



Water-Data Report 2006

12404500 KETTLE RIVER NEAR LAURIER, WA

Upper Columbia Basin
Kettle Subbasin

LOCATION.--Lat 48°59'04", long 118°12'55" referenced to North American Datum of 1927, in SW ¼ NW ¼ sec.11, T.40 N., R.36 E., Ferry County, WA, Hydrologic Unit 17020002, on right bank 1,000 ft downstream from Deep Creek, 1.1 mi south of international boundary, 1.1 mi southeast of Laurier, and at mile 29.71.

DRAINAGE AREA.--3,800 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1929 to current year.

REVISED RECORDS.--WSP 737: 1930-31. WSP 862: 1937. WSP 882: 1938.

GAGE.--Water-stage recorder. Datum of gage is 1,425.5 above NGVD of 1929. Prior to Jan. 3, 1930, nonrecording gage at same site and datum.

COOPERATION.--This station is maintained by the United States under agreement with Canada.

REMARKS.--Records excellent, except for estimated daily discharges and discharges for July 11-17, which are fair. Diversions for irrigation of about 720 acres in the United States (for 1946 from United States reports), and 2,090 acres in Canada from the Canada Year Book for 1940. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--77 years (water years 1930-2006), 2,933 ft³/s, 2,125,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,000 ft³/s May 29, 1948, gage height, 17.25 ft; minimum daily discharge, 70 ft³/s Jan. 11-31, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May or June 1894 reached a stage of about 22 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,100 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 01	0030	19,600	12.47
May 21	2230	*30,300	*15.75
Jun 16	0630	18,800	12.20

Minimum discharge, 140 ft³/s, Dec 5.

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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	239	627	355	e590	626	680	1,660	18,500	14,200	4,010	740	249
2	238	655	369	e600	616	686	1,910	15,600	15,400	3,690	707	246
3	246	647	e350	e620	609	677	2,160	13,000	17,500	3,390	674	245
4	257	619	e260	e610	633	673	2,400	11,700	16,400	3,150	641	241
5	263	603	e140	e610	660	653	2,890	11,500	14,000	3,030	610	238
6	268	598	e180	e600	667	667	3,590	12,500	13,100	2,920	583	233
7	280	584	e230	608	656	690	4,740	13,300	12,600	3,120	560	226
8	282	569	e240	625	648	707	5,370	12,700	12,700	3,260	534	219
9	291	551	e250	648	642	726	6,120	11,600	14,900	2,880	512	211
10	300	524	e270	683	617	709	7,560	10,300	14,100	2,600	498	203
11	318	514	e310	721	525	688	8,680	9,760	13,800	2,510	477	198
12	318	514	e330	731	473	660	9,250	10,000	14,600	2,370	462	194
13	312	520	e340	757	548	644	10,100	10,200	14,300	2,240	456	189
14	306	520	e340	760	554	639	10,300	9,610	13,900	2,170	447	189
15	300	503	e350	757	536	663	10,400	10,400	16,500	2,090	432	201
16	298	482	e345	721	511	663	9,760	14,000	17,900	1,930	414	213
17	302	461	e340	688	e520	683	8,590	19,100	14,400	1,770	394	215
18	317	458	e330	689	e410	705	7,660	23,300	12,200	1,640	378	213
19	536	472	e325	690	e370	719	7,070	26,300	10,600	1,530	362	216
20	1,070	471	e310	675	516	729	6,950	27,100	9,660	1,440	348	226
21	1,090	469	e305	653	563	745	7,360	28,500	8,900	1,360	337	240
22	1,170	463	e260	653	571	769	8,510	29,000	8,130	1,280	324	239
23	984	460	e290	640	593	796	8,980	25,400	7,540	1,210	313	248
24	870	451	e320	635	563	854	8,940	24,700	6,980	1,140	304	257
25	800	447	e360	624	529	985	9,540	23,100	6,500	1,070	298	264
26	747	446	e410	621	563	1,130	10,400	22,900	6,150	1,010	292	268
27	698	422	e470	621	561	1,200	11,200	20,400	5,790	954	284	262
28	666	388	e520	621	623	1,230	11,600	18,100	5,340	896	277	254
29	651	378	e560	618	---	1,260	13,600	16,600	4,850	834	265	245
30	625	366	e590	624	---	1,290	17,600	15,300	4,390	787	257	236
31	610	---	e600	627	---	1,420	---	14,400	---	759	252	---
Total	15,652	15,182	10,649	20,320	15,903	25,340	234,890	528,870	347,330	63,040	13,432	6,878
Mean	505	506	344	655	568	817	7,830	17,060	11,580	2,034	433	229
Max	1,170	655	600	760	667	1,420	17,600	29,000	17,900	4,010	740	268
Min	238	366	140	590	370	639	1,660	9,610	4,390	759	252	189
Ac-ft	31,050	30,110	21,120	40,300	31,540	50,260	465,900	1,049,000	688,900	125,000	26,640	13,640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	670	750	608	527	576	1,097	5,284	12,170	9,221	2,772	814	619
Max	3,815	2,600	2,652	1,509	1,988	4,247	12,170	18,620	17,650	6,928	3,140	3,773
(WY)	(1942)	(1942)	(1942)	(2005)	(2005)	(1983)	(1934)	(1997)	(1974)	(1982)	(1976)	(1941)
Min	176	202	154	76.5	97.9	212	1,478	4,246	2,888	759	216	145
(WY)	(1988)	(1930)	(1930)	(1930)	(1930)	(1930)	(1937)	(1930)	(1987)	(1934)	(2003)	(2003)

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SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1929 - 2006	
Annual total	1,126,642		1,297,486			
Annual mean	3,087		3,555		2,933	
Highest annual mean					4,725	1997
Lowest annual mean					1,251	1930
Highest daily mean	21,400	May 17	29,000	May 22	34,200	May 29, 1948
Lowest daily mean	140	Dec 5	140	Dec 5	70	Jan 11, 1930
Annual seven-day minimum	224	Dec 4	198	Sep 9	70	Jan 11, 1930
Annual runoff (ac-ft)	2,235,000		2,574,000		2,125,000	
10 percent exceeds	9,120		13,000		9,620	
50 percent exceeds	1,570		648		800	
90 percent exceeds	285		257		290	

