

Water-Data Report 2011

## 13037500 SNAKE RIVER NEAR HEISE, ID

Snake Headwaters Basin  
Palisades Subbasin

LOCATION.--Lat 43°36'45", long 111°39'36" referenced to North American Datum of 1983, in SE ¼ SW ¼ sec.5, T.3 N., R.41 E., Bonneville County, ID, Hydrologic Unit 17040104, Poplar quad., on left bank 850 ft upstream from Anderson Canal headgate, 2.4 mi upstream from Heise, 6 mi east of Ririe, 24 mi upstream from Henrys Fork, and at mile 853.6.

DRAINAGE AREA.--5,752 mi<sup>2</sup>, mean elevation, 7,770 ft.

### SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1910 to current year. Monthly discharge only for some periods, published in WSP 1317. Prior to 1911, published as "South Fork of Snake River near Heise."

REVISED RECORDS.--WSP 1217: Drainage area. WSP 1347: 1912.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 5,015.3 ft above NGVD of 1929. Prior to July 9, 1913, nonrecording gage, and July 9, 1913 to Sept. 29, 1922, water-stage recorder at datum 2.65 ft higher. Sept. 30, 1922 to Sept. 30, 1933, water-stage recorder at datum 2.0 ft higher.

REMARKS.--Records good except for the estimated discharges, which are fair. Station equipment includes satellite telemetry. Some diurnal fluctuations occur during winter powerplant operations at Palisades. Riley Ditch, 1.5 mi upstream, was not in operation during the year. Diversions from tributaries above station for irrigation in Wyoming and Idaho of about 104,000 acres (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 60,000 ft<sup>3</sup>/s May 19, 1927, result of landslide washout on Gros Ventre River, gage height, about 16.0 ft, present datum; minimum, 460 ft<sup>3</sup>/s Nov. 10, 12, 1956, gage height, -0.18 ft.

Maximum discharge since filling of Palisades Reservoir (Nov. 1956), 43,500 ft<sup>3</sup>/s June 13, 1997, gage height, 11.26 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in early June 1894 estimated as 65,000 ft<sup>3</sup>/s by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,100 ft<sup>3</sup>/s June 7, gage height, 8.09 ft; minimum discharge, 1,200 ft<sup>3</sup>/s Dec. 6, gage height, 0.59 ft.

