Water-Data Report 2013

13081500 SNAKE RIVER NEAR MINIDOKA, ID

Upper Snake Basin
Lake Walcott Subbasin

LOCATION.--Lat 42°40′22″, long 113°30′01″ referenced to North American Datum of 1983, in SW ¼ NE ¼ sec.2, T.9 S., R.25 E., Minidoka County, ID, Hydrologic Unit 17040209, Lake Walcott West quad., on right bank 1 mi downstream from Minidoka Dam, 6 mi south of Minidoka, and at mile 673.5.

DRAINAGE AREA.--15,700 mi^2, approximately, excluding indeterminate nontributary area on Snake River Plain.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 21, 1910 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "below Minidoka Dam, at Howell's Ferry", 1911. Records for August 1895 to Apr. 20, 1910, at site 6 mi downstream "at Montgomery Ferry near Minidoka" are not equivalent.

REVISED RECORDS.--WSP 1347: 1911.

GAGE.--Water-stage recorder. Datum of gage is 4,132.2 ft above NGVD of 1929 (river-profile survey). Prior to Apr. 21, 1910, nonrecording gage at site 6 mi downstream at different datum. Apr. 21, 1910 to Aug. 28, 1911, nonrecording gage at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station equipment includes satellite telemetry. Flow regulated by Lake Walcott (1906), American Falls Reservoir (1927), and other reservoirs, having a combined usable capacity of about 4,700,000 acre-ft. Diversions above station for irrigation of about 128,000 acres below and about 1,200,000 acres above station, of which about 304,000 acres are irrigated by withdrawals from ground water (1966 determination). Considerable water leaks into the Snake River Plain aquifer above station.

EXTREMES FOR PERIOD OF RECORD.--

UNREGULATED PERIOD (1910-26): Maximum discharge prior to regulation by American Falls Dam, 45,900 ft^3/s June 21, 1918, gage height, 16.02 ft; minimum daily, 1,700 ft^3/s Aug. 2, 1919.

REGULATED PERIOD (1927 to current year): Maximum discharge since regulation began in 1927, 42,900 ft^3/s June 21, 1997, gage height, 15.49 ft; minimum, 37 ft^3/s Jan. 28, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge of 47,500 ft^3/s May 29, 30, 1897, at site 6 mi downstream at Montgomery Ferry near Minidoka, gage height, 12.6 ft (datum at that site).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,900 ft^3/s May 15, gage height, 8.06 ft; minimum discharge, 403 ft^3/s December 21, gage height, 2.57 ft.

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 13081500, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/13081500.2013.pdf

