

Flooding in Illinois, April-June 2002

Open-File Report 02-487

U.S. Department of the Interior
U.S. Geological Survey

Flooding in Illinois, April-June 2002

By Charles Avery and Daniel F. Smith

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Urbana, Illinois
2003

U.S. DEPARTMENT OF THE INTERIOR
GALE A. NORTON, Secretary

U.S. GEOLOGICAL SURVEY
Charles G. Groat, Director

For additional information write to:

District Chief
U.S. Geological Survey
221 N. Broadway Avenue
Urbana, IL 61801

Copies of this report can be purchased from:

U.S. Geological Survey
Branch of Information Services
Box 25286
Denver, CO 80225-0286

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CONVERSION FACTORS AND DATUM

Multiply	By	To obtain
Length		
inch (in.)	25.4	millimeter
foot (ft)	0.3048	meter
square mile (mi ²)	2.590	square kilometer
Area		
cubic foot per second (ft ³ /s)	0.02832	cubic meter per second

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$$

DATUM

In this report, "datum" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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Abstract

Widespread flooding occurred throughout most of Illinois in spring 2002 as a result of multiple intense rainstorms that moved through the State during an extended 2-month period from the third week in April through the month of May in central and southern Illinois, the first week in June in northern Illinois, and the second week in June in west-central Illinois. The scale of flooding was highly variable in time and intensity throughout the State. A Federal disaster was declared for central and southern Illinois to deal with the extensive damage incurred during the severe weather, and to provide emergency aid relief.

Discharge and stage records for the flood periods described above are presented for 193 streamflow-gaging stations throughout Illinois and in drainages just upstream of the State. New maximum instantaneous discharge was recorded at 12 stations during this flood period, and new maximum stage was recorded at 15 stations. Flood stage was exceeded for at least 1 day during this 2-month period at 67 of the 82 stations with established flood-stage elevations given by the National Weather Service. Of the 162 streamflow-gaging stations with an established flood-frequency distribution, a 5-year or greater flood discharge was recorded at 87 stations, and a 100-year or greater flood discharge occurred at six stations.

INTRODUCTION

Widespread flooding occurred throughout most of Illinois in spring 2002 as a result of multiple intense rainstorms that moved through the State during an extended period from the third week in April through the entire month of May in central and southern Illinois, the first week in June in northern Illinois, and the second week in June in west-central Illinois. Because the flooding resulted from multiple rainfall events stretched along successive frontal boundaries, many of which stalled as they passed over Illinois, the scale of flooding was highly variable in time and intensity through the State. A Federal disaster area was declared for central and southern Illinois to deal with the extensive damage incurred during the severe weather, and to provide emergency aid relief.

The U.S. Geological Survey (USGS) operates more than 193 active discharge or stage-recording streamflow-gaging stations (as of 2002) throughout Illinois, in drainages just upstream of the State, and on the Mississippi, Ohio, and Wabash Rivers (fig. 1). Most of the selected stations have 10 or more years of record and subsequently have an established flood-frequency distribution relating annual maximum instantaneous peak flows to recurrence intervals at the station (David T. Soong and others, U.S. Geological Survey, written commun., 2002). The method described in Bulletin 17B (Interagency Advisory Committee on Water Data, 1982) was used to compute the flood frequencies. The recurrence interval, which is the reciprocal of the annual exceedance probability, is the statistical average number of years between exceedances of a specified flood magnitude. For example, a flood discharge with a recurrence interval of 100 years has a 1-percent (probability of annual exceedance of 0.01) chance of occurrence in any one year.

¹ U.S. Geological Survey, Urbana, Ill.

² National Weather Service, National Oceanic and Atmospheric Administration (NOAA), Lincoln, Ill.

Purpose and Scope

This report documents the maximum instantaneous discharge and stage recorded during flooding from mid-April to mid-June 2002 at selected USGS streamflow-gaging stations in Illinois, selected streamflow-gaging stations in the adjacent States on drainages upstream of Illinois, and streamflow-gaging stations on the Mississippi, Ohio, and Wabash Rivers. The duration of time that stage was above flood stage is shown for gages with established flood-stage elevations. The data presented in this report are considered provisional, and subject to revision until the data are finalized after the completion of this water year¹.

Flood Damage Assessments

A Federal Disaster Declaration was issued May 21, 2002, by President George W. Bush that provided aid to individuals, families, and businesses in 30 counties in southern Illinois affected by storms, tornadoes, and flooding that began April 21. An amendment to that Declaration issued May 30, 2002, expanded the area to include 68 counties of central and southern Illinois. On June 6, 2002, disaster assistance was expanded to include aid for local governments in 33 counties. The aid to local governments later was expanded on June 21, 2002, to 38 counties. By June 28, 2002, the amount of disaster assistance to individuals and businesses had exceeded \$10.3 million (Federal Emergency Management Agency, 2002).

During the flooding, numerous highways and bridges were washed out, inundated, or threatened by high water (figs. 2, 3), levees were breached, agricultural land and low-lying residential areas were inundated for extensive periods of time, and several deaths were attributed to lightning strikes, tornado damage, and drownings in the floodwaters.

¹ The water year is the 12-month period from October 1 to September 30, and designated by the year in which it ends, during which streamflow data are collected, compiled, and reported.

Acknowledgments

Jennifer Sharpe (USGS) prepared the report illustrations, and James Angel (Illinois State Water Survey) and Daniel Kelly (National Weather Service (NWS), National Oceanic and Atmospheric Administration) provided maps of precipitation distributions estimated for various periods from data obtained from the NWS cooperative observer network.

METEOROLOGICAL CONDITIONS AND RAINFALL DISTRIBUTION

During the third week of April 2002, atmospheric steering currents evolved into a broad southwesterly flow, which translates to a much more active weather pattern in the Midwest, and generally persisted until the middle of June. An active jet stream pattern developed with the polar and subtropical jet streams both contributing to conditions that produced multiple episodes of appreciable rainfall across Illinois.

On April 19, a cold front moved across Illinois and became stationary over central Illinois. Waves of low pressure moved along the stalled frontal boundary and produced a band of moderate to heavy rainfall (1 to 2 in.) during the following several days. The combination of abundant low-level moisture from the Gulf of Mexico, a stationary east-west frontal boundary, and the presence of the upper-level (25,000 ft) jet contributed to produce the widespread rainfall.

In the last week of April, several strong low-pressure systems and frontal boundaries moved across the Midwest. A rainfall event in the region on April 24-25 was aided by a merging of the polar and subtropical jet streams over the Midwest. The strong lift associated with the merging jets, the influx of low-level moisture from the Gulf of Mexico, and frontal activity across the Midwest combined to produce the widespread heavy rainfall. On April 27, a more intense low-pressure system approached the Midwest from the southern Rockies and produced another heavy rainfall event. Total precipitation in Illinois during April 2002 ranged from less than 3 in. to more than 8 in. (Illinois State Water Survey, 2002). Normal precipitation in Illinois during April ranges from about 3.3 to 4.7 in.

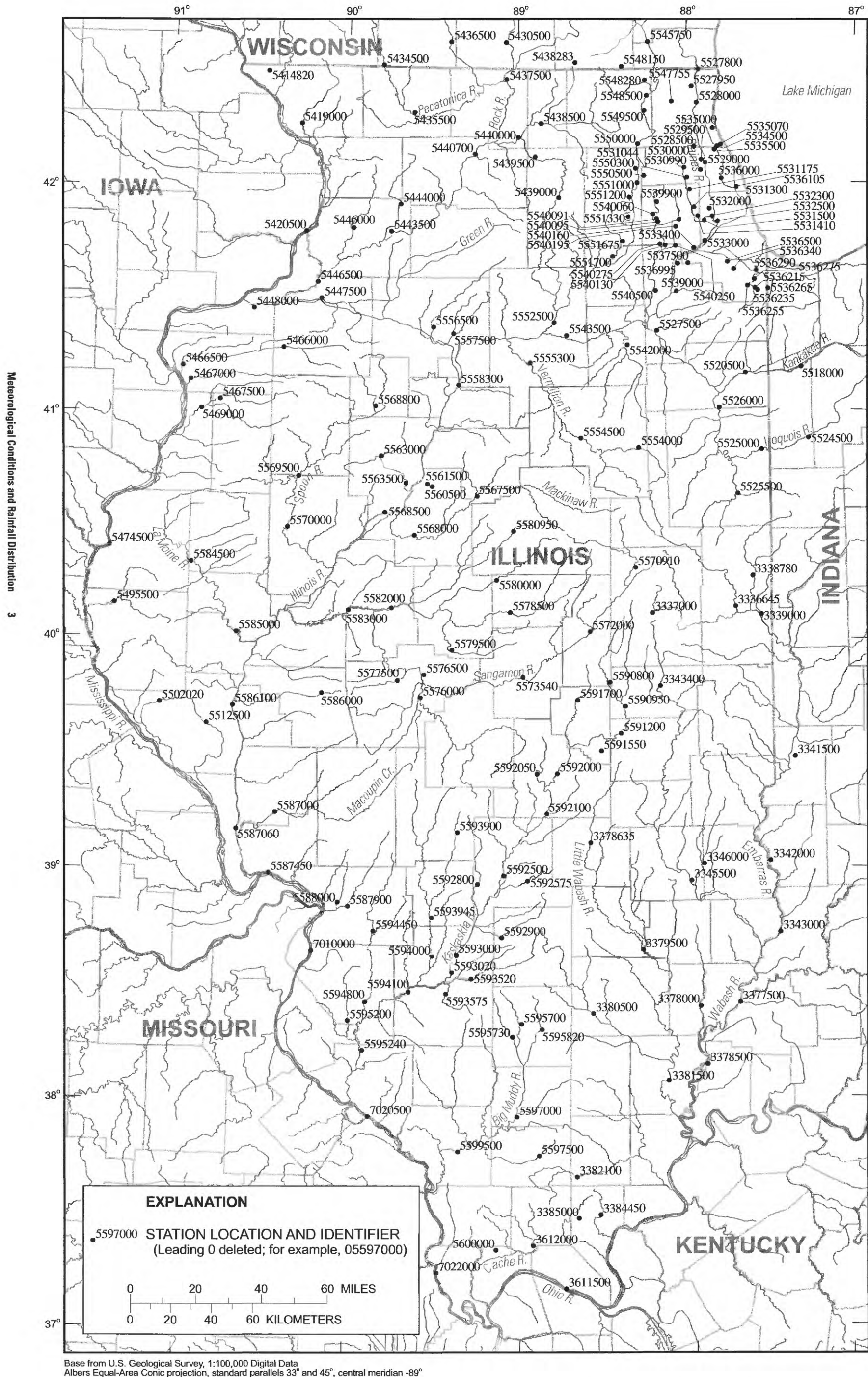


Figure 1. Selected U.S. Geological Survey streamflow-gaging stations in Illinois, in drainages just upstream of the State, and on the Mississippi, Ohio, and Wabash Rivers.



