.5	1.8	.51	.20

Magnitude and probability of seasonal low flow from November-February based on 63 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	2.5	0.36	0.05	0.00	0.00	0.00
3	2.6	.43	.10	.00	.00	.00
7	2.9	.51	.13	.00	.00	.00
14	3.3	.61	.18	.04	.00	.00
30	4.2	.91	.31	.11	.01	.00

Duration of daily mean flows based on 63 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.18	0.36	0.89	2.9	7.5	12	17	23
40%	30%	20%	15%	10%	5%	2%	1%
33	49	83	115	182	373	873	1,790

Magnitude and probability of annual high flow based on 63 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	1,730	5,710	10,600	20,200	30,700	44,400
3	1,460	4,810	8,940	17,300	26,600	39,000
7	1,120	3,450	6,190	11,500	17,300	24,800
15	792	2,240	3,870	6,960	10,200	14,400
30	540	1,390	2,270	3,860	5,440	7,400
60	346	820	1,290	2,100	2,870	3,820
90	263	592	905	1,420	1,910	2,480

Magnitude and probability of seasonal low flow from July-October based on 62 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	6.0	1.2	0.30	0.00	0.00	0.00
3	6.5	1.3	.36	.00	.00	.00
7	7.1	1.5	.43	.00	.00	.00
14	7.7	1.7	.52	.01	.00	.00
30	11	2.1	.55	.14	.02	.01

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	82	2.2	28	20	64
November	94	4.2	27	16	63
December	50	1.3	16	10	63
January	30	.01	8.5	7.4	63
February	743	.10	27	94	63
March	2,440	.18	332	496	63
April	4,920	37	672	1,010	63
May	421	17	123	102	63
June	336	2.8	86	75	64
July	800	.68	78	111	64
August	220	.04	28	37	66
September	206	.15	24	30	66
Annual	435	14	120	99	63

06182500 Big Muddy Creek at Daleview, Mont.
Site Number 132

LOCATION.--Lat 48°54'40", long 104°56'42" (NAD 27), near center of north line of sec.5, T.36 N., R.52 E., Sheridan County, on right bank 0.5 mi west of Daleview, 0.5 mi upstream from Whitetail Creek, 6 mi north of Redstone, and at river mile 149.6.
DRAINAGE AREA.--279 mi^2.
PERIOD OF RECORD.--24 years (1947-71).
REVISED RECORDS.--WSP 1209: 1948(M). WSP 1309: Drainage area. WSP 1389: 1948. WSP 1559: 1955.
GAGE.--Water-stage recorder. Altitude of gage is 2,120 ft (NGVD 29, by barometer).
REMARKS.--Diversions for irrigation of about 90 acres upstream from station.

Magnitude and probability of annual low flow based on 24 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.00	.00	.00	.00	--	--
60	.06	.00	.00	.00	--	--
90	.34	.09	.04	.02	--	--
120	.72	.45	.35	.28	--	--
183	.92	.62	.52	.46	--	--

Magnitude and probability of seasonal low flow from March-June based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	--
3	.00	.00	.00	.00	.00	--
7	.00	.00	.00	.00	.00	--
14	.48	.00	.00	.00	.00	--
30	2.6	.59	.18	.05	.01	--

Magnitude and probability of seasonal low flow from November-February based on 25 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	0.00	--
3	.00	.00	.00	.00	.00	--
7	.00	.00	.00	.00	.00	--
14	.00	.00	.00	.00	.00	--
30	.00	.00	.00	.00	.00	--

Duration of daily mean flows based on 24 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.03	0.05	0.13	0.26	0.52	0.78	1.1	1.5
40%	30%	20%	15%	10%	5%	2%	1%
2.1	3.0	5.2	7.6	14	36	132	339

Magnitude and probability of annual high flow based on 24 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	759	1,810	2,770	4,250	--	--
3	543	1,260	1,900	2,860	--	--
7	329	737	1,100	1,660	--	--
15	186	402	600	918	--	--
30	110	227	330	491	--	--
60	61	122	174	254	--	--
90	44	85	118	167	--	--

Magnitude and probability of seasonal low flow from July-October based on 24 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.11	.00	.00	.00	--	--
30	.32	.00	.00	.00	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	8.1	0.90	2.1	1.5	25
November	3.7	.84	1.8	.68	25
December	3.5	.01	.90	.85	25
January	3.5	.00	.39	.72	25
February	38	.00	3.2	8.5	25
March	282	.04	53	75	25
April	534	4.3	100	141	25
May	59	2.0	12	14	25
June	96	.84	13	22	25
July	26	.46	3.9	6.1	24
August	19	.00	2.2	3.9	24
September	10	.00	1.8	2.5	25
Annual	45	3.3	16	11	24

