



Water-Data Report 2007

## 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 mi<sup>2</sup>.

### 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 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.--78 years (water years 1930-2007), 2,925 ft<sup>3</sup>/s, 2,119,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,000 ft<sup>3</sup>/s May 29, 1948, gage height, 17.25 ft; minimum daily discharge, 70 ft<sup>3</sup>/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 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
May 18	1230	*14,900	*10.89

Minimum discharge, 100 ft<sup>3</sup>/s, Nov. 29.

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**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	229	251	e160	e280	e285	414	4,130	7,790	9,590	5,160	493	175
2	221	232	e200	e320	e295	399	4,180	7,930	10,000	4,280	467	170
3	217	229	e240	e380	e305	367	3,970	8,950	9,940	3,650	442	167
4	216	246	e270	e410	e310	387	3,660	9,470	9,840	3,230	414	164
5	216	245	e310	e380	e325	411	3,510	8,460	10,700	2,930	388	158
6	216	262	e330	e390	e345	426	3,390	7,680	13,400	2,660	370	152
7	213	309	e340	e395	e355	450	3,550	7,570	10,400	2,420	355	147
8	209	381	e350	e390	e360	480	4,420	8,780	8,070	2,210	342	142
9	207	466	e360	e390	e375	503	6,880	11,200	7,030	2,020	324	139
10	205	565	e370	e380	e380	537	10,600	12,700	6,700	1,860	307	138
11	206	540	e380	e340	e390	588	9,530	12,400	6,790	1,720	291	136
12	209	474	402	e240	e400	718	8,180	12,700	6,380	1,590	280	135
13	209	451	410	e230	e405	1,540	7,350	13,500	6,060	1,470	273	132
14	209	441	392	e250	e415	1,810	6,900	13,300	5,470	1,380	264	131
15	210	426	e365	e260	421	1,660	6,750	12,000	5,020	1,290	251	128
16	242	413	e315	e265	418	1,560	6,520	12,600	4,620	1,200	240	127
17	269	403	e240	e275	413	1,500	6,240	14,000	4,360	1,120	229	125
18	281	389	e215	e285	421	1,490	5,890	14,700	4,690	1,050	218	125
19	288	374	e245	e310	424	1,620	5,600	14,100	4,650	1,000	218	130
20	300	366	e280	e320	416	1,920	5,350	13,100	4,190	970	217	135
21	304	360	e320	e325	417	2,340	5,140	11,200	3,890	996	221	142
22	299	381	e360	e335	402	2,390	5,010	9,660	3,640	1,080	225	151
23	293	404	369	e350	396	2,350	4,980	9,000	3,360	998	228	157
24	289	396	356	e365	400	2,350	5,270	8,550	3,090	916	220	161
25	286	380	369	e380	390	3,170	6,240	8,070	2,950	844	212	169
26	279	377	358	e390	411	4,190	7,030	7,760	3,260	782	205	175
27	273	370	365	e360	418	4,200	6,980	8,090	3,620	730	197	180
28	267	303	e330	e335	415	3,980	6,940	8,890	3,710	668	191	190
29	265	e100	e260	e330	---	3,730	7,860	9,070	3,420	616	186	196
30	259	e130	e240	e335	---	3,670	8,200	8,670	3,770	569	182	205
31	255	---	e250	e320	---	3,840	---	8,850	---	527	179	---
<b>Total</b>	7,641	10,664	9,751	10,315	10,707	54,990	180,250	320,740	182,610	51,936	8,629	4,582
<b>Mean</b>	246	355	315	333	382	1,774	6,008	10,350	6,087	1,675	278	153
<b>Max</b>	304	565	410	410	424	4,200	10,600	14,700	13,400	5,160	493	205
<b>Min</b>	205	100	160	230	285	367	3,390	7,570	2,950	527	179	125
<b>Ac-ft</b>	15,160	21,150	19,340	20,460	21,240	109,100	357,500	636,200	362,200	103,000	17,120	9,090

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2007, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	665	745	605	525	573	1,106	5,293	12,150	9,181	2,758	807	613
<b>Max</b>	3,815	2,600	2,652	1,509	1,988	4,247	12,170	18,620	17,650	6,928	3,140	3,773
<b>(WY)</b>	(1942)	(1942)	(1942)	(2005)	(2005)	(1983)	(1934)	(1997)	(1974)	(1982)	(1976)	(1941)
<b>Min</b>	176	202	154	76.5	97.9	212	1,478	4,246	2,888	759	216	145
<b>(WY)</b>	(1988)	(1930)	(1930)	(1930)	(1930)	(1930)	(1937)	(1930)	(1987)	(1934)	(2003)	(2003)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1929 - 2007	
<b>Annual total</b>	1,284,059		852,815			
<b>Annual mean</b>	3,518		2,336		2,925	
<b>Highest annual mean</b>					4,725	1997
<b>Lowest annual mean</b>					1,251	1930
<b>Highest daily mean</b>	29,000	May 22	14,700	May 18	34,200	May 29, 1948
<b>Lowest daily mean</b>	100	Nov 29	100	Nov 29	70	Jan 11, 1930
<b>Annual seven-day minimum</b>	198	Sep 9	128	Sep 13	70	Jan 11, 1930
<b>Annual runoff (ac-ft)</b>	2,547,000		1,692,000		2,119,000	
<b>10 percent exceeds</b>	13,000		8,080		9,610	
<b>50 percent exceeds</b>	624		399		796	
<b>90 percent exceeds</b>	233		197		287	