Figure 2. Water from the Sangamon River flowing over Business Route I-55 at Riverside Park between Springfield and Sherman, Ill. The stage at the Sangamon River at Riverton, Ill. (05576500) at the time of the photograph was 29.31 feet. Photograph by Daniel Smith, National Weather Service, Lincoln, Ill.



Figure 3. The river stage at the bridge deck of the State Highway 1 bridge over the Embarras River at Lawrenceville, Ill. Photograph by Daniel Smith, National Weather Service, Lincoln, Ill.

The weather pattern across the Midwest started to change during the first 2 weeks in May. The polar jet began its normal migration northward, although the subtropical jet still was active out of the southwestern United States. Heavy rainfall and severe weather continued to be a problem in southern Illinois during the first week of May. On May 11, an area of low pressure and its attendant frontal boundary developed west of Illinois and started tracking slowly eastward across the State. Mid- to high-level moisture (15,000-25,000 ft) provided in large part by the subtropical jet and transport of moisture from the Gulf of Mexico at low levels (less than 5,000 ft) brought in tremendous amounts of moisture to the State. The 3-day rainfall amounts (fig. 4) for this storm ranged from less than 1 in. in extreme northern Illinois to greater than 5 in. at several widely separated raingages in central Illinois. Total precipitation in Illinois during May 2002 ranged from less than 2 in. to more than 12 in. (Illinois State Water Survey, 2002). Normal precipitation in Illinois during May ranges from about 3.4 to 4.6 in.

More rainfall events occurred across Illinois during the first 2 weeks of June. A stalled frontal boundary over the northern part of Illinois produced over 8 in. of rain in the northwestern part of the State during June 3-4. On June 11, low pressure aloft began to move towards the center of the Nation and transported high dew-point air (greater than 70°F dew points) into the Midwest ahead of an approaching frontal boundary. Although the contribution from the upper levels (jet stream dynamics) was not as prolific as in the April and May events, an appreciable rainfall event occurred across central Illinois as the thunderstorms interacted with a slow moving frontal boundary. The pattern was more typical of a heavy mid-summer rainfall event in which cells develop and "back build" to the west, which leads to storms continually moving over the same location (commonly referred to as training). By the time the low-level pattern supporting the training of cells across central Illinois broke down, rainfall amounts greater than 6 in. had occurred in the western and central sections of Illinois (fig. 5). This rain fell on generally the same area that received large amounts of rain in April and May, and aggravated an already serious flooding situation across central Illinois.

Total amounts of rain for the 2-month period from mid-April to mid-June, 2002 ranged from less than 8 in. in extreme northeastern Illinois to over 23 in. in the central part of the State (Illinois State Water Survey, 2002; Daniel Kelly, National Weather Service, written commun., 2002). For comparison, annual precipitation in the State normally ranges from about 35 in. in the north to 46 in. in the south.

FLOODING IN ILLINOIS, APRIL-JUNE 2002

Kaskaskia River Drainage

Seven new maximum discharge values were recorded at streamflow-gaging stations during this period of flooding in the Kaskaskia River drainage (table 1, on page 15). Most of the records were broken as result of the rainfall during the first 2 weeks of May. Five-year or greater flood discharges occurred at all the stations, except for two stations on small tributaries in the southwestern part of the drainage. The discharge recorded at Kaskaskia River near Cowden, Ill. (05592100) was determined to have been a 500-year flood discharge.

Stage at the three streamflow-gaging stations on the Kaskaskia River with established flood-stage elevations (by the NWS) was above flood stage for 22 days or more; Kaskaskia River near Cowden, Ill. (05592100) was intermittently above flood stage for 24 days (fig. 6). Eight new record stage values were recorded. The stage recorded at Kaskaskia River at Vandalia, Ill. (05592500) during the highest flows was affected by levee breaks upstream of the station and, thus, is not applicable to the discharge.

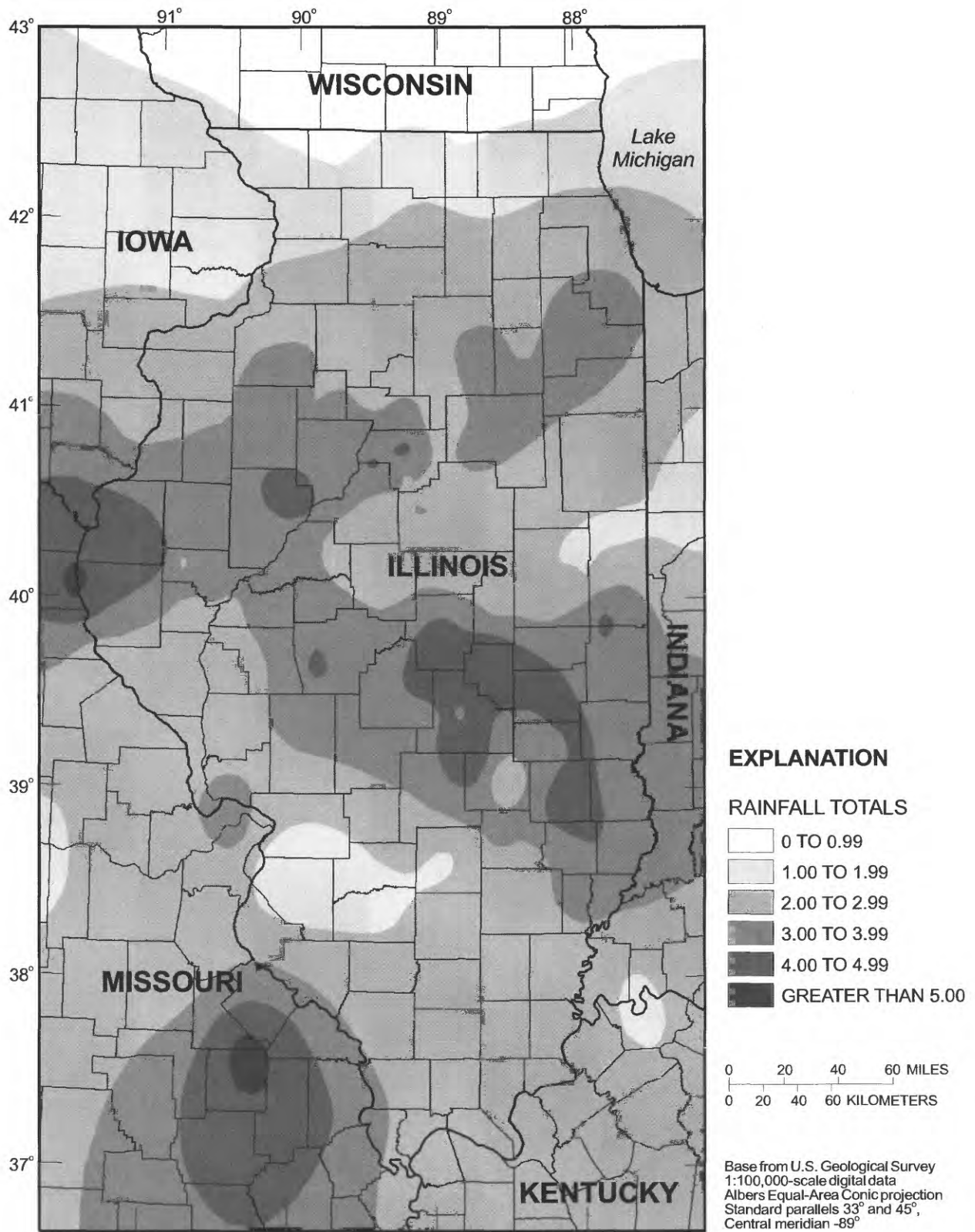


Figure 4. Provisional rainfall totals for Illinois, May 11-13, 2002, from the National Weather Service Cooperative Observer Network.

