

12362500 SOUTH FORK FLATHEAD RIVER NEAR COLUMBIA FALLS, MTPend Oreille Basin
South Fork Flathead Subbasin

LOCATION.--Lat 48°21'24", long 114°02'12" referenced to North American Datum of 1927, in SW ¼ SE ¼ SW ¼ sec.16, T.30 N., R.19 W., Flathead County, MT, Hydrologic Unit 17010209, on right bank 1.7 mi downstream from Hungry Horse Dam, 6.8 mi east of Columbia Falls, and at river mile 3.5.

DRAINAGE AREA.--1,663 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1910 to January 1911 (discharge measurements only), February 1911 to September 1913 (no winter records), October 1913 to August 1916 (scattered daily discharge only), water years 1917-22 (annual maximum), April 1923 to November 1924 (no winter records), July to October 1925, May to November 1927, May 1928 to current year. Monthly discharge only for some periods, published in Water Supply Paper (WSP) 1316.

REVISED RECORDS.-- WSP 1216: Drainage area. WSP 1316: 1923-24, maximum discharge (M); 1926-27 (M); 1932 (M); 1935-36 (M). WSP 1636: 1958, adjusted runoff.

GAGE.--Water-stage recorder. Elevation of gage is 3,040 ft, referenced to National Geodetic Vertical Datum of 1929 (levels by the U.S. Bureau of Reclamation). September 1910 to September 1916, nonrecording gage, Apr. 23, 1923, to Sept. 30, 1928, water-stage recorder at site 3 mi downstream at different elevation. Oct. 1, 1928, to Sept. 30, 1952, water-stage recorder at site 1.5 mi downstream at different elevation.

REMARKS.--Records are good. Flow regulated by Hungry Horse Reservoir since Sept. 21, 1951 (see preceding page). U.S. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--79 years (water years, 1929-2007), 3,489 ft³/s, 28.49 in/yr, 2,528,500 acre-ft/yr, adjusted for change in contents in Hungry Horse Reservoir since Oct. 1, 1951.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 46,200 ft³/s, June 19, 1916, gage height, 16.6 ft, site and elevation then in use, from rating curve extended above 20,000 ft³/s; minimum observed, 7.3 ft³/s, Sept. 24, 1951, gage height, 0.52 ft, dam closure, site and elevation then in use; minimum daily, 7.3 ft³/s, Sept. 24, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,250 ft³/s, Apr. 3, gage height, 9.21 ft; minimum daily, 912 ft³/s, Nov. 9.

