

12449950 METHOW RIVER NEAR PATEROS, WA

Upper Columbia Basin
Methow Subbasin

LOCATION.--Lat 48°04'39", long 119°59'02" referenced to North American Datum of 1927, in SE ¼ SW ¼ sec.20, T.30 N., R.23 E., Okanogan County, WA, Hydrologic Unit 17020008, on right bank 1.4 mi downstream from Black Canyon Creek, 4.3 mi northwest of Pateros, and at mile 6.7.

DRAINAGE AREA.--1,772 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1959 to current year. Water temperature October 1968 to October 1970.

REVISED RECORDS.--WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 900 ft above NGVD of 1929, from topographic map. Prior to Dec. 17, 1964, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges which are fair. Diversions for irrigation of about 11,000 acres upstream from station (1959 Bureau of Reclamation land classification). U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--53 years (water years 1960-2012), 1,555 ft³/s, 1,127,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,800 ft³/s, May 31, 1972, gage height, 12.25 ft; minimum daily discharge, 150 ft³/s, Jan. 8-10, 1974, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since 1894, 46,700 ft³/s, May 29, 1948, determined by slope-area measurement of peak flow at site 1 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 27	0130	8,950	7.26
May 16	1115	*11,700	*8.19
Jun 2	1400	9,390	7.42
Jun 18	1100	8,440	7.07
Jun 23	1830	8,550	7.11

Minimum discharge, 264 ft³/s, Jan. 12, but may have been lower during ice period Jan.12 to Feb. 7.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	481	539	418	379	e355	340	570	6,690	7,780	6,120	1,400	464
2	516	518	406	372	e350	327	551	6,100	9,000	5,960	1,310	452
3	538	512	408	369	e340	326	552	5,500	9,060	5,290	1,230	441
4	561	510	404	376	e335	328	564	4,970	7,890	4,760	1,170	430
5	660	483	398	376	e330	340	571	4,470	8,400	4,250	1,120	420
6	701	467	388	371	e335	354	575	4,120	8,300	4,070	1,090	413
7	668	454	360	365	e340	347	575	4,120	6,970	4,250	1,090	403
8	642	463	340	361	359	340	577	4,580	6,230	4,660	1,050	395
9	621	466	e340	363	343	344	594	5,710	5,580	5,050	987	393
10	606	462	e340	360	339	344	635	5,850	5,070	5,220	948	390
11	621	457	e360	334	346	351	739	5,470	4,970	4,820	897	386
12	658	458	e360	e275	350	370	892	5,440	5,320	4,290	852	386
13	654	454	e350	e340	349	389	1,130	5,970	6,130	4,060	816	383
14	628	449	e360	e360	342	377	1,280	7,220	6,910	3,950	789	379
15	610	439	e370	e345	331	376	1,360	9,280	6,460	3,950	761	374
16	598	424	e375	e340	328	378	1,390	11,200	6,210	4,010	744	365
17	580	429	e375	e330	333	386	1,440	10,700	7,310	3,620	717	352
18	563	445	e380	e339	340	381	1,430	9,380	8,210	3,330	694	348
19	553	445	e365	e310	329	373	1,430	8,300	7,130	3,010	669	346
20	544	416	e365	e320	325	375	1,470	7,440	6,160	2,760	651	342
21	530	399	e370	e350	326	381	1,680	7,170	6,110	3,010	627	339
22	525	432	e340	e360	338	377	1,920	7,910	6,620	2,670	607	340
23	551	464	e335	e355	349	376	2,790	7,490	7,820	2,370	593	347
24	612	479	e360	e350	339	378	5,100	6,840	8,090	2,160	573	344
25	592	469	e375	e355	343	381	6,660	6,280	7,030	1,960	565	345
26	570	443	e375	e355	337	386	7,830	5,970	6,370	1,890	554	335
27	557	434	381	e340	326	403	8,210	5,980	5,770	1,950	535	330
28	549	439	383	e345	310	453	6,830	6,640	5,310	1,850	506	328
29	548	435	409	e355	347	476	6,440	6,970	5,390	1,710	495	325
30	541	429	415	e370	---	518	6,750	6,700	5,640	1,580	485	324
31	538	---	397	e360	---	563	---	6,840	---	1,480	476	---
Total	18,116	13,713	11,602	10,880	9,814	11,838	72,535	207,300	203,240	110,060	25,001	11,219
Mean	584	457	374	351	338	382	2,418	6,687	6,775	3,550	806	374
Max	701	539	418	379	359	563	8,210	11,200	9,060	6,120	1,400	464
Min	481	399	335	275	310	326	551	4,120	4,970	1,480	476	324
Ac-ft	35,930	27,200	23,010	21,580	19,470	23,480	143,900	411,200	403,100	218,300	49,590	22,250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	479	546	476	430	423	606	1,628	5,035	5,844	2,140	687	431
Max	1,458	1,327	1,361	938	803	1,670	3,567	9,768	13,150	5,043	1,860	1,196
(WY)	(1960)	(1991)	(1996)	(1981)	(1968)	(2007)	(2007)	(1972)	(1972)	(2011)	(1976)	(1978)
Min	293	273	270	248	262	237	309	1,415	1,583	471	283	235
(WY)	(2003)	(2003)	(1995)	(1995)	(2001)	(1977)	(2001)	(1977)	(2001)	(1977)	(2005)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1959 - 2012	
Annual total	901,391		705,318			
Annual mean	2,470		1,927		1,555	
Highest annual mean					2,963	1972
Lowest annual mean					565	1977
Highest daily mean	15,400	Jun 8	11,200	May 16	27,200	May 31, 1972
Lowest daily mean	335	Dec 23	275	Jan 12	150	Jan 8, 1974
Annual seven-day minimum	350	Dec 7	329	Feb 27	154	Jan 5, 1974
Annual runoff (ac-ft)	1,788,000		1,399,000		1,127,000	
10 percent exceeds	8,890		6,510		4,350	
50 percent exceeds	682		514		540	
90 percent exceeds	418		340		306	