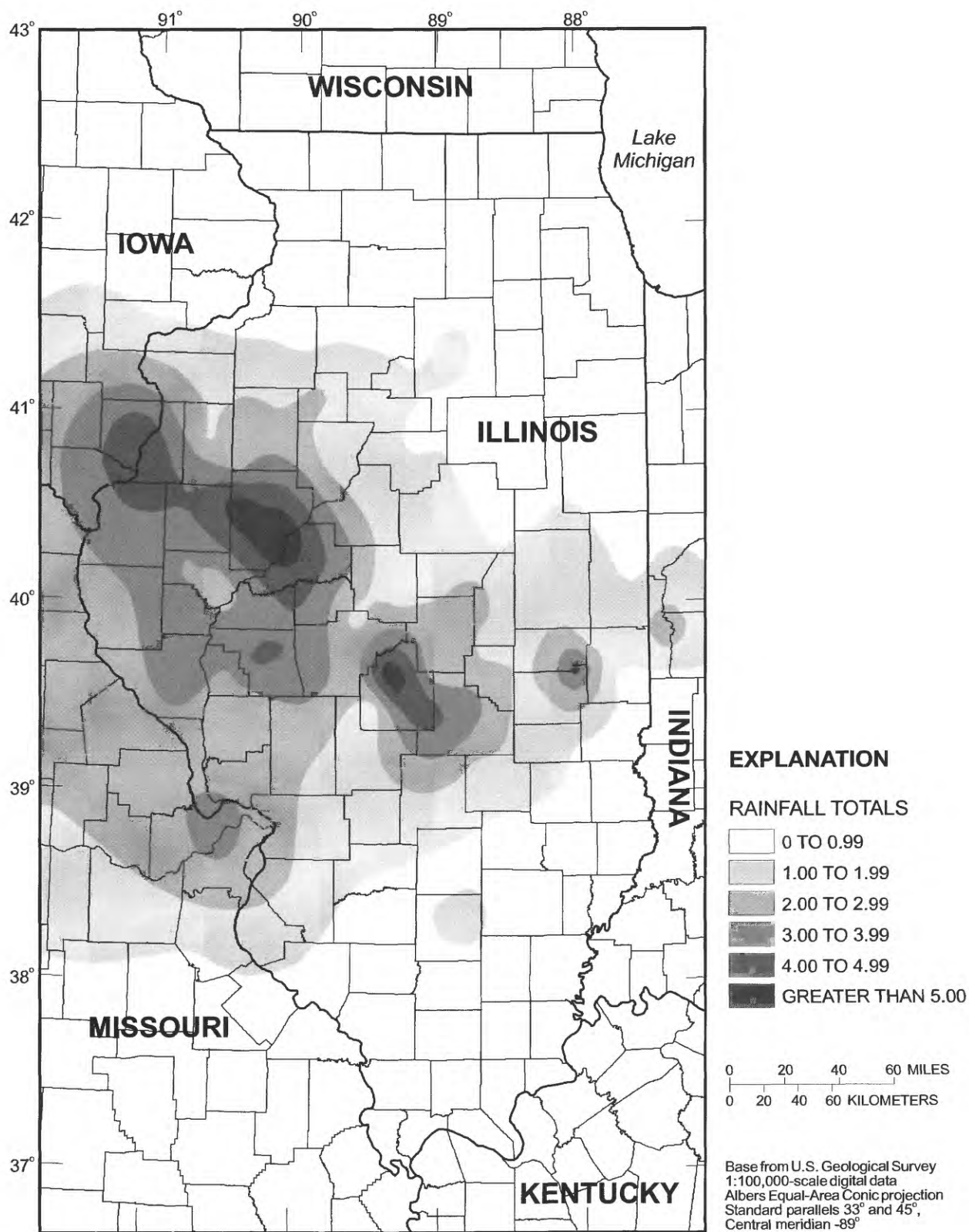


Figure 5. Provisional rainfall totals for Illinois, June 12-13, 2002, from the National Weather Service Cooperative Observer Network.

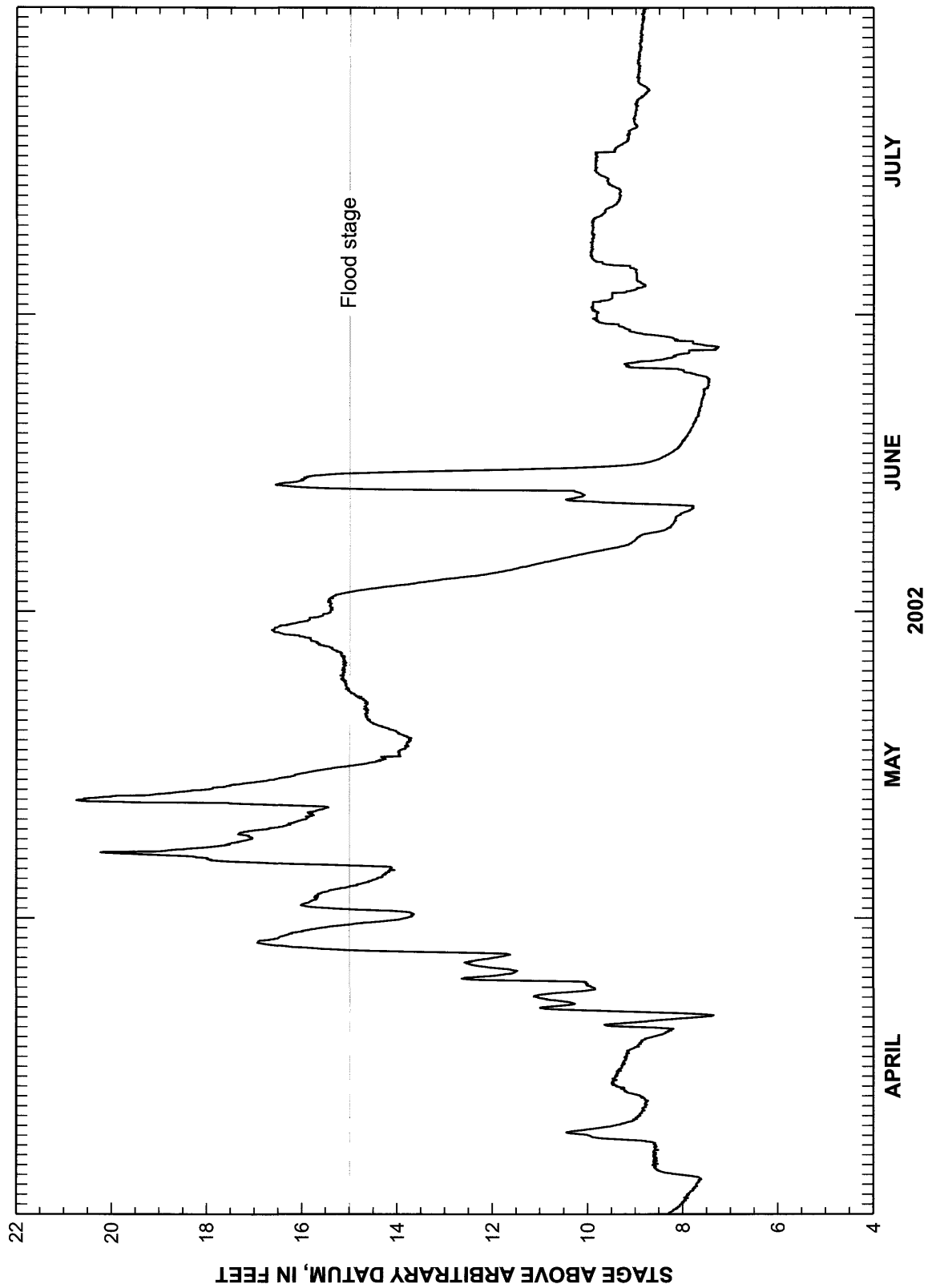


Figure 6. Hydrograph of the stage of Kaskaskia River near Cowden, Ill. (05592100), April-July 2002.

Wabash River Drainage

A new maximum discharge was recorded at Little Wabash River near Effingham, Ill. (03378635) and was determined to have been about a 500-year flood discharge. Five-year or greater flood discharges occurred at all stations, except for Skillet Fork at Wayne City, Ill. (033080500) and the three stations in the Vermilion River drainage. The maximum flooding in the Wabash River drainage occurred as a result of the storms during the first 2 weeks of May.

Stage exceeded flood stage for 14 days or more at 8 of the 11 stations with established flood-stage elevations. Two new maximum stage values were recorded. Little Wabash River at Carmi, Ill. (03381500) was above flood stage for 23 days (fig. 7).

Illinois River Drainage

The greatest flooding within the Illinois River drainage occurred along the Sangamon River. A new maximum discharge was recorded at Sangamon River at Route 48 at Decatur, Ill. (05573540) and was determined to be about a 500-year flood discharge. Streamflow-gaging stations on tributary streams in the northern part of the Sangamon River drainage and other drainages tributary to the Illinois River north of the Sangamon River generally recorded 2-year or less flood discharges but stations on the main stem of the lower Sangamon River recorded 50-year or greater flood discharges. A new maximum stage value was recorded at South Fork Sangamon River near Rochester, Ill. (05576000). The maximum flooding in the Illinois River drainage occurred as a result of the storms during the first 2 weeks of May.

Stations in the Kankakee and Iroquois River drainages recorded 2- to 10-year flood discharges. The highest magnitude flooding occurred at Kankakee River at Momence, Ill. (05520500) and Iroquois River near Foresman, Ind. (05524500).

No large-magnitude flooding occurred in the Des Plaines and Fox River drainages. A 10-year flood discharge was recorded at Deer Creek near Chicago Heights, Ill. (05536235). A 500-year flood discharge was recorded at Tyler Creek at Elgin, Ill. (05550300),

but the drainage probably has been affected by recent urbanization in the basin that has changed the flood-frequency distribution. Illinois River at Marseilles, Ill. (05543500) recorded a 10-year flood discharge, probably the result of combined inflows from the minor flooding simultaneously occurring on the Du Page, Des Plaines and Kankakee Rivers. All the flooding in the Fox River drainage occurred from the storms during the first week in June.

In the lower part of the Illinois River drainage, 10- to 25-year flood discharges were recorded at streamflow-gaging stations on the LaMoine River and Macoupin Creek, with a 10-year flood discharge recorded at Illinois River at Valley City, Ill. (05586100).

No new maximum stages were recorded in the Illinois River drainage. The Illinois River at Henry, Ill. (05558300) recorded 17 days above flood stage, whereas Illinois River at Hardin, Ill. (05587060) recorded 55 days above flood stage (fig. 8). South Fork Sangamon River near Rochester, Ill. (05576000) recorded 40 days above flood stage, whereas Sangamon River at Riverton, Ill. (05576500) recorded 35 days above flood stage.

Rock River Drainage

A new maximum discharge was recorded at Rock River near Joslin, Ill. (05447500). The higher-magnitude flood discharges (5 years and greater) generally were confined to the lower reaches of the Rock River drainage, such as Rock Creek at Morrison, Ill. (05446000) with a 100-year flood discharge. An exception was Kishwaukee River near Perryville, Ill. (05440000), which recorded a 10-year flood discharge. All of the high flows in the Rock River drainage occurred as a result of storms during the first week of June.

New maximum stages were recorded at Rock River near Joslin, Ill. (05447500) and Rock Creek at Morrison, Ill. (05446000). Rock River near Joslin, Ill. (05446500) was above flood stage for 9 days (fig. 9), whereas Pecatonica River at Freeport, Ill. (05435500) and Kishwaukee River near Perryville, Ill. (05440000) were above flood stage for 5 days.

