

Water-Data Report 2009

**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 mi<sup>2</sup>.

**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 Several unpublished observations of water temperature and specific conductance were made during the year.

## 05013900 GRINNELL CREEK AT GRINNELL GLACIER, NEAR MANY GLACIER, MT—Continued

**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	6.2									e23	31	19
2	7.1									22	30	22
3	8.9									23	27	20
4	10									26	24	17
5	14									27	21	14
6	11									30	21	14
7	e10									29	22	12
8	e8.0									23	20	9.2
9	e5.0									20	24	7.3
10	e3.0									19	23	6.9
11	e3.0									19	18	6.4
12	e2.5									21	21	6.2
13	e2.0									30	20	6.4
14	e1.0									53	20	6.7
15	e0.75									36	23	9.3
16	e0.70									31	22	12
17	e0.75									30	19	14
18	e1.0									29	21	13
19	e2.0									29	22	13
20	e2.5									27	22	19
21	e3.0									25	22	12
22	e3.0									26	22	9.3
23	e3.0									26	19	10
24	e2.5									34	16	11
25	e2.5									33	15	11
26	e2.0									35	14	11
27	e2.0									36	14	9.5
28	1.6									33	14	7.3
29	1.4									27	14	6.0
30	1.2									23	15	5.2
31	1.1									32	17	---
<b>Total</b>	122.70									877	633	339.7
<b>Mean</b>	3.96									28.3	20.4	11.3
<b>Max</b>	14									53	31	22
<b>Min</b>	0.70									19	14	5.2
<b>Ac-ft</b>	243									1,740	1,260	674

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2009, BY WATER YEAR (WY)\***

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	7.69									37.5	27.3	14.6
<b>Max</b>	19.3									47.0	38.6	31.6
<b>(WY)</b>	(1962)									(1967)	(1971)	(1968)
<b>Min</b>	2.72									26.2	15.9	6.93
<b>(WY)</b>	(2007)									(2005)	(2007)	(1965)

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

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1959 - 2009*	
<b>Highest daily mean</b>	59	Jul 2	53	Jul 14	126	Sep 30, 2005
<b>Lowest daily mean</b>	0.70	Oct 16	0.70	Oct 16	0.00	Nov 29, 1960
<b>Annual seven-day minimum</b>	1.2	Oct 13	1.2	Oct 13	0.00	Nov 18, 1961
<b>Maximum peak flow</b>			67	Jul 13	230	Sep 30, 2005
<b>Maximum peak stage</b>			2.99	Jul 13	4.43	Sep 30, 2005

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

