

Discharge at Miscellaneous Sites

DISCHARGE AT MISCELLANEOUS SITES

19

Discharge measurements made at miscellaneous sites during the 2002 water year are listed in the following table. Those measurements of base flow are designated by an asterisk (*) and measurements from earlier water years but not previously published by an (a). Stations previously published as Continuous Record Sites are designated by an (#), those sites published as an High-Flow Partial-Record are designated by an (+) estimated values designated by (a).

Stream Name and [Station No.]	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Lake Superior Basin						
Brule River near Hovland (04011000)	Lake Superior	Lat 47°49'06", long 90°03'04" in SE1/4 SW1/4 sec. 27, T.62 N., R.3 E., Cook County, Hydrologic Unit 04010101, at bridge on U.S. High- way 61, 0.3 mile upstream from mouth, 4.5 miles southwest of Hovland.	a264	1912, 1970-71 1974, 1976, 1986	04-16-02	568
					04-22-02	570
Popular River at Superior National Golf Course near Lutsen (04012500)	Lake Superior	Lat 47°38'29", long 90°42'36" in SW1/4 NE1/4 sec. 33, T.60 N., R.3 W., Cook County, Hydrologic Unit 04010101, at golf course 500 ft upstream from U.S. Hwy 61, 2 miles southwest of Lutsen (within 300 ft of old gage).	112	#1912-17, #1930-47, #1953-61, +1976-87, 2001	11-29-01	160
					04-16-02	295
					04-22-02	144
Sucker Creek near Palmers (04015339)	Lake Superior	Lat 46°55'57", long 91°51'29", in NW1/4 SE1/4 sec. 4, T.5 N., R.12 W., St. Louis County, Hydrologic Unit 04010102, at culvert on County Road 290, 1 mile northwest of Palmers, 0.4 mile above U.S. Highway 61 and 0.7 mile above site 04015340.	--	2001	04-13-02	247
					04-15-02	325
					06-24-02	369
Talmadge River at Co. Rd. 281 near Duluth (04015368)	Lake Superior	Lat 46°53'55", long 91°56'30", in SE1/4 SE1/4 sec. 14, T.51 N., R.13 W., St. Louis County, Hydro- logic Unit 04010102, at bridge on County Road 281, 1.1 miles above site 04015370, 1.3 miles north- west of Clifton.	--	2001	04-13-02	63.8
					06-24-02	46.7
					07-08-02	179
Amity Creek at Duluth (04015387)	Lake Superior	Lat 46°50'39", long 92°00'36", in SE1/4 NE1/4 sec. 5, T.50 N., R.13 W., St. Louis County, Hydrologic Unit 04010102, at bridge on Park- way Road, 0.4 mile upstream from Lester River, 6 miles northeast of aerial bridge in Duluth.	16.2	1970-71, 1974, 1976, 1980, 1983, 1986	04-11-02	260
					04-12-02	113
					06-24-02	184
					07-08-02	302
Red River of the North Basin						
Ottertail River below Fergus Falls (05045900)	Red River of the North	Lat 46°16'32", long 96°08'03", in SE1/4 NW1/4 sec. 6, T.132 N., R.43 W., Ottertail County, Hydro- logic Unit 09020103, at culverts on road, one mile south and 2.5 miles east of Fergus Falls.	--	2001	10-11-01	*264
					11-08-01	*348
					12-13-01	*507
					02-14-02	*441
					04-17-02	738
					05-16-02	874
					06-03-02	700
					06-26-02	484
					07-11-02	851
					07-22-02	693
					08-05-02	656
					08-19-02	*463
					09-12-02	622
09-25-02	*399					
Ottertail River near Everdell (05046270)	Red River of the North	Lat 46°13'00", long 96°24'31", in SE1/4 NE1/4 sec. 26, T.132 N., R.46 W., Wilkin County, Hydro- logic Unit 09020103, at bridge on county road, 8.7 miles east and 4.5 miles south of Breckenridge.	--	2001	10-10-01	*384
					11-07-01	*440
					12-12-01	*577
					01-16-02	*481
					03-20-02	560
					04-17-02	768
					05-15-02	932
					06-05-02	742
					06-26-02	677
					07-10-02	1,340
					07-24-02	706
					08-07-02	605
					08-21-02	707
09-11-02	690					
09-25-02	*447					

