

# **Physical Characteristics of Stream Subbasins in the Chippewa River Basin, West-Central Minnesota**

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## **ABSTRACT**

Data that describe the physical characteristics of stream subbasins upstream from selected points on streams in the Chippewa River Basin, located in west-central Minnesota, are presented in this report. The physical characteristics are the drainage area of the subbasin, the percentage area of the subbasin covered only by lakes, the percentage area of the subbasin covered by both lakes and wetlands, the main-channel length, and the main-channel slope. The points on the stream include outlets of subbasins of at least 5 square miles, outlets of sewage treatment plants, and locations of U.S. Geological Survey low-flow, high-flow, and continuous-record gaging stations.

## **INTRODUCTION**

Detailed data for the Chippewa River Basin, which is represented by hydrologic accounting unit 07020005 (U.S. Geological Survey, 1974) are presented in this report. The Chippewa River drains an area of 2,080 square miles. The Chippewa River Basin includes parts of Otter Tail, Grant, Douglas, Stevens, Pope, Stearns, Swift, Kandiyohi, and Chippewa Counties in west-central Minnesota.

This report is one of several that present subbasin characteristics of streams in Minnesota. Selected data for points on streams at outlets of subbasins larger than about 5 square miles, at outfalls of sewage treatment plants, and at locations of U.S. Geological Survey low-flow, high-flow, and continuous-record gaging stations located in the Chippewa River Basin are presented in this report.

## **Acknowledgments**

The Minnesota State Planning Land Management Information Center (LMIC), provided assistance with the digitizing and programming needed to produce this report. The Center's assistance is gratefully acknowledged.

## **METHODS**

U.S. Geological Survey 7-1/2 minute series topographic maps were used as source maps to obtain the areas for lakes, and marshes, the main-channel length, and the contour locations used in this report. Paper copies of the maps were used. Data digitized from paper copies were in error by no more than twice the horizontal accuracy of National

Mapping Standards of 40 feet (Thompson, 1987, p. 104). Albers Equal-Area projection was used for storage and analysis of data.

Subbasin boundaries were delineated on the basis of human activities and topographic contours. Human activities, such as the installation of storm sewers, the drainage of wetlands, and the diversion of streams may alter the drainage area of the stream. Data from field inspections and recent drainage-ditch maps, therefore, were transferred to the topographic maps.

Subbasin boundaries (represented by line segments) and labels were recorded using a geographic information system (GIS). The GIS was used to define the subbasin polygons, recording the line segments that comprise each subbasin and identifying the subbasin with a label. The GIS automatically calculates the area of each subbasin. The subbasin boundaries were digitized by LMIC using a GIS.

Lake and marsh data were digitized using a computer-aided drafting (CAD) system and transferred to the GIS. The lake data were overlaid onto the subbasin data to associate each lake with a subbasin. Total lake area for each subbasin was calculated by the GIS.

The marsh data were overlaid onto the subbasin data to associate each marsh area with a subbasin. Total marsh area for each subbasin was calculated by the GIS. Total marsh area plus total lake area is equal to storage area. Lakes and marshes were digitized by the U.S. Geological Survey Minnesota District.

Main channels were delineated for each subbasin on the 7-1/2 minute topographic maps starting at the mouth of the subbasin and working upstream. Whenever the main channel joined with another stream, the stream upstream of the junction that drained the largest area was selected as the main channel. The main channel is continuous and is a single trace that passes through marshes, lakes, and the midline of rivers and braided streams.

The stream-channel line segments forming the main channel were digitized using the CAD system and transferred to the GIS. The stream channel is defined as a single trace from its confluence, or mouth, to the point within the basin that drains the most area; this is generally the basin divide. Several computer programs were used to automatically identify the line segments forming an individual stream channel and to enter this information into the GIS data base. The stream-channel line segments were digitized by U.S. Geological Survey Minnesota District.

Elevation data for the streams were recorded using the CAD system at the intersection of topographic contour lines and stream channels. The data were transferred to the GIS and each data point was associated with a stream-channel line segment. Two points on the stream channel, at 10 percent and at 85 percent of the stream-channel length from the basin outlet to the drainage divide, were located by the GIS. The elevations of these two points were interpolated from the data recorded in the GIS. Main-channel slope was calculated by dividing the difference in elevation between these points by the distance along the stream channel between these points.

## PHYSICAL CHARACTERISTICS OF CHIPPEWA RIVER SUBBASINS

Physical characteristics determined for each of the subbasins shown on plate 1 are presented in table 1. Subbasins are presented in order from headwaters to mouth. The rank of the subbasin stream is shown by indentation; whenever two subbasin streams joined, the stream draining the least cumulative area was assigned a lower rank and indented in the table.

