

05293000 YELLOW BANK RIVER NEAR ODESSA, MN

LOCATION.--Lat 45°13'37", long 96°21'12", in SW¼SW¼ sec. 6, T. 120 N., R. 45 W., Lac qui Parle County, Hydrologic Unit 07020001, on left bank 1,200 ft upstream from highway bridge, 2.5 mi southwest of Odessa, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--459 mi².

PERIOD OF RECORD.--October 1939 to September 1999, October 1999 to March 2001 (peak flow only), April 2001 to current year.

REVISED RECORDS.--WSP 1388: 1947(M), 1950. WDR MN-95-1: Sept. 5 (Q). WRIR 97-4249: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 953.34 ft above sea level (U.S. Army Corps of Engineers benchmark, NGVD of 1929). Prior to Aug. 28, 1940, nonrecording gage at site 150 ft upstream at same datum.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
No peak greater than base discharge.			

Minimum discharge, 0.28 ft³/s, Sept. 8, gage height, 1.37 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	10	e8.9	e8.0	e4.4	e3.4	35	32	e25	6.6	2.1	0.78
2	6.0	10	e8.3	e7.9	e4.8	e3.4	36	30	e23	5.9	1.9	0.63
3	5.5	11	e7.8	e7.7	e4.8	e3.3	34	29	e22	5.3	1.8	0.50
4	6.9	10	e7.4	e7.6	e4.7	e3.3	32	30	e21	5.3	1.7	0.46
5	6.1	9.6	e7.2	e7.5	e4.6	e3.3	29	30	e19	4.5	1.7	0.43
6	5.5	9.9	e7.1	e7.5	e4.5	e3.3	26	30	e18	4.2	1.9	0.47
7	5.3	10	e7.1	e7.7	e4.4	e3.2	24	30	e17	3.8	1.8	0.40
8	4.6	10	e7.2	e8.0	e4.4	e3.2	24	37	e20	3.5	1.7	0.32
9	4.2	10	e7.3	e7.8	e4.3	e3.1	23	46	e19	3.7	1.6	0.29
10	4.6	10	e7.5	e7.2	e4.2	e3.1	21	49	e19	3.4	2.1	0.61
11	5.8	10	e7.8	e6.7	e4.1	e3.0	20	61	19	3.2	1.6	0.75
12	6.7	10	e8.0	e6.2	e4.1	e3.0	20	72	19	3.1	1.5	0.69
13	5.7	10	e8.0	e5.5	e4.0	e3.1	20	69	18	2.9	1.1	0.77
14	6.4	11	e8.3	e5.3	e4.0	e12	19	78	e17	2.8	0.94	0.90
15	7.0	10	e8.5	e5.3	e3.9	e38	19	77	e15	2.5	0.81	1.1
16	6.7	9.4	e8.7	e5.2	e3.9	e109	22	73	e13	2.9	0.67	0.96
17	7.5	9.8	e9.1	e5.0	e3.9	e299	28	70	e12	2.9	0.63	0.85
18	8.4	10	e9.9	e4.9	e4.0	e253	32	64	e11	3.4	0.54	1.1
19	9.5	9.8	e10	e4.7	e4.0	e184	44	59	e9.8	3.0	0.57	1.2
20	9.3	9.9	e10	e4.5	e4.2	e140	57	53	e8.6	5.5	0.60	0.93
21	9.2	10	e10	e4.1	e4.2	e109	80	51	e7.8	5.0	0.69	0.84
22	8.9	10	e9.8	e3.8	e4.1	e92	80	48	e7.7	4.7	0.97	1.00
23	9.9	10	e9.6	e3.7	e3.9	e84	71	45	7.9	4.4	1.0	1.3
24	10	10	e8.8	e3.6	e3.8	e80	61	44	8.2	3.8	0.70	1.5
25	9.3	e9.1	e7.8	e3.6	e3.7	e73	52	44	8.7	3.1	0.68	1.6
26	9.6	e9.2	e7.4	e3.5	e3.6	e66	46	43	7.3	2.9	0.57	1.5
27	9.3	e8.5	e7.5	e3.5	e3.5	e58	41	40	6.6	2.8	0.55	1.7
28	9.3	e8.6	e7.9	e3.6	e3.5	54	36	37	6.0	2.6	0.82	1.7
29	9.9	e8.1	e8.3	e3.7	---	47	35	33	6.1	2.4	0.92	1.9
30	10	e7.0	e8.3	e3.9	---	41	33	31	6.9	2.4	0.83	1.5
31	9.9	---	e8.2	e4.1	---	36	---	28	---	2.2	0.78	---
TOTAL	233.6	290.9	257.7	171.3	115.5	1,816.7	1,100	1,463	418.6	114.7	35.77	28.68
MEAN	7.54	9.70	8.31	5.53	4.12	58.6	36.7	47.2	14.0	3.70	1.15	0.96
MAX	10	11	10	8.0	4.8	299	80	78	25	6.6	2.1	1.9
MIN	4.2	7.0	7.1	3.5	3.5	3.0	19	28	6.0	2.2	0.54	0.29
AC-FT	463	577	511	340	229	3,600	2,180	2,900	830	228	71	57
CFSM	0.02	0.02	0.02	0.01	0.01	0.13	0.08	0.10	0.03	0.01	0.00	0.00
IN.	0.02	0.02	0.02	0.01	0.01	0.15	0.09	0.12	0.03	0.01	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2003, BY WATER YEAR (WY)

MEAN	25.2	24.6	13.1	7.94	17.4	171	263	110	104	63.8	29.3	16.7
MAX	588	256	86.3	68.0	147	693	1,614	652	577	741	281	273
(WY)	(1996)	(1996)	(1996)	(1994)	(1998)	(1996)	(1997)	(1972)	(1992)	(1993)	(1991)	(1985)
MIN	0.31	0.44	0.32	0.090	0.001	1.59	9.13	2.94	1.83	0.27	0.088	0.083
(WY)	(1941)	(1977)	(1977)	(1977)	(1977)	(1965)	(1981)	(1981)	(1976)	(1976)	(1976)	(1976)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1940 - 2003	
ANNUAL TOTAL	15,114.3		6,046.45			
ANNUAL MEAN	41.4		16.6		a70.7	
HIGHEST ANNUAL MEAN					237	1996
LOWEST ANNUAL MEAN					3.98	1981
HIGHEST DAILY MEAN	1,300	Mar 31	299	Mar 17	6,640	Apr 9, 1969
LOWEST DAILY MEAN	2.6	Sep 21	0.29	Sep 9	b0.00	Jan 26, 1940
ANNUAL SEVEN-DAY MINIMUM	2.8	Sep 18	0.41	Sep 3	0.00	Jan 26, 1940
MAXIMUM PEAK FLOW			c299	Mar 17	6,970	Apr 9, 1969
MAXIMUM PEAK STAGE			d5.15	Mar 17	19.07	Apr 9, 1969
INSTANTANEOUS LOW FLOW			0.28	Sep 8	b0.00	Jan 26, 1940
ANNUAL RUNOFF (AC-FT)	29,980		11,990		51,190	
ANNUAL RUNOFF (CFSM)	0.090		0.036		0.15	
ANNUAL RUNOFF (INCHES)	1.22		0.49		2.09	
10 PERCENT EXCEEDS	95		44		150	
50 PERCENT EXCEEDS	10		7.4		12	
90 PERCENT EXCEEDS	4.7		1.0		1.0	

- a Median of annual mean discharges is 53 ft³/s.
- b Many days, several years.
- c Estimated daily discharge. Maximum discharge probably higher.
- d Backwater from ice.
- e Estimated.

