Water-Data Report 2013

06466500 Bazile Creek near Niobrara, Nebr.

Lewis and Clark Lake Basin
Lewis and Clark Lake Subbasin

LOCATION.--Lat 42°43′56″, long 97°55′21″ referenced to North American Datum of 1983, in NW ¼ SE ¼ sec.20, T.32 N., R.5 W., Knox County, NE, Hydrologic Unit 10170101, on right bank 10 ft downstream from county bridge, 4.3 mi above the confluence with the Missouri River, and 5.7 mi southeast of Niobrara.

DRAINAGE AREA.--440 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--DAILY DISCHARGE--May 1952 to September 1995. October 2002 to current year. Records for October 1931 to September 1932, published in WSP 731, have been found to be unreliable and should not be used.

PERIOD OF RECORD.--DAILY GAGE HEIGHT--October 2009 to current year.

REVISED RECORDS.--WSP 1279: 1952. WSP 1729: 1958(M). WDR NE-81-1: 1977, 1979-80. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 1,243.32 ft above sea level. Prior to Dec. 16, 1952, non-recording gage only. Dec. 16, 1952 to June 16, 1957, water-stage recorder at site 1.8 mi downstream at datum 28.51 ft lower. June 17, 1957 to Sept. 14, 1958, at site 1.8 mi downstream at datum 24.31 ft lower. Sept. 15, 1958 to Sept. 30, 1995, at site 1.8 mi downstream at datum 32.51 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. There are some diversions for irrigation above the station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 19, 1951, reached a stage of 15.36 ft, site and datum then in use, from floodmarks, discharge, 24,400 ft^3/s on basis of contracted-opening measurement of peak flow.

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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	31	41	e46	e41	e33	e72	71	134	228	51	56	79
2	32	41	48	e36	e38	e70	61	e138	190	49	64	72
3	31	39	47	e38	e42	e74	61	e139	167	51	66	65
4	29	41	43	e34	e46	e74	64	138	152	44	63	55
5	29	44	41	e32	e47	e73	63	131	137	39	107	51
6	31	42	43	e32	e51	e71	57	116	136	38	67	53
7	32	42	44	e32	e53	e74	63	105	122	39	54	53
8	34	42	46	e35	e55	e76	65	102	123	40	54	51
9	37	42	e39	e40	e61	e80	148	101	168	37	47	50
10	38	43	e36	e44	e63	e77	193	115	149	37	47	49
11	36	44	e38	e46	e64	50	164	115	115	33	565	51
12	37	40	e42	e42	e65	70	136	107	102	30	209	50
13	39	43	e46	e38	e71	56	136	95	99	28	98	50
14	44	48	e46	e31	e71	76	161	88	97	39	99	46
15	42	45	e48	e35	e63	72	164	e79	321	51	179	45
16	40	45	e48	e38	e61	66	147	e77	377	44	133	45
17	36	44	e46	e42	e69	65	131	90	210	36	e93	51
18	38	44	e48	e48	e70	62	128	95	e136	30	e75	53
19	46	42	e48	e48	e67	55	123	110	e103	e29	69	48
20	42	44	e46	e46	e64	54	137	124	78	e28	63	47
21	40	45	e42	e39	e68	63	133	161	67	37	68	47
22	42	42	e42	e37	e68	66	147	153	64	32	2,000	46
23	47	40	e39	e35	e61	69	141	134	72	29	663	44
24	44	37	e36	e33	e63	64	134	110	72	28	350	51
25	44	43	e33	e33	e65	71	131	101	69	31	233	52
26	42	e39	e34	e35	e66	60	126	99	119	71	168	51
27	44	e34	e34	e37	e69	70	122	424	88	41	123	48
28	44	e45	e34	e41	e71	73	109	448	71	38	101	61
29	41	e47	e30	e46	---	74	100	421	60	35	89	63
30	41	e47	e35	e44	---	75	95	380	54	35	78	56
31	41	---	e38	e38	---	71	---	268	---	34	74	---
Total	1,194	1,275	1,286	1,196	1,685	2,123	3,511	4,898	3,946	1,184	6,155	1,583
Mean	38.5	42.5	41.5	38.6	60.2	68.5	117	158	132	38.2	199	52.8
Max	47	48	48	48	71	80	193	448	377	71	2,000	79
Min	29	34	30	31	33	50	57	77	54	28	47	44
Ac-ft	2,370	2,530	2,550	2,370	3,340	4,210	6,960	9,720	7,830	2,350	12,210	3,140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	55.4	57.6	52.5	51.8	93.8	159	137	135	170	83.2	62.7	51.1
Max	156	126	118	116	331	621	587	469	933	388	326	231
(WY)	(2008)	(2011)	(2011)	(2009)	(2008)	(1962)	(1960)	(1960)	(1957)	(1993)	(1960)	(2010)
Min	24.4	25.9	24.5	18.4	26.0	48.0	37.9	30.6	24.6	8.44	7.95	9.48
(WY)	(1990)	(1990)	(1990)	(1979)	(1978)	(1981)	(1981)	(1981)	(1956)	(1980)	(1991)	(1991)