DISCHARGE AT MISCELLANEOUS SITES--Continued

Stream Name and [Station No.]	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Red River of the North (continued)						
Ottertail River above Breckenridge (05046450)	Red River of the North	Lat 46°15'42", long 96°32'45", in SE1/4 NW1/4 sec. 11, T.132 N., R.47 W., Wilkin County, Hydro- logic Unit 09020103, at bridge on county road, 2 miles east of Breckenridge.	--	2001	10-10-01	*468
					11-07-01	*411
					12-12-01	*545
					02-12-02	*488
					03-20-02	*525
					04-17-02	729
					05-15-02	910
					06-05-02	751
					06-26-02	569
					07-10-02	1,190
					07-24-02	677
					08-07-02	604
					08-20-02	*510
					09-11-02	667
09-24-02	*544					
Ottertail- River on 11th St. in Breckenridge (05046502)	Red River of the North	Lat 46°16'28", long 96°34'47", in NE1/4 SE1/4 sec. 4, T.132 N., R.47 W., Wilkin County, Hydro- logic Unit 09020103, at bridge on 11th St., in Breckenridge.	--	2001	10-10-01	533
					11-07-01	608
					01-16-02	573
					02-13-02	540
					03-20-02	607
					04-17-02	837
					05-15-02	1,000
					06-05-02	793
					06-26-02	829
					07-10-02	1,220
					07-24-02	754
					08-07-02	636
					08-21-02	694
					09-11-02	812
09-25-02	477					
Mustinka River below Norcross (05047010)	Red River of the North	Lat 45°53'15", long 96°12'48", in NE1/4 NE1/4 sec. 20, T.128 N., R.45 W., Grant County, Hydrologic Unit 09020102, at bridge on County Highway 9, 1.3 miles northwest of Norcross.	--	1943-44, 1950, 2001	10-09-01	*6.54
					11-05-01	*12.3
					12-11-01	*17.5
					01-15-02	*12.5
					02-12-02	*9.60
					03-19-02	*14.0
					04-16-02	37.7
					05-14-02	95.6
					06-04-02	25.1
					06-25-02	*7.13
					07-09-02	228
					07-23-02	205
					08-06-02	63.2
					08-20-02	30.6
09-10-02	14.5					
09-24-02	*4.41					
Mustinka River above Wheaton (05049000)	Red River of the North	Lat 45°49'15", long 96°29'25", in SW1/4 SW1/4 sec. 8, T.127 N., R.46 W., Traverse County, Hydro- logic Unit 09020102, at bridge on U.S. Highway 75, 1 mile upstream from Chicago, Milwaukee and St. Paul Railroad bridge, 0.5 mile north of Wheaton, about 8 miles above Lake Traverse.	810	1915-24# 1930-58# +1985- current year	2-12-02	*5.82
					3-19-02	*29.2
Rabbit River near Nashua (05050700)	Red River of the North	Lat 46°04'30", long 96°18'24", in SE1/4 NE1/4 sec. 15, T.130 N., R.45 W., Wilkin County, Hydro- logic Unit 09020101, at bridge on county road, 4.7 miles east and 2.3 miles south of Campbell.	99.2	+1979- current year	11-06-01	*1.49
					12-11-01	*2.48
					01-15-02	*1.27
					02-12-02	*1.01
					04-16-02	17.8
					05-14-02	30.8
					06-04-02	*3.41
					07-09-02	86.6
					07-23-02	35.1
					08-06-02	11.6
					08-20-02	6.16
					09-12-02	*1.78
Rabbit River at Campbell (05051000)	Red River of the North	Lat 46°05'40", long 96°24'37", in SE1/4 SE1/4 sec. 2, T.130 N., R.46 W., Wilkin County, Hydro- logic Unit 09020101, at bridge on County Road 4, at west edge of Campbell.	266	1942, 1952, 1964-65, 1970, 1998, 2001	04-16-02	24.2
					05-14-02	51.1
					06-04-02	*2.63
					07-09-02	170
					07-23-02	38.1
					08-06-02	*9.43