The data for drainage area, main-channel length, and main-channel slope are reported using three significant figures or rounded to the nearest hundredth of a unit. The data for lake area and storage area are reported using two significant figures or rounded to the nearest tenth of a percent.

The following is an explanation of terms used in table 1:

**Subbasin Number.** A seven digit number based on the Minnesota Common Stream and Watershed Numbering

System (Minnesota Department of Natural Resources, 1981). The first two digits are 26 and identify the Chippewa River Basin. The following five digits are arbitrary and are used to identify each individual subbasin.

**Stream Name.** The name of the stream or ditch shown on U.S. Geological Survey 1:24,000 topographic maps. The relative position of the subbasin above other subbasins, streams, gaging stations, and outfalls from sewage treatment plants also is given.

**Outlet Location.** The U.S. Public Lands Survey System is used to describe the location the stream exits the subbasin, down to quarter-quarter section. The description includes quarter-quarter section, section, township, and range.

**Drainage area.** That area, measured on a horizontal plane, enclosed by a topographic divide, within which direct surface runoff from precipitation normally flows by gravity into a watercourse above a specific point. This may include closed basins and other areas that do not contribute directly to surface runoff.

**Lake Area.** The percentage of the drainage area covered by open water as shown on 7-1/2 minute topographic maps.

**Storage Area.** The percentage of a drainage area covered by open water and marshes as shown on 7-1/2 minute topographic maps. Marsh areas are not shown on plate 1.

**Main-Channel Length.** The total length of the main channel from the basin outlet to the point within the basin that drains the greatest area; this is generally the drainage divide. The main channel is the watercourse that drains the greatest area.

**Main-Channel Slope.** The average slope of the watercourse between the points at 10 and at 85 percent of the distance along the main channel from the basin outlet to the drainage divide.

## REFERENCES CITED

- Thompson, M.M., 1987, Maps for America, Third edition: U.S. Geological Survey, 265 p.
- U.S. Geological Survey, 1974, Hydrologic unit map-- 1974 State of Minnesota: 1 plate, scale 1:500,000.
- Minnesota Department of Natural Resources, 1981, The Common Stream And Watershed Numbering System: Stream Inventory and Data Retrieval Systems Report 7002, unpagged.

Table 1.—*Physical characteristic data for the Chippewa drainage basin*  
 [All cities and towns are in Minnesota; --, not computed]

Basin number	Stream name and location	Outlet location				By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)		

Table 1.—Physical characteristic data for the Chippewa River drainage basin--continued

Basin number	Stream name and location	Outlet location				By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-quarter section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)		
2613000	██████████ Unnamed tributary to Chippewa River above mouth	SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	23	129N	40	6.96	5.2	16.2	15.7	5.1	16.4	8.16	4.2	
2612000	Chippewa River above Albert Lake	NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	31	129N	40	17.0	6.6	13.1	160	8.7	22.2	41.1	5.4	
2611800	Chippewa River at Albert Lake outlet	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	31	129N	40	11.9	13.1	21.6	172	9.0	22.2	41.6	5.4	
2612101	Chippewa River above gaging station near Evansville: station number is 05301802	SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	31	129N	40	0.17	5.1	8.6	173	9.0	22.1	42.1	5.4	
2612200	██████████ Unnamed tributary to Chippewa River above mouth	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	01	128N	41	10.8	11.1	18.3	10.8	11.1	18.3	9.14	17.9	
2612100	Chippewa River above Ellingson Lake	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	13	128N	41	13.6	8.7	12.3	197	9.1	21.3	48.7	6.0	
2612500	██████████ Unnamed tributary above Minister Lake	NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	07	128N	39	13.7	10.8	18.2	13.7	10.8	18.2	7.93	14.6	
2612300	██████████ Unnamed tributary above Minister Lake	NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	07	128N	39	9.35	4.9	10.2	9.35	4.9	10.2	8.39	10.5	
2612400	██████████ Unnamed tributary above Lake Venus	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	15	128N	40	9.51	14.7	20.9	32.6	10.3	16.7	14.4	6.8	
2612809	██████████ Non-contributing area to subbasin 2612800					10.7	23.0	31.5	10.7	23.0	31.5	--	--	
2612800	██████████ Unnamed tributary above Lake Venus	NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	22	128N	40	8.31	10.8	17.9	19.0	17.7	25.5	6.99	12.0	
2612600	██████████ Unnamed tributary to Chippewa River above Ellingson Lake	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	13	128N	41	7.92	7.4	16.2	59.5	12.2	19.5	21.8	7.2	
2612701	Chippewa River above outfall from sewage treatment plant for Hoffman	SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	12	127N	41	25.7	11.4	17.5	282	9.9	20.5	55.4	5.4	
2608400	██████████ Unnamed tributary to Chippewa River above Wilson Lake	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	14	127N	41	4.87	2.8	8.3	4.87	2.8	8.3	3.74	17.1	