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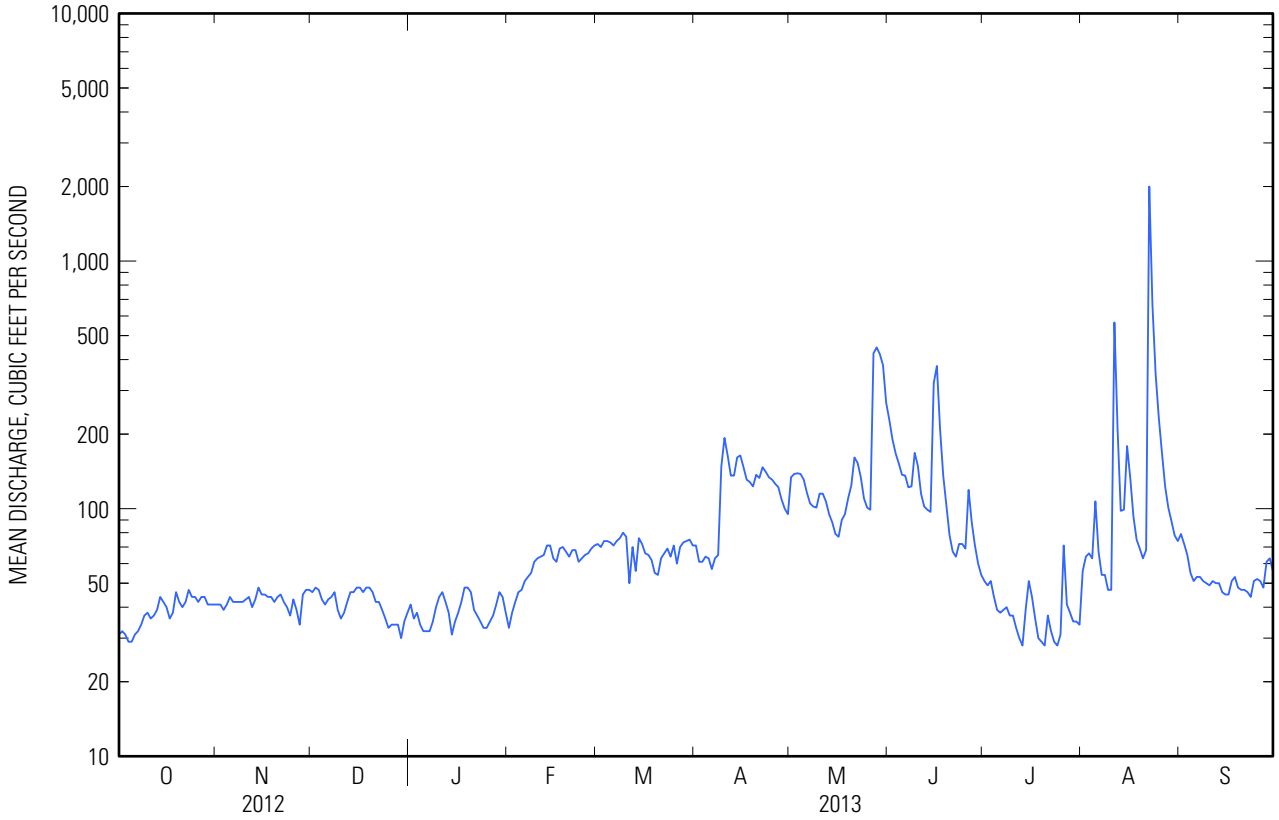
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1952 - 2013	
Annual total	27,612		30,036			
Annual mean	75.4		82.3		92.5	
Highest annual mean					194	1960
Lowest annual mean					34.9	1981
Highest daily mean	1,310	Feb 29	2,000	Aug 22	12,300	Jun 16, 1957
Lowest daily mean	17	Aug 30	28	Jul 13	0.00	Jul 24, 1976
Annual seven-day minimum	19	Aug 28	30	Jul 18	0.77	Aug 25, 1976
Maximum peak flow			4,620	Aug 22	[a]68,600	Jun 16, 1957
Maximum peak stage			7.01	Aug 22	[b]20.25	Feb 19, 1971
Annual runoff (ac-ft)	54,770		59,580		67,010	
10 percent exceeds	152		137		160	
50 percent exceeds	46		53		56	
90 percent exceeds	22		35		24	

