14123500 WHITE SALMON RIVER NEAR UNDERWOOD, WA

Middle Columbia Basin
Middle Columbia-Hood Subbasin

LOCATION.--Lat 45°45′08″, long 121°31′33″ referenced to North American Datum of 1927, in NW ¼ NW ¼ sec.14, T.3 N., R.10 E., Skamania County, WA, Hydrologic Unit 17070105, on right bank 300 ft downstream from bridge, 1,000 ft downstream from PacifiCorp Condit powerplant, 1.7 mi north of Underwood and at mile 1.9.

DRAINAGE AREA.--386 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1912 to February 1913 (published as "at Condit Dam, near Underwood"), March 1915 to September 1930, September 1935 to current year.

REVISED RECORDS.--WSP 484: 1915-17. WSP: 1348 1936-41(M). WSP 1638: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 112.96 ft above NGVD of 1929. Prior to March 1913, reference point at dam 1 mi upstream at different datum. March 1915 to July 16, 1918, water-stage recorder at site 200 ft upstream at datum 3.24 ft higher, and July 17, 1918, to Sept. 30, 1930, at datum 2.24 ft higher than present datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 4,000 acres in Trout Lake area. Low and medium flows regulated by powerplant of PacifiCorp. Chemical analyses August 1960 to August 1961, water years 1964-68 (miscellaneous), October 1967 to September 1970 (monthly), November 1975 to June 1980. Water temperatures July 1968 to August 1970. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--86 years (water years 1916-30, 1936-2006), 1,116 ft^3/s, 808,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,200 ft^3/s, Feb. 8, 1996, result of flashboard failure on Condit Dam, gage height, 19.16 ft, from rating curve extended above 8,030 ft^3/s, on basis of theoretical weir computation of peak flow; minimum discharge, practically no flow at times when powerplant is shut down; minimum daily discharge, 158 ft^3/s, Jan. 17, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,030 ft^3/s, Jan 11, gage height, 9.53 ft; minimum discharge, 143 ft^3/s, Nov 4, gage height, 2.57 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	600	798	539	2,910	3,090	1,350	1,210	1,710	1,560	990	726	587
2	503	804	541	2,410	3,400	1,330	1,210	1,600	1,680	1,020	735	555
3	547	662	541	2,050	3,470	1,270	1,200	1,530	1,720	991	730	572
4	514	673	517	1,800	3,420	1,270	1,230	1,510	1,770	1,030	710	572
5	490	682	514	1,610	3,080	1,280	1,220	1,510	1,840	1,010	688	563
6	490	727	513	1,590	2,690	1,240	1,250	1,530	1,730	988	705	572
7	505	663	503	e2,000	2,390	1,270	1,210	1,510	1,650	944	715	564
8	491	599	493	e2,100	2,200	1,250	1,270	1,520	1,610	936	682	572
9	510	561	474	e2,100	2,050	1,290	1,330	1,460	1,540	913	675	563
10	485	545	489	5,410	1,910	1,270	1,370	1,410	1,470	931	690	522
11	496	530	483	7,170	1,810	1,280	1,320	1,430	1,440	889	662	545
12	477	597	473	5,020	1,730	1,250	1,300	1,440	1,400	886	663	542
13	487	616	480	4,320	1,670	1,240	1,370	1,390	1,710	886	645	531
14	485	705	491	3,690	1,630	1,250	1,390	1,410	1,580	872	652	539
15	485	703	473	3,050	1,570	1,240	1,540	1,430	1,510	872	647	536
16	477	629	469	e2,600	1,520	1,230	1,510	1,600	1,470	872	622	535
17	479	606	458	e3,400	1,460	1,250	1,410	1,850	1,430	863	633	517
18	477	574	454	e3,800	1,330	1,230	1,330	2,110	1,370	839	627	531
19	477	560	471	e3,200	1,370	1,200	1,300	2,200	1,300	823	613	536
20	491	575	495	e2,800	1,390	1,200	1,270	2,190	1,240	836	622	534
21	490	547	558	e2,200	1,400	1,190	1,340	2,070	1,210	818	603	532
22	489	550	886	2,080	1,320	1,170	1,330	2,040	1,170	825	622	532
23	470	559	1,380	1,910	1,340	1,160	1,320	2,060	1,190	814	600	516
24	472	544	1,450	1,800	1,310	1,150	1,350	2,020	1,120	786	609	525
25	458	550	1,310	1,720	1,280	1,200	1,360	1,890	1,120	798	601	527
26	471	554	1,480	1,650	1,250	1,160	1,400	1,790	1,090	790	607	523
27	472	541	2,000	1,650	1,260	1,160	1,420	1,690	1,130	785	597	522
28	500	504	2,910	1,930	1,380	1,160	1,510	1,660	1,150	779	598	510
29	517	538	2,600	2,160	---	1,150	1,640	1,670	1,040	755	589	514
30	491	539	2,640	2,830	---	1,150	1,760	1,580	1,030	757	592	509
31	612	---	3,130	3,010	---	1,160	---	1,520	---	744	577	---
Total	15,408	18,235	30,215	85,970	53,720	38,000	40,670	52,330	42,270	27,042	20,037	16,198
Mean	497	608	975	2,773	1,919	1,226	1,356	1,688	1,409	872	646	540
Max	612	804	3,130	7,170	3,470	1,350	1,760	2,200	1,840	1,030	735	587
Min	458	504	454	1,590	1,250	1,150	1,200	1,390	1,030	744	577	509
Ac-ft	30,560	36,170	59,930	170,500	106,600	75,370	80,670	103,800	83,840	53,640	39,740	32,130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	630	801	1,138	1,341	1,526	1,505	1,506	1,510	1,258	884	696	628
Max	1,210	1,607	2,984	3,362	4,110	3,417	2,518	2,631	2,506	1,911	1,225	1,026
(WY)	(1998)	(1956)	(1918)	(1974)	(1996)	(1972)	(1943)	(1997)	(1956)	(1916)	(1916)	(1997)
Min	429	396	452	430	508	558	651	659	587	456	424	391
(WY)	(1993)	(1930)	(1945)	(1979)	(1929)	(1977)	(1977)	(1977)	(1992)	(1977)	(1994)	(1994)