06183450 Big Muddy Creek near Antelope, Mont.
Site Number 133

LOCATION.--Lat 48°40'22", long 104°30'42" (NAD 27), in SW¼SW¼NW¼ sec.27, T.34 N., R.55 E., Sheridan County, Hydrologic Unit 10060006, on right bank, 3 mi southwest of Antelope, and 7 mi south of Plentywood.
DRAINAGE AREA.--967 mi^2. Prior to 1981, drainage area published as 1,171 mi^2.
PERIOD OF RECORD.--October 1978 to current year (2002).
REVISED RECORDS.--WDR MT-81-1: Drainage area.
GAGE.--Water-stage recorder. Altitude of gage is 2,000 ft (NGVD 29).
REMARKS.--Several known diversions for irrigation upstream from station. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow
based on 23 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.02	0.00	0.00	0.00	--	--
3	.05	.00	.00	.00	--	--
7	.07	.00	.00	.00	--	--
14	.13	.00	.00	.00	--	--
30	.19	.00	.00	.00	--	--
60	.61	.08	.00	.00	--	--
90	1.5	.55	.25	.05	--	--
120	2.5	1.0	.56	.30	--	--
183	3.4	1.7	1.1	.71	--	--

Magnitude and probability of seasonal low flow from
March-June based on 24 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.92	0.20	0.00	0.00	--	--
3	1.0	.23	.00	.00	--	--
7	1.8	.28	.00	.00	--	--
14	3.2	.84	.35	.15	--	--
30	6.1	2.2	1.2	.67	--	--

Magnitude and probability of seasonal low flow from
November-February based on 23 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.45	0.00	0.00	0.00	--	--
3	.48	.00	.00	.00	--	--
7	.54	.08	.00	.00	--	--
14	.79	.09	.00	.00	--	--
30	.86	.18	.00	.00	--	--

Duration of daily mean flows based on 24 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.05	0.10	0.26	0.52	1.1	2.0	3.2	4.7
40%	30%	20%	15%	10%	5%	2%	1%
6.6	10	18	26	39	90	307	609

Magnitude and probability of annual high flow
based on 24 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	600	1,510	2,370	3,750	--	--
3	506	1,320	2,130	3,490	--	--
7	364	990	1,660	2,860	--	--
15	226	635	1,090	1,940	--	--
30	138	374	628	1,090	--	--
60	86	219	356	596	--	--
90	63	156	251	419	--	--

Magnitude and probability of seasonal low flow from
July-October based on 23 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.15	0.00	0.00	0.00	--	--
3	.21	.00	.00	.00	--	--
7	.23	.02	.00	.00	--	--
14	.26	.03	.00	.00	--	--
30	.44	.05	.01	.00	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	25	0.14	5.3	5.4	24
November	12	.88	5.9	2.9	24
December	6.9	.45	3.6	2.0	24
January	6.4	.00	1.8	1.6	24
February	290	.00	25	62	24
March	851	2.7	133	197	24
April	826	5.0	116	220	24
May	120	5.3	25	29	24
June	62	.23	16	18	24
July	226	.03	26	47	24
August	92	.00	9.1	19	24
September	36	.00	4.5	7.5	24
Annual	93	4.7	31	28	24

06185000 Big Muddy Creek near Culbertson, Mont.
Site Number 134

LOCATION.--Lat 48°15'26", long 104°43'25" (NAD 27), in NE¼ sec.20, T.29 N., R.54 E., Roosevelt County, 11 mi upstream from mouth and 12 mi northwest of Culbertson.

DRAINAGE AREA.--2,447 mi^2.

PERIOD OF RECORD.--13 years (1908-21).

GAGE.--Wire-weight gage. Altitude of gage is 1,910 ft (NGVD 29, from topographic map). July 19, 1909, to Sept. 16, 1918, slope gage at same datum. Prior to July 19, 1909, staff gage at site 8 mi downstream at different datum.

REMARKS.--Several small diversions upstream from station.

