

**11482500 Redwood Creek at Orick, CA**

Redwood Creek Basin

LOCATION.--Lat 41°17'58", long 124°03'00" referenced to North American Datum of 1927, in NE ¼ NE ¼ sec.34, T.11 N., R.1 E., Humboldt County, CA, Hydrologic Unit 18010102, Humboldt meridian, on right bank, on U.S. Highway 101, 300 ft downstream from Prairie Creek, 0.8 mi north of Orick, and 3.7 mi upstream from mouth.

DRAINAGE AREA.--277 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--September 1911 to September 1913, October 1953 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1315-B: 1912-13.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 5.16 ft above NGVD of 1929. Sept. 10, 1911, to Aug. 9, 1913, nonrecording gage at different datum. October 1953 to Apr. 16, 1987, at site 0.9 mi downstream at same datum. May 7 to Aug. 3, 1987, nonrecording gage at same site and datum.

REMARKS.--Records fair except for discharges below 10 ft<sup>3</sup>/s, which are poor. No regulation or diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,500 ft<sup>3</sup>/s, Dec. 22, 1964, former site, from outside high-water marks, maximum gage height, 28.22 ft, Jan. 1, 1997; minimum daily, 2.1 ft<sup>3</sup>/s, Oct. 20-22, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 18, 1953, reached a stage of 23.95 ft, former site, from floodmarks, discharge, 50,000 ft<sup>3</sup>/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec 29	0100	*17,500	*21.62
Mar 16	---	11,550	19.28

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**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4.7	30	85	2,800	332	2,040	1,000	410	243	88	25	8.2
2	9.5	182	89	5,980	313	3,120	988	553	239	84	25	8.0
3	16	252	87	3,790	300	3,480	972	1,070	237	80	24	7.6
4	128	578	84	2,450	288	3,360	869	1,290	245	77	24	6.9
5	155	347	79	2,640	283	2,740	797	4,680	250	74	24	7.0
6	93	362	75	2,720	328	2,450	729	2,230	235	73	24	9.7
7	62	300	72	2,300	327	2,120	687	1,550	221	71	24	11
8	46	345	71	2,370	302	1,860	659	1,220	208	69	24	10
9	35	654	68	2,390	306	1,660	719	1,020	197	68	24	9.3
10	28	368	66	1,930	291	1,450	805	881	189	69	23	9.1
11	24	349	64	1,600	695	1,300	691	754	184	69	22	8.7
12	21	852	66	1,370	1,160	1,170	636	668	181	73	20	7.8
13	19	753	133	1,220	1,260	1,050	623	606	175	72	18	8.3
14	19	542	253	1,090	2,110	981	599	617	171	68	17	8.6
15	19	354	418	966	1,760	1,850	577	601	166	63	16	8.5
16	18	266	403	866	1,540	e10,100	546	545	160	58	14	8.1
17	17	210	283	782	1,240	e6,030	520	505	157	54	13	8.0
18	17	175	330	714	993	3,880	505	473	151	50	13	8.3
19	17	150	1,260	650	874	2,930	492	450	145	48	12	6.6
20	17	162	804	598	859	2,440	480	430	145	46	11	5.5
21	16	169	2,090	558	862	2,180	467	410	144	43	10	4.7
22	15	152	2,800	530	1,870	3,180	454	390	137	42	9.4	4.2
23	14	138	1,960	511	4,450	2,740	438	373	130	41	8.3	3.9
24	14	129	1,800	483	4,320	2,320	424	359	123	40	7.7	3.8
25	14	119	4,370	477	2,840	2,100	410	343	118	38	7.3	3.8
26	13	111	2,480	466	3,280	1,930	396	323	114	36	7.5	3.8
27	13	105	2,600	423	2,840	1,710	385	307	110	34	7.9	3.4
28	13	98	13,500	403	2,320	1,540	382	291	104	32	7.8	2.9
29	13	93	13,300	388	---	1,400	373	277	97	30	8.0	3.3
30	13	89	7,050	369	---	1,240	367	261	93	28	7.7	3.2
31	15	---	3,850	350	---	1,110	---	250	---	27	7.9	---
<b>Total</b>	918.2	8,434	60,590	44,184	38,343	77,461	17,990	24,137	5,069	1,745	486.5	202.2
<b>Mean</b>	29.6	281	1,955	1,425	1,369	2,499	600	779	169	56.3	15.7	6.74
<b>Max</b>	155	852	13,500	5,980	4,450	10,100	1,000	4,680	250	88	25	11
<b>Min</b>	4.7	30	64	350	283	981	367	250	93	27	7.3	2.9
<b>Ac-ft</b>	1,820	16,730	120,200	87,640	76,050	153,600	35,680	47,880	10,050	3,460	965	401

