12409000 COLVILLE RIVER AT KETTLE FALLS, WA

Upper Columbia Basin
Colville Subbasin

LOCATION.--Lat 48°35′40″, long 118°03′41″ referenced to North American Datum of 1927, in NE ¼ NE ¼ sec.30, T.36 N., R.38 E., Stevens County, WA, Hydrologic Unit 17020003, on right bank 600 ft downstream from hydroelectric plant at foot of Meyers Falls, 1.0 mi south of town of Kettle Falls, and at mile 5.0.

DRAINAGE AREA.--1,007 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1922 to current year. Published as "at Meyer Falls" 1922-38.

REVISED RECORDS.--WSP 1316: 1938(M), 1941(M), 1948(M). WSP 1636: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,400 ft above NGVD of 1929, from topographic map. Prior to Oct. 21, 1932, non-recording gage at site 500 ft upstream at different datum. Oct. 21, 1932, to Sept. 19, 1938, non-recording gages at site 200 ft upstream at different datum. Sept. 20, 1938, to Mar. 20, 1949, non-recording gage at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Several diversions upstream from station for irrigation. Regulation at low flow by powerplant. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--84 years (water years 1923-2006), 307 ft^3/s, 222,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,440 ft^3/s Jan. 21, 1974, gage height, 9.84 ft; maximum gage height, 10.17 ft Apr. 23, 1956; minimum discharge observed, 0.5 ft^3/s Aug. 15, 1930.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,020 ft^3/s, Apr 16, gage height, 8.27 ft, result of regulation; minimum discharge, 16 ft^3/s, Dec 4, result of regulation. May have been less during period of ice effect.

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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	63	109	91	185	507	490	755	1,350	502	280	102	88
2	64	132	85	206	509	496	782	1,310	482	270	103	92
3	73	146	76	208	496	492	808	1,220	485	256	104	91
4	73	134	e48	214	508	480	851	1,140	489	243	103	83
5	73	137	e54	192	551	458	903	1,080	535	235	97	76
6	73	141	e52	190	522	462	972	1,020	524	233	94	75
7	73	131	e50	232	490	519	1,070	975	477	236	91	81
8	75	122	e52	318	461	544	1,140	930	449	231	87	79
9	79	114	e54	319	425	573	1,220	887	439	219	82	79
10	76	108	e53	355	384	580	1,350	826	428	210	79	82
11	73	104	e53	604	364	569	1,430	796	435	202	93	78
12	73	102	e54	645	356	550	1,460	774	426	193	113	78
13	75	102	e56	610	360	525	1,520	739	420	194	107	80
14	73	104	e56	669	346	514	1,640	712	486	193	100	83
15	74	107	e54	728	326	488	1,830	695	656	183	93	88
16	73	97	e53	688	306	475	1,990	683	671	170	90	92
17	73	101	e52	655	279	500	2,000	679	626	169	89	92
18	72	98	e51	613	244	547	1,910	675	575	158	88	92
19	75	94	e50	568	293	558	1,750	662	527	150	87	95
20	82	97	e52	534	338	555	1,580	660	500	148	90	108
21	93	96	e58	486	359	543	1,480	696	452	142	78	120
22	85	94	e60	444	335	541	1,440	690	425	136	77	120
23	81	93	93	404	295	534	1,380	684	396	130	80	109
24	80	94	138	377	294	554	1,310	656	377	132	74	110
25	79	98	171	353	279	612	1,260	619	359	118	79	100
26	83	111	171	344	278	644	1,220	611	344	116	82	100
27	88	114	172	338	295	652	1,200	640	328	113	80	100
28	93	104	184	340	370	669	1,180	618	313	112	77	97
29	99	98	185	351	---	675	1,180	611	292	103	82	95
30	108	92	193	395	---	683	1,250	600	291	100	89	96
31	103	---	179	479	---	702	---	553	---	100	87	---
Total	2,457	3,274	2,750	13,044	10,570	17,184	39,861	24,791	13,709	5,475	2,777	2,759
Mean	79.3	109	88.7	421	378	554	1,329	800	457	177	89.6	92.0
Max	108	146	193	728	551	702	2,000	1,350	671	280	113	120
Min	63	92	48	185	244	458	755	553	291	100	74	75
Ac-ft	4,870	6,490	5,450	25,870	20,970	34,080	79,060	49,170	27,190	10,860	5,510	5,470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	118	153	182	213	286	501	843	685	355	157	88.0	96.3
Max	301	401	783	1,374	970	1,410	2,168	1,744	1,035	467	258	241
(WY)	(1928)	(1928)	(1974)	(1974)	(1974)	(1983)	(1969)	(1948)	(1948)	(1948)	(1948)	(1997)
Min	35.8	49.5	56.3	32.9	65.8	127	128	93.8	48.4	20.6	12.0	22.7
(WY)	(1932)	(1932)	(1932)	(1930)	(1937)	(1930)	(1930)	(1930)	(1926)	(1977)	(1931)	(1931)

