

11530000 TRINITY RIVER AT HOOPA, CA

Klamath River Basin

LOCATION.--Lat 41°03'00", long 123°40'15" referenced to North American Datum of 1927, in SE ¼ NW ¼ sec.25, T.8 N., R.4 E., Humboldt County, Hydrologic Unit 18010211, Humboldt meridian, in Hoopa Valley Indian Reservation, on left bank, 0.1 mi upstream from Supply Creek, 0.1 mi downstream from Hospital Creek, in the town of Hoopa.

DRAINAGE AREA.--2,853 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1911 to January 1914, October 1916 to September 1918, October 1931 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Published as "near Hoopa" 1931-60.

REVISED RECORDS.--WSP 1565: 1913. WDR CA-77-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 274.82 ft above NGVD of 1929. Prior to October 1931, nonrecording gage at site 0.4 mi upstream at different datum. October 1931 to Dec. 22, 1964, water-stage recorder at site 2.5 mi upstream at datum 31.67 ft higher.

REMARKS.--Records good. Flow regulated since November 1960 by Trinity Lake (station 11525400) 84 mi upstream, and by transbasin diversion to Judge Francis Carr Powerplant (station 11525430) since April 1963. Small diversions upstream from station for irrigation. See schematic diagram of Klamath River and Trinity River Basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 231,000 ft³/s, Dec. 22, 1964, gage height, 57.0 ft, present site and datum, from floodmarks, from rating curve extended above 123,000 ft³/s; minimum daily, 162 ft³/s, Oct. 4, 1931.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 19	0400	*33,100	*25.85
No other peak greater than base discharge			

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	716	919	812	4,960	6,590	5,460	10,700	7,440	7,570	4,470	1,280	934
2	716	872	800	4,360	5,950	5,630	9,620	7,300	7,140	4,320	1,240	859
3	714	905	788	3,810	5,530	5,620	9,030	7,090	6,680	4,180	1,210	843
4	713	928	776	3,430	5,390	5,280	9,050	7,160	6,400	4,100	1,200	844
5	712	881	768	3,110	5,290	4,970	8,010	8,580	6,140	4,030	1,170	839
6	707	839	859	2,860	5,030	4,670	7,520	10,100	5,970	4,040	1,120	838
7	707	807	2,250	2,980	4,760	4,490	8,140	11,100	5,740	3,980	1,120	840
8	715	785	15,000	3,520	4,390	4,440	9,880	12,500	5,560	3,860	1,090	856
9	765	773	19,000	3,890	4,070	4,450	12,300	19,400	6,060	3,800	1,070	851
10	754	796	10,500	3,850	3,820	4,440	11,300	19,100	5,780	3,710	1,050	848
11	754	830	6,780	3,940	3,630	4,350	10,800	17,200	5,440	3,410	1,030	856
12	745	886	5,140	3,930	3,490	4,300	10,400	15,700	5,240	3,160	1,020	866
13	740	900	4,350	3,590	3,520	4,230	9,520	14,900	5,080	2,920	1,010	864
14	733	857	3,990	3,340	4,850	4,010	8,560	14,300	5,000	2,760	994	859
15	715	822	3,630	3,150	4,980	3,700	7,810	13,700	4,850	2,600	979	854
16	749	816	3,120	3,210	4,660	3,480	7,420	14,200	4,770	2,520	970	849
17	720	814	2,740	4,000	4,560	3,290	7,480	12,900	5,260	2,350	964	860
18	729	812	2,490	4,990	4,530	3,150	7,180	19,300	6,330	2,160	958	871
19	1,090	785	2,340	6,110	4,500	3,570	6,730	28,700	8,090	2,010	952	869
20	1,630	764	2,220	6,990	5,010	6,900	6,230	21,400	7,080	1,840	945	860
21	1,160	750	2,090	7,220	6,030	10,400	5,870	17,600	6,200	1,760	938	845
22	892	736	1,950	6,850	5,640	15,700	5,730	15,200	5,700	1,690	928	837
23	1,280	725	1,840	6,590	5,170	16,300	6,340	13,700	5,410	1,590	919	825
24	1,920	717	1,740	6,560	4,770	12,000	6,750	12,400	5,210	1,510	908	819
25	1,240	743	1,670	6,780	4,460	9,300	6,320	11,300	5,010	1,460	900	823
26	1,520	821	1,760	8,630	4,240	7,890	5,970	10,700	4,920	1,430	886	820
27	1,490	927	2,120	11,100	4,120	7,670	5,840	10,200	4,770	1,400	875	821
28	1,240	922	4,590	10,700	5,240	16,400	6,110	9,800	4,670	1,360	868	817
29	1,080	874	5,440	11,500	---	17,000	6,030	8,960	4,580	1,340	858	814
30	1,010	839	5,190	8,980	---	15,200	7,040	8,210	4,500	1,320	1,810	808
31	964	---	5,360	7,510	---	12,600	---	7,810	---	1,290	1,460	---
Total	29,620	24,845	122,103	172,440	134,220	230,890	239,680	407,950	171,150	82,370	32,722	25,389
Mean	955	828	3,939	5,563	4,794	7,448	7,989	13,160	5,705	2,657	1,056	846
Max	1,920	928	19,000	11,500	6,590	17,000	12,300	28,700	8,090	4,470	1,810	934
Min	707	717	768	2,860	3,490	3,150	5,730	7,090	4,500	1,290	858	808
Ac-ft	58,750	49,280	242,200	342,000	266,200	458,000	475,400	809,200	339,500	163,400	64,900	50,360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1960, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	926	2,578	6,468	9,239	11,830	10,400	10,170	8,663	4,755	1,635	650	508
Max	5,405	9,589	28,060	30,140	50,380	26,370	19,320	16,700	9,875	4,265	1,365	1,248
(WY)	(1951)	(1938)	(1956)	(1956)	(1958)	(1938)	(1938)	(1938)	(1953)	(1941)	(1953)	(1912)
Min	260	373	531	647	2,433	3,815	4,790	3,000	1,378	466	249	213
(WY)	(1933)	(1940)	(1937)	(1937)	(1937)	(1955)	(1944)	(1934)	(1934)	(1918)	(1934)	(1934)