Table 1.—Physical characteristic data for the Chippewa River drainage basin--continued

Basin number	Stream name and location	Outlet location				By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)		
2612700	Chippewa River above Reed Lake	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	24	127N	41	5.71	2.8	13.3	293	9.7	20.2	61.1	5.0	
2612900	Unnamed tributary to Chippewa River above Reed Lake	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	24	127N	41	5.78	1.7	7.0	5.78	1.7	7.0	7.73	23.3	
2600200	Chippewa River above unnamed tributary (subbasin 2600100)	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	12	126N	41	20.3	2.0	7.1	319	9.0	19.1	68.2	4.6	
2600101	XXXX Unnamed stream extension above outfall from sewage treatment plant for Kensington	NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	34	127N	40	0.17	7.4	16.2	0.17	7.4	16.2	0.39	17.0	
2600100	Unnamed tributary to Chippewa River above mouth	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	12	126N	41	21.8	8.2	18.3	22.0	8.2	18.3	16.1	13.5	
2604300	Unnamed tributary to Chippewa River above mouth	NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	13	126N	41	14.4	8.0	14.9	14.4	8.0	14.9	12.7	12.7	
2600300	Chippewa River above unnamed tributary (subbasin 2610000)	SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	32	126N	40	17.6	3.8	8.7	373	8.7	18.4	77.6	4.3	
2610000	XXXX Unnamed tributary to Chippewa River above mouth	SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	32	126N	40	9.85	5.2	9.2	9.85	5.2	9.2	5.56	25.9	
2609902	Chippewa River above gaging station near Cyrus: station number is 05301950	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	18	125N	40	7.32	2.0	4.2	390	8.5	17.9	86.6	3.9	
2609901	Chippewa River above Cyrus sewage treatment plant outfall	NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	29	125N	40	17.5	8.7	12.0	407	8.5	17.7	89.1	3.8	
2609900	Chippewa River above Little Chippewa River	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	34	125N	40	10.3	1.5	5.7	418	8.3	17.4	93.7	3.6	
2600809	XXXX Non-contributing area to subbasin 2600800					23.9	26.3	35.1	23.9	26.3	35.1	--	--	

Table 1.—Physical characteristic data for the Chippewa River drainage basin—continued

Basin number	Stream name and location	Outlet location				By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-quarter section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)		
2600800	Little Chippewa River above unmanned tributary (subbasin 2610100)	NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	31	126N	39	37.6	5.8	12.6	61.5	13.8	21.3	28.0	5.7	
2610100	Unnauned tributary to Little Chippewa River above mouth	NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	31	126N	39	19.6	9.1	15.7	19.6	9.1	15.7	12.5	12.4	
2609802	Little Chippewa River above gaging station near Starbuck: station number is 05302500	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	19	125N	39	15.1	2.6	5.2	96.2	11.1	17.7	38.8	6.5	
2609801	Little Chippewa River above gaging station at Cyrus: station number is 05302700	SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	35	125N	40	12.6	0.5	12.8	109	9.9	17.1	46.0	6.8	
2609800	Little Chippewa River above mouth	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	34	125N	40	0.31	0.0	0.0	109	9.8	17.0	46.9	6.8	
2610800	Chippewa River above unnamed tributary (subbasin 2600400)	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	20	124N	40	5.95	0.5	2.4	533	8.5	17.1	101	3.4	
2600400	Unnauned tributary to Chippewa River above mouth	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	20	124N	40	25.6	7.4	11.8	25.6	7.4	11.8	12.0	4.8	
2600901	County Ditch No. 7 above outfall from sewage treatment plant for Lowry	NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	25	126N	39	1.81	0.0	0.3	1.81	0.0	0.3	2.29	29.7	
2600900	Trappers Run above Lake Minnewaska	SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	11	125N	38	45.9	7.2	11.7	47.7	6.9	11.3	14.6	12.3	
2609701	Unnauned tributary above outfall from sewage treatment plant for Glenwood	NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	12	125N	38	1.37	0.0	0.0	1.37	0.0	0.0	2.75	115	
2602009	Non-contributing area to subbasin 2602000					2.22	3.4	7.0	2.22	3.4	7.0	—	—	
2602000	Unnauned tributary to Lake Minnewaska	SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	27	125N	38	3.02	4.4	9.0	5.24	4.0	8.2	4.94	35.9	
2609700	Lake Minnewaska outlet	NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	25	125N	39	35.5	35.8	38.6	89.8	18.1	21.7	22.6	7.5	