12362500 SOUTH FORK FLATHEAD RIVER NEAR COLUMBIA FALLS, MT—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,500	2,780	1,030	2,240	2,530	2,420	5,170	6,700	6,140	4,120	4,370	3,890
2	2,520	2,910	1,010	2,080	2,510	2,530	5,200	7,670	6,160	4,120	4,310	3,380
3	2,530	2,880	1,030	1,720	2,480	2,600	7,230	7,800	6,140	4,400	4,360	2,880
4	2,560	2,830	1,030	1,670	2,470	2,580	5,450	7,780	6,150	4,400	4,340	2,690
5	2,590	2,740	1,050	1,730	2,430	2,540	5,210	7,770	3,220	4,380	4,320	2,500
6	2,620	2,590	1,110	1,810	2,350	2,530	5,170	7,760	3,210	4,380	4,330	2,380
7	2,620	1,320	1,200	1,830	2,310	2,450	5,170	7,770	3,160	4,420	4,320	2,490
8	2,630	928	1,240	1,870	2,310	2,330	5,210	7,750	3,160	4,410	4,300	2,460
9	2,650	912	1,350	1,860	2,420	2,190	5,200	7,750	3,150	4,370	4,310	2,440
10	2,640	938	1,390	1,860	2,420	2,140	5,200	7,770	3,190	4,320	4,310	2,460
11	2,730	943	1,430	2,140	2,430	2,060	5,180	7,760	3,180	4,330	4,300	2,460
12	2,730	935	1,440	2,450	2,430	1,630	5,210	7,770	3,120	4,320	4,330	2,480
13	2,650	970	1,440	2,700	2,520	1,040	5,190	7,790	3,100	4,300	4,330	2,570
14	2,790	1,040	1,410	2,620	2,550	1,040	3,210	7,750	3,520	4,280	4,300	2,560
15	2,710	1,060	1,380	2,680	2,490	1,010	3,150	6,220	4,130	4,320	4,290	2,490
16	2,640	1,060	1,260	2,740	2,470	1,000	3,150	6,250	4,100	4,260	4,340	2,490
17	2,590	1,030	1,590	2,630	2,450	1,000	3,140	6,220	4,110	4,310	4,310	2,480
18	2,620	1,010	2,070	2,480	2,440	1,020	3,150	6,260	4,070	4,290	4,310	2,570
19	2,690	996	2,110	2,320	2,440	1,920	3,150	6,240	4,060	4,290	4,310	2,450
20	2,640	1,030	2,010	2,210	2,400	2,870	3,160	6,210	4,070	4,280	4,330	2,500
21	2,620	1,060	2,000	2,210	2,340	2,850	3,150	6,210	4,100	4,330	4,340	2,470
22	2,590	1,010	1,910	2,280	2,410	2,860	3,130	6,200	4,380	4,280	4,370	2,450
23	2,600	998	1,750	2,240	2,450	2,860	3,140	6,160	4,700	4,290	4,340	2,490
24	2,630	1,000	1,760	2,230	2,450	2,870	3,140	6,140	4,640	4,310	4,380	3,540
25	2,640	988	1,720	2,160	2,440	2,880	3,150	6,140	4,630	4,330	4,370	3,240
26	2,670	986	1,710	2,230	2,440	4,140	3,140	6,120	4,630	4,330	4,390	2,820
27	2,670	995	1,700	2,360	2,430	5,240	3,150	6,140	4,060	4,360	4,370	2,480
28	2,730	1,010	1,710	2,520	2,420	5,240	3,160	6,150	4,100	4,300	4,380	2,600
29	2,740	1,010	1,950	2,590	---	5,240	3,130	6,150	4,100	4,330	4,390	2,560
30	2,720	1,040	2,220	2,650	---	5,190	4,630	6,150	4,130	4,280	4,370	2,550
31	2,720	---	2,280	2,640	---	5,170	---	6,160	---	4,360	4,380	---
Total	81,980	40,999	48,290	69,750	68,230	83,440	124,820	212,710	124,610	133,800	134,500	79,820
Mean	2,645	1,367	1,558	2,250	2,437	2,692	4,161	6,862	4,154	4,316	4,339	2,661
Max	2,790	2,910	2,280	2,740	2,550	5,240	7,230	7,800	6,160	4,420	4,390	3,890
Min	2,500	912	1,010	1,670	2,310	1,000	3,130	6,120	3,100	4,120	4,290	2,380
Med	2,640	1,010	1,440	2,240	2,440	2,530	3,190	6,250	4,100	4,320	4,330	2,500
Ac-ft	162,600	81,320	95,780	138,300	135,300	165,500	247,600	421,900	247,200	265,400	266,800	158,300
Cfs/m	1.59	0.82	0.94	1.35	1.47	1.62	2.50	4.13	2.50	2.60	2.61	1.60
In.	1.83	0.92	1.08	1.56	1.53	1.87	2.79	4.76	2.79	2.99	3.01	1.79