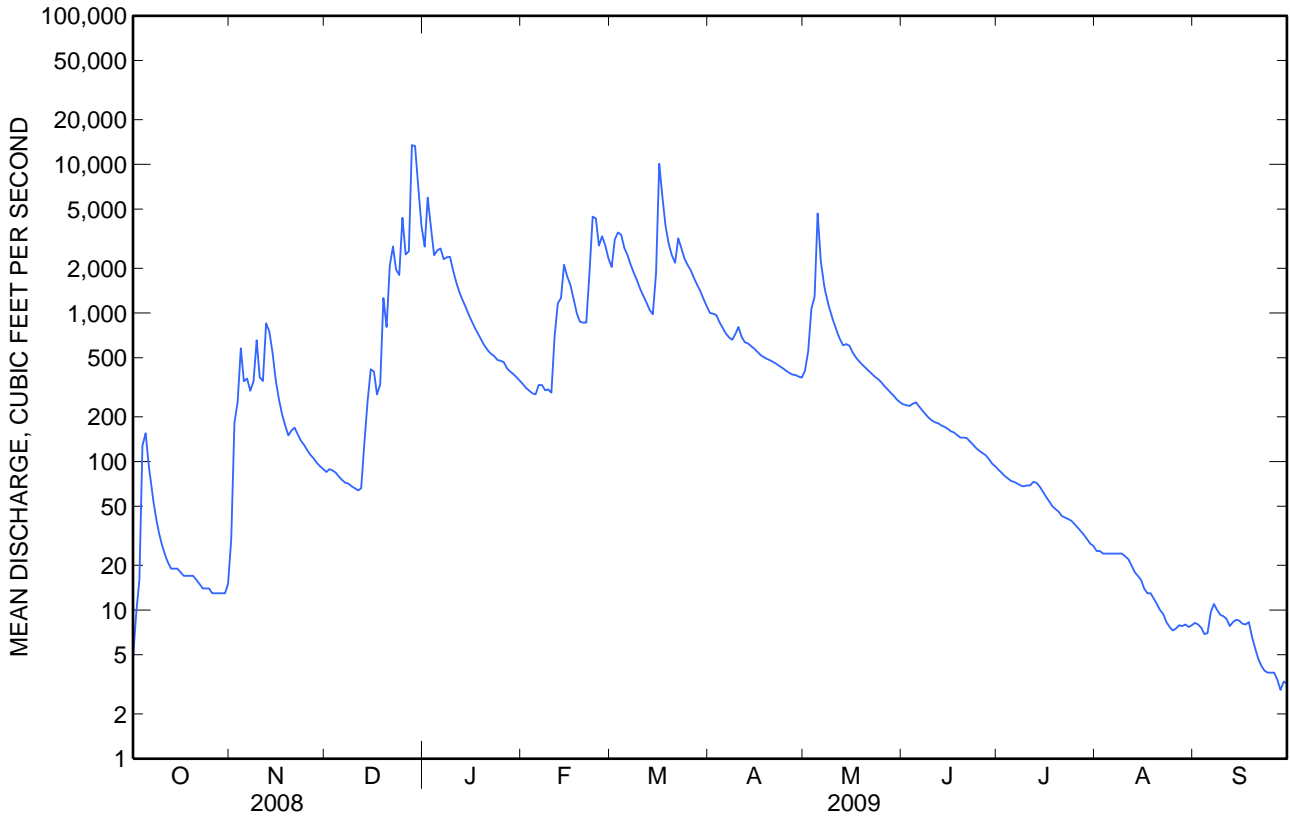
**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2009, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	138	955	2,171	2,512	2,194	1,911	1,208	627	247	84.4	39.1	34.6
<b>Max</b>	1,559	5,219	8,981	6,041	6,320	5,565	4,026	1,732	1,213	199	91.6	149
<b>(WY)</b>	(1963)	(1974)	(1965)	(1956)	(1986)	(1975)	(1963)	(1912)	(1993)	(2005)	(1968)	(1986)
<b>Min</b>	2.91	35.3	42.1	180	190	297	251	188	77.3	35.7	9.89	4.44
<b>(WY)</b>	(1988)	(1960)	(1977)	(1977)	(1977)	(1988)	(1988)	(1987)	(1987)	(1987)	(1992)	(1992)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1911 - 2009	
<b>Annual total</b>	309,621.3		279,559.9			
<b>Annual mean</b>	846		766		1,006	
<b>Highest annual mean</b>					1,726	1974
<b>Lowest annual mean</b>					192	1977
<b>Highest daily mean</b>	13,500	Dec 28	13,500	Dec 28	43,200	Dec 22, 1964
<b>Lowest daily mean</b>	4.7	Oct 1	2.9	Sep 28	2.1	Oct 20, 1987
<b>Annual seven-day minimum</b>	5.2	Sep 25	3.5	Sep 24	2.2	Oct 17, 1987
<b>Maximum peak flow</b>			17,500	Dec 29	50,500	Dec 22, 1964
<b>Maximum peak stage</b>			21.62	Dec 29	28.22	Jan 1, 1997
<b>Annual runoff (ac-ft)</b>	614,100		554,500		728,500	
<b>10 percent exceeds</b>	1,900		2,310		2,700	
<b>50 percent exceeds</b>	207		250		308	
<b>90 percent exceeds</b>	13		9.2		23	



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## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955-56, 1959 to current year.

CHEMICAL DATA: Water years 1959-66, 1973-81.

WATER TEMPERATURE: Water years 1966-92, 2001.

