

## SPOKANE RIVER BASIN

## 12422500 SPOKANE RIVER AT SPOKANE, WA

LOCATION.--Lat 47°39'34", long 117°26'53", in SW 1/4 SW 1/4 sec.13, T.25 N., R.42 E., Spokane County, 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>, approximately, of which about 122 mi<sup>2</sup> in the vicinity of Hayden Lake is noncontributing to this station.

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

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. Chemical analyses October 1972 to September 1973. U.S. Geological Survey satellite telemeter at station.

COOPERATION.--Discharge figures for July 16-19 and 23 provided by Avista Corporation.

AVERAGE DISCHARGE.--111 years (water years 1892-2002), 6,742 ft<sup>3</sup>/s, 4,884,000 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, 31,400 ft<sup>3</sup>/s Apr. 18, gage height, 26.88 ft; minimum discharge, 860 ft<sup>3</sup>/s Aug. 26, gage height, 17.31 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1370	2470	3440	3950	7010	8360	9560	19300	29400	9620	1510	1010
2	1660	2480	3460	3740	6820	8240	9690	19400	29600	9050	1320	1020
3	1670	2490	3480	3610	6440	8000	9910	19600	29500	7610	1300	1050
4	1710	2500	3490	3500	6180	7610	10100	20000	29000	6590	1290	1020
5	1760	2490	3530	3350	6100	7400	10300	20500	28400	6170	1260	1060
6	1770	2490	3530	3350	5920	7130	10600	20600	27800	5090	1260	1050
7	1790	2500	3530	3390	5720	6930	11000	20400	27100	4630	1460	1040
8	1800	2530	3540	3600	5610	6680	11700	19900	26300	4520	1410	1050
9	1780	2470	3540	4560	5350	6510	11800	19200	25300	4490	1410	1120
10	1800	2410	3640	5270	5250	6340	12700	18400	24100	4200	1420	1610
11	1830	2440	3910	5770	5020	5980	14800	17600	23000	3780	1390	1620
12	1820	2430	4240	6010	4990	6670	16200	16700	21800	3520	1390	1640
13	1860	2450	4380	6130	4830	7560	17500	16000	20700	3120	1390	1640
14	1860	2410	4620	6850	4680	8390	19400	15800	19600	3020	1360	1670
15	1870	2430	5080	7360	4650	8780	22900	16200	19100	3000	1380	1700
16	1890	2430	5160	8010	4540	8940	27700	16700	18700	3060	1350	1700
17	1870	2500	5180	7960	4330	8890	30400	17000	18500	3020	1240	1730
18	1870	2420	5360	7880	4370	8850	30800	17200	18400	3150	1240	1740
19	1910	2440	5600	7820	4210	8550	30000	17400	17900	3280	1250	1760
20	1940	2440	5610	7680	4380	8500	28700	18100	17500	3200	1150	1770
21	1950	2460	5600	7540	4290	8560	27400	19400	16500	3160	1040	1750
22	1950	2470	5590	7410	4290	8580	26200	21300	15100	2770	1060	1800
23	1960	2470	5530	7240	4550	8530	25100	23000	14400	2410	1010	1770
24	2090	2470	5470	7030	5540	8510	24300	24900	13600	2280	1040	1770
25	2300	2490	5190	6850	6990	8510	23400	26000	12400	2240	1040	1810
26	2340	2610	4860	7070	7800	8510	22600	26200	11500	2190	1030	1800
27	2390	2800	4610	7320	8260	8540	21800	26100	10400	2010	1020	1830
28	2390	2870	4510	7400	8360	8650	21100	26300	9190	1990	999	1830
29	2430	2960	4380	7300	---	8920	20400	26800	8740	1960	965	1800
30	2450	3060	4100	7190	---	9120	19700	27800	9640	1720	945	1840
31	2490	---	4070	7090	---	9230	---	28700	---	1720	989	---
TOTAL	60570	75880	138230	189230	156480	249970	577760	642500	593170	118570	37918	46000
MEAN	1954	2529	4459	6104	5589	8064	19260	20730	19770	3825	1223	1533
MAX	2490	3060	5610	8010	8360	9230	30800	28700	29600	9620	1510	1840
MIN	1370	2410	3440	3350	4210	5980	9560	15800	8740	1720	945	1010
AC-FT	120100	150500	274200	375300	310400	495800	1146000	1274000	1177000	235200	75210	91240

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1891 - 2002, BY WATER YEAR (WY)

	1891	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2002
MEAN	2157	3291	5176	5521	6284	8316	14180	17900	11050	3420	1756	1740
MAX	5643	13050	22910	25430	22060	25380	25030	34390	29850	11910	4744	3302
(WY)	1928	1928	1934	1934	1996	1972	1943	1997	1894	1899	1899	1912
MIN	1300	1151	1233	1339	1489	2047	3865	5214	2141	1050	531	932
(WY)	1893	1940	1932	1931	1929	1929	1977	1992	1926	1994	1994	1966

## SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1891 - 2002

ANNUAL TOTAL	1142158	2886278	
ANNUAL MEAN	3129	7908	6742
HIGHEST ANNUAL MEAN			12310
LOWEST ANNUAL MEAN			2508
HIGHEST DAILY MEAN	15600	May 4	30800
LOWEST DAILY MEAN	550	Sep 7	945
ANNUAL SEVEN-DAY MINIMUM	578	Sep 1	993
ANNUAL RUNOFF (AC-FT)	2265000	5725000	4884000
10 PERCENT EXCEEDS	5600	20900	17200
50 PERCENT EXCEEDS	1980	4630	3720
90 PERCENT EXCEEDS	907	1400	1510