

Water-Data Report 2013

**12370000 SWAN RIVER NEAR BIGFORK, MT**

Pend Oreille Basin  
Swan Subbasin

LOCATION.--Lat 48°01'27", long 113°58'44" referenced to North American Datum of 1983, in S ½ 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<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--May 1922 to current year. Monthly discharges only for May 1922 to December 1950 are 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 Several unpublished observations of water temperature and specific conductance were made during the year.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 2012 TO SEPTEMBER 2013**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	465	820	731	524	490	441	990	1,810	3,220	2,490	734	459
2	451	865	781	517	495	447	1,090	1,780	3,070	2,460	730	448
3	454	887	847	503	498	471	1,210	1,690	2,960	2,410	752	447
4	454	861	893	474	490	498	1,370	1,620	2,910	2,360	737	445
5	452	836	879	460	494	508	1,530	1,590	2,920	2,280	727	443
6	452	828	890	470	493	499	1,800	1,580	2,930	2,160	715	439
7	447	828	889	489	496	512	2,070	1,670	3,040	2,020	698	428
8	445	859	887	506	484	512	2,190	1,880	3,280	1,900	678	444
9	443	860	871	518	480	505	2,160	2,230	3,620	1,770	663	466
10	451	854	806	529	478	508	2,030	2,650	3,860	1,680	648	468
11	447	831	788	528	472	505	1,870	3,170	3,920	1,570	629	462
12	444	813	780	514	466	520	1,750	3,640	3,820	1,480	616	459
13	448	791	770	481	465	532	1,690	4,160	3,660	1,390	610	445
14	456	777	749	480	464	561	1,630	5,030	3,490	1,330	602	439
15	475	759	703	477	462	614	1,550	6,030	3,250	1,260	595	438
16	513	738	677	475	465	704	1,430	5,990	2,960	1,190	571	423
17	539	721	671	468	464	840	1,330	5,290	2,740	1,150	561	415
18	541	702	644	462	471	958	1,250	4,550	2,610	1,100	551	494
19	529	699	643	462	467	993	1,180	4,000	2,630	1,070	539	577
20	525	686	637	461	462	1,000	1,170	3,660	2,870	1,040	524	606
21	526	720	605	458	459	1,010	1,270	3,490	3,040	1,000	510	595
22	520	739	604	454	458	1,010	1,370	3,380	3,000	971	503	583
23	518	748	591	446	461	993	1,410	3,720	2,810	942	493	581
24	528	748	582	454	458	950	1,390	4,150	2,590	911	490	576
25	524	773	590	459	455	900	1,370	4,170	2,440	881	486	571
26	518	786	553	464	454	852	1,360	3,850	2,420	859	480	567
27	526	751	547	473	452	835	1,360	3,470	2,470	830	475	566
28	546	713	546	480	446	821	1,420	3,230	2,490	796	475	555
29	592	698	545	483	---	820	1,570	3,160	2,500	775	475	562
30	671	703	534	481	---	849	1,740	3,170	2,500	754	470	575
31	760	---	532	478	---	906	---	3,240	---	745	463	---
<b>Total</b>	15,660	23,394	21,765	14,928	13,199	22,074	45,550	103,050	90,020	43,574	18,200	14,976
<b>Mean</b>	505	780	702	482	471	712	1,518	3,324	3,001	1,406	587	499
<b>Max</b>	760	887	893	529	498	1,010	2,190	6,030	3,920	2,490	752	606
<b>Min</b>	443	686	532	446	446	441	990	1,580	2,420	745	463	415
<b>Ac-ft</b>	31,060	46,400	43,170	29,610	26,180	43,780	90,350	204,400	178,600	86,430	36,100	29,700
<b>Cfsm</b>	0.75	1.16	1.05	0.72	0.70	1.06	2.26	4.95	4.47	2.09	0.87	0.74
<b>In.</b>	0.87	1.30	1.21	0.83	0.73	1.22	2.53	5.71	4.99	2.42	1.01	0.83

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2013, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	545	598	562	502	496	632	1,514	2,801	3,311	1,658	697	535
<b>Max</b>	1,682	1,514	1,796	1,298	1,627	1,813	3,228	5,469	5,803	4,704	1,442	1,096
<b>(WY)</b>	(1960)	(1928)	(1934)	(1934)	(1971)	(1986)	(1925)	(1928)	(1974)	(2011)	(2011)	(1965)
<b>Min</b>	308	290	307	271	236	244	636	1,670	1,433	609	322	285
<b>(WY)</b>	(1938)	(1937)	(1937)	(1930)	(1930)	(1930)	(2008)	(1941)	(1941)	(1941)	(1941)	(1988)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1922 - 2013	
<b>Annual total</b>	531,654		426,390			
<b>Annual mean</b>	1,453		1,168		1,155	
<b>Highest annual mean</b>					1,860	1928
<b>Lowest annual mean</b>					607	1941
<b>Highest daily mean</b>	5,580	Jun 27	6,030	May 15	8,800	Jun 21, 1974
<b>Lowest daily mean</b>	428	Feb 17	415	Sep 17	193	Jan 26, 1930
<b>Annual seven-day minimum</b>	436	Feb 14	440	Sep 11	195	Jan 26, 1930
<b>Maximum peak flow</b>			6,210	May 15	8,890	Jun 20, 1974
<b>Maximum peak stage</b>			6.08	May 15	7.34	Jun 20, 1974
<b>Instantaneous low flow</b>					<sup>a</sup> 193	Jan 26, 1930
<b>Annual runoff (ac-ft)</b>	1,055,000		845,700		837,000	
<b>Annual runoff (cfsm)</b>	2.16		1.74		1.72	
<b>Annual runoff (inches)</b>	29.47		23.64		23.39	
<b>10 percent exceeds</b>	3,820		2,940		2,840	
<b>50 percent exceeds</b>	768		713		633	
<b>90 percent exceeds</b>	462		458		365	

<sup>a</sup>Jan. 26-29, 1930; site and datum then in use.

