Water-Data Report 2013

13135000 SNAKE RIVER BELOW LOWER SALMON FALLS, NEAR HAGERMAN, ID

Upper Snake Basin
Upper Snake-Rock Subbasin

LOCATION.--Lat 42°50′55″, long 114°54′02″ referenced to North American Datum of 1927, in NW ¼ sec.2, T.7 S., R.13 E., Gooding County, ID, Hydrologic Unit 17040212, Hagerman quad., on right bank, 0.5 mi downstream from Lower Salmon Falls powerplant, 1 mi upstream from Malad River, 2.2 mi north of Hagerman, and at mile 572.5.

DRAINAGE AREA.--26,070 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for October 1937, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 2,727.7 ft above NGVD of 1929 (stadia levels). Prior to Jan. 3, 1950, at site 340 ft upstream.

COOPERATION.--Discharge records furnished by Idaho Power and reviewed by U.S. Geological Survey beginning April 2001.

REMARKS.--Flow regulated by American Falls Reservoir, 141.6 mi upstream. Diurnal fluctuation caused by hydroelectric plants upstream. At times, practically entire flow is diverted at Milner during the irrigation season; only minor diversions below Milner. Most of the percolation upstream into the Snake River Plain aquifer returns above station, including some water diverted from the Malad River. Diversions above station for irrigation of about 2,330,000 acres, of which about 665,000 acres are irrigated by withdrawals from ground water. There are about 83,000 acres irrigated below station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,500 ft^3/s June 21, 1997, gage height, 18.81 ft; minimum, probably less than 100 ft^3/s Jan. 10, 11, 1950, when river was below intake pipes; minimum daily, 3,500 ft^3/s Nov. 2, 2005; minimum observed, 500 ft^3/s Nov. 2, 2005, result of discharge measurement by Idaho Power Company.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,650 ft^3/s May 5; minimum daily, 4,440 ft^3/s March 31.

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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	5,830	5,190	5,700	5,420	5,540	5,270	4,580	5,270	7,280	4,560	6,260	5,020
2	5,770	5,230	5,620	5,390	5,610	5,210	4,590	5,310	7,150	4,490	6,330	5,040
3	5,750	5,170	5,600	5,390	5,570	5,210	4,530	7,170	6,840	4,560	6,260	5,140
4	5,930	5,140	5,620	5,400	5,420	5,260	4,450	7,380	6,160	4,570	6,330	5,240
5	5,960	5,170	5,880	5,390	5,530	5,190	4,510	7,650	5,450	4,720	6,340	5,630
6	6,010	5,140	5,660	5,310	5,530	5,180	4,540	7,430	4,950	4,730	6,270	5,570
7	6,030	5,140	5,640	5,480	5,470	5,250	4,570	7,300	4,650	4,710	6,290	5,600
8	6,040	5,160	5,730	5,400	5,380	5,160	4,710	7,310	4,640	4,720	6,470	5,420
9	6,030	5,190	5,660	5,290	5,400	5,150	4,810	7,350	4,580	4,760	6,660	5,550
10	5,990	5,150	5,640	5,430	5,390	5,160	4,990	7,080	4,570	4,710	6,150	5,440
11	5,970	5,110	5,700	5,420	5,420	5,180	5,080	7,030	4,580	4,660	5,210	5,460
12	5,910	5,130	5,690	5,430	5,280	5,180	5,090	7,070	4,640	4,740	4,970	5,400
13	5,870	5,110	5,630	5,390	5,390	5,150	4,970	7,120	4,520	4,730	4,940	5,470
14	5,900	5,170	5,660	5,360	5,340	5,180	5,170	7,120	4,680	5,050	4,890	5,600
15	5,980	5,110	5,660	5,380	5,380	5,090	5,290	7,110	4,700	4,720	4,860	5,590
16	5,960	5,080	5,590	5,350	5,300	5,160	5,280	7,100	4,660	4,810	4,890	5,660
17	5,970	5,210	5,670	5,360	5,330	5,110	5,250	7,210	4,590	4,580	4,880	5,680
18	5,940	5,380	5,630	5,300	5,340	5,150	5,270	7,210	4,570	4,590	4,880	5,560
19	5,860	5,370	5,620	5,320	5,360	5,180	5,120	7,240	4,520	4,700	4,980	5,660
20	5,790	5,380	5,610	5,320	5,360	5,130	5,090	7,410	4,510	4,760	5,000	5,670
21	5,760	5,390	5,510	5,320	5,310	5,200	5,080	7,260	4,690	4,670	4,890	5,660
22	5,920	5,500	5,590	5,290	5,360	5,140	5,110	7,130	4,700	4,750	4,910	5,700
23	5,960	5,480	5,690	5,290	5,280	4,810	5,060	7,230	4,700	4,790	4,930	5,860
24	5,980	5,540	5,520	5,310	5,310	4,760	4,960	7,150	4,750	5,870	4,970	5,770
25	5,790	5,510	5,570	5,380	5,320	4,610	5,010	7,100	4,790	6,280	5,000	5,810
26	5,660	5,430	5,520	5,440	5,230	4,550	4,920	7,080	4,660	6,130	5,070	5,910
27	5,390	5,380	5,610	5,350	5,240	4,580	4,750	7,220	4,660	6,170	5,070	5,910
28	5,330	5,370	5,410	5,370	5,230	4,530	4,790	7,290	4,550	6,160	4,920	6,010
29	5,310	5,410	5,430	5,300	---	4,500	4,900	7,450	4,530	6,270	4,960	5,830
30	5,240	5,590	5,490	5,570	---	4,650	4,910	7,410	4,520	6,250	4,940	5,980
31	5,210	---	5,520	5,520	---	4,440	---	7,300	---	6,240	4,980	---
Total	180,040	158,330	174,070	166,670	150,620	155,320	147,380	220,490	148,790	157,450	167,500	167,840
Mean	5,808	5,278	5,615	5,376	5,379	5,010	4,913	7,113	4,960	5,079	5,403	5,595
Max	6,040	5,590	5,880	5,570	5,610	5,270	5,290	7,650	7,280	6,280	6,660	6,010
Min	5,210	5,080	5,410	5,290	5,230	4,440	4,450	5,270	4,510	4,490	4,860	5,020
Ac-ft	357,100	314,000	345,300	330,600	298,800	308,100	292,300	437,300	295,100	312,300	332,200	332,900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	8,377	8,595	8,880	9,204	9,235	9,306	10,620	9,829	9,897	6,659	6,523	7,199
Max	16,610	18,910	17,490	19,770	23,680	25,260	25,250	24,090	29,800	11,620	9,373	13,060
(WY)	(1985)	(1985)	(1984)	(1984)	(1997)	(1997)	(1971)	(1984)	(1997)	(1983)	(1997)	(1997)
Min	5,508	5,250	5,153	5,170	5,032	4,881	4,715	4,459	4,460	4,313	4,488	5,105
(WY)	(2005)	(2008)	(2006)	(2005)	(2005)	(1992)	(2005)	(1992)	(2004)	(2004)	(2004)	(2004)

