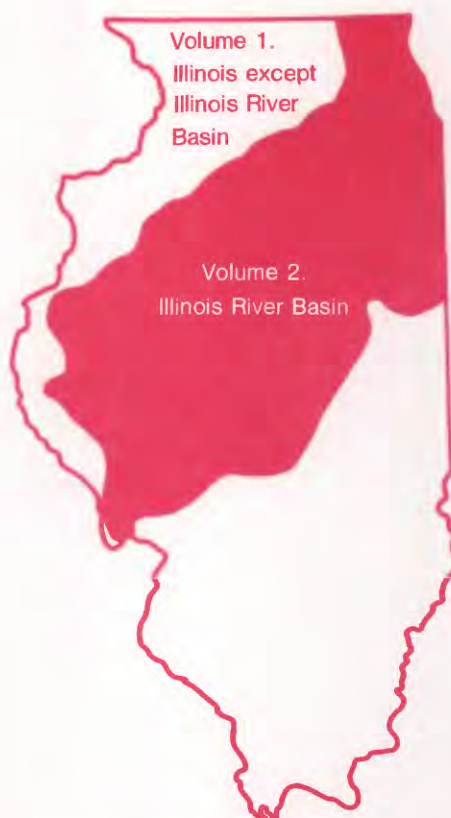


# Water Resources Data Illinois Water Year 1997

## Volume 2. Illinois River Basin



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IL-97-2  
Prepared in cooperation with the State of Illinois  
and with other agencies



**CALENDAR FOR WATER YEAR 1997**

1996

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28
27	28	29	30	31			24	25	26	27	28	29	30	29	30	31				

1997

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28		23	24	25	26	27	28	29
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APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
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# Water Resources Data Illinois Water Year 1997

## Volume 2. Illinois River Basin

by T.L. Wicker, J.K. LaTour, and J.C. Maurer



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IL-97-2  
Prepared in cooperation with the State of Illinois  
and with other agencies

U.S. DEPARTMENT OF THE INTERIOR  
BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY  
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Box 25286, Bldg. 810  
Denver, CO 80225-0286



## PREFACE

This volume of the annual hydrologic data report of Illinois is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Illinois are contained in two volumes:

Volume 1. Illinois except Illinois River Basin

Volume 2. Illinois River Basin

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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Becky L. Vickers, Jennifer Sharpe, and Sherry Reeves contributed significantly to the compilation and conversion of the data tables.

This report was prepared in cooperation with the State of Illinois and with other agencies under the general supervision of Daniel J. Fitzpatrick, District Chief.

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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,  
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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NOTE:--Data for partial-record stations and miscellaneous sites for both surface-water discharge and quality are published in separate sections of the data report. See references at the end of this list for page numbers for these sections.

[Letters after station name designate type of data: (d) discharge, (g) gage height, (v) contents, (c) chemical, (m) microbiological, (s) sediment, (e) elevation, and (p) precipitation]

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The following continuous-record surface-water discharge or stage-only stations (gaging stations) operated by the Illinois District have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station in the Illinois River Basin (Volume 2). Those stations with an asterisk (\*) after the station number are currently operated as crest-stage partial-record stations. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

[mi<sup>2</sup>, square miles, d, discharge]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Terry Creek near Custer Park, Ill. (d)	05526500	12.1	1949-75
Kankakee River at Custer Park, Ill. (d)	05527000	4,810	1915-34
Bull Creek near Libertyville, Ill. (d)	05528030	6.30	1990-96
Indian Creek at Prairie View, Ill. (d)	05528230	36.0	1990-96
Willow Creek near Park Ridge, Ill. (d)	05530500	19.7	1950-58
Salt Creek near Arlington Heights, Ill. (d)	05531000	32.1	1950-71, 1973
Des Plaines River at Lemont, Ill. (d)	05533500	684	1915-44
Thorn Creek near Chicago Heights, Ill. (d)	05536210	17.2	1964-79
North Creek near Lansing, Ill. (d)	05536270	16.8	1948-79
Little Calumet River at Harvey, Ill. (d)	05536325	252	1917-33
Chicago Sanitary and Ship Canal at Lockport, Ill. (d)	05537000	740	1900-84
Des Plaines River at Joliet, Ill. (d)	05538000	1,503	1915-32
Spring Creek at Joliet, Ill. (d)	05538500	19.6	1925-35
St. Joseph Creek at Lisle, Ill. (d)	05540200	11.8	1986-89
Mazon River near Coal City, Ill. (d)	05542000*	455	1940-95
Boone Creek near McHenry, Ill. (d)	05549000	15.5	1948-82
Flint Creek near Fox River Grove, Ill. (d)	05549850	37.0	1990-96
North Fork Vermilion River near Charlotte, Ill. (d)	05554000*	186	1943-62
Vermilion River at Streator, Ill. (d)	05555000	1,084	1914-30
Vermilion River at Lowell, Ill. (d)	05555500	1,278	1931-71
West Bureau Creek at Wyanet, Ill. (d)	05557000	86.7	1936-66
East Bureau Creek near Bureau, Ill. (d)	05557500*	99.0	1936-66
Big Bureau Creek at Bureau, Ill. (d)	05558000	485	1941-51
Crow Creek (West) near Henry, Ill. (d)	05558500	56.2	1949-71
Gimlet Creek at Sparland, Ill. (d)	05559000	5.66	1946-47, 1950-71
Crow Creek near Washburn, Ill. (d)	05559500	115	1945-71
Illinois River at Peoria, Ill. (d)	05560000	14,165	1903-06, 1910-39
Farm Creek at Farmdale, Ill. (d)	05560500	27.4	1949-85
Ackerman Creek at Farmdale, Ill. (d)	05561000	11.2	1954-80
Fondulac Creek near East Peoria, Ill. (d)	05561500	5.54	1948-85
Farm Creek at East Peoria, Ill. (d)	05562000	61.2	1943-80
Kickapoo Creek near Kickapoo, Ill. (d)	05563000*	119	1945-62
Kickapoo Creek at Peoria, Ill. (d)	05563500*	297	1942-71
Money Creek near Towanda, Ill. (d)	05564400	49.0	1958-82
Money Creek above Lake Bloomington, Ill. (d)	05564500	53.1	1933-58
Hickory Creek above Lake Bloomington, Ill. (d)	05565000	9.81	1939-58
Money Creek at Lake Bloomington, Ill. (d)	05565500	69.1	1931-58
East Branch Panther Creek near Gridley, Ill. (d)	05566000	6.30	1950-60
East Branch Panther Creek at El Paso, Ill. (d)	05566500	30.5	1950-82
Panther Creek near El Paso, Ill. (d)	05567000*	93.9	1950-60

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Brush Creek at Lake Bracken near Galesburg, Ill. (d)	05569000	9.11	1932-58
Big Creek at St. David, Ill. (d)	05570350	28.0	1972-86
Evelyn Branch near Bryant, Ill. (d)	05570360	5.78	1972-92
Big Creek near Bryant, Ill. (d)	05570370	41.2	1972-92
Slug Run near Bryant, Ill. (d)	05570380	7.12	1975-92
Illinois River at Havana, Ill. (d)	05570500	18,299	1922-27, 1985-89
Sangamon River at Mahomet, Ill. (d)	05571000	362	1948-78
Goose Creek near De Land, Ill. (d)	05571500	47.9	1951-59
Friends Creek at Argenta, Ill. (d)	05572450	111	1967-82
Sangamon River near Oakley, Ill. (d)	05572500	774	1951-77
South Fork Sangamon River near Nokomis, Ill. (d)	05574000	11.0	1951-75
Flat Branch near Taylorville, Ill. (d)	05574500	276	1949-82
South Fork Sangamon River near Taylorville, Ill. (d)	05575000	434	1908-17
South Fork Sangamon River at Kincaid, Ill. (d)	05575500	562	1917-34, 1945-61
Horse Creek at Pawnee, Ill. (d)	05575800	52.2	1968-85
Brush Creek near Divernon, Ill. (d)	05575830	32.4	1974-82
Salt Creek near Kenney, Ill. (d)	05579000	390	1908-13
Kickapoo Creek near Lincoln, Ill. (d)	05580500	306	1945-71
Sugar Creek near Hartsburg, Ill. (d)	05581500	333	1945-71
Crane Creek near Easton, Ill. (d)	05582500	26.5	1950-75
Illinois River at Beardstown, Ill. (d)	05584000	24,227	1921-38
Drowning Fork at Bushnell, Ill. (d)	05584400	26.3	1960-82
Illinois River at Meredosia, Ill. (d)	05585500	26,029	1939-89
North Fork Mauvaise Terre Creek near Jacksonville, Ill. (d)	05586000*	29.1	1950-75
Hurricane Creek near Roodhouse, Ill. (d)	05586500	2.30	1951-75
Otter Creek near Palmyra, Ill. (d)	05586800	61.1	1960-80

## DISCONTINUED SURFACE-WATER-QUALITY STATIONS

xiii

The following stations are discontinued continuing-record surface-water-quality stations operated by the Illinois District. Daily records of temperature, specific conductance, or sediment were collected and published for the period of record, expressed in water years, shown for each station in the Illinois River Basin (Volume 2). Discontinued project stations with short periods of record have not been included.

[mi<sup>2</sup>, square miles, --, not determined]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record
Kankakee River at Shelby, Ind.	05518000	1,779	Sed.	1993-96
Singleton Ditch at Schneider, Ind.	05519000	123	Sed.	1993-96
Kankakee River at Momence, Ill.	05520500	2,294	Temp. Sed.	1975-77 1979-81, 1993-96
Iroquois River at Iroquois, Ill.	05525000	686	Sed.	1979-80, 1993-96
Iroquois River near Chebanse, Ill.	05526000	2,091	Sed.	1979-81, 1993-96
Kankakee River near Wilmington, Ill.	05527500	5,150	Temp. Sed.	1973-77 1979-82, 1993-96
Des Plaines River at Riverside, Ill.	05532500	630	Sed.	1979-82
Des Plaines River at Romeoville, Ill.	05534000	696	Temp.	1974-77
North Branch Chicago River at Niles, Ill.	05536000	100	Sed.	1985-86
Chicago Sanitary and Ship Canal at Ashland Avenue at Chicago, Ill.	05536135	--	Temp.	1975-77
Calumet Sag Channel at Blue Island, Ill.	05536368	292	Temp.	1975-77
Chicago Sanitary and Ship Canal at Romeoville, Ill.	05536995	739	Temp.	1974-77
Des Plaines River at Rockdale, Ill.	05538010	1,506	Temp.	1974-77
Des Plaines River at Channahon, Ill.	05539670	1,711	Temp.	1973-77
Du Page River at Shorewood, Ill.	05540500	324	Temp.	1964-76
Illinois River at Dresden Island, Ill.	05541500	7,278	Temp.	1967-77
Illinois River at Marseilles, Ill.	05543500	8,259	S.C., Temp.	1975-81
Illinois River at Starved Rock, Ill.	05553700	11,056	Temp.	1967-77
Vermilion River near Leonore, Ill.	05555300	1,251	Sed.	1980-81
Illinois River at Henry, Ill.	05558300	13,543	Sed.	1983-86
Illinois River at Lock and Dam at Peoria, Ill.	05563600	14,550	Temp.	1974-77
Mackinaw River below Congerville, Ill.	05567510	776	Sed.	1983-86
Illinois River at Kingston Mines, Ill.	05568500	15,818	Temp.	1975-77
Indian Creek near Wyoming, Ill.	05568800	62.7	S.C., Temp., Sed.	1981
Big Creek at St. David, Ill.	05570350	28.0	S.C., Temp. Sed.	1972-83 1972-80
Evelyn Branch near Bryant, Ill.	05570360	5.78	S.C., Temp.	1972-80
Big Creek near Bryant, Ill.	05570370	41.2	S.C., Temp. Sed.	1972-83 1972-87
Slug Run near Bryant, Ill.	05570380	7.12	S.C., Temp. Sed.	1975-80 1976-80
Sangamon River near Oakford, Ill.	05583000	5,093	Temp.	1976-77
La Moine River at Ripley, Ill.	05585000	1,293	S.C., Temp. S.C., Temp.	1979-81 1979
Illinois River at Lock and Dam at La Grange, Ill.	05585100	25,648	Temp.	1968-77
Illinois River at Valley City, Ill.	05586100	26,742	S.C., Temp.	1975-81
Illinois River at Hardin, Ill.	05587060	28,690	Temp.	1973-77

Type of record: S.C., specific conductance; Temp., temperature; Sed., sediment.

The following are discontinued continuing-record stations operated by the Illinois District for which records of surface-water quality (collection frequency not less than quarterly) were published. The stations listed are for those in the Illinois River Basin (Volume 2). Discontinued project stations with short periods of record have not been included.

[mi<sup>2</sup>, square miles; a, approximately; --, not determined]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record (water years)
Kankakee River at Momence, Ill.	05520500	2,294	c,m	1978-91
Iroquois River at Iroquois, Ill.	05525000	686	c,m	1978-91
Sugar Creek at Milford, Ill.	05525500	446	c,m	1978-91
Iroquois River near Chebanse, Ill.	05526000	2,091	c,m	1978-91
Kankakee River near Wilmington, Ill.	05527500	5,150	c,m	1977-91
Des Plaines River at Russell, Ill.	05527800	123	c,m	1978-91
Des Plaines River near Gurnee, Ill.	05528000	232	c,m	1977-91
Des Plaines River near Des Plaines, Ill.	05529000	360	c,m	1978-91
Des Plaines River near Schiller Park, Ill.	05530590	444	c,m	1978-90
Salt Creek at Western Springs, Ill.	05531500	115	c,m	1978-91
Addison Creek at Bellwood, Ill.	05532000	17.9	c,m	1979-91
Des Plaines River at Riverside, Ill.	05532500	630	c,m	1987-92
Des Plaines River at Lockport, Ill.	05534050	700	c,m	1978-90
North Branch Chicago River at Deerfield, Ill.	05534500	19.7	c,m	1978-91
North Branch Chicago River at Niles, Ill.	05536000	100	c,m	1978-91
Little Calumet River at Munster, Ind.	05536195	90.0	c,m	1978-91
Thorn Creek at Thornton, Ill.	05536275	104	c,m	1979-91
Calumet Sag Channel at Sag Bridge, Ill.	05536700	389	c,m	1978-87
Chicago Sanitary and Ship Canal at Lockport, Ill.	05537000	740	c,m	1978-91
Des Plaines River at Route 53 at Joliet, Ill.	05537980	1,502	c,m	1982-87
Hickory Creek at Joliet, Ill.	05539000	107	c,m	1979-91
West Branch Du Page River near West Chicago, Ill.	05539900	28.5	c,m	1979-91
West Branch Du Page River near Warrenville, Ill.	05540095	90.4	c,m	1977-91
East Branch Du Page River at Route 34 bridge at Lisle, Ill.	05540210	51.4	c,m	1978-91
Du Page River near Naperville, Ill.	05540290	220	c,m	1978-90
Du Page River at Shorewood, Ill.	05540500	324	c,m	1978-91
Aux Sable Creek near Morris, Ill.	05541710	172	c,m	1979-87
Mazon River near Coal City, Ill.	05542000	455	c,m	1978-91
Illinois River at Marseilles, Ill.	05543500	8,259	c	1975-96
Fox River near Channel Lake, Ill.	05546700	871	c,m	1976-91
Nippersink Creek near Spring Grove, Ill.	05548280	192	c,m	1976-91
Fox River at Burtons Bridge, Ill.	05549600	1,278	c,m	1979-87
Fox River at Algonquin, Ill.	05550000	1,403	c,m	1978-91
Poplar Creek at Elgin, Ill.	05550500	35.2	c,m	1977-91
Fox River at South Elgin, Ill.	05551000	1,556	c,m	1978-91
Fox River at Montgomery, Ill.	05551540	1,732	c,m	1978-90
Blackberry Creek near Yorkville, Ill.	05551700	70.2	c,m	1978-91
Somonauk Creek at Sheridan, Ill.	05551995	83.3	c,m	1979-87
Fox River at Dayton, Ill.	05552500	2,642	c,m	1978-92, 1996
Vermilion River at McDowell, Ill.	05554490	551	c,m	1978-91
Vermilion River near Leonore, Ill.	05555300	1,251	c,m	1978-91
Little Vermilion River at La Salle, Ill.	05555950	125	c,m	1979-87
Illinois River at Hennepin, Ill.	05556200	12,756	c,m	1978-88, 1990-91
Big Bureau Creek at Princeton, Ill.	05556500	196	c,m	1978-91
West Bureau Creek at Wyanet, Ill.	05557000	86.7	c,m	1979-91



Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record (water years)
Illinois River at Lacon, Ill.	05558995	13,666	c,m	1978-88, 1990-91
Illinois River at Water Company at Peoria, Ill.	05559900	a13,900	c,m	1970-72, 1978-91
Farm Creek at Camp Street Bridge at East Peoria, Ill.	05562010	61.3	c,m	1979-87
Kickapoo Creek at Bartonville, Ill.	05563525	304	c,m	1979-87
Illinois River at Pekin, Ill.	05563800	14,585	c,m	1978-91
Mackinaw River below Congerville, Ill.	05567510	776	c,m	1978-91
Mackinaw River below Green Valley, Ill.	05568005	1,092	c,m	1978-91
Spoon River near Wyoming, Ill.	05568775	197	c,m	1979-87
Indian Creek near Wyoming, Ill.	05568800	62.7	c,m	1978-91
Spoon River near Dahinda, Ill.	05568915	762	c,m	1979-87
Spoon River at London Mills, Ill.	05569500	1,072	c,m	1978-91
Spoon River at Seville, Ill.	05570000	1,636	c,m,s	1978-93
Big Creek at St. David, Ill.	05570350	28.0	c	1975-86
Illinois River at Power Company at Havana, Ill.	05570520	a18,300	c,m	1978-91
Sangamon River at Fisher, Ill.	05570910	240	c,m	1979-91
Sangamon River at Mahomet, Ill.	05571000	362	c,m	1978
Sangamon River at Monticello Ill.	05572000	550	c	1990-92
Sangamon River at Allerton Park near Monticello, Ill.	05572125	573	c,m	1979-91
Sangamon River at Lake Decatur Water Intake at Decatur, Ill.	05573504	927	c,m	1980-87
Sangamon River at Route 48 at Decatur, Ill.	05573540	938	c,m	1979-91
Sangamon River near Niantic, Ill.	05573650	1,054	c,m	1978-90
Sangamon River near Roby, Ill.	05573800	1,264	c,m	1978-90
Flat Branch near Taylorville, Ill.	05574500	276	c,m	1979-90
South Fork Sangamon River at Kincaid, Ill.	05575500	562	c,m	1978-91
Sangchris Lake near New City, Ill.	05575570	--	c,m	1980-87
South Fork Sangamon River below Rochester, Ill.	05576022	870	c,m	1978-91
Sugar Creek near Springfield, Ill.	05576250	270	c,m	1979-87
Sangamon River at Riverton, Ill.	05576500	2,618	c,m	1978-91
Spring Creek at Burns Lane Bridge at Springfield, Ill.	05577505	109	c,m	1979-91
Sangamon River at Petersburg, Ill.	05578000	3,063	c,m	1978-90
Salt Creek near Rowell, Ill.	05578500	335	c,m	1978-91
Lake Fork near Cornland, Ill.	05579500	214	c,m	1978-91
Kickapoo Creek at Waynesville, Ill.	05580000	227	c,m	1978-91
Kickapoo Creek near Lincoln, Ill.	05580500	306	c,m	1978-91
Sugar Creek near Hartsburg, Ill.	05581500	333	c,m	1978-91
Salt Creek near Greenview, Ill.	05582000	1,804	c,m	1978-91
Sangamon River near Oakford, Ill.	05583000	5,093	c,m	1976-94
Sugar Creek near Frederick, Ill.	05583915	162	c,m	1979-87
La Moine River at Colmar, Ill.	05584500	655	c,m	1975-91
La Moine River at Ripley, Ill.	05585000	1,293	c,m	1975-91
Indian Creek at Arenzville, Ill.	05585275	164	c,m	1978-90
McKee Creek at Chambersburg, Ill.	05585830	341	c,m	1979-87
Mauvaise Terre Creek near Merritt, Ill.	05586040	146	c,m	1978-90
Apple Creek near Eldred, Ill.	05586600	404	c,m	1978-87
Macoupin Creek near Macoupin, Ill.	05586690	304	c,m	1979-90
Macoupin Creek near Kane, Ill.	05587000	868	c,m	1978-91
Illinois River at Hardin, Ill.	05587060	28,690	c,m	1978-91

Type of record: c, chemical; m, microbiological; s, sediment.



## WATER RESOURCES DATA - ILLINOIS, 1997

### INTRODUCTION

The Water Resources Division of the U.S. Geological Survey (USGS), in cooperation with State, Federal, and other local governmental agencies, obtains a large amount of data, collected each water year, pertaining to the water resources of Illinois. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the USGS, the data are published annually in this report series entitled "Water Resources Data - Illinois."

Water-resources data for Illinois for the 1997 water year consist of records of stage, discharge, and water quality of streams; stage and content of lakes and reservoirs; water level and water quality of ground-water wells; and precipitation. This volume (Volume 2, Illinois River Basin) contains (1) discharge for 87 surface-water gaging stations and for 6 crest-stage partial-record stations; (2) stage for 9 surface-water gaging stations; (3) water-quality records for 36 surface-water gaging stations; (4) sediment-discharge records for 9 surface-water gaging stations; (5) water-level records for 9 observation wells; (6) water-quality records for 4 wells; and (7) precipitation records for 8 rain gages. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous water-quality analyses.

This series of annual reports for Illinois began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1965 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface water and ground water, and ground-water levels. Because of the large increase in water-resources data collected in Illinois, it was necessary to go to a two-volume format in 1978.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Illinois were published in USGS Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir content and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 3A, 4, and 5." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Bldg. 810, CO 80225-0286.

Publications similar to this report are published annually by the USGS for all States. These official USGS reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report IL-97-2." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information for ordering specific reports may be obtained from the District Office at the address given on the back of the title page or by telephone (217) 344-0037.

Water-resources data, including those provided in water-data reports, are available through the World Wide Web on the Internet. The Universal Resource Locator (URL) to the Illinois District's home page is: <http://www-il.usgs.gov/>

### COOPERATION

The USGS and agencies of the State of Illinois have had cooperative agreements for the collection of water-resources records since 1930. Organizations that assisted in collecting the data in this report through cooperative agreement with the USGS are:

Illinois Department of Natural Resources, Brent Manning, Director.

Office of Water Resources, D.R. Vonnahme, Director.

Illinois State Water Survey, Dr. Derek Winstanley, Chief.

Wetland Program and Environmental Management Program, Marvin Hubbell, Program Administrator.

Bloomington and Normal Water Reclamation District, J.M. Callahan, Executive Director.

Danville Sanitary District, P.C. Morgan, Director.

Forest Preserve District of Cook County, Allan Mellis, Director of Planning and Development.

Forest Preserve District of Du Page County, R.A. Hill, Project Engineer.

Du Page County Department of Environmental Concerns, J.P. Steffen, Principal Engineer.

Kane County Development Department, P.M. Schuch, Director of Planning and Water Resources.

Lake County Stormwater Management Commission, W.S. Miller, Executive Director.

McHenry County Conservation District, Craig D. Hubert, Interim Director.

## WATER RESOURCES DATA - ILLINOIS, 1997

Vermilion County Conservation District, K.F. Konsis, Executive Director.

Winnebago County, Joseph A. Vanderwerff, Sr., County Engineer, Department of Public Works.

Wonder Lake Master Property Owners Association, Dick Hilton, President.

City of Champaign, Jeffrey M. Smith, City Engineer.

City of De Kalb, J.C. Maurer, Civil Engineer.

City of Decatur, B.A. McNabb, Director of Public Works.

City of Joliet, Chuck Parini, Emergency Management Agency Coordinator

City of Monticello, Floyd Allsop, Superintendent of City Services.

City of Peru, J.E. Prazen, Superintendent

City of Springfield, William Brown, Water Plant Superintendent.

City of Urbana, W.R. Gray, Public Works Director.

Village of Oak Brook, D.L. Durfey, Jr., Village Engineer.

University of Illinois, Charles C. Colbert, Vice Chancellor for Administrative Affairs and Human Resources.

Assistance, by providing funds or services, was given by the U.S. Army Corps of Engineers in collecting records for 62 surface-water gaging stations and 2 crest-stage gage sites.

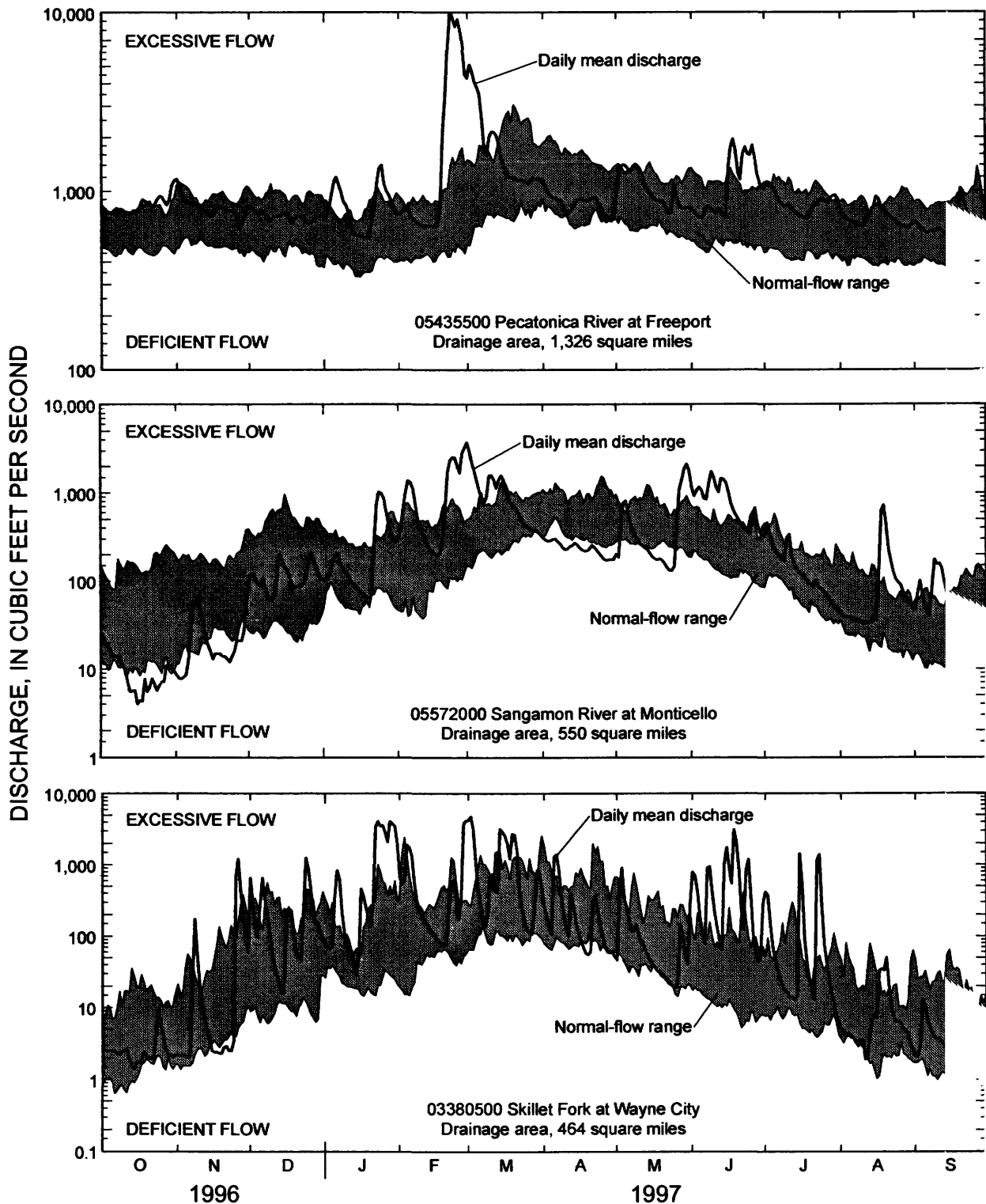
## SUMMARY OF HYDROLOGIC CONDITIONS

### Surface Water

Average annual streamflow at the three index stations were above average (30-year average) at the northern Illinois index stations and below average at the central and southern Illinois index stations during the 1997 water year. Above average flows in northern Illinois can be attributed to the significant high flows during February and March. Below average flows in central and southern Illinois can be explained in that significant low flows occurred during October, November, August, and September. Annual discharge during 1997 for the northern index station—Pecatonica River at Freeport (05435500)—was 117 percent of average. In central Illinois, the annual discharge for the index station—Sangamon River at Monticello (05572000)—was 87 percent of average. In southern Illinois, the annual discharge for the index station—Skillet Fork at Wayne City (03380500)—was 97 percent of average.

A comparison of the 1997 daily discharges for the three index stations and the mean daily discharges for the 30-year period (1961-90) is shown in figure 1. Flow generally was near normal for all three stations during most of the year. All three sites had some excessive flows during January, February, March, and June. Excessive flows occurred at Monticello and Wayne City because of flood events during August. Excessive flows also occurred in September at Monticello and in July at Wayne City. Below normal flows occurred at Monticello and Wayne City during November. Below normal flows also occurred during October, April, and May at Monticello. The Freeport station did not have below normal flows during the year.





**Figure 1.** Daily mean discharge for water year 1997 compared with percentile distribution of mean daily discharges for the 30-year period, 1961-90, for three representative gaging stations. A daily mean discharge is in the deficient-flow range if its value is less than or equal to the 25th percentile, in the normal-flow range if its value is between the 25th and 75th percentiles, and in the excessive-flow range if its value is equal to or greater than the 75th percentile.

Suspended Sediment

Suspended-sediment and water-discharge data for 15 sediment sites in this report are listed in table 1. In general, runoff and sediment yields for long-term stations in 1997 were lower than the long-term average.

**Table 1.** Average annual suspended-sediment yield and stream runoff  
[(T/mi<sup>2</sup>)/yr, tons per square mile per year; cfs/m, cubic feet per second per square mile]

Station number	Station name	Period of sediment-record collection	Volume Number	Average for period of sediment record		1997 water year	
				Yield [(T/mi <sup>2</sup> )/yr]	Runoff (cfs/m)	Yield [(T/mi <sup>2</sup> )/yr]	Runoff (cfs/m)
05416100	Mississippi River at Lock and Dam 12 at Bellevue, Iowa	10/94 to 09/97	1	33.6	0.74	34.6	0.75
05419000	Apple River near Hanover, Ill.	10/94 to 09/97	1	269	0.74	194	0.59
05420100	Plum River at Savanna, Ill.	10/94 to 09/97	1	233	0.82	249	0.61
05548105	Nippersink Creek above Wonder Lake, Ill.	06/94 to 09/97	2	63.6	0.59	90.7	0.68
05548110	Nippersink Creek below Wonder Lake, Ill.	06/94 to 06/97	2	1	1	1	1
05559600	Illinois River at Chillicothe, Ill.	05/93 to present	2	1	1	1	1
05563800	Illinois River at Pekin, Ill.	10/94 to 09/97	2	103	1.07	129	1.06
05568000	Mackinaw River near Green Valley, Ill.	10/94 to 09/97	2	332	0.59	137	0.40
05570000	Spoon River at Seville, Ill.	10/94 to 09/97	2	638	0.77	441	0.63
05583000	Sangamon River near Oakford, Ill.	10/80 to 09/81	2	277.2	0.76	100	0.43
		10/83 to 09/85					
05585000	LaMoine River at Ripley, Ill.	10/94 to 09/97	2	705	0.91	284	0.56
		10/80 to 09/81					
05586100	Illinois River at Valley City, Ill.	10/94 to 09/97	2	224	1.03	153	0.81
05591200	Kaskaskia River at Cooks Mills, Ill.	02/80 to present	2	224	1.03	153	0.81
05594100	Kaskaskia River near Venedy Station, Ill.	01/79 to 09/97	1	89.6	0.96	49.3	0.70
05595500	Big Muddy River at Murphysboro, Ill.	05/80 to 09/97	1	133	0.91	81.3	0.60
		05/80 to 09/97	1	108	1.04	93.8	1.12

<sup>1</sup>Partial-record station.

## SPECIAL NETWORKS AND PROGRAMS

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The NASQAN sampling sites for which data are published in this report (vol 1.) are Ohio River at Lock and Dam 53 near Grand Chain, Ill. (03612500), Mississippi River at Clinton, Iowa (05420500), and Mississippi River at Thebes (07022000).

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO<sub>2</sub> emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO<sub>2</sub> and NO<sub>x</sub> scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

<http://nadp.nrel.colostate.edu/NADP>

In Illinois, atmospheric-deposition data are available for five stations. Four of the five stations are operated by the University of Illinois; Agriculture Department and State Water Survey. The other station is operated by Argonne National Laboratory. Data for these stations are not published in this report but can be obtained over the Internet via URL previously noted.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 58 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water-resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies.

Additional information about the NAWQA Program is available through the World Wide Web at:

[http://www.rvares.er.usgs.gov/nawqa/nawqa\\_home.html](http://www.rvares.er.usgs.gov/nawqa/nawqa_home.html)

In Illinois, a pilot project study of the upper Illinois River Basin began in 1986. The three major work elements of the study were (1) an analysis of available information, (2) fixed-station sampling, and (3) synoptic sampling. The fixed-station sampling program was operated in cooperation with the Illinois Environmental Protection Agency. The fixed-station sampling program, through August 1990, consisted of eight stations that were sampled on a monthly basis; after August 1990, only four stations continued to be monitored. Synoptic sampling was conducted for trace metals and organic compounds in bottom material and for dissolved oxygen, bacteria, nutrients, and trace organic compounds in water. All sampling was discontinued in April 1992.

Work on the lower Illinois River Basin NAWQA study unit began in 1994. After 2 years of planning and historical data review, data collection began in 1996. Major rivers in the basin are the Illinois, Vermilion, Mackinaw, Spoon, Sangamon, and La Moine Rivers. In water year 1997, monthly surface-water samples were collected at fixed stations and analyzed for nutrients, major ions, suspended sediment, and selected pesticides. Guidelines for collecting and processing stream-water samples are found in Shelton (1994). Bed-sediment and tissue samples were collected at 6 sites across the basin and analyzed for selected pesticides, trace metals, and many synthetic organic compounds. Guidelines for collecting and processing bed-sediment samples are found in Shelton and Capel (1994). Guidelines for tissue samples are found in Crawford and Luoma (1992). A series of habitat surveys were completed and biological samples also were collected for analysis. Fifty-six private and public-supply wells were sampled. The ground-water samples were analyzed for major ions, nutrients, selected pesticides and selected trace metals. Specific details describing the ground-water site selection process are defined in Scott (1990) and guidelines for collecting and processing ground-water samples are found in Koterba, Wilde, and Lapham (1995).

## EXPLANATION OF THE RECORDS

The surface-water, ground-water, and precipitation records published in this report are for the 1997 water year that began October 1, 1996, and ended September 30, 1997. A calendar of the water year is provided on the inside of the front cover. The records contain stream-flow data; stage and content data for lakes and reservoirs; water-quality data for surface water; and ground-water-level and quality data; and precipitation data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

### Station Identification Numbers

Each data station in this report, whether stream site or well, is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the USGS to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and rain gages at surface-water stations; the "latitude-longitude" system is used for wells and other sites not at surface-water stations.

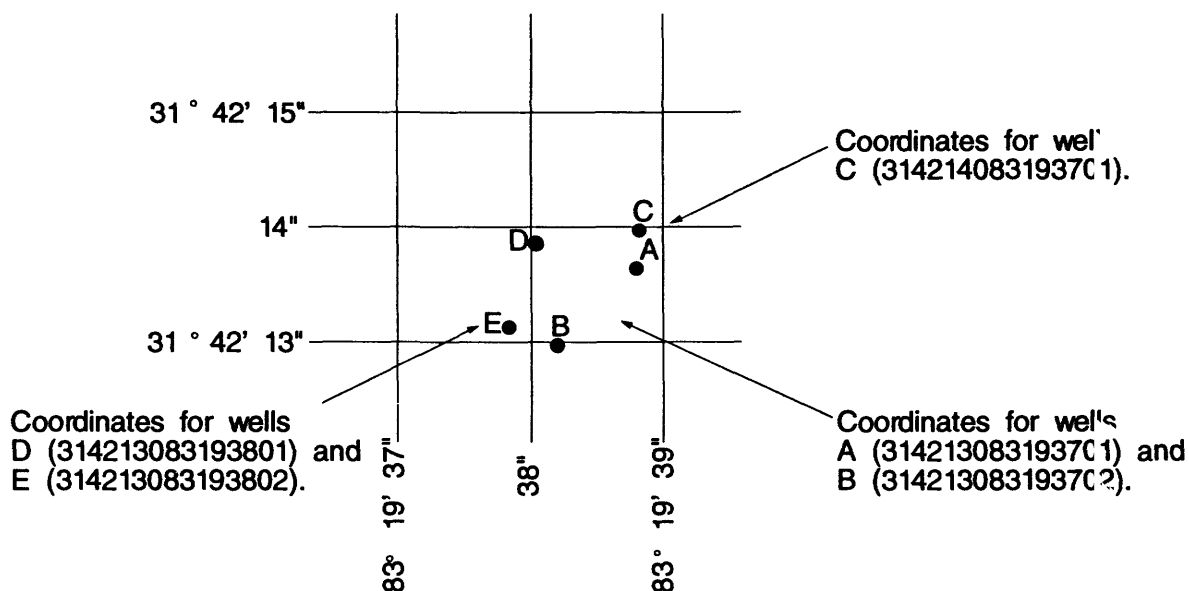
### Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in USGS reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 05527500, which appears just to the left of the station name, includes the two-digit part number "05" plus the six-digit downstream-order number "527500." The part number designates the major river basin; for example, part "05" is the upper Mississippi River Basin.

### Latitude-Longitude System

The identification numbers for wells and other sites not at surface-water stations are assigned according to the grid system of latitude and longitude (fig. 2). The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude is found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description.



**Figure 2.** System for numbering wells (latitude and longitude).

### Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained based on discrete measurements and a continuous stage-recording device. Data from these may be used to compute either instantaneous or mean-daily discharges for any instant or period of time within the period of record. Similarly, complete records of lake or reservoir content are those for which stage or content may be computed or estimated with reasonable accuracy for any instant or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharge or end-of-day content commonly are published for such stations, they are referred to as "daily stations." Locations of all active surface-water gaging stations for which data are given in this volume are shown in figures 3 and 4.

By contrast, partial records are obtained through discrete measurements, without the use of a continuous stage-recording device, and pertain to only one or a few flow characteristics. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but are presented separately in this report.

### Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relation between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relation between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with digital recorders that punch stage values on paper tapes at selected time intervals, with electronic data loggers or satellite telemeters. Measurements of discharge are made with current meters and acoustical flow meters based on methods adapted by the USGS as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175 (Rantz and others, 1982), and in USGS Techniques of Water-Resources Investigations (TWRI's), Book 3, Chapters A1 through A20 and Book 8, Chapters A2 and B2. The TWRI's are listed near the end of this introductory text. Methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (IOS).

At some gaging stations, acoustic velocity meter (AVM) systems are used to compute discharge. The AVM system measures the stream's velocity at one or more paths in the channel cross section. Coefficients are developed to relate this path velocity to the mean velocity in the channel cross section. Because the AVM sensors are fixed in position, the adjustment coefficients generally vary with stage. Cross-sectional area curves are developed to relate stage, recorded as noted above, to channel cross-sectional area. Discharge is computed by multiplying path velocity by the appropriate stage related coefficient and area.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements or peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some surface-water gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir content, it is necessary to have available from surveys, curves or tables that define the relation of stage and content. The application of stage to stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relation changes because of deposition of sediment in a lake or reservoir, periodic

resurveys may be necessary to redefine the relation. Computations may become increasingly in error as time since the last survey elapses. Discharges over lake or reservoir spillways are computed from stage-discharge relation much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or content. This happens when a recorder stops or otherwise malfunctions, when intakes become plugged, when a float freezes in a well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily content may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

#### Data Presentation

Streamflow data in this report are presented in a format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts: the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

#### Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

**LOCATION.**--Information on locations is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council, and are published in "River Mileages and Drainage Areas for Illinois Streams" (Healy, 1979a, 1979b).

**DRAINAGE AREA.**--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

**PERIOD OF RECORD.**--This indicates the period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that flow at it can reasonably be considered equivalent to flow at the present station.

**REVISED RECORDS.**--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

**GAGE.**--The type of gage in current use, the datum of the current gage referred to sea level (see Definition of Terms), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

**REMARKS.**--This paragraph is used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items, such as whether the site has telemetry. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

**COOPERATION.**--Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

**EXTREMES FOR PERIOD OF RECORD.**--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the



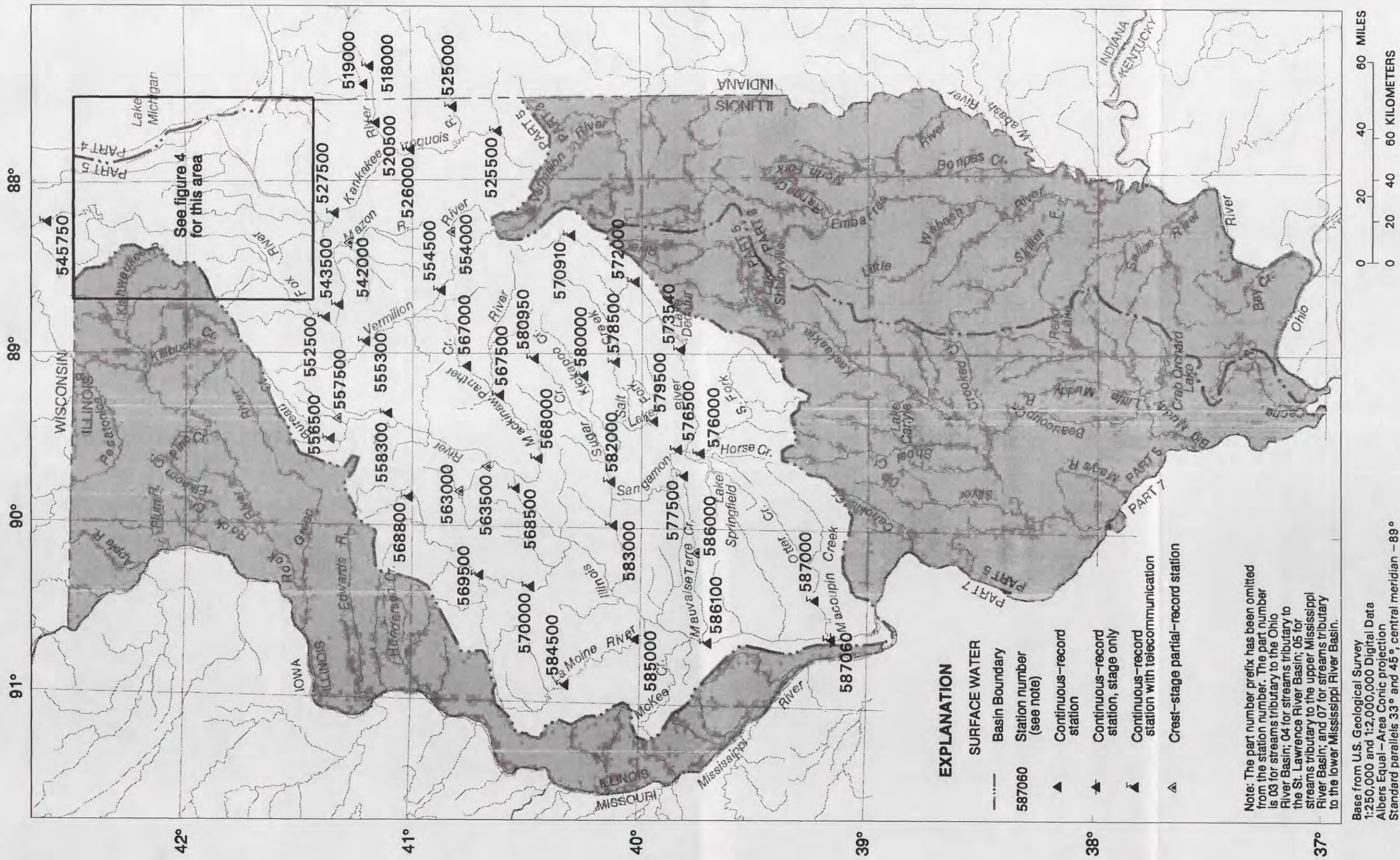
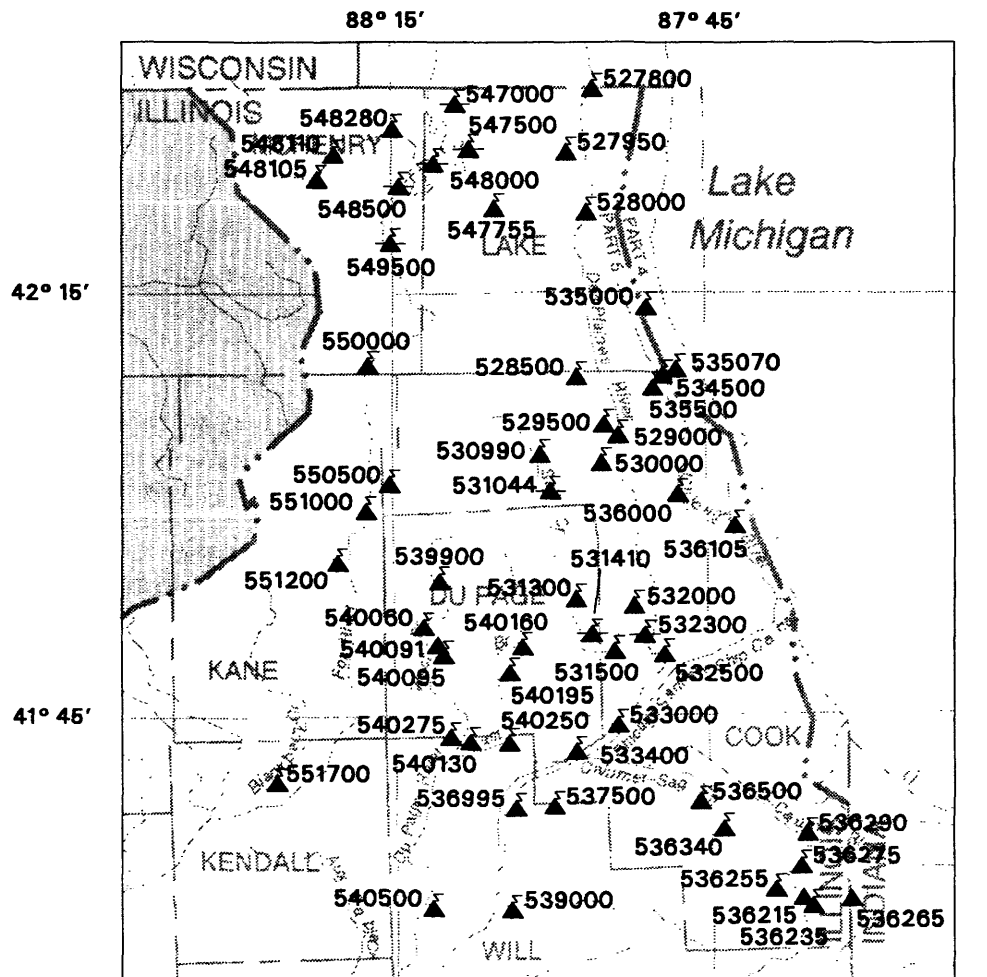


Figure 3. Location of active surface-water gaging stations in the Illinois River Basin.









Base from U.S. Geological Survey  
 1:250,000 and 1:2,000,000 Digital Data  
 Albers Equal-Area Conic projection  
 Standard parallels 33° and 45°, central meridian -89°

0 5 10 15 MILES  
 0 5 10 15 KILOMETERS

### EXPLANATION

#### SURFACE WATER

- Basin boundary
- 551700 Station number (see note)
- Continuous-record station
- Continuous-record station, stage only
- Continuous-record station with telecommunication

Note: The part number prefix has been omitted from the station number. The part number is 04 for streams tributary to the St. Lawrence River Basin, and 05 for streams tributary to the upper Mississippi River Basin.

Figure 4. Location of active surface-water gaging stations in northeastern Illinois.

highest stage that occurred. The highest stage may have been obtained from a recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the USGS.

**EXTREMES FOR CURRENT YEAR.**--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages that occurred during the water year and were greater than a selected base discharge are presented under this heading. Peaks greater than the base discharge, excluding the highest, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour central standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

**REVISIONS.**--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations, who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE and EXTREMES FOR PERIOD OF RECORD have been deleted for most stations and the information contained in these paragraphs is now presented in the tabular summaries following the discharge table. The EXTREMES FOR PERIOD OF RECORD paragraph was retained for those stations where the period of record differed from the period used for the tabular summary statistics. No changes have been made to the data presentations of lake contents.

#### Data table of daily mean values

The daily table of discharge records for surface-water gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month usually also is expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN."); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote. For other stations, a daily table of stage records is presented.

#### Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS \_\_-\_\_, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of the entire station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

#### Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS \_\_-\_\_," will consist of the entire station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the

manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data also are given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

**ANNUAL TOTAL.**--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

**ANNUAL MEAN.**--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations, the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

**HIGHEST ANNUAL MEAN.**--The maximum annual mean discharge occurring for the designated period.

**LOWEST ANNUAL MEAN.**--The minimum annual mean discharge occurring for the designated period.

**HIGHEST DAILY MEAN.**--The maximum daily mean discharge for the year or for the designated period.

**LOWEST DAILY MEAN.**--The minimum daily mean discharge for the year or for the designated period.

**ANNUAL 7-DAY MINIMUM.**--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1 through March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

**INSTANTANEOUS PEAK FLOW.**--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

**INSTANTANEOUS PEAK STAGE.**--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

**INSTANTANEOUS LOW FLOW.**--The minimum instantaneous discharge occurring for the water year or for the designated period.

**ANNUAL RUNOFF.**--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

**Acre-foot (AC-FT)** is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

**Cubic feet per second per square mile (CFSM)** is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

**Inches (INCHES)** indicate the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

**10 PERCENT EXCEEDS.**--The discharge that has been exceeded 10 percent of the time for the designated period.

**50 PERCENT EXCEEDS.**--The discharge that has been exceeded 50 percent of the time for the designated period.

**90 PERCENT EXCEEDS.**--The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

### Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables are identified by flagging individual daily values with the letter symbol "e" and a footnote.

### Accuracy of the Records

The accuracy of streamflow records depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true value; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft<sup>3</sup>/s; to the nearest tenth between 1.0 and 10 ft<sup>3</sup>/s; to whole numbers between 10 and 1,000 ft<sup>3</sup>/s; and to 3 significant figures for more than 1,000 ft<sup>3</sup>/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules also apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations may not reflect natural runoff because of the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or other factors. For such stations, values of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

### Other Records Available

Records of water use from Lake Michigan are collected by the Illinois Department of Natural Resources, Office of Water Resources. These records may be obtained from the Illinois Department of Natural Resources, Office of Water Resources, 310 S. Michigan Avenue, Room 1606, Chicago, IL 60604 (telephone number 312-793-3123).

Records of discharge, not published by the USGS, are collected at several sites in Illinois by the U.S. Army Corps of Engineers. The National Water Data Exchange (NAWDEX), U.S. Geological Survey, 421 National Center, Reston, VA 20192, maintains an index of these sites as well as an index of records of discharge collected by other agencies but not published by the USGS. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the USGS Illinois District office whose address is given on the back of the title page of this report. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the USGS Illinois District office.

### Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near surface-water gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

### Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing- or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in a river basin. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 5.

### Arrangement of Records

For continuing-record stations, water-quality records collected at a surface-water daily-record station are published immediately following the surface-water record. Station number and name are the same for both records. Where a surface-water daily-record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous-sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.



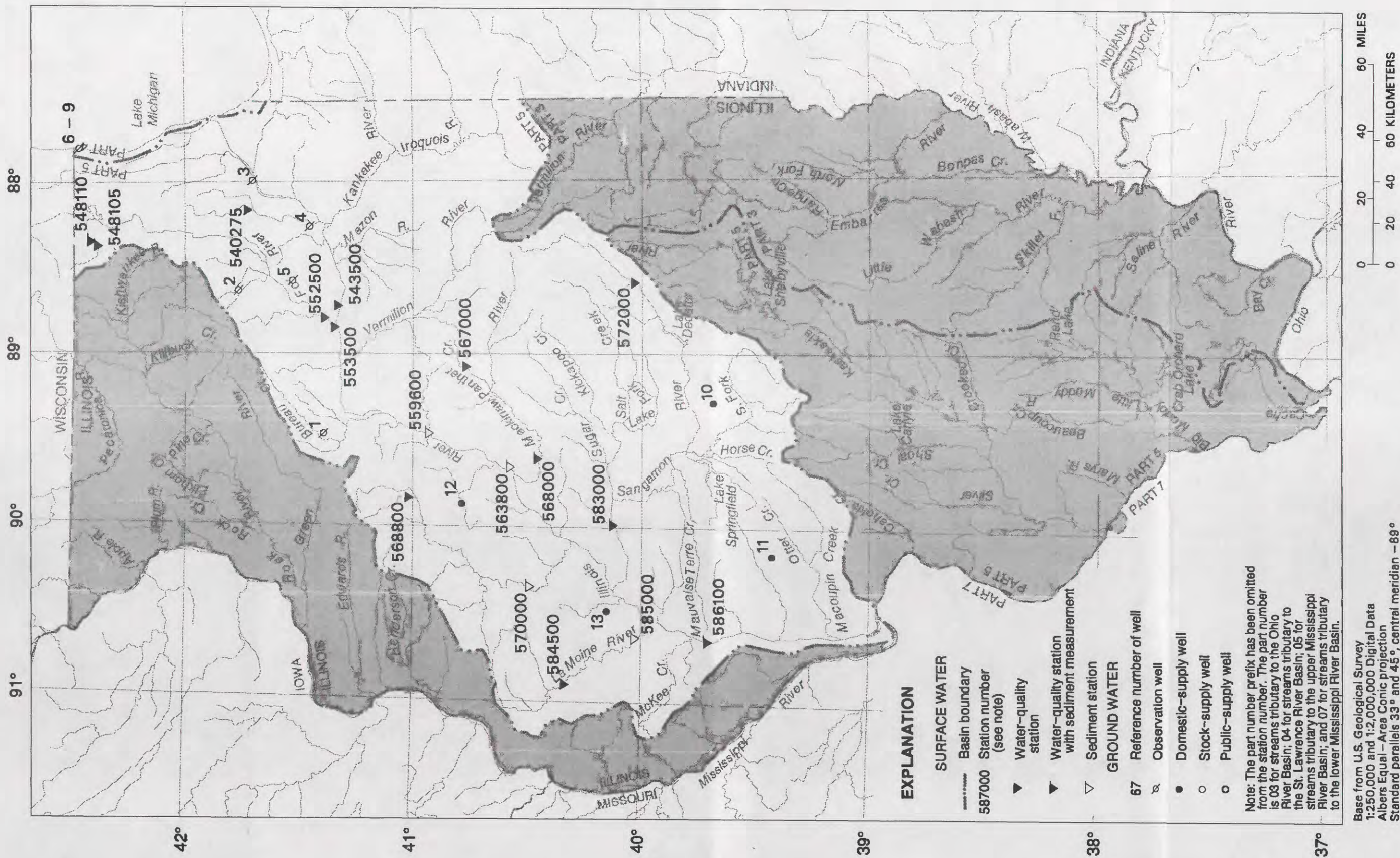


Figure 5. Location of active surface-water, water-quality stations and observation wells in the Illinois River Basin.





### On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern is that the data obtained represent the ambient quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen concentration, need to be made on-site when the samples are taken. To assure that measurements made in the laboratory represent field conditions, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are detailed in TWRI Book 1, Chapter D2; Book 3, Chapter C2; Book 5, Chapters A1, A3, and A4; and other USGS publications. These methods are consistent with ASTM standards and generally follow IOS standards. Detailed information on collecting, treating, and shipping samples also may be obtained from the USGS Illinois District office.

One sample can adequately define the water quality at a given time if the mixture of constituents throughout the stream cross section is homogeneous. However, the concentrations of constituents at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors that must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling, as much as possible, consistent with available sampling techniques and methods of analysis.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based on hourly values.

### Water Temperatures

Water temperatures are measured at all of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. Large streams have small diel temperature changes; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the USGS Illinois District office.

### Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to compute the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment discharges for other periods of similar water discharge. Methods used in the computation of sediment records are described in TWRI Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow IOS standards. Locations of stations for which records of suspended-sediment discharge appear in this report are shown in figure 5.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in determining long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material may be included for some stations.

## Laboratory Measurements

Sediment samples are analyzed at the USGS sediment laboratory in Louisville, Kentucky. Samples for indicator bacteria are analyzed locally. All other samples are analyzed in the USGS National Laboratory in Denver, Colorado, or the Illinois Environmental Protection Agency laboratory in Champaign, Illinois. Methods used in analyzing sediment samples and in computing sediment records are given in TWRI Book 5, Chapter C1. Methods used by the USGS laboratories are given in TWRI Book 1, Chapter D2; Book 3, Chapter C2; Book 5, Chapters A1, A3, A4, and A5; and other USGS publications. These methods are consistent with ASTM standards and generally follow IOS standards. The following codes identify the agency or office having the principal responsibility for collecting and (or) analyzing water samples.

<u>Agency</u>	<u>Agency Code</u>
U.S. Geological Survey (general)	1028
Illinois Environmental Protection Agency	17002
U.S. Geological Survey, Denver Laboratory	80020
U.S. Geological Survey, Illinois District	81700

## Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily, are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the surface-water daily discharge station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

**LOCATION.**—See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

**DRAINAGE AREA.**—See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

**PERIOD OF RECORD.**—This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

**INSTRUMENTATION.**—Information on instrumentation is given only if a water-quality monitor temperature recorder, pumping sediment sampler, or other sampling device is in operation at a station.

**REMARKS.**—Remarks provide added information pertinent to the collection, analysis, or computation of the record.

**COOPERATION.**—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

**EXTREMES.**—Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

**REVISIONS.**—If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the USGS's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of USGS water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.



### Records of Ground-Water Levels

#### Data Collection and Computation

Measurements of ground-water levels are made under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability. Locations of observation wells for which data are given in this report are shown in figure 5.

Tables of ground-water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric identifier, derived from the township-range location of the well.

Ground-water-level records are obtained by direct measurements using a steel tape or from an electronic water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. The method and frequency of measurement are given in the station description.

Ground-water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

#### Data Presentation

Each well record consists of two parts: the station description and the data table of water levels observed during the current water year. The description of the well is presented first through the use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings of the well description.

**LOCATION.**--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

**AQUIFER.**--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

**WELL CHARACTERISTICS.**--This entry describes the well in terms of depth, diameter, casing depth and (or) screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

**INSTRUMENTATION.**--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

**DATUM.**--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) sea level; it is reported with a precision depending on the method of determination.

**REMARKS.**--This entry describes factors that may affect the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-USGS) observers.

**PERIOD OF RECORD.**--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the USGS and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the USGS, may be noted.

**EXTREMES FOR PERIOD OF RECORD.**--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

### Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, samples for water-quality analyses are taken from the wells used to monitor water-level changes on an infrequent basis--about once every 3 to 4 years. Typically, 3 to 4 wells are sampled each year. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

#### Data Collection and Computation

Most methods for collecting and analyzing water samples are described in the USGS TWRI publications referred to in the "On-Site Measurements and Sample Collection" and the "Laboratory Measurements" sections in this data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow IOS standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, compose the casings.

#### Data Presentation

The records of ground-water quality are published in a section titled "Quality of Ground Water" immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by county, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The "Remark" codes listed for surface-water-quality records also are applicable to ground-water-quality records.

### Records of Precipitation

#### Data Collection and Computation

Rainfall values were determined using tipping-bucket rain gages. Rainfall data were collected by electronic data loggers in 0.01-in. increments every 5-minutes. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight the previous day to midnight the current day. Monthly rainfall totals were not computed for months containing days with missing record. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to appreciable errors. Snowfall-affected readings were determined by routine field trips and by comparing recorded data with snowfall, snow depth, and temperature and precipitation data from NOAA precipitation gages. Locations of rain gages for which data are given in this report are shown in figure 6.

#### Arrangement of Records

Precipitation records collected at surface-water, daily-record stations are published immediately following the surface-water record. Station number and name are the same for both records. Where a surface-water, daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number. These records appear in separate tables following the ground-water records.

#### Data Presentation

For precipitation stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, record accuracy, general remarks, and maximum daily values.

In the descriptive headings, if the location is identical to that of the surface-water daily discharge station, the LOCATION statement is not repeated. The following information, as appropriate, is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. A consideration used in the determination of site locations was the proximity of existing structures and minimal obstructions.

PERIOD OF RECORD.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

ACCURACY.--Information about the physical characteristics of gage that may effect accuracy of the recorded values.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of records.

MAXIMUM FOR PERIOD OF RECORD.--Maximum daily precipitation value for the period of record.

MAXIMUM FOR CURRENT YEAR.--Maximum daily precipitation value for the current year.

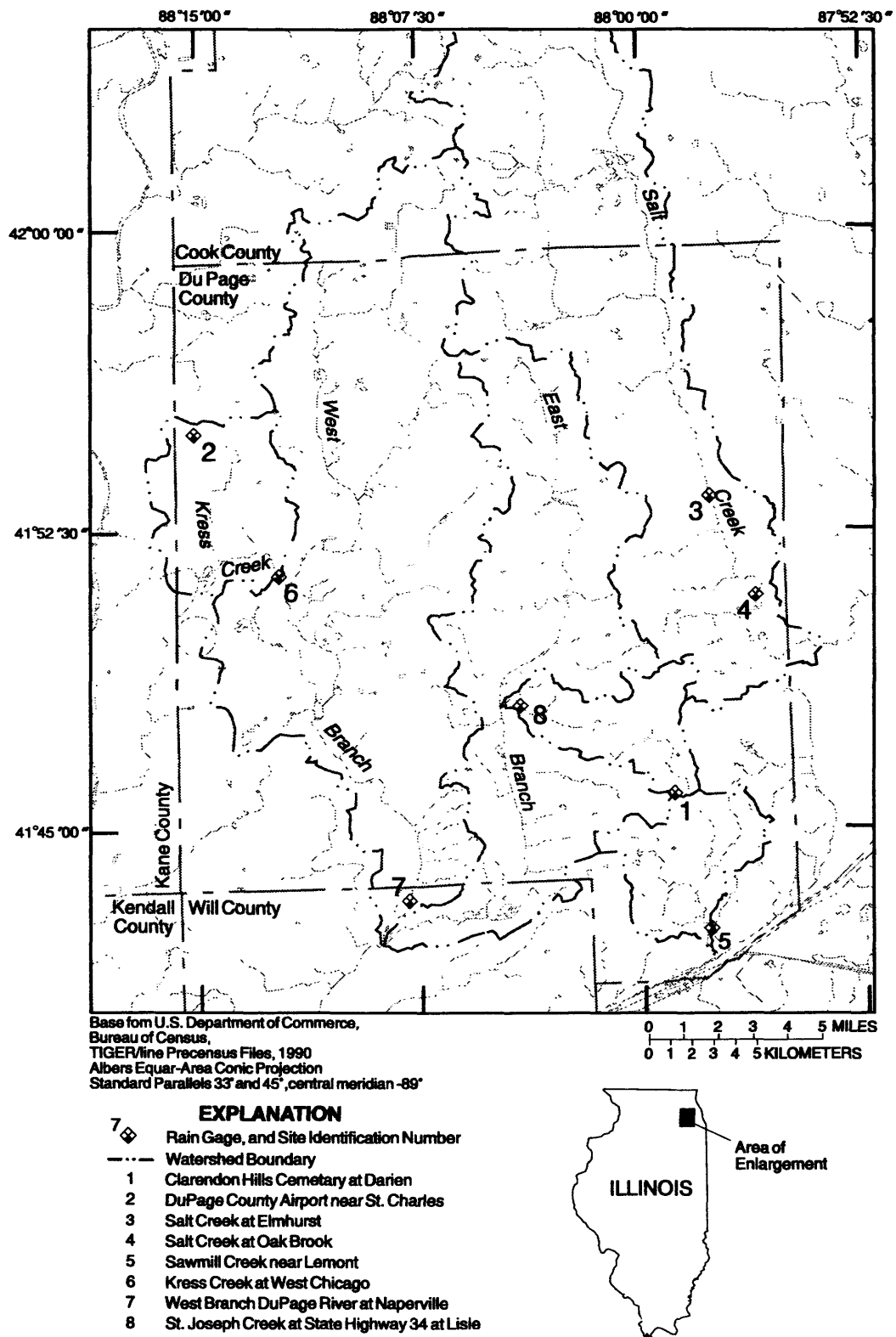


Figure 6. Location of precipitation stations in Du Page County.

## ACCESS TO WATSTORE DATA

The USGS is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the USGS's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the USGS and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses, such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the USGS at its National Center in Reston, Virginia, and consists of related files and data bases.

- Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the USGS collects or has collected data.
- Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radiochemical characteristics of both surface and ground water.
- Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data include site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the USGS opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the USGS is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting the National Water Data Exchange (NAWDEX) Program Office at:

U.S. Geological Survey  
National Water Data Exchange  
421 USGS National Center  
Reston, Virginia 20192

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or floppy disks. Data from WATSTORE can be retrieved electronically through the use of File Transfer Protocol (FTP) on the Internet instead of receiving data on magnetic tape or diskette through the mail. A request for data is initially placed through the NAWDEX Program Office. The NAWDEX office will retrieve the data from WATSTORE and place the resulting data file in a directory for you to retrieve. The file can be retrieved by accessing the NAWDEX server ([h2o.er.usgs.gov](http://h2o.er.usgs.gov)) via anonymous FTP.

Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.) Water-resources data, including those provided in water-data reports, also are available through the World Wide Web on the Internet. The Universal Resource Locator (URL) to the Illinois District's home page is: <http://www-il.usgs.gov/>

## DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. A table for converting inch-pound units to the International System of Units (SI) is on the inside of the back cover.

**Acre-foot** (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

**Adenosine triphosphate** (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

**Algae** are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

**Algal growth potential** (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

**Aquifer** is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

**Artesian** means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

**Bacteria** are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

**Total coliform bacteria** are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C  $\pm$  1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as numbers of colonies per 100 mL of sample.

**Fecal coliform bacteria** are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C  $\pm$  0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

**Fecal streptococcal bacteria** are bacteria found in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, coccal bacteria which are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C  $\pm$  1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as numbers of colonies per 100 mL of sample.

**Bed material** is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

**Biochemical oxygen demand** (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

**Biomass** is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

**Ash mass** is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter ( $\text{g}/\text{m}^3$ ), and periphyton and benthic organisms in grams per square meter ( $\text{g}/\text{m}^2$ ).

**Dry mass** refers to the mass of residue of zooplankton and periphyton present after drying in an oven at 105 °C until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

**Organic mass** or volatile mass of the living substance is the difference between the dry mass and the ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash and dry mass.

**Wet mass** is the mass of living matter plus contained water.

**Bottom material:** See Bed material.

Cells/volume refers to the number of cells of any organism, which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft<sup>3</sup>/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meter per second.

Cubic foot per second-day (cfs-day) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1 through March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Dissolved refers to that material in a representative water sample, which passes through a 0.45- $\mu$ m membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, bicarbonate is converted to carbon dioxide, water, and carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the conversion.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or non-contributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO<sub>3</sub>).

Hydrologic Bench-Mark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Micrograms per gram ( $\mu\text{g/g}$ ) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter ( $\text{UG/L}$ ,  $\mu\text{g/L}$ ) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of solvent. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter ( $\text{MG/L}$ ,  $\text{mg/L}$ ) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of solvent. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins-- the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used to (1) describe the long-term trends and changes in concentration and transport of these constituents; (2) test findings of the National Water-Quality Assessment Program (NAWQA); (3) characterize processes unique to large-river systems, such as storage and remobilization of sediments and associated contaminants; and (4) refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites; (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in  $\text{SO}_2$  emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred; and (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for  $\text{SO}_2$  and  $\text{NO}_x$  schedules to begin in 2000.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area habitat, usually square meter ( $\text{m}^2$ ), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a five-digit number used in the USGS computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are, for the most part, the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and (or) water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classifications used in this report agree with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay.....	0.0004 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one trillionth ( $1 \times 10^{-12}$ ) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields  $3.7 \times 10^{10}$  radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [ $\text{mg C}/(\text{m}^2 \cdot \text{time})$ ] for periphyton and macrophytes and [ $\text{mg C}/(\text{m}^3 \cdot \text{time})$ ] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark-bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.



Milligrams of oxygen per area or volume per unit time [ $\text{mg O}_2/(\text{m}^2 \cdot \text{time})$ ] for periphyton and macrophytes and [ $\text{mg O}_2/(\text{m}^3 \cdot \text{time})$ ] for phytoplankton are units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrologic event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sea level 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 the United States and Canada, formerly called Sea Level Datum of 1929.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Streambed sediment is the sediment that has accumulated on the bed of a stream.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L)  $\times$  discharge ( $\text{ft}^3/\text{s}$ )  $\times$  0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow ( $7 Q_{10}$ ) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in a solvent.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific conductance is related to the type and concentration of ions in solution and can be used as an indicator of the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and the volume of water, per unit of time (discharge), flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton.

Surface area of a lake is that area, in acres, outlined on the latest USGS topographic map as the boundary of the lake and measured by a planimeter. In localities not covered by topographic maps, the areas are computed from the best maps available. All areas shown are those corresponding to the stage existing at the time when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-µm filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-µm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-µm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

Kingdom.....	Animal
Phylum.....	Arthropoda
Class.....	Insects
Order.....	Ephemeroptera
Family.....	Ephemeridae
Genus.....	<u>Hexagenia</u>
Species.....	<u>Hexagenia limbata</u>

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average

represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses, because different digestion procedures are likely to produce different analytical results.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data also are obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Water year in USGS reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1992, is called the "1992 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

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- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S. A. Leake and D. E. Prudic: USGS--TWRI Book 6, Chapter A2. 1991. 68 pages.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L. J. Torak: USGS--TWRI Book 6, Chapter A3. 1993. 136 pages.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R. L. Cooley: USGS--TWRI Book 6, Chapter A4. 1992. 108 pages.
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- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
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- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, by D. N. Myers and F. D. Wilde: USGS--TWRI Book 9, Chapter A7. 1997. 49 pages.





## SURFACE-WATER-DISCHARGE AND SURFACE-WATER-QUALITY RECORDS

## Remarks Codes

The following remark codes may appear with the water-quality data in this section:

PRINT OUTPUT	REMARK
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.

## Dissolved Trace-Element Concentrations

NOTE.-- Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.



## 05518000 KANKAKEE RIVER AT SHELBY, IN

LOCATION.--Lat 41°10'58", long 87°20'33", in SW1/4NE1/4 sec.33, T.32 N., R.8 W., Lake County, Hydrologic Unit 07120001, on right bank 25 ft upstream from Monon Railroad bridge, 1 mi south of Shelby, 7.7 mi upstream from Beaver Lake Ditch, and at mile 67.9.

DRAINAGE AREA.--1,779 mi<sup>2</sup>, of which 201 mi<sup>2</sup> does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1922 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1005: 1928(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 628.13 ft above sea level. Prior to Dec. 19, 1934, nonrecording gage at highway bridge about 400 ft upstream. Dec. 19, 1934, to Oct. 4, 1965, water-stage recorder on left bank 50 ft downstream, and Oct. 5, 1965, to Sept. 21, 1966, nonrecording gage on right bank 200 ft upstream. All at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1380	1490	1980	2540	e2200	5760	3400	1950	3580	2930	2200	1720
2	1370	1490	2260	2550	e2300	5830	3430	1980	3580	3040	2010	1670
3	1320	1470	2440	2570	e2400	5830	3410	1980	3520	2980	1880	1640
4	1270	1440	2580	2600	e2550	5760	3350	1980	3400	2850	1800	1600
5	1220	1420	2690	2650	e2700	5700	3310	1960	3290	2660	1730	1560
6	1180	1420	2690	2700	e2800	5630	3250	1950	3510	2490	1640	1500
7	1130	1490	2600	e2600	2970	5530	3150	1950	4380	2390	1550	1460
8	1090	1760	2520	e2500	2930	5400	3120	1950	4790	2290	1480	e1400
9	1120	2030	2460	e2400	2810	5260	3070	1930	4650	2300	1430	e1370
10	1130	2250	2380	e2300	2680	5140	2960	1890	4470	2260	1390	e1350
11	1120	2420	2380	e2200	2580	5000	2860	1840	4320	2180	1440	e1400
12	1080	2490	2510	e2100	2500	4850	2810	1800	4290	2070	1770	e1500
13	1080	2510	2580	e2000	2420	4730	2750	1790	4450	1970	2180	1430
14	1060	2470	2650	e1900	2350	4650	2690	1770	4400	1860	2520	1370
15	1040	2360	2730	e1840	2260	4580	2620	1750	4130	1770	2510	1340
16	1010	2230	2780	e1900	2210	4490	2550	1720	4090	1670	2370	1320
17	1020	2140	2770	e1850	2160	4410	2480	1690	5150	1590	2720	1360
18	1150	2090	2680	e1800	2130	4370	2400	1670	5480	1520	3440	1390
19	e1520	2070	2560	e1750	2370	4320	2350	2080	5210	1530	e3400	e1200
20	e1720	2060	2410	e1800	2550	4250	2290	e3200	5030	1560	e3100	e1220
21	e1780	2050	e2250	e2200	3350	4160	2230	e3450	4920	1640	2900	e1200
22	e1670	2000	e2100	e2500	4610	4040	2180	3510	4800	2290	2610	e1220
23	e1610	1950	e2200	e2800	4890	3920	2150	3450	4650	3330	2410	e1260
24	e1590	1910	2410	e3000	4900	3820	2100	3230	4440	3790	2270	e1290
25	e1530	1910	2510	e3200	4890	3700	2050	3120	4150	3810	2180	e1280
26	e1500	1900	2570	e3300	4960	3610	2010	3460	3840	3660	2140	e1270
27	e1470	1890	2680	e3200	5300	3510	1970	3400	3530	3370	2110	e1260
28	e1420	1880	2720	e3000	5700	3430	1940	3350	3290	3020	2060	e1240
29	e1380	1840	2710	e2800	---	3390	1910	3430	3100	2750	1980	e1220
30	e1330	1840	2620	e2600	---	3350	1910	3650	2890	2560	1880	e1200
31	e1300	---	2550	e2400	---	3340	---	3640	---	2390	1790	---
TOTAL	40590	58270	77970	75550	88470	141760	78700	76520	125330	76520	66890	41240
MEAN	1309	1942	2515	2437	3160	4573	2623	2468	4178	2468	2158	1375
MAX	1780	2510	2780	3300	5700	5830	3430	3650	5480	3810	3440	1720
MIN	1010	1420	1980	1750	2130	3340	1910	1670	2890	1520	1390	1200
CFSM	.74	1.09	1.41	1.37	1.78	2.57	1.47	1.39	2.35	1.39	1.21	.77
IN.	.85	1.22	1.63	1.58	1.85	2.96	1.65	1.60	2.62	1.60	1.40	.86

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1997, BY WATER YEAR (WY)

MEAN	1079	1358	1643	1820	1955	2547	2769	2301	1826	1283	985	886
MAX	3529	3413	4502	4867	3658	5570	5365	4409	4347	3228	3058	2843
(WY)	1991	1973	1928	1991	1950	1985	1982	1943	1981	1996	1990	1993
MIN	455	519	540	460	462	848	1226	789	569	441	402	356
(WY)	1954	1954	1964	1940	1963	1934	1925	1934	1934	1988	1988	1941

## SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

## WATER YEARS 1924 - 1997

ANNUAL TOTAL	778656		947810				
ANNUAL MEAN	2127		2597			1702	
HIGHEST ANNUAL MEAN						2767	1993
LOWEST ANNUAL MEAN						775	1964
HIGHEST DAILY MEAN	5470	Jul 25	5830	Mar 2		7650	Mar 26 1982
LOWEST DAILY MEAN	870	Jan 12	1010	Oct 16		260	Jan 13 1954
ANNUAL SEVEN-DAY MINIMUM	889	Jan 9	1060	Oct 11		298	Aug 2 1988
INSTANTANEOUS PEAK FLOW			5850	Mar 2		7650	Mar 26 1982
INSTANTANEOUS PEAK STAGE			12.11	Mar 2		12.98	Mar 24 1982
ANNUAL RUNOFF (CFSM)	1.20		1.46			.96	
ANNUAL RUNOFF (INCHES)	16.28		19.82			13.00	
10 PERCENT EXCEEDS	4220		4400			3350	
50 PERCENT EXCEEDS	1580		2390			1370	
90 PERCENT EXCEEDS	991		1370			634	

## 05519000 SINGLETON DITCH AT SCHNEIDER, IN

**LOCATION.**--Lat 41°12'44", long 87°26'44", in SW1/4NW1/4 sec.22, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on left bank 15 ft upstream from bridge on Ackerman Avenue, 0.5 mi upstream from Bruce Ditch, 1.5 mi downstream from Cedar Creek, 1.6 mi north of Schneider, and at mile 10.1.

**DRAINAGE AREA.**--123 mi<sup>2</sup>.

**PERIOD OF RECORD.**--July 1948 to current year.

**REVISED RECORDS.**--WSP 1915: 1956-59. WSP 2115: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 623.67 ft above sea level. Prior to Oct. 1, 1949, nonrecording gage at same site at datum 2.00 ft higher. Oct. 1, 1949, to Aug. 13, 1951, nonrecording gage at same site and datum.

**REMARKS.**--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	45	144	97	e160	680	133	91	167	217	76	89
2	43	42	173	117	224	530	127	83	165	146	57	85
3	41	42	138	137	251	406	123	86	159	126	57	82
4	40	58	116	130	329	339	121	83	146	115	66	79
5	40	55	109	213	365	296	139	82	136	107	63	76
6	40	52	105	174	199	269	173	88	931	103	59	74
7	38	81	98	149	159	242	156	80	1700	97	57	72
8	40	149	92	e130	137	227	134	87	1090	96	51	71
9	44	116	85	e110	124	230	127	85	681	138	50	70
10	42	100	82	e100	116	273	121	81	436	102	51	68
11	43	89	119	e96	e105	206	121	79	322	88	71	66
12	42	81	248	e90	e98	183	130	79	325	83	139	64
13	42	75	177	e86	e90	176	133	77	408	81	166	62
14	39	70	149	e84	85	305	124	76	290	78	119	60
15	39	67	140	e82	80	264	118	77	211	76	102	58
16	40	65	149	e84	77	214	116	74	1170	72	93	56
17	43	67	136	e80	75	198	113	73	1690	68	1110	69
18	64	67	e120	e76	122	184	111	72	1220	67	854	59
19	56	65	e105	e74	281	176	110	549	752	75	503	64
20	48	62	e94	e72	205	168	107	467	461	71	328	71
21	46	61	e84	e80	1300	161	104	299	359	76	240	63
22	46	60	e78	e470	1470	151	102	210	281	166	171	59
23	55	59	e120	701	955	144	99	155	213	186	151	58
24	57	59	282	421	619	140	94	130	196	159	143	56
25	53	67	203	310	438	142	89	882	184	121	136	55
26	48	70	296	e220	392	135	86	666	177	105	126	54
27	47	65	219	e180	1290	131	86	374	156	96	117	53
28	45	78	158	e160	958	127	87	256	143	90	110	52
29	44	87	142	e150	---	167	84	235	133	83	104	54
30	53	101	106	e140	---	155	84	212	134	100	99	51
31	51	---	97	e130	---	143	---	182	---	106	94	---
TOTAL	1413	2155	4364	5143	10704	7162	3452	6070	14436	3294	5563	1950
MEAN	45.6	71.8	141	166	382	231	115	196	481	106	179	65.0
MAX	64	149	296	701	1470	680	173	882	1700	217	1110	89
MIN	38	42	78	72	75	127	84	72	133	67	50	51
CFSM	.37	.58	1.14	1.35	3.11	1.88	.94	1.59	3.91	.86	1.46	.53
IN.	.43	.65	1.32	1.56	3.24	2.17	1.04	1.84	4.37	1.00	1.68	.59

e Estimated

## ILLINOIS RIVER BASIN

## 05519000 SINGLETON DITCH AT SCHNEIDER, IN--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1997, BY WATER YEAR (WY)

MEAN	60.7	88.7	116	126	150	208	212	146	124	72.0	48.3	46.5
MAX	295	471	457	475	487	634	477	421	481	321	237	308
(WY)	1994	1986	1991	1993	1959	1982	1950	1974	1997	1996	1990	1993
MIN	7.54	11.8	8.13	17.5	15.6	34.3	48.6	30.6	26.3	10.6	7.09	7.78
(WY)	1964	1957	1964	1977	1964	1957	1963	1958	1988	1988	1964	1964

## SUMMARY STATISTICS

## FOR 1996 CALENDAR YEAR

## FOR 1997 WATER YEAR

## WATER YEARS 1949 - 1997

ANNUAL TOTAL	46588		65706									
ANNUAL MEAN	127		180							116		
HIGHEST ANNUAL MEAN										227		1993
LOWEST ANNUAL MEAN										24.0		1964
HIGHEST DAILY MEAN	1760	Jul 19				1700	Jun 7			2990	Mar 5	1976
LOWEST DAILY MEAN	28	Jan 13				38	Oct 7			3.6	Sep 7	1964
ANNUAL SEVEN-DAY MINIMUM	29	Jan 9				40	Oct 2			3.8	Sep 4	1964
INSTANTANEOUS PEAK FLOW						2270	Jun 16			3550	Mar 5	1976
INSTANTANEOUS PEAK STAGE						12.05	Jun 16			12.54	Nov 28	1990
ANNUAL RUNOFF (CFSM)	1.03					1.46				.95		
ANNUAL RUNOFF (INCHES)	14.09					19.87				12.84		
10 PERCENT EXCEEDS	259					333				256		
50 PERCENT EXCEEDS	67					105				62		
90 PERCENT EXCEEDS	39					53				18		

## 05520500 KANKAKEE RIVER AT MOMENCE, IL

LOCATION.--Lat 41°09'36", long 87°40'07", in SW1/4NE1/4 sec.24, T.31 N., R.13 E., Kankakee County, Hydrologic Unit 07120001, on right bank at end of Hill Street in Momence, 0.2 mi downstream from bridge on State Highways 1 and 17, 1.2 mi upstream from Tower Creek, and at mile 47.9.

DRAINAGE AREA.--2,294 mi<sup>2</sup>, of which 201 mi<sup>2</sup> probably is noncontributing.

PERIOD OF RECORD.--February to December 1905, February to July 1906, December 1914 to current year.

REVISED RECORDS.--WSP 1238: 1916, 1930. WSP 1308: 1915(M), 1917(M), 1919(M), 1922(M), 1926(M), 1934-35(M), 1938(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 609.18 ft above sea level. Prior to Aug. 1, 1938, nonrecording gage at site 0.2 mi upstream at datum 1.00 ft higher. Aug. 1, 1938, to Aug. 8, 1969, water-stage recorder at present site at datum 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,100 ft<sup>3</sup>/s, Feb. 27, gage height, 5.81 ft; minimum discharge, 1,130 ft<sup>3</sup>/s, Oct. 15-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1470	1530	2310	3150	e3500	8520	3930	2710	4260	3560	2670	2020
2	1470	1540	2480	3170	e3600	8110	3890	2680	4290	3440	2380	1900
3	1450	1540	2650	3220	e3800	7640	3890	2670	4220	3420	2120	1810
4	1420	1540	2810	3220	e4300	7320	3880	2570	4110	3370	1960	1760
5	1380	1530	2950	3400	e4800	7050	3940	2450	3950	3250	1850	1720
6	1310	1510	3080	3370	e5400	6820	3990	2380	5290	3090	1720	1640
7	1280	1650	3100	3260	e5000	6640	3890	2280	8320	2890	1580	1560
8	1260	1920	3090	3220	e4100	6500	3800	2250	8400	2750	1460	1520
9	1250	2050	3060	3200	e3800	6400	3730	2250	7870	2750	1380	1540
10	1230	2230	2980	3180	3590	6520	3670	2190	7040	2800	1330	1530
11	1230	2400	2990	3100	3410	6310	3640	2150	6380	2770	1570	1530
12	1210	2560	3460	e3050	3270	5980	3640	2110	6360	2610	2220	1550
13	1180	2700	3360	e2950	3130	5760	3630	2070	6280	2420	2640	1540
14	1170	2740	3260	e2900	2980	6050	3570	2060	6080	2260	2880	1480
15	1160	2740	3240	e2800	2870	5960	3450	2040	5720	2090	3040	1440
16	1140	2720	3380	e2700	2810	5640	3350	1970	7000	1910	3150	1400
17	1140	2620	3390	e2650	2750	5420	3280	1920	9350	1750	5680	1450
18	1180	2490	3370	e2600	2860	5290	3210	1880	8520	1650	5790	1480
19	1270	2430	3290	e2550	3600	5160	3130	3080	7710	1650	5210	1550
20	1480	2400	e3100	e2500	3570	5050	3020	4050	6980	1650	4820	1600
21	1680	2380	e2800	e2600	6740	4950	2930	4030	6660	1760	4380	1510
22	1760	2360	2470	e2900	8620	4840	2880	4290	6310	2320	3900	1470
23	1800	2320	2870	e4000	7940	4690	2830	4370	5860	2900	3490	1440
24	1790	2300	e3300	e4700	7390	4580	2800	4260	5520	3550	3170	1430
25	1770	2290	e3200	e5000	6880	4530	2760	5030	5270	3970	2900	1430
26	1750	2280	3200	e4600	6620	4400	2720	5280	4990	4140	2690	1400
27	1730	2230	3230	e4300	9400	4250	2720	4760	4560	4000	2600	1350
28	1660	2200	3230	e4000	9340	4140	2730	4490	4190	3730	2530	1300
29	1620	2200	3250	e3700	---	4210	2730	4330	3850	3420	2450	1270
30	1570	2220	3230	e3600	---	4140	2720	4280	3630	3170	2330	1240
31	1540	---	3190	e3500	---	4050	---	4260	---	2940	2170	---
TOTAL	44350	65620	95320	103090	136070	176920	100350	97140	178970	87980	88060	45860
MEAN	1431	2187	3075	3325	4860	5707	3345	3134	5966	2838	2841	1529
MAX	1800	2740	3460	5000	9400	8520	3990	5280	9350	4140	5790	2020
MIN	1140	1510	2310	2500	2750	4050	2720	1880	3630	1650	1330	1240
CFSM	.62	.95	1.34	1.45	2.12	2.49	1.46	1.37	2.60	1.24	1.24	.67
IN.	.72	1.06	1.55	1.67	2.21	2.87	1.63	1.58	2.90	1.43	1.43	.74

e Estimated

## ILLINOIS RIVER BASIN

## 05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 1997, BY WATER YEAR (WY)

MEAN	1204	1574	2009	2217	2468	3267	3489	2888	2197	1481	1087	993
MAX	4739	4731	6759	6250	5136	7485	7438	5936	5966	4471	3530	4014
(WY)	1994	1991	1928	1991	1968	1982	1950	1943	1997	1996	1996	1993
MIN	429	511	547	404	498	1001	862	883	640	434	378	369
(WY)	1964	1965	1964	1918	1963	1957	1915	1934	1934	1988	1988	1919

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1905 - 1997		
ANNUAL TOTAL	982920		1219730				
ANNUAL MEAN	2686		3342		2081		
HIGHEST ANNUAL MEAN					3743		
LOWEST ANNUAL MEAN					857		
HIGHEST DAILY MEAN	9740	Jul 22	9400	Feb 27	14800	Mar 7	1979
LOWEST DAILY MEAN	1000 A	Jan 12-13	1140	Oct 16-17	248	Aug 7	1988
ANNUAL SEVEN-DAY MINIMUM	1030	Jan 9	1170	Oct 12	271	Aug 3	1988
INSTANTANEOUS PEAK FLOW			10100	Feb 27	16000	Mar 6	1979
INSTANTANEOUS PEAK STAGE			5.81	Feb 27	10.51 B	Mar 6	1979
INSTANTANEOUS LOW FLOW			1130	Oct 15-17	243	Aug 7	1988
ANNUAL RUNOFF (CFSM)	1.17		1.46		.91		
ANNUAL RUNOFF (INCHES)	15.94		19.78		12.33		
10 PERCENT EXCEEDS	5450		5970		4300		
50 PERCENT EXCEEDS	1880		2990		1580		
90 PERCENT EXCEEDS	1210		1480		655		

A - Estimated due to backwater from ice.

B - Ice jam.



## 05525000 IROQUOIS RIVER AT IROQUOIS, IL

LOCATION.--Lat 40°49'25", long 87°34'55", in NE1/4 SE1/4 sec.15, T.27 N., R.11 W., Iroquois County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on U.S. Highway 52 in Iroquois, 500 ft upstream from a railroad bridge. 4.5 mi downstream from Indiana-Illinois State line, and at mile 50.4.

DRAINAGE AREA.--686 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 614.34 ft above sea level. Prior to Aug. 5, 1945, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Recording raingage and gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,030 ft<sup>3</sup>/s, Feb. 28, gage height, 21.94 ft; minimum discharge, 51 ft<sup>3</sup>/s, Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	148	587	e560	e540	5780	1010	415	1920	394	205	141
2	75	154	861	665	e500	5390	955	463	1750	369	166	127
3	66	146	943	761	e650	4870	854	584	1700	339	139	116
4	62	135	909	819	e900	4280	768	1040	1630	304	128	109
5	60	128	812	889	e1300	3690	723	1180	1480	275	115	102
6	58	129	703	933	1790	3060	803	1120	2250	252	102	94
7	54	142	619	e750	1740	2490	884	973	4510	236	91	89
8	53	267	561	e630	1540	2030	874	825	5340	226	81	87
9	54	557	536	e530	1230	1710	771	709	5590	238	74	88
10	56	578	497	e450	943	1700	666	616	5430	415	68	108
11	59	485	517	e400	752	1710	610	541	5050	505	67	155
12	59	388	922	e360	650	1660	629	501	4800	442	76	160
13	58	311	1110	e330	566	1560	738	470	4970	339	120	129
14	55	261	1150	e300	e480	1680	802	434	4790	276	227	105
15	55	234	1100	e280	e440	1930	793	402	4290	263	274	93
16	54	218	998	e270	e400	2040	729	370	3670	273	244	85
17	54	214	909	e260	e360	2050	656	348	2920	250	320	82
18	58	226	825	e250	427	1920	593	339	2350	215	440	84
19	114	243	694	e240	1050	1710	559	357	1870	219	506	86
20	183	250	e500	e260	1410	1470	542	399	1450	227	508	86
21	162	245	635	e300	2780	1230	521	407	1100	200	437	127
22	132	230	590	e450	4110	1050	494	376	859	223	343	182
23	119	216	532	e700	4500	886	464	346	705	361	269	159
24	131	212	696	e1400	4470	755	437	331	635	379	220	130
25	184	214	936	e1500	4200	700	409	532	583	335	190	115
26	191	245	e800	e1500	3850	708	381	1530	562	292	174	105
27	171	291	e650	e1400	5170	729	367	1990	529	249	165	98
28	152	285	e600	e1200	5990	721	369	2220	484	211	183	91
29	138	284	e560	e900	---	762	371	2320	430	228	229	85
30	133	303	e540	e700	---	895	366	2380	396	275	203	77
31	129	---	e520	e580	---	984	---	2180	---	252	165	---
TOTAL	3016	7739	22812	20567	52738	62150	19138	26698	74043	9062	6529	3295
MEAN	97.3	258	736	663	1884	2005	638	861	2468	292	211	110
MAX	191	578	1150	1500	5990	5780	1010	2380	5590	505	508	182
MIN	53	128	497	240	360	700	366	331	396	200	67	77
CFSM	.14	.38	1.07	.97	2.75	2.92	.93	1.26	3.60	.43	.31	.16
IN.	.16	.42	1.24	1.12	2.86	3.37	1.04	1.45	4.02	.49	.35	.18

e Estimated

## ILLINOIS RIVER BASIN

## 05525000 IROQUOIS RIVER AT IROQUOIS, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1997, BY WATER YEAR (WY)

MEAN	256	356	558	629	809	1067	1096	842	735	406	139	194
MAX	2556	1878	1794	3030	2213	3462	3116	1944	3496	1958	595	2020
(WY)	1994	1986	1968	1950	1950	1982	1950	1981	1958	1951	1990	1993
MIN	10.6	18.0	16.9	20.6	27.7	94.8	249	141	53.7	23.4	11.4	11.7
(WY)	1957	1957	1964	1945	1963	1957	1946	1958	1988	1988	1988	1964

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1945 - 1997	
ANNUAL TOTAL	178806		307787			
ANNUAL MEAN	489		843		589	
HIGHEST ANNUAL MEAN					1323	
LOWEST ANNUAL MEAN					121	
HIGHEST DAILY MEAN	2930		5990		10200	
LOWEST DAILY MEAN	42 A	Jan 11, Feb 7	53	Oct 8	5.5	Sep 13 1964
ANNUAL SEVEN-DAY MINIMUM	46	Jan 7	56	Oct 6	6.6	Sep 8 1964
INSTANTANEOUS PEAK FLOW			6030	Feb 28	10400	Jun 13 1958
INSTANTANEOUS PEAK STAGE			21.94	Feb 28	26.31	Jun 13 1958
INSTANTANEOUS LOW FLOW			51	Oct 17	5.2	Sep 13 1964
ANNUAL RUNOFF (CFSM)	.71		1.23		.86	
ANNUAL RUNOFF (INCHES)	9.70		16.69		11.66	
10 PERCENT EXCEEDS	1410		1950		1600	
50 PERCENT EXCEEDS	179		442		270	
90 PERCENT EXCEEDS	57		94		32	

A - Estimated due to backwater from ice.

## 05525500 SUGAR CREEK AT MILFORD, IL

LOCATION.--Lat 40°37'50", long 87°43'25", in NW1/4NE1/4 sec.16, T.25 N., R.12 W., Iroquois County, Hydrologic Unit 07120002, on pier at downstream side of bridge on County Highway 9, 200 ft downstream from Mud Creek, 1 mi west of Milford, and at mile 23.9.

DRAINAGE AREA.--446 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 622.00 ft above sea level. Prior to July 23, 1970, nonrecording gage at same site and datum.

REMARKS.--Records good except those for July 23-24, and Aug. 5-12, which are fair, and those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	0645	4,160	18.49	June 7	1800	2,940	16.87
Feb. 27	1930	*5,750	*20.16	June 13	1900	4,270	18.62

Minimum discharge, 8.9 ft<sup>3</sup>/s, Sept. 30, observed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	23	360	176	e260	2640	323	219	862	365	56	24
2	10	20	416	219	298	1860	296	193	1140	252	50	24
3	10	18	300	263	610	1390	280	731	1550	203	47	24
4	9.7	20	219	278	1090	1020	272	1980	1310	174	43	23
5	9.5	20	186	382	1770	789	280	1530	930	156	39	22
6	9.6	20	169	382	1360	647	319	922	881	140	35	21
7	9.7	40	139	245	796	535	268	623	2330	133	33	21
8	10	109	121	e210	459	484	229	497	2580	130	31	21
9	12	98	104	e180	336	507	207	413	2410	630	28	22
10	12	64	102	e155	e290	1230	197	339	1700	1010	28	23
11	11	45	419	e135	e250	1070	203	300	1140	721	30	21
12	11	34	1170	e120	e220	764	216	286	949	359	34	20
13	10	29	823	e110	e190	608	216	258	3150	216	34	19
14	.0	25	542	e100	e175	1320	198	236	3370	164	34	19
15	11	24	418	e96	e165	1660	185	210	2210	161	35	19
16	10	23	410	e91	e155	1040	181	185	1500	128	34	18
17	11	25	390	e88	148	737	174	181	989	107	140	18
18	17	27	303	e85	268	611	168	175	653	95	411	18
19	19	26	243	e82	957	566	181	189	516	102	240	17
20	16	25	e200	e105	1090	540	176	201	440	91	123	19
21	14	24	292	158	3140	490	171	175	391	90	78	18
22	15	22	218	713	4000	434	166	158	351	472	57	17
23	23	21	217	e1870	2860	359	e160	156	307	618	46	17
24	25	22	435	e1890	1930	315	e150	155	282	368	42	18
25	24	31	363	1350	1360	326	e140	822	263	226	39	17
26	21	44	e290	767	1070	306	e130	1890	304	163	37	17
27	21	45	e235	e460	4170	291	e140	2120	359	127	35	16
28	19	45	e210	e360	4490	293	e150	2090	305	105	32	14
29	20	40	e190	e320	---	344	e140	1780	254	86	30	12
30	22	119	e175	e290	---	345	e140	1560	228	73	26	e8.9
31	22	---	e170	e274	---	326	---	1090	---	62	24	---
TOTAL	455.5	1128	9829	11954	33907	23847	6056	21664	33654	7727	1951	567.9
MEAN	14.7	37.6	317	386	1211	769	202	699	1122	249	62.9	18.9
MAX	25	119	1170	1890	4490	2640	323	2120	3370	1010	411	24
MIN	9.5	18	102	82	148	291	130	155	228	62	24	8.9
CFSM	.03	.08	.71	.86	2.72	1.72	.45	1.57	2.52	.56	.14	.04
IN.	.04	.09	.82	1.00	2.83	1.99	.51	1.81	2.81	.64	.16	.05

e Estimated

## ILLINOIS RIVER BASIN

## 05525500 SUGAR CREEK AT MILFORD, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1997, BY WATER YEAR (WY)

MEAN	120	237	382	407	532	646	704	547	483	302	104	114
MAX	1290	1964	1361	2240	1918	1915	1908	1435	1722	1599	814	1250
(WY)	1994	1986	1991	1950	1951	1979	1994	1995	1980	1993	1977	1993
MIN	4.55	7.69	5.57	4.06	12.0	64.5	110	56.6	27.2	10.8	6.13	4.27
(WY)	1964	1964	1964	1977	1963	1981	1986	1988	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1948 - 1997	
ANNUAL TOTAL	112810.5		152740.4			
ANNUAL MEAN	308		418		380	
HIGHEST ANNUAL MEAN					855	
LOWEST ANNUAL MEAN					87.2	
HIGHEST DAILY MEAN	12100	Jun 18	4490	Feb 28	15200	Apr 13 1994
LOWEST DAILY MEAN	9.5	Oct 5	8.9	Sep 30	2.5	Sep 1 1972
ANNUAL SEVEN-DAY MINIMUM	9.8	Oct 2	9.8	Oct 2	2.9	Sep 11 1988
INSTANTANEOUS PEAK FLOW			5750	Feb 27	22900 A	Feb 21 1951
INSTANTANEOUS PEAK STAGE			20.16	Feb 27	28.16	Apr 12 1994
INSTANTANEOUS LOW FLOW			8.9 B	Sep 30	2.0	C
ANNUAL RUNOFF (CFSM)	.69		.94		.85	
ANNUAL RUNOFF (INCHES)	9.41		12.74		11.59	
10 PERCENT EXCEEDS	769		1150		1000	
50 PERCENT EXCEEDS	95		181		128	
90 PERCENT EXCEEDS	14		19		11	

A - Gage height, 20.90 ft, from rating curve extended above 8,200 ft<sup>3</sup>/s.

B - Observed.

C - Sept. 1, 2, 7, 1972; Oct 8, 1994.

## 05526000 IROQUOIS RIVER NEAR CHEBANSE, IL

LOCATION.--Lat 41°00'32", long 87°49'27", in SE1/4SW1/4 sec.10, T.29 N., R.13 W., Kankakee County, Hydrologic Unit 07120002, on right bank at upstream side of bridge on county highway, 3.1 mi downstream from Beaver Creek, 4.5 mi east of Chebanse, and at mile 6.5.

DRAINAGE AREA.--2,091 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1923 to current year.