13081500 SNAKE RIVER NEAR MINIDOKA, ID—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	5,350	478	469	463	594	542	996	7,730	9,700	9,200	9,630	6,970
2	5,370	522	492	465	574	537	1,300	8,690	9,330	9,150	9,590	6,970
3	5,440	585	475	e462	573	568	1,360	8,680	8,650	9,150	9,620	6,870
4	5,200	586	463	e464	573	551	1,190	8,660	7,530	9,310	9,600	6,600
5	5,020	579	448	e455	563	537	1,130	8,650	7,900	9,410	9,590	6,300
6	4,830	569	445	e458	573	545	1,250	8,810	8,020	9,240	9,380	6,050
7	4,750	568	469	e452	558	542	1,260	9,250	8,100	8,910	9,540	5,850
8	4,530	586	479	e453	542	546	1,300	9,260	8,570	8,940	9,570	5,770
9	4,090	576	447	453	553	550	1,630	9,420	8,600	9,000	8,040	5,710
10	4,000	580	486	483	542	552	1,670	9,630	8,470	8,840	7,850	5,750
11	4,030	580	450	e470	541	595	1,800	9,670	8,450	8,750	7,930	5,820
12	3,100	569	450	e463	543	492	1,960	9,650	8,360	8,620	7,930	5,720
13	3,140	560	532	e460	557	492	2,200	9,770	8,240	8,660	7,900	5,530
14	3,030	562	470	466	549	508	2,090	9,950	8,400	8,670	7,740	5,360
15	2,420	561	467	465	546	513	1,940	10,200	8,510	8,430	7,620	5,360
16	1,280	565	466	462	542	513	2,280	10,600	8,530	8,030	7,590	5,260
17	894	568	497	e459	578	599	2,550	10,500	8,480	8,020	7,560	5,240
18	823	572	482	e458	543	552	2,710	10,500	8,440	8,280	7,640	5,360
19	753	529	485	e457	538	504	3,000	10,300	8,580	8,300	7,680	5,170
20	674	464	494	e455	550	502	3,350	10,300	8,770	8,290	7,580	4,970
21	668	471	471	e470	549	656	3,600	9,930	8,900	8,320	7,540	4,970
22	574	469	610	548	548	543	3,800	9,840	8,920	9,520	7,430	5,080
23	490	459	479	597	639	532	4,150	9,910	8,650	9,790	7,380	4,870
24	491	465	485	598	549	529	4,150	9,970	8,580	9,790	7,340	4,770
25	495	478	e460	594	545	539	4,190	10,000	8,590	9,850	7,180	4,720
26	490	463	465	590	549	549	4,740	9,930	8,600	9,910	7,200	4,560
27	498	460	471	605	539	549	5,220	9,930	8,630	9,900	7,020	4,390
28	490	461	470	598	540	543	5,850	10,000	8,810	9,720	6,670	4,170
29	482	463	e465	594	---	546	6,240	9,970	9,090	9,630	6,820	4,120
30	482	468	462	654	---	547	6,770	9,970	9,300	9,650	7,010	4,090
31	479	---	463	604	---	555	---	9,950	---	9,690	6,980	---
Total	74,363	15,816	14,767	15,675	15,590	16,828	85,676	299,620	257,700	280,970	248,150	162,370
Mean	2,399	527	476	506	557	543	2,856	9,665	8,590	9,064	8,005	5,412
Max	5,440	586	610	654	639	656	6,770	10,600	9,700	9,910	9,630	6,970
Min	479	459	445	452	538	492	996	7,730	7,530	8,020	6,670	4,090
Ac-ft	147,500	31,370	29,290	31,090	30,920	33,380	169,900	594,300	511,100	557,300	492,200	322,100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1926, BY WATER YEAR (WY) (UNREGULATED)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	5,941	6,683	6,047	5,740	6,081	6,342	8,108	14,000	16,910	8,233	4,800	4,732
Max	10,390	9,138	7,279	7,226	7,657	7,790	11,820	19,940	30,430	18,490	8,725	11,820
(WY)	(1913)	(1913)	(1918)	(1912)	(1911)	(1911)	(1914)	(1921)	(1918)	(1917)	(1912)	(1912)
Min	2,154	4,805	4,350	3,813	5,014	4,632	4,599	4,320	3,371	2,986	2,067	2,151
(WY)	(1925)	(1920)	(1920)	(1925)	(1920)	(1920)	(1924)	(1924)	(1924)	(1919)	(1919)	(1919)

13081500 SNAKE RIVER NEAR MINIDOKA, ID—Continued

SUMMARY STATISTICS

	Water Years 1910 - 1926	
Annual mean	[a]7,841	
Highest annual mean	10,830	1913
Lowest annual mean	4,562	1924
Highest daily mean	45,800	Jun 21, 1918
Lowest daily mean	1,700	Aug 2, 1919
Annual seven-day minimum	1,820	Jul 27, 1919
Annual runoff (ac-ft)	5,681,000	
10 percent exceeds	14,500	
50 percent exceeds	6,260	
90 percent exceeds	3,450	

