

Water-Data Report 2012

**05060550 RUSH RIVER NEAR PROSPER, ND**

Devils Lake-Sheyenne Basin  
Lower Sheyenne Subbasin

LOCATION.--Lat 46°57'59", long 97°03'04" referenced to North American Datum of 1927, in SW ¼ SW ¼ sec.6, T.140 N., R.50 W., Cass County, ND, Hydrologic Unit 09020204, on upstream side of county road, 1.5 mi west and 0.2 mi north of Prosper, ND.

DRAINAGE AREA.--170 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1980 to August 1985, March to November 2011, March to October, 2012 (seasonal records only since 1982).

GAGE.--Water stage recorder. Datum of gage is 870 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to March 2011 at datum 38 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,100 ft<sup>3</sup>/s, April 9, 2011 gage height, 25.56 ft, from flood mark; no flow at times in most years.

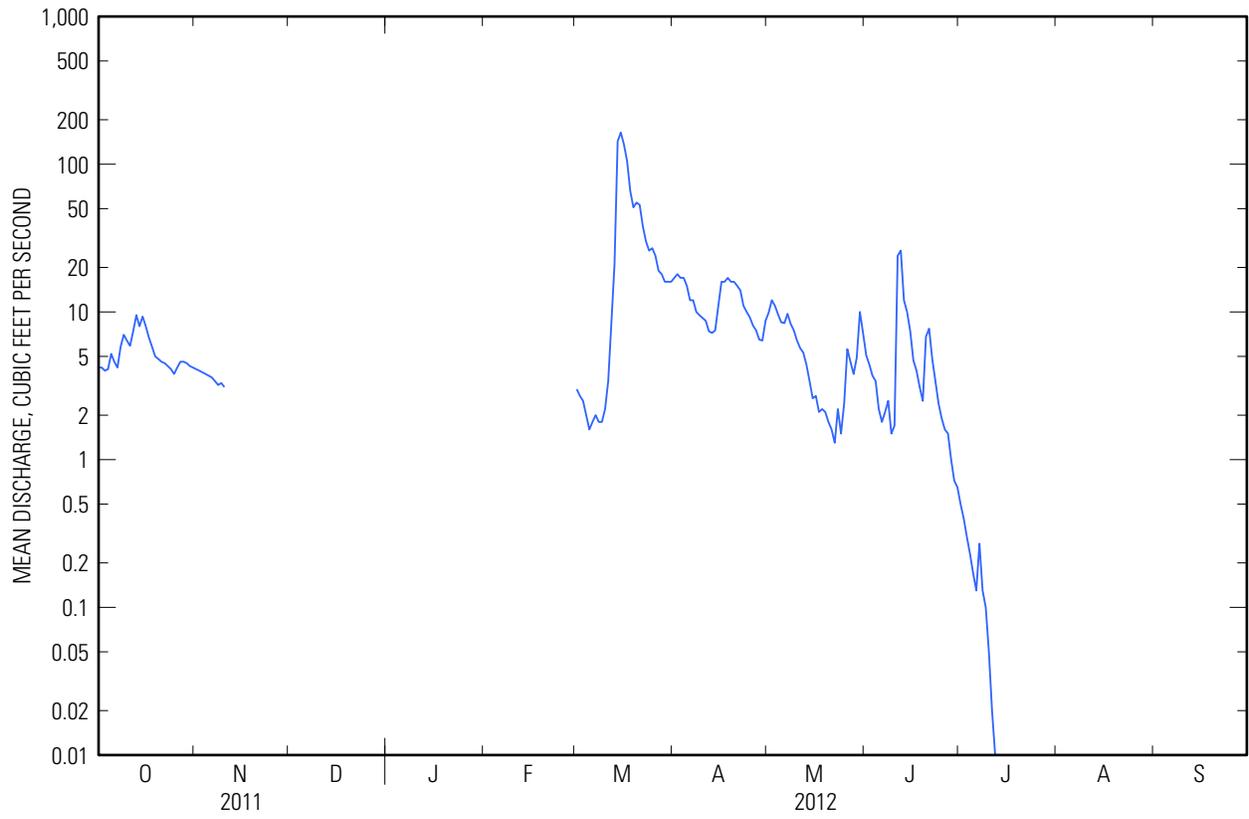
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 189 ft<sup>3</sup>/s, March 14, gage height, 18.55 ft; maximum gage height, 18.60 ft, March 15, backwater from ice; no flow on many days.

