

14338000 ELK CREEK NEAR TRAIL, OR

Southern Oregon Coastal Basin
Upper Rogue Subbasin

LOCATION.--Lat 42°40'44", long 122°44'27" referenced to North American Datum of 1927, in NE ¼ NW ¼ sec.30, T.33 S., R.1 E., Jackson County, OR, Hydrologic Unit 17100307, on right bank, 4.5 mi northeast of Trail and at mile 1.5.

DRAINAGE AREA.--129 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--November 1945 to June 2006, October 2006 to September 2007. Prior to March 1946, monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WDR OR-89-2: Drainage area. WDR OR-92-1: 1989(M), 1990(M), 1991(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,493.91 ft above NGVD of 1929. Prior to July 5, 1946, nonrecording gage at various sites within 1.0 mi of present site at different datums. July 5, 1946 to June 22, 1950, nonrecording gage and June 23, 1950 to May 23, 1954, water-stage recorder at site 0.5 mi downstream at datum 25.21 ft lower. May 24, 1954 to Sept. 30, 1988, at site 0.8 mi downstream at datum 37.35 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions for irrigation and fish hatchery operation upstream from station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--60 years (water years 1947-2005m 2007), 214 ft³/s, 155,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,200 ft³/s Dec. 22, 1964, gage height, 18.84 ft, site and datum then in use, from rating curve extended above 4,700 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 0.01 ft³/s Oct. 8, 1987, result of dam construction 1.3 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 26	1830	*3,570	*8.35
No other peak greater than base discharge			

Minimum discharge, 2.8 ft³/s, Sept. 12, 13, gage height, 0.87 ft.

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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	e8.0	8.9	217	264	101	361	171	117	29	14	6.2	e5.0
2	e8.0	9.4	189	228	93	542	155	116	28	13	5.9	e5.0
3	e8.0	21	147	733	87	881	140	110	26	13	5.5	e5.0
4	e8.0	37	127	1,440	83	1,260	130	111	26	12	5.3	e5.2
5	e8.0	e40	122	836	101	1,400	122	100	34	11	5.5	5.3
6	e8.0	e82	135	583	124	1,310	118	91	48	10	5.6	5.9
7	e8.0	e35	139	510	120	1,200	123	85	42	9.7	5.7	5.0
8	e8.0	75	133	674	158	1,100	118	81	36	9.3	5.5	4.3
9	e8.0	63	128	748	271	838	115	78	33	8.8	5.3	4.1
10	e8.0	51	124	687	271	777	108	75	49	8.6	5.6	3.9
11	e8.0	92	128	544	558	767	106	71	39	8.2	5.4	3.5
12	e9.0	74	797	404	550	918	112	68	33	9.5	5.0	3.3
13	e9.5	138	1,630	319	381	857	108	65	29	8.8	4.6	3.0
14	e10	334	2,100	265	295	663	125	61	27	8.3	4.6	3.6
15	e11	146	1,250	227	942	509	158	58	25	8.0	4.4	4.3
16	e47	223	657	200	1,050	421	145	56	24	7.8	4.3	4.6
17	e100	171	417	178	855	401	149	53	23	8.3	4.4	4.6
18	e30	99	289	156	592	378	203	52	22	17	4.3	5.0
19	e12	75	227	144	452	337	241	50	21	26	5.7	5.1
20	e9.0	244	181	144	369	329	230	50	19	17	11	5.4
21	e8.5	215	243	138	379	288	238	53	18	13	8.5	5.5
22	e8.5	324	278	128	475	249	497	e48	18	12	7.8	5.4
23	e8.3	460	303	122	456	225	444	e46	18	11	6.8	5.0
24	8.3	262	399	125	508	208	330	43	18	9.5	6.1	5.2
25	8.4	230	1,450	135	829	218	259	40	17	9.4	5.7	5.3
26	8.7	251	2,810	140	737	212	214	39	17	8.5	5.4	5.2
27	8.8	393	1,950	139	532	211	180	37	15	7.3	5.1	5.0
28	8.8	242	1,010	134	424	211	155	36	14	6.8	5.2	5.1
29	8.5	157	611	124	---	204	138	34	15	6.4	e5.2	9.2
30	8.5	127	428	117	---	199	125	31	14	6.9	e5.2	11
31	8.4	---	329	110	---	186	---	30	---	6.7	e5.0	---
Total	419.2	4,679.3	18,948	10,696	11,793	17,660	5,457	1,985	777	325.8	175.8	153.0
Mean	13.5	156	611	345	421	570	182	64.0	25.9	10.5	5.67	5.10
Max	100	460	2,810	1,440	1,050	1,400	497	117	49	26	11	11
Min	8.0	8.9	122	110	83	186	106	30	14	6.4	4.3	3.0
Ac-ft	831	9,280	37,580	21,220	23,390	35,030	10,820	3,940	1,540	646	349	303

