12026150 SKOOKUMCHUCK RIVER BELOW BLOODY RUN CREEK, NEAR CENTRALIA, WA

Washington Coastal Basin
Upper Chehalis Subbasin

LOCATION.--Lat 46°47′25″, long 122°44′03″ referenced to North American Datum of 1927, in NW ¼ NW ¼ sec.18, T.15 N., R.1 E., Thurston County, WA, Hydrologic Unit 17100103, on right bank 0.7 mi downstream from Bloody Run Creek, 1.2 mi downstream from Skookumchuck Dam, 12 mi northeast of Centralia, and at mile 20.7.

DRAINAGE AREA.--65.9 mi^2, Prior to August 1969, 61.7 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1929 to November 1933, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1316 and 1736. Published as "near Centralia" (12026000) prior to August 1969.

GAGE.--Water-stage recorder. Datum of gage is 317.34 ft above NGVD of 1929. Apr. 1, 1929, to Sept. 30, 1931, and Feb. 1, 1932, to Dec. 6, 1933, nonrecording gage at site 1.1 mi upstream at different datum. Oct. 9, 1939, to July 31, 1969, at site 1.3 mi upstream at datum 301.04 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Skookumchuck Dam since January 1971. No diversions upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--76 years (water years 1930-33, 1940-2011), 257 ft^3/s, 186,200 acre-ft/yr, unadjusted. 40 years (water years 1972-2011), 263 ft^3/s, 190,400 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,020 ft^3/s, Feb. 8, 1996, gage height, 13.41 ft, result of flow over dam computation, provided by Pacific Power & Light; minimum discharge, 12 ft^3/s, May 28, 1970, caused by pumping during dam construction.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 13	0515	2,610	10.56
Jan 16	1715	2,490	10.44
Mar 10	1145	*3,050	*10.96

Minimum discharge, 92 ft^3/s, Oct. 23, minimum gage height, 5.41 ft, Sept. 29, 30.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 12026150, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/12026150.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	132	182	525	404	297	262	1,320	364	217	170	144	137
2	131	215	555	346	280	268	966	324	219	171	119	133
3	131	205	461	311	273	264	725	311	220	170	114	132
4	130	198	380	299	274	379	608	287	219	171	112	133
5	130	196	332	299	273	582	794	267	217	171	112	133
6	129	198	318	301	272	580	919	256	215	171	115	132
7	133	287	314	307	265	465	837	286	217	170	115	125
8	144	662	475	308	238	382	655	338	214	170	114	118
9	146	602	1,090	306	205	520	521	341	208	170	114	118
10	151	559	1,440	320	217	2,520	436	309	183	170	115	118
11	146	545	1,030	349	231	1,860	480	295	174	166	114	118
12	143	503	1,530	398	232	1,160	498	339	174	165	114	118
13	143	466	2,360	1,370	234	1,040	447	316	173	168	114	118
14	143	433	1,880	1,540	235	1,700	459	287	174	167	114	118
15	146	419	1,420	1,220	241	1,610	656	553	175	165	114	119
16	146	405	976	1,980	232	1,640	651	767	175	168	114	119
17	145	388	731	1,850	218	1,240	559	577	173	165	113	119
18	145	471	603	1,220	215	885	460	430	174	165	114	119
19	144	741	523	872	214	675	385	343	174	165	114	119
20	145	701	502	659	213	535	333	290	175	165	115	119
21	144	554	475	567	212	469	291	258	176	163	114	119
22	129	452	442	526	206	433	273	239	175	162	115	119
23	106	379	423	490	209	382	244	221	175	161	114	119
24	107	336	407	475	213	339	225	214	175	161	114	119
25	149	329	393	458	208	317	244	215	175	160	113	119
26	159	336	380	443	204	300	307	214	173	160	112	111
27	146	390	380	431	205	299	346	215	169	160	112	107
28	128	439	358	407	253	331	486	221	170	160	112	106
29	117	391	541	387	---	368	496	231	170	160	112	104
30	113	370	599	353	---	721	427	226	170	160	111	105
31	118	---	490	329	---	1,440	---	220	---	160	127	---
Total	4,219	12,352	22,333	19,525	6,569	23,966	16,048	9,754	5,598	5,130	3,570	3,593
Mean	136	412	720	630	235	773	535	315	187	165	115	120
Max	159	741	2,360	1,980	297	2,520	1,320	767	220	171	144	137
Min	106	182	314	299	204	262	225	214	169	160	111	104
Ac-ft	8,370	24,500	44,300	38,730	13,030	47,540	31,830	19,350	11,100	10,180	7,080	7,130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	140	241	483	516	433	376	302	188	142	105	98.7	136
Max	230	653	1,100	1,038	1,131	829	590	365	368	165	134	167
(WY)	(1998)	(2007)	(1978)	(2006)	(1999)	(1972)	(1991)	(1984)	(2010)	(2011)	(1997)	(1983)
Min	91.7	75.8	95.8	92.6	62.5	88.0	145	109	85.4	81.7	78.9	114
(WY)	(2003)	(2003)	(1977)	(1977)	(1977)	(1977)	(1973)	(1989)	(1989)	(1992)	(1985)	(2003)