Table 1.—Physical characteristic data for the Chippewa River drainage basin--continued

Basin number	Stream name and location	Outlet location				By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)		
2601001	Outlet Creek above outfall from sewage treatment plant for Starbuck	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	26	125N	39	0.73	1.0	7.6	90.6	17.9	21.6	23.2	7.2	
2601000	Outlet Creek above Signalness Creek	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	16	124N	39	17.5	0.3	10.2	108	15.1	19.8	31.2	5.3	
2601309	Non-contributing area to subbasin 2601300					4.60	1.6	10.1	4.60	1.6	10.1	--	--	
2601300	Signalness Creek above mouth	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	16	124N	39	8.19	2.0	7.1	12.8	1.9	8.2	7.72	22.1	
2601201	Unnamed tributary to Outlet Creek above gaging station near Starbuck station number is 05302970	NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	27	124N	39	0.57	0.0	0.5	0.57	0.0	0.5	1.62	53.5	
2601200	Outlet Creek above Lake Emily	NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	29	124N	39	10.1	1.0	9.1	132	12.6	17.7	35.2	5.5	
2601101	Outlet Creek above gaging station near Hancock: station number is 05302980	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	28	124N	40	22.0	16.5	22.9	154	13.2	18.5	40.7	5.1	
2601100	Outlet Creek above mouth	NE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	29	124N	40	0.58	0.0	10.3	154	13.1	18.4	42.0	4.9	
2610700	Chippewa River above unnamed tributary (subbasin 2610400)	SE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	28	123N	40	18.6	0.0	3.5	731	9.3	16.9	115	3.3	
2610400	Unnamed tributary to Chippewa River above mouth	SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	27	123N	40	11.8	0.1	5.0	11.8	0.1	5.0	10.4	16.9	
2600500	Chippewa River above East Branch Chippewa River	NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	06	121N	39	24.7	0.0	2.2	768	8.8	16.2	124	3.1	
2610300	Judicial Ditch No. 4 above Leven Lake	SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	12	126N	37	13.2	0.1	10.6	13.2	0.1	10.6	7.14	6.7	
2601700	Unnamed tributary above Villard Lake	NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	23	126N	37	7.06	0.9	17.4	7.06	0.9	17.4	5.61	9.7	

Table 1.—*Physical characteristic data for the Chippewa River drainage basin—continued*

Basin number	Stream name and location	Outlet location				By subbasin			Cumulative to mouth of basin				Main-channel slope (foot per mile)	
		Quarter-section		Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)		Main channel length (miles)
2601600	County Ditch No. 12 above Villard Lake	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	23	126N	37	9.34	0.1	8.0	9.34	0.1	8.0	8.50	7.7	
2601800	East Branch Chippewa River above Amelia Lake outlet	SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	02	125N	37	16.9	16.2	21.1	46.5	6.1	14.9	12.6	3.6	
2602200	Unnamed tributary above East Branch Chippewa River	NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	23	124N	37	13.7	4.4	22.4	13.7	4.4	22.4	8.84	8.0	
2601900	East Branch Chippewa River above unnamed tributary (subbasin 2602400)	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	26	124N	37	24.6	5.0	13.3	84.7	5.5	15.6	28.7	3.7	
2602400	Unnamed tributary above East Branch Chippewa River	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	26	124N	37	8.70	0.5	17.4	8.70	0.5	17.4	6.16	5.4	
2602301	East Branch Chippewa River above gaging station at Terrace: station number is 05303280	SW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	33	124N	37	4.60	1.9	12.9	98.0	4.9	15.7	31.2	3.7	
2602300	East Branch Chippewa River above County Ditch No. 15	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	22	123N	38	27.8	7.5	15.5	126	5.4	15.6	43.3	5.4	
2602109	Non-contributing area to subbasin 2602100					2.59	8.3	13.8	2.59	8.3	13.8	--	--	
2602100	County Ditch No. 15 above East Branch Chippewa River	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	22	123N	38	60.4	6.4	13.6	63.0	6.5	13.7	19.2	8.5	
2602601	East Branch Chippewa River above gaging station near Swift Falls: station number is 05303350	SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	14	122N	38	11.3	0.2	1.5	200	5.5	14.2	55.6	5.4	
2602600	East Branch Chippewa River above Mud Creek	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	26	122N	38	2.06	0.0	15.8	202	5.4	14.2	59.7	5.9	



Table 1.—Physical characteristic data for the Chippewa River drainage basin--continued