REVISED RECORDS.--WSP 1308: 1924-28(M), 1930(M), 1936(M), 1938(M), 1942(M), 1947(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 595.99 ft above sea level. Prior to June 16, 1976, nonrecording gage, and June 17, 1976 to Aug. 13, 1979 water-stage recorder at site 600 ft upstream at datum 2.00 ft higher. Aug. 14 to Oct. 24, 1979, nonrecording gage at present site at datum 2.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in spring of 1913 reached a stage of 21.6 ft, present datum, discharge about 34,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,700 ft<sup>3</sup>/s, Mar. 1, gage height, 15.08 ft; minimum discharge, 88 ft<sup>3</sup>/s, Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	200	665	1220	e1600	17200	e2300	824	4620	1220	419	295
2	148	195	1210	1310	e1500	16800	e2200	885	3960	1270	375	255
3	136	203	1670	1590	e1700	14500	e1900	1100	4010	1170	330	223
4	131	205	1740	1900	e2200	11800	1750	1950	4420	1030	284	216
5	123	194	1630	2100	e3000	9360	1700	3590	4180	905	252	205
6	119	208	1440	2200	e6400	7240	1730	3790	4330	797	231	189
7	103	e230	1260	e1800	e6000	5600	1750	2870	8590	712	205	173
8	113	e260	1110	e1500	e5000	4430	1720	2260	11500	654	182	168
9	116	e400	996	e1300	e4000	3890	1600	1890	13200	604	167	167
10	109	e1000	913	e1100	e3400	4720	1460	1630	13400	906	157	173
11	117	e1050	1090	e1000	e2800	5220	1370	1430	12600	1650	172	196
12	114	e850	2360	e920	e2300	4800	1800	1280	12300	1630	231	205
13	109	e700	3550	e850	e2000	3990	2080	1190	12400	1260	259	223
14	106	554	3430	e800	e1700	4140	2000	1110	12000	937	263	226
15	110	483	2900	e750	e1500	5190	1870	1030	11800	739	291	205
16	110	431	2480	e700	e1400	5550	1740	956	11200	644	359	183
17	116	416	2210	e660	e1200	4810	1600	878	9920	593	547	169
18	123	386	1930	e630	1610	4010	1480	847	7690	535	898	162
19	138	382	1550	e600	3420	3540	1380	916	5460	505	1460	161
20	139	382	1300	e580	5460	3150	1340	977	4000	509	1660	e160
21	175	385	1660	e560	11100	2800	1280	978	3050	499	1510	e170
22	210	388	1460	e1000	15200	2490	1220	944	2460	490	1070	e200
23	216	379	1330	e2000	16200	2160	1160	880	2060	785	768	e240
24	216	375	1540	e5000	16000	1890	1090	829	1760	1280	577	e230
25	210	372	e2100	e5500	14400	1760	1020	828	1570	1240	456	e210
26	215	423	e2300	e5000	11900	1710	953	1970	1520	964	391	e200
27	240	433	e2000	e4000	14000	1680	893	4160	1630	758	349	e180
28	241	451	e1700	e3000	e16000	e1650	877	5290	1770	603	316	e170
29	239	474	e1500	e2300	---	e1900	870	5810	1580	490	299	e165
30	223	524	1350	e1900	---	e2100	860	5910	1320	434	315	e160
31	209	---	1210	e1700	---	e2200	---	5510	---	428	319	---
TOTAL	4830	12933	53584	55470	172990	162280	44993	64512	190300	26241	15112	5879
MEAN	156	431	1729	1789	6178	5235	1500	2081	6343	846	487	196
MAX	241	1050	3550	5500	16200	17200	2300	5910	13400	1650	1660	295
MIN	103	194	665	560	1200	1650	860	824	1320	428	157	160
CFSM	.07	.21	.83	.86	2.95	2.50	.72	1.00	3.03	.40	.23	.09
IN.	.09	.23	.95	.99	3.08	2.89	.80	1.15	3.39	.47	.27	.10

e Estimated

## ILLINOIS RIVER BASIN

## 05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1997, BY WATER YEAR (WY)

MEAN	717	986	1574	1904	2524	3100	3222	2653	1978	1211	463	592
MAX	8019	5850	8203	9079	7425	11210	8396	10910	7934	7004	2497	7372
(WY)	1994	1986	1928	1950	1982	1982	1950	1943	1958	1993	1977	1973
MIN	25.5	37.2	40.7	26.1	82.3	200	574	169	94.6	33.0	33.7	26.3
(WY)	1957	1965	1964	1945	1931	1931	1931	1934	1934	1934	1988	1941

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1923 - 1977	
ANNUAL TOTAL	556306		809124			
ANNUAL MEAN	1520		2217		1741	
HIGHEST ANNUAL MEAN					4477	
LOWEST ANNUAL MEAN					365	
HIGHEST DAILY MEAN	12500	Jun 20	17200	Mar 1	27000	Mar 7 1979
LOWEST DAILY MEAN	103	Oct 7	103	Oct 7	10	Oct 6 1956
ANNUAL SEVEN-DAY MINIMUM	111	Oct 10	111	Oct 10	14	Aug 2 1934
INSTANTANEOUS PEAK FLOW			17700	Mar 1	27000	A
INSTANTANEOUS PEAK STAGE			15.08	Mar 1	21.68 B	Mar 7 1979
INSTANTANEOUS LOW FLOW			88	Oct 7	9.0	C
ANNUAL RUNOFF (CFSM)	.73		1.06		.83	
ANNUAL RUNOFF (INCHES)	9.90		14.39		11.32	
10 PERCENT EXCEEDS	4100		5360		4740	
50 PERCENT EXCEEDS	502		1160		735	
90 PERCENT EXCEEDS	144		178		79	

A - May 13, 1933; Mar. 7, 1979.

B - Present datum, ice jam.

C - Oct. 6-8, 1956.

## 05527500 KANKAKEE RIVER NEAR WILMINGTON, IL

LOCATION.--Lat 41°20'48", long 88°11'11", in NW1/4NW1/4 sec.15, T.33 N., R.9 E., Will County, Hydrologic Unit 07120001, on right bank, 0.4 mi downstream from Prairie Creek, 0.5 mi upstream from bridge on Interstate 55, 5 mi downstream from Wilmington, and at mile 5.7.

DRAINAGE AREA.--5,150 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1308.

December 1914 to September 1933 at site 8.5 mi upstream, published as Kankakee River at Custer Park. Records may not be equivalent.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-83-2: 1982(M). WDR IL-91-2: 1981(M).

GAGE.--Water-stage recorder. Datum of gage is 510.86 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Slight diurnal fluctuation at low flow caused by powerplants upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods in 1883, 1887 reached a stage of 16.73 ft, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37,500 ft<sup>3</sup>/s, Feb. 22, gage height, 7.27 ft; maximum gage height, 9.59 ft (ice jam), Dec. 26; minimum discharge, 1,210 ft<sup>3</sup>/s, Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1880	2020	3580	5300	e5100	28800	7640	4630	10600	5690	3490	2630
2	1800	2000	4020	5500	e5000	28100	7460	4650	9890	5400	3200	2360
3	1870	2020	4920	6210	e6000	25700	7320	4920	9570	5270	2850	2160
4	1710	2020	5480	6620	e8000	22800	7180	5150	9870	5180	2590	2050
5	1640	2030	5660	7330	e13000	19800	7170	7310	9820	4950	2410	1980
6	1590	2030	5630	7490	e16000	17200	7170	8630	9350	4620	2210	1950
7	1540	2380	5430	6830	e14000	15100	7290	7640	15800	4270	2050	1860
8	1510	3130	5080	6420	e12000	13500	6960	6620	20200	3960	1870	1800
9	1510	3690	4930	5990	e9500	12800	6690	5840	21600	3660	1750	1710
10	1480	3850	4640	5300	e8500	13900	6380	5260	21500	3700	1660	1740
11	1590	4050	4720	4370	e7000	14200	6370	4840	20300	4460	2070	1730
12	1480	4100	6860	e4000	e6200	13600	7320	4600	20100	5120	2720	1750
13	1410	4080	8520	e3700	e5600	12500	8090	4310	20500	4580	3420	1740
14	1380	4020	8490	e3500	e5100	13100	7670	4040	19500	3890	3470	1870
15	1360	3930	7900	e3300	e4600	13900	7210	3940	18700	3380	3640	1800
16	1410	3810	7760	e3200	e4300	13600	6800	3710	20600	3100	3830	1670
17	1490	3730	7230	e3100	e4000	12900	6430	3560	24800	2820	7590	1830
18	1570	3540	6710	e3000	4720	11800	6070	3510	20300	2640	10200	1830
19	1710	3380	5980	e2900	9260	11000	5880	4780	16600	2760	8850	1790
20	1840	3260	5120	e2800	11100	10400	5610	6540	14000	2660	8350	1860
21	2170	3140	e4800	e2900	26100	9980	5410	5960	12300	2570	7620	1800
22	2320	3110	e4500	e3200	34400	9450	5200	5870	11000	3500	6500	1780
23	2520	3060	7290	e9000	28200	8820	5020	5960	10100	3940	5400	1830
24	2490	3020	8450	e12000	26100	8170	4850	5750	9260	4960	4590	1810
25	2440	3040	e8000	e14000	24000	7900	4680	6210	8350	5810	4050	1800
26	2400	3120	e7300	e13000	22300	7590	4530	8170	8070	5870	3570	1750
27	2380	3140	e6600	e10000	31900	7350	4490	9890	7480	5510	3320	1630
28	2350	3140	e6200	e8000	30500	7160	4550	11000	7130	5050	3260	1650
29	2250	3190	e5800	e6800	---	7410	4540	11400	6660	4500	3130	1530
30	2240	3350	e5500	e5800	---	7720	4530	11600	5890	4070	2970	1390
31	2200	---	e5400	e5400	---	7760	---	11300	---	3710	2840	---
TOTAL	57530	94380	188500	186960	382480	414010	186510	197590	419840	131600	125470	55080
MEAN	1856	3146	6081	6031	13660	13360	6217	6374	13990	4245	4047	1836
MAX	2520	4100	8520	14000	34400	28800	8090	11600	24800	5870	10200	2630
MIN	1360	2000	3580	2800	4000	7160	4490	3510	5890	2570	1660	1390
CFSM	.36	.61	1.18	1.17	2.65	2.59	1.21	1.24	2.72	.82	.79	.36
IN.	.42	.68	1.36	1.35	2.76	2.99	1.35	1.43	3.03	.95	.91	.40

e Estimated

## ILLINOIS RIVER BASIN

## 05527500 KANKAKEE RIVER NEAR WILMINGTON, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1997, BY WATER YEAR (WY)

MEAN	2310	3343	4426	4883	5912	7844	8052	6975	5482	3459	1966	1906
MAX	15570	15530	18150	17270	13870	22730	18360	21480	14320	12710	5793	14370
(WY)	1994	1986	1983	1993	1968	1982	1950	1943	1993	1993	1990	1993
MIN	515	605	637	700	709	1443	2359	1820	957	463	451	482
(WY)	1964	1954	1964	1945	1963	1957	1940	1958	1936	1936	1988	1941

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1934 - 1997		
ANNUAL TOTAL	1929290			2439950					
ANNUAL MEAN	5271			6685			4709		
HIGHEST ANNUAL MEAN							10380		
LOWEST ANNUAL MEAN							1407		
HIGHEST DAILY MEAN	28600			34400			55100		
LOWEST DAILY MEAN	1200 A			1360			270		
ANNUAL SEVEN-DAY MINIMUM	1250			1440			340		
INSTANTANEOUS PEAK FLOW				37500 B			75900 C		
INSTANTANEOUS PEAK STAGE				9.59D			13.88 D		
INSTANTANEOUS LOW FLOW				1210			204		
ANNUAL RUNOFF (CFSM)	1.02			1.30			.91		
ANNUAL RUNOFF (INCHES)	13.94			17.62			12.42		
10 PERCENT EXCEEDS	12900			13600			10700		
50 PERCENT EXCEEDS	3050			5050			3060		
90 PERCENT EXCEEDS	1550			1810			872		

A - Estimated due to backwater from ice.

B - Gage height, 7.27 ft.

C - Gage height, 11.40 ft.

D - Ice jam.



## 05527800 DES PLAINES RIVER AT RUSSELL, IL

LOCATION.--Lat 42°29'22", long 87°55'32", in SE1/4 sec.3, T.46 N., R.11 E., Lake County, Hydrologic Unit 07120004, or right bank at upstream side of Russell Road bridge, 0.3 mi west of Russell, 7.2 mi upstream from Mill Creek, and at mile 109.3.

DRAINAGE AREA.--123 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961-63, and annual maximum gage heights, water years 1962-66. June 1967 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-76-1: 1960-68(M), 1973(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 662.00 ft above sea level. Oct. 17, 1961 to June 29, 1967, crest-stage gage at left downstream side of bridge at datum 4.29 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Recording rain gage and gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 853 ft<sup>3</sup>/s, Feb. 24, gage height, 7.77 ft; minimum discharge, .97 ft<sup>3</sup>/s, Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	49	28	e20	e43	421	69	143	68	51	5.5	7.3
2	5.6	30	34	e22	e54	423	64	192	58	50	5.0	4.9
3	4.2	20	25	e30	e70	409	60	229	52	46	4.6	4.3
4	3.1	16	21	e44	e90	392	60	239	46	38	5.4	4.3
5	3.0	14	e20	e66	e120	361	60	234	40	32	6.0	3.3
6	2.6	12	e25	e100	e135	328	66	217	63	25	5.2	3.2
7	1.9	12	e26	e110	e125	289	59	193	91	18	4.4	3.0
8	1.6	11	e25	e78	e115	252	50	178	89	16	3.3	2.7
9	1.8	10	24	e60	e87	220	44	162	71	19	3.5	2.8
10	2.8	9.5	17	e48	e70	189	40	145	55	17	3.3	2.8
11	2.1	8.6	35	e44	e59	163	38	127	45	14	3.4	2.9
12	1.8	7.4	103	e39	e50	143	46	105	42	10	6.0	2.8
13	1.9	6.9	106	e35	e46	128	68	85	48	8.1	15	2.4
14	1.5	6.8	87	e32	e42	122	97	74	53	6.6	12	2.3
15	1.2	6.3	75	e30	e37	114	114	70	47	5.8	9.7	2.2
16	1.2	6.2	e63	e27	e33	101	120	68	189	5.5	12	2.0
17	2.4	7.6	e56	e25	e30	94	112	62	256	4.2	13	39
18	5.6	7.7	e41	e23	e46	88	99	61	286	3.7	21	70
19	5.2	7.6	e31	e21	e90	82	87	117	301	3.3	17	63
20	4.6	7.5	e25	e20	207	77	78	164	296	3.1	13	117
21	3.7	7.1	e23	e21	409	74	76	162	298	28	12	167
22	2.6	7.2	23	e50	691	72	76	132	287	97	11	193
23	5.5	8.0	26	e108	797	71	75	98	247	85	7.9	203
24	9.5	11	42	e120	799	67	71	75	228	51	27	193
25	8.0	17	e34	e110	684	74	65	83	208	32	54	160
26	6.6	23	e27	e90	549	86	60	103	176	22	44	102
27	6.9	15	e22	e78	486	89	55	109	122	19	26	56
28	6.0	12	e21	e64	434	85	52	98	77	17	14	39
29	15	10	e21	e55	---	82	49	86	55	12	12	27
30	73	16	e20	e47	---	80	54	78	51	8.9	8.0	18
31	73	---	e20	e41	---	76	---	74	---	6.8	6.9	---
TOTAL	271.6	382.4	1146	1658	6398	5252	2064	3963	3945	755.0	391.1	1500.2
MEAN	8.76	12.7	37.0	53.5	229	169	68.8	128	132	24.4	12.6	50.0
MAX	73	49	106	120	799	423	120	239	301	97	54	203
MIN	1.2	6.2	17	20	30	67	38	61	40	3.1	3.3	2.0
CFSM	.07	.10	.30	.43	1.86	1.38	.56	1.04	1.07	.20	.10	.41
IN.	.08	.12	.35	.50	1.94	1.59	.62	1.20	1.19	.23	.12	.45

e Estimated

## ILLINOIS RIVER BASIN

## 05527800 DES PLAINES RIVER AT RUSSELL, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1997, BY WATER YEAR (WY)

MEAN	42.7	71.6	94.2	64.5	99.0	222	220	119	81.5	56.8	45.0	57.3
MAX	364	390	382	279	327	673	718	410	356	363	417	410
(WY)	1987	1986	1983	1993	1974	1979	1993	1996	1996	1978	1978	1972
MIN	.056	2.75	3.06	1.46	2.35	14.9	33.4	6.15	1.90	.78	.87	.060
(WY)	1995	1972	1977	1977	1977	1968	1977	1977	1988	1988	1988	1994

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1967 - 1997		
ANNUAL TOTAL	38497.11			27726.3					
ANNUAL MEAN	105			76.0			97.9		
HIGHEST ANNUAL MEAN							206		
LOWEST ANNUAL MEAN							9.24		
HIGHEST DAILY MEAN	1160	May 23		799	Feb 24		2100	Mar 21	1979
LOWEST DAILY MEAN	.37	Sep 5, 6		1.2	Oct 15, 16		.00	A	
ANNUAL SEVEN-DAY MINIMUM	.62	Aug 31		1.7	Oct 11		.00	Jul 27	1988
INSTANTANEOUS PEAK FLOW				853	Feb 24		2120 B	Mar 21	1979
INSTANTANEOUS PEAK STAGE				7.77	Feb 24		10.75	C	
INSTANTANEOUS LOW FLOW				.97	Oct 16				
ANNUAL RUNOFF (CFSM)	.86			.62			.80		
ANNUAL RUNOFF (INCHES)	11.64			8.39			10.82		
10 PERCENT EXCEEDS	330			190			271		
50 PERCENT EXCEEDS	32			44			32		
90 PERCENT EXCEEDS	2.7			4.2			3.0		

A - At times in most years.

B - Gage-height, 9.69 ft.

C - Mar. 6, 1976; Sept. 27, 1986.

## 05527950 MILL CREEK AT OLD MILL CREEK, IL

LOCATION.--Lat 42°24'55", long 87°58'08", in SW1/4SE1/4 sec.32, T.46 N., R.11 E., Lake County, Hydrologic Unit 07120004, on right bank at upstream side of bridge on Hunt Club Road, about 0.5 mi southeast of Old Mill Creek, and at mile 2.9.

DRAINAGE AREA.--61.0 mi<sup>2</sup>.

PERIOD OF RECORD.--Annual maximum, water years 1962 to 1976. October 1989 to current year.

REVISED RECORDS.--WDR IL-77-1: 1962-76(M). WDR IL-91-2: 1990(P). WDR IL-92-2: 1990.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 668.00 ft above sea level. Prior to Oct. 1, 1989, at datum 8.85 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,090 ft<sup>3</sup>/s, June 30, 1993, gage height, 12.06 ft; maximum gage height, 12.88 ft, present datum, Mar. 6, 1976; minimum discharge, 0.03 ft<sup>3</sup>/s, Sept. 7, 8, 10, 11, 1991.

EXTREMES OUTSIDE PERIOD OF RECORD.--A gage height of 13.73 ft, present datum, discharge unknown, occurred between October 1976 and September 1989, from mark on crest-stage gage.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 280 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1125	*1,000	*11.90	June 16	0500	915	11.72
Mar. 01	0905	477	10.59				

Minimum discharge, 0.51 ft<sup>3</sup>/s, Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	7.6	13	e13	e31	436	65	123	58	78	4.4	6.3
2	2.8	e5.5	13	e15	e33	380	58	119	53	61	3.5	5.4
3	2.6	e3.7	12	28	e38	320	52	165	45	50	2.5	5.0
4	2.8	2.7	11	38	47	291	47	142	39	42	2.2	4.7
5	2.6	2.6	11	64	61	253	46	129	35	37	2.0	4.3
6	2.5	2.9	11	46	50	211	48	120	36	32	1.8	3.9
7	1.9	4.2	10	34	43	169	42	108	37	28	1.7	3.7
8	2.7	7.1	e9.6	e28	39	142	38	133	34	27	1.6	3.7
9	3.1	8.6	9.0	e26	e35	127	36	120	30	31	1.6	3.8
10	2.7	9.3	8.7	e25	e31	118	32	106	28	28	1.5	3.3
11	2.3	10	25	e23	e28	109	32	97	28	22	1.7	2.8
12	1.9	10	48	e21	e26	101	41	88	36	20	3.0	2.5
13	1.5	9.8	36	e19	e25	94	53	80	17	17	4.2	2.1
14	1.4	9.0	29	e18	e24	93	74	73	10	14	3.5	1.9
15	1.3	9.0	27	e17	e24	83	71	70	26	12	3.3	1.8
16	1.0	8.6	28	e16	e23	78	67	65	550	11	3.5	1.7
17	2.5	9.3	25	e16	28	75	62	58	253	9.0	7.7	5.2
18	3.1	9.1	21	e15	55	71	58	69	196	8.6	13	6.8
19	2.6	8.6	21	e14	102	67	57	134	168	9.2	9.3	8.6
20	1.8	7.9	e17	e14	85	63	60	91	150	9.6	8.3	29
21	1.4	8.7	e15	20	650	60	66	73	182	18	7.7	18
22	1.5	8.5	e15	63	424	57	60	62	151	17	7.1	12
23	2.4	8.0	e17	75	347	59	51	54	122	15	7.0	10
24	2.8	9.5	24	57	309	59	46	49	101	14	36	9.0
25	2.6	11	20	54	289	81	41	91	88	12	24	7.5
26	2.3	9.2	e18	e51	265	85	37	83	73	10	16	6.5
27	2.0	8.0	e16	e41	339	77	37	72	60	9.2	13	5.4
28	1.9	7.6	e15	e36	306	72	38	65	49	8.4	11	4.1
29	5.4	7.7	e14	e33	---	73	36	64	40	6.8	8.6	4.0
30	20	11	e13	e31	---	72	41	62	75	5.7	7.4	3.2
31	12	---	e13	e30	---	70	---	62	---	5.0	6.9	---
TOTAL	100.4	234.7	565.3	981	3757	4046	1492	2827	2813	667.5	225.0	186.2
MEAN	3.24	7.82	18.2	31.6	134	131	49.7	91.2	93.8	21.5	7.26	6.21
MAX	20	11	48	75	650	436	74	165	550	78	36	29
MIN	1.0	2.6	8.7	13	23	57	32	49	26	5.0	1.5	1.7
CFSM	.05	.13	.30	.52	2.20	2.14	.82	1.50	1.54	.35	.12	.10
IN.	.06	.14	.34	.60	2.29	2.47	.91	1.73	1.72	.41	.14	.11

e Estimated

## ILLINOIS RIVER BASIN

## 05527950 MILL CREEK AT OLD MILL CREEK, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

MEAN	8.86	48.4	47.4	45.4	65.0	105	106	90.9	60.7	32.9	12.3	7.40
MAX	34.1	127	106	126	134	157	297	245	188	168	44.0	24.6
(WY)	1991	1993	1992	1993	1997	1993	1993	1996	1996	1993	1990	1992
MIN	1.38	7.59	6.15	8.27	25.2	22.9	28.5	11.9	3.45	1.00	.55	.48
(WY)	1995	1990	1990	1994	1996	1996	1994	1994	1992	1991	1991	1991

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1990 - 1997	
ANNUAL TOTAL	19918.3		17895.1			
ANNUAL MEAN	54.4		49.0		52.4	
HIGHEST ANNUAL MEAN					102	1993
LOWEST ANNUAL MEAN					29.3	1994
HIGHEST DAILY MEAN	618	May 20	650	Feb 21	758	Feb 27 1994
LOWEST DAILY MEAN	1.0	Oct 16	1.0	Oct 16	.03	Sep 11 1991
ANNUAL SEVEN-DAY MINIMUM	1.7	Oct 11	1.7	Oct 11	.05	Sep 5 1991
INSTANTANEOUS PEAK FLOW			1000	Feb 21	1090	Jun 30 1993
INSTANTANEOUS PEAK STAGE			11.90	Feb 21	12.06	Jun 30 1993
INSTANTANEOUS LOW FLOW			.51	Oct 16	.03	A
ANNUAL RUNOFF (CFSM)	.89		.80		.86	
ANNUAL RUNOFF (INCHES)	12.15		10.92		11.67	
10 PERCENT EXCEEDS	181		108		137	
50 PERCENT EXCEEDS	18		25		25	
90 PERCENT EXCEEDS	2.6		2.7		2.1	

A - Sept. 7, 8, 10, 11, 1991.

## 05528000 DES PLAINES RIVER NEAR GURNEE, IL

**LOCATION.**--Lat 42°20'39", long 87°56'18", in SE1/4SW1/4 sec.27, T.45 N., R.11 E., Lake County, Hydrologic Unit 07120004, on left bank 800 ft upstream from bridge on State Highway 120, 2.5 mi southwest of Gurnee, and at mile 94.2.

**DRAINAGE AREA.**--232 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1945 to September 1958, and annual maximum, water years 1960-68, October 1968 to current year. **REVISED RECORDS.**--WDR IL-75-1: Drainage area. WDR IL-76-1: 1960(M), 1962(M). WDR IL-77-1: 1971.

**GAGE.**--Water-stage recorder. Datum of gage is 650.30 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to May 26, 1946, nonrecording gage at site 825 ft downstream at same datum. May 27, 1946, to Sept. 30, 1958, water-stage recorder at site 800 ft downstream at same datum. Dec. 17, 1959, to September 1968, crest-stage gage at site 800 ft downstream at same datum.

**REMARKS.**--Records fair. Effluent from sewage-treatment plants, 0.5 mi upstream, averaged about 52 ft<sup>3</sup>/s per day, with a maximum of about 71 ft<sup>3</sup>/s per day in February and a minimum of about 40 ft<sup>3</sup>/s per day in October. Recording rain gage and gage-height telemeter at station.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 3,530 ft<sup>3</sup>/s, Sept. 27, 1986, gage height, 11.95 ft; no flow Sept. 26 to Oct. 19, 1956, and part of each day Aug. 27-30, Sept. 1, 2, 1970.

**EXTREMES FOR CURRENT YEAR.**--Maximum discharge, 1,320 ft<sup>3</sup>/s, Feb. 22, 23, gage height, 7.99 ft; minimum discharge, 35 ft<sup>3</sup>/s, Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	118	76	90	127	1170	217	443	198	202	57	57
2	56	94	81	103	135	1160	196	531	185	176	54	56
3	55	76	86	113	148	1100	181	639	167	147	53	52
4	52	67	80	155	199	1020	167	611	150	137	54	50
5	51	62	75	187	224	940	179	596	136	117	50	48
6	52	64	73	194	236	864	175	560	146	105	51	48
7	51	61	71	173	233	791	165	530	166	97	51	49
8	50	59	69	186	220	717	152	555	199	98	50	50
9	46	57	66	171	195	654	139	505	175	99	50	48
10	47	57	75	132	179	584	130	448	147	98	47	47
11	45	56	110	106	153	517	130	389	131	91	52	45
12	44	56	149	103	135	441	186	337	134	82	56	45
13	45	54	197	99	121	385	219	287	142	73	52	45
14	45	52	194	87	121	368	273	244	129	68	51	45
15	44	51	174	83	111	328	300	224	128	65	66	46
16	45	52	155	83	107	291	307	205	392	65	65	46
17	48	54	148	80	102	270	300	196	722	63	102	88
18	46	54	122	75	141	260	280	187	747	67	83	86
19	47	53	104	73	251	247	253	291	695	65	80	137
20	47	52	103	73	334	230	228	347	646	58	75	160
21	51	56	89	76	941	214	235	350	627	93	66	170
22	48	56	83	169	1230	203	227	336	634	99	62	197
23	56	56	100	200	1290	197	212	291	620	140	61	219
24	46	67	102	230	1220	195	200	236	569	129	126	227
25	45	66	91	223	1170	255	186	341	535	98	114	221
26	46	65	93	202	1140	254	169	305	467	82	111	193
27	45	65	90	184	1180	253	157	288	369	73	97	141
28	45	63	90	158	1160	250	154	270	261	70	80	102
29	81	59	86	136	---	251	151	260	171	64	68	81
30	117	77	88	124	---	241	196	228	151	62	67	70
31	125	---	87	121	---	229	---	211	---	57	61	---
TOTAL	1682	1879	3207	4189	12803	14879	6064	11241	9939	2940	2112	2869
MEAN	54.3	62.6	103	135	457	480	202	363	331	94.8	68.1	95.6
MAX	125	118	197	230	1290	1170	307	639	747	202	126	227
MIN	44	51	66	73	102	195	130	187	128	57	47	45

## ILLINOIS RIVER BASIN

## 05528000 DES PLAINES RIVER NEAR GURNEE, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

MEAN	134	193	258	160	225	465	496	289	181	158	143	144
MAX	1011	785	865	514	486	1510	1395	847	738	599	648	756
(WY)	1987	1986	1983	1993	1984	1979	1993	1996	1996	1993	1978	1986
MIN	16.6	16.5	12.7	10.6	11.9	61.8	79.9	31.3	23.1	23.9	15.0	18.3
(WY)	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1977 - 1997	
ANNUAL TOTAL	86685		73804			
ANNUAL MEAN	237		202		237	
HIGHEST ANNUAL MEAN					428	
LOWEST ANNUAL MEAN					26.8	
HIGHEST DAILY MEAN	1620	May 24	1290	Feb 23	3470	Sep 27 1986
LOWEST DAILY MEAN	33	Sep 18	44	Oct 12,15	7.5	Feb 6 1977
ANNUAL SEVEN-DAY MINIMUM	34	Sep 13	45	Oct 10	7.9	Jan 31 1977
INSTANTANEOUS PEAK FLOW			1320	Feb 22,23	3530	Sep 27 1986
INSTANTANEOUS PEAK STAGE			7.99	Feb 22,23	11.95	Sep 27 1986
INSTANTANEOUS LOW FLOW			35	Sep 14		
10 PERCENT EXCEEDS	729		482		568	
50 PERCENT EXCEEDS	103		125		123	
90 PERCENT EXCEEDS	48		51		43	



## 05528500 BUFFALO CREEK NEAR WHEELING, IL

**LOCATION.**--Lat 42°09'05", long 87°57'25", in NE1/4NW1/4 sec.4, T.42 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on Short Aptakisic Road, 1.0 mi downstream from unnamed tributary, 2.5 mi west of Wheeling, and at mile 5.0.

**DRAINAGE AREA.**--19.6 mi<sup>2</sup>.

**PERIOD OF RECORD.**--August 1952 to current year.

**REVISED RECORDS.**--WDR IL-75-1: Drainage area. WDR IL-94-2: 1986-93 (P), 1993.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 658.60 ft above sea level (Cook County Highway Department bench mark).

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter and recording rain gage at station.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0745	*541	*6.61	No other peak greater than base discharge			

Minimum discharge, 0.28 ft<sup>3</sup>/s, Oct. 22, Sept. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	10	11	e3.1	e5.6	140	15	94	7.1	25	3.3	2.8
2	3.9	6.5	9.3	e3.8	e5.4	135	13	102	8.1	e17	2.4	2.1
3	2.7	4.5	11	e5.0	e6.4	104	11	85	7.1	e6.8	1.8	1.5
4	2.2	3.1	9.0	14	e17	67	11	61	5.9	4.7	3.2	1.3
5	1.9	2.1	11	22	e20	51	16	43	4.9	3.2	5.3	1.1
6	1.8	4.8	9.2	e11	e12	41	16	32	12	2.7	5.3	.54
7	1.5	8.5	8.2	e7.5	e8.0	33	12	31	18	2.4	3.3	.44
8	1.1	4.7	6.5	e5.8	e7.4	28	9.9	49	17	3.8	1.9	1.2
9	.79	3.4	5.3	e4.7	e5.6	28	8.8	42	12	2.7	1.4	1.3
10	.79	2.2	4.8	e4.0	e4.7	26	7.8	32	8.5	2.2	1.2	1.2
11	.52	1.5	34	e3.4	e3.9	23	10	25	6.6	1.6	13	.96
12	.46	1.0	43	e3.0	e3.4	20	26	20	5.5	1.2	24	.74
13	.44	.97	34	e2.7	e3.8	18	34	16	5.6	.96	15	.55
14	.35	1.1	22	e2.5	e3.2	25	31	17	5.5	1.2	8.4	.53
15	.37	1.3	20	e2.4	e2.9	20	26	14	4.9	e.96	15	.53
16	1.9	1.2	16	e2.3	e2.8	19	24	12	32	e.70	20	2.1
17	4.4	2.9	e10	e2.3	e5.4	17	19	9.9	23	e.60	127	40
18	1.7	1.5	e7.8	e2.3	24	15	16	18	13	e5.4	120	20
19	.98	1.1	e5.8	e2.5	48	15	14	19	9.2	7.8	68	19
20	.78	1.2	e4.6	e3.9	52	14	14	14	6.9	4.9	36	22
21	.47	3.8	e4.0	e13	384	14	15	11	5.5	4.1	25	16
22	3.8	3.4	e3.8	e60	367	13	15	9.2	4.6	2.9	16	9.1
23	5.7	3.1	12	e49	249	12	13	7.7	3.8	62	12	6.3
24	3.5	3.4	e7.6	e22	219	14	12	11	3.1	58	13	4.0
25	2.2	3.3	e5.6	e10	172	28	10	25	4.3	28	8.8	3.2
26	1.6	3.1	e4.1	e7.2	91	29	9.1	26	2.6	22	6.6	3.4
27	1.2	2.3	e3.3	e5.2	119	25	8.4	19	2.1	26	4.8	2.6
28	.61	2.3	e5.6	e4.2	115	21	7.6	14	1.7	19	4.0	1.9
29	17	4.3	e4.5	e3.7	---	24	7.0	13	3.1	12	3.5	1.3
30	22	13	e3.6	e3.5	---	20	24	10	17	7.4	3.3	.76
31	14	---	e3.2	e4.9	---	17	---	8.4	---	4.6	3.3	---
TOTAL	104.96	105.57	339.8	290.9	1957.5	1056	455.6	890.2	260.6	341.82	575.8	168.45
MEAN	3.39	3.52	11.0	9.38	69.9	34.1	15.2	28.7	8.69	11.0	18.6	5.61
MAX	22	13	43	60	384	140	34	102	32	62	127	40
MIN	.35	.97	3.2	2.3	2.8	12	7.0	7.7	1.7	.60	1.2	.44
CFSM	.17	.18	.56	.48	3.57	1.74	.77	1.47	.44	.56	.95	.25
IN.	.20	.20	.64	.55	3.72	2.00	.86	1.69	.49	.65	1.09	.32

e Estimated

## ILLINOIS RIVER BASIN

## 05528500 BUFFALO CREEK NEAR WHEELING, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1997, BY WATER YEAR (WY)

MEAN	8.19	15.0	16.7	13.8	20.8	34.1	35.6	23.5	17.2	11.5	11.1	10.2
MAX	37.9	89.6	92.8	53.1	69.9	147	97.1	116	103	46.1	64.5	65.4
(WY)	1987	1986	1983	1974	1997	1979	1983	1996	1970	1978	1977	1972
MIN	.000	.000	.032	.042	.12	4.80	4.26	3.33	.74	.058	.070	.000
(WY)	1953	1954	1954	1954	1963	1956	1963	1977	1963	1953	1975	1953

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1952 - 1997	
ANNUAL TOTAL	8190.11		6547.20			
ANNUAL MEAN	22.4		17.9		18.1	
HIGHEST ANNUAL MEAN					32.9	
LOWEST ANNUAL MEAN					2.00	
HIGHEST DAILY MEAN	500	May 21	384	Feb 21	525	Dec 3 1982
LOWEST DAILY MEAN	.35	Oct 14	.35	Oct 14	.00	A
ANNUAL SEVEN-DAY MINIMUM	.53	Oct 9	.53	Oct 9	.00	Aug 22 1952
INSTANTANEOUS PEAK FLOW			541	Feb 21	887	Jul 22 1982
INSTANTANEOUS PEAK STAGE			6.61	Feb 21	7.94	Jul 22 1982
INSTANTANEOUS LOW FLOW			.28	B		
ANNUAL RUNOFF (CFSM)	1.14		.92		.92	
ANNUAL RUNOFF (INCHES)	15.54		12.43		12.57	
10 PERCENT EXCEEDS	55		33		44	
50 PERCENT EXCEEDS	5.5		7.2		7.7	
90 PERCENT EXCEEDS	1.2		1.2		.40	

A - At times in several years.

B - Oct. 22, Sept. 6,7.

## 05529000 DES PLAINES RIVER NEAR DES PLAINES, IL

LOCATION.--Lat 42°04'55", long 87°53'25", in SE1/4SE1/4 sec.25, T.42 N., R.11 E., Cook County, Hydrologic Unit 07120004, on right bank 50 ft upstream from Dam No. 2 of Cook County Forest Preserve, 0.3 mi downstream from Lake Avenue Bridge, 1.2 mi upstream from Central Road Bridge, 2.5 mi north of Des Plaines, and at mile 69.3.

DRAINAGE AREA.--360 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 975: 1942. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and masonry dam. Datum of gage is 626.31 ft above sea level. Prior to Apr. 8, 1941, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 4, 1938, reached a stage of 9.0 ft, from floodmark, discharge, 5,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	1015	*3,540	*8.05	Mar. 02	0745	2,070	4.74

Minimum discharge, 55 ft<sup>3</sup>/s, Oct. 12-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	207	172	e145	e220	2010	375	724	318	444	88	96
2	81	190	154	e159	e270	e2010	354	851	330	361	85	89
3	72	152	169	e185	301	e1900	329	892	306	289	82	84
4	67	127	174	317	395	e1770	308	888	278	250	76	79
5	63	111	166	398	540	e1550	312	839	249	217	82	74
6	60	105	158	405	522	e1340	330	783	284	177	76	73
7	62	138	148	364	507	e1200	306	744	308	156	73	71
8	63	114	137	338	469	e1050	289	824	328	152	71	73
9	60	104	127	355	429	e940	267	797	317	154	67	77
10	60	98	117	329	401	e840	248	719	283	147	65	74
11	62	98	276	226	357	755	242	618	273	144	133	73
12	60	93	396	e190	316	667	350	514	263	128	200	70
13	59	90	390	e168	283	587	434	420	257	111	145	69
14	61	87	406	e155	266	578	479	367	237	99	100	69
15	59	83	396	e144	259	530	469	332	220	92	137	71
16	68	86	368	e134	246	469	461	315	459	85	186	72
17	78	116	326	e130	232	430	435	290	605	88	668	321
18	82	109	297	e127	309	410	405	318	757	140	524	216
19	78	99	210	e126	574	401	372	388	810	160	366	236
20	76	90	e185	e126	694	387	335	405	781	115	269	383
21	74	100	e160	e127	2460	366	327	429	728	128	200	316
22	89	105	e150	e345	3500	346	324	437	699	161	158	302
23	136	104	e180	e460	3070	324	313	419	690	339	131	312
24	107	104	232	e500	e2400	320	304	372	675	374	197	322
25	85	120	211	e430	e2050	411	288	452	653	265	240	322
26	78	114	157	e300	1880	451	264	533	591	201	205	312
27	77	107	e148	e262	1940	431	255	459	507	244	186	287
28	76	103	e144	e236	1970	423	246	427	410	173	155	212
29	147	98	e139	e220	---	472	234	413	311	140	126	155
30	262	168	e136	e205	---	422	271	381	304	116	106	125
31	216	---	e138	e200	---	396	---	350	---	100	115	---
TOTAL	2711	3420	6567	7806	26860	24186	9926	16700	13231	5750	5312	5035
MEAN	87.5	114	212	252	959	780	331	539	441	185	171	168
MAX	262	207	406	500	3500	2010	479	892	810	444	668	383
MIN	59	83	117	126	220	320	234	290	220	85	65	69
CFSM	.24	.32	.59	.70	2.66	2.17	.92	1.50	1.23	.52	.48	.47
IN.	.28	.35	.68	.81	2.78	2.50	1.03	1.73	1.37	.59	.55	.52

e Estimated

## ILLINOIS RIVER BASIN

## 05529000 DES PLAINES RIVER NEAR DES PLAINES, IL--Continued

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## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	145	214	231	230	298	636	621	401	268	171	130	130
MAX	1453	1187	1368	1046	1070	2216	1990	1557	1224	908	726	1191
(WY)	1987	1986	1983	1960	1974	1979	1993	1996	1996	1993	1972	1972
MIN	.96	3.02	2.73	2.92	5.01	40.7	57.7	41.5	15.3	6.35	.81	.30
(WY)	1945	1954	1945	1945	1963	1945	1945	1946	1963	1946	1944	1944

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1941 - 1997		
ANNUAL TOTAL	146949		127504				
ANNUAL MEAN	402		349		289		
HIGHEST ANNUAL MEAN					656		
LOWEST ANNUAL MEAN					31.4		
HIGHEST DAILY MEAN	3620	May 21	3500	Feb 22	4870	Oct 1	1986
LOWEST DAILY MEAN	50	Sep 19,20	59	Oct 13,15	.00	A	
ANNUAL SEVEN-DAY MINIMUM	53	Sep 14	60	Oct 9	.00	Aug 10	1944
INSTANTANEOUS PEAK FLOW			3540	Feb 22	4900	Oct 1	1986
INSTANTANEOUS PEAK STAGE			8.05	Feb 22	10.88	Oct 1	1986
INSTANTANEOUS LOW FLOW			55	Oct 12-15			
ANNUAL RUNOFF (CFSM)	1.12		.97		.80		
ANNUAL RUNOFF (INCHES)	15.18		13.18		10.91		
10 PERCENT EXCEEDS	990		681		759		
50 PERCENT EXCEEDS	174		249		130		
90 PERCENT EXCEEDS	74		78		10		

A - Many days in 1944, 1946, and Aug. 7, 8, 1962.

## 05529500 McDONALD CREEK NEAR MOUNT PROSPECT, IL

LOCATION.--Lat 42°05'43", long 87°54'46", in SW1/4SE1/4 sec.23, T.42 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Camp McDonald Road, 2.5 mi northeast of Mount Prospect, and at mile 2.0.

DRAINAGE AREA.--7.93 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1952 to current year.

REVISED RECORDS.--WSP 1915: 1958. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 638.12 ft above sea level (Cook County Highway Department bench mark). Prior to May 9, 1978, at site 55 ft downstream at same datum. Mar. 7 to Sept. 30, 1994, at temporary site 50 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1245	*322	*6.69	No other peaks greater than base discharge			
Minimum discharge, 0.36 ft <sup>3</sup> /s, Sept. 14, 15.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	4.2	4.3	e1.4	e3.2	44	4.8	20	1.5	3.0	1.5	.76
2	1.6	2.9	3.0	e1.8	e2.9	27	4.0	16	3.2	2.1	1.3	.66
3	1.4	2.2	4.4	2.5	3.7	15	3.4	18	2.5	1.4	1.2	.56
4	1.2	3.0	3.7	8.7	10	11	3.1	9.8	1.9	1.2	1.6	.56
5	1.0	4.4	3.4	7.6	8.4	7.8	5.9	6.7	1.6	1.1	2.4	.52
6	.95	4.2	e2.6	5.3	5.6	6.3	3.6	4.8	7.2	.95	1.4	.53
7	.66	7.6	e2.1	e3.3	4.2	5.2	2.7	5.9	9.7	.89	1.4	.48
8	.82	4.2	e1.9	e2.3	3.5	4.5	1.8	20	10	1.0	1.3	.56
9	.74	3.0	e1.7	e2.2	e2.6	4.8	1.7	11	5.3	1.3	1.0	.53
10	.78	2.3	1.7	e1.9	e2.1	4.8	1.7	6.2	3.6	.97	.98	.48
11	.79	2.1	14	e1.7	e1.9	4.0	2.4	5.5	4.1	1.1	6.6	.49
12	.58	1.7	9.3	e1.6	e1.7	4.3	14	4.1	2.5	.89	17	.47
13	.47	1.5	5.3	e1.5	e1.6	3.4	11	2.9	2.0	1.2	9.1	.46
14	.43	1.6	3.8	e1.4	e1.5	5.8	7.2	2.6	1.6	1.7	4.4	.42
15	.46	1.3	4.7	e1.5	e1.5	4.5	5.2	2.2	1.4	1.1	7.8	.40
16	1.4	1.2	3.3	e1.4	e1.6	3.8	4.1	2.0	20	.89	15	.81
17	1.1	2.1	e2.3	e1.4	e2.6	3.5	3.7	1.8	12	.88	69	16
18	1.2	1.5	e1.9	e1.5	8.1	3.3	4.3	5.6	7.0	4.5	29	6.4
19	.91	1.1	e1.7	e1.7	10	3.1	5.5	12	4.6	4.8	13	14
20	.66	1.0	e1.5	e2.1	9.7	2.9	4.2	8.4	3.5	2.9	7.0	14
21	.70	1.8	e1.4	e5.0	222	2.7	5.4	4.5	3.5	3.3	3.6	5.8
22	1.8	2.1	e1.5	e35	175	2.5	3.7	3.2	2.8	3.1	2.0	3.0
23	6.4	1.6	e4.5	e16	82	2.3	3.2	2.6	2.3	14	1.6	2.2
24	3.0	1.8	e3.0	e6.4	39	3.0	3.5	2.2	2.3	8.5	2.4	1.7
25	1.9	1.7	e1.9	e3.8	24	6.9	5.9	6.5	4.3	4.6	1.5	2.5
26	1.7	2.1	e1.4	e3.1	25	4.8	6.1	3.4	3.3	4.8	1.2	2.5
27	1.4	1.7	e1.2	e2.3	47	3.8	4.0	2.4	2.5	6.5	1.0	1.6
28	1.3	1.8	e3.2	e2.0	42	3.4	3.1	2.2	2.0	5.1	.88	1.2
29	10	2.0	e2.8	e1.7	---	11	2.5	2.7	1.8	3.7	.80	.89
30	13	7.3	e2.1	e1.6	---	5.8	7.7	2.0	2.2	2.5	.86	.61
31	7.7	---	e1.3	e2.5	---	5.1	---	1.7	---	1.8	.88	---
TOTAL	68.05	77.0	100.9	132.2	742.4	220.3	139.4	198.9	132.2	91.77	208.70	81.09
MEAN	2.20	2.57	3.25	4.26	26.5	7.11	4.65	6.42	4.41	2.96	6.73	2.70
MAX	13	7.6	14	35	222	44	14	20	20	14	69	16
MIN	.43	1.0	1.2	1.4	1.5	2.3	1.7	1.7	1.4	.88	.80	.40
CFSM	.28	.32	.41	.54	3.34	.90	.59	.81	.56	.37	.85	.34
IN.	.32	.36	.47	.62	3.48	1.03	.65	.93	.62	.43	.98	.38

e Estimated

## 05529500 McDONALD CREEK NEAR MOUNT PROSPECT, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1997, BY WATER YEAR (WY)

MEAN	3.41	5.31	5.02	4.13	6.05	10.1	11.7	7.59	6.95	4.77	5.01	3.85
MAX	16.9	28.5	27.2	19.5	26.5	36.2	32.3	31.3	33.5	26.2	39.7	23.9
(WY)	1955	1986	1983	1974	1997	1979	1983	1996	1970	1957	1987	1972
MIN	.000	.000	.000	.000	.000	1.58	2.05	1.46	.50	.019	.000	.000
(WY)	1953	1954	1954	1954	1954	1956	1989	1988	1963	1953	1953	1953

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1952 - 1997	
ANNUAL TOTAL	2512.06		2192.91			
ANNUAL MEAN	6.86		6.01		6.15	
HIGHEST ANNUAL MEAN					11.7	
LOWEST ANNUAL MEAN					1.17	
HIGHEST DAILY MEAN	141	May 20	222	Feb 21	476	Aug 14 1987
LOWEST DAILY MEAN	.34	Sep 25	.40	Sep 15	.00	A
ANNUAL SEVEN-DAY MINIMUM	.44	Sep 19	.46	Sep 9	.00	Sep 12 1952
INSTANTANEOUS PEAK FLOW			322	Feb 21	806	Aug 14 1987
INSTANTANEOUS PEAK STAGE			6.69	Feb 21	8.08	Aug 14 1987
INSTANTANEOUS LOW FLOW			.36	Sep 14,15		
ANNUAL RUNOFF (CFSM)	.87		.76		.78	
ANNUAL RUNOFF (INCHES)	11.78		10.29		10.54	
10 PERCENT EXCEEDS	18		10		14	
50 PERCENT EXCEEDS	2.1		2.6		2.1	
90 PERCENT EXCEEDS	.88		.89		.00	

A - At times in most years.



## 05530000 WELLER CREEK AT DES PLAINES, IL

**LOCATION.**--Lat 42°02'58", long 87°55'05", in NW1/4NW1/4 sec.18, T.41 N., R.12 E., Cook County, Hydrologic Unit 07120004, on right bank 10 ft upstream from bridge on State Highway 58 (Golf Road) in Des Plaines, 2 mi west of U.S. Highway 45, and at mile 3.0.

**DRAINAGE AREA.**--13.2 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1950 to current year.

**REVISED RECORDS.**--WSP 1915: 1957-60. WDR IL-75-1: Drainage area.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 634.02 ft above sea level (Cook County Highway Department bench mark). Prior to Sept. 9, 1968, at site 90 ft downstream and at datum 1.00 ft higher. Sept. 9, 1968, to Sept. 10, 1973, at present site at datum 1.00 ft higher.

**REMARKS.**--Records good except those greater than 150 ft<sup>3</sup>/s, which are fair, and those for estimated daily discharges, which are poor. Prior to Nov. 15, 1958, effluent from Arlington Heights sewage-treatment plant entered Weller Creek above station. Gage-height telemeter at station.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 550 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0730	*1,040	*10.45	Aug. 17	0415	558	5.32
Aug. 16	1930	970	8.79				

Minimum discharge, 0.25 ft<sup>3</sup>/s, Sept. 4, 5, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	1.1	3.3	e.78	e2.4	24	1.9	9.1	.80	.83	.47	.43
2	.62	1.1	1.9	e1.2	e2.0	13	1.7	14	8.5	.77	.42	.53
3	.45	.95	4.8	2.1	e1.6	9.0	1.7	5.6	2.4	.53	.42	.49
4	.44	.76	2.3	16	e6.6	7.3	1.7	2.3	1.3	.59	2.7	.30
5	.44	1.4	2.8	8.0	e2.8	5.5	5.4	1.9	.94	.59	1.3	.33
6	.42	2.8	2.5	e2.9	e2.0	3.6	2.5	1.5	14	.53	.53	.34
7	.48	14	1.8	e1.5	e1.6	2.8	1.3	15	20	.52	.48	.33
8	.55	2.1	1.3	e1.0	e1.4	2.3	1.1	28	6.3	3.0	.51	.59
9	.48	1.1	1.2	e1.1	e1.6	5.0	1.0	2.9	1.8	1.4	.56	.68
10	.48	.95	1.1	e.94	e1.1	3.5	1.1	2.2	1.0	1.0	.53	.47
11	.55	.80	25	e.80	e.92	2.3	7.3	1.9	3.3	1.1	18	.46
12	.49	.69	6.0	e.72	e.83	2.3	22	1.5	1.2	.79	51	.45
13	.42	.65	2.2	e.66	e.78	1.8	6.6	1.3	1.3	.75	6.5	.56
14	.42	.58	1.4	e.74	e.76	8.5	2.3	1.4	1.3	1.0	1.9	.60
15	.57	.61	4.3	e.86	e.80	2.7	1.5	1.0	1.1	.63	28	.56
16	2.1	.74	2.0	e.76	e.84	1.8	1.7	.84	81	.59	179	8.3
17	2.0	2.6	e1.3	e.70	e2.4	1.6	1.4	.91	3.6	.53	238	46
18	1.7	.92	e1.0	e.68	17	1.7	1.3	41	1.7	77	26	2.9
19	.59	.80	e.88	e.66	11	1.8	1.9	24	1.0	15	4.6	25
20	.42	.84	e.80	e.65	12	1.6	1.7	2.8	18	2.6	2.3	6.9
21	.42	2.3	e.77	e1.5	639	1.5	3.2	1.6	13	2.7	1.3	1.6
22	6.0	3.7	e1.0	e37	210	1.4	1.7	.81	2.9	1.1	1.1	1.1
23	7.6	1.9	e3.7	e7.0	36	1.3	1.7	.79	1.4	2.8	.84	1.1
24	1.5	1.0	e2.0	e2.4	14	4.0	2.3	1.9	1.6	1.2	2.8	.84
25	.84	1.1	e1.2	e1.4	9.4	7.5	1.4	8.2	4.6	.72	1.1	.63
26	.72	1.4	e.90	e1.0	30	1.9	1.1	1.6	1.3	7.7	.79	.53
27	.92	.66	e.76	e9.0	44	1.4	1.4	1.0	1.1	4.9	.64	.46
28	.92	.74	e2.2	e.85	17	1.9	1.2	2.4	.94	1.2	.56	.45
29	36	4.2	e1.5	e.82	---	26	1.3	2.6	.89	.77	.53	.39
30	12	15	e.96	e.80	---	4.0	15	1.2	.92	.65	.46	.39
31	1.8	---	e.84	e1.4	---	2.5	---	.96	---	.64	.46	---
TOTAL	83.19	67.49	83.71	105.92	1069.83	155.5	97.4	182.21	199.19	134.13	573.80	103.71
MEAN	2.68	2.25	2.70	3.42	38.2	5.02	3.25	5.88	6.64	4.33	18.5	3.46
MAX	36	15	25	37	639	26	22	41	81	77	238	46
MIN	.42	.58	.76	.65	.76	1.3	1.0	.79	.80	.52	.42	.30
CFSM	.20	.17	.20	.26	2.89	.38	.25	.45	.50	.33	1.40	.26
IN.	.23	.19	.24	.30	3.01	.44	.27	.51	.56	.38	1.62	.29

e Estimated

## ILLINOIS RIVER BASIN

## 05530000 WELLER CREEK AT DES PLAINES, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	6.63	8.26	7.00	6.45	9.09	15.0	19.0	12.5	12.5	9.18	10.5	8.23
MAX	35.6	46.4	34.3	43.2	38.2	107	54.1	64.0	54.1	38.4	69.9	55.7
(WY)	1955	1986	1983	1974	1997	1979	1975	1974	1972	1957	1987	1972
MIN	.13	.31	.077	.077	.19	.72	2.24	1.44	.90	2.41	.32	.60
(WY)	1963	1963	1964	1959	1972	1968	1989	1982	1982	1994	1973	1966

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	2455.99		2856.08			
ANNUAL MEAN	6.71		7.82		10.4	
HIGHEST ANNUAL MEAN					23.4	
LOWEST ANNUAL MEAN					3.07	
HIGHEST DAILY MEAN	283	May 20	639	Feb 21	1120	Aug 14 1987
LOWEST DAILY MEAN	.42	A	.30	Sep 4	.00	B
ANNUAL SEVEN-DAY MINIMUM	.42	Sep 14	.39	Sep 1	.00	Nov 4 1958
INSTANTANEOUS PEAK FLOW			1040	Feb 21	1590	Jun 10 1967
INSTANTANEOUS PEAK STAGE			10.45	Feb 21	15.09 C	Jun 10 1967
INSTANTANEOUS LOW FLOW			.25	D		
ANNUAL RUNOFF (CFSM)	.51		.59		.79	
ANNUAL RUNOFF (INCHES)	6.92		8.05		10.67	
10 PERCENT EXCEEDS	13		14		21	
50 PERCENT EXCEEDS	1.4		1.4		2.2	
90 PERCENT EXCEEDS	.65		.53		.20	

A - Several days.

B - At times in most years.

C - Present datum.

D - Sept. 4, 5, 29, 30.

## 05530990 SALT CREEK AT ROLLING MEADOWS, IL

LOCATION.--Lat 42°03'37", long 88°00'59", in SW1/4NW1/4 sec.8, T.41 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Algonquin Road in Rolling Meadows, 0.25 mi downstream from Arlington Heights Branch Salt Creek, and at mile 35.6.

DRAINAGE AREA.--30.5 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1973 to current year. August 1950 to September 1971, October 1971 to September 1972 (annual maximum discharge and gage height only), October 1972 to September 1973 at site 0.9 mi downstream, published as Salt Creek near Arlington Heights. Records may not be equivalent.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-93-2: 1992.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 686.40 ft above sea level (Cook County Highway Department bench mark).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0900	*1,450	*10.09	Aug. 17	0415	410	5.73
Aug. 16	1915	501	6.22				

Minimum discharge, 0.34 ft<sup>3</sup>/s, Oct. 22, but may have been less during period of estimated discharges, Sept. 6-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	5.7	23	e9.8	e12	271	24	227	17	28	1.9	1.8
2	2.3	3.5	14	e11	e11	170	20	140	28	12	1.6	1.5
3	1.5	2.7	24	36	e15	103	17	109	18	6.0	1.5	1.1
4	1.1	1.8	16	66	e40	77	16	75	14	3.7	21	1.2
5	1.1	1.8	17	e48	e38	60	30	59	15	2.9	14	1.0
6	.83	7.4	18	e28	e27	40	26	45	70	2.7	5.4	e.96
7	1.1	27	13	e15	e17	33	18	55	53	2.3	3.3	e.93
8	1.2	8.6	9.4	e11	e13	30	14	122	50	4.2	2.4	e1.7
9	1.0	5.6	6.8	e9.5	e12	34	13	71	23	5.1	1.5	e1.6
10	1.0	4.0	6.1	e8.0	e9.8	29	13	57	14	2.6	1.2	e1.1
11	.82	2.9	84	e6.6	e8.7	30	19	48	11	2.0	30	e.90
12	.75	2.0	77	e6.0	e7.8	25	73	37	9.3	1.5	46	e.83
13	.64	1.6	54	e5.4	e8.6	23	63	30	17	1.4	19	e.80
14	1.1	2.8	45	e6.2	e7.3	37	52	30	14	1.4	8.7	e.92
15	.85	3.4	50	e5.6	e6.9	24	38	25	16	1.2	27	e.88
16	7.8	2.1	40	e5.1	e7.6	20	30	22	141	.81	94	e8.0
17	9.1	9.3	e27	e4.7	e15	19	25	19	36	.78	240	e70
18	5.4	4.9	e19	e4.5	83	18	21	52	18	55	74	e16
19	2.3	5.7	e14	e4.3	103	17	26	68	12	26	34	e41
20	.97	3.3	e11	e4.4	90	14	27	43	17	11	19	e50
21	.61	9.8	e9.6	e17	1090	13	33	29	26	8.2	13	e19
22	9.7	8.3	e9.6	e110	525	13	25	24	11	6.6	8.3	e11
23	22	6.8	38	e78	215	12	21	19	13	26	6.2	e7.5
24	6.3	7.6	35	e36	118	18	20	27	9.0	17	12	e5.6
25	3.5	8.4	e20	e20	110	48	18	67	30	8.1	6.6	e5.2
26	2.0	6.2	e15	e13	140	31	e16	46	10	18	5.5	e4.4
27	1.3	5.2	e11	e11	260	24	e15	30	5.1	28	e4.2	e3.8
28	.89	4.6	e12	e9.8	161	25	e14	28	4.5	12	e3.5	e2.9
29	45	10	e19	e8.9	---	56	e15	26	3.9	6.6	e2.9	e2.6
30	36	40	e14	e8.6	---	35	103	21	22	4.3	e2.5	e2.3
31	12	---	e11	e8.7	---	36	---	19	---	2.8	e2.3	---
TOTAL	183.66	213.0	762.5	616.1	3151.7	1385	845	1670	727.8	308.19	712.5	266.52
MEAN	5.92	7.10	24.6	19.9	113	44.7	28.2	53.9	24.3	9.94	23.0	8.88
MAX	45	40	84	110	1090	271	103	227	141	55	240	70
MIN	.61	1.6	6.1	4.3	6.9	12	13	19	3.9	.78	1.2	.80
CFSM	.19	.23	.81	.65	3.69	1.46	.92	1.77	.80	.33	.75	.29
IN.	.22	.26	.93	.75	3.84	1.69	1.03	2.04	.89	.38	.87	.33

e Estimated

## ILLINOIS RIVER BASIN

## 05530990 SALT CREEK AT ROLLING MEADOWS, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1997, BY WATER YEAR (WY)

MEAN	15.2	31.3	30.5	23.2	33.2	53.2	57.4	43.2	25.8	19.7	27.9	17.7
MAX	49.5	120	107	79.4	113	202	136	148	87.6	83.6	136	58.9
(WY)	1987	1986	1983	1974	1997	1979	1983	1996	1996	1993	1987	1986
MIN	2.42	2.32	.62	.13	2.43	13.1	9.73	7.33	3.15	3.00	2.56	1.63
(WY)	1980	1977	1977	1977	1978	1996	1989	1977	1988	1979	1986	1974

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1974 - 1997	
ANNUAL TOTAL	12075.56		10841.97			
ANNUAL MEAN	33.0		29.7		31.5	
HIGHEST ANNUAL MEAN					52.1	
LOWEST ANNUAL MEAN					9.25	
HIGHEST DAILY MEAN	577	May 20	1090	Feb 21	1180	Aug 14 1987
LOWEST DAILY MEAN	.61	Oct 21	.61	Oct 21	.00	A
ANNUAL SEVEN-DAY MINIMUM	.88	Oct 9	.88	Oct 9	.00	Jan 12 1977
INSTANTANEOUS PEAK FLOW			1450	Feb 21	1650	Aug 14 1987
INSTANTANEOUS PEAK STAGE			10.09	Feb 21	14.03	Aug 14 1987
INSTANTANEOUS LOW FLOW			.34B	Oct 22		
ANNUAL RUNOFF (CFSM)	1.08		.97		1.03	
ANNUAL RUNOFF (INCHES)	14.73		13.22		14.03	
10 PERCENT EXCEEDS	89		64		73	
50 PERCENT EXCEEDS	8.4		14		13	
90 PERCENT EXCEEDS	1.9		1.5		1.8	

A - Jan. 12 to Feb. 8, 1977, result of freezeup, and Aug. 20, 25, 1986.

B - May have been less during period of estimated discharges, Sept. 6-30.

## 05531044 SALT CREEK NEAR ELK GROVE VILLAGE, IL

LOCATION.--Lat 42°01'01", long 88°00'01", in NE1/4SE1/4 sec.29, T.41 N., R.11 E., Cook County, Hydrologic Unit 07120004, on right bank at upstream side of concrete dam in Busse Woods Forest Preserve, 0.1 mi northwest of Elk Grove Village and at mile 31.8.

DRAINAGE AREA.--51.9 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1992 to current year (gage heights only).

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 674.75 ft above sea level.

REMARKS.--Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 14.78 ft, Feb. 21, 1997; minimum recorded, 10.87 ft, June 11, 12, 1994.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height of approximately 16.0 ft was reached during the flood on Aug. 14, 1987, from information furnished by Illinois Department of Transportation.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 14.78 ft, Feb. 21; minimum, 10.92 ft, July 17.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.10	11.24	11.29	11.13	11.18	12.25	11.31	11.86	11.14	11.18	11.04	11.04
2	11.07	11.16	11.26	11.15	11.19	12.20	11.25	11.93	11.15	11.17	11.03	11.03
3	11.02	11.10	11.25	11.18	11.21	11.92	11.21	11.89	11.17	11.12	11.01	11.03
4	11.00	11.08	11.24	11.29	11.33	11.71	11.18	11.69	11.15	11.07	11.06	11.02
5	10.99	11.07	11.22	11.43	11.49	11.59	11.23	11.53	11.13	11.04	11.18	11.01
6	10.99	11.08	11.23	11.35	11.41	11.48	11.30	11.40	11.24	11.01	11.14	11.00
7	10.99	11.24	11.21	11.26	11.32	11.38	11.25	11.33	11.36	11.00	11.09	10.99
8	10.98	11.24	11.18	11.20	11.26	11.34	11.18	11.72	11.40	11.01	11.06	11.00
9	10.98	11.18	11.15	11.19	11.23	11.32	11.14	11.65	11.31	11.03	11.03	11.01
10	10.98	11.13	11.13	11.18	11.20	11.33	11.13	11.48	11.23	11.01	11.02	11.01
11	10.96	11.10	11.31	11.15	11.18	11.31	11.17	11.39	11.18	11.00	11.16	11.00
12	10.96	11.07	11.50	11.12	11.16	11.28	11.49	11.32	11.12	10.99	11.41	10.99
13	10.96	11.05	11.43	11.10	11.14	11.24	11.61	11.24	11.10	10.97	11.48	11.00
14	10.96	11.05	11.35	11.08	11.13	11.30	11.52	11.22	11.07	10.97	11.33	11.02
15	10.96	11.05	11.33	11.09	11.12	11.28	11.41	11.22	11.06	10.95	11.35	11.03
16	10.99	11.04	11.30	11.11	11.13	11.23	11.35	11.21	11.57	10.94	11.46	11.02
17	11.04	11.08	11.24	11.09	11.13	11.21	11.29	11.17	11.66	10.93	12.42	11.43
18	11.10	11.10	11.18	11.08	11.23	11.20	11.24	11.18	11.58	11.10	12.16	11.40
19	11.08	11.09	11.15	11.07	11.55	11.18	11.24	11.52	11.53	11.58	11.70	11.33
20	11.06	11.08	11.12	11.06	11.58	11.16	11.24	11.41	---	11.39	11.43	11.46
21	11.04	11.11	11.10	11.08	13.68	11.16	11.27	11.29	---	11.26	11.29	11.33
22	11.04	11.11	11.10	11.60	13.97	11.15	11.25	11.22	---	11.19	11.20	11.23
23	11.20	11.10	11.14	11.77	12.78	11.13	11.21	11.17	---	11.18	11.14	11.18
24	11.22	11.10	11.24	11.56	12.14	11.12	11.19	11.14	---	11.22	11.14	11.14
25	11.16	11.10	11.21	11.41	11.90	11.30	11.18	11.29	---	11.17	11.12	11.12
26	11.12	11.08	11.18	11.31	11.84	11.32	11.16	11.31	---	11.14	11.10	11.09
27	11.10	11.06	11.15	11.26	12.31	11.28	11.15	11.25	---	11.24	11.08	11.07
28	11.07	11.06	11.14	11.22	12.27	11.25	11.14	11.20	---	11.19	11.07	11.07
29	11.15	11.07	11.16	11.18	---	11.42	11.13	11.21	---	11.13	11.05	11.06
30	11.49	11.24	11.15	11.16	---	11.43	11.18	11.19	11.07	11.09	11.05	11.03
31	11.36	---	11.13	11.14	---	11.36	---	11.16	---	11.06	11.04	---
MEAN	11.07	11.11	11.22	11.23	11.64	11.38	11.25	11.38	---	11.11	11.25	11.10
MAX	11.49	11.24	11.50	11.77	13.97	12.25	11.61	11.93	---	11.58	12.42	11.46
MIN	10.96	11.04	11.10	11.06	11.12	11.12	11.13	11.14	---	10.93	11.01	10.99

## 05531300 SALT CREEK AT ELMHURST, IL

LOCATION.--Lat 41°53'12", long 87°57'34", in SW1/4NW1/4 sec.11, T.39 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on left bank at upstream side of the Illinois Prairie Path Bikeway bridge in Elmhurst, and at mile 20.1.

DRAINAGE AREA.--91.5 mi<sup>2</sup>.

PERIOD OF RECORD.--Annual maximum, water years 1961-80. June 1989 to current year.

REVISED RECORDS.--WDR IL-77-1: 1961-76(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 655.00 ft above sea level. Prior to October 1, 1996, at site 990 ft upstream at same datum. Prior to June 1, 1989, crest-stage gage at datum 5.49 ft higher.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Gage-height telemeter at station. Recording rain gage installed December 11, 1996.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,230 ft<sup>3</sup>/s, Aug. 27, 1972, gage height, 12.76 ft, present datum; maximum gage height, 13.37 ft, Aug. 21, 1990; minimum discharge, 18 ft<sup>3</sup>/s, July 1, 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	1305	*1,460	*11.95	Aug. 16	1935	1,110	10.69
Feb. 28	1345	778	9.38				

Minimum discharge, 22 ft<sup>3</sup>/s, Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	103	128	64	86	689	157	238	63	76	49	38
2	73	77	107	69	87	665	134	357	87	80	44	47
3	62	64	100	78	92	572	117	362	70	67	45	39
4	51	58	98	143	168	472	108	276	67	57	65	36
5	48	55	95	179	203	400	137	198	60	49	77	35
6	47	84	101	146	169	306	146	149	111	48	68	36
7	50	129	93	106	125	216	123	148	132	50	59	34
8	52	108	82	84	104	145	90	275	131	61	52	37
9	51	88	75	79	91	165	76	275	112	58	46	37
10	50	72	71	75	84	174	81	186	84	53	48	36
11	51	64	132	68	80	198	123	138	95	48	106	37
12	41	58	195	e64	76	181	291	119	73	47	250	34
13	39	56	157	e60	72	154	315	97	64	45	201	34
14	42	50	122	56	69	161	249	88	53	47	124	36
15	48	49	121	55	66	137	197	87	46	45	152	37
16	67	48	119	e53	65	114	165	79	256	45	302	44
17	67	65	98	e50	67	138	139	75	248	42	663	177
18	74	61	81	e51	134	136	125	106	169	139	629	124
19	63	57	69	e52	235	e110	127	163	119	241	405	105
20	56	53	65	e54	277	e123	112	154	104	155	206	134
21	55	65	63	76	1200	e120	106	113	153	113	142	99
22	62	65	60	314	1410	e118	102	88	109	110	109	74
23	96	61	89	354	1290	e113	88	75	91	86	82	61
24	91	62	96	237	922	e114	87	78	79	89	80	54
25	74	62	88	162	608	e140	79	132	160	80	85	51
26	61	59	73	119	544	e160	71	115	112	70	88	44
27	56	58	69	101	723	e153	69	98	92	104	102	38
28	55	55	70	88	744	e150	70	89	70	83	84	39
29	121	60	73	77	---	e280	70	89	59	69	45	42
30	207	126	71	68	---	e230	81	77	65	60	42	42
31	155	---	69	74	---	176	---	66	---	53	45	---
TOTAL	2146	2072	2930	3256	9791	7010	3835	4590	3134	2370	4495	1681
MEAN	69.2	69.1	94.5	105	350	226	128	148	104	76.5	145	56.0
MAX	207	129	195	354	1410	689	315	362	256	241	663	177
MIN	39	48	60	50	65	110	69	66	46	42	42	34
CFSM	.76	.76	1.03	1.15	3.82	2.47	1.40	1.62	1.14	.84	1.59	.61
IN.	.87	.84	1.19	1.32	3.98	2.85	1.56	1.87	1.27	.96	1.83	.68

e Estimated

## 05531300 SALT CREEK AT ELMHURST, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	96.0	167	114	129	155	187	208	197	152	105	147	85.9
MAX	193	251	186	282	350	263	430	431	360	229	338	157
(WY)	1992	1991	1992	1993	1997	1993	1993	1996	1996	1993	1990	1989
MIN	56.8	67.7	46.1	56.2	76.8	82.7	99.4	58.4	53.1	38.1	50.7	48.8
(WY)	1993	1994	1990	1994	1996	1996	1994	1992	1992	1991	1991	1994

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	53138		47310			
ANNUAL MEAN	145		130		144	
HIGHEST ANNUAL MEAN					196	
LOWEST ANNUAL MEAN					110	
HIGHEST DAILY MEAN	1110	May 30	1410	Feb 22	1450	Aug 21 1990
LOWEST DAILY MEAN	35	A	34	Sep 7,12,13	29	Jul 1 1989
ANNUAL SEVEN-DAY MINIMUM	41	Jan 5	36	Sep 7	32	Sep 16 1994
INSTANTANEOUS PEAK FLOW			1460	Feb 22	1530	Aug 21 1990
INSTANTANEOUS PEAK STAGE			11.95	Feb 22	13.37	Aug 21 1990
INSTANTANEOUS LOW FLOW			22	Oct 3	18	Jul 1 1989
ANNUAL RUNOFF (CFSM)	1.59		1.42		1.58	
ANNUAL RUNOFF (INCHES)	21.61		19.24		21.41	
10 PERCENT EXCEEDS	373		236		298	
50 PERCENT EXCEEDS	74		84		88	
90 PERCENT EXCEEDS	47		47		44	

A - Jan. 8, Sept. 19.

## ILLINOIS RIVER BASIN

05531300 SALT CREEK AT ELMHURST, IL--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--October 16, 1989 to March 31, 1996 and December 4, 1996 to current year.

GAGE.--An 8-in.-diameter, unheated, tipping-bucket rain gage

REMARKS.--Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to appreciable errors.

MAXIMUM FOR PERIOD OF RECORD.--Maximum recorded, 3.45 in., May 9, 1990.

MAXIMUM FOR WATER YEAR 1996.--Maximum recorded, 1.04 in., Oct. 6, but may have been greater during periods of missing record.

WATER YEAR 1997.--Maximum recorded, 3.40 in., Feb. 21, but may have been greater during periods of missing record.

PRECIPITATION TOTALS (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.59	.00	.00	.00	.00	---	---	---	---	---	---
2	.00	.08	.00	.00	.00	.00	---	---	---	---	---	---
3	.03	.00	.00	.00	.00	.00	---	---	---	---	---	---
4	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
5	.13	.00	.07	.00	.00	.30	---	---	---	---	---	---
6	1.04	.00	.00	.00	.00	.01	---	---	---	---	---	---
7	.00	.00	.00	.00	s .03	.00	---	---	---	---	---	---
8	.00	.00	.00	.00	.04	.00	---	---	---	---	---	---
9	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
10	.00	2.25	.00	.00	.00	.00	---	---	---	---	---	---
11	.00	s .01	.00	.00	.00	.00	---	---	---	---	---	---
12	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
13	.06	s .01	.00	s .17	.00	.00	---	---	---	---	---	---
14	.09	.00	s .22	.00	.00	.00	---	---	---	---	---	---
15	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
16	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
17	.00	.00	.00	s .13	.00	.00	---	---	---	---	---	---
18	.00	.00	.00	.11	.00	.01	---	---	---	---	---	---
19	.73	.00	.00	.00	.00	.00	---	---	---	---	---	---
20	.51	.00	.00	.01	.00	.00	---	---	---	---	---	---
21	.04	.00	.00	.04	.00	.00	---	---	---	---	---	---
22	.01	.00	.00	.20	.00	.00	---	---	---	---	---	---
23	.16	.00	.00	.04	.00	.01	---	---	---	---	---	---
24	.00	.00	.00	.00	.00	.29	---	---	---	---	---	---
25	.00	.00	.00	.00	.03	.08	---	---	---	---	---	---
26	.12	.00	.00	.30	.15	.00	---	---	---	---	---	---
27	.29	.16	.00	.00	.35	.00	---	---	---	---	---	---
28	.13	.03	.00	.00	.00	.00	---	---	---	---	---	---
29	.03	.00	.00	.00	.00	.00	---	---	---	---	---	---
30	.26	.00	.00	.00	---	.00	---	---	---	---	---	---
31	.10	---	s .05	.00	---	.03	---	---	---	---	---	---
TOTAL	3.82	3.13	0.34	1.00	0.60	0.73	---	---	---	---	---	---

s Snowfall-affected precipitation



## 05531300 SALT CREEK AT ELMHURST, IL--Continued

## PRECIPITATION RECORDS--Continued

PRECIPITATION TOTALS (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
 DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	.03	.00	.10	.00	.20	.00	---	---	.00
2	---	---	---	.00	.00	.00	---	.45	.42	---	---	.00
3	---	---	---	.01	.00	.00	---	.09	.00	---	---	.00
4	---	---	.00	.67	.40	.00	.04	.00	.00	---	---	.00
5	---	---	s.23	.00	.00	.00	.35	.01	.00	---	---	.00
6	---	---	.00	.00	.00	.00	.00	.00	.34	---	---	.00
7	---	---	.00	.00	.00	.00	.00	.55	.29	---	---	.00
8	---	---	.00	.00	s.01	.00	.00	.03	.00	---	---	.03
9	---	---	.00	.00	s.01	.15	.00	.00	.00	---	---	.02
10	---	---	.00	.00	.00	.00	.00	.00	.00	---	---	.00
11	---	---	---	.00	.00	.00	.93	.04	.38	---	.93	.00
12	---	---	.00	.00	.00	.00	.18	.00	.00	---	1.67	.00
13	---	---	.00	.00	.00	.14	.01	.01	.00	---	.00	.01
14	---	---	.01	.00	.00	.07	.00	.02	.00	---	.00	.02
15	---	---	.13	.00	.00	.00	.04	.00	.00	---	.58	.00
16	---	---	.00	.00	.00	.00	.01	.00	1.03	---	2.37	.09
17	---	---	.00	.00	s.21	.00	.00	.00	.00	---	1.41	.18
18	---	---	.00	.00	.00	.00	.05	.82	.00	---	.00	.00
19	---	---	.00	.00	.00	.00	.09	.00	.00	---	.01	.50
20	---	---	.00	s.07	.96	.00	.00	.00	.02	---	.00	.00
21	---	---	.00	s.59	3.40	.00	.01	.00	.17	---	.00	.00
22	---	---	.00	.00	.00	.00	.00	.00	---	---	.00	.05
23	---	---	.45	.00	.00	.00	.00	.00	---	---	.07	.07
24	---	---	.00	s.03	.00	.26	.08	.77	---	---	.06	.00
25	---	---	.00	.00	.00	.08	.00	.22	---	---	.00	.00
26	---	---	.00	.00	s.86	.00	.00	.00	---	---	.00	.00
27	---	---	s.11	.00	s.33	.00	.03	.00	---	---	.00	.00
28	---	---	s.01	.00	s.04	.84	.00	.19	---	---	.00	.00
29	---	---	.00	.00	---	.08	.00	.00	---	---	.00	.00
30	---	---	.00	.00	---	.10	.30	.00	---	---	.03	.00
31	---	---	.00	s.39	---	.00	---	.00	---	---	.00	---
TOTAL	---	---	---	1.79	6.22	1.82	---	3.40	---	---	---	0.97

s Snowfall-affected precipitation

## 05531410 SALT CREEK AT 22ND STREET AT OAK BROOK, IL

LOCATION.--Lat 41°50'50", long 87°56'10", in SE1/4SW1/4 sec.24, T.39 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on 22nd Street in Oak Brook and at mile 14.9.

DRAINAGE AREA.--103 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1994 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft above sea level.

REMARKS.--Recording rain gage and gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 55.03 ft, Feb. 21, 1997; minimum, 46.76 ft, Sept. 27, 28, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 55.03 ft, Feb. 21; minimum, 47.07 ft, Feb. 17.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48.13	48.46	48.69	48.14	48.33	51.34	48.88	49.13	48.07	48.12	47.85	47.86
2	48.07	48.23	48.49	48.18	48.33	51.14	48.72	49.77	48.27	48.13	47.82	47.88
3	48.02	48.10	48.46	48.26	48.36	50.71	48.59	49.85	48.17	48.06	47.83	47.83
4	47.95	48.03	48.42	48.98	48.96	50.20	48.51	49.44	48.12	47.95	48.08	47.80
5	47.91	48.02	48.40	49.15	48.97	49.84	48.74	49.00	48.08	47.90	48.10	47.82
6	47.90	48.34	48.46	48.82	48.38	49.36	48.80	48.72	48.52	47.85	48.03	47.82
7	47.92	48.81	48.39	48.51	47.96	48.81	48.63	48.67	48.65	47.85	47.96	47.81
8	47.95	48.53	48.29	48.32	47.73	48.22	48.39	49.43	48.61	47.93	47.89	47.83
9	47.94	48.37	48.23	48.24	47.57	48.27	48.28	49.40	48.46	47.97	47.83	47.86
10	47.93	48.20	48.19	48.22	47.49	---	48.27	48.95	48.27	47.92	47.83	47.85
11	47.93	48.10	48.63	48.15	47.39	---	48.60	48.63	48.42	47.88	48.39	47.83
12	47.85	48.04	49.03	48.15	47.38	---	49.73	48.49	48.28	47.86	49.49	47.85
13	47.82	48.03	48.83	48.14	47.30	---	49.68	48.34	48.17	47.85	49.07	47.81
14	47.84	47.97	48.59	48.07	47.27	---	49.34	48.26	48.07	47.84	48.57	47.81
15	47.89	47.96	48.59	48.05	47.23	---	49.05	48.25	48.02	47.84	48.76	47.82
16	48.17	47.96	48.56	48.07	47.20	---	48.86	48.20	49.22	47.83	49.61	47.89
17	48.19	48.17	48.42	48.08	47.24	---	48.66	48.17	48.98	47.82	52.03	49.03
18	48.23	48.09	48.28	48.08	48.08	---	48.57	48.42	48.58	48.57	51.04	48.54
19	48.07	48.05	48.18	48.07	48.89	---	48.56	48.87	48.31	49.19	49.99	48.46
20	47.99	48.01	48.13	48.06	49.17	48.81	48.49	48.76	48.17	48.66	48.86	48.63
21	47.99	48.12	48.10	48.24	54.39	48.78	48.39	48.48	48.57	48.37	48.38	48.37
22	48.05	48.11	48.08	49.87	---	48.75	48.38	48.27	48.36	48.31	48.06	48.16
23	48.42	48.13	48.46	49.89	54.06	48.71	48.28	48.18	48.22	48.17	47.78	48.07
24	48.33	48.13	48.47	49.32	52.63	48.73	48.27	48.21	48.16	48.15	47.73	48.01
25	48.19	48.15	48.38	48.87	51.00	49.07	48.21	48.79	48.96	48.11	47.77	47.93
26	48.06	48.10	48.22	48.57	50.81	49.07	48.15	48.49	48.44	48.04	48.25	47.91
27	48.00	48.10	48.18	48.42	51.80	48.98	48.13	48.36	48.28	48.23	48.29	47.84
28	48.02	48.09	48.19	48.31	51.57	48.88	48.15	48.29	48.11	48.14	48.26	47.82
29	48.58	48.11	48.21	48.23	---	49.72	48.14	48.34	48.00	48.02	47.90	47.84
30	49.22	48.72	48.19	48.15	---	49.25	48.19	48.25	48.08	47.94	47.84	47.84
31	48.84	---	48.16	48.20	---	49.02	---	48.16	---	47.90	47.85	---
MEAN	48.11	48.17	48.38	48.45	---	---	48.59	48.66	48.35	48.08	48.49	47.99
MAX	49.22	48.81	49.03	49.89	---	---	49.73	49.85	49.22	49.19	52.03	49.03
MIN	47.82	47.96	48.08	48.05	---	---	48.13	48.16	48.00	47.82	47.73	47.80

CAL YR 1996 MEAN 48.52 MAX 53.22 MIN 47.08

## 05531410 SALT CREEK AT 22ND STREET AT OAK BROOK, IL--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--October 1, 1995 to current year.

GAGE.--An 8-in.-diameter, unheated, tipping-bucket rain gage

REMARKS.--Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to appreciable errors.

MAXIMUM FOR PERIOD OF RECORD.--Maximum recorded, 2.35 in., Sept. 26, 1996.

MAXIMUM FOR WATER YEAR 1996.--Maximum recorded, 2.35 in., Sept. 26, but may have been greater during periods of missing record.

WATER YEAR 1997.--Maximum recorded, 1.92 in., Aug. 16, but may have been greater during periods of missing record.

PRECIPITATION TOTALS (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.57	.00	s.01	.00	.00	.00	.00	.40	.00	.00	.00
2	.00	.08	.00	.00	.00	.00	.00	.00	---	.07	.00	.00
3	.02	.00	.00	.00	.00	.00	.00	.16	---	.00	.00	.00
4	.00	.00	.00	.00	.00	.02	.01	.01	---	.00	.00	.00
5	.11	.00	.07	.00	.00	.35	.01	.00	---	.00	.00	.00
6	1.16	.01	.00	.00	.00	.00	.00	.00	---	.00	.00	.00
7	.00	.00	.00	.00	---	.00	.00	.07	---	.00	---	.00
8	.00	.00	.00	.00	---	.00	.00	---	---	.00	---	.97
9	.00	.00	.00	.00	.00	.00	.00	---	---	.00	---	---
10	.00	---	.00	.00	.00	s.02	.00	---	---	.00	---	---
11	.00	---	.00	.00	.00	.00	.00	---	---	.00	---	---
12	.00	.00	.00	.00	.00	.00	.02	---	.00	.00	---	---
13	.08	.00	s.04	s.11	.00	.00	.00	---	.00	.00	---	.00
14	.13	.00	s.14	.00	.00	.00	.19	.09	.00	---	---	.00
15	.00	.00	.00	.00	.00	.00	.25	.02	.00	---	---	.00
16	.00	s.02	.00	.00	.00	.00	---	.90	.83	---	---	.01
17	.00	s.02	.00	s.53	.00	.00	---	---	---	---	---	.00
18	.00	.00	.00	---	.00	---	.85	.00	---	---	---	.00
19	.62	.00	.00	.00	s.02	.00	.31	.00	---	---	---	.00
20	.52	.00	.00	.00	.00	.00	.00	.35	.00	---	---	.02
21	.06	.00	.00	.01	.00	.00	.00	.00	.00	---	---	.05
22	.00	.00	.00	.00	.00	.00	.42	.00	.00	---	---	.00
23	.23	.00	.00	---	.00	.02	.00	.40	.21	---	---	.05
24	.00	.00	.00	.00	.00	.45	.01	.34	---	---	.00	.00
25	.00	.00	.00	.00	.00	.02	.23	---	.00	---	.00	.00
26	.14	.00	.00	.41	---	.00	.00	---	.00	---	.00	2.35
27	.33	.24	.00	.01	---	.00	.00	---	.00	---	.00	.03
28	.13	.04	.00	.00	.00	.00	.01	---	.00	---	.00	.00
29	.02	.00	.00	.00	.00	.00	---	---	.00	---	.00	.00
30	.26	s.06	.00	.00	---	.00	.00	.00	.00	---	.00	.00
31	.12	---	s.08	.00	---	.09	---	.00	---	---	.00	---
TOTAL	3.99	---	.33	---	---	---	---	---	---	---	---	---

s Snowfall-affected precipitation

## ILLINOIS RIVER BASIN

05531410 SALT CREEK AT 22ND STREET AT OAK BROOK, IL--Continued

## PRECIPITATION RECORDS

PRECIPITATION TOTALS (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

## DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	s.03	.03	---	.10	.00	.81	.00	.00	.00	.00
2	.00	.00	.00	.00	---	.00	.00	.33	.05	.00	.00	.00
3	.00	.00	s.10	.01	---	.00	.00	.11	.00	.00	.38	.00
4	.10	.05	.00	.83	---	.00	.04	.00	.00	.04	.31	.00
5	.00	.00	s.13	.10	---	.00	.28	.01	.00	.00	.00	.00
6	.00	1.59	s.01	.00	---	.00	.00	.00	.59	.00	.00	.00
7	.00	.05	.00	.00	---	.00	.00	.46	.32	.00	.00	.00
8	.03	.03	.00	.00	---	.00	.00	.02	.00	.09	.00	.03
9	.00	.00	.00	.00	---	.15	.00	.00	.00	.00	.00	.00
10	.03	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.22	.00	---	.00	.68	.02	.32	.00	.67	.00
12	.00	.00	.00	.00	---	.00	.06	.00	.00	.00	.72	.00
13	.00	.00	.00	.00	---	.08	.02	.00	.00	.00	.00	.00
14	.00	.00	.01	.00	---	.07	.00	.04	.00	.00	.00	.00
15	.00	.00	.15	.00	---	.00	.03	.00	.00	.00	.32	.00
16	---	.00	.00	.00	---	.00	.00	.00	.85	.00	1.92	.24
17	---	.26	.00	.00	---	.00	.00	.00	.00	.00	1.65	.22
18	.00	.00	.00	.00	---	.00	.04	.63	.00	1.89	.01	.00
19	.00	.00	.00	---	---	.00	.11	.50	.00	.00	.00	.64
20	.00	.00	.00	---	---	.00	.00	.00	.08	.00	.01	.00
21	.00	s.13	.00	---	---	.00	.01	.00	.06	.07	.00	.00
22	.33	s.01	.00	---	---	.00	.00	.00	.00	.03	.00	.04
23	.08	.01	.61	---	---	.00	.00	.00	.00	.00	.03	.04
24	.00	.08	.00	---	---	.24	.06	.49	.00	.00	.10	.00
25	.00	.00	.00	---	---	.06	.00	.14	.90	.00	.00	.00
26	.00	.00	.00	---	---	.00	.00	.00	.00	.03	.00	.00
27	.00	.00	s.07	---	---	.00	.01	.00	.00	.00	.00	.00
28	.00	s.03	.00	---	---	.69	.01	.23	.00	.00	.00	.00
29	.72	.32	.00	---	---	.03	.00	.00	.00	.00	.00	.00
30	.00	.04	.00	---	---	.09	.25	.00	.41	.00	.02	.00
31	.00	---	.00	---	---	.00	---	.00	---	.00	.00	---
TOTAL	---	2.60	1.33	---	---	1.51	1.60	3.79	3.58	2.15	6.14	1.21

s Snowfall-affected precipitation

## 05531500 SALT CREEK AT WESTERN SPRINGS, IL

LOCATION.--Lat 41°49'35", long 87°54'00", in NE1/4SE1/4 sec.31, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Wolf Road, in Cook County Forest Preserve, 0.5 mi north of Western Springs, and at mile 8.8.

DRAINAGE AREA.--115 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1945 to current year.

REVISED RECORDS.--WSP 1915: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 624.93 ft above sea level. Prior to July 26, 1946, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation by sewage treatment plants upstream from station. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gageheight (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1730	*2,510	*9.35	Aug. 17	0400	1,470	7.91

Minimum discharge, 42.0 ft<sup>3</sup>/s, Oct. 13, Aug. 3.

REVISIONS.--Revised figures of daily discharge for July 21 to Sept. 26, 1996 are given below in ft<sup>3</sup>/s. These figures supersede those published in the report for 1996.

July 21	290	Aug. 07	261	Aug. 24	102	Sept. 10	91
22	184	08	268	25	85	11	80
23	126	09	151	26	78	12	74
24	119	10	109	27	70	13	64
25	104	11	86	28	63	14	58
26	87	12	78	29	61	15	54
27	81	13	73	30	58	16	55
28	94	14	68	31	54	17	59
29	262	15	65	Sept. 01	51	18	58
30	215	16	60	02	47	19	40
31	136	17	56	03	52	20	45
Aug. 01	106	18	54	04	52	21	62
02	96	19	66	05	56	22	57
03	81	20	72	06	58	23	50
04	76	21	82	07	56	24	59
05	71	22	106	08	83	25	60
06	137	23	239	09	195	26	222

MONTH	TOTAL	MEAN	MAX	MIN	CFSM	IN
July 1996	5704	184	1390	50	1.60	1.85
Aug. 1996	3032	97.8	268	54	.85	.98
Sep. 1996	2943	98.1	540	40	.85	.95
Wtr Yr 1996	68442	187	1390	40	1.63	22.14

## ILLINOIS RIVER BASIN

## 05531500 SALT CREEK AT WESTERN SPRINGS, IL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e100	132	173	84	108	813	201	263	91	95	55	57
2	e85	97	136	84	106	764	170	422	113	92	53	61
3	e76	83	129	90	111	676	148	463	104	87	49	64
4	e67	72	122	194	207	568	135	382	94	71	89	56
5	e62	70	119	293	260	486	173	e300	86	63	89	56
6	e58	105	128	194	209	393	190	e220	164	56	81	53
7	e53	212	119	139	157	295	161	e190	189	59	69	53
8	e55	147	104	115	128	199	123	e350	181	65	61	54
9	57	120	92	98	117	192	105	e310	152	74	55	59
10	55	93	89	93	110	212	96	e230	122	63	54	59
11	56	83	148	89	96	239	135	e170	146	59	135	53
12	50	74	222	e91	92	227	442	145	123	56	375	56
13	46	70	188	e97	90	178	418	128	101	56	302	49
14	47	64	144	e80	89	197	330	114	86	55	179	53
15	54	61	140	e70	87	175	253	111	76	56	205	55
16	87	61	137	e67	86	146	210	104	346	52	310	57
17	90	84	120	e64	84	148	170	96	326	52	1200	253
18	105	80	101	e62	156	177	149	114	215	164	788	169
19	81	73	91	e66	282	126	150	264	145	311	558	145
20	70	68	e86	e70	331	157	142	204	116	195	297	192
21	68	78	e80	e150	1900	154	126	153	174	133	189	137
22	67	84	76	543	1780	151	127	118	131	123	140	98
23	123	82	120	440	1490	146	116	104	107	99	112	89
24	111	78	129	311	1130	147	115	98	97	94	104	80
25	90	83	117	206	768	208	109	228	271	91	94	70
26	77	77	94	156	681	211	101	160	152	84	104	68
27	67	73	88	139	927	192	93	135	118	101	108	60
28	67	73	88	120	852	172	93	120	92	92	117	58
29	130	68	89	e110	---	393	93	131	77	81	67	59
30	298	175	88	e100	---	295	95	111	86	68	58	63
31	199	---	86	91	---	236	---	99	---	61	60	---
TOTAL	2651	2720	3643	4506	12434	8673	4969	6037	4281	2808	6157	2436
MEAN	85.5	90.7	118	145	444	280	166	195	143	90.6	199	81.2
MAX	298	212	222	543	1900	813	442	463	346	311	1200	253
MIN	46	61	76	62	84	126	93	96	76	52	49	49
CFSM	.74	.79	1.02	1.26	3.86	2.43	1.44	1.69	1.24	.79	1.73	.71
IN.	.86	.88	1.18	1.46	4.02	2.81	1.61	1.95	1.38	.91	1.99	.79

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1997, BY WATER YEAR (WY)

MEAN	79.3	105	108	108	127	210	228	158	130	92.5	103	82.9
MAX	331	457	500	368	444	809	565	480	388	288	795	414
(WY)	1955	1986	1983	1993	1997	1979	1983	1996	1996	1978	1987	1972
MIN	3.34	5.55	8.14	5.79	12.4	46.1	41.8	24.8	25.6	10.6	3.08	3.33
(WY)	1949	1949	1954	1954	1954	1956	1946	1946	1956	1946	1948	1952

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1946 - 1997	
ANNUAL TOTAL	62554		61315		128	
ANNUAL MEAN	171		168		250	
HIGHEST ANNUAL MEAN					36.6	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	1390	Jul 18	1900	Feb 21	3220	Aug 17 1987
LOWEST DAILY MEAN	40	Sep 19	46	Oct 13	1.0	Aug 27 1950
ANNUAL SEVEN-DAY MINIMUM	52	Jul 6	52	Oct 9	2.1	Oct 15 1948
INSTANTANEOUS PEAK FLOW			2510	Feb 21	3540	Aug 17 1987
INSTANTANEOUS PEAK STAGE			9.35	Feb 21	10.54	Aug 17 1987
INSTANTANEOUS LOW FLOW			42	Oct 13, Aug. 3	.40	Jul 13 1953
ANNUAL RUNOFF (CFSM)	1.49		1.46		1.11	
ANNUAL RUNOFF (INCHES)	20.23		19.83		15.08	
10 PERCENT EXCEEDS	434		301		291	
50 PERCENT EXCEEDS	100		108		71	
90 PERCENT EXCEEDS	56		59		15	

## 05532000 ADDISON CREEK AT BELLWOOD, IL

LOCATION.--Lat 41°52'48", long 87°52'07", in SW1/4SE1/4 sec.9, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on right bank at downstream side of bridge on Washington Boulevard in Bellwood, 1,050 ft upstream from railroad bridge, and at mile 3.2.

DRAINAGE AREA.--17.9 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1950 to June 1951, October 1951 to current year.

REVISED RECORDS.--WSP 1338: 1952. WSP 1708: 1958, 1959(P). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 617.65 ft above sea level (Cook County Highway Department bench mark). Prior to Oct. 26, 1951, at datum 2.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0800	649	8.94	Aug. 16	2115	*753	*7.86

Minimum discharge, 1.1 ft<sup>3</sup>/s, Oct. 14, 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	14	20	5.6	e17	86	18	44	12	8.8	3.3	14
2	7.5	14	14	6.5	e11	72	11	36	30	6.8	3.6	14
3	6.3	15	14	8.7	e7.4	61	10	37	11	9.9	3.6	7.3
4	5.0	16	8.2	63	e34	51	9.9	15	8.2	5.2	14	4.7
5	3.4	14	11	34	e22	36	22	11	7.1	4.9	15	4.7
6	4.3	36	21	e13	e14	31	13	9.8	68	5.2	9.0	4.1
7	11	46	11	e11	e8.3	24	9.2	18	73	3.4	4.1	3.7
8	7.2	19	6.5	e7.2	e7.2	17	9.5	57	19	14	3.1	4.3
9	12	12	5.7	e6.7	e6.7	18	12	17	9.2	9.0	2.5	5.5
10	7.6	8.5	5.6	e6.6	e6.4	16	17	11	8.6	6.2	4.8	5.2
11	20	6.4	31	e6.4	e6.2	13	28	11	20	4.1	54	5.1
12	7.7	8.0	19	e6.4	e5.8	11	71	12	11	2.5	96	4.5
13	3.1	6.7	12	e6.1	e5.4	11	38	11	7.7	2.7	36	3.8
14	2.1	9.5	8.0	e6.0	e5.2	24	38	9.1	6.5	3.3	28	3.5
15	1.4	6.5	14	e5.8	e5.2	11	18	8.0	5.6	2.7	54	8.8
16	28	6.2	e8.1	e5.1	e5.4	10	14	7.8	107	2.2	135	11
17	33	25	e7.5	e4.1	e5.6	10	13	6.8	22	2.5	256	70
18	25	8.0	e7.4	e3.9	31	9.3	11	39	9.7	67	110	18
19	6.4	6.4	e5.7	e4.0	35	12	14	46	8.3	67	87	31
20	4.3	14	5.4	e4.6	36	12	11	21	11	42	53	28
21	12	16	5.1	e32	425	8.4	9.7	8.5	41	24	48	6.8
22	25	9.2	5.3	e104	95	7.6	10	7.6	24	21	40	5.3
23	24	7.0	44	e20	80	6.8	8.6	8.4	19	e18	33	5.8
24	18	7.4	e13	e18	105	8.0	10	22	17	e8.0	34	4.8
25	20	7.7	e7.6	e17	105	27	9.1	53	76	8.0	27	7.8
26	7.7	6.3	e5.0	e14	131	10	8.6	9.8	16	18	23	8.2
27	7.9	7.2	5.1	e11	138	9.0	7.6	7.3	10	10	7.0	3.5
28	16	15	8.9	e7.0	87	19	7.1	10	8.2	5.1	12	3.1
29	51	13	7.7	e5.8	---	66	9.1	17	5.9	4.3	7.7	2.8
30	33	38	11	e5.8	---	26	9.8	8.4	7.2	3.9	9.5	3.3
31	13	---	6.5	e12	---	36	---	11	---	4.2	13	---
TOTAL	441.9	418.0	354.3	461.3	1440.8	759.1	477.2	590.5	679.2	393.9	1226.2	302.6
MEAN	14.3	13.9	11.4	14.9	51.5	24.5	15.9	19.0	22.6	12.7	39.6	10.1
MAX	51	46	44	104	425	86	71	57	107	67	256	70
MIN	1.4	6.2	5.0	3.9	5.2	6.8	7.1	6.8	5.6	2.2	2.5	2.8
CFSM	.80	.78	.64	.83	2.87	1.37	.89	1.06	1.26	.71	2.21	.56
IN.	.92	.87	.74	.96	2.99	1.58	.99	1.23	1.41	.82	2.55	.63

e Estimated

## ILLINOIS RIVER BASIN

## 05532000 ADDISON CREEK AT BELLWOOD, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1997, BY WATER YEAR (WY)

MEAN	12.3	14.8	13.9	12.5	15.3	23.1	26.0	19.3	16.5	14.0	16.2	13.5
MAX	46.5	44.5	53.5	39.2	51.5	72.6	59.0	57.9	41.5	46.6	103	61.4
(WY)	1955	1986	1983	1993	1997	1979	1983	1990	1993	1957	1987	1951
MIN	.22	.46	1.63	.98	1.38	6.69	7.87	4.25	1.64	.68	.42	.31
(WY)	1953	1954	1954	1954	1963	1956	1971	1952	1956	1955	1953	1952

## SUMMARY STATISTICS

## FOR 1996 CALENDAR YEAR

## FOR 1997 WATER YEAR

## WATER YEARS 1950 - 1997

ANNUAL TOTAL	6573.3		7545.0									
ANNUAL MEAN	18.0		20.7							16.5		
HIGHEST ANNUAL MEAN										27.6		1993
LOWEST ANNUAL MEAN										3.98		1953
HIGHEST DAILY MEAN	150	Jul 18	425	Feb 21					768		Aug 14	1997
LOWEST DAILY MEAN	1.4	Oct 15	1.4	Oct 15					.00		Sep 14	1962
ANNUAL SEVEN-DAY MINIMUM	3.3	Jul 4	2.9	Jul 11					.10		Oct 6	1952
INSTANTANEOUS PEAK FLOW			753	Aug 16					1120		Aug 14	1987
INSTANTANEOUS PEAK STAGE			9.86	Aug 16					12.84		Aug 14	1987
INSTANTANEOUS LOW FLOW			1.1	Oct 14,15,16								
ANNUAL RUNOFF (CFSM)	1.00		1.15						.92			
ANNUAL RUNOFF (INCHES)	13.66		15.68						12.53			
10 PERCENT EXCEEDS	41		46						36			
50 PERCENT EXCEEDS	11		10						8.2			
90 PERCENT EXCEEDS	5.1		4.6						2.4			



## 05532300 SALT CREEK AT BROOKFIELD, IL

**LOCATION.**--Lat 41°50'44", long 87°51'08", in SW1/4NE1/4 sec.27, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Maple Avenue in Brookfield, 300 ft downstream from Addison Creek, 1.0 mi upstream from diversion to Des Plaines River, and at mile 3.5.

**DRAINAGE AREA.**--146 mi<sup>2</sup>.

**PERIOD OF RECORD.**--July 1961 to September 1962 (low-flow discharge measurements only), October 1989 to current year (gage heights only).

**GAGE.**--Water-stage recorder. Datum of gage is 608.04 ft above sea level (levels by Illinois Department of Transportation).

**REMARKS.**--Gage-height telemeter at station.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum gage height, 10.63 ft, Feb. 21, 1997; minimum, 0.56 ft, Sept. 4, 1992.

