

COLUMBIA RIVER MAIN STEM

14246900 COLUMBIA RIVER AT BEAVER ARMY TERMINAL, NEAR QUINCY, OR

LOCATION.--Lat 46°10'55", long 123°10'50", in NE 1/4 sec.16, T.8 N., R.4 W., Columbia County, Hydrologic Unit 17080003, on left bank, 0.7 mi downstream from Crims Island, 3.0 mi northwest of Quincy, and at mile 53.8.

DRAINAGE AREA.--256,900 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1968 to June 1970, June 1991 to current year.

GAGE.--Water-stage and velocity index recorder. Datum of gage is 0.52 ft above sea level. May 1968 to June 1970 water-stage recorder with auxillary water-stage recorder 5.6 miles downstream, at datum 10.00 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by many reservoirs on Columbia River and in tributary basins. Flows affected by tide which can cause reverse direction during tidal cycle when mean daily flows are less than 250,000 ft³/s. Mean discharge values are based on a 24 hour day, not a tidal cycle.

AVERAGE DISCHARGE.--11 years (water years 1969, 1992-2001), 241,000 ft³/s, 174,600,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 864,000 ft³/s Feb. 10, 1996; minimum daily discharge, 63,600 ft³/s Sept. 9, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 232,000 ft³/s May 18; maximum gage height, 7.99 ft Dec. 14; minimum daily discharge, 63,600 ft³/s Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133000	158000	163000	175000	137000	e140000	162000	e170000	201000	124000	89100	99700
2	133000	156000	159000	164000	133000	e140000	154000	e200000	180000	124000	84400	94800
3	130000	154000	168000	154000	148000	e130000	168000	228000	151000	128000	85900	96300
4	143000	138000	154000	150000	145000	e130000	170000	188000	150000	135000	90000	85100
5	152000	146000	158000	155000	166000	e130000	151000	186000	166000	113000	84400	84900
6	120000	145000	148000	166000	164000	e140000	e150000	183000	175000	103000	97000	93800
7	113000	144000	158000	160000	159000	e140000	e160000	165000	170000	92600	102000	84500
8	130000	147000	170000	154000	151000	e130000	e150000	169000	153000	87700	107000	76700
9	128000	161000	180000	150000	143000	130000	e130000	153000	181000	81200	127000	63600
10	123000	167000	164000	145000	e140000	128000	e160000	153000	159000	91400	118000	70200
11	139000	166000	170000	147000	142000	135000	e170000	131000	131000	101000	102000	77100
12	138000	172000	169000	159000	152000	128000	e170000	144000	175000	102000	99200	92100
13	134000	156000	172000	154000	153000	118000	e170000	149000	185000	89000	112000	112000
14	119000	155000	171000	163000	152000	130000	e160000	140000	165000	83900	105000	111000
15	119000	158000	226000	162000	152000	125000	e130000	157000	145000	79200	118000	103000
16	123000	155000	176000	154000	157000	136000	e120000	212000	145000	85600	124000	89800
17	119000	162000	218000	158000	155000	142000	e150000	224000	131000	99500	124000	86300
18	134000	153000	200000	145000	140000	120000	e150000	232000	126000	101000	119000	79200
19	123000	e160000	200000	166000	139000	154000	e170000	208000	140000	107000	96700	78600
20	117000	e150000	194000	170000	141000	172000	e150000	172000	160000	94700	88200	81700
21	169000	e140000	192000	143000	128000	165000	e150000	161000	137000	93800	94100	87400
22	151000	e180000	175000	157000	121000	148000	e130000	151000	147000	89700	85700	84000
23	129000	152000	201000	149000	115000	152000	e120000	170000	137000	82800	106000	89000
24	124000	158000	214000	144000	e140000	148000	e130000	183000	132000	88100	98100	83100
25	129000	151000	219000	141000	e110000	121000	e140000	184000	122000	88500	91600	100000
26	129000	149000	204000	143000	e110000	131000	e150000	172000	118000	95400	119000	110000
27	135000	165000	195000	148000	e130000	145000	e150000	167000	129000	101000	125000	109000
28	116000	171000	192000	143000	e140000	168000	e160000	139000	148000	110000	120000	101000
29	150000	152000	178000	143000	---	171000	e130000	159000	146000	93700	134000	91800
30	150000	165000	170000	150000	---	181000	e160000	186000	147000	89300	124000	86700
31	157000	---	172000	144000	---	177000	---	181000	---	94900	116000	---
TOTAL	4109000	4686000	5630000	4756000	3963000	4405000	4515000	5417000	4552000	3050000	3296400	2702400
MEAN	132500	156200	181600	153400	141500	142100	150500	174700	151700	98390	106300	90080
MAX	169000	180000	226000	175000	166000	181000	170000	232000	201000	135000	134000	112000
MIN	113000	138000	148000	141000	110000	118000	120000	131000	118000	79200	84400	63600
AC-FT	8150000	9295000	11170000	9434000	7861000	8737000	8956000	10740000	9029000	6050000	6538000	5360000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
MEAN	148700	199400	268700	291200	287400	260400	272400	329200	325500	215600	157600	130900																								
MAX	212300	256500	430800	444300	543400	388700	406500	507500	514500	279300	223000	177300																								
(WY)	1998	1996	1996	1997	1996	1997	1997	1997	1997	1997	1997	1997																								
MIN	114500	136100	175400	153400	141500	142100	150500	174700	151700	98390	106300	90080																								
(WY)	1995	1994	1994	2001	2001	2001	2001	2001	2001	2001	2001	2001																								

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1968 - 2001

ANNUAL TOTAL	78908400	51081800	
ANNUAL MEAN	215600	140000	241000
HIGHEST ANNUAL MEAN			338200
LOWEST ANNUAL MEAN			140000
HIGHEST DAILY MEAN	430000	Apr 24	232000
LOWEST DAILY MEAN	99400	Sep 5	63600
ANNUAL SEVEN-DAY MINIMUM	108000	Sep 4	78700
ANNUAL RUNOFF (AC-FT)	156500000		101300000
10 PERCENT EXCEEDS	320000		175000
50 PERCENT EXCEEDS	210000		144000
90 PERCENT EXCEEDS	123000		91700
			128000

e Estimated