

Water-Data Report 2011

**06131200 NELSON CREEK NEAR VAN NORMAN, MT**

Fort Peck Lake Basin  
Fort Peck Reservoir Subbasin

LOCATION.--Lat 47°32'08", long 106°09'11" referenced to North American Datum of 1927, in SW ¼ NW ¼ sec.36, T.21 N., R.43 E., McCone County, MT, Hydrologic Unit 10040104, on left bank at downstream side of bridge on State Highway 24, 1.5 mi upstream from Fort Peck Lake, and 19 mi northeast of Van Norman.

DRAINAGE AREA.--100.2 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1975 to September 1985, February 2000 to September 2004, October 2006 to September 2011, discontinued.

GAGE.--Water-stage recorder. Elevation of gage is 2,300 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--Records are fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 163 acres occur upstream from station, of which about 158 acres are flood irrigated. Some storage occurs in stock ponds upstream. U.S. Geological Survey satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

## 06131200 NELSON CREEK NEAR VAN NORMAN, MT—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**  
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.03	0.28	e0.00	e0.00	e0.00	e1.0	30	0.67	22	0.40	0.06	0.01
2	0.02	0.26	e0.00	e0.00	e0.00	e1.0	26	0.77	13	0.34	0.05	0.02
3	0.01	0.22	e0.00	e0.00	e0.00	e0.56	22	0.62	7.6	0.29	0.03	0.02
4	0.01	0.18	e0.00	e0.00	e0.00	e0.33	10	0.53	4.5	0.23	0.04	0.02
5	0.01	0.16	e0.00	e0.00	e0.00	e0.72	11	0.47	3.1	0.23	0.03	0.04
6	0.00	0.14	e0.00	e0.00	e0.00	e0.05	12	0.44	2.0	0.32	0.04	0.02
7	0.01	0.13	e0.00	e0.00	e0.00	e0.05	10	0.41	1.7	0.30	0.03	0.00
8	0.01	0.12	e0.00	e0.00	e0.00	e0.06	13	0.42	1.5	0.21	0.01	0.00
9	0.02	0.11	e0.00	e0.00	e0.00	e0.08	12	0.57	1.5	0.18	0.00	0.00
10	0.01	0.10	e0.00	e0.00	e0.00	e0.12	8.9	170	1.8	0.15	0.00	0.00
11	0.01	0.09	e0.00	e0.00	e0.01	e0.00	8.5	58	1.9	0.12	3.8	0.00
12	0.01	0.07	e0.00	e0.00	e0.00	e0.00	6.8	17	1.6	0.10	24	0.00
13	0.01	0.07	e0.00	e0.00	e0.14	e0.14	5.1	7.5	1.3	0.06	0.42	0.00
14	0.01	0.07	e0.00	e0.00	e1.0	e1.7	4.0	4.0	1.1	0.09	0.11	0.00
15	0.01	0.07	e0.00	e0.00	e2.0	e5.5	3.6	2.1	0.93	0.10	0.06	0.00
16	0.01	0.09	e0.00	e0.00	e1.5	e11	2.8	1.2	0.85	9.2	0.06	0.00
17	0.01	0.11	e0.00	e0.00	e2.4	e19	2.4	2.4	6.6	18	0.04	0.01
18	0.01	0.12	e0.00	e0.00	e2.6	e27	2.5	49	6.2	8.0	0.02	0.01
19	0.01	e0.12	e0.00	e0.00	e2.0	e15	2.0	20	4.3	3.6	0.00	0.00
20	0.01	e0.12	e0.00	e0.00	e0.57	e9.5	1.7	23	3.9	1.4	0.01	0.00
21	0.01	e0.11	e0.00	e0.00	e1.0	e5.7	1.5	153	3.0	0.69	0.00	0.00
22	0.01	e0.11	e0.00	e0.00	e1.8	e6.9	1.3	165	3.0	0.44	0.00	0.00
23	0.01	e0.10	e0.00	e0.00	e1.0	e8.8	1.2	38	2.0	0.51	0.00	0.00
24	0.01	e0.10	e0.00	e0.00	e0.82	e10	1.1	16	2.7	0.39	0.00	0.00
25	0.02	e0.10	e0.00	e0.00	e1.5	e8.0	0.90	9.4	2.2	0.27	0.00	0.00
26	0.02	e0.09	e0.00	e0.00	e1.2	e8.4	0.80	5.8	1.1	0.44	0.00	0.00
27	0.11	e0.07	e0.00	e0.00	e0.64	e6.5	0.73	4.7	0.93	0.72	0.00	0.00
28	0.15	e0.02	e0.00	e0.00	e0.73	5.1	0.66	5.8	0.74	0.25	0.00	0.00
29	0.16	e0.00	e0.00	e0.00	---	6.0	0.61	7.2	0.63	0.13	0.00	0.00
30	0.27	e0.00	e0.00	e0.00	---	18	0.67	48	0.53	0.09	0.00	0.00
31	0.38	---	e0.00	e0.00	---	29	---	116	---	0.08	0.00	---
<b>Total</b>	1.38	3.33	0.00	0.00	20.91	205.21	203.77	928.00	104.21	47.33	28.81	0.15
<b>Mean</b>	0.04	0.11	0.00	0.00	0.75	6.62	6.79	29.9	3.47	1.53	0.93	0.01
<b>Max</b>	0.38	0.28	0.00	0.00	2.6	29	30	170	22	18	24	0.04
<b>Min</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.41	0.53	0.06	0.00	0.00
<b>Ac-ft</b>	2.7	6.6	0.00	0.00	41	407	404	1,840	207	94	57	0.3