## 05060550 RUSH RIVER NEAR PROSPER, ND—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**  
**DAILY MEAN VALUES**  
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e4.2	e4.1	---	---	---	e3.0	e17	9.9	5.1	0.50	0.00	0.00
2	e4.2	e4.0	---	---	---	e2.7	e18	12	4.4	0.40	0.00	0.00
3	e4.0	e3.9	---	---	---	e2.5	17	11	3.7	0.30	0.00	0.00
4	e4.1	e3.8	---	---	---	e2.0	17	9.6	3.4	0.23	0.00	0.00
5	e5.2	e3.7	---	---	---	e1.6	15	8.5	2.2	0.17	0.00	0.00
6	e4.6	e3.6	---	---	---	e1.8	12	e8.4	1.8	0.13	0.00	0.00
7	e4.2	e3.4	---	---	---	e2.0	e12	e9.7	2.1	0.27	0.00	0.00
8	e5.8	e3.2	---	---	---	e1.8	e10	8.3	2.5	0.13	0.00	0.00
9	e7.0	e3.3	---	---	---	e1.8	e9.5	7.5	1.5	0.10	0.00	0.00
10	e6.4	e3.1	---	---	---	e2.2	e9.1	6.4	1.7	0.05	0.00	0.00
11	e5.9	---	---	---	---	e3.4	8.7	5.7	24	0.02	0.00	0.00
12	e7.4	---	---	---	---	e8.4	e7.4	5.3	26	0.00	0.00	0.00
13	e9.5	---	---	---	---	e21	e7.2	4.4	12	0.00	0.00	0.00
14	e8.0	---	---	---	---	143	7.5	3.4	10	0.00	0.00	0.00
15	e9.3	---	---	---	---	e164	11	2.6	7.4	0.00	0.00	0.00
16	e8.0	---	---	---	---	e136	16	2.7	4.7	0.00	0.00	0.00
17	e6.7	---	---	---	---	e105	16	2.1	4.0	0.00	0.00	0.00
18	e5.8	---	---	---	---	e66	17	2.2	3.1	0.00	0.00	0.00
19	e5.0	---	---	---	---	51	16	2.1	2.5	0.00	0.00	0.00
20	e4.8	---	---	---	---	55	16	1.8	6.8	0.00	0.00	0.00
21	e4.6	---	---	---	---	53	15	1.6	7.7	0.00	0.00	0.00
22	e4.5	---	---	---	---	38	14	1.3	4.8	0.00	0.00	0.00
23	e4.3	---	---	---	---	30	11	2.2	3.4	0.00	0.00	0.00
24	e4.1	---	---	---	---	e26	10	1.5	2.4	0.00	0.00	0.00
25	e3.8	---	---	---	---	27	9.2	2.4	1.9	0.00	0.00	0.00
26	e4.2	---	---	---	---	24	8.1	5.6	1.6	0.00	0.00	0.00
27	e4.6	---	---	---	---	19	7.5	4.6	1.5	0.00	0.00	0.00
28	e4.6	---	---	---	---	18	6.5	3.8	1.0	0.00	0.00	0.00
29	e4.5	---	---	---	---	16	6.4	4.9	0.72	0.00	0.00	0.00
30	e4.3	---	---	---	---	16	8.7	10	0.65	0.00	0.00	0.00
31	e4.2	---	---	---	---	e16	---	7.2	---	0.00	0.00	---
<b>Total</b>	167.8	---	---	---	---	1,057.2	355.8	168.7	154.57	2.30	0.00	0.00
<b>Mean</b>	5.41	---	---	---	---	34.1	11.9	5.44	5.15	0.07	0.00	0.00
<b>Max</b>	9.5	---	---	---	---	164	18	12	26	0.50	0.00	0.00
<b>Min</b>	3.8	---	---	---	---	1.6	6.4	1.3	0.65	0.00	0.00	0.00
<b>Ac-ft</b>	333	---	---	---	---	2,100	706	335	307	4.6	0.00	0.00