Basin number	Stream name and location	Outlet location			By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-quarter section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)	
2610909	Non-contributing area to subbasin 2610900					12.4	17.3	28.0	12.4	17.3	28.0	--	--
2610900	Mud Creek above unnamed tributary (subbasin 2609600)	SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	29	123N	36	0.72	0.0	21.2	13.2	16.4	27.6	1.64	66.6
2609600	Unnamed tributary to Mud Creek above mouth	SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	29	123N	36	12.7	2.5	23.7	12.7	2.5	23.7	8.82	6.8
2602800	Mud Creek above County Ditch No. 15	SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	03	122N	37	23.1	7.2	18.3	49.0	8.4	22.2	8.50	27.8
2604600	Unnamed tributary to County Ditch No. 15 at Sunburg	NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	30	122N	36	6.90	20.4	28.9	6.90	20.4	28.9	4.73	2.5
2602700	County Ditch No. 15 above Mud Creek	SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	03	122N	37	35.0	6.2	23.6	41.9	8.6	24.5	18.8	11.0
2604500	Spring Creek above Mud Creek	SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	18	122N	37	10.2	0.3	6.4	10.2	0.3	6.4	8.06	29.0
2603001	Mud Creek above gaging station near Swift Falls: station number is 05303400	SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	19	122N	37	11.7	4.4	11.4	113	7.3	20.5	15.2	8.1
2603000	Mud Creek above East Branch Chippewa River	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	26	122N	38	15.7	2.0	13.9	128	6.7	19.7	19.3	4.6
2604100	East Branch Chippewa River above County Ditch No. 8	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	26	122N	39	28.5	0.2	16.1	359	5.5	16.3	70.4	5.9
2602500	County Ditch No. 8 above East Branch Chippewa River	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	26	122N	39	16.2	3.8	12.0	16.2	3.8	12.0	7.69	25.8
2604900	Judicial Ditch No. 19 above unnamed tributary (subbasin 2609300)	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	03	120N	37	14.0	1.4	10.7	14.0	1.4	10.7	9.93	13.3

Table 1.—Physical characteristic data for the Chippewa River drainage basin—continued

Basin number	Stream name and location	Outlet location				By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)		
2609300	Unnamed tributary to Judicial Ditch No. 19 above mouth	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	03	120N	37	10.9	0.9	5.1	10.9	0.9	5.1	6.89	26.3	
2609400	Unnamed tributary to Judicial Ditch No. 19 above mouth	SE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	19	121N	38	5.82	0.0	2.2	5.82	0.0	2.2	5.71	6.8	
2609200	Judicial Ditch No. 19 above Hollerberg Floodway	SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	18	121N	38	27.2	0.1	3.5	58.0	0.5	5.4	22.1	7.4	
2604800	County Ditch No. 63 above Hollerberg Floodway	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	14	121N	38	8.94	0.0	3.6	8.94	0.0	3.6	7.99	16.7	
2604000	Hollerberg Floodway above Judicial Ditch No. 19	SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	18	121N	38	9.23	3.8	7.6	18.2	2.0	5.6	12.8	12.5	
2608901	Judicial Ditch No. 19 above gaging station near Benson: station number is 05303430	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	02	121N	39	6.64	0.0	3.5	82.8	0.8	5.3	25.7	6.3	
2608900	Judicial Ditch No. 19 above East Branch Chippewa River	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	27	122N	39	5.16	0.0	3.0	87.9	0.8	5.2	28.7	5.1	
2601409	Non-contributing area to subbasin 2601400					1.23	3.6	10.7	1.23	3.6	10.7	—	—	
2601400	County Ditch No. 13 above Lake Hassel	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	08	122N	39	20.9	1.0	4.2	22.2	1.1	4.6	12.1	18.5	
2601501	Hassel Creek above gaging station near Clontarf: station number is 05303450	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	04	122N	39	7.24	0.3	3.6	7.24	0.3	3.6	6.16	38.1	
2601500	Hassel Creek above Lake Hassel	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	04	122N	39	0.04	0.0	7.3	7.29	0.3	3.7	6.41	38.7	
2602900	Unnamed Tributary to East Branch Chippewa River above mouth	SE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	29	122N	39	10.49	12.7	22.2	39.9	4.0	9.0	16.7	13.4	

Table 1.—Physical characteristic data for the Chippewa River drainage basin--continued