**EXTREMES FOR CURRENT YEAR.**--Maximum gage height, 10.63 ft, Feb. 21; minimum, 0.73 ft, Aug. 3.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.36	1.64	1.88	1.22	---	5.28	2.02	2.27	1.28	1.35	.91	1.08
2	1.20	1.40	1.68	1.23	.96	4.96	1.82	2.82	1.50	1.29	.87	1.03
3	1.14	1.27	1.68	1.34	1.44	4.55	1.71	2.98	1.40	1.25	.78	1.08
4	1.06	1.22	1.58	2.02	2.07	4.02	1.63	2.57	1.29	1.07	1.25	.94
5	.98	1.21	1.54	2.58	2.25	3.50	1.90	2.16	1.22	1.00	1.33	.93
6	.95	1.52	1.67	2.03	2.03	2.92	1.91	1.89	1.92	.90	1.19	.91
7	.97	2.22	1.53	1.70	1.73	2.36	1.75	1.82	2.14	.90	1.06	.92
8	1.03	1.75	1.39	1.53	1.54	1.91	1.53	2.63	1.85	1.00	.99	.93
9	1.05	1.57	1.31	1.37	1.44	1.85	1.43	2.48	1.68	1.15	.89	.96
10	1.02	1.35	1.28	1.35	1.38	1.96	1.42	2.10	1.48	.99	.90	.98
11	1.10	1.22	1.78	---	1.31	2.04	1.72	1.81	1.59	.94	1.78	.93
12	.99	1.16	2.08	---	1.34	2.00	3.02	1.67	1.53	.86	2.89	.97
13	.84	1.12	1.94	---	1.27	1.80	2.78	1.54	1.31	.87	2.37	.87
14	.83	1.09	1.71	---	1.23	1.95	2.50	1.47	1.20	.85	1.88	.90
15	.91	1.04	1.72	---	1.19	1.81	2.17	1.42	1.10	.87	2.06	.98
16	1.40	1.04	1.64	---	1.19	1.65	2.04	1.39	2.85	.80	2.90	1.05
17	1.47	1.38	1.52	---	1.21	1.61	1.85	1.34	2.45	.83	7.28	2.43
18	1.54	1.24	1.38	---	1.83	1.82	1.74	1.54	1.98	1.77	5.19	1.84
19	1.22	1.15	2.01	---	2.37	1.55	1.76	2.33	1.64	2.57	3.74	1.80
20	1.10	1.14	---	---	2.54	1.74	1.70	1.98	1.46	1.96	2.45	2.00
21	1.10	1.26	2.41	---	9.00	1.71	1.57	1.69	1.93	1.68	2.07	1.63
22	1.20	1.29	2.27	1.58	9.55	1.68	1.58	1.47	1.64	1.55	1.79	1.42
23	1.64	1.29	2.22	2.86	8.45	1.64	1.49	1.38	1.44	1.35	1.60	1.32
24	1.49	1.19	1.70	2.31	7.40	1.66	1.48	1.37	1.36	1.31	1.57	1.23
25	1.38	1.23	---	1.92	5.63	2.06	1.42	2.20	2.52	1.26	1.46	1.15
26	1.19	1.18	---	---	5.07	1.97	1.36	1.70	1.75	1.35	1.52	1.17
27	1.08	1.17	---	---	6.37	1.89	1.32	1.58	1.49	1.34	1.42	1.02
28	1.12	1.21	1.47	---	5.60	1.93	1.32	1.46	1.29	1.28	1.53	.97
29	1.70	1.17	1.28	---	---	2.97	1.33	1.61	1.12	1.13	1.13	.95
30	2.41	1.95	1.30	---	---	2.36	1.34	1.41	1.17	1.03	1.05	1.00
31	1.95	---	1.25	---	---	2.18	---	1.33	---	.98	1.06	---
MEAN	1.24	1.32	---	---	---	2.37	1.75	1.85	1.62	1.21	1.90	1.18
MAX	2.41	2.22	---	---	---	5.28	3.02	2.98	2.85	2.57	7.28	2.43
MIN	.83	1.04	---	---	---	1.55	1.32	1.33	1.10	.80	.78	.87

## 05532500 DES PLAINES RIVER AT RIVERSIDE, IL

LOCATION.--Lat 41°49'20", long 87°49'15", in SW1/4SW1/4 sec.36, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left bank 400 ft downstream from bridge on Barry Point Road in Riverside, 500 ft downstream from Hoffman Dam, 4,000 ft downstream from Salt Creek, and at mile 44.3.

DRAINAGE AREA.--630 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1174: 1944, 1948. WSP 1308: 1944(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 594.68 ft above sea level. Prior to Nov. 27, 1945, nonrecording gage at bridge 400 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation by gates at Hoffman Dam. Gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1919, reached a discharge of 7,450 ft<sup>3</sup>/s, from information furnished by Metropolitan Sanitary District of Greater Chicago.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,990 ft<sup>3</sup>/s, Feb. 22, gage height, 8.45 ft; minimum discharge, 149 ft<sup>3</sup>/s, Oct. 13, 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	423	522	299	e460	3390	709	998	471	551	221	232
2	250	372	433	305	e500	3200	628	1360	559	561	208	214
3	224	323	414	343	536	2980	576	1580	546	472	193	207
4	205	278	438	606	838	2680	533	1440	442	381	218	188
5	191	268	387	989	1050	2320	615	1270	399	346	262	180
6	177	347	444	685	936	1980	656	1140	672	310	233	177
7	174	686	396	579	817	1680	568	1030	739	282	210	168
8	191	427	347	455	730	1430	493	1470	767	292	211	170
9	207	337	313	494	669	1300	446	1370	579	343	198	180
10	193	275	294	440	614	1250	418	1150	502	285	175	179
11	191	239	533	345	562	1140	455	949	472	268	470	173
12	188	226	791	310	512	1030	1190	825	511	254	1080	168
13	161	207	674	e310	458	903	1060	728	418	235	925	158
14	159	212	606	e310	420	911	941	642	385	225	468	158
15	164	200	615	e305	400	860	865	580	342	219	617	161
16	281	199	592	e290	392	746	814	532	1230	204	968	174
17	308	283	506	e275	377	680	748	502	1160	198	3960	969
18	344	282	430	e270	617	685	686	530	1000	571	2810	608
19	240	234	309	e280	1050	623	662	1010	986	1300	1530	447
20	201	221	297	300	1210	630	631	761	971	553	876	812
21	193	251	319	359	4690	619	582	701	1490	366	650	551
22	217	299	340	1260	6770	589	576	646	1050	387	476	428
23	452	278	450	1380	6120	560	544	606	859	356	393	423
24	377	262	520	1100	5350	540	523	565	825	567	384	416
25	285	270	358	939	4110	767	502	890	1170	475	413	401
26	235	269	280	713	3400	766	468	761	895	402	404	401
27	207	256	305	555	3990	726	439	701	729	542	362	369
28	205	252	e320	e500	3660	697	423	616	611	390	364	327
29	416	252	e330	e450	---	1330	408	680	483	311	281	263
30	1020	575	321	e440	---	971	405	575	405	266	241	228
31	585	---	309	e430	---	805	---	518	---	242	232	---
TOTAL	8534	9003	13193	16316	51238	38788	18564	27126	21668	12154	20033	9530
MEAN	275	300	426	526	1830	1251	619	875	722	392	646	318
MAX	1020	686	791	1380	6770	3390	1190	1580	1490	1300	3960	969
MIN	159	199	280	270	377	540	405	502	342	198	175	158
CFSM	.44	.48	.68	.84	2.90	1.99	.98	1.39	1.15	.62	1.03	.50
IN.	.50	.53	.78	.96	3.03	2.29	1.10	1.60	1.28	.72	1.18	.56

e Estimated

## 05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1997, BY WATER YEAR (WY)

MEAN	301	403	434	423	514	1010	1069	726	538	378	349	311
MAX	2224	2056	2211	1711	1830	3499	3050	2362	1922	1355	2306	2035
(WY)	1987	1986	1983	1960	1997	1979	1993	1996	1996	1993	1987	1972
MIN	4.27	11.8	15.2	11.2	28.9	77.8	184	79.4	69.7	26.5	8.46	11.9
(WY)	1954	1954	1945	1945	1963	1945	1945	1946	1963	1944	1944	1946

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1944 - 1997		
ANNUAL TOTAL	265376			246147					
ANNUAL MEAN	725			674			538		
HIGHEST ANNUAL MEAN							1092		
LOWEST ANNUAL MEAN							111		
HIGHEST DAILY MEAN	5100			6770			9180		
LOWEST DAILY MEAN	126			158			.00		
ANNUAL SEVEN-DAY MINIMUM	141			167			1.5		
INSTANTANEOUS PEAK FLOW				6990			9770		
INSTANTANEOUS PEAK STAGE				8.45			9.90		
INSTANTANEOUS LOW FLOW				149					
ANNUAL RUNOFF (CFSM)	1.15			1.07			.85		
ANNUAL RUNOFF (INCHES)	15.67			14.53			11.60		
10 PERCENT EXCEEDS	1860			1160			1320		
50 PERCENT EXCEEDS	371			458			290		
90 PERCENT EXCEEDS	200			207			34		

A - Aug. 23, 1962; Aug. 31, Oct. 7, 1974.

## 05533000 FLAG CREEK NEAR WILLOW SPRINGS, IL

LOCATION.--Lat 41°44'20", long 87°53'48", in SE1/4NE1/4 sec.31, T.38 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on German Church Road, 1.1 mi northwest of Willow Springs, and at mile 2.2.

DRAINAGE AREA.--16.5 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 606.36 ft above sea level. Prior to June 17, 1963, water-stage recorder at same site at datum 3.73 ft higher. June 17, 1963, to June 26, 1964, nonrecording gage at site 0.5 mi upstream at datum 4.82 ft higher.

REMARKS.--Records fair. Effluent from sewage-treatment plant 2 mi upstream averaged 19.1 ft<sup>3</sup>/s during the year. The maximum monthly average was 31.4 ft<sup>3</sup>/s in February, and the minimum was 14.6 ft<sup>3</sup>/s in September. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 470 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0800	*1,540	*9.34	Aug. 16	2200	620	7.30

Minimum discharge, 2.2 ft<sup>3</sup>/s, November 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	19	42	20	31	100	27	44	18	51	11	13
2	13	17	30	22	27	76	25	36	19	28	11	14
3	12	15	28	24	26	61	24	36	18	22	17	14
4	12	14	23	47	70	49	22	26	16	18	40	14
5	11	14	26	55	50	44	38	22	16	16	14	14
6	11	67	29	34	36	37	32	20	44	16	13	13
7	12	103	25	25	29	32	24	24	45	17	14	13
8	14	45	21	22	25	31	23	55	28	18	13	15
9	12	36	19	22	28	39	21	29	22	18	12	14
10	12	26	18	21	22	32	20	24	18	16	11	14
11	12	20	59	18	20	30	32	22	43	15	36	14
12	11	11	43	16	19	28	86	23	27	15	76	14
13	10	15	32	16	19	27	47	21	20	14	32	12
14	12	15	28	16	19	33	36	21	17	13	19	13
15	12	16	37	17	17	29	27	21	16	13	34	13
16	26	17	30	15	16	24	28	20	58	12	116	15
17	31	25	26	15	23	24	22	19	28	13	296	59
18	26	19	21	13	69	23	20	31	22	52	77	20
19	16	15	19	13	102	22	29	43	21	30	41	17
20	14	14	19	14	95	22	21	23	20	17	29	21
21	14	17	19	25	920	22	20	23	24	19	23	14
22	17	16	16	133	303	21	19	23	18	17	19	15
23	31	15	51	61	136	22	17	21	18	15	18	17
24	18	16	46	46	90	22	21	19	18	15	24	16
25	15	18	25	37	68	35	17	49	67	13	17	15
26	14	16	22	26	121	22	16	24	27	13	17	13
27	13	16	20	25	270	22	15	22	21	15	17	15
28	13	15	21	22	116	23	15	21	19	13	15	14
29	48	17	20	21	---	56	13	26	17	12	15	12
30	55	57	18	20	---	34	22	21	85	11	17	14
31	23	---	17	25	---	32	---	20	---	11	13	---
TOTAL	554	726	850	886	2767	1074	779	829	830	568	1107	481
MEAN	17.9	24.2	27.4	28.6	98.8	34.6	26.0	26.7	27.7	18.3	35.7	16.0
MAX	55	103	59	133	920	100	86	55	85	52	296	59
MIN	10	11	16	13	16	21	13	19	16	11	11	12

## 05533000 FLAG CREEK NEAR WILLOW SPRINGS, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	14.4	19.2	19.1	17.3	21.1	31.7	33.9	25.0	20.2	17.4	16.3	16.0
MAX	100	69.6	86.6	59.8	98.8	110	95.0	90.9	68.1	67.7	66.8	106
(WY)	1955	1991	1983	1993	1997	1979	1983	1996	1993	1996	1987	1961
MIN	2.30	2.37	2.83	2.44	4.05	5.88	7.00	4.94	5.64	4.94	4.65	3.01
(WY)	1954	1954	1959	1956	1963	1957	1971	1958	1956	1952	1953	1954

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	12371		11451			
ANNUAL MEAN	33.8		31.4		20.9	
HIGHEST ANNUAL MEAN					39.6	
LOWEST ANNUAL MEAN					7.79	
HIGHEST DAILY MEAN	1040	Jul 18	920	Feb 21	1040	Jul 18 1996
LOWEST DAILY MEAN	10	Oct 13	10	Oct 13	.10	Dec 9 1957
ANNUAL SEVEN-DAY MINIMUM	12	Aug 29	12	Oct 9	1.0	Feb 3 1959
INSTANTANEOUS PEAK FLOW			1540	Feb 21	2680	Sep 14 1961
INSTANTANEOUS PEAK STAGE			9.34	Feb 21	13.71 A	Sep 14 1961
INSTANTANEOUS LOW FLOW			2.2	Nov 12		
10 PERCENT EXCEEDS	62		51		39	
50 PERCENT EXCEEDS	18		21		12	
90 PERCENT EXCEEDS	12		13		4.2	

A - Present datum.

## ILLINOIS RIVER BASIN

05533400 SAWMILL CREEK NEAR LEMONT, IL

LOCATION.--Lat 41°42'28", long 87°57'45", in NE1/4SW1/4 sec.10, T.37 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on concrete abutment on right bank, 50 ft upstream from bridge on Bluff Road at south edge of Argonne National Laboratory, 2.5 mi northeast of Lemont, and at mile 1.

DRAINAGE AREA.--13.0 mi<sup>2</sup>

PERIOD OF RECORD.--Annual maximum, water years 1961-79. December 1985 to current year

REVISED RECORDS.--WDR IL-77-1: 1961-76(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 630.00 ft above sea level. Oct. 11, 1961, to Sept. 30, 1976, crest-stage gage on bridge 50 ft downstream at datum 11.22 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter and recording rain gage at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 240 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0755	*1,360	*14.64	Aug. 17	0645	328	11.64
Feb. 27	0540	385	11.89				

No flow several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	2.8	17	4.6	e4.5	50	3.6	16	1.8	4.8	.08	1.1
2	.45	1.8	8.2	6.7	e4.5	35	3.1	11	1.9	2.1	.08	.90
3	.05	1.5	7.5	6.7	e4.7	23	2.9	9.0	1.9	1.2	19	.94
4	.00	1.3	5.7	20	e6.0	16	2.9	5.1	1.6	1.0	40	1.4
5	.13	1.4	6.3	20	e9.0	11	7.9	4.1	1.4	.81	4.6	1.5
6	.00	42	7.0	7.5	e7.0	7.8	5.8	3.0	6.7	.13	2.3	.89
7	.00	65	5.6	5.4	e5.4	6.3	3.3	6.3	8.7	.11	1.7	.40
8	.00	17	4.5	4.6	e5.0	5.7	2.8	19	2.9	.10	1.5	.31
9	.36	8.2	3.7	4.4	e4.5	8.8	2.6	5.3	2.1	.67	2.2	.32
10	.00	4.7	3.5	e4.0	e4.2	7.0	2.6	3.7	1.6	.11	1.3	.20
11	.00	4.0	30	e3.8	e4.1	5.7	11	3.2	1.8	.10	20	.15
12	.00	3.3	16	e3.5	e3.7	4.7	44	2.8	2.3	.09	43	.14
13	.00	2.9	8.3	e3.2	e3.5	4.5	17	2.9	1.9	.09	10	.12
14	.00	2.6	6.4	e3.2	e3.4	6.8	8.3	2.7	1.4	.09	3.2	.11
15	.00	2.5	14	e3.3	e3.2	4.3	5.7	2.6	.98	.09	10	.11
16	7.1	2.5	7.7	e3.2	3.2	4.0	5.2	2.4	17	.08	46	.27
17	8.8	6.6	5.6	e3.1	3.8	3.8	4.1	2.2	2.9	.08	174	29
18	7.0	3.9	4.4	e3.1	34	3.7	3.7	7.1	2.0	20	38	2.8
19	2.4	3.0	4.2	e3.1	34	3.4	5.1	18	1.6	6.3	14	2.1
20	1.6	2.7	3.9	e3.1	42	3.4	4.0	4.1	1.4	2.1	6.0	1.9
21	1.1	3.3	3.6	e4.5	774	3.2	3.4	2.9	1.5	2.6	3.9	1.2
22	2.3	3.3	3.1	e16	138	3.0	3.1	2.5	1.1	2.2	3.0	1.0
23	6.9	3.2	30	e14	68	2.8	3.0	2.3	.45	1.6	2.5	1.6
24	2.9	3.6	19	e9.0	41	3.7	4.6	2.1	.15	.80	9.4	1.3
25	1.7	4.0	9.7	e8.0	29	7.5	3.1	13	2.7	.27	2.9	1.0
26	1.2	3.0	6.1	e5.4	66	3.8	2.7	3.6	1.2	.56	2.4	.75
27	.78	2.7	4.8	e4.5	162	3.2	2.5	2.6	.47	2.2	1.9	.41
28	.55	2.6	5.4	e4.0	59	3.4	2.5	2.8	.24	1.6	1.6	.14
29	16	4.3	5.2	e3.7	---	8.4	2.4	3.2	.13	.31	1.3	.09
30	17	25	4.5	e3.8	---	4.8	2.7	2.4	18	.11	1.2	.08
31	5.3	---	3.9	e4.0	---	5.2	---	2.2	---	.09	1.2	---
TOTAL	84.40	234.7	264.8	193.4	1526.7	263.9	175.6	170.1	89.82	52.39	468.26	52.23
MEAN	2.72	7.82	8.54	6.24	54.5	8.51	5.85	5.49	2.99	1.69	15.1	1.74
MAX	17	65	30	20	774	50	44	19	18	20	174	29
MIN	.00	1.3	3.1	3.1	3.2	2.8	2.4	2.1	.13	.08	.08	.08
CFSM	.21	.60	.66	.48	4.19	.65	.45	.42	.23	.13	1.16	.13
IN.	.24	.67	.76	.55	4.37	.76	.50	.49	.26	.15	1.34	.15

e Estimated

## 05533400 SAWMILL CREEK NEAR LEMONT, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1997, BY WATER YEAR (WY)

MEAN	6.09	14.8	10.8	11.2	13.6	15.1	14.4	13.0	12.2	11.3	7.66	6.73
MAX	17.8	37.4	28.7	30.6	54.5	27.7	34.6	49.3	57.6	58.6	24.9	20.6
(WY)	1992	1991	1988	1993	1997	1990	1991	1990	1993	1996	1987	1989
MIN	1.11	4.61	1.03	2.78	2.08	3.83	5.30	1.25	1.02	.14	.50	.095
(WY)	1993	1994	1996	1987	1993	1996	1989	1992	1992	1991	1991	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1986 - 1997	
ANNUAL TOTAL	4614.83		3576.30			
ANNUAL MEAN	12.6		9.80		11.1	
HIGHEST ANNUAL MEAN					17.9	
LOWEST ANNUAL MEAN					7.58	
HIGHEST DAILY MEAN	1220	Jul 18	774	Feb 21	1220	Jul 18 1996
LOWEST DAILY MEAN	.00	A	.00	B	.00	C
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 25	.05	Oct 6	.00	Jul 24 1991
INSTANTANEOUS PEAK FLOW			1360	Feb 21	3070	Jul 18 1996
INSTANTANEOUS PEAK STAGE			14.64	Feb 21	17.53	Jul 18 1996
ANNUAL RUNOFF (CFSM)	.97		.75		.85	
ANNUAL RUNOFF (INCHES)	13.21		10.23		11.59	
10 PERCENT EXCEEDS	22		17		23	
50 PERCENT EXCEEDS	3.1		3.2		4.0	
90 PERCENT EXCEEDS	.00		.15		.38	

A - Many days.

B - Several days.

C - Oct 9, 10, 1988; many days in 1991-92, 1994-96.

## 05533400 SAWMILL CREEK NEAR LEMONT, IL--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April 17, 1986 to current year.

GAGE.--An 8-in.-diameter, unheated, tipping-bucket rain gage

ACCURACY.--Over-recording of rainfall may have resulted from wind vibrating the gage causing the tipping mechanism to tip before it was fully filled. The gage vibrates because of its installation on a 10-ft pole. The vibrating has been manually reproduced in the field.

The pole was secured on April 21, 1997, to eliminate excess vibrating.

REMARKS.--Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to appreciable errors.

MAXIMUM FOR PERIOD OF RECORD.--Maximum recorded, 6.17 in., July 17, 1996.

MAXIMUM FOR WATER YEAR 1996.--Maximum recorded, 6.17 in., July 17, but may have been greater during periods of missing record.

WATER YEAR 1997.--Maximum recorded, 2.82 in., Feb. 21, but may have been greater during periods of missing record.

PRECIPITATION TOTALS (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	.63	.00	s.06	.00	.00	.00	.00	.78	.00	.00	.00
2	---	---	.00	.00	.00	.00	.00	.00	.45	.00	.00	.00
3	---	.00	.00	.00	.00	.00	.00	.12	.01	.00	.00	.00
4	---	.00	.00	.00	.00	.01	.01	.01	.63	.00	.00	.00
5	.19	.00	.03	.00	.00	.41	.00	.04	.00	.00	.00	.00
6	1.04	.05	.00	.00	.00	.00	.00	.00	.39	.00	.00	.00
7	.03	.00	.00	.00	s.04	.00	.00	.00	.01	.00	.36	.00
8	.00	.00	.00	.00	.13	.00	.00	.02	.01	.00	.02	.24
9	.00	.00	.00	.00	.00	.00	.00	1.20	.31	.00	.00	.00
10	.00	3.33	.00	.00	.00	s.02	.00	.42	.04	.00	.00	.00
11	.00	s.02	.00	.00	.00	.00	.00	.00	.05	.00	.00	1.18
12	.00	.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.01
13	.07	.00	s.08	s.11	.00	.00	.00	.00	.00	.00	.00	.00
14	.10	.00	s.09	s.15	.00	.00	.43	.06	.00	.01	.00	.00
15	.00	.00	.00	.00	.00	.00	.42	.04	.00	.18	.00	.00
16	.00	.00	.00	.00	.00	.00	.02	.26	.28	.00	.00	.00
17	.00	.00	.00	s.14	.00	.01	.00	.00	1.38	6.17	.00	.00
18	.00	.00	.00	.76	.00	.00	.20	.00	.02	4.58	.14	.00
19	.68	.00	.00	.00	s.04	.00	.41	.00	.12	.00	.00	.00
20	.63	.00	.00	.00	.00	.00	.01	.45	.00	.00	.00	.03
21	.11	.00	.00	.01	.00	.00	.06	.01	.00	.24	.00	.00
22	.01	.00	.00	.00	.00	.00	.23	.00	.00	.00	.02	.00
23	.26	.00	.00	.08	.00	.01	.00	.35	.14	.00	.02	.06
24	.00	.00	.00	.00	.00	.40	.00	.23	.14	.30	.00	.00
25	.00	.00	.00	.00	.00	.02	.25	.28	.00	.00	.00	.00
26	.13	.00	.00	.28	.07	.00	.00	.05	.00	.00	.00	1.78
27	.08	---	.00	.00	.32	.00	.00	.55	.00	.05	.00	.01
28	---	---	.00	.00	.00	.00	.11	1.50	.00	.05	.00	.00
29	---	.00	.00	.00	.00	.00	.50	.00	.00	.05	.00	.00
30	---	s.02	.00	.00	---	.00	.01	.00	.00	1.05	.00	.00
31	---	---	s.08	.00	---	.10	---	.00	---	.00	.00	---
TOTAL	---	---	0.28	1.59	0.60	0.98	---	5.63	4.76	12.68	0.56	3.31

s Snowfall-affected precipitation



## 05533400 SAWMILL CREEK NEAR LEMONT, IL--Continued

## PRECIPITATION RECORDS

PRECIPITATION TOTALS (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	s.01	.04	.00	---	.00	.00	---	.00	.00	---
2	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.00	---
3	.00	.00	s.08	.00	.00	.00	.00	.00	---	.00	.58	---
4	.00	.07	s.01	.05	.43	.00	.04	.00	---	.01	---	---
5	.00	.00	.00	.00	.00	.00	.33	.01	---	.00	---	---
6	.00	1.57	s.14	.00	.00	.00	.00	.00	---	.00	---	---
7	.00	.11	.00	.00	.00	.00	.00	.57	---	.00	---	---
8	.04	.03	.00	s.01	.00	.00	.01	.02	---	.16	---	---
9	.00	.00	.00	.00	.00	.20	.00	.00	---	.00	---	---
10	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	---	---
11	.00	.00	.60	.00	.00	.00	.88	.02	---	.00	---	---
12	.00	.00	.00	.00	.00	.00	.03	.00	---	.00	---	---
13	.00	.00	.00	.00	s.01	.14	.01	.05	---	.00	---	---
14	.00	.00	.01	.00	.00	.05	.00	.01	---	.00	---	---
15	.00	.00	.23	.00	.00	.00	.05	.01	---	.00	---	---
16	---	.00	.00	.00	.00	.00	.01	.00	---	.00	---	---
17	---	.34	.00	.00	s.34	.00	.00	.00	---	.00	---	---
18	.00	.00	.00	.00	s.01	.00	.06	.77	---	1.58	---	---
19	.00	.00	.00	.00	.00	.00	.10	---	---	.00	---	---
20	.00	.00	.00	s.05	1.44	.00	.00	---	---	.00	---	---
21	.00	s.12	.01	s.68	2.82	.00	.01	---	.17	.08	---	---
22	.35	s.09	.00	.00	s.03	.00	.00	---	.00	.02	---	---
23	.13	.02	.88	.00	s.01	.00	.00	---	.00	.06	---	---
24	.00	.16	.00	s.12	.00	.29	.21	---	.00	.00	---	---
25	.00	.00	.00	.00	s.01	.07	.00	---	.11	.00	---	---
26	.00	.00	.00	.00	s.94	.00	.00	---	.00	.64	---	---
27	.00	.00	s.05	.00	s.51	.00	.04	---	.00	1.37	---	---
28	.00	s.06	s.01	.00	s.05	.14	.00	---	.00	.01	---	---
29	.98	.42	.00	.00	---	.01	.00	---	.00	.03	---	---
30	.05	.05	.00	.00	---	.07	.35	---	.93	.00	---	---
31	.00	---	.00	s.38	---	.00	---	---	---	.00	---	---
TOTAL	---	3.04	2.03	1.33	6.60	---	2.13	---	---	3.96	---	---

s Snowfall-affected precipitation

## 05534500 NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL

LOCATION.--Lat 42°09'10", long 87°49'07", in SW1/4SE1/4 sec.34, T.43 N., R.12 E., Lake County, Hydrologic Unit 07120003, on right bank at upstream side of bridge on Lake-Cook Road, 1.7 mi southeast of Deerfield, 5.7 mi upstream from Skokie River, and at mile 64.7.

DRAINAGE AREA.--19.7 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1952 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 638.88 ft above sea level (Cook County Highway Department bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Recording rain gage discontinued July 31, 1997. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 290 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0945	*630	*10.83	No other peak greater than base discharge			
Minimum discharge, 0.51 ft <sup>3</sup> /s, Oct 7, 8; 14, 15.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	5.6	9.7	e3.5	e8.0	143	11	46	5.6	33	1.2	2.2
2	1.1	4.6	6.3	6.5	e11	120	9.1	50	16	15	1.3	1.7
3	.83	3.7	7.0	8.9	14	94	8.1	63	9.9	9.3	.98	1.2
4	.80	3.4	6.6	19	25	74	7.3	44	6.8	6.4	.87	1.1
5	.80	3.6	6.6	e16	e24	46	10	29	5.2	4.7	.79	1.2
6	.71	4.1	6.9	e9.5	e16	24	10	20	16	3.4	.76	1.1
7	.61	6.3	6.4	e6.8	e11	20	7.5	17	9.7	2.5	.70	1.1
8	.66	3.6	5.4	e5.4	e8.0	39	6.5	38	8.1	4.0	.69	1.1
9	.62	2.8	4.8	e4.2	e6.0	32	5.8	26	6.1	4.0	.64	1.4
10	1.4	2.3	4.8	e4.8	e5.0	18	5.4	18	4.5	3.2	.81	1.5
11	.78	2.0	29	e4.0	e4.4	18	6.5	13	21	2.0	11	1.2
12	.65	1.8	25	e3.3	e3.8	17	27	10	42	1.6	21	1.0
13	.62	1.7	16	e2.8	e3.3	15	33	7.8	26	1.5	9.5	.96
14	.55	1.7	13	e2.5	e3.0	21	33	6.4	11	2.0	3.5	1.0
15	.61	1.5	12	e2.3	e2.9	18	25	5.5	6.4	1.6	9.9	1.1
16	1.0	1.5	12	e2.1	e2.7	16	20	4.8	58	1.5	7.4	2.2
17	2.1	2.8	8.0	e2.0	6.1	15	16	4.0	26	1.1	74	38
18	2.4	2.0	e5.2	e1.9	23	15	13	17	15	e19	32	13
19	.86	1.8	e3.7	e1.8	40	12	11	17	11	e12	15	17
20	.77	1.8	e3.0	e3.7	30	10	9.7	8.1	8.3	e5.0	9.9	27
21	.73	2.8	e2.8	e6.8	489	9.7	9.8	6.3	8.6	e30	6.9	12
22	2.2	3.3	3.7	e48	385	8.7	9.1	7.4	7.2	e17	4.3	8.8
23	7.0	3.4	6.5	e36	220	7.7	7.9	5.1	5.3	e40	2.8	7.7
24	4.0	7.6	e6.2	e22	104	8.5	8.1	4.6	5.7	e20	27	6.2
25	2.0	7.8	e3.6	e15	69	21	6.5	16	7.8	6.4	12	4.4
26	1.3	5.8	e3.0	e10	65	19	5.4	14	5.9	9.2	7.3	3.3
27	.98	4.2	e2.9	e7.8	112	17	4.9	12	3.8	17	5.0	2.7
28	.80	3.5	5.4	e6.4	106	15	4.7	10	2.5	6.3	3.8	2.3
29	15	4.2	e5.0	e5.4	---	22	4.3	10	2.0	3.5	2.7	1.5
30	20	11	e3.7	e5.0	---	15	14	8.2	14	2.1	1.9	1.0
31	8.3	---	e3.0	e5.5	---	13	---	6.9	---	1.5	2.6	---
TOTAL	83.18	112.2	237.2	278.9	1797.2	923.6	349.6	545.1	375.4	285.8	278.24	165.96
MEAN	2.68	3.74	7.65	9.00	64.2	29.8	11.7	17.6	12.5	9.22	8.98	5.53
MAX	20	11	29	48	489	143	33	63	58	40	74	38
MIN	.55	1.5	2.8	1.8	2.7	7.7	4.3	4.0	2.0	1.1	.64	.96
CFSM	.14	.19	.39	.46	3.26	1.51	.59	.89	.64	.47	.46	.28
IN.	.16	.21	.45	.53	3.39	1.74	.66	1.03	.71	.54	.53	.31

e Estimated

## 05534500 NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1997, BY WATER YEAR (WY)

MEAN	6.68	13.5	15.1	11.7	18.3	35.0	35.6	19.6	14.5	9.36	8.71	8.49
MAX	42.8	76.3	95.9	62.8	64.2	153	101	108	64.3	59.7	59.9	70.5
(WY)	1987	1986	1983	1974	1997	1979	1965	1996	1996	1982	1990	1972
MIN	.094	.16	.048	.000	.082	3.89	6.40	2.16	.79	.44	.22	.023
(WY)	1961	1963	1963	1963	1963	1968	1986	1992	1963	1965	1966	1966

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1953 - 1997	
ANNUAL TOTAL	7903.49		5432.38			
ANNUAL MEAN	21.6		14.9		16.3	
HIGHEST ANNUAL MEAN					32.2 1974	
LOWEST ANNUAL MEAN					2.32 1963	
HIGHEST DAILY MEAN	457	May 21	489	Feb 21	601	Dec 3 1982
LOWEST DAILY MEAN	.07	Sep 23	.55	Oct 14	.00	A
ANNUAL SEVEN-DAY MINIMUM	.15	Sep 17	.72	Oct 3	.00	Oct 5 1953
INSTANTANEOUS PEAK FLOW			630	Feb 21	933	Aug 14 1987
INSTANTANEOUS PEAK STAGE			10.83	Feb 21	11.52	Aug 14 1987
INSTANTANEOUS LOW FLOW			.51	B		
ANNUAL RUNOFF (CFSM)	1.10		.76		.83	
ANNUAL RUNOFF (INCHES)	14.92		10.26		11.27	
10 PERCENT EXCEEDS	58		28		40	
50 PERCENT EXCEEDS	5.4		6.4		4.6	
90 PERCENT EXCEEDS	.69		1.1		.30	

A - At times in most years.

B - Oct. 7, 8, 14, 15.

## 05535000 SKOKIE RIVER AT LAKE FOREST, IL

LOCATION.--Lat 42°13'57", long 87°50'41", in NW1/4SW1/4 sec.4, T.43 N., R.12 E., Lake County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on West Leigh Road at Lake Forest and at mile 13.1.

DRAINAGE AREA.--13.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1952, records published with those for streams in the St. Lawrence River Basin (WSP 1237).

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 648.75 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 140 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1030	*496	*7.24	No other peak greater than base discharge			

Minimum discharge, 0.60 ft<sup>3</sup>/s, Aug. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	9.6	6.9	2.0	e5.0	90	5.5	34	3.3	12	1.0	2.0
2	1.3	3.7	3.9	3.7	e6.2	55	4.7	32	11	4.0	1.1	2.5
3	1.3	2.1	7.5	5.4	7.1	34	5.3	36	6.1	2.4	.90	1.1
4	1.1	1.8	4.1	18	28	26	3.9	23	4.3	1.7	.84	1.0
5	1.1	1.6	4.3	14	17	21	6.7	17	3.3	1.5	.86	.93
6	1.0	1.6	4.4	8.8	12	18	6.6	15	5.4	1.3	.74	.85
7	1.5	3.0	3.6	4.0	e7.4	15	5.0	18	5.9	1.2	.75	.85
8	1.4	1.8	2.9	2.5	e4.5	14	4.0	35	4.7	5.4	.72	1.2
9	1.2	1.6	2.2	2.0	e3.8	14	3.2	19	3.2	3.3	.63	1.4
10	1.7	1.4	2.2	e1.8	e2.5	14	2.9	15	2.5	1.4	1.1	1.3
11	1.2	1.2	29	e1.6	e1.8	13	4.1	15	3.7	1.2	6.7	1.1
12	1.1	1.1	17	e1.4	e1.5	12	26	13	13	1.1	9.3	1.1
13	1.2	1.2	13	e1.2	e1.3	13	26	13	6.0	1.6	2.2	1.0
14	1.1	.93	11	e1.1	e1.2	18	22	12	3.7	1.5	1.8	.93
15	.98	.97	8.6	e1.0	e1.1	14	17	8.4	2.9	1.1	4.0	.84
16	1.8	1.1	5.1	e.95	e1.2	11	14	6.2	41	.85	15	1.3
17	3.3	2.5	4.1	e.88	e2.4	5.5	13	4.5	14	1.1	36	39
18	1.5	1.8	3.1	e.84	26	6.3	9.5	6.6	11	9.1	15	10
19	1.0	1.5	2.2	e.90	29	6.2	6.8	9.6	7.2	3.3	6.7	2.0
20	.83	1.3	1.7	e1.0	24	6.1	5.4	6.0	4.0	1.3	3.2	17
21	.73	3.5	1.4	e4.0	369	5.7	7.5	5.1	5.1	13	2.0	11
22	3.4	3.6	1.3	e35	157	6.9	6.3	4.5	3.7	3.8	1.5	7.4
23	9.3	3.0	6.1	e20	73	4.4	5.5	4.1	3.7	15	1.3	6.8
24	3.1	6.9	4.9	e12	39	4.5	5.5	5.2	4.5	3.2	24	4.7
25	1.9	4.7	e2.7	e8.8	25	20	4.4	21	4.1	2.0	8.4	2.7
26	1.5	2.6	e1.7	e6.3	30	14	5.2	13	2.5	3.3	5.6	1.6
27	1.6	1.9	e1.4	e4.2	70	13	4.6	11	1.7	1.9	3.5	1.2
28	1.1	1.6	e2.2	e2.8	49	11	4.0	10	1.4	1.5	2.3	1.0
29	21	2.4	3.4	e2.2	---	9.6	3.6	11	1.2	1.2	1.7	.79
30	17	14	2.0	e1.8	---	7.9	15	7.4	31	1.1	1.4	.67
31	11	---	1.8	e1.7	---	6.7	---	4.5	---	1.0	2.8	---
TOTAL	98.84	86.00	165.7	171.87	995.0	509.8	253.2	435.1	215.1	103.35	163.04	151.26
MEAN	3.19	2.87	5.35	5.54	35.5	16.4	8.44	14.0	7.17	3.33	5.26	5.04
MAX	21	14	29	35	369	90	26	36	41	15	36	39
MIN	.73	.93	1.3	.84	1.1	4.4	2.9	4.1	1.2	.85	.63	.67
CFSM	.25	.22	.41	.43	2.73	1.27	.65	1.08	.55	.26	.40	.39
IN.	.28	.25	.47	.49	2.85	1.46	.72	1.25	.62	.30	.47	.43

e Estimated

## 05535000 SKOKIE RIVER AT LAKE FOREST, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1997, BY WATER YEAR (WY)

MEAN	7.03	10.7	11.4	9.39	13.0	23.0	24.2	14.8	11.9	8.18	7.30	7.89
MAX	30.0	44.5	53.7	42.4	35.5	82.3	56.9	54.3	41.6	33.3	41.7	61.7
(WY)	1987	1986	1983	1974	1997	1979	1983	1996	1996	1993	1972	1986
MIN	.83	1.38	1.20	.29	1.08	4.01	5.95	2.26	.91	1.29	1.26	1.12
(WY)	1957	1954	1959	1959	1963	1956	1986	1988	1988	1991	1955	1979

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1952 - 1997	
ANNUAL TOTAL	4822.78		3348.26			
ANNUAL MEAN	13.2		9.17		12.4	
HIGHEST ANNUAL MEAN					22.2	
LOWEST ANNUAL MEAN					3.54	
HIGHEST DAILY MEAN	325	May 20	369	Feb 21	444	Sep 27 1986
LOWEST DAILY MEAN	.73	Oct 21	.63	Aug 9	.00	A
ANNUAL SEVEN-DAY MINIMUM	1.0	Sep 13	.78	Aug 3	.00	Jan 3 1959
INSTANTANEOUS PEAK FLOW			496	Feb 21	496 B	Feb 21 1997
INSTANTANEOUS PEAK STAGE			7.24	Feb 21	8.35	Jul 22 1982
INSTANTANEOUS LOW FLOW			.60	Aug 9,10		
ANNUAL RUNOFF (CFSM)	1.01		.71		.95	
ANNUAL RUNOFF (INCHES)	13.80		9.58		12.95	
10 PERCENT EXCEEDS	32		20		28	
50 PERCENT EXCEEDS	4.0		3.9		5.2	
90 PERCENT EXCEEDS	1.1		1.1		1.5	

A - Many days in 1959.

B - Gage height, 7.24 ft.

## 05535070 SKOKIE RIVER NEAR HIGHLAND PARK, IL

LOCATION.--Lat 42°09'34", long 87°47'52", in NW1/4SE1/4 sec.35, T.43 N., R.12 E., Lake County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Clavey Road in Highland Park, and at mile 7.3.

DRAINAGE AREA.--21.1 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1967 to current year.

REVISED RECORDS.--WSP 2115: 1968. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 622.83 ft above sea level (city of Highland Park bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Recording rain gage and gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1938 reached a stage of 10.6 ft, discharge not determined, from information furnished by Highland Park City Engineer.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1400	*894	*9.13	No other peak greater than base discharge			

Minimum discharge, 0.04 ft<sup>3</sup>/s, Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	10	11	5.2	e8.4	169	11	e52	5.0	33	.85	2.8
2	1.9	7.1	7.3	7.7	e12	105	9.4	e58	32	9.5	1.1	2.4
3	1.3	4.3	11	10	e19	77	9.2	e40	13	4.7	1.5	1.9
4	1.4	3.6	8.7	31	50	46	8.0	e30	8.2	3.5	1.4	1.3
5	1.6	3.4	7.7	26	e33	37	13	e25	6.2	2.4	1.2	1.0
6	1.8	5.4	8.5	14	e20	28	12	e24	16	1.8	.81	.88
7	1.6	10	6.8	e8.9	e13	24	8.6	e60	12	1.2	1.0	.83
8	2.4	3.7	5.4	e5.9	e9.0	23	7.1	42	9.7	6.5	.88	.94
9	1.4	2.8	4.1	e4.0	e6.4	22	6.3	25	7.1	9.5	.73	1.4
10	3.4	2.4	3.8	e3.2	e4.8	21	5.8	20	5.2	2.8	.83	1.1
11	2.3	2.4	47	e2.8	e4.0	18	8.0	18	27	.98	30	.75
12	1.9	1.8	27	e2.4	e3.6	16	43	15	57	.72	46	.77
13	1.9	1.7	18	e2.2	e2.7	18	39	14	28	1.2	15	.81
14	1.6	1.7	15	e2.0	e2.3	31	31	13	12	3.3	5.5	.79
15	.95	1.7	15	e1.8	e2.0	20	25	11	7.1	.55	22	.42
16	2.8	1.9	9.6	e1.7	e3.5	17	22	7.8	88	.66	13	1.7
17	7.9	3.9	e8.0	e1.6	9.4	11	17	6.1	35	.39	113	85
18	4.6	3.3	e6.0	e1.5	47	11	14	24	18	28	47	18
19	3.1	2.3	e4.4	e1.7	52	11	11	22	13	19	20	41
20	2.6	2.0	e3.5	e3.0	41	10	9.5	10	8.8	4.5	11	48
21	2.4	4.5	e3.0	e13	647	9.5	11	7.6	12	37	6.6	21
22	5.5	5.2	e2.5	e72	383	9.7	9.3	6.7	9.0	15	4.4	10
23	15	4.5	11	e35	176	7.9	7.7	5.6	5.1	51	3.4	9.5
24	5.8	7.8	e9.1	e24	83	8.6	10	7.0	7.6	18	61	7.0
25	3.7	8.4	e5.7	e16	50	34	7.5	26	8.2	8.3	19	5.4
26	2.9	4.8	e4.0	e11	62	23	6.6	15	5.4	15	13	3.1
27	2.9	4.0	e2.9	e8.4	147	18	7.1	12	3.2	16	8.4	2.2
28	3.1	3.6	e4.5	e6.2	98	16	5.8	12	2.9	5.9	5.4	2.2
29	36	4.8	e6.0	e4.9	---	27	5.4	15	2.4	3.6	3.6	1.5
30	33	21	e4.0	e4.0	---	15	e21	9.4	37	2.2	3.2	.82
31	13	---	e3.1	e3.5	---	13	---	6.6	---	1.2	6.6	---
TOTAL	173.05	144.0	283.6	334.6	1989.1	896.7	401.3	639.8	501.1	307.40	467.40	274.81
MEAN	5.58	4.80	9.15	10.8	71.0	28.9	13.4	20.6	16.7	9.92	15.1	9.16
MAX	36	21	47	72	647	169	43	60	88	51	113	85
MIN	.95	1.7	2.5	1.5	2.0	7.9	5.4	5.6	2.4	.39	.73	.42
CFSM	.26	.23	.43	.51	3.37	1.37	.63	.98	.79	.47	.71	.43
IN.	.31	.25	.50	.59	3.51	1.58	.71	1.13	.88	.54	.82	.48

e Estimated

## 05535070 SKOKIE RIVER NEAR HIGHLAND PARK, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1997, BY WATER YEAR (WY)

MEAN	12.0	19.0	20.3	15.4	23.7	37.0	37.8	24.2	20.2	15.5	17.7	15.9
MAX	51.4	69.9	79.3	56.3	71.0	119	83.2	90.5	64.4	55.0	69.7	98.0
(WY)	1987	1986	1983	1974	1997	1979	1993	1996	1969	1969	1987	1986
MIN	2.01	4.23	2.53	2.83	3.28	8.60	7.63	3.48	1.92	1.31	3.40	2.38
(WY)	1989	1977	1977	1977	1978	1968	1989	1992	1988	1991	1991	1982

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1967 - 1997	
ANNUAL TOTAL	7524.18		6412.86			
ANNUAL MEAN	20.6		17.6		21.6	
HIGHEST ANNUAL MEAN					33.2	
LOWEST ANNUAL MEAN					7.83	
HIGHEST DAILY MEAN	501	May 21	647	Feb 21	647	Feb 21 1997
LOWEST DAILY MEAN	.53	Sep 6	.39	Jul 17	.00	A
ANNUAL SEVEN-DAY MINIMUM	.75	Sep 17	.91	Sep 9	.00	Jun 14 1988
INSTANTANEOUS PEAK FLOW			894	Feb 21	895 B	Aug 14 1987
INSTANTANEOUS PEAK STAGE			9.13	Feb 21	9.13	Feb 21 1997
INSTANTANEOUS LOW FLOW			.04	Sep 15		
ANNUAL RUNOFF (CFSM)	.97		.83		1.02	
ANNUAL RUNOFF (INCHES)	13.27		11.31		13.88	
10 PERCENT EXCEEDS	48		37		47	
50 PERCENT EXCEEDS	6.9		7.8		9.3	
90 PERCENT EXCEEDS	1.6		1.5		2.4	

A - At times in 1988-89, 1991.

B - Gage height, 9.09 ft.

## 05535500 WEST FORK OF NORTH BRANCH CHICAGO RIVER AT NORTHBROOK, IL

LOCATION.--Lat 42°08'18", long 87°50'04", in SW1/4SE1/4 sec.4, T.42 N., R.12 E., Cook County, Hydrologic Unit 07120003, on left bank at upstream side of bridge on State Highway 68 at Northbrook, and at mile 7.9.

DRAINAGE AREA.--11.5 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 637.98 ft above sea level (Cook County Highway Department bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Effluent from sewage-treatment plant, 1.7 mi upstream, averaged about 5.1 ft<sup>3</sup>/s per day, with a maximum of 6.7 ft<sup>3</sup>/s in February and a minimum of 3.7 ft<sup>3</sup>/s in November. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 320 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0715	*507	*6.95	Aug. 17	0300	373	5.70

Minimum daily discharge 2.7 ft<sup>3</sup>/s, Dec. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	6.9	11	4.0	6.7	112	9.1	37	6.1	16	4.1	3.6
2	4.3	4.3	8.0	6.1	7.4	71	8.6	32	25	7.0	4.0	3.7
3	3.8	6.1	14	8.3	6.8	42	7.6	33	11	5.2	3.4	4.6
4	4.2	4.7	8.6	28	23	35	7.3	20	7.8	4.4	4.4	5.1
5	3.7	4.9	11	20	17	24	15	15	7.1	4.0	4.3	5.7
6	3.8	9.8	9.5	8.8	9.8	19	11	11	25	3.7	4.1	3.6
7	4.1	15	7.4	6.0	7.5	13	7.6	18	17	3.9	3.7	3.0
8	5.3	6.5	6.1	4.9	6.8	8.6	6.5	37	12	8.8	3.8	3.3
9	4.1	5.1	5.4	4.7	5.9	9.9	5.7	17	8.2	4.8	3.5	3.3
10	6.8	4.6	5.2	5.0	5.1	10	5.3	12	6.6	4.1	3.4	3.2
11	4.3	4.5	41	4.3	4.6	7.6	9.4	9.8	41	3.9	29	3.1
12	4.1	4.3	17	4.0	4.5	7.9	40	8.7	51	3.5	54	3.1
13	3.5	4.1	9.2	e3.7	4.1	7.6	30	7.8	26	3.5	14	2.9
14	4.0	4.1	7.2	e3.5	3.9	19	23	7.4	14	4.0	6.6	3.0
15	4.1	4.2	11	3.4	3.6	9.7	16	6.9	9.5	3.7	23	3.3
16	9.3	4.0	6.6	e3.3	3.9	7.7	14	6.4	77	3.8	19	6.0
17	11	8.5	5.4	e3.4	5.6	8.0	10	5.8	22	3.7	146	74
18	6.8	4.8	4.5	e3.6	23	8.6	8.9	42	11	58	41	11
19	4.3	4.1	4.2	e4.5	32	8.1	7.6	31	9.0	19	17	37
20	4.0	4.0	3.8	4.7	26	6.4	6.9	12	7.8	6.7	9.5	16
21	3.9	8.2	3.7	14	306	7.2	8.4	8.9	10	28	6.5	6.8
22	12	7.2	2.7	76	141	6.5	7.3	7.7	6.2	9.8	5.4	5.1
23	15	6.5	11	25	74	5.5	6.3	7.3	6.3	47	4.5	5.5
24	6.2	9.1	6.2	13	63	9.3	8.1	7.9	6.4	14	32	5.8
25	5.2	7.7	3.8	9.5	77	24	6.1	18	8.8	8.1	9.0	5.9
26	4.5	6.1	3.4	6.7	103	13	5.0	9.5	5.3	16	6.7	3.4
27	4.1	5.5	3.3	6.1	150	9.5	5.0	7.7	4.9	17	5.1	3.1
28	4.2	5.5	6.3	6.1	87	9.7	4.8	8.3	4.4	7.7	4.5	3.1
29	40	9.1	5.3	4.8	---	35	4.8	9.8	3.8	5.6	4.0	5.3
30	24	23	4.1	3.7	---	17	26	7.6	15	4.7	4.1	7.3
31	8.5	---	3.6	6.6	---	13	---	6.7	---	4.2	4.1	---
TOTAL	227.3	202.4	249.5	305.7	1208.2	584.8	331.3	469.2	465.2	333.8	483.7	249.8
MEAN	7.33	6.75	8.05	9.86	43.1	18.9	11.0	15.1	15.5	10.8	15.6	8.33
MAX	40	23	41	76	306	112	40	42	77	58	146	74
MIN	3.5	4.0	2.7	3.3	3.6	5.5	4.8	5.8	3.8	3.5	3.4	2.9
CFSM	.64	.59	.70	.86	3.75	1.64	.96	1.32	1.35	.94	1.36	.72
IN.	.74	.65	.81	.99	3.91	1.89	1.07	1.52	1.50	1.08	1.56	.81

e Estimated



## 05535500 WEST FORK OF NORTH BRANCH CHICAGO RIVER AT NORTHBROOK, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1997, BY WATER YEAR (WY)

MEAN	8.03	11.3	12.1	9.28	13.5	23.3	24.6	15.5	14.0	11.3	10.9	9.79
MAX	23.1	40.4	51.2	40.0	43.2	86.6	57.3	67.3	41.6	59.2	57.5	50.0
(WY)	1987	1986	1983	1974	1997	1979	1983	1996	1978	1982	1987	1986
MIN	.24	.34	.54	.38	1.04	3.01	6.58	4.61	1.51	.50	.47	.24
(WY)	1954	1954	1954	1954	1963	1956	1953	1953	1956	1956	1955	1952

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1952 - 1997	
ANNUAL TOTAL	5897.2		5110.9			
ANNUAL MEAN	16.1		14.0		13.6	
HIGHEST ANNUAL MEAN					22.5	
LOWEST ANNUAL MEAN					2.96	
HIGHEST DAILY MEAN	255	May 17	306	Feb 21	753	Aug 14 1987
LOWEST DAILY MEAN	2.6	Sep 15, 16	2.7	Dec 22	.00	A
ANNUAL SEVEN-DAY MINIMUM	3.0	Sep 14	3.1	Sep 7	.00	Oct 27 1956
INSTANTANEOUS PEAK FLOW			507	Feb 21	1190	Aug 14 1987
INSTANTANEOUS PEAK STAGE			6.95	Feb 21	10.10	Aug 14 1987
INSTANTANEOUS LOW FLOW			.48 B	Jan. 16		
ANNUAL RUNOFF (CFSM)	1.40		1.22		1.19	
ANNUAL RUNOFF (INCHES)	19.08		16.53		16.12	
10 PERCENT EXCEEDS	40		29		28	
50 PERCENT EXCEEDS	6.2		6.8		5.9	
90 PERCENT EXCEEDS	3.7		3.7		1.7	

A - At times in several years.

B - Minimum recorded, but may have been less during periods of ice effect, Jan 13-14 and 16-19.

## 05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL

LOCATION.--Lat 42°00'44", long 87°47'45", in SW1/4SE1/4 sec.30, T.41 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Touhy Avenue in Niles, 3.6 mi downstream from West Fork of North Branch, 7.9 mi upstream from North Shore Channel, and at mile 51.4.

DRAINAGE AREA.--100 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1952, records published with those for streams in the St. Lawrence River basin (WSP 1207, 1237).

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 601.99 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation at low flow caused by sewage-treatment plants. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft<sup>3</sup>/s and maximum (\*)

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1345	*2,260	*10.63	July 18	1600	923	6.85
Feb. 27	0930	937	6.91	Aug. 16	2000	985	7.09
June 20	2030	1,000	7.16				

Minimum discharge, 11 ft<sup>3</sup>/s, Oct. 16, Nov. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	69	114	37	64	723	84	353	51	62	30	32
2	33	49	83	41	62	716	74	339	124	87	26	30
3	24	39	79	56	68	625	65	401	116	58	25	29
4	22	34	85	153	141	551	57	297	75	43	25	27
5	21	33	77	203	165	463	85	201	63	35	25	27
6	19	58	77	120	126	264	95	142	156	30	24	27
7	18	115	63	96	99	182	56	150	127	28	24	24
8	24	64	55	76	84	151	53	376	87	38	24	24
9	26	36	36	53	70	144	48	232	69	38	23	26
10	55	36	38	52	60	116	45	166	53	33	23	26
11	34	29	175	48	47	99	61	133	207	31	86	25
12	25	27	224	e46	46	83	240	116	220	29	219	24
13	22	26	143	e44	43	80	252	104	213	26	173	23
14	18	25	98	e41	40	130	186	98	115	25	66	22
15	19	20	98	e39	36	110	157	96	74	28	137	22
16	33	26	88	e38	35	84	144	85	481	29	276	40
17	46	50	58	e39	39	79	97	84	296	25	743	236
18	50	45	e54	e43	112	77	90	106	138	292	491	134
19	40	33	e47	e52	251	74	83	435	109	188	165	145
20	32	28	e43	59	230	66	69	127	231	63	83	220
21	28	46	e38	90	1810	61	72	77	187	101	59	96
22	53	55	32	436	1560	58	69	66	64	96	49	65
23	109	53	52	321	1100	53	62	62	54	115	41	54
24	76	56	67	174	729	51	67	69	49	158	104	46
25	52	73	44	123	619	136	63	85	58	74	114	44
26	39	60	e41	105	714	123	54	74	53	116	84	32
27	31	51	e39	e86	903	101	50	63	42	88	47	36
28	27	48	44	71	784	89	49	68	37	75	40	29
29	132	51	52	e63	---	303	49	77	32	43	35	27
30	265	123	41	58	---	167	70	65	30	39	33	26
31	116	---	39	54	---	117	---	59	---	32	35	---
TOTAL	1528	1458	2224	2917	10037	6076	2646	4806	3611	2125	3329	1618
MEAN	49.3	48.6	71.7	94.1	358	196	88.2	155	120	68.5	107	53.9
MAX	265	123	224	436	1810	723	252	435	481	292	743	236
MIN	18	20	32	37	35	51	45	59	30	25	23	22
CFSM	.49	.49	.72	.94	3.58	1.96	.88	1.55	1.20	.69	1.07	.54
IN.	.57	.54	.83	1.09	3.73	2.26	.98	1.79	1.34	.79	1.24	.60

e Estimated

## 05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	60.4	81.3	84.2	74.6	102	171	184	123	101	80.1	75.9	67.1
MAX	293	349	381	239	358	582	454	445	339	290	401	315
(WY)	1987	1986	1983	1974	1997	1979	1993	1996	1996	1982	1987	1972
MIN	2.83	5.53	6.56	5.51	4.87	28.6	50.0	24.9	19.0	9.46	6.15	4.54
(WY)	1953	1954	1951	1963	1963	1968	1986	1952	1963	1956	1955	1953

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	44384.0		42375			
ANNUAL MEAN	121		116		100	
HIGHEST ANNUAL MEAN					171	
LOWEST ANNUAL MEAN					28.0	
HIGHEST DAILY MEAN	1040	May 21	1810	Feb 21	2030	Aug 15 1987
LOWEST DAILY MEAN	8.1	Sep 2	18	Oct 7,14	.10	Sep 30 1953
ANNUAL SEVEN-DAY MINIMUM	9.3	Sep 19	22	Oct 3	1.3	Oct 9 1952
INSTANTANEOUS PEAK FLOW			2260	Feb 21	2590	Aug 14 1987
INSTANTANEOUS PEAK STAGE			10.63	Feb 21	11.35	Aug 14 1987
INSTANTANEOUS LOW FLOW			11	Oct 16,Nov 15		
ANNUAL RUNOFF (CFSM)	1.21		1.16		1.00	
ANNUAL RUNOFF (INCHES)	16.51		15.76		13.62	
10 PERCENT EXCEEDS	384		230		239	
50 PERCENT EXCEEDS	50		63		47	
90 PERCENT EXCEEDS	20		26		12	

## 05536105 NORTH BRANCH CHICAGO RIVER AT ALBANY AVENUE AT CHICAGO, IL

LOCATION.--Lat 41°58'27", long 87°42'22", in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right downstream side of bridge in West River Park in Chicago, 0.1 mi upstream from North Shore Channel, and at mile 43.4.

DRAINAGE AREA.--113 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 580.67 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 950 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	2130	*2,360	*6.81	Aug. 16	1945	1,710	6.13
Feb. 27	0930	969	5.01				

Minimum discharge, 16 ft<sup>3</sup>/s, Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	72	105	45	e66	688	94	267	55	54	29	33
2	38	54	80	47	e73	680	77	293	122	97	27	31
3	32	45	72	58	81	601	78	302	129	70	25	32
4	28	38	77	173	153	521	61	230	77	51	24	26
5	27	36	70	216	179	456	86	157	67	41	27	26
6	26	62	71	129	140	285	101	115	164	34	25	26
7	24	97	64	104	112	193	70	107	161	31	24	23
8	28	66	55	e88	99	153	58	268	95	46	25	23
9	32	39	43	e66	88	150	59	176	69	42	24	24
10	61	38	39	e58	76	123	53	123	50	38	24	24
11	44	33	127	e54	68	104	72	98	188	35	100	24
12	32	31	208	e49	62	95	230	84	211	33	248	23
13	28	30	138	e46	63	81	229	77	193	32	195	22
14	25	29	99	e43	61	121	175	72	117	29	75	21
15	26	23	93	e40	57	119	153	71	75	29	150	19
16	49	29	89	e38	53	93	133	67	436	31	425	24
17	48	49	65	e39	62	83	108	59	304	30	954	261
18	48	43	58	e43	107	81	90	73	131	291	554	158
19	44	34	e53	e49	239	80	87	368	101	257	194	119
20	36	27	e49	e62	237	74	79	158	196	72	97	233
21	31	35	e47	135	1830	68	78	79	409	67	66	105
22	43	48	47	389	1990	67	81	68	81	126	54	64
23	88	47	77	367	1320	62	76	61	58	90	51	55
24	69	48	71	194	822	62	80	65	55	164	87	48
25	51	59	59	137	584	120	79	101	84	79	113	44
26	41	55	e48	103	672	127	69	76	58	76	99	26
27	36	46	e47	e88	926	105	64	65	48	125	53	32
28	30	45	e54	e79	798	93	62	61	42	74	47	26
29	117	45	59	e70	---	297	62	84	38	45	39	21
30	248	105	52	e64	---	181	67	64	36	38	33	21
31	119	---	48	e62	---	121	---	63	---	32	35	---
TOTAL	1593	1408	2264	3135	11018	6084	2811	3952	3850	2259	3923	1614
MEAN	51.4	46.9	73.0	101	394	196	93.7	127	128	72.9	127	53.8
MAX	248	105	208	389	1990	688	230	368	436	291	954	261
MIN	24	23	39	38	53	62	53	59	36	29	24	19
CFSM	.45	.42	.65	.89	3.48	1.74	.83	1.13	1.14	.64	1.12	.48
IN.	.52	.46	.75	1.03	3.63	2.00	.93	1.30	1.27	.74	1.29	.53

e Estimated

## 05536105 NORTH BRANCH CHICAGO RIVER AT ALBANY AVENUE AT CHICAGO, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

MEAN	83.6	150	98.2	119	149	189	213	195	152	101	124	74.7
MAX	205	266	175	280	394	288	514	446	332	189	342	144
(WY)	1992	1991	1992	1993	1997	1993	1993	1996	1996	1993	1990	1993
MIN	38.7	46.9	31.3	45.4	50.3	69.9	84.1	45.0	46.0	46.6	48.3	24.1
(WY)	1995	1997	1990	1994	1995	1996	1994	1992	1992	1991	1996	1994

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1990 - 1997		
ANNUAL TOTAL	46287			43911			137		
ANNUAL MEAN	126			120			201		
HIGHEST ANNUAL MEAN							1993		
LOWEST ANNUAL MEAN							95.2		
HIGHEST DAILY MEAN	1220	May 29		1990	Feb 22		1990	Feb 22	1997
LOWEST DAILY MEAN	18	Sep 18-20		19	Sep 15		11	Oct 11	1992
ANNUAL SEVEN-DAY MINIMUM	19	Sep 16		22	Sep 9		14	Sep 16	1994
INSTANTANEOUS PEAK FLOW				2360	Feb 21		2360	Feb 21	1997
INSTANTANEOUS PEAK STAGE				6.81	Feb 21		6.81	Feb 21	1997
INSTANTANEOUS LOW FLOW				16	Sep 26		3.6		A
ANNUAL RUNOFF (CFSM)	1.12			1.06			1.21		
ANNUAL RUNOFF (INCHES)	15.24			14.46			16.49		
10 PERCENT EXCEEDS	343			231			308		
50 PERCENT EXCEEDS	59			67			70		
90 PERCENT EXCEEDS	25			29			28		

A - Aug. 5, 6, 1993.

## 05536215 THORN CREEK AT GLENWOOD, IL

LOCATION.--Lat 41°31'50", long 87°36'20", in SW1/4SE1/4 sec.9, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank 20 ft downstream from Baltimore and Ohio Chicago Terminal Railroad bridge, 0.7 mi north of Chicago Heights, 0.8 mi south of Glenwood, 1.0 mi upstream from Deer Creek, and at mile 9.2.

DRAINAGE AREA.--24.7 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1949 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1437: 1955. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.97 ft above sea level.

REMARKS.--Records good. Effluent from sewage-treatment plant upstream averaged 24.4 ft<sup>3</sup>/s. The maximum monthly effluent was 41.7 ft<sup>3</sup>/s in February, and the minimum was 16.8 ft<sup>3</sup>/s in September.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0730	*1,370	*10.08	No other peak greater than base discharge			

Minimum discharge, 2.6 ft<sup>3</sup>/s, July 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	26	84	34	51	124	24	42	23	28	15	21
2	19	25	53	39	47	97	23	39	23	23	16	22
3	18	23	49	43	47	76	23	33	21	19	63	21
4	15	22	37	70	141	64	23	29	20	15	85	19
5	18	20	44	81	94	56	58	28	18	14	29	21
6	19	40	48	56	66	49	41	23	125	14	21	20
7	25	135	41	42	51	44	31	34	83	15	19	20
8	47	54	35	35	44	42	27	45	48	98	18	29
9	25	50	30	33	40	71	24	30	34	43	17	22
10	72	34	29	32	38	63	22	25	28	24	16	20
11	27	30	152	29	36	50	42	24	148	19	114	18
12	25	24	122	26	35	43	89	23	120	18	60	19
13	22	24	72	24	33	63	55	23	61	17	39	20
14	25	22	53	25	32	141	42	25	41	19	28	19
15	22	22	116	25	30	70	35	22	31	17	30	19
16	60	21	82	26	30	51	36	20	288	18	106	18
17	77	57	58	25	33	44	32	20	94	18	230	68
18	53	26	42	25	68	39	30	66	53	153	69	26
19	28	25	33	23	91	37	39	234	40	84	45	39
20	25	22	29	26	162	35	31	74	33	35	36	28
21	22	31	29	64	1040	34	29	45	32	56	31	22
22	45	26	26	251	433	31	26	34	26	45	28	23
23	48	27	142	113	161	29	25	29	27	34	25	24
24	26	52	111	74	102	36	23	25	24	26	42	21
25	23	48	59	59	79	48	22	146	28	24	26	18
26	21	32	45	46	243	35	21	63	23	23	24	20
27	21	27	40	42	416	30	20	39	21	24	25	21
28	21	27	39	37	154	32	20	31	21	21	23	19
29	69	36	37	34	---	32	18	32	19	17	22	23
30	63	84	35	33	---	27	28	27	27	16	22	19
31	29	---	33	45	---	26	---	25	---	16	21	---
TOTAL	1031	1092	1805	1517	3797	1619	959	1355	1580	993	1345	699
MEAN	33.3	36.4	58.2	48.9	136	52.2	32.0	43.7	52.7	32.0	43.4	23.3
MAX	77	135	152	251	1040	141	89	234	288	153	230	68
MIN	15	20	26	23	30	26	18	20	18	14	15	18

## 05536215 THORN CREEK AT GLENWOOD, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1997, BY WATER YEAR (WY)

MEAN	26.9	34.6	38.8	35.1	41.0	58.2	60.1	48.1	43.5	33.4	28.2	28.0
MAX	87.1	108	172	97.7	136	188	112	153	138	147	85.2	108
(WY)	1955	1991	1983	1993	1997	1979	1979	1996	1993	1996	1968	1961
MIN	11.0	9.31	11.4	12.0	19.3	20.8	19.3	18.2	12.4	14.0	11.8	9.28
(WY)	1950	1950	1954	1954	1964	1981	1971	1954	1949	1952	1949	1949

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1949 - 1997	
ANNUAL TOTAL	21619		17792			
ANNUAL MEAN	59.1		48.7		39.8	
HIGHEST ANNUAL MEAN					67.9	
LOWEST ANNUAL MEAN					24.8	
HIGHEST DAILY MEAN	1500 A	Jul 18	1040	Feb 21	1500	B
LOWEST DAILY MEAN	15	C	14	Jul 5, 6	6.0	D
ANNUAL SEVEN-DAY MINIMUM	16	Jan 31	18	Jul 27	8.5	Sep 5 1949
INSTANTANEOUS PEAK FLOW			1370	Feb 21	2700 A	Jul 18 1996
INSTANTANEOUS PEAK STAGE			10.08	Feb 21	11.26 E	Aug 17 1968
INSTANTANEOUS LOW FLOW			2.6	Jul 7	.00 F	Jun 3 1992
10 PERCENT EXCEEDS	117		84		68	
50 PERCENT EXCEEDS	29		31		23	
90 PERCENT EXCEEDS	18		19		15	

A - Estimated

B - Aug. 17, 1968, July 18, 1996.

C - Feb. 2, 6 Sept. 19, 20, Oct. 4.

D - July 4, Aug. 21, Sept. 5, 11, 25, 1949.

E - May have been higher during period of no gage-height record, July 17-20, 1996.

F - No effluent from sewage-treatment plant because of temporary equipment repair.

## 05536235 DEER CREEK NEAR CHICAGO HEIGHTS, IL

LOCATION.--Lat 41°31'15", long 87°35'25", in SE1/4NW1/4 sec.14, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on Joe Orr Road, 0.4 mi east of Cottage Grove Avenue, 1.0 mi north of U.S. Highway 30, 1.5 mi northeast of Chicago Heights, and at mile 2.8.

DRAINAGE AREA.--23.1 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 615.95 ft above sea level. See WSP 1707 or 1727 for history of changes prior to Aug. 13, 1958.

REMARKS.--Records poor. Undetermined amount of flow diverted for irrigation. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	Unknown	*803	*11.36	May 19	1615	310	9.58
Feb. 27	0800	503	10.52	June 16	1945	497	10.50

Minimum discharge, 0.04 ft<sup>3</sup>/s, July 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	11	24	17	16	148	10	24	3.0	11	6.3	3.0
2	1.5	8.9	24	26	32	105	8.1	15	3.4	.74	1.7	3.1
3	1.6	8.1	18	38	42	68	11	19	3.9	.85	8.1	2.0
4	1.5	7.6	16	40	91	51	11	10	3.5	4.3	33	1.4
5	1.5	7.7	13	73	100	39	23	7.2	3.7	5.3	4.8	e1.2
6	1.7	9.5	13	38	60	26	23	5.0	64	4.8	1.5	e1.1
7	1.7	32	13	21	41	18	21	7.4	77	5.3	.63	e.96
8	2.8	24	11	e14	27	16	12	19	43	18	.63	e2.5
9	3.7	9.2	7.8	e11	19	29	7.4	9.3	13	7.1	.60	e2.0
10	9.8	5.0	7.1	e8.0	15	49	5.6	6.0	3.5	e2.5	.48	e1.5
11	8.1	2.9	53	e7.0	13	35	11	4.0	67	e1.5	31	e1.1
12	2.7	2.3	89	e6.0	9.3	21	50	4.0	123	e1.2	27	e.94
13	2.2	2.0	56	5.6	5.4	20	34	5.1	50	e1.0	21	e.83
14	2.4	1.6	40	5.1	6.9	e110	17	5.7	16	e.90	5.9	e.76
15	2.3	1.6	47	5.5	4.6	e50	10	4.3	6.3	e1.4	3.8	e.72
16	3.8	1.5	55	5.7	3.5	e30	8.6	5.6	260	e1.2	19	e.70
17	8.6	3.2	40	e5.2	4.2	e20	6.6	6.8	199	e1.0	106	20
18	19	5.4	26	e4.7	21	e14	5.1	14	71	36	52	7.4
19	6.3	5.5	16	e4.3	83	e11	6.7	237	36	47	22	8.2
20	2.3	3.8	e13	e4.2	83	e9.2	6.6	95	13	14	7.6	4.0
21	1.8	3.7	12	9.5	e760	e8.2	8.3	47	6.8	21	2.7	e1.5
22	2.0	3.6	12	157	630	e7.4	4.6	23	2.4	21	1.4	e1.0
23	4.3	3.6	52	114	257	e6.8	3.9	12	1.2	11	1.6	e.97
24	3.2	5.3	161	69	131	e8.0	3.8	6.5	1.3	6.0	3.3	e2.0
25	2.4	12	e50	46	78	e25	15	77	1.3	3.3	1.7	e1.5
26	2.6	13	e34	26	133	7.8	2.7	52	.94	2.6	1.5	e1.2
27	3.2	6.2	e29	21	455	5.6	2.4	20	1.1	1.8	1.9	e1.0
28	3.5	5.5	e24	17	219	7.0	3.3	10	1.8	.89	2.6	e.92
29	6.4	5.6	e22	13	---	9.2	7.0	7.6	4.6	3.6	3.4	e.83
30	17	20	e20	10	---	8.8	11	4.7	5.0	1.3	3.1	e.81
31	15	---	18	9.6	---	10	---	3.2	---	.91	2.2	---
TOTAL	146.2	231.3	1015.9	831.4	3339.9	973.0	349.7	766.4	1085.74	238.49	378.44	75.14
MEAN	4.72	7.71	32.8	26.8	119	31.4	11.7	24.7	36.2	7.69	12.2	2.50
MAX	19	32	161	157	760	148	50	237	260	47	106	20
MIN	1.3	1.5	7.1	4.2	3.5	5.6	2.4	3.2	.94	.74	.48	.70
CFSM	.20	.33	1.42	1.16	5.16	1.36	.50	1.07	1.57	.33	.53	.11
IN.	.24	.37	1.64	1.34	5.38	1.57	.56	1.23	1.75	.38	.61	.12

e Estimated



## 05536235 DEER CREEK NEAR CHICAGO HEIGHTS, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1997, BY WATER YEAR (WY)

MEAN	7.94	15.2	19.4	17.6	25.8	39.0	34.8	23.5	19.8	9.52	6.50	7.35
MAX	55.9	78.3	83.6	74.5	119	167	77.3	77.7	109	57.0	43.1	59.9
(WY)	1955	1991	1983	1993	1997	1979	1975	1974	1993	1996	1968	1993
MIN	.000	.25	.59	.36	.51	3.75	3.75	2.15	.61	.54	.63	.030
(WY)	1957	1957	1957	1984	1978	1957	1963	1988	1988	1988	1956	1956

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1948 - 1997	
ANNUAL TOTAL	8057.77		9431.61			
ANNUAL MEAN	22.0		25.8		18.9	
HIGHEST ANNUAL MEAN					42.8	
LOWEST ANNUAL MEAN					5.77	
HIGHEST DAILY MEAN	656	Jul 18	760	Feb 21	860	Jul 13 1957
LOWEST DAILY MEAN	.03	Aug 13	.48	Aug 10	.00	A
ANNUAL SEVEN-DAY MINIMUM	.51	Jun 27	.94	Sep 10	.00	Sep 21 1949
INSTANTANEOUS PEAK FLOW			803	Feb 21	1380 B	Jul 13 1957
INSTANTANEOUS PEAK STAGE			11.36	Feb 21	11.79	Nov 28 1990
INSTANTANEOUS LOW FLOW			.04	Jul 2		
ANNUAL RUNOFF (CFSM)	.95		1.12		.82	
ANNUAL RUNOFF (INCHES)	12.98		15.19		11.10	
10 PERCENT EXCEEDS	52		54		42	
50 PERCENT EXCEEDS	7.0		7.7		5.0	
90 PERCENT EXCEEDS	1.5		1.4		.90	

A - At times in several years.

B - Gage height, 11.75 ft.

## 05536255 BUTTERFIELD CREEK AT FLOSSMOOR, IL

LOCATION.--Lat 41°32'25", long 87°38'55", in NE1/4NW1/4 sec.8, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of Riegel Road Bridge at Homewood city limits, 0.1 mi north of Holbrook Road, 0.8 mi east of Flossmoor, and at mile 1.2.

DRAINAGE AREA.--23.5 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River Basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1437: 1948(M), 1953, 1955. WDR IL-75-1: Drainage area. WDR IL-81-2: 1955(M), 1957(M), 1968(M), 1974(M).

GAGE.--Water-stage recorder. Datum of gage is 616.80 ft above sea level. Prior to Sept. 9, 1948, nonrecording gage at same site an datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1230	*1,070	*10.79	No other peaks greater than base discharge			

Minimum discharge, 0.22 ft<sup>3</sup>/s, July 18, Aug. 3, Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	4.6	21	7.1	22	95	5.1	12	4.9	3.3	.73	.64
2	2.0	3.9	14	8.8	26	70	4.3	11	4.2	.87	.43	.66
3	1.8	2.3	9.5	12	26	50	3.9	8.7	3.6	.71	9.1	.57
4	1.3	1.3	6.6	18	87	39	3.5	6.0	2.9	.63	49	.48
5	.94	1.1	5.6	32	62	31	15	4.8	2.5	.57	10	.43
6	.92	1.8	7.5	e15	29	23	12	3.6	36	.44	3.4	.38
7	2.5	129	5.9	e9.2	17	18	6.8	6.2	27	.33	1.7	.43
8	6.1	80	4.3	e7.2	11	16	4.6	14	15	37	.90	1.8
9	4.5	50	2.7	e6.0	7.4	27	3.5	6.2	9.3	31	.69	1.1
10	6.1	13	1.9	e5.0	6.0	25	3.0	4.4	6.2	7.1	.54	.47
11	3.1	5.8	46	e4.4	5.0	18	8.6	3.6	11	2.6	47	.36
12	1.6	3.7	43	e3.9	4.5	14	38	3.1	14	1.3	22	.31
13	1.5	2.4	24	e3.5	6.5	15	21	3.0	9.0	.86	13	.27
14	1.4	1.9	14	e3.1	3.3	45	14	3.7	5.2	.57	8.3	.26
15	1.3	1.5	28	e2.8	2.5	24	10	3.2	3.2	.52	8.4	.38
16	12	1.4	23	e2.6	2.6	17	9.2	2.6	52	.43	24	.54
17	27	37	15	e2.4	2.9	14	6.9	3.9	30	.49	139	19
18	45	3.1	8.4	e2.3	22	12	5.6	12	12	69	46	3.6
19	11	1.0	e5.8	e2.2	49	9.9	8.8	74	7.1	83	19	5.9
20	4.5	.59	e4.3	e2.1	75	8.9	6.8	29	4.0	22	11	3.4
21	2.1	1.9	3.8	13	831	8.0	5.4	15	6.9	22	6.4	1.0
22	3.5	5.3	3.2	185	377	7.1	4.4	10	3.2	26	3.9	.58
23	23	.90	63	72	134	5.9	3.8	6.7	2.1	19	2.7	.90
24	5.2	2.6	72	37	81	6.7	5.0	6.5	2.3	8.5	9.6	1.3
25	2.8	7.8	e36	e25	54	18	3.3	104	2.2	4.6	3.4	.71
26	1.8	3.5	e24	e18	127	11	3.5	45	1.4	3.0	1.7	.51
27	1.3	2.1	e15	e14	286	8.5	2.9	24	1.0	2.0	1.4	.48
28	1.1	1.1	e9.0	e11	119	7.8	2.6	15	.72	1.2	1.3	.37
29	24	1.6	e6.0	8.7	---	7.4	2.4	12	.80	.75	.99	.38
30	96	24	4.5	7.9	---	6.3	2.9	8.2	4.5	.55	1.2	.68
31	18	---	3.3	11	---	6.3	---	6.4	---	.42	.72	---
TOTAL	315.86	396.19	530.3	552.2	2475.7	664.8	226.8	467.8	284.22	350.74	447.50	47.89
MEAN	10.2	13.2	17.1	17.8	88.4	21.4	7.56	15.1	9.47	11.3	14.4	1.60
MAX	96	129	72	185	831	95	38	104	52	83	139	19
MIN	.92	.59	1.9	2.1	2.5	5.9	2.4	2.6	.72	.33	.43	.26
CFSM	.43	.56	.73	.76	3.76	.91	.32	.64	.40	.48	.61	.07
IN..	.50	.63	.84	.87	3.92	1.05	.36	.74	.45	.56	.71	.08

e Estimated

## 05536255 BUTTERFIELD CREEK AT FLOSSMOOR, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1997, BY WATER YEAR (WY)

MEAN	7.79	14.5	17.6	17.2	21.6	34.0	32.9	25.7	20.9	12.2	7.81	8.57
MAX	76.1	96.7	105	73.7	88.4	120	97.7	95.6	119	85.9	60.0	77.1
(WY)	1955	1991	1983	1969	1997	1979	1970	1996	1993	1957	1968	1961
MIN	.27	.20	.073	.032	.38	4.42	3.57	2.49	1.14	.55	.32	.25
(WY)	1953	1954	1977	1977	1978	1981	1986	1992	1988	1988	1948	1953

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1948 - 1997	
ANNUAL TOTAL	10259.84		6760.00			
ANNUAL MEAN	28.0		18.5		18.4	
HIGHEST ANNUAL MEAN					42.3	
LOWEST ANNUAL MEAN					4.82	
HIGHEST DAILY MEAN	1380	Jul 18	831	Feb 21	1500	Jul 13 1957
LOWEST DAILY MEAN	.43	Jul 14	.26	Sep 14	.00	A
ANNUAL SEVEN-DAY MINIMUM	.56	Jul 8	.37	Sep 10	.00	Aug 8 1975
INSTANTANEOUS PEAK FLOW			1070	Feb 21	2220	Jul 18 1996
INSTANTANEOUS PEAK STAGE			10.79	Feb 21	12.59	Jul 18 1996
INSTANTANEOUS LOW FLOW			.22	B		
ANNUAL RUNOFF (CFSM)	.1.19		.79		.78	
ANNUAL RUNOFF (INCHES)	16.24		10.70		10.66	
10 PERCENT EXCEEDS	54		44		42	
50 PERCENT EXCEEDS	5.9		5.9		4.5	
90 PERCENT EXCEEDS	.89		.72		.44	

A - At times in many years.

B - July 18, Aug. 3, Sept. 13, 14.

## 05536265 LANSING DITCH NEAR LANSING, IL

LOCATION.--Lat 41°31'40", long 87°31'45", at north boundary of sec.17, T.35 N., R.15 E., Cook County, Hydrologic Unit 07120003, on right bank at upstream side of bridge on 202nd Street, 0.2 mi west of Indiana State line, 0.5 mi east of Burnham Avenue, 2 mi south of Lansing, and at mile 2.7.

DRAINAGE AREA.--8.84 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for stream in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-79-2: 1975-78.

GAGE.--Water-stage recorder. Datum of gage is 607.16 ft above sea level. Prior to Sept. 20, 1948, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for Oct. 3 to June 4, which are poor. Some diurnal fluctuation caused by pumping operations above station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 140 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0830	*168	*8.35	No other peak greater than base discharge.			
No flow for several days.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	6.8	9.2	2.6	e3.1	35	7.9	21	1.9	e19	1.9	e4.7
2	.84	7.4	7.7	2.9	e2.9	18	6.0	18	3.1	e8.2	.68	e3.3
3	3.1	6.5	8.6	3.2	e2.8	38	8.0	14	1.9	e4.0	.50	1.5
4	1.8	5.7	6.1	5.4	12	35	6.0	15	1.0	e4.8	12	.68
5	.41	8.4	6.8	7.0	6.8	18	9.5	12	4.0	e13	2.8	.82
6	.28	9.4	7.2	2.7	4.4	3.8	8.6	13	60	26	5.7	.62
7	.55	16	e6.6	e2.0	3.7	4.0	6.9	14	54	18	.41	.78
8	.63	12	e6.0	e1.2	2.5	5.2	5.6	21	26	24	.54	5.5
9	.80	8.8	e5.4	e1.1	2.3	5.7	5.6	17	8.4	39	.58	4.9
10	5.3	4.8	8.6	e.10	e2.0	6.5	5.8	16	4.5	48	.68	2.9
11	3.3	5.9	21	e.10	e1.8	6.0	6.5	19	13	45	12	1.5
12	3.1	5.8	18	e.20	2.1	7.1	15	19	23	11	9.6	.39
13	3.4	3.3	6.3	e.10	2.0	7.4	11	19	12	4.5	4.0	.08
14	4.9	3.2	3.3	e.00	1.7	30	6.9	21	8.8	3.6	1.0	.04
15	8.4	3.2	7.9	e.00	1.6	18	5.3	22	11	2.8	.73	.05
16	6.0	2.9	7.7	e.00	1.5	18	4.4	25	50	1.9	4.6	.05
17	4.9	3.7	4.3	e.00	2.1	9.3	4.3	28	41	1.5	49	4.9
18	5.1	3.7	3.0	e.00	2.4	6.3	1.9	32	15	30	29	2.3
19	5.0	3.1	2.7	e.00	3.5	6.0	3.8	61	10	47	16	7.1
20	7.8	2.8	2.5	e.20	6.0	5.6	11	36	12	11	13	2.6
21	8.0	3.4	2.5	2.5	119	7.6	19	15	12	13	12	.57
22	11	3.2	2.5	14	45	7.2	22	10	12	14	7.2	.50
23	14	3.0	12	14	22	5.0	19	9.1	7.9	6.5	8.9	.29
24	12	3.1	20	10	15	7.5	19	9.5	15	4.2	11	.26
25	8.6	6.0	9.1	8.0	13	10	18	25	5.9	2.7	7.4	.24
26	13	4.2	e6.0	e6.4	18	7.4	17	14	7.0	2.3	4.2	.23
27	9.3	4.4	e3.5	e5.2	31	5.5	12	4.8	12	3.5	3.2	.19
28	12	2.8	2.4	e4.5	13	7.2	10	5.6	14	3.1	4.5	.15
29	13	4.7	2.4	e4.0	---	7.3	13	4.3	17	1.7	e5.1	.18
30	15	6.2	2.3	e3.6	---	5.6	16	3.4	e22	1.5	e6.2	.16
31	7.1	---	2.4	e3.3	---	8.2	---	2.3	---	1.4	e7.2	---
TOTAL	188.72	164.4	214.0	104.30	343.2	361.4	305.0	546.0	485.4	416.2	241.62	47.48
MEAN	6.09	5.48	6.90	3.36	12.3	11.7	10.2	17.6	16.2	13.4	7.79	1.58
MAX	15	16	21	14	119	38	22	61	60	48	49	7.1
MIN	.11	2.8	2.3	.00	1.5	3.8	1.9	2.3	1.0	1.4	.41	.04
CFSM	.69	.62	.78	.38	1.39	1.32	1.15	1.99	1.83	1.52	.88	.18
IN.	.79	.69	.90	.44	1.44	1.52	1.28	2.30	2.04	1.75	1.02	.20

e Estimated

## 05536265 LANSING DITCH NEAR LANSING, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1997, BY WATER YEAR (WY)

MEAN	5.14	6.65	7.12	7.28	9.16	13.9	13.7	10.6	9.17	6.66	4.42	4.54
MAX	41.8	25.6	28.0	24.1	23.1	44.4	40.7	31.5	33.8	26.1	16.5	23.3
(WY)	1955	1986	1983	1952	1951	1979	1950	1959	1993	1957	1990	1965
MIN	.16	.22	.23	.12	.13	1.52	.64	1.53	.96	.95	.28	.18
(WY)	1953	1954	1964	1963	1963	1957	1986	1958	1949	1953	1948	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1948 - 1997	
ANNUAL TOTAL	3113.88		3417.72			
ANNUAL MEAN	8.51		9.36		8.21	
HIGHEST ANNUAL MEAN					14.0	
LOWEST ANNUAL MEAN					2.22	
HIGHEST DAILY MEAN	172	Jul 18	119	Feb 21	377	May 11 1951
LOWEST DAILY MEAN	.01	Sep 25	.00	A	.00	B
ANNUAL SEVEN-DAY MINIMUM	.95	Sep 30	.01	Jan 13	.00	Sep 16 1949
INSTANTANEOUS PEAK FLOW			168	Feb 21	461 C	D
INSTANTANEOUS PEAK STAGE			8.35	Feb 21	10.18	Oct 11 1954
ANNUAL RUNOFF (CFSM)	.96		1.06		.93	
ANNUAL RUNOFF (INCHES)	13.10		14.38		12.61	
10 PERCENT EXCEEDS	18		20		16	
50 PERCENT EXCEEDS	4.3		6.0		4.2	
90 PERCENT EXCEEDS	1.2		.66		.60	

A - Several days, estimated.

B - At times in most years.

C - Gage height, 9.24 ft, from floodmark.

D - May 10 or 11, 1948.

## 05536275 THORN CREEK AT THORNTON, IL

LOCATION.--Lat 41°34'05", long 87°36'30", in SE1/4NW1/4 sec.34, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Margaret Street in Thornton, 1.0 mi downstream from North Creek and at mile 4.2.

DRAINAGE AREA.--104 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1707: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 586.43 ft above sea level. Prior to Dec. 18, 1948, nonrecording gage at same site and datum.

REMARKS.--Records good. Effluent from sewage-treatment plant upstream averaged 24.4 ft<sup>3</sup>/s. Maximum monthly effluent was 41.7 ft<sup>3</sup>/s in February, and minimum was 16.8 ft<sup>3</sup>/s in September. Gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 5, 1947, reached a stage of 14.34 ft (from floodmark), discharge, 4,200 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft<sup>3</sup>/s and maximum (\*).

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	0030	*3,370	*14.74	Feb. 27	1415	1,380	10.82

Minimum discharge, 18 ft<sup>3</sup>/s, Sept. 13, 14, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	45	149	66	89	572	45	108	60	56	36	33
2	25	42	128	81	108	449	42	96	56	41	37	35
3	30	41	102	104	123	327	38	89	56	36	43	32
4	29	36	89	127	288	283	39	71	52	33	234	27
5	28	34	81	239	340	239	92	62	48	33	64	27
6	28	39	90	162	211	169	92	53	306	34	47	29
7	31	177	84	88	131	117	62	51	456	34	43	29
8	43	142	73	73	95	106	57	115	301	123	40	32
9	43	105	64	61	79	157	45	76	154	157	39	34
10	74	73	58	56	71	190	40	57	90	69	38	27
11	60	53	201	49	68	144	52	49	179	62	209	26
12	38	43	301	50	64	110	261	51	443	52	130	25
13	31	40	210	43	54	102	182	46	192	36	92	24
14	34	38	138	36	52	419	114	48	115	37	59	23
15	32	36	181	37	45	280	81	46	81	35	56	24
16	57	38	201	37	44	147	73	41	473	35	114	23
17	66	69	146	42	44	106	64	41	631	33	603	105
18	132	51	98	38	100	87	56	54	222	216	317	44
19	62	46	69	37	247	76	65	611	113	503	133	46
20	43	40	56	36	278	70	58	398	78	176	73	46
21	35	42	47	50	2090	63	55	168	71	103	59	35
22	35	44	45	523	2670	62	49	102	60	138	46	29
23	75	45	190	445	1100	55	47	79	53	88	38	28
24	48	54	443	243	534	48	45	66	49	63	54	27
25	40	91	196	168	305	102	51	413	50	55	39	25
26	38	70	129	102	402	76	46	295	47	48	33	25
27	36	53	96	87	1260	61	38	137	42	51	35	25
28	35	51	85	75	886	57	40	94	38	46	35	25
29	51	47	79	63	---	66	40	88	37	40	35	31
30	138	137	72	58	---	57	44	74	44	39	36	28
31	64	---	65	62	---	49	---	65	---	37	36	---
TOTAL	1510	1822	3966	3338	11778	4846	2013	3744	4597	2509	2853	969
MEAN	48.7	60.7	128	108	421	156	67.1	121	153	80.9	92.0	32.3
MAX	138	177	443	523	2670	572	261	611	631	503	603	105
MIN	25	34	45	36	44	48	38	41	37	33	33	23

## 05536275 THORN CREEK AT THORNTON, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1997, BY WATER YEAR (WY)

MEAN	60.4	89.3	100	96.1	121	180	177	134	113	74.3	57.9	59.7
MAX	356	385	391	328	421	534	362	399	445	333	236	372
(WY)	1955	1991	1983	1993	1997	1979	1950	1996	1993	1996	1968	1961
MIN	12.5	14.3	15.5	16.2	26.6	37.4	34.0	29.3	24.9	21.7	14.9	11.7
(WY)	1951	1949	1951	1954	1963	1981	1986	1958	1948	1952	1948	1948

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1948 - 1997	
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ANNUAL TOTAL	46655		43945			
ANNUAL MEAN	127		120		106	
HIGHEST ANNUAL MEAN					199	
LOWEST ANNUAL MEAN					51.5	
HIGHEST DAILY MEAN	2980	Jul 19	2670	Feb 22	3810	Nov 28 1990
LOWEST DAILY MEAN	22	A	23	Sep 14, 16	4.4	Sep 11 1949
ANNUAL SEVEN-DAY MINIMUM	23	Sep 15	25	Sep 10	9.0	Sep 14 1948
INSTANTANEOUS PEAK FLOW			3370	Feb 22	4700 B	Jul 13 1957
INSTANTANEOUS PEAK STAGE			14.74	Feb 22	17.06	Jun 14 1981
INSTANTANEOUS LOW FLOW			18	Sep 13, 14, 16		
10 PERCENT EXCEEDS	247		245		225	
50 PERCENT EXCEEDS	49		58		47	
90 PERCENT EXCEEDS	27		34		22	

A - Sept. 17, 18, 20, 25.

B - Gage height, 16.00 ft.

## 05536290 LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL

LOCATION.--Lat 41°36'25", long 87°35'52", in NE1/4SE1/4 sec.15, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on Cottage Grove Avenue in South Holland, 2.0 mi downstream from Thorn Creek, and at mile 23.0.

DRAINAGE AREA.--208 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1947 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1507: 1950, 1953. WDR IL-81-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 575.00 ft above sea level (Illinois Department of Transportation bench mark). Prior to Oct. 27, 1947, nonrecording gage and Oct. 27, 1947, to Mar. 31, 1981, water-stage recorder at site 1.4 mi upstream at same datum. Apr. 1 to Nov. 8, 1981, nonrecording gage at same site and datum. Nov. 17, 1947, to Nov. 19, 1970, auxiliary water-stage recorder at Dixmoor, 4.7 mi downstream; prior to Nov. 17, 1947, nonrecording gage at the Dixmoor site read twice daily.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow from upper Little Calumet River is diverted to Lake Michigan by Burns ditch. Calumet Sag Channel, 6.6 mi downstream from station, diverts the entire flow to the Mississippi River Basin. Gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1947, reached a stage of 19.24 ft, from floodmarks, discharge, 4,760 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,540 ft<sup>3</sup>/s, Feb. 22, gage height, 19.10 ft; minimum discharge, 25 ft<sup>3</sup>/s, Aug. 1, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	79	198	107	153	1060	89	148	91	85	28	56
2	39	68	200	119	158	792	86	133	85	56	29	55
3	37	64	158	147	180	594	82	129	83	44	39	54
4	40	58	139	187	394	500	79	105	79	39	272	47
5	39	53	126	318	525	416	126	96	72	37	84	45
6	38	57	137	248	354	323	143	85	435	41	49	45
7	41	216	128	146	239	238	112	82	609	39	41	47
8	54	212	114	121	179	206	98	141	443	46	34	50
9	76	154	100	98	145	239	88	108	281	222	30	54
10	126	114	91	e90	125	293	79	85	191	87	34	42
11	124	86	248	e82	114	242	96	76	165	74	348	39
12	75	71	420	e74	104	192	296	73	454	66	249	37
13	57	62	319	e67	89	174	242	72	301	46	154	35
14	49	58	220	e65	87	479	174	71	232	40	84	33
15	49	53	254	e63	75	431	135	70	153	38	60	35
16	81	51	287	e62	72	268	122	64	434	37	125	33
17	125	88	224	e61	72	214	112	62	1020	35	872	187
18	212	85	164	e61	122	185	101	84	522	355	587	79
19	108	66	130	e60	314	161	105	579	295	817	278	67
20	78	59	e107	e70	427	150	103	653	204	322	160	81
21	64	59	e92	e82	2420	137	95	304	159	147	124	57
22	62	64	83	846	3450	126	90	190	126	184	96	48
23	111	62	220	715	2530	119	85	139	101	135	77	45
24	82	76	691	421	1260	108	81	108	86	83	92	43
25	67	125	403	e240	699	169	82	393	79	63	74	39
26	60	104	264	e170	725	141	80	412	71	56	64	35
27	56	85	198	e140	1840	115	72	215	61	72	61	35
28	52	76	164	e123	1820	107	71	145	56	65	61	38
29	96	75	146	e110	---	114	70	133	52	43	58	38
30	226	174	129	e100	---	109	72	115	61	36	59	38
31	107	---	117	e110	---	98	---	98	---	31	59	---
TOTAL	2480	2654	6271	5303	18672	8500	3266	5168	7001	3441	4382	1537
MEAN	80.0	88.5	202	171	667	274	109	167	233	111	141	51.2
MAX	226	216	691	846	3450	1060	296	653	1020	817	872	187
MIN	37	51	83	60	72	98	70	62	52	31	28	33
CFSM	.38	.43	.97	.82	3.21	1.32	.52	.80	1.12	.53	.68	.25
IN.	.44	.47	1.12	.95	3.34	1.52	.58	.92	1.25	.62	.78	.27

e Estimated



## 05536290 LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1997, BY WATER YEAR (WY)

MEAN	103	153	179	173	221	328	321	250	200	131	101	106
MAX	645	572	767	572	667	916	712	638	817	555	360	480
(WY)	1955	1991	1983	1993	1997	1979	1950	1996	1993	1957	1968	1961
MIN	19.8	18.1	27.8	27.0	38.1	81.2	65.1	51.8	35.4	39.0	23.8	17.8
(WY)	1957	1950	1963	1963	1964	1964	1986	1958	1949	1948	1948	1949

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1948 - 1997	
ANNUAL TOTAL	77866		68675			
ANNUAL MEAN	213		188		189	
HIGHEST ANNUAL MEAN					333	
LOWEST ANNUAL MEAN					72.4	
HIGHEST DAILY MEAN	3700	Jul 19	3450	Feb 22	4240	Jul 14 1957
LOWEST DAILY MEAN	31	Sep 21	28	Aug 1	7.9	Oct 6 1950
ANNUAL SEVEN-DAY MINIMUM	34	Sep 19	36	Sep 10	14	Oct 27 1949
INSTANTANEOUS PEAK FLOW			3540	Feb 22	4440 A	Jul 14 1957
INSTANTANEOUS PEAK STAGE			19.10	Feb 22	20.50	Nov 28 1990
INSTANTANEOUS LOW FLOW			25	Aug 1, 3		
ANNUAL RUNOFF (CFSM)	1.02		.90		.91	
ANNUAL RUNOFF (INCHES)	13.93		12.28		12.32	
10 PERCENT EXCEEDS	423		398		434	
50 PERCENT EXCEEDS	90		98		85	
90 PERCENT EXCEEDS	44		43		36	

A - Gage height, 20.11 ft, site then in use.

## 05536340 MIDLOTHIAN CREEK AT OAK FOREST, IL

LOCATION.--Lat 41°36'51", long 87°43'46", in SE1/4NW1/4 sec.15, T.36 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Kilbourn Avenue in Oak Forest, and at mile 5.9.

DRAINAGE AREA.--12.6 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR-IL 1971-74).

REVISED RECORDS.--WSP 1337: 1951-53: WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 620.41 ft above sea level (Cook County Highway Department bench mark).

REMARKS.--Records good except those above 150 ft<sup>3</sup>/s, which are fair, and those for estimated daily discharges, which are poor. Diurnal fluctuation at low flow caused by small industrial plants upstream. Retention pond 1.0 mi upstream detains water during periods of heavy runoff and gradually releases water during the recession. Flow bypassed gage from Nov. 21, 1962, to Mar. 2, 1963, due to diversion 1.0 mi upstream. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 22	1345	297	4.23	Feb. 27	0345	173	3.13
Feb. 21	0700	*323	*4.53	Aug. 17	1815	151	3.43

Minimum discharge, 0.21 ft<sup>3</sup>/s Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	15	24	4.4	24	106	3.4	13	2.2	11	1.5	.28
2	3.9	4.1	13	8.8	20	81	2.5	7.5	2.6	2.8	1.4	.31
3	1.7	2.3	8.6	12	16	49	2.2	6.0	3.0	1.7	13	.64
4	2.3	1.6	6.9	13	68	25	3.0	4.8	2.3	1.0	100	.97
5	1.6	1.9	6.1	15	54	12	17	6.4	1.5	.70	33	.87
6	1.1	3.5	9.8	7.9	28	8.5	11	2.9	e13	1.5	6.9	.73
7	1.6	68	8.1	e5.4	17	7.0	3.7	3.0	e5.0	.89	2.9	.55
8	3.9	22	6.3	e3.7	10	6.5	2.8	18	e4.8	1.5	4.4	.87
9	5.8	11	6.6	e3.0	7.9	18	2.2	3.5	4.2	8.5	1.6	1.7
10	8.2	5.4	4.5	e2.5	6.7	14	2.2	1.6	3.9	2.7	1.0	1.3
11	4.6	3.5	64	e2.1	6.1	7.5	11	1.3	e5.0	.91	68	.83
12	2.4	2.7	52	1.4	5.5	6.0	58	1.1	e7.0	.71	55	.77
13	1.3	2.0	28	1.6	9.4	5.5	17	1.1	e15	.58	18	.71
14	.90	1.3	16	2.4	7.6	24	8.7	1.1	e30	.58	9.7	.60
15	1.3	1.1	25	3.8	4.0	6.4	6.1	1.1	11	.58	4.8	.63
16	28	1.0	22	3.1	2.4	4.7	9.3	1.1	70	.58	19	2.6
17	34	9.8	13	1.8	7.7	4.1	6.1	.91	30	.58	135	61
18	67	4.0	7.4	1.1	28	4.3	4.2	7.2	7.5	33	78	12
19	28	2.0	e4.5	.90	50	3.8	6.3	41	5.0	62	41	4.3
20	5.5	1.5	e3.5	.94	59	2.8	5.6	11	3.5	10	20	14
21	3.2	2.2	2.4	18	282	2.3	4.1	5.3	4.7	4.0	6.5	7.6
22	5.3	3.7	2.1	234	279	2.0	3.9	3.6	4.2	6.1	2.0	3.8
23	20	2.6	22	122	243	1.5	3.3	2.7	3.5	53	1.2	3.9
24	7.4	4.5	35	31	172	2.0	3.3	3.0	2.7	26	5.8	6.5
25	3.9	17	e34	23	130	19	2.8	e20	3.2	6.9	2.2	1.8
26	4.9	5.9	e26	e6.6	121	6.9	2.3	8.1	2.7	3.9	1.3	1.2
27	3.8	7.8	e13	e5.8	159	4.6	1.7	5.5	1.5	5.3	.99	.97
28	3.8	3.2	5.8	e5.2	113	4.2	1.6	5.4	5.0	3.5	.87	1.1
29	17	3.9	5.8	e4.5	---	5.3	1.5	5.4	4.9	2.7	.65	1.3
30	42	44	5.2	4.1	---	3.1	2.5	4.9	5.4	2.1	.56	2.2
31	33	---	4.5	6.3	---	4.6	---	2.9	---	1.9	.41	---
TOTAL	353.40	258.5	485.1	555.34	1930.3	451.6	209.3	200.41	264.3	257.21	636.68	136.03
MEAN	11.4	8.62	15.6	17.9	68.9	14.6	6.98	6.46	8.81	8.30	20.5	4.53
MAX	67	68	64	234	282	106	58	41	70	62	135	61
MIN	.90	1.0	2.1	.90	2.4	1.5	1.5	.91	1.5	.58	.41	.28
CFSM	.90	.68	1.24	1.42	5.47	1.16	.55	.51	.70	.66	1.63	.36
IN.	1.04	.76	1.43	1.64	5.70	1.33	.62	.59	.78	.76	1.88	.40

e Estimated

## 05536340 MIDLOTHIAN CREEK AT OAK FOREST, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	6.93	10.3	11.4	10.3	13.5	22.3	21.1	15.6	12.3	9.01	5.84	7.30
MAX	70.9	40.7	70.9	43.9	68.9	86.9	53.5	46.1	60.0	67.8	22.0	43.6
(WY)	1955	1986	1983	1993	1997	1979	1973	1990	1981	1996	1979	1977
MIN	.035	.17	.000	.000	.000	3.13	1.41	1.84	.88	.29	.25	.11
(WY)	1964	1965	1963	1963	1963	1964	1963	1968	1965	1964	1966	1963

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	7007.70		5738.17			
ANNUAL MEAN	19.1		15.7		12.1	
HIGHEST ANNUAL MEAN					21.0	
LOWEST ANNUAL MEAN					2.68	
HIGHEST DAILY MEAN	350	Jul 18	282	Feb 21	448	Oct 11 1954
LOWEST DAILY MEAN	.90	Oct 14	.28	Sep 1	.00	A
ANNUAL SEVEN-DAY MINIMUM	1.1	Jan 5	.53	Aug 28	.00	Nov 22 1962
INSTANTANEOUS PEAK FLOW			323	Feb 21	627 B	Apr 22 1973
INSTANTANEOUS PEAK STAGE			4.53	Feb 21	9.00	Jul 13 1957
INSTANTANEOUS LOW FLOW			.21	Sep 2		
ANNUAL RUNOFF (CFSM)	1.52		1.25		.96	
ANNUAL RUNOFF (INCHES)	20.69		16.94		13.09	
10 PERCENT EXCEEDS	42		34		31	
50 PERCENT EXCEEDS	6.4		4.7		3.5	
90 PERCENT EXCEEDS	1.6		1.1		.50	

A - At times in most years.

