

Discharge at Low-Flow Sites

DISCHARGE AT LOW-FLOW SITES

Measurements of streamflow made at low-flow partial record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water sources. These measurements, when correlated with simultaneous discharge of a nearby stream (when continuous records are available), will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Stream	Tributary to	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
Lake Superior Basin						
Beaver River on Co. Hwy. 3 near Beaver Bay	Lake Superior	Lat 47°15'14", long 91°22'45", in NE1/4 NW1/4 sec. 17, T.55 N., R.8 W., Lake County, Hydrologic unit 04010102, at bridge on County Highway 3, 3.5 miles west of Beaver Bay.	--	1974, 2001	10-11-00	5.12
Red River of the North Basin						
Rabbit River at Campbell (05051000)	Red River of the North	Lat 46°05'43", long 96°24'37", in SE1/4 SE1/4 sec. 2, T.130 N., R.46 W., Wilkin County, Hydrologic Unit 09020101, at bridge on County Road 4, 2.0 miles from confluence an intermittent stream, and at west edge of Campbell.	266	# 1942-52, 1964-65, 1970, 1998, 2001	10-18-00	0.04
Crow Wing River Basin						
Eagle Creek at Bowerville (05245200)	Long Prairie River	Lat 46°05'35", long 94°51'53", in SE1/4 SW1/4 sec.5, T.130 N., R.33 W., Todd County, Hydrologic Unit 07010108, at bridge on County Highway 21, 0.5 mile upstream from mouth, 0.5 mile north of Bowerville.	77	1970-71, 1973,1976, 1980,1988, 1998, 2001	10-05-00	4.5
Sauk River Basin						
Sauk River at Sauk Centre (05270180)	Mississippi River	Lat 45°43'22", long 94°56'17", in SW1/4 NE1/4 sec.15, T.126 N., R.34 W., Stearns County, Hydrologic Unit 07010202, at bridge on County Highway 186 in Sauk Centre, 1.1 miles downstream from Sauk Lake.	367	1941, 1969-70, 1974, 1976, 1980,1988, 2000-01	10-05-00	7.88
Crow River Basin						
South Fork Crow River at St. Hwy. 7 at Cosmos (05278500)	Crow River	Lat 44°56'05", long 94°40'20", in SW1/4 SW1/4 sec.14, T.117 N., R.32 W., Meeker County, Hydrologic Unit 07010205, at bridge on State Highway 7, 1 mile east of Cosmos.	221	# 1945-64, 1965, 1969-70, 1976-77, 1988, 2000-01	10-02-00	0.11
Buffalo Creek at Brownton	South Fork Crow River	Lat 44°44'09", long 94°21'02", in SE1/4 SW1/4 sec. 29, T.115 N., R.29 W., McLeod County, Hydrologic Unit 07010205, at bridge No. 43520 on County Road 25, at north edge of Brownton.	--	1970, 1998, 2000-01	10-03-00	0.00
Buffalo Creek near Glencoe (05278930)	South Fork Crow River	Lat 44°45'50", long 94°05'27", in SW1/4 SW1/4 sec.16, T.115 N., R.27 W., McLeod County, Hydrologic Unit 07010205, at bridge on County Highway 1, 2.6 miles east of Glencoe.	373	# 1971-80, + 1991-94, + 1998-current	10-03-00	1.54
South Fork Crow River near Mayer (05279000)	Crow River	Lat 44°54'20", long 93°53'05", in SW1/4 SW1/4 sec. 30, T.117 N., R.25 W., Carver County, Hydrologic Unit 07010205, at bridge No. 10023 on State Highway 7, 16 miles upstream from confluence with North Fork Crow River, and 1.3 miles north of Mayer.	1,170	# 1934-79 + 1980-91, 1998, 2001	10-02-00	3.05