Magnitude and probability of annual low flow
based on 12 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.60	.00	.00	.00	--	--
60	1.2	.00	.00	.00	--	--
90	1.9	.00	.00	.00	--	--
120	2.4	.34	.03	.00	--	--
183	4.4	1.0	.39	.15	--	--

Magnitude and probability of seasonal low flow from
March-June based on 13 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	3.8	1.0	0.00	0.00	--	--
3	4.1	1.3	.00	.00	--	--
7	4.8	1.5	.00	.00	--	--
14	7.3	3.2	2.1	1.5	--	--
30	11	6.1	4.7	4.0	--	--

Magnitude and probability of seasonal low flow from
November-February based on 13 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	1.7	0.00	0.00	0.00	--	--
3	1.8	.00	.00	.00	--	--
7	1.9	.00	.00	.00	--	--
14	2.0	.00	.00	.00	--	--
30	2.2	.00	.00	.00	--	--

Duration of daily mean flows based on 13 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.07	0.14	0.35	0.70	2.1	3.7	5.2	7.4
40%	30%	20%	15%	10%	5%	2%	1%
11	21	39	60	109	258	788	1,090

Magnitude and probability of annual high flow
based on 13 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	840	1,250	1,490	1,820	--	--
3	789	1,210	1,460	1,790	--	--
7	698	1,160	1,450	1,780	--	--
15	516	940	1,260	1,690	--	--
30	328	661	952	1,400	--	--
60	191	392	574	866	--	--
90	140	277	404	613	--	--

Magnitude and probability of seasonal low flow from
July-October based on 13 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.77	0.00	0.00	0.00	--	--
3	.82	.00	.00	.00	--	--
7	1.0	.22	.05	.00	--	--
14	1.3	.48	.22	.00	--	--
30	1.9	.74	.38	.00	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	35	0.00	8.4	8.6	14
November	11	.00	5.9	4.0	14
December	12	.00	3.9	3.5	13
January	10	.00	2.5	2.8	13
February	30	.00	3.7	8.0	13
March	359	10	116	139	13
April	1,210	47	369	373	13
May	246	3.7	68	77	13
June	249	6.9	59	71	13
July	143	2.0	44	47	13
August	45	.54	13	12	14
September	51	.44	11	16	14
Annual	170	19	58	43	13

06185110 Big Muddy Creek near mouth, near Culbertson, Mont.
Site Number 135

LOCATION.--Lat 48°09'52", long 104°37'45" (NAD 27), in NE¼NW¼SW¼ sec.21, T.28 N., R.55 E., Roosevelt County, Hydrologic Unit 10060006, Fort Peck Indian Reservation, on right bank 30 ft downstream from U.S. Highway 2 bridge and 5.3 mi northwest of Culbertson.
DRAINAGE AREA.--2,684 mi^2.
PERIOD OF RECORD.--November 1981 to September 1992 (discontinued).
GAGE.--Water-stage recorder. Altitude of gage is 1,896.52 ft (NVGD 29).
REMARKS.--Flows are subject to extreme regulation by diversions and dams at Medicine Lake National Wildlife Refuge about 40 mi upstream.

Magnitude and probability of annual low flow based on 10 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.01	.00	.00	.00	--	--
60	.09	.00	.00	.00	--	--
90	.23	.00	.00	.00	--	--
120	.66	.00	.00	.00	--	--
183	1.4	.24	.00	.00	--	--

Magnitude and probability of seasonal low flow from March-June based on 11 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.01	.00	.00	.00	--	--
14	.24	.00	.00	.00	--	--
30	1.6	.19	.01	.00	--	--

Magnitude and probability of seasonal low flow from November-February based on 10 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.03	.00	.00	.00	--	--
30	.07	.00	.00	.00	--	--

Duration of daily mean flows based on 11 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
0.02	0.04	0.11	0.21	0.43	0.64	0.85	1.2
40%	30%	20%	15%	10%	5%	2%	1%
2.9	5.6	11	18	36	94	231	352

Magnitude and probability of annual high flow based on 11 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	77	360	857	--	--	--
3	64	304	743	--	--	--
7	50	236	585	--	--	--
15	39	188	480	--	--	--
30	30	142	358	--	--	--
60	22	100	243	--	--	--
90	17	76	184	--	--	--

Magnitude and probability of seasonal low flow from July-October based on 10 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	0.00	0.00	0.00	0.00	--	--
3	.00	.00	.00	.00	--	--
7	.00	.00	.00	.00	--	--
14	.00	.00	.00	.00	--	--
30	.04	.00	.00	.00	--	--

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	39	0.00	7.5	13	11
November	6.6	.00	2.5	2.6	11
December	5.3	.00	1.3	1.9	11
January	1.6	.00	.49	.59	11
February	5.4	.00	1.5	2.0	11
March	254	.18	34	74	11
April	779	.63	96	228	11
May	422	.46	55	125	11
June	235	.00	27	69	11
July	110	.00	20	34	11
August	58	.00	7.8	17	11
September	128	.00	14	38	11
Annual	141	.88	22	41	11