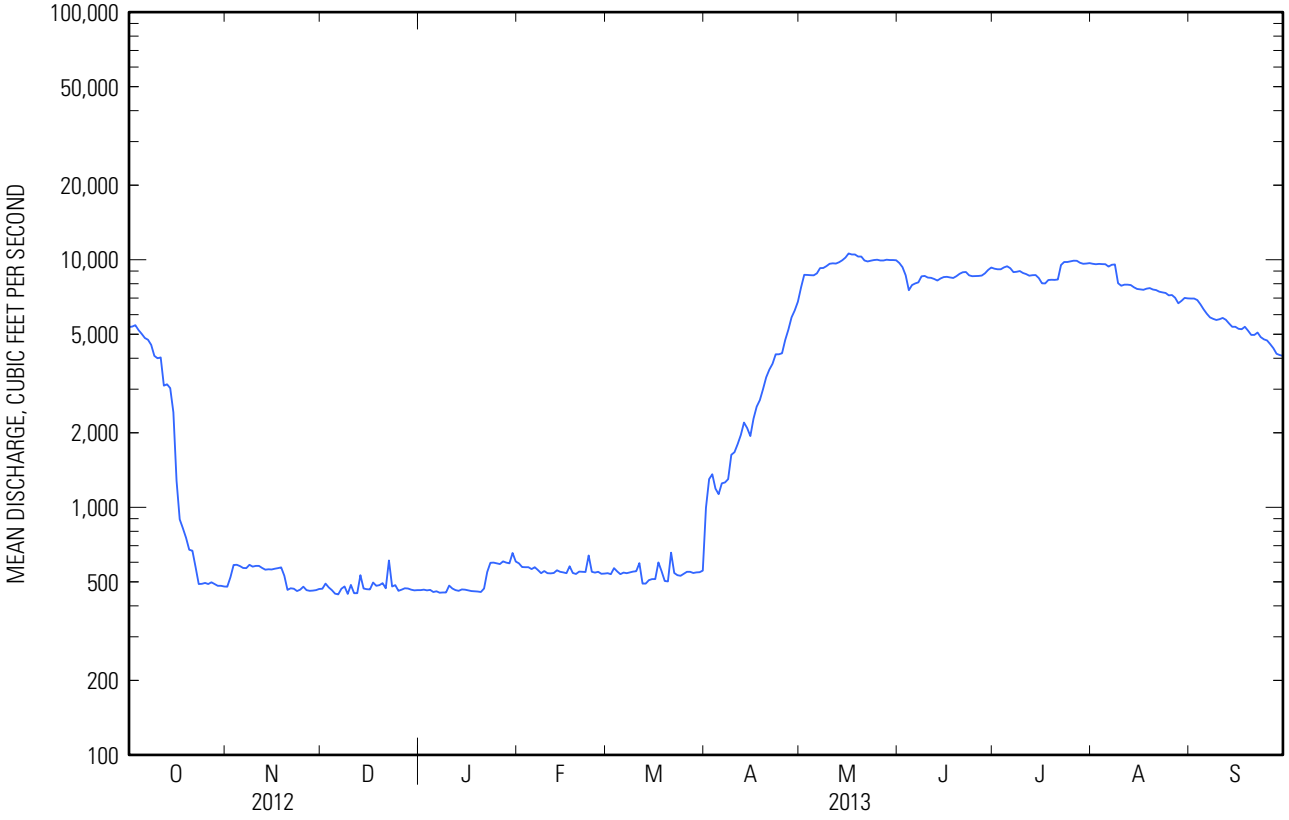
[a] Statistics 1910-1926 are prior to regulation by American Falls Dam.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3,777	3,436	3,631	3,939	4,045	4,407	7,494	11,440	12,330	9,451	7,995	5,997
Max	11,900	12,620	11,400	13,250	18,120	20,020	22,130	23,390	32,370	18,490	12,310	12,870
(WY)	(1985)	(1985)	(1984)	(1984)	(1997)	(1997)	(1971)	(1971)	(1997)	(1917)	(2011)	(1997)
Min	714	306	294	398	287	251	1,015	3,891	3,371	2,986	2,067	2,151
(WY)	(1962)	(1962)	(1962)	(1967)	(1961)	(1961)	(1935)	(2005)	(1924)	(1919)	(1919)	(1919)

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1910 - 2013	
Annual total	2,094,596		[b]1,487,525			
Annual mean	5,723		4,075		6,515	
Highest annual mean					13,020	1997
Lowest annual mean					3,330	1934
Highest daily mean	13,200	Jun 29	10,600	May 16	45,800	Jun 21, 1918
Lowest daily mean	445	Dec 6	445	Dec 6	37	Jan 28, 1962
Annual seven-day minimum	461	Dec 5	457	Jan 3	111	Mar 15, 1968
Annual runoff (ac-ft)	4,155,000		2,951,000		4,720,000	
10 percent exceeds	10,700		9,590		11,600	
50 percent exceeds	5,670		2,280		6,130	
90 percent exceeds	482		466		946	

[b] Statistics from 1927 to Current Year are since regulation by American Falls Dam.

13081500 SNAKE RIVER NEAR MINIDOKA, ID—Continued