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SUMMARY STATISTICS

	Water Years 1912 - 1960	
Annual mean	5,618	
Highest annual mean	12,270	1958
Lowest annual mean	2,630	1934
Highest daily mean	158,000	Dec 22, 1955
Lowest daily mean	162	Oct 4, 1931
Annual seven-day minimum	164	Oct 1, 1931
Maximum peak flow	^a 190,000	Dec 22, 1955
Maximum peak stage	36.90	Dec 22, 1955
Annual runoff (ac-ft)	4,070,000	
10 percent exceeds	12,700	
50 percent exceeds	3,070	
90 percent exceeds	442	

^a From rating curve extended above 56,000 ft³/s.

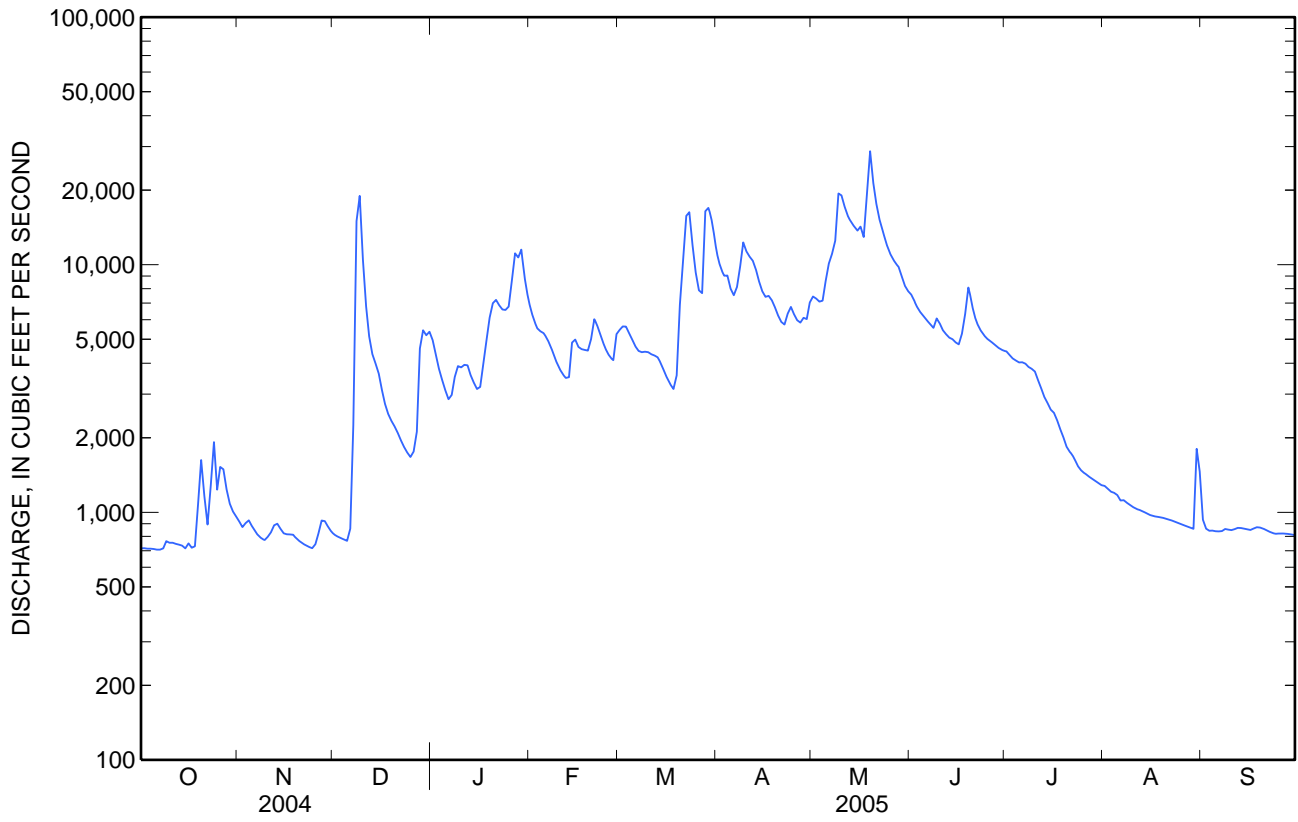
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	815	2,879	7,038	10,770	9,962	9,864	6,537	4,972	2,872	1,299	771	688
Max	1,805	12,900	29,710	32,090	28,810	32,240	16,040	13,160	9,731	3,233	1,681	1,309
(WY)	(1980)	(1974)	(1965)	(1970)	(1986)	(1983)	(1983)	(2005)	(1998)	(1983)	(1983)	(1983)
Min	472	679	529	745	891	1,608	1,325	1,204	746	338	270	336
(WY)	(1988)	(1991)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1969)

SUMMARY STATISTICS

	Calendar Year 2004	Water Year 2005	Water Years 1964 - 2005
Annual total	1,747,735	1,673,379	
Annual mean	4,775	4,585	4,852
Highest annual mean			11,350
Lowest annual mean			786
Highest daily mean	62,200	Feb 18	28,700
Lowest daily mean	678	Aug 22	707
Annual seven-day minimum	711	Sep 26	712
Maximum peak flow			33,100
