

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2090	4640	6010	e3710	e3520	e3210	3780	17300	11800	6880	3330	2390
2	2110	4380	5570	e3700	e3500	e3210	3810	17100	11700	6280	3360	2260
3	2180	5020	5210	e3700	e3480	e3200	3790	16800	11500	6000	3390	2240
4	2350	5130	4480	e3700	e3440	e3200	4140	16300	11200	5770	3460	2150
5	2430	5610	4400	e3690	e3420	e3200	4370	15700	11000	5300	3530	2180
6	2460	6050	3780	e3690	e3400	e3200	4570	15200	10500	5180	3510	2100
7	2420	6660	4000	e3690	e3400	e3200	5990	14700	9970	5040	3380	2320
8	2380	6980	3940	e3690	e3400	e3200	7960	14300	9530	4720	3500	2040
9	2390	7590	e3900	e3690	e3380	e3200	9190	14100	9150	4450	3290	1930
10	2380	7640	e3700	e3690	e3360	e3200	10200	13800	8790	4280	3240	1870
11	2330	7810	e2750	e3690	e3350	e3200	12600	13600	8500	4050	3230	2020
12	2400	8000	e3600	e3690	e3340	e3220	14100	13300	8400	4080	3380	1940
13	2360	8080	e3850	e3690	e3330	e3230	14300	13000	8330	3850	3290	2000
14	2370	8090	e3950	e3680	e3330	e3240	14600	12500	9740	3770	3280	2000
15	2440	8160	e4000	e3670	e3300	e3250	14700	12200	10400	3760	3380	2160
16	2620	8250	e4050	e3660	e3280	e3270	14800	11900	10900	3690	3340	2130
17	2870	8220	e4080	e3650	e3250	e3290	14800	11400	11000	3740	3120	2030
18	3140	8170	e4080	e3640	e3240	e3300	14800	11000	11200	3700	3130	2090
19	3060	7980	e4050	e3630	e3240	e3320	14900	10600	11200	3870	3140	1990
20	3330	7720	e4050	e3620	e3230	e3330	15000	10200	11300	3760	3180	1980
21	3100	6300	e4020	e3610	e3230	e3350	15100	10200	11400	3790	3280	1980
22	3130	5480	e4000	e3610	e3220	e3370	15100	10200	11200	3950	3160	2000
23	3260	5790	e3950	e3600	e3220	e3390	15900	10500	10900	3740	3220	1800
24	3080	6120	e3920	e3590	e3220	e3420	16400	10900	10500	3820	2930	1810
25	3130	5860	e3880	e3580	e3220	e3450	16800	11300	10200	3620	2880	2060
26	3380	5830	e3830	e3570	e3220	e3470	17200	11700	9650	3540	2500	2120
27	3420	5880	e3800	e3570	e3220	e3500	17300	11900	9130	3450	2630	2040
28	3150	6060	e3780	e3570	e3220	e3570	17400	12000	8610	3640	2460	2100
29	3670	6030	e3760	e3570	---	e3630	17300	12000	7800	3370	2280	2100
30	3960	6110	e3740	e3560	---	3660	17400	11900	7490	3360	2530	2020
31	3980	---	e3730	e3540	---	3720	---	11900	---	3340	2310	---
TOTAL	87370	199640	125860	112940	92960	103200	368300	399500	302990	131790	96640	61850
MEAN	2818	6655	4060	3643	3320	3329	12280	12890	10100	4251	3117	2062
MAX	3980	8250	6010	3710	3520	3720	17400	17300	11800	6880	3530	2390
MIN	2090	4380	2750	3540	3220	3200	3780	10200	7490	3340	2280	1800
AC-FT	173300	396000	249600	224000	184400	204700	730500	792400	601000	261400	191700	122700
CFSM	.39	.91	.55	.50	.45	.45	1.68	1.76	1.38	.58	.43	.28
IN.	.44	1.01	.64	.57	.47	.52	1.87	2.03	1.54	.67	.49	.31

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3418	3850	3199	2689	2504	2953	6424	6180	4287	4397	2708	2588
MAX	8002	6655	5926	4081	3973	4306	12890	12890	10100	10260	6950	6925
(WY)	1996	2001	1997	1997	1997	2000	1997	2001	2001	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 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1987 - 2001
ANNUAL TOTAL	1288530	2083040	
ANNUAL MEAN	3521	5707	3816
HIGHEST ANNUAL MEAN			5707
LOWEST ANNUAL MEAN			1950
HIGHEST DAILY MEAN	8250	Nov 16	17400
LOWEST DAILY MEAN	1300	Aug 15	1800
ANNUAL SEVEN-DAY MINIMUM	1480	Aug 9	1950
MAXIMUM PEAK FLOW			17500
MAXIMUM PEAK STAGE			16.70
INSTANTANEOUS LOW FLOW			821a
ANNUAL RUNOFF (AC-FT)	2556000	4132000	2764000
ANNUAL RUNOFF (CFSM)	.48	.78	.52
ANNUAL RUNOFF (INCHES)	6.55	10.59	7.08
10 PERCENT EXCEEDS	5620	12000	7100
50 PERCENT EXCEEDS	3240	3690	3160
90 PERCENT EXCEEDS	2060	2360	1460

a Result of regulation.
e Estimated.

