

COLUMBIA RIVER MAIN STEM

12453700 COLUMBIA RIVER AT ROCKY REACH DAM, WA

LOCATION.--Lat 47°31'28", long 120°18'04", in SW 1/4 NW 1/4 sec.2, T.23 N., R.20 E., Chelan County, Hydrologic Unit 17020010, on right bank 0.5 mi downstream from Rocky Reach Dam, 1.5 mi downstream from Swakane Creek, 7.4 mi north of Wenatchee, and at mile 473.4.

DRAINAGE AREA.--87,800 mi², approximately.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Daily discharge determined from flow through turbines plus spillway flow when present. Datum of gage is NGVD of 1929. Oct. 1, 1960, to July 22, 1988, water-stage recorder with auxiliary water-stage recorder 1.9 mi downstream from base gage at same datum.

REMARKS.--Flow regulated by numerous reservoirs. Feeder Canal diversion (station 12435500) for Columbia Basin project is used to irrigate approximately 600,000 acres in the United States. An additional 66,500 acres in Canada are irrigated by other diversions.

COOPERATION.--Discharge records provided by Public Utility District No. 1 of Chelan County at Rocky Reach Dam through the Corps of Engineers, North Pacific Division, Reservoir Control Center. The U.S. Geological Survey made 6 discharge measurements at this site during the year.

AVERAGE DISCHARGE.--42 years (water years 1961-2002), 115,200 ft³/s, 83,460,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 535,000 ft³/s June 10, 1961, elevation, about 635.50 ft; minimum daily discharge, 25,100 ft³/s Nov. 11, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 254,000 ft³/s June 20; minimum daily discharge, 30,100 ft³/s March 31.

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	72600	56900	50700	76000	103000	89300	58500	130000	142000	243000	139000	49300
2	49900	50700	48200	93500	85800	76300	67500	134000	154000	251000	146000	65300
3	59700	48500	93000	108000	74900	53200	61600	133000	192000	248000	117000	91500
4	65700	51200	96800	116000	127000	74200	51700	124000	234000	218000	92400	65800
5	42700	74400	97600	99200	102000	68100	58200	110000	236000	188000	116000	70600
6	45300	78200	74400	64800	110000	84900	39900	160000	218000	189000	121000	70300
7	40600	77400	78600	80600	91100	94400	37800	160000	238000	159000	143000	53000
8	62000	79600	49600	78500	104000	100000	56800	128000	229000	143000	148000	51400
9	56300	65800	56000	68200	94300	64600	61400	148000	202000	175000	133000	89400
10	59600	56600	95100	61800	86800	57800	64400	135000	227000	206000	118000	72300
11	61300	59700	105000	74500	126000	90200	107000	112000	203000	204000	95300	62900
12	65600	69600	96800	69900	110000	85400	120000	103000	209000	213000	124000	76400
13	47800	61400	94500	66700	104000	75500	100000	136000	186000	204000	125000	77200
14	43200	68300	82800	106000	92500	72500	109000	137000	194000	161000	125000	50200
15	70500	75400	66700	114000	118000	82700	141000	132000	182000	162000	123000	44000
16	75200	80700	49100	106000	102000	67900	173000	142000	173000	211000	105000	79000
17	72900	54400	87400	111000	71100	60700	187000	131000	191000	184000	75400	71500
18	62400	65600	99700	106000	96500	86600	185000	120000	213000	179000	81600	76200
19	66300	85600	101000	97100	98900	78200	186000	117000	233000	200000	118000	95700
20	50600	85100	111000	68400	93400	99700	180000	136000	254000	181000	114000	91900
21	44500	91300	103000	107000	90000	86600	154000	125000	235000	160000	111000	85300
22	64300	56600	79800	113000	70800	48900	187000	140000	195000	169000	125000	71500
23	59100	69600	67200	113000	82000	31000	164000	149000	158000	170000	117000	97800
24	71300	74500	89900	89600	65100	41300	160000	147000	177000	156000	95800	97800
25	65100	65700	57200	112000	82200	46000	157000	124000	215000	145000	69000	95000
26	56000	103000	102000	79800	87400	67500	145000	141000	207000	122000	112000	87600
27	45700	102000	99800	72400	95000	57000	125000	159000	236000	103000	109000	57500
28	50700	105000	93300	111000	81500	52800	110000	155000	245000	107000	116000	62900
29	72900	98800	74100	122000	---	50200	153000	159000	219000	129000	109000	41800
30	62900	86000	58300	125000	---	36300	154000	156000	194000	143000	106000	84300
31	49200	---	91100	126000	---	30100	---	161000	---	149000	92700	---
TOTAL	1811900	2197600	2549700	2937000	2645300	2109900	3536800	4244000	6191000	5472000	3522200	2185400
MEAN	58450	73250	82250	94740	94480	68060	117900	136900	206400	176500	113600	72850
MAX	75200	105000	111000	126000	127000	100000	187000	161000	254000	251000	148000	97800
MIN	40600	48500	48200	61800	65100	30100	37800	103000	142000	103000	69000	41800
AC-FT	3594000	4359000	5057000	5826000	5247000	4185000	7015000	8418000	12280000	10850000	6986000	4335000
CAL YR 2001	TOTAL 26117900	MEAN 71560	MAX 125000	MIN 28600	AC-FT 51800000							
WTR YR 2002	TOTAL 39402800	MEAN 108000	MAX 254000	MIN 30100	AC-FT 78160000							