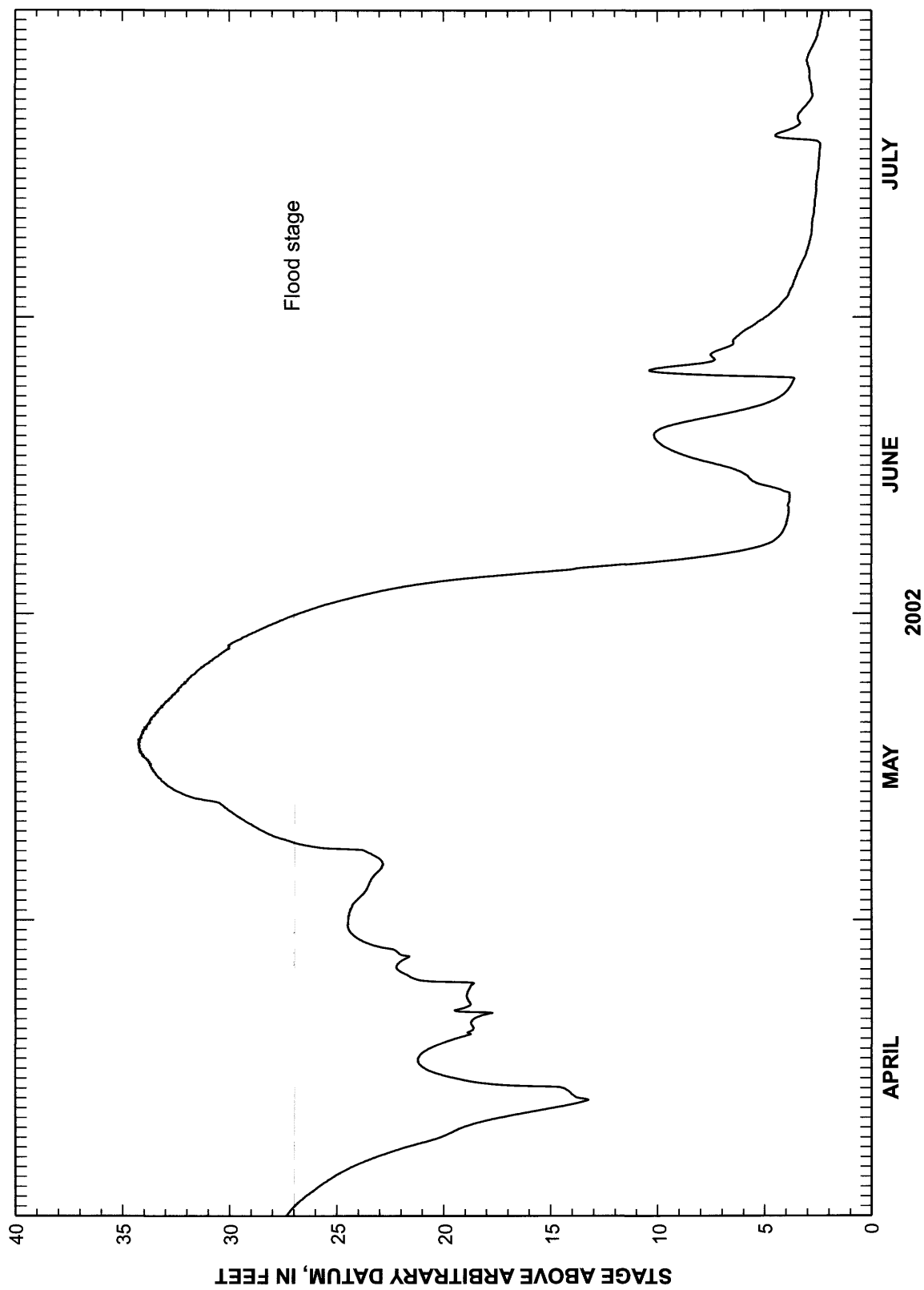


Figure 7. Hydrograph of the stage of Little Wabash River at Carmi, Ill. (03381500), April-July 2002.

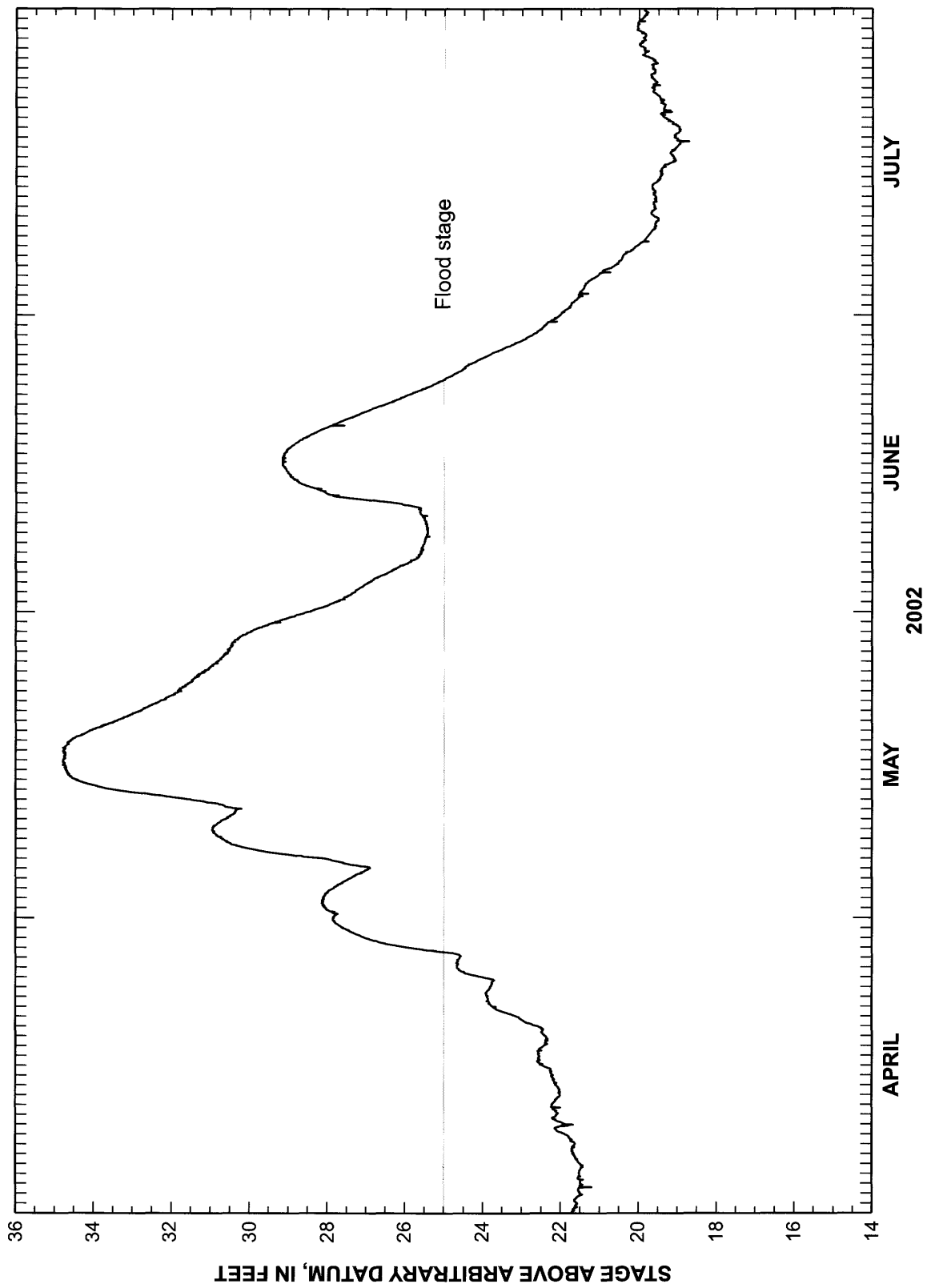


Figure 8. Hydrograph of the stage of Illinois River at Hardin, Ill. (05587060), April-July 2002.