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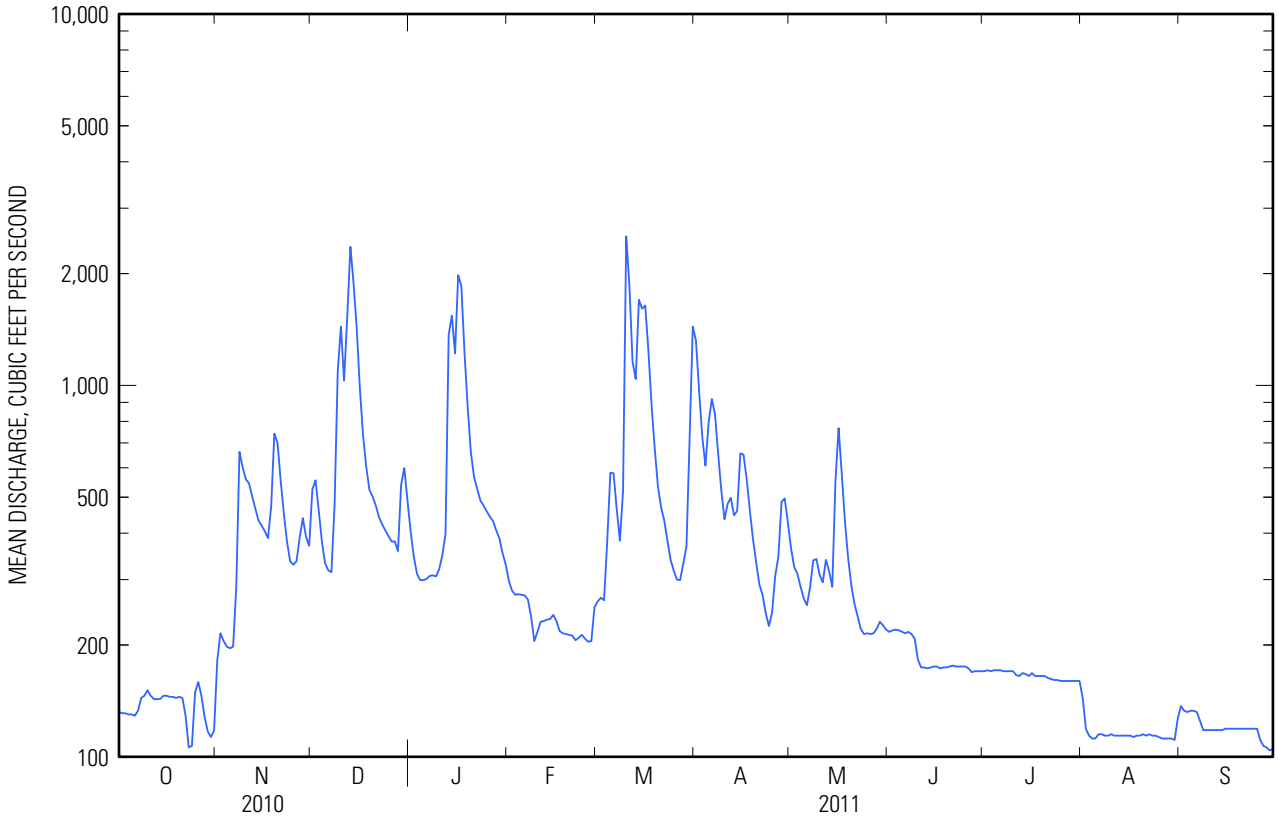
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1972 - 2011	
Annual total	111,150		132,657			
Annual mean	305		363		263	
Highest annual mean					413	1999
Lowest annual mean					119	1977
Highest daily mean	2,360	Dec 13	2,520	Mar 10	6,600	Feb 8, 1996
Lowest daily mean	79	Jul 26	104	Sep 29	52	Feb 18, 1977
Annual seven-day minimum	79	Aug 18	110	Sep 24	53	Feb 14, 1977
Annual runoff (ac-ft)	220,500		263,100		190,400	
10 percent exceeds	603		685		505	
50 percent exceeds	239		231		149	
90 percent exceeds	83		116		96