

05293000 YELLOW BANK RIVER NEAR ODESSA, MN

LOCATION.--Lat 45°13'37", long 96°21'12", in SW¹/₄SW¹/₄ 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 to fair except those for estimated daily discharges, which are poor.

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

	Time	Discharge (ft ³ /s)	Gage height (ft)		Time	Discharge (ft ³ /s)	Gage height (ft)
	Jun 15	2000	*1,320				*7.74

Minimum discharge, 1.5 ft³/s, Jan. 18, (estimated daily).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	132	26	e9.3	e6.7	e9.5	60	31	46	30	6.1	e2.8
2	24	124	27	e9.2	e7.0	e9.1	53	30	43	27	5.6	e1.9
3	26	100	25	e8.7	e7.3	e8.9	48	28	40	26	7.6	e2.7
4	29	81	25	e8.2	e7.3	e9.6	45	28	38	23	7.2	e2.7
5	38	69	23	e7.2	e8.8	e11	41	26	38	21	6.7	e2.5
6	39	61	26	e6.5	e12	e13	39	25	42	19	6.2	e3.2
7	38	54	24	e6.0	e7.4	e13	37	26	67	17	5.5	e3.4
8	33	48	23	e5.0	e6.8	e14	36	30	70	18	4.9	e4.3
9	27	43	22	e5.0	e6.6	e13	36	47	111	16	5.3	e3.4
10	24	40	23	e4.7	e6.5	e11	34	36	188	14	4.2	e2.6
11	21	36	e21	e4.8	e7.1	e12	43	37	215	13	5.0	e1.9
12	18	33	e21	e4.7	e7.7	e11	63	39	303	14	4.8	e2.3
13	17	32	e8.0	e4.6	e9.2	e12	89	48	352	12	4.7	e6.9
14	16	30	e13	e3.9	e17	e11	112	58	532	11	4.5	e5.7
15	14	29	e16	e2.5	e19	e10	117	69	1,120	10	4.4	e5.0
16	14	28	e15	e1.9	e15	e10	108	79	990	9.7	4.1	e4.4
17	13	27	e15	e1.7	e15	e10	95	83	629	8.5	4.0	e4.3
18	13	26	e15	e1.5	e14	e9.3	84	100	424	7.5	4.8	e3.8
19	13	26	e12	e1.8	e14	e8.3	75	107	298	6.9	5.4	e4.2
20	12	26	e11	e2.8	e15	e9.3	68	111	222	7.5	5.1	e3.4
21	13	27	e12	e3.1	e14	e10	65	95	175	7.4	4.8	e3.1
22	13	27	e8.6	e3.1	e13	e15	56	80	142	6.8	5.3	e2.3
23	14	29	e6.0	e3.4	e12	e22	51	69	113	6.6	6.0	e1.9
24	15	29	e4.2	e4.4	e11	e33	48	63	89	5.9	6.0	e1.7
25	14	31	e4.4	e6.3	e11	e43	44	59	73	6.6	6.1	e2.9
26	15	29	e5.4	e6.0	e11	e45	40	59	62	7.5	11	e3.0
27	14	28	e5.7	e5.7	e10	e44	39	58	53	6.6	e8.3	e3.1
28	23	29	e6.0	e5.5	e9.7	46	37	56	45	6.2	e6.3	e3.4
29	39	26	e7.0	e5.4	---	50	34	55	40	6.5	e5.1	e2.7
30	70	26	e9.6	e5.9	---	60	32	52	34	6.1	e3.9	e1.9
31	117	---	e8.8	e6.1	---	65	---	49	---	6.2	e3.3	---
TOTAL	801	1,326	468.7	154.9	301.1	648.0	1,729	1,733	6,594	383.5	172.2	97.4
MEAN	25.8	44.2	15.1	5.00	10.8	20.9	57.6	55.9	220	12.4	5.55	3.25
MAX	117	132	27	9.3	19	65	117	111	1,120	30	11	6.9
MIN	12	26	4.2	1.5	6.5	8.3	32	25	34	5.9	3.3	1.7
AC-FT	1,590	2,630	930	307	597	1,290	3,430	3,440	13,080	761	342	193
CFSM	0.06	0.10	0.03	0.01	0.02	0.05	0.13	0.12	0.48	0.03	0.01	0.01
IN.	0.06	0.11	0.04	0.01	0.02	0.05	0.14	0.14	0.53	0.03	0.01	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

MEAN	24.8	24.6	13.0	7.79	17.1	167	256	107	105	62.3	28.5	16.5
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	0.09	0.00	1.59	9.13	2.94	1.83	0.27	0.09	0.08
(WY)	(1941)	(1977)	(1977)	(1977)	(1977)	(1965)	(1981)	(1981)	(1976)	(1976)	(1976)	(1976)

05293000 YELLOW BANK RIVER NEAR ODESSA, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL TOTAL	7,125.7		14,408.8		a69.3	
ANNUAL MEAN	19.5		39.5		237	
HIGHEST ANNUAL MEAN					3.98 1981	
LOWEST ANNUAL MEAN					6,640 Apr 9, 1969	
HIGHEST DAILY MEAN	132	Nov 1	1,120	Jun 15	19.07 Apr 9, 1969	
LOWEST DAILY MEAN	1.1	Feb 10	1.5	Jan 18	b0.00 Jan 26, 1940	
ANNUAL SEVEN-DAY MINIMUM	1.1	Feb 10	2.2	Jan 15	0.00 Jan 26, 1940	
MAXIMUM PEAK FLOW			1,320	Jun 15	6,970 Apr 9, 1969	
MAXIMUM PEAK STAGE			7.74	Jun 15	19.07 Apr 9, 1969	
INSTANTANEOUS LOW FLOW			c1.5	Jan 18	b0.00 Jan 26, 1940	
ANNUAL RUNOFF (AC-FT)	14,130		28,580		50,180	
ANNUAL RUNOFF (CFSM)	0.042		0.086		0.151	
ANNUAL RUNOFF (INCHES)	0.58		1.17		2.05	
10 PERCENT EXCEEDS	45		71		145	
50 PERCENT EXCEEDS	13		14		11	
90 PERCENT EXCEEDS	1.5		4.1		1.1	

- a Median of annual mean discharges is 50 ft³/s.
- b Many days, several years.
- c Estimated daily-mean discharge, backwater from ice.
- e Estimated.