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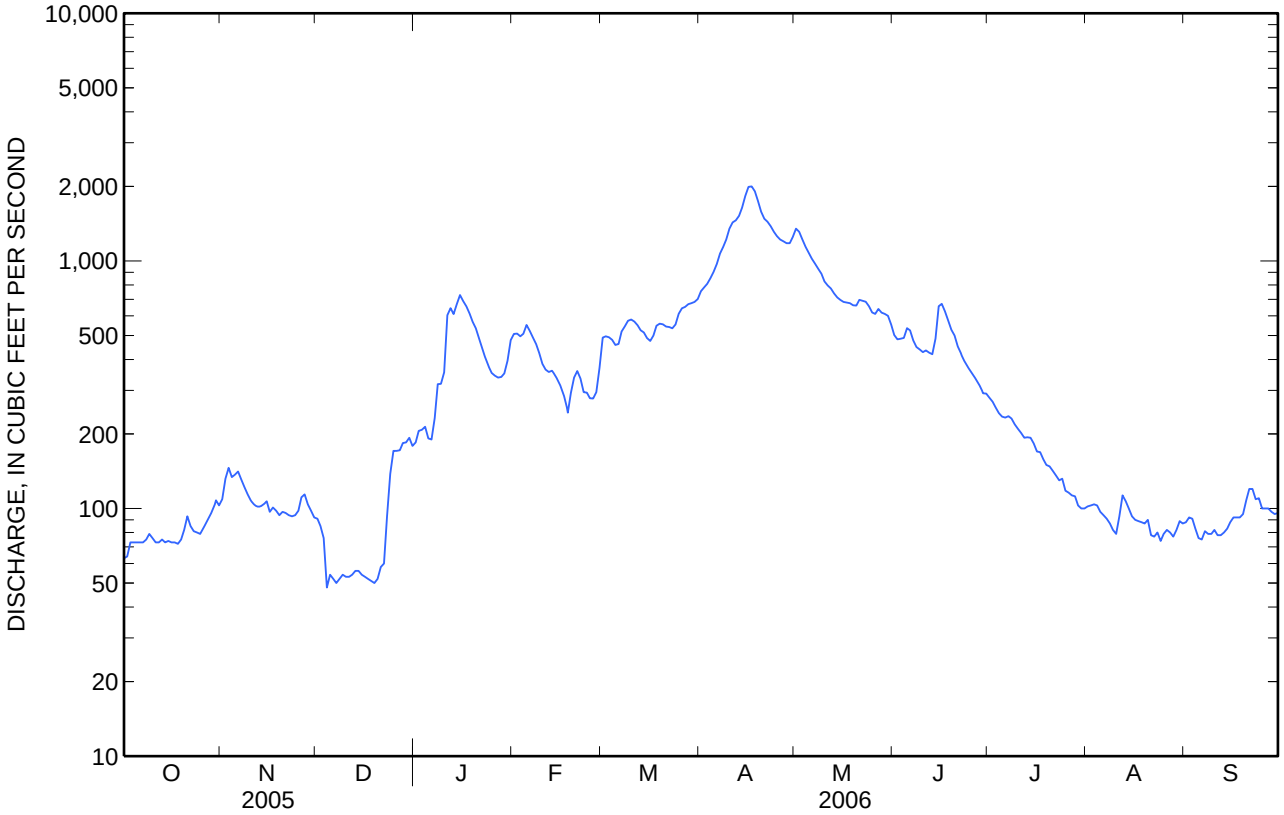
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1923 - 2006	
Annual total	57,736		138,651			
Annual mean	158		380		307	
Highest annual mean					768	1974
Lowest annual mean					70.5	1930
Highest daily mean	512	Mar 29	2,000	Apr 17	3,360	Jan 20, 1974
Lowest daily mean	35	Aug 13	48	Dec 4	0.50	Aug 15, 1930
Annual seven-day minimum	39	Aug 8	52	Dec 4	5.3	Aug 14, 1930
Annual runoff (ac-ft)	114,500		275,000		222,300	
10 percent exceeds	315		836		720	
50 percent exceeds	132		231		174	
90 percent exceeds	50		75		65