DISCHARGE AT LOW-FLOW SITES--Continued

329

Stream	Tributary to	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Dis- charge (ft ³ /s)
Crow River Basin (continued)						
South Fork Crow River at Delano (05279400)	Crow River	Lat 45°02'31", long 93°47'22", in NE1/4 SE1/4 sec. 11, T.118 N., R.25 W., Wright County, Hydro- logic Unit 07010205, at bridge on Bridge Street, 5.8 miles from confluence with North Fork Crow River, and at west edge of Del- ano.	--	1962-63, 1966-69, 1971-73, 1998, 2000-01	10-02-00	3.18
Minnesota River Basin						
Lac Qui Parle River near Prov- idence (05299650)	Minnesota River	Lat 44°53'07", long 96°03'07", in SE1/4 NE1/4 sec. 5, T.116 N., R.43 W., Lac Qui Parle County, Hydrologic Unit 07020003, at bridge No 37515 on County Road 23, 6.2 miles from confluence with West Branch Lac Qui Parle River, 3 miles south of Dawson, bridge locally known as the 'Max- well Bridge'.	--	1967, 1998, 2001	10-04-00	<0.01
West Branch Lac Qui Parle River near Madison	Lac Qui Parle River	Lat 44°56'09", long 96°11'33", in NE1/4 sec. 20, T.117 N., R.44 W., Lac Qui Parle County, Hydro- logic Unit 07020003, at bridge No. 37005 on U.S. Highway 212, 7 miles west of Dawson.	--	1948-49, 1966-69, 1972, 1998, 2001	10-04-00	0.02
West Branch Lac Qui Parle River at Dawson (05299800)	Lac Qui Parle River	Lat 44°55'47", Long 96°03'01", in SE1/4 NE1/4 sec.21, T.117 N., R.43 W., Lac qui Parle County, Hydrologic Unit 07020003, at bridge on city street above dam, about 400 feet downstream from railroad and highway bridge in Dawson.	485	1963-66, 1968-70, 1973-75, 1998, 2001	10-04-00	0.03
Chippewa River at Benson (05303500)	Minnesota River	Lat 45°18'40", long 95°37'30", in SE1/4 sec. 1, T.121 N., R.40 W., Swift County, Hydrologic Unit 07020005, at bridge No. 76001 on U. S. Highway 12, at southwest corner of Benson.	--	# 1949-51, 1980-81, 1998, 2001	10-04-00	29.5
Chippewa River at Canton Ave. in Montevideo (05305400)	Minnesota River	Lat 44°56'53", long 95°43'50", in NE1/4 NW1/4 sec. 18, T.117 N., R.40 W., Chippewa County, Hydro- logic Unit 07020005, at bridge on Canton Ave. in Montevideo, above waste treatment plant outfall.	--	1989-90, 1992, 1999, 2001	10-04-00	17.9
Redwood River at Russell	Minnesota River	Lat 44°19'20", long 95°57'10", in SW 1/4 of sec. 19, T. 110 N., R. 42 W., Lyon County, Hydrologic Unit 07020006, at bridge No 42542 on County Road 15, at northwest corner of Russell.	--	1998, 2001	10-05-00	2.31
Cottonwood River near Lamberton (05316880)	Minnesota River	Lat 44°14'19", long 95°14'42", in NW1/4 of sec. 24, T.109 N., R.37 W., Redwood County, Hydrologic Unit 07020008, at bridge No. 64006 on U.S. Highway 14 , 2.2 miles upstream from confluence with Dutch Charlie Creek, and one mile northeast of Lamberton, 3 miles downstream of site 05316880.		1965-69, 1973-74, 1988-89, 1998, 2001	10-05-00	2.11

DISCHARGE AT LOW-FLOW SITES--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
Minnesota River Basin (continued)						
Cottonwood River near Springfield (05316950)	Minnesota River	Lat 44°12'12", Long 95°02'63", in NE1/4 SE1/4 sec.33, T.109 N., R.35 W., Brown County, Hydrologic Unit 07020008, at bridge on County Highway 2, 1.3 miles downstream from Mound Creek, 1.0 mile upstream from Coal Mine Creek, 3.6 miles southwest of Springfield.	777	+1973-present	10-05-00	7.38
Minnesota River near Redwood Falls	Mississippi River	Lat 44°34'25", long 95°05'50", in SE1/4 SE1/4 sec. 19, T.113 N., R.35 W., Renville County, Hydrologic Unit 07020004, at bridge on Renville County Road 1 (Redwood County Road 101) and 0.4 miles upstream from Redwood River.	--	2001	10-05-00	64.1
Minnesota River below Co. Rd. 37 at New Ulm	Mississippi River	Lat 44°17'20", long 94°25'08", in NW1/4 SE1/4, sec. 34, T.110 N., R.30 W., Nicollet County, Hydrologic unit 0702007, at mouth of Heymans Creek, 3 miles southeast of bridge on U.S. Highway 14 (05316770), 0.9 mile southeast of County Road 37, at New Ulm, above mouth of Cottonwood River.	9,530	# 1968-76 (all low-flow measurements for site 05316770), 2001	10-06-00	125
Rush River near Henderson (05326400)	Minnesota River	Lat 44°29'57", long 93°54'18", 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 miles upstream from mouth, and 2.0 miles south of Henderson.	397	1970-71, 1976, 1979-80, 1984-85, 1987-92, 2001	10-03-00	2.14
St.Croix River Basin						
Browns Creek at St. Hwy. 95 in Stillwater (05341540)	St.Croix River	Lat 45°04'35", long 92°48'21", NE1/4 NE1/4 sec.21, T.30 N., R.20 W., Washington County, Hydrologic Unit 07030005, at culvert on State Highway 95, 0.1 mile upstream from mouth at Stillwater.	30.8	1969, 1974-76, 1979, 1980,1988, 2001	10-04-00	4.19
Valley Branch at old St. Hwy. 95 in Afton (05341765)	St. Croix River	Lat 44°54'40", long 92°46'48", in NW1/4 SW1/4 sec.14, T.28 N., R.20 W., Washington County, Hydrologic Unit 07030005, at bridge on old State Highway 95, 0.8 mile north of Afton.	13	1967-72, 1988, 2000	10-11-00	14.7
St. Croix River trib. on Co. Hwy. 21 at Afton (05341790)	St. Croix River	Lat 44°53'49", long 92°46'59", NE1/4 SE1/4 sec.22, T.28 N., R.20 W., Washington County, Hydrologic Unit 07030005, at bridge on County Highway 21, 0.2 mile upstream from mouth, at Afton.	2.49	1969, 1974-76, 1980,1988, 2001	10-04-00	0.41
Trout Brook at Co. Hwy. 21 near Afton (05341810)	St. Croix River	Lat 44°51'49", long 92°48'04", in SW1/4 SW1/4 sec.34, T.28 N., R.20 W., Washington County, Hydrologic Unit 07030005, at bridge on County Highway 21, 1.9 miles upstream from mouth, 2.9 miles southwest of Afton.	5.90	1969, 1974-76, 1980, 1988, 2001	10-04-00	0.40
Cannon River Basin						
Whitewater Creek at Waterville (05349550)	Cannon River	Lat 44°13'04", long 93°33'48", in NW1/4 SW1/4 sec.26, T.109 N., R.23 W., Le Sueur County, Hydrologic Unit 07040002, at bridge on Hoosac St. in Waterville.	--	1985, 1987-88, 2001	10-05-00	0.10