Maximum peak stage			25.85
Annual runoff (ac-ft)	3,467,000	3,319,000	3,515,000
10 percent exceeds	10,400	10,600	11,300
50 percent exceeds	3,100	3,810	2,200
90 percent exceeds	747	813	604

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-79, 1998 to current year.

CHEMICAL ANALYSES: Water years 1951-81, 2002.

DISSOLVED OXYGEN: Water years 2002-03.

pH: Water years 2002-03.

SPECIFIC CONDUCTANCE: Water years 2002-03.

WATER TEMPERATURE: Water years 1957-83, 1998 to current year.

SEDIMENT DATA: Water years 1955-79.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: June 2002 to October 2002 (seasonal only).

pH: June 2002 to October 2002 (seasonal only).

SPECIFIC CONDUCTANCE: June 2002 to October 2002 (seasonal only).

WATER TEMPERATURE: November 1956 to September 1983, July 1998 to current year.

SEDIMENT DATA: November 1956 to September 1979.

INSTRUMENTATION.--Temperature recorder since July 1998.

REMARKS.--Water temperature record rated excellent.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: Maximum recorded, 14.5 mg/L, Aug. 5, 2002; minimum recorded, 7.0 mg/L, Sept. 3, 2002.

pH: Maximum recorded, 8.7 standard units, several days during 2002; minimum recorded, 7.7 standard units, Sept. 17, 2002.

SPECIFIC CONDUCTANCE: Maximum recorded, 166 microsiemens, Oct. 28, 2002; minimum recorded, 127 microsiemens, July 21, 2002.