06185500 Missouri River near Culbertson, Mont.
Site Number 136

LOCATION.--Lat 48°07'30", long 104°28'20" (NAD 27), in SE¼NW¼ sec.3, T.27 N., R.56 E., Richland County, Hydrologic Unit 10060005, on right bank at upstream side of bridge on State Highway 16, 2.5 mi southeast of Culbertson, 10 mi downstream from Big Muddy Creek, and at river mile 1,620.76.
DRAINAGE AREA.--91,557 mi^2.
PERIOD OF RECORD.--July 1941 to December 1951, April 1958 to current year (2002).
REVISED RECORDS.--WSP 1729: Drainage area.
GAGE.--Water-stage recorder. Altitude of gage is 1,883.4 ft (NGVD 29, U.S. Army Corps of Engineers bench mark). July 1 to Nov. 6, 1941, water-stage recorder at site 400 ft upstream at datum 0.11 ft higher. Nov. 7, 1941, to Aug. 17, 1950, water-stage recorder at site 580 ft downstream at present datum. Aug. 18, 1950, to Dec. 31, 1951, nonrecording gage on bridge at present datum. Apr. 1, 1958, to Nov. 1, 1967, water-stage recorder at site 580 ft downstream at present datum.
REMARKS.--Flow partly regulated by Fort Peck Lake (station number 06131500) and many other reservoirs upstream from station. Diversions for irrigation of about 1,030,400 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

Magnitude and probability of annual low flow
based on 52 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	4,560	2,550	1,740	1,220	785	568
3	4,690	2,630	1,810	1,280	827	602
7	4,910	2,790	1,940	1,380	908	668
14	5,170	3,020	2,140	1,550	1,040	781
30	5,790	3,530	2,550	1,880	1,280	961
60	6,550	4,010	2,900	2,130	1,440	1,090
90	7,150	4,460	3,250	2,410	1,650	1,250
120	7,680	5,030	3,810	2,940	2,110	1,660
183	8,560	6,260	5,230	4,460	3,690	3,230

Magnitude and probability of seasonal low flow from
March-June based on 54 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,530	3,070	2,090	1,460	937	676
3	5,630	3,140	2,150	1,520	977	710
7	5,860	3,280	2,260	1,600	1,040	759
14	6,160	3,520	2,480	1,790	1,200	899
30	6,910	4,150	3,020	2,250	1,570	1,210

Magnitude and probability of seasonal low flow from
November-February based on 54 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,220	2,780	1,820	1,230	794	574
3	5,440	2,880	1,890	1,290	837	610
7	5,800	3,140	2,100	1,430	924	677
14	6,230	3,430	2,300	1,580	1,050	796
30	7,080	4,050	2,750	1,890	1,300	992

Duration of daily mean flows based on 54 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
1,230	1,460	2,890	4,420	6,230	7,250	8,270	9,510
40%	30%	20%	15%	10%	5%	2%	1%
10,900	12,400	14,500	15,500	16,600	20,700	24,700	30,600

Magnitude and probability of annual high flow
based on 54 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	19,300	28,100	35,400	46,600	56,600	68,000
3	18,800	26,800	33,200	42,600	50,700	59,800
7	18,100	25,300	30,700	38,300	44,600	51,500
15	17,200	23,300	27,700	33,800	38,600	43,700
30	15,900	21,200	25,000	30,200	34,400	38,700
60	14,400	18,900	22,100	26,400	29,800	33,300
90	13,300	17,100	19,800	23,300	26,100	28,900

Magnitude and probability of seasonal low flow from
July-October based on 55 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	5,960	3,380	2,380	1,720	1,150	866
3	6,140	3,480	2,440	1,760	1,180	883
7	6,450	3,650	2,550	1,830	1,220	907
14	6,760	3,880	2,740	2,000	1,350	1,020
30	7,350	4,380	3,180	2,380	1,670	1,290

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	28,600	1,240	10,700	5,930	55
November	22,400	1,130	9,260	4,420	55
December	13,300	1,060	9,140	2,830	55
January	14,400	1,010	9,910	3,480	54
February	17,400	1,170	10,500	4,400	54
March	20,700	2,670	10,400	4,330	54
April	32,800	1,960	10,500	5,590	55
May	26,200	1,350	9,540	4,770	55
June	26,600	1,370	9,740	4,780	55
July	37,000	1,270	10,200	5,340	56
August	25,300	3,820	11,400	4,720	56
September	26,600	3,770	11,100	5,440	56
Annual	16,600	4,080	10,200	2,860	54

06186500 Yellowstone River at Yellowstone Lake outlet, Yellowstone National Park, Wyo.
Site Number 137

LOCATION.--Lat 44°34'03", long 110°22'48" (NAD 27), Yellowstone National Park, Hydrologic Unit 10070001, on left bank 450 ft downstream from Fishing Bridge, 0.3 mi downstream from outlet of Yellowstone Lake, and at river mile 616.4.

