

Water-Data Report 2007

05013900 GRINNELL CREEK AT GRINNELL GLACIER, NEAR MANY GLACIER, MT

Saskatchewan Basin
St. Mary Subbasin

LOCATION.--Lat 48°45'28", long 113°43'29" referenced to North American Datum of 1927, in S ¼ W ¼ sec.29, T.35 N., R.16 W., Glacier County, MT, Hydrologic Unit 10010002, Glacier National Park, on left bank 0.2 mi downstream from outlet of Grinnell Glacier, 0.4 mi upstream from Grinnell Falls, 4 mi southwest of Many Glacier, and 15 mi southwest of Babb.

DRAINAGE AREA.--1.10 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1959 to September 1971, July 2004 to current year (no winter records).

GAGE.--Water-stage recorder. Elevation of gage is 6,322 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--Records are good except those for estimated daily discharges, which are poor. No regulation or diversion occurs upstream from station. Bureau of Reclamation satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

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DISCHARGE, CUBIC FEET PER SECOND
CALENDAR YEAR JANUARY TO DECEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1							23	23	17	5.8		
2							25	23	14	e9.0		
3							28	23	14	e8.0		
4							31	21	14	e7.5		
5							33	19	13	e7.0		
6							37	19	12	e6.0		
7							37	19	11	e6.5		
8							32	17	9.3	e7.0		
9							28	15	7.5	e8.0		
10							26	16	6.9	e9.0		
11							27	15	8.1	e10		
12							30	15	9.0	e11		
13							33	15	7.5	e12		
14							36	17	6.4	e12		
15							34	17	6.2	11		
16							32	16	6.4	5.7		
17							31	17	8.2	4.2		
18							34	17	7.5	6.1		
19							40	15	8.6	e6.4		
20							33	18	6.9	e6.6		
21							28	15	7.4	e6.2		
22							27	12	5.7	e6.0		
23							31	13	6.3	e6.5		
24							36	13	5.5	e7.0		
25							31	13	4.3	e6.5		
26							28	13	3.8	e4.5		
27							30	11	3.4	e4.5		
28							30	10	3.2	e5.5		
29							30	11	6.3	e6.0		
30							27	12	5.7	e5.5		
31							25	14	---	e5.5		
Total							953	494	245.1	222.5		
Mean							30.7	15.9	8.17	7.18		
Max							40	23	17	12		
Min							23	10	3.2	4.2		
Ac-ft							1,890	980	486	441		

STATISTICS OF MONTHLY MEAN DATA FOR SEASONS 1959 - 2007*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean							38.1	28.0	15.1	7.97		
Max							47.0	38.6	31.6	19.3		
(WY)							(1967)	(1971)	(1968)	(1962)		
Min							26.2	15.9	6.93	2.72		
(WY)							(2005)	(2007)	(1965)	(2007)		

* For periods of seasonal records, July 1959 to September 1971 and July 2004 to current year.

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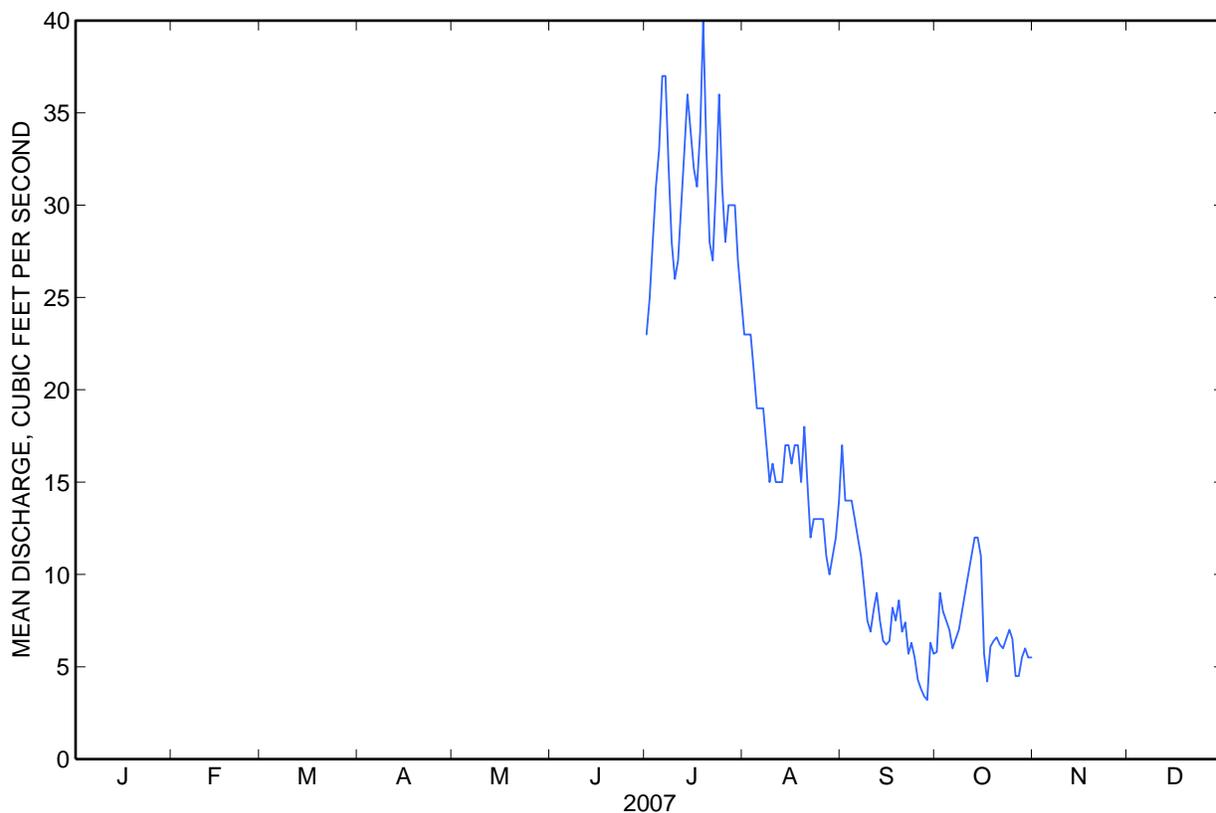
SUMMARY STATISTICS

	2007 Season		Seasons 1959 - 2007*	
Highest daily mean	40	Jul 19	126	Sep 30, 2005
Lowest daily mean	3.2	Sep 28	0.00	Nov 29, 1960
Maximum peak flow	^a 43	Jul 19	230	Sep 30, 2005
Maximum peak stage	^b 3.63	Oct 08	4.43	Sep 30, 2005

* For periods of seasonal records, July 1959 to September 1971 and July 2004 to current year.

^a Gage height, 2.69 ft.

^b Backwater from ice.



STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	7.97	3.07	1.84	---	---	---	---	---	---	38.1	28.0	15.1
Max	19.3	5.52	1.84	---	---	---	---	---	---	47.0	38.6	31.6
(WY)	(1962)	(1963)	(1963)	(---	(---	(---	(---	(---	(---	(1967)	(1971)	(1968)
Min	2.72	0.85	1.84	---	---	---	---	---	---	26.2	15.9	6.93
(WY)	(2007)	(1962)	(1963)	(---	(---	(---	(---	(---	(---	(2005)	(2007)	(1965)