12370000 SWAN RIVER NEAR BIGFORK, MT

Pend Oreille Basin
Swan Subbasin

LOCATION.--Lat 48°01′28″, long 113°58′44″ referenced to North American Datum of 1927, in SH ¼ SW ¼ sec.11, T.26 N., R.19 W., Lake County, MT, Hydrologic Unit 17010211, on left bank 0.2 mi downstream from Johnson Creek, 0.4 mi downstream from Swan Lake, 5.1 mi southeast of Bigfork, and at river mile 14.0.

DRAINAGE AREA.--671 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1910 to May 1911 (gage heights only), April 1922 to current year. Monthly discharge only for some periods, published in Water Supply Paper (WSP) 1316.

REVISED RECORDS.-- WSP 1216: Drainage area. WSP 1246: 1923-24, maximum discharge; 1930. WSP 1316: 1923.

GAGE.--Water-stage recorder. Elevation of gage is 3,062.6 ft, referenced to National Geodetic Vertical Datum of 1929 (from river-profile survey). Oct. 10, 1910, to May 22, 1911, nonrecording gage at site 10 mi upstream at different elevation. Apr. 28, 1922, to Oct. 14, 1930, nonrecording gage at site 800 ft upstream at elevation 1.9 ft higher.

REMARKS.--Records are good. Diversions for irrigation include about 360 acres upstream from station. U.S. Geological Survey satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	386	406	638	480	385	450	1,400	1,640	2,070	1,350	561	382
2	378	394	624	475	381	440	1,340	1,760	2,170	1,310	551	379
3	373	397	619	492	374	430	1,290	2,040	2,330	1,260	531	377
4	366	403	597	515	374	420	1,220	2,370	2,540	1,220	516	367
5	369	419	579	529	380	420	1,170	2,440	2,760	1,180	501	362
6	362	461	581	527	386	417	1,130	2,310	3,130	1,140	500	362
7	360	537	560	523	393	425	1,090	2,120	3,450	1,090	492	358
8	365	929	549	512	404	452	1,040	1,950	3,390	1,060	481	354
9	359	1,710	535	509	418	479	1,030	1,850	3,090	1,030	474	353
10	359	2,030	526	500	432	508	1,050	1,970	2,830	996	474	353
11	350	1,900	524	490	443	534	1,080	2,250	2,710	965	470	348
12	352	1,700	520	448	462	616	1,100	2,530	2,670	931	460	343
13	349	1,510	523	400	472	890	1,110	2,790	2,560	903	449	339
14	348	1,320	537	373	468	1,270	1,100	3,040	2,380	865	442	333
15	356	1,200	570	367	470	1,420	1,080	3,130	2,220	842	437	329
16	371	1,070	588	364	471	1,430	1,090	2,980	2,070	821	428	331
17	383	983	591	367	479	1,440	1,100	2,850	1,990	818	421	324
18	395	896	545	374	484	1,480	1,120	2,870	1,990	824	415	333
19	406	841	499	390	487	1,570	1,180	3,060	2,000	820	411	350
20	430	796	473	406	492	1,650	1,220	3,200	1,960	811	421	356
21	462	788	463	416	490	e1,680	1,210	3,200	1,910	785	424	369
22	472	821	460	424	486	e1,670	1,170	3,050	1,860	766	427	372
23	461	838	462	434	480	1,670	1,130	2,800	1,850	737	428	373
24	454	832	458	438	476	1,630	1,120	2,530	1,810	703	425	392
25	438	824	475	429	470	1,590	1,120	2,360	1,790	683	421	400
26	431	813	488	424	466	1,620	1,160	2,210	1,730	673	404	395
27	424	768	514	420	462	1,690	1,220	2,050	1,640	644	396	400
28	421	739	524	404	457	1,690	1,290	1,990	1,530	630	392	385
29	418	700	524	393	---	1,630	1,350	2,050	1,440	608	391	387
30	423	666	512	382	---	1,550	1,490	2,070	1,400	582	386	387
31	420	---	494	384	---	1,460	---	2,050	---	573	380	---
Total	12,241	27,691	16,552	13,589	12,442	34,621	35,200	75,510	67,270	27,620	13,909	10,893
Mean	395	923	534	438	444	1,117	1,173	2,436	2,242	891	449	363
Max	472	2,030	638	529	492	1,690	1,490	3,200	3,450	1,350	561	400
Min	348	394	458	364	374	417	1,030	1,640	1,400	573	380	324
Ac-ft	24,280	54,930	32,830	26,950	24,680	68,670	69,820	149,800	133,400	54,780	27,590	21,610
Cfsm	0.59	1.38	0.80	0.65	0.66	1.66	1.75	3.63	3.34	1.33	0.67	0.54
In.	0.68	1.54	0.92	0.75	0.69	1.92	1.95	4.19	3.73	1.53	0.77	0.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	546	595	564	499	498	634	1,513	2,806	3,268	1,607	687	532
Max	1,682	1,514	1,796	1,298	1,627	1,813	3,228	5,469	5,803	3,310	1,225	1,096
(WY)	(1960)	(1928)	(1934)	(1934)	(1971)	(1986)	(1925)	(1928)	(1974)	(1950)	(1950)	(1965)
Min	308	290	307	271	236	244	675	1,670	1,433	609	322	285
(WY)	(1938)	(1937)	(1937)	(1930)	(1930)	(1930)	(1937)	(1941)	(1941)	(1941)	(1941)	(1988)