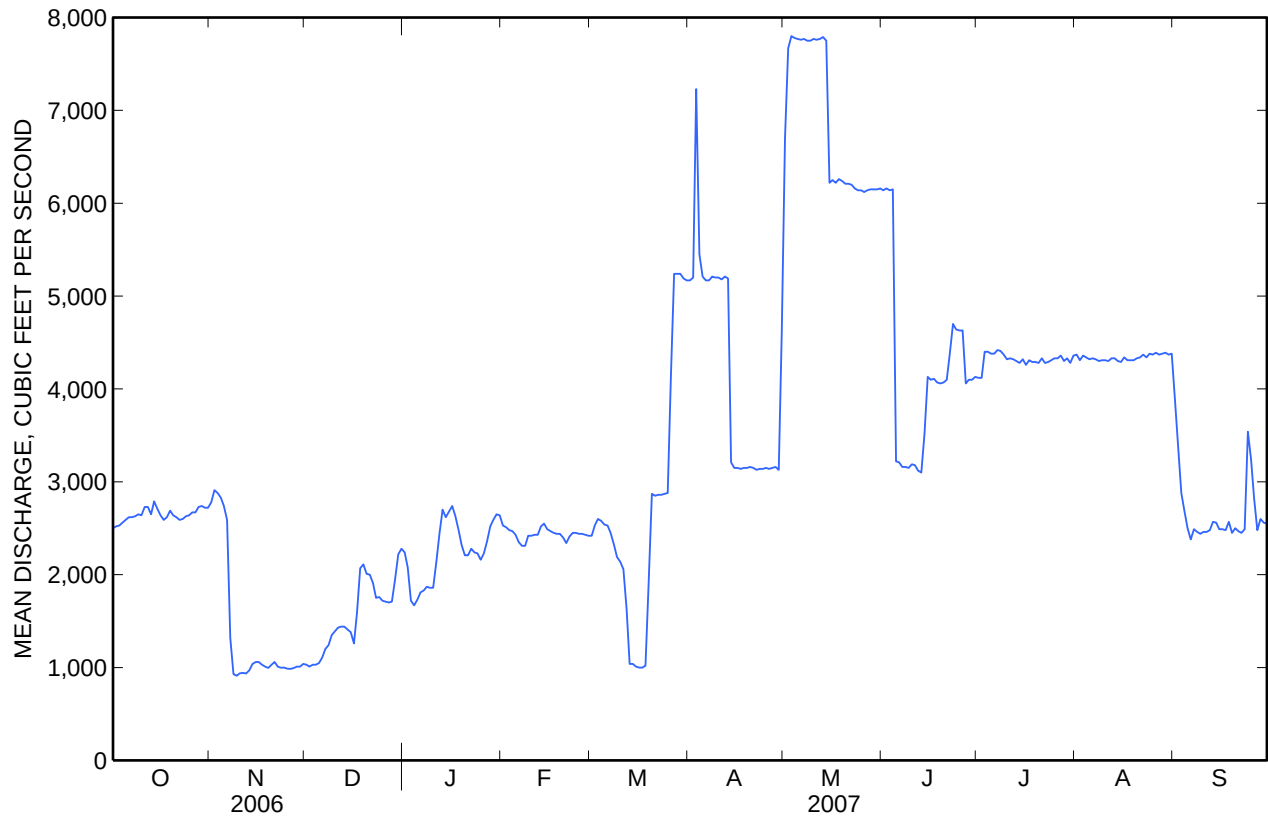
ADJUSTED FOR CHANGE IN CONTENTS IN HUNGRY HORSE RESERVOIR

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	514	3,248	1,200	932	959	4,090	4,850	11,790	7,213	1,714	696	476
Cfs/m	0.31	1.95	0.72	0.56	0.58	2.46	2.92	4.09	4.34	1.03	0.42	0.29
In.	0.36	2.18	0.83	0.65	0.60	2.84	3.25	8.17	4.84	1.19	0.48	0.32
Ac-ft	31,600	193,300	73,780	57,300	53,300	251,500	288,600	724,900	429,200	105,400	42,800	28,300

12362500 SOUTH FORK FLATHEAD RIVER NEAR COLUMBIA FALLS, MT—Continued

OBSERVED									
Calendar Year 2006	Total	1,398,927	Mean	3,833	Max	11,700	Min	717	Ac-ft 2,775,000
Water Year 2007	Total	1,202,949	Mean	3,296	Max	7,800	Min	912	Ac-ft 2,286,000

ADJUSTED									
Calendar Year 2006	Total	1,409,629	Mean	3,862	Cfsm	2.32	In	31.52	Ac-ft 2,796,000
Water Year 2007	Total	1,099,067	Mean	3,011	Cfsm	1.81	In	24.58	Ac-ft 2,180,000



12362500 SOUTH FORK FLATHEAD RIVER NEAR COLUMBIA FALLS, MT—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--March 2007 to September 2007.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1964 to September 1968, March 1979 to current year.

INSTRUMENTATION.--Temperature recorder since Mar. 30, 1979.