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2011, BY WATER YEAR (WY)\***

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	0.13	0.02	0.02	0.26	1.89	4.85	2.69	3.14	1.97	1.94	1.47	0.82
<b>Max</b>	1.47	0.14	0.15	2.90	19.0	37.4	39.9	29.9	5.64	16.0	9.99	15.4
<b>(WY)</b>	(1982)	(1979)	(1976)	(1983)	(1982)	(1978)	(1979)	(2011)	(1977)	(1978)	(2009)	(1978)
<b>Min</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
<b>(WY)</b>	(1977)	(1977)	(1977)	(1977)	(1978)	(2002)	(2000)	(2001)	(1981)	(1980)	(1977)	(1976)

\*During periods of operation (October 1975 to September 1985, February 2000 to September 2004, October 2006 to September 2011, discontinued).

06131200 NELSON CREEK NEAR VAN NORMAN, MT—Continued

SUMMARY STATISTICS

	Calendar Year 2010	Water Year 2011	Water Years 1976 – 2011*	
<b>Annual total</b>	432.53	1,543.10		
<b>Annual mean</b>	1.19	4.23	1.64	
<b>Highest annual mean</b>			7.57	1978
<b>Lowest annual mean</b>			0.14	1980
<b>Highest daily mean</b>	115 May 25	170 May 10	445	Jul 4, 1978
<b>Lowest daily mean</b>	0.00 Jan 1	0.00 Oct 6	0.00	Oct 1, 1975 <sup>a</sup>
<b>Annual seven-day minimum</b>	0.00 Jan 1	0.00 Nov 29	0.00	Oct 1, 1975
<b>Maximum peak flow</b>		464 May 10	1,750	Jul 4, 1978
<b>Maximum peak stage</b>		6.82 May 10	9.30	Jul 4, 1978
<b>Annual runoff (ac-ft)</b>	858	3,060	1,190	
<b>10 percent exceeds</b>	2.5	8.8	1.1	
<b>50 percent exceeds</b>	0.02	0.10	0.00	
<b>90 percent exceeds</b>	0.00	0.00	0.00	

\*During periods of operation (October 1975 to September 1985, February 2000 to September 2004, October 2006 to September 2011, discontinued).

<sup>a</sup>No flow at times most years.