DRAINAGE AREA.--991 mi^2.

PERIOD OF RECORD.--December 1922 to September 1982, October 1983 to September 1986, October 1988 to current year (2002). Prior to October 1926, gage heights only. Monthly discharge only for winter periods in water years 1927-30, 1932-33, 1935-38, 1940, 1942-46 published in WSP 1309; figures of daily discharge for these months published in WSP 646, 666, 686, 701, 731, 746, 786, 806, 826, 856, 896, 956, 976, 1006, 1036, and 1056, have been found to be unreliable and were not used in analysis.

REVISED RECORDS.--WSP 1309: See PERIOD OF RECORD. WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,729.58 ft (NGVD 29). Prior to Oct. 2, 1928, nonrecording gage at site 450 ft upstream at datum 1.07 ft higher.

REMARKS.--No diversion or regulation upstream from station. U.S. Geological Survey satellite telemeter at station.

Magnitude and probability of annual low flow based on 71 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	293	204	166	138	111	96
3	294	206	167	140	113	98
7	297	208	170	143	116	101
14	303	214	175	147	120	104
30	318	227	187	158	129	112
60	356	264	223	191	160	141
90	402	309	267	235	202	182
120	454	354	308	274	238	217
183	644	506	441	392	340	309

Magnitude and probability of seasonal low flow from March-June based on 73 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	404	280	221	177	134	109
3	406	281	222	177	134	109
7	410	285	225	181	137	112
14	420	294	233	187	142	116
30	450	323	260	211	162	134

Magnitude and probability of seasonal low flow from November-February based on 73 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	342	236	189	155	122	103
3	342	237	191	157	125	106
7	344	240	194	160	128	109
14	349	244	198	164	131	112
30	358	252	205	170	136	117

Duration of daily mean flows based on 73 years of record

Discharge, in ft^3/s, which was equaled or exceeded for indicated percent of time							
99%	98%	95%	90%	80%	70%	60%	50%
167	200	265	328	427	510	607	708
40%	30%	20%	15%	10%	5%	2%	1%
909	1,310	2,130	2,770	3,570	4,700	5,890	7,010

Magnitude and probability of annual high flow based on 73 years of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and exceedance probability, in percent					
	2	5	10	25	50	100
	50%	20%	10%	4%	2%	1%
1	4,780	6,310	7,230	8,300	9,050	9,750
3	4,770	6,300	7,210	8,280	9,020	9,720
7	4,740	6,250	7,160	8,230	8,970	9,660
15	4,660	6,140	7,030	8,070	8,800	9,480
30	4,450	5,820	6,630	7,580	8,230	8,840
60	3,890	5,000	5,650	6,380	6,870	7,320
90	3,320	4,230	4,740	5,320	5,710	6,060

Magnitude and probability of seasonal low flow from July-October based on 71 seasons of record

Period of consecutive days	Discharge, in ft^3/s, for indicated recurrence interval, in years, and non-exceedance probability, in percent					
	2	5	10	20	50	100
	50%	20%	10%	5%	2%	1%
1	671	532	468	420	370	339
3	679	538	474	425	374	343
7	693	549	484	434	382	350
14	718	570	501	449	396	363
30	785	621	543	484	423	386

Monthly and annual mean discharges

Month	Maximum (ft^3/s)	Minimum (ft^3/s)	Mean (ft^3/s)	Standard deviation (ft^3/s)	Years of record
October	1,260	327	800	213	73
November	984	276	606	162	73
December	775	246	475	134	73
January	700	168	398	135	73
February	637	122	387	133	73
March	717	130	446	133	73
April	801	175	543	118	73
May	2,210	604	1,160	391	73
June	8,570	1,710	3,700	1,220	73
July	7,160	1,270	4,050	1,380	73
August	4,030	812	2,210	723	73
September	1,950	538	1,210	344	73
Annual	2,250	682	1,340	318	73