Basin number	Stream name and location	Outlet location			By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-quarter section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)	
2608801	East Branch Chippewa River above gaging station near Benson: station number is 05303470	SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	29	122N	39	2.83	0.0	3.6	506	4.4	13.6	74.4	5.7
2608800	East Branch Chippewa River above Chippewa River	NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	06	121N	39	1.71	0.0	1.2	508	4.4	13.6	76.5	5.6
2603701	Chippewa River above outfall from sewage treatment plant for Benson	NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	06	121N	39	2.04	0.0	0.6	1280	7.1	15.1	124	3.1
2603700	Chippewa River above County Ditch No. 3	NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	23	121N	40	9.00	0.1	1.4	1290	7.0	15.0	129	3.1
2610600	Unnamed Tributary to Judicial Ditch No. 9 above mouth	NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	35	123N	41	13.9	0.0	1.1	13.9	0.0	1.1	9.15	9.9
2611000	Unnamed Tributary to Judicial Ditch No. 9 above mouth	NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	35	123N	41	7.25	0.0	0.8	7.25	0.0	0.8	8.60	16.0
2603600	Judicial Ditch No. 9 above unnamed tributary (subbasin 2603100)	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	02	122N	41	5.41	0.0	3.4	26.6	0.0	1.5	10.8	9.1
2603100	Unnamed tributary to Judicial Ditch No. 9 above mouth	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	02	122N	41	7.04	0.2	4.0	7.04	0.2	4.0	7.18	5.8
2600601	Unnamed tributary above outfall from sewage treatment plant for Hancock	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	02	123N	41	6.75	10.2	13.4	6.75	10.2	13.4	6.32	9.7
2600600	Unnamed tributary to Judicial Ditch No. 9 above mouth	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	12	122N	41	9.13	0.0	2.8	15.9	4.4	7.3	15.2	9.2
2608600	Judicial Ditch No. 9 above County Ditch No. 3	NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	30	122N	40	5.64	0.0	2.5	55.1	1.3	3.6	15.0	7.2
2600700	Unnamed tributary to County Ditch No. 3 above mouth	NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	30	122N	40	8.47	0.0	5.6	8.47	0.0	5.6	6.51	3.9

Table 1.—*Physical characteristic data for the Chippewa River drainage basin--continued*

Basin number	Stream name and location	Outlet location				By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)		
2611500	County Ditch No. 7 above unnamed ditch to County Ditch No. 3	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	04	121N	40	8.96	2.0	7.1	8.96	2.0	7.1	7.21	3.9	
2608700	County Ditch No. 3 above Chippewa River	NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	23	121N	40	19.4	0.3	18.2	91.9	1.0	7.2	21.9	4.7	
2611300	Chippewa River above Shakopee Creek	SW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	15	120N	40	12.1	0.1	1.7	1390	6.6	14.4	136	3.1	
2604700	County Ditch No. 27 above Norway Lake	NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	12	121N	36	15.8	0.1	6.5	15.8	0.1	6.5	9.84	6.9	
2604200	Andrew Lake outlet above Shakopee Creek	NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	11	121N	35	32.6	22.3	35.7	48.4	15.1	26.1	16.9	3.5	
2606000	Shakopee Creek above Florida Slough Lake	NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	33	121N	35	10.1	2.6	20.8	58.4	12.9	25.2	23.8	5.8	
2604400	Shakopee Creek above Lower Crook Lake	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	32	121N	35	12.6	18.2	28.2	71.0	13.8	25.8	26.2	5.6	
2605001	Unnamed tributary above outfall from sewage treatment plant for Kerkhoven	NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	22	120N	37	3.12	0.3	11.3	3.12	0.3	11.3	3.62	19.9	
2605000	Shakopee Creek above subbasin 2605201	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	22	120N	37	51.2	4.0	14.7	125	9.4	20.3	38.8	9.4	
2607200	Unnamed tributary above unnamed tributary (subbasin 2607100)	SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	15	119N	38	25.0	0.0	3.3	25.0	0.0	3.3	11.5	7.2	
2607100	Unnamed tributary to Shakopee Creek above mouth	NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	08	119N	38	16.9	0.0	1.7	41.9	0.0	2.6	14.2	6.1	
2605201	Shakopee Creek above gaging station near Shakopee Lake: station number is 340501	NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	08	119N	38	26.3	0.4	4.8	194	6.2	14.7	50.8	4.3	
2605200	Shakopee Creek above Shakopee Lake	NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	07	119N	38	0.60	0.0	1.0	194	6.2	14.7	51.9	4.3	
2607300	Unnamed tributary above Shakopee Lake	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	07	119N	38	6.65	2.2	5.8	6.65	2.2	5.8	4.25	5.7	

Table 1.—Physical characteristic data for the Chippewa River drainage basin—continued