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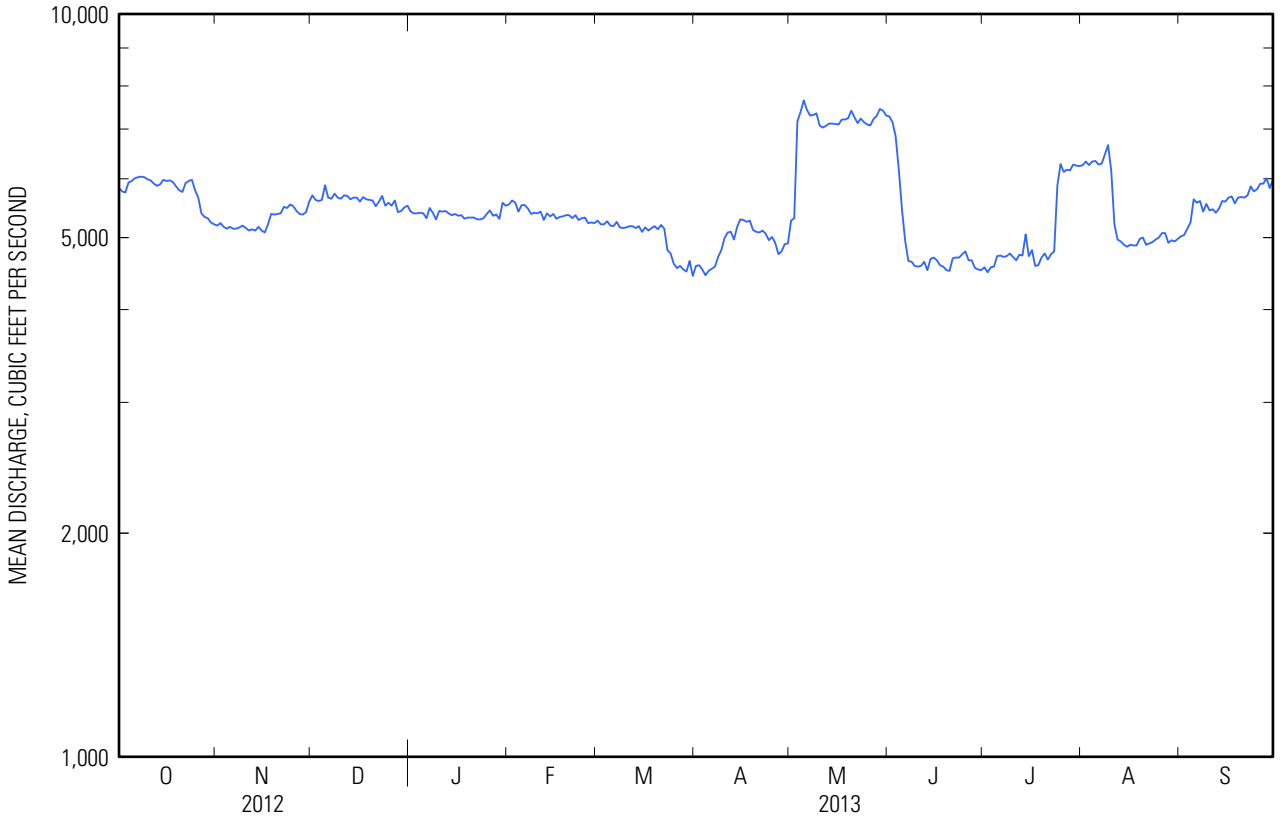
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1938 - 2013	
Annual total	2,545,080		1,994,500			
Annual mean	6,954		5,464		8,685	
Highest annual mean					15,660	1984
Lowest annual mean					5,079	2004
Highest daily mean	14,300	Apr 7	7,650	May 5	38,000	Jun 21, 1997
Lowest daily mean	4,680	May 17	4,440	Mar 31	3,500	Nov 2, 2005
Annual seven-day minimum	4,780	Jul 27	4,520	Mar 31	4,110	Jun 24, 2004
Annual runoff (ac-ft)	5,048,000		3,956,000		6,292,000	
10 percent exceeds	9,740		6,330		14,800	
50 percent exceeds	5,950		5,360		7,110	
90 percent exceeds	5,100		4,660		5,340