B - Gage height, 7.67 ft.

## 05536500 TINLEY CREEK NEAR PALOS PARK, IL

LOCATION.--Lat 41°38'48", long 87°45'59", in SW1/4SE1/4 sec.32, T.37 N., R.13 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on 135th Street, 1.5 mi west of State Highway 50, 3 mi southeast of Palos Park, and at mile 1.8.

DRAINAGE AREA.--11.2 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1951 to current year. Prior to October 1952, records published with those for streams in the St. Lawrence River basin (WSP 1237).

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-81-2: 1955(M), 1957(M), 1970(M), 1978(M).

GAGE.--Water-stage recorder. Datum of gage is 607.40 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0815	*1,080	*8.96	Feb. 27	0700	354	6.07

Minimum discharge, 0.25 ft<sup>3</sup>/s, July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	5.8	17	4.5	30	63	5.1	7.9	2.5	15	1.1	.92
2	3.9	3.6	11	7.1	24	40	4.8	9.5	1.9	4.9	1.3	.75
3	2.1	2.7	7.8	8.2	19	21	4.6	10	1.8	2.2	4.2	.64
4	1.4	2.3	6.7	9.4	96	15	4.1	7.3	1.5	1.4	105	.61
5	1.2	2.0	5.9	11	54	13	7.4	5.8	1.3	1.0	15	.51
6	.94	6.3	7.8	7.0	18	9.6	9.6	5.6	7.2	3.2	5.4	.47
7	1.1	68	7.6	4.7	11	7.6	6.1	4.9	11	6.2	3.4	.68
8	1.5	19	6.3	3.7	8.2	7.1	4.5	20	8.3	2.4	2.3	.49
9	3.4	11	5.0	e3.3	7.5	11	3.6	9.8	4.6	1.9	1.8	.50
10	2.6	6.7	4.2	e2.9	6.4	14	3.3	6.1	2.8	1.1	1.7	.53
11	3.5	4.8	48	e2.7	5.7	10	6.4	5.0	4.0	.81	50	.56
12	2.8	3.7	29	e2.5	5.2	10	93	4.1	8.7	.63	39	.78
13	2.3	3.1	13	e2.3	5.6	10	21	3.6	20	.71	15	.53
14	1.3	2.7	8.4	e2.1	4.5	16	11	3.3	31	.57	6.6	.45
15	1.4	2.1	12	e1.9	3.7	9.7	8.2	3.3	8.0	.50	4.5	.60
16	6.9	2.0	13	e1.8	4.1	7.0	7.6	3.1	66	.51	16	.69
17	18	5.4	8.8	e1.8	3.9	6.0	6.4	3.3	24	.34	204	65
18	42	5.5	e5.8	e1.7	22	5.7	5.6	3.3	7.8	21	40	13
19	9.0	3.9	e4.2	e1.7	39	5.0	6.3	22	5.4	32	13	5.2
20	4.6	3.0	e3.3	e1.7	63	4.8	6.4	9.0	4.1	5.8	7.4	16
21	3.4	3.1	e2.8	4.6	719	4.8	5.5	5.4	5.0	3.0	5.0	6.2
22	3.0	4.2	e2.4	174	240	4.5	5.0	3.7	5.0	3.5	3.5	3.7
23	13	3.8	34	99	89	3.9	4.2	2.8	3.3	34	2.8	3.2
24	7.5	4.1	38	59	34	3.7	3.8	2.4	2.3	14	4.8	3.0
25	4.6	10	28	45	21	9.0	3.4	6.8	2.1	4.2	4.0	2.0
26	3.2	6.5	12	20	89	7.8	3.0	6.6	2.2	2.9	2.6	1.4
27	3.2	5.6	6.2	e12	251	6.1	2.9	4.2	1.6	4.2	2.0	1.1
28	3.4	3.5	5.8	e8.8	82	4.4	3.0	2.8	1.2	2.9	1.7	.97
29	8.5	3.0	5.6	e8.0	---	5.2	2.8	4.0	.84	1.9	1.3	.75
30	38	20	4.8	e7.0	---	5.3	2.8	3.5	14	1.5	1.3	.52
31	10	---	4.3	e6.6	---	5.8	---	2.8	---	1.2	1.1	---
TOTAL	210.54	227.4	368.7	526.0	1955.8	346.0	261.4	191.9	259.44	175.47	566.8	131.75
MEAN	6.79	7.58	11.9	17.0	69.8	11.2	8.71	6.19	8.65	5.66	18.3	4.39
MAX	42	68	48	174	719	63	93	22	66	34	204	65
MIN	.94	2.0	2.4	1.7	3.7	3.7	2.8	2.4	.84	.34	1.1	.45
CFSM	.61	.68	1.06	1.51	6.24	1.00	.78	.55	.77	.51	1.63	.39
IN.	.70	.76	1.22	1.75	6.50	1.15	.87	.64	.86	.58	1.88	.44

e Estimated

## 05536500 TINLEY CREEK NEAR PALOS PARK, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	6.32	9.61	10.2	10.2	13.2	21.4	21.1	14.1	10.2	6.42	4.66	5.26
MAX	87.0	46.2	57.7	38.2	69.8	90.2	50.7	43.5	50.2	58.5	28.3	38.2
(WY)	1955	1991	1983	1995	1997	1979	1970	1991	1993	1996	1987	1993
MIN	.000	.17	.15	.062	.19	2.24	1.52	1.79	.67	.15	.003	.000
(WY)	1953	1954	1964	1977	1963	1981	1963	1963	1965	1956	1964	1953

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	6268.24		5221.20			
ANNUAL MEAN	17.1		14.3		11.0	
HIGHEST ANNUAL MEAN					22.7	
LOWEST ANNUAL MEAN					2.27	
HIGHEST DAILY MEAN	817	Jul 18	719	Feb 21	891	Oct 10 1954
LOWEST DAILY MEAN	.85A	Jan. 9	.34	Jul 17	.00	B
ANNUAL SEVEN-DAY MINIMUM	.88	Jan 4	.53	Sep 5	.00	Oct 1 1952
INSTANTANEOUS PEAK FLOW			1080	Feb 21	2010 C,D	Jul 18 1996
INSTANTANEOUS PEAK STAGE			8.96	Feb 21	10.30	Oct 10 1954
INSTANTANEOUS LOW FLOW			.25	Jul 18		
ANNUAL RUNOFF (CFSM)	1.53		1.28		.98	
ANNUAL RUNOFF (INCHES)	20.82		17.34		13.37	
10 PERCENT EXCEEDS	35		28		24	
50 PERCENT EXCEEDS	5.5		4.8		2.5	
90 PERCENT EXCEEDS	1.5		1.2		.14	

A - Estimated due to backwater from ice.

B - At times in most years.

C - From rating curve extended above 800 ft<sup>3</sup>/s on basis of indirect measurement of flow through culvert.

D - Gage height, 10.25 ft.

## 05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL

LOCATION.--Lat 41°38'26", long 88°03'38", in SE1/4SW1/4 sec.35, T.37 N., R.10 E., Will County, Hydrologic Unit 07120004, on left bank 40 ft upstream from bridge on Romeoville Road in Romeoville, 5.2 mi upstream from Lockport Lock and Dam, and at mile 6.2.

DRAINAGE AREA.--739 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1984 to current year.

REVISED RECORDS.--WDR IL-86-2: 1985. WDR IL-92-2: 1986-89.

GAGE.--Acoustical flowmeter. Datum of gage is 551.89 ft above sea level (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Estimated daily discharges determined from a regression relation between present site and the previous site 5.2 mi downstream.

This gaging station provides flow data essential to determine Illinois' diversion of Lake Michigan water. A U.S. Supreme Court Decree limits Illinois' diversion to an average of 3,200 ft<sup>3</sup>/s. Illinois' diversion includes water diverted from the lake for domestic water supply, for navigation and water-quality improvement in the Chicago Sanitary and Ship Canal system, and the stormwater runoff from a 673 mi<sup>2</sup> diverted watershed area. Flows recorded at this station also include nondiversion flows. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,466 ft<sup>3</sup>/s, Feb. 21, gage height, 23.95 ft; maximum gage height, 26.22 ft, Nov. 14; minimum discharge, -1,890 ft<sup>3</sup>/s, Mar. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2513	2108	3078	2156	2738	6489	2802	3245	2682	3915	3578	3725
2	2936	2526	2282	1908	2855	5613	2188	4224	2712	e3774	2911	3030
3	2027	2509	2609	2450	e2651	4959	2267	3011	3087	3417	3856	3102
4	2456	1705	2588	3050	4243	4364	e2039	3217	2558	3215	2637	3348
5	3319	2040	3062	3346	3707	3825	2814	2421	2680	3286	3912	3065
6	2705	3887	2408	2493	3011	3476	2479	2432	4184	2980	4189	3472
7	2132	3496	2657	2115	2725	2558	1999	3413	4258	3217	3262	3524
8	2512	2886	2003	2172	2925	3282	1949	3017	3690	3141	3412	3142
9	2664	2819	2299	2329	2461	3064	2116	2888	3100	3436	3230	3000
10	3197	2706	1994	2308	2502	2997	e2145	2851	2911	3455	3343	3012
11	2647	2232	3812	2202	2381	2735	3202	2826	3648	2857	4806	3146
12	2565	2057	3226	2122	2265	2822	4036	2094	3615	3982	4765	3183
13	2654	2020	3012	2337	2319	2911	3512	2225	3487	3163	4130	3349
14	2254	2033	3084	2278	2250	2968	e2912	2376	3369	3495	4119	3158
15	2571	e2344	2700	2087	2350	2612	2809	2450	3301	3106	4497	3218
16	3412	e2381	2566	2264	2558	2876	2579	2135	5200	3559	7502	4118
17	3284	e2691	2432	2215	2266	2039	2581	2375	4652	3527	13997	5171
18	3670	e2216	2508	2505	2836	2435	2576	3524	4001	5911	6211	4149
19	2723	2033	2124	2266	3232	2052	2845	3890	3556	5523	4281	4341
20	2952	2045	2136	e2140	e4257	2206	2280	3361	4336	4426	4115	4522
21	2184	2342	2209	2520	17281	1720	e2505	2641	5566	4095	4319	3908
22	2952	2164	2017	5542	15860	2089	2364	2857	3976	4053	e3917	2902
23	2523	1849	3323	4284	10795	2181	2251	2453	4253	3826	e3996	2502
24	2927	2265	3501	3490	7865	3238	2585	2736	4037	3895	3951	3121
25	2554	2149	3121	3453	5481	2964	2157	3752	3903	3687	3585	3058
26	2597	e2150	2645	3507	8113	2648	2415	3245	3656	3837	3440	3108
27	2303	e2054	2277	2535	8739	1976	2430	2386	3922	5033	e3928	3498
28	2277	2019	2402	2818	8627	2421	2200	2443	3542	3427	2920	3025
29	3675	2067	2409	2406	---	3596	2108	2757	3581	3683	3156	2739
30	3437	3378	2075	2837	---	3054	2860	2236	3570	3496	3792	e2986
31	2786	---	2206	2842	---	2565	---	2435	---	3318	2865	---
TOTAL	85408	71171	80765	82977	139293	94735	76005	87916	111033	115735	132622	101622
MEAN	2755	2372	2605	2677	4975	3056	2534	2836	3701	3733	4278	3387
MAX	3675	3887	3812	5542	17281	6489	4036	4224	5566	5911	13997	5171
MIN	2027	1705	1994	1908	2250	1720	1949	2094	2558	2857	2637	2502

e Estimated

## 05536995 CHICAGO SANITARY AND SHIP CANAL AT ROMEOVILLE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	3101	3241	2738	2930	2946	3179	3817	3641	4173	4168	4109	3859
MAX	4098	4419	3373	4347	4975	4084	5194	5053	6405	4770	4723	4974
(WY)	1992	1991	1991	1993	1997	1993	1992	1992	1993	1996	1993	1992
MIN	2633	2372	1964	2252	2192	2186	2534	2370	3288	3733	3446	3175
(WY)	1996	1997	1996	1996	1996	1996	1997	1994	1995	1997	1996	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1991 - 1997		
ANNUAL TOTAL	1161215			1179282					
ANNUAL MEAN	3173			3231			3493		
HIGHEST ANNUAL MEAN							4074		
LOWEST ANNUAL MEAN							3095		
HIGHEST DAILY MEAN	17202			17281			17530		
LOWEST DAILY MEAN	1613			1705			1613		
ANNUAL SEVEN-DAY MINIMUM	1810			2080			1810		
INSTANTANEOUS PEAK FLOW				19466 A			19466 A		
INSTANTANEOUS PEAK STAGE				26.22B			26.43 C		
INSTANTANEOUS LOW FLOW				-1890			D		
10 PERCENT EXCEEDS	4550			4250			5080		
50 PERCENT EXCEEDS	2870			2910			3110		
90 PERCENT EXCEEDS	1930			2140			2140		

A - Gage height, 23.95 ft.

B - Discharge, 1,741 ft<sup>3</sup>/s.C - Discharge, 2,876 ft<sup>3</sup>/s.

D - No flow or periods of reverse flow at times in most years.

## 05537500 LONG RUN NEAR LEMONT, IL

LOCATION.--Lat 41°38'33", long 87°59'57", in SW1/4SE1/4 sec.32, T.37 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on State Street, 2 mi south of Lemont, and at mile 5.4.

DRAINAGE AREA.--20.9 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WSP 1338: 1952(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 637.20 ft above sea level.

REMARKS.--Records good except those for June 13-Sept. 30, which are fair, and those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 260 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0815	*1,670	*8.30	Aug. 17	1030	264	4.52
Feb. 27	0745	342	5.11				

Minimum discharge, 0.63 ft<sup>3</sup>/s, Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	4.7	21	10	e11	112	9.8	16	2.8	16	1.3	3.1
2	3.0	3.1	16	15	e14	80	8.4	16	2.9	4.7	1.4	3.4
3	2.1	2.4	12	17	21	52	8.3	18	2.7	2.7	2.6	4.2
4	1.7	2.2	11	23	82	40	7.8	13	2.5	2.6	28	3.9
5	1.9	2.1	10	36	54	33	12	11	2.2	2.7	10	3.8
6	1.6	12	12	19	31	27	15	9.9	2.5	1.9	4.7	3.7
7	1.6	73	11	16	21	23	12	8.8	2.5	1.8	2.6	4.4
8	2.0	30	9.6	11	17	21	9.8	22	2.8	1.6	2.0	4.1
9	2.1	18	7.9	e10	e14	22	8.7	14	2.5	1.9	1.7	3.9
10	2.0	13	6.8	e9.0	e12	24	9.6	9.9	2.1	2.0	1.7	3.8
11	2.3	9.0	46	e8.5	e11	19	12	8.3	3.3	1.7	15	3.8
12	2.3	6.9	45	e7.9	e10	16	63	7.6	4.1	1.8	38	3.8
13	2.3	5.6	25	e7.5	e9.7	16	33	7.7	2.4	1.8	19	3.7
14	2.3	4.9	18	e7.1	e9.2	19	23	7.3	1.9	1.7	7.6	4.0
15	2.2	4.2	20	e6.9	e8.7	15	18	6.7	1.5	1.7	6.6	4.0
16	4.5	4.1	20	e6.8	e8.5	13	17	6.1	24	1.6	14	4.1
17	6.0	6.2	16	e6.7	9.3	13	13	5.7	12	1.6	200	24
18	12	7.1	11	e6.6	42	13	12	7.1	5.8	6.4	79	9.3
19	5.0	5.6	e9.6	e6.5	61	12	14	21	4.0	14	40	5.0
20	3.3	4.8	e8.6	e6.4	65	11	13	10	3.2	4.3	24	20
21	2.7	4.9	e8.4	15	1090	10	11	7.3	2.8	2.9	13	6.9
22	2.5	5.6	e8.4	191	388	9.7	10	6.0	2.5	4.1	8.4	4.3
23	5.6	5.8	e25	e80	224	10	9.1	5.1	2.2	3.2	5.7	4.7
24	5.2	6.2	e62	e38	101	8.1	11	4.4	2.1	2.8	5.6	4.0
25	3.5	9.6	e30	e21	58	15	11	5.0	2.3	2.4	4.5	3.1
26	2.6	7.8	e22	e15	107	12	8.9	5.2	2.0	3.1	3.6	2.4
27	2.3	6.1	e14	e12	290	10	8.1	4.4	1.5	12	5.2	2.4
28	2.0	5.1	e13	e10	142	9.8	7.8	3.6	1.5	9.2	3.4	2.5
29	5.6	5.3	e13	e9.1	---	11	7.2	3.9	1.9	3.3	2.6	2.6
30	24	21	e11	e8.8	---	10	7.2	3.6	10	1.7	3.9	4.2
31	8.4	---	e10	e9.4	---	11	---	3.1	---	1.4	4.0	---
TOTAL	127.3	296.3	553.3	646.2	2911.4	697.6	410.7	277.7	116.5	120.6	559.1	157.1
MEAN	4.11	9.88	17.8	20.8	104	22.5	13.7	8.96	3.88	3.89	18.0	5.24
MAX	24	73	62	191	1090	112	63	22	24	16	200	24
MIN	1.6	2.1	6.8	6.4	8.5	8.1	7.2	3.1	1.5	1.4	1.3	2.4
CFSM	.20	.47	.85	1.00	4.98	1.08	.66	.43	.19	.19	.86	.25
IN.	.23	.53	.98	1.15	5.18	1.24	.73	.49	.21	.21	1.00	.28

e Estimated



## 05537500 LONG RUN NEAR LEMONT, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	9.95	14.6	17.2	15.8	20.9	35.0	35.5	22.1	17.3	11.4	5.26	7.81
MAX	163	71.9	92.2	75.5	104	131	86.9	74.5	89.6	126	27.4	74.9
(WY)	1955	1986	1983	1993	1997	1979	1975	1966	1993	1996	1972	1961
MIN	.000	.006	.016	.020	.028	2.19	1.69	2.83	.73	.048	.000	.000
(WY)	1965	1972	1964	1977	1964	1964	1963	1958	1988	1961	1964	1963

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1951 - 1997		
ANNUAL TOTAL	9524.5			6873.8					
ANNUAL MEAN	26.0			18.8			17.7		
HIGHEST ANNUAL MEAN							39.9		
LOWEST ANNUAL MEAN							3.37		
HIGHEST DAILY MEAN	2190	Jul 18		1090	Feb 21		2190	Jul 18	1996
LOWEST DAILY MEAN	1.6	A		1.3	Aug 1		.00	B	
ANNUAL SEVEN-DAY MINIMUM	1.7	Jan 7		1.7	Jul 11		.00	Aug 27	1953
INSTANTANEOUS PEAK FLOW				1670	Feb 21		5310 C	Jul 18	1996
INSTANTANEOUS PEAK STAGE				8.30	Feb 21		11.10	Jul 18	1996
INSTANTANEOUS LOW FLOW				.63	Oct 6				
ANNUAL RUNOFF (CFSM)	1.25			.90			.85		
ANNUAL RUNOFF (INCHES)	16.95			12.23			11.50		
10 PERCENT EXCEEDS	48			27			41		
50 PERCENT EXCEEDS	7.0			7.9			5.0		
90 PERCENT EXCEEDS	2.2			2.1			.10		

A - Jan. 10-12, estimated due to backwater from ice; and Oct. 6-7.

B - At times in most years.

C - From rating curve extended above 2,800 ft<sup>3</sup>/s.

## 05539000 HICKORY CREEK AT JOLIET, IL

LOCATION.--Lat 41°31'10", long 88°04'10", in SW1/4NE1/4 sec.15, T.35 N., R.10 E., Will County, Hydrologic Unit 07120004, on right bank at Third Avenue in Joliet, 0.2 mi downstream from Spring Creek, and at mile 1.9.

DRAINAGE AREA.--107 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1944 to current year.

REVISED RECORDS.--WDR IL-91-2: 1981(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 526.00 ft above sea level. Prior to Oct. 9, 1946, nonrecording gage at same site at datum 1.00 ft higher. Oct. 9, 1946, to Sept. 30, 1974, at datum 1.00 ft higher.

REMARKS.--Records good except those for Oct. 1-Dec. 10, which are fair, and those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	Unknown	*5,170	*7.84	No other peak greater than base discharge			
Minimum discharge, 5.9 ft <sup>3</sup> /s, Sept. 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	33	112	45	e80	514	48	49	33	14	11	15
2	18	24	90	64	e100	374	44	56	32	15	11	14
3	15	22	59	92	e170	267	42	60	31	13	10	13
4	14	19	47	95	359	220	40	52	28	13	83	12
5	14	19	43	127	276	188	49	44	25	13	56	12
6	13	29	43	92	161	166	64	40	90	12	29	11
7	13	77	42	72	114	147	53	38	123	12	20	11
8	13	99	41	e62	83	137	44	58	78	13	16	13
9	12	61	37	e56	63	143	40	64	47	49	14	12
10	12	46	34	e53	e52	162	38	46	34	25	13	11
11	12	e36	144	e51	e47	126	44	41	58	18	105	10
12	12	e35	238	e49	e43	99	176	38	121	15	139	11
13	12	e34	149	e47	e41	90	146	35	70	13	78	10
14	12	e32	97	e45	e39	142	102	34	50	12	44	9.6
15	12	31	102	e44	e38	125	79	32	38	11	32	10
16	17	31	148	e43	38	94	69	31	108	9.8	57	12
17	36	34	97	e42	40	84	62	31	138	9.5	489	67
18	122	37	66	e41	101	76	57	40	89	34	278	49
19	52	38	88	e40	257	67	65	245	59	277	142	28
20	30	34	e110	e40	264	64	63	164	37	100	87	27
21	21	33	e74	102	e3720	59	53	106	32	62	58	23
22	20	32	e58	e920	e1830	55	47	62	28	105	42	18
23	28	32	e74	e540	733	50	47	48	25	113	33	15
24	34	32	e200	e280	408	47	44	42	22	67	28	15
25	22	48	e120	e150	280	64	43	153	21	38	29	13
26	20	56	e94	e96	436	71	40	151	19	28	24	10
27	17	44	e75	e76	1230	62	41	102	16	24	21	9.4
28	14	38	e60	e66	657	58	39	63	15	22	19	8.4
29	26	35	e54	e62	---	58	37	49	14	17	18	7.9
30	90	75	e49	e60	---	52	40	44	15	15	17	6.8
31	54	---	47	e64	---	50	---	38	---	13	17	---
TOTAL	809	1196	2692	3616	11660	3911	1756	2056	1496	1182.3	2020	484.1
MEAN	26.1	39.9	86.8	117	416	126	58.5	66.3	49.9	38.1	65.2	16.1
MAX	122	99	238	920	3720	514	176	245	138	277	489	67
MIN	12	19	34	40	38	47	37	31	14	9.5	10	6.8
CFSM	.24	.37	.81	1.09	3.89	1.18	.55	.62	.47	.36	.61	.15
IN.	.28	.42	.94	1.26	4.05	1.36	.61	.71	.52	.41	.70	.17

e Estimated

## 05539000 HICKORY CREEK AT JOLIET, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1997, BY WATER YEAR (WY)

MEAN	39.1	65.0	82.1	82.1	106	170	169	125	99.7	57.0	32.3	40.6
MAX	458	359	552	306	416	726	566	488	581	432	131	372
(WY)	1955	1991	1983	1974	1997	1979	1947	1974	1981	1957	1979	1961
MIN	3.05	5.34	3.15	3.89	5.54	18.9	13.8	20.1	10.9	7.17	3.36	4.35
(WY)	1964	1964	1964	1963	1963	1964	1963	1985	1988	1988	1964	1966

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1945 - 1997		
ANNUAL TOTAL	42146.5			32878.4					
ANNUAL MEAN	115			90.1			88.9		
HIGHEST ANNUAL MEAN							168		
LOWEST ANNUAL MEAN							20.8		
HIGHEST DAILY MEAN	5020	Jul 18		3720	Feb 21		8400	Jun 13	1981
LOWEST DAILY MEAN	9.5	Sep 23-25		6.8	Sep 30		.80	Aug 16	1964
ANNUAL SEVEN-DAY MINIMUM	9.8	Sep 19		10	Sep 24		1.0	Aug 12	1964
INSTANTANEOUS PEAK FLOW				5170	Feb 21		17300 A	Jun 13	1981
INSTANTANEOUS PEAK STAGE				7.84	Feb 21		14.90	Jun 13	1981
INSTANTANEOUS LOW FLOW				5.9	Sep 30		.50	B	
ANNUAL RUNOFF (CFSM)	1.08			.84			.83		
ANNUAL RUNOFF (INCHES)	14.65			11.43			11.29		
10 PERCENT EXCEEDS	238			148			193		
50 PERCENT EXCEEDS	40			44			29		
90 PERCENT EXCEEDS	13			13			7.3		

A - From rating curve extended above 6,300 ft<sup>3</sup>/s.

B - Aug. 9, 16, 19, 1964.

## 05539900 WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL

LOCATION.--Lat 41°54'39", long 88°10'44", in SE1/4NW1/4 sec.35, T.40 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on State Highway 64, 2 mi northeast of West Chicago, and at mile 49.2.

DRAINAGE AREA.--28.5 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1961 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-77-1: 1966-67(M).

GAGE.--Water-stage recorder. Datum of gage is 717.76 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation at low flow caused by sewage-treatment plant upstream from station. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1800	*892	*10.78	No other peak greater than base discharge.			

Minimum discharge, 11 ft<sup>3</sup>/s, Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	23	38	24	e30	223	45	118	24	21	13	20
2	19	20	31	29	e31	154	40	83	28	20	14	22
3	18	20	32	34	e31	102	39	93	25	19	22	19
4	18	20	31	52	e59	88	36	69	23	18	61	19
5	17	18	29	58	e53	79	46	55	22	17	37	18
6	18	21	32	37	e40	71	48	48	61	16	26	18
7	19	50	31	31	e35	59	37	50	66	17	25	19
8	18	29	28	27	e30	53	33	117	72	21	24	21
9	18	23	25	25	e29	52	31	65	40	23	24	20
10	17	20	22	24	e28	52	29	53	32	17	24	20
11	17	19	66	e24	e26	48	33	48	29	17	53	18
12	17	19	54	e23	e25	43	107	41	26	16	59	18
13	17	17	38	e22	e24	40	80	37	25	16	47	18
14	18	17	32	e20	e23	48	59	35	23	16	33	19
15	17	17	41	e19	22	44	51	34	22	15	59	19
16	24	17	37	e19	23	38	46	33	94	14	47	19
17	27	26	30	e18	22	36	40	34	48	14	215	70
18	28	23	27	e18	67	33	38	37	34	31	106	30
19	19	19	e25	e18	95	34	43	58	31	46	60	28
20	19	18	e23	e18	76	33	39	34	26	25	47	36
21	19	20	23	38	621	32	40	29	31	23	38	25
22	19	22	21	212	630	30	35	28	27	20	35	23
23	36	20	34	74	320	31	33	26	23	18	31	23
24	24	21	38	53	169	30	31	27	22	17	30	22
25	20	20	28	47	138	49	31	50	45	17	28	20
26	18	19	29	e35	133	38	30	33	28	16	27	19
27	18	17	22	e30	315	35	29	29	22	16	24	19
28	18	19	25	e27	209	33	28	26	20	16	23	20
29	39	19	27	e28	---	76	28	25	20	14	22	21
30	59	54	24	e26	---	59	49	25	23	13	21	21
31	28	---	22	26	---	56	---	24	---	14	21	---
TOTAL	684	667	965	1136	3304	1799	1254	1464	1012	583	1296	684
MEAN	22.1	22.2	31.1	36.6	118	58.0	41.8	47.2	33.7	18.8	41.8	22.8
MAX	59	54	66	212	630	223	107	118	94	46	215	70
MIN	17	17	21	18	22	30	28	24	20	13	13	18
CFSM	.77	.78	1.09	1.29	4.14	2.04	1.47	1.66	1.18	.66	1.47	.80
IN.	.89	.87	1.26	1.48	4.31	2.35	1.64	1.91	1.32	.76	1.69	.89

e Estimated

## 05539900 WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	23.1	33.2	34.8	28.7	37.5	53.7	60.1	44.0	37.4	26.5	29.1	27.1
MAX	68.0	111	134	77.8	118	191	135	113	103	63.8	135	115
(WY)	1987	1986	1983	1993	1997	1979	1983	1996	1996	1993	1987	1972
MIN	1.54	1.62	.97	.87	.75	12.3	14.7	13.9	2.02	5.36	1.50	1.22
(WY)	1964	1963	1963	1963	1963	1968	1963	1971	1963	1966	1961	1962

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1961 - 1997	
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ANNUAL TOTAL	16161		14848			
ANNUAL MEAN	44.2		40.7		36.2	
HIGHEST ANNUAL MEAN					58.1	
LOWEST ANNUAL MEAN					6.41	
HIGHEST DAILY MEAN	509	Jul 18	630	Feb 22	817	Dec 3 1982
LOWEST DAILY MEAN	14	Sep 6	13	Jul 30, Aug. 1	.20	Jul 5 1963
ANNUAL SEVEN-DAY MINIMUM	16	Aug 31	14	Jul 27	.26	Jul 5 1963
INSTANTANEOUS PEAK FLOW			892	Feb 21	984 A	Dec 3 1982
INSTANTANEOUS PEAK STAGE			10.78	Feb 21	10.78	Feb 21 1997
INSTANTANEOUS LOW FLOW			11	Aug 1	.20	B
ANNUAL RUNOFF (CFSM)	1.55		1.43		1.27	
ANNUAL RUNOFF (INCHES)	21.09		19.38		17.27	
10 PERCENT EXCEEDS	90		61		74	
50 PERCENT EXCEEDS	26		28		23	
90 PERCENT EXCEEDS	18		18		7.0	

A - Gage height, 10.44 ft.

B - July 1, 5, 8-12, 1963.

## 05540060 KRESS CREEK AT WEST CHICAGO, IL

LOCATION.--Lat 41°51'23", long 88°12'15", in NW1/4NW1/4 sec.22, T.39 N., R.9 E., Du Page County, Hydrologic Unit 07120004,

on left downstream side of bridge at intersection of Wilson Street and Joliet Road, 0.5 mi south of West Chicago, and at mile 0.5.

DRAINAGE AREA.--18.1 mi<sup>2</sup>.

PERIOD OF RECORD.--Annual maximum, water years 1961-80. November 1985 to current year.

REVISED RECORDS.--WDR IL-77-1: 1961-76(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 700.00 ft above sea level. Prior to November 8, 1985 at datum 5.44 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter and recording rain gage at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 120 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1355	*579	*7.66	Feb. 27	0820	146	5.65

Minimum discharge, 0.10 ft<sup>3</sup>/s, several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	6.6	7.0	3.6	6.2	107	10	28	4.8	46	.48	.50
2	1.6	5.1	7.2	5.2	7.2	79	9.8	25	4.6	22	.44	.37
3	.96	3.3	8.1	7.4	10	65	8.8	27	5.5	15	5.4	.25
4	.73	2.4	7.7	20	29	55	8.3	21	5.2	11	9.0	.15
5	.63	2.2	7.9	24	27	48	15	18	3.1	7.0	9.1	.14
6	.84	4.0	6.2	13	19	41	14	15	14	4.3	4.3	.14
7	1.9	14	4.7	9.0	14	35	11	17	14	3.0	2.7	.13
8	1.8	6.4	3.9	6.5	9.1	31	9.6	34	17	7.0	1.2	.10
9	1.8	5.2	4.5	e5.4	7.2	28	8.6	23	11	7.8	.51	.14
10	1.7	5.7	5.1	e5.5	6.4	26	6.8	19	8.7	4.9	.53	.14
11	1.2	4.9	16	e5.2	5.6	24	11	17	5.4	2.3	12	.14
12	1.2	4.2	e13	e4.7	5.5	21	33	15	4.0	1.4	16	.12
13	1.4	2.9	e11	3.5	4.9	19	29	13	5.9	1.4	9.3	.10
14	1.6	3.0	e7.0	3.3	4.6	20	23	10	3.2	1.5	5.8	.10
15	1.9	2.2	e11	3.1	4.2	16	18	9.5	2.6	1.1	12	.10
16	4.7	1.9	e9.0	e2.9	3.6	15	15	8.3	15	.88	13	1.4
17	8.6	3.5	e6.0	e2.7	4.3	13	13	7.8	9.2	1.4	37	18
18	8.4	3.5	e5.0	2.6	23	12	12	15	6.6	2.7	16	7.8
19	2.7	3.2	e4.5	2.3	37	12	14	36	3.8	3.0	12	6.4
20	1.8	2.1	e4.1	2.5	37	12	12	23	2.8	3.8	8.9	6.1
21	1.5	1.8	3.6	5.2	432	9.1	12	19	3.4	2.2	5.9	3.6
22	2.5	4.0	3.5	55	292	7.6	11	16	2.4	.94	4.5	2.7
23	4.7	4.2	7.5	31	171	9.2	10	13	3.0	.81	3.6	1.7
24	4.7	4.3	8.7	22	81	10	9.2	7.6	1.8	.74	2.8	1.2
25	4.2	4.5	8.0	15	61	15	8.0	13	25	.65	1.1	.73
26	3.6	2.6	6.9	10	85	13	6.7	10	14	.55	.60	.69
27	2.7	1.9	6.1	9.3	131	11	5.0	7.5	9.3	.48	.46	.18
28	2.0	1.8	5.1	7.8	94	8.9	6.4	6.3	4.3	.88	.27	.14
29	16	2.5	5.1	7.3	---	13	7.2	4.5	2.9	.67	.19	.17
30	26	9.1	4.0	5.5	---	12	9.8	4.1	47	.52	.93	.17
31	9.0	---	3.3	5.3	---	12	---	6.4	---	.50	.70	---
TOTAL	124.46	123.0	210.7	305.8	1611.8	799.8	367.2	489.0	259.5	156.42	196.71	53.60
MEAN	4.01	4.10	6.80	9.86	57.6	25.8	12.2	15.8	8.65	5.05	6.35	1.79
MAX	26	14	16	55	432	107	33	36	47	46	37	18
MIN	.63	1.8	3.3	2.3	3.6	7.6	5.0	4.1	1.8	.48	.19	.10
CFSM	.22	.23	.38	.55	3.18	1.43	.68	.87	.48	.28	.35	.10
IN.	.26	.25	.43	.63	3.31	1.64	.75	1.01	.53	.32	.40	.11

e Estimated

## 05540060 KRESS CREEK AT WEST CHICAGO, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1997, BY WATER YEAR (WY)

MEAN	8.48	17.5	15.2	14.2	18.9	23.1	23.5	19.5	17.8	13.8	13.8	7.97
MAX	21.0	36.0	40.5	36.9	57.6	44.4	62.9	46.1	48.3	80.8	82.1	29.1
(WY)	1987	1996	1988	1993	1997	1990	1993	1990	1996	1996	1987	1987
MIN	2.37	4.10	2.38	3.45	5.63	6.97	6.09	3.99	2.01	3.12	1.51	1.52
(WY)	1993	1997	1990	1987	1987	1996	1989	1989	1992	1991	1986	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1986 - 1997	
ANNUAL TOTAL	7249.27		4697.99			
ANNUAL MEAN	19.8		12.9		16.5	
HIGHEST ANNUAL MEAN					24.0	
LOWEST ANNUAL MEAN					9.33	
HIGHEST DAILY MEAN	1210	Jul 18	432	Feb 21	1210	Jul 18 1996
LOWEST DAILY MEAN	.33	Sep 7	.10	A	.04	Sep 9 1988
ANNUAL SEVEN-DAY MINIMUM	.65	Sep 1	.12	Sep 8	.12	Sep 8 1997
INSTANTANEOUS PEAK FLOW			579	Feb 21	1980	Jul 18 1996
INSTANTANEOUS PEAK STAGE			7.66	Feb 21	9.24	Jul 18 1996
INSTANTANEOUS LOW FLOW			.10	B	.02	C
ANNUAL RUNOFF (CFSM)	1.09		.71		.91	
ANNUAL RUNOFF (INCHES)	14.90		9.66		12.39	
10 PERCENT EXCEEDS	43		24		37	
50 PERCENT EXCEEDS	6.3		6.1		8.0	
90 PERCENT EXCEEDS	1.7		.72		1.4	

A - Sept. 8, 13, 14, 15.

B - Several days.

C - Sept. 1, 2, 9, 1988.

## 05540060 KRESS CREEK AT WEST CHICAGO, IL--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April 5, 1986 to current year.

GAGE.--An 8-in.-diameter, unheated, tipping-bucket rain gage

REMARKS.--Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to appreciable errors.

MAXIMUM FOR PERIOD OF RECORD.--Maximum recorded, 6.88 in., July 17, 1996

MAXIMUM FOR WATER YEAR 1996.--Maximum recorded, 6.88 in., July 17, but may have been greater during periods of missing record.

WATER YEAR 1997.--Maximum recorded, 3.05 in., Feb. 21, but may have been greater during periods of missing record.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.86	.00	s.02	.00	.00	.00	.00	.87	.00	.00	.00
2	.00	.09	.00	.00	.00	.00	.00	.00	.45	.02	.00	.00
3	.08	.00	.00	.00	.00	.00	.00	.11	.01	.00	.00	.00
4	.00	.00	.00	.00	.00	.03	.01	.11	.19	.00	.00	.00
5	.41	.00	.09	.00	.00	.33	.01	.00	.08	.00	.12	.00
6	1.22	.01	.00	.00	.00	.00	.00	.00	.67	.00	.26	.00
7	.01	.01	.00	.00	s.06	.00	.00	.11	.05	.00	.82	.00
8	.00	.00	.00	.00	.03	.00	.00	.01	.00	.00	.00	1.11
9	.00	.00	.00	.00	.01	.00	.00	---	.27	.00	.00	.00
10	.00	2.92	.00	.00	.00	.00	.00	.08	.01	.00	.00	.00
11	.00	s.02	.00	s.01	.00	.00	.00	.00	.00	.00	.00	---
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.14	s.01	s.08	s.14	.00	.00	.00	.00	.00	.00	.00	.00
14	.06	.00	s.10	s.01	.00	.00	.32	.02	.00	.24	.00	.00
15	.00	.00	.00	.00	.00	.00	.68	.01	.00	.06	.00	.00
16	.00	.00	.00	.00	.00	.00	.01	---	.56	.01	.00	.00
17	.00	s.01	.00	s.66	.00	.02	.00	---	1.64	6.88	.00	.00
18	.00	.00	s.01	.50	.00	.01	.38	.00	.03	2.52	.06	.00
19	1.24	.00	.00	.01	s.02	.00	.20	.00	.01	.01	.08	.00
20	.48	.00	.00	.00	.00	.00	.02	.80	.00	.00	.00	.01
21	.04	.00	.00	.00	.00	.00	.01	.01	.00	.28	.00	.08
22	.00	.00	.00	.00	.00	.00	.23	.00	.00	.00	.41	.01
23	.26	.00	.00	.05	.01	.02	.00	.67	.88	.00	.00	.04
24	.00	.00	.00	.00	.00	.51	.01	.59	.01	.08	.00	.00
25	.00	.00	.00	.00	.01	.01	.15	.17	.00	.00	.00	.00
26	.18	.00	.00	.38	.28	.00	.00	.04	.00	.00	.00	1.81
27	.32	.15	.00	.00	.42	.00	.00	.50	.00	.00	.00	.06
28	.11	.02	.00	.00	.00	.00	.00	1.68	.00	.69	.00	.00
29	.03	.00	.00	.00	.00	.00	.45	.00	.00	1.02	.00	.00
30	.33	.00	.00	.00	---	.00	.00	.00	.00	.27	.00	.00
31	.14	---	s.11	.00	---	.09	---	.00	---	.00	.00	---
TOTAL	5.11	4.10	0.39	1.78	0.84	1.02	2.48	---	5.73	12.08	1.75	---

s Snowfall-affected precipitation



## 05540060 KRESS CREEK AT WEST CHICAGO, IL--Continued

## PRECIPITATION RECORDS

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.04	.00	.18	.00	.27	.00	.01	.00	.00
2	.00	.00	.00	.01	.00	.00	.00	.37	.21	.00	.00	.00
3	.00	.00	s.10	.01	.00	.00	.00	.04	.00	.00	1.19	.00
4	.00	.07	.00	.22	.43	.00	.08	.01	.00	.00	.37	.00
5	.00	.00	s.09	.00	.00	.00	.43	.00	.00	.00	.00	.00
6	.00	.66	s.04	.00	.00	.00	.00	.00	.52	.00	.00	.00
7	.00	.06	s.01	.00	.00	.00	.00	.75	.31	.00	.00	.00
8	.08	.02	.00	.00	.00	.00	.00	.02	.00	.54	.00	.00
9	.00	.00	.00	.00	.00	.20	.01	.00	.00	.00	.04	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.12	.00
11	.00	.00	.37	.00	.00	.00	.99	.04	.62	.00	.97	.00
12	.00	.00	.00	.00	.00	.00	.06	.00	.00	.00	1.05	.00
13	.00	.00	.00	.00	.00	.07	.00	.05	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.10	.00	.04	.00	.00	.00	.00
15	.00	.00	---	.00	.00	.00	.06	.00	.00	.00	.20	.00
16	.47	.00	.00	.00	.00	.00	.00	.01	.47	.00	.63	.23
17	.40	.29	.00	.00	s.04	.00	.00	.00	.00	.00	.98	.25
18	.00	.00	.00	.00	.00	.00	.08	.69	.00	.34	.01	.00
19	.00	.00	.00	.00	.00	.00	.18	.01	.00	.00	.01	.58
20	.00	.00	.00	s.24	.92	.00	.00	.00	.07	.00	.00	.00
21	.07	s.21	.00	s.34	3.05	.00	.06	.00	.02	.00	.00	.00
22	.45	s.01	.00	s.02	s.02	.00	.01	.00	.00	.04	.00	.07
23	.06	.00	.37	.00	.00	.00	.00	.00	.00	.00	.05	.10
24	.00	.03	.00	s.01	.00	.36	.01	.19	.00	.00	.01	.00
25	.00	.00	.00	.00	.00	.08	.00	.21	1.16	.00	.00	.00
26	.00	.00	.00	.00	s.82	.00	.01	.00	.00	.00	.00	.00
27	.00	.00	s.09	.00	s.25	.00	.03	.00	.00	.00	.00	.00
28	.00	s.10	s.01	.00	s.08	.10	.00	.05	.00	.00	.00	.00
29	1.02	.40	.00	.00	---	.16	.00	.02	.00	.00	.00	.00
30	.02	.03	.00	.00	---	.12	.52	.00	2.04	.00	.00	.00
31	.00	---	.00	s.23	---	.00	---	.00	---	.00	.00	---
TOTAL	2.57	1.88	---	1.12	5.61	1.37	2.53	2.77	5.42	0.93	5.63	1.23

s Snowfall-affected precipitation

## 05540091 SPRING BROOK AT FOREST PRESERVE NEAR WARRENVILLE, IL

LOCATION.--Lat 41°50'07", long 88°10'56", in SW1/4SW1/4 sec.26, T.39 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on right bank on upstream side of footbridge in Roy C. Blackwell Forest Preserve, 0.7 mi upstream from the confluence with the West Branch Du Page River and 1 mi northwest of Warrenville.

DRAINAGE AREA.--6.83 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 690.15 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Effluent from sewage-treatment plant 3 mi upstream averaged about 4 ft<sup>3</sup>/s per day.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1030	*310	*11.84	Aug. 17	0700	118	9.70
May 19	0900	103	9.48				

Minimum discharge, 1.9 ft<sup>3</sup>/s, May 28, but may have been less during periods of estimated discharges.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	e15	e22	e14	e12	50	e19	e24	12	32	5.7	6.5
2	5.4	e12	e19	e15	e14	42	e16	e21	14	13	5.5	7.6
3	6.4	e11	e18	e18	e16	35	e15	e23	12	8.9	6.4	7.4
4	6.3	e10	e17	e28	e30	31	e14	e19	11	7.2	39	7.0
5	6.5	e15	e16	e35	e29	25	e19	e17	10	7.3	19	7.1
6	7.2	e22	e17	e25	e25	23	e21	e13	16	6.4	13	6.9
7	8.3	e31	e17	e18	e20	21	e18	e19	20	6.4	10	7.0
8	7.4	e20	e12	e15	e17	20	e14	e46	19	7.1	8.8	8.1
9	7.2	e17	e11	e15	e15	21	e12	e35	13	9.8	7.8	8.1
10	6.7	e16	e15	e14	e14	22	e12	e23	11	8.6	8.3	8.0
11	8.7	e14	e20	e14	e12	19	e20	e21	14	7.7	22	7.7
12	9.7	e13	e20	e13	e12	18	e45	e19	12	6.8	44	7.4
13	9.1	e12	e19	e12	e11	17	e33	e17	11	7.0	24	7.3
14	9.7	e11	e17	e11	e10	18	e27	e16	10	7.4	13	7.7
15	10	e11	e19	e11	e10	18	e22	e15	9.2	7.2	21	8.7
16	16	e12	e18	e10	e10	17	e20	e14	21	6.6	23	7.9
17	22	e16	e15	e10	e11	16	e19	e15	12	6.8	80	24
18	23	e14	e14	e10	e18	14	e16	e20	9.7	8.6	29	8.1
19	9.9	e13	e12	e10	e29	14	e17	38	7.1	15	22	e12
20	8.3	e12	e11	e11	e28	14	e15	18	7.4	8.8	19	e13
21	8.7	e13	e11	e24	240	13	e14	15	12	9.1	17	e11
22	9.4	e13	e14	e52	98	13	e13	14	11	8.9	15	e9.0
23	21	e13	e22	e27	55	12	e12	13	9.9	8.7	12	e8.0
24	14	e12	e22	e21	42	13	e12	15	9.0	8.6	11	e6.6
25	12	e12	e15	e17	36	18	e11	28	36	8.1	11	e6.2
26	e11	e11	e14	e14	54	15	e10	17	12	7.8	9.5	e6.0
27	e11	e11	e13	e12	74	13	e10	15	7.7	7.5	8.7	e5.8
28	e14	e12	e15	e12	48	e14	e10	12	11	7.8	9.4	e5.6
29	e25	e13	e14	e10	---	e18	e10	14	11	7.8	8.4	e5.4
30	e35	e24	e13	e11	---	e27	e15	13	34	7.0	8.3	e5.8
31	e20	---	e13	e12	---	e22	---	12	---	5.7	7.1	---
TOTAL	376.6	431	495	521	990	633	511	601	405.0	275.6	537.9	246.9
MEAN	12.1	14.4	16.0	16.8	35.4	20.4	17.0	19.4	13.5	8.89	17.4	8.23
MAX	35	31	22	52	240	50	45	46	36	32	80	24
MIN	5.4	10	11	10	10	12	10	12	7.1	5.7	5.5	5.4
CFSM	1.78	2.10	2.34	2.46	5.18	2.99	2.49	2.84	1.98	1.30	2.54	1.20
IN.	2.05	2.35	2.70	2.84	5.39	3.45	2.78	3.27	2.21	1.50	2.93	1.34

e Estimated

## 05540091 SPRING BROOK AT FOREST PRESERVE NEAR WARRENVILLE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

MEAN	10.2	15.7	12.9	16.4	15.5	17.8	20.1	16.4	17.8	12.6	12.9	9.81
MAX	13.7	20.9	17.9	29.5	35.4	25.2	34.4	26.7	30.2	29.6	17.4	13.5
(WY)	1992	1995	1993	1993	1997	1993	1993	1996	1993	1996	1997	1993
MIN	7.35	6.49	7.72	8.92	7.37	10.7	8.35	6.98	7.41	8.44	10.1	6.60
(WY)	1995	1994	1994	1994	1996	1996	1994	1994	1992	1995	1992	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1992 - 1997	
ANNUAL TOTAL	5806.4		6024.0			
ANNUAL MEAN	15.9		16.5		14.8	
HIGHEST ANNUAL MEAN					18.8	
LOWEST ANNUAL MEAN					11.3	
HIGHEST DAILY MEAN	309	Jul 18	240	Feb 21	309	Jul 18 1996
LOWEST DAILY MEAN	4.8	Feb 16, 17	5.4	A	4.1	B
ANNUAL SEVEN-DAY MINIMUM	5.0	Feb 15	5.9	Sep 24	4.6	Nov 5 1993
INSTANTANEOUS PEAK FLOW			310	Feb 21	393	Jul 18 1996
INSTANTANEOUS PEAK STAGE			11.84	Feb 21	12.60	Jul 18 1996
INSTANTANEOUS LOW FLOW			1.9 C	May 28	1.9 C	May 28 1997
ANNUAL RUNOFF (CFSM)	2.32		2.42		2.17	
ANNUAL RUNOFF (INCHES)	31.62		32.81		29.49	
10 PERCENT EXCEEDS	27		27		26	
50 PERCENT EXCEEDS	12		13		11	
90 PERCENT EXCEEDS	6.6		7.3		6.2	

A - Oct. 2; Sept. 29, estimated.

B - July 30, Nov. 11, 1993.

C - May have been less during periods of estimated discharges.

## 05540095 WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL

LOCATION.--Lat 41°49'22", long 88°10'23", in SW1/4NE1/4 sec.35, T.39 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on right bank 400 ft upstream from Warrenville Forest Preserve Dam in Warrenville, 0.6 mi downstream from Spring Brook, and at mile 38.9.

DRAINAGE AREA.--90.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1968 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage and masonry dam. Datum of gage is 688.59 ft above sea level (Illinois Department of Transportation bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow slightly regulated by sewage-treatment plants upstream. Gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 11, 1954, reached a stage of 5.54 ft, from floodmark, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	0100	*2,640	*5.43	Feb. 27	1215	882	3.28

Minimum discharge, 22 ft<sup>3</sup>/s, Jan. 11, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	70	105	48	e66	594	106	246	50	229	34	39
2	26	55	87	53	e64	519	94	182	54	108	34	41
3	26	47	77	67	e68	346	89	232	54	81	42	41
4	24	44	84	102	e120	268	84	182	50	66	182	39
5	23	44	76	173	e105	211	107	138	47	58	123	38
6	23	59	80	108	e85	180	125	112	94	48	76	38
7	24	152	77	76	e72	153	97	109	115	46	58	38
8	25	102	70	63	e64	142	82	294	191	56	47	42
9	26	71	66	57	e63	145	74	203	103	71	42	42
10	26	59	62	54	e61	152	67	148	77	55	41	41
11	28	51	131	41	e59	134	75	124	72	47	99	41
12	28	46	164	e50	e54	121	288	107	60	41	e270	40
13	27	42	112	e46	e55	113	266	97	57	40	e200	41
14	28	40	85	e44	e50	123	188	82	50	41	105	41
15	32	40	97	40	e48	116	147	76	47	40	128	44
16	46	43	100	38	e49	102	125	74	158	37	128	45
17	63	48	79	39	e54	101	107	71	200	38	486	148
18	70	54	63	e40	160	90	98	83	e230	47	e300	83
19	41	45	45	e41	329	90	107	256	e100	102	202	65
20	35	44	49	41	259	93	104	136	64	66	137	85
21	34	44	49	42	1820	88	95	104	68	58	100	59
22	35	53	47	338	2310	83	87	85	66	53	80	53
23	69	52	66	331	1390	82	82	80	60	48	66	49
24	57	51	97	190	672	84	75	68	55	46	61	45
25	46	53	54	140	431	128	72	111	170	43	56	41
26	40	47	55	85	410	112	68	88	120	40	52	41
27	36	44	56	e63	818	102	65	78	80	39	48	36
28	26	46	54	e56	736	89	68	71	62	40	48	38
29	50	46	59	e52	---	129	69	65	52	38	46	38
30	199	118	53	e53	---	126	74	58	190	36	44	37
31	104	---	48	e60	---	123	---	54	---	34	43	---
TOTAL	1351	1710	2347	2631	10472	4939	3185	3814	2796	1792	3378	1469
MEAN	43.6	57.0	75.7	84.9	374	159	106	123	93.2	57.8	109	49.0
MAX	199	152	164	338	2310	594	288	294	230	229	486	148
MIN	23	40	45	38	48	82	65	54	47	34	34	36
CFSM	.48	.63	.84	.94	4.14	1.76	1.17	1.36	1.03	.64	1.21	.54
IN.	.56	.70	.97	1.08	4.31	2.03	1.31	1.57	1.15	.74	1.39	.60

e Estimated

## 05540095 WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1997, BY WATER YEAR (WY)

MEAN	59.8	94.6	99.6	80.8	108	160	176	133	109	77.0	90.8	72.7
MAX	181	276	354	246	374	588	396	295	300	283	512	261
(WY)	1973	1986	1983	1993	1997	1979	1983	1974	1996	1996	1987	1972
MIN	12.6	16.5	15.1	12.6	21.7	56.8	42.1	39.6	27.0	18.5	17.8	14.8
(WY)	1972	1977	1977	1977	1972	1969	1986	1988	1971	1971	1971	1971

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1969 - 1997		
ANNUAL TOTAL	44432			39884					
ANNUAL MEAN	121			109			105		
HIGHEST ANNUAL MEAN							162		
LOWEST ANNUAL MEAN							35.1		
HIGHEST DAILY MEAN	2870	Jul 18		2310	Feb 22		2880	Aug 15	1987
LOWEST DAILY MEAN	23	Oct 5, 6		23	Oct 5, 6		7.8	A	
ANNUAL SEVEN-DAY MINIMUM	24	Oct 2		24	Oct 2		10	Oct 20	1971
INSTANTANEOUS PEAK FLOW				2640	Feb 22		3470	Jul 18	1996
INSTANTANEOUS PEAK STAGE				5.43	Feb 22		6.41	Jul 18	1996
INSTANTANEOUS LOW FLOW				22 B	Jan 11				
ANNUAL RUNOFF (CFSM)	1.34			1.21			1.16		
ANNUAL RUNOFF (INCHES)	18.28			16.41			15.78		
10 PERCENT EXCEEDS	254			189			222		
50 PERCENT EXCEEDS	62			66			60		
90 PERCENT EXCEEDS	38			39			25		

A - Sept. 14, 1971; Oct. 26, 1972.

B - Result of freezeup.

## 05540130 WEST BRANCH DU PAGE RIVER NEAR NAPERVILLE, IL

LOCATION.--Lat 41°43'13", long 88°07'55", in SW1/4NE1/4 sec.6, T.37 N., R.10 E., Will County, Hydrologic Unit 07120004, on downstream side of bridge on Washington Street, 3.5 mi southeast of Naperville, and at mile 29.3.

DRAINAGE AREA.--123 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 630.00 ft above sea level. Water years 1989 to 1995 datum incorrectly published as 625.28 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter and recording rain gage at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 920 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	0255	*3,260	*10.98	Aug. 17	Unknown	980	7.66
Feb. 27	1135	1,060	7.82				

Minimum discharge, 30 ft<sup>3</sup>/s, Aug. 2, 3, Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	99	145	e71	e94	720	142	276	88	396	36	40
2	57	77	116	e84	e96	661	125	258	89	175	32	40
3	48	63	103	e120	e180	472	115	285	96	111	62	42
4	45	55	108	e150	e250	369	107	243	85	85	252	38
5	43	55	102	e300	e290	308	145	194	74	75	162	37
6	42	83	104	e200	e170	269	167	162	110	63	99	37
7	43	230	100	e120	e140	231	131	162	161	56	77	35
8	44	158	89	e96	e115	208	113	313	226	59	62	37
9	42	109	78	e84	e105	204	102	262	157	82	53	41
10	40	86	77	e80	e95	205	96	189	117	67	49	38
11	38	70	126	e78	e90	183	121	161	134	58	110	37
12	39	63	208	e73	e86	165	325	146	117	53	380	35
13	40	57	151	e70	e86	154	320	130	93	47	247	33
14	39	51	124	e65	81	160	244	124	76	45	133	34
15	41	47	136	e61	75	151	194	114	63	45	134	36
16	74	50	144	e62	73	136	168	109	174	42	e350	50
17	91	65	121	e60	72	130	146	106	201	39	e960	175
18	105	71	103	e56	130	122	133	136	126	62	e700	109
19	75	58	e70	e57	336	116	143	306	92	101	e400	75
20	58	52	e73	e60	330	114	145	197	77	81	e250	91
21	52	54	e74	e100	2510	109	133	149	82	67	e150	71
22	59	59	e72	e400	3110	101	128	124	78	61	95	59
23	94	63	e110	e540	2000	97	119	115	67	55	81	62
24	93	60	147	e300	940	103	115	104	58	50	86	53
25	74	59	e90	e200	578	143	110	198	241	48	68	46
26	64	54	e80	e120	573	135	105	148	180	46	62	43
27	57	57	e82	e94	1000	119	102	120	106	41	57	39
28	52	52	e86	e85	911	129	103	106	76	40	53	36
29	113	56	e84	e70	---	173	106	106	60	39	50	36
30	236	137	e78	e74	---	179	115	92	287	38	47	36
31	147	---	e72	e86	---	162	---	92	---	39	46	---
TOTAL	2114	2250	3253	4016	14516	6528	4318	5227	3591	2266	5343	1541
MEAN	68.2	75.0	105	130	518	211	144	169	120	73.1	172	51.4
MAX	236	230	208	540	3110	720	325	313	287	396	960	175
MIN	38	47	70	56	72	97	96	92	58	38	32	33
CFSM	.55	.61	.85	1.05	4.21	1.71	1.17	1.37	.97	.59	1.40	.42
IN.	.64	.68	.98	1.21	4.39	1.97	1.31	1.58	1.09	.69	1.62	.47

e Estimated

## 05540130 WEST BRANCH DU PAGE RIVER NEAR NAPERVILLE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	81.5	171	120	144	176	189	220	217	169	129	119	94.3
MAX	157	290	187	289	518	316	449	449	368	456	172	229
(WY)	1992	1996	1991	1993	1997	1990	1993	1990	1996	1996	1997	1989
MIN	30.5	53.3	33.5	75.8	54.8	81.6	69.5	62.6	32.7	39.5	35.7	40.9
(WY)	1990	1990	1990	1994	1989	1996	1989	1989	1992	1991	1991	1991

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	63006		54963			
ANNUAL MEAN	172		151		152	
HIGHEST ANNUAL MEAN					200	
LOWEST ANNUAL MEAN					110	
HIGHEST DAILY MEAN	4960	Jul 18	3110	Feb 22	4960	Jul 18 1996
LOWEST DAILY MEAN	36	A	32	Aug 2	16	Oct 13 1989
ANNUAL SEVEN-DAY MINIMUM	37	Sep 19	36	Sep 9	19	Jun 3 1994
INSTANTANEOUS PEAK FLOW			3260	Feb 22	6620	Jul 18 1996
INSTANTANEOUS PEAK STAGE			10.98	Feb 22	14.31	Jul 18 1996
INSTANTANEOUS LOW FLOW			30	B		
ANNUAL RUNOFF (CFSM)	1.40		1.22		1.24	
ANNUAL RUNOFF (INCHES)	19.06		16.62		16.82	
10 PERCENT EXCEEDS	349		254		306	
50 PERCENT EXCEEDS	86		95		90	
90 PERCENT EXCEEDS	47		43		38	

A - Sept. 20, 21, 25.

B - Aug. 2, 3 Sept. 12.

## 05540130 WEST BRANCH DU PAGE RIVER NEAR NAPERVILLE, IL--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--May 26, 1989 to current year.

GAGE.--An 8-in.-diameter, unheated, tipping-bucket rain gage

REMARKS.--Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to appreciable errors.

MAXIMUM FOR PERIOD OF RECORD.--Maximum recorded, 3.64 in., May 9, 1990.

MAXIMUM FOR WATER YEAR 1996.--Maximum recorded, 1.98 in., Sept. 26, but may have been greater during periods of missing record.

WATER YEAR 1997.--Maximum recorded, 2.55 in., Aug. 16, but may have been greater during periods of missing record.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.58	.00	.00	.00	.00	.00	.00	.66	.00	.00	.00
2	.00	.12	.00	.00	.00	.00	.00	.00	.44	.07	.00	.00
3	.03	.00	.00	.00	.00	.00	.00	.16	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.01	.01	.00	.52	.00	.00	.00
5	.28	.00	.03	.00	.00	.43	.00	.06	.00	.00	.00	.00
6	1.38	.02	.00	.00	.00	.00	.00	.00	.57	.00	.00	.00
7	.00	.01	.00	.00	s.03	.00	.00	.07	.01	.00	.23	.00
8	.00	.00	.00	.00	.11	.00	.00	.02	.01	.00	.00	.42
9	.00	.00	.00	.00	.00	.00	.00	.82	.26	.00	.00	.00
10	.00	2.68	.00	.00	.00	.00	.00	.26	.03	.00	.00	.00
11	.00	s.03	.00	s.02	.00	.00	.00	.00	.03	.00	.00	.56
12	.00	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.01
13	.14	s.01	s.10	s.10	.00	.00	.00	.00	.00	.00	.00	.00
14	.05	.00	s.01	.00	.00	.00	.31	.05	.00	.14	.00	.00
15	.00	.00	.00	.00	.00	.00	.41	.04	.00	.17	.00	.00
16	.00	s.01	.00	.00	.00	.00	.01	.37	.64	---	.00	.00
17	.00	s.01	.00	s.25	.00	.01	.00	.00	1.71	---	.00	.00
18	.00	.00	.00	.43	.00	.00	.38	.00	.00	---	.13	.00
19	.99	.00	.00	.00	s.01	.00	.32	.00	.11	.00	.01	.00
20	.44	.00	.00	.00	.00	.00	.01	.43	.00	.00	.00	.02
21	.07	.00	.00	.00	.00	.00	.04	.01	.00	.34	.00	.00
22	.00	.00	.00	.00	.00	.00	.31	.00	.00	.01	.05	.00
23	.18	.00	.00	.05	.00	.01	.00	.42	.65	.00	.01	.02
24	.00	.00	.00	.00	.00	.48	.00	.63	.10	.36	.00	.00
25	.00	.00	.00	.01	.00	.01	.17	.12	.00	.00	.00	.00
26	.28	.00	.00	.42	.08	.00	.00	.05	.00	.00	.00	1.98
27	.16	.23	.00	.00	.40	.00	.00	.50	.00	.02	.00	.02
28	.08	---	.00	.00	.00	.00	.07	1.47	.00	.06	.00	.00
29	.00	.00	.00	.00	.00	.00	.41	.00	.00	.03	.00	.00
30	.39	.00	.00	.00	---	.00	.00	.00	.00	.58	.00	.00
31	.14	---	s.10	.00	---	.10	---	.00	---	.00	.00	---
TOTAL	4.66	---	0.24	1.28	0.63	1.05	2.51	5.48	5.74	---	0.43	3.03

s Snowfall-affected precipitation



## 05540130 WEST BRANCH DU PAGE RIVER NEAR NAPERVILLE, IL--Continued

## PRECIPITATION RECORDS

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	s.03	.04	.00	.02	.00	---	---	.00	---	.00
2	.00	.00	s.02	.01	.00	.00	.00	---	---	.00	---	.00
3	.00	.00	s.11	.01	.00	.00	.00	---	---	.00	---	.00
4	.00	.05	.00	.56	.44	.00	.00	---	---	.00	---	.00
5	.00	.01	s.13	.00	.01	.00	.09	---	---	.00	---	.00
6	.00	1.15	s.04	.00	.00	.00	.00	---	---	.00	---	.00
7	.00	.05	.00	.00	.00	.00	.00	---	---	.00	---	.00
8	.00	.01	.00	.00	s.01	.00	.00	---	---	.10	---	.08
9	.00	.00	.00	.00	s.01	.18	.00	---	---	.00	---	.00
10	.00	.00	.00	.00	.00	.00	.00	---	---	.00	---	.00
11	.00	.00	.29	.00	.00	.00	.85	---	---	.00	---	.00
12	.00	.00	.00	.00	s.01	.00	.04	---	---	.00	---	.00
13	.00	.00	.01	.00	.00	.06	.00	---	---	.00	---	.00
14	.00	.00	.01	.00	.00	.05	.00	---	---	.00	---	.00
15	.00	.00	.11	s.01	.00	.00	.02	---	---	.00	.04	.00
16	.51	.00	.00	.00	s.01	.00	.01	---	---	.00	2.55	---
17	.31	.23	.00	.00	s.10	.00	.00	---	---	.00	1.20	.08
18	.00	.00	.00	.00	.00	.00	---	---	---	.26	.00	.00
19	.00	.00	.00	.00	.00	.00	---	---	---	.00	.01	.09
20	.00	.00	.00	s.20	.92	.00	---	---	---	.00	.00	.00
21	.00	s.23	.00	s.30	2.32	.00	---	---	.06	.01	.00	.00
22	---	s.01	.00	.00	.00	.00	---	---	.00	.02	.00	.12
23	.09	.00	.33	.00	.00	.00	---	---	.00	---	.14	.15
24	.00	.10	.00	s.09	.00	.28	---	---	.00	---	.00	.00
25	.00	.00	.00	s.01	.00	.07	---	---	.84	---	.00	.00
26	.00	.00	.00	.00	s.54	.00	---	---	.00	---	.00	.00
27	.00	.00	s.03	s.04	s.03	.00	---	---	.00	---	.00	.00
28	.00	s.05	s.01	.00	.00	.28	---	---	.00	---	.00	.00
29	.77	.36	.00	.00	---	.01	---	---	.00	---	.00	.00
30	.00	.04	.00	.00	---	.07	---	---	1.24	---	.03	.00
31	.00	---	.00	s.20	---	.00	---	---	---	---	.00	---
TOTAL	---	2.29	1.12	1.47	4.40	1.02	---	---	---	---	---	---

s Snowfall-affected precipitation

## 05540160 EAST BRANCH DU PAGE RIVER NEAR DOWNERS GROVE, IL

LOCATION.--Lat 41°49'54", long 88°02'51", in SE1/4SW1/4 sec.25, T.39 N., R.10 E., Du Page County, Hydrologic Unit 07120004, on upstream side of bridge on State Highway 56, 2.2 mi northwest of Downers Grove, and at mile 15.0.

DRAINAGE AREA.--26.6 mi<sup>2</sup>.

PERIOD OF RECORD.--Annual maximum, water years 1961-76. October 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 660.00 ft above sea level. Prior to July 19, 1989, at datum 12.21 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation at low flow caused by sewage-treatment plants upstream from station. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1925	*925	*16.08	Aug. 12	0700	340	12.95
Feb. 27	0820	307	12.77	Aug. 17	0405	428	13.49

Minimum discharge, 9.0 ft<sup>3</sup>/s, July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	39	49	30	39	179	48	e83	32	e76	19	22
2	23	34	42	33	38	142	42	e76	41	e64	17	20
3	22	30	40	36	37	112	39	e84	37	e40	35	19
4	21	29	38	72	74	95	37	e60	32	e27	63	18
5	20	28	37	85	72	80	54	e53	31	e26	39	18
6	21	47	40	56	54	66	55	40	36	e25	27	19
7	21	75	38	42	43	57	44	47	47	e24	24	20
8	21	52	37	34	39	53	39	88	48	23	21	19
9	21	42	32	34	36	57	37	65	40	26	23	20
10	21	36	31	34	35	56	35	49	33	24	21	19
11	20	32	44	31	34	49	50	44	37	23	53	19
12	20	30	49	30	31	45	119	41	36	21	170	18
13	21	28	46	27	29	43	104	36	32	20	94	18
14	21	26	39	25	29	50	84	34	29	20	40	18
15	20	25	42	25	28	44	68	34	e34	20	64	18
16	35	25	41	25	28	40	59	e32	e115	20	111	22
17	41	37	37	23	30	40	48	e33	e60	19	384	76
18	36	33	32	23	63	37	43	e38	e43	42	242	40
19	27	28	29	23	83	36	49	e86	e40	43	116	44
20	24	26	27	24	89	37	44	e65	e33	27	65	42
21	23	30	28	36	746	36	40	e54	e37	25	47	30
22	40	30	27	145	738	34	38	e47	e35	26	38	27
23	41	29	51	106	442	33	36	37	e28	26	32	24
24	32	29	50	72	214	36	34	41	25	24	31	23
25	27	28	35	53	136	50	33	79	92	21	20	21
26	24	26	32	41	160	41	32	49	58	24	19	20
27	23	25	31	37	293	38	32	40	37	22	22	20
28	23	26	35	32	232	52	31	39	29	21	22	20
29	53	30	32	31	---	105	31	43	19	19	21	19
30	81	57	31	30	---	67	e45	37	e34	19	21	21
31	50	---	29	35	---	59	---	33	---	19	20	---
TOTAL	897	1012	1151	1330	3872	1869	1450	1587	1230	856	1921	734
MEAN	28.9	33.7	37.1	42.9	138	60.3	48.3	51.2	41.0	27.6	62.0	24.5
MAX	81	75	51	145	746	179	119	88	115	76	384	76
MIN	20	25	27	23	28	33	31	32	19	19	17	18
CFSM	1.09	1.27	1.40	1.61	5.20	2.27	1.82	1.92	1.54	1.04	2.33	.92
IN.	1.25	1.42	1.61	1.86	5.41	2.61	2.03	2.22	1.72	1.20	2.69	1.03

e Estimated

## 05540160 EAST BRANCH DU PAGE RIVER NEAR DOWNERS GROVE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

MEAN	33.1	56.1	39.8	46.9	53.9	59.1	69.1	66.8	56.1	37.7	38.4	29.7
MAX	60.1	92.8	56.2	100	138	87.8	139	121	97.2	96.5	62.0	49.6
(WY)	1992	1991	1991	1993	1997	1993	1993	1990	1993	1996	1997	1993
MIN	18.5	21.8	16.3	25.4	28.9	29.9	33.3	22.2	21.5	19.9	18.4	19.7
(WY)	1990	1990	1990	1994	1996	1996	1990	1992	1992	1991	1991	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1990 - 1997	
ANNUAL TOTAL	18256		17909			
ANNUAL MEAN	49.9		49.1		48.8	
HIGHEST ANNUAL MEAN					64.1	
LOWEST ANNUAL MEAN					38.5	
HIGHEST DAILY MEAN	853	Jul 18	746	Feb 21	853	Jul 18 1996
LOWEST DAILY MEAN	16	Feb 22	17	Aug 2	11	A
ANNUAL SEVEN-DAY MINIMUM	19	Sep 19	19	Sep 9	12	Aug 14 1992
INSTANTANEOUS PEAK FLOW			925	Feb 21	936	Jul 18 1996
INSTANTANEOUS PEAK STAGE			16.08	Feb 21	16.13 B	Jul 18 1996
INSTANTANEOUS LOW FLOW			9.0	Jul 14	3.6	Dec 19 1989
ANNUAL RUNOFF (CFSM)	1.88		1.84		1.83	
ANNUAL RUNOFF (INCHES)	25.53		25.05		24.93	
10 PERCENT EXCEEDS	99		77		90	
50 PERCENT EXCEEDS	31		35		31	
90 PERCENT EXCEEDS	21		21		18	

A - Aug. 19, Oct. 7, 1992.

B - From floodmark.

## 05540195 ST. JOSEPH CREEK AT ROUTE 34 AT LISLE, IL

LOCATION.--Lat 41°48'06", long 88°04'08", in SW1/4SW1/4 sec.2, T.38 N., R.10 E., Du Page County, Hydrologic Unit 07120004, on downstream side of bridge on U.S. Highway 34 (Ogden Avenue) in Lisle, and 0.8 mi upstream from confluence of East Branch Du Page River.

DRAINAGE AREA.--11.1 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 660.00 ft above sea level.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Gage-height telemeter and recording rain gage at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	0635	*898	*11.10	Aug. 16	2135	491	8.83

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.8	9.2	2.7	e2.7	32	5.6	16	1.8	9.3	.00	.70
2	1.4	1.6	5.2	3.5	e2.8	18	4.1	13	1.8	3.1	.00	.28
3	.90	1.4	5.3	2.4	e3.0	12	3.5	11	1.7	1.8	33	.09
4	.22	1.2	3.5	e12	e6.0	9.7	3.2	7.0	1.4	1.7	22	.09
5	.07	1.4	5.2	e8.0	e4.5	8.3	13	4.8	1.4	1.1	5.7	.14
6	.03	11	5.1	e5.6	e3.9	6.6	6.6	3.6	9.8	.95	2.5	.10
7	.04	29	3.6	e3.5	e3.4	5.0	3.6	10	9.9	.86	1.8	.09
8	.00	9.2	2.8	e3.0	e3.2	4.3	2.9	15	4.7	.97	1.3	.12
9	.25	5.1	2.4	e2.8	e2.8	7.0	2.4	7.0	3.7	.95	1.0	.01
10	.00	2.9	2.4	e2.6	e2.7	4.8	2.3	4.6	2.5	.65	.95	.02
11	.00	2.5	16	e2.6	e2.5	3.7	17	3.6	14	.63	15	.00
12	.00	1.7	8.7	e2.5	e2.4	3.2	35	3.1	4.7	.44	49	.00
13	.00	1.4	5.5	e2.4	e2.3	3.0	13	2.6	2.7	.53	10	.00
14	.00	1.3	3.7	e2.2	e2.1	4.8	8.3	3.2	1.8	.48	4.3	.01
15	.00	1.0	6.0	e2.1	e2.0	3.1	6.5	2.4	1.5	.70	13	.00
16	4.5	.97	3.6	e2.0	e2.2	3.1	5.9	1.9	20	.72	80	3.1
17	7.5	5.8	2.7	e1.9	e3.1	2.3	5.1	1.8	2.8	.26	171	20
18	2.5	1.3	2.5	e1.8	18	2.0	4.1	17	1.9	33	32	1.5
19	1.3	e1.5	2.5	e1.8	16	1.9	7.0	10	1.1	5.2	10	2.7
20	1.1	e1.7	2.5	e2.2	34	1.9	4.3	4.8	3.0	2.8	6.2	1.4
21	1.0	e1.7	2.4	e4.0	638	1.9	4.0	3.2	2.6	2.8	4.0	.90
22	4.6	e1.6	2.3	e11	154	1.7	3.0	3.4	1.1	1.9	2.7	.63
23	4.1	e2.0	14	e8.0	51	1.6	2.7	2.4	.88	1.2	2.0	.94
24	1.7	e2.3	6.1	e6.0	24	4.4	2.8	6.9	.56	1.1	5.0	.60
25	1.3	e1.8	e4.7	e4.5	16	6.5	2.3	17	44	.96	1.5	.24
26	.84	e1.5	e4.3	e3.5	62	3.2	2.1	4.9	5.3	.81	1.2	.05
27	.16	e1.3	e4.7	e2.9	109	2.5	2.1	3.2	2.1	.48	1.1	.02
28	.10	e1.5	e4.2	e2.5	36	11	1.9	4.6	1.1	.20	1.1	.03
29	17	6.1	e3.6	e2.3	---	18	1.6	3.9	.97	.16	1.0	.06
30	6.2	14	e3.0	e2.2	---	9.5	5.3	2.4	24	.00	.99	.03
31	2.7	---	2.0	e2.5	---	7.7	---	2.1	---	.00	.91	---
TOTAL	61.31	117.57	149.7	117.0	1209.6	204.7	181.2	196.4	174.81	75.75	480.25	33.85
MEAN	1.98	3.92	4.83	3.77	43.2	6.60	6.04	6.34	5.83	2.44	15.5	1.13
MAX	17	29	16	12	638	32	35	17	44	33	171	20
MIN	.00	.97	2.0	1.8	2.0	1.6	1.6	1.8	.56	.00	.00	.00
CFSM	.18	.35	.44	.34	3.89	.59	.54	.57	.52	.22	1.40	.10
IN.	.21	.39	.50	.39	4.05	.69	.61	.66	.59	.25	1.61	.11

e Estimated

## 05540195 ST. JOSEPH CREEK AT ROUTE 34 AT LISLE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	5.59	12.0	5.99	7.76	10.5	11.7	11.4	11.7	9.12	8.02	5.94	5.20
MAX	17.7	24.8	15.1	19.2	43.2	25.1	26.5	37.7	27.6	28.9	15.5	12.2
(WY)	1992	1991	1993	1993	1997	1990	1991	1990	1993	1996	1997	1992
MIN	1.58	3.92	.66	1.79	1.35	4.11	3.56	.67	.50	.67	.97	.046
(WY)	1990	1997	1990	1994	1989	1996	1994	1994	1992	1991	1991	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1989 - 1997		
ANNUAL TOTAL	3179.89			3002.14					
ANNUAL MEAN	8.69			8.23			8.72		
HIGHEST ANNUAL MEAN							12.4		
LOWEST ANNUAL MEAN							4.79		
HIGHEST DAILY MEAN	615	Jul 18		638	Feb 21		638	Feb 21	1997
LOWEST DAILY MEAN	.00	A		.00	A		.00	B	
ANNUAL SEVEN-DAY MINIMUM	.00	C		.01	Sep 9		.00	Aug 19	1992
INSTANTANEOUS PEAK FLOW				898	Feb 21		1280	Jul 18	1996
INSTANTANEOUS PEAK STAGE				11.10	Feb 21		12.89	Jul 18	1996
ANNUAL RUNOFF (CFSM)	.78			.74			.79		
ANNUAL RUNOFF (INCHES)	10.66			10.06			10.68		
10 PERCENT EXCEEDS	16			14			18		
50 PERCENT EXCEEDS	2.9			2.7			3.0		
90 PERCENT EXCEEDS	.00			.21			.26		

A - Many days.

B - At times in most years.

C - July 5, Aug. 29.

## 05540195 ST. JOSEPH CREEK AT U.S. ROUTE 34 AT LISLE, IL--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--July 11, 1989 to current year.

GAGE.--An 8-in.-diameter, unheated, tipping-bucket rain gage

REMARKS.--Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to appreciable errors.

MAXIMUM FOR PERIOD OF RECORD.--Maximum recorded, 3.95 in., July 17, 1996

MAXIMUM FOR WATER YEAR 1996.--Maximum recorded, 3.95 in., July 17, but may have been greater during periods of missing record.

WATER YEAR 1997.--Maximum recorded, 2.82 in., Feb. 21, but may have been greater during periods of missing record.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	---	.00	.00	.00	.00	.00	.00	.73	.00	.00	.00
2	.00	---	.00	.00	.00	.00	.00	.00	.46	.01	.00	.00
3	.04	.00	.00	.00	.00	.00	.00	.18	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.02	.01	.00	.29	.00	.00	.00
5	.10	.00	.04	.00	.00	.35	.00	.02	.01	.00	.00	.00
6	---	.01	.00	.00	.00	.00	.00	.00	.75	.00	.00	.00
7	.00	.01	.00	.00	s .05	.00	.00	.11	.02	.00	.40	.04
8	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00	.30
9	.00	.00	.00	.00	.00	.00	.00	.75	.31	.00	.00	.00
10	.00	2.80	.00	.00	.00	.00	.00	.26	.03	.00	.00	.00
11	.00	s .04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21
12	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.01
13	.08	s .01	.00	s .02	.00	.00	.00	.00	.00	.00	.00	.00
14	.10	.01	s .02	.00	.00	.00	.21	.05	.00	.11	.00	.00
15	.00	.00	s .01	.00	.00	.00	.54	.02	.00	.05	.00	.00
16	.00	.00	.00	.00	.00	.00	.02	.36	1.45	.00	.00	.00
17	.00	.00	.00	s .34	.00	.01	.00	.00	1.70	3.95	.00	.00
18	.00	.00	.00	.53	.00	.00	.55	.00	.00	3.21	.08	.00
19	.95	.00	.00	.00	s .01	.00	.27	.00	.03	.00	.06	.00
20	.46	.00	.00	.00	.00	.00	.00	.32	.00	.00	.00	.01
21	.06	.00	.00	.00	.00	.00	.01	.01	.00	.34	1.01	.02
22	.02	.00	.00	.00	.00	.00	.28	.00	.00	.00	.48	.00
23	.19	.00	.00	.05	.00	.00	.00	.46	.53	.00	.00	.04
24	---	.00	.00	.00	.00	.56	.01	.37	.04	.12	.00	.00
25	---	.00	.00	.00	.00	.00	.19	.14	.00	.00	.00	.00
26	---	.00	.00	.38	.22	.00	.00	.04	.00	.00	.00	2.18
27	---	.10	.00	.00	.44	.00	.00	.46	.00	.00	.00	.04
28	---	.01	.00	.00	.00	.00	.02	1.63	.00	.12	.00	.00
29	---	.00	.00	.00	.00	.00	.50	.00	.00	.32	.00	.00
30	---	s .02	.00	.00	---	.00	.00	.00	.00	1.29	.00	.00
31	---	---	.00	.00	---	.10	---	.00	---	.00	.00	---
TOTAL	---	---	0.07	1.32	0.78	1.04	2.65	5.18	6.35	9.52	2.03	2.85

s Snowfall-affected precipitation

## 05540195 ST. JOSEPH CREEK AT U.S. ROUTE 34 AT LISLE, IL--Continued

## PRECIPITATION RECORDS

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	s.04	.02	.00	.12	---	---	.00	.00	---	.00
2	.00	.00	.00	.00	.00	.00	---	---	.04	.00	---	.00
3	.00	.00	s.13	.01	.00	.00	---	---	.00	.00	---	.00
4	.00	.07	.00	.44	.37	.00	---	---	.00	.00	---	.00
5	.00	.00	s.22	.00	.00	.00	---	---	.00	.00	---	.00
6	.00	.88	s.01	.00	.00	.00	---	---	.08	.00	---	.00
7	.00	.04	.00	.00	.00	.00	---	---	.16	.00	---	.00
8	.06	.04	.00	.00	s.07	.00	---	---	.00	.12	---	.00
9	.00	.00	.00	s.01	s.01	.19	---	.00	.00	.00	---	.00
10	.01	.00	.00	.00	.00	.00	---	.00	.00	.00	---	.00
11	.00	.00	.33	.00	.00	.00	---	.03	.45	.00	---	.00
12	.00	.00	.00	.00	.00	.00	---	.00	.00	.00	---	.00
13	.00	.01	.01	.00	.00	.06	---	.01	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.06	---	.03	.00	.00	.00	.00
15	.00	.00	.13	.00	.00	.00	---	.01	.00	.00	.39	.00
16	.48	.00	.00	.00	.00	.00	---	.00	.73	.00	1.19	.67
17	.32	.26	.00	.00	s.14	.00	---	.00	.00	.00	.80	.13
18	.00	.00	.00	.00	.00	.00	---	.74	.00	---	.01	.00
19	.00	.00	.00	.00	.00	.00	---	.01	.00	---	.00	.23
20	.00	.00	.00	s.13	.96	.00	---	.00	.22	---	.00	.00
21	.00	s.22	.00	s.34	2.82	.00	---	.00	.05	---	.00	.00
22	.36	s.00	.00	.00	s.05	.00	---	.00	.00	---	.00	.05
23	.08	.01	.43	.00	s.01	.00	---	.00	.00	---	.18	.08
24	.00	.14	.00	s.10	.00	.27	---	.33	.00	---	.00	.00
25	.00	.00	.00	.00	.00	.19	---	.32	1.22	---	.00	.00
26	.00	.00	.00	.00	s.78	.00	---	.00	.00	---	.00	.00
27	.00	.00	s.07	.00	s.27	.00	---	.00	.00	---	.00	.00
28	.00	s.07	.00	.00	s.05	1.07	---	.23	.00	---	.00	.00
29	.86	.53	s.02	.00	---	.01	---	.00	.00	---	.00	.00
30	.02	.06	.00	.00	---	---	---	.00	.84	---	.02	.00
31	.00	---	.00	s.11	---	---	---	.00	---	---	.00	---
TOTAL	2.19	2.33	1.39	1.16	5.53	---	---	---	3.79	---	---	1.16

s Snowfall-affected precipitation

## 05540250 EAST BRANCH DU PAGE RIVER AT BOLINGBROOK, IL

LOCATION.--Lat 41°43'05", long 88°04'14", in NE1/4SE1/4 sec.3, T.37 N., R.10 E., Will County, Hydrologic Unit 07120004, on downstream side of bridge on Royce Road, 0.5 mi north of Bolingbrook, 4.8 mi northwest of Lemont, and at mile 6.0.

DRAINAGE AREA.--75.8 mi<sup>2</sup>.

PERIOD OF RECORD.--Annual maximum gage height, water years 1962-70 (published as "at Barbers Corners"). October 1988 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 625.28 ft above sea level. Prior to Oct. 1, 1988, at datum 17.07 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation at low flow caused by sewage treatment plants upstream from station. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	0150	*1,910	*22.55	Aug. 17	Unknown	759	19.56
Feb. 27	1525	665	19.28				

Minimum discharge, 14 ft<sup>3</sup>/s, Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	95	135	66	101	404	117	154	65	160	38	42
2	61	82	113	81	95	339	99	131	69	92	37	41
3	56	68	101	89	99	278	88	153	71	70	54	36
4	54	61	94	154	187	237	84	130	65	63	256	38
5	52	64	92	267	193	207	115	105	62	57	134	33
6	53	110	98	160	138	177	131	90	75	52	86	39
7	56	271	94	114	111	156	98	86	82	49	74	38
8	54	159	86	e90	96	146	86	177	87	50	64	36
9	52	113	78	e81	89	147	79	136	77	54	62	35
10	47	89	74	e81	84	148	75	104	68	51	58	40
11	51	77	124	76	81	130	88	89	e80	49	122	36
12	46	68	132	e70	79	118	285	81	e77	47	301	38
13	49	63	112	e66	71	115	228	73	e68	44	280	36
14	48	60	95	61	67	120	175	69	e63	40	135	34
15	47	57	101	59	62	110	144	68	e60	45	144	30
16	72	57	101	63	61	101	130	63	e250	42	174	37
17	93	79	90	e59	64	96	113	61	e200	41	e660	147
18	110	75	79	e59	134	91	97	70	e120	78	e450	80
19	67	65	70	e58	218	88	105	178	e84	121	e250	63
20	56	58	65	58	204	87	99	123	e72	65	e180	85
21	51	62	64	67	1250	85	88	100	e80	58	132	60
22	62	67	63	347	1660	82	82	83	e75	56	100	52
23	104	63	101	282	1060	79	77	74	e63	54	78	49
24	77	62	145	197	578	77	73	70	56	49	89	46
25	61	68	91	160	352	116	70	147	169	47	66	42
26	53	61	76	117	336	96	64	109	127	48	59	38
27	47	57	72	101	597	82	64	86	84	46	57	38
28	45	57	78	88	509	90	63	78	67	42	50	38
29	94	57	76	80	---	272	61	88	57	40	47	32
30	219	153	71	76	---	171	67	76	108	38	45	36
31	125	---	66	79	---	145	---	69	---	38	42	---
TOTAL	2126	2478	2837	3406	8576	4590	3145	3121	2681	1786	4324	1395
MEAN	68.6	82.6	91.5	110	306	148	105	101	89.4	57.6	139	46.5
MAX	219	271	145	347	1660	404	285	178	250	160	660	147
MIN	45	57	63	58	61	77	61	61	56	38	37	30
CFSM	.90	1.09	1.21	1.45	4.04	1.95	1.38	1.33	1.18	.76	1.84	.61
IN.	1.04	1.22	1.39	1.67	4.21	2.25	1.54	1.53	1.32	.88	2.12	.68

e Estimated



## ILLINOIS RIVER BASIN

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## 05540250 EAST BRANCH DU PAGE RIVER AT BOLINGBROOK, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	72.6	127	89.2	107	111	137	152	138	119	94.6	83.2	70.3
MAX	130	179	135	263	306	208	358	286	239	299	139	114
(WY)	1992	1991	1995	1993	1997	1993	1993	1990	1993	1996	1997	1989
MIN	38.4	44.0	23.5	53.3	42.3	63.5	50.5	43.5	43.6	41.7	38.0	41.1
(WY)	1990	1990	1990	1994	1989	1996	1989	1992	1992	1991	1991	1991

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1989 - 1997	
ANNUAL TOTAL	43695		40465			
ANNUAL MEAN	119		111		108	
HIGHEST ANNUAL MEAN					152	
LOWEST ANNUAL MEAN					76.9	
HIGHEST DAILY MEAN	2700	Jul 18	1660	Feb 22	2700	Jul 18 1996
LOWEST DAILY MEAN	27	Apr 10	30	Sep 15	12	Aug 5 1993
ANNUAL SEVEN-DAY MINIMUM	36	Apr 8	36	Sep 9	18	Aug 16 1992
INSTANTANEOUS PEAK FLOW			1910	Feb 22	3980	Jul 18 1996
INSTANTANEOUS PEAK STAGE			22.55	Feb 22	23.75	Jul 18 1996
INSTANTANEOUS LOW FLOW			14	Sep 11	2.4	Aug 5 1993
ANNUAL RUNOFF (CFSM)	1.58		1.46		1.43	
ANNUAL RUNOFF (INCHES)	21.44		19.86		19.41	
10 PERCENT EXCEEDS	212		177		207	
50 PERCENT EXCEEDS	76		78		71	
90 PERCENT EXCEEDS	48		46		35	

## 05540275 SPRING BROOK AT 87TH STREET NEAR NAPERVILLE, IL

LOCATION.--Lat 41°43'33", long 88°09'46", in SW1/4SW1/4 sec.36, T.38 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on right bank at upstream side of bridge on 87th Street, 3.0 mi south of Naperville, and at mile 2.9.  
DRAINAGE AREA.--9.90 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 647.00 ft above sea level.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1430	*465	*7.32	Aug. 17	1330	104	5.35
Feb. 27	0645	108	5.04				

Minimum discharge, 0.26 ft<sup>3</sup>/s, Aug. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	8.8	10	5.7	e6.8	46	6.4	6.1	3.2	48	.43	1.5
2	7.9	7.0	8.6	6.6	e7.2	38	6.3	7.1	2.9	32	.34	1.7
3	6.0	5.8	7.7	7.2	9.3	31	6.6	9.2	2.7	18	.37	1.2
4	4.8	5.0	7.5	11	25	27	6.9	7.0	2.5	13	4.4	1.2
5	3.4	4.5	7.3	21	21	23	8.8	6.0	2.2	8.4	5.5	1.1
6	3.4	5.9	7.6	17	15	20	12	5.1	2.6	6.7	3.3	1.1
7	2.9	25	7.2	e12	12	18	8.9	4.6	3.2	5.4	2.2	1.1
8	2.0	15	6.5	e9.7	11	17	8.1	8.2	3.2	4.7	2.0	1.1
9	2.3	11	6.0	e8.6	9.4	16	6.6	7.4	2.9	3.9	1.9	1.3
10	1.6	9.5	5.5	e8.8	8.7	16	6.1	6.0	2.4	2.9	2.0	1.1
11	1.1	8.0	13	e8.2	8.0	14	7.9	5.8	3.1	2.6	4.4	.84
12	1.0	6.8	15	e7.6	7.5	12	27	5.8	4.4	2.2	19	.73
13	1.0	5.8	11	e7.0	9.6	10	19	5.0	4.2	1.7	9.9	.57
14	1.0	6.2	9.7	e6.6	6.0	10	15	4.6	3.8	1.4	6.0	.67
15	.99	4.5	12	e6.4	6.3	8.8	13	4.2	3.3	1.1	6.0	.81
16	1.9	4.2	12	e6.3	6.2	8.7	14	3.9	7.4	1.1	7.8	.74
17	4.1	4.4	10	e6.0	7.2	7.9	13	3.8	11	1.0	83	5.4
18	5.3	4.3	13	e6.0	17	6.9	11	3.9	6.0	.88	66	4.2
19	4.2	3.8	10	e6.0	25	6.2	12	9.1	3.8	2.6	31	2.8
20	3.2	3.3	8.0	e6.2	23	6.1	11	8.0	3.1	3.0	14	2.4
21	3.0	3.2	7.9	e8.0	346	5.8	10	6.0	2.7	3.0	13	1.8
22	3.0	3.3	6.7	e36	238	5.4	8.9	5.1	2.3	2.7	11	1.5
23	5.3	4.1	8.8	e33	120	4.8	8.1	4.5	2.0	2.6	8.9	1.8
24	5.1	3.7	15	e22	58	4.8	7.5	4.3	1.7	2.2	6.6	1.8
25	4.4	3.4	21	e15	37	6.4	6.6	7.9	11	1.7	4.7	1.4
26	3.8	4.1	12	e12	48	6.5	e5.4	7.2	10	1.3	3.6	1.2
27	3.4	3.3	8.7	e10	96	6.2	e4.7	6.0	7.2	.93	2.7	1.1
28	2.9	2.8	7.4	e8.5	57	6.4	e4.5	5.1	6.1	.81	2.2	.88
29	5.0	2.8	7.0	e7.4	---	12	4.0	4.8	4.5	.60	1.9	.67
30	18	9.8	6.3	e6.4	---	9.2	4.0	4.2	15	.73	1.8	.50
31	11	---	e5.8	e6.6	---	7.5	---	3.6	---	.60	1.6	---
TOTAL	131.99	189.3	294.2	338.8	1241.2	417.6	283.3	179.5	140.4	177.75	327.54	44.21
MEAN	4.26	6.31	9.49	10.9	44.3	13.5	9.44	5.79	4.68	5.73	10.6	1.47
MAX	18	25	21	36	346	46	27	9.2	15	48	83	5.4
MIN	.99	2.8	5.5	5.7	6.0	4.8	4.0	3.6	1.7	.60	.34	.50
CFSM	.43	.64	.96	1.10	4.48	1.36	.95	.58	.47	.58	1.07	.15
IN.	.50	.71	1.11	1.27	4.66	1.57	1.06	.67	.53	.67	1.23	.17

e Estimated

## 05540275 SPRING BROOK AT 87TH STREET NEAR NAPERVILLE, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1997, BY WATER YEAR (WY)

MEAN	3.90	11.3	9.67	11.1	11.9	13.4	15.4	14.1	11.3	12.2	4.25	4.79
MAX	10.9	20.1	22.6	30.7	44.3	26.1	34.0	46.3	31.3	78.1	10.6	13.6
(WY)	1992	1993	1988	1993	1997	1990	1993	1990	1993	1996	1997	1989
MIN	.70	1.25	.69	4.40	3.22	4.07	4.03	1.57	.78	.39	.22	.36
(WY)	1993	1990	1990	1994	1996	1996	1989	1989	1988	1988	1991	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1988 - 1997	
ANNUAL TOTAL	5225.03		3765.79			
ANNUAL MEAN	14.3		10.3		10.3	
HIGHEST ANNUAL MEAN					15.7	
LOWEST ANNUAL MEAN					6.40	
HIGHEST DAILY MEAN	1370	Jul 18	346	Feb 21	1370	Jul 18 1996
LOWEST DAILY MEAN	.67	Sep 1	.34	Aug 2	.00	Oct 11 1988
ANNUAL SEVEN-DAY MINIMUM	.90	Aug 31	.55	Jul 28	.05	Oct 9 1988
INSTANTANEOUS PEAK FLOW			465	Feb 21	1750	Jul 18 1996
INSTANTANEOUS PEAK STAGE			7.32	Feb 21	10.77	Jul 18 1996
INSTANTANEOUS LOW FLOW			.26	Aug 2,3		
ANNUAL RUNOFF (CFSM)	1.44		1.04		1.04	
ANNUAL RUNOFF (INCHES)	19.63		14.15		14.07	
10 PERCENT EXCEEDS	23		17		25	
50 PERCENT EXCEEDS	4.3		6.0		4.8	
90 PERCENT EXCEEDS	1.3		1.3		.69	

05540275 SPRING BROOK AT 87TH STREET NEAR NAPERVILLE, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY	AGENCY	TEMPER- ATURE WATER (DEG C) (00010)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE D (MG/L) (00530)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	
		COL- LECTING SAMPLE (CODE NUMBER) (00027)	ANA- LYZING SAMPLE (CODE NUMBER) (00028)									
NOV 1996												
06...	1200	81700	80020	9.0	4.6	2.52	582	11.3	7.9	35	0.96	
DEC												
03...	1300	81700	80020	3.5	7.5	2.65	776	13.2	7.8	11	1.2	
JAN 1997												
07...	1200	81700	80020	0.5	e12	3.00	924	9.7	7.7	13	1.9	
FEB												
13...	1215	81700	80020	0.5	8.8	2.70	1230	14.1	7.9	16	1.8	
MAR												
04...	1300	81700	80020	6.0	26	3.12	921	10.8	7.6	28	2.0	
APR												
02...	1230	81700	80020	12.0	6.3	2.55	997	15.0	8.4	8	--	
MAY												
07...	1145	81700	80020	12.0	4.4	2.46	1030	10.7	7.5	8	0.78	
JUN												
10...	1245	81700	80020	21.5	2.3	2.33	1120	8.9	7.7	42	0.66	
JUL												
02...	1230	81700	80020	28.0	33	3.31	--	--	--	135	1.5	
AUG												
19...	1030	81700	80020	21.0	33	3.32	664	6.5	7.5	39	1.2	
DATE		NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOC CI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 1996												
06...	0.070	0.030	0.40	0.70	0.560	0.070	<0.010	<0.010	1600	210	1600	
DEC												
03...	0.100	0.020	0.40	0.70	0.830	0.060	0.020	<0.010	470	280	150	
JAN 1997												
07...	0.150	0.030	0.50	0.60	1.40	0.060	<0.010	<0.010	680	K28	170	
FEB												
13...	0.050	0.040	0.30	0.50	1.50	0.030	<0.010	<0.010	K60	K1	K6	
MAR												
04...	0.110	0.010	0.30	0.60	1.70	0.050	0.010	0.020	1200	K8	36	
APR												
02...	<0.015	0.010	<0.20	0.30	0.640	0.020	<0.010	<0.010	K120	K3	K5	
MAY												
07...	<0.015	0.019	0.22	0.48	0.565	0.048	<0.010	<0.010	370	37	45	
JUN												
10...	0.095	0.034	0.40	0.70	0.263	0.053	0.016	0.017	410	220	93	
JUL												
02...	0.084	0.044	0.69	1.4	0.812	0.216	<0.010	0.015	200	K480	650	
AUG												
19...	0.083	0.034	0.58	1.2	0.671	0.153	<0.010	0.015	4900	780	1200	

## 05540500 DU PAGE RIVER AT SHOREWOOD, IL

LOCATION.--Lat 41°31'20", long 88°11'35", in SE1/4SW1/4 sec.10, T.35 N., R.9 E., Will County, Hydrologic Unit 0712004, on left bank 400 ft upstream from bridge on U.S. Highway 52 at Shorewood, 3.8 mi downstream from Lily Cache Creek and at mile 10.6.

DRAINAGE AREA.--324 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1940 to current year. Published as "at Troy" 1940-65.