Basin number	Stream name and location	Outlet location				By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)		
2605100	Unnamed tributary to Shakopee Creek above mouth	NW <sup>1</sup> / <sub>4</sub>	SW <sup>1</sup> / <sub>4</sub>	25	120N	39	14.6	0.0	1.7	14.6	0.0	1.7	11.3	7.3
2605400	Unnamed tributary to Shakopee Creek above mouth	NW <sup>1</sup> / <sub>4</sub>	SW <sup>1</sup> / <sub>4</sub>	25	120N	39	6.83	0.3	1.5	6.83	0.3	1.5	7.09	8.3
2605300	Shakopee Creek above unnamed tributary (subbasin 2607000)	SW <sup>1</sup> / <sub>4</sub>	NE <sup>1</sup> / <sub>4</sub>	27	120N	39	9.03	5.4	8.8	231	5.5	13.0	56.9	4.3
2607600	Unnamed tributary above unnamed tributary (subbasin 2607000)	SE <sup>1</sup> / <sub>4</sub>	SE <sup>1</sup> / <sub>4</sub>	10	119N	39	5.56	0.0	1.1	5.56	0.0	1.1	4.59	5.8
2607000	Unnamed tributary to Shakopee Creek above mouth	SW <sup>1</sup> / <sub>4</sub>	NE <sup>1</sup> / <sub>4</sub>	27	120N	39	8.22	0.0	0.3	13.8	0.0	0.6	9.52	2.5
2609500	Shakopee Creek above Judicial Ditch No. 5	NW <sup>1</sup> / <sub>4</sub>	SW <sup>1</sup> / <sub>4</sub>	18	120N	39	12.0	0.0	2.1	257	4.9	11.8	61.9	4.1
2609000	Unnamed ditch above unnamed ditch (subbasin 2609100)	NE <sup>1</sup> / <sub>4</sub>	SW <sup>1</sup> / <sub>4</sub>	04	120N	39	10.1	0.0	0.0	10.1	0.0	0.0	6.55	5.3
2609100	Unnamed ditch to Judicial Ditch No. 5 above mouth	NW <sup>1</sup> / <sub>4</sub>	SE <sup>1</sup> / <sub>4</sub>	05	120N	39	20.8	0.0	0.2	30.9	0.0	0.1	12.6	7.4
2603900	Judicial Ditch No. 5 above Shakopee Creek	NW <sup>1</sup> / <sub>4</sub>	SW <sup>1</sup> / <sub>4</sub>	18	120N	39	17.6	0.0	0.3	48.4	0.0	0.2	16.0	5.6
2603801	Shakopee Creek above gaging station near Benson: station number is 05304000	SE <sup>1</sup> / <sub>4</sub>	SE <sup>1</sup> / <sub>4</sub>	11	120N	40	2.41	0.0	0.5	308	4.1	9.9	63.5	4.0
2603800	Shakopee Creek above Chippewa River	SW <sup>1</sup> / <sub>4</sub>	NE <sup>1</sup> / <sub>4</sub>	15	120N	40	11.8	0.0	1.5	320	4.0	9.6	65.5	3.9
2603500	Chippewa River above unnamed tributary (subbasin 2605600)	NW <sup>1</sup> / <sub>4</sub>	NW <sup>1</sup> / <sub>4</sub>	05	119N	40	10.8	0.0	0.0	1720	6.0	13.4	142	3.1

Table 1.—Physical characteristic data for the Chippewa River drainage basin--continued

Basin number	Stream name and location	Outlet location			By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)	
2605600	Unamed tributary to Chippewa River above mouth	NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	05	119N	40	8.25	0.0	0.0	8.25	0.0	0.0	6.26	4.9
2603400	Unamed tributary to Chippewa River above mouth	NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	35	120N	41	13.2	0.1	2.5	13.2	0.1	2.5	7.98	5.7
2605500	Chippewa River above Cottonwood Creek	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	04	119N	41	6.63	0.0	0.1	1750	5.9	13.2	150	3.0
2611400	Unamed tributary above unnamed tributary (subbasin 2608500)	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	11	121N	41	10.5	0.2	7.0	10.5	0.2	7.0	10.7	14.8
2608500	Unamed tributary to Judicial Ditch No. 8 above mouth	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	23	121N	41	17.9	0.0	2.2	28.4	0.1	4.0	10.0	12.1
2603200	Judicial Ditch No. 8 above Cottonwood Creek	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	16	120N	41	18.8	0.0	0.5	47.2	0.1	2.6	16.9	6.1
2611200	Unamed Ditch above Judicial Ditch No. 8	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	16	120N	41	18.6	0.0	1.3	18.6	0.0	1.3	146	3.0
2605900	Unamed tributary to Cottonwood Creek above mouth	NE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	20	120N	41	32.0	0.1	1.1	32.0	0.1	1.1	16.9	3.3
2605800	Unamed tributary to Cottonwood Creek above mouth	SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	28	120N	41	18.4	0.1	1.9	18.4	0.1	1.9	14.0	2.6
2606100	Cottonwood Creek above Chippewa River	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	04	119N	41	6.46	0.0	1.1	123	0.1	1.8	22.6	4.5
2605701	Chippewa River above gaging station near Milan: station number is 05304500	SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	16	119N	41	5.43	0.3	3.0	1880	5.5	12.5	154	3.0
2605700	Chippewa River above unnamed tributary (subbasin 2606700)	NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	27	119N	41	3.00	0.1	0.8	1880	5.5	12.4	156	3.0
2606700	Unamed tributary to Chippewa River above mouth	NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	27	119N	41	19.5	0.2	3.6	19.5	0.2	3.6	14.3	4.1

