

Water-Data Report 2013

06288400 BIGHORN RIVER AT TWO LEGGINS BRIDGE, NEAR HARDIN MT

Big Horn Basin
Little Bighorn Subbasin

LOCATION.--Lat 45°38'39", long 107°39'27" referenced to North American Datum of 1927, in SE ¼ SW ¼ NE ¼ sec.21, T.2 S., R.33 E., Big Horn County, MT, Hydrologic Unit 10080016, on Secondary Highway 313 bridge over the Bighorn River at Two Leggins Fishing Access about 5.3 miles southwest of Hardin MT.

DRAINAGE AREA.--20,610 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 2012 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,930 ft, referenced to the North American Vertical Datum of 1988.

REMARKS.--Records are fair. Since November 1965, flow has been regulated by Bighorn Lake (usable capacity, 1,312,000 acre-ft). Major regulation prior to November 1965 occurred from 14 reservoirs in Wyoming and one in Montana with a combined usable capacity of about 1,400,000 acre-ft. 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 Several unpublished observations of water temperature and specific conductance were made during the year.

06288400 BIGHORN RIVER AT TWO LEGGINS BRIDGE, NEAR HARDIN MT—Continued

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	1,360	1,600	1,960	1,910	1,920	1,870	1,800	1,420	2,090	1,640	1,550	1,790
2	1,340	1,600	1,960	1,920	1,910	1,890	1,800	1,380	1,870	1,640	1,740	1,790
3	1,340	1,610	1,970	1,930	1,910	1,920	1,790	1,430	1,660	1,620	1,780	1,770
4	1,370	1,610	1,780	1,940	1,910	1,880	1,790	1,410	1,630	1,620	1,800	1,740
5	1,470	1,610	1,810	1,940	1,910	1,880	1,790	1,420	1,610	1,650	1,800	1,750
6	1,460	1,620	1,820	1,950	1,910	1,880	1,780	1,530	1,590	1,640	1,810	1,780
7	1,430	1,620	1,840	1,960	1,910	1,880	1,790	1,490	1,550	1,670	1,820	1,810
8	1,440	1,620	1,880	1,960	1,900	1,870	1,820	1,480	1,500	1,680	1,800	1,860
9	1,450	1,630	1,900	2,000	1,900	1,870	1,790	1,510	1,500	1,680	1,850	1,810
10	1,420	1,650	1,920	2,000	1,900	1,870	1,780	1,500	1,480	1,670	1,840	1,780
11	1,380	1,640	1,950	2,010	1,890	1,870	1,770	1,500	1,510	1,700	1,850	1,770
12	1,370	1,640	1,980	2,010	1,880	1,870	1,770	1,510	1,570	1,750	1,840	1,740
13	1,450	1,660	1,950	1,990	1,880	1,850	1,780	1,530	1,720	1,710	1,830	1,750
14	1,530	1,750	1,800	2,000	1,890	1,860	1,780	1,540	1,800	1,700	1,850	1,900
15	1,520	1,750	1,830	1,970	1,890	1,870	1,780	1,520	1,780	1,690	1,880	1,860
16	1,530	1,760	1,820	1,890	1,890	1,890	1,800	1,560	1,760	1,650	1,880	1,990
17	1,570	1,780	1,830	1,910	1,890	1,880	1,780	1,600	1,750	1,660	1,860	1,900
18	1,600	1,790	1,840	1,920	1,900	1,860	1,780	1,640	1,730	1,640	1,850	1,820
19	1,580	1,790	1,850	1,930	1,880	1,820	1,770	1,820	1,700	1,640	1,840	1,820
20	1,570	1,790	1,860	1,930	1,890	1,810	1,760	2,050	1,710	1,640	1,810	1,790
21	1,570	1,800	1,880	1,920	1,880	1,820	1,770	1,930	1,720	1,660	1,810	1,770
22	1,580	1,800	1,900	1,920	1,860	1,800	1,760	1,730	1,740	1,650	1,810	1,750
23	1,570	1,820	1,900	1,920	1,880	1,800	1,730	1,650	1,740	1,660	1,740	1,740
24	1,580	1,840	1,900	1,920	1,880	1,800	1,630	1,610	1,720	1,670	1,780	1,840
25	1,560	1,850	1,920	1,920	1,880	1,790	1,620	1,610	1,690	1,690	1,810	1,890
26	1,560	1,860	1,920	1,910	1,870	1,790	1,600	1,600	1,650	1,660	1,800	1,970
27	1,570	1,880	1,910	1,930	1,870	1,790	1,530	1,640	1,620	1,660	1,790	2,070
28	1,570	1,900	1,870	1,930	1,870	1,790	1,470	1,640	1,620	1,670	1,800	2,010
29	1,580	1,920	1,880	1,920	---	1,790	1,460	1,670	1,630	1,650	1,780	1,960
30	1,590	1,940	1,890	1,920	---	1,790	1,440	1,830	1,630	1,650	1,790	1,960
31	1,590	---	1,890	1,930	---	1,790	---	2,030	---	1,600	1,810	---
Total	46,500	52,130	58,410	60,210	52,950	57,140	51,710	49,780	50,270	51,510	56,000	55,180
Mean	1,500	1,738	1,884	1,942	1,891	1,843	1,724	1,606	1,676	1,662	1,806	1,839
Max	1,600	1,940	1,980	2,010	1,920	1,920	1,820	2,050	2,090	1,750	1,880	2,070
Min	1,340	1,600	1,780	1,890	1,860	1,790	1,440	1,380	1,480	1,600	1,550	1,740
Ac-ft	92,230	103,400	115,900	119,400	105,000	113,300	102,600	98,740	99,710	102,200	111,100	109,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2012 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,500	1,738	1,884	1,942	1,891	1,843	2,211	1,668	1,602	1,572	1,655	1,637
Max	1,500	1,738	1,884	1,942	1,891	1,843	2,699	1,730	1,676	1,662	1,806	1,839
(WY)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)	(2012)	(2012)	(2013)	(2013)	(2013)	(2013)
Min	1,500	1,738	1,884	1,942	1,891	1,843	1,724	1,606	1,528	1,482	1,503	1,435
(WY)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)	(2012)	(2012)	(2012)	(2012)

06288400 BIGHORN RIVER AT TWO LEGGINS BRIDGE, NEAR HARDIN MT—Continued

SUMMARY STATISTICS

	Water Year 2013		Water Years 2012 - 2013	
Annual total	641,790			
Annual mean	1,758		1,758	
Highest annual mean			1,758	2013
Lowest annual mean			1,758	2013
Highest daily mean	2,090	Jun 1	5,980	Apr 10, 2012
Lowest daily mean	1,340	Oct 2	1,340	Oct 2, 2012
Annual seven-day minimum	1,400	Oct 1	1,360	Sep 28, 2012
Maximum peak flow	2,190	May 20	6,740	Apr 10, 2012
Maximum peak stage	10.35	May 20	12.43	Apr 10, 2012
Instantaneous low flow	^a 1,290	Oct 2	^a 1,290	Oct 2, 2012
Annual runoff (ac-ft)	1,273,000		1,274,000	
10 percent exceeds	1,920		1,920	
50 percent exceeds	1,790		1,790	
90 percent exceeds	1,530		1,530	

^aGage height, 9.53 ft.