SEDIMENT DATA: Water years 1955-56, 1970-81 (daily), 1982-92, 2001 (storm season only), 1993-2000, 2002 to current year (storm season only).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1965 to September 1970.

SUSPENDED-SEDIMENT DISCHARGE: March 1970 to September 1981 (daily), October 1981 to September 1992, October 2000 to April 2001 (storm season only).

REMARKS.--Periodic total load sampling above 5,000 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 9,610 mg/L, Mar. 18, 1975; minimum daily mean, 0 mg/L, Nov. 10-12, 1986, Apr. 20, 29, 30, 1987, several days during 1989-90, many days during 1991 and 2001.

SEDIMENT LOAD: Maximum daily, 1,070,000 tons, Mar. 18, 1975; minimum daily, 0 ton, Nov. 10-12, 1986, Apr. 20, 29, 30, 1987, several days during 1989-90, many days during 1991 and 2001

**PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Date	Time	Instan- taneous dis- charge, ft <sup>3</sup> /s (00061)	Temper- ature, deg C (00010)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)	Suspnd. sedi- ment sieve diametr percent <0.0625 mm (70331)	Suspnd. sedi- ment, sieve diametr percent <.125mm (70332)	Suspnd. sedi- ment, sieve diametr percent <.25mm (70333)	Suspnd. sedi- ment, sieve diametr percent <.5 mm (70334)	Suspnd. sedi- ment, sieve diametr percent <1 mm (70335)	Suspnd. sedi- ment, sieve diametr percent <2 mm (70336)
<b>Dec</b>											
30...	1430	6,300	8.0	327	5,560	58	66	74	90	100	--
<b>Mar</b>											
16...	1400	11,000	9.0	642	19,100	54	65	81	94	98	100
17...	1250	5,700	9.5	260	4,000	50	58	65	83	100	--

**PARTICLE-SIZE DISTRIBUTION OF BEDLOAD  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 1 of 3

[Remark codes: <, less than.]

Date	Time	Sam- pling method, code (82398)	Sampler type, code (84164)	Bag mesh size, bedload sampler mm (30333)	Tether line used in samplng (yes=1) code (04117)	Startng time, 24 hour clock, hr-min (82073)	Ending time, 24 hour clock, hr-min (82074)
<b>Dec</b>							
30...	1050	Bedload (SEWI)	BL3X3 H-S 50-100 Cab	.250	No	1025	1115
30...	1152	Bedload (SEWI)	BL3X3 H-S 50-100 Cab	.250	No	1127	1218
<b>Mar</b>							
17...	1057	Bedload (SEWI)	BL3X3 H-S 50-100 Cab	.250	No	1035	1119
17...	1145	Bedload (SEWI)	BL3X3 H-S 50-100 Cab	.250	No	1125	1204

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**PARTICLE-SIZE DISTRIBUTION OF BEDLOAD  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 2 of 3

[Remark codes: <, less than.]

Date	Rest time on bed for bed load sample, seconds (04120)	Horizontal width of vertical, feet (04121)	Compstd samples in x-sec bedload measmnt number (04118)	Verticals in composite sample, number (04119)	Number of sam- pling points, count (00063)	Loca- tion in X-sect. looking dwnstrm ft from l bank (00009)	Stream width, feet (00004)	Instan- taneous dis- charge, ft <sup>3</sup> /s (00061)	Temper- ature, deg C (00010)	Bedload sedimnt dschrge average unit cmposit t/d/ft (04122)	Bedload sedi- ment dis- charge, tons/d (80225)	Bedload sedi- ment, sieve diametr percent <.125mm (80227)	Bedload sedi- ment, sieve diametr percent <.25mm (80228)
<b>Dec</b>													
30...	10	12.0	2	21	21	6.00	252	7,190	8.0	14.3	4,380	<1	1
30...	10	12.0	2	21	21	6.00	252	6,840	8.0	20.4	4,380	<1	1
<b>Mar</b>													
17...	10	10.0	2	20	20	5.00	205	6,000	9.5	27.0	4,230	--	1
17...	10	10.0	2	20	20	5.00	200	5,910	9.5	14.7	4,230	<1	1

**PARTICLE-SIZE DISTRIBUTION OF BEDLOAD  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 3 of 3

[Remark codes: <, less than.]

Date	Bedload sedi- ment, sieve diametr percent <.5 mm (80229)	Bedload sedi- ment, sieve diametr percent <1 mm (80230)	Bedload sedi- ment, sieve diametr percent <2 mm (80231)	Bedload sedi- ment, sieve diametr percent <4 mm (80232)	Bedload sedi- ment, sieve diametr percent <8 mm (80233)	Bedload sedi- ment, sieve diametr percent <16 mm (80234)	Bedload sedi- ment, sieve diametr percent <32 mm (80235)	Bedload sedi- ment, sieve diametr percent <64 mm (80236)
<b>Dec</b>								
30...	6	22	42	65	80	92	100	--
30...	4	8	19	39	60	80	94	100
<b>Mar</b>								
17...	3	7	21	42	62	81	99	100
17...	4	19	39	58	75	89	100	--