

Water-Data Report 2013

06131200 NELSON CREEK NEAR VAN NORMAN, MT

Fort Peck Lake Basin
Fort Peck Reservoir Subbasin

LOCATION.--Lat 47°32'12", long 106°09'12" referenced to North American Datum of 1983, 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.--110 mi², revised.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1975 to September 1985, February 2000 to September 2004, October 2006 to current year.

REVISED RECORDS.--WDR MT-2013: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 2,300 ft, referenced to the North American Vertical Datum of 1988.

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 Several unpublished observations of water temperature and specific conductance were made during the year.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.05	0.10	e0.05	e0.00	e0.00	e0.00	0.94	0.29	55	0.15	0.01	0.00
2	0.05	0.12	e0.05	e0.00	e0.00	e0.00	0.75	0.24	21	0.12	0.00	0.00
3	0.07	0.12	e0.05	e0.00	e0.00	e0.00	0.62	0.21	13	0.11	6.4	0.00
4	0.06	0.12	e0.04	e0.00	e0.00	e0.00	0.50	0.19	11	0.08	62	0.00
5	0.06	0.11	e0.04	e0.00	e0.00	e0.00	0.45	0.16	7.4	0.09	4.8	0.00
6	0.05	0.10	e0.04	e0.00	e0.00	e0.00	0.47	0.15	4.7	0.10	0.61	0.00
7	0.06	0.10	e0.03	e0.00	e0.00	e0.00	0.49	0.12	3.5	0.08	0.36	0.01
8	0.06	0.10	e0.02	e0.00	e0.00	e0.00	0.56	0.09	51	0.07	0.21	3.6
9	0.06	e0.08	e0.00	e0.00	e0.00	e0.00	0.52	0.10	14	0.08	0.10	14
10	0.06	e0.06	e0.00	e0.00	e0.00	e0.00	0.51	0.11	6.1	0.05	0.06	0.78
11	0.06	e0.04	e0.00	e0.00	e0.00	e0.00	0.58	0.10	4.2	0.04	0.04	0.21
12	0.06	e0.06	e0.00	e0.00	e0.00	e0.00	0.57	0.08	13	0.03	0.02	0.15
13	0.06	e0.08	e0.00	e0.00	e0.00	e0.00	0.52	0.07	4.7	0.02	0.00	0.13
14	0.06	e0.08	e0.00	e0.00	e0.00	e0.00	0.75	0.07	164	0.01	0.61	0.07
15	0.06	e0.08	e0.00	e0.00	e0.00	e0.00	0.77	0.05	13	0.00	0.06	0.01
16	0.08	e0.08	e0.00	e0.00	e0.00	e0.00	0.77	0.05	6.9	0.02	0.02	0.00
17	0.09	e0.09	e0.00	e0.00	e0.00	e0.00	0.99	0.06	2.8	0.02	0.00	0.00
18	0.08	e0.09	e0.00	e0.00	e0.00	e0.00	1.0	0.06	1.4	0.02	0.00	0.00
19	0.07	e0.09	e0.00	e0.00	e0.00	e0.00	1.5	0.10	0.75	0.01	0.01	0.00
20	0.08	e0.09	e0.00	e0.00	e0.00	e0.00	2.0	0.11	160	0.00	0.01	0.02
21	0.08	e0.09	e0.00	e0.00	e0.00	e0.00	1.7	0.10	10	0.00	0.00	0.04
22	0.08	e0.08	e0.00	e0.00	e0.00	e0.00	1.2	0.12	11	0.00	0.00	0.02
23	0.18	e0.07	e0.00	e0.00	e0.00	e0.00	1.0	0.06	10	0.00	0.02	0.00
24	0.15	e0.07	e0.00	e0.00	e0.00	e0.00	0.80	0.03	1.2	0.00	0.03	0.00
25	0.12	e0.07	e0.00	e0.00	e0.00	e0.50	0.65	2.6	0.59	0.00	0.02	0.01
26	0.10	e0.06	e0.00	e0.00	e0.00	e1.5	0.52	33	0.44	0.00	0.03	0.04
27	0.09	e0.05	e0.00	e0.00	e0.00	e2.5	0.44	169	0.34	0.00	0.04	0.05
28	0.09	e0.05	e0.00	e0.00	e0.00	e4.5	0.36	41	0.26	0.00	0.03	0.03
29	0.10	e0.05	e0.00	e0.00	---	e3.7	0.33	20	0.22	0.00	0.17	0.02
30	0.11	e0.05	e0.00	e0.00	---	2.1	0.33	203	0.16	0.09	0.03	0.02
31	0.11	---	e0.00	e0.00	---	1.3	---	306	---	0.04	0.00	---
Total	2.49	2.43	0.32	0.00	0.00	16.10	22.59	777.32	591.66	1.23	75.69	19.21
Mean	0.08	0.08	0.01	0.00	0.00	0.52	0.75	25.1	19.7	0.04	2.44	0.64
Max	0.18	0.12	0.05	0.00	0.00	4.5	2.0	306	164	0.15	62	14
Min	0.05	0.04	0.00	0.00	0.00	0.00	0.33	0.03	0.16	0.00	0.00	0.00
Ac-ft	4.9	4.8	0.6	0.00	0.00	32	45	1,540	1,170	2.4	150	38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2013, BY WATER YEAR (WY)*

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.12	0.03	0.01	0.23	1.72	4.53	2.49	4.06	3.02	1.77	1.45	0.77
Max	1.47	0.14	0.15	2.90	19.0	37.4	39.9	29.9	19.7	16.0	9.99	15.4
(WY)	(1982)	(1979)	(1976)	(1983)	(1982)	(1978)	(1979)	(2011)	(2013)	(1978)	(2009)	(1978)
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
(WY)	(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 current year).

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1976 – 2013*	
Annual total	336.65		1,509.04			
Annual mean	0.92		4.13		1.73	
Highest annual mean					7.57 1978	
Lowest annual mean					0.14 1980	
Highest daily mean	159	Jun 9	306	May 31	445	Jul 4, 1978
Lowest daily mean	0.00	Jan 1	0.00	Dec 9	0.00	Oct 1, 1975 ^a
Annual seven-day minimum	0.00	Jan 1	0.00	Dec 9	0.00	Oct 1, 1975
Maximum peak flow			673	May 31	1,750	Jul 4, 1978
Maximum peak stage			7.43	May 31	9.30	Jul 4, 1978
Annual runoff (ac-ft)	668		2,990		1,250	
10 percent exceeds	0.54		2.3		1.1	
50 percent exceeds	0.05		0.05		0.00	
90 percent exceeds	0.00		0.00		0.00	

*During periods of operation (October 1975 to September 1985, February 2000 to September 2004, October 2006 to current year).

^aNo flow at times most years.