REVISED RECORDS.--WSP 1035: 1944. WSP 1055: 1942(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and masonry dam. Datum of gage is 564.62 ft above sea level (Illinois Department of Transportation bench mark). Prior to Apr. 11, 1941, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some effluent from sewage-treatment plants upstream. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	2315	*7,100	*9.14	Feb. 27	1415	2,850	5.25

Minimum discharge, 115 ft<sup>3</sup>/s, Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

## DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	301	409	e210	e300	1960	393	402	221	942	126	158
2	204	251	390	245	e320	1700	345	549	217	522	122	155
3	190	218	335	269	366	1330	310	549	232	343	127	151
4	169	199	313	320	581	1090	291	532	222	263	339	150
5	162	193	308	677	792	934	330	447	205	225	486	149
6	162	237	311	553	566	806	421	371	205	198	295	140
7	161	773	310	396	444	702	359	339	285	181	213	146
8	157	621	296	e320	377	627	306	497	325	179	180	146
9	157	416	275	e280	344	599	294	585	331	189	164	136
10	157	332	258	e250	322	609	283	452	268	196	162	134
11	154	281	294	e230	302	555	283	379	241	177	211	134
12	149	240	508	e210	e280	513	646	344	318	161	573	129
13	149	233	450	e200	e250	485	828	302	262	152	748	132
14	149	219	368	e190	e240	469	651	278	230	147	473	137
15	145	206	339	e185	e230	450	516	264	206	136	332	139
16	157	202	371	e180	e220	407	458	257	282	141	445	129
17	224	205	357	e175	232	380	412	240	490	138	1370	318
18	296	245	306	e175	347	357	370	246	354	144	1500	362
19	248	233	246	e170	771	346	361	509	268	265	1040	238
20	189	218	e220	e170	755	334	386	498	228	253	621	238
21	172	214	e210	e250	5150	330	353	375	220	203	456	236
22	162	216	e220	e500	6400	327	323	313	232	194	366	198
23	227	223	e250	e900	4830	304	300	268	217	181	308	188
24	263	227	e360	e600	2810	292	298	254	195	170	275	168
25	209	233	e280	e470	1700	339	284	316	303	155	255	156
26	186	222	e240	e400	1440	361	274	390	483	153	206	159
27	167	210	e230	e350	2650	317	265	299	307	147	209	153
28	156	210	e240	e320	2470	308	268	266	246	141	193	136
29	174	215	e230	e290	---	452	261	263	202	142	185	141
30	493	299	e220	e280	---	536	254	250	242	138	172	137
31	425	---	e210	e270	---	446	---	229	---	131	167	---
TOTAL	6235	8092	9354	10035	35489	18665	11123	11263	8037	6707	12319	5093
MEAN	201	270	302	324	1267	602	371	363	268	216	397	170
MAX	493	773	508	900	6400	1960	828	585	490	942	1500	362
MIN	145	193	210	170	220	292	254	229	195	131	122	129
CFSM	.62	.83	.93	1.00	3.91	1.86	1.14	1.12	.83	.67	1.23	.52
IN.	.72	.93	1.07	1.15	4.07	2.14	1.28	1.29	.92	.77	1.41	.58

e Estimated

## ILLINOIS RIVER BASIN

## 05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	179	219	240	238	308	470	502	402	306	224	181	172
MAX	1474	788	1257	927	1267	1946	1418	1105	946	1337	1245	908
(WY)	1955	1986	1983	1993	1997	1979	1983	1974	1996	1996	1987	1961
MIN	26.2	27.4	22.7	30.8	28.4	71.2	102	99.5	68.6	45.8	31.2	26.8
(WY)	1957	1957	1964	1954	1964	1945	1963	1958	1963	1956	1941	1946

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1941 - 1997		
ANNUAL TOTAL	161354			142412					
ANNUAL MEAN	441			390			286		
HIGHEST ANNUAL MEAN							564		
LOWEST ANNUAL MEAN							94.2		
HIGHEST DAILY MEAN	11300	Jul	19	6400	Feb	22	11400	Oct	11 1954
LOWEST DAILY MEAN	115 A	Jan	8	122	Aug	2	14	Dec	24 1963
ANNUAL SEVEN-DAY MINIMUM	134	Feb	1	132	Jul	28	15	Dec	27 1963
INSTANTANEOUS PEAK FLOW				7100	Feb	21	17300 B	Jul	18 1996
INSTANTANEOUS PEAK STAGE				9.14	Feb	21	14.03 C	Jul	18 1996
INSTANTANEOUS LOW FLOW				115	Aug	2	.20 D	Nov	17 1955
ANNUAL RUNOFF (CFSM)	1.36			1.20			.88		
ANNUAL RUNOFF (INCHES)	18.53			16.35			12.01		
10 PERCENT EXCEEDS	803			583			618		
50 PERCENT EXCEEDS	240			266			162		
90 PERCENT EXCEEDS	152			153			46		

A - Estimated due to backwater from ice.

B - From rating curve extended above 14,000 ft<sup>3</sup>/s.

C - From floodmark.

D - Result of freezeup.

## 05543500 ILLINOIS RIVER AT MARSEILLES, IL

LOCATION.--Lat 41°19'37", long 88°43'03", in SE1/4SW1/4 sec.13, T.33 N., R.4 E., La Salle County, Hydrologic Unit 07120005, on right bank 0.5 mi downstream from Marseilles Dam in Marseilles, 6.9 mi upstream from Fox River, and at mile 246.5.

DRAINAGE AREA.--8,259 mi<sup>2</sup>, does not include diversion from Lake Michigan through the Chicago Sanitary and Ship Canal, which has occurred since Jan. 17, 1900.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1919 to current year. Prior to October 1939, published as "at Morris."

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 462.91 ft above sea level. October 1919 to January 1935, nonrecording gage at site at Morris, 16.6 mi upstream, at datum 478.50 ft above sea level. January 1935 to September 1939, water-stage recorder at site 300 ft downstream from site used 1919-35 and at that datum.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. Figures of daily discharge include flow through navigation locks. Flow regulated by powerplants and navigation dam above station. Since Jan. 17, 1900, flow has included diversion from Lake Michigan through Chicago Sanitary and Ship Canal. U.S. Army Corps of Engineers satellite telemeter at station. Water temperature and specific conductance continuously recorded at station for the National Water-Quality Assessment Program.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 26.2 ft at Morris occurred in 1831, and a stage of 25.4 ft (ice jam) occurred at present site on Jan. 21, 1916.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 95,000 ft<sup>3</sup>/s, Feb. 22, gage height, 16.85 ft; minimum discharge, 864 ft<sup>3</sup>/s, Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5800	5200	7410	8760	9890	56300	11900	8030	13400	10700	6560	6400
2	4330	4840	7780	7500	9500	49900	10900	9540	13100	10200	6830	6820
3	4510	6080	8070	9570	10200	45100	10100	9690	12400	8940	6150	5390
4	4430	4530	8580	9930	11900	38400	10900	9770	12800	9120	6600	5580
5	4470	4070	8560	11600	18500	33100	10500	9460	11800	8650	7590	5850
6	5010	5380	8450	12700	18500	27800	9970	11900	13300	7950	6850	5060
7	4080	8470	9330	10500	16300	24100	10600	11100	16900	7970	6180	6210
8	4760	7630	7740	9660	14900	21600	9360	11100	23500	7880	5420	5360
9	3970	7360	8060	9290	13400	19100	10300	10100	25400	7320	5750	5800
10	4650	7750	7270	8260	11700	20000	9290	9700	25200	7590	5070	4870
11	4580	6550	8240	6570	11000	20600	9480	9020	24100	7760	7690	4940
12	4500	6740	10200	8090	9870	19300	12700	8450	24500	9060	8360	5730
13	3740	6610	12800	7710	9210	17600	15400	7970	24900	8010	9730	4680
14	3800	6320	12100	6580	8860	17800	14900	7730	24500	7510	9340	5840
15	3870	6700	12000	e5000	8520	20000	12700	7200	22500	6940	8850	5120
16	6070	6550	10800	e5200	8380	18400	11300	7310	25800	6630	10700	6280
17	4680	6580	10000	e5600	7400	17300	11200	6550	33800	7000	21800	7890
18	7030	5730	9900	e5400	8630	16000	10200	7010	31400	6750	24700	7960
19	4940	6420	8620	e5100	14300	14800	10200	10900	24400	10500	19300	7510
20	5250	5860	7330	e4800	18900	13500	9740	11800	20200	9000	15800	7330
21	4280	5780	6440	e6200	49900	13300	9520	10700	20000	8440	13900	7390
22	5830	5610	7540	e8600	89600	12700	8880	9460	16700	7740	11700	5520
23	5260	5490	8690	e11000	80200	12400	8670	9530	16400	8590	10200	5140
24	6210	5670	13000	e14000	60500	11400	9210	8970	14200	8860	9150	5740
25	6040	6140	11700	15800	48300	12000	7950	10600	13300	10400	8700	5660
26	5220	5900	9380	14100	41000	11400	7960	11600	13000	9530	8560	5580
27	5390	5680	9750	13000	54200	11200	7760	12500	12500	10600	7730	5630
28	4420	6000	10800	11400	63600	10400	7590	13100	11500	9980	6500	5910
29	6150	5990	9770	10800	---	12300	6780	13800	11000	8490	7380	4390
30	6740	7120	9310	10100	---	12200	6510	14600	10300	8660	7420	4820
31	7170	---	8520	9610	---	12900	---	13600	---	7570	6310	---
TOTAL	157180	184750	288140	282430	727160	642900	302470	312790	562800	264340	296820	176400
MEAN	5070	6158	9295	9111	25970	20740	10080	10090	18760	8527	9575	5880
MAX	7170	8470	13000	15800	89600	56300	15400	14600	33800	10700	24700	7960
MIN	3740	4070	6440	4800	7400	10400	6510	6550	10300	6630	5070	4390

e Estimated

## ILLINOIS RIVER BASIN

## 05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 1997, BY WATER YEAR (WY)

MEAN	7640	8712	9931	10080	11690	15170	16290	13720	11710	9265	7887	7846
MAX	21050	24180	30100	28430	25970	41290	33180	35180	25940	21020	19220	27770
(WY)	1927	1986	1983	1993	1997	1979	1922	1943	1993	1957	1924	1993
MIN	3518	3720	3739	3202	3264	5153	6516	5649	4346	4687	4242	3522
(WY)	1975	1977	1944	1963	1963	1964	1986	1988	1988	1988	1939	1976

## SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1920 - 1997

ANNUAL TOTAL	3834660		4198180									
ANNUAL MEAN	10480		11500							10820		
HIGHEST ANNUAL MEAN										17850		1993
LOWEST ANNUAL MEAN										5583		1964
HIGHEST DAILY MEAN	71900	Jul 19	89600	Feb 22	89600	Feb 22	1997					
LOWEST DAILY MEAN	3120	Jan 6	3740	Oct 13	1460	Oct 16	1943					
ANNUAL SEVEN-DAY MINIMUM	3460	Jan 6	4160	Oct 9	2570	Jan 26	1940					
INSTANTANEOUS PEAK FLOW			95000	Feb 22	95000	Feb 22	1997					
INSTANTANEOUS PEAK STAGE			16.85	Feb 22	16.85	Feb 22	1997					
INSTANTANEOUS LOW FLOW			864	Aug 2								
10 PERCENT EXCEEDS	22200		19300		19400							
50 PERCENT EXCEEDS	6670		8880		9020							
90 PERCENT EXCEEDS	4260		5240		4590							



## 05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to January 1997. (Discontinued).

## WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY	AGENCY	GAGE	DIS-	STREAM	NUMBER	TEMPER-	SPE-	PH	OXYGEN,	CYGEN,
		COL-	ANA-		CHARGE,		OF		CIFIC	WATER		DIS-
		LECTING	LYZING		INST.		SAM-		CON-	WHOLE		FIELD
SAMPLE	SAMPLE	HEIGHT	FEET	WIDTH	PLING	ATURE	DUCT-	(STAND-	ARD	SOLVED	SATUR-	
(CODE	(CODE	(FEET)	PER	(FT)	POINTS	WATER	ANCE	ARD	SOLVED	(MG/L)	(CENT	
NUMBER)	NUMBER)	(00065)	SECOND	(00004)	(COUNT)	(DEG C)	(US/CM)	UNITS)	(00300)	(00301)	(00301)	
(00027)	(00028)											
NOV 1996												
04...	0950	81700	80020	1.65	5020	600	10	9.0	800	8.1	11.6	100
20...	1150	81700	80020	2.04	6490	600	10	6.5	1370	7.9	12.6	102
DEC												
11...	1200	81700	80020	2.25	7260	600	10	4.0	900	7.9	12.0	92
JAN 1997												
28...	1100	81700	80020	3.15	11000	550	2	0.0	1100	7.3	6.3	31

## ILLINOIS RIVER BASIN

## 05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
NOV 1996												
04...	0.024	<0.002	<0.006	0.056	<0.001	<0.017	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
20...	0.019	<0.002	<0.006	0.054	<0.001	<0.017	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
DEC												
11...	0.049	<0.002	<0.006	0.039	<0.001	<0.017	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
JAN 1997												
28...	0.132	<0.002	<0.006	<0.002	<0.001	<0.017	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
DATE	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
NOV 1996												
04...	<0.005	0.253	<0.004	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	0.023
20...	<0.005	0.079	<0.004	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	0.020
DEC												
11...	<0.005	0.114	<0.004	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	E0.015
JAN 1997												
28...	<0.005	0.219	<0.004	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	0.024
DATE	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	
NOV 1996												
04...	<0.003	<0.007	<0.004	<0.013	0.015	0.019	<0.007	<0.013	<0.002	<0.001	<0.002	
20...	<0.003	<0.007	<0.004	<0.013	0.058	E0.009	<0.007	<0.013	<0.002	<0.001	<0.002	
DEC												
11...	<0.003	<0.007	<0.004	<0.013	0.014	E0.008	<0.007	<0.013	<0.002	<0.001	<0.002	
JAN 1997												
28...	<0.003	<0.007	<0.004	<0.013	0.012	E0.020	<0.007	<0.013	<0.002	<0.001	<0.002	

## 05545750 FOX RIVER NEAR NEW MUNSTER, WI

LOCATION.--Lat 42°36'39", long 88°13'33", in NW 1/4 NW 1/4 sec.26, T.2 N., R.19 E., Kenosha County, Hydrologic Unit 07120006, on right bank 40 ft downstream from bridge on County Trunk Highway JB, 2.2 mi north of New Munster, and 17.0 mi upstream from Fox Chain of Lakes.

DRAINAGE AREA.--811 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1993, published as "at Wilmot" under station number 05546500.

REVISED RECORDS.--WSP 1308: 1943(M), 1945(M). WDR WI-67-1: Drainage area. WDR WI-92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is 735.72 ft above sea level (Racine County Surveyor bench mark). Prior to Sept. 1, 1965, nonrecording gage at bridge in Wilmot 11 mi downstream at datum 0.50 ft lower, and recording gage Sept. 1, 1965 to Sept. 30, 1993.

REMARKS.--Estimated daily discharges: Feb. 24, 25, and ice-affected periods, Nov. 9-16, 25-30, Dec. 17 to Jan. 3, Jan. 6-22, and Jan. 25 to Feb. 18. Records are good, except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	649	419	330	370	1720	712	575	435	1330	266	435
2	193	667	446	400	360	2070	633	696	411	1240	169	349
3	213	634	496	560	360	2130	629	933	366	1060	196	278
4	227	594	486	721	360	1950	616	997	253	934	258	234
5	215	582	456	754	360	1660	470	894	252	884	291	282
6	192	463	432	600	350	1370	540	871	279	832	227	226
7	204	404	397	560	340	1190	580	883	283	805	233	192
8	241	276	372	520	330	1120	658	829	293	774	241	195
9	237	290	358	450	320	1070	553	854	301	809	226	199
10	248	290	352	420	320	1040	513	844	314	791	218	209
11	251	280	333	410	310	1000	416	693	253	669	218	233
12	178	270	422	380	300	977	455	656	215	676	247	202
13	241	270	440	350	290	933	489	576	264	674	261	183
14	231	270	464	290	290	903	521	325	236	670	299	190
15	194	270	480	290	280	862	564	466	224	622	311	199
16	229	280	510	290	270	816	575	496	614	548	311	212
17	257	344	500	290	270	797	656	456	1070	375	360	388
18	289	305	410	280	450	746	616	435	841	372	411	426
19	359	313	440	290	1340	710	591	453	742	474	330	377
20	445	324	370	290	1570	652	566	507	644	440	332	732
21	460	331	340	320	2000	647	583	478	800	399	310	677
22	430	342	340	500	3130	670	607	406	1340	378	265	422
23	363	330	360	767	2900	728	596	321	1220	386	250	369
24	400	314	390	746	2600	693	539	294	1050	369	342	374
25	393	300	360	640	2120	724	510	411	1080	336	452	348
26	382	300	350	540	1920	774	469	547	1230	330	491	327
27	366	300	340	480	1800	725	475	448	1290	359	472	304
28	319	300	340	450	1700	749	451	277	1360	369	534	288
29	310	310	340	420	---	755	400	313	1360	376	508	259
30	553	360	340	370	---	770	345	417	1320	326	504	144
31	667	---	340	370	---	766	---	460	---	321	481	---
TOTAL	9582	10962	12423	14078	27010	31717	16328	17811	20340	18928	10014	9253
MEAN	309	365	401	454	965	1023	544	575	678	611	323	308
MAX	667	667	510	767	3130	2130	712	997	1360	1330	534	732
MIN	178	270	333	280	270	647	345	277	215	321	169	144
CFSM	.38	.45	.49	.56	1.19	1.26	.67	.71	.84	.75	.40	.38
IN.	.44	.50	.57	.65	1.24	1.45	.75	.82	.93	.87	.46	.42

## ILLINOIS RIVER BASIN

## 05545750 FOX RIVER NEAR NEW MUNSTER, WI--Continued --

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	386	483	457	420	517	1133	1074	690	515	388	328	339
MAX	1931	1536	1755	1818	1354	2434	3591	2078	1711	1382	902	1763
(WY)	1987	1986	1983	1960	1974	1979	1993	1973	1996	1969	1952	1972
MIN	79.5	113	91.4	87.7	105	252	256	108	124	69.2	57.2	62.7
(WY)	1957	1950	1964	1940	1940	1968	1958	1958	1988	1958	1958	1946

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1940 - 1997	
ANNUAL TOTAL	209603		198446			
ANNUAL MEAN	573		544		561	
HIGHEST ANNUAL MEAN					1240	
LOWEST ANNUAL MEAN					174	
HIGHEST DAILY MEAN	2890	Jun 20	3130	Feb 22	7100	Apr 1 1960
LOWEST DAILY MEAN	123	Sep 21	144	Sep 30	35	Sep 9 1958
ANNUAL SEVEN-DAY MINIMUM	170	Sep 17	202	Sep 8	41	Sep 7 1958
INSTANTANEOUS PEAK FLOW			3260	Feb 22	(a) 7520	Mar 31 1960
INSTANTANEOUS PEAK STAGE			12.60	Feb 22	(b) 14.10	Feb 21 1994
INSTANTANEOUS LOW FLOW			126	Sep 30	.00	(c) Oct 26 1945
ANNUAL RUNOFF (CFSM)	.71		.67		.69	
ANNUAL RUNOFF (INCHES)	9.61		9.10		9.40	
10 PERCENT EXCEEDS	1260		951		1260	
50 PERCENT EXCEEDS	397		411		360	
90 PERCENT EXCEEDS	200		241		123	

A - Gage height, 9.25 ft, from graph based on gage readings, site and datum then in use

B - Backwater from ice

C - Also occurred Aug. 10, 1990

## 05547000 CHANNEL LAKE NEAR ANTIOCH, IL

LOCATION.--Lat 42°28'20", long 88°08'50", in NW1/4NE1/4 sec.14, T.46 N., R.9 E., Lake County, Hydrologic Unit 07120006, on right bank 30 ft downstream from bridge on State Highway 173, at dredged channel outlet of Channel Lake, 0.8 mi south west of natural outlet, and 3 mi west of Antioch.

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft above sea level (levels by Illinois Department of Transportation). Prior to Oct. 1, 1971, at datum 2.21 ft higher.

REMARKS.--Stage regulated by Stratton Lock and Dam (previously known as McHenry Dam). Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.29 ft, present datum, Apr. 6, 1960; minimum, 1.65 ft, Jan. 25, 26, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.32 ft, Mar. 4; minimum recorded, 2.53 ft, Dec. 30-Jan. 1, may have been lower during periods of missing record, Jan. 11-19 and June 30-Feb. 20.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.26	4.19	2.66	2.53	---	5.17	4.28	4.11	4.09	4.66	4.18	4.33
2	4.21	4.12	2.67	2.56	---	5.20	4.25	4.22	4.05	4.72	4.14	4.26
3	4.15	4.14	2.67	2.59	---	5.25	4.17	4.29	4.05	4.64	4.10	4.18
4	4.15	4.10	2.69	2.65	---	5.30	4.18	4.40	4.04	4.50	4.07	4.16
5	4.15	4.01	2.69	2.90	---	5.25	4.16	4.53	4.03	4.44	4.07	4.18
6	4.19	4.00	2.69	2.92	---	5.13	4.42	4.42	4.01	4.37	4.09	4.17
7	4.06	3.89	2.69	2.90	---	4.96	4.12	4.42	4.01	4.30	4.07	4.11
8	4.06	3.78	2.69	2.91	---	4.75	3.95	4.53	3.99	4.30	4.08	4.09
9	4.10	3.69	2.69	2.93	---	4.58	3.96	4.41	3.99	4.26	4.10	4.08
10	4.05	3.60	2.67	3.00	---	4.47	4.00	4.42	4.05	4.29	4.10	4.04
11	4.15	3.54	2.67	---	---	4.27	3.98	4.54	4.09	4.29	4.06	4.05
12	4.16	3.52	2.66	---	---	4.10	4.00	4.37	4.14	4.29	4.13	4.06
13	4.13	3.50	2.65	---	---	3.92	4.10	4.28	4.14	4.32	4.14	4.06
14	4.07	3.48	2.65	---	---	3.87	4.16	4.25	4.11	4.32	4.17	4.05
15	4.12	3.46	2.65	---	---	3.85	4.26	4.19	4.21	4.34	4.27	4.04
16	4.14	3.45	2.65	---	---	3.79	4.20	4.25	e4.42	4.36	4.25	4.09
17	4.23	3.57	2.66	---	---	3.70	4.20	4.20	---	4.34	4.34	4.19
18	4.22	3.37	2.68	---	---	3.56	4.23	4.25	---	4.33	4.36	4.28
19	4.19	3.28	2.68	---	---	3.65	4.24	4.34	---	4.34	4.36	4.32
20	4.21	3.19	2.68	e2.99	---	3.66	4.25	4.35	e4.76	4.39	4.34	4.30
21	4.25	3.14	2.68	2.83	e3.37	3.72	4.22	4.34	4.70	4.40	4.28	4.36
22	4.25	3.08	2.69	2.86	3.99	3.73	4.16	4.30	4.68	4.36	4.25	4.36
23	4.32	3.03	2.69	2.86	4.57	3.78	4.14	4.24	4.70	4.36	4.24	4.29
24	4.25	2.90	2.65	2.91	4.98	3.90	4.12	4.22	4.73	4.34	4.27	4.25
25	4.22	2.85	2.63	2.95	5.17	4.03	4.09	4.23	4.68	4.35	4.25	4.19
26	4.17	2.81	2.63	2.97	5.22	4.17	4.05	4.25	4.59	4.33	4.28	4.14
27	4.19	2.79	2.61	2.98	5.23	4.23	4.02	4.29	4.56	4.30	4.30	4.16
28	4.11	2.74	2.58	2.99	5.20	4.24	4.03	4.28	4.56	4.24	4.29	4.17
29	4.15	2.67	2.56	3.00	---	4.25	4.12	4.26	4.56	4.18	4.30	4.21
30	4.33	2.66	2.54	---	---	4.26	4.04	4.21	4.62	4.17	4.34	4.10
31	4.23	---	2.54	---	---	4.27	---	4.16	---	4.17	4.32	---
MEAN	4.18	3.42	2.65	---	---	4.29	4.14	4.31	---	4.35	4.21	4.18
MAX	4.33	4.19	2.69	---	---	5.30	4.42	4.54	---	4.72	4.36	4.36
MIN	4.05	2.66	2.54	---	---	3.56	3.95	4.11	---	4.17	4.06	4.04

e Estimated

## 05547500 FOX LAKE NEAR LAKE VILLA, IL

LOCATION.--Lat 42°25'10", long 88°07'35", in SE1/4SE1/4 sec.36, T.46 N., R.9 E., Lake County, Hydrologic Unit 07120006, on east shore of Columbia Bay of Fox Lake, 2.5 mi west of Lake Villa.

PERIOD OF RECORD.--October 1939 to current year (gauge heights only).

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft above sea level (levels by Illinois Department of Transportation). Prior to Dec. 15, 1939, nonrecording gage at same site at datum 2.26 ft higher. Dec. 15, 1939, to Sept. 30, 1971, at datum 2.26 ft higher.

REMARKS.--Stage regulated by Stratton lock and Dam (previously known as McHenry Dam). Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.18 ft, present datum, Apr. 6, 1960; minimum, 1.83 ft, present datum, Jan. 11-14, 16-18, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.22 ft, Mar. 4; minimum recorded, 2.47 ft, Dec. 30. may have been lower during periods of missing record, Feb. 13-18 and Feb. 20-Mar. 2.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.16	4.15	2.64	2.49	2.91	---	4.21	4.13	4.08	4.60	4.13	4.28
2	4.20	4.10	2.64	2.55	2.90	---	4.18	4.15	4.05	4.64	4.12	4.25
3	4.18	4.06	2.67	2.58	2.90	e5.18	4.14	4.28	4.04	4.60	4.07	4.19
4	4.15	4.01	2.68	2.64	2.90	5.21	4.09	4.35	4.01	4.50	4.06	4.14
5	4.13	3.98	2.68	2.80	2.89	5.19	4.03	4.47	3.98	4.40	4.08	4.10
6	4.13	3.94	2.67	2.86	2.86	5.07	4.23	4.42	3.96	4.33	4.06	4.10
7	4.13	3.90	2.66	2.86	2.82	4.88	4.08	4.35	3.97	4.25	4.05	4.08
8	4.11	3.81	2.64	2.87	2.76	4.69	3.98	4.46	3.98	4.23	4.04	4.06
9	4.09	3.71	2.60	2.91	2.69	4.54	3.95	4.47	3.99	4.25	4.03	4.05
10	4.09	3.64	2.59	2.94	2.64	4.38	3.94	4.40	4.03	4.25	4.05	4.04
11	4.09	3.57	2.60	2.94	2.58	4.22	3.96	4.43	4.08	4.25	4.05	4.03
12	4.10	3.52	2.61	2.96	2.54	4.05	4.01	4.38	4.11	4.24	4.09	4.02
13	4.09	3.48	2.61	2.95	---	3.87	4.08	4.25	4.14	4.26	4.12	4.01
14	4.09	3.43	2.61	2.92	---	3.87	4.09	4.21	4.13	4.28	4.12	4.01
15	4.09	3.39	2.69	2.89	---	3.80	4.15	4.19	4.14	4.31	4.19	4.00
16	4.10	3.37	2.71	2.89	---	3.67	4.19	4.18	4.58	4.32	4.20	4.00
17	4.14	3.39	2.71	2.88	---	3.61	4.20	4.17	4.69	4.32	4.32	4.15
18	4.21	3.33	2.70	2.85	---	3.56	4.19	4.18	4.78	4.31	4.35	4.16
19	4.21	3.26	2.64	2.82	e2.67	3.60	4.20	4.32	4.77	4.33	4.33	4.22
20	4.19	3.17	2.59	2.78	---	3.62	4.20	4.33	4.69	4.35	4.32	4.27
21	4.21	3.14	2.57	2.76	---	3.69	4.20	4.30	4.61	4.41	4.29	4.30
22	4.21	3.08	2.57	2.77	---	3.75	4.18	4.24	4.60	4.37	4.23	4.31
23	4.24	3.01	2.57	2.80	---	3.79	4.15	4.19	4.63	4.36	4.18	4.25
24	4.24	2.95	2.57	2.85	---	3.81	4.11	4.17	4.62	4.33	4.22	4.18
25	4.19	2.90	2.57	2.91	---	3.99	4.07	4.23	4.61	4.30	4.21	4.14
26	4.17	2.81	2.55	2.93	---	4.08	4.01	4.24	4.56	4.29	4.23	4.10
27	4.16	2.70	2.53	2.95	---	4.13	3.99	4.26	4.52	4.27	4.24	4.09
28	4.12	2.66	2.51	2.96	---	4.16	3.99	4.22	4.50	4.24	4.25	4.10
29	4.08	2.63	2.49	2.96	---	4.22	4.01	4.18	4.50	4.20	4.25	4.16
30	4.27	2.63	2.49	2.94	---	4.22	4.00	4.16	4.55	4.17	4.26	4.09
31	4.17	---	2.48	2.92	---	4.24	---	4.13	---	4.14	4.27	---
MEAN	4.15	3.39	2.61	2.84	---	---	4.09	4.27	4.33	4.33	4.17	4.13
MAX	4.27	4.15	2.71	2.96	---	---	4.23	4.47	4.78	4.64	4.35	4.31
MIN	4.08	2.63	2.48	2.49	---	---	3.94	4.13	3.96	4.14	4.03	4.00

e Estimated

## 05547755 SQUAW CREEK AT ROUND LAKE, IL

LOCATION.--Lat 42°21'00", long 88°05'13", in SW1/4NE1/4 sec.29, T.45 N., R.10 E., Lake County, Hydrologic Unit 07120006, on left bank at upstream side of bridge on MacGillis Road at Round Lake, and at mile 7.5.

DRAINAGE AREA.--17.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 764.94 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1755	*232	*5.45	May 25	1540	100	3.62
Mar. 01	1650	168	4.58				

Minimum discharge, 0.10 ft<sup>3</sup>/s, Oct. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.57	3.8	3.0	e2.2	e4.6	155	15	76	8.0	e25	.52	2.0
2	.81	2.7	2.5	e4.0	e4.6	147	13	75	6.8	e10	.40	1.8
3	.67	1.9	2.0	8.7	e5.8	110	12	87	6.3	e5.0	.37	1.4
4	.46	1.5	1.6	14	e12	86	12	67	5.6	e3.3	.69	.91
5	.40	1.3	1.5	17	e14	73	13	51	4.9	e2.7	.47	.68
6	.41	1.6	e1.3	14	e9.7	61	14	37	5.6	e2.3	.38	.53
7	.39	1.1	e1.2	e6.6	e7.0	52	13	33	9.2	e2.2	.39	.36
8	.51	.93	e1.1	e5.2	e6.6	46	13	67	5.3	e3.8	.54	.48
9	.47	.77	e1.0	e4.2	e5.1	44	12	56	4.1	e2.3	.43	.50
10	.43	1.0	1.0	e3.4	e4.0	41	11	40	2.9	e1.4	.39	.41
11	.42	1.0	15	e3.0	e3.4	35	17	32	5.7	e.92	.62	.58
12	.36	.53	22	e2.6	e3.0	30	20	26	9.4	e.66	1.4	.58
13	.33	.50	14	e2.3	e3.1	27	29	19	6.9	e.54	.82	.71
14	.32	.50	10	e2.2	e2.7	27	38	17	9.2	e1.4	.71	.51
15	.31	.63	9.6	e2.0	e2.5	26	30	17	5.4	.94	1.1	.58
16	.46	.65	8.1	e1.9	e2.6	25	24	14	21	1.0	1.3	1.1
17	.61	.78	6.3	e1.8	e2.9	19	20	13	15	.95	4.9	3.6
18	.36	.77	e4.7	e1.7	e11	19	17	14	11	2.2	4.6	2.8
19	.31	.71	e4.0	e1.8	e34	17	17	17	8.3	1.5	3.2	4.7
20	.27	.61	e3.6	e1.9	38	15	15	15	2.6	1.3	2.6	2.4
21	.18	.70	e3.4	e3.0	203	14	16	13	3.3	2.0	2.0	1.7
22	.54	.68	3.6	e30	211	14	15	11	4.0	1.5	1.5	1.2
23	.47	.83	6.4	e28	166	13	24	9.3	1.7	2.3	1.7	.97
24	.34	1.3	e4.6	e18	116	13	16	12	1.2	1.9	3.8	.74
25	.32	1.4	e3.5	e9.0	90	28	11	85	e2.3	1.5	2.9	.55
26	.32	1.1	e2.6	e5.7	79	29	9.4	72	e1.6	1.1	2.0	.52
27	.28	.96	e2.3	e4.2	103	24	9.5	41	e1.2	1.1	1.3	.41
28	.28	.84	e2.8	e3.5	104	22	9.9	23	e1.1	1.2	1.5	.34
29	3.3	1.1	e2.4	e3.0	---	20	9.3	17	e1.8	.94	1.1	.38
30	5.9	2.5	e2.1	e2.6	---	19	22	12	e8.8	.68	1.4	.52
31	5.3	---	e1.9	e3.0	---	17	---	9.8	---	.57	2.1	---
TOTAL	26.10	34.69	149.1	210.5	1248.6	1268	497.1	1078.1	180.2	84.20	47.13	33.96
MEAN	.84	1.16	4.81	6.79	44.6	40.9	16.6	34.8	6.01	2.72	1.52	1.13
MAX	5.9	3.8	22	30	211	155	38	87	21	25	4.9	4.7
MIN	.18	.50	1.0	1.7	2.5	13	9.3	9.3	1.1	.54	.37	.34
CFSM	.05	.07	.28	.40	2.62	2.41	.97	2.05	.35	.16	.09	.07
IN.	.06	.08	.33	.46	2.73	2.77	1.09	2.36	.39	.18	.10	.07

e Estimated

## ILLINOIS RIVER BASIN

## 05547755 SQUAW CREEK AT ROUND LAKE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

MEAN	2.64	14.8	13.3	13.2	21.8	30.3	30.4	29.7	17.3	10.2	2.77	2.63
MAX	8.55	33.6	26.6	30.3	44.6	45.8	79.4	99.6	74.4	54.0	7.60	12.9
(WY)	1991	1993	1992	1993	1997	1990	1993	1996	1996	1993	1990	1992
MIN	.40	1.16	.98	3.14	10.9	7.56	9.33	3.36	.76	.44	.19	.11
(WY)	1995	1997	1990	1994	1995	1996	1994	1994	1992	1991	1991	1994

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1990 - 1997	
ANNUAL TOTAL	7624.82		4857.68			
ANNUAL MEAN	20.8		13.3		15.7	
HIGHEST ANNUAL MEAN					27.6	
LOWEST ANNUAL MEAN					9.47	
HIGHEST DAILY MEAN	284	May 21	211	Feb 22	284	May 21 1996
LOWEST DAILY MEAN	.18	Oct 21	.18	Oct 21	.00	A
ANNUAL SEVEN-DAY MINIMUM	.35	Oct 19	.35	Oct 19	.00	Sep 10 1994
INSTANTANEOUS PEAK FLOW			232	Feb 21	312 B	Jul 18 1993
INSTANTANEOUS PEAK STAGE			5.45	Feb 21	6.42	Jul 18 1993
INSTANTANEOUS LOW FLOW			.10	Oct 21		
ANNUAL RUNOFF (CFSM)	1.23		.78		.92	
ANNUAL RUNOFF (INCHES)	16.68		10.63		12.54	
10 PERCENT EXCEEDS	67		31		37	
50 PERCENT EXCEEDS	5.6		3.0		6.8	
90 PERCENT EXCEEDS	.60		.50		.48	

A - No flow at times in 1991 and 1994.

B - From rating curve extended above 120 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.



## 05548000 NIPPERSINK LAKE AT FOX LAKE, IL

LOCATION.--Lat 42°24'10", long 88°10'55", in SE1/4SE1/4 sec.4, T.45 N., R.9 E., Lake County, Hydrologic Unit 07120006, on east shore of Nippersink Lake, 350 ft upstream from bridge on U.S. Route 12 and 300 ft upstream from railroad bridge in village of Fox Lake, and at mile 106.4.

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft above sea level (levels by Illinois Department of Transportation). Prior to Dec. 16, 1939, nonrecording gage at same site at datum 2.13 ft higher. Dec. 16, 1939, to Sept. 30, 1971, at datum 2.13 ft higher.

REMARKS.--Stage regulated by Stratton Lock and Dam (previously known as McHenry Dam). Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.12 ft, present datum, Apr. 5, 1960; minimum observed, 1.70 ft, Feb. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.19 ft, Mar. 4; minimum, 2.39 ft, Dec. 30, 31.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.13	4.03	2.56	2.41	2.88	5.07	4.17	4.07	4.10	4.54	4.08	4.20
2	4.15	4.02	2.57	2.44	2.87	5.09	4.13	4.17	4.07	4.50	4.07	4.20
3	4.13	3.97	2.59	2.50	2.84	5.15	4.09	4.26	4.04	4.46	4.03	4.15
4	4.10	3.93	2.60	2.58	2.85	5.18	4.03	4.29	3.99	4.43	4.03	4.08
5	4.08	3.91	2.60	2.68	2.84	5.16	3.97	4.29	3.94	4.32	4.05	4.03
6	4.07	3.85	2.59	2.77	2.81	5.04	3.78	4.34	3.93	4.26	4.01	4.03
7	4.10	3.80	2.57	2.78	2.76	4.88	3.83	4.31	3.94	4.23	3.99	4.04
8	4.07	3.71	2.53	2.79	2.72	4.69	3.89	4.32	3.99	4.19	3.98	4.03
9	4.04	3.61	2.50	2.84	2.67	4.49	3.90	4.37	3.99	4.23	3.97	4.01
10	4.06	3.53	2.48	2.89	2.60	4.32	3.92	4.33	4.01	4.22	3.98	4.01
11	4.04	3.49	2.52	2.89	2.53	4.20	3.98	4.24	4.05	4.21	4.02	3.99
12	4.04	3.45	2.52	2.89	2.50	4.05	4.04	4.24	4.08	4.20	4.05	3.97
13	4.05	3.44	2.51	2.87	2.46	3.89	4.04	4.20	4.12	4.19	4.08	3.96
14	4.07	3.41	2.53	2.87	2.45	3.80	4.04	4.14	4.11	4.20	4.07	3.96
15	4.04	3.35	2.55	2.83	2.41	3.72	4.05	4.12	4.08	4.21	4.09	3.95
16	4.04	3.31	2.59	2.82	2.42	3.64	4.12	4.10	4.54	4.22	4.14	3.95
17	4.07	3.20	2.61	2.79	2.42	3.56	4.15	4.14	4.68	4.23	4.28	4.07
18	4.09	3.21	2.62	2.78	2.43	3.60	4.15	4.15	4.74	4.24	4.30	4.08
19	4.11	3.19	2.57	2.77	2.57	3.56	4.16	4.26	4.72	4.28	4.28	4.13
20	4.13	3.11	2.51	2.73	2.76	3.57	4.16	4.27	4.60	4.28	4.25	4.22
21	4.16	3.06	2.48	2.71	3.32	3.62	4.18	4.26	4.55	4.35	4.22	4.23
22	4.16	3.00	2.48	2.72	3.89	3.70	4.16	4.22	4.55	4.33	4.18	4.23
23	4.16	2.92	2.48	2.74	4.47	3.77	4.12	4.15	4.57	4.31	4.12	4.20
24	4.12	2.86	2.48	2.79	4.87	3.82	4.08	4.14	4.52	4.26	4.17	4.12
25	4.10	2.81	2.48	2.85	5.03	3.91	4.04	4.27	4.51	4.23	4.17	4.07
26	4.09	2.71	2.48	2.88	5.07	3.97	3.97	4.29	4.48	4.21	4.18	4.06
27	4.05	2.63	2.45	2.90	5.11	4.04	3.95	4.27	4.46	4.21	4.18	4.05
28	4.04	2.59	2.44	2.91	5.09	4.11	3.95	4.21	4.45	4.20	4.20	4.04
29	4.03	2.54	2.44	2.91	---	4.15	3.91	4.12	4.45	4.17	4.20	4.01
30	3.99	2.53	2.41	2.90	---	4.19	3.97	4.09	4.50	4.12	4.19	4.02
31	4.02	---	2.40	2.88	---	4.21	---	4.10	---	4.10	4.20	---
MEAN	4.08	3.31	2.52	2.78	3.20	4.20	4.03	4.22	4.29	4.26	4.12	4.07
MAX	4.16	4.03	2.62	2.91	5.11	5.18	4.18	4.37	4.74	4.54	4.30	4.23
MIN	3.99	2.53	2.40	2.41	2.41	3.56	3.78	4.07	3.93	4.10	3.97	3.95

CAL YR 1996 MEAN 3.67 MAX 5.41 MIN 2.16  
WTR YR 1997 MEAN 3.76 MAX 5.18 MIN 2.40

## 05548105 NIPPERSINK CREEK ABOVE WONDER LAKE, IL

LOCATION.-- Lat 42° 23' 07" ,long 88° 22' 09", in NE1/4, NW 1/4, sec. 13, T. 45N., R. 7E., McHenry County, Hydrologic Unit 07120006, on left bank at downstream side of bridge on Thompson Road, at west edge of Wonder Lake and 1.1 miles east of Greenwood, and at mile 19.7.

DRAINAGE AREA.-- 84.5 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- Annual maximum water years 1965 to 1977. June 13, 1994 to September 30, 1997 (discontinued).

GAGE.-- Water-stage recorder and crest-stage gage. Datum of gage is 798.00 ft above sea level. Prior to June 13, 1994, at datum 8.31 ft higher.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are fair. Recording rain gage and gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.-- Maximum gage height, 13.95 ft, present datum, June 11, 1967, discharge not determined.

EXTREMES OUTSIDE THE PERIOD OF RECORD.-- Maximum stage of 12.26 ft, present datum occurred between Sept. 30, 1977 and June 13, 1994, from floodmark obtained from crest-stage gage, discharge not determined.

EXTREMES FOR CURRENT YEAR.-- Peak discharge greater than base discharge of 250 ft<sup>3</sup>/s and maximum (\*).

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 18	2030	398	6.72	Mar. 02	0445	419	6.78
Feb. 21	1430	*1,660	*9.20	June 16	0945	1,170	8.21

Minimum discharge, 10.0 ft<sup>3</sup>/s, Sept. 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	36	37	e25	e32	321	58	107	53	108	22	16
2	20	28	32	e26	e30	330	53	99	48	78	22	15
3	19	26	29	e45	e33	184	50	136	46	55	21	15
4	14	24	27	e64	e38	144	49	113	44	45	24	14
5	13	23	27	e100	e42	119	52	93	41	41	29	14
6	13	23	27	e80	e34	97	59	78	39	37	28	12
7	13	22	25	e56	e32	82	49	73	38	34	27	11
8	13	19	24	e48	e30	76	44	131	39	34	26	11
9	14	20	23	e42	e29	74	41	114	36	33	25	12
10	15	22	32	e36	e27	80	41	92	33	31	25	12
11	15	27	60	e32	e26	78	42	82	32	29	25	12
12	16	23	89	e28	e25	71	49	73	32	28	28	12
13	16	20	69	e26	e24	66	57	66	31	27	27	11
14	16	25	48	e25	e24	68	77	65	29	26	24	11
15	16	18	54	e27	e24	62	78	67	31	27	26	11
16	17	19	57	e29	e25	65	66	63	847	26	26	11
17	24	22	46	e27	e29	57	58	59	472	25	52	28
18	27	20	39	e24	165	56	54	72	209	37	68	26
19	21	20	e33	e23	334	56	58	137	145	51	50	25
20	13	21	e31	e22	169	57	61	93	119	36	39	61
21	13	32	e29	e23	1160	58	73	72	147	61	29	42
22	15	25	e28	e30	780	59	70	62	148	58	22	32
23	24	23	e31	e100	357	56	61	53	103	43	20	29
24	23	23	e40	e80	196	54	56	51	81	36	28	26
25	20	21	e38	e70	150	75	53	142	85	32	24	23
26	19	23	e35	e60	135	77	49	131	74	30	21	21
27	17	20	e32	e50	162	68	45	96	58	29	20	19
28	16	19	e29	e45	163	64	45	79	50	28	18	19
29	32	19	e27	e40	---	63	44	71	44	25	17	17
30	71	30	e25	e36	---	61	50	66	64	23	17	16
31	48	---	e24	e34	---	60	---	59	---	22	17	---
TOTAL	627	693	1147	1353	4275	2838	1642	2695	3218	1195	847	584
MEAN	20.2	23.1	37.0	43.6	153	91.5	54.7	86.9	107	38.5	27.3	19.5
MAX	71	36	89	100	1160	330	78	142	847	108	68	61
MIN	13	18	23	22	24	54	41	51	29	22	17	11
CFSM	.24	.27	.44	.52	1.81	1.08	.65	1.03	1.27	.46	.32	.23
IN.	.28	.31	.50	.60	1.88	1.25	.72	1.19	1.42	.53	.37	.26

e Estimated

## 05548105 NIPPERSINK CREEK ABOVE WONDER LAKE, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

MEAN	14.8	32.1	31.9	41.2	72.0	52.5	68.6	113	104	36.5	27.8	14.5
MAX	20.2	38.2	37.0	50.1	153	91.5	105	169	170	51.5	37.9	19.5
(WY)	1997	1996	1997	1995	1997	1997	1995	1996	1996	1996	1996	1997
MIN	10.1	23.1	27.2	29.9	31.3	21.8	46.5	82.8	33.2	19.5	18.2	9.97
(WY)	1995	1997	1996	1996	1995	1996	1996	1995	1995	1995	1995	1995

## SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1995 - 1997

ANNUAL TOTAL	19989		21114			
ANNUAL MEAN	54.6		57.8		50.5	
HIGHEST ANNUAL MEAN					57.8	1997
LOWEST ANNUAL MEAN					39.2	1995
HIGHEST DAILY MEAN	785	May 21	1160	Feb 21	1160	Feb 21 1997
LOWEST DAILY MEAN	11	Sep 19	11	A	7.0	Sep 11 1995
ANNUAL SEVEN-DAY MINIMUM	12	Sep 13	11	Sep 10	7.5	Sep 9 1995
INSTANTANEOUS PEAK FLOW			1660	Feb 21	1660	Feb 21 1997
INSTANTANEOUS PEAK STAGE			9.20	Feb 21	9.20	Feb 21 1997
INSTANTANEOUS LOW FLOW			10	Sep 15, 16	5.5	Sep 12 1995
ANNUAL RUNOFF (CFSM)	.65		.68		.60	
ANNUAL RUNOFF (INCHES)	8.80		9.30		8.12	
10 PERCENT EXCEEDS	128		98		97	
50 PERCENT EXCEEDS	27		34		30	
90 PERCENT EXCEEDS	16		17		13	

A - Several days.

05548105 NIPPERSINK CREEK ABOVE WONDER LAKE, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1994 to September 1997. (Discontinued)..

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: June 1994 to Sept. 1997. (Discontinued).

REMARKS.--Suspended-sediment samples were collected by a local observer once a week with additional samples collected during storm runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 808 mg/L, Aug. 17, 1995; minimum daily, 1 mg/L, Aug. 27, 1997.

SEDIMENT LOADS: Maximum daily, 1,830 tons, Feb. 21, 1997; minimum daily, 0.06 tons, Aug. 27, 1997.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 530 mg/L, Feb. 21; minimum daily, 1 mg/L, Aug. 27.

SEDIMENT LOADS: Maximum daily, 1,830 tons, Feb. 21; minimum daily, 0.06 tons, Aug. 27.

## SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	14	32	1.2	36	61	6.0	37	20	2.0
2	20	33	1.8	28	60	4.5	32	18	1.6
3	19	34	1.7	26	58	4.0	29	17	1.3
4	14	36	1.4	24	57	3.7	27	17	1.2
5	13	36	1.3	23	55	3.5	27	33	2.4
6	13	35	1.2	23	53	3.3	27	59	4.3
7	13	33	1.2	22	50	3.0	25	57	3.9
8	13	31	1.1	19	48	2.4	24	50	3.3
9	14	29	1.1	20	45	2.5	23	47	3.0
10	15	28	1.1	22	43	2.5	32	56	4.9
11	15	26	1.1	27	41	3.0	60	68	11
12	16	25	1.1	23	39	2.4	89	70	17
13	16	23	.99	20	40	2.1	69	60	11
14	16	22	.95	25	58	3.8	48	53	6.8
15	16	22	.94	18	78	3.9	54	56	8.3
16	17	24	1.1	19	67	3.5	57	59	9.1
17	24	24	1.5	22	55	3.3	46	56	6.9
18	27	17	1.3	20	45	2.5	39	54	5.7
19	21	12	.67	20	39	2.1	e33	51	4.5
20	13	8	.29	21	42	2.3	e31	48	4.0
21	13	7	.25	32	45	3.9	e29	46	3.6
22	15	11	.45	25	49	3.3	e28	44	3.3
23	24	18	1.2	23	53	3.3	e31	46	3.8
24	23	26	1.6	23	58	3.5	e40	58	6.3
25	20	25	1.4	21	60	3.5	e38	59	6.0
26	19	24	1.2	23	46	2.9	e35	57	5.4
27	17	22	1.0	20	32	1.8	e32	56	4.8
28	16	26	1.1	19	23	1.2	e29	54	4.3
29	32	59	5.8	19	16	.85	e27	53	3.9
30	71	99	19	30	18	1.5	e25	51	3.5
31	48	65	8.4	---	---	---	e24	47	3.1
TOTAL	627	---	64.44	693	---	90.05	1147	---	160.2

e Estimated

## 05548105 NIPPERSINK CREEK ABOVE WONDER LAKE, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	e25	43	2.9	e32	6	.50	321	146	134
2	e26	50	3.5	e30	6	.50	330	157	143
3	e45	65	7.9	e33	7	.60	184	97	48
4	e64	84	14	e38	7	.74	144	57	22
5	e100	86	23	e42	8	.88	119	52	17
6	e80	81	17	e34	8	.76	97	55	15
7	e56	76	11	e32	9	.77	82	59	13
8	e48	71	9.2	e30	10	.78	76	62	13
9	e42	66	7.5	e29	10	.81	74	66	13
10	e36	60	5.8	e27	11	.81	80	67	15
11	e32	54	4.6	e26	12	.84	78	59	12
12	e28	48	3.6	e25	13	.87	71	52	9.8
13	e26	43	3.0	e24	14	.90	66	45	8.1
14	e25	39	2.6	e24	15	.96	68	39	7.1
15	e27	35	2.5	e24	16	1.0	62	33	5.5
16	e29	31	2.4	e25	22	1.5	65	27	4.8
17	e27	28	2.0	e29	64	5.0	57	23	3.6
18	e24	25	1.6	165	265	146	56	23	3.5
19	e23	22	1.4	334	152	140	56	24	3.6
20	e22	20	1.2	169	46	21	57	24	3.7
21	e23	20	1.3	1160	530	1830	58	24	3.8
22	e30	42	3.4	780	295	653	59	25	3.9
23	e100	70	19	357	106	108	56	25	3.8
24	e80	49	11	196	53	28	54	37	5.4
25	e70	34	6.3	150	47	19	75	70	14
26	e60	23	3.7	135	45	16	77	72	15
27	e50	16	2.1	162	42	18	68	66	12
28	e45	11	1.3	163	48	22	64	61	11
29	e40	7	.79	---	---	---	63	57	9.7
30	e36	5	.51	---	---	---	61	54	8.8
31	e34	5	.50	---	---	---	60	51	8.2
TOTAL	1353	---	176.60	4275	---	3019.22	2838	---	590.3
APRIL			MAY			JUNE			
1	58	.9	7.6	107	140	41	53	101	15
2	53	50	7.2	99	155	41	48	97	13
3	50	53	7.1	136	100	37	46	93	12
4	49	55	7.2	113	77	24	44	89	11
5	52	62	8.8	93	61	15	41	86	9.4
6	59	86	14	78	49	10	39	82	8.7
7	49	80	11	73	53	11	38	80	8.3
8	44	71	8.4	131	111	40	39	86	9.1
9	41	63	7.1	114	84	26	36	93	9.1
10	41	56	6.1	92	78	19	33	101	9.1
11	42	54	6.2	82	77	17	32	110	9.5
12	49	61	8.0	73	76	15	32	117	10
13	57	67	10	66	75	13	31	116	9.8
14	77	67	14	65	73	13	29	145	11
15	78	62	13	67	72	13	31	309	27
16	66	58	10	63	71	12	847	382	872
17	58	64	10	59	73	11	472	239	311
18	54	62	9.1	72	149	32	209	183	104
19	58	59	9.2	137	289	106	145	145	57
20	61	56	9.1	93	220	55	119	209	66
21	73	52	10	72	152	30	147	279	111
22	70	45	8.6	62	112	19	148	246	98
23	61	39	6.5	53	103	15	103	206	57
24	56	34	5.1	51	113	16	81	173	38
25	53	29	4.2	142	234	92	85	148	34
26	49	29	3.8	131	217	77	74	139	28
27	45	28	3.4	96	183	47	58	133	21
28	45	31	3.7	79	154	33	50	126	17
29	44	47	5.6	71	130	25	44	123	14
30	50	81	11	66	111	20	64	267	50
31	---	---	---	59	105	17	---	---	---
TOTAL	1642	---	245.0	2695	---	942	3218	---	2050.0

e Estimated

## 05548105 NIPPERSINK CREEK ABOVE WONDER LAKE, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	108	188	54	22	15	.87	16	34	1.5
2	78	130	27	22	15	.90	15	33	1.4
3	55	103	15	21	18	.98	15	31	1.2
4	45	81	10	24	36	2.4	14	29	1.1
5	41	65	7.2	29	34	2.7	14	27	1.0
6	37	51	5.2	28	28	2.1	12	24	.80
7	34	40	3.7	27	22	1.6	11	22	.68
8	34	32	2.9	26	18	1.3	11	20	.62
9	33	26	2.3	25	14	.98	12	18	.58
10	31	26	2.1	25	14	.94	12	17	.54
11	29	26	2.0	25	23	1.5	12	15	.49
12	28	26	1.9	28	41	3.1	12	14	.44
13	27	26	1.9	27	63	4.7	11	13	.38
14	26	26	1.8	24	61	4.0	11	12	.35
15	27	26	1.9	26	56	4.0	11	10	.31
16	26	26	1.8	26	46	3.2	11	17	.52
17	25	38	2.6	52	25	3.4	28	36	2.8
18	37	69	7.0	68	13	2.4	26	32	2.3
19	51	56	7.7	50	7	.92	25	25	1.7
20	36	44	4.2	39	4	.37	61	51	8.5
21	61	93	16	29	16	1.1	42	45	5.2
22	58	122	19	22	17	1.0	32	30	2.6
23	43	110	13	20	9	.51	29	23	1.8
24	36	74	7.3	28	5	.39	26	22	1.6
25	32	48	4.2	24	3	.20	23	22	1.4
26	30	32	2.6	21	2	.10	21	22	1.2
27	29	26	2.0	20	1	.06	19	21	1.1
28	28	22	1.6	18	2	.11	19	21	1.1
29	25	18	1.2	17	5	.22	17	20	.96
30	23	15	.98	17	10	.45	16	20	.85
31	22	15	.91	17	19	.90	---	---	---
TOTAL	1195	---	230.99	847	---	47.40	584	---	45.02
YEAR	21114		7661.22						

## 05548105 NIPPERSINK CREEK ABOVE WONDER LAKE, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1994 to September 1997. (Discontinued).

## WATER-QUALITY DATA WATER YEARS OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TEMPER- ATURE WATER (DEG C) (00010)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
OCT 1996								
21...	0830	81700	80020	14	5.14	--	0.050	<0.010
30...	0830	81700	80020	78	5.55	10.0	0.240	0.070
NOV								
13...	1030	81700	80020	19	5.17	1.0	0.070	--
DEC								
04...	0930	81700	80020	24	5.23	2.0	0.040	<0.010
JAN 1997								
30...	1100	81700	80020	E36	6.53	0.0	0.020	--
MAR								
04...	1015	81700	80020	150	5.82	2.5	0.140	0.080
25...	0945	81700	80020	75	5.52	--	0.110	<0.010
APR								
17...	1100	81700	80020	58	5.41	8.5	0.050	0.050
MAY								
01...	1200	81700	80020	116	5.67	--	0.21	0.04
08...	1200	81700	80020	142	5.81	14.0	0.23	0.04
29...	1115	81700	80020	71	5.50	13.0	0.10	<0.01
JUN								
16...	1100	81700	80020	1130	8.13	18.0	0.17	0.07
JUL								
23...	1200	81700	80020	43	5.30	21.0	0.21	0.08
AUG								
06...	0900	81700	80020	29	5.17	17.0	0.05	0.04
21...	1000	81700	80020	26	5.14	17.5	0.11	<0.01
SEP								
15...	1000	81700	80020	11	4.93	8.0	0.07	0.01

## 05548110 NIPPERSINK CREEK BELOW WONDER LAKE, IL

LOCATION.-- Lat 42° 24' 51" , long 88° 20' 35", in NW 1/4, NE 1/4, sec. 6, T.45N, R.8E., McHenry County, Hydrologic Unit 07120006, on left bank at upstream side of bridge on Barnard Mill Road, 2.0 miles North of Wonder Lake, 2.8 miles northwest of Ringwood, and at mile 16.5.

DRAINAGE AREA.-- 97.3 mi<sup>2</sup>

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- Annual maximum water years 1965 to 1977. June 13, 1994 to September 30, 1997. (Discontinued)

GAGE.-- Water-stage recorder and crest-stage gage, Datum of gage is 776.00 ft above sea level. Prior to June 13, 1994, at datum 4.29 ft higher.

REMARKS.-- Water-discharge records good except those greater than 600 ft<sup>3</sup>/s and those for estimated daily discharges, which are fair. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.-- Maximum gage height, 8.76 present datum, June 11, 1967, discharge undetermined.

EXTREMES OUTSIDE THE PERIOD OF RECORD.-- Maximum stage of 9.28 ft, present datum occurred between Sept. 30, 1977 and June 13, 1994, from floodmark obtained from crest-stage gage, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 260 ft<sup>3</sup>/s (revised) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 19	2030	359	4.14	Mar. 02	0845	405	4.33
Feb. 21	2045	*1,330	*7.62	June 16	1745	802	5.90

Minimum discharge, 8.1 ft<sup>3</sup>/s, Oct. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	51	43	33	37	282	66	99	64	102	25	23
2	15	40	43	38	39	376	62	120	59	101	23	18
3	15	41	41	57	44	267	55	150	57	68	23	16
4	17	33	37	80	54	195	58	143	56	54	21	18
5	16	29	38	117	55	153	63	124	52	52	19	20
6	20	34	37	90	50	124	89	91	47	45	20	17
7	10	30	35	71	45	104	43	88	46	40	20	13
8	13	26	32	60	42	93	40	128	45	41	20	14
9	15	24	31	57	38	89	43	127	45	34	21	15
10	13	23	32	52	36	91	44	114	43	35	21	14
11	21	25	54	41	34	88	46	108	41	33	20	14
12	17	27	83	37	33	85	61	78	40	32	34	14
13	13	25	83	33	30	79	67	72	37	32	32	15
14	11	23	68	31	30	83	78	70	34	29	28	14
15	16	23	67	34	29	72	92	67	44	26	34	14
16	19	24	66	35	32	68	76	71	618	25	27	19
17	31	38	61	30	30	63	70	56	601	23	50	38
18	31	22	49	28	68	60	68	66	314	37	62	43
19	27	24	42	27	300	65	72	126	201	52	59	37
20	24	25	40	26	274	61	75	118	155	48	50	50
21	21	33	38	28	884	65	85	92	143	50	39	53
22	24	35	37	61	969	63	88	75	163	54	33	44
23	35	31	43	103	526	61	81	66	130	51	31	38
24	30	29	48	93	296	62	73	64	107	43	35	34
25	29	28	43	74	202	77	67	115	90	41	32	28
26	25	26	43	57	165	89	63	153	83	35	31	25
27	27	25	39	52	182	79	57	128	72	32	28	24
28	21	26	38	44	177	69	55	107	60	29	24	23
29	46	26	36	39	---	70	59	99	52	25	22	22
30	81	34	34	38	---	68	55	83	71	24	24	13
31	64	---	33	37	---	67	---	73	---	24	23	---
TOTAL	767	880	1414	1603	4701	3268	1951	3071	3570	1317	931	730
MEAN	24.7	29.3	45.6	51.7	168	105	65.0	99.1	119	42.5	30.0	24.3
MAX	81	51	83	117	969	376	92	153	618	102	62	53
MIN	10	22	31	26	29	60	40	56	34	23	19	13
CFSM	.25	.30	.47	.53	1.73	1.08	.67	1.02	1.22	.44	.31	.25
IN.	.29	.34	.54	.61	1.80	1.25	.75	1.17	1.36	.50	.36	.28



## 05548110 NIPPERSINK CREEK BELOW WONDER LAKE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

MEAN	19.1	41.4	38.9	48.5	79.8	62.5	78.3	128	114	40.8	32.0	18.1
MAX	24.7	49.6	45.6	56.8	168	105	115	184	184	58.2	42.4	24.3
(WY)	1997	1996	1997	1995	1997	1997	1995	1996	1996	1996	1996	1997
MIN	13.3	29.3	33.6	36.9	35.7	28.5	54.8	99.1	37.8	21.8	23.6	11.1
(WY)	1995	1997	1996	1996	1996	1996	1996	1997	1995	1995	1995	1995

## SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	22671			24203								
ANNUAL MEAN	61.9			66.3						58.2		
HIGHEST ANNUAL MEAN										66.3		1997
LOWEST ANNUAL MEAN										46.1		1995
HIGHEST DAILY MEAN	676	May 21		969	Feb 22					969	Feb 22	1997
LOWEST DAILY MEAN	10	Oct 7		10	Oct 7					4.5	Sep 7	1995
ANNUAL SEVEN-DAY MINIMUM	14	Sep 12		14	Sep 7					6.9	Sep 7	1995
INSTANTANEOUS PEAK FLOW				1330	Feb 21					1330	Feb 21	1997
INSTANTANEOUS PEAK STAGE				7.62	Feb 21					7.62	Feb 21	1997
INSTANTANEOUS LOW FLOW				8.1	Oct 13, 14					3.5	Sep 7	1995
ANNUAL RUNOFF (CFSM)	.64			.68						.60		
ANNUAL RUNOFF (INCHES)	8.67			9.25						8.12		
10 PERCENT EXCEEDS	138			114						111		
50 PERCENT EXCEEDS	34			43						37		
90 PERCENT EXCEEDS	19			21						16		

## 05548110 NIPPERSINK CREEK BELOW WONDER LAKE, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1994 to June 1997. (Discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: June 1994 to June 1997. (Discontinued).

REMARKS.--Suspended-sediment samples were collected by a local observer once a week with additional samples collected during storm runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 90 mg/L, Feb. 22, 1997; minimum daily, 3 mg/L, Nov. 30, Dec. 1, 1995.

SEDIMENT LOADS: Maximum daily, 238 tons, Feb. 22, 1997; minimum daily, 0.14 tons, Sept. 19, 1994.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 90 mg/L, Feb. 22; minimum daily, 8 mg/L, Nov. 28-Dec. 7, Feb. 17.

SEDIMENT LOADS: Maximum daily, 238 tons, Feb. 22; minimum daily, 0.43 tons, Oct. 7.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	20	15	.80	51	17	2.4	43	8	.97
2	15	15	.63	40	19	2.0	43	8	.95
3	15	15	.61	41	18	2.0	41	8	.90
4	17	15	.68	33	17	1.5	37	8	.81
5	16	15	.68	29	17	1.3	38	8	.84
6	20	15	.83	34	16	1.5	37	8	.83
7	10	15	.43	30	15	1.2	35	8	.80
8	13	16	.53	26	15	1.0	32	9	.75
9	15	16	.62	24	14	.92	31	9	.74
10	13	16	.56	23	13	.83	32	10	.85
11	21	16	.89	25	12	.85	54	16	2.5
12	17	16	.71	27	12	.85	83	20	4.5
13	13	16	.58	25	11	.75	83	19	4.1
14	11	16	.48	23	10	.63	68	16	3.0
15	16	18	.79	23	9	.57	67	14	2.6
16	19	21	1.1	24	10	.68	66	13	2.3
17	31	23	1.9	38	13	1.4	61	12	2.0
18	31	22	1.8	22	11	.65	49	11	1.5
19	27	20	1.4	24	10	.66	42	10	1.2
20	24	18	1.2	25	12	.82	40	10	1.1
21	21	17	.97	33	13	1.2	38	9	.95
22	24	19	1.2	35	9	.86	37	9	.86
23	35	20	1.9	31	9	.75	43	9	1.0
24	30	19	1.5	29	9	.69	48	12	1.6
25	29	17	1.3	28	9	.66	43	13	1.4
26	25	15	1.1	26	9	.62	43	11	1.3
27	27	14	1.0	25	9	.57	39	11	1.1
28	21	13	.72	26	8	.60	38	11	1.1
29	46	13	1.6	26	8	.60	36	10	1.0
30	81	14	3.1	34	8	.77	34	10	.95
31	64	16	2.7	---	---	---	33	10	.90
TOTAL	767	---	34.31	880	---	29.83	1414	---	45.40

## 05548110 NIPPERSINK CREEK BELOW WONDER LAKE, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	33	13	1.2	37	33	3.3	282	46	36
2	38	23	2.4	39	30	3.2	376	63	64
3	57	36	5.6	44	28	3.3	267	49	35
4	80	41	8.9	54	25	3.7	195	45	24
5	117	34	11	55	23	3.4	153	47	19
6	90	29	7.1	50	21	2.9	124	43	15
7	71	26	5.0	45	20	2.4	104	40	11
8	60	23	3.7	42	18	2.0	93	37	9.4
9	57	22	3.3	38	17	1.7	89	35	8.4
10	52	21	3.0	36	15	1.5	91	32	7.9
11	41	21	2.3	34	14	1.3	88	30	7.2
12	37	20	2.0	33	13	1.1	85	28	6.4
13	33	20	1.8	30	12	.94	79	26	5.6
14	31	20	1.6	30	11	.88	83	24	5.4
15	34	19	1.8	29	10	.77	72	23	4.4
16	35	19	1.7	32	9	.78	68	21	3.8
17	30	18	1.5	30	8	.69	63	20	3.4
18	28	18	1.3	68	14	3.2	60	18	2.9
19	27	18	1.3	300	21	16	65	17	3.0
20	26	17	1.2	274	13	9.6	61	16	2.6
21	28	18	1.4	884	35	112	65	15	2.6
22	61	26	4.4	969	90	238	63	14	2.3
23	103	40	11	526	68	98	61	13	2.1
24	93	44	11	296	52	42	62	12	2.0
25	74	43	8.7	202	39	21	77	16	3.3
26	57	42	6.5	165	31	14	89	24	5.8
27	52	42	5.8	182	31	15	79	20	4.2
28	44	41	4.9	177	30	14	69	17	3.1
29	39	40	4.2	---	---	---	70	15	2.9
30	38	39	4.0	---	---	---	68	14	2.6
31	37	36	3.6	---	---	---	67	13	2.3
TOTAL	1603	---	133.2	4701	---	616.66	3268	---	307.6
APRIL			MAY			JUNE			
1	66	12	2.2	99	23	6.2	64	21	3.7
2	62	13	2.2	120	24	7.8	59	21	3.3
3	55	14	2.1	150	25	9.9	57	20	3.1
4	58	15	2.4	143	23	8.8	56	20	3.0
5	63	22	3.9	124	21	7.0	52	19	2.7
6	89	35	8.4	91	19	4.7	47	19	2.4
7	43	37	4.3	88	17	4.1	46	18	2.3
8	40	34	3.6	128	17	5.8	45	18	2.2
9	43	32	3.7	127	20	6.8	45	17	2.1
10	44	30	3.6	114	20	6.0	43	17	2.0
11	46	28	3.5	108	19	5.6	41	16	1.8
12	61	30	4.9	78	19	4.0	40	16	1.8
13	67	35	6.4	72	19	3.6	37	16	1.6
14	78	40	8.5	70	18	3.4	34	15	1.4
15	92	37	9.1	67	18	3.2	44	17	2.1
16	76	31	6.4	71	18	3.4	618	25	44
17	70	27	5.1	56	17	2.6	601	39	65
18	68	26	4.8	66	18	3.3	314	29	25
19	72	28	5.4	126	21	7.3	201	26	14
20	75	31	6.3	118	21	6.8	155	25	10
21	85	35	8.0	92	21	5.1	143	23	8.9
22	88	35	8.3	75	20	4.0	163	22	9.5
23	81	33	7.2	66	19	3.4	130	20	7.1
24	73	32	6.3	64	18	3.2	107	19	5.5
25	67	30	5.5	115	20	6.3	90	18	4.4
26	63	29	4.9	153	24	9.8	83	18	4.0
27	57	28	4.3	128	25	8.5	72	18	3.5
28	55	26	4.0	107	24	6.9	60	18	2.9
29	59	25	4.1	99	23	6.2	52	18	2.5
30	55	24	3.6	83	23	5.1	71	18	3.5
31	---	---	---	73	22	4.3	---	---	---
TOTAL	1951	---	153.0	3071	---	173.1	3570	---	245.3

## ILLINOIS RIVER BASIN

## 05548110 NIPPERSINK CREEK BELOW WONDER LAKE, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	102	---	---	25	---	---	23	---	---
2	101	---	---	23	---	---	18	---	---
3	68	---	---	23	---	---	16	---	---
4	54	---	---	21	---	---	18	---	---
5	52	---	---	19	---	---	20	---	---
6	45	---	---	20	---	---	17	---	---
7	40	---	---	20	---	---	13	---	---
8	41	---	---	20	---	---	14	---	---
9	34	---	---	21	---	---	15	---	---
10	35	---	---	21	---	---	14	---	---
11	33	---	---	20	---	---	14	---	---
12	32	---	---	34	---	---	14	---	---
13	32	---	---	32	---	---	15	---	---
14	29	---	---	28	---	---	14	---	---
15	26	---	---	34	---	---	14	---	---
16	25	---	---	27	---	---	19	---	---
17	23	---	---	50	---	---	38	---	---
18	37	---	---	62	---	---	43	---	---
19	52	---	---	59	---	---	37	---	---
20	48	---	---	50	---	---	50	---	---
21	50	---	---	39	---	---	53	---	---
22	54	---	---	33	---	---	44	---	---
23	51	---	---	31	---	---	38	---	---
24	43	---	---	35	---	---	34	---	---
25	41	---	---	32	---	---	28	---	---
26	35	---	---	31	---	---	25	---	---
27	32	---	---	28	---	---	24	---	---
28	29	---	---	24	---	---	23	---	---
29	25	---	---	22	---	---	22	---	---
30	24	---	---	24	---	---	13	---	---
31	24	---	---	23	---	---	---	---	---
TOTAL	1317	---	---	931	---	---	730	---	---

## 05548110 NIPPERSINK CREEK BELOW WONDER LAKE, IL.--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.-- July 1994 to June 1997. (Discontinued)..

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	TEMPER- ATURE WATER (DEG C) (00010)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
OCT 1996								
21...	1015	81700	80020	22	2.03	--	0.080	<0.010
30...	0930	81700	80020	73	2.56	12.0	0.100	0.040
NOV								
13...	1200	81700	80020	25	2.07	4.0	0.080	--
DEC								
04...	1115	81700	80020	36	2.21	--	0.070	<0.010
JAN 1997								
30...	1250	81700	80020	37	2.22	3.5	0.020	--
MAR								
04...	1120	81700	80020	199	3.36	3.5	0.280	0.170
25...	1145	81700	80020	77	2.59	--	0.140	<0.010
APR								
17...	0900	81700	80020	67	2.51	9.0	0.100	0.020
MAY								
01...	1500	81700	80020	107	2.82	--	0.18	0.02
08...	1130	81700	80020	128	2.96	15.0	0.15	0.02
29...	1040	81700	80020	113	2.86	16.0	0.22	<0.01
JUN								
16...	1400	81700	80020	760	5.75	24.0	1.8	0.54

## ILLINOIS RIVER BASIN

## 05548280 NIPPERSINK CREEK NEAR SPRING GROVE, IL

LOCATION.--Lat 42°26'37", long 88°14'51", in NE1/4NW1/4 sec.25, T.46 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank at upstream side of bridge on Winn Road, 0.6 mi west of Spring Grove, and at mile 7.4.

DRAINAGE AREA.--192 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1966 to current year.

REVISED RECORDS.--WSP 2115: 1969-70(M). WDR IL-75-1: Drainage area. WDR IL-85-2: 1966-67(M), 1971.

GAGE.--Water stage recorder and crest-stage gage. Datum of gage is 746.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Recording rain gage and gage-height tele-meter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1960 reached a stage of 13.7 ft, from information by local resident, and flood in July 1938 reached a stage of about 4 to 6 ft higher than that in April 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	2115	*1,770	*11.44	June 17	1300	1,120	9.32
Mar. 02	1945	749	7.88				

Minimum discharge, 43 ft<sup>3</sup>/s, Sept. 10, 11, 13, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	98	91	74	e78	491	143	179	119	197	65	55
2	58	82	91	87	e80	692	133	193	109	203	62	52
3	54	77	86	119	e90	591	124	242	104	147	61	50
4	57	74	82	160	e105	407	123	240	104	118	61	50
5	56	66	80	228	e110	312	129	207	98	110	57	51
6	59	68	81	186	111	262	164	159	91	101	56	51
7	54	69	77	158	99	228	112	143	89	90	55	46
8	52	66	72	133	93	208	98	211	90	94	54	45
9	56	63	70	113	87	202	99	212	84	91	53	46
10	55	64	70	108	84	206	102	186	81	87	56	45
11	59	64	104	e90	80	198	104	172	78	82	55	45
12	61	65	161	e80	78	191	124	136	81	78	75	44
13	55	63	165	e74	79	181	136	121	80	77	80	44
14	51	62	143	e70	75	183	158	117	72	74	71	45
15	53	60	137	e80	70	166	173	116	78	69	77	43
16	60	60	139	e86	72	155	151	116	838	66	72	46
17	76	78	127	e72	71	153	140	104	1080	62	115	93
18	70	59	104	e65	179	146	136	116	777	106	131	93
19	63	58	e90	e62	487	148	139	249	453	156	116	82
20	59	58	e84	e62	481	145	141	216	306	118	101	164
21	55	69	e78	e64	1030	147	158	168	293	254	85	150
22	54	72	e74	e120	1640	146	160	141	353	239	74	114
23	70	72	e80	e200	1290	144	148	124	265	152	70	102
24	67	68	e100	e180	668	139	137	120	211	119	91	93
25	63	68	e95	e140	423	164	128	202	192	105	78	84
26	59	66	e88	e120	315	178	121	246	174	98	73	74
27	61	e64	e84	e110	330	168	113	214	153	94	67	71
28	53	63	e82	e93	325	156	109	177	132	88	62	70
29	78	62	82	e84	---	154	110	167	118	78	57	67
30	158	77	77	e80	---	151	103	149	128	71	58	56
31	123	---	75	e76	---	148	---	132	---	67	58	---
TOTAL	2009	2035	2969	3374	8630	6960	3916	5275	6831	3491	2246	2071
MEAN	64.8	67.8	95.8	109	308	225	131	170	228	113	72.5	69.0
MAX	158	98	165	228	1640	692	173	249	1080	254	131	164
MIN	51	58	70	62	70	139	98	104	72	62	53	43
CFSM	.34	.35	.50	.57	1.61	1.17	.68	.89	1.19	.59	.38	.36
IN.	.39	.39	.58	.65	1.67	1.35	.76	1.02	1.32	.68	.44	.40

e Estimated

## 05548280 NIPPERSINK CREEK NEAR SPRING GROVE, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1997, BY WATER YEAR (WY)

MEAN	104	126	148	120	162	258	260	178	156	112	89.6	114
MAX	473	372	493	316	455	554	652	542	393	522	258	579
(WY)	1987	1986	1983	1974	1971	1979	1993	1974	1967	1993	1972	1972
MIN	30.7	36.3	29.9	28.7	35.8	62.2	83.8	55.0	34.6	26.0	25.3	21.1
(WY)	1989	1972	1990	1977	1978	1968	1989	1989	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1966 - 1997		
ANNUAL TOTAL	49815			49807					
ANNUAL MEAN	136			136			152		
HIGHEST ANNUAL MEAN							288		
LOWEST ANNUAL MEAN							52.4		
HIGHEST DAILY MEAN	1130	May 22		1640	Feb 22		2580 A	Feb 21	1994
LOWEST DAILY MEAN	45	Sep 13		43	Sep 15		10	Aug 6	1988
ANNUAL SEVEN-DAY MINIMUM	46	Sep 12		45	Sep 9		14	Aug 2	1988
INSTANTANEOUS PEAK FLOW				1770	Feb 22		2910	Sep 26	1988
INSTANTANEOUS PEAK STAGE				11.44	Feb 22		14.26	Sep 26	1988
INSTANTANEOUS LOW FLOW				43	B		6.6	Aug 7	1988
ANNUAL RUNOFF (CFSM)	.71			.71			.79		
ANNUAL RUNOFF (INCHES)	9.65			9.65			10.79		
10 PERCENT EXCEEDS	286			211			310		
50 PERCENT EXCEEDS	79			93			99		
90 PERCENT EXCEEDS	55			57			41		

A - From graph based on daily gage readings and existing record.

B - Sept. 10, 11, 13, 15.

## ILLINOIS RIVER BASIN

## 05548500 FOX RIVER AT JOHNSBURG, IL

LOCATION.--Lat 42°22'35", long 88°14'15", in SW1/4SW1/4 sec.18, T.45 N., R.9 E., McHenry County, Hydrologic Unit 07120006, on left bank at upstream side of bridge on Chapel Hill Road in Johnsburg, 5.5 mi upstream from McHenry Dam, and at mile 103.0.

DRAINAGE AREA.--1,205 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft above sea level (levels by Illinois Department of Transportation). Prior to Dec. 14, 1939, nonrecording gage at same site at datum 2.16 ft higher. Dec. 14, 1939, to Sept. 30, 1971, at datum 2.16 ft higher.

REMARKS.--Stage regulated by Stratton Lock and Dam, 5.5 mi downstream from station (previously known as McHenry Dam). Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.55 ft, present datum, Apr. 6, 1960; minimum, 1.43 ft, present datum, Mar. 9, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.83 ft, Mar. 3; minimum, 2.18 ft, Feb. 18.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.11	3.97	2.55	2.42	2.75	4.71	4.07	4.04	4.11	4.39	4.04	4.22
2	4.14	4.00	2.56	2.46	2.74	4.72	4.01	4.18	4.05	4.30	4.03	4.25
3	4.15	3.90	2.59	2.53	2.75	4.81	3.99	4.21	4.01	4.27	4.02	4.19
4	4.11	3.89	2.56	2.55	2.76	4.79	3.91	4.19	3.94	4.26	4.05	4.09
5	4.08	3.89	2.57	2.49	2.69	4.77	3.86	4.11	3.92	4.17	4.06	4.02
6	4.03	3.80	2.54	2.70	2.63	4.62	3.29	4.25	3.94	4.16	4.00	4.02
7	4.14	3.77	2.49	2.75	2.59	e4.50	3.58	4.25	3.94	4.14	3.98	4.09
8	4.07	3.68	2.47	2.77	2.55	---	3.83	4.18	4.02	4.11	3.97	4.06
9	4.05	3.58	2.44	2.84	2.47	---	3.89	4.25	3.99	4.20	3.97	4.04
10	4.07	3.51	2.46	2.84	2.40	e3.89	3.91	4.24	4.01	4.16	3.97	4.04
11	4.00	3.48	2.58	2.83	2.34	3.85	4.02	4.04	4.04	4.15	4.05	4.01
12	4.01	3.43	2.48	2.80	2.33	3.71	4.07	4.12	4.07	4.13	4.06	4.00
13	4.03	3.42	2.45	2.77	2.30	3.67	4.02	4.15	4.14	4.12	4.09	3.97
14	4.11	3.38	2.51	2.74	2.32	3.57	4.02	4.10	4.11	4.16	4.07	3.99
15	4.03	3.34	2.43	2.73	2.32	3.46	e3.92	4.07	4.01	4.18	4.05	4.00
16	4.03	3.29	2.54	2.75	2.34	3.39	---	4.04	4.45	4.17	4.16	3.96
17	4.04	3.08	2.56	2.71	2.28	3.34	e4.04	4.16	4.52	4.19	4.30	4.09
18	4.07	3.20	2.53	2.67	2.26	3.57	4.03	4.13	4.58	4.23	4.31	4.05
19	4.15	3.17	2.47	2.64	2.45	3.46	4.05	4.25	4.55	4.28	4.29	4.12
20	4.18	3.10	2.40	2.62	2.52	3.50	4.06	4.25	4.43	4.25	4.25	4.24
21	4.22	3.03	2.37	2.61	3.17	3.55	4.10	4.23	4.40	---	4.23	4.25
22	4.21	2.94	2.40	2.63	3.53	3.66	4.09	4.17	4.39	e4.37	4.17	4.25
23	4.11	2.86	2.43	2.67	4.08	3.74	4.05	4.10	4.42	e4.32	4.11	4.23
24	4.10	2.87	2.40	2.73	4.49	3.80	4.01	4.11	4.34	4.25	4.17	4.14
25	4.10	2.77	2.39	2.76	4.65	3.84	3.98	4.31	4.34	4.19	4.19	4.08
26	4.07	2.63	2.39	2.79	4.71	3.85	3.94	4.32	4.33	4.19	4.19	4.10
27	3.99	2.54	2.37	2.82	4.75	3.93	3.95	4.28	4.29	4.19	4.20	4.07
28	4.01	2.54	2.37	2.81	4.72	4.03	3.94	4.19	4.29	4.21	4.23	4.06
29	4.01	2.51	2.39	2.79	---	4.09	3.83	4.04	4.30	4.18	4.23	3.96
30	3.78	2.52	2.38	2.77	---	4.15	3.98	4.03	4.39	4.13	4.21	4.05
31	3.92	---	2.40	2.75	---	4.14	---	4.07	---	4.09	4.23	---
MEAN	4.07	3.27	2.47	2.70	3.00	---	---	4.16	4.21	---	4.13	4.09
MAX	4.22	4.00	2.59	2.84	4.75	---	---	4.32	4.58	---	4.31	4.25
MIN	3.78	2.51	2.37	2.42	2.26	---	---	4.03	3.92	---	3.97	3.96

e Estimated



## 05549500 FOX RIVER NEAR McHENRY, IL

**LOCATION.**--Lat 42°18'35", long 88°15'05", in NW1/4 sec.12, T.44 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank of main channel, 300 ft upstream from Stratton Lock and Dam, 2.5 mi downstream from McHenry, and a+ mile 97.8.

**DRAINAGE AREA.**--1,250 mi<sup>2</sup>.

**PERIOD OF RECORD.**--June 1941 to current year (gage heights only).

**REVISED RECORDS.**--WDR IL-75-1: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 733.00 ft above sea level (levels by Illinois Department of Transportation). Prior to Oct. 1, 1971, at datum 2.07 ft higher.

**REMARKS.**--Stage regulated by Stratton Lock and Dam (previously known as McHenry Dam). Gage-height telemeter at station.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum gage height, 6.36 ft, present datum, Apr. 5, 1960; minimum, 0.32 ft, present datum, Feb. 6, 1967.

**EXTREMES FOR CURRENT YEAR.**--Maximum gage height, 4.50 ft, June 16; minimum, 1.45 ft, Feb. 20.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.09	3.87	2.42	2.30	2.27	3.79	3.85	3.99	4.10	4.12	4.04	---
2	4.14	3.86	2.39	2.35	2.32	3.79	3.79	4.06	4.05	4.01	4.04	---
3	4.15	3.74	2.43	2.40	2.41	3.87	3.79	4.03	4.00	3.99	4.02	---
4	4.10	3.73	2.34	2.36	2.40	3.84	3.67	3.98	3.93	3.99	4.07	e4.10
5	4.07	3.75	2.35	2.18	2.26	3.83	3.60	3.87	3.93	3.95	4.08	e3.97
6	4.00	3.64	2.31	2.35	2.21	3.68	2.82	4.03	3.95	4.00	4.01	4.02
7	4.16	3.63	2.24	2.42	2.19	3.54	3.38	4.02	3.97	3.98	3.99	4.09
8	4.10	3.58	2.25	2.44	2.17	3.37	3.75	3.96	4.07	3.98	3.98	4.08
9	4.05	3.50	2.23	2.57	2.05	3.15	3.82	4.06	4.03	4.12	3.95	4.06
10	4.11	3.44	2.30	2.56	1.97	2.84	3.85	4.04	4.04	4.07	3.97	4.06
11	3.98	3.43	2.42	2.40	1.93	2.84	3.98	3.79	4.06	4.07	4.06	4.02
12	3.99	3.38	2.22	2.37	1.99	2.71	4.05	3.93	4.10	4.07	4.07	4.00
13	4.03	3.38	2.18	2.33	1.95	2.92	3.95	4.00	4.17	4.04	4.11	3.97
14	4.12	3.31	2.30	2.29	2.12	3.06	3.92	4.02	4.16	4.11	4.07	4.00
15	4.02	3.25	2.15	2.33	2.10	2.90	3.84	4.03	3.99	4.15	4.02	4.01
16	4.02	3.16	2.31	2.40	2.17	2.69	4.05	3.96	4.25	4.12	4.15	3.94
17	4.02	2.85	2.35	2.34	1.98	2.85	4.06	4.12	4.18	4.17	4.29	4.07
18	4.07	3.11	2.03	2.27	1.95	3.39	4.01	4.09	4.22	4.22	4.29	3.98
19	4.14	3.06	1.97	2.22	2.14	3.20	4.02	4.20	4.25	4.28	4.26	4.05
20	4.17	2.95	1.89	2.21	1.68	3.32	4.02	4.18	4.16	4.23	4.22	4.16
21	4.19	2.89	1.84	2.22	2.40	3.42	4.05	4.16	4.14	4.31	4.21	4.16
22	4.17	2.77	1.91	2.24	2.53	3.56	4.04	4.09	4.14	4.29	4.17	4.14
23	4.04	2.68	2.05	2.22	3.07	3.65	3.98	4.07	4.17	4.26	4.09	4.15
24	4.05	2.73	2.05	2.29	3.52	3.69	3.92	4.08	4.07	4.22	4.16	4.05
25	4.03	2.63	1.89	2.31	3.72	3.74	3.87	4.30	4.08	4.15	4.17	4.03
26	4.02	2.34	1.90	2.30	3.75	3.67	3.83	4.27	4.08	4.15	4.16	4.08
27	3.93	2.25	1.92	2.36	3.83	3.75	3.86	4.22	4.05	4.17	4.18	4.05
28	3.98	2.31	2.02	2.30	3.78	3.88	3.87	4.12	4.09	4.20	e4.22	4.03
29	3.92	2.34	2.18	2.28	---	3.94	3.69	3.96	4.09	4.17	---	3.94
30	3.62	2.38	2.17	2.25	---	4.00	3.91	3.97	4.14	4.13	---	4.05
31	3.82	---	2.26	2.23	---	3.97	---	4.05	---	4.09	---	---
MEAN	4.04	3.13	2.17	2.33	2.46	3.45	3.84	4.05	4.09	4.12	---	---
MAX	4.19	3.87	2.43	2.57	3.83	4.00	4.06	4.30	4.25	4.31	---	---
MIN	3.62	2.25	1.84	2.18	1.68	2.69	2.82	3.79	3.93	3.95	---	---

e Estimated

## ILLINOIS RIVER BASIN

## 05550000 FOX RIVER AT ALGONQUIN, IL

LOCATION.--Lat 42°09'59", long 88°17'25", in NE1/4NW1/4 sec.34, T.43 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank 20 ft upstream from bridge on State Highway 62 (Chicago Street) in Algonquin, 140 ft upstream from Algonquin Dam, and at mile 81.6.

DRAINAGE AREA.--1,403 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1915 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1175: 1916. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 729.48 ft above sea level. Prior to Oct. 20, 1933, nonrecording gage at site 20 ft downstream at same datum.

REMARKS.--Records good. Flow regulated by Stratton Lock and Dam (previously known as McHenry Dam), 16 mi upstream from station, and occasionally affected by wind action. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,550 ft<sup>3</sup>/s, Feb. 24, gage height, 2.89 ft; minimum discharge, 222 ft<sup>3</sup>/s, Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	390	950	636	475	974	3160	1370	1010	973	1750	434	629
2	419	1040	682	449	929	3490	1360	1220	940	1700	433	662
3	443	1030	706	525	900	3480	1350	1540	896	1680	416	646
4	402	1030	776	579	879	3400	1310	1660	832	1690	439	570
5	373	1030	790	810	1020	3360	1300	1590	657	1590	444	444
6	330	982	780	883	1080	3250	1120	1640	595	1400	407	341
7	419	1010	783	826	1080	3130	1240	1620	543	1350	375	382
8	404	957	827	802	1090	3000	1050	1610	541	1220	320	376
9	360	849	771	764	1090	2780	945	1680	495	1100	295	353
10	386	814	605	806	1060	2580	793	1650	410	1040	289	350
11	318	693	669	886	1040	2510	773	1480	403	996	356	320
12	298	635	797	907	976	2430	854	1480	408	901	372	307
13	331	578	750	899	910	2300	868	1430	449	850	397	293
14	388	559	599	894	763	1910	947	1190	470	833	375	300
15	339	541	666	882	730	1780	932	974	362	717	339	313
16	326	571	725	861	725	1700	1000	849	840	674	424	281
17	330	656	736	851	698	1640	1070	834	1860	650	655	422
18	350	729	767	853	717	1370	1150	804	2130	630	834	497
19	400	744	780	851	899	1220	1180	902	2160	661	811	552
20	423	819	776	748	1260	1180	1170	1000	1930	623	752	860
21	474	844	743	713	2400	961	1230	1060	1840	707	731	930
22	629	823	596	829	3190	952	1270	1100	1830	885	687	939
23	717	826	557	956	3440	953	1260	1010	1820	896	612	951
24	705	848	776	935	3520	949	1200	826	1770	851	619	906
25	688	838	798	957	3400	986	1160	1060	1760	677	642	812
26	675	742	793	965	3370	1030	1100	1220	1770	640	625	663
27	629	733	747	958	3400	1140	972	1230	1720	670	632	512
28	659	678	566	951	3390	1190	852	1210	1600	667	652	475
29	704	648	552	930	---	1230	769	1110	1550	647	655	410
30	853	625	574	930	---	1270	849	1030	1620	581	620	467
31	948	---	568	978	---	1310	---	966	---	494	636	---
TOTAL	15110	23822	21891	25653	44930	61641	32444	37985	35174	29770	16278	15963
MEAN	487	794	706	828	1605	1988	1081	1225	1172	960	525	532
MAX	948	1040	827	978	3520	3490	1370	1680	2160	1750	834	951
MIN	298	541	552	449	698	949	769	804	362	494	289	281
CFSM	.35	.57	.50	.59	1.14	1.42	.77	.87	.84	.68	.37	.38
IN.	.40	.63	.58	.68	1.19	1.63	.86	1.01	.93	.79	.43	.42

## ILLINOIS RIVER BASIN

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## 05550000 FOX RIVER AT ALGONQUIN, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1997, BY WATER YEAR (WY)

MEAN	614	810	790	714	846	1672	1710	1126	783	597	463	499
MAX	3650	2492	3105	2675	3613	4162	4961	3786	3075	2902	2964	2926
(WY)	1987	1986	1983	1960	1938	1918	1993	1973	1996	1938	1924	1972
MIN	31.8	147	185	142	168	274	237	150	110	57.7	31.4	52.9
(WY)	1957	1954	1940	1940	1940	1934	1934	1934	1934	1934	1934	1934

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1916 - 1997		
ANNUAL TOTAL	396284			360661			885		
ANNUAL MEAN	1083			988			1936		
HIGHEST ANNUAL MEAN							1936		
LOWEST ANNUAL MEAN							202		
HIGHEST DAILY MEAN	4530	May 23		3520	Feb 24		6610	Apr 2	1979
LOWEST DAILY MEAN	236	Sep 20		281	Sep 16		12		A
ANNUAL SEVEN-DAY MINIMUM	248	Sep 19		309	Sep 10		19	Oct 16	1956
INSTANTANEOUS PEAK FLOW				3550	Feb 24		6610		B
INSTANTANEOUS PEAK STAGE				2.89	Feb 24		4.50 C	Apr 1	1916
INSTANTANEOUS LOW FLOW				222	Sep 16		.00		D
ANNUAL RUNOFF (CFSM)	.77			.70			.63		
ANNUAL RUNOFF (INCHES)	10.51			9.56			8.57		
10 PERCENT EXCEEDS	2570			1700			2000		
50 PERCENT EXCEEDS	772			834			590		
90 PERCENT EXCEEDS	351			403			186		

A - Aug. 30, 31, 1934; July 28, 1942.

B - Apr. 6, 1960; Apr. 2, 1979.

C - From graph based on gage readings.

D - Nov. 26, 1952; Nov. 20, 1953; Oct. 25, 1956; and Sept. 9, 14, 1958, result of windstorms.

## 05550500 POPLAR CREEK AT ELGIN, IL

LOCATION.—Lat 42°01'35", long 88°15'20", in SE1/4NW1/4 sec.19, T.41 N., R.9 E., Cook County, Hydrologic Unit 07120006, on right bank 35 ft upstream from bridge on U.S. Highway B.R. 20 (Villa Street) in Elgin, and at mile 2.3.

DRAINAGE AREA.—35.2 mi<sup>2</sup>.

PERIOD OF RECORD.—August 1951 to current year.

REVISED RECORDS.—WSP 1338: 1952-53. WDR IL-75-1: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 716.00 ft above sea level.

REMARKS.—Records good except those for July 8 - September 30, and estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.—Peak discharges greater than base discharge of 230 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	2100	*1,180	*6.78	Mar. 01	1230	249	3.01

Minimum discharge, 0.58 ft<sup>3</sup>/s, several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	11	22	e12	e14	228	35	189	12	10	.65	3.1
2	3.9	6.9	19	16	e17	207	29	176	11	11	.58	2.6
3	4.4	4.9	15	22	21	151	26	162	13	7.0	5.5	2.3
4	3.2	3.7	e14	29	30	114	22	120	13	4.3	6.7	2.0
5	2.8	3.2	e13	38	52	87	24	86	11	4.1	3.6	1.8
6	2.6	3.6	e12	31	40	70	30	64	16	4.1	2.0	1.3
7	2.4	13	e11	e18	29	57	30	49	33	4.0	1.5	1.2
8	2.3	14	e9.4	e13	23	50	22	114	66	2.9	.99	2.3
9	2.3	10	e8.2	e11	20	45	17	100	36	2.6	.67	2.4
10	2.3	6.9	8.8	e8.8	19	46	13	68	23	1.7	.60	1.4
11	2.8	5.0	38	e8.0	16	46	14	48	16	1.4	8.8	1.1
12	2.6	5.9	58	e7.2	15	38	43	35	11	.97	22	1.2
13	2.2	4.5	46	e6.5	14	32	66	29	9.9	.72	37	.79
14	2.1	3.0	32	e5.9	14	33	51	24	6.1	.72	12	.82
15	2.5	2.6	29	e5.2	13	33	39	22	4.8	.76	25	.78
16	6.1	2.5	31	e5.6	12	28	32	19	79	.75	38	2.0
17	5.4	5.2	28	e5.9	13	26	28	17	74	.73	147	37
18	6.6	7.0	e24	e4.6	36	25	24	21	38	2.9	131	37
19	5.6	5.7	e19	e3.8	88	25	24	70	24	12	86	26
20	4.6	4.3	e13	7.4	79	23	25	49	16	8.3	45	41
21	3.4	4.0	e10	8.7	766	20	32	32	17	7.7	22	32
22	3.8	5.0	e8.0	64	861	20	30	27	16	6.4	17	19
23	10	5.2	e6.6	e74	495	19	27	21	11	4.7	13	15
24	16	5.2	e11	e45	260	18	21	17	8.2	3.5	11	10
25	12	5.2	e19	e35	155	37	18	41	21	2.6	9.4	7.2
26	8.0	4.6	e16	e26	120	37	16	38	18	2.0	7.8	7.1
27	5.3	3.9	e14	e20	185	28	15	28	11	1.7	6.2	5.4
28	3.7	3.5	e13	e17	193	25	14	22	6.3	3.1	5.2	4.4
29	11	4.1	e13	e14	---	51	14	19	4.5	2.5	4.2	1.6
30	29	16	e12	e11	---	54	44	16	4.7	1.9	3.8	1.3
31	20	---	e13	e8.8	---	48	---	14	---	1.1	3.6	---
TOTAL	193.6	179.6	586.0	582.4	3600	1721	825	1737	630.5	118.15	677.79	271.09
MEAN	6.25	5.99	18.9	18.8	129	55.5	27.5	56.0	21.0	3.81	21.9	9.04
MAX	29	16	58	74	861	228	66	189	79	12	147	41
MIN	2.1	2.5	6.6	3.8	12	18	13	14	4.5	.72	.58	.78
CFSM	.18	.17	.54	.53	3.65	1.58	.78	1.59	.60	.11	.62	.26
IN.	.20	.19	.62	.62	3.80	1.82	.87	1.84	.67	.12	.72	.29

e Estimated

## 05550500 POPLAR CREEK AT ELGIN, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	12.9	21.7	23.7	21.0	28.7	49.4	51.6	35.0	26.6	15.6	16.0	12.9
MAX	64.6	133	113	85.1	129	235	146	130	102	92.4	103	94.6
(WY)	1973	1986	1983	1993	1997	1979	1983	1974	1996	1993	1990	1972
MIN	.50	.25	.60	.91	.72	4.76	9.51	3.50	.97	1.27	.87	.25
(WY)	1957	1954	1957	1959	1978	1956	1986	1989	1963	1988	1956	1956

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1951 - 1997	
ANNUAL TOTAL	11804.3		11122.13			
ANNUAL MEAN	32.3		30.5		26.2	
HIGHEST ANNUAL MEAN					52.6	
LOWEST ANNUAL MEAN					4.69	
HIGHEST DAILY MEAN	408	May 29	861	Feb 22	861	Feb 22 1997
LOWEST DAILY MEAN	1.8	Sep 25	.58	Aug 2	.10	Sep 16 1956
ANNUAL SEVEN-DAY MINIMUM	2.0	Sep 19	.86	Jul 11	.10	Sep 9 1958
INSTANTANEOUS PEAK FLOW			1180	Feb 21	1180	Feb 21 1997
INSTANTANEOUS PEAK STAGE			6.78	Feb 21	6.78	Feb 21 1997
INSTANTANEOUS LOW FLOW			.58	A	.00	B
ANNUAL RUNOFF (CFSM)	.92		.87		.75	
ANNUAL RUNOFF (INCHES)	12.47		11.75		10.13	
10 PERCENT EXCEEDS	90		57		64	
50 PERCENT EXCEEDS	13		14		10	
90 PERCENT EXCEEDS	2.9		2.3		1.2	

A - Several days.

B - July 10, 1957; Sept. 14, 1958; July 18, 1989.

## 05551000 FOX RIVER AT SOUTH ELGIN, IL

LOCATION.--Lat 41°59'40", long 88°17'38", in SE1/4NW1/4 sec.35, T.41 N., R.8 E., Kane County, Hydrologic Unit 07120007, on right bank, upstream of dam in South Elgin, 0.1 mi upstream from State Street, 1.4 mi downstream from Brewster Creek, 1.4 mi downstream from Poplar Creek, and at mile 67.2.

DRAINAGE AREA.--1,556 mi<sup>2</sup>.