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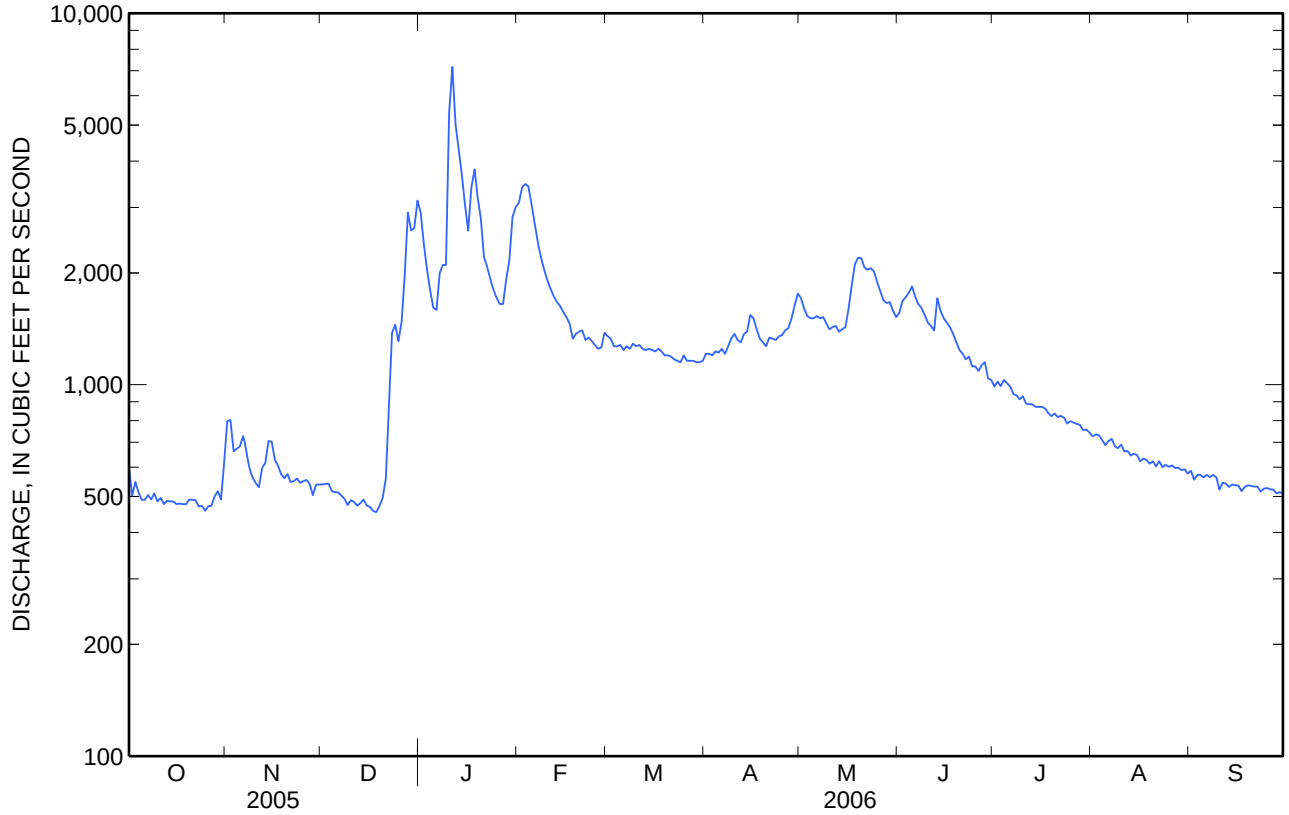
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1916 - 2006	
Annual total	279,453		440,095			
Annual mean	766		1,206		1,116	
Highest annual mean					1,765	1974
Lowest annual mean					554	1977
Highest daily mean	3,130	Dec 31	7,170	Jan 11	15,400	Feb 9, 1996
Lowest daily mean	454	Dec 18	454	Dec 18	158	Jan 17, 1950
Annual seven-day minimum	471	Dec 13	471	Dec 13	372	Sep 21, 1994
Annual runoff (ac-ft)	554,300		872,900		808,700	
10 percent exceeds	1,120		2,060		1,900	
50 percent exceeds	653		1,150		929	
90 percent exceeds	484		502		526