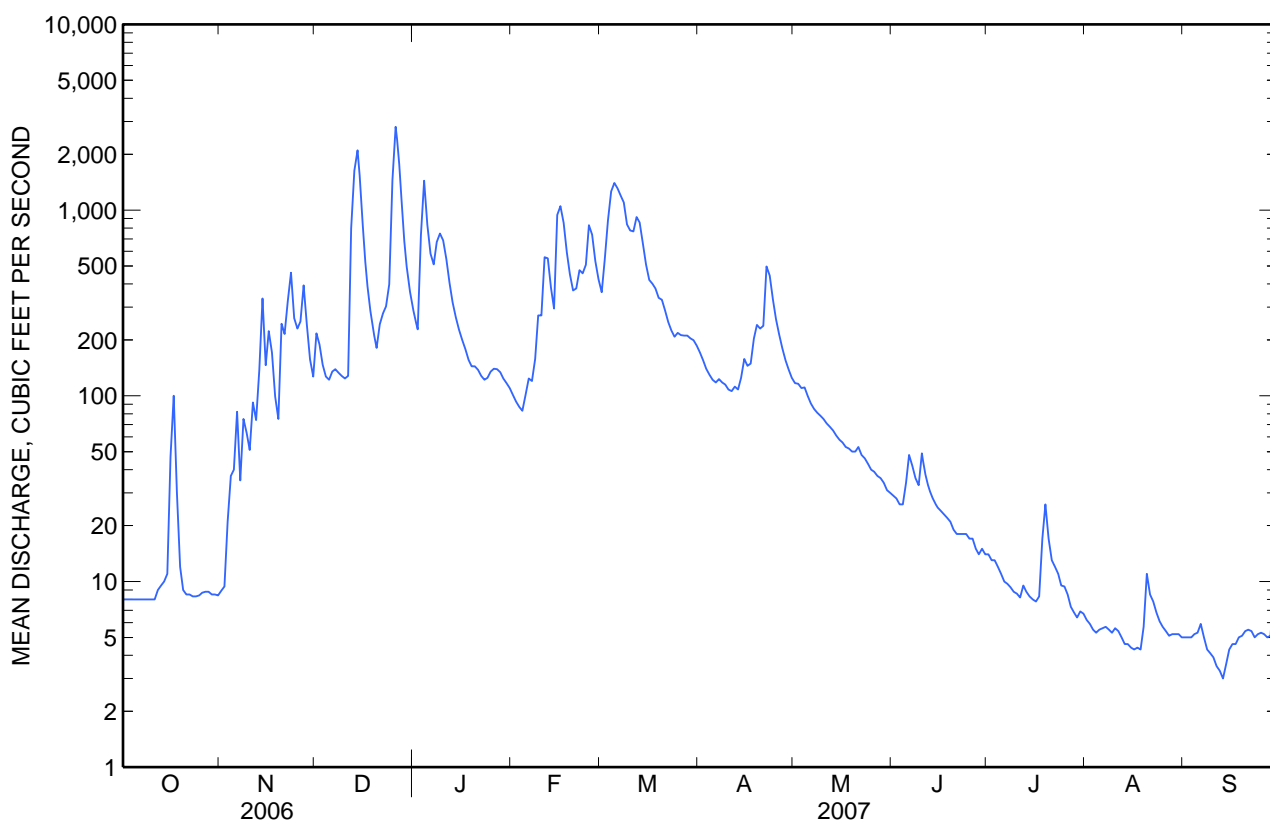
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	28.5	175	446	522	495	410	281	160	57.7	14.6	6.43	7.00
Max	404	1,008	1,851	1,283	1,131	1,074	565	358	254	36.1	25.1	43.7
(WY)	(1951)	(1974)	(1965)	(1965)	(1958)	(1972)	(1956)	(1975)	(1953)	(1953)	(1976)	(1986)
Min	3.17	8.92	13.1	19.8	23.1	45.4	65.8	21.6	7.42	1.39	0.21	0.60
(WY)	(1953)	(1994)	(1977)	(1977)	(1977)	(1992)	(1968)	(1992)	(1992)	(1994)	(1994)	(1992)