WATER TEMPERATURE: Maximum recorded, 26.0°C, July 25, 26, 2001, July 25-28, 2004; minimum recorded, 2.0°C, Dec. 23, 24, 1998.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 25.1°C, Aug. 7, 9; minimum recorded, 4.5°C, Jan. 8, 9.

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	18.3	16.7	11.5	10.8	7.3	6.6	6.5	6.2	7.6	6.9	---	---
2	18.4	16.9	10.9	10.4	7.0	6.2	6.5	6.2	7.2	6.7	---	---
3	18.5	17.0	11.2	10.3	6.4	5.5	6.6	6.2	7.2	6.6	---	---
4	18.6	17.1	10.5	9.5	5.7	5.3	6.6	6.3	7.3	6.8	---	---
5	18.4	17.0	10.2	9.4	5.4	5.2	6.4	6.0	7.9	7.2	---	---
6	17.9	16.5	10.1	9.2	5.6	5.3	6.8	6.2	7.5	7.1	---	---
7	18.6	17.0	9.9	9.1	6.5	5.6	6.4	5.7	7.7	7.0	---	---
8	18.3	16.9	10.0	9.1	7.8	6.4	5.7	4.5	7.6	6.9	---	---
9	17.5	16.4	9.8	9.5	8.4	7.7	5.2	4.5	7.3	6.7	---	---
10	16.9	15.7	10.4	9.7	9.0	8.4	5.9	5.2	7.4	6.4	---	---
11	16.3	15.1	11.6	10.3	9.1	8.8	6.7	5.9	7.3	6.3	---	---
12	15.8	14.5	11.4	11.0	9.1	8.6	6.7	6.0	7.2	6.3	---	---
13	15.8	14.4	11.8	11.0	9.6	8.8	6.1	5.7	7.4	6.8	---	---
14	15.9	14.6	11.8	11.2	10.0	9.5	6.3	5.5	7.9	7.3	---	---
15	16.0	14.6	11.3	10.9	9.6	8.6	6.7	6.0	8.1	7.4	---	---
16	15.7	14.6	11.8	10.9	8.6	7.8	7.6	6.6	8.8	7.8	---	---
17	15.3	14.3	12.0	11.3	7.8	7.3	7.6	7.1	---	---	---	---
18	14.3	13.7	11.8	11.1	7.3	6.8	7.7	7.2	---	---	---	---
19	13.7	12.5	11.4	10.3	7.2	6.8	7.4	6.9	---	---	---	---
20	13.1	12.3	10.4	9.2	7.5	6.9	7.1	6.8	---	---	---	---
21	13.2	12.3	9.4	8.2	7.2	6.8	7.1	6.6	---	---	---	---
22	12.8	12.5	8.3	7.4	6.9	6.3	6.9	6.6	---	---	---	---
23	13.3	12.3	7.9	7.3	6.4	5.8	7.2	6.7	---	---	---	---
24	13.0	12.1	8.1	7.4	5.8	5.2	7.2	6.7	---	---	---	---
25	12.5	11.6	8.3	7.8	5.4	4.8	7.9	6.9	---	---	---	---
26	11.8	11.1	8.9	8.3	5.6	5.2	8.2	7.9	---	---	---	---
27	11.6	10.6	9.4	8.6	6.0	5.6	8.0	7.6	---	---	---	---
28	11.6	10.8	8.7	7.7	6.4	5.8	8.0	7.6	---	---	---	---
29	12.0	11.4	7.8	6.6	7.1	6.2	7.6	7.2	---	---	---	---
30	11.9	11.3	6.8	6.4	6.9	6.3	7.4	6.8	---	---	---	---
31	12.1	11.2	---	---	6.3	6.0	7.3	6.8	---	---	---	---
Month	18.6	10.6	12.0	6.4	10.0	4.8	8.2	4.5	---	---	---	---