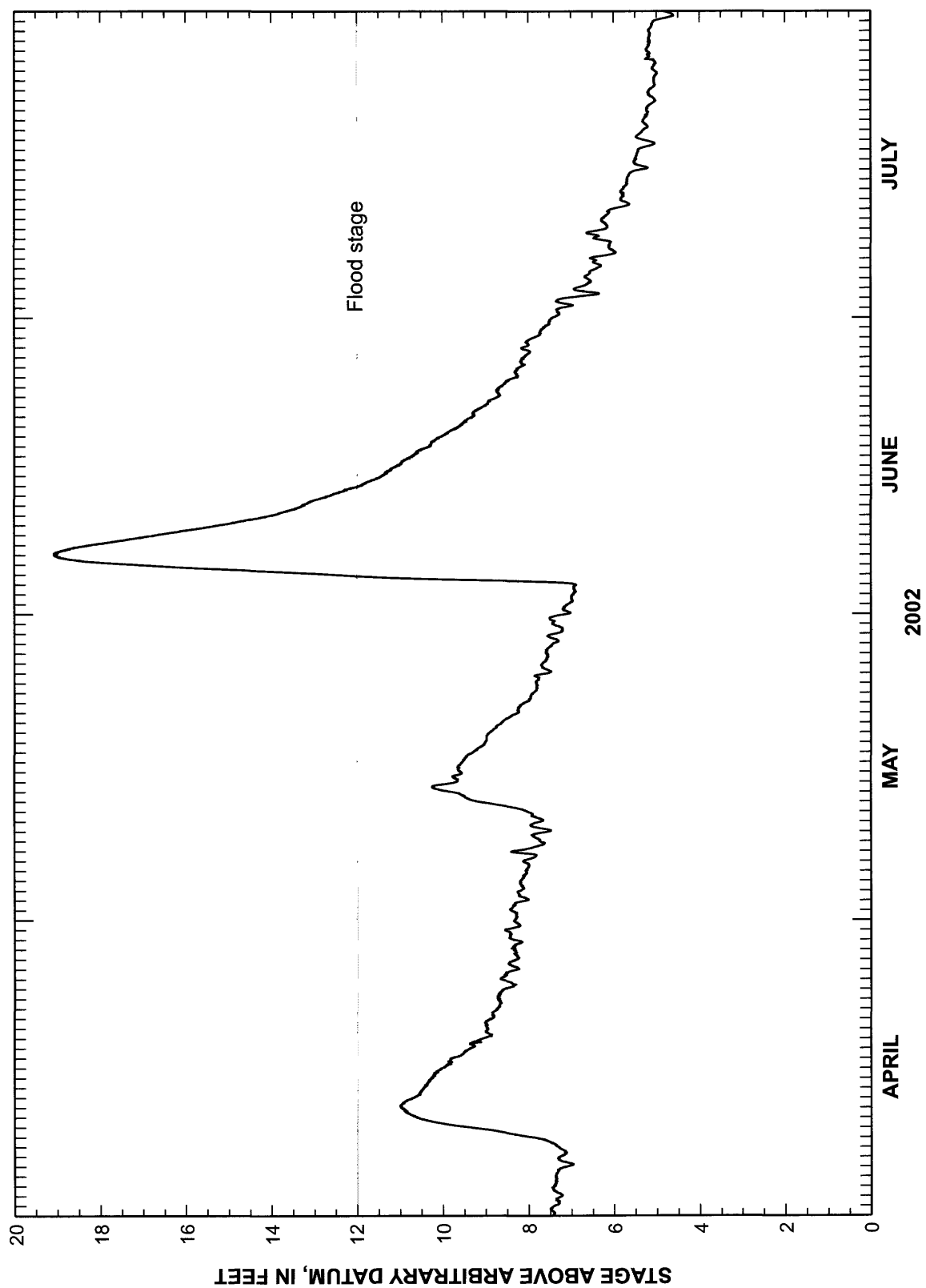


Figure 9. Hydrograph of the stage of Rock River near Joslin, Ill. (05446500), April-July 2002.

Other Tributaries to the Mississippi and Ohio Rivers

A new maximum discharge and stage was recorded at Apple River near Hanover, Ill. (05419000) and the discharge was determined to be a 50-year flood discharge. Bear Creek near Marcelline, Ill. (05495500) recorded a 20-year flood discharge. Sinsinawa River near Menominee, Ill. (05414820), Green River near Geneseo, Ill. (05447500), Cahokia Creek at Edwardsville, Ill. (05587900), and Pope Creek near Keithsburg, Ill. (05467000) recorded 10-year flood discharges. The remainder of the streamflow-gaging stations on other tributaries to the Mississippi and Ohio Rivers recorded 5-year or less flood discharges. Flooding in northwestern Illinois was the result of storms during the first week of June. Flooding in west-central Illinois occurred during the first 2 weeks of May and minor flooding again occurred during the second week of June.

SUMMARY

Widespread flooding occurred throughout most of Illinois in spring 2002 as a result of multiple intense rainstorms that moved through the State during an extended period from the last 2 weeks in April through the month of May in central and southern Illinois, the first week in June in northern Illinois, and the second week in June in west-central Illinois. Discharge or stage records for this flood period are presented for 193 streamflow-gaging stations throughout Illinois and in drainages just upstream of the State.

New maximum instantaneous discharge was recorded at 12 streamflow-gaging stations during this flood period, and new maximum stage was recorded at 15 stations. Flood stage was exceeded for at least 1 day during this 2-month period at 67 of the 82 stations with established flood-stage elevations determined by the National Weather Service. Of the 162 streamflow-gaging stations for which flood-frequency distributions have been determined, a 5-year or greater flood discharge was recorded at 87 stations. A 100-year or greater flood discharge was recorded at 6 stations.

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- Federal Emergency Management Agency, 2002, Information on Federally declared disasters: accessed August 5, 2002, at URL <http://www.fema.gov/diz02/d1416.shtm>
- Illinois State Water Survey, 2002, Maps and data of the Heavy Spring 2002 Rainfall in the Midwest: accessed August 12, 2002, at URL <http://www.sws.uiuc.edu/atmos/statecli/Flood2002/flood2002.htm>
- Interagency Advisory Committee on Water Data, 1982, Guidelines for determining flood flow frequency: Hydrology Subcommittee Bulletin 17B, 28 p. and appendixes.

Table 1. Flood-flow data at selected U.S. Geological Survey streamflow-gaging stations in Illinois and adjacent States

[Stage and discharge values in bold type are new maximums for the period of record at the station; ft³/s, cubic feet per second; NWS, National Weather Service; --, not available or applicable; ne, flood-frequency distribution not established; >, greater than; <, less than]
Current (2002) type of record: Q, continuous stage and discharge; GH, continuous stage; CS, annual maximum discharge (crest-stage gage).

Station number	Station Name	Drainage area, in square miles	Period of record, water years (may include gaps in record)	Previous maximum flood						Flood period of April 19-June 20, 2002					
				Current type of record	Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Water year of maximum peak	Water year of maximum stage, if different than date of maximum peak	Approximate recurrence interval of maximum discharge, in years	Date of maximum discharge	Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Approximate recurrence interval of maximum discharge, in years	Flood stage (NWS), in feet above arbitrary datum	Period, in days, of daily mean stage above flood stage
03336645	Middle Fork Vermilion River above Oakwood, IL	432	1979-current	Q	15,500	20.46	1994	--	50	12-May	4,490	8.34	1.25	--	--
03337000	Boneyard Creek at Urbana, IL	4.46	1948-current	Q	946	9.93	1993	--	25	11-Jun	535	18.33 ^b	2	--	--
03338780	North Fork Vermilion River near Bismarck, IL	262	1989-current	Q	20,100	22.45	1990/1994	1994	15	13-May	3,620	12.31	1.25	--	--
03339000	Vermilion River near Danville, IL	1,290	1915-current	Q	48,700	31.56	1939	1994	200	13-May	15,500	18.54	2	18.0	1
03341500	Wabash River at Terre Haute, IN	12,263	1928-current	Q	189,000	30.50	1943	--	200	15-May	78,500	23.26	5	14.0	>22
03342000	Wabash River at Riverton, IN	13,161	1939-current	Q	201,000	29.36	1943	--	200	17-May	86,400	22.81	5	15.0	44
03343000	Wabash River at Vincennes, IN	13,706	1930-current	GH	--	29.33	1943	--	ne	17-May	--	26.66	ne	17.5	27
03343400	Embaras River near Camargo, IL	186	1961-current	Q	8,040	17.33	1994	--	50	13-May	7,540	17.04	50	--	--
03345500	Embaras River at Ste. Marie, IL	542	1908-current	Q	44,800	26.54	1950	1957	50	13-May	38,300	26.28	20	19.0	14
03346000	North Fork Embarras River near Oblong, IL	318	1941-current	Q	27,100	24.38	1950	--	60	13-May	17,000	23.13	10	19.0	3
03346500	Embaras River at Lawrenceville, IL	2,333	2002-current	Q	--	--	--	--	ne	16-May	41,800	41.56	ne	--	--
03377500	Wabash River at Mount Carmel, IN	28,635	1928-current	Q	305,000	27.54	1943	--	80	17-May	237,000	32.35	20	19.0	43
03378000	Bonpas Creek at Browns, IL	228	1941-current	Q	7,500	24.04	1961	--	80	14-May	5,320	22.32 ^b	15	--	--
03378500	Wabash River at New Harmony, IN	29,234	1939-current	GH	--	23.84	1943	--	ne	18-May	--	21.79	ne	15.0	42
03378635	Little Wabash River near Effingham, IL	240	1967-current	Q	17,800	21.19	1996	--	50	13-May	32,000	24.34	500	--	--
03379500	Little Wabash River below Clay City, IL	1,131	1915-current	Q	47,000	26.67	1950	--	40	15-May	35,900	24.66	15	16.0	27
03380500	Skillet Fork at Wayne City, IL	464	1909-current	Q	59,400	26.68	1990	1961	200	14-May	7,660	16.95	2	15.0	2
03381500	Little Wabash River at Carmi, IL	3,102	1940-current	Q	46,900	36.70	1961	1961	100	18-May	37,200	34.22	30	27.0	23
03381700	Ohio River at Old Shawneetown, IL	141,000	2002-current	Q	--	--	--	--	ne	23-May	640,000	44.5	ne	--	--
03382100	South Fork Saline River nr Carrier Mills, IL	147	1966-current	Q	5,160	16.32	1982	--	20	14-May	3,380	14.69	5	--	--
03384450	Lusk Creek near Eddyville, IL	42.9	1968-current	Q	16,100	27.78	1985	--	100	13-May	4,660	15.67	2	--	--
03385000	Hayes Creek at Glendale, IL	19.1	1950-current	CS	9,450	19.14	1985	--	200	13-May	2,030	14.17	2	--	--
03611500	Ohio River at Metropolis, IL	203,000	1928-current	Q	1,850,000	66.60	1937	--	ne	24-May	822,000	52.69 ^c	ne	--	--
03612000	Cache River at Foran, IL	244	1923-current	Q	9,630	42.29	1935	--	25	15-May	6,050	33.18 ^b	5	--	--
05414820	Sinsinawa River near Menominee, IL	39.6	1968-current	Q	17,000	14.37	1999	--	50	4-Jun	7,630	12.01	10	--	--
05419000	Apple River near Hanover, IL	247	1935-current	Q	12,000	26.12	1946	--	25	4-Jun	13,700	27.91	50	20.0	1
05420500	Mississippi River at Clinton, IA	85,600	1874-current	Q	307,000	24.65	1965	--	ne	25-Apr	168,000	17.26	ne	17.0	3
05430500	Rock River at Alton, WI	3,340	1914-current	Q	13,000	13.05	1929	1916	50	20-Apr	4,200	6.99	1.25	9.0	0
05434500	Pecatonica River at Martintown, WI	1,034	1940-current	Q	15,100	21.46	1969	--	30	7-Jun	3,060	13.57	1.25	13.5	1
05435500	Pecatonica River at Freeport, IL	1,326	1914-current	Q	18,400	19.76	1929	--	25	6-Jun	4,880	13.54	2	13.0	5

Table 1. Flood-flow data at selected U.S. Geological Survey streamflow-gaging stations in Illinois and adjacent States—Continued