05060550 RUSH RIVER NEAR PROSPER, ND—Continued

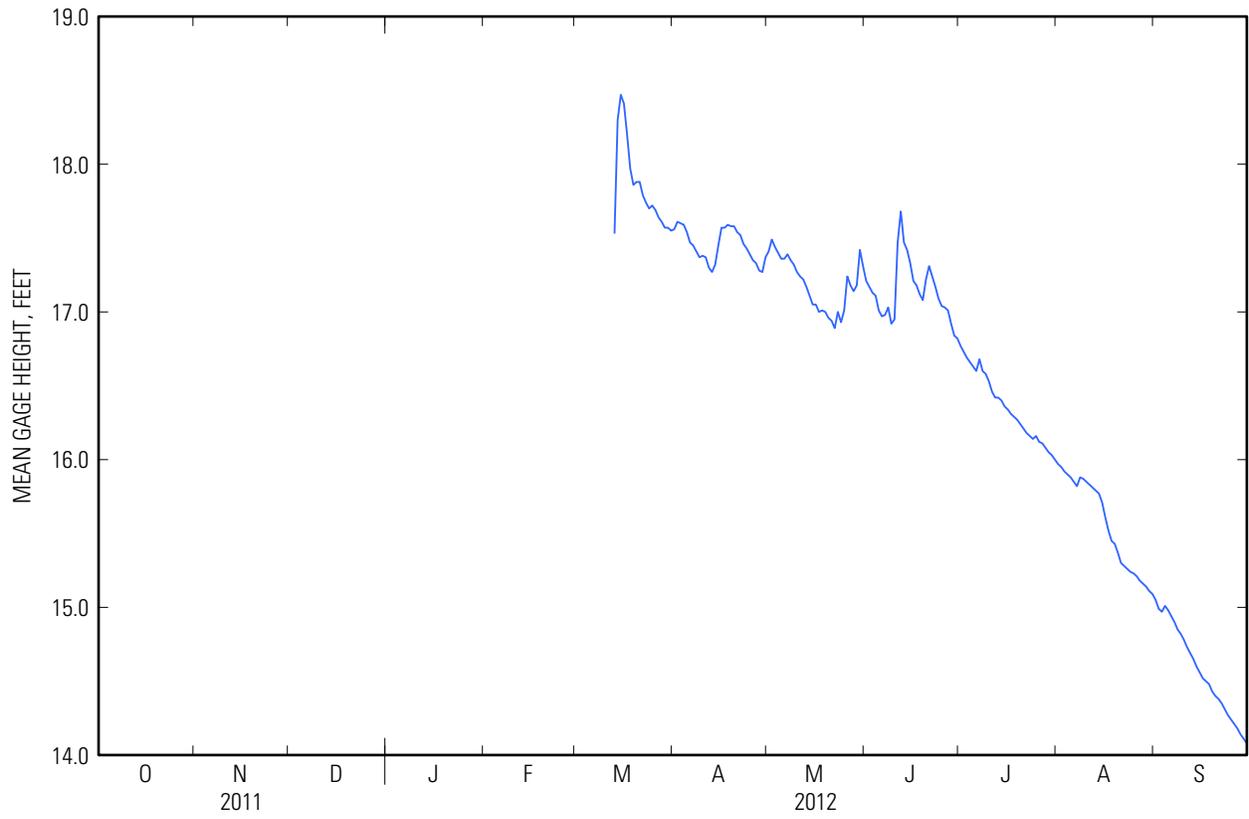


## 05060550 RUSH RIVER NEAR PROSPER, ND—Continued

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	---	---	17.56	17.41	17.21	16.77	15.97	15.05
2	---	---	---	---	---	---	17.61	17.49	17.17	16.73	15.95	14.99
3	---	---	---	---	---	---	17.60	17.44	17.13	16.69	15.92	14.97
4	---	---	---	---	---	---	17.59	17.40	17.11	16.66	15.90	15.01
5	---	---	---	---	---	---	17.54	17.36	17.01	16.63	15.88	14.98
6	---	---	---	---	---	---	17.47	17.36	16.97	16.60	15.85	14.94
7	---	---	---	---	---	---	17.45	17.39	16.98	16.68	15.82	14.90
8	---	---	---	---	---	---	17.41	17.35	17.03	16.60	15.88	14.85
9	---	---	---	---	---	---	17.37	17.32	16.92	16.58	15.87	14.82
10	---	---	---	---	---	---	17.38	17.27	16.95	16.53	15.85	14.78
11	---	---	---	---	---	---	17.37	17.24	17.47	16.46	15.83	14.73
12	---	---	---	---	---	---	17.30	17.22	17.68	16.42	15.81	14.69
13	---	---	---	---	---	17.53	17.27	17.17	17.47	16.42	15.79	14.65
14	---	---	---	---	---	18.30	17.32	17.11	17.42	16.40	15.77	14.60
15	---	---	---	---	---	18.47	17.45	17.05	17.33	16.36	15.71	14.56
16	---	---	---	---	---	18.41	17.57	17.05	17.21	16.34	15.61	14.52
17	---	---	---	---	---	18.20	17.57	17.00	17.18	16.31	15.52	14.50
18	---	---	---	---	---	17.97	17.59	17.01	17.12	16.29	15.45	14.48
19	---	---	---	---	---	17.86	17.58	17.00	17.08	16.27	15.43	14.43
20	---	---	---	---	---	17.88	17.58	16.96	17.22	16.24	15.37	14.40
21	---	---	---	---	---	17.88	17.54	16.94	17.31	16.21	15.30	14.38
22	---	---	---	---	---	17.79	17.52	16.89	17.24	16.18	15.28	14.35
23	---	---	---	---	---	17.74	17.46	17.00	17.17	16.16	15.26	14.31
24	---	---	---	---	---	17.70	17.43	16.93	17.09	16.14	15.24	14.27