REMARKS.--Prior to March 1979, thermograph records furnished by Montana Department of Fish, Wildlife, and Parks. Daily temperature record is rated excellent. Missing water temperature data for June 20, 27 to and July 2-9 due to equipment problems. Several unpublished observations of specific conductance and water temperature were made during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 19.0°C Aug. 9-11, 1966, Aug. 2-6, 1968, Aug. 6, 2003; minimum (water years 1965-68, 1979-81, 1983-88), 2.0°C on many days during winter most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 18.0°C, July 18 and 22, minimum, 3.0°C, Jan. 14, 15, 16. Maximum water temperature may have been higher during the period of missing record from July 2-9.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 1 of 3

Date	Time	Instantaneous dis- charge, cfs (00061)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)
Mar 26...	1100	3,950	652	10.6	93	7.4	151	6.5	3.5	85	24.4	5.74	.37
Apr 16...	1330	3,140	683	12.0	102	7.7	152	13.5	4.0	79	22.8	5.36	.34
30...	1245	5,150	690	10.6	89	8.0	155	15.5	4.0	78	22.3	5.42	.35
May 14...	1345	7,790	688	12.4	105	7.9	156	16.5	4.0	80	22.8	5.52	.33
Jun 04...	1200	6,180	682	11.6	99	8.0	153	29.0	4.0	82	23.6	5.66	.38
18...	1200	4,010	682	9.5	99	8.2	144	13.5	12.0	76	21.6	5.45	.30
Jul 18...	1000	4,330	681	9.4	110	8.3	144	22.5	17.5	76	21.8	5.17	.24
Aug 08...	1030	4,200	682	9.2	106	8.2	142	19.5	16.5	74	20.8	5.36	.33

12362500 SOUTH FORK FLATHEAD RIVER NEAR COLUMBIA FALLS, MT—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 3

[Remark codes: <, less than; E, estimated.]

Date	Sodium adsorp- tion ratio (00931)	Sodium, water, flt'd, mg/L (00930)	Alka- linity, wat flt end lab, mg/L as CaCO3 (29801)	Chlor- ide, water, flt'd, mg/L (00940)	Fluor- ide, water, flt'd, mg/L (00950)	Silica, water, flt'd, mg/L (00955)	Sulfate water, flt'd, mg/L (00945)	Dis- solved, sum of consti- tuents mg/L (70301)	Dis- solved, solids, tons/ acre-ft (70303)	Dis- solved, solids, tons/d (70302)	Ammonia water, flt'd, mg/L as N (00608)	Nitrite + nitrate water flt'd, mg/L as N (00631)	Nitrite water, flt'd, mg/L as N (00613)
Mar													
26...	.0	.79	80	.18	<.10	4.23	2.05	86	.12	921	<.020	.083	<.002
Apr													
16...	.0	.74	81	.24	<.10	4.20	1.67	84	.11	713	<.020	.080	<.002
30...	.0	.78	80	.15	<.10	4.31	2.10	84	.11	1,170	<.020	.080	<.002
May													
14...	.0	.77	82	E.10	<.10	4.32	2.13	E85	E.12	E1,790	<.020	.082	<.002
Jun													
04...	.0	.78	83	.19	<.10	4.25	2.11	87	.12	1,450	<.020	.075	<.002
18...	.0	.71	77	.14	E.05	3.95	1.73	80	.11	867	<.020	.049	<.002
Jul													
18...	.0	.65	76	.15	<.10	3.40	1.77	79	.11	922	<.020	.021	E.002
Aug													
08...	.0	.70	76	.15	<.10	3.32	1.72	78	.11	884	<.020	.019	E.001

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 3

[Remark codes: <, less than; E, estimated.]

Date	Total nitro- gen, water, unflt'd, mg/L (62855)	Ortho- phos- phate, water, flt'd, mg/L as P (00671)	Total phos- phorus, water, unflt'd mg/L (00665)	Organic carbon, water, unflt'd mg/L (00680)	Chloro- phyll a phyto- plank- ton, fluoro, µg/L (70953)	Pheo- phytin a, phyto- plank- ton, µg/L (62360)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
Mar									
26...	.13	E.003	<.008	--	--	--	70	1	11
Apr									
16...	.11	<.006	<.008	--	--	--	84	1	8.5
30...	.14	<.006	<.008	--	--	--	89	1	14
May									
14...	.16	E.004	<.008	1.5	.2	<.1	86	1	21
Jun									
04...	.14	<.006	<.008	--	--	--	85	<1	E17
18...	.15	E.004	<.008	--	--	--	87	1	11
Jul									
18...	.08	E.003	<.008	--	--	--	93	1	12
Aug									
08...	.09	<.006	<.008	1.8	1.3	.3	87	1	11