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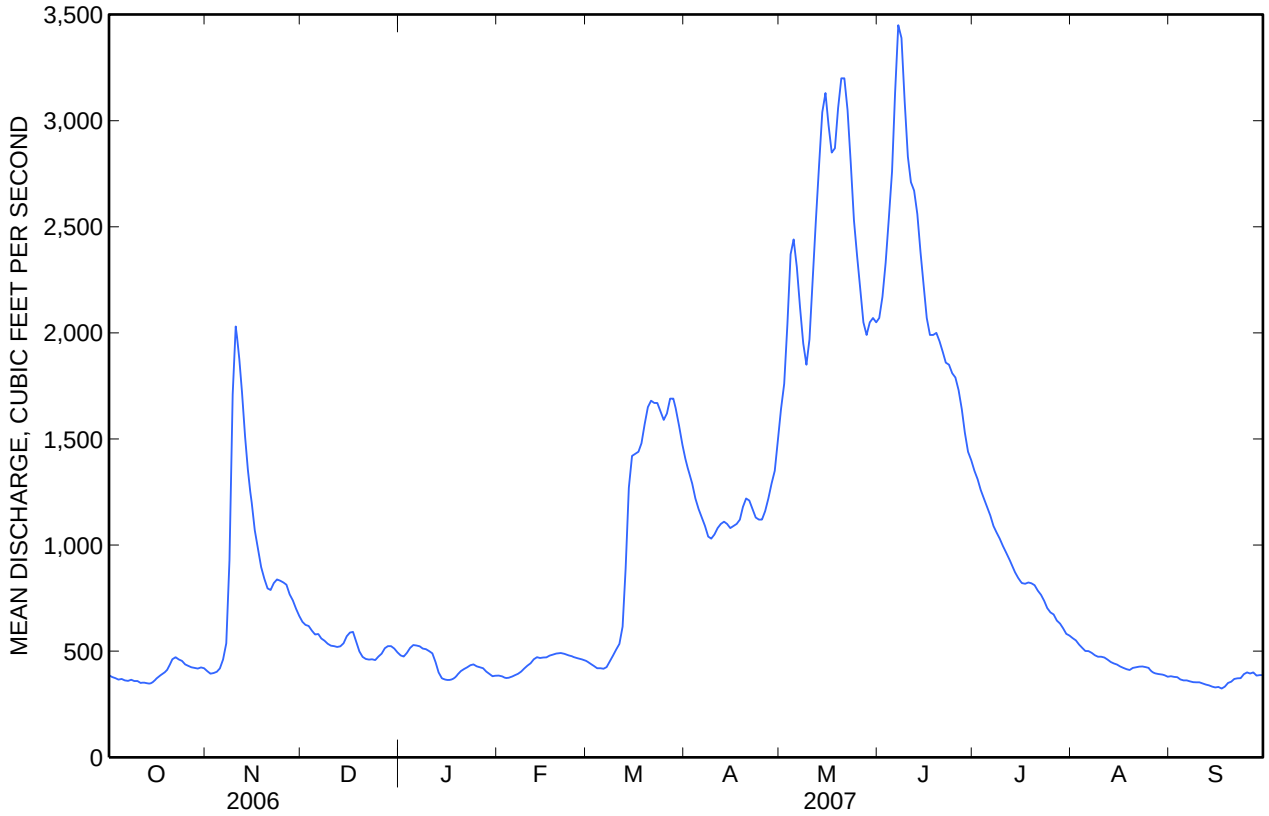
SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1922 - 2007	
Annual total	445,455		347,538			
Annual mean	1,220		952		1,147	
Highest annual mean					1,860	1928
Lowest annual mean					607	1941
Highest daily mean	6,040	Jun 18	3,450	Jun 7	8,800	Jun 21, 1974
Lowest daily mean	348	Oct 14	324	Sep 17	193	Jan 26, 1930
Annual seven-day minimum	353	Oct 9	333	Sep 12	195	Jan 26, 1930
Maximum peak flow			[a]3,510	Jun 7	8,890	Jun 20, 1974
Maximum peak stage			4.76	Jun 7	7.34	Jun 20, 1974
Instantaneous low flow			[b]299	Sep 18	[c]193	Jan 26, 1930
Annual runoff (ac-ft)	883,600		689,300		830,700	
Annual runoff (cfsm)	1.82		1.42		1.71	
Annual runoff (inches)	24.70		19.27		23.22	
10 percent exceeds	2,820		2,070		2,810	
50 percent exceeds	662		534		631	
90 percent exceeds	406		373		363	

[a] Also occurred on June 8, 2007.
[b] Gage height, 2.06 ft.
[c] Jan. 26-29, 1930; site and datum then in use.