Station number	Station Name	Drainage area, in square miles	Period of record, water years (may include gaps in record)	Current type of record	Previous maximum flood					Flood period of April 19–June 20, 2002					
					Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Water year of maximum peak	Water year of maximum stage, if different than date of maximum peak	Approximate recurrence interval of maximum discharge, in years	Data of maximum discharge	Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Approximate recurrence interval of maximum discharge, in years	Flood stage (NWS), in feet above arbitrary datum	Period, in days, of daily mean stage above flood stage
05436500	Sugar River near Brodhead, WI	523.00	1914–current	Q	14,800	11.40	1915	--	70	5-Jun	1,410	4.41	1.25	5.0	0
05437500	Rock River at Rockton, IL	6,363	1904–current	Q	32,500	15.54	1916	1975	50	9-Jun	13,400	8.84 ^b	1.25	10.0	0
05438283	Piscasaw Creek near Walworth, WI	9.58	1993–current	Q	571	10.05	1999	1993	ne	4-Jun	90	6.42	ne	--	--
05438500	Kishwaukee River at Belvidere, IL	538	1940–current	Q	11,900	14.19	1994	--	25	5-Jun	4,570	9.32	2	9.0	1
05439000	South Branch Kishwaukee River at DeKalb, IL	77.7	1926–current	Q	3,500	15.80	1983	--	200	5-Jun	1,090	9.86	2	--	--
05439500	South Branch Kishwaukee River nr Fairdale, IL	387	1940–current	Q	25,400	13.37	1996	--	500	4-Jun	10,900	10.95	1.25	--	--
05440000	Kishwaukee River near Perryville, IL	1,099	1940–current	Q	24,200	23.54	1996	--	50	5-Jun	15,700	18.59	10	12.0	5
05440700	Rock River at Byron, IL	7,990	2000–current	Q	--	--	--	--	ne	5-Jun	31,600	14.72	ne	--	--
05443500	Rock River at Como, IL	8,753	1915–current	Q	59,700	17.51	1973	1938	70	5-Jun	49,100	13.69	20	10.0	2
05444000	Elkhorn Creek near Penrose, IL	146	1940–current	Q	6,770	17.75	1974	1946	20	5-Jun	4,720	13.84	5	--	--
05446000	Rock Creek at Morrison, IL	164	1940–2000	CS	5,770	17.12	1946	1990	200	5-Jun	5,230	17.84 ^{bd}	100	--	--
05446500	Rock River near Joslin, IL	9,549	1940–current	Q	46,500	18.88	1993	1997	20	7-Jun	47,700	19.24	20	12.0	9
05447500	Green River near Geneseo, IL	1,003	1936–current	Q	12,100	21.59	1974	1969	30	5-Jun	9,520	17.93	10	15.0	2
05448000	Mill Creek at Milan, IL	62.4	1940–current	Q	9,300	12.65	1973	--	50	12-May	1,520	5.98	1.25	--	--
05466000	Edwards River near Orion, IL	155	1941–current	Q	8,910	15.52	1951	1974	50	12-May	3,880	14.17	2	--	--
05466500	Edwards River near New Boston, IL	445	1935–current	Q	18,000	23.33	1973	--	500	15-May	4,300	22.11	2	--	--
05467000	Pope Creek near Keithsburg, IL	174	1935–current	Q	8,900	29.25	1973	2001	60	12-May	4,840	28.04	10	--	--
05468500	Cedar Creek at Little York, IL	132	1941–current	CS	18,100	18.76	1993	--	100	13-Jun	3,080	15.05	5	--	--
05469000	Henderson Creek near Oquawka, IL	432	1935–current	Q	34,600	32.65	1982	1993	200	14-Jun	6,530	25.56	2	--	--
05474500	Mississippi River at Keokuk, IA	119,000	1878–current	Q	446,000	27.58	1993	--	ne	29-Apr	193,100	--	ne	16.0	ne
05495500	Bear Creek near Marceline, IL	349	1944–current	Q	35,500	28.38	1996	1985	100	12-May	23,700	23.56	20	--	--
05502020	Hadley Creek near Barry, IL	40.9	1956–current	CS	9,000	15.31	1973\1979	--	25	11-May	3,630	9.56	2	--	--
05512500	Bay Creek at Pittsfield, IL	39.4	1940–current	Q	13,700	14.92	1993	--	15	6-May	5,270	12.22	2	--	--
05518000	Kankakee River at Shelby, IN	1,779	1923–current	Q	7,650	--	1982	--	300	19-May	5,110	11.72	5	9.0	24
05520500	Kankakee River at Momence, IL	2,294	1915–current	Q	16,000	10.51	1979	--	500	12-May	10,300	5.85	10	5.0	3
05524500	Iroquois River near Foresman, IN	449	1949–current	Q	5,930	24.42	1958	--	70	13-May	4,230	19.32 ^c	10	--	--
05525000	Iroquois River at Iroquois, IL	686	1945–current	Q	10,400	26.31	1958	--	200	14-May	4,440	19.91	2	18.0	7
05525500	Sugar Creek at Milford, IL	446	1949–current	Q	22,900	28.16	1951	1994	50	13-May	7,920	20.38	2	--	--
05526000	Iroquois River near Chebanse, IL	2,091	1924–current	Q	27,000	21.68	1933	1979	25	13-May	18,500	15.41	5	16.0	0
05527500	Kankakee River near Wilmington, IL	5,150	1915–current	Q	75,900	13.88	1957	1968	40	13-May	44,600	8.17	5	5.0	6
05527800	Des Plaines River at Russell, IL	123	1960–current	Q	2,130	10.75	2000	1976\1986	25	13-Apr	527	6.87	2	7.0	0
05527950	Mill Creek at Old Mill Creek, IL	61.0	1962–current	Q	1,160	12.88	1999	1976	15	4-Jun	411	10.31	1.25	--	--
05528000	Des Plaines River near Gurnee, IL	232	1946–current	Q	3,530	11.95	1986	--	100	13-Apr	734	5.59	1.25	7.0	0
05528500	Buffalo Creek near Wheeling, IL	19.6	1953–current	Q	887	7.94	1982	--	50	4-Jun	296	5.22	1.25	--	--
05529000	Des Plaines River near Des Plaines, IL	360	1941–current	Q	4,900	10.88	1986	--	60	5-Jun	1,920	4.55	1.25	5.0	0

Table 1. Flood-flow data at selected U.S. Geological Survey streamflow-gaging stations in Illinois and adjacent States—Continued

Previous maximum flood										Flood period of April 19–June 20, 2002					
Station number	Station Name	Drainage area, in square miles	Period of record, water years (may include gaps in record)	Current type of record	Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Water year of maximum peak	Water year of maximum stage, if different than date of maximum peak	Approximate recurrence interval of maximum discharge, in years	Date of maximum discharge	Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Approximate recurrence interval of maximum discharge, in years	Flood stage (NWS), in feet above arbitrary datum	Period, in days, of daily mean stage above flood stage
05529500	Mc Donald Creek near Mount Prospect, IL	7.93	1953-current	Q	806	8.08	1987	--	70	4-Jun	151	4.50	1.25	--	--
05530000	Weller Creek at Des Plaines, IL	13.2	1951-current	Q	1,590	15.09	1967	--	30	11-May	691	6.34	1.25	--	--
05530990	Salt Creek at Rolling Meadows, IL	30.5	1974-current	Q	1,650	14.03	1987	--	70	4-Jun	805	8.33	2	8.5	0
05531044	Salt Creek near Elk Grove Village, IL	51.9	1992-current	GH	--	14.78	1997	--	ne	4-Jun	954	13.47	ne	--	--
05531175	Salt Creek at Wood Dale, IL	74.7	2000-current	GH	--	--	--	--	ne	5-Jun	--	12.82	ne	--	--
05531300	Salt Creek at Elmhurst, IL	91.5	1960-current	Q	2,230	13.56	1972	1989	100	5-Jun	1,240	10.84 ^b	2	--	--
05531410	Salt Creek at 22nd St. at Oakbrook IL	103	1994-current	GH	--	55.03	1995	--	ne	5-Jun	--	53.38	ne	--	--
05531500	Salt Creek at Western Springs, IL	115	1946-current	Q	3,540	10.54	1987	--	500	12-May	1,220	7.36	2	7.5	0
05532000	Addison Creek at Bellwood, IL	17.9	1952-current	Q	1,120	12.84	1987	--	200	11-May	326	5.63	1.25	--	--
05532300	Salt Creek at Brookfield, IL (North Riverside)	146	1990-current	GH	--	10.63	1997	--	ne	12-May	--	7.35	ne	--	--
05532500	Des Plaines River at Riverside, IL	630	1914-current	Q	9,770	9.90	1987	--	500	12-May	3,720	6.35	2	6.0	3
05533000	Flag Creek near Willow Springs, IL	16.5	1951-current	Q	2,680	13.71	1961	--	60	12-May	830	7.94	2	--	--
05533400	Sawmill Creek near Lemont, IL	13.0	1961-current	Q	3,070	17.53	1996	--	200	12-May	1,060	13.97	5	--	--
05534500	North Branch Chicago River at Deerfield, IL	19.7	1953-current	Q	933	11.52	1987	--	100	4-Jun	415	9.64	2	--	--
05535000	Skokie River at Lake Forest, IL	13.0	1952-current	Q	496	8.35	1997	1982	30	4-Jun	273	5.38	2	--	--
05535070	Skokie River near Highland Park, IL	21.1	1967-current	Q	895	9.13	1987	1997	30	4-Jun	534	8.12	2	--	--
05535500	Wf of Nb Chicago River at Northbrook IL	11.5	1953-current	Q	1,190	10.10	1987	--	200	11-May	384	5.83	1.25	--	--
05536000	North Branch Chicago River At Niles, IL	100	1951-current	Q	2,590	11.35	1987	--	100	12-May	1,270	8.03	2	--	--
05536105	Nb Chicago River at Albany Avenue at Chicago, IL	113	1990-current	Q	2,390	6.81	1997	--	ne	12-May	1,360	5.58	ne	--	--
05536215	Thorn Creek at Glenwood, IL	24.7	1950-current	Q	2,700	11.26	1996	1968	50	12-May	1,280	9.96	5	--	--
05536235	Deer Creek near Chicago Heights, IL	23.1	1948-current	Q	1,380	11.79	1957	1990	500	12-May	755	11.49	10	10.0	2
05536255	Butterfield Creek at Flossmoor, IL	23.5	1948-current	Q	2,220	12.59	1996	--	30	12-May	949	10.52	5	9.5	1
05536265	Lansing Ditch near Lansing, IL	8.84	1948-current	Q	461	10.18	1948	1954	70	12-May	126	7.88	1.25	--	--
05536275	Thorn Creek at Thornton, IL	104	1948-current	Q	4,700	17.06	1957	1981	30	12-May	2,920	14.04	5	10.0	2
05536290	Little Calumet River at South Holland, IL	208	1948-current	Q	4,440	20.50	1957	1990	50	13-May	3,260	18.38	5	13.0	3
05536340	Midlothian Creek at Oak Forest, IL	12.6	1951-current	Q	627	9.00	1973	1957	100	12-May	263	4.53	2	6.0	0
05536500	Tinley Creek near Palos Park, IL	11.2	1951-current	Q	2,010	10.30	1996	1954	60	12-May	837	8.57	5	--	--
05536995	Chicago Sanitary and Ship Canal at Romeoville, IL	739	1985-current	Q	19,466	26.43	1997	1996	100	27-Apr	9,511	24.44	<1.25	--	--
05537500	Long Run near Lemont, IL	20.9	1951-current	Q	5,310	11.10	1996	--	500	12-May	811	6.93	2	--	--
05539000	Hickory Creek at Joliet, IL	107	1945-current	Q	17,300	14.90	1981	--	200	12-May	4,400	7.27	5	7.0	0
05539900	W Branch Du Page River nr West Chicago, IL	28.5	1961-current	Q	984	10.78	1983	1997	30	4-Jun	764	9.97	5	--	--
05540060	Kress Creek at West Chicago, IL	18.1	1961-current	Q	1,980	9.24	1996	--	500	12-May	273	6.45	2	--	--
05540091	Spring Brook at Forest Preserve near Warrenville, IL	6.83	1992-current	Q	393	12.60	1996	--	ne	12-May	205	10.46	ne	--	--
05540095	West Br Du Page River near Warrenville, IL	90.4	1968-current	Q	3,470	6.41	1996	--	100	12-May	1,600	4.13	2	4.0	0
05540130	West Branch Du Page River near Naperville, IL	123	1989-current	Q	6,620	14.31	1996	--	500	12-May	1,860	9.15	1.25	--	--

