

12462600 COLUMBIA RIVER BELOW ROCK ISLAND DAM, WA

Upper Columbia Basin
Upper Columbia-Entiat Subbasin

LOCATION.--Lat 47°19'57", long 120°04'48" referenced to North American Datum of 1927, in NE ¼ NW ¼ sec.9, T.21 N., R.22 E., Douglas County, WA, Hydrologic Unit 17020010, on left bank 1.0 mi downstream from Rock Island Dam, 2.0 mi downstream from Rock Island Creek, 12 mi southeast of Wenatchee, and at mile 452.4.

Auxiliary GAGE: Lat 47 18'15", long 120 05'00", in NE ¼ NW ¼ sec. 21, T. 21 N., R. 22 E., Douglas County, Hydrologic Unit 17020010, on left bank 2.0 mi downstream from the base gage, and at mile 450.4.

DRAINAGE AREA.--89,400 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January to December 1910 (gage heights only), May 1913 to December 1916, October 1930 to current year. Published as "at Wenatchee" January 1910 to December 1916, and as "at Trinidad" October 1930 to May 1961.

GAGE.--Daily discharge determined from flow through turbines plus spillway flow when present. Datum of gage is NGVD of 1929. Prior to Jan. 1, 1916, nonrecording gage 1.2 mi upstream from highway bridge at Wenatchee, at mile 466.3, at datum 583 ft above NGVD of 1929. Jan. 1 to Dec. 31, 1916, nonrecording gage on pier of highway bridge at Wenatchee, at mile 465.1, at datum 579.30 ft above NGVD of 1929. Oct. 1, 1930, to May 31, 1961, water-stage recorder 0.5 mi southwest of Trinidad, at mile 441.7, at datum 499.3 ft above NGVD of 1929 (river-profile survey). June 1, 1961, to July 22, 1988, water-stage recorder at present site and datum; May 21, 1963, to July 22, 1988, auxiliary water-stage recorder 2.0 mi downstream at same datum.

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

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.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--86 years (water years 1914-16, 1931-2013), 118,300 ft³/s, 85,710,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 692,600 ft³/s, June 12, 1948, gage height, 59.35 ft, site and datum then in use; minimum discharge, 4,120 ft³/s, Feb. 10, 1932, gage height, 11.40 ft, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 7, 1894, reached a discharge of about 740,000 ft³/s, from flood-marks at Wenatchee.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 230,000 ft³/s, June 30; minimum daily discharge, 40,500 ft³/s, Oct. 14.

12462600 COLUMBIA RIVER BELOW ROCK ISLAND DAM, WA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
 [$\times 10^6$, million]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	75,700	77,400	104,000	144,000	96,900	65,000	92,000	168,000	154,000	220,000	124,000	63,400
2	66,400	99,000	115,000	140,000	90,700	58,800	89,500	158,000	182,000	219,000	136,000	56,400
3	69,800	75,100	96,300	152,000	58,100	54,400	126,000	155,000	168,000	219,000	135,000	83,600
4	72,400	69,100	97,800	155,000	85,800	87,200	136,000	143,000	182,000	191,000	135,000	82,400
5	67,700	84,500	124,000	157,000	94,300	83,800	135,000	136,000	187,000	200,000	135,000	73,800
6	57,200	102,000	127,000	147,000	111,000	80,000	131,000	154,000	171,000	207,000	126,000	62,000
7	55,900	84,800	133,000	143,000	124,000	78,000	125,000	168,000	160,000	195,000	125,000	64,000
8	74,200	90,500	140,000	141,000	131,000	86,600	148,000	186,000	157,000	174,000	133,000	59,500
9	71,300	102,000	137,000	124,000	97,700	65,800	170,000	192,000	143,000	166,000	123,000	86,100
10	63,800	102,000	137,000	135,000	82,000	40,600	178,000	218,000	155,000	153,000	102,000	81,100
11	72,000	102,000	147,000	141,000	94,400	86,700	190,000	205,000	162,000	161,000	107,000	78,200
12	48,500	93,200	144,000	144,000	86,600	88,200	186,000	190,000	187,000	173,000	122,000	85,000
13	50,800	83,000	152,000	142,000	87,300	92,300	179,000	190,000	174,000	166,000	119,000	78,100
14	40,500	94,600	142,000	146,000	114,000	71,900	178,000	188,000	170,000	164,000	122,000	74,900
15	62,200	103,000	156,000	142,000	110,000	79,500	180,000	188,000	157,000	158,000	135,000	78,000
16	42,200	107,000	142,000	144,000	97,400	67,000	190,000	182,000	152,000	158,000	132,000	86,200
17	52,100	109,000	146,000	154,000	85,000	55,000	181,000	200,000	168,000	155,000	112,000	69,200
18	62,100	101,000	143,000	156,000	114,000	71,200	165,000	194,000	163,000	158,000	104,000	66,100
19	41,600	102,000	144,000	154,000	117,000	82,200	159,000	207,000	151,000	164,000	106,000	75,700
20	42,700	101,000	132,000	153,000	113,000	64,400	139,000	201,000	144,000	143,000	131,000	63,000
21	62,300	64,000	137,000	145,000	104,000	74,300	137,000	202,000	181,000	125,000	126,000	75,600
22	92,000	83,100	106,000	156,000	87,100	76,600	155,000	215,000	202,000	148,000	117,000	62,000
23	96,300	83,700	105,000	151,000	60,900	66,600	167,000	201,000	202,000	134,000	82,900	71,900
24	94,200	92,400	108,000	144,000	65,500	53,000	164,000	211,000	204,000	134,000	94,900	76,100
25	88,700	100,000	117,000	139,000	69,500	77,200	160,000	211,000	201,000	141,000	104,000	71,000
26	95,800	103,000	133,000	121,000	102,000	92,000	154,000	210,000	207,000	132,000	112,000	79,700
27	78,200	87,000	120,000	91,600	90,100	99,600	145,000	210,000	213,000	122,000	109,000	77,800
28	60,500	101,000	144,000	104,000	86,400	116,000	133,000	205,000	222,000	116,000	108,000	60,200
29	65,200	113,000	155,000	124,000	---	108,000	145,000	185,000	217,000	131,000	109,000	53,200
30	72,800	109,000	140,000	108,000	---	95,900	159,000	146,000	230,000	145,000	114,000	76,200
31	84,100	---	154,000	99,600	---	73,200	---	150,000	---	144,000	104,000	---
Total	2,079,200	2,818,400	4,078,100	4,297,200	2,655,700	2,391,000	4,596,500	5,769,000	5,366,000	5,016,000	3,644,800	2,170,400
Mean	67,070	93,950	131,600	138,600	94,850	77,130	153,200	186,100	178,900	161,800	117,600	72,350
Max	96,300	113,000	156,000	157,000	131,000	116,000	190,000	218,000	230,000	220,000	136,000	86,200
Min	40,500	64,000	96,300	91,600	58,100	40,600	89,500	136,000	143,000	116,000	82,900	53,200
Ac-ft	4,124,000	5,590,000	8,089,000	8,523,000	5,268,000	4,743,000	9,117,000	11.44 $\times 10^6$	10.64 $\times 10^6$	9,949,000	7,229,000	4,305,000

	Calendar Year 2012	Water Year 2013
Total	52,654,800	44,882,300
Mean	143,900	123,000
Max	323,000	230,000
Min	40,500	40,500
Ac-ft	104,400,000	89,020,000

12462600 COLUMBIA RIVER BELOW ROCK ISLAND DAM, WA—Continued

