

Water-Data Report 2013

## 12422500 SPOKANE RIVER AT SPOKANE, WA

Spokane Basin  
Upper Spokane Subbasin

LOCATION.--Lat 47°39'34", long 117°26'53" referenced to North American Datum of 1927, in SW ¼ SW ¼ sec.13, T.25 N., R.42 E., Spokane County, WA, Hydrologic Unit 17010305, on right bank at Cochran Street in Spokane, 0.5 mi upstream from Hangman Creek, and at mile 72.9.

DRAINAGE AREA.--4,290 mi<sup>2</sup>, of which about 122 mi<sup>2</sup> in the vicinity of Hayden Lake is noncontributing to this station.

### SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1891 to current year.

Chemical analyses October 1972 to September 1973.

REVISED RECORDS.--WSP 532: 1891-1904. WSP 1246: Drainage area. WSP 1286: 1907-09.

GAGE.--Water-stage recorder. Elevation of gage is 1,697 ft above NGVD of 1929 (river-profile survey). Prior to July 1, 1921, water-stage recorders and nonrecording gages at several sites within 4 mi of present site at various datums.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by powerplants of Avista Corp. at Post Falls, Idaho, 28.8 mi upstream and at Spokane, 1.3 mi upstream, and by Coeur d'Alene Lake, Idaho. Rathdrum Prairie Canal diverts water upstream from station for irrigation. In 1946, approximately 22,600 acres, of which about 15,000 acres utilized surface water, were under irrigation upstream from Spokane. Since 1966 irrigation has been from many wells in the valley near the river with only about 3,000 acres irrigated from the river. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--122 years (water years 1892-2013), 6,695 ft<sup>3</sup>/s, 4,850,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,000 ft<sup>3</sup>/s, estimated, May 31, 1894 (see WSP 532); minimum, 49.7 ft<sup>3</sup>/s Aug. 26, 1991, due to regulation for construction at Post Street Dam, but may have been lower during periods of missing record in 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,400 ft<sup>3</sup>/s, Apr. 10 and Apr. 11, gage height, 24.37 ft; minimum discharge, 845 ft<sup>3</sup>/s, Sept. 1, gage height, 17.33 ft, result of regulation.