Table 1. Flood-flow data at selected U.S. Geological Survey streamflow-gaging stations in Illinois and adjacent States—Continued

Station number	Station Name	Drainage area, in square miles	Period of record, water years (may include gaps in record)	Previous maximum flood						Flood period of April 19-June 20, 2002					
				Current type of record	Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Water year of maximum peak	Water year of maximum stage, if different than date of maximum peak	Approximate recurrence interval of maximum discharge, in years	Date of maximum discharge	Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Approximate recurrence interval of maximum discharge, in years	Flood stage (NWS), in feet above arbitrary datum	Period, in days, of daily mean stage above flood stage
05540160	E Br Du Page River near Downers Grove, IL	26.6	1961-current	Q	1,720	4.73	1972	--	200	12-May	474	13.54 ^b	1.25	--	--
05540195	St. Joseph Creek At U.S. Route 34 at Lisle, IL	11.1	1989-current	Q	1,280	12.89	1996	--	30	12-May	437	8.48	1.25	--	--
05540250	East Branch Du Page River at Bolingbrook, IL	75.8	1989-current	Q	3,980	23.75	1996	--	500	12-May	1,050	20.50	2	--	--
05540275	Spring Brook at 87th Street near Naperville, IL	9.90	1988-current	Q	1,750	10.77	1996	--	500	12-May	272	6.60	2	--	--
05540500	Du Page River at Shorewood, IL	324	1941-current	Q	17,300	14.03	1996	--	500	12-May	4,130	6.45	2	8.0	0
05542000	Mazon River near Coal City, IL	455	1940-current	Q	22,400	19.70	1983	1958	50	13-May	14,000	15.02	5	8.5	2
05543500	Illinois River at Marseilles, IL	8,259	1919-current	Q	95,000	16.85	1997	--	30	13-May	79,500	14.56	10	--	--
05545750	Fox River near New Munster, WI	811	1940-current	Q	7,520	14.10	1960	1994	100	5-Jun	2,480	11.50 ^b	2	10.0	4
05547755	Squaw Creek at Round Lake, IL	17.0	1990-current	Q	312	6.42	1993	--	15	7-Jun	248	5.54	5	--	--
05548150	North Br Nippersink Crk nr Genoa City, WI	13.6	1962-current	Q	517	13.90	1999	--	100	4-Jun	237	11.96	5	--	--
05548280	Nippersink Creek near Spring Grove, IL	192	1966-current	Q	2,910	14.26	1986	--	20	7-Jun	893	8.47	1.25	--	--
05548500	Fox River at Johnsbury, IL	1,205	1939-current	GH	--	7.55	--	1960	ne	9-Jun	--	4.46	ne	6.5	0
05549500	Fox River near McHenry, IL	1,250	1941-current	GH	--	6.36	--	1960	ne	28-May	--	4.35	ne	4.0	5
05550000	Fox River at Algonquin, IL	1,403	1916-current	Q	6,610	4.50	1960\1979	1916	50	6-Jun	3,740	3.20	2	3.0	5
05550300	Tyler Creek at Elgin, IL	38.9	1962-current	Q	953	8.23	1999	--	500	4-Jun	1,360	8.08	500	--	--
05550500	Poplar Creek at Elgin, IL	35.2	1952-current	Q	1,180	6.78	1997	--	100	5-Jun	526	4.57	2	--	--
05551000	Fox River at South Elgin, IL	1,556	1989-current	GH	6,990	14.45	1993	--	ne	6-Jun	4,100	13.79	ne	--	--
05551200	Ferson Creek near St. Charles, IL	51.7	1961-current	Q	2,560	9.66	1997	1965	50	5-Jun	1,430	6.73	5	5.0	1
05551330	Mill Creek near Batavia, IL	27.6	1998-current	Q	1,080	7.52	1999	--	ne	5-Jun	368	6.46	ne	--	--
05551675	Blackberry Creek near Montgomery, IL	55.0	1996-current	Q	1,040	8.61	1999	--	ne	5-Jun	608	7.63	ne	--	--
05551700	Blackberry Creek near Yorkville, IL	70.2	1961-current	Q	5,510	13.16	1996	--	500	6-Jun	529	7.31	2	6.0	6
05552500	Fox River at Dayton, IL	2,642	1915-current	Q	55,400	36.47	1996	1960	500	5-Jun	16,900	14.65	2	12.0	3
05554000	North Fork Vermilion River near Charlotte, IL	186	1943-current	CS	4,900	17.09	1987\1990	1987	15	13-May	3,800	14.54	5	--	--
05554500	Vermilion River at Pontiac, IL	579	1943-current	Q	13,100	19.16	1983	--	30	13-May	9,930	16.35	10	14.0	2
05555300	Vermilion River near Leonore, IL	1,251	1931-current	Q	33,500	27.13	1958	1982	30	13-May	21,200	22.65 ^b	10	16.0	4
05556500	Big Bureau Creek at Princeton, IL	196	1936-current	Q	12,500	16.01	1974	--	50	5-Jun	7,980	12.76	10	8.0	2
05557500	East Bureau Creek near Bureau, IL	99	1936-current	CS	9,260	17.39	1997	1938	80	12-May	2,250	12.62	2	--	--
05558300	Illinois River at Henry, IL	13,543	1982-current	Q	117,000	32.02	1997	1985	20	14-May	88,500	28.28	5	23.0	17
05560500	Farm Creek at Farmdale, IL	27.4	1949-current	Q	1,050 ^a	6.55 ^a	1980	1982	15	12-May	597	9.37 ^b	2	--	--
05561500	Fondulac Creek near East Peoria, IL	5.54	1948-current	Q	560	4.66	1979	--	25	12-May	172	3.13	1.25	--	--
05563000	Kickapoo Creek near Kickapoo, IL	119	1945-current	CS	27,500	17.08	1967	--	25	12-May	6,580	13.90	2	--	--
05563500	Kickapoo Creek at Peoria, IL	297	1942-current	CS	48,500	29.68	1974	--	300	12-May	8,890	15.99	2	--	--
05567500	Mackinaw River near Congerville, IL	767	1945-current	Q	44,800	20.21	1983	--	100	12-May	19,400	18.13	5	13.0	3
05568000	Mackinaw River near Green Valley, IL	1,073	1921-current	Q	51,000	28.29	1983	1993	100	14-May	14,300	27.59	5	24.0	4
05568500	Illinois River at Kingston Mines, IL	15,818	1939-current	Q	88,800	26.02	1983	1943	50	20-May	48,300	23.84	2	20.0	13