PERIOD OF RECORD.--July to September 1914 (stage only), July 1961 to September 1962 (low-flow discharge measurements only), water years 1978-89 (occasional discharge measurements), October 1989 to current year.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 687.95 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Strattor Lock and Dam (previously known as McHenry Dam), 30 mi upstream, and occasionally affected by wind action. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,740 ft<sup>3</sup>/s, Feb. 21, gage height, 14.19; minimum discharge, 274 ft<sup>3</sup>/s, Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	447	981	706	607	905	4300	1630	1480	998	2030	508	652
2	448	1020	696	500	897	4560	1630	1460	980	2000	481	661
3	474	1060	745	422	914	4320	1560	1870	913	1890	502	675
4	462	1040	776	606	941	4260	1470	2000	878	1890	616	639
5	437	1070	830	899	1100	4180	1450	e1900	722	1850	507	545
6	421	1010	827	954	1160	4030	1350	1850	623	1640	483	425
7	438	1070	830	873	1160	3810	1370	1830	611	1530	461	413
8	466	1050	815	878	1150	3650	1240	2150	635	1410	413	424
9	441	936	812	898	1110	3450	1110	2050	576	1270	381	406
10	438	863	742	890	1110	3250	961	2000	481	1160	359	384
11	416	782	899	795	1080	3100	852	1840	449	1110	443	365
12	369	697	1140	806	1010	2980	1030	1700	463	1040	478	340
13	390	634	1130	829	943	2850	1070	1690	470	956	489	329
14	418	591	1030	824	844	2450	1100	1450	500	924	463	324
15	418	592	977	810	743	2200	1120	1120	436	826	454	328
16	407	578	975	767	730	2070	1120	1000	904	740	473	322
17	420	641	960	700	720	2010	1140	913	1990	705	967	492
18	407	729	835	712	799	1790	1210	930	2360	721	1090	487
19	426	733	755	745	1170	1520	1260	1030	2470	757	1010	516
20	451	774	790	750	1350	1490	1290	1080	2270	726	898	789
21	469	842	789	696	4130	1260	1320	1110	2140	710	805	924
22	572	852	804	900	5000	1190	1380	1140	2100	866	746	951
23	743	814	806	1120	4670	1160	1390	1100	2060	945	674	959
24	728	823	879	1090	4330	1150	1370	916	2020	942	623	950
25	723	839	748	1020	4400	1300	1320	1470	2090	841	654	867
26	705	777	763	951	4350	1300	1260	1480	2040	697	652	730
27	674	726	788	968	4100	1340	1200	1400	1940	717	647	554
28	664	716	779	913	4190	1430	1070	1350	1810	692	652	488
29	706	673	752	934	---	1590	952	1230	1730	684	660	443
30	934	715	725	940	---	1600	1040	1120	1800	645	654	446
31	1010	---	703	919	---	1630	---	1030	---	574	649	---
TOTAL	16522	24628	25806	25716	55006	77220	37265	44689	39459	33488	18892	16828
MEAN	533	821	832	830	1965	2491	1242	1442	1315	1080	609	561
MAX	1010	1070	1140	1120	5000	4560	1630	2150	2470	2030	1090	959
MIN	369	578	696	422	720	1150	852	913	436	574	359	322
CFSM	.34	.53	.53	.53	1.26	1.60	.80	.93	.85	.69	.39	.36
IN.	.39	.59	.62	.61	1.32	1.85	.89	1.07	.94	.80	.45	.40

e Estimated

## 05551000 FOX RIVER AT SOUTH ELGIN, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

MEAN	658	1346	1189	1081	1270	2035	2170	1876	1446	1076	776	568
MAX	913	2043	2420	2299	1965	3230	5808	3155	3614	3370	1456	1068
(WY)	1994	1993	1992	1993	1997	1994	1993	1996	1996	1993	1990	1993
MIN	302	722	360	628	675	805	949	697	345	281	294	351
(WY)	1995	1990	1990	1994	1995	1996	1994	1992	1992	1991	1991	1994

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1990 - 1997	
ANNUAL TOTAL	467171		415519			
ANNUAL MEAN	1276		1138		1290	
HIGHEST ANNUAL MEAN					2245	
LOWEST ANNUAL MEAN					999	
HIGHEST DAILY MEAN	5510		5000		6740	
LOWEST DAILY MEAN	345		322		222	
ANNUAL SEVEN-DAY MINIMUM	352		342		234	
INSTANTANEOUS PEAK FLOW			5740		6990	
INSTANTANEOUS PEAK STAGE			14.19		14.45	
INSTANTANEOUS LOW FLOW			274		177	
ANNUAL RUNOFF (CFSM)	.82		.73		.83	
ANNUAL RUNOFF (INCHES)	11.17		9.93		11.26	
10 PERCENT EXCEEDS	3190		2010		2650	
50 PERCENT EXCEEDS	836		899		953	
90 PERCENT EXCEEDS	438		450		370	

A - Apr. 21-23, 1993.

## 05551200 FERSON CREEK NEAR ST. CHARLES, IL

**LOCATION.**--Lat 41°56'00", long 88°20'30", in NE1/4SE1/4 sec.20, T.40 N., R.8 E., Kane County, Hydrologic Unit 07120007, on right bank at downstream side of bridge on Randall Road, 2.4 mi northwest of St. Charles, and at mile 2.2.

**DRAINAGE AREA.**--51.7 mi<sup>2</sup>.

**PERIOD OF RECORD.**--December 1960 to current year.

**REVISED RECORDS.**--WDR IL-75-1: Drainage area. WDR IL-82-2: 1966(M), 1968(M), 1970-71(M), 1973(M), 1978-79(M).

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 704.84 ft above sea level.

**REMARKS.**--Records good except for those estimated daily discharges, which are poor. Gage-height telemeter at station.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 550 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1645	*2,580	*8.77	Mar. 01	1515	674	4.96

Minimum discharge, 2.8 ft<sup>3</sup>/s, Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	23	31	e23	e23	490	49	154	35	e80	4.2	5.2
2	11	20	25	29	e28	269	43	115	32	e45	3.9	5.4
3	11	18	22	38	e30	150	42	130	31	e25	3.5	4.7
4	11	17	21	52	e50	120	39	95	28	e25	10	4.4
5	10	17	21	68	75	104	52	74	26	e23	4.8	4.8
6	10	17	21	43	47	88	57	59	24	e20	3.8	3.8
7	10	21	19	e33	36	77	44	53	28	e17	3.4	3.6
8	10	20	18	e27	30	73	38	140	39	e18	4.1	3.6
9	11	18	17	e23	27	73	34	101	28	18	4.6	6.6
10	11	17	17	e21	26	75	33	73	e16	15	5.3	5.1
11	10	16	53	e18	24	68	35	60	e15	13	10	4.6
12	10	14	96	e17	e20	61	71	54	e14	12	15	4.2
13	10	14	70	e15	e20	58	85	48	e15	12	14	3.3
14	9.8	15	54	e14	e19	60	69	45	e14	11	9.4	3.4
15	9.7	13	58	e13	e18	49	57	42	e13	10	13	3.2
16	11	14	56	e12	e18	46	49	39	e26	9.1	14	4.7
17	13	17	45	e16	21	45	43	36	e37	8.1	57	21
18	13	17	e35	e13	73	44	41	40	e16	24	42	11
19	12	15	e29	e11	227	42	46	81	e11	39	23	5.9
20	12	15	e24	e12	102	42	44	54	e11	20	17	5.9
21	11	15	e21	e15	1620	42	41	43	e16	14	13	5.7
22	12	16	e18	e80	952	39	38	38	e11	15	10	4.6
23	19	15	e23	e88	263	37	35	34	e10	14	8.8	4.6
24	17	16	e32	e68	157	35	33	33	e25	12	7.8	4.8
25	15	16	e33	e43	120	56	32	124	e89	10	7.3	4.5
26	15	15	e23	e35	126	51	29	109	e30	8.8	6.9	4.4
27	16	16	e22	e29	351	45	29	70	e15	7.8	6.8	3.8
28	13	13	e21	e25	270	45	29	54	e13	6.7	6.2	3.7
29	18	14	e24	e21	---	62	28	49	e25	5.6	5.7	3.6
30	51	32	23	e19	---	60	39	44	e70	4.9	5.4	4.3
31	30	---	21	e17	---	57	---	39	---	4.3	5.8	---
<b>TOTAL</b>	<b>434.5</b>	<b>506</b>	<b>993</b>	<b>938</b>	<b>4773</b>	<b>2563</b>	<b>1304</b>	<b>2130</b>	<b>763</b>	<b>547.3</b>	<b>345.7</b>	<b>158.4</b>
<b>MEAN</b>	<b>14.0</b>	<b>16.9</b>	<b>32.0</b>	<b>30.3</b>	<b>170</b>	<b>82.7</b>	<b>43.5</b>	<b>68.7</b>	<b>25.4</b>	<b>17.7</b>	<b>11.2</b>	<b>5.28</b>
<b>MAX</b>	<b>51</b>	<b>32</b>	<b>96</b>	<b>88</b>	<b>1620</b>	<b>490</b>	<b>85</b>	<b>154</b>	<b>89</b>	<b>80</b>	<b>57</b>	<b>21</b>
<b>MIN</b>	<b>9.7</b>	<b>13</b>	<b>17</b>	<b>11</b>	<b>18</b>	<b>35</b>	<b>28</b>	<b>33</b>	<b>10</b>	<b>4.3</b>	<b>3.4</b>	<b>3.2</b>
<b>CFSM</b>	<b>.27</b>	<b>.33</b>	<b>.62</b>	<b>.59</b>	<b>3.30</b>	<b>1.60</b>	<b>.84</b>	<b>1.33</b>	<b>.49</b>	<b>.34</b>	<b>.22</b>	<b>.10</b>
<b>IN.</b>	<b>.31</b>	<b>.36</b>	<b>.71</b>	<b>.67</b>	<b>3.43</b>	<b>1.84</b>	<b>.94</b>	<b>1.53</b>	<b>.55</b>	<b>.39</b>	<b>.25</b>	<b>.11</b>

e Estimated



## 05551200 FERSON CREEK NEAR ST. CHARLES, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	20.9	37.0	38.6	35.3	49.5	72.1	69.9	54.0	45.4	25.9	26.1	24.7
MAX	99.3	151	159	134	170	303	186	148	159	113	141	170
(WY)	1973	1986	1983	1969	1997	1979	1993	1996	1993	1996	1987	1972
MIN	1.61	2.39	1.98	1.63	3.31	17.1	16.4	7.87	3.07	1.05	1.65	1.64
(WY)	1964	1972	1964	1977	1963	1968	1977	1989	1977	1961	1964	1976

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1961 - 1997		
ANNUAL TOTAL	19783.8			15455.9					
ANNUAL MEAN	54.1			42.3			42.2		
HIGHEST ANNUAL MEAN							76.7		
LOWEST ANNUAL MEAN							8.72		
HIGHEST DAILY MEAN	1460	Jul 18		1620	Feb 21		1620	Feb 21	1997
LOWEST DAILY MEAN	8.4	Sep 25		3.2	Sep 15		.10	A	
ANNUAL SEVEN-DAY MINIMUM	9.0	Sep 14		4.1	Sep 10		.23	Aug 26	1961
INSTANTANEOUS PEAK FLOW				2580 B	Feb 21		2580 B,C	Feb 21	1997
INSTANTANEOUS PEAK STAGE				8.77	Feb 21		9.66 D	Feb 8	1965
INSTANTANEOUS LOW FLOW				2.8	Sep 15		.10	E	
ANNUAL RUNOFF (CFSM)	1.05			.82			.82		
ANNUAL RUNOFF (INCHES)	14.24			11.12			11.08		
10 PERCENT EXCEEDS	106			73			88		
50 PERCENT EXCEEDS	24			21			22		
90 PERCENT EXCEEDS	12			5.5			4.1		

A - Several days in 1961.

B - From rating curve extended above 1,960 ft<sup>3</sup>/s.

C - Gage height, 8.77 ft.

D - From floodmark, ice jam.

E - Several days in 1961 and 1965.

## 05551700 BLACKBERRY CREEK NEAR YORKVILLE, IL

LOCATION.--Lat 41°40'18", long 88°26'29", in SE1/4NW1/4 sec.21, T.37 N., R.7 E., Kendall County, Hydrologic Unit 07120007, on right bank 300 ft upstream from bridge on State Highway 47, 2.0 mi north of Yorkville, and at mile 3.3.

DRAINAGE AREA.--70.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 612.34 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 240 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	1145	* 2,040	*9.96	Feb. 28	1315	479	6.66

Minimum discharge, 4.0 ft<sup>3</sup>/s, Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	33	33	24	e29	374	60	61	28	99	7.8	8.9
2	25	29	33	26	e32	368	57	78	28	64	7.8	8.1
3	25	27	31	31	e40	286	56	78	27	39	11	8.0
4	23	26	31	33	60	218	53	75	26	29	17	8.0
5	22	25	28	51	106	184	56	66	25	25	18	7.5
6	21	30	28	48	86	156	62	59	25	22	19	5.8
7	22	51	27	43	61	132	57	55	24	20	16	8.6
8	21	47	26	e35	47	121	53	67	24	18	20	8.6
9	23	38	25	e27	e40	110	49	80	23	17	30	11
10	23	33	25	e23	e36	109	49	65	21	16	31	9.0
11	23	30	31	e21	e33	104	51	57	22	15	32	8.1
12	22	27	63	e20	e30	97	74	54	23	13	33	9.1
13	22	26	66	e18	e27	92	92	51	24	13	25	9.7
14	21	24	53	e17	e26	89	84	49	22	13	21	12
15	21	24	48	e16	e25	81	74	47	19	11	19	8.4
16	22	23	51	e15	e24	76	67	43	21	10	24	7.8
17	28	24	e40	e15	e25	74	62	41	24	11	48	18
18	34	26	e27	e14	e35	73	60	41	22	11	37	18
19	29	26	e24	e14	e160	69	59	83	19	12	25	14
20	27	24	e21	e13	137	67	59	88	18	12	16	13
21	25	24	e20	e18	500	65	57	61	17	11	13	13
22	25	25	e21	e35	1600	63	54	51	17	11	10	12
23	27	26	e24	e82	745	60	50	44	15	10	8.7	14
24	29	26	e32	e68	434	59	47	38	14	10	7.6	14
25	26	26	e22	e52	293	64	45	38	19	9.6	9.1	12
26	24	23	e21	e43	239	64	43	36	28	8.8	9.2	12
27	23	23	e21	e38	329	60	41	34	23	8.7	9.3	11
28	22	26	e20	e32	455	58	40	33	18	8.8	9.6	11
29	24	24	e20	e29	---	67	40	31	16	7.7	9.1	9.7
30	43	28	e21	e28	---	69	41	30	36	7.0	8.8	11
31	41	---	e22	e27	---	66	---	29	---	6.4	9.0	---
TOTAL	788	844	955	956	5654	3575	1692	1663	668	569.0	561.0	321.3
MEAN	25.4	28.1	30.8	30.8	202	115	56.4	53.6	22.3	18.4	18.1	10.7
MAX	43	51	66	82	1600	374	92	88	36	99	48	18
MIN	21	23	20	13	24	58	40	29	14	6.4	7.6	5.8
CFSM	.36	.40	.44	.44	2.88	1.64	.80	.76	.32	.26	.26	.15
IN.	.42	.45	.51	.51	3.00	1.89	.90	.88	.35	.30	.30	.17

e Estimated

## 05551700 BLACKBERRY CREEK NEAR YORKVILLE, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	29.0	43.3	48.9	43.9	60.7	88.5	88.6	76.1	62.5	46.8	29.3	33.5
MAX	126	175	217	146	202	360	249	221	197	381	172	131
(WY)	1973	1986	1983	1993	1997	1979	1979	1974	1974	1996	1987	1987
MIN	5.42	7.44	4.16	4.25	5.46	22.9	27.2	16.7	14.3	8.43	4.21	5.23
(WY)	1964	1964	1964	1977	1963	1964	1963	1989	1977	1961	1991	1976

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1961 - 1997		
ANNUAL TOTAL	28603			18246.3			54.2		
ANNUAL MEAN	78.2			50.0			97.8		
HIGHEST ANNUAL MEAN							16.7		
LOWEST ANNUAL MEAN							3460		
HIGHEST DAILY MEAN	3460	Jul 19		1600	Feb 22		3460	Jul 19 1995	
LOWEST DAILY MEAN	18	Jan 8, Feb 4-5		5.8	Sep 6		1.6	Aug 2 1991	
ANNUAL SEVEN-DAY MINIMUM	19	Jan 31		7.7	Jul 27		2.1	Jul 31 1991	
INSTANTANEOUS PEAK FLOW				2040	Feb 22		5510 A	Jul 18 1995	
INSTANTANEOUS PEAK STAGE				9.96	Feb 22		13.16	Jul 18 1995	
INSTANTANEOUS LOW FLOW				4.0	Sep 16		.10 B	Dec 7 1962	
ANNUAL RUNOFF (CFSM)	1.11			.71			.77		
ANNUAL RUNOFF (INCHES)	15.16			9.67			10.49		
10 PERCENT EXCEEDS	147			77			111		
50 PERCENT EXCEEDS	29			27			31		
90 PERCENT EXCEEDS	21			10			9.9		

A - From rating curve extended above 3,900 ft<sup>3</sup>/s, backwater from debris jam.

B - Result of freezeup.

## 05552500 FOX RIVER AT DAYTON, IL

**LOCATION.**--Lat 41°23'02", long 88°47'23", in SW1/4SE1/4 sec.29, T.34 N., R.4 E., La Salle County, Hydrologic Unit 07120007, on left bank under County Highway 18 bridge in Dayton, and at mile 5.2.

**DRAINAGE AREA.**--2,642 mi<sup>2</sup>.

**PERIOD OF RECORD.**--November 1914 to current year. Prior to April 1925, published as "at Wedron." Monthly discharge only for some periods, published in WSP 1308.

**REVISED RECORDS.**--WSP 730: 1931. WSP 1208: 1930, 1935, 1939. WSP 1308: 1916(M), 1922(M), 1926-31(M), 1934-40(M), 1946-47(M). WDR IL-75-1: Drainage area. WDR IL-76-1: 1969.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 462.30 ft above sea level. Prior to Apr. 13, 1925, nonrecording gage at site 4.1 mi upstream at datum 496.80 ft above Memphis datum. Apr. 13, 1925, to Sept. 30, 1942, nonrecording gage at site 1,000 ft upstream at datum 7.70 ft below sea level. Oct. 1, 1942, to Apr. 10, 1951, nonrecording gage, and Apr. 11, 1951, to Sept. 30, 1978, water-stage recorder, at site 1,000 ft upstream at same datum. Oct. 1, 1978 to June 11, 1997, water-stage recorder at site 500 ft upstream at same datum.

**REMARKS.**--Records good except those for Oct. 29 to Mar. 14 and estimated daily discharges, which are poor. Gage-height telemeter at station. Regulation by powerplant upstream from gage ended July 1996 due to dam failure.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 9,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	0700	*41,200	*21.46	Feb. 28	0400	12,900	13.39

Minimum discharge, 436 ft<sup>3</sup>/s, Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	967	1360	1570	1400	e1700	10100	2230	1980	1650	3440	751	876
2	938	1300	1540	1420	e1750	10000	2220	2580	1610	2910	671	874
3	920	1300	1500	1420	e1820	7700	2200	2730	1590	2470	609	863
4	918	1290	1540	1510	e1950	6700	2200	3000	1490	2250	601	884
5	921	1260	1540	1620	e2580	6120	2220	2930	1420	2180	814	846
6	892	1450	1570	1570	e2550	5570	2300	2760	1310	2080	686	764
7	866	2050	1540	1530	e2100	5040	2080	2640	1220	1860	644	645
8	850	2060	1510	1570	e1900	4760	2030	2940	1190	1770	594	572
9	892	1930	e1500	1630	e1800	4550	1860	3250	1180	1720	556	603
10	877	1780	e1400	1700	e1730	4420	1720	2980	1100	1550	507	585
11	857	1650	e1300	1620	e1670	4110	1620	2800	1040	1420	571	557
12	857	1570	1560	e1600	e1600	3890	1990	2600	1070	1350	778	527
13	821	1460	2070	e1550	e1550	3720	2390	2470	1060	1270	1000	493
14	807	1380	2030	e1490	e1500	3690	2340	2410	997	1180	840	466
15	830	1340	1900	e1420	e1470	3280	2270	2170	951	1150	746	450
16	904	1340	1860	e1390	e1420	3030	2120	1860	982	1060	849	465
17	931	1350	1810	e1360	e1400	2930	2040	1690	1430	959	1350	640
18	969	1410	1660	e1330	1900	2820	2010	1590	2400	922	1890	851
19	934	1460	1210	e1310	2860	2520	2150	2280	2690	1020	1630	775
20	885	1450	1190	e1300	2920	2310	2190	2430	2690	1040	1430	791
21	904	1500	1600	e1300	17900	2280	2110	2100	2470	1000	1250	964
22	926	1540	1770	e1700	33100	2040	2130	1960	2360	1100	1140	1150
23	1030	1520	1770	e2100	15300	1900	2100	1920	2290	1160	1060	1210
24	1190	1510	1770	e2350	10000	1860	2060	1840	2250	1220	990	1210
25	1200	1540	1560	e2220	7870	1970	1980	1730	2340	1200	922	1170
26	1180	1490	1490	e2030	7560	2070	1870	2260	2550	1060	943	1090
27	1150	1320	1650	e1890	11600	1990	1800	2210	2330	911	933	975
28	1130	1460	1630	e1780	11400	2020	1720	2060	2180	925	918	817
29	1080	1450	1660	e1720	---	2160	1580	2000	2030	887	899	691
30	1250	1520	1550	e1710	---	2270	1480	1900	1970	868	912	628
31	1370	---	1420	e1700	---	2260	---	1770	---	831	898	---
TOTAL	30246	45040	49670	50240	152900	120080	61010	71840	51840	44763	28382	23432
MEAN	976	1501	1602	1621	5461	3874	2034	2317	1728	1444	916	781
MAX	1370	2060	2070	2350	33100	10100	2390	3250	2690	3440	1890	1210
MIN	807	1260	1190	1300	1400	1860	1480	1590	951	831	507	450
CFSM	.37	.57	.61	.61	2.07	1.47	.77	.88	.65	.55	.35	.30
IN.	.43	.63	.70	.71	2.15	1.69	.86	1.01	.73	.63	.40	.33

e Estimated

## ILLINOIS RIVER BASIN

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## 05552500 FOX RIVER AT DAYTON, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1997, BY WATER YEAR (WY)

MEAN	1121	1478	1499	1462	2013	3306	3265	2384	1852	1247	928	972
MAX	5239	5444	7695	4941	5461	11290	9157	7575	6189	5988	4909	5141
(WY)	1955	1986	1983	1960	1997	1979	1979	1974	1996	1996	1924	1972
MIN	141	329	364	335	338	412	418	217	267	174	153	186
(WY)	1957	1954	1940	1940	1934	1934	1934	1934	1934	1934	1934	1946

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1915 - 1997		
ANNUAL TOTAL	925813			729443					
ANNUAL MEAN	2530			1998			1792		
HIGHEST ANNUAL MEAN							3940		
LOWEST ANNUAL MEAN							330		
HIGHEST DAILY MEAN	46600 A			33100			46600		
LOWEST DAILY MEAN	637			450			1.0 B		
ANNUAL SEVEN-DAY MINIMUM	655			506			120		
INSTANTANEOUS PEAK FLOW				41200			55400 C		
INSTANTANEOUS PEAK STAGE				21.46			36.47 D		
INSTANTANEOUS LOW FLOW				436					
ANNUAL RUNOFF (CFSM)	.96			.76			.68		
ANNUAL RUNOFF (INCHES)	13.03			10.27			9.22		
10 PERCENT EXCEEDS	5450			2780			4060		
50 PERCENT EXCEEDS	1510			1550			1160		
90 PERCENT EXCEEDS	861			848			370		

A - Estimated.

B - When turbines were shut down; lowest daily mean with plant operating, 78 ft<sup>3</sup>/s, Oct. 29, 1956.C - From rating curve extended above 43,000 ft<sup>3</sup>/s; affected by dam failure 500 ft upstream from gage then in use.

D - Ice jam.

## 05552500 FOX RIVER AT DAYTON, IL.--Continued

## WATER-QUALITY RECORDS

**PERIOD OF RECORD.**— Water years 1978 to 1992 and 1996 to January 1997. (Discontinued).

## WATER-QUALITY DATA, WATER YEARS OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY	AGENCY	GAGE	DIS-	STREAM	NUMBER	TEMPER-	SPE-	PH	O <sub>2</sub> GEN	OXYGEN	
		COL-	AN-		CHARGE,		OF		CIFIC	WATER		DIS-	
		LECTING	LYZING		INST.		SAM-		CON-	WHOLE		OKGEN	(PER-
		SAMPLE	SAMPLE		FEET		PLING		DUCT-	(STAND-		DIS-	CENT
		(CODE	(CODE		PER		POINTS		ANCE	ARD		SOLVED	SATUR-
(NUMBER)	(NUMBER)	HEIGHT	WIDTH	SECOND	(FT)	(COUNT)	(DEG C)	(US/CM)	(UNITS)	(% /L)	(ATION)		
(00027)	(00028)	(00065)	(00061)	(00004)	(00063)	(00010)	(00095)	(00400)	(01300)	(00301)			
OCT 1996	29...	1640	81700	80020	7.10	1050	140	10	13.0	830	8.7	4.0	40
NOV	20...	1520	81700	80020	7.14	1450	230	10	3.0	1620	8.6	14.1	105
DEC	11...	1610	81700	80020	6.47	E1300	240	10	2.5	979	8.5	13.3	98
JAN 1997	28...	1410	81700	80020	7.78	E1780	240	3	0.0	1050	7.8	4.1	28
DATE	CALCIUM	MAGNE-	SODIUM,	POTAS-	ALKA-	CAR-	BICAR-	CHLO-	SULFATE	FLUO-	SILICA,	SOLIDS,	
	DIS-	SUM,	DIS-	SUM,	LINITY	BONATE	BONATE	RIDE,	DIS-	RIDE,	LIS-	RESIDUE,	
	SOLVED	SOLVED	SOLVED	SOLVED	WAT DIS	WATER	WATER	DIS-	SOLVED	DIS-	SOLVED	AT 180	
	(MG/L	(MG/L	(MG/L	(MG/L	TOT IT	DIS IT	DIS IT	SOLVED	SOLVED	SOLVED	(MG/L	DEG. C	
	AS CA)	AS MG)	AS NA)	AS K)	FIELD	FIELD	FIELD	(MG/L	(MG/L	(MG/L	AS	DIS-	
(00915)	(00925)	(00930)	(00935)	MG/L AS	MG/L AS	MG/L AS	(MG/L	(MG/L	(MG/L	(MG/L	SOLVED		
					CACO3	CO3	HCO3	AS CL)	AS SO4)	AS F)	SiO2)	(MG/L)	
					(39086)	(00452)	(00453)	(00940)	(00945)	(00950)	(00955)	(70300)	
OCT 1996	29...	68	40	55	4.1	250	12	281	96	56	0.30	0.06	498
NOV	20...	70	40	57	4.1	262	14	290	98	60	0.40	1.4	522
DEC	11...	75	41	68	4.2	272	22	288	120	65	0.30	1.0	571
JAN 1997	28...	76	40	73	4.4	248	0	303	130	63	0.30	7.0	602
DATE	NITRO-	NITRO-	NITRO-	NITRO-	NITRO-			PHOS-	PHOS-			CARBON,	
	GEN,	GEN,	GEN,AM-	GEN,AM-	GEN,			PHOS-	PHORUS			ORGANIC	
	AMMONIA	NITRITE	MONIA +	MONIA +	NO2+NO3			PHOS-	ORTH,			SUS-	
	DIS-	DIS-	ORGANIC	ORGANIC	DIS-			PHORUS	DIS-			PENDED	
	SOLVED	SOLVED	DIS.	TOTAL	SOLVED			TOTAL	SOLVED			TOTAL	
(MG/L	(MG/L	(MG/L	(MG/L	(MG/L			(MG/L	(MG/L			(MG/L	(MG/L	
AS N)	AS N)	AS N)	AS N)	AS N)			AS P)	AS P)			AS C)	AS C)	
(00608)	(00613)	(00623)	(00625)	(00631)			(00665)	(00666)			(00681)	(00689)	
OCT 1996	29...	<0.020	0.020	0.50	1.0	1.40	0.280	0.150	0.160	23	2.0	5.7	1.8
NOV	20...	<0.015	0.060	0.40	1.4	1.80	0.350	0.180	0.150	33	4.0	5.8	4.8
DEC	11...	<0.015	0.020	0.50	0.80	2.30	0.200	0.120	0.120	28	4.0	5.1	1.7
JAN 1997	28...	0.380	0.050	0.90	1.0	3.50	0.280	0.260	0.230	18	8.0	4.9	0.40
DATE	ACETO-	ALA-	2,6-DI-	ATRA-	DEETHYL			METHYL	BEN-		CAR-	CARBO-	
	CHLOR,	CHLOR,	ETHYL	ZINE,	ATRA-			AZIN-	FLUR-		BARYL	FURAN	
	WATER	WATER,	ANILINE	WATER,	ZINE,			PHOS	ALIN		WATER	WATER	
	FLTRD	DISS,	WAT FLT	DISS,	WATER,			WAT FLT	WAT FLD		FLTRD	FLTRD	
	REC	REC,	0.7 U	REC	DISS,			0.7 U	0.7 U		0.7 U	0.7 U	
(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)			(UG/L)	(UG/L)		(UG/L)	(UG/L)	(UG/L)	
(49260)	(46342)	(82660)	(39632)	(04040)			(34253)	(82686)	(82673)		(82680)	(82674)	
OCT 1996	29...	<0.002	<0.002	<0.003	0.049	E0.030	<0.002	<0.001	<0.002	<0.002	<0.003	<0.003	<0.004
NOV	20...	<0.002	<0.002	<0.003	0.041	E0.026	<0.002	<0.001	<0.002	<0.002	<0.003	<0.003	<0.004
DEC	11...	<0.002	<0.002	<0.003	0.031	E0.012	<0.002	<0.001	<0.002	<0.002	<0.003	<0.003	E0.003
JAN 1997	28...	<0.002	<0.002	<0.003	0.080	E0.049	<0.002	<0.001	<0.002	<0.002	<0.003	<0.003	<0.004

## 05552500 FOX RIVER AT DAYTON, IL.-Continued

WATER-QUALITY DATA, WATER YEARS OCTOBER 1996 TO SEPTEMBER 1997

DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P, P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	
	OCT 1996												
	29...	<0.004	<0.002	<0.006	0.012	<0.001	<0.017	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
	NOV												
20...	<0.004	<0.002	<0.006	<0.002	<0.001	<0.017	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	
DEC													
11...	E0.004	<0.002	<0.006	0.004	<0.001	<0.017	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	
JAN 1997													
28...	0.019	<0.002	<0.006	<0.002	<0.001	<0.017	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	
DATE	MALA- THION, DIS- SOLVED (UG/L) (39532)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	
OCT 1996													
29...	<0.005	0.014	<0.004	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	E0.013	
NOV													
20...	<0.005	0.014	<0.004	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	E0.013	
DEC													
11...	<0.005	0.013	<0.004	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	E0.013	
JAN 1997													
28...	<0.005	0.060	<0.004	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.005	<0.002	0.019	
DATE	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUPOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82561)		
OCT 1996													
29...	<0.003	<0.007	<0.004	<0.013	0.016	<0.010	<0.007	<0.013	<0.002	<0.001	<0.002		
NOV													
20...	<0.003	<0.007	<0.004	<0.013	0.016	<0.010	<0.007	<0.013	<0.002	<0.001	<0.002		
DEC													
11...	<0.003	<0.007	<0.004	<0.013	0.009	E0.005	<0.007	<0.013	<0.002	<0.001	<0.002		
JAN 1997													
28...	<0.003	<0.007	<0.004	<0.013	0.012	<0.010	<0.007	<0.013	<0.002	<0.001	<0.002		

## ILLINOIS RIVER BASIN

05553500 ILLINOIS RIVER AT OTTAWA, IL

## WATER-QUALITY RECORDS

LOCATION.--Lat 41°20'32", long 88°50'48", in SE1/4SW1/4sec. 11, T.33 N., R.3 E., LaSalle County, Hydrologic Unit 07130001, 0.3 mi downstream from Fox River, 0.3 mi downstream from State Highway 23, and at mile 239.4.

DRAINAGE AREA.--10,949 mi<sup>2</sup>.

PERIOD OF RECORD.--Water year 1997.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	NUMBER OF SAM-PLING POINTS (COUNT) (00063)	TEMPER-ATURE WATER (DEG C) (00010)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L AS CA) (00300) (00301)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
FEB 1997											
26...	1640	81700	80020	800	4	3.5	667	7.2	13.6	102	51 20
MAR											
20...	1450	81700	80020	800	10	7.0	703	7.9	13.6	115	72 27
APR											
03...	1500	81700	80020	800	10	13.0	766	8.1	13.9	132	7^ 28
17...	1450	81700	80020	800	10	11.5	795	8.1	12.1	112	6^ 28
MAY											
01...	1550	81700	80020	800	10	15.5	859	8.3	12.1	121	70 32
15...	1610	81700	80020	800	10	14.5	809	8.2	11.3	111	68 30
30...	1230	81700	80020	850	10	16.5	617	7.8	10.1	103	65 24
JUN											
12...	1300	81700	80020	750	10	19.5	501	7.7	10.0	109	52 18
18...	1520	81700	80020	750	10	21.5	495	7.7	8.4	96	53 23
JUL											
10...	1620	81700	80020	750	10	26.5	703	8.3	10.0	124	63 26
24...	1530	81700	80020	850	10	28.0	622	7.9	7.9	101	51 21
AUG											
07...	1430	81700	80020	800	10	27.5	684	8.2	9.0	114	58 20
21...	1550	81700	80020	800	10	23.5	578	7.5	8.7	102	51 19
SEP											
04...	1430	81700	80020	800	10	24.0	757	8.4	9.8	116	63 24
18...	1500	81700	80020	800	10	26.5	711	8.0	9.4	116	60 22

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO3) (39086)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
FEB 1997											
26...	50	4.1	124	0	151	91	47	0.24	6.3	378	0.290
MAR											
20...	39	3.5	180	0	220	68	75	0.30	6.7	435	0.150
APR											
03...	45	3.6	194	0	237	80	76	0.30	3.2	464	<0.015
17...	48	3.7	192	0	234	89	78	0.36	3.1	477	0.056
MAY											
01...	56	4.3	200	0	244	94	84	0.38	0.76	503	<0.015
15...	49	3.7	208	0	254	90	74	0.31	2.1	489	0.022
30...	29	3.8	160	0	195	52	63	0.34	6.7	400	0.124
JUN											
12...	21	3.8	128	0	156	36	47	0.25	7.0	317	<0.015
18...	32	3.9	136	0	166	50	45	0.48	5.1	333	<0.015
JUL											
10...	42	4.2	186	14	198	67	70	0.37	4.5	451	<0.015
24...	38	4.4	164	0	200	65	64	0.40	4.1	406	<0.015
AUG											
07...	47	5.0	148	0	181	68	76	0.47	4.4	423	0.023
21...	35	4.1	150	0	183	56	57	0.26	6.9	353	0.045
SEP											
04...	52	5.1	166	7	188	79	77	0.46	3.8	443	<0.015
18...	53	5.4	150	0	183	76	79	0.55	3.6	428	0.027



## 05553500 ILLINOIS RIVER AT OTTAWA, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00639)
FEB 1997											
26...	0.040	0.80	1.7	4.90	0.370	0.150	0.160	30	14	5.7	3.2
MAR											
20...	0.040	0.60	0.90	5.70	0.280	0.210	0.200	9.0	14	4.5	0.70
APR											
03...	0.050	0.40	1.5	4.20	0.250	0.180	0.130	11	2.0	4.7	1.9
17...	0.052	0.40	0.96	5.03	0.330	0.208	0.241	7.6	<1.0	4.5	1.1
MAY											
01...	0.050	0.49	1.0	3.77	0.339	0.197	0.208	8.5	<1.0	4.6	0.70
15...	0.053	0.49	1.1	3.57	0.371	0.171	0.164	12	<1.0	5.0	1.9
30...	0.115	0.93	1.3	8.72	0.320	0.239	0.218	9.4	2.2	5.8	1.6
JUN											
12...	0.084	0.58	1.2	6.90	0.364	0.163	0.128	10	1.4	6.7	1.1
18...	0.081	0.54	1.6	5.12	0.504	0.146	0.144	23	<1.0	7.3	3.1
JUL											
10...	0.038	0.59	1.1	2.69	0.377	0.305	0.242	5.8	<1.0	5.0	2.0
24...	0.084	0.48	1.5	2.27	0.435	0.344	0.272	4.5	1.3	5.5	1.4
AUG											
07...	0.069	0.43	1.0	2.71	0.507	0.430	0.404	<3.0	<1.0	5.2	1.5
21...	0.059	0.59	0.82	2.33	0.319	0.230	0.205	7.9	<1.0	5.1	2.2
SEP											
04...	0.037	0.57	1.0	2.38	0.464	0.367	0.323	3.2	<1.0	4.8	1.1
18...	0.077	0.39	0.83	3.32	0.611	0.506	0.489	<3.0	1.3	4.0	1.6
	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI- CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RE SUL- FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82676)
FEB 1997											
26...	0.010	0.013	<0.003	0.134	E0.017	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
MAR											
20...	--	--	--	--	--	<0.035	<0.016	<0.016	<0.021	--	--
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	0.142	0.011	<0.003	0.466	E0.018	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
MAY											
01...	0.105	0.013	<0.003	0.268	E0.012	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
15...	0.146	0.012	<0.003	0.612	E0.021	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
30...	1.66	0.196	<0.003	10.6	E0.187	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
JUN											
12...	0.969	0.150	<0.003	8.26	E0.160	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
18...	0.776	0.056	<0.003	5.65	E0.161	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
JUL											
10...	0.172	0.030	<0.003	0.628	E0.060	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
24...	<0.025	0.007	<0.003	0.264	E0.030	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
AUG											
07...	<0.002	0.007	<0.003	0.163	E0.021	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
21...	0.016	0.007	<0.003	0.175	E0.032	<0.035	<0.016	<0.016	<0.021	<0.002	<0.070
SEP											
04...	0.008	0.006	<0.003	0.116	E0.011	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
18...	0.008	0.025	<0.003	0.149	E0.008	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001

## ILLINOIS RIVER BASIN

## 05553500 ILLINOIS RIVER AT OTTAWA, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	3HYDRY- CARBO- FURAN WAT, FLT GF 0.7U REC (UG/L) (49308)	CHLOR- AMBN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)
FEB 1997											
26...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	E0.007	<0.028	<0.014	<0.011
MAR											
20...	--	<0.014	<0.035	<0.035	--	--	<0.008	--	<0.028	<0.014	<0.011
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
MAY											
01...	<0.002	<0.014	<0.035	<0.035	--	E0.009	<0.008	<0.003	<0.028	<0.014	<0.011
15...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
30...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
JUN											
12...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
18...	<0.002	E0.230	<0.035	E0.020	<0.002	E0.006	<0.008	E0.041	<0.028	<0.014	<0.011
JUL											
10...	<0.002	0.060	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
24...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
AUG											
07...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
21...	<0.002	0.040	<0.035	<0.035	<0.002	E0.015	<0.008	<0.010	<0.028	<0.014	<0.011
SEP											
04...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
18...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
DATE	CHLORO- THALO- NIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DACTHAL MONO- ACID, WAT, FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P, P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOR- BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)
FEB 1997											
26...	<0.035	<0.004	<0.050	0.015	<0.017	<0.002	<0.006	0.016	<0.035	<0.020	<0.032
MAR											
20...	<0.035	--	<0.050	--	<0.017	--	--	--	<0.035	<0.020	<0.032
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.035	0.005	<0.050	0.227	<0.017	<0.002	<0.006	0.052	<0.035	<0.020	<0.032
MAY											
01...	<0.035	E0.003	<0.050	0.026	<0.017	0.063	<0.006	0.036	<0.035	<0.020	<0.032
15...	<0.035	<0.004	<0.050	0.291	<0.017	E0.002	<0.006	0.022	<0.035	<0.020	<0.032
30...	<0.035	<0.004	<0.050	3.00	<0.017	<0.002	<0.006	0.020	<0.035	<0.020	<0.032
JUN											
12...	<0.035	<0.004	<0.050	1.34	<0.017	E0.002	<0.006	0.017	<0.035	<0.020	<0.032
18...	<0.035	--	<0.050	1.14	<0.017	E0.001	<0.006	0.012	E0.250	<0.020	<0.032
JUL											
10...	<0.035	0.005	<0.050	0.097	<0.017	E0.001	<0.006	0.021	<0.035	<0.020	<0.032
24...	<0.035	0.006	<0.050	0.052	<0.017	E0.001	<0.006	0.049	<0.035	<0.020	<0.032
AUG											
07...	<0.035	0.010	<0.050	0.031	<0.017	<0.002	<0.006	0.021	<0.035	<0.020	<0.032
21...	<0.035	<0.004	<0.050	0.052	<0.017	<0.002	<0.006	0.065	<0.035	<0.020	<0.032
SEP											
04...	<0.035	<0.004	<0.050	0.035	<0.017	<0.002	<0.006	0.032	<0.035	<0.020	<0.032
18...	<0.035	<0.004	<0.050	0.008	<0.017	<0.002	<0.006	0.035	<0.035	<0.020	<0.032

## 05553500 ILLINOIS RIVER AT OTTAWA, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DINOSEB WATER, FLTRD, GF 0.7U (UG/L) (49301)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT,FLT REC (UG/L) (49299)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ESPEN- VAL- ERATE, WAT,FLT REC (UG/L) (49298)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)
FEB 1997											
26...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
MAR											
20...	--	<0.035	--	<0.020	<0.035	--	<0.019	--	--	<0.013	<0.035
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.001	<0.035	<0.017	E0.070	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
MAY											
01...	<0.001	<0.035	<0.017	<0.020	<0.035	E0.003	<0.019	<0.004	<0.003	<0.013	<0.035
15...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
30...	<0.001	<0.035	<0.017	0.130	<0.035	0.009	<0.019	<0.004	<0.003	<0.013	<0.035
JUN											
12...	<0.001	<0.035	<0.017	0.050	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
18...	E0.004	<0.035	<0.017	0.120	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
JUL											
10...	<0.001	<0.035	<0.017	0.200	<0.035	<0.002	<0.019	<0.004	<0.003	<0.030	<0.035
24...	<0.001	<0.035	<0.017	0.280	<0.035	<0.002	<0.019	<0.004	<0.003	<0.030	<0.035
AUG											
07...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
21...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
SEP											
04...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
18...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
DATE	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METHRI- BULIN WATER DISSOLV (UG/L) (82630)
FEB 1997											
26...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.214	0.020
MAR											
20...	--	--	--	<0.018	--	<0.035	<0.050	<0.026	<0.017	--	--
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.223	<0.004
MAY											
01...	<0.003	<0.004	<0.002	<0.018	E0.004	<0.035	<0.050	<0.026	<0.017	0.122	<0.004
15...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.208	<0.004
30...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	2.72	0.089
JUN											
12...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	2.78	0.023
18...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	0.040	<0.026	<0.017	1.15	0.011
JUL											
10...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.207	<0.004
24...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.092	<0.004
AUG											
07...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.051	<0.004
21...	<0.003	<0.004	<0.002	<0.018	E0.003	<0.035	<0.050	<0.026	<0.017	0.114	<0.004
SEP											
04...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.053	<0.004
18...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.012	<0.004

## ILLINOIS RIVER BASIN

## 05553500 ILLINOIS RIVER AT OTTAWA, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	1-NAPH THOL, WATER FLTRD 0.7 U GF, REC (UG/L) (49295)	MAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER FLTRD 0.7 U GF, REC (UG/L) (49294)	NORFLUR AZON, WATER FLTRD 0.7 U GF, REC (UG/L) (49293)	ORY- ZALIN, WATER FLTRD 0.7 U GF, REC (UG/L) (49292)	OKAMYL, WATER FLTRD 0.7 U GF, REC (UG/L) (38866)	PARA- THION, DIS- SOLVED (UG/L) (39542)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
FEB 1997											
26...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
MAR											
20...	--	<0.007	--	<0.015	<0.024	<0.019	<0.018	--	--	--	--
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
MAY											
01...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.008
15...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.013
30...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
JUN											
12...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.028
18...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
JUL											
10...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
24...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
AUG											
07...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
21...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
SEP											
04...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
18...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
DATE	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER FLTRD 0.7 U GF, REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRO- PHAM, WATER, FLTRD 0.7 U GF, REC (UG/L) (49236)	PRO- POKUR, WATER, FLTRD 0.7 U GF, REC (UG/L) (38538)	SILVEX, DIS- SOLVED (UG/L) (39762)
FEB 1997											
26...	<0.005	<0.002	<0.050	E0.014	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
MAR											
20...	--	--	<0.050	--	--	--	--	--	<0.035	<0.035	<0.021
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.005	<0.002	<0.050	0.029	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
MAY											
01...	<0.005	<0.002	<0.050	E0.014	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
15...	<0.005	<0.002	<0.050	E0.014	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
30...	<0.005	<0.002	<0.050	0.022	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
JUN											
12...	<0.005	<0.002	<0.050	E0.016	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
18...	<0.005	<0.002	<0.050	0.035	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
JUL											
10...	<0.005	<0.002	<0.050	0.024	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
24...	<0.005	<0.002	<0.050	0.059	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
AUG											
07...	<0.005	<0.002	<0.050	0.027	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
21...	<0.005	<0.002	<0.050	0.064	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
SEP											
04...	<0.005	<0.002	<0.050	0.018	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
18...	<0.005	<0.002	<0.050	E0.015	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021

## 05553500 ILLINOIS RIVER AT OTTAWA, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUPOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CLOPYR, WATER, FLTRD, WAT FLT GF 0.7U REC (UG/L) (49235)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	2,4,5-T DIS- SOLVED (UG/L) (39742)	2,4-D, DIS- SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38744)
FEB 1997											
26...	0.007	<0.010	<0.007	<0.013	<0.002	0.005	<0.050	EO.003	<0.035	<0.035	<0.035
MAR											
20...	--	--	--	--	--	--	<0.050	--	<0.035	<0.035	<0.035
APR											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	0.009	<0.010	<0.007	<0.013	<0.002	0.009	<0.050	<0.002	<0.035	<0.035	<0.035
MAY											
01...	0.094	<0.010	<0.007	<0.013	<0.002	0.007	<0.050	<0.002	<0.035	<0.035	<0.035
15...	0.033	0.027	<0.007	<0.013	<0.002	0.025	<0.050	<0.002	<0.035	<0.035	<0.035
30...	0.101	0.012	EO.017	<0.013	<0.002	0.051	<0.050	EO.003	<0.035	1.13	<0.035
JUN											
12...	0.055	0.017	EO.014	<0.013	<0.002	0.023	<0.050	<0.002	<0.035	<0.035	<0.035
18...	0.041	<0.010	<0.007	<0.013	<0.002	0.020	<0.050	0.005	<0.035	0.530	<0.035
JUL											
10...	0.038	EO.037	EO.025	<0.013	<0.002	0.067	<0.050	<0.002	<0.035	0.520	<0.035
24...	0.038	EO.035	<0.007	<0.013	<0.002	0.118	<0.050	<0.002	<0.035	<0.035	<0.035
AUG											
07...	<0.005	<0.020	<0.007	<0.013	<0.002	0.044	<0.050	<0.002	<0.035	0.070	<0.035
21...	0.021	0.034	<0.007	<0.013	<0.002	0.041	<0.050	<0.002	<0.035	<0.035	<0.035
SEP											
04...	0.009	<0.010	<0.007	<0.013	<0.002	0.027	<0.050	<0.002	<0.035	<0.035	<0.035
18...	<0.005	<0.010	<0.007	<0.013	<0.002	0.020	<0.050	<0.002	<0.035	<0.035	<0.035

## 05554500 VERMILION RIVER AT PONTIAC, IL

LOCATION.--Lat 40°52'40", long 88°38'10", in SE1/4SW1/4 sec.22, T.28 N., R.5 E., Livingston County, Hydrologic Unit 07130002, near center of span on downstream side of bridge on Vermilion Street in Pontiac, 0.1 mi upstream from State Highway 116, 0.8 mi upstream from Turtle Creek, and at mile 60.3.

DRAINAGE AREA.--579 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-83-2: 1951, 1957, 1965(M), 1968, 1970, 1980.

GAGE.--Water-stage recorder. Datum of gage is 619.45 ft above sea level. Prior to Nov. 8, 1965, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. An average of 1.4 ft<sup>3</sup>/s, diverted 0.5 mi upstream from station for water supply of city of Pontiac, is not included in records. U.S. Army Corps of Engineers satellite tele-meter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	unknown	*unknown	*unknown	June 13	1830	3620	9.08
Feb. 27	unknown	unknown	unknown				

Minimum discharge, .44 ft<sup>3</sup>/s, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	31	116	150	207	4120	405	288	173	170	11	21
2	18	30	165	160	207	2820	355	302	171	203	11	19
3	15	28	175	200	276	2080	328	265	173	158	11	18
4	13	25	160	267	496	1560	323	249	183	130	10	17
5	12	24	165	401	1230	1240	322	220	167	114	13	15
6	12	25	166	479	1310	1010	313	227	162	103	14	15
7	11	39	154	236	808	831	295	221	528	97	12	15
8	15	336	136	e180	499	711	262	207	774	89	11	16
9	16	461	150	e150	346	685	229	206	919	82	12	17
10	18	278	146	e125	286	1580	212	203	813	79	12	17
11	19	182	156	e110	e245	1490	246	185	586	71	24	17
12	18	131	400	e97	e220	1070	781	180	744	62	26	16
13	17	103	567	e89	e200	842	1570	188	3170	53	26	15
14	16	90	426	e84	e185	1290	1130	181	2680	49	28	15
15	14	82	346	e79	e175	1610	830	163	1450	51	25	14
16	13	75	345	e75	169	1080	678	159	965	49	24	14
17	16	73	323	e72	159	808	579	151	717	42	158	21
18	25	74	241	e70	357	707	511	158	549	35	1090	18
19	72	70	e170	e70	1790	625	506	181	456	32	641	19
20	70	68	e145	e74	2120	588	529	209	385	27	294	16
21	48	64	e160	e82	e7800	544	524	173	345	28	180	15
22	39	59	e180	e140	e7200	493	479	151	308	37	124	13
23	34	55	216	e700	4410	408	423	144	266	47	84	23
24	40	55	369	e1100	2860	363	389	141	236	56	60	32
25	52	59	329	e850	1910	369	346	145	217	45	49	22
26	48	80	e290	e560	1560	382	307	151	207	33	41	18
27	38	80	e240	e390	e6200	352	294	152	203	27	35	12
28	32	98	e210	e310	e6000	351	300	176	180	23	33	10
29	31	89	e190	e260	---	524	290	177	165	19	29	8.3
30	22	102	e170	e230	---	610	270	180	158	16	27	2.5
31	26	---	159	209	---	495	---	189	---	14	23	---
TOTAL	847	2966	7165	7999	49225	31638	14026	5922	18050	2041	3138	490.8
MEAN	27.3	98.9	231	258	1758	1021	468	191	602	65.8	101	16.4
MAX	72	461	567	1100	7800	4120	1570	302	3170	203	1090	32
MIN	11	24	116	70	159	351	212	141	158	14	10	2.5
CFSM	.05	.17	.40	.45	3.04	1.76	.81	.33	1.04	.11	.17	.03
IN.	.05	.19	.46	.51	3.16	2.03	.90	.38	1.16	.13	.20	.03

e Estimated

## 05554500 VERMILION RIVER AT PONTIAC, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1997, BY WATER YEAR (WY)

MEAN	142	240	352	374	494	737	818	713	546	316	130	127
MAX	1682	2327	2773	1981	1758	3123	2801	2968	2232	2350	1186	1540
(WY)	1994	1986	1983	1993	1997	1979	1957	1943	1980	1951	1943	1989
MIN	.000	1.46	4.58	3.03	6.71	23.7	109	71.1	27.0	.000	.000	.000
(WY)	1989	1954	1954	1977	1963	1964	1977	1964	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1943 - 1997		
ANNUAL TOTAL	130132.5		143507.8				
ANNUAL MEAN	356		393		415		
HIGHEST ANNUAL MEAN					1094		
LOWEST ANNUAL MEAN					49.7		
HIGHEST DAILY MEAN	8080	May 29	7800	Feb 21	12300	Dec 4	1982
LOWEST DAILY MEAN	9.8	Sep 22, 24	2.5	Sep 30	.00	A	
ANNUAL SEVEN-DAY MINIMUM	11	Sep 19	12	Aug 1	.00	Jul 1	1988
INSTANTANEOUS PEAK FLOW			unknown	Feb 21	13100	Dec 4	1982
INSTANTANEOUS PEAK STAGE			unknown	Feb 21	19.16	Dec 4	1982
INSTANTANEOUS LOW FLOW			.44	Sep 30			
ANNUAL RUNOFF (CFSM)	.61		.68		.72		
ANNUAL RUNOFF (INCHES)	8.36		9.22		9.74		
10 PERCENT EXCEEDS	847		830		1060		
50 PERCENT EXCEEDS	107		165		134		
90 PERCENT EXCEEDS	20		16		6.9		

A - Many days in 1953, 1983-84, 1986-91.

## 05555300 VERMILION RIVER NEAR LEONORE, IL

**LOCATION.**--Lat 41°12'30", long 88°55'51", in SW1/4SW1/4 sec.30, T.32 N., R.3 E., La Salle County, Hydrologic Unit 07130002, on left downstream side of bridge on County Highway 57 (Red, White and Blue Bridge Road), 3 mi northeast of Leonore, 6.2 mi downstream from Otter Creek, 8 mi northwest of Streator, and at mile 17.2.

**DRAINAGE AREA.**--1,251 mi<sup>2</sup>.

**PERIOD OF RECORD.**--May 1931 to current year. Prior to October 1971, published as "at Lowell."

**REVISED RECORDS.**--WSP 745: 1931-32. WSP 1308: 1932(M), 1935-38(M), 1940(M), 1942(M). WDR IL-75-1: Drainage area.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 520.58 ft above sea level. Prior to Aug. 20, 1952, nonrecording gage at site 6.8 mi downstream at datum 19.97 ft lower. Aug. 20, 1952 to Sept. 30, 1971, nonrecording gage at site 6.7 mi downstream at datum 19.97 ft lower.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum discharge, 33,500 ft<sup>3</sup>/s, July 15, 1958, gage height, 15.30 ft, from graph based on gage readings, site and datum then in use; maximum gage height, 27.13 ft, Dec. 4, 1982, present site; minimum discharge, 2.6 ft<sup>3</sup>/s, Aug. 3, 1988.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 7,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	2345	*20,800	*22.50	Feb. 27	2130	14,000	18.72
Minimum discharge, 18 ft <sup>3</sup> /s, Aug. 8-9, Sept. 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	43	185	e260	e470	9500	792	649	358	400	31	38
2	68	37	194	e270	e580	6370	702	628	345	595	27	35
3	51	39	249	e350	e800	4650	649	647	340	450	25	29
4	41	45	269	440	e1300	3660	631	576	325	344	23	26
5	35	45	258	541	e1900	2990	650	540	323	287	21	26
6	31	52	260	757	e2700	2480	639	500	313	249	21	24
7	29	132	254	557	e2200	2050	578	487	343	223	20	21
8	27	114	251	372	e1300	1790	529	505	761	202	19	23
9	26	449	262	e300	e900	1690	e485	475	905	177	21	23
10	28	531	247	e250	e720	2400	e450	446	1070	156	22	22
11	27	374	250	e220	e580	2960	504	443	896	144	118	29
12	26	276	267	e200	e500	2380	1300	438	733	129	84	30
13	26	217	509	e180	e440	1890	3530	420	1690	110	84	25
14	25	176	614	e170	e400	2120	3070	425	3630	97	55	27
15	27	152	495	e165	e370	2870	2260	400	2450	84	50	28
16	53	144	433	e155	e350	2330	1780	360	2470	81	62	27
17	67	139	447	e150	e330	1770	1450	348	1980	87	230	92
18	81	131	415	e150	e940	1490	1250	355	1250	44	987	83
19	50	123	e290	e148	e2800	1340	1260	509	948	34	1380	119
20	54	121	e250	e148	e4100	1250	1410	458	779	60	683	81
21	99	117	e260	e230	16000	1190	1370	436	673	75	378	67
22	86	112	e290	e440	15400	1070	1220	373	589	79	261	61
23	81	105	e370	e1100	8990	939	1070	335	520	100	193	51
24	61	100	e640	e2200	5870	829	956	323	453	84	141	43
25	54	102	e560	e1900	4060	850	853	334	404	82	108	41
26	49	97	e490	e1300	4170	848	756	343	373	84	82	51
27	59	96	e420	e900	12500	830	712	359	351	70	68	46
28	58	139	e370	e680	12400	795	704	340	341	57	57	36
29	54	160	e320	e580	---	781	681	357	315	46	47	29
30	59	188	e290	e480	---	948	650	361	321	40	45	21
31	45	---	e270	e440	---	923	---	351	---	35	43	---
TOTAL	1568	4556	10679	16033	103070	67983	32891	13521	26249	4705	5386	1254
MEAN	50.6	152	344	517	3681	2193	1096	436	875	152	174	41.8
MAX	99	531	640	2200	16000	9500	3530	649	3630	595	1380	119
MIN	25	37	185	148	330	781	450	323	313	34	19	21
CFSM	.04	.12	.28	.41	2.94	1.75	.88	.35	.70	.12	.14	.03
IN.	.05	.14	.32	.48	3.06	2.02	.98	.40	.78	.14	.16	.04

e Estimated



## ILLINOIS RIVER BASIN

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## 05555300 VERMILION RIVER NEAR LEONORE, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1997, BY WATER YEAR (WY)

MEAN	489	824	1129	943	1279	2140	1951	1581	1301	699	377	463
MAX	3188	4978	6201	4259	3681	7649	5098	5152	4442	2966	2678	3997
(WY)	1987	1986	1983	1993	1997	1979	1982	1995	1980	1993	1981	1993
MIN	11.4	11.4	11.4	6.36	40.9	192	208	241	78.5	8.83	6.89	13.3
(WY)	1972	1972	1977	1977	1977	1996	1977	1992	1988	1988	1988	1991

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1972 - 1997	
ANNUAL TOTAL	257742		287895			
ANNUAL MEAN	704		789		1096	
HIGHEST ANNUAL MEAN					2419	
LOWEST ANNUAL MEAN					280	
HIGHEST DAILY MEAN	16600	May 29	16000	Feb 21	30000	Dec 4 1982
LOWEST DAILY MEAN	21	Sep 25	19	Aug 8	2.6	Aug 3 1988
ANNUAL SEVEN-DAY MINIMUM	23	Sep 19	21	Aug 4	3.0	Jul 30 1988
INSTANTANEOUS PEAK FLOW			20800	Feb 21	31800	Dec 4 1982
INSTANTANEOUS PEAK STAGE			22.50	Feb 21	27.13	Dec 4 1982
INSTANTANEOUS LOW FLOW			18	A	2.6	Aug 3 1988
ANNUAL RUNOFF (CFSM)	.56		.63		.88	
ANNUAL RUNOFF (INCHES)	7.66		8.56		11.91	
10 PERCENT EXCEEDS	1610		1830		2710	
50 PERCENT EXCEEDS	200		330		420	
90 PERCENT EXCEEDS	40		33		34	

A - Aug. 8-9, Sept. 30.

## 05556500 BIG BUREAU CREEK AT PRINCETON, IL

LOCATION.--Lat 41°21'55", long 89°29'55", in SW1/4SE1/4 sec.18, T.16 N., R.9 E., Bureau County, Hydrologic Unit 07130001, on right bank 500 ft downstream from bridge on U.S. Highways 6 and 34, 0.6 mi downstream from Epperson Rm, 1.5 mi west of Princeton, and at mile 20.5.

DRAINAGE AREA.--196 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1936 to current year. Prior to October 1974, published as Bureau Creek at Princeton.

REVISED RECORDS.--WSP 1175: 1940-41, 1948. WSP 1308: 1942(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 555.39 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to July 18, 1940, nonrecording gage at bridge 400 ft upstream at datum 30.00 ft lower. July 18, 1940, to Sept. 30, 1944, water-stage recorder at site 500 ft upstream at present datum.

REMARKS.--Records good except those for July 1-22, which are fair, and those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1915	*12,000	*15.73	Feb. 28	0430	2,340	6.98
Feb. 27	0815	2,490	7.20	Mar. 1	1615	3,330	8.27

Minimum discharge, 2.3 ft<sup>3</sup>/s, Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	31	26	36	e43	2210	78	182	85	34	4.6	3.7
2	11	32	25	43	e60	959	73	196	80	34	4.1	6.0
3	9.5	27	28	50	e120	530	72	203	77	31	3.9	4.0
4	8.1	25	28	57	e210	397	73	203	73	28	3.9	3.4
5	6.8	26	29	59	e240	319	82	189	69	26	3.9	3.1
6	6.6	26	26	e52	e140	257	82	172	87	24	3.5	2.7
7	7.5	27	23	e66	e90	215	75	160	132	22	3.1	2.6
8	6.2	26	23	e50	e70	193	69	206	127	20	3.1	14
9	5.3	25	24	e42	e58	188	65	239	93	18	4.2	64
10	5.5	23	24	e36	e50	195	64	216	80	16	4.1	16
11	5.1	21	27	e33	e46	187	81	200	81	15	28	8.4
12	5.1	20	34	e29	e42	171	104	182	85	14	8.3	5.7
13	4.8	19	63	e27	e39	163	129	166	105	13	5.7	4.6
14	4.2	22	75	e26	e37	165	169	152	79	12	4.4	4.3
15	4.1	20	74	e24	e35	132	183	139	67	11	6.7	3.8
16	56	19	79	e23	e34	136	162	125	77	9.7	6.8	5.0
17	43	24	e60	e22	e50	139	144	120	68	8.4	40	14
18	33	22	e50	e21	e140	120	136	124	59	7.5	11	6.1
19	23	20	e40	e20	e800	108	161	302	55	6.7	12	5.5
20	17	20	e30	e20	486	104	147	226	53	6.4	10	4.8
21	14	22	e29	e25	6930	103	139	164	51	14	9.7	4.3
22	22	21	e30	e90	6040	98	134	141	48	14	7.5	4.2
23	24	19	e31	e160	935	90	123	129	45	10	6.2	5.3
24	23	18	e33	e200	645	87	115	123	41	9.6	5.9	4.5
25	23	18	e35	e150	493	99	107	120	39	7.9	5.0	4.1
26	21	19	e33	e110	617	99	98	124	38	7.4	4.6	3.5
27	20	17	e32	e86	1990	98	96	112	36	6.8	4.2	3.5
28	18	17	e31	e64	1400	102	98	101	33	8.1	3.9	3.3
29	24	20	e30	e50	---	99	94	101	31	7.2	3.6	3.4
30	24	25	e32	e42	---	90	119	98	32	5.9	6.8	4.4
31	32	---	e34	e39	---	82	---	91	---	5.1	4.7	---
TOTAL	519.8	671	1138	1752	21840	7935	3272	5006	2026	452.7	233.4	222.2
MEAN	16.8	22.4	36.7	56.5	780	256	109	161	67.5	14.6	7.53	7.41
MAX	56	32	79	200	6930	2210	183	302	132	34	40	64
MIN	4.1	17	23	20	34	82	64	91	31	5.1	3.1	2.6
CFSM	.09	.11	.19	.29	3.98	1.31	.56	.82	.34	.07	.04	.04
IN.	.10	.13	.22	.33	4.15	1.51	.62	.95	.38	.09	.04	.04

e Estimated

## 05556500 BIG BUREAU CREEK AT PRINCETON, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1997, BY WATER YEAR (WY)

MEAN	59.6	87.0	95.5	129	185	259	242	220	198	99.9	58.7	58.1
MAX	523	556	572	626	851	1439	832	915	716	624	356	567
(WY)	1942	1993	1983	1969	1949	1979	1973	1995	1972	1982	1972	1970
MIN	.92	.37	1.79	.000	4.84	24.5	14.6	9.94	10.2	.63	2.29	1.93
(WY)	1954	1954	1977	1940	1963	1977	1977	1989	1977	1936	1944	1943

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1936 - 1997	
ANNUAL TOTAL	52679.6		45068.1			
ANNUAL MEAN	144		123		141	
HIGHEST ANNUAL MEAN					365	
LOWEST ANNUAL MEAN					14.6	
HIGHEST DAILY MEAN	3280	May 29	6930	Feb 21	8730	Jun 24 1994
LOWEST DAILY MEAN	4.1	Oct 15	2.6	Sep 7	.00	A
ANNUAL SEVEN-DAY MINIMUM	4.8	Sep 19	3.6	Aug 2	.00	Jan 1 1940
INSTANTANEOUS PEAK FLOW			12000	Feb 21	12500 B	May 17 1974
INSTANTANEOUS PEAK STAGE			15.73	Feb 21	16.01	May 17 1974
INSTANTANEOUS LOW FLOW			2.3	Sep 7		
ANNUAL RUNOFF (CFSM)	.73		.63		.72	
ANNUAL RUNOFF (INCHES)	10.00		8.55		9.80	
10 PERCENT EXCEEDS	327		182		328	
50 PERCENT EXCEEDS	43		34		55	
90 PERCENT EXCEEDS	14		4.8		3.0	

A - January 1940 and several days in October and November 1953.

B - From rating curve extended above 11,800 ft<sup>3</sup>/s.

## ILLINOIS RIVER BASIN

## 05558300 ILLINOIS RIVER AT HENRY, IL

**LOCATION.**--Lat 41°06'36", long 89°21'00", in SW1/4 sec.15, T.13 N., R.10 E., Marshall County, Hydrologic Unit 07130001, on right bank 600 ft upstream from bridge on State Highway 18, 4.4 mi upstream from Crow Creek, 38.2 mi upstream from Peoria Lock and Dam, and at mile 196.0.

**DRAINAGE AREA.**--13,543 mi<sup>2</sup>, does not include diversion from Lake Michigan through the Chicago Sanitary and Ship Canal, which has occurred since Jan. 17, 1900.

**PERIOD OF RECORD.**--October 1981 to current year.

**GAGE.**--Water-stage recorder and acoustical-velocity meter. Datum of gage is 425.88 ft above sea level.

**REMARKS.**--Records fair except those for estimated daily discharges, which are poor. Some regulation by locks and dams upstream from station at Starved Rock and downstream at Peoria. Gage-height telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Mar. 22, 1979, reached a stage of 32.67 ft, from information by the U.S. Army Corps of Engineers, discharge, about 140,000 ft<sup>3</sup>/s, based on rating curve extended above 32.20 ft.

**EXTREMES FOR CURRENT YEAR.**--Maximum discharge, 117,000 ft<sup>3</sup>/s, Feb. 23, gage height, 27.19 ft; maximum gage height, 30.50 ft, March 2; minimum discharge, 1,430 ft<sup>3</sup>/s, Oct. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6240	7190	8360	10700	e11500	76600	15200	11900	16600	14300	7130	6690
2	6320	6980	10600	10600	e11300	71000	14700	10200	14800	15500	6970	7450
3	5600	6460	9900	10900	e11200	63500	14600	11900	12900	14200	5560	7360
4	5250	6930	10600	11100	e11000	57800	12800	11800	14500	12800	8120	6690
5	5410	6470	10100	13800	e14000	55500	14100	11100	14200	12800	8960	5410
6	4860	5540	10900	16100	e19000	51900	13300	13600	11600	12400	6840	5430
7	6440	9050	10900	13700	23000	46200	17700	12100	12200	9820	7060	6440
8	4590	9460	11800	12700	19500	47200	16100	13700	16900	7990	5220	6180
9	5250	9570	9960	12100	16900	41300	13400	15900	20600	9120	5540	6020
10	5360	10500	9990	11400	16400	38800	11600	15100	22600	8840	5360	5710
11	4840	9730	9910	7610	14600	42700	13400	13100	21400	8690	8140	5320
12	5190	9790	11900	6870	14300	37700	14500	15200	20300	8430	9470	5520
13	4500	8840	13500	7650	13100	34700	16700	12800	20800	8890	9670	5110
14	4860	8290	14000	8510	11900	31400	19100	9550	21800	9340	9290	5620
15	4570	7010	14700	e6800	11800	33600	17000	11200	21000	9180	8320	5480
16	5760	5830	14100	e5800	11600	28000	18300	7600	23200	7210	8580	4740
17	5520	7880	15300	e6100	7410	32300	17500	9730	25000	7570	14400	7890
18	6460	8230	14400	e6600	9240	30800	14400	8260	27200	6500	20100	6570
19	6310	8900	12800	e6200	14400	23400	15100	11700	27200	9110	21100	7480
20	5770	8210	9370	e5800	19900	22100	13800	14000	25100	9130	19300	7560
21	5800	7630	8340	e5600	46800	22600	14200	13800	24400	9620	17400	7660
22	4790	7650	9340	e7500	93800	21400	13900	12400	22300	9720	15100	6630
23	7110	6900	9410	e9500	111000	20200	12000	11500	20400	10200	12900	6590
24	6670	7680	13400	e12000	92800	17100	11700	10400	18200	9370	11800	6470
25	5760	9220	12000	e15000	74700	17600	11800	12300	19300	8940	11500	6260
26	5940	7890	9730	e19000	66500	15800	10400	14000	18200	9050	8190	6420
27	6460	7490	10000	e17000	69000	15600	10300	13600	16400	10300	7860	5740
28	6000	6460	12300	e15000	77200	14400	10900	13200	15600	11800	7950	5590
29	4030	7130	13500	e14000	---	18500	9960	12200	14400	11400	7730	4560
30	8540	7680	12500	e12500	---	18600	8730	14100	15200	10300	6650	5850
31	8310	---	11600	e12000	---	17800	---	14400	---	7950	6930	---
TOTAL	178510	236590	355210	330140	913850	1066100	417190	382340	574300	310470	309140	187160
MEAN	5758	7886	11460	10650	32640	34390	13910	12330	19140	10020	9972	6239
MAX	8540	10500	15300	19000	111000	76600	19100	15900	27200	15500	21100	7890
MIN	4030	5540	8340	5600	7410	14400	8730	7600	11600	6500	5220	4560

e Estimated

## 05558300 ILLINOIS RIVER AT HENRY, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1997, BY WATER YEAR (WY)

MEAN	9733	14180	17070	14250	16800	24650	23440	17990	16570	13060	9835	9835
MAX	23990	31730	51370	36120	32640	55690	48890	31670	33600	28840	18640	26090
(WY)	1994	1986	1983	1993	1997	1982	1983	1995	1996	1993	1993	1993
MIN	5497	7026	4698	7102	7176	8202	10770	8544	7199	5669	3739	2687
(WY)	1995	1988	1990	1996	1996	1996	1986	1989	1988	1991	1991	1991

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1982 - 1997		
ANNUAL TOTAL	4889640			5261000					
ANNUAL MEAN	13360			14410			15610		
HIGHEST ANNUAL MEAN							24470		
LOWEST ANNUAL MEAN							10780		
HIGHEST DAILY MEAN	74100			111000			111000		
LOWEST DAILY MEAN	4030			4030			2040		
ANNUAL SEVEN-DAY MINIMUM	4590			4940			2140		
INSTANTANEOUS PEAK FLOW				117000 A			117000 A		
INSTANTANEOUS PEAK STAGE				30.50B			32.02		
INSTANTANEOUS LOW FLOW				1430					
10 PERCENT EXCEEDS	29000			22400			30000		
50 PERCENT EXCEEDS	8390			11100			11700		
90 PERCENT EXCEEDS	5360			5790			6260		

A - Gage height, 27.19 ft.

B - Discharge, 72,600 ft<sup>3</sup>/s.

## 05559600 ILLINOIS RIVER AT CHILLICOTHE, IL

LOCATION.--Lat 40°55'45", long 89°27'42", in NW1/4 sec.22, T.11 N., R.9 W., Peoria County, Hydrologic Unit 07130001, at center of Atchison, Topeka and Santa Fe Railroad bridge, 1 mi north of Chillicothe and at mile 181.9.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--May 1993 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: May 1993 to current year.

REMARKS.--Records of discharge are given for Illinois River at Henry (station 05558300). Suspended-sediment samples were collected by a local observer once weekly with additional samples collected during high runoff periods. Samples were not collected (and data are not published) during periods of ice.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 491 mg/L, July 20, 1996; minimum daily, 19 mg/L, May 2, 1993, Sept. 15, 1994.

SEDIMENT LOADS: Maximum daily, 93,800 tons, July 20, 1996; minimum daily, 284 tons, Sept. 15, 1994.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 167 mg/L, June 11, 17; minimum daily, 21 mg/L, Dec. 4.

SEDIMENT LOADS: Maximum daily, 23,700 tons, Mar. 2; minimum daily, 438 tons, Nov. 6.

## SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	6240	63	1070	7190	36	693	8360	27	610
2	6320	70	1190	6980	37	699	10600	25	709
3	5600	79	1190	6460	39	672	9900	23	610
4	5250	86	1220	6930	39	727	10600	21	611
5	5410	79	1160	6470	33	577	10100	22	598
6	4860	70	917	5540	29	438	10900	23	674
7	6440	63	1090	9050	44	1070	10900	24	711
8	4590	62	768	9460	56	1430	11800	28	877
9	5250	62	879	9570	54	1390	9960	32	855
10	5360	61	890	10500	52	1480	9990	36	979
11	4840	60	780	9730	51	1340	9910	41	1110
12	5190	58	812	9790	50	1320	11900	47	1510
13	4500	56	683	8840	49	1160	13500	---	---
14	4860	55	716	8290	48	1060	14000	---	---
15	4570	54	666	7010	46	878	14700	---	---
16	5760	58	905	5830	46	718	14100	---	---
17	5520	53	792	7880	54	1160	15300	---	---
18	6460	47	818	8230	58	1300	14400	---	---
19	6310	46	784	8900	56	1350	12800	---	---
20	5770	46	710	8210	54	1200	9370	---	---
21	5800	43	670	7630	52	1080	8340	---	---
22	4790	40	514	7650	50	1040	9340	---	---
23	7110	37	709	6900	49	908	9410	---	---
24	6670	35	625	7680	50	1030	13400	---	---
25	5760	37	576	9220	47	1170	12000	---	---
26	5940	41	654	7890	43	911	9730	---	---
27	6460	45	783	7490	39	789	10000	---	---
28	6000	48	783	6460	36	621	12300	---	---
29	4030	41	447	7130	32	625	13500	---	---
30	8540	34	784	7680	30	614	12500	---	---
31	8310	34	771	---	---	---	11600	---	---
TOTAL	178510	---	25356	236590	---	29450	355210	---	---

## ILLINOIS RIVER BASIN

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## 05559600 ILLINOIS RIVER AT CHILLICOTHE, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	10700	---	---	e11500	---	---	76600	101	21000
2	10600	---	---	e11300	---	---	71000	124	23700
3	10900	---	---	e11200	---	---	63500	116	19800
4	11100	---	---	e11000	---	---	57800	107	16600
5	13800	---	---	e14000	---	---	55500	98	14700
6	16100	---	---	e19000	---	---	51900	91	12700
7	13700	---	---	23000	---	---	46200	84	10400
8	12700	---	---	19500	---	---	47200	77	9800
9	12100	---	---	16900	---	---	41300	71	7900
10	11400	---	---	16400	---	---	38800	65	6800
11	7610	---	---	14600	---	---	42700	60	6900
12	6870	---	---	14300	---	---	37700	56	5600
13	7650	---	---	13100	---	---	34700	51	4810
14	8510	---	---	11900	---	---	31400	47	4010
15	e6800	---	---	11800	---	---	33600	44	3900
16	e5800	---	---	11600	---	---	28000	40	3000
17	e6100	---	---	7410	---	---	32300	37	3200
18	e6600	---	---	9240	---	---	30800	34	2800
19	e6200	---	---	14400	---	---	23400	31	1900
20	e5800	---	---	19900	---	---	22100	30	1810
21	e5600	---	---	46800	---	---	22600	35	2100
22	e7500	---	---	93800	---	---	21400	41	2340
23	e9500	---	---	111000	---	---	20200	46	2540
24	e12000	---	---	92800	---	---	17100	51	2300
25	e15000	---	---	74700	---	---	17600	56	2600
26	e19000	---	---	66500	---	---	15800	61	2610
27	e17000	---	---	69000	---	---	15600	62	2600
28	e15000	---	---	77200	---	---	14400	50	1900
29	e14000	---	---	---	---	---	18500	56	2820
30	e12500	---	---	---	---	---	18600	67	3360
31	e12000	---	---	---	---	---	17800	77	3680
TOTAL	330140	---	---	913850	---	---	1066100	---	210750

e Estimated

APRIL			MAY			JUNE			
1	15200	80	3270	11900	55	1770	16600	102	4570
2	14700	81	3220	10200	75	2070	14800	127	5090
3	14600	83	3270	11900	78	2510	12900	119	4130
4	12800	85	2940	11800	69	2200	14500	87	3410
5	14100	96	3650	11100	60	1800	14200	63	2420
6	13300	91	3260	13600	53	1940	11600	48	1510
7	17700	166	7910	12100	49	1600	12200	61	1990
8	16100	158	6880	13700	61	2250	16900	87	3950
9	13400	126	4540	15900	62	2660	20600	123	6810
10	11600	105	3280	15100	51	2080	22600	149	9120
11	13400	94	3410	13100	50	1760	21400	167	9620
12	14500	85	3310	15200	80	3260	20300	158	8660
13	16700	76	3420	12800	129	4470	20800	109	6120
14	19100	77	3950	9550	114	2930	21800	69	4050
15	17000	80	3650	11200	90	2710	21000	121	6880
16	18300	84	4130	7600	70	1430	23200	162	10200
17	17500	80	3800	9730	54	1420	25000	167	11300
18	14400	79	3060	8260	42	939	27200	129	9490
19	15100	130	5300	11700	35	1100	27200	112	8240
20	13800	50	1870	14000	47	1770	25100	99	6680
21	14200	48	1860	13800	43	1610	24400	89	5840
22	13900	54	2040	12400	41	1360	22300	103	6210
23	12000	61	1990	11500	39	1220	20400	98	5410
24	11700	63	1990	10400	42	1180	18200	88	4340
25	11800	63	2000	12300	70	2340	19300	101	5270
26	10400	59	1650	14000	81	3070	18200	95	4650
27	10300	53	1480	13600	69	2540	16400	79	3510
28	10900	47	1380	13200	59	2090	15600	66	2770
29	9960	43	1150	12200	59	1930	14400	64	2490
30	8730	44	1030	14100	63	2400	15200	92	3770
31	---	---	---	14400	80	3110	---	---	---
TOTAL	417190	---	94690	382340	---	65519	574300	---	168510

e estimated

## ILLINOIS RIVER BASIN

## 05559600 ILLINOIS RIVER AT CHILLICOTHE, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	14300	107	4120	7130	33	635	6600	37	655
2	15500	98	4110	6970	34	643	7450	41	832
3	14200	82	3150	5560	55	826	7360	46	911
4	12800	69	2380	8120	56	1230	6600	44	793
5	12800	63	2170	8960	30	730	5410	42	611
6	12400	59	1970	6840	29	541	5430	40	585
7	9820	55	1460	7060	31	592	6440	45	784
8	7990	51	1100	5220	33	467	6180	44	733
9	9120	48	1180	5540	35	530	6020	39	629
10	8840	46	1100	5360	39	570	5710	36	556
11	8690	45	1060	8140	58	1270	5320	34	490
12	8430	53	1210	9470	59	1510	5520	33	487
13	8890	63	1520	9670	42	1100	5110	36	499
14	9340	55	1390	9290	35	873	5620	41	630
15	9180	44	1080	8320	41	932	5480	47	697
16	7210	41	793	8580	56	1290	4740	44	560
17	7570	40	826	14400	75	2920	7890	39	832
18	6500	40	705	20100	94	5090	6570	52	917
19	9110	41	1020	21100	72	4090	7480	63	1280
20	9130	44	1080	19300	78	4090	7560	48	989
21	9620	50	1300	17400	87	4100	7860	37	790
22	9720	59	1540	15100	87	3540	6830	37	683
23	10200	64	1770	12900	83	2890	6990	39	735
24	9370	69	1750	11800	78	2470	6470	33	574
25	8940	75	1800	11500	55	1710	6360	26	454
26	9050	79	1940	8190	37	818	6420	29	506
27	10300	75	2080	7860	36	773	5740	35	542
28	11800	67	2130	7950	41	872	5590	54	810
29	11400	52	1590	7730	39	806	4560	40	493
30	10300	44	1220	6650	35	626	5850	36	569
31	7950	38	808	6930	33	618	---	---	---
TOTAL	310470	---	51352	309140	---	49152	187160	---	20626



## 05563800 ILLINOIS RIVER AT PEKIN, IL

## WATER QUALITY RECORDS

LOCATION.--Lat 40°34'23", long 89°39'17", in SW 1/4 sec.24, T.7 N., R.7 E., Tazewell County, Hydrologic Unit 07130003, at State Highway 9 bridge at Pekin, 5.1 mi upstream from Mackinaw River and at mile 152.9.

DRAINAGE AREA.--14,585 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1994 to September 1997. (Discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Oct. 1994 to Sept. 1997. (Discontinued).

REMARKS.--Suspended-sediment samples were collected by a local observer once a week with additional samples collected during storm runoff periods.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily 1,090 mg/L, Feb. 21, 1997; minimum daily 15 mg/L, May 22, 1995.

SEDIMENT LOADS: Maximum daily, 91,500 tons, July 21, 1996; minimum daily 295 tons, Jan. 23, 1997.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 1,090 mg/L, Feb. 21; minimum daily, 19 mg/L, Jan. 22.

SEDIMENT LOADS: Maximum daily, 79,400 tons, Feb. 25; minimum daily, 295 tons, Jan. 23.

## SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	8510	68	1560	7040	51	971	7360	46	909
2	6610	64	1150	8140	50	1100	8260	44	990
3	6510	61	1080	7830	49	1040	10600	43	1230
4	6630	58	1050	6800	49	906	10600	44	1250
5	6170	57	957	7100	50	953	10400	53	1490
6	6550	63	1110	6800	51	940	11900	65	2080
7	5920	67	1070	7560	57	1160	12100	78	2540
8	6160	65	1080	8940	63	1520	12300	80	2650
9	5820	63	993	11000	70	2070	11600	79	2480
10	6180	69	1150	11200	76	2310	9280	80	2000
11	6050	72	1180	10900	76	2240	11600	82	2580
12	6260	63	1060	10000	72	1950	12300	85	2830
13	5540	54	811	8170	59	1310	12400	88	2930
14	5750	51	794	9340	48	1200	12900	87	3030
15	5660	50	757	7720	40	825	13200	86	3060
16	5680	51	782	5850	36	573	15000	86	3470
17	5470	54	804	6350	33	574	15700	88	3720
18	6210	62	1040	9610	33	868	15600	90	3780
19	6130	69	1140	11300	50	1520	15100	90	3690
20	6190	72	1210	10200	78	2140	13100	82	2900
21	6040	76	1230	8610	114	2650	10700	73	2110
22	5520	76	1130	7540	99	2010	10900	66	1950
23	5800	76	1200	6180	76	1270	11600	64	2000
24	6110	80	1310	6890	59	1090	11500	62	1920
25	6660	83	1490	9230	48	1190	11300	61	1870
26	6490	82	1440	9880	48	1280	12100	71	2330
27	6500	82	1430	7340	49	972	12300	85	2820
28	6470	79	1380	6850	50	919	12100	92	3020
29	6240	70	1170	6410	49	840	14100	80	3030
30	6810	61	1120	6930	47	882	15900	68	2910
31	6570	54	950	---	---	---	15800	59	2520
TOTAL	193210	---	34628	247710	---	39273	379600	---	76089

## ILLINOIS RIVER BASIN

## 05563800 ILLINOIS RIVER AT PEKIN, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	14400	55	2150	12800	25	873	71200	189	36300
2	13400	52	1890	12400	24	819	72900	134	26400
3	13000	50	1760	12000	24	783	72400	110	21400
4	12600	50	1710	10500	26	726	69500	108	20200
5	12000	51	1640	8440	82	1870	66700	113	20400
6	13000	51	1800	13300	100	3600	62500	102	17300
7	14700	52	2080	21300	96	5530	58800	85	13500
8	14800	48	1900	23000	95	5910	56100	73	11000
9	14700	40	1570	23600	94	6010	52300	66	9290
10	14000	37	1410	23600	94	5960	48200	62	8010
11	11900	35	1130	22500	93	5660	47000	60	7580
12	9910	33	889	21600	94	5460	45300	55	6780
13	10400	31	879	20400	94	5180	44000	46	5480
14	10900	30	868	19300	95	4930	41400	44	4970
15	7930	28	595	18100	95	4640	40100	43	4690
16	5940	26	420	15500	96	4000	38700	42	4400
17	6240	25	416	6800	96	1760	38400	43	4430
18	6940	23	436	5820	99	1550	38700	50	5200
19	6540	22	388	9590	201	5210	36300	49	4770
20	6040	21	342	14200	515	19700	34300	50	4640
21	5730	20	309	19700	1090	57900	33000	51	4580
22	6210	19	323	33300	734	66000	31900	55	4720
23	5470	20	295	47900	497	64200	30700	59	4870
24	7780	21	442	61000	478	78700	29100	62	4860
25	9550	22	578	64700	455	79400	27900	62	4650
26	11500	25	763	65100	438	77000	26600	63	4540
27	11100	27	810	64600	355	61900	25800	76	5300
28	16700	28	1280	66500	243	43700	24400	87	5750
29	14800	31	1230	---	---	---	24200	82	5340
30	12800	45	1550	---	---	---	23900	78	5060
31	12800	30	1040	---	---	---	23900	84	5440
TOTAL	333780	---	32893	737550	---	618971	1336200	---	291850
APRIL			MAY			JUNE			
1	22900	70	4350	6750	147	2680	22000	139	8250
2	22800	71	4370	6280	135	2290	20400	144	7950
3	22900	74	4550	8410	124	2820	19300	158	8210
4	21500	94	5460	9480	114	2920	18700	145	7320
5	20100	141	7660	10400	118	3320	14100	155	5920
6	18400	151	7480	14400	198	7680	7930	143	3070
7	20600	156	8700	14800	207	8250	11400	103	3160
8	20800	169	9480	15200	178	7320	16600	148	6620
9	20000	169	9100	20300	154	8450	20800	107	6010
10	18900	146	7460	22200	326	19500	20800	55	3100
11	18900	181	9230	20100	209	11300	21500	84	4860
12	17900	215	10400	19500	140	7390	22100	121	7210
13	17400	195	9140	15900	178	7650	22400	107	6490
14	18600	171	8570	7480	281	5680	23200	99	6210
15	19300	158	8240	8200	107	2380	22900	89	5530
16	20500	187	10300	9000	40	970	23900	137	8830
17	20700	136	7590	8690	36	835	24800	121	8090
18	20100	101	5490	9810	42	1120	25400	121	8300
19	19900	93	4980	11700	71	2250	26400	157	11200
20	19200	91	4700	14500	80	3120	26500	81	5780
21	19100	113	5830	15100	65	2670	26500	65	4660
22	18700	95	4820	15300	44	1810	26400	86	6120
23	18300	109	5370	15100	61	2470	25700	93	6440
24	17600	117	5540	15000	36	1460	23900	213	13700
25	17000	161	7400	14700	41	1630	23100	80	5020
26	16400	165	7320	14500	70	2740	22500	75	4540
27	15000	169	6830	14700	188	7460	21600	78	4530
28	14400	173	6740	14800	150	5990	20500	81	4490
29	14200	173	6640	15300	107	4430	19400	92	4820
30	8180	160	3530	15600	98	4120	18500	105	5230
31	---	---	---	20700	106	5930	---	---	---
TOTAL	560280	---	207270	423900	---	148635	639230	---	191660

## 05563800 ILLINOIS RIVER AT PEKIN, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	17900	108	5230	6010	83	1350	7130	186	3580
2	16700	87	3930	3280	63	554	7810	182	3840
3	16400	81	3570	4150	58	653	10800	165	4810
4	16300	102	4480	9480	57	1470	7510	110	2220
5	13200	91	3250	8740	77	1830	5400	79	1160
6	7100	79	1520	5630	95	1450	5300	112	1610
7	6780	72	1320	5980	76	1220	5370	163	2370
8	5490	74	1090	3940	66	707	7170	139	2690
9	8070	75	1620	4040	113	1230	7030	102	1940
10	8780	75	1780	6670	199	3580	6140	77	1270
11	8810	75	1780	10500	154	4350	5600	62	940
12	8670	74	1730	9850	81	2160	5560	54	808
13	8660	64	1490	9690	70	1830	5280	55	780
14	9960	55	1490	8220	70	1550	5620	58	879
15	9960	54	1460	4930	74	990	5460	69	1010
16	7590	56	1160	7600	121	2490	5240	80	1140
17	5360	76	1090	13100	120	4250	6380	81	1390
18	4360	97	1140	17900	113	5460	6950	79	1470
19	4440	98	1170	20400	127	6970	7510	76	1540
20	8390	96	2170	21300	195	11200	9510	74	1900
21	11600	86	2690	21100	284	16200	9500	71	1830
22	11100	76	2290	20200	143	7810	9000	69	1670
23	10900	78	2280	18900	112	5710	8100	62	1360
24	9020	81	1960	17300	110	5150	6950	55	1030
25	5860	80	1260	12700	244	8370	5970	50	809
26	5730	80	1230	5840	335	5280	5650	50	763
27	8930	83	2010	5690	278	4280	5730	50	774
28	12400	89	2970	7710	231	4820	5820	50	786
29	12400	129	4320	9050	199	4870	6010	50	811
30	11400	164	5030	6560	194	3430	6070	50	820
31	8760	118	2800	5880	190	3010	---	---	---
TOTAL	301020	---	71310	312340	---	124224	201570	---	48000
YEAR	5666390		1884803						

## 05567000 PANTHER CREEK NEAR EL PASO, IL

LOCATION.--Lat 40°46'05", long 89°04'30", in SE1/4NW1/4 sec.26, T.27 N., R.1 E., Woodford County, Hydrologic Unit 07130004, on right bank on downstream side of bridge on county road just downstream from East Branch Panther Creek, 2 mi upstream from West Branch, 3.8 mi northwest of El Paso, and at mi 12.9.

DRAINAGE AREA.--93.9 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1949 to September 1960, water years 1961-1996 (annual maximums), October 1996-September 1997.

REVISED RECORDS.--WDR IL-75-1: Drainage area. WDR IL-92-2: 1988 (M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 658.86 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Gage-height telemeter at station. Water temperature and specific conductance continuously recorded at station for the National Water-Quality Assessment Program.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1615	1,110	10.61	Feb. 27	0745	*2,970	*11.02

Minimum discharge, 0.19 ft<sup>3</sup>/s, Aug. 9.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.1	7.1	8.4	e14	420	36	44	21	47	.57	5.5
2	1.2	2.1	6.9	11	e30	313	35	40	24	25	.68	5.8
3	1.1	2.0	6.8	14	e80	221	36	41	20	15	.40	6.3
4	1.3	2.1	6.6	15	112	176	35	32	18	11	.41	5.5
5	1.4	2.2	6.9	14	136	143	38	35	18	8.7	.86	5.8
6	1.6	2.6	7.1	e10	72	117	36	31	28	6.9	.33	5.9
7	1.6	8.8	6.9	e8.7	46	102	28	29	28	6.0	.27	6.1
8	1.8	7.3	6.6	e7.5	34	93	26	32	22	5.0	.22	7.6
9	1.7	6.6	6.7	e6.6	e25	110	25	27	20	4.6	.43	7.5
10	1.7	6.0	6.6	e5.9	e21	140	28	24	17	3.6	1.5	7.4
11	1.5	5.7	6.8	e5.3	e17	113	40	28	18	3.0	7.7	6.6
12	1.7	5.4	7.2	e4.9	e14	93	171	27	26	2.7	4.8	6.2
13	1.6	e5.0	7.1	e4.6	e12	88	254	25	55	2.7	2.3	6.3
14	1.6	e4.7	7.3	e4.4	e12	160	188	24	40	2.4	2.0	6.5
15	1.5	e4.5	7.3	e4.3	e11	119	137	20	31	2.1	2.2	6.5
16	1.2	e4.4	7.1	e4.2	e10	92	113	18	33	1.5	2.2	6.6
17	1.2	e4.4	6.6	e4.2	e15	84	94	21	25	1.1	151	12
18	1.9	e4.4	6.2	e4.2	e60	77	84	21	22	1.1	112	15
19	1.7	e4.3	e5.5	e4.3	e70	72	81	26	19	.97	48	9.0
20	1.8	e4.1	e4.9	e5.4	57	71	73	19	19	.77	26	10
21	1.8	e3.8	e4.7	e9.0	792	67	69	16	18	1.1	14	8.2
22	1.9	e3.7	e5.2	e50	432	56	64	15	15	3.0	7.4	6.1
23	2.4	e3.9	e20	114	201	51	60	17	13	2.7	4.1	5.8
24	2.3	e4.2	e42	57	128	50	54	19	11	2.6	3.7	5.6
25	2.3	e4.7	e23	39	92	55	48	23	11	1.9	3.3	5.5
26	2.1	e5.2	e13	e26	312	49	45	28	10	.99	3.5	6.0
27	1.8	e5.6	e10	e18	1970	51	49	26	8.5	.79	4.0	5.8
28	1.8	e6.1	e9.2	e15	605	51	46	27	7.3	.68	4.3	5.8
29	1.9	6.7	e8.3	e13	---	44	42	26	6.7	.72	4.4	5.7
30	2.0	7.4	7.6	e12	---	40	46	23	9.6	.58	5.2	5.8
31	2.1	---	7.6	e11	---	37	---	22	---	.50	5.9	---
TOTAL	52.8	140.0	284.8	510.9	5380	3355	2081	806	614.1	166.70	423.67	208.4
MEAN	1.70	4.67	9.19	16.5	192	108	69.4	26.0	20.5	5.38	13.7	6.95
MAX	2.4	8.8	42	114	1970	420	254	44	55	47	151	15
MIN	1.1	2.0	4.7	4.2	10	37	25	15	6.7	.50	.22	5.5
CFSM	.02	.05	.10	.18	2.05	1.15	.74	.28	.22	.06	.15	.07
IN.	.02	.06	.11	.20	2.13	1.33	.82	.32	.24	.07	.17	.08

e Estimated

## 05567000 PANTHER CREEK NEAR EL PASO, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1997, BY WATER YEAR (WY)

MEAN	4.53	14.2	14.5	49.0	87.7	80.8	133	72.0	111	71.4	17.1	3.11
MAX	23.9	129	68.9	229	274	165	237	175	217	392	106	11.4
(WY)	1952	1952	1950	1950	1951	1952	1950	1959	1960	1951	1958	1951
MIN	.22	.58	.94	1.14	4.14	4.19	5.30	13.5	9.12	5.38	1.35	.14
(WY)	1957	1957	1957	1956	1957	1956	1956	1958	1956	1997	1957	1956

## SUMMARY STATISTICS

## FOR 1997 WATER YEAR

## WATER YEARS 1950 - 1997

ANNUAL TOTAL	14023.37											
ANNUAL MEAN	38.4									54.5		
HIGHEST ANNUAL MEAN										114		1951
LOWEST ANNUAL MEAN										7.20		1956
HIGHEST DAILY MEAN	1970	Feb 27								6460	Jul 9	1951
LOWEST DAILY MEAN	.22	Aug 8								.00	A	
ANNUAL SEVEN-DAY MINIMUM	.42	Aug 3								.00	Sep 7	1959
INSTANTANEOUS PEAK FLOW	2970	Feb 27								10900 B	Jul 9	1951
INSTANTANEOUS PEAK STAGE	11.02	Feb 27								15.15 C	Jul 9	1951
INSTANTANEOUS LOW FLOW	.19	Aug 9										
ANNUAL RUNOFF (CFSM)	.41									.58		
ANNUAL RUNOFF (INCHES)	5.56									7.89		
10 PERCENT EXCEEDS	84									127		
50 PERCENT EXCEEDS	8.8									12		
90 PERCENT EXCEEDS	1.7									.70		

A - No flow for many days in 1959.

B - From rating curve extended above 2,000 ft<sup>3</sup>/s.

C - From floodmark.

## ILLINOIS RIVER BASIN

05567000 PANTHER CREEK NEAR EL PASO, IL.--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water year 1997.

WATER-QUALITY DATA, WATER YEARS OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 1996												
15...	1300	81700	80020	2.46	1.6	40.0	10	15.0	1370	7.8	6.6	66
NOV												
14...	1620	81700	80020	2.56	24.7	47.0	1	1.0	1360	7.8	12.5	89
DEC												
09...	1830	81700	80020	2.75	7.0	40.0	10	1.0	1150	8.3	16.1	113
JAN 1997												
27...	1400	81700	80020	2.82	18	50.0	1	0.0	685	7.4	11.2	79
FEB												
18...	1330	81700	80020	3.68	60	50.0	10	2.0	396	7.0	12.0	87
MAR												
13...	1400	81700	80020	3.38	84	45.0	11	5.0	658	8.0	12.5	100
APR												
10...	1300	81700	80020	2.36	26	40.0	10	6.5	709	8.2	14.0	115
MAY												
08...	1640	81700	80020	2.58	32	44.0	10	18.5	665	8.5	13.1	141
JUN												
02...	1650	81700	80020	2.41	25	34.0	10	16.0	699	8.1	9.1	92
JUL												
01...	1010	81700	80020	2.94	55	45.0	10	20.5	569	7.7	7.0	78
31...	1140	81700	80020	1.27	0.54	30.0	10	20.0	969	7.8	8.9	99
AUG												
14...	1300	81700	80020	1.48	2.1	16.0	7	21.5	815	7.9	7.3	83
27...	1310	81700	80020	1.72	4.0	35.0	10	23.0	913	8.2	7.4	87
SEP												
26...	1220	81700	80020	2.52	6.0	44.0	10	16.0	845	7.9	9.1	92

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 1996												
15...	71	40	75	5.1	258	0	315	130	57	0.40	2.9	592
NOV												
14...	77	38	28	3.3	278	0	339	44	62	0.30	3.3	454
DEC												
09...	86	41	88	4.4	294	0	359	150	62	0.40	2.7	654
JAN 1997												
27...	79	32	17	2.2	216	0	264	45	49	0.30	7.8	440
FEB												
18...	45	16	9.0	5.3	126	0	154	25	23	0.30	6.2	222
MAR												
13...	78	33	9.8	1.1	212	0	259	32	48	0.20	7.0	385
APR												
10...	78	36	14	1.1	208	0	254	37	54	0.29	2.4	405
MAY												
08...	77	37	12	1.0	254	0	310	37	51	0.26	1.5	414
JUN												
02...	76	37	11	0.89	212	0	259	34	49	0.23	3.7	418
JUL												
01...	59	26	13	2.8	162	0	198	33	32	0.28	10	363
31...	68	43	68	2.5	276	0	337	130	50	0.40	16	613
AUG												
14...	61	31	57	4.3	210	2	251	93	46	0.30	11	501
27...	93	41	49	3.3	286	0	349	91	55	0.35	9.7	548
SEP												
26...	94	42	21	2.0	298	0	364	56	45	0.28	9.1	490

05567000 PANTHER CREEK NEAR EL PASO, IL.--Continued

## WATER-QUALITY DATA, WATER YEARS OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	
	OCT 1996												
	15...	0.040	0.040	0.60	0.90	1.10	0.260	0.190	0.170	15	75	6.3	0.90
	NOV 14...	0.080	0.030	0.40	0.50	2.90	0.070	0.050	0.050	33	33	3.8	0.40
DEC 09...	0.110	0.060	0.70	0.90	5.40	0.140	0.090	0.100	33	25	4.9	1.5	
JAN 1997													
27...	0.300	0.070	0.60	0.70	12.0	0.130	0.130	0.130	9.0	29	2.6	0.60	
FEB 18...	1.10	0.090	2.0	2.6	5.60	0.910	0.680	0.590	17	7.0	8.1	3.0	
MAR 13...	0.060	0.020	0.30	0.70	18.0	0.220	0.050	0.050	<3.0	18	2.0	0.50	
APR 10...	0.020	0.090	0.30	0.40	13.0	0.020	<0.010	0.020	11	36	2.2	0.70	
MAY 08...	<0.015	0.134	0.20	0.40	15.9	0.016	<0.010	<0.010	17	24	2.4	0.80	
JUN 02...	0.092	0.155	0.41	0.61	13.8	0.012	<0.010	0.017	11	12	2.3	0.60	
JUL 01...	0.136	0.121	0.76	1.2	13.6	0.219	0.093	0.098	9.6	13	5.5	3.1	
31...	<0.015	0.013	0.62	2.2	0.326	0.292	0.126	0.121	7.5	59	6.9	3.1	
AUG 14...	0.154	0.084	0.87	1.2	1.32	0.212	0.141	0.134	7.1	93	5.9	1.3	
27...	<0.015	0.045	0.47	1.5	2.03	0.256	0.128	0.116	7.6	32	5.2	3.4	
SEP 26...	0.031	0.043	0.34	0.51	10.1	0.073	0.055	0.060	<3.0	20	2.5	0.40	

[illegible]

## ILLINOIS RIVER BASIN

## 05567000 PANTHER CREEK NEAR EL PASO, IL.--Continued

## WATER-QUALITY DATA, WATER YEARS OCTOBER 1996 TO SEPTEMBER 1997

[illegible][illegible]



## WATER-QUALITY DATA, WATER YEARS OCTOBER 1996 TO SEPTEMBER 1997

[illegible]

## 05567500 MACKINAW RIVER NEAR CONGERVILLE, IL

LOCATION.--Lat 40°37'25", long 89°14'30", in NE1/4SW1/4 sec.17, T.25 N., R.1 W., Woodford County, Hydrologic Unit 07130004, on right bank at downstream side of bridge on U.S. Highway 150, 0.2 mi downstream from Walnut Creek, 2 mi northwest of Congerville, and at mile 58.7.

DRAINAGE AREA.--767 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1944 to current year.

