

UPPER MISSISSIPPI RIVER MAIN STEM--Continued

05242300 MISSISSIPPI RIVER AT BRAINERD, MN

LOCATION.--Lat 46°22'40", long 94°10'59", in SE¹/₄/SW¹/₄ sec. 18, T. 145 N., R.30 W., Crow Wing County, Hydrologic Unit 07010104, on left bank in hydropower plant of Potlach Corporation, Northwest Paper Division in Brainerd, 12.7 mi upstream from Crow Wing River, and at mile 1003.7 upstream from Ohio River.

DRAINAGE AREA.--7,320 mi² (approximately).

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,146.96 ft above sea level (NGVD of 1929).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Winnibigoshish Lake, Leech Lake, Pokegama Lake, Sandy Lake, Pine River Reservoir at Cross Lake, and by hydropower plant in Brainerd.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7080	5250	4480	e3650	e3000	e3800	3710	3020	2870	4170	2080	1800
2	6970	5400	4500	e3650	e2970	3850	3520	2770	2960	4160	1980	1960
3	7060	5210	4490	e3650	e2950	3900	3650	2850	2900	3960	1980	1930
4	6950	5230	4500	e3650	e2900	4020	3430	2890	2830	3910	1980	2040
5	6890	5250	4510	e3650	e2850	4200	3520	2730	2580	3840	1750	2010
6	6360	5110	4490	e3600	e2820	4380	3760	2900	2690	3540	2000	2130
7	6300	5030	4430	e3600	e2800	4690	4070	2730	2420	3670	1720	2070
8	6330	4980	4370	e3600	e2800	5470	4250	3450	2400	3250	1710	2080
9	6240	5030	4350	e3600	e2780	5720	4310	3900	2360	3540	1620	2100
10	6480	5000	4320	e3600	e2770	6050	4250	5090	1920	3200	1530	2250
11	6450	4930	4160	e3600	e2760	5980	4240	5650	2040	3120	1530	2320
12	6560	4870	4010	e3600	e2750	5380	4090	6090	1640	3130	1600	2150
13	6550	4860	3980	e3600	e2730	5050	4170	6540	1710	2930	1460	2310
14	6390	4830	4100	e3600	e2700	4800	3970	6540	1760	2960	1310	2350
15	6310	4730	4440	e3600	e2700	4680	3620	6670	1680	2900	1300	2310
16	6280	4740	3830	e3600	e2700	4340	3420	6560	1960	2900	1690	2090
17	6230	4730	2980	e3550	e2700	4060	3230	6180	2130	2830	2140	2140
18	6130	4730	e2550	e3520	e2700	4030	3300	5700	2400	2950	2440	2220
19	6120	4580	e2250	e3480	e2700	3950	3210	5600	3000	2750	2840	2200
20	5990	4690	e2050	e3400	e2700	3700	3010	5320	3300	2750	2770	2000
21	6070	4750	e2100	e3250	e2720	3820	3190	5010	3790	2540	3030	2140
22	6040	4740	e2250	e3250	e2730	3590	3060	4710	4060	2550	2800	2200
23	5730	4660	e2550	e3200	e2760	3720	3140	4410	4170	2310	2660	2030
24	5870	4670	e2900	e3170	e2800	3590	3130	4310	4440	2340	2400	2000
25	5720	4680	e3050	e3150	e2900	3770	3070	3980	4640	2360	2390	2050
26	5700	4690	e3300	e3150	e3500	3880	3030	3880	4890	2430	2270	2120
27	5670	4680	e3400	e3130	e4050	3990	3030	3720	4940	2200	1940	2100
28	5490	4660	e3550	e3100	e3930	3780	2870	3480	4780	2230	1990	2100
29	5470	4610	e3600	e3100	e3850	3900	2850	3240	4490	2200	1760	2110
30	5470	4490	e3600	e3050	---	3770	2700	3100	4370	2160	1770	2150
31	5450	---	e3650	e3000	---	3640	---	3010	---	2130	2030	---
TOTAL	192350	145810	112740	106350	85020	133500	104800	136030	92120	91910	62470	63460
MEAN	6205	4860	3637	3431	2932	4306	3493	4388	3071	2965	2015	2115
MAX	7080	5400	4510	3650	4050	6050	4310	6670	4940	4170	3030	2350
MIN	5450	4490	2050	3000	2700	3590	2700	2730	1640	2130	1300	1800
AC-FT	381500	289200	223600	210900	168600	264800	207900	269800	182700	182300	123900	125900
CFSM	.85	.66	.50	.47	.40	.59	.48	.60	.42	.41	.28	.29
IN.	.98	.74	.57	.54	.43	.68	.53	.69	.47	.47	.32	.32

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3464	3634	3133	2615	2441	2924	5974	5701	3871	4407	2678	2626
MAX	8002	5854	5926	4081	3973	4306	12890	10770	6193	10260	6950	6925
(WY)	1996	1997	1997	1997	1997	2000	1997	1996	1990	1993	1999	1999
MIN	1840	1931	1362	1140	1040	1435	3400	1928	662	442	935	1067
(WY)	1992	1993	1991	1991	1991	1991	1990	1988	1988	1988	1990	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1987 - 2000
ANNUAL TOTAL	1966450	1326560	
ANNUAL MEAN	5388	3624	3670
HIGHEST ANNUAL MEAN			5438
LOWEST ANNUAL MEAN			1950
HIGHEST DAILY MEAN	12900	May 18	7080
LOWEST DAILY MEAN	2050	Dec 20	1300
ANNUAL SEVEN-DAY MINIMUM	2150	Feb 25	1480
INSTANTANEOUS PEAK FLOW			7330
INSTANTANEOUS PEAK STAGE			10.18
INSTANTANEOUS LOW FLOW			1290
ANNUAL RUNOFF (AC-FT)	3900000	2631000	2659000
ANNUAL RUNOFF (CFMS)	.74		.50
ANNUAL RUNOFF (INCHES)	9.99		6.74
10 PERCENT EXCEEDS	8360	5680	6690
50 PERCENT EXCEEDS	5030	3520	3090
90 PERCENT EXCEEDS	2620	2050	1420

e Estimated.