## 13037500 SNAKE RIVER NEAR HEISE, ID—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	7,340	2,880	1,250	e1,370	e2,540	2,610	10,800	18,600	24,700	17,500	15,400	9,790
2	7,330	2,360	1,250	e1,400	e2,500	2,610	10,900	18,400	24,900	18,900	15,300	9,760
3	7,360	1,660	1,280	e1,380	e2,540	2,640	10,900	16,700	24,200	18,900	15,200	9,770
4	7,360	1,420	1,250	e1,450	e2,580	2,580	10,900	15,700	24,100	18,900	14,800	9,720
5	7,410	1,360	1,240	e1,440	2,590	2,560	10,900	15,100	24,600	18,800	14,100	9,680
6	7,390	1,360	1,240	e1,470	2,580	2,630	11,900	15,400	25,200	20,200	13,900	9,680
7	6,990	1,360	1,260	e1,470	2,620	2,610	12,900	16,200	25,800	23,400	13,200	9,660
8	6,930	1,420	1,240	e1,460	2,600	2,620	13,800	17,200	24,200	23,900	12,500	9,670
9	6,930	1,410	1,250	e1,430	e2,590	2,610	14,700	18,900	21,400	24,500	10,700	9,710
10	6,900	1,360	1,290	e1,450	2,610	2,650	15,000	19,900	20,000	24,500	10,200	9,720
11	6,560	1,340	1,520	e1,420	2,600	2,680	15,000	19,600	18,300	24,000	10,200	9,790
12	6,410	1,340	1,520	e1,460	2,590	2,660	15,000	19,600	18,200	23,100	10,200	9,890
13	6,050	1,330	1,510	1,500	2,590	2,660	15,100	19,900	18,200	23,200	10,200	9,910
14	5,170	1,340	1,490	1,480	2,590	2,670	15,100	20,300	18,200	23,400	10,100	9,960
15	4,780	1,360	e1,480	1,440	2,590	2,670	15,300	20,700	18,300	24,100	10,100	9,980
16	4,820	1,330	e1,450	1,550	2,590	2,740	15,900	20,900	18,200	24,500	10,100	10,100
17	4,490	1,300	e1,390	1,560	2,600	2,730	16,500	20,300	19,200	24,100	10,100	10,200
18	4,330	1,300	e1,420	1,530	2,590	2,700	17,200	20,100	19,400	22,400	10,100	10,100
19	4,310	1,290	e1,460	1,870	2,600	2,700	17,400	20,600	19,500	21,800	9,610	10,100
20	4,330	1,340	e1,430	2,190	2,620	2,700	17,200	20,600	19,600	23,500	9,450	10,100
21	3,970	1,310	e1,400	2,470	2,620	2,690	17,900	21,400	19,300	24,000	9,470	10,100
22	3,590	1,310	e1,420	2,590	2,610	2,750	18,600	22,200	17,900	23,700	9,450	10,100
23	3,480	1,310	e1,430	2,570	2,610	3,060	18,800	22,400	17,900	21,800	9,420	10,100
24	3,520	1,280	e1,420	2,590	2,610	3,570	18,700	23,200	17,900	19,700	9,470	10,100
25	3,630	1,240	e1,420	2,610	2,620	3,700	18,800	23,600	17,800	18,800	9,900	10,100
26	3,520	1,260	1,440	2,590	2,610	4,200	18,900	23,700	17,700	18,300	9,880	10,100
27	3,500	1,260	1,450	2,590	2,600	5,110	18,600	23,300	17,400	17,700	9,890	10,000
28	3,480	1,280	1,440	2,590	2,610	6,040	18,700	23,300	17,200	17,000	9,910	9,080
29	3,470	1,250	1,470	2,590	---	7,990	18,700	24,100	17,200	16,700	9,890	7,950
30	3,240	1,250	1,440	2,600	---	10,400	18,700	24,600	17,200	15,400	9,840	7,690
31	2,870	---	e1,400	2,580	---	10,800	---	24,500	---	15,200	9,770	---
<b>Total</b>	161,460	42,610	42,950	58,690	72,600	113,340	468,800	631,000	603,700	651,900	342,350	292,610
<b>Mean</b>	5,208	1,420	1,385	1,893	2,593	3,656	15,630	20,350	20,120	21,030	11,040	9,754
<b>Max</b>	7,410	2,880	1,520	2,610	2,620	10,800	18,900	24,600	25,800	24,500	15,400	10,200
<b>Min</b>	2,870	1,240	1,240	1,370	2,500	2,560	10,800	15,100	17,200	15,200	9,420	7,690
<b>Ac-ft</b>	320,300	84,520	85,190	116,400	144,000	224,800	929,900	1,252,000	1,197,000	1,293,000	679,100	580,400
<b>(Mean) Adjusted for Storage in Jackson Lake and Palisades Reservoir</b>	---	---	---	---	---	---	---	---	---	---	---	---
<b>(Ac-ft) Adjusted for Storage in Jackson Lake and Palisades Reservoir</b>	---	---	---	---	---	---	---	---	---	---	---	---

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2011, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	3,669	2,719	2,576	2,526	2,599	3,321	6,347	13,290	16,760	13,420	9,312	6,578
<b>Max</b>	8,179	5,758	6,270	6,233	10,520	13,760	16,800	26,960	36,520	22,920	13,510	10,520
<b>(WY)</b>	(1972)	(1984)	(1984)	(1984)	(1997)	(1997)	(1971)	(1928)	(1918)	(1917)	(2008)	(2008)
<b>Min</b>	1,666	1,183	1,064	1,084	1,040	983	1,398	3,951	6,416	6,850	3,761	2,791
<b>(WY)</b>	(1978)	(1989)	(1989)	(1989)	(1988)	(1977)	(1963)	(1991)	(1934)	(1934)	(1919)	(1934)

**13037500 SNAKE RIVER NEAR HEISE, ID—Continued**

**SUMMARY STATISTICS**

	Calendar Year 2010		Water Year 2011		Water Years 1911 - 2011	
<b>Annual total</b>	2,220,450		3,482,010			
<b>Annual mean</b>	6,083		9,540		6,946	
<b>Highest annual mean</b>					11,590	1997
<b>Lowest annual mean</b>					4,117	1934
<b>Highest daily mean</b>	23,200	Jun 13	25,800	Jun 7	51,600	Jun 15, 1918
<b>Lowest daily mean</b>	1,100	Mar 15	1,240	Nov 25	460	Nov 10, 1956
<b>Annual seven-day minimum</b>	1,120	Mar 11	1,250	Nov 30	481	Nov 6, 1956
<b>Annual runoff (ac-ft)</b>	4,404,000		6,907,000		5,032,000	
<b>10 percent exceeds</b>	13,800		21,400		14,900	
<b>50 percent exceeds</b>	3,470		9,080		4,300	
<b>90 percent exceeds</b>	1,260		1,390		1,640	