12362500 SOUTH FORK FLATHEAD RIVER NEAR COLUMBIA FALLS, MT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	13.0	12.0	12.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	3.5	3.5
2	13.0	12.5	12.5	4.5	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5
3	12.5	12.0	12.0	4.5	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5
4	12.0	11.0	12.0	4.5	4.5	4.5	4.0	4.0	4.0	3.5	3.5	3.5
5	12.5	11.5	12.0	4.5	4.5	4.5	4.0	4.0	4.0	4.0	3.5	3.5
6	12.5	12.0	12.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	3.5	3.5
7	12.0	10.5	11.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	3.5	3.5
8	11.5	10.5	11.0	4.5	4.0	4.5	4.0	4.0	4.0	4.0	3.5	4.0
9	12.0	10.5	11.5	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
10	12.0	11.5	11.5	4.5	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0
11	11.5	10.5	11.0	4.5	4.0	4.5	4.0	4.0	4.0	4.0	3.5	4.0
12	11.5	9.0	10.0	4.5	4.5	4.5	4.0	4.0	4.0	4.0	3.5	3.5
13	9.5	7.5	8.5	4.5	4.0	4.5	4.0	4.0	4.0	4.0	3.5	3.5
14	7.5	5.5	6.5	4.5	4.0	4.0	4.0	4.0	4.0	3.5	3.0	3.5
15	6.0	5.5	5.5	4.5	4.0	4.5	4.0	4.0	4.0	3.5	3.0	3.5
16	5.5	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.0	3.5
17	4.0	4.0	4.0	4.5	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5
18	4.0	4.0	4.0	4.5	4.0	4.0	4.0	3.5	4.0	3.5	3.5	3.5
19	4.5	4.0	4.0	4.5	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5
20	4.0	4.0	4.0	4.5	4.0	4.5	4.0	3.5	4.0	4.0	3.5	3.5
21	4.0	4.0	4.0	4.5	4.5	4.5	4.0	3.5	4.0	4.0	3.5	3.5
22	4.5	4.0	4.0	4.5	4.5	4.5	4.0	4.0	4.0	3.5	3.5	3.5
23	4.5	4.0	4.5	4.5	4.0	4.5	4.0	4.0	4.0	3.5	3.5	3.5
24	4.5	4.0	4.0	4.5	4.0	4.5	4.0	3.5	4.0	3.5	3.5	3.5
25	4.5	4.0	4.0	4.5	4.0	4.0	4.0	3.5	4.0	3.5	3.5	3.5
26	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0	3.5	3.5	3.5
27	4.5	4.0	4.0	4.0	3.5	4.0	4.0	3.5	4.0	3.5	3.5	3.5
28	4.5	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0	3.5	3.5	3.5
29	4.5	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0	3.5	3.5	3.5
30	4.5	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	3.5
31	4.5	4.0	4.5	---	---	---	4.0	3.5	3.5	3.5	3.5	3.5
Month	13.0	4.0	7.5	4.5	3.5	4.0	4.0	3.5	4.0	4.0	3.0	3.5

12362500 SOUTH FORK FLATHEAD RIVER NEAR COLUMBIA FALLS, MT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5
4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5
7	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
9	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
10	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	4.0	4.0
11	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
12	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
13	3.5	3.5	3.5	4.0	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5
14	3.5	3.5	3.5	4.0	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5
15	3.5	3.5	3.5	4.0	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5
16	3.5	3.5	3.5	4.0	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5
17	3.5	3.5	3.5	4.0	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
18	3.5	3.5	3.5	4.0	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
19	3.5	3.5	3.5	4.0	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5
20	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0
21	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5
22	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5	4.0	3.5	3.5
23	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5	4.0	3.5	3.5
24	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5	4.0	3.5	3.5
25	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	3.5	4.0	3.5	4.0
26	3.5	3.5	3.5	3.5	3.5	3.5	4.0	3.5	4.0	4.0	3.5	4.0
27	3.5	3.5	3.5	3.5	3.5	3.5	4.0	4.0	4.0	4.0	3.5	4.0
28	3.5	3.5	3.5	3.5	3.5	3.5	4.0	4.0	4.0	4.0	3.5	4.0
29	---	---	---	3.5	3.5	3.5	4.0	4.0	4.0	4.0	3.5	4.0
30	---	---	---	3.5	3.5	3.5	4.0	3.5	4.0	4.0	3.5	3.5
31	---	---	---	3.5	3.5	3.5	---	---	---	4.0	3.5	4.0
Month	3.5	3.5	3.5	4.0	3.5	3.5	4.0	3.5	3.5	4.0	3.5	4.0