DISCHARGE AT LOW-FLOW SITES--Continued

331

Stream	Tributary to	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
Cannon River Basin (continued)						
Devils Creek near Morrystown (05351400)	Cannon River	Lat 44°15'15", long 93°28'04", in SE1/4 SE1/4 sec.9, T.109 N., R.22 W., Rice County, Hydrologic Unit 07040002, on County Road 16, 2 miles northwest of Morrystown.	--	1965, 1985-89, 2001	10-05-00	0.00
Mackenzie Creek near Warsaw (05351800)	Cannon River	Lat 44°15'18", long 93°21'24", in SE1/4 SW1/4 sec.9, T.109 N., R.21 W., Rice County, Hydrologic Unit 07040002, at State Highway 60, 2 miles east of Warsaw.	--	1965, 1985, 1988-89, 2001	10-05-00	0.23
Cannon River on 2nd Ave. NW in Faribault (05352010)	Mississippi River	Lat 44°18'28", Long 93°18'28", in SW1/4 NE1/4 sec. 30, T.110 N., R.20 W., Rice County, Hydrologic Unit 07040002, at bridge on 2nd Ave. NW (State Highway 218) in Faribault 75 ft. below old mill dam, 0.3 mile upstream of Straight River.	341	1965-73, 1995, 2000-01	10-05-00	31
Turtle Creek near Owatonna (05352810)	Straight River	Lat 44°02'00", long 93°14'46", in NE1/4 NE1/4 sec.32, T.107 N., R.20 W., Steele County, Hydrologic Unit 07040002, at bridge on township road, 0.7 mile upstream from mouth, 3.7 miles south of Owatonna, 0.1 mile upstream from Interstate 35.	41.1	1969-88, 2000-01	10-06-00	1.06
Maple River at Owatonna (05352900)	Straight River	Lat 44°05'42", long 93°13'24", in NW1/4 NW1/4 sec.10, T.107 N., R.20 W., Steele County, Hydrologic Unit 07040002, 0.3 mile upstream from mouth, at Elm Street bridge in Owatonna.	39.0	1969-71, 1974,1976, 1979-80, 1984,1988, 2001	10-06-00	1.61
Straight River on 14th St. in Faribault	Cannon River	Lat 44°18'37", long 93°16'09", in NW1/4 NE1/4 sec. 30, T.110 N., R.20 W., Rice County, Hydrologic Unit 07040002, at bridge on 14th St in Faribault, 200 feet upstream from confluence with Cannon River, above waste treatment plant outfall.	--	1965, 1970, 2000-01	10-05-00	57.9
Cannon River at Carleton College in Northfield (05355027)	Mississippi River	Lat 44°27'46", long 93°09'27", in SW1/4 NW1/4 sec. 31, T.112 N., R.19 W., Rice County, Hydrologic Unit 07040002, on right bank 1/4 mile north (downstream) of intersection of Division St. (State Hwy. 19) and East 2nd St. in Northfield, and approximately 300 ft. north (downstream) of stadium fieldhouse at Carleton College.	--	1996-97, 1999-01	10-05-00	114

Previously operated as a continuous-record gaging station.

+ Previously operated as a high-flow partial-record station.

a High-flow measurements

b Approximately

c Estimated