

METHOW RIVER BASIN

12448998 TWISP RIVER NEAR TWISP, WA

LOCATION.--Lat 48°22'12", long 120°08'51", in SE 1/4 SE 1/4 sec.12, T.33 N., R.21 E., Okanogan County, Hydrologic Unit 17020008, on left bank, 20 ft downstream from county road bridge, 0.8 mi west of the Twisp city limits, and at mile 1.6.

DRAINAGE AREA.--245 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--May 1975 to September 1979, October 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,640 ft above NGVD of 1929, from topographic map, May 1975 to September 1979, water-stage recorder at same site. Crest-stage gage since September 1992.

REMARKS.--Records good except for estimated daily discharges which are fair. No known regulation. Several diversions upstream from station for irrigation. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--17 years (water years 1976-79, 1990-2002), 262 ft³/s, 189,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,540 ft³/s June 17, 1999, gage height, 11.83 ft; maximum gage height, 12.42 ft June 17, 1999, from crest-stage gage; minimum daily discharge, 15 ft³/s Oct. 2-4, 1989, Sept. 28-30, Oct. 1-3, 1994, Sept. 19-20 and 22-24, 2001.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 29, 1948, had a discharge of 9,440 ft³/s, by slope-area measurement made about 1,000 ft upstream from mouth.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 30	0430	1,970	10.51	June 16	--	--	(a) *11.02
June 5	2245	1,920	10.47	June 23	0115	1,350	9.88
June 16	0115	*2,220	10.79	June 27	0345	1,370	9.92

Minimum discharge, 18 ft³/s Oct.1 and 3-6.

(a) From crest-stage gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	41	54	41	e44	e74	117	489	1480	690	135	38
2	20	39	53	43	e44	75	117	640	1460	600	121	38
3	19	39	53	41	e44	73	115	687	1530	547	111	38
4	18	38	e50	40	e43	73	119	631	1580	541	105	37
5	18	38	e45	39	44	74	133	572	1780	480	100	37
6	23	38	e47	40	43	73	149	515	1730	443	98	37
7	30	38	e45	42	44	74	165	464	1290	449	98	36
8	35	36	e47	51	44	e73	172	423	1030	686	91	36
9	37	37	e43	59	43	73	176	389	865	614	87	35
10	38	37	e44	56	42	73	180	362	808	542	82	34
11	43	37	e45	54	41	74	200	353	977	590	80	35
12	40	37	46	53	e39	75	233	375	1250	605	76	34
13	39	38	46	52	e42	72	308	460	1480	550	72	33
14	40	51	e44	51	e47	70	541	561	1800	549	69	32
15	40	63	e46	e40	e42	68	536	584	1970	484	69	32
16	40	63	48	e44	e38	69	467	586	1880	406	64	32
17	40	56	49	e43	e40	67	417	652	1450	381	62	31
18	39	53	e46	e43	38	65	380	744	1210	358	59	32
19	38	56	e42	e46	39	67	356	743	995	339	56	32
20	38	61	e39	e47	39	67	344	916	947	312	53	32
21	37	63	e42	e48	40	64	348	1070	1020	265	53	32
22	39	62	e45	e44	50	63	363	971	1170	247	53	32
23	e48	60	44	e44	112	64	367	853	1250	239	49	31
24	e43	55	42	e47	100	67	353	803	1170	239	45	31
25	43	56	41	e48	e77	71	345	820	1090	233	49	29
26	42	53	38	e46	e79	75	342	889	1170	231	57	29
27	40	51	e37	e44	e81	78	338	1010	1260	213	50	29
28	41	54	e42	e42	e78	81	328	1370	1140	187	47	29
29	40	51	e41	e40	---	86	327	1760	1020	173	43	28
30	40	53	40	e45	---	90	366	1810	886	163	40	27
31	42	---	41	e47	---	103	---	1650	---	154	41	---
TOTAL	1109	1454	1385	1420	1457	2271	8702	24152	38688	12510	2215	988
MEAN	35.8	48.5	44.7	45.8	52.0	73.3	290	779	1290	404	71.5	32.9
MAX	48	63	54	59	112	103	541	1810	1970	690	135	38
MIN	18	36	37	39	38	63	115	353	808	154	40	27
AC-FT	2200	2880	2750	2820	2890	4500	17260	47910	76740	24810	4390	1960

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	63.0	108	97.2	67.5	71.3	114	338	839	933	412	103	47.8																
MAX	144	350	323	152	168	270	723	1455	1517	859	302	110																
(WY)	1998	1991	1996	1976	1996	1996	1996	1997	1999	1991	1976	1978																
MIN	34.2	44.8	36.3	31.6	29.2	39.6	80.1	201	282	56.9	23.7	16.4																
(WY)	1990	1978	1994	1993	1994	1977	2001	1977	1977	1977	1977	1994																

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1975 - 2002

ANNUAL TOTAL	36436	96351																											
ANNUAL MEAN	99.8	264																											
HIGHEST ANNUAL MEAN		413																											
LOWEST ANNUAL MEAN		82.9																											
HIGHEST DAILY MEAN			1180	May 24		1970	Jun 15			3200	May 19	1991																	
LOWEST DAILY MEAN			15	Sep 19		18	Oct 4			15	Sep 28	1994																	
ANNUAL SEVEN-DAY MINIMUM			17	Sep 17		21	Oct 1			15	Sep 26	1994																	
ANNUAL RUNOFF (AC-FT)			72270			191100				189800																			
10 PERCENT EXCEEDS			254			887				785																			
50 PERCENT EXCEEDS			42			59				86																			
90 PERCENT EXCEEDS			23			37				35																			

e Estimated