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SUMMARY STATISTICS

	Water Year 2007		Water Years 1947 - 2007	
Annual total	73,069.1			
Annual mean	200		214	
Highest annual mean			438	1974
Lowest annual mean			38.4	2001
Highest daily mean	2,810	Dec 26	12,200	Dec 22, 1964
Lowest daily mean	3.0	Sep 13	0.12	Sep 1, 1994
Annual seven-day minimum	3.7	Sep 8	0.12	Sep 1, 1994
Annual runoff (ac-ft)	144,900		155,400	
10 percent exceeds	553		545	
50 percent exceeds	75		65	
90 percent exceeds	5.3		4.7	



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WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1973 to June 2006, October 2006 to September 2007.

TURBIDITY: October 1999 to June 2006.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--

WATER TEMPERATURE: Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 33.0°C Aug. 24, 1999; minimum, 0.0°C at times during most winter months.

TURBIDITY: Maximum recorded, >328 FNU Dec. 1, 30, 2005, but may have been higher during periods of missing record; minimum, <1 FNU on many days each year.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 27.3°C July 12; minimum, 0.5°C Jan. 13, 15.

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	7.4	5.9	6.5	6.0	5.0	5.4	5.6	4.2	4.9
2	---	---	---	8.0	6.7	7.3	6.1	4.9	5.6	6.0	5.1	5.6
3	---	---	---	9.3	8.0	8.6	5.0	3.6	4.4	7.1	6.0	6.4
4	---	---	---	---	9.2	---	4.9	3.4	4.1	6.9	5.6	6.5
5	---	---	---	---	---	---	5.1	3.5	4.3	5.8	4.9	5.4
6	---	---	---	---	---	---	4.8	3.4	4.1	5.5	4.3	4.7
7	---	---	---	---	---	---	5.1	3.6	4.3	6.3	4.8	5.5
8	---	---	---	---	---	---	5.4	4.7	5.0	6.4	5.4	5.9
9	---	---	---	9.8	8.1	9.0	7.2	5.4	6.4	6.4	5.6	6.0
10	---	---	---	8.1	6.8	7.1	7.1	6.5	6.8	6.1	4.6	5.6
11	---	---	---	7.7	6.8	7.2	6.9	6.2	6.4	4.6	3.4	4.0
12	---	---	---	7.6	6.4	6.8	8.0	6.8	7.5	3.4	1.5	2.2
13	---	---	---	7.6	6.3	6.9	8.6	7.9	8.3	1.9	0.5	1.3
14	---	---	---	8.5	7.4	7.8	9.1	8.3	8.7	2.0	1.1	1.6
15	---	---	---	7.4	6.3	6.8	8.8	6.1	7.5	1.8	0.5	1.3
16	---	---	---	8.7	7.2	8.0	6.1	5.1	5.6	1.5	0.8	1.1
17	---	---	---	8.7	7.8	8.3	5.4	3.9	4.4	2.8	1.4	2.2
18	---	---	---	8.2	6.9	7.5	3.9	2.7	3.3	3.5	2.6	2.9
19	---	---	---	8.4	7.2	7.7	3.6	2.6	3.2	3.7	2.2	2.9
20	---	---	---	9.8	8.4	9.1	4.0	2.6	3.2	4.2	3.0	3.5
21	---	---	---	9.3	8.2	8.6	5.6	4.0	4.8	3.4	1.9	2.7
22	---	---	---	8.3	7.8	8.0	5.4	4.6	5.0	3.0	1.4	2.3
23	11.8	---	---	7.9	7.2	7.6	6.3	5.0	5.6	3.3	1.6	2.4
24	11.2	9.4	10.2	8.0	7.2	7.6	7.1	5.5	6.1	3.2	1.4	2.3
25	11.0	8.6	9.5	7.8	7.0	7.5	8.0	7.0	7.5	3.3	1.5	2.4
26	10.3	8.0	8.9	7.0	6.3	6.5	7.9	7.7	7.9	3.3	1.6	2.5
27	9.8	7.6	8.6	6.6	5.7	6.2	7.8	6.3	7.2	3.8	1.9	2.8
28	9.1	---	---	6.0	5.4	5.7	6.3	5.2	5.7	3.3	1.4	2.4
29	---	---	---	5.1	4.1	4.7	5.5	4.4	5.0	3.5	1.4	2.5
30	---	---	---	5.2	4.1	4.6	5.5	4.6	5.1	3.7	1.7	2.7
31	---	---	---	---	---	---	5.7	4.8	5.2	3.4	1.3	2.4
Month	---	---	---	---	---	---	9.1	2.6	5.6	7.1	0.5	3.4