12362500 SOUTH FORK FLATHEAD RIVER NEAR COLUMBIA FALLS, MT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	4.0	3.5	3.5	14.0	13.0	13.5	15.0	13.0	14.0	15.0	12.5	14.0
2	4.0	3.5	3.5	---	---	---	15.5	13.5	14.5	16.0	14.5	15.0
3	4.0	3.5	4.0	---	---	---	15.5	14.0	15.0	16.0	14.0	15.0
4	4.0	3.5	4.0	---	---	---	16.0	13.0	14.5	15.5	14.5	15.0
5	4.0	3.5	4.0	---	---	---	16.0	14.5	15.5	15.0	13.5	14.0
6	4.0	3.5	4.0	---	---	---	16.5	14.0	15.0	15.0	14.0	14.5
7	4.0	3.5	4.0	---	---	---	17.5	14.0	16.0	15.0	13.0	14.0
8	4.0	3.5	4.0	---	---	---	17.0	15.0	16.0	14.5	11.5	13.5
9	4.0	3.5	4.0	---	---	---	15.5	14.0	14.5	15.0	13.5	14.0
10	4.0	4.0	4.0	16.5	14.0	15.5	15.0	12.0	13.5	15.5	14.0	15.0
11	4.0	3.5	4.0	16.5	14.5	15.5	15.5	10.5	13.0	15.5	14.5	15.0
12	6.0	3.5	4.5	16.5	15.0	16.0	15.0	12.5	14.0	15.5	13.5	14.5
13	9.5	6.0	8.0	16.5	15.5	16.0	15.5	13.5	14.5	15.0	14.5	15.0
14	12.5	9.0	11.0	17.0	15.5	16.0	15.0	13.5	14.0	15.0	12.5	13.5
15	11.5	10.5	11.0	17.0	16.0	16.5	14.5	13.0	14.0	14.5	13.5	14.0
16	12.0	10.0	11.5	16.5	15.0	16.0	15.0	13.5	14.0	14.0	12.0	13.5
17	11.5	10.0	10.5	17.0	14.5	15.5	15.0	13.5	14.0	14.0	12.5	13.0
18	12.0	11.0	11.5	18.0	15.5	17.0	15.0	13.5	14.0	14.0	11.0	13.0
19	12.5	11.0	12.0	17.5	13.5	15.5	14.5	13.5	14.0	13.5	11.0	12.5
20	---	---	---	16.5	14.0	15.0	14.5	11.5	13.0	13.5	12.5	13.0
21	13.0	12.0	12.5	17.0	14.5	15.5	14.0	12.5	13.5	13.5	11.5	12.5
22	13.0	12.0	12.5	18.0	15.5	16.5	15.5	13.0	14.0	13.0	12.5	13.0
23	13.0	12.0	12.5	17.5	15.0	16.0	15.0	13.5	14.5	13.0	10.5	11.5
24	12.5	11.5	12.5	15.5	13.0	14.0	15.0	13.0	14.0	13.0	10.0	11.5
25	12.5	11.0	11.5	15.0	13.5	14.5	15.5	13.5	14.5	12.5	12.0	12.5
26	12.5	10.5	12.0	16.5	14.5	15.5	15.5	11.0	13.5	12.0	11.5	12.0
27	---	---	---	17.0	15.0	16.0	15.0	12.5	13.5	12.5	11.5	12.0
28	14.0	13.0	13.5	17.0	15.5	16.0	14.5	12.5	13.5	12.5	11.5	12.5
29	14.0	12.5	13.5	16.5	14.5	15.5	15.0	13.5	14.5	12.0	10.0	11.0
30	13.5	12.0	13.0	16.5	14.5	15.5	15.0	13.5	14.5	12.0	10.5	11.5
31	---	---	---	16.0	13.0	14.0	15.0	14.0	14.5	---	---	---
Month	---	---	---	---	---	---	17.5	10.5	14.2	16.0	10.0	13.4