REVISED RECORDS.--WSP 1175: 1948. WSP 1308: 1945(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 607.01 ft above sea level. Prior to July 11, 1945, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	0100	*8,550	*13.60	Feb.27	1815	7,560	12.82

Minimum discharge, 7.1 ft<sup>3</sup>/s, Oct. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	10	32	68	e96	3630	375	390	298	213	21	48
2	13	9.1	34	70	e130	2470	363	340	287	240	20	47
3	11	9.6	32	73	e260	1920	355	349	291	176	19	47
4	9.0	10	30	77	462	1620	362	332	313	147	21	41
5	8.8	11	32	77	793	1360	398	309	291	133	23	35
6	8.8	20	34	71	694	1130	408	303	285	121	19	32
7	7.9	36	35	66	442	945	336	288	306	112	16	30
8	8.2	86	32	75	268	e780	293	307	326	103	14	32
9	8.3	55	30	72	213	e980	280	293	387	94	18	69
10	8.2	43	30	e64	177	e1150	275	273	548	90	20	101
11	9.4	33	33	e56	e140	1200	342	268	470	96	52	113
12	11	26	39	e50	e120	994	662	279	416	84	78	81
13	11	23	50	e44	e105	862	1440	280	454	75	50	60
14	9.4	20	48	e41	e96	1100	1380	274	601	69	33	51
15	9.2	19	53	e40	e88	1220	1070	260	494	63	31	43
16	8.0	19	50	e39	e85	980	893	241	419	60	31	37
17	8.6	20	47	e39	e84	844	753	243	374	58	901	46
18	16	19	e41	e38	309	752	668	240	322	54	857	115
19	18	18	e37	e39	644	685	656	270	296	50	647	108
20	17	22	e34	e41	741	664	615	254	275	47	360	85
21	18	20	e31	e52	4430	646	569	219	263	47	242	81
22	15	19	34	86	6310	591	528	201	242	88	172	68
23	15	17	e50	e180	2750	517	485	199	221	74	126	59
24	13	17	e110	e400	1810	484	457	204	203	57	100	54
25	11	19	e215	e560	1340	528	421	215	199	51	85	49
26	12	18	e190	e400	1520	487	390	220	193	46	71	46
27	13	20	138	e160	6320	463	377	253	185	39	62	43
28	15	19	110	e130	5460	465	393	523	182	34	56	38
29	12	21	93	e112	---	468	377	458	170	29	51	35
30	13	27	80	e105	---	433	372	378	163	25	49	30
31	12	---	73	e100	---	397	---	329	---	23	52	---
TOTAL	365.8	705.7	1877	3425	35887	30765	16293	8992	9474	2598	4297	1724
MEAN	11.8	23.5	60.5	110	1282	992	543	290	316	83.8	139	57.5
MAX	18	86	215	560	6320	3630	1440	523	601	240	901	115
MIN	7.9	9.1	30	38	84	397	275	199	163	23	14	30
CFSM	.02	.03	.08	.14	1.67	1.29	.71	.38	.41	.11	.18	.07
IN.	.02	.03	.09	.17	1.74	1.49	.79	.44	.46	.13	.21	.08

e Estimated

## 05567500 MACKINAW RIVER NEAR CONGERVILLE, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1997, BY WATER YEAR (WY)

MEAN	204	284	415	473	618	933	1072	866	752	377	187	237
MAX	2765	3340	4062	2808	2089	3157	3136	4216	3322	2687	2734	4330
(WY)	1987	1986	1983	1993	1951	1979	1973	1995	1974	1951	1981	1993
MIN	.59	2.47	2.40	6.01	14.9	68.1	99.7	114	21.6	6.09	1.22	1.84
(WY)	1957	1964	1964	1945	1963	1956	1977	1958	1963	1988	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1945 - 1997		
ANNUAL TOTAL	113188.5		116403.5				
ANNUAL MEAN	309		319		534		
HIGHEST ANNUAL MEAN					1672		
LOWEST ANNUAL MEAN					78.2		
HIGHEST DAILY MEAN	8830	May 28	6320	Feb 27	34000	Dec 4	1982
LOWEST DAILY MEAN	6.6	Sep 23	7.9	Oct 7	.20	A	
ANNUAL SEVEN-DAY MINIMUM	7.7	Sep 19	8.5	Oct 4	.20	Oct 27	1956
INSTANTANEOUS PEAK FLOW			8550	Feb 22	44800	Dec 4	1982
INSTANTANEOUS PEAK STAGE			13.60	Feb 22	20.21 B	Dec 4	1982
INSTANTANEOUS LOW FLOW			7.1	Oct 17	.20	C	
ANNUAL RUNOFF (CFSM)	.40		.42		.70		
ANNUAL RUNOFF (INCHES)	5.49		5.65		9.46		
10 PERCENT EXCEEDS	772		689		1280		
50 PERCENT EXCEEDS	87		94		187		
90 PERCENT EXCEEDS	12		17		12		

A - Oct. 21-24, Oct. 27 to Nov. 3, 1956.

B - From floodmark.

C - Oct. 21-24, Oct. 27 to Nov. 3, 1956; Oct. 6, 1957; Oct. 8-10, 1963.

## 05568000 MACKINAW RIVER NEAR GREEN VALLEY, IL

**LOCATION.**--Lat 40°27'15", long 89°36'22", in SE1/4SE1/4 sec.12, T.23 N., R.5 W., Tazewell County, Hydrologic Unit 07130004, on right downstream side of bridge on Towerline Road, 2.5 mi east of State Highway 29, 3.9 mi northeast of Green Valley, 5.8 mi south of Pekin, 10.2 mi north of U.S. Highway 136, and at mile 17.3.

**DRAINAGE AREA.**--1,073 mi<sup>2</sup>. Area at site used prior to Oct. 1, 1988, 1,089 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--March 1921 to October 1956; annual maximum, water years 1957-88; October 1988 to current year.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 477.10 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Jan. 17, 1933, chain gage at site 3.5 mi downstream on railroad bridge at datum 2.00 ft higher. Jan. 17, 1933, to May 13, 1940, chain gage, and May 14, 1940 to Sept. 30, 1952, wire-weight gage at site 3.6 mi downstream at datum 2.00 ft higher. Oct. 1, 1952 to Oct. 31, 1956, wire-weight gage, and Nov. 1, 1956 to Sept. 30, 1988, crest-stage gage at site 3.6 mi downstream at present datum.

**REMARKS.**--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 3,800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb.22	2345	6,390	22.99	Feb. 28	1100	*6,590	23.21

Minimum discharge, 38 ft<sup>3</sup>/s, Nov. 3-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	42	70	113	195	5160	551	541	391	254	73	103
2	58	41	64	110	185	3700	527	504	363	285	70	105
3	54	38	64	107	290	2740	510	479	356	297	68	128
4	52	38	64	107	474	2210	505	477	355	250	65	110
5	51	38	67	108	563	1880	540	443	368	224	66	94
6	49	41	67	100	714	1590	566	422	757	206	62	87
7	48	82	70	84	676	1370	522	400	710	194	59	82
8	49	94	69	97	490	1230	449	406	542	185	56	144
9	49	79	67	104	363	1230	415	400	502	174	56	159
10	47	109	67	e106	295	1500	406	372	564	164	56	106
11	46	86	65	e99	254	1680	481	349	664	159	59	132
12	46	77	65	e90	229	1490	888	340	707	158	89	138
13	46	71	65	e80	e205	1280	1520	341	817	154	98	120
14	45	65	66	e72	e190	1370	1840	334	707	145	92	102
15	45	62	75	e67	e180	1570	1540	325	753	139	77	91
16	45	61	77	e63	e174	1470	1270	308	635	131	71	84
17	45	60	78	e61	168	1250	1080	295	552	126	259	82
18	64	61	72	e60	186	1110	962	295	494	123	904	81
19	53	59	e64	e60	409	1010	912	307	438	119	729	100
20	44	57	e60	e62	608	954	876	314	404	113	519	129
21	43	56	e57	e70	3390	928	819	293	381	110	331	111
22	47	55	e56	e86	5930	878	763	268	358	125	251	104
23	57	55	72	e130	4770	792	707	254	331	116	199	101
24	59	55	114	e220	2650	720	663	253	307	124	171	92
25	51	56	152	e450	1960	743	619	258	285	112	183	85
26	47	56	206	e490	1700	733	572	287	289	104	137	80
27	45	51	164	e450	5190	681	547	357	269	100	121	79
28	41	52	161	e310	6490	671	543	361	258	93	111	78
29	41	54	153	e240	---	663	540	565	254	87	97	70
30	42	62	130	e220	---	639	520	499	243	80	101	64
31	45	---	118	e200	---	590	---	437	---	76	131	---
TOTAL	1518	1813	2739	4616	38928	43832	22653	11484	14054	4727	5361	3041
MEAN	49.0	60.4	88.4	149	1390	1414	755	370	468	152	173	101
MAX	64	109	206	490	6490	5160	1840	565	817	297	904	159
MIN	41	38	56	60	168	590	406	253	243	76	56	64
CFSM	.05	.06	.08	.14	1.30	1.32	.70	.35	.44	.14	.16	.09
IN.	.05	.06	.09	.16	1.35	1.52	.79	.40	.49	.16	.19	.11

e Estimated

## 05568000 MACKINAW RIVER NEAR GREEN VALLEY, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1997, BY WATER YEAR (WY)

MEAN	316	440	481	714	955	1068	1345	1233	814	574	292	371
MAX	3525	3417	2425	3514	3066	3629	4996	5756	2516	3109	2404	6057
(WY)	1927	1927	1928	1993	1927	1993	1944	1943	1946	1951	1924	1993
MIN	19.8	21.8	26.3	29.6	34.1	49.3	68.8	79.9	53.2	37.1	28.6	23.7
(WY)	1941	1941	1941	1940	1931	1931	1931	1934	1934	1988	1988	1940

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1921 - 1997		
ANNUAL TOTAL	146219			154766					
ANNUAL MEAN	400			424			721		
HIGHEST ANNUAL MEAN							2353		
LOWEST ANNUAL MEAN							98.4		
HIGHEST DAILY MEAN	7810	May 29		6490	Feb 28		23500	Apr 24	1944
LOWEST DAILY MEAN	38	Nov 3-5		38	Nov 3-5		17	A	
ANNUAL SEVEN-DAY MINIMUM	40	Oct 31		40	Oct 31		18	Oct 21	1940
INSTANTANEOUS PEAK FLOW				6590	Feb 28		51000 B	Dec 5	1982
INSTANTANEOUS PEAK STAGE				23.21	Feb 28		C	Sep 16	1993
INSTANTANEOUS LOW FLOW				38	Nov 3-6		17 D	A	
ANNUAL RUNOFF (CFSM)	.37			.40			.67		
ANNUAL RUNOFF (INCHES)	5.07			5.37			9.12		
10 PERCENT EXCEEDS	954			907			1770		
50 PERCENT EXCEEDS	130			158			259		
90 PERCENT EXCEEDS	51			55			44		

A - Oct. 26, 27, 1940.

B - Gage height, 16.13 ft, site then in use.

C - Maximum recorded, 28.29 ft.; discharge unknown.

D - Observed.

## 05568000 MACKINAW RIVER NEAR GREEN VALLEY, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1994 to September 1997. (Discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Oct. 1994 to Sept. 1997. (Discontinued).

REMARKS.--Suspended-sediment samples were collected by a local observer once a week with additional samples collected during storm runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 6,160 mg/L, May 27, 1996; minimum daily, 4 mg/L, May 11, 1997.

SEDIMENT LOADS: Maximum daily 99,800 tons, May 27, 1996; minimum daily, .83 tons, Dec. 21, 1996.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 1,540 mg/L, Feb. 22; minimum daily, 4 mg/L, May 11.

SEDIMENT LOADS: Maximum daily, 24,900 tons, Feb. 22; minimum daily, .83 tons, Dec. 21.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	64	19	3.3	42	12	1.4	70	39	7.3
2	58	23	3.6	41	13	1.4	64	35	6.1
3	54	28	4.0	38	14	1.4	64	32	5.5
4	52	33	4.7	38	14	1.5	64	29	5.0
5	51	36	4.9	38	15	1.5	67	27	4.8
6	49	27	3.6	41	27	3.1	67	26	4.7
7	48	20	2.5	82	62	15	70	26	5.0
8	49	21	2.8	94	63	16	69	26	4.9
9	49	25	3.4	79	45	9.6	67	26	4.8
10	47	31	3.9	109	32	9.6	67	26	4.8
11	46	37	4.6	86	23	5.4	65	27	4.7
12	46	42	5.3	77	17	3.5	65	27	4.7
13	46	48	5.9	71	13	2.5	65	27	4.7
14	45	49	5.9	65	20	3.4	66	27	4.8
15	45	28	3.3	62	30	5.1	75	27	5.5
16	45	16	2.0	61	40	6.6	77	31	6.5
17	45	23	2.8	60	52	8.5	78	37	7.9
18	64	36	6.4	61	67	11	72	45	8.6
19	53	40	5.7	59	86	14	e64	33	5.7
20	44	39	4.7	57	106	16	e60	6	.94
21	43	39	4.6	56	101	15	e57	5	.83
22	47	38	4.9	55	92	14	e56	6	.88
23	57	38	5.9	55	83	12	72	10	2.0
24	59	37	6.0	55	76	11	114	28	8.9
25	51	36	5.0	56	69	10	152	69	28
26	47	32	4.0	56	63	9.5	206	67	37
27	45	27	3.3	51	57	7.9	164	47	21
28	41	23	2.6	52	52	7.3	161	33	14
29	41	20	2.2	54	47	6.8	153	27	11
30	42	18	2.0	62	43	7.1	130	24	8.3
31	45	18	2.2	---	---	---	118	21	6.6
TOTAL	1518	---	126.0	1813	---	237.1	2739	---	245.45

## ILLINOIS RIVER BASIN

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## 05568000 MACKINAW RIVER NEAR GREEN VALLEY, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	113	18	5.5	195	50	27	5160	944	13200
2	110	16	4.6	185	59	29	3700	696	7010
3	107	14	3.9	290	83	67	2740	513	3810
4	107	12	3.4	474	118	153	2210	379	2270
5	108	10	3.0	563	145	221	1880	279	1420
6	100	9	2.5	714	124	238	1590	206	887
7	84	8	1.8	676	74	136	1370	152	566
8	97	7	1.9	490	42	56	1230	114	379
9	104	7	2.0	363	24	24	1230	104	347
10	e106	7	2.1	295	14	11	1500	100	404
11	e99	7	1.9	254	10	6.8	1680	95	430
12	e90	7	1.8	229	13	7.8	1490	91	366
13	e80	7	1.6	e205	12	6.7	1280	87	302
14	e72	8	1.5	e190	12	6.0	1370	84	313
15	e67	8	1.4	e180	12	5.6	1570	81	345
16	e63	8	1.3	e174	11	5.3	1470	79	311
17	e61	8	1.3	168	11	5.2	1250	76	256
18	e60	8	1.3	186	25	13	1110	73	220
19	e60	9	1.4	409	72	87	1010	71	193
20	e62	13	2.1	608	210	358	954	68	175
21	e70	19	3.5	3390	612	6330	928	66	165
22	e86	27	6.3	5930	1540	24900	878	63	150
23	e130	41	14	4770	1040	13800	792	61	131
24	e220	74	44	2650	437	3210	720	59	115
25	e450	123	149	1960	315	1670	743	57	114
26	e490	92	122	1700	311	1440	733	55	109
27	e450	65	79	5190	1280	19600	681	49	91
28	e310	61	51	6490	1280	22500	671	43	77
29	e240	58	38	---	---	---	663	40	71
30	e220	55	33	---	---	---	639	37	64
31	e200	53	29	---	---	---	590	34	55
TOTAL	4616	---	615.1	38928	---	94913.4	43832	---	34346
APRIL			MAY			JUNE			
1	551	32	48	541	33	48	391	94	99
2	527	30	42	504	34	46	363	97	95
3	510	28	38	479	32	42	356	85	82
4	505	26	35	477	29	38	355	109	104
5	540	24	35	443	42	50	368	87	87
6	566	22	34	422	45	52	757	105	233
7	522	21	29	400	66	72	710	248	466
8	449	19	23	406	33	36	542	184	270
9	415	74	82	400	31	34	502	183	249
10	406	174	191	372	29	30	564	189	288
11	481	252	330	349	4	4.1	664	194	348
12	888	276	664	340	11	10	707	308	599
13	1520	281	1150	341	24	22	817	367	808
14	1840	181	903	334	19	17	707	307	584
15	1540	126	524	325	21	19	753	217	442
16	1270	123	420	308	36	30	635	127	220
17	1080	79	232	295	64	51	552	107	159
18	962	54	141	295	60	48	494	108	144
19	912	55	137	307	67	55	438	113	133
20	876	31	73	314	69	58	404	92	101
21	819	42	92	293	68	54	381	82	84
22	763	51	104	268	62	45	358	93	90
23	707	43	83	254	77	53	331	93	83
24	663	30	54	253	64	44	307	92	76
25	619	47	79	258	45	31	285	91	70
26	572	27	42	287	59	46	289	89	70
27	547	21	32	357	74	71	269	88	64
28	543	18	27	361	87	86	258	87	60
29	540	38	56	565	130	198	254	86	59
30	520	40	56	499	82	111	243	91	60
31	---	---	---	437	90	106	---	---	---
TOTAL	22653	---	5756	11484	---	1607.1	14054	---	6227

## ILLINOIS RIVER BASIN

## 05568000 MACKINAW RIVER NEAR GREEN VALLEY, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	254	178	121	73	52	10	103	47	13
2	285	171	131	70	48	9.0	105	48	14
3	297	130	105	68	43	7.9	128	49	17
4	250	101	68	65	39	6.9	110	50	15
5	224	84	51	66	36	6.5	94	47	12
6	206	71	40	62	44	7.3	87	43	10
7	194	58	30	59	58	9.3	82	40	8.9
8	185	57	29	56	63	9.5	144	48	19
9	174	62	29	56	64	9.6	159	53	23
10	164	66	30	56	64	9.8	106	57	16
11	159	72	31	59	65	11	132	62	22
12	158	77	33	89	66	16	138	67	25
13	154	83	35	98	67	18	120	72	23
14	145	90	35	92	68	17	102	78	21
15	139	97	36	77	66	14	91	79	19
16	131	102	36	71	62	12	84	79	18
17	126	99	34	259	88	69	82	79	17
18	123	96	32	904	78	191	81	78	17
19	119	94	30	729	64	126	100	78	21
20	113	91	28	519	59	83	129	72	25
21	110	88	26	331	55	49	111	65	20
22	125	86	29	251	52	35	104	59	17
23	116	83	26	199	49	26	101	54	15
24	124	81	27	171	47	22	92	50	12
25	112	78	24	183	45	22	85	45	10
26	104	76	21	137	43	16	80	42	9.1
27	100	74	20	121	41	13	79	44	9.4
28	93	71	18	111	39	12	78	49	10
29	87	69	16	97	51	13	70	54	10
30	80	64	14	101	49	13	64	58	10
31	76	58	12	131	47	16	---	---	---
TOTAL	4727	---	1197	5361	---	879.8	3041	---	478.4
YEAR	154766		146628.35						

e Estimated



## 05568000 MACKINAW RIVER AT GREEN VALLEY, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1997.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY	AGENCY	GAGE	DIS-	STREAM	NUMBER	TEMPER-	SPE-	PH	OXYGEN,	OXYGEN,	
		COL- LECTING SAMPLE (CODE NUMBER) (00027)	ANA- LYZING SAMPLE (CODE NUMBER) (00028)		CHARGE, INST. CUBIC FEET PER SECOND (00061)		OF SAM- PLING POINTS (COUNT) (00063)		CON- DUCT- ANCE (US/CM) (00095)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)		DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	DIS- SOLVED (MG/L) (00300)
OCT 1996													
16...	1130	81700	80020	13.01	45	50.0	10	16.5	1040	6.9	--	--	
NOV													
13...	1110	81700	80020	13.18	70	88.0	10	3.5	1330	7.6	12.2	92	
DEC													
18...	1300	81700	80020	13.18	70	70.0	10	1.0	735	7.9	9.6	68	
JAN 1997													
23...	1350	81700	80020	13.63	e130	110	1	1.0	830	7.6	7.6	54	
FEB													
13...	1420	81700	80020	14.04	e205	110	5	1.0	640	7.5	12.7	89	
MAR													
12...	1430	81700	80020	16.82	1470	210	4	7.5	616	8.1	10.9	91	
APR													
09...	1150	81700	80020	14.48	416	100	10	7.5	635	8.3	12.3	103	
MAY													
07...	1220	81700	80020	14.43	398	90.0	10	15.5	671	8.3	10.2	102	
29...	1840	81700	80020	14.88	554	110	10	16.5	638	8.2	9.6	98	
JUL													
01...	1550	81700	80020	13.94	248	105	10	29.0	624	8.3	9.5	124	
29...	1550	81700	80020	13.26	85	85.0	10	27.5	603	8.4	13.4	169	
AUG													
13...	0830	81700	80020	13.40	96	105	10	22.5	553	7.7	6.5	75	
28...	1240	81700	80020	13.49	113	70.0	10	24.5	609	8.5	14.3	172	
SEP													
24...	1250	81700	80020	13.39	94	100	10	18.5	721	8.0	11.4	122	
DATE		CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 1996													
16...	72	36	24	2.3	274	0	334	35	31	0.30	8.9	420	
NOV													
13...	72	36	26	2.8	330	0	403	33	37	0.20	6.4	408	
DEC													
18...	71	37	39	2.6	276	0	337	57	48	0.30	3.8	449	
JAN 1997													
23...	82	38	45	2.4	260	0	317	79	51	0.20	4.4	520	
FEB													
13...	69	29	17	4.3	224	0	273	37	42	0.30	7.6	367	
MAR													
12...	72	29	10	1.4	192	0	234	34	41	0.20	7.3	370	
APR													
09...	73	34	13	1.4	236	0	288	34	46	0.22	1.5	388	
MAY													
07...	73	34	13	1.4	242	0	295	32	45	0.21	0.99	411	
29...	74	34	11	1.5	220	0	268	31	47	0.26	3.3	388	
JUL													
01...	67	33	12	2.0	232	5	273	30	40	0.23	7.0	390	
29...	56	34	18	1.9	238	0	290	33	39	0.20	12	360	
AUG													
13...	46	23	31	2.6	180	0	216	50	24	0.23	6.1	323	
28...	66	32	18	2.3	236	7	273	31	36	0.24	7.0	366	
SEP													
24...	71	34	27	2.9	258	0	315	47	37	0.24	6.5	433	

## 05568000 MACKINAW RIVER AT GREEN VALLEY, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NSE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT 1996											
16...	0.170	0.050	0.30	0.50	1.10	0.060	0.010	0.010	18	180	2.4
NOV											
13...	0.160	0.030	0.30	0.40	0.990	0.070	0.040	0.020	68	100	3.1
DEC											
18...	0.100	0.030	0.30	0.30	1.30	0.070	0.030	0.040	180	96	2.9
JAN 1997											
23...	0.150	0.070	0.50	0.60	5.70	0.310	0.240	0.230	21	98	3.1
FEB											
13...	0.360	0.060	0.80	0.70	6.80	0.270	0.230	0.220	9.0	29	3.4
MAR											
12...	0.020	0.030	0.30	0.60	14.0	0.110	0.050	0.070	<3.0	3.0	2.4
APR											
09...	0.040	0.050	0.20	0.30	9.40	0.010	<0.010	0.020	9.9	20	2.9
MAY											
07...	<0.015	0.062	<0.20	0.66	10.0	0.068	0.029	<0.010	15	14	2.5
29...	0.026	0.075	0.38	0.83	8.79	0.076	0.014	0.022	6.2	2.4	2.5
JUL											
01...	<0.015	0.052	0.30	0.66	7.47	0.112	0.035	0.036	<3.0	1.4	3.1
29...	<0.015	0.022	<0.20	1.6	0.257	0.101	<0.010	<0.010	26	5.2	2.7
AUG											
13...	0.064	0.036	0.32	1.1	1.00	0.281	0.108	0.111	5.0	38	3.3
28...	<0.015	0.026	0.26	1.2	2.40	0.118	<0.010	<0.010	11	12	3.3
SEP											
24...	<0.015	0.035	0.30	0.80	2.81	0.082	<0.010	<0.010	14	16	3.5

[illegible]

## 05568500 ILLINOIS RIVER AT KINGSTON MINES, IL

**LOCATION.**--Lat 40°33'10", long 89°46'40", in SE1/4SE1/4 sec.26, T.7 N., R.6 E., Peoria County, Hydrologic Unit 07130003, on right bank at Kingston Mines, 2.3 mi downstream from Mackinaw River, and at mile 145.4.

**DRAINAGE AREA.**--15,818 mi<sup>2</sup>, does not include diversion from Lake Michigan through the Chicago Sanitary and Ship Canal, which has occurred since Jan. 17, 1900.

**PERIOD OF RECORD.**--October 1939 to current year.

**REVISED RECORDS.**--WSP 1558: 1957. WDR IL-75-1: Drainage area.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 428.00 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1940, nonrecording gage at same site at datum 1.65 ft higher. Oct. 1, 1940, to Mar. 31, 1942, nonrecording gage at present site and datum. Auxiliary water-stage recorder 0.6 mi downstream from mouth of Copperas Creek, 8.6 mi downstream. Prior to Oct. 30, 1967, auxiliary water-stage recorder at mouth of Copperas Creek, 8.0 mi downstream.

**REMARKS.**--Records good except those for low-flow periods April 30 to May 4, May 14-19, July 7 to Aug. 17 and Aug. 26 to Sept. 30, which are fair, and those for estimated daily discharges, which are poor. Occasional regulation at low flow by navigation dams at Peoria and La Grange. Since Jan. 17, 1900, flow has included diversion from Lake Michigan through Chicago Sanitary and Ship Canal. U.S. Army Corps of Engineers satellite telemeter at site and at auxiliary site, 8.6 mi downstream.

**EXTREMES FOR CURRENT YEAR.**--Maximum discharge, 77,200 ft<sup>3</sup>/s, March 1, gage height, 23.02 ft; maximum gage height, 23.59 ft, March 3; minimum discharge, 1,270 ft<sup>3</sup>/s, Aug. 2, but may have been less during periods of partial record Aug 3, 8-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8570	7080	7430	14500	e13000	76400	23500	7290	22400	18200	6080	7230
2	6670	8180	8320	13500	e12600	76600	23300	6780	20800	17000	3350	7910
3	6560	7870	10700	13100	e12300	75100	23400	8890	19700	16700	4220	10900
4	6680	6840	10700	12700	e11000	71700	22000	9960	19100	16500	9540	7620
5	6220	7140	10500	12100	e9000	68600	20600	10800	14500	13400	8810	5490
6	6600	6840	12000	13100	e14000	64100	19000	14800	8690	7310	5690	5390
7	5970	7640	12200	14800	e22000	60200	21100	15200	12100	6970	6040	5450
8	6210	9030	12400	14900	e23500	57300	21200	15600	17100	5670	e4000	7310
9	5870	11100	11700	14800	e24000	53500	20400	20700	21300	8240	e4100	7190
10	6230	11300	9350	14100	23900	49700	19300	22600	21400	8940	e6730	6250
11	6100	11000	11700	e12000	22800	48700	19400	20400	22200	8970	10600	5730
12	6310	10100	12400	e10000	21800	46800	18800	19800	22800	8830	9940	5700
13	5590	8240	12500	e10500	20600	45300	18900	16200	23200	8810	9790	5400
14	5790	9400	13000	e11000	19500	42800	20400	7810	23900	10100	8310	5720
15	5700	7780	13300	e8000	18300	41700	20800	8520	23700	10100	5010	5550
16	5720	5910	15100	e6000	15700	40200	21800	9310	24500	7720	7670	5320
17	5510	6410	15800	e6300	6970	39600	21800	8980	25400	5490	13400	6460
18	6270	9670	15700	e7000	6010	39800	21100	10100	25900	4480	18800	7030
19	6180	11400	15200	e6600	10000	37300	20800	12000	26800	4560	21100	7610
20	6230	10300	13200	e6100	14800	35300	20100	14800	26900	8500	21800	9640
21	6080	8670	10800	e5800	23100	33900	19900	15400	26900	11700	21400	9610
22	5570	7590	11000	e6300	39200	32800	19500	15600	26800	11200	20500	9100
23	5860	6230	11700	e5600	52700	31500	19000	15400	26000	11000	19100	8200
24	6170	6940	11600	e8000	63600	29800	18300	15300	24200	9140	17500	7040
25	6710	9290	11500	e10000	66700	28600	17600	15000	23400	5970	12900	6050
26	6540	9940	12300	e12000	66800	27300	17000	14800	22800	5830	5980	5730
27	6540	7390	12500	e11500	69800	26500	15500	15100	21900	9030	5810	5810
28	6510	6900	12300	e17000	73000	25100	14900	15200	20800	12500	7820	5900
29	6280	6460	14300	e15000	---	24900	14700	15900	19700	12500	9150	6080
30	6850	6990	16000	e13000	---	24500	8700	16100	18700	11500	6660	6130
31	6610	---	15900	e13000	---	24500	---	21100	---	8840	6010	---
TOTAL	194700	249630	383100	338300	776680	1380100	582800	435440	653590	305700	317810	204550
MEAN	6281	8321	12360	10910	27740	44520	19430	14050	21790	9861	10250	6818
MAX	8570	11400	16000	17000	73000	76600	23500	22600	26900	18200	21800	10900
MIN	5510	5910	7430	5600	6010	24500	8700	6780	8690	4480	3350	5320

e Estimated

## ILLINOIS RIVER BASIN

## 05568500 ILLINOIS RIVER AT KINGSTON MINES, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	9611	11340	13770	14380	16700	23640	25520	23120	18690	13560	9849	9252
MAX	33180	37100	52390	44480	40470	56190	55630	52180	46230	46130	28440	34620
(WY)	1987	1986	1983	1993	1974	1979	1983	1943	1974	1993	1993	1993
MIN	3362	4428	4598	3747	3421	7000	7928	7822	5579	4474	5038	4027
(WY)	1964	1977	1944	1963	1963	1964	1940	1989	1977	1965	1944	1963

## SUMMARY STATISTICS

## FOR 1996 CALENDAR YEAR

## FOR 1997 WATER YEAR

## WATER YEARS 1940 - 1997

ANNUAL TOTAL	5416320			5822400								
ANNUAL MEAN	14800			15950						15770		
HIGHEST ANNUAL MEAN										32200		1993
LOWEST ANNUAL MEAN										6820		1964
HIGHEST DAILY MEAN	51800	Jun 2		76600	Mar 2					86700	Dec 7	1982
LOWEST DAILY MEAN	4150	Jan 10		3350 A	Aug 2					1700	B	
ANNUAL SEVEN-DAY MINIMUM	4500	Jan 7		5670	Sep 10					2060	Oct 8	1964
INSTANTANEOUS PEAK FLOW				77200 C	Mar 1					88800	Dec 7	1982
INSTANTANEOUS PEAK STAGE				23.59D	Mar 3					26.02	May 25	1943
INSTANTANEOUS LOW FLOW				1270 A	Aug 2							
10 PERCENT EXCEEDS	37300			26800						32400		
50 PERCENT EXCEEDS	9010			12000						11000		
90 PERCENT EXCEEDS	5960			5970						5310		

A - May have been less during periods of partial record, Aug. 3, 8-10.

B - Aug. 29 to Sept. 1, 1984.

C - Gage height, 23.02 ft.

D - Discharge, 76,000 ft<sup>3</sup>/s.

## ILLINOIS RIVER BASIN

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## 05568800 INDIAN CREEK NEAR WYOMING, IL

LOCATION.--Lat 41°01'06", long 89°50'07", in SE1/4SE1/4 sec.17, T.12 N., R.6 E., Stark County, Hydrologic Unit 07130005, on left bank at upstream side of bridge on West Jersey Road (County Road 300 N), 4.5 mi southwest of Wyoming and at mile 4.9.

DRAINAGE AREA.--62.7 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 606.78 ft above sea level. Prior to Oct. 1, 1994, at same site at datum 10.00 ft. higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 21	1430	*4,710	*23.00	Aug. 17	0830	827	19.73

Minimum discharge, 1.8 ft<sup>3</sup>/s, Nov. 26, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	5.4	e9.4	e6.4	e14	389	22	47	20	37	7.4	36
2	4.0	5.0	e11	e7.4	e19	191	21	41	20	26	7.0	32
3	4.0	5.0	e7.0	e8.4	e30	138	21	42	20	23	7.1	31
4	3.4	5.0	e10	9.1	e60	110	22	35	19	22	9.3	27
5	3.6	5.7	e9.2	8.3	e94	91	26	35	19	22	8.0	26
6	3.5	6.2	8.8	12	e45	77	25	32	32	20	5.9	24
7	3.4	8.1	e10	10	e30	69	19	31	51	20	5.8	23
8	3.3	7.9	e9.6	9.4	e21	63	19	39	87	19	5.7	27
9	3.4	5.9	e11	e9.2	e17	75	18	31	50	19	12	24
10	3.6	5.3	8.4	e9.0	e14	93	20	28	41	18	11	22
11	3.4	5.3	6.6	e8.8	e11	81	28	30	38	17	52	20
12	3.3	6.7	7.3	e8.7	e9.5	70	49	28	39	16	27	19
13	3.1	5.3	7.5	e8.6	e8.4	66	77	27	37	22	15	18
14	3.0	8.6	7.0	e8.5	e7.6	64	110	27	30	20	13	17
15	3.1	5.6	7.0	e8.4	e7.2	52	90	24	27	15	19	17
16	14	5.4	8.2	e8.4	e14	50	76	24	43	14	19	18
17	9.2	6.7	e7.0	e8.3	e50	48	65	24	32	14	494	97
18	5.0	5.9	e5.6	e8.2	e220	42	61	24	28	13	218	53
19	3.6	5.4	e5.0	e8.1	245	38	58	31	26	e14	134	38
20	3.4	4.9	e4.9	e8.0	181	38	51	21	27	e17	89	32
21	3.5	4.8	e5.0	e10	3330	37	48	20	24	e20	62	27
22	4.4	5.2	e5.3	e15	839	32	44	20	22	18	49	26
23	12	5.0	e5.6	e25	266	30	42	20	20	15	41	28
24	7.4	5.0	e5.8	e43	170	30	39	20	20	13	48	27
25	5.1	4.8	e5.6	e30	145	38	36	21	19	12	49	26
26	4.6	e8.0	e5.1	e18	248	31	34	23	19	11	40	24
27	4.5	e7.1	e4.9	e14	346	30	35	27	18	9.8	36	23
28	4.4	e7.2	e4.8	e9.7	208	30	35	25	17	9.1	35	23
29	5.3	e7.6	e4.9	e8.8	---	27	33	24	17	9.1	30	22
30	8.8	e8.4	e5.2	e8.4	---	25	51	22	37	8.1	36	20
31	7.0	---	e5.6	e11	---	23	---	21	---	7.9	47	---
TOTAL	154.2	182.4	218.3	366.1	6649.7	2178	1275	864	899	521.0	1632.2	847
MEAN	4.97	6.08	7.04	11.8	237	70.3	42.5	27.9	30.0	16.8	52.7	28.2
MAX	14	8.6	11	43	3330	389	110	47	87	37	494	97
MIN	3.0	4.8	4.8	6.4	7.2	23	18	20	17	7.9	5.7	17
CFSM	.08	.10	.11	.19	3.79	1.12	.68	.44	.48	.27	.84	.45
IN.	.09	.11	.13	.22	3.95	1.29	.76	.51	.53	.31	.97	.50

e Estimated

## ILLINOIS RIVER BASIN

## 05568800 INDIAN CREEK NEAR WYOMING, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1997, BY WATER YEAR (WY)

MEAN	19.3	29.9	37.1	44.2	53.4	83.7	83.2	80.4	66.7	45.2	24.8	27.5
MAX	124	154	177	223	237	272	243	248	338	243	158	184
(WY)	1987	1986	1983	1974	1997	1979	1983	1995	1974	1993	1981	1970
MIN	.64	1.37	.96	1.35	3.22	16.4	6.88	6.82	6.20	3.51	1.33	.50
(WY)	1964	1965	1964	1963	1964	1996	1989	1989	1977	1988	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1960 - 1997	
ANNUAL TOTAL	12845.4		15786.9			
ANNUAL MEAN	35.1		43.3		49.6	
HIGHEST ANNUAL MEAN					131	
LOWEST ANNUAL MEAN					13.6	
HIGHEST DAILY MEAN	940	May 27	3330	Feb 21	3330	Feb 21 1997
LOWEST DAILY MEAN	3.0	Oct 14	3.0	Oct 14	.00	A
ANNUAL SEVEN-DAY MINIMUM	3.3	Oct 9	3.3	Oct 9	.11	Oct 6 1963
INSTANTANEOUS PEAK FLOW			4710	Feb 21	6540 B	Jun 22 1974
INSTANTANEOUS PEAK STAGE			23.00	Feb 21	23.81 C	Jun 22 1974
INSTANTANEOUS LOW FLOW			1.8 D	Nov 26		
ANNUAL RUNOFF (CFSM)	.56		.69		.79	
ANNUAL RUNOFF (INCHES)	7.62		9.37		10.74	
10 PERCENT EXCEEDS	84		63		103	
50 PERCENT EXCEEDS	11		20		22	
90 PERCENT EXCEEDS	4.8		5.0		2.6	

A - Sept. 25, 26, 1988.

B - From rating curve extended above 1,400 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.

C - Present datum.

D - Result of freezeup.

## 05568800 INDIAN CREEK NEAR WYOMING, IL.--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water year 1997.

Water quality data, water year October 1996 to September 1997

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 1996												
18...	1020	81700	80020	9.94	<5.1	18.0	10	12.0	1160	7.1	10.8	103
NOV												
13...	1410	81700	80020	9.98	6.2	18.0	3	1.0	1540	8.3	16.3	115
DEC												
18...	1600	81700	80020	10.22	5.6	32.0	10	0.0	773	8.3	12.3	89
JAN 1997												
23...	1620	81700	80020	12.65	25	40.0	1	0.0	531	7.3	5.6	38
FEB												
13...	1720	81700	80020	11.09	8.4	35.0	1	0.0	764	7.4	11.7	80
MAR												
13...	1640	81700	80020	11.23	65	35.0	12	6.0	634	8.0	11.8	96
APR												
11...	1250	81700	80020	10.69	26	30.0	10	1.5	604	8.2	14.8	105
MAY												
08...	1200	81700	80020	10.89	39	32.0	10	15.0	637	8.3	12.2	121
JUN												
03...	1740	81700	80020	10.58	20	28.0	10	18.0	702	8.1	8.6	91
JUL												
01...	1300	81700	80020	10.79	34	35.0	10	26.0	548	8.0	7.5	92
31...	1420	81700	80020	10.10	8.0	20.0	10	25.5	632	8.6	13.4	164
AUG												
04...	1040	81700	80020	10.16	9.3	14.5	10	26.0	663	8.0	7.6	94
27...	1100	81700	80020	10.83	36	30.0	10	21.0	720	8.0	8.6	96
SEP												
24...	1630	81700	80020	10.61	25	30.0	10	18.0	737	8.1	10.5	110

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CA CO3) (39086)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 1996												
18...	55	29	26	4.4	234	0	286	33	42	0.20	5.1	360
NOV												
13...	81	37	35	3.3	302	14	339	48	55	0.30	7.0	482
DEC												
18...	83	40	34	2.4	280	10	322	51	58	0.30	4.7	465
JAN 1997												
23...	52	22	24	6.6	150	0	183	43	31	0.30	8.1	327
FEB												
13...	84	35	23	2.9	300	0	366	38	49	0.30	11	441
MAR												
13...	81	30	11	1.2	248	0	303	24	40	0.20	10	389
APR												
11...	64	30	16	1.1	224	0	273	27	40	0.21	3.6	363
MAY												
08...	75	34	16	1.1	212	0	259	29	42	0.25	2.4	417
JUN												
03...	80	35	16	1.1	260	0	317	28	42	0.22	7.6	416
JUL												
01...	61	25	11	2.9	198	0	242	20	30	0.25	11	338
31...	58	35	23	2.1	232	12	271	36	44	0.31	6.3	382
AUG												
04...	63	33	24	2.5	228	0	274	37	43	0.26	8.0	406
27...	99	36	13	1.1	302	0	368	24	39	0.23	14	462
SEP												
24...	92	35	14	1.2	270	7	327	26	39	0.26	9.7	439

## 05568800 INDIAN CREEK NEAR WYOMING, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	NITRO- GEN, AMMONIA	NITRO- GEN, NITRITE	NITRO- GEN,AM- MONIA +	NITRO- GEN,AM- MONIA +	NITRO- GEN, NO2+NO3	PHOS- PHORUS	PHOS- PHORUS	PHOS- PHORUS	IRON,	MANGA- NESE,	CAFBON, ORGANIC	CARBON, ORGANIC
	DIS- SOLVED	DIS- SOLVED	ORGANIC	ORGANIC	DIS- SOLVED	TOTAL	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED	TOTAL
	(MG/L	(MG/L	(MG/L	TOTAL	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L
	AS N)	AS N)	AS N)	AS N)	AS N)	AS P)	AS P)	AS P)	AS FE)	AS MN)	AS C)	AS C)
	(00608)	(00613)	(00623)	(00625)	(00631)	(00665)	(00666)	(00671)	(01046)	(01056)	(00681)	(00689)
OCT 1996												
18...	0.020	0.050	0.40	0.60	1.80	0.200	0.130	0.120	19	120	5.0	1.3
NOV												
13...	0.040	0.040	0.30	0.30	4.00	0.130	0.120	0.090	18	47	3.4	0.40
DEC												
18...	0.020	0.040	0.30	0.40	6.10	0.090	0.050	0.060	8.0	61	2.8	0.60
JAN 1997												
23...	0.770	0.070	1.8	2.3	5.70	0.590	0.430	0.420	29	86	7.2	1.6
FEB												
13...	0.540	0.060	0.80	0.80	6.70	0.190	0.160	0.160	9.0	51	2.4	0.30
MAR												
13...	0.060	0.020	0.30	0.30	12.0	0.030	0.020	0.060	<3.0	27	1.9	0.40
APR												
11...	0.050	0.040	0.30	0.40	6.70	0.040	0.020	0.030	8.9	54	2.4	0.70
MAY												
08...	<0.015	0.094	0.20	0.50	8.95	0.040	<0.010	0.011	15	97	2.2	0.90
JUN												
03...	0.210	0.170	0.49	0.72	7.12	0.068	0.060	0.054	5.5	105	7.3	0.30
JUL												
01...	0.083	0.127	0.51	1.5	7.36	0.420	0.135	0.133	<3.0	5.5	4.4	>5.0
31...	<0.015	0.044	0.29	0.70	2.49	0.070	0.047	0.036	6.7	21	3.8	0.70
AUG												
04...	0.105	0.080	0.54	0.89	2.19	0.161	0.067	0.079	7.9	183	4.1	0.90
27...	0.025	0.042	0.27	0.48	9.65	0.160	0.117	0.085	<3.0	23	1.7	1.7
SEP												
24...	<0.015	0.025	0.20	0.23	8.19	0.065	0.044	0.057	7.4	36	2.0	0.40

[illegible]



Water quality data, water year October 1996 to September 1997

[illegible][illegible]

Water quality data, water year October 1996 to September 1997

[illegible]

## 05569500 SPOON RIVER AT LONDON MILLS, IL

**LOCATION.**--Lat 40°42'32", long 90°16'53", in SW1/4NE1/4 sec.4, T.8 N., R.2 E., Fulton County, Hydrologic Unit 07130005, on left bank at downstream side of bridge on State Highway 116, 0.2 mi downstream from a railroad bridge, 0.5 mi west of London Mills, 0.5 mi upstream from Cedar Creek, 4.0 mi downstream from Littlers Creek, and at mile 69.2.

**DRAINAGE AREA.**--1,072 mi<sup>2</sup>. Area at site used prior to April 26, 1984, 1,062 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1942 to current year.

**REVISED RECORDS.**--WSP 1175: 1947. WDR IL-84-2: 1948(M), 1950(M), 1951, 1954(M), 1955, 1958, 1960, 1962, 1964, 1965, 1970, and drainage area.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 508.97 ft above sea level. Prior to July 13, 1945, no recording gage at same site and datum. July 14, 1945, to Apr. 26, 1984, at site 0.9 mi upstream at same datum.

**REMARKS.**--Records good except those for Mar. 17-20, which are fair, and those for estimated discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Aug. 26, 1924, reached a stage of 27.08 ft, from information by local residents.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 5,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	1130	*11,900	*22.48	Feb. 27	1915	7,420	17.75

Minimum daily discharge, 29 ft<sup>3</sup>/s, Jan. 19, estimated due to backwater from ice.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	64	118	83	e200	6330	380	766	382	511	91	518
2	55	81	127	96	e250	5640	364	767	345	516	87	525
3	49	81	119	107	e400	4030	353	778	315	444	114	2080
4	48	70	106	129	e700	2540	349	735	296	339	383	732
5	47	65	103	138	e1200	1930	376	656	285	300	208	503
6	46	67	103	80	e1000	1570	410	610	353	277	118	398
7	44	93	102	133	e800	1320	379	569	485	258	99	340
8	42	143	88	100	e450	1180	331	609	938	238	88	365
9	42	133	81	80	e340	1390	301	619	814	221	79	433
10	43	119	99	e68	e260	1750	289	556	551	208	78	408
11	42	98	97	e56	e220	1530	347	509	470	198	245	341
12	44	84	103	e47	e200	1320	762	496	780	186	472	278
13	44	77	98	e41	e190	1160	1320	488	1440	176	473	244
14	44	69	96	e37	e170	1100	2300	472	890	208	264	226
15	44	68	103	e34	e165	930	2580	458	661	204	285	218
16	45	75	103	e32	e160	769	2120	437	1080	168	724	212
17	45	132	95	e31	e155	760	1680	422	1390	145	1960	609
18	84	133	e64	e30	e220	737	1410	432	982	135	4200	825
19	101	135	e68	e29	e800	666	1320	654	739	129	2900	671
20	79	131	71	e30	1490	617	1210	675	619	182	1440	456
21	67	127	72	e35	7330	586	1090	507	548	424	1010	362
22	63	122	71	e60	11300	553	1000	439	501	968	784	307
23	92	118	75	e110	e11100	505	918	416	448	539	636	291
24	109	115	e76	e200	e8290	472	842	408	413	304	527	311
25	100	113	e74	e370	e3080	534	771	407	383	215	483	300
26	110	105	e71	e330	e3050	560	709	432	363	175	501	278
27	82	97	69	e260	7040	513	671	635	338	151	415	256
28	70	107	69	e230	6610	487	669	644	312	133	372	240
29	64	88	70	e210	---	473	651	590	292	121	330	231
30	62	103	72	e200	---	442	659	492	324	108	373	215
31	61	---	78	e190	---	411	---	429	---	98	621	---
TOTAL	1935	3013	2741	3576	67170	42805	26561	17107	17737	8279	20360	13173
MEAN	62.4	100	88.4	115	2399	1381	885	552	591	267	657	439
MAX	110	143	127	370	11300	6330	2580	778	1440	968	4200	2080
MIN	42	64	64	29	155	411	289	407	285	98	78	212
CFSM	.06	.09	.08	.11	2.24	1.29	.83	.51	.55	.25	.61	.41
IN.	.07	.10	.10	.12	2.33	1.49	.92	.59	.62	.29	.71	.46

e Estimated

## ILLINOIS RIVER BASIN

## 05569500 SPOON RIVER AT LONDON MILLS, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1997, BY WATER YEAR (WY)

MEAN	300	387	463	637	911	1183	1309	1205	1077	731	337	365
MAX	3647	2196	3090	3262	3185	4185	3905	4793	6036	4654	2989	3715
(WY)	1987	1986	1983	1974	1949	1979	1983	1995	1974	1993	1993	1970
MIN	15.1	23.0	14.3	11.3	35.4	132	71.2	94.3	80.8	30.2	11.1	10.4
(WY)	1964	1950	1964	1977	1989	1956	1956	1989	1963	1988	1989	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1943 - 1997		
ANNUAL TOTAL	210953			224457					
ANNUAL MEAN	576			615			740		
HIGHEST ANNUAL MEAN							2205		
LOWEST ANNUAL MEAN							150		
HIGHEST DAILY MEAN	13700	May 28		11300	Feb 22		35100	Jun 23	1974
LOWEST DAILY MEAN	42	Oct 8-9, 11		29	Jan 19		3.0	Sep 15	1988
ANNUAL SEVEN-DAY MINIMUM	43	Oct 7		32	Jan 15		3.3	Sep 12	1988
INSTANTANEOUS PEAK FLOW				11900	Feb 22		41000	Jun 23	1974
INSTANTANEOUS PEAK STAGE				22.48	Feb 22		28.03A	Jun 23	1974
INSTANTANEOUS LOW FLOW				B			2.6	Sep 16	1988
ANNUAL RUNOFF (CFSM)	.54			.57			.69		
ANNUAL RUNOFF (INCHES)	7.32			7.79			9.38		
10 PERCENT EXCEEDS	1320			1190			1700		
50 PERCENT EXCEEDS	169			300			319		
90 PERCENT EXCEEDS	65			67			41		

A - From graph based on gage readings.

B - Minimum recorded, 41 ft<sup>3</sup>/s, Oct. 11, but may have been less during period of ice effect, Jan. 13-21.

## 05570000 SPOON RIVER AT SEVILLE, IL

**LOCATION.**--Lat 40°29'08", long 90°20'34", in NE1/4NW1/4 sec.24, T.6 N., R.1 E., Fulton County, Hydrologic Unit 07130005, on right bank at downstream side of bridge on unimproved road, 100 ft upstream from a railroad bridge, 0.1 mi northeast of Seville, 0.47 mi downstream from State Highway 95, 0.55 mi downstream from Shaw Creek, and at mile 38.7.

**DRAINAGE AREA.**--1,636 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--July 1914 to current year. Monthly discharge only for some periods, published in WSP 1308.

**REVISED RECORDS.**--WSP 1208: 1917, 1920, 1922, 1924, 1926-27, 1929(M). WSP 1308: 1919(M), 1936(M), 1938(M), 1942(M), 1945(M). WDR IL-75-1: Drainage area.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 467.04 ft above sea level. Prior to May 9, 1935, nonrecording gage at site 100 ft downstream at same datum. May 9, 1935, to June 30, 1976, nonrecording gage at present site and datum. July 1, 1976, to July 7, 1983, at site 0.47 mi upstream at same datum.

**REMARKS.**--Water discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of 1883 reached a stage of about 33.0 ft, backwater from ice, discharge not determined.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 7,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 24	0245	*21,500	*27.31	Feb. 28	1800	11,000	21.63

Minimum daily discharge, 38 ft<sup>3</sup>/s, Jan. 19, estimated due to backwater from ice.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	88	158	127	e270	10300	809	1190	898	583	103	949
2	97	89	169	143	e300	9330	754	1190	819	721	96	923
3	84	100	182	155	e500	7680	726	1280	751	717	94	1950
4	76	112	165	162	e900	5030	709	1230	700	560	529	2120
5	72	104	159	179	e1500	3600	756	1110	657	454	461	980
6	71	103	159	140	e1850	2870	819	991	669	404	245	727
7	69	140	153	155	e1300	2410	811	928	935	369	138	591
8	68	146	147	e140	e900	2120	710	933	1560	344	106	562
9	66	218	133	e120	e560	2640	622	957	1890	313	94	732
10	67	206	124	e100	e440	3300	586	898	1340	285	86	652
11	70	170	145	e85	e360	2920	1090	813	1070	266	98	601
12	70	142	139	e73	e330	2500	1930	757	1670	249	325	481
13	72	127	146	e63	e290	2170	2460	737	2350	231	536	397
14	71	116	141	e55	e270	2030	3300	713	2040	218	471	350
15	70	111	146	e49	e250	1830	3940	680	1400	266	271	319
16	70	109	150	e42	e245	1560	3760	644	1300	245	462	304
17	73	124	146	e40	e240	1450	3000	612	2210	194	1080	361
18	73	190	e90	e39	e300	1420	2440	602	1870	169	4090	1030
19	85	202	e100	e38	e600	1340	2160	722	1380	155	4630	1060
20	124	198	e105	e40	1650	1250	2010	1110	1150	162	2630	794
21	104	185	e107	e47	11100	1190	1810	909	1010	246	1560	582
22	106	169	e105	e110	14500	1130	1640	708	924	696	1180	481
23	130	164	e110	e170	20200	1060	1510	620	834	1060	928	430
24	136	160	e112	e250	20000	982	1390	601	744	554	747	419
25	149	157	e112	e450	13800	1050	1280	599	671	337	614	441
26	140	144	e110	e560	6260	1120	1180	725	630	242	600	427
27	137	138	e107	e450	8970	1090	1100	980	567	198	572	389
28	111	140	e103	e380	10600	1020	1060	1460	520	171	492	355
29	98	147	e105	e330	---	977	1040	1320	485	147	446	329
30	98	147	e110	e310	---	935	1050	1150	486	129	496	311
31	92	---	122	e280	---	871	---	1000	---	114	700	---
TOTAL	2865	4346	4060	5282	118485	79175	46452	28169	33530	10799	24880	20047
MEAN	92.4	145	131	170	4232	2554	1548	909	1118	348	803	668
MAX	149	218	182	560	20200	10300	3940	1460	2350	1060	4630	2120
MIN	66	88	90	38	240	871	586	599	485	114	86	304
CFSM	.06	.09	.08	.10	2.59	1.56	.95	.56	.68	.21	.49	.41
IN.	.07	.10	.09	.12	2.69	1.80	1.06	.64	.76	.25	.57	.46

e Estimated

## ILLINOIS RIVER BASIN

## 05570000 SPOON RIVER AT SEVILLE, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1997, BY WATER YEAR (WY)

MEAN	544	608	663	998	1390	1636	1844	1682	1548	1050	534	630
MAX	5356	4386	5745	5500	4387	6524	6752	8015	7908	7839	4767	8440
(WY)	1987	1986	1983	1916	1949	1985	1983	1995	1974	1993	1924	1926
MIN	26.5	24.9	26.8	17.7	44.2	188	89.7	29.1	88.0	30.1	6.46	17.9
(WY)	1957	1915	1915	1940	1989	1956	1956	1934	1934	1936	1914	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1914 - 1997	
ANNUAL TOTAL	355620		378090			
ANNUAL MEAN	972		1036		1091	
HIGHEST ANNUAL MEAN					3578	
LOWEST ANNUAL MEAN					168	
HIGHEST DAILY MEAN	22300	May 29	20200	Feb 23	32800	Aug 23 1924
LOWEST DAILY MEAN	66	Oct 9	38	Jan 19	3.8	Jul 31 1914
ANNUAL SEVEN-DAY MINIMUM	69	Oct 6	42	Jan 15	4.2	Aug 23 1914
INSTANTANEOUS PEAK FLOW			21500	Feb 24	37300 A	Aug 22 1924
INSTANTANEOUS PEAK STAGE			27.31	Feb 24	33.10	Jul 26 1993
INSTANTANEOUS LOW FLOW			B		3.8 C	D
ANNUAL RUNOFF (CFSM)	.59		.63		.67	
ANNUAL RUNOFF (INCHES)	8.09		8.60		9.06	
10 PERCENT EXCEEDS	2040		2020		2500	
50 PERCENT EXCEEDS	317		461		470	
90 PERCENT EXCEEDS	98		97		61	

A - Gage height, 30.77 ft, from graph based on gage readings.

B - Minimum recorded, 65 ft<sup>3</sup>/s, Oct. 9, but may have been less during period of ice effect, Jan. 14-21.

C - Observed.

D - July 31 and Aug. 27-29, 1914.

## 05570000 SPOON RIVER AT SEVILLE, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1994 to September 1997. (Discontinued)

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Oct. 1994 to Sept. 1997. (Discontinued).

REMARKS.--Suspended-sediment samples were collected by a local observer once a week with additional samples collected during storm runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 4,630 mg/L, July 21, 1996; minimum daily, 10 mg/L, Feb. 5, 6, 1996.

SEDIMENT LOADS: Maximum daily, 128,000 tons, May 27, 1996; minimum daily, 2.9 tons, Feb. 6, 1996.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 2,360 mg/L, June 12; minimum daily, 20 mg/L, Dec. 4.

SEDIMENT LOADS: Maximum daily, 74,800 tons, Feb. 23; minimum daily, 3.8 tons, Jan. 19.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	116	47	14	88	53	13	158	39	17
2	97	56	14	89	56	14	169	29	13
3	84	57	13	100	53	15	182	21	10
4	76	42	8.7	112	54	16	165	20	8.8
5	72	35	6.8	104	64	18	159	32	14
6	71	38	7.2	103	77	22	159	44	19
7	69	41	7.5	140	94	36	153	40	16
8	68	42	7.6	146	103	41	147	35	14
9	66	41	7.4	218	85	51	133	32	11
10	67	39	7.1	206	70	39	124	28	9.6
11	70	37	7.0	170	60	27	145	25	9.7
12	70	36	6.9	142	53	20	139	23	8.5
13	72	35	6.9	127	52	18	146	22	8.8
14	71	33	6.4	116	51	16	141	23	8.7
15	70	34	6.5	111	53	16	146	23	9.2
16	70	43	8.1	109	55	16	150	24	9.6
17	73	51	10	124	61	21	146	24	9.4
18	73	50	10	190	67	35	e90	25	6.0
19	85	50	12	202	71	39	e100	25	6.8
20	124	49	16	198	66	35	e105	26	7.3
21	104	47	13	185	41	20	e107	26	7.6
22	106	42	12	169	29	13	e105	27	7.6
23	130	38	14	164	33	15	e110	27	8.1
24	136	39	14	160	38	16	e112	28	8.5
25	149	44	18	157	42	18	e112	29	8.6
26	140	69	26	144	47	18	e110	29	8.7
27	137	88	32	138	51	19	e107	30	8.6
28	111	77	23	140	55	21	e103	30	8.4
29	98	63	17	147	57	23	e105	31	8.8
30	98	47	12	147	53	21	e110	32	9.4
31	92	49	12	---	---	---	122	32	11
TOTAL	2865	---	376.1	4346	---	692	4060	---	311.7

## ILLINOIS RIVER BASIN

## 05570000 SPOON RIVER AT SEVILLE, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	127	33	11	e270	35	26	10300	1000	27700
2	143	34	13	e300	35	28	9330	1160	28800
3	155	34	14	e500	66	89	7680	1170	23800
4	162	35	16	e900	134	324	5030	764	10100
5	179	42	20	e1500	219	886	3600	508	4890
6	140	50	19	e1850	151	756	2870	302	2310
7	155	59	24	e1300	94	331	2410	255	1640
8	e140	58	22	e900	59	143	2120	242	1370
9	e120	55	18	e560	37	56	2640	1150	9400
10	e100	53	14	e440	23	27	3300	782	6950
11	e85	51	12	e360	21	20	2920	414	3220
12	e73	49	9.7	e330	21	19	2500	356	2390
13	e63	47	8.1	e290	22	17	2170	204	1180
14	e55	46	6.8	e270	22	16	2030	162	885
15	e49	44	5.8	e250	23	16	1830	118	577
16	e42	42	4.8	e245	24	16	1560	186	766
17	e40	41	4.4	e240	24	16	1450	574	2240
18	e39	39	4.1	e300	35	28	1420	186	714
19	e38	37	3.8	e600	172	279	1340	104	375
20	e40	36	3.9	1650	921	5490	1250	143	479
21	e47	39	5.0	11100	1920	59500	1190	177	570
22	e110	56	17	14500	1830	74000	1130	118	357
23	e170	82	38	20200	1350	74800	1060	114	323
24	e250	117	79	20000	1220	65600	982	105	280
25	e450	115	139	13800	723	25900	1050	127	361
26	e560	97	146	6260	832	14300	1120	117	356
27	e450	82	99	8970	1710	42400	1090	165	480
28	e380	69	71	10600	1170	33700	1020	167	461
29	e330	58	52	---	---	---	977	155	409
30	e310	49	41	---	---	---	935	149	375
31	e280	42	31	---	---	---	871	144	338
TOTAL	5282	---	952.4	118485	---	398783	79175	---	134096
APRIL			MAY			JUNE			
1	809	133	288	1190	370	1190	898	154	370
2	754	135	273	1190	184	590	819	141	309
3	726	133	260	1280	118	409	751	154	311
4	709	132	254	1230	110	362	700	145	273
5	756	125	258	1110	90	265	657	138	243
6	819	147	325	991	82	219	669	174	318
7	811	125	273	928	78	194	935	256	748
8	710	84	159	933	71	179	1560	585	2440
9	622	78	129	957	66	172	1890	805	4120
10	586	150	240	898	62	149	1340	475	1690
11	1090	641	2240	813	62	135	1070	279	797
12	1930	559	2930	757	82	168	1670	2360	14500
13	2460	417	2820	737	95	189	2350	833	5370
14	3300	557	5150	713	89	169	2040	906	4780
15	3940	622	6640	680	79	144	1400	573	2150
16	3760	491	4940	644	97	168	1300	434	1590
17	3000	334	2670	612	125	206	2210	829	5090
18	2440	276	1790	602	143	234	1870	660	3290
19	2160	247	1440	722	236	490	1380	351	1300
20	2010	186	1000	1110	398	1200	1150	324	986
21	1810	153	742	909	314	755	1010	368	998
22	1640	144	635	708	218	412	924	226	562
23	1510	127	512	620	137	229	834	200	443
24	1390	113	422	601	115	187	744	215	429
25	1280	106	365	599	124	200	671	189	339
26	1180	151	475	725	125	255	630	214	361
27	1100	96	285	980	193	557	567	176	268
28	1060	85	243	1460	305	1200	520	194	271
29	1040	111	312	1320	246	870	485	203	264
30	1050	177	522	1150	170	520	486	169	225
31	---	---	---	1000	161	431	---	---	---
TOTAL	46452	---	38592	28169	---	12448	33530	---	54835



## 05570000 SPOON RIVER AT SEVILLE, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	583	242	401	103	35	9.7	949	336	837
2	721	357	686	96	32	8.3	923	551	1460
3	717	288	560	94	41	11	1950	987	6190
4	560	166	246	529	176	299	2120	1370	7370
5	454	131	159	461	344	409	980	735	1920
6	404	108	117	245	181	118	727	371	722
7	369	107	106	138	84	31	591	205	324
8	344	109	101	106	46	13	562	294	460
9	313	102	86	94	43	11	732	378	746
10	285	108	83	86	42	9.8	652	227	398
11	266	133	95	98	49	13	601	144	231
12	249	108	72	325	96	84	481	124	158
13	231	99	61	536	153	221	397	112	118
14	218	90	53	471	90	113	350	113	106
15	266	96	71	271	53	38	319	112	96
16	245	109	71	462	127	239	304	105	87
17	194	108	56	1080	1020	3480	361	135	140
18	169	106	48	4090	1900	21800	1030	225	662
19	155	103	43	4630	934	11600	1060	174	492
20	162	123	55	2630	517	3570	794	129	270
21	246	226	167	1560	305	1260	582	102	157
22	696	447	990	1180	260	812	481	100	128
23	1060	721	2010	928	238	586	430	103	119
24	554	428	626	747	226	448	419	116	132
25	337	241	216	614	214	349	441	117	140
26	242	134	87	600	200	328	427	90	103
27	198	71	38	572	173	263	389	76	80
28	171	43	20	492	147	195	355	96	92
29	147	39	15	446	212	247	329	114	100
30	129	37	13	496	804	1160	311	111	93
31	114	36	11	700	542	1040	---	---	---
TOTAL	10799	---	7363	24880	---	48765.8	20047	---	23931
YEAR	378090		721146.1						

e Estimated

## 05570910 SANGAMON RIVER AT FISHER, IL

LOCATION.--Lat 40°18'40", long 88°19'20", in NE1/4NW1/4 sec.5, T.21 N., R.8 E., Champaign County, Hydrologic Unit 07130006, on left downstream side of bridge on U.S. Highway 136, 1.2 mi east of Fisher, 8.8 mi west of Rantoul, and at mile 201.1.

DRAINAGE AREA.--240 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 683.23 ft above sea level.

REMARKS.--Records good except those for Feb. 21-25, which are fair, and those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 22	1415	1,810	13.38	May 27	1200	2,070	13.79
Feb. 27	1615	*3,020	*15.03				

Minimum discharge, .58 ft<sup>3</sup>/s, Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	15	41	44	e140	1300	136	92	484	201	15	22
2	1.4	13	44	53	e160	994	132	77	652	139	15	21
3	2.6	11	38	70	e350	805	131	290	817	107	15	20
4	3.3	11	30	75	e550	631	132	385	650	94	14	17
5	3.2	11	30	118	665	502	137	258	486	87	16	16
6	3.3	9.9	41	e130	613	411	151	193	410	80	15	16
7	3.5	34	27	e100	369	341	135	149	438	75	10	14
8	2.1	59	22	86	250	312	114	143	452	70	8.3	15
9	2.4	43	20	e74	161	362	108	131	647	368	7.3	62
10	4.3	22	22	e60	135	746	105	110	514	170	9.6	103
11	5.0	14	41	e50	e110	689	114	104	397	90	9.9	66
12	4.7	9.7	175	e45	e94	484	146	105	391	72	10	47
13	3.7	6.9	121	e41	e80	393	172	96	747	64	15	37
14	4.5	6.7	89	e37	e74	618	144	91	771	60	11	30
15	2.8	5.0	76	e34	e68	635	129	83	487	67	9.0	27
16	.83	7.0	66	e31	e63	437	125	72	375	56	10	24
17	.88	7.7	60	e29	61	358	117	72	308	47	384	22
18	1.5	7.2	47	e28	112	323	112	73	264	42	762	23
19	3.4	6.8	e40	e26	355	295	139	78	231	40	253	21
20	2.2	6.5	e31	e26	423	282	149	71	208	37	133	21
21	2.6	6.1	e32	56	1360	263	136	60	195	33	96	22
22	1.9	8.4	e35	251	1760	237	123	55	177	38	72	18
23	4.5	5.8	e45	749	1300	199	113	55	158	43	57	17
24	12	6.0	e140	770	802	181	107	57	146	40	47	17
25	7.1	11	e130	445	551	195	97	318	142	34	42	17
26	4.5	16	e100	271	530	177	88	999	182	30	39	15
27	4.5	12	e78	e210	2370	166	90	1880	150	27	35	14
28	5.3	11	e65	e160	2140	169	95	1550	127	24	31	12
29	14	8.9	e57	e140	---	181	89	1100	118	22	28	11
30	7.4	13	51	e130	---	158	86	747	115	19	25	7.3
31	11	---	47	e130	---	148	---	564	---	16	23	---
TOTAL	131.91	404.6	1841	4469	15646	12992	3652	10058	11239	2292	2217.1	774.3
MEAN	4.26	13.5	59.4	144	559	419	122	324	375	73.9	71.5	25.8
MAX	14	59	175	770	2370	1300	172	1880	817	368	762	103
MIN	.83	5.0	20	26	61	148	86	55	115	16	7.3	7.3
CFSM	.02	.06	.25	.60	2.33	1.75	.51	1.35	1.56	.31	.30	.11
IN.	.02	.06	.29	.69	2.43	2.01	.57	1.56	1.74	.36	.34	.12

e Estimated

## 05570910 SANGAMON RIVER AT FISHER, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1997, BY WATER YEAR (WY)

MEAN	81.2	205	214	170	247	383	383	425	263	192	94.0	55.9
MAX	645	1453	669	898	796	1225	1135	1349	600	935	711	605
(WY)	1994	1986	1983	1993	1984	1979	1979	1981	1980	1981	1981	1993
MIN	.55	7.47	10.6	15.3	15.1	72.9	73.2	80.4	20.8	1.94	.59	.33
(WY)	1989	1979	1980	1979	1979	1996	1986	1988	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1979 - 1997	
ANNUAL TOTAL	54020.24		65716.91			
ANNUAL MEAN	148		180		226	
HIGHEST ANNUAL MEAN					499	
LOWEST ANNUAL MEAN					97.4	
HIGHEST DAILY MEAN	3820	May 11	2370	Feb 27	9250	Apr 12 1994
LOWEST DAILY MEAN	.73	Sep 24	.83	Oct 16	.00	A
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 19	1.9	Oct 16	.00	Sep 13 1988
INSTANTANEOUS PEAK FLOW			3020	Feb 27	13000	Apr 12 1994
INSTANTANEOUS PEAK STAGE			15.03	Feb 27	21.58	Apr 12 1994
INSTANTANEOUS LOW FLOW			.58	Oct 17		
ANNUAL RUNOFF (CFSM)	.61		.75		.94	
ANNUAL RUNOFF (INCHES)	8.37		10.19		12.79	
10 PERCENT EXCEEDS	332		493		550	
50 PERCENT EXCEEDS	50		72		91	
90 PERCENT EXCEEDS	3.5		7.2		5.0	

A - Aug. 31 to Sept. 4, Sept. 13-21, Oct. 10-16, 1988; Sept. 17, 18, 1994.

## 05572000 SANGAMON RIVER AT MONTICELLO, IL

LOCATION.--Lat 40°01'51", long 88°35'20", in NE1/4SW1/4 sec.12, T.18 N., R.5 E., Piatt County, Hydrologic Unit 07130006, on right downstream side of highway bridge, 0.5 mi west of Monticello, and at mile 162.2.

DRAINAGE AREA.--550 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1908 to December 1912, June 1914 to current year. Monthly discharge only for some periods, published in WSP 1308. Published as "near Monticello" 1910-12.

REVISED RECORDS.--WSP 525: 1920. WSP 1115: 1946-47. WSP 1208: 1915-16, 1918-20, 1927, 1929, 1939. WSP 1508: 1908(M), 1917, 1928(M). WDR IL-81-2: 1909(P), 1912(P), 1915(P), 1919-32(P), 1935(P), 1937-38(P), 1940-41(P), 1944(P), 1946-47(P). WDR IL-89-2: 1988.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 625.89 ft above sea level. Prior to Sept. 30, 1964, nonrecording gage at site 0.2 mi downstream at same datum. Oct. 1, 1964, to Oct. 22, 1971, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Recording raingage and gage-height telemeter at station. Water temperature and specific conductance continuously recorded at station for the National Water-Quality Assessment Program.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 24	0200	2,690	13.47	May 30	0745	2,180	12.75
Mar. 1	1330	*3,900	*14.42				

Minimum discharge, 3.1 ft<sup>3</sup>/s, Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	8.7	96	102	299	3740	311	203	1180	321	44	47
2	23	7.9	119	103	396	2990	294	186	927	460	41	71
3	20	7.7	123	108	663	2200	286	424	1050	353	39	101
4	18	8.1	104	128	1020	1760	287	777	1170	275	39	e72
5	16	8.6	94	172	1380	1380	299	820	1080	235	39	54
6	14	13	e88	190	1320	1070	302	622	868	210	37	46
7	14	28	e110	207	1120	870	281	454	846	195	36	40
8	14	56	e80	156	737	769	266	379	1280	177	36	83
9	13	55	e68	142	495	906	240	330	1750	167	36	176
10	11	61	e60	e130	403	1580	227	293	1510	312	33	155
11	9.5	46	e63	e120	e340	1600	232	264	1170	340	34	158
12	7.0	33	68	e105	e300	1430	247	250	1020	197	34	140
13	5.5	24	140	e95	e250	1130	252	239	1470	156	34	99
14	5.7	19	204	e88	e230	1400	272	228	1440	137	34	75
15	5.7	16	168	e82	e210	1590	258	208	1320	129	37	62
16	4.0	13	145	e77	e200	1400	237	189	1040	120	36	53
17	4.4	15	133	e72	194	1060	227	180	771	116	134	49
18	4.3	15	115	e69	211	861	219	174	649	102	614	43
19	7.7	15	80	e66	289	770	221	180	570	e96	725	40
20	5.5	14	84	e64	632	714	229	173	510	e90	459	43
21	6.1	14	87	70	1710	666	256	159	460	87	237	50
22	7.8	13	86	291	2320	599	242	142	421	103	170	45
23	6.8	12	90	755	2540	515	223	132	386	85	128	42
24	5.7	14	96	1030	2530	450	207	131	350	82	106	38
25	6.5	16	126	992	2060	434	191	147	347	78	97	33
26	7.2	21	178	875	1690	410	177	447	575	e72	91	29
27	7.2	21	211	616	2830	389	172	1080	676	e65	77	26
28	11	21	e170	443	3250	372	174	1410	460	59	67	23
29	11	27	e140	e350	---	371	176	1880	361	55	60	22
30	11	59	e120	e285	---	356	175	2130	327	51	54	22
31	9.6	---	e108	277	---	335	---	1810	---	48	51	---
TOTAL	318.2	682.0	3554	8260	29619	34117	7180	16041	25984	4973	3659	1937
MEAN	10.3	22.7	115	266	1058	1101	239	517	866	160	118	64.6
MAX	26	61	211	1030	3250	3740	311	2130	1750	460	725	176
MIN	4.0	7.7	60	64	194	335	172	131	327	48	33	22
CF5M	.02	.04	.21	.48	1.92	2.00	.44	.94	1.57	.29	.21	.12
IN.	.02	.05	.24	.56	2.00	2.31	.49	1.08	1.76	.34	.25	.13

e Estimated

## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 1997, BY WATER YEAR (WY)

MEAN	179	249	355	423	570	703	817	720	483	290	155	120
MAX	2868	2842	2155	2636	1899	2472	2753	3609	2081	1585	1486	2427
(WY)	1927	1986	1928	1950	1959	1979	1922	1908	1974	1993	1981	1926
MIN	1.32	5.50	3.67	3.43	10.0	20.2	57.6	42.6	19.3	3.85	1.76	.48
(WY)	1989	1915	1964	1977	1931	1931	1931	1934	1934	1988	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1908 - 1997	
ANNUAL TOTAL	111204.2		136324.2			
ANNUAL MEAN	304		373		419	
HIGHEST ANNUAL MEAN					1105	1927
LOWEST ANNUAL MEAN					68.0	1934
HIGHEST DAILY MEAN	5370	May 12	3740	Mar 1	18700	Oct 4 1926
LOWEST DAILY MEAN	4.0	Oct 16	4.0	Oct 16	.00	A
ANNUAL SEVEN-DAY MINIMUM	5.2	Oct 12	5.2	Oct 12	.07	Sep 11 1988
INSTANTANEOUS PEAK FLOW			3900	Mar 1	19000 B	Oct 4 1926
INSTANTANEOUS PEAK STAGE			14.42	Mar 1	19.06	Apr 13 1994
INSTANTANEOUS LOW FLOW			3.1	Oct 17		
ANNUAL RUNOFF (CFSM)	.55		.68		.76	
ANNUAL RUNOFF (INCHES)	7.52		9.22		10.34	
10 PERCENT EXCEEDS	815		1100		1100	
50 PERCENT EXCEEDS	107		158		159	
90 PERCENT EXCEEDS	14		14		12	

A - Aug. 28, Sept. 5, 11, 17, 18, Oct. 30 to Nov. 1, 1988.

B - Gage height, 18.50 ft, from graph based on gage readings, site then in use.

## ILLINOIS RIVER BASIN

05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to 1992, 1997.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 1996												
25...	0940	81700	80020	4.18	5.9	75.0	7	10.0	776	6.8	898	87
NOV												
15...	1430	81700	80020	4.50	16	77.0	10	2.0	1580	7.6	11.1	81
DEC												
16...	1330	81700	80020	6.02	144	85.0	3	4.0	586	7.7	10.1	77
JAN 1997												
13...	1100	81700	80020	5.68	e95	--	1	--	--	--	--	--
FEB												
11...	1200	81700	80020	7.66	e340	95.0	3	0.5	609	7.8	9.3	80
MAR												
17...	1300	81700	80020	10.85	1040	100	10	4.5	554	7.8	12.9	102
27...	1330	81700	80020	8.01	389	90.0	10	9.0	621	8.0	--	--
31...	1350	81700	80020	7.65	331	100	10	9.5	600	8.1	11.1	98
APR												
07...	1450	81700	80020	7.30	280	90.0	10	11.5	612	8.2	70.8	99
14...	1520	81700	80020	7.27	276	90.0	10	9.0	622	8.3	13.0	112
21...	1410	81700	80020	7.14	258	90.0	10	13.0	615	8.3	10.5	100
28...	1520	81700	80020	6.45	174	86.0	10	13.5	634	8.2	11.1	106
MAY												
03...	1000	81700	80020	7.85	363	94.0	10	12.0	535	7.8	8.8	82
03...	1400	81700	80020	8.35	453	96.0	10	12.0	523	7.8	9.0	84
03...	1800	81700	80020	8.91	569	100	8	12.0	534	7.8	9.1	94
03...	2400	81700	80020	9.29	657	100	10	11.0	565	7.8	9.4	85
04...	0600	81700	80020	9.40	683	100	10	10.5	578	7.8	9.5	86
04...	1200	81700	80020	9.91	791	102	10	11.0	600	7.9	9.8	89
04...	1800	81700	80020	10.26	865	104	10	12.0	588	7.8	9.8	90
04...	2400	81700	80020	10.30	876	105	10	13.0	568	7.9	9.4	89
05...	0600	81700	80020	10.24	863	100	10	12.0	547	8.0	9.3	87
05...	1420	81700	80020	10.01	812	100	10	12.5	574	8.0	9.7	91
06...	1120	81700	80020	9.16	627	100	9	13.0	585	7.9	9.0	--
07...	0950	81700	80020	8.39	462	98.0	10	13.5	607	8.0	8.8	85
12...	1330	81700	80020	7.09	251	90.0	10	14.5	612	8.1	9.8	96
21...	1220	81700	80020	6.31	159	88.0	10	16.0	647	8.1	8.8	90
27...	1330	81700	80020	11.07	1120	106	10	13.5	538	7.8	9.2	89
30...	0740	81700	80020	12.74	2180	245	12	14.5	459	7.7	8.0	--
JUN												
05...	1050	81700	80020	11.01	1100	106	10	15.0	604	8.0	9.2	91
09...	1520	81700	80020	12.22	1780	240	10	15.0	518	7.8	9.6	95
16...	1410	81700	80020	10.70	993	100	10	18.0	595	7.9	8.0	85
26...	0815	81700	80020	8.04	453	96.0	9	23.5	1100	7.9	6.7	79
30...	1240	81700	80020	7.20	315	91.0	10	23.5	641	8.0	7.2	85
JUL												
08...	1220	81700	80020	6.14	177	86.0	10	23.0	667	8.1	7.5	87
14...	0910	81700	80020	5.76	138	85.0	10	24.5	586	7.8	6.8	81
22...	0950	81700	80020	5.43	91	82.0	10	25.0	606	8.1	6.3	77
28...	1350	81700	80020	4.78	60	80.0	10	28.5	685	8.1	7.7	99
AUG												
04...	1430	81700	80020	4.44	28	77.0	10	26.0	695	8.0	8.4	104
11...	1300	81700	80020	4.36	34	77.0	10	22.0	752	7.8	6.2	71
18...	1650	81700	80020	9.23	659	96.0	10	21.5	208	7.4	6.9	78
25...	1340	81700	80020	5.29	96	80.0	10	21.0	566	8.0	7.9	89
SEP												
02...	1220	81700	80020	4.54	45	78.0	10	23.5	663	8.2	8.8	64
08...	1540	81700	80020	5.36	102	82.0	10	21.5	566	7.9	8.5	96
15...	1530	81700	80020	4.87	61	80.0	10	21.5	551	8.1	9.9	112
22...	1530	81700	80020	4.71	43	80.0	10	18.5	628	8.1	10.5	111

## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 1996												
25...	71	34	48	3.1	260	0	317	83	52	0.20	6.1	469
NOV												
15...	65	33	63	0.80	216	0	264	95	57	0.30	6.8	485
DEC												
16...	70	30	15	1.5	208	0	254	39	41	0.24	6.0	369
JAN 1997												
13...	88	37	16	1.2	272	0	332	43	50	0.20	6.0	456
FEB												
11...	69	29	10	1.4	212	0	259	30	39	0.20	7.3	355
MAR												
17...	64	26	7.3	1.0	192	0	234	26	34	0.20	7.1	326
27...	75	32	9.9	0.90	228	0	278	31	42	0.20	5.2	368
31...	69	31	9.9	0.90	214	0	261	31	41	0.20	4.2	367
APR												
07...	69	31	11	0.99	218	0	266	32	42	0.24	3.0	397
14...	71	32	11	0.89	214	0	261	32	43	0.20	1.7	370
21...	66	32	11	0.91	212	0	259	32	43	0.20	0.56	352
28...	68	33	12	0.93	232	0	283	34	43	0.19	0.72	375
MAY												
03...	65	30	10	1.3	200	0	244	29	36	0.20	2.3	346
03...	--	--	--	--	176	0	215	--	--	--	--	--
03...	--	--	--	--	176	0	215	--	--	--	--	--
03...	62	28	7.7	1.3	196	0	239	27	30	0.21	5.8	347
04...	--	--	--	--	198	0	242	--	--	--	--	--
04...	66	30	9.6	1.2	200	0	244	31	35	0.22	5.7	372
04...	--	--	--	--	212	0	259	--	--	--	--	--
04...	63	28	8.5	1.3	184	0	225	28	33	0.23	5.6	336
05...	--	--	--	--	174	0	212	--	--	--	--	--
05...	61	27	7.6	1.4	186	0	227	27	32	0.22	6.3	357
06...	--	--	--	--	154	0	188	--	--	--	--	--
07...	72	30	7.5	0.92	174	0	212	27	33	0.21	6.5	390
12...	68	32	9.2	0.85	234	0	286	31	37	0.23	3.4	391
21...	73	34	13	1.0	212	0	259	35	41	0.25	2.9	402
27...	60	26	6.6	1.7	156	0	190	23	27	0.22	8.5	340
30...	51	21	4.1	2.5	123	0	150	17	22	0.22	9.4	282
JUN												
05...	70	30	6.2	1.1	190	0	232	24	31	0.19	8.9	354
09...	--	--	--	--	194	0	237	--	--	--	--	--
16...	73	29	6.0	1.2	200	0	244	23	29	0.21	9.0	398
26...	67	30	8.1	1.2	202	0	246	25	34	0.21	7.1	381
30...	73	32	8.5	1.1	228	0	278	27	36	0.22	8.6	398
JUL												
08...	76	33	11	0.98	246	7	286	30	40	0.21	8.1	438
14...	66	29	9.7	1.8	246	0	300	27	35	0.23	8.7	380
22...	71	30	14	1.8	228	0	278	34	39	0.21	7.4	371
28...	69	32	24	1.8	240	0	293	46	48	0.21	3.6	457
AUG												
04...	76	33	23	1.9	276	0	337	47	48	0.26	6.8	491
11...	74	33	31	2.1	276	0	337	58	51	0.24	7.9	482
18...	19	8.2	6.9	3.4	70	0	85	13	11	0.16	4.4	126
25...	72	28	12	2.0	218	0	266	24	38	0.24	10	354
SEP												
02...	72	31	22	2.3	252	5	298	41	45	0.22	8.2	404
08...	57	26	20	2.5	204	0	249	38	35	0.23	5.0	339
15...	60	25	15	2.4	196	0	239	31	33	0.20	7.3	323
22...	78	32	18	2.4	240	0	293	39	36	0.21	7.7	372

## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
25...	0.030	0.020	0.30	0.50	<0.050	0.120	0.130	0.090	53	190	5.0	1.1
NOV												
15...	0.030	<0.010	0.50	0.60	0.930	0.130	0.110	0.090	68	48	5.6	0.50
DEC												
16...	0.051	0.071	0.31	0.43	7.66	0.038	0.017	0.025	8.0	10	2.8	0.80
JAN 1997												
13...	0.040	0.050	0.20	0.30	10.0	0.020	0.020	0.030	<3.0	9.0	1.9	0.50
FEB												
11...	0.270	0.040	0.60	0.60	7.60	0.100	0.100	0.100	8.0	19	2.4	0.50
MAR												
17...	0.040	0.020	0.30	<0.20	6.00	0.460	0.030	0.050	<3.0	9.0	--	--
27...	0.060	0.010	<0.20	0.30	11.0	0.050	0.030	0.030	<3.0	18	1.8	0.50
31...	0.040	0.040	0.40	<0.20	9.90	0.060	0.030	0.030	4.0	15	1.8	0.60
APR												
07...	<0.015	0.050	<0.20	0.80	9.00	0.090	0.010	0.030	<3.0	12	2.3	1.5
14...	<0.015	0.030	0.20	0.20	7.30	0.030	0.010	0.010	7.6	17	2.0	0.90
21...	0.032	0.047	0.20	0.47	8.62	0.040	<0.010	<0.010	11	16	2.0	1.0
28...	<0.015	0.048	0.28	0.41	8.02	0.017	0.019	0.012	16	18	1.9	0.30
MAY												
03...	0.062	0.067	0.35	1.0	7.10	0.146	0.053	0.036	<3.0	29	3.4	2.8
03...	0.216	0.074	0.47	1.9	6.89	0.374	0.077	0.078	--	--	3.4	4.4
03...	0.236	0.085	0.58	1.5	8.39	0.269	0.056	0.056	--	--	3.4	5.2
03...	0.163	0.092	0.47	1.1	10.0	0.155	0.067	0.046	<3.0	13	3.7	3.0
04...	0.125	0.084	0.46	1.0	10.0	0.141	0.052	0.039	--	--	3.2	2.0
04...	0.077	0.075	0.40	0.91	9.31	0.137	0.040	0.039	<3.0	9.5	3.0	1.6
04...	0.032	0.069	0.33	0.81	8.28	0.125	0.033	0.031	--	--	2.7	1.7
04...	0.100	0.081	0.50	1.1	10.1	0.158	0.066	0.031	3.2	1.1	3.0	2.0
05...	0.131	0.094	0.52	1.4	10.9	0.248	0.054	0.036	--	--	3.4	5.1
05...	0.140	0.083	0.55	1.1	11.7	0.183	0.046	0.041	<3.0	2.9	3.3	1.8
06...	--	--	--	--	--	--	--	--	--	--	2.9	0.50
07...	0.023	0.059	0.23	0.77	11.8	0.082	0.040	0.038	13	8.8	3.0	3.3
12...	<0.015	0.047	<0.20	0.33	9.70	0.038	0.041	0.024	5.8	20	2.4	1.0
21...	<0.015	0.059	0.31	0.67	7.27	0.051	0.026	0.028	7.1	2.5	3.1	0.60
27...	0.077	0.119	0.64	1.3	16.7	0.191	0.029	0.043	4.3	<1.0	3.9	3.6
30...	0.064	0.102	0.58	1.0	5.32	0.209	0.115	0.138	5.7	2.5	4.7	0.80
JUN												
05...	0.040	0.058	0.25	0.65	15.1	0.093	0.032	0.051	3.8	1.1	2.4	--
09...	<0.015	0.067	0.36	1.1	12.1	0.251	0.095	0.096	--	--	3.2	3.1
16...	0.017	0.056	0.29	0.83	13.9	0.157	0.065	0.061	<3.0	1.8	3.0	2.5
26...	0.028	0.049	0.30	0.91	10.9	0.263	0.064	0.059	<3.0	<1.0	2.7	3.4
30...	0.034	0.046	0.34	0.72	10.8	0.123	0.054	0.061	<3.0	7.2	2.6	2.1
JUL												
08...	<0.015	0.033	0.20	0.39	1.87	0.070	0.033	0.045	<3.0	6.6	2.3	2.0
14...	0.016	0.036	0.31	1.3	7.88	0.179	0.066	0.068	<3.0	2.0	4.1	1.5
22...	0.030	0.016	0.28	0.93	3.25	0.176	0.053	0.059	<3.0	1.2	3.3	2.6
28...	<0.015	0.051	0.43	0.67	1.19	0.096	<0.010	0.011	<3.0	12	3.2	1.4
AUG												
04...	0.025	0.015	0.26	0.86	0.626	0.170	0.076	0.075	<3.0	39	3.4	2.5
11...	<0.015	0.034	0.38	0.61	0.415	0.173	0.101	0.077	3.0	55	3.3	1.5
18...	<0.015	0.022	0.31	1.3	1.28	0.473	0.137	0.146	21	<1.0	4.6	6.7
25...	<0.015	0.025	0.28	0.47	4.13	0.155	0.109	0.102	<3.0	8.3	3.1	1.7
SEP												
02...	<0.015	0.011	0.33	0.82	1.41	0.179	0.099	0.084	<3.0	14	3.2	2.3
08...	<0.015	0.010	0.27	0.98	0.584	0.221	0.060	0.069	3.9	3.8	3.2	1.6
15...	<0.015	<0.010	0.21	0.73	0.070	0.095	0.032	0.013	11	13	3.5	1.6
22...	<0.015	0.017	0.28	0.64	1.90	0.127	0.056	0.049	<3.0	15	3.4	0.80



## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI- CARB SULFONE WAT, FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT, FLT GF 0.7U REC (UG/L) (49314)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	METHYL AZIN- PHO <sup>o</sup> WAT FLT 0.7 U GF, REC (UG/L) (82686)
OCT 1996											
25...	<0.002	<0.002	<0.003	0.084	E0.022	--	--	--	--	<0.002	<0.001
NOV											
15...	0.047	0.015	<0.003	0.166	E0.041	--	--	--	--	<0.002	<0.001
DEC											
16...	0.009	0.007	<0.003	0.190	E0.049	--	--	--	--	<0.002	<0.001
JAN 1997											
13...	0.016	0.005	<0.003	0.217	E0.117	--	--	--	--	<0.002	<0.001
FEB											
11...	0.039	0.005	<0.003	0.175	E0.073	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
MAR											
17...	--	--	--	--	--	<0.035	<0.016	<0.016	<0.021	--	--
27...	<0.007	0.004	<0.003	0.102	E0.068	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
31...	0.009	0.005	<0.003	0.101	E0.061	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
APR											
07...	0.053	E0.004	<0.003	0.166	E0.074	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
14...	0.052	0.005	<0.003	0.128	E0.042	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
21...	0.078	0.004	<0.003	0.216	E0.040	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
28...	0.060	E0.003	<0.003	0.158	E0.021	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
MAY											
03...	E4.72	0.016	<0.003	E32.2	E0.151	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
03...	E4.12	0.022	<0.003	E23.4	E0.110	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
03...	1.19	0.060	<0.003	3.06	E0.030	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
03...	1.29	0.082	<0.003	2.81	E0.051	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
04...	0.928	0.042	<0.003	2.90	E0.039	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
04...	<0.002	<0.002	<0.003	E0.003	<0.002	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
04...	0.534	0.012	<0.003	1.56	E0.092	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
04...	--	--	--	--	--	--	--	--	--	--	--
05...	4.78	0.128	<0.003	9.07	E0.190	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
05...	5.49	0.102	<0.003	9.27	E0.195	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
06...	2.75	0.050	<0.003	4.12	E0.178	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
07...	1.48	0.020	<0.003	2.32	E0.065	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
12...	0.107	0.004	<0.003	0.387	E0.034	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
21...	0.050	0.005	<0.003	0.266	E0.027	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
27...	1.94	0.037	<0.003	7.69	E0.159	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
30...	3.17	0.034	<0.003	14.9	E0.278	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
JUN											
05...	0.365	0.008	<0.003	2.32	E0.100	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
09...	0.336	0.013	<0.003	4.98	E0.154	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
16...	0.168	E0.004	<0.003	3.97	E0.122	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
26...	0.032	E0.003	<0.003	4.95	E0.199	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
30...	0.036	E0.004	<0.003	1.43	E0.164	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
JUL											
08...	0.018	E0.004	<0.003	0.543	E0.082	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
14...	0.029	0.005	<0.003	0.788	E0.094	0.040	<0.016	<0.016	<0.021	<0.002	<0.001
22...	0.013	<0.002	<0.003	0.462	E0.109	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
28...	<0.002	<0.002	<0.003	0.364	E0.057	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
AUG											
04...	<0.002	<0.002	<0.003	0.311	E0.026	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
11...	<0.002	<0.002	<0.003	0.218	E0.021	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
18...	0.029	0.009	<0.003	0.546	E0.064	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
25...	0.011	0.006	<0.003	0.391	E0.078	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
SEP											
02...	0.004	E0.003	<0.003	0.287	E0.046	<0.035	<0.016	<0.016	<0.021	<0.002	<0.030
08...	0.008	E0.002	<0.003	0.168	E0.014	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
15...	0.014	0.005	<0.003	0.236	E0.028	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
22...	E0.004	E0.003	<0.003	0.176	E0.045	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001

## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	3HYDRXY CARBO- FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	CHLOR- AMBN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)
OCT 1996											
25...	<0.002	--	--	--	<0.002	<0.003	--	<0.003	--	--	--
NOV											
15...	<0.002	--	--	--	<0.002	<0.003	--	<0.003	--	--	--
DEC											
16...	<0.002	--	--	--	<0.002	E0.005	--	<0.003	--	--	--
JAN 1997											
13...	<0.002	--	--	--	<0.002	E0.003	--	<0.003	--	--	--
FEB											
11...	<0.002	E0.110	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
MAR											
17...	--	0.130	<0.035	<0.035	--	--	<0.008	--	<0.028	<0.014	<0.011
27...	<0.002	0.140	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
31...	<0.002	E0.120	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
APR											
07...	<0.002	E0.100	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
14...	<0.002	0.130	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
21...	<0.002	0.130	<0.035	<0.035	0.018	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
28...	<0.002	0.150	<0.035	<0.035	0.015	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
MAY											
03...	<0.002	0.070	<0.035	<0.035	E0.003	<0.003	<0.008	E0.021	<0.028	<0.014	<0.011
03...	<0.002	0.080	<0.035	<0.035	0.020	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
03...	<0.002	0.090	<0.035	<0.035	0.093	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
03...	<0.002	0.130	<0.035	<0.035	0.056	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
04...	<0.002	0.080	<0.035	<0.035	0.042	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
04...	<0.002	0.080	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
04...	<0.002	0.100	<0.035	<0.035	0.020	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
04...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.002	0.110	<0.035	<0.035	0.022	<0.003	<0.008	E0.017	<0.028	<0.014	<0.011
05...	<0.002	0.110	<0.035	<0.035	0.035	<0.003	<0.008	E0.012	<0.028	<0.014	<0.011
06...	<0.002	0.090	<0.035	<0.035	0.022	<0.003	<0.008	E0.007	<0.028	<0.014	<0.011
07...	<0.002	0.080	<0.035	<0.035	0.009	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
12...	<0.002	0.080	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
21...	<0.002	0.060	<0.035	<0.035	<0.002	<0.003	<0.008	E0.004	<0.028	<0.014	<0.011
27...	<0.002	E0.190	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
30...	<0.002	E0.090	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
JUN											
05...	<0.002	0.060	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
09...	<0.002	0.740	<0.035	<0.035	<0.002	<0.003	<0.008	E0.442	0.280	<0.014	<0.011
16...	<0.002	E0.740	<0.035	0.140	<0.002	<0.003	<0.008	E0.098	<0.028	<0.014	<0.011
26...	<0.002	E1.16	<0.035	E0.002	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
30...	<0.002	E1.29	<0.035	<0.035	<0.002	E0.002	<0.008	E0.050	<0.028	<0.014	<0.011
JUL											
08...	<0.002	0.490	<0.035	<0.035	<0.002	<0.003	<0.008	E0.018	<0.028	<0.014	<0.011
14...	<0.002	E0.660	<0.035	<0.035	<0.002	<0.003	<0.008	E0.011	<0.028	<0.014	<0.011
22...	<0.002	E0.310	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
28...	<0.002	E0.300	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
AUG											
04...	<0.002	E0.170	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
11...	<0.002	E0.100	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
18...	<0.002	0.110	<0.035	<0.035	<0.002	E0.022	<0.008	E0.016	<0.028	<0.014	<0.011
25...	<0.002	0.200	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
SEP											
02...	<0.002	0.120	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
08...	<0.002	0.060	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
15...	<0.002	0.110	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
22...	<0.002	0.120	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011

## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CHLORO- THALO- NIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA- ZINE, WATER, DISS, (UG/L) (04041)	DACTHAL MONO- ACID, WAT, FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P, P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOR- BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)
OCT 1996											
25...	--	<0.004	--	0.037	--	<0.002	<0.006	<0.002	--	--	--
NOV											
15...	--	<0.004	--	0.053	--	<0.002	<0.006	<0.002	--	--	--
DEC											
16...	--	<0.004	--	0.032	--	<0.002	<0.006	<0.002	--	--	--
JAN 1997											
13...	--	<0.004	--	0.060	--	<0.002	<0.006	E0.003	--	--	--
FEB											
11...	<0.035	<0.004	<0.050	0.031	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
MAR											
17...	<0.035	--	<0.050	--	<0.017	--	--	--	<0.035	<0.020	<0.032
27...	<0.035	<0.004	<0.050	0.011	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
31...	<0.035	<0.004	<0.050	<0.004	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
APR											
07...	<0.035	<0.004	<0.050	0.022	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
14...	<0.035	<0.004	<0.050	<0.004	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
21...	<0.035	<0.004	<0.050	0.074	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
28...	<0.035	<0.004	<0.050	0.038	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
MAY											
03...	<0.035	E0.097	<0.050	3.91	<0.017	E0.002	<0.006	E0.003	<0.035	<0.020	<0.032
03...	<0.035	E0.117	<0.050	4.40	<0.017	E0.002	<0.006	<0.002	<0.035	<0.020	<0.032
03...	<0.035	0.006	<0.050	0.355	<0.017	0.006	<0.006	<0.002	<0.035	<0.020	<0.032
03...	<0.035	0.005	<0.050	0.308	<0.017	E0.002	<0.006	<0.002	<0.035	<0.020	<0.032
04...	<0.035	0.004	<0.050	0.257	<0.017	E0.003	<0.006	<0.002	<0.035	<0.020	<0.032
04...	<0.035	<0.004	<0.050	<0.004	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
04...	<0.035	0.010	<0.050	0.246	<0.017	E0.002	<0.006	<0.002	<0.035	<0.020	<0.032
04...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.035	0.131	<0.050	2.34	<0.017	E0.002	<0.006	<0.002	<0.035	<0.020	<0.032
05...	<0.035	0.128	<0.050	2.56	<0.017	E0.002	<0.006	<0.002	<0.035	<0.020	<0.032
06...	<0.035	0.076	<0.050	1.36	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
07...	<0.035	0.041	<0.050	1.25	<0.017	E0.002	<0.006	<0.002	<0.035	<0.020	<0.032
12...	<0.035	<0.004	<0.050	0.121	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
21...	<0.035	0.006	<0.050	0.063	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
27...	<0.035	<0.004	<0.050	2.74	<0.017	<0.002	<0.006	0.006	E0.400	<0.020	<0.032
30...	<0.035	<0.004	<0.050	5.76	<0.017	<0.002	<0.006	<0.002	E0.500	<0.020	<0.032
JUN											
05...	<0.035	<0.004	<0.050	0.850	<0.017	E0.002	<0.006	<0.002	<0.035	<0.020	<0.032
09...	<0.035	<0.004	<0.050	0.358	<0.017	<0.002	<0.006	<0.002	E0.030	<0.020	<0.032
16...	<0.035	0.010	<0.050	0.522	<0.017	E0.001	<0.006	<0.002	<0.035	<0.020	<0.032
26...	<0.035	E0.004	<0.050	0.204	<0.017	E0.001	<0.006	<0.002	E0.300	<0.020	<0.032
30...	<0.035	0.008	<0.050	0.524	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
JUL											
08...	<0.035	0.006	<0.050	0.057	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
14...	<0.035	0.007	<0.050	0.149	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
22...	<0.035	E0.004	<0.050	0.060	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
28...	<0.035	E0.004	<0.050	0.050	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
AUG											
04...	<0.035	<0.004	<0.050	0.060	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
11...	<0.035	<0.004	<0.050	0.044	<0.017	<0.002	<0.006	E0.002	<0.035	<0.020	<0.032
18...	<0.035	0.010	<0.050	0.021	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
25...	<0.035	<0.004	<0.050	0.105	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
SEP											
02...	<0.035	<0.004	<0.050	0.063	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
08...	<0.035	<0.004	<0.050	0.021	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
15...	<0.035	<0.004	<0.050	0.029	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
22...	<0.035	<0.004	<0.050	0.019	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032

## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DISUL- FOTON WATER FLTRD GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT, FLT GF 0.7U REC (UG/L) (49299)	EPTC WATER FLTRD GF, REC (UG/L) (82668)	ESFEN- VAL- ERATE, WAT, FLT GF 0.7U REC (UG/L) (49298)	ETHAL- FLUR- ALIN WAT FLT GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD GF, REC (UG/L) (82672)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)
OCT 1996											
25...	<0.001	--	<0.017	--	--	<0.002	--	<0.004	<0.003	--	--
NOV											
15...	<0.001	--	<0.017	--	--	<0.002	--	<0.004	<0.003	--	--
DEC											
16...	<0.001	--	<0.017	--	--	<0.002	--	<0.004	<0.003	--	--
JAN 1997											
13...	<0.001	--	<0.017	--	--	<0.002	--	<0.004	<0.003	--	--
FEB											
11...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
MAR											
17...	--	<0.035	--	<0.020	<0.035	--	<0.019	--	--	<0.013	<0.035
27...	E0.002	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
31...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
APR											
07...	E0.002	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
14...	<0.001	<0.035	<0.017	<0.020	<0.035	0.009	<0.019	<0.004	<0.003	<0.013	<0.035
21...	<0.001	<0.035	<0.017	<0.020	<0.035	0.010	<0.019	<0.004	<0.003	<0.013	<0.035
28...	<0.001	<0.035	<0.017	<0.020	<0.035	E0.002	<0.019	<0.004	<0.003	<0.013	<0.035
MAY											
03...	E0.003	<0.035	<0.017	<0.020	<0.035	0.005	<0.019	<0.004	<0.003	<0.013	<0.035
03...	E0.004	<0.035	<0.017	<0.020	<0.035	E0.003	<0.019	<0.004	<0.003	<0.013	<0.035
03...	0.005	<0.035	<0.017	<0.020	<0.035	0.009	<0.019	<0.004	<0.003	<0.013	<0.035
03...	E0.004	<0.035	<0.017	<0.020	<0.035	0.008	<0.019	<0.004	<0.003	<0.013	<0.035
04...	E0.004	<0.035	<0.017	<0.020	<0.035	0.006	<0.019	<0.004	<0.003	<0.013	<0.035
04...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
04...	E0.004	<0.035	<0.017	<0.020	<0.035	0.007	<0.019	<0.004	<0.003	<0.013	<0.035
04...	--	--	--	--	--	--	--	--	--	--	--
05...	0.004	<0.035	<0.017	<0.020	<0.035	0.012	<0.019	<0.004	<0.003	<0.013	<0.035
05...	E0.003	<0.035	<0.017	E0.020	<0.035	0.014	<0.019	<0.004	<0.003	<0.013	<0.035
06...	<0.001	<0.035	<0.017	0.120	<0.035	0.008	<0.019	<0.004	<0.003	<0.013	<0.035
07...	E0.003	<0.035	<0.017	E0.030	<0.035	0.006	<0.019	<0.004	<0.003	<0.013	<0.035
12...	<0.001	<0.035	<0.017	E0.030	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
21...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
27...	<0.001	<0.035	<0.017	0.180	<0.035	E0.002	<0.019	<0.004	<0.003	<0.013	<0.035
30...	<0.001	<0.035	<0.017	0.050	<0.035	0.008	<0.019	<0.004	<0.003	<0.013	<0.035
JUN											
05...	<0.001	<0.035	<0.017	E0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
09...	0.004	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
16...	E0.002	<0.035	<0.017	0.090	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
26...	0.006	<0.035	<0.017	E0.009	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
30...	E0.003	<0.035	<0.017	E0.030	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
JUL											
08...	<0.001	<0.035	<0.017	E0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
14...	<0.001	<0.035	<0.017	0.040	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
22...	<0.001	<0.035	<0.017	E0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
28...	<0.001	<0.035	<0.017	E0.010	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
AUG											
04...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
11...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
18...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
25...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
SEP											
02...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
08...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
15...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
22...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035

## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER, FLTRD 0.7 U GF, REC (UG/L) (82666)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MCPB, WATER, FLTRD, REC (UG/L) (38487)	MCPA, WATER, FLTRD, REC (UG/L) (38482)	METHIO- CABB, WATER, FLTRD, REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, REC (UG/L) (49296)	METO- LACHLOR DISSOLV (UG/L) (39415)	METOLI- BUZIN WATER DISSOLV (UG/L) (82630)
OCT 1996											
25...	<0.003	<0.004	<0.002	--	<0.005	--	--	--	--	0.044	<0.004
NOV											
15...	<0.003	<0.004	<0.002	--	<0.005	--	--	--	--	0.388	<0.004
DEC											
16...	<0.003	<0.004	<0.002	--	<0.005	--	--	--	--	0.111	<0.004
JAN 1997											
13...	<0.003	<0.004	<0.002	--	<0.005	--	--	--	--	0.070	<0.004
FEB											
11...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.506	0.009
MAR											
17...	--	--	--	<0.018	--	<0.035	<0.050	<0.026	<0.017	--	--
27...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.093	<0.004
31...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.155	<0.004
APR											
07...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.226	<0.004
14...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	4.08	<0.004
21...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.260	<0.004
28...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.176	<0.004
MAY											
03...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.41	<0.004
03...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.76	0.222
03...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	5.93	0.016
03...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	5.13	0.014
04...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	4.54	0.010
04...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	80.002	<0.004
04...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	2.14	0.018
04...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	8.46	0.118
05...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	4.13	0.049
06...	0.007	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	2.30	0.015
07...	0.004	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.66	0.008
12...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.230	<0.004
21...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.154	<0.004
27...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	2.57	0.052
30...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	4.88	0.059
JUN											
05...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.890	0.014
09...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	3.41	0.014
16...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.789	0.007
26...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.725	<0.004
30...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.335	<0.004
JUL											
08...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.181	<0.004
14...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.326	<0.004
22...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.172	<0.004
28...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.171	<0.004
AUG											
04...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.098	<0.004
11...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.071	<0.004
18...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.673	<0.004
25...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.260	<0.017	0.279	<0.004
SEP											
02...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.141	<0.004
08...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.095	<0.004
15...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.202	<0.004
22...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.204	<0.004

## ILLINOIS RIVER BASIN

## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	1-NAPH THOL, WATER FLTRD 0.7 U GF, REC (UG/L) (49295)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER FLTRD 0.7 U GF, REC (UG/L) (49294)	NORFLUR AZON, WATER FLTRD 0.7 U GF, REC (UG/L) (49293)	ORY- ZALIN, WATER FLTRD 0.7 U GF, REC (UG/L) (49292)	OXAMYL, WATER FLTRD 0.7 U GF, REC (UG/L) (38866)	PARA- THION, DIS- SOLVED (UG/L) (39542)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
OCT 1996											
25...	<0.004	--	<0.003	--	--	--	--	<0.004	<0.006	<0.004	<0.004
NOV											
15...	<0.004	--	<0.003	--	--	--	--	<0.004	<0.006	<0.004	<0.004
DEC											
16...	<0.004	--	<0.003	--	--	--	--	<0.004	<0.006	<0.004	<0.004
JAN 1997											
13...	<0.004	--	<0.003	--	--	--	--	<0.004	<0.006	<0.004	<0.004
FEB											
11...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
MAR											
17...	--	<0.007	--	<0.015	<0.024	<0.019	<0.018	--	--	--	--
27...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
31...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
APR											
07...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
14...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
21...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
28...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
MAY											
03...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.078
03...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.077
03...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.102
03...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.091
04...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.080
04...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
04...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.040
04...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.055
05...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.111
06...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.072
07...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.052
12...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
21...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
27...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
30...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
JUN											
05...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.017
09...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.034
16...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
26...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
30...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
JUL											
08...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
14...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
22...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
28...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
AUG											
04...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
11...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
18...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	0.211	<0.004	<0.004
25...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
SEP											
02...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
08...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
15...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
22...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004

## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DIS- SOLVED (UG/L) (39762)
OCT 1996											
25...	<0.005	<0.002	--	0.045	<0.003	<0.007	<0.004	<0.013	--	--	--
NOV											
15...	<0.005	<0.002	--	0.067	<0.003	<0.007	<0.004	<0.013	--	--	--
DEC											
16...	<0.005	<0.002	--	E0.010	<0.003	<0.007	<0.004	<0.013	--	--	--
JAN 1997											
13...	<0.005	<0.002	--	E0.007	<0.003	<0.007	<0.004	<0.013	--	--	--
FEB											
11...	<0.005	<0.002	<0.050	E0.006	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
MAR											
17...	--	--	<0.050	--	--	--	--	--	<0.035	<0.035	<0.021
27...	<0.005	<0.002	<0.050	E0.007	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
31...	<0.005	<0.002	<0.050	<0.018	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
APR											
07...	<0.005	<0.002	<0.050	E0.006	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
14...	<0.005	<0.002	<0.050	E0.005	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
21...	<0.005	<0.002	<0.050	<0.018	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
28...	<0.005	<0.002	<0.050	E0.005	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
MAY											
03...	<0.005	<0.002	<0.050	E0.002	<0.003	E0.006	<0.004	<0.013	<0.035	<0.035	<0.021
03...	<0.005	<0.002	<0.050	E0.006	<0.003	E0.007	<0.004	<0.013	<0.035	<0.035	<0.021
03...	<0.005	<0.002	<0.050	E0.006	<0.003	E0.002	<0.004	<0.013	<0.035	<0.035	<0.021
03...	<0.005	<0.002	<0.050	E0.008	<0.003	0.055	<0.004	<0.013	<0.035	<0.035	<0.021
04...	<0.005	<0.002	<0.050	E0.006	<0.003	0.018	<0.004	<0.013	<0.035	<0.035	<0.021
04...	<0.005	<0.002	<0.050	E0.003	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
04...	<0.005	<0.002	<0.050	E0.013	<0.003	0.023	<0.004	<0.013	<0.035	<0.035	<0.021
04...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.005	<0.002	<0.050	E0.011	<0.003	0.021	<0.004	<0.013	<0.035	<0.035	<0.021
05...	<0.005	<0.002	<0.050	E0.011	<0.003	0.011	<0.004	<0.013	<0.035	<0.035	<0.021
06...	<0.005	<0.002	<0.050	E0.015	<0.003	E0.006	<0.004	<0.013	<0.035	<0.035	<0.021
07...	<0.005	<0.002	<0.050	E0.013	<0.003	E0.004	<0.004	<0.013	<0.035	<0.035	<0.021
12...	<0.005	<0.002	<0.050	E0.008	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
21...	<0.005	<0.002	<0.050	E0.007	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
27...	<0.005	<0.002	<0.050	0.030	<0.003	0.511	<0.004	<0.013	<0.035	<0.035	<0.021
30...	<0.005	<0.002	<0.050	E0.008	<0.003	0.074	<0.004	<0.013	<0.035	<0.035	<0.021
JUN											
05...	<0.005	<0.002	<0.050	E0.008	<0.003	0.024	<0.004	<0.013	<0.035	<0.035	<0.021
09...	<0.005	<0.002	<0.050	0.025	<0.003	E0.005	<0.004	<0.013	<0.035	<0.035	<0.021
16...	<0.005	<0.002	<0.050	0.033	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
26...	<0.005	<0.002	<0.050	E0.015	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
30...	<0.005	<0.002	<0.050	0.029	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
JUL											
08...	<0.005	<0.002	<0.050	E0.012	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
14...	<0.005	<0.002	<0.050	0.022	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
22...	<0.005	<0.002	<0.050	0.045	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
28...	<0.005	<0.002	<0.050	0.031	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
AUG											
04...	<0.005	<0.002	<0.050	0.021	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
11...	<0.005	<0.002	<0.050	0.027	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
18...	<0.005	<0.002	<0.050	0.019	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
25...	<0.005	<0.002	<0.050	0.065	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
SEP											
02...	<0.005	<0.002	<0.050	0.019	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
08...	<0.005	<0.002	<0.050	0.058	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
15...	<0.005	<0.002	<0.050	0.029	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
22...	<0.005	<0.002	<0.050	E0.013	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021

## 05572000 SANGAMON RIVER AT MONTICELLO, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	2,4,5-T DIS- SOLVED (UG/L) (39742)	2,4-D, DIS- SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)
OCT 1996											
25...	0.044	<0.010	<0.007	<0.013	<0.002	<0.001	--	<0.002	--	--	--
NOV											
15...	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	--	<0.002	--	--	--
DEC											
16...	E0.004	<0.010	<0.007	<0.013	<0.002	<0.001	--	<0.002	--	--	--
JAN 1997											
13...	E0.004	E0.003	<0.007	<0.013	<0.002	<0.001	--	<0.002	--	--	--
FEB											
11...	E0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.004	<0.035	<0.035	<0.035
MAR											
17...	--	--	--	--	--	--	<0.050	--	<0.035	<0.035	<0.035
27...	E0.004	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
31...	E0.003	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	E0.004	<0.035	<0.035	<0.035
APR											
07...	E0.003	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	E0.002	<0.035	<0.035	<0.035
14...	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	E0.007	<0.035	<0.035	<0.035
21...	E0.003	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
28...	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
MAY											
03...	1.41	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.005	<0.035	0.150	<0.035
03...	0.141	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.005	<0.035	0.260	<0.035
03...	0.013	<0.010	<0.007	E0.009	<0.002	<0.001	<0.050	0.007	<0.035	0.460	<0.035
03...	0.033	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.008	<0.035	0.650	<0.035
04...	0.018	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.007	<0.035	0.470	<0.035
04...	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	0.800	<0.035
04...	0.020	E0.004	<0.007	<0.013	<0.002	<0.001	<0.050	0.006	<0.035	0.440	<0.035
04...	--	--	--	--	--	--	--	--	--	--	--
05...	0.027	E0.005	<0.007	<0.013	<0.002	<0.001	<0.050	0.008	<0.035	E1.89	<0.035
05...	0.030	E0.006	<0.007	<0.013	<0.002	<0.001	<0.050	0.008	<0.035	1.40	<0.035
06...	0.019	E0.008	<0.007	<0.013	<0.002	<0.001	<0.050	0.007	<0.035	0.720	<0.035
07...	0.015	E0.004	<0.007	<0.013	<0.002	<0.001	<0.050	0.005	<0.035	0.540	<0.035
12...	0.007	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	E0.003	<0.035	<0.035	<0.035
21...	0.014	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	E0.003	<0.035	0.060	<0.035
27...	0.038	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.007	<0.035	0.760	<0.035
30...	0.039	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.008	<0.035	0.420	<0.035
JUN											
05...	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.005	<0.035	<0.035	<0.035
09...	0.018	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.010	<0.035	<0.035	<0.035
16...	0.017	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.006	<0.035	<0.035	<0.035
26...	0.015	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.016	<0.035	0.080	<0.035
30...	0.014	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.006	<0.035	<0.035	<0.035
JUL											
08...	0.009	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.004	<0.035	<0.035	<0.035
14...	0.009	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	E0.004	<0.035	<0.035	<0.035
22...	0.010	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	E0.004	<0.035	0.190	<0.035
28...	0.008	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
AUG											
04...	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
11...	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
18...	E0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	E0.003	<0.035	<0.035	<0.035
25...	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
SEP											
02...	0.015	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
08...	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
15...	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
22...	E0.003	E0.007	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035



## 05573540 SANGAMON RIVER AT ROUTE 48 AT DECATUR, IL

LOCATION.--Lat 39°49'52", long 88°58'35", in NE1/4NE1/4 sec.21, T.16 N., R.2 E., Macon County, Hydrologic Unit 07130006, on right upstream side of bridge on State Highway 48 in Decatur, 1.2 mi downstream from Lake Decatur Dam, 2.5 mi upstream from Stevens Creek, and at mile 129.0.