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				Current type of record	Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Water year of maximum peak	Water year of maximum stage, if different than date of maximum peak	Approximate recurrence interval of maximum discharge, in years	Date of maximum discharge	Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Approximate recurrence interval of maximum discharge, in years	Flood stage (NWS), in feet above arbitrary datum	Period, in days, of daily mean stage above flood stage	
05568800	Indian Creek near Wyoming, IL	62.7	1960–current	Q	6,540	23.81	1974	--	--	100	12-May	2,000	20.77	2	--	--
05569500	Spoon River at London Mills, IL	1,072	1943–current	Q	41,000	28.03	1974	--	--	200	13-May	13,200	23.29	5	15.0	4
05570000	Spoon River at Seville, IL	1,636	1914–current	Q	37,300	33.10	1924	1993	1993	60	14-May	24,700	28.45	10	22.0	9
05570910	Sangamon River at Fisher, IL	240	1979–current	Q	13,000	21.58	1994	--	--	50	13-May	4,040	16.12	2	--	--
05572000	Sangamon River at Monticello, IL	550	1908–current	Q	19,000	19.06	1927	1994	1994	70	14-May	5,670	15.77	2	13.0	12
05573540	Sangamon River at Rt 48 at Decatur, IL	938	1983–current	Q	17,100	23.04	1994	1983	1983	15	12-May	31,900	24.35	500	--	--
05576000	South Fork Sangamon River nr Rochester, IL	867	1949–current	Q	20,300	32.40	1994	--	--	50	13-May	17,000	33.65	30	20.0	40
05576500	Sangamon River at Riverton, IL	2,618	1908–current	Q	68,700	31.52	1943	--	--	500	14-May	49,200	30.07	200	18.0	35
05577500	Spring Creek at Springfield, IL	107	1948–current	Q	10,700	16.23	1996	--	--	50	12-May	5,860	14.01	10	--	--
05578500	Salt Creek near Rowell, IL	335	1908–current	Q	24,500	29.21	1968	--	--	200	14-May	3,230	19.86	2	19.0	4
05579500	Lake Fork near Cornland, IL	214	1948–current	Q	8,930	23.11	1979	--	--	25	13-May	4,950	20.41	5	17.0	6
05580000	Kickapoo Creek at Waynesville, IL	227	1948–current	Q	24,600	16.91	1981	--	--	100	12-May	3,840	13.41	1.25	--	--
05580950	Sugar Creek near Bloomington, IL	34.4	1975–current	Q	6,600	14.02	1983	--	--	30	13-Jun	1,690	7.15	1.25	--	--
05582000	Salt Creek near Greenview, IL	1,804	1942–current	Q	41,200	20.50	1943	--	--	50	14-May	17,600	15.71	5	16.0	0
05583000	Sangamon River near Oakford, IL	5,093	1910–current	Q	123,000	25.63	1943	--	--	500	15-May	77,300	23.85	50	18.12 (471 ^a)	10
05584500	La Moine River at Colmar, IL	655	1945–current	Q	38,900	27.03	1985	1965	1965	70	13-May	29,400	25.76	25	18.5	13
05585000	La Moine River at Ripley, IL	1,293	1921–current	Q	28,000	29.15	1985	1995	1995	50	15-May	20,000	28.41	10	22.0	15
05586000	N Fk Mauvaise Terre Cr nr Jacksonville, IL	29.1	1950–current	CS	7,160	12.77	1994	1990	1990	50	11-May	3,940	11.57	10	--	--
05586100	Illinois River at Valley City, IL	26,744	1939–current	Q	123,000	28.61	1943	--	--	25	20-May	103,000	25.48	10	11.0	63
05587000	Macoupin Creek near Kane, IL	868	1921–current	Q	40,100	28.50	1994	1943	1943	100	17-May	29,400	26.60	25	--	--
05587060	Illinois River at Hardin, IL	28,690	1986–current	GH	--	38.20	--	1973	1973	ne	16-May	--	34.80	ne	25.0	55
05587450	Mississippi River at Grafton, IL	171,300	1879–current	Q	598,000	441.96 ^a	1993	--	--	ne	16-May	383,000	28.10 (431.89) ^c	ne	18.0	54
05587900	Cahokia Creek at Edwardsville, IL	212	1969–current	Q	8,200	24.74	1979	--	--	20	13-May	8,120	23.12	10	--	--
05588000	Indian Creek at Wanda, IL	36.7	1941–current	Q	9,340	18.41	1946	--	--	200	12-May	3,600	16.47 ^b	5	--	--
05590800	Lake Fork at Atwood, IL	149	1973–current	Q	4,030	15.39	1979	1994	1994	25	13-May	4,040	15.25	25	--	--
05590950	Kaskaskia River at Chesterville, IL	358	1995–current	Q	8,290	43.86	1996	--	--	ne	13-May	8,880	44.49	ne	--	--
05591200	Kaskaskia River at Cooks Mills, IL	473	1971–current	Q	9,950	17.30	1994	--	--	15	14-May	10,800	17.72	25	8.0	38
05591550	Whitley Creek near Allenville, IL	34.6	1980–current	Q	3,200	13.04	1996	1999	1999	25	12-May	3,140	13.27	25	--	--
05591700	West Okaw River near Lovington, IL	112	1980–current	Q	10,300	16.40	1996	--	--	100	12-May	9,930	16.26	50	--	--
05592000	Kaskaskia River at Shelbyville, IL	1,054	1908–current	Q	8,160 ^a	16.42 ^a	1969	--	--	20	1-Jun	4,920	17.65	5	--	--
05592050	Robinson Creek near Shelbyville, IL	93.1	1980–current	Q	11,300	14.92	1983	1993	1993	20	12-May	7,590	13.73	10	--	--
05592100	Kaskaskia River near Cowden, IL	1,330	1971–current	Q	19,700	19.12	1979	1985	1985	50	12-May	27,900	20.74	500	15.0	24
05592500	Kaskaskia River at Vandalia, IL	1,940	1908–current	Q	30,000 ^a	27.41 ^a	1970	1996	1996	15	7-May	41,000	--	30	18.0	22
05592575	Hickory Creek nr Brownstown, IL	44.2	1989–current	Q	6,250	16.43	1994	--	--	10	13-May	4,610	15.92	5	--	--
05592800	Hurricane Creek near Mulberry Grove, IL	152	1971–current	Q	17,900	20.91	1990	--	--	25	13-May	15,500	21.00	10	--	--

Table 1. Flood-flow data at selected U.S. Geological Survey streamflow-gaging stations in Illinois and adjacent States—Continued

Station number	Station Name	Drainage area, in square miles	Period of record, water years (may include gaps in record)	Current type of record	Previous maximum flood					Flood period of April 19-June 20, 2002					
					Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Water year of maximum peak	Water year of maximum stage, if different than data of maximum peak	Approximate recurrence interval of maximum discharge, in years	Date of maximum discharge	Maximum discharge, in ft ³ /s	Maximum stage, in feet above arbitrary datum	Approximate recurrence interval of maximum discharge, in years	Flood stage (NWS), in feet above arbitrary datum	Period, in days, of daily mean stage above flood stage
05592900	East Fork Kaskaskia River near Sandoval, IL	113	1980-current	Q	17,000	20.03	1990	--	50	13-May	5,960	18.03	5	--	--
05593000	Kaskaskia River at Carlyle, IL	2,719	1908-current	Q	12,300 ^a	25.04 ^a	1996	1970	5	27-May	13,500	23.72	10	--	--
05593020	Kaskaskia River at Posey, IL	2,745	1996-current	GH	--	26.20	--	1993	ne	2-Jun	--	25.47	ne	--	--
05593520	Crooked Creek near Hoffman, IL	254	1975-current	GH	26,900	17.40	1990	--	ne	9-May	--	14.39	ne	12.0	8
05593575	Little Crooked Creek near New Minden, IL	84.3	1968-current	Q	11,900	21.76	1995	--	20	13-May	2,650	17.51	1.25	--	--
05593900	East Fork Shoal Creek near Coffeen, IL	55.5	1964-current	Q	5,910	14.75	1967	1998	50	7-May	5,320	14.88	25	--	--
05593945	Shoal Creek near Pierson, IL	678	1995-current	Q	17,700	60.21	1995	--	ne	8-May	20,400	60.50	ne	--	--
05594000	Shoal Creek near Breese, IL	735	1910-current	Q	23,100	23.02	1950	1979	500	9-May	20,900	22.12	10	14.5	28
05594100	Kaskaskia River near Venedy Station, IL	4,393	1970-current	Q	50,300	25.79	1995	--	15	11-May	35,200	24.07	5	--	--
05594450	Silver Creek near Troy, IL	154	1967-current	Q	10,600	17.94	1979	1990	25	13-May	7,420	17.41	5	--	--
05594800	Silver Creek near Freeburg, IL	464	1971-current	Q	15,300	25.38	1995	--	30	10-May	7,720	19.52	5	--	--
05595200	Richland Creek near Hecker, IL	129	1970-current	Q	23,400	44.40	1996	--	100	12-Jun	3,760	39.62	1.25	--	--
05595240	Kaskaskia River near Red Bud, IL	5,505	1994-current	GH	--	91.90	--	1995	ne	18-May	--	88.56	ne	--	--
05595700	Big Muddy River near Mt. Vernon, IL	71.9	1979-current	GH	--	12.04	--	1993	ne	13-May	--	10.48	ne	--	--
05595730	Rayse Creek near Waltonville, IL	88.0	1980-current	Q	21,200	17.73	1994	--	15	13-May	6,110	13.85	2	--	--
05595820	Casey Fork at Mount Vernon, IL	76.9	1986-current	Q	16,100	17.03	1990	--	15	13-May	4,500	13.91	2	--	--
05597000	Big Muddy River at Plumfield, IL	794	1908-current	Q	14,200 ^a	31.83 ^a	1996	--	500	17-May	7,500	27.21 ^b	5	20.0	18
05597500	Crab Orchard Creek near Marion, IL	31.7	1952-current	Q	9,270	13.60	1996	--	200	13-May	3,400	11.98	5	--	--
05599500	Big Muddy River at Murphysboro, IL	2,169	1916-current	Q	33,800 ^a	36.85 ^a	1996	1983	25	17-May	22,300	32.53	5	16.0	42
05600000	Big Creek near Wetaug, IL	32.2	1942-current	CS	7,200	16.32	1943	1945	500	13-May	2,630	15.09	5	--	--
07010000	Mississippi River at St. Louis, MO	697,000	1861-current	Q	1,080,000	49.58	1993	--	ne	17-May	682,000	37.34	ne	30.0	14
07020500	Mississippi River at Chester, IL	708,600	1928-current	Q	1,000,000	49.74	1993	--	ne	17-May	728,000	40.58	ne	27.0	24
07022000	Mississippi River at Thebes, IL	713,200	1933-current	Q	996,000	45.91	1993	1995	ne	18-May	866,000	44.31 ^c	ne	33.0	23

^a discharge and stage are for post-reservoir period of record^b datum change^c maximum instantaneous discharge did not occur at the same time as maximum instantaneous stage^d from floodmark; streamflow-gaging station discontinued on September 30, 2000^e flood stage in feet above sea level