[a] Gage height, 19.96 ft, site and datum then in use.
[b] Backwater from ice, site and datum then in use.



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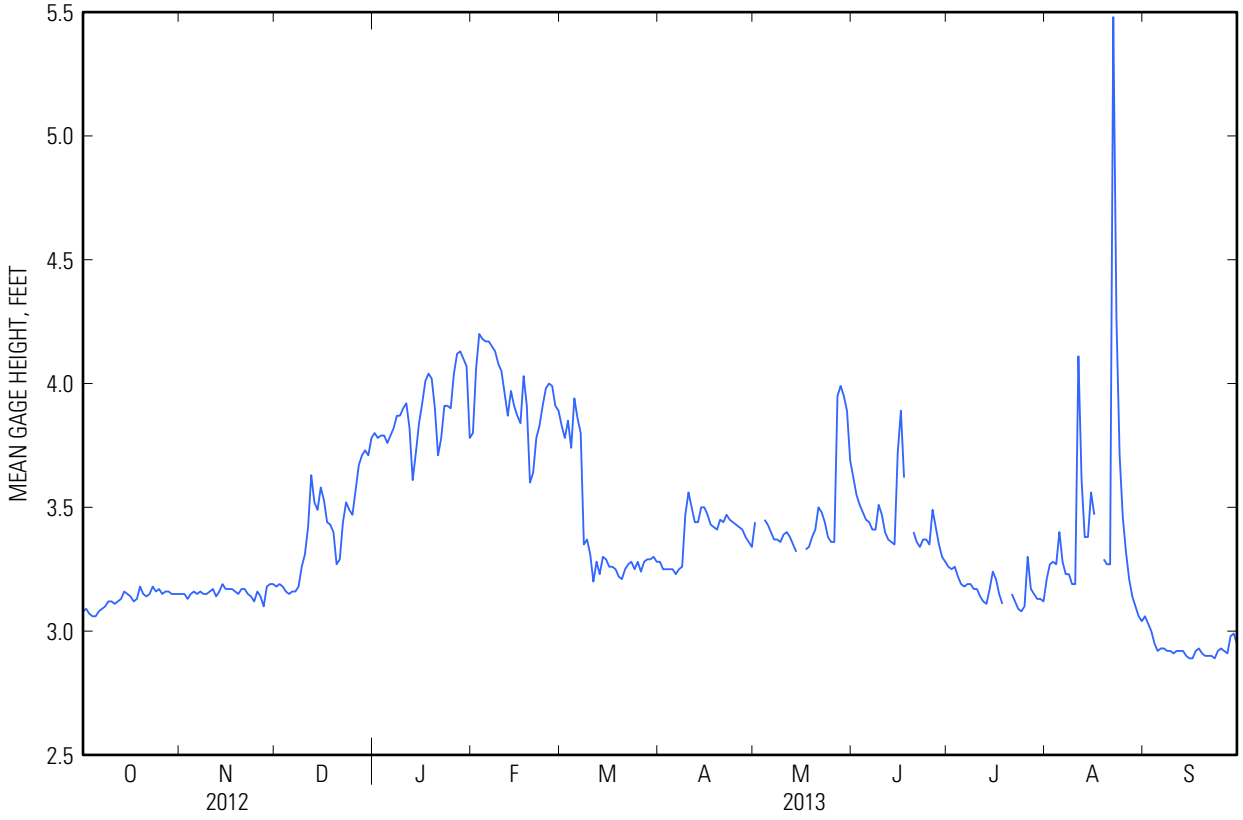
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3.08	3.15	3.18	3.80	3.80	3.83	3.28	3.44	3.62	3.26	3.21	3.06
2	3.09	3.15	3.19	3.78	4.06	3.78	3.25	---	3.55	3.25	3.27	3.03
3	3.07	3.13	3.18	3.79	4.20	3.85	3.25	---	3.51	3.26	3.28	3.00
4	3.06	3.15	3.16	3.79	4.18	3.74	3.25	3.45	3.48	3.22	3.27	2.95
5	3.06	3.16	3.15	3.76	4.17	3.94	3.25	3.43	3.45	3.19	3.40	2.92
6	3.08	3.15	3.16	3.79	4.17	3.86	3.23	3.40	3.44	3.18	3.28	2.93
7	3.09	3.16	3.16	3.82	4.15	3.80	3.25	3.37	3.41	3.19	3.23	2.93
8	3.10	3.15	3.18	3.87	4.13	3.35	3.26	3.37	3.41	3.19	3.23	2.92
9	3.12	3.15	3.26	3.87	4.08	3.37	3.47	3.36	3.51	3.17	3.19	2.92
10	3.12	3.16	3.31	3.90	4.05	3.31	3.56	3.39	3.47	3.17	3.19	2.91
11	3.11	3.17	3.42	3.92	3.96	3.20	3.50	3.40	3.40	3.14	4.11	2.92
12	3.12	3.14	3.63	3.82	3.87	3.28	3.44	3.38	3.37	3.12	3.61	2.92
13	3.13	3.16	3.52	3.61	3.97	3.23	3.44	3.35	3.36	3.11	3.38	2.92
14	3.16	3.19	3.49	3.72	3.91	3.30	3.50	3.32	3.35	3.17	3.38	2.90
15	3.15	3.17	3.58	3.84	3.87	3.29	3.50	---	3.72	3.24	3.56	2.89