DISCHARGE AT MISCELLANEOUS SITES--Continued

21

Stream Name and [Station No.]	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Red River of the North (continued)						
Rabbit River near Campbell (05051200)	Red River of the North	Lat 46°06'43", long 96°29'32", in SE1/4 SE1/4 sec. 31, T.130 N., R.46 W., Wilkin County, Hydrologic Unit 09020101, at bridge on US Highway 75, 4 miles west, and 1.2 miles north of Campbell.	--	2001	11-06-01	*7.68
					12-11-01	*3.02
					01-16-02	*2.02
					02-13-02	*0.90
					03-19-02	*6.01
					04-16-02	35.2
					05-14-02	81.0
					06-04-02	*4.05
					07-10-02	648
					07-23-02	60.7
					08-06-02	16.4
					08-20-02	*1.27
Whiskey Creek below Brushvale (05051515)	Red River of the North	Lat 46°23'55", long 96°39'08", in SW1/4 SW1/4 sec. 19, T.134 N., R.47 W., Wilkin County, Hydrologic Unit 09020104, at culverts on road, 2.7 miles south and 0.4 mile east of Kent.	--	2001	04-15-02	3.53
					05-13-02	3.76
Whiskey Creek near Kent (05051520)	Red River of the North	Lat 46°24'48", long 96°39'30", in SE1/4 SE1/4 sec. 13, T.134 N., R.48 W., Wilkin County, Hydrologic Unit 09020104, at culverts on County Road 20, 1.6 miles south and 1.5 miles east of Kent.	80.0	1964-66, 1970-74, 1976, 1988, 2001	11-06-01	4.40
					12-10-01	0.30
					01-14-02	0.17
					03-18-02	2.11
					04-15-02	12.0
					05-13-02	8.44
					06-24-02	0.23
					07-03-02	5.30
					07-22-02	2.13
					09-09-02	1.10
					09-23-02	a0.04
Whiskey Creek at Kent (05051521)	Red River of the North	Lat 46°26'21", long 96°40'43", in NE1/4 NE1/4 sec. 11, T.134 N., R.48 W., Wilkin County, Hydrologic Unit 09020104, at bridge on upstream left bank of US Highway 75, on northeast side of Kent.	--	2001	11-06-01	12.7
					12-10-01	*4.02
					01-14-02	*3.92
					02-11-02	*4.89
					03-18-02	*0.95
					04-15-02	33.0
					05-13-02	48.4
					06-03-02	*4.82
					06-24-02	8.21
					07-08-02	57.6
					07-22-02	9.18
					08-05-02	*2.70
					08-29-02	*1.11
09-09-02	*3.26					
09-23-02	*3.78					
Judicial Ditch 64 near Mentor (05078470)	Badger Creek	Lat 47°44'16", long 96°12'09", in SE1/4 NE1/4 sec. 7, T.149 N., R.43 W., Polk County, Hydrologic Unit 09020303, at culverts on township road, 0.5 mile north of U.S. Highway 2, 4.2 miles northwest of Mentor.	--	--	06-25-02	19.0
					08-06-02	*0.22
					08-29-02	8.49
					09-05-02	20.8
Cyr Creek near Marcoux Corners (05078520)	Red Lake River	Lat 47°48'13", long 96°16'36", in NW1/4 NE1/4 sec. 22, T.150 N., R.44 W., Red Lake County, Hydrologic Unit 09020303, at culvert on County State Aid Highway 14, 0.5 mile west of State Highway 32, 3.0 miles north of Marcoux Corners.	--	--	06-25-02	17.9
					08-06-02	*0.14
					08-29-02	108
					08-29-02	107
					09-05-02	16.0
County Ditch 140 near Benoit (05078730)	Gentilly River	Lat 47°41'15", long 96°22'22", in NW1/4 NW1/4 sec. 36, T.149 N., R.45 W., Polk County, Hydrologic Unit 09020303, at culvert on field access road, 1.0 mile south of County State Aid Highway 45, 1.4 miles southeast of Benoit.	--	--	06-25-02	16.6
					08-06-02	*0.67
					08-29-02	*4.82
					08-30-02	22.2

