

MINNESOTA RIVER BASIN

05293000 YELLOW BANK RIVER NEAR ODESSA, MN

LOCATION.--Lat 4513'35", long 9621'12", in SW 1 / 4 SW 1 / 4 sec. 6, T. 120 N., R. 45 W., Lac qui Parle County, Hydrologic Unit 07020001, on left bank 600 ft downstream from highway bridge, 2.5 mi southwest of Odessa, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--459 mi² (revised).

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1388: 1947(M), 1950. WRIR 97-4249: Drainage area.

REVISIONS.-- Daily-mean discharge for Sept. 30, 1995 changed to 105 ft³/s.

GAGE.--Water-stage recorder. Datum of gage is 953.34 ft above mean sea level (U.S. Army Corps of Engineers bench mark). 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(*).

Discharge			Discharge		
Date	Time	Gage height (ft)	Date	Time	Gage height (ft)
		(ft ³ /s)			(ft ³ /s)
Feb. 25	1300	*1300	Apr. 09	1900	7.86
Mar. 28	1200	736	May 17	1900	4.52
		*8.95		1010	
		6.71		331	

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	32	e35	e29	e20	301	368	118	54	44	9.3	14
2	16	31	e34	e28	e20	248	283	108	51	41	9.1	12
3	18	31	e33	e26	e20	199	314	97	48	35	9.8	11
4	17	33	e32	e25	e20	170	416	90	47	29	10	10
5	19	35	e31	e25	e20	179	561	84	46	33	9.9	9.5

6	19	35	e30	e25	e20	166	684	78	44	43	9.4	9.0
7	19	39	e30	e25	e20	150	683	73	43	40	9.9	8.5
8	18	42	e29	e24	e20	131	729	71	42	38	12	7.9
9	22	39	e29	e24	e21	e125	927	69	42	37	11	7.8
10	21	39	e28	e24	e21	e119	780	71	42	33	9.8	8.1
11	20	40	e28	e22	e22	e112	541	84	42	29	9.4	8.0
12	27	46	e27	e21	e23	e108	424	101	43	26	9.1	8.1
13	36	38	e27	e19	e23	e104	371	119	45	24	9.1	8.3
14	44	38	e27	e18	e25	e101	318	145	51	22	8.9	12
15	46	40	e26	e18	e27	e98	275	140	58	34	8.4	8.0
16	47	39	e26	e18	e29	e95	242	139	50	28	8.2	7.6
17	43	40	e26	e18	e32	e93	217	251	57	35	8.2	7.4
18	40	38	e26	e19	e35	e90	196	249	56	30	8.2	7.2
19	38	e37	e26	e19	e40	e88	181	195	54	25	11	6.8
20	36	e36	e26	e19	e47	e87	167	162	52	25	29	6.6
21	34	e36	e26	e19	e60	e86	157	145	46	20	20	6.4
22	33	e35	e26	e20	e130	e87	151	130	42	17	22	6.2
23	33	e35	e26	e20	e300	90	145	113	40	15	49	6.3
24	33	e35	e25	e20	441	94	140	99	37	14	38	6.7
25	32	e35	e25	e20	1100	119	135	95	35	13	30	6.4
26	32	e35	e26	e20	669	161	137	87	34	12	27	6.5
27	34	e35	e26	e20	506	279	139	80	44	11	25	6.2
28	33	e36	e26	e20	395	656	143	70	48	11	22	6.3
29	32	e37	e27	e20	---	572	145	63	54	10	18	5.9
30	32	e36	e28	e20	---	489	131	60	47	10	15	5.6
31	32	---	e29	e20	---	461	---	57	---	9.9	16	---
TOTAL	922	1103	866	665	4106	5858	10100	3443	1394	793.9	491.7	240.3
MEAN	29.7	36.8	27.9	21.5	147	189	337	111	46.5	25.6	15.9	8.01
MAX	47	46	35	29	1100	656	927	251	58	44	49	14

MIN	16	31	25	18	20	86	131	57	34	9.9	8.2	5.6
AC-FT	1830	2190	1720	1320	8140	11620	20030	6830	2760	1570	975	477
CFSM	.06	.08	.06	.05	.32	.41	.73	.24	.10	.06	.03	.02
IN.	.07	.09	.07	.05	.33	.47	.82	.28	.11	.06	.04	.02

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	25.3	23.7	12.2	7.49	16.3	177	269	109	104	67.2	31.1	17.4
MAX	588	256	86.3	68.0	147	693	1614	652	577	741	281	273
(WY)	1996	1996	1996	1994	1998	1996	1997	1972	1992	1993	1991	1985
MIN	.31	.44	.32	.090	.001	1.59	9.13	2.94	1.83	.27	.088	.083
(WY)	1941	1977	1977	1977	1977	1965	1981	1981	1976	1976	1976	1976

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1940 - 1998
ANNUAL TOTAL	78072	29982.9	
ANNUAL MEAN	214	82.1	71.8a
HIGHEST ANNUAL MEAN			237 1996
LOWEST ANNUAL MEAN			3.98 1981
HIGHEST DAILY MEAN	6190	Apr 2 1100	Feb 25 6640 Apr 9 1969
LOWEST DAILY MEAN	13	Feb 7 5.6	Sep 30 .00b Jan 26 1940
ANNUAL SEVEN-DAY MINIMUM	13	Feb 7 6.2	Sep 24 .00 Jan 26 1940
INSTANTANEOUS PEAK FLOW		1300	Feb 25 6970 Apr 9 1969
INSTANTANEOUS PEAK STAGE		8.95	Feb 25 19.07c Apr 9 1969
INSTANTANEOUS LOW FLOW		5.2	Sep 30 .00 Jan 26 1940

ANNUAL RUNOFF (AC-FT)	154900		59470		52010		
ANNUAL RUNOFF (CFSM)	.47		.18		.16		
ANNUAL RUNOFF (INCHES)	6.33		2.43		2.12		
10 PERCENT EXCEEDS	277		180		150		
50 PERCENT EXCEEDS	35		33		11		
90 PERCENT EXCEEDS	16		9.7		1.0		

a Median of annual mean discharges is 54 ft ³/s.

b Many days, several years.

c From highwater mark.