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	3.3	1.2	2.2	5.9	4.2	4.9	10.1	8.0	8.7	13.6	10.5	11.3
2	3.1	1.2	2.2	5.2	4.7	4.9	9.5	5.7	7.6	11.7	9.8	10.5
3	4.2	2.2	3.1	7.8	5.0	6.1	9.9	6.7	8.3	11.6	8.7	10.1
4	5.2	2.9	4.0	8.0	5.4	6.4	12.1	8.2	9.9	11.4	8.2	9.8
5	5.6	3.9	4.7	8.3	6.1	6.9	12.9	8.4	10.7	12.2	8.0	10.0
6	6.4	4.4	5.4	8.1	5.6	6.7	13.8	9.6	11.7	14.1	8.9	11.2
7	6.1	5.0	5.6	7.4	6.1	6.7	13.9	11.5	12.8	16.5	11.8	14.0
8	6.0	5.0	5.5	7.6	5.4	6.4	12.4	9.6	11.0	17.3	13.4	15.3
9	6.6	4.8	5.7	6.7	6.0	6.2	11.3	9.4	10.4	17.2	13.3	15.3
10	6.8	4.9	5.7	8.0	5.8	6.8	11.7	8.2	9.9	17.0	13.2	15.2
11	7.2	6.4	6.8	9.2	6.1	7.5	11.0	8.7	9.7	16.1	13.1	14.7
12	7.2	5.7	6.4	8.7	6.5	7.6	9.6	7.3	8.5	15.5	13.0	14.0
13	7.1	5.9	6.4	9.1	6.8	7.8	10.9	6.3	8.5	15.0	10.7	12.8
14	6.1	4.8	5.5	8.7	6.0	7.3	10.7	8.6	9.6	16.3	11.7	13.9
15	7.7	5.8	6.6	8.9	5.1	6.9	10.8	6.6	8.6	17.1	13.2	15.1
16	8.2	7.4	7.7	9.8	5.8	7.7	9.8	6.8	8.4	17.5	13.8	15.6
17	8.1	6.5	7.3	10.2	6.4	8.3	9.4	7.8	8.6	17.4	13.9	15.7
18	7.8	6.0	7.1	10.5	7.2	8.8	8.7	6.0	7.3	17.5	14.2	15.9
19	6.5	5.1	5.8	9.2	6.7	7.9	8.7	6.0	7.3	17.3	15.4	16.4
20	6.7	5.9	6.2	8.6	7.2	7.9	10.4	5.4	7.8	16.4	13.2	14.1
21	6.1	4.6	5.4	8.3	5.0	6.7	9.6	7.3	7.9	14.6	11.3	12.9
22	4.9	3.8	4.4	9.4	5.2	7.3	9.9	7.2	8.3	15.3	11.5	13.4
23	5.9	4.5	5.1	9.8	6.2	8.1	11.4	7.0	8.9	16.4	12.5	14.4
24	6.0	4.7	5.3	10.9	7.6	9.2	12.7	8.0	10.1	18.1	14.2	16.0
25	5.9	4.6	5.2	10.4	8.6	9.4	12.7	9.1	10.8	18.0	15.6	16.8
26	6.1	4.8	5.3	9.0	6.3	7.3	12.2	7.6	10	19.3	15.8	17.4
27	5.5	4.6	5.0	7.2	5.1	6.1	13.8	8.6	11.1	18.7	16.7	17.7
28	5.4	4.3	4.8	8.5	4.4	6.3	14.8	10.0	12.4	17.6	14.8	16.3
29	---	---	---	9.2	4.6	6.9	14.8	11.0	13.0	19.0	15.1	16.8
30	---	---	---	10.4	6.2	8.3	14.7	10.7	12.8	20.3	16.4	18.3
31	---	---	---	11.0	8.4	9.7	---	---	---	21.4	17.9	19.5
Month	8.2	1.2	5.4	11.0	4.2	7.3	14.8	5.4	9.7	21.4	8.0	14.5