DISCHARGE AT MISCELLANEOUS SITES--Continued

22

Stream Name and [Station No.]	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Red River of the North (continued)						
Unnamed Ditch near Benoit	Gentilly River	Lat 47°43'52", long 96°22'22", in NW1/4 NW1/4 sec. 13, T.149 N., R.45 W., Polk County, Hydrologic Unit 09020303, at culvert on township road, 1.0 mile east of County State Aid Highway 44, 2.3 miles northeast of Benoit.	--	--	06-25-02	10.8
Judicial Ditch 66, near Marcoux Corners (05078770)	Kripple Creek	Lat 47°46'36", long 96°19'31", in SW1/4 NW1/4 sec. 29, T.150 N., R.44 W., Red Lake County, Hydrologic Unit 09020303, at culvert on Township Road, 1.5 miles north of U.S. Highway 2, 3.4 miles northwest of Marcoux Corners.	--	--	08-29-02 09-06-02	32.4 23.8
Judicial Ditch 66 on State Hwy 2 near Marcoux Corners	Kripple Creek	Lat 47°45'38", long 96°18'45", in SE1/4 SE1/4 sec. 32, T.150 N., R.44 W., Red Lake County, Hydrologic Unit 09020303, at culvert on State Highway 2, 2.1 miles west of Marcoux Corners.	--	--	06-25-02 08-06-02	20.4 *1.35
County Ditch 72 (Burnham Creek) near Maple Bay (05079200)	County Ditch 11	Lat 47°38'19", long 96°16'48", in SE1/4 NE1/4 sec. 17, T.148 N., R.44 W., Polk County, Hydrologic Unit 09020303, at culvert on State Highway 32, 2.4 miles west of Maple Bay.	--	--	06-25-02 08-05-02 08-28-02 09-05-02	5.25 *0.57 4.57 23.0
County Ditch 65 near Maple Bay (05079250)	County Ditch 72	Lat 47°36'43", long 96°16'45", in SE1/4 NE1/4 sec. 29, T.148 N., R.44 W., Polk County, Hydrologic Unit 09020303, at culvert on State Highway 32, 3.0 miles southwest of Maple Bay.	--	--	06-25-02 08-05-02 08-28-02 09-04-02	11.4 *0.09 2.31 30.7
Mississippi River Basin						
Mississippi River at Franklin Ave. in Minneapolis (05288930)	Gulf of Mexico	Lat 44°57'49", long 93°13'22", in SE1/4 SW1/4 sec. 24, T.29 N., R.24 W., Ramsey County, Hydrologic Unit 07010206, at Franklin Ave. Bridge, at River mile 853.2 above mouth of Ohio River, in Minneapolis.	--	1976-82 1984-86 1990-93 1995-97 1999-2000	10-18-02	15,800
Minnesota River Basin						
Christina Lake outlet near Ashby (05293255)	Pomme de Terre River	Lat 46°04'18", long 95°46'15", in SE1/4 NE1/4 sec. 13, T.130 N., R.41 W., Grant County, Hydrologic Unit 07020002, at downstream side of fish gate at Lake Christina outlet, 2.4 miles southeast of Ashby.	--	--	08-19-02	21.8
Pelican Lake near Ashby (05293280)	Pomme de Terre River	Lat 46°04'27", long 95°48'59", in SW1/4 NE1/4 sec. 15, T.130 N., R.41 W., Grant County, Hydrologic Unit 07020002, at culvert under County Road 10, 0.9 mile south of Ashby.	--	--	08-19-02	17.8
North Branch Rush River at Sibley County Rd. 9, near New Rome (05326090)	Rush Creek	Lat 44°30'48", long 94°05'26", in NE1/4 NE1/4 sec. 17, T.112 N., R.27 W., Sibley County, Hydrologic Unit 07020012, at bridge on County Road 9, 6 miles south of Arlington, 2 miles south of New Rome.	--	--	07-11-02	31.1

DISCHARGE AT MISCELLANEOUS SITES--Continued

23

Stream Name and [Station No.]	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Minnesota River Basin (continued)						
Middle Branch Rush River at Co. Rd. 13 near New Sweden (05326105)	Rush River	Lat 44°28'32", long 94°09'00", in NW1/4 SW1/4 sec. 25, T.112 N. R.28 W., Sibley County, Hydrologic Unit 07020012, at bridge on County Road 13, 5 miles northeast of New Sweden.	--	--	08-01-02	12.9
South Branch Rush River at Co. Rd. 9, near Norseland (05326190)	Rush River	Lat 44°28'04", long 94°07'12", in NE1/4 NW1/4 sec. 31, T.112 N. R.27 W., Sibley County, Hydrologic Unit 07020012, at bridge on County Road 9, 3.7 miles north of Norseland.	--	--	07-09-02	15.8
Judicial Ditch 1A near Norseland (05326205)	South Branch Rush River	Lat 44°26'36", long 94°07'12", in SE1/4 SW1/4 sec. 6, T.111 N. R.27 W., Nicollet County, Hydrologic Unit 07020012, at bridge on County Road 3, 2.2 miles north of Norseland.	--	--	07-11-02	23.4
Rush River near Henderson (05326400)	Minnesota River	Lat 44°29'57", long 93°54'18", in NW1/4 NW1/4 sec. 24, T.112 N. R.26 W., Sibley County, Hydrologic Unit 07020012, at bridge on State Highway 93, 0.4 mile upstream from mouth, and 2.0 miles south of Henderson.	397	1970-71, 1976, 1979-80, 1984-85, 1987-92, 2000	7/9/02	109
Chippewa River diversion at Watson Sag Wier (05304980)	Chippewa River	Lat 45°01'30", long 95°47'49", in SE 1/4 sec. 16, T.118 N., R.41 W., Chippewa County, Hydrologic Unit 07020001, at bridge on county road, 1 mile north of Watson.	--	1945-90, 1991, 2001	04-11-01, 10-11-01, 04-11-02	8,560, 87.7, 472
Zumbro River Basin						
Bear Creek tributary near Chester (05372915)	Zumbro River	Lat 44°00'43", long 92°22'10", in SE1/4 NE1/4 sec. 3, T.106 N., R.13 W., Olmsted County, Hydrologic Unit 07040004, 0.25 mile north of Highway 14, 2.2 miles east of Rochester Community and Technical College and 3 miles east of Rochester.	--	--	08-27-02	*0.42