25	---	---	---	---	---	17.72	17.39	17.01	17.04	16.16	15.23	14.24
26	---	---	---	---	---	17.69	17.35	17.24	17.03	16.12	15.21	14.21
27	---	---	---	---	---	17.64	17.33	17.18	17.01	16.11	15.18	14.18
28	---	---	---	---	---	17.61	17.28	17.14	16.92	16.08	15.16	14.14
29	---	---	---	---	---	17.57	17.27	17.18	16.84	16.05	15.14	14.11
30	---	---	---	---	---	17.57	17.37	17.42	16.82	16.03	15.11	14.08
31	---	---	---	---	---	17.55	---	17.31	---	16.00	15.09	---
<b>Mean</b>	---	---	---	---	---	---	17.45	17.19	17.14	16.36	15.56	14.57
<b>Max</b>	---	---	---	---	---	---	17.61	17.49	17.68	16.77	15.97	15.05
<b>Min</b>	---	---	---	---	---	---	17.27	16.89	16.82	16.00	15.09	14.08

**05060550 RUSH RIVER NEAR PROSPER, ND—Continued**



## 05060550 RUSH RIVER NEAR PROSPER, ND—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981-88, April to November 2011, March to June 2012.

## WATER-QUALITY DATA

## WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

[FNU, Formazin nephelometric units; LED, light-emitting diode; ft<sup>3</sup>/s, cubic feet per second; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; E, estimated]

Date	Sample start time	Discharge, ft <sup>3</sup> /s (00060)	Discharge, instantaneous, ft <sup>3</sup> /s (00061)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, monochrome near infrared LED light, 780-900 nm, detection angle 90 +/- 2.5 degrees, FNU (63680)	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
10-17-2011	1325	E 6.7	--	--	8.5	--	99	50	--
11-03-2011	1235	E 3.9	--	--	--	--	99	34	--
03-19-2012	1430	--	43	818	6.1	150	100	216	25
04-18-2012	1750	--	17	1,160	12.0	21	97	35	1.6
05-29-2012	1155	--	3.0	1,270	15.4	86	99	125	1.0
06-13-2012	1520	--	11	648	20.0	180	100	221	6.6
06-21-2012	0940	--	6.9	1,080	19.0	69	100	94	1.8