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	22.2	18.7	20.3	22.6	19.0	20.7	25.5	21.3	23.5	25.0	20.3	22.4
2	22.9	19.8	21.1	22.9	19.5	21.2	27.0	21.9	24.0	25.0	20.1	22.3
3	22.9	20.4	21.6	24.1	20.1	22.0	26.1	21.4	23.6	24.7	19.9	22.0
4	22.1	20.5	21.2	25.7	20.9	23.1	25.4	21.0	23.1	23.1	20.3	21.4
5	20.5	15.9	18.3	26.8	22.2	24.3	25.4	20.7	22.7	23.9	18.9	21.0
6	15.9	13.6	14.6	26.8	22.9	24.7	25.0	20.4	22.4	22.9	18.8	20.8
7	16.2	13.0	14.7	26.8	22.7	24.4	24.2	20.1	21.9	23.7	18.7	20.8
8	18.1	14.2	16.0	26.3	22.0	23.9	24.8	19.8	22.1	23.4	17.8	20.3
9	17.8	15.6	16.2	26.2	21.8	24.0	24.8	20.0	22.1	24.1	18.0	20.6
10	17.4	14.7	15.9	26.4	22.5	24.6	24.9	19.8	22.0	23.0	17.4	20.0
11	18.2	15.2	16.7	26.1	23.7	24.9	23.9	19.6	21.8	23.1	17.4	20.1
12	18.8	15.6	17.1	27.3	23.2	25.0	23.8	19.5	21.6	23.1	17.7	20.1
13	20.0	17.0	18.4	26.7	23.1	24.9	24.1	19.4	21.8	22.7	17.4	19.7
14	20.2	17.7	18.9	26.2	23.4	24.8	24.6	19.6	22.1	21.1	18.3	19.4
15	21.2	18.0	19.4	25.8	22.8	24.4	24.9	20.2	22.6	21.5	16.9	19.0
16	20.9	19.0	19.9	25.6	22.5	23.9	24.8	20.2	22.3	20.4	16.8	18.3
17	19.7	18.1	18.9	23.5	21.4	22.4	24.5	19.6	21.7	20.9	17.0	18.5
18	20.4	17.4	18.7	21.4	20.2	20.8	23.8	19.6	21.4	20.0	16.6	17.8
19	21.5	18.1	19.6	22.2	19.1	20.5	22.1	19.8	20.8	17.7	15.5	16.4
20	22.5	19.1	20.6	21.6	20.1	20.9	21.9	19.3	20.6	18.6	14.3	16.3
21	22.4	19.6	20.8	23.8	20.0	21.8	23.7	20.1	21.6	18.1	14.3	16.3
22	21.5	19.3	20.3	25.2	21.3	23.2	24.2	20.1	21.8	18.2	14.6	16.2
23	20.8	18.2	19.3	26.7	22.4	24.3	24.2	19.6	21.8	18.0	14.0	15.7
24	20.2	17.4	18.5	26.6	22.7	24.4	24.8	19.9	22.2	17.6	13.1	15.0
25	19.6	16.3	18.0	26.4	22.2	24.0	24.6	20.0	22.2	16.8	13.0	14.9
26	20.7	16.9	18.7	26.6	22.3	24.2	24.4	20.0	21.8	17.1	13.0	14.9
27	22.0	17.9	19.9	26.6	22.2	24.2	23.5	19.1	21.2	17.2	13.4	15.1
28	21.3	19.3	20.3	26.6	22.1	24.2	23.6	18.9	21.3	15.5	13.5	14.4
29	21.1	19.3	20.1	26.5	21.8	23.8	24.2	19.3	21.8	15.5	13.0	13.9
30	21.9	18.6	20.1	26.1	21.8	23.5	25.1	20.8	23.0	13.6	12.5	13.0
31	---	---	---	26.1	21.2	23.4	25.8	21.5	23.4	---	---	---
Month	22.9	13.0	18.8	27.3	19.0	23.4	27.0	18.9	22.1	25.0	12.5	18.2