Table 1.—*Physical characteristic data for the Chippewa River drainage basin--continued*

Basin number	Stream name and location	Outlet location				By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-quarter section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)		
2607500	Unnamed tributary above unnamed tributary (subbasin 2607400)	NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	05	118N	39	8.48	0.0	1.1	8.48	0.0	1.1	7.04	3.0	
2607400	Unnamed tributary above unnamed tributary (subbasin 2607700)	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	31	119N	39	20.2	0.1	1.3	28.6	0.1	1.3	16.5	2.6	
2606900	Unnamed tributary above unnamed tributary (subbasin 2608300)	SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	30	119N	39	16.4	0.5	2.1	16.4	0.5	2.1	9.72	3.8	
2606800	Unnamed tributary above unnamed tributary (subbasin 2608300)	SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	30	119N	39	6.19	0.0	0.3	6.19	0.0	0.3	5.26	1.5	
2608300	Unnamed tributary above unnamed tributary (subbasin 2607700)	NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	31	119N	39	2.57	0.9	7.2	25.2	0.4	2.2	11.2	3.3	
2607700	Unnamed tributary to Dry Weather Creek above mouth	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	14	118N	40	8.49	0.0	2.4	62.4	0.2	1.8	21.7	2.5	
2608100	Dry Weather Creek above unnamed tributary (subbasin 2607700)	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	14	118N	40	12.4	0.0	0.8	12.4	0.0	0.8	8.00	3.5	
2608200	Unnamed tributary to Dry Weather Creek above mouth	NE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	10	118N	40	11.5	0.5	5.5	11.5	0.5	5.5	6.04	4.2	
2607801	Dry Weather Creek above gaging station near Montevideo: station number is 05304800	NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	11	118N	41	19.6	1.3	5.1	106	0.4	2.7	32.5	2.0	
2607800	Dry Weather Creek above Chippewa River	NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	02	118N	41	0.50	0.0	0.6	106	0.4	2.7	34.4	2.1	
2606500	Unnamed tributary to Chippewa River above mouth	NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub>	15	118N	41	29.1	0.1	1.8	29.1	0.1	1.8	19.1	3.0	
2606600	Chippewa River above subbasin 2607903	SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	15	118N	41	13.7	0.4	2.5	2050	5.1	11.6	163	2.9	

Table 1.—Physical characteristic data for the Chippewa River drainage basin—continued

Basin number	Stream name and location	Outlet location				By subbasin				Cumulative to mouth of basin				Main-channel slope (foot per mile)
		Quarter-quarter section	Sec-tion	Town-ship	Range	Drainage area (square miles)	Lake area (percent of sub-basin area)	Storage area (percent of sub-basin area)	Drainage area (square miles)	Lake area (percent of total area)	Storage area (percent of total area)	Main channel length (miles)		
2607903	Chippewa River above gaging station near Watson: station number is 05305000	SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	15	118N	41	0.01	0.0	0.0	0.0	2050	5.1	11.6	163	2.9
2607902	Chippewa River above outfall from sewage treatment plant for Watson	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	22	118N	41	2.35	0.0	2.0	2.0	2050	5.1	11.6	164	2.9
2608001	Spring Creek above gaging station near Montevideo: station number is 05305200	NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub>	5	117N	40	15.8	0.0	1.7	1.7	15.8	0.0	1.7	8.20	5.7
2608000	Spring Creek above Chippewa River	SW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub>	06	117N	40	0.51	0.0	0.0	0.0	16.4	0.0	1.7	9.36	9.1
2607901	Chippewa River above outfall from sewage treatment plant for Montevideo	NE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	18	117N	40	15.6	0.2	4.2	4.2	2080	5.0	11.5	174	2.9
2607900	Chippewa River above mouth	SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub>	18	117N	40	0.24	0.0	0.0	0.0	2080	5.0	11.5	175	2.9