16	3.14	3.17	3.53	3.92	3.84	3.26	3.47	---	3.89	3.21	3.47	2.89
17	3.12	3.17	3.44	4.01	4.03	3.26	3.43	3.33	3.62	3.15	---	2.92
18	3.13	3.16	3.43	4.04	3.91	3.25	3.42	3.34	---	3.11	---	2.93
19	3.18	3.15	3.40	4.02	3.60	3.22	3.41	3.38	---	---	3.29	2.91
20	3.15	3.17	3.27	3.90	3.64	3.21	3.45	3.41	3.40	---	3.27	2.90
21	3.14	3.17	3.29	3.71	3.78	3.25	3.44	3.50	3.36	3.15	3.27	2.90
22	3.15	3.15	3.44	3.78	3.83	3.27	3.47	3.48	3.34	3.12	5.48	2.90
23	3.18	3.14	3.52	3.91	3.91	3.28	3.45	3.44	3.37	3.09	4.26	2.89
24	3.16	3.12	3.49	3.91	3.98	3.25	3.44	3.38	3.37	3.08	3.71	2.92
25	3.17	3.16	3.47	3.90	4.00	3.28	3.43	3.36	3.35	3.10	3.46	2.93
26	3.15	3.14	3.57	4.04	3.99	3.24	3.42	3.36	3.49	3.30	3.32	2.92
27	3.16	3.10	3.67	4.12	3.91	3.28	3.41	3.95	3.42	3.17	3.21	2.91
28	3.16	3.18	3.71	4.13	3.89	3.29	3.38	3.99	3.35	3.15	3.14	2.98
29	3.15	3.19	3.73	4.10	---	3.29	3.36	3.95	3.30	3.13	3.10	2.99
30	3.15	3.19	3.71	4.07	---	3.30	3.34	3.89	3.28	3.13	3.06	2.95
31	3.15	---	3.78	3.78	---	3.28	---	3.69	---	3.12	3.04	---
Mean	3.13	3.16	3.42	3.88	3.96	3.40	3.39	---	---	---	---	2.93
Max	3.18	3.19	3.78	4.13	4.20	3.94	3.56	---	---	---	---	3.06
Min	3.06	3.10	3.15	3.61	3.60	3.20	3.23	---	---	---	---	2.89

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