## 12422500 SPOKANE RIVER AT SPOKANE, WA—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	1,650	3,300	7,600	5,060	4,370	4,440	10,100	14,600	7,340	3,680	1,120	1,000
2	1,640	3,600	7,640	4,900	4,490	4,460	10,500	14,600	7,360	3,380	1,380	1,020
3	1,660	3,640	7,850	4,740	4,560	4,610	11,200	14,300	7,150	3,380	2,550	1,000
4	1,670	3,650	8,640	4,490	4,640	4,740	12,000	14,000	6,740	3,380	2,170	1,060
5	1,680	3,680	9,450	4,280	4,770	5,000	12,900	13,800	6,150	3,350	1,950	1,160
6	1,680	3,690	9,810	4,260	4,920	5,270	14,100	13,600	6,040	3,150	1,780	1,410
7	1,690	3,690	10,100	4,190	4,930	5,400	15,600	13,700	6,080	2,790	1,570	1,330
8	1,700	3,730	10,000	4,220	4,990	5,700	17,200	13,800	6,330	2,450	1,420	1,410
9	1,690	3,770	10,100	4,290	5,110	5,830	18,500	14,500	6,380	2,270	1,270	1,380
10	1,690	3,710	10,200	4,150	5,090	5,910	19,200	15,300	6,440	2,100	1,150	1,410
11	1,670	3,720	10,100	4,230	5,060	5,990	19,300	16,100	6,060	1,960	1,150	1,410
12	1,690	3,800	10,000	4,190	5,020	6,110	19,000	16,700	5,600	1,950	1,130	1,410
13	1,680	3,790	10,100	4,180	4,970	6,070	18,800	17,300	5,150	1,940	1,120	1,420
14	1,710	3,790	10,100	4,170	4,920	6,290	18,400	17,900	4,770	1,900	1,110	1,440
15	1,710	3,810	10,100	4,150	4,880	6,670	17,700	18,200	4,620	1,870	1,100	1,420
16	1,720	3,730	10,000	4,070	4,820	7,400	16,200	18,100	4,470	1,780	1,100	1,440
17	1,700	3,660	9,810	3,950	4,810	8,290	13,300	16,700	4,220	1,610	1,090	1,440
18	1,700	3,660	9,270	3,900	4,900	9,310	12,900	13,900	3,890	1,520	1,100	1,450
19	1,720	3,630	8,790	3,790	4,840	10,000	13,200	12,400	3,890	1,490	1,100	1,450
20	2,030	3,820	8,400	3,770	4,770	10,400	13,600	11,900	5,560	1,460	1,080	1,480
21	2,060	4,130	7,810	3,710	4,810	10,800	13,200	10,500	7,720	1,460	1,060	1,470
22	2,050	4,150	7,470	3,590	4,800	11,200	13,000	10,200	6,630	1,430	1,060	1,500
23	2,060	4,180	7,150	3,630	4,730	11,400	13,200	9,890	5,630	1,410	1,040	1,510
24	2,090	4,190	6,850	3,540	4,820	11,500	13,200	9,060	5,440	1,350	1,030	1,520
25	2,110	4,180	6,660	3,510	4,730	11,400	13,300	7,970	5,320	1,310	1,050	1,520
26	2,100	4,230	6,370	3,570	4,690	11,200	14,300	7,240	5,290	1,300	1,050	1,520
27	2,620	4,380	6,090	3,690	4,720	11,000	14,500	7,000	5,120	1,300	1,020	1,520
28	2,710	4,420	5,850	3,950	4,490	10,700	14,400	6,790	4,340	1,310	1,020	1,550
29	2,740	6,420	5,680	4,090	---	10,400	14,400	6,760	3,960	1,290	1,010	1,580
30	3,240	7,510	5,450	4,270	---	10,100	14,500	6,880	3,850	1,150	1,040	1,580
31	3,310	---	5,240	4,290	---	10,000	---	7,230	---	1,120	1,010	---
<b>Total</b>	61,170	121,660	258,680	126,820	134,650	247,590	441,700	390,920	167,540	61,840	38,830	41,810
<b>Mean</b>	1,973	4,055	8,345	4,091	4,809	7,987	14,720	12,610	5,585	1,995	1,253	1,394
<b>Max</b>	3,310	7,510	10,200	5,060	5,110	11,500	19,300	18,200	7,720	3,680	2,550	1,580
<b>Min</b>	1,640	3,300	5,240	3,510	4,370	4,440	10,100	6,760	3,850	1,120	1,010	1,000
<b>Ac-ft</b>	121,300	241,300	513,100	251,500	267,100	491,100	876,100	775,400	332,300	122,700	77,020	82,930

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1891 - 2013, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	2,152	3,282	5,136	5,550	6,232	8,276	14,150	17,660	11,030	3,373	1,699	1,705
<b>Max</b>	5,643	13,050	22,910	25,430	22,060	25,380	25,030	34,390	29,850	11,910	4,744	3,302
<b>(WY)</b>	(1928)	(1928)	(1934)	(1934)	(1996)	(1972)	(1943)	(1997)	(1894)	(1899)	(1899)	(1912)
<b>Min</b>	1,300	1,151	1,233	1,339	1,489	2,047	3,865	5,214	2,141	1,050	531	932
<b>(WY)</b>	(1893)	(1940)	(1932)	(1931)	(1929)	(1929)	(1977)	(1992)	(1926)	(1994)	(1994)	(1966)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1891 - 2013	
<b>Annual total</b>	3,121,040		2,093,210			
<b>Annual mean</b>	8,527		5,735		6,695	
<b>Highest annual mean</b>					12,310	1974
<b>Lowest annual mean</b>					2,508	1977
<b>Highest daily mean</b>	36,300	Apr 29	19,300	Apr 11	49,000	May 31, 1894
<b>Lowest daily mean</b>	1,200	Sep 1	1,000	Sep 1	466	Aug 11, 1973
<b>Annual seven-day minimum</b>	1,220	Aug 28	1,010	Aug 28	502	Aug 21, 1994
<b>Annual runoff (ac-ft)</b>	6,191,000		4,152,000		4,850,000	
<b>10 percent exceeds</b>	21,900		13,300		17,000	
<b>50 percent exceeds</b>	4,180		4,370		3,710	
<b>90 percent exceeds</b>	1,610		1,320		1,490	

