

SPOKANE RIVER BASIN

12419500 SPOKANE RIVER ABOVE LIBERTY BRIDGE, NEAR OTIS ORCHARDS, WA

LOCATION.--Lat 47°40'56", long 117°05'05", in NW 1/4 sec.11, T.25 N., R.45 E., Spokane County, Hydrologic Unit 17010305, on left bank 1.2 mi upstream from Liberty Bridge, 1.8 mi southeast of Otis Orchards, 3.3 mi northeast of Greenacres, and at mile 93.9.

DRAINAGE AREA.--3,880 mi², approximately.

PERIOD OF RECORD.--January 1929 to December 1936, March 1937, August 1937 to August 1941, October 1941 to October 1942, February to May 1943, August 1943 to November 1946, February to July 1947, September 1947 to February 1948; May to November 1948, March to November 1949, and April to September 1950 (monthly discharge only); October 1950 to September 1983, April 1999 to current year.

REVISED RECORD.--None.

GAGE.--Water-stage recorder. Datum of gage is 2,000 ft above NGVD of 1929, (levels by Avista Corporation).

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow partly regulated by dam at Post Falls, Idaho, 8.2 mi upstream and affected by storage in Coeur d'Alene Lake. Chemical analysis July 1959 to September 1971, April to September 1999. Water temperature December 1963 to September 1965.

AVERAGE DISCHARGE.-- 50 years (water years 1930-36, 1938-40, 1942, 1944-46, 1951-83, 2000-02), 6,097 ft³/s, 4,417,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,100 ft³/s Dec. 25, 1933, gage height, 22.24 ft; minimum daily discharge, 38 ft³/s July 20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 31,400 ft³/s Apr. 17, gage height, 19.11 ft, from inside high water mark; minimum discharge, 427 ft³/s Aug. 28-30, gage height 8.37 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	1080	2110	3190	3370	6510	8140	9290	18600	e29000	8930	754	519
2	1350	2110	3190	3120	6300	7900	9410	18900	e29300	8080	596	555
3	1370	2110	3210	3030	5870	7620	9710	19100	e29000	6490	589	559
4	1410	2110	3220	2870	5650	7100	9890	19600	e28300	5720	578	565
5	1420	2110	3220	2750	5540	6930	10100	20000	e27700	5100	571	566
6	1430	2110	3220	2750	5340	6560	10500	20100	e26500	4030	701	562
7	1430	2130	3220	2750	5130	6380	11000	19700	e25900	3690	864	566
8	1430	2110	3220	3250	5030	6110	11700	19200	e24900	3690	865	567
9	1430	2010	3220	4590	4700	5950	11700	18500	23800	3680	866	906
10	1440	1990	3360	5140	4580	5690	13100	17600	22900	3290	866	1370
11	1440	1990	3820	5760	4430	5600	15300	16800	21800	2980	864	1370
12	1470	1980	4100	5920	4330	6310	16800	16000	20600	2600	862	1360
13	1470	1980	4140	6000	4170	7390	18100	15200	19500	2290	860	1360
14	1470	1980	4650	6990	4030	8230	20100	15300	18500	2280	858	1390
15	1460	1980	5040	7490	3990	8570	23700	15700	18100	2280	859	1390
16	1450	1980	5060	8020	3850	8640	e27600	16200	17800	2280	782	1400
17	1470	1980	5060	7890	3730	8540	e30200	16600	17700	2280	716	1410
18	1470	1970	5310	7750	3680	8490	e30600	16700	17600	2520	716	1410
19	1470	1970	5520	7630	3630	8110	e29900	17000	17000	2700	670	1420
20	1470	1980	5470	7470	3750	8020	e28200	17800	16600	2700	554	1430
21	1480	1980	5450	7270	3720	8120	e26800	19300	15400	2610	474	1430
22	1470	1990	5390	7060	3730	8130	e25400	21100	14100	2040	474	1430
23	1490	1990	5310	6890	4210	8100	24100	22900	13600	1590	491	1430
24	1760	1990	5120	6640	5400	8050	23300	e24600	12700	1590	511	1430
25	2000	2000	4830	6440	6970	8040	22600	e25800	11400	1580	510	1430
26	2060	2270	4370	6750	7750	8080	21800	e25800	10500	1520	510	1430
27	2080	2470	4130	6990	8160	8140	21000	e25700	9270	1360	506	1430
28	2080	2500	4000	6990	8190	8290	20400	e25800	8030	1350	467	1440
29	2090	2600	3930	6910	---	8580	19600	e26600	8050	1250	427	1440
30	2100	2840	3510	6780	---	8750	19000	e27500	8960	1080	463	1450
31	2110	---	3520	6660	---	8870	---	e28500	---	999	510	---
TOTAL	49150	63320	130000	179920	142370	237430	570900	628200	564510	94579	20334	35015
MEAN	1585	2111	4194	5804	5085	7659	19030	20260	18820	3051	656	1167
MAX	2110	2840	5520	8020	8190	8870	30600	28500	29300	8930	866	1450
MIN	1080	1970	3190	2750	3630	5600	9290	15200	8030	999	427	519
AC-FT	97490	125600	257900	356900	282400	470900	1132000	1246000	1120000	187600	40330	69450
CFSM	0.41	0.54	1.08	1.50	1.31	1.97	4.90	5.22	4.85	0.79	0.17	0.30
IN.	0.47	0.61	1.25	1.73	1.36	2.28	5.47	6.02	5.41	0.91	0.19	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2002, BY WATER YEAR (WY)

	MEAN	1929	2002	1929	2002	1929	2002	1929	2002	1929	2002	
MEAN	1629	2665	4721	5273	6131	7519	14090	17730	9735	1901	801	1055
MAX	3281	7913	23660	24980	16050	24440	25150	28700	25710	6043	1464	1731
(WY)	1969	1960	1934	1934	1961	1972	1943	1932	1974	1950	1948	1971
MIN	748	597	726	834	1010	1673	3605	5441	2067	717	149	127
(WY)	1964	1936	1936	2001	2001	1929	1977	1944	1931	2001	2001	1949

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1929 - 2002

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1929 - 2002
ANNUAL TOTAL	972977	2715728	
ANNUAL MEAN	2666	7440	6104
HIGHEST ANNUAL MEAN			11260
LOWEST ANNUAL MEAN			2077
HIGHEST DAILY MEAN	16200	May 3	30600
LOWEST DAILY MEAN	66	Aug 21	427
ANNUAL SEVEN-DAY MINIMUM	71	Aug 21	485
ANNUAL RUNOFF (AC-FT)	1930000	5387000	4422000
ANNUAL RUNOFF (CFSM)	0.69	1.92	1.57
ANNUAL RUNOFF (INCHES)	9.33	26.04	21.38
10 PERCENT EXCEEDS	5410	20200	17100
50 PERCENT EXCEEDS	1490	4140	3030
90 PERCENT EXCEEDS	278	865	784

e Estimated