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	---	---	13.6	12.6	16.1	14.3	19.7	17.4	23.8	22.5	20.5	18.4
2	---	---	14.2	12.2	16.0	13.9	19.0	16.9	23.9	22.2	21.3	19.2
3	---	---	13.7	12.5	16.2	13.9	18.8	16.6	24.3	22.6	21.1	19.4
4	---	---	13.4	12.4	16.1	14.0	18.9	16.5	24.3	22.7	21.1	19.2
5	11.0	9.3	12.8	12.1	15.5	13.9	19.1	16.8	24.6	22.9	20.9	18.8
6	11.8	10.3	12.6	12.0	14.6	12.9	19.7	17.4	24.9	23.2	20.8	18.8
7	---	---	12.5	11.7	14.0	12.1	19.5	17.6	25.1	23.4	20.9	18.9
8	10.6	8.3	12.4	11.5	13.5	12.7	19.1	17.1	25.0	23.3	20.0	19.2
9	9.6	7.8	11.5	10.5	15.1	12.7	19.7	17.7	25.1	23.1	19.9	18.1
10	10.4	9.2	10.6	10.2	16.7	14.3	19.7	17.9	24.2	22.4	19.4	17.9
11	11.4	10.1	11.6	10.4	16.5	15.1	20.6	18.3	23.7	21.8	19.1	17.1
12	10.6	9.4	12.6	11.4	16.9	14.4	20.4	18.6	23.4	21.5	19.0	17.2
13	9.4	8.3	12.9	12.2	17.2	14.6	21.1	18.6	23.6	21.4	18.9	16.9
14	9.7	8.1	13.3	12.4	17.2	15.1	22.1	19.3	23.9	21.7	19.0	16.9
15	10.7	8.9	13.2	12.1	16.7	14.6	23.1	20.3	24.1	21.9	19.2	17.2
16	10.8	10.1	12.4	11.8	16.0	15.0	23.3	20.7	24.1	21.9	18.1	17.2
17	11.4	10.2	13.5	11.2	15.3	13.3	23.7	20.8	23.7	21.8	18.2	16.9
18	11.3	10.1	13.4	11.3	13.3	12.5	23.8	21.2	23.8	21.6	18.6	16.7
19	11.4	9.7	12.1	11.4	13.0	12.1	23.7	21.1	23.8	21.7	18.5	16.6
20	12.0	10.0	12.4	11.5	15.3	12.5	23.9	21.3	23.8	21.7	18.8	16.8
21	12.7	10.5	13.0	11.7	15.6	13.8	23.9	21.8	23.7	21.7	18.9	17.1
22	13.0	11.1	13.6	12.6	16.9	14.4	23.6	21.5	23.8	21.6	18.7	16.9
23	12.9	12.0	13.9	12.7	17.9	15.2	23.7	21.5	23.9	21.8	17.9	16.8
24	12.2	11.3	14.2	12.4	18.3	15.7	23.2	21.4	23.6	21.3	17.3	15.7
25	13.3	11.1	15.1	13.2	17.7	16.0	23.1	20.9	23.6	21.3	17.0	15.2
26	13.7	11.9	16.1	14.1	18.0	15.8	23.7	21.4	23.4	21.2	15.9	15.1
27	13.7	12.4	16.3	14.6	18.7	16.4	24.0	22.1	23.2	21.0	16.7	14.6
28	13.1	12.1	15.9	14.8	19.0	16.9	24.2	22.4	22.7	20.6	16.8	14.9
29	13.8	12.0	15.0	13.8	19.4	16.8	24.2	22.6	21.9	20.3	17.2	15.3
30	13.9	12.7	15.3	13.5	19.8	17.3	24.5	22.7	21.0	19.6	17.6	15.6
31	---	---	16.2	14.3	---	---	24.3	22.8	19.9	17.4	---	---
Month	---	---	16.3	10.2	19.8	12.1	24.5	16.5	25.1	17.4	21.3	14.6

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CROSS SECTION ANALYSES
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	DepthTo bottom at sample loca- tion, feet (81903)	Temper- ature, water, deg C (00010)	Loca- tion in X-sect. looking dwnstrm ft from l bank (00009)
May				
31...	1420	9.40	15.3	30.0
31...	1422	11.3	15.3	70.0
31...	1424	7.70	15.3	110
31...	1426	2.75	15.3	150
31...	1428	1.55	15.3	190
Sep				
06...	1305	1.88	20.2	135
06...	1307	2.68	20.1	105
06...	1309	2.00	20.0	75.0
06...	1311	2.00	20.1	45.0
06...	1313	1.24	20.1	15.0

* Instantaneous discharge at time of cross-sectional measurement: May 31, 7,870 ft³/s; Sept. 6, 840 ft³/s.