DRAINAGE AREA.--938 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1982 to current year.

REVISED RECORDS.--WDR IL-94-2: 1992

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 583.43 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by Lake Decatur Dam, 1.2 mi upstream. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,210 ft<sup>3</sup>/s, Feb. 27, gage height, 15.58 ft; no flow for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	3.1	4.2	141	e150	4890	422	224	1190	1270	6.4	3.5
2	.00	2.7	3.9	88	165	4970	331	239	1220	280	7.4	42
3	.00	2.3	3.5	6.3	517	4590	374	717	770	360	6.8	214
4	.08	2.1	3.2	2.0	1240	2780	372	892	719	310	4.6	248
5	.51	2.1	3.4	.86	1760	1870	267	1030	930	325	3.9	52
6	1.1	6.1	3.9	e12	1900	1830	377	1120	820	347	3.9	11
7	1.9	39	3.7	e186	1670	1080	440	885	1050	309	3.5	4.7
8	2.2	15	3.3	e205	1500	896	426	638	1080	268	3.6	11
9	2.2	3.6	3.0	e195	1440	883	267	378	1060	264	8.7	8.3
10	2.3	2.2	2.9	170	976	992	210	344	1060	241	5.7	106
11	2.3	1.6	3.0	141	408	1340	233	362	1110	263	4.5	44
12	2.5	1.3	3.0	e80	347	1720	273	371	1170	267	3.9	132
13	2.5	1.1	3.0	e50	400	1230	277	348	1290	207	3.3	62
14	2.7	.94	2.9	e3.0	587	1480	328	367	1330	193	3.1	29
15	2.7	.77	2.8	e.70	604	1570	334	373	1160	257	4.2	23
16	2.6	.88	2.7	e.07	458	1470	302	334	1160	36	3.7	16
17	4.6	1.7	2.7	.00	162	1210	195	275	1070	12	10	6.3
18	7.4	2.0	2.7	.00	142	1110	110	245	813	7.6	5.8	3.1
19	5.2	2.1	2.7	.00	186	1090	104	245	468	49	6.1	6.3
20	4.1	2.1	2.5	5.8	577	648	126	241	570	208	7.0	5.8
21	3.5	2.1	2.4	80	1700	721	315	239	595	59	271	3.9
22	11	2.0	2.4	285	1900	775	368	220	278	26	239	3.1
23	12	1.9	3.9	476	2660	858	321	167	414	13	24	3.4
24	4.3	2.3	4.6	1330	3980	349	236	216	327	8.5	12	3.4
25	2.4	3.4	3.7	1870	3150	148	199	223	195	7.6	144	2.7
26	2.1	3.4	3.3	1290	3200	384	196	277	528	6.7	27	1.9
27	2.1	2.9	3.2	832	5000	641	196	674	605	6.7	7.6	1.5
28	2.0	2.6	3.5	385	4820	530	197	961	484	6.8	223	1.2
29	2.2	2.7	3.2	e250	---	109	196	802	385	5.7	180	1.1
30	3.0	4.1	30	e190	---	219	203	1040	1020	5.4	20	1.4
31	2.7	---	113	e160	---	440	---	1180	---	5.8	6.7	---
TOTAL	94.19	120.09	236.2	8434.73	41599	42823	8195	15627	24871	5624.8	1260.4	1051.6
MEAN	3.04	4.00	7.62	272	1486	1381	273	504	829	181	40.7	35.1
MAX	12	39	113	1870	5000	4970	440	1180	1330	1270	271	248
MIN	.00	.77	2.4	.00	142	109	104	167	195	5.4	3.1	1.1

e Estimated

## 05573540 SANGAMON RIVER AT ROUTE 48 AT DECATUR, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

MEAN	279	688	958	713	877	1121	1154	1502	788	393	124	149
MAX	2217	4041	2294	3087	2230	2384	3674	4027	2085	1947	515	1736
(WY)	1994	1986	1991	1993	1984	1993	1994	1995	1990	1993	1985	1993
MIN	.24	3.67	2.21	26.8	56 0	180	83.8	129	17.3	2.69	.33	.51
(WY)	1995	1983	1990	1990	1989	1996	1986	1988	1988	1989	1996	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997	
ANNUAL TOTAL	195631.61		149937.01			
ANNUAL MEAN	535		411		728	
HIGHEST ANNUAL MEAN					1511	
LOWEST ANNUAL MEAN					337	
HIGHEST DAILY MEAN	8060	May 9	5000	Feb 27	16400	Apr 15 1994
LOWEST DAILY MEAN	.00	Many days	.00	Several days	.00	A
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 4	.51	Oct 1	.00	Oct 8 1988
INSTANTANEOUS PEAK FLOW			5210	Feb 27	17100 B	Apr 15 1994
INSTANTANEOUS PEAK STAGE			15.58	Feb 27	23.04	May 2 1983
10 PERCENT EXCEEDS	1830		1170		2100	
50 PERCENT EXCEEDS	18		142		241	
90 PERCENT EXCEEDS	.00		2.1		1.6	

A - Many days in 1988-89, 1991-96.

B - Gage height, 21.12 ft.

## 05576000 SOUTH FORK SANGAMON RIVER NEAR ROCHESTER, IL

LOCATION.--Lat 39°44'32", long 89°34'02", in NE1/4NW1/4 sec.20, T.15 N., R.4 W., Sangamon County, Hydrologic Unit 07130007, on right bank at city of Springfield dam, 100 ft downstream from Horse Creek, 1.7 mi southwest of Rochester, and at mile 7.4.

DRAINAGE AREA.--867 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1949 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 511.30 ft above sea level. Prior to Oct. 1, 1964, water-stage recorder, and Oct. 1, 1964, to Apr. 12, 1966, nonrecording gage, at site 2.2 mi downstream at same datum. Auxiliary water-stage recorder at site 1.2 mi downstream. May 19, 1950 to Apr. 29, 1975, auxiliary nonrecording gage at same site. Prior to May 19, 1950, auxiliary nonrecording gage at site 6.2 mi downstream.

REMARKS.--Records fair except those for Dec. 26 to Jan. 11 and those for estimated daily discharges, which are poor. Beginning Apr. 14, 1955, diversion above station for Springfield municipal supply during some years. Occasional regulation caused by operation of gate at diversion dam. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,880 ft<sup>3</sup>/s, Mar. 3, gage height, 23.51 ft; minimum discharge, 0.72 ft<sup>3</sup>/s, Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	7.0	35	15	e160	3290	368	138	240	444	e17	5.0
2	7.5	7.4	41	14	200	4310	350	131	251	606	e12	5.7
3	8.0	9.2	45	14	679	4820	315	176	251	257	e10	6.6
4	6.5	8.7	43	14	1160	4430	295	290	206	163	e8.5	12
5	5.5	6.3	41	14	e1240	3690	306	326	188	129	e7.5	19
6	6.3	3.6	41	13	1320	2700	320	367	279	93	6.9	11
7	4.8	5.6	40	13	1410	1680	323	373	636	74	6.3	8.1
8	4.6	52	40	18	1380	1060	295	313	608	63	4.4	17
9	4.5	57	37	21	e1180	e1100	238	248	629	57	1.9	42
10	4.3	91	35	25	e850	e1200	195	185	713	51	2.4	19
11	4.3	66	33	21	525	e1300	179	153	723	45	2.5	11
12	5.1	47	31	e19	297	1450	181	138	676	43	2.1	76
13	5.3	36	28	e18	223	1450	189	133	623	39	1.7	100
14	5.4	30	26	e17	322	1880	192	124	608	36	1.7	52
15	4.9	24	24	e17	232	1980	189	113	607	32	1.8	28
16	5.1	19	23	e16	192	1850	182	104	571	29	1.7	17
17	5.8	16	21	e16	169	1850	170	101	533	26	1.7	14
18	5.7	15	e19	e15	151	1840	156	92	462	25	1.5	10
19	3.4	13	e16	e15	152	1630	143	99	364	36	1.9	8.4
20	3.6	11	19	e9.0	187	1320	138	116	251	75	1.9	7.6
21	5.1	12	18	e3.0	633	1060	159	107	218	57	1.5	8.9
22	6.8	12	18	e4.0	e800	918	184	89	207	33	41	7.6
23	7.7	12	18	e200	e900	796	198	72	162	26	8.6	4.4
24	4.3	11	e18	e400	e940	710	192	66	140	26	7.6	9.5
25	2.2	12	e17	e580	e1000	618	175	68	129	26	7.3	5.6
26	2.1	13	18	e750	e1200	515	158	78	112	22	6.3	4.8
27	2.0	15	18	e680	2440	485	144	75	117	20	5.6	4.0
28	15	21	18	e560	2860	490	137	108	120	20	4.9	4.2
29	3.1	28	17	e350	---	537	133	162	103	12	4.4	4.4
30	8.1	34	16	e230	---	427	131	151	89	9.3	4.1	4.4
31	7.9	---	16	e180	---	380	---	191	---	27	4.4	---
TOTAL	169.3	694.8	830	4261.0	22802	51766	6335	4887	10816	2601.3	191.1	527.2
MEAN	5.46	23.2	26.8	137	814	1670	211	158	361	83.9	6.16	17.6
MAX	15	91	45	750	2860	4820	368	373	723	606	41	100
MIN	2.0	3.6	16	3.0	151	380	131	66	89	9.3	1.5	4.0
CFSM	.01	.03	.03	.16	.94	1.93	.24	.18	.42	.10	.01	.02
IN.	.01	.03	.04	.18	.98	2.22	.27	.21	.46	.11	.01	.02

e Estimated

## ILLINOIS RIVER BASIN

## 05576000 SOUTH FORK SANGAMON RIVER NEAR ROCHESTER, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1997, BY WATER YEAR (WY)

MEAN	183	264	557	604	869	1037	1063	936	794	390	251	147
MAX	2748	2846	4546	3788	4273	3669	3991	4482	3600	3053	3046	2876
(WY)	1970	1986	1968	1950	1982	1978	1994	1996	1974	1957	1958	1993
MIN	1.06	.67	.19	.75	4.48	13.1	79.0	17.9	3.20	1.74	1.02	1.13
(WY)	1989	1977	1977	1990	1989	1954	1977	1954	1988	1954	1964	1987

## SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1949 - 1997

ANNUAL TOTAL	238676.33		105880.7									
ANNUAL MEAN	652		290							590		
HIGHEST ANNUAL MEAN										1345		1973
LOWEST ANNUAL MEAN										26.3		1954
HIGHEST DAILY MEAN	10600	May 11	4820	Mar 3						19000	Apr 14	1994
LOWEST DAILY MEAN	.53	Sep 24	1.5	Aug 18, 21						.00	A	
ANNUAL SEVEN-DAY MINIMUM	3.4	Sep 20	1.7	Aug 13						.00	Jun 9	1988
INSTANTANEOUS PEAK FLOW			4880	Mar 3						20300	Apr 14	1994
INSTANTANEOUS PEAK STAGE			23.51	Mar 3						32.40	Apr 14	1994
INSTANTANEOUS LOW FLOW			.72	Sep 24								
ANNUAL RUNOFF (CFSM)	.75		.33							.68		
ANNUAL RUNOFF (INCHES)	10.24		4.54							9.25		
10 PERCENT EXCEEDS	1230		798							1540		
50 PERCENT EXCEEDS	48		43							163		
90 PERCENT EXCEEDS	6.3		4.6							5.6		

A - Nov. 4-6, 1985; Sept. 9, 1987; many days in 1988-90, 1992.

## 05576500 SANGAMON RIVER AT RIVERTON, IL

**LOCATION.**--Lat 39°50'34", long 89°32'52", in NW1/4NE1/4 sec.16, T.16 N., R.4 W., Sangamon County, Hydrologic Unit 07130008, at right abutment on former U.S. Highway 36 bridge in Riverton, 2.2 mi downstream from Sugar Creek, 5.6 mi upstream from Fancy Creek, and at mile 83.1.

**DRAINAGE AREA.**--2,618 mi<sup>2</sup>.

**PERIOD OF RECORD.**--February 1908 to December 1912, August 1914 to October 1956, and annual maximum, water years 1957-85. January 1986 to current year.

**REVISED RECORD.**--WSP 1208: 1908-9, 1921-22, 1926-27, 1947. WDR IL-75-1: Drainage area.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 508.38 ft above sea level. Prior to Aug. 14, 1934, chain gage on old Wabash Railway bridge (currently Norfolk and Western Railway bridge), 1,450 ft downstream, at datum 5.61 ft lower.

**REMARKS.**--Records fair except those for estimated daily discharges, which are poor. Some regulation by municipal reservoirs at Decatur (since 1922) and at Springfield (since 1934). U.S. Army Corps of Engineers satellite telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--The high water of 1883 reached a stage of approximately 32 ft with respect to the gage at the old Wabash Railway bridge. The high water of 1875 is said to have been about one-half foot lower.

**EXTREMES FOR CURRENT YEAR.**--Maximum discharge, 11,700 ft<sup>3</sup>/s, Mar. 3, gage height, 19.06 ft; minimum discharge, 58 ft<sup>3</sup>/s, Dec. 19, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	73	156	110	e730	11200	1330	568	2020	2370	122	168
2	81	70	158	161	821	11400	1370	602	2080	2820	113	146
3	79	68	152	161	1510	11600	1180	858	2100	1510	112	213
4	77	67	147	117	2040	11600	1180	2170	1720	1140	113	378
5	77	75	144	88	2830	11000	1370	2250	1550	926	112	495
6	78	81	139	93	3010	9330	1210	2400	1830	780	105	304
7	76	152	146	85	3090	7280	1160	2530	2070	742	101	191
8	75	224	140	94	2920	5160	1150	2140	2240	666	99	249
9	75	236	129	203	2650	3620	1110	1770	2270	544	104	765
10	74	189	125	180	2210	3670	855	1390	2350	507	110	386
11	73	169	122	156	1550	3910	737	1220	2370	461	127	223
12	72	140	117	e140	911	4280	744	1180	2440	441	107	270
13	71	127	122	e130	746	4700	794	1220	2500	436	101	313
14	71	116	124	e110	757	5450	760	1150	2610	410	93	315
15	72	108	116	e105	904	5900	796	1100	2680	332	112	221
16	70	101	112	e97	878	5790	816	1030	2450	476	97	178
17	75	102	104	e91	769	5630	762	984	2360	276	134	183
18	84	97	93	e87	522	5240	647	834	2220	218	133	159
19	71	104	69	e84	462	4760	529	788	1910	205	134	142
20	83	97	92	e82	501	4470	493	742	1430	331	118	125
21	78	94	86	e80	1670	3180	527	645	1420	327	125	120
22	84	92	86	306	3180	2770	707	599	1440	279	189	128
23	90	91	96	945	3590	2340	834	552	934	226	523	125
24	102	95	88	1480	3670	2310	796	479	932	188	235	120
25	102	107	81	1870	4390	1890	663	521	930	165	182	125
26	80	118	85	2870	5350	1350	569	566	655	154	281	112
27	71	122	90	2530	7180	1450	532	602	1130	145	249	102
28	68	113	87	1850	9510	1770	530	1150	1280	144	172	96
29	72	117	86	1020	---	1850	528	1660	1110	131	180	90
30	69	138	83	e820	---	1180	524	1560	891	120	422	86
31	67	---	74	e760	---	1080	---	1810	---	115	238	---
TOTAL	2401	3483	3449	16905	68351	157160	25203	37070	53922	17585	5043	6528
MEAN	77.5	116	111	545	2441	5070	840	1196	1797	567	163	218
MAX	102	236	158	2870	9510	11600	1370	2530	2680	2820	523	765
MIN	67	67	69	80	462	1080	493	479	655	115	93	86
CFSM	.03	.04	.04	.21	.93	1.94	.32	.46	.69	.22	.06	.08
IN.	.03	.05	.05	.24	.97	2.23	.36	.53	.77	.25	.07	.09

e Estimated

## ILLINOIS RIVER BASIN

## 05576500 SANGAMON RIVER AT RIVERTON, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 1997, BY WATER YEAR (WY)

MEAN	887	977	1170	1896	2258	2718	3281	3134	2186	1115	525	602
MAX	12280	5516	7500	12940	7762	8117	14100	16760	7377	4819	5914	12730
(WY)	1927	1942	1928	1950	1951	1939	1922	1943	1947	1951	1915	1926
MIN	7.29	12.6	27.5	29.5	34.6	50.8	180	113	146	49.1	40.7	22.3
(WY)	1915	1915	1915	1918	1931	1954	1931	1954	1934	1954	1936	1922

## SUMMARY STATISTICS

## FOR 1996 CALENDAR YEAR

## FOR 1997 WATER YEAR

## WATER YEARS 1908 - 1997

ANNUAL TOTAL	679927					397100						
ANNUAL MEAN	1858					1088				1725		
HIGHEST ANNUAL MEAN										4808		1927
LOWEST ANNUAL MEAN										114		1954
HIGHEST DAILY MEAN	31000	May 10				11600	Mar 3-4			67700	May 19	1943
LOWEST DAILY MEAN	67	Oct 31, Nov 4				67	Oct 31, Nov 4			3.0	A	
ANNUAL SEVEN-DAY MINIMUM	69	Oct 29				69	Oct 29			3.0	Oct 3	1914
INSTANTANEOUS PEAK FLOW						11700	Mar 3			68700	May 19	1943
INSTANTANEOUS PEAK STAGE						19.06	Mar 3			31.52 B	May 19	1943
INSTANTANEOUS LOW FLOW						58 C	Dec 19					
ANNUAL RUNOFF (CFSM)	.71					.42				.66		
ANNUAL RUNOFF (INCHES)	9.66					5.64				8.95		
10 PERCENT EXCEEDS	5980					2660				4570		
50 PERCENT EXCEEDS	331					327				663		
90 PERCENT EXCEEDS	79					83				58		

A - Oct. 3-15, 1914.

B - From graph based on gage readings.

C - Result of freezeup.

## 05577500 SPRING CREEK AT SPRINGFIELD, IL

LOCATION.--Lat 39°48'57", long 89°41'57", in NW1/4NE1/4 sec.30, T.16 N., R.5 W., Sangamon County, Hydrologic Unit 07130008, on right bank at downstream side of bridge on State Highways 125 and 97 (Jefferson Street), 0.1 mi east of intersection of State Highway 4 (Veterans Parkway) and State Highways 125 and 97 (Jefferson Street), in Springfield, and at mile 8.2.

DRAINAGE AREA.--107 mi<sup>2</sup>.

PERIOD OF RECORD.--January to September 1948, December 1948 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 524.65 ft above sea level. Prior to Dec. 22, 1948, and Mar. 24, 1981, to Mar. 30, 1983, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for Feb. 27-July 19, which are good, and those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 26	2245	*476	*6.65				

No flow for several days in Oct. and Sept.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.12	3.4	1.0	e10	150	41	27	30	15	.08	.62
2	.00	.09	2.5	1.2	19	128	40	25	36	13	.10	2.5
3	.00	.07	1.3	1.4	30	106	39	81	29	10	.11	.63
4	e.00	.06	.92	1.3	41	96	40	51	25	8.8	.19	.05
5	e.00	.04	3.5	1.4	32	84	50	38	22	8.0	.24	.01
6	e.00	e7.0	3.4	1.2	17	73	48	34	47	7.3	.24	.01
7	e.00	e18	1.5	1.0	9.7	67	36	29	39	6.7	.22	.01
8	.00	.66	.99	e.86	6.3	65	29	28	34	5.7	.25	8.2
9	.00	.25	.84	e.74	4.7	95	28	27	30	4.6	.53	1.3
10	.00	.27	.78	e.64	3.6	98	28	23	28	5.1	.81	.13
11	.00	.22	.69	e.56	2.9	84	34	23	26	5.2	1.5	.02
12	.00	.17	.78	e.52	2.4	74	40	24	37	4.6	1.1	.01
13	.00	.15	.83	e.48	1.7	102	35	26	35	4.0	.98	.01
14	.00	.15	.80	e.44	e1.4	142	29	24	37	4.1	.91	.00
15	.00	.14	.80	e.42	e1.3	106	25	22	31	3.7	9.6	.00
16	.00	.13	1.1	e.38	e1.3	89	27	19	27	3.6	.38	.00
17	.42	3.1	1.2	e.36	1.6	85	25	17	27	3.0	30	4.9
18	.12	1.2	e.50	e.35	2.3	90	23	18	24	3.8	.80	.07
19	.03	.44	e.30	e.50	5.4	82	25	44	19	34	1.1	.01
20	.01	.28	e.32	e1.0	11	77	36	34	18	23	.51	.01
21	.01	.38	.36	e3.0	15	75	51	23	18	5.6	.12	.02
22	1.4	.82	.48	e7.0	22	69	41	20	18	4.1	.08	.06
23	.13	.55	e.60	14	15	59	32	18	17	2.6	.09	2.0
24	.06	3.3	e.90	30	8.3	58	28	23	16	2.2	.17	.14
25	.06	4.1	e.70	19	5.4	63	25	28	30	1.7	.18	.02
26	.06	1.2	e.60	12	139	57	23	28	22	1.1	.41	.01
27	.04	.51	e.54	e9.0	374	52	23	30	17	.71	.53	.02
28	.04	.32	e.60	e7.6	204	56	25	32	13	.54	.44	.03
29	.04	1.5	e.70	e6.8	---	59	24	24	20	.30	.33	.04
30	.22	5.0	e.80	e6.4	---	52	29	32	20	.19	.33	.02
31	.14	---	e.90	e7.0	---	45	---	30	---	.09	.87	---
TOTAL	2.78	50.22	33.63	137.55	987.3	2538	979	902	792	192.33	53.20	20.85
MEAN	.090	1.67	1.08	4.44	35.3	81.9	32.6	29.1	26.4	6.20	1.72	.69
MAX	1.4	18	3.5	30	374	150	51	81	47	34	30	8.2
MIN	.00	.04	.30	.35	1.3	45	23	17	13	.09	.08	.00
CFSM	.00	.02	.01	.04	.33	.77	.30	.27	.25	.06	.02	.01
IN.	.00	.02	.01	.05	.34	.88	.34	.31	.28	.07	.02	.01

e Estimated

## ILLINOIS RIVER BASIN

## 05577500 SPRING CREEK AT SPRINGFIELD, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1997, BY WATER YEAR (WY)

MEAN	23.2	30.0	58.0	58.2	82.3	110	131	125	91.2	44.3	27.5	21.9
MAX	244	225	523	282	281	374	605	617	418	358	292	296
(WY)	1960	1986	1983	1950	1975	1978	1957	1996	1990	1981	1981	1993
MIN	.000	.000	.000	.000	.22	.23	.66	.052	8.05	1.38	.016	.000
(WY)	1954	1954	1954	1956	1954	1954	1954	1954	1953	1976	1953	1952

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1948 - 1997	
ANNUAL TOTAL	25874.11		6688.86			
ANNUAL MEAN	70.7		18.3		67.5	
HIGHEST ANNUAL MEAN					156	1993
LOWEST ANNUAL MEAN					2.15	1954
HIGHEST DAILY MEAN	5320	May 8	374	Feb 27	5320	May 8 1996
LOWEST DAILY MEAN	.00	A	.00	B	.00	C
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 28	.00	Oct 1	.00	Sep 1 1949
INSTANTANEOUS PEAK FLOW			476	Feb 26	10700	May 8 1996
INSTANTANEOUS PEAK STAGE			6.65	Feb 26	16.23	May 8 1996
ANNUAL RUNOFF (CFSM)	.66		.17		.63	
ANNUAL RUNOFF (INCHES)	9.00		2.33		8.57	
10 PERCENT EXCEEDS	113		50		152	
50 PERCENT EXCEEDS	5.0		3.4		21	
90 PERCENT EXCEEDS	.03		.04		.01	

A - Many days in Sept. and Oct.

B - Several days in Oct. and Sept.

C - Many days in most years.



## 05578500 SALT CREEK NEAR ROWELL, IL

LOCATION.--Lat 40°06'54", long 89°02'57", in NE1/4SE1/4 sec.11, T.19 N., R.1 E., De Witt County, Hydrologic Unit 07130009, on right bank at downstream side of bridge on County Road 490 E, 0.5 mi upstream from State Highway 54, 0.8 mi upstream from a railroad bridge and Ten Mile Creek, 3.2 mi northwest of Rowell, and at mile 65.3.

DRAINAGE AREA.--335 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.00 ft above sea level (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Beginning Oct. 12, 1977, flow partially regulated by Clinton Reservoir, 11 mi upstream from gage. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 ft<sup>3</sup>/s, May 16, 1968, gage height, 29.21 ft; minimum, 0.7 ft<sup>3</sup>/s, Oct. 4, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,070 ft<sup>3</sup>/s, Mar. 1, gage height, 19.02 ft; minimum discharge, 8.4 ft<sup>3</sup>/s, Oct. 7-8, 13-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	25	19	75	e180	2020	264	72	646	308	20	59
2	9.7	24	18	74	e210	1850	242	107	621	228	16	53
3	9.6	25	16	75	e260	1670	227	129	583	196	15	72
4	11	26	15	80	e380	1410	221	146	570	187	15	62
5	11	29	16	77	e420	1100	235	144	521	172	15	47
6	14	26	19	e72	408	876	225	142	535	154	14	39
7	9.7	58	17	e64	e390	737	197	145	607	143	13	35
8	9.9	34	15	e69	e340	633	212	151	747	131	13	98
9	11	18	15	e84	e300	792	199	134	980	126	22	157
10	11	14	15	e106	e260	971	190	127	1030	120	15	110
11	11	13	15	e96	e225	960	201	114	958	107	13	94
12	9.2	12	14	e83	e190	925	201	98	986	98	14	82
13	9.1	11	14	e74	e165	848	179	98	1450	92	14	72
14	9.3	12	15	e68	e145	886	182	97	1260	85	12	63
15	9.7	11	29	e64	e135	805	176	82	1320	83	17	58
16	11	14	21	e60	e130	764	166	79	1040	76	14	52
17	15	17	29	e58	e135	686	160	68	831	70	92	47
18	29	17	25	e56	141	640	156	73	662	70	188	47
19	13	14	e21	e56	154	580	168	79	528	70	249	41
20	12	13	e25	e58	188	498	160	92	430	66	245	48
21	14	13	e31	e71	401	460	157	85	377	60	219	48
22	17	14	39	e100	738	424	160	78	337	83	191	41
23	31	12	48	e160	887	391	149	68	306	81	161	36
24	23	14	71	e260	909	377	132	60	277	71	137	38
25	18	21	67	e410	847	347	123	133	257	62	149	31
26	20	18	e69	e550	841	317	119	253	265	54	120	24
27	18	14	e74	e370	1560	296	116	491	244	43	99	24
28	17	13	e77	e230	1880	286	117	716	222	43	87	21
29	21	14	e79	e190	---	299	109	759	203	40	78	16
30	26	22	e80	e175	---	296	105	738	283	33	67	12
31	26	---	79	e170	---	281	---	710	---	26	65	---
TOTAL	465.8	568	1087	4135	12819	23425	5248	6268	19076	3178	2389	1627
MEAN	15.0	18.9	35.1	133	458	756	175	202	636	103	77.1	54.2
MAX	31	58	80	550	1880	2020	264	759	1450	308	249	157
MIN	9.1	11	14	56	130	281	105	60	203	26	12	12

e Estimated

## ILLINOIS RIVER BASIN

## 05578500 SALT CREEK NEAR ROWELL, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

MEAN	137	191	277	231	314	576	521	537	314	245	154	68.5
MAX	1069	1236	1268	1316	975	2129	1704	1648	679	1370	1576	658
(WY)	1994	1986	1983	1993	1982	1982	1979	1995	1990	1981	1981	1993
MIN	8.31	9.77	12.1	11.0	14.9	28.4	91.8	45.2	13.7	8.51	6.57	5.46
(WY)	1989	1989	1996	1980	1989	1989	1996	1988	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1978 - 1997		
ANNUAL TOTAL	59748.9			80285.8					
ANNUAL MEAN	163			220			297		
HIGHEST ANNUAL MEAN							601		
LOWEST ANNUAL MEAN							105		
HIGHEST DAILY MEAN	3010			2020			6960		
LOWEST DAILY MEAN	8.5 A			9.1			3.7		
ANNUAL SEVEN-DAY MINIMUM	8.7			10			4.1		
INSTANTANEOUS PEAK FLOW				2070			7810		
INSTANTANEOUS PEAK STAGE				19.02			24.04		
INSTANTANEOUS LOW FLOW				8.4					
10 PERCENT EXCEEDS	468			696			744		
50 PERCENT EXCEEDS	29			85			121		
90 PERCENT EXCEEDS	11			14			11		

A - Estimated due to backwater from ice.

## 05579500 LAKE FORK NEAR CORNLAND, IL

**LOCATION.**--Lat 39°57'00", long 89°23'10", in NW1/4 SW1/4 sec.1, T.17 N., R.3 W., Logan County, Hydrologic Unit 07130009, on right bank at downstream side of bridge on State Highway 54, 100 ft upstream from a railroad bridge, 2.0 mi northeast of Cornland, 8 mi downstream from Jones Fork, and at mile 12.9.

**DRAINAGE AREA.**--214 mi<sup>2</sup>.

**PERIOD OF RECORD.**--January 1948 to current year.

**REVISED RECORDS.**--WDR IL-75-1: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 555.06 ft above sea level. Prior to Sept. 6, 1973, nonrecording gage at same site and datum.

**REMARKS.**--Records good except those for Oct. 1-Nov. 22 and Feb. 28-Mar. 19, which are fair, and those for estimated daily discharges, which are poor. Gage-height telemeter at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood in May 1943 reached a stage of 23.4 ft, from floodmarks, discharge 29,000 ft<sup>3</sup>/s, by contracted-opening measurement of peak flow.

**EXTREMES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 1,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 27	1230	*1,150	*12.43	No other peak greater than base discharge			

Minimum discharge, 1.8 ft<sup>3</sup>/s, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	4.4	9.5	8.1	e9.2	617	140	68	166	81	9.4	5.2
2	6.2	4.5	9.0	8.2	e13	536	135	57	164	78	9.7	5.4
3	7.4	4.1	16	8.2	e30	470	135	72	158	67	9.8	10
4	8.1	4.7	8.6	7.9	e60	412	137	74	149	62	10	6.4
5	7.9	5.2	8.4	8.1	e88	365	142	66	141	56	8.7	4.7
6	7.0	6.2	9.0	8.1	e54	319	152	65	188	52	8.3	4.4
7	7.3	19	8.3	8.5	e37	281	130	57	273	48	7.6	4.9
8	6.3	16	7.9	8.1	e28	259	117	67	224	44	7.0	5.3
9	5.3	14	8.3	12	e20	297	109	66	241	41	8.0	11
10	3.8	10	7.5	15	e16	504	110	56	213	38	7.3	12
11	4.0	8.0	8.1	13	e13	424	118	56	190	35	7.2	6.5
12	4.4	7.1	7.9	e12	e12	352	125	62	186	32	6.7	4.8
13	4.9	9.8	6.8	e11	e10	326	111	58	256	30	6.5	4.9
14	4.5	7.6	6.9	e10	e9.3	432	94	57	214	29	6.1	4.0
15	3.7	6.0	6.9	e9.3	e8.7	400	90	53	171	27	7.1	3.7
16	3.6	7.4	7.5	e8.7	e8.3	338	93	46	162	24	6.1	3.5
17	4.7	8.0	6.6	e8.3	e8.0	314	86	48	144	22	15	4.1
18	5.0	8.1	e6.1	e7.9	e20	295	86	48	134	21	27	3.1
19	3.7	7.1	e5.9	e7.8	e52	275	94	58	120	20	14	3.6
20	4.5	6.7	e8.0	e7.8	66	270	86	58	113	19	10	2.7
21	5.1	7.4	e7.7	e10	280	257	86	51	110	19	8.6	2.4
22	6.1	6.7	e7.2	e50	345	229	80	48	102	19	7.4	2.4
23	7.4	6.3	10	e150	264	202	76	48	92	17	6.4	3.0
24	7.1	6.2	e12	e110	198	190	72	52	86	16	6.4	2.8
25	6.7	7.4	13	e60	168	201	65	146	83	14	15	3.0
26	6.4	8.1	12	e30	219	174	61	269	89	13	10	2.8
27	6.6	7.7	11	e16	989	170	66	210	83	12	7.1	2.5
28	6.8	6.4	10	e11	772	176	70	205	79	12	6.0	2.5
29	3.9	7.0	9.4	e10	---	177	64	200	75	11	5.5	2.1
30	7.6	8.5	8.8	e9.9	---	163	65	181	73	10	6.0	2.1
31	4.8	---	8.3	e9.6	---	150	---	172	---	9.8	6.3	---
TOTAL	176.5	235.6	272.6	654.5	3797.5	9575	2995	2774	4479	978.8	276.2	135.8
MEAN	5.69	7.85	8.79	21.1	136	309	99.8	89.5	149	31.6	8.91	4.53
MAX	8.1	19	16	150	989	617	152	269	273	81	27	12
MIN	3.6	4.1	5.9	7.8	8.0	150	61	46	73	9.8	5.5	2.1
CFSM	.03	.04	.04	.10	.63	1.44	.47	.42	.70	.15	.04	.02
IN.	.03	.04	.05	.11	.66	1.66	.52	.48	.78	.17	.05	.02

e Estimated

## ILLINOIS RIVER BASIN

## 05579500 LAKE FORK NEAR CORNLAND, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1997, BY WATER YEAR (WY)

MEAN	66.7	82.1	150	150	211	261	292	291	223	132	75.1	44.3
MAX	680	1009	1260	988	712	1116	1016	1024	1099	772	887	546
(WY)	1978	1986	1983	1950	1959	1979	1979	1995	1974	1981	1981	1993
MIN	2.02	2.06	2.46	4.01	5.02	6.56	16.7	7.27	17.0	7.20	3.84	1.57
(WY)	1955	1955	1964	1977	1963	1954	1954	1954	1963	1954	1988	1954

## SUMMARY STATISTICS

## FOR 1996 CALENDAR YEAR

## FOR 1997 WATER YEAR

## WATER YEARS 1948 - 1997

ANNUAL TOTAL	46465.7		26350.5			
ANNUAL MEAN	127		72.2			165
HIGHEST ANNUAL MEAN						372
LOWEST ANNUAL MEAN						8.89
HIGHEST DAILY MEAN	2690	May 11	989	Feb 27		7000
LOWEST DAILY MEAN	3.6	Oct 16	2.1	Sep 29, 30		.77
ANNUAL SEVEN-DAY MINIMUM	3.9	Sep 16	2.5	Sep 24		.96
INSTANTANEOUS PEAK FLOW			1150	Feb 27		8930
INSTANTANEOUS PEAK STAGE			12.43	Feb 27		23.11
INSTANTANEOUS LOW FLOW			1.8	Sep 30		.30
ANNUAL RUNOFF (CFSM)	.59		.34			.77
ANNUAL RUNOFF (INCHES)	8.08		4.58			10.47
10 PERCENT EXCEEDS	344		207			400
50 PERCENT EXCEEDS	23		13			62
90 PERCENT EXCEEDS	4.8		4.9			6.7

## 05580000 KICKAPOO CREEK AT WAYNESVILLE, IL

LOCATION.--Lat 40°15'20", long 89°07'40", on line between secs.19 and 20, T.21 N., R.1 E., De Witt County, Hydrologic Unit 07130009, on left upstream side of bridge on Waynesville Road, 0.5 mi downstream from Rock Creek, 0.7 mi north of Waynesville, and at mile 25.3.

DRAINAGE AREA.--227 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1948 to current year.

REVISED RECORDS.--WSP 1175: 1948-49.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 620.24 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Sept. 8, 1970, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 27	unknown	*2,020	11.08	June 13	0700	*2,020	*11.09
May 27	0530	1,920	10.79				

Minimum discharge 0.68 ft<sup>3</sup>/s, Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	6.5	20	34	e22	e620	137	105	277	e220	17	15
2	3.0	4.4	16	42	e30	e500	131	82	326	188	16	14
3	5.6	2.8	19	45	e70	e400	129	90	410	151	15	26
4	3.0	2.5	13	51	e150	e330	130	84	332	129	15	16
5	2.6	3.1	18	54	e210	e280	144	73	e281	109	16	13
6	2.6	8.1	17	e45	e130	e250	173	74	e496	99	18	10
7	1.8	28	18	e37	e85	e220	130	67	e515	91	15	10
8	2.2	56	16	e32	e60	e210	113	86	e390	86	15	79
9	9.3	33	13	e35	e45	e250	109	80	e468	80	21	161
10	6.8	21	14	e31	e39	e500	109	64	e350	72	35	58
11	4.3	16	22	e28	e33	e450	116	63	e322	65	18	35
12	2.6	13	44	e26	e28	372	175	67	e548	61	16	27
13	1.8	14	34	e24	e24	337	175	66	e1430	55	15	21
14	1.0	11	26	e22	e22	431	142	67	e555	53	15	18
15	.79	11	21	e20	e21	373	130	62	e385	51	14	17
16	.84	11	e19	e19	e20	295	126	54	e321	45	19	17
17	1.2	13	e16	e18	e19	280	116	53	e280	40	190	17
18	1.7	11	e14	e17	e45	256	111	56	e250	36	100	18
19	1.9	19	e12	e17	e100	234	118	60	e230	35	46	15
20	2.9	18	e12	e18	118	222	108	58	e210	32	37	14
21	2.3	20	e13	e35	762	207	103	47	e190	149	31	14
22	2.3	13	17	e90	782	185	107	43	e170	143	25	12
23	3.1	11	24	e330	454	163	96	42	e160	72	22	12
24	3.8	12	26	e220	313	157	91	43	e150	52	23	12
25	3.8	14	28	e130	259	174	83	123	e150	44	22	12
26	4.3	20	29	e70	287	150	75	606	e190	36	20	10
27	4.2	18	30	e35	e1200	144	79	1410	e170	30	17	8.6
28	3.8	10	e31	e28	e1000	152	85	679	e140	26	16	8.5
29	4.1	9.7	e32	e26	---	230	82	483	e130	23	14	7.8
30	4.4	16	e33	e24	---	172	85	376	e120	20	12	5.7
31	4.5	---	33	e23	---	151	---	322	---	18	14	---
TOTAL	99.23	446.1	680	1626	6328	8695	3508	5585	9946	2311	869	703.6
MEAN	3.20	14.9	21.9	52.5	226	280	117	180	332	74.5	28.0	23.5
MAX	9.3	56	44	330	1200	620	175	1410	1430	220	190	161
MIN	.79	2.5	12	17	19	144	75	42	120	18	12	5.7
CFSM	.01	.07	.10	.23	1.00	1.24	.52	.79	1.46	.33	.12	.10
IN.	.02	.07	.11	.27	1.04	1.42	.57	.92	1.63	.38	.14	.12

e Estimated

## ILLINOIS RIVER BASIN

## 05580000 KICKAPOO CREEK AT WAYNESVILLE, IL.—Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1997, BY WATER YEAR (WY)

MEAN	58.7	91.9	162	166	212	289	334	266	223	125	76.8	61.9
MAX	523	877	954	1020	731	1294	1020	976	1100	713	1540	1028
(WY)	1978	1986	1991	1993	1959	1979	1973	1995	1974	1993	1981	1993
MIN	.31	2.07	.79	3.69	3.76	34.6	47.7	32.1	9.69	2.40	1.33	.70
(WY)	1964	1964	1964	1977	1963	1956	1956	1963	1963	1988	1963	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1948 - 1997	
ANNUAL TOTAL	38313.73		40796.93			
ANNUAL MEAN	105		112		173	
HIGHEST ANNUAL MEAN					518	1993
LOWEST ANNUAL MEAN					38.5	1954
HIGHEST DAILY MEAN	2170	May 11	1430	Jun 13	16100	Aug 15 1981
LOWEST DAILY MEAN	.79	Oct 15	.79	Oct 15	.00	A
ANNUAL SEVEN-DAY MINIMUM	1.3	Oct 13	1.3	Oct 13	.20	Oct 21 1963
INSTANTANEOUS PEAK FLOW			2020	B	24600	Aug 15 1981
INSTANTANEOUS PEAK STAGE			11.09	Jun 13	16.91	Aug 15 1981
INSTANTANEOUS LOW FLOW			.68	Oct 16		
ANNUAL RUNOFF (CFSM)	.46		.49			
ANNUAL RUNOFF (INCHES)	6.28		6.69			
10 PERCENT EXCEEDS	252		316			
50 PERCENT EXCEEDS	34		37			
90 PERCENT EXCEEDS	3.8		7.4			

A - Sept. 15, 28, 29, 1988.

B - Feb. 27 (gage height, 11.08 ft.), and June 13.

## 05580950 SUGAR CREEK NEAR BLOOMINGTON, IL

LOCATION.--Lat 40°28'18", long 89°01'46", in NE1/4NW1/4 sec.7, T.23 N., R.2 E., McLean County, Hydrologic Unit 07130009, on left bank at Bloomington-Normal Sanitary District sewage-treatment plant, 250 ft upstream from bridge on Interstate 74, 0.4 mi west of Bloomington, and at mile 48.8.

DRAINAGE AREA.--34.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR IL-82-2: Drainage area. WDR IL-87-2: 1985.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 725.11 ft above sea level.

REMARKS.--Records good, except those for Aug. 2-11, Sept. 25-30, and estimated daily discharges, which are poor. Discharge values include effluent of about 14 ft<sup>3</sup>/s from the sewage-treatment plant.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,060 ft<sup>3</sup>/s, Sept. 8, gage height, 5.02 ft; minimum discharge, 3.0 ft<sup>3</sup>/s, Oct. 10., but may have been less during periods of missing record Oct. 1-7 and 12-15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e15	19	36	22	34	119	35	34	26	47	44	23
2	e15	19	26	23	53	89	33	38	66	32	48	37
3	e15	19	25	25	34	76	34	49	26	27	33	28
4	e14	19	23	48	86	66	35	31	e25	23	50	23
5	e15	22	36	28	38	59	63	35	e24	24	38	25
6	e15	78	35	23	33	52	40	29	e25	23	55	22
7	e35	150	28	22	31	50	30	30	e26	24	55	32
8	55	41	24	21	19	46	30	74	e70	26	38	280
9	17	28	23	22	20	179	30	30	32	23	117	78
10	14	24	26	21	17	96	41	28	27	24	27	34
11	16	22	83	20	16	71	111	27	26	23	39	30
12	e13	22	32	20	18	60	101	27	72	22	37	25
13	e12	23	25	18	17	98	63	29	50	28	25	23
14	e16	22	24	17	17	101	53	28	36	27	24	23
15	e23	22	55	17	15	66	48	28	28	24	78	23
16	21	22	27	16	18	59	49	28	e27	23	25	25
17	70	48	24	16	35	56	43	37	e27	23	294	47
18	32	23	21	15	43	62	50	35	e26	23	44	25
19	22	22	19	16	40	49	52	67	e26	22	33	54
20	20	22	19	17	179	48	39	29	e26	23	29	25
21	21	22	18	91	319	46	56	27	e25	37	25	21
22	48	22	21	167	183	39	44	29	e25	75	28	23
23	38	22	73	48	109	37	45	30	e28	27	28	37
24	24	70	28	65	76	58	39	29	32	30	43	25
25	21	31	18	27	60	44	34	26	45	32	27	21
26	20	19	18	23	278	38	32	150	43	32	29	26
27	20	21	19	24	313	40	38	48	30	31	31	25
28	19	17	21	18	137	75	32	38	28	38	28	28
29	41	44	20	17	---	51	39	30	29	32	23	36
30	28	48	30	16	---	37	35	28	109	34	59	39
31	21	---	20	32	---	34	---	25	---	36	27	---
TOTAL	756	983	897	955	2238	2001	1374	1173	1085	915	1481	1163
MEAN	24.4	32.8	28.9	30.8	79.9	64.5	45.8	37.8	36.2	29.5	47.8	38.8
MAX	70	150	83	167	319	179	111	150	109	75	294	280
MIN	12	17	18	15	15	34	30	25	24	22	23	21

e Estimated

## ILLINOIS RIVER BASIN

## 05580950 SUGAR CREEK NEAR BLOOMINGTON, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, BY WATER YEAR (WY)

MEAN	37.0	47.0	56.3	39.0	56.8	82.8	69.8	73.6	50.4	44.2	44.9	44.2
MAX	152	203	201	130	148	208	146	181	118	125	138	178
(WY)	1987	1986	1983	1993	1976	1979	1979	1984	1993	1993	1981	1993
MIN	17.1	17.5	14.0	15.5	22.5	29.6	28.1	28.0	21.1	17.2	16.5	18.2
(WY)	1975	1977	1977	1977	1980	1981	1977	1987	1988	1994	1988	1979

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1975 - 1997		
ANNUAL TOTAL	16223			15021					
ANNUAL MEAN	44.3			41.2			53.8		
HIGHEST ANNUAL MEAN							99.6		
LOWEST ANNUAL MEAN							32.0		
HIGHEST DAILY MEAN	507			319			2500		
LOWEST DAILY MEAN	12 A			12 A			9.0		
ANNUAL SEVEN-DAY MINIMUM	15			16			12		
INSTANTANEOUS PEAK FLOW				1060			6600		
INSTANTANEOUS PEAK STAGE				5.02			14.02 B		
INSTANTANEOUS LOW FLOW				3.0 C					
10 PERCENT EXCEEDS	81			70			94		
50 PERCENT EXCEEDS	28			29			31		
90 PERCENT EXCEEDS	18			19			18		

A - Estimated.

B - From floodmark.

C - May have been less during periods of missing record, Oct. 1-7 and 12-15.



## 05582000 SALT CREEK NEAR GREENVIEW, IL

LOCATION.--Lat 40°08'01", long 89°44'08", in NE1/4NE1/4 sec.2, T.19 N., R.6 W., Menard County, Hydrologic Unit 07130009, on left downstream side of bridge on State Highway 29, 3.3 mi downstream from Pike Creek, 3.5 mi north of Greenview, and at mile 4.9.

DRAINAGE AREA.--1,804 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WSP 1175: 1948(P). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 479.00 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Nov. 3, 1972, nonrecording gage at same site and datum.

REMARKS.--Records good except those for July 21 to Sept. 30, which are fair, and those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 28	0230	*7,290	*9.34	No other peak greater than base discharge			
Minimum discharge, 95 ft <sup>3</sup> /s, Nov. 3.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	116	182	205	e660	5720	1310	585	1790	e1000	215	262
2	122	108	173	201	e680	5240	1240	579	1690	1720	202	306
3	117	106	169	196	e760	5080	1200	560	1740	1200	195	497
4	114	111	159	196	949	4820	1170	599	1730	994	186	312
5	113	118	165	196	1120	4280	1170	578	1600	879	178	271
6	113	128	161	207	1200	3650	1190	553	1660	788	183	237
7	112	162	165	189	1090	3040	1140	539	2340	724	174	213
8	124	283	161	163	962	2600	1000	564	2320	672	178	223
9	164	240	156	182	867	2620	933	609	2220	628	188	835
10	140	215	155	279	782	4650	908	572	2380	579	229	869
11	126	181	154	323	719	4640	922	522	2260	546	206	551
12	124	161	166	282	e650	3850	1020	514	2270	516	250	393
13	121	150	182	e235	e590	3350	1180	508	3770	487	222	337
14	116	144	166	e210	e560	3490	1090	496	3980	470	177	312
15	113	140	162	e195	e520	3770	980	477	3070	445	185	289
16	111	137	162	e180	e500	3260	938	457	2670	418	205	267
17	116	140	165	e170	499	2900	898	439	2420	393	267	272
18	127	138	153	e160	522	2710	858	441	2080	370	584	263
19	153	140	e130	e155	601	2470	857	454	1760	413	493	252
20	124	140	e160	e150	703	2320	865	480	1600	587	430	236
21	121	136	e155	e150	1430	2170	826	452	1570	353	428	224
22	124	139	148	e200	3300	2000	795	423	1370	384	400	204
23	124	139	161	e230	3220	1790	783	410	1200	476	367	212
24	141	141	149	e410	2720	1650	740	411	1100	393	342	202
25	131	144	e155	e800	2440	1650	699	421	1010	354	390	199
26	123	174	e160	e1500	2330	1610	648	624	1290	326	368	194
27	120	142	172	e1700	4970	1450	617	2170	1320	301	335	181
28	116	144	183	e1200	6970	1420	629	2750	1090	283	309	171
29	117	148	202	e920	---	1560	629	2360	993	258	281	166
30	115	156	206	e740	---	1600	604	2150	e995	241	265	170
31	120	---	203	e680	---	1420	---	1940	---	226	251	---
TOTAL	3830	4521	5140	12604	42314	92780	27839	24637	57288	17424	8683	9120
MEAN	124	151	166	407	1511	2993	928	795	1910	562	280	304
MAX	164	283	206	1700	6970	5720	1310	2750	3980	1720	584	869
MIN	111	106	130	150	499	1420	604	410	993	226	174	166
CFSM	.07	.08	.09	.23	.84	1.66	.51	.44	1.06	.31	.16	.17
IN.	.08	.09	.11	.26	.87	1.91	.57	.51	1.18	.36	.18	.19

e Estimated

## ILLINOIS RIVER BASIN

## 05582000 SALT CREEK NEAR GREENVIEW, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1997, BY WATER YEAR (WY)

MEAN	539	804	1068	1174	1625	2120	2445	2367	1785	1201	662	429
MAX	3666	7170	7545	6674	5363	8252	7523	9888	8412	5819	7914	4890
(WY)	1978	1986	1983	1993	1951	1979	1979	1995	1974	1981	1981	1993
MIN	65.0	72.7	65.6	81.7	89.5	238	208	308	191	115	101	68.1
(WY)	1964	1964	1964	1956	1989	1954	1956	1963	1963	1988	1963	1954

## SUMMARY STATISTICS

## FOR 1996 CALENDAR YEAR

## FOR 1997 WATER YEAR

## WATER YEARS 1942 - 1997

ANNUAL TOTAL	299059			306180								
ANNUAL MEAN	817			839						1349		
HIGHEST ANNUAL MEAN										3362		1993
LOWEST ANNUAL MEAN										315		1954
HIGHEST DAILY MEAN	9610	May 12		6970	Feb 28					38700	May 19	1943
LOWEST DAILY MEAN	106	Nov 3		106	Nov 3					46		A
ANNUAL SEVEN-DAY MINIMUM	113	Oct 29		113	Oct 29					50	Oct 8	1963
INSTANTANEOUS PEAK FLOW				7290	Feb 28					41200	May 19	1943
INSTANTANEOUS PEAK STAGE				9.34	Feb 28					20.50 B	May 19	1943
INSTANTANEOUS LOW FLOW				95	Nov 3							
ANNUAL RUNOFF (CFSM)	.45			.46						.75		
ANNUAL RUNOFF (INCHES)	6.17			6.31						10.16		
10 PERCENT EXCEEDS	2080			2320						3220		
50 PERCENT EXCEEDS	262			411						655		
90 PERCENT EXCEEDS	124			138						122		

A - Sept. 25, 26, Oct. 12 - 14, 1963.

B - From graph based on gage readings.

## 05583000 SANGAMON RIVER NEAR OAKFORD, IL

LOCATION.--Lat 40°07'25", long 89°59'05", in NW1/4SE1/4 sec.3, T.19 N., R.8 W., Mason County, Hydrologic Unit 07130008, on right bank at downstream side of bridge on State Highway 97, 300 ft upstream from a railroad bridge, 0.8 mi downstream from Crane Creek, 1.8 mi northwest of Oakford, and at mile 25.7.

DRAINAGE AREA.--5,093 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1909 to October 1911, December 1911 to March 1912, August 1914 to June 1919, March 1921 to September 1922, October 1928 to December 1933, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 715: 1922(M). WSP 1175: 1912(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and artificial control. Datum of gage is 452.88 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Jan. 1, 1934, nonrecording gage at site 2.4 mi upstream at datum 458.66 ft above sea level. Oct. 1, 1939, to May 14, 1940, nonrecording gage at present site at sea level.

REMARKS.--Water-discharge records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,200 ft<sup>3</sup>/s, Mar. 4, gage height, 14.01 ft; minimum discharge, 261 ft<sup>3</sup>/s, Oct. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	380	311	442	461	e1800	12400	3060	1740	4190	2500	533	819
2	341	294	478	452	e1700	12800	3070	1750	4390	4390	513	770
3	319	293	479	460	e1800	13800	3090	1820	4510	4520	508	1180
4	309	296	476	521	e2100	14200	2960	2040	4570	3180	507	832
5	301	296	476	526	e2900	14000	2950	3060	4120	2510	473	759
6	300	317	466	503	e3600	13600	3040	3320	3720	2180	480	811
7	297	363	467	466	e4500	12500	2970	3390	4530	1960	468	813
8	323	500	456	435	e4700	10500	2750	3540	5030	1820	448	759
9	334	661	451	448	e4600	8400	2610	3340	5060	1710	462	994
10	342	622	442	525	4330	8490	2580	2980	5250	1560	452	1830
11	319	581	425	651	3720	8710	2420	2450	5240	1440	507	1310
12	308	516	412	755	2990	8070	2340	2180	5210	1350	533	893
13	300	481	443	e690	2230	7790	2500	2090	6060	1270	734	721
14	292	442	422	e620	1930	8180	2510	2060	6890	1230	501	680
15	294	419	418	e550	1790	9070	2360	1970	6190	1170	497	681
16	297	407	412	e500	1920	8930	2300	1920	5860	1070	490	650
17	303	395	414	e470	1890	8550	2290	1840	5490	1050	685	592
18	330	381	388	e450	1840	8300	2240	1830	5140	1010	1010	559
19	340	390	e440	e430	1710	7830	2130	1810	4700	884	1270	579
20	354	378	e480	e410	1680	7360	2020	1820	4170	1390	987	509
21	317	371	e460	e400	2120	6940	1940	1760	3670	1120	945	488
22	331	370	447	e400	4720	6010	1960	1660	3330	978	899	454
23	342	364	423	e420	6630	5410	2040	1560	3170	1090	847	456
24	350	363	358	e720	6580	4900	2160	1520	2770	930	880	457
25	383	367	e380	e1200	6370	4780	2130	1480	2490	823	1010	459
26	342	396	e400	e2000	6690	4390	1970	1630	2710	748	918	439
27	344	404	e420	e2800	9210	3590	1820	2830	2780	693	811	418
28	324	393	e440	e3400	12700	3500	1770	4000	2630	652	811	403
29	318	414	e450	e2900	---	3890	1770	3950	2650	610	760	385
30	303	419	e460	e2400	---	4160	1760	4310	2500	588	703	370
31	296	---	463	e1900	---	3400	---	4140	---	559	701	---
TOTAL	10033	12204	13588	28863	108750	254450	71510	75790	129020	46985	21343	21070
MEAN	324	407	438	931	3884	8208	2384	2445	4301	1516	688	702
MAX	383	661	480	3400	12700	14200	3090	4310	6890	4520	1270	1830
MIN	292	293	358	400	1680	3400	1760	1480	2490	559	448	370
CFSM	.06	.08	.09	.18	.76	1.61	.47	.48	.84	.30	.14	.14
IN.	.07	.09	.10	.21	.79	1.86	.52	.55	.94	.34	.16	.15

e Estimated

## ILLINOIS RIVER BASIN

## 05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1997, BY WATER YEAR (WY)

MEAN	1294	1757	2579	3382	4341	5304	6372	6163	4633	2841	1637	1146
MAX	12180	13180	18250	19580	14010	19590	25140	30570	20730	11480	15000	13180
(WY)	1994	1986	1983	1950	1968	1979	1922	1943	1974	1981	1981	1993
MIN	118	98.1	102	78.9	186	287	526	598	699	302	184	70.0
(WY)	1915	1915	1915	1918	1931	1941	1931	1954	1988	1911	1922	1922

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1910 - 1997	
ANNUAL TOTAL	1115532		793606			
ANNUAL MEAN	3048		2174		3451	
HIGHEST ANNUAL MEAN					8523	
LOWEST ANNUAL MEAN					516	
HIGHEST DAILY MEAN	3'600	May 12	14200	Mar 4	120000	May 20 1943
LOWEST DAILY MEAN	292	Oct 14	292	Oct 14	45 A	B
ANNUAL SEVEN-DAY MINIMUM	298	Oct 30	298	Oct 30	45	Jan 21 1918
INSTANTANEOUS PEAK FLOW			14200	Mar 4	123000	May 20 1943
INSTANTANEOUS PEAK STAGE			14.01	Mar 4	25.63	May 20 1943
INSTANTANEOUS LOW FLOW			261	Oct 30		
ANNUAL RUNOFF (CFSM)	.60		.43		.68	
ANNUAL RUNOFF (INCHES)	8.15		5.80		9.21	
10 PERCENT EXCEEDS	8850		5220		8880	
50 PERCENT EXCEEDS	825		1010		1610	
90 PERCENT EXCEEDS	341		361		296	

A - Estimated.

B - Jan. 21-31, 1918.

## 05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to September 1997. (Discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Oct. 1980 to Sept. 1981, June 1983 to Sept. 1981, Oct. 1994 to Sept. 1997. (Discontinued).

REMARKS.--Suspended-sediment samples were collected by a local observer once a week with additional samples collected during storm runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 3,540 mg/L, June 9, 1984; minimum daily, 1 mg/L, Dec. 7, 8, 1996, Jan. 11, 1997.

SEDIMENT LOADS: Maximum daily, 120,000 tons, Feb. 24, 1985; minimum daily, 1.6 tons, Dec. 7, 1996.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 880 mg/L, Feb. 28; minimum daily, 1 mg/L, Dec. 7, 8, Jan. 11.

SEDIMENT LOADS: Maximum daily, 30,100 tons, Feb. 28; minimum daily, 1.6 tons, Dec. 7.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	380	30	31	311	3	2.3	442	3	3.7
2	341	29	26	294	2	1.9	478	5	6.3
3	319	26	23	293	3	2.4	479	8	10
4	309	24	20	296	5	4.2	476	8	11
5	301	24	20	296	10	7.6	476	8	11
6	300	25	20	317	10	8.6	466	4	4.4
7	297	21	17	363	11	11	467	1	1.6
8	323	17	15	500	38	54	456	1	1.7
9	334	17	15	661	30	54	451	2	2.3
10	342	16	15	622	16	27	442	2	2.4
11	319	17	14	581	9	14	425	2	2.6
12	308	18	15	516	4	6.2	412	4	4.6
13	300	18	14	481	3	3.4	443	7	9.0
14	292	17	14	442	6	7.6	422	9	11
15	294	20	16	419	3	3.2	418	9	9.9
16	297	24	19	407	5	5.4	412	4	5.0
17	303	20	16	395	12	12	414	5	5.9
18	330	16	14	381	10	9.9	388	5	5.6
19	340	16	15	390	6	6.8	e440	6	7.0
20	354	17	16	378	5	5.2	e480	6	7.8
21	317	17	15	371	4	4.3	e460	6	6.9
22	331	17	15	370	5	5.0	447	4	4.4
23	342	15	14	364	6	6.2	423	2	2.6
24	350	13	13	363	4	3.9	358	3	2.7
25	383	13	14	367	2	2.1	e380	4	4.2
26	342	14	13	396	2	2.1	e400	6	6.1
27	344	14	13	404	2	2.3	e420	6	6.8
28	324	17	15	393	3	2.7	e440	6	7.2
29	318	20	17	414	3	3.3	e450	6	7.9
30	303	18	15	419	3	3.4	e460	4	5.0
31	296	8	6.4	---	---	---	463	3	3.7
TOTAL	10033	---	505.4	12204	---	282.0	13588	---	180.3

e Estimated

## ILLINOIS RIVER BASIN

## 05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	461	8	10	e1800	65	317	12400	603	20200
2	452	13	16	e1700	87	400	12800	363	12600
3	460	18	22	e1800	87	424	13800	376	14000
4	521	16	23	e2100	81	461	14200	325	12400
5	526	14	20	e2900	110	862	14000	298	11300
6	503	9	13	e3600	176	1710	13600	259	9510
7	466	6	7.5	e4500	252	3070	12500	237	7970
8	435	4	4.4	e4700	331	4190	10500	268	7580
9	448	2	2.9	e4600	301	3740	8400	306	6920
10	525	2	2.1	4330	259	3030	8490	308	7060
11	651	1	2.1	3720	259	2600	8710	312	7330
12	755	2	4.6	2990	215	1760	8070	290	6310
13	e690	4	8.3	2230	98	593	7790	247	5190
14	e620	5	8.4	1930	205	1070	8180	235	5190
15	e550	5	7.5	1790	231	1120	9070	228	5580
16	e500	6	8.3	1920	220	1140	8930	222	5350
17	e470	8	9.7	1890	117	597	8550	212	4900
18	e450	7	8.5	1840	54	272	8300	166	3710
19	e430	6	7.1	1710	45	206	7830	161	3390
20	e410	5	5.9	1680	449	2080	7360	171	3410
21	e400	5	5.0	2120	829	4750	6940	167	3130
22	e400	5	4.9	4720	825	10500	6010	188	3050
23	e420	10	11	6630	728	13000	5410	184	2690
24	e720	16	30	6580	603	10700	4900	135	1780
25	e1200	29	93	6370	391	6730	4780	119	1540
26	e2000	54	290	6690	305	5540	4390	157	1850
27	e2800	85	640	9210	839	21300	3590	240	2330
28	e3400	74	678	12700	880	30100	3500	159	1510
29	e2900	64	476	---	---	---	3890	149	1560
30	e2400	54	350	---	---	---	4160	152	1700
31	e1900	51	262	---	---	---	3400	141	1300
TOTAL	28863	---	3031.2	108750	---	132262	254450	---	182340
e Estimated									
APRIL			MAY			JUNE			
1	3060	116	960	1740	85	397	4190	199	2250
2	3070	167	1380	1750	103	486	4390	194	2300
3	3090	106	883	1820	100	489	4510	205	2490
4	2960	103	818	2040	107	595	4570	207	2550
5	2950	138	1100	3060	216	1820	4120	212	2360
6	3040	171	1410	3320	301	2690	3720	194	1950
7	2970	188	1510	3390	225	2060	4530	250	3060
8	2750	128	956	3540	187	1790	5030	248	3360
9	2610	53	375	3340	194	1750	5060	235	3210
10	2580	107	746	2980	150	1210	5250	204	2890
11	2420	106	693	2450	116	771	5240	226	3190
12	2340	70	444	2180	98	575	5210	627	8810
13	2500	36	242	2090	102	573	6060	808	13300
14	2510	45	304	2060	92	511	6890	732	13700
15	2360	71	454	1970	97	516	6190	333	5580
16	2300	71	444	1920	94	486	5860	235	3720
17	2290	63	392	1840	93	463	5490	189	2800
18	2240	78	473	1830	92	455	5140	181	2510
19	2130	65	375	1810	79	388	4700	187	2370
20	2020	53	292	1820	82	402	4170	187	2110
21	1940	65	338	1760	75	357	3670	182	1800
22	1960	73	386	1660	80	357	3330	138	1240
23	2040	62	338	1560	75	317	3170	131	1120
24	2160	61	354	1520	94	383	2770	119	892
25	2130	55	317	1480	327	1300	2490	119	796
26	1970	55	294	1630	474	2090	2710	127	930
27	1820	61	301	2830	441	3340	2780	145	1080
28	1770	69	331	4000	358	3870	2630	142	1010
29	1770	78	373	3950	327	3480	2650	136	972
30	1760	85	402	4310	241	2800	2500	130	874
31	---	---	---	4140	224	2500	---	---	---
TOTAL	71510	---	17685	75790	---	39221	129020	---	95224

## 05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	2500	245	1730	533	65	94	819	57	125
2	4390	482	5730	513	73	101	770	73	155
3	4520	449	5530	508	68	94	1180	284	906
4	3180	230	2000	507	92	126	832	137	316
5	2510	180	1220	473	82	104	759	61	125
6	2180	150	887	480	66	86	811	71	156
7	1960	129	685	468	71	90	813	80	175
8	1820	109	533	448	81	98	759	105	216
9	1710	99	454	462	84	105	994	128	367
10	1560	89	374	452	91	112	1830	356	1750
11	1440	98	379	507	99	135	1310	222	814
12	1350	104	378	533	111	162	893	133	322
13	1270	89	307	734	189	374	721	92	180
14	1230	92	303	501	120	164	680	78	143
15	1170	162	511	497	103	138	681	65	120
16	1070	144	417	490	119	158	650	63	110
17	1050	164	465	685	189	353	592	59	94
18	1010	117	316	1010	297	827	559	52	78
19	884	112	267	1270	296	1020	579	49	77
20	1390	111	418	987	169	452	509	47	64
21	1120	106	320	945	131	334	488	46	60
22	978	106	281	899	122	296	454	38	47
23	1090	100	294	847	105	239	456	30	37
24	930	98	245	880	92	218	457	32	39
25	823	89	197	1010	84	230	459	34	42
26	748	92	186	918	92	227	439	31	36
27	693	80	150	811	79	174	418	29	33
28	652	62	109	811	78	172	403	38	41
29	610	65	107	760	80	164	385	41	43
30	588	74	118	703	60	115	370	47	47
31	559	64	97	701	56	107	---	---	---
TOTAL	46985	---	25008	21343	---	7069	21070	---	6718
YEAR	793606		509525.9						

## 05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to 1994, 1997.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY	AGENCY	GAGE	DIS-	STREAM	NUMBER	TEMPER-	SPE-	PH	OXYGEN,	OXYGEN,	
		COL- LECTING	ANA- LYZING		CHARGE, INST. CUBIC		OF SAM- PLING		CIFIC CON- DUCT-	WATER WHOLE FIELD			DIS-
		SAMPLE (CODE NUMBER) (00027)	SAMPLE (CODE NUMBER) (00028)	HEIGHT (FEET) (00065)	FEET PER SECOND (00061)	WIDTH (FT) (00004)	POINTS (COUNT) (00063)	ATURE WATER (DEG C) (00010)	ANCE (US/CM) (00095)	(STAND- ARD UNITS) (00400)	SOLVED (MG/L) (00300)	(PER- CENT SATUR- ATION) (00301)	
OCT 1996													
17...	1110	81700	80020	3.13	299	160	10	18.0	1270	8.4	--	--	
NOV													
12...	1440	81700	80020	3.51	507	225	3	4.5	1740	8.1	14.8	114	
DEC													
16...	1720	81700	80020	3.34	410	240	10	5.0	864	8.3	9.8	77	
JAN 1997													
23...	1120	81700	80020	3.67	420	220	1	0.5	782	7.4	6.4	44	
FEB													
13...	1130	81700	80020	5.48	2250	370	5	0.5	565	7.5	13.0	90	
MAR													
11...	1540	81700	80020	10.54	8590	375	3	7.5	518	7.8	12.0	102	
APR													
08...	1250	81700	80020	5.96	2760	340	10	10.5	645	8.4	12.1	109	
MAY													
06...	1530	81700	80020	6.48	3310	350	10	16.0	574	8.0	8.8	89	
JUN													
03...	1150	81700	80020	7.51	4490	360	10	17.0	625	8.1	8.8	88	
JUL													
02...	1650	81700	80020	7.69	4710	360	10	37.0	519	8.0	7.2	91	
28...	1720	81700	80020	3.72	638	310	10	29.0	733	8.8	21.0	274	
AUG													
25...	1640	81700	80020	4.03	997	340	10	24.0	909	8.7	13.6	162	
SEP													
22...	1820	81700	80020	3.40	443	240	10	21.5	729	8.6	13.0	147	
DATE		CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (%G/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 1996													
17...	64	30	62	5.7	200	5	234	58	85	0.40	6.7	500	
NOV													
12...	65	27	100	7.9	238	0	290	110	110	0.40	8.3	593	
DEC													
16...	66	29	83	6.3	242	10	276	100	96	0.40	5.2	560	
JAN 1997													
23...	62	29	64	6.1	214	0	261	80	80	0.40	5.8	493	
FEB													
13...	52	24	26	3.8	172	0	210	44	47	0.30	6.8	325	
MAR													
11...	59	25	16	2.5	168	0	205	35	42	0.20	8.0	314	
APR													
08...	68	31	22	2.3	220	0	268	44	54	0.28	3.7	393	
MAY													
06...	56	25	25	3.0	178	0	217	40	45	0.26	4.3	345	
JUN													
03...	61	31	15	1.8	194	0	237	35	43	0.24	5.0	385	
JUL													
02...	55	25	26	4.0	172	0	210	39	45	0.29	7.1	352	
28...	39	30	68	4.5	180	10	210	79	81	0.31	1.5	433	
AUG													
25...	65	28	132	8.9	232	14	254	130	130	0.45	4.0	667	
SEP													
22...	72	30	50	4.8	222	10	251	62	69	0.33	6.4	441	



## 05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOS DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
17...	0.030	0.030	0.30	0.80	1.30	0.430	0.340	0.350	6.0	74	3.2	3.4
NOV												
12...	0.070	0.050	0.50	0.70	1.60	0.670	0.630	0.610	28	130	5.1	0.40
DEC												
16...	0.020	0.060	0.40	0.50	1.70	0.450	0.430	0.430	44	190	4.3	0.80
JAN 1997												
23...	0.460	0.050	0.90	1.1	2.10	0.580	0.470	0.490	21	150	4.2	0.90
FEB												
13...	0.710	0.060	1.2	1.5	4.20	0.490	0.320	0.320	9.0	12	4.9	0.90
MAR												
11...	0.060	0.030	0.40	1.4	7.70	0.390	0.130	0.140	<3.0	<1.0	3.2	3.9
APR												
08...	<0.015	0.030	<0.20	0.80	5.80	0.220	0.080	0.110	7.9	1.3	3.2	1.7
MAY												
06...	0.089	0.055	0.34	1.8	5.61	0.492	0.199	0.193	7.3	1.1	3.7	4.0
JUN												
03...	0.032	0.050	0.34	0.91	7.00	0.328	0.121	0.128	<3.0	<1.0	2.5	0.50
JUL												
02...	<0.015	0.049	0.76	2.4	5.70	0.499	0.480	0.136	<3.0	<1.0	4.4	>5.0
28...	<0.015	<0.010	0.28	1.7	0.059	0.245	<0.010	0.020	3.5	<1.0	4.4	5.1
AUG												
25...	<0.015	0.033	0.67	1.5	1.49	0.679	0.490	0.456	<3.0	<1.0	4.6	3.9
SEP												
22...	<0.015	0.018	0.26	0.90	1.44	0.402	0.273	0.267	<3.0	2.3	3.0	1.4

## 05584500 LA MOINE RIVER AT COLMAR, IL

LOCATION.--Lat 40°19'45", long 90°53'55", in SE1/4SW1/4 sec.18, T.4 N., R.4 W., McDonough County, Hydrologic Unit 07130010, on right bank at downstream side of bridge on State Highway 61, 0.2 mi downstream from a railroad bridge, 1 mi southwest of Colmar, 1.8 mi upstream from Troublesome Creek, and at mile 61.8.

DRAINAGE AREA.--655 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 491.53 ft above sea level. Prior to July 13, 1945, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station. Water temperature and specific conductance continuously recorded at station for the National Water-Quality Assessment Program.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 23	0300	*11,100	*22.97	June 14	0430	6,700	21.59
Feb. 28	0615	4,380	20.05	June 18	1215	4,550	20.20
Apr. 12	0500	3,930	19.61				

Minimum daily discharge, 7.4 ft<sup>3</sup>/s, Jan. 19, 20, estimated due to backwater from ice.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	14	35	22	e48	3190	281	e400	541	386	31	178
2	18	14	43	25	e60	2010	263	e520	456	253	28	109
3	15	14	50	28	e120	1400	251	e1500	400	219	25	72
4	12	14	39	36	e300	1050	245	e1300	361	209	24	53
5	12	15	40	42	e470	840	261	e640	324	200	22	43
6	11	15	36	29	e450	687	302	540	303	180	21	36
7	12	22	35	34	e230	584	287	439	332	164	19	39
8	12	33	34	30	e140	527	227	969	709	153	18	85
9	11	40	33	25	e100	1050	199	750	879	140	16	141
10	11	41	32	22	e82	2150	193	478	617	130	16	99
11	12	34	30	e18	e68	1280	1170	395	454	122	17	57
12	13	28	29	e15	e58	870	3760	370	1670	112	20	38
13	13	25	30	e12	e51	681	3060	340	4930	106	28	30
14	13	23	32	e10	e46	618	2040	312	6200	101	30	26
15	13	22	31	e9.0	e43	540	1540	287	2590	93	26	22
16	12	22	29	e8.0	e40	432	1170	252	1770	84	22	19
17	12	23	26	e7.8	e44	427	927	230	3360	70	83	20
18	13	25	e17	e7.6	e50	428	766	232	4120	66	242	77
19	13	33	e18	e7.4	e150	403	677	228	1580	61	132	73
20	14	30	20	e7.4	315	365	600	210	773	58	66	45
21	15	32	18	e11	4520	360	547	181	622	61	44	30
22	14	29	17	e20	8820	347	499	165	540	101	33	23
23	21	28	18	e35	9840	307	447	159	467	155	26	21
24	44	26	e17	e120	4290	281	407	165	412	98	35	20
25	36	25	e16	e140	1440	541	374	188	372	71	756	24
26	37	23	e17	e110	1610	626	340	778	345	60	189	24
27	28	23	17	e80	4200	496	320	1790	314	52	376	24
28	22	24	17	e66	4210	437	323	2810	282	46	361	19
29	18	23	18	e55	---	408	313	1620	269	40	137	14
30	16	27	19	e48	---	356	296	896	925	36	232	11
31	14	---	20	e45	---	313	---	667	---	34	129	---
TOTAL	531	747	833	1125.2	41795	24004	22085	19811	36917	3661	3204	1472
MEAN	17.1	24.9	26.9	36.3	1493	774	736	639	1231	118	103	49.1
MAX	44	41	50	140	9840	3190	3760	2810	6200	386	756	178
MIN	11	14	16	7.4	40	281	193	159	269	34	16	11
CFSM	.03	.04	.04	.06	2.28	1.18	1.12	.98	1.88	.18	.16	.07
IN.	.03	.04	.05	.06	2.37	1.36	1.25	1.13	2.10	.21	.18	.08

e Estimated

## 05584500 LA MOINE RIVER AT COLMAR, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1997, BY WATER YEAR (WY)

MEAN	270	265	272	338	504	718	818	744	664	468	165	275
MAX	3502	2693	2686	2077	2199	3734	3193	4471	3081	4194	899	4024
(WY)	1987	1986	1983	1974	1949	1985	1973	1995	1974	1993	1993	1961
MIN	.67	2.61	2.54	3.33	5.70	30.5	22.9	20.8	21.1	3.89	2.82	1.75
(WY)	1989	1990	1990	1956	1989	1956	1956	1956	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1945 - 1997	
ANNUAL TOTAL	208036		156185.2			
ANNUAL MEAN	568		428		458	
HIGHEST ANNUAL MEAN					1347	
LOWEST ANNUAL MEAN					23.1	
HIGHEST DAILY MEAN	17400	May 28	9840	Feb 23	35600	Mar 5 1985
LOWEST DAILY MEAN	11	A	7.4 B	Jan 19, 20	.00	Oct 19 1988
ANNUAL SEVEN-DAY MINIMUM	12	Oct 4	8.2	Jan 14	.12	Oct 16 1988
INSTANTANEOUS PEAK FLOW			11100	Feb 23	38900 C	Mar 5 1985
INSTANTANEOUS PEAK STAGE			22.97	Feb 23	27.03 D	Jan 3 1965
INSTANTANEOUS LOW FLOW			E			
ANNUAL RUNOFF (CFSM)	.87		.65		.70	
ANNUAL RUNOFF (INCHES)	11.82		8.87		9.49	
10 PERCENT EXCEEDS	905		926		1000	
50 PERCENT EXCEEDS	126		70		120	
90 PERCENT EXCEEDS	16		15		9.4	

A - Sept. 22, 23, Oct 6, 9, and 10.

B - Estimated due to backwater from ice.

C - Gage height, 26.61 ft.

D - Ice jam.

E - Minimum recorded, 11 ft <sup>3</sup>/s, several days, but may have been less during period of ice effect, Jan. 11-21.

## ILLINOIS RIVER BASIN

05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water year 1997.

Water quality data, water year October 1996 to September 1997

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 1996												
23...	1200	81700	80020	2.89	21	50.0	9	11.0	--	7.5	--	--
NOV												
14...	1150	81700	80020	2.91	23	50.0	10	1.5	1040	7.5	12.1	87
DEC												
17...	1630	81700	80020	2.98	26	52.0	3	1.0	580	7.8	9.9	70
JAN 1997												
22...	1050	81700	80020	3.13	E20	75.0	1	0.5	622	6.9	4.9	30
FEB												
12...	1130	81700	80020	4.01	E58	70.0	1	0.0	475	7.1	12.4	99
MAR												
19...	1120	81700	80020	6.65	406	75.0	10	5.5	510	7.8	12.3	99
26...	1630	81700	80020	7.99	602	80.0	10	8.5	440	7.4	--	--
APR												
01...	1610	81700	80020	5.67	278	60.0	10	12.5	522	8.0	11.2	105
08...	1600	81700	80020	5.16	217	60.0	10	10.0	501	8.1	12.3	109
15...	1800	81700	80020	12.34	1410	120	10	9.0	416	7.7	10.8	94
22...	1540	81700	80020	7.26	494	80.0	10	12.0	520	8.0	10.5	97
29...	1640	81700	80020	5.90	309	66.0	10	16.5	514	8.2	11.3	115
MAY												
06...	1750	81700	80020	7.39	513	80.0	10	16.5	496	7.9	9.6	98
08...	1540	81700	80020	11.23	1180	112	10	16.5	459	7.6	8.2	--
08...	2130	81700	80020	10.96	1130	112	10	16.5	388	7.6	7.8	--
09...	0440	81700	80020	9.75	903	112	11	16.0	379	7.6	8.0	--
09...	1040	81700	80020	8.87	746	87.0	9	15.5	407	7.6	8.0	--
13...	1740	81700	80020	6.08	333	70.0	10	15.5	509	8.0	9.7	98
21...	1700	81700	80020	4.79	177	66.0	10	18.5	534	8.3	11.5	123
28...	1020	81700	80020	18.18	2970	140	10	15.5	306	7.5	8.9	85
JUN												
03...	1430	81700	80020	6.57	395	72.0	10	17.5	535	7.9	8.7	91
10...	1630	81700	80020	7.71	559	80.0	10	18.5	411	7.8	8.4	90
12...	2050	81700	80020	19.00	3450	145	9	18.5	2320	7.7	6.9	75
13...	1540	81700	80020	20.82	5380	145	9	20.5	1710	7.3	5.6	63
16...	1830	81700	80020	16.78	2430	140	10	20.0	253	7.4	6.3	69
27...	0830	81700	80020	5.98	320	60.0	11	23.5	527	7.6	7.3	30
JUL												
03...	1020	81700	80020	5.17	218	60.0	10	24.0	515	7.7	7.0	84
08...	1910	81700	80020	4.52	150	56.0	10	24.5	545	8.0	8.2	99
14...	2000	81700	80020	3.95	98	54.0	10	28.0	542	8.1	9.1	116
22...	1800	81700	80020	4.05	108	53.0	10	26.0	551	8.0	7.2	89
29...	1140	81700	80020	3.10	40	50.0	10	25.5	452	7.7	6.5	79
AUG												
05...	1520	81700	80020	2.76	22	46.0	9	26.5	542	8.0	10.7	132
05...	1640	81700	80020	2.76	22	50.0	10	25.5	531	8.0	8.6	34
11...	1720	81700	80020	2.65	18	50.0	10	23.0	560	7.8	7.7	90
20...	1040	81700	80020	3.51	57	54.0	10	20.5	377	7.5	6.9	76
26...	1040	81700	80020	4.63	161	58.0	10	21.5	204	7.4	6.3	71
SEP												
02...	2000	81700	80020	3.85	90	54.0	10	24.0	378	7.8	7.2	60
08...	1950	81700	80020	3.75	82	54.0	10	22.0	389	7.8	7.2	82
16...	1700	81700	80020	2.73	19	44.0	10	22.5	446	M7.7	8.6	100
23...	1610	81700	80020	2.77	21	50.0	10	17.5	479	7.7	8.2	86

## 05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03 (39086)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 1996												
23...	62	23	18	4.2	206	0	251	22	54	0.30	7.6	338
NOV												
14...	66	25	20	4.8	224	0	273	24	54	0.30	9.8	352
DEC												
17...	58	24	27	3.0	204	0	249	35	65	0.30	2.8	349
JAN 1997												
22...	71	27	26	2.4	216	0	264	30	65	0.30	3.8	368
FEB												
12...	49	18	15	11	148	0	181	30	45	0.30	10	308
MAR												
19...	62	24	11	1.9	172	0	210	22	48	0.30	11	325
26...	50	19	12	3.1	140	0	171	22	48	0.30	8.7	270
APR												
01...	58	24	12	1.8	172	0	210	24	48	0.30	6.8	322
08...	55	23	12	1.8	176	0	215	24	48	0.26	5.0	306
15...	45	18	8.3	3.0	116	0	142	22	34	0.23	10	261
22...	54	24	10	1.5	162	0	198	24	45	0.25	7.2	302
29...	54	25	12	1.4	164	0	200	24	46	0.24	2.9	310
MAY												
06...	56	22	11	8.3	148	0	181	23	42	0.27	8.8	313
08...	53	21	9.5	2.5	114	0	139	21	45	0.26	6.2	270
08...	43	16	9.6	3.3	111	0	135	19	36	0.28	6.6	219
09...	42	16	8.6	3.6	100	0	122	18	33	0.27	6.8	217
09...	45	17	9.4	3.3	116	0	142	20	35	0.26	7.3	233
13...	59	24	11	1.5	168	0	205	23	44	0.26	4.7	322
21...	59	26	11	1.6	184	0	225	24	46	0.29	1.6	331
28...	32	12	6.3	4.3	72	0	88	15	24	0.23	9.3	190
JUN												
03...	58	24	10	1.6	154	0	188	25	40	0.25	10	348
10...	44	18	7.3	2.9	112	0	137	19	27	0.24	10	258
12...	27	8.5	3.4	3.0	76	0	93	8.1	21	0.29	5.2	150
13...	17	5.0	2.4	4.5	52	0	63	5.7	10	0.25	5.1	111
16...	29	10	4.6	2.9	76	0	93	10	18	0.22	7.7	170
27...	61	25	9.2	1.7	168	0	205	22	37	0.33	13	334
JUL												
03...	61	25	9.4	2.4	172	0	210	22	37	0.29	12	332
08...	63	25	10	1.6	188	5	220	22	39	0.26	12	376
14...	61	25	11	2.0	196	0	239	23	39	0.29	10	358
22...	68	27	11	2.2	204	0	249	22	46	0.29	8.8	347
29...	52	20	9.5	3.9	174	0	212	16	32	0.26	10	285
AUG												
05...	65	24	12	3.6	232	0	283	20	39	0.28	8.0	337
05...	--	--	--	--	--	--	--	--	--	--	--	--
11...	65	25	13	3.3	224	0	251	2	43	0.28	6.3	342
20...	40	15	10	4.7	142	0	183	16	28	0.26	6.8	233
26...	24	7.5	5.7	4.9	72	0	98	8.7	17	0.20	6.1	136
SEP												
02...	44	16	8.4	5.8	176	0	266	14	27	0.26	10	238
08...	43	16	9.6	5.0	140	0	171	14	29	0.25	8.7	244
16...	54	18	10	5.1	174	0	211	16	30	0.26	9.5	267
23...	55	18	14	5.3	180	0	220	20	36	0.29	8.0	278

## ILLINOIS RIVER BASIN

## 05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC FIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)
OCT 1996												
23...	<0.015	0.010	0.30	0.50	0.100	0.120	0.020	0.020	55	680	5.0	1.7
NOV												
14...	0.040	<0.010	0.40	0.40	0.060	0.090	0.030	0.020	69	210	5.8	0.40
DEC												
17...	<0.015	<0.010	0.20	0.20	0.090	0.030	<0.010	<0.010	170	180	3.7	0.60
JAN 1997												
22...	0.080	0.020	0.30	0.60	0.650	0.050	<0.010	<0.010	110	670	4.9	0.50
FEB												
12...	0.910	0.120	1.9	2.3	3.00	0.470	0.360	0.330	130	120	11	0.80
MAR												
19...	0.110	0.040	0.40	0.50	7.50	0.110	0.060	0.040	6.0	120	2.6	0.60
26...	0.130	0.020	0.50	1.2	4.80	0.410	0.080	0.080	8.0	47	5.0	2.8
APR												
01...	<0.015	0.030	<0.20	0.40	6.30	0.080	0.050	0.030	8.0	65	F22	0.80
08...	<0.015	0.040	0.30	0.50	5.10	0.080	0.030	0.020	16	36	3.5	--
15...	0.140	0.060	0.50	1.0	7.20	0.380	0.100	0.100	6.0	23	4.5	4.3
22...	0.058	0.024	0.23	0.44	8.09	0.075	0.063	0.041	6.5	54	2.9	1.3
29...	<0.015	0.039	<0.20	0.44	6.85	0.099	<0.010	0.016	22	25	3.4	0.60
MAY												
06...	<0.015	0.065	0.44	0.33	8.03	0.064	0.057	0.071	6.1	21	3.3	1.6
08...	0.037	0.050	<0.20	1.6	6.17	0.497	0.076	0.059	7.0	14	5.5	4.2
08...	0.105	0.063	0.57	2.8	5.49	0.803	0.091	0.096	16	1.7	6.3	7.6
09...	0.159	0.068	0.54	2.3	5.47	0.573	0.103	0.099	17	1.7	7.6	5.2
09...	0.107	0.071	<0.20	1.6	6.00	0.459	0.085	0.075	12	6.7	5.6	4.7
13...	<0.015	0.037	0.25	0.53	6.83	0.097	0.025	0.025	9.2	51	2.4	1.4
21...	<0.015	0.052	0.24	0.61	5.30	0.075	<0.010	0.011	13	49	2.6	1.1
28...	0.219	0.085	0.95	2.7	7.97	0.668	0.115	0.120	23	<1.0	7.9	>17
JUN												
03...	0.023	0.064	0.27	0.67	9.33	0.192	0.054	0.059	<3.0	16	2.3	1.2
10...	0.040	0.105	0.47	1.5	9.40	0.404	0.099	0.087	6.7	1.3	3.8	>5.0
12...	0.105	0.050	0.41	4.4	3.53	1.67	0.049	0.056	5.1	<1.0	5.0	1.7
13...	0.114	0.061	0.64	2.9	3.12	1.08	0.100	0.113	16	40	7.0	>5.0
16...	0.022	0.059	0.46	1.0	4.86	0.309	0.090	0.089	9.4	<1.0	4.6	>17
27...	<0.015	0.073	0.39	0.26	9.43	0.077	0.083	0.071	<3.0	37	3.7	1.7
JUL												
03...	<0.015	0.064	0.69	0.59	7.68	0.167	0.076	0.030	5.5	51	3.2	2.2
08...	<0.015	0.023	<0.20	0.48	1.50	0.110	0.085	0.064	<3.0	55	2.6	1.5
14...	<0.015	0.030	<0.20	0.83	6.10	0.117	0.026	0.038	4.7	47	4.6	1.4
22...	0.018	0.036	0.35	0.62	3.41	0.140	0.045	0.050	<3.0	77	3.3	1.5
29...	<0.015	0.031	0.31	0.70	1.54	0.131	0.056	0.038	<3.0	129	4.5	1.4
AUG												
05...	<0.015	0.015	0.32	0.80	0.520	0.117	0.018	0.030	<3.0	256	4.1	1.2
05...	--	--	--	--	--	--	--	--	--	--	--	--
11...	<0.015	<0.010	0.28	0.93	<0.050	0.165	<0.010	0.016	5.5	370	--	--
20...	0.064	0.041	0.50	0.94	0.894	0.271	0.069	0.066	4.2	80	5.2	2.8
26...	0.019	0.029	0.54	1.8	0.662	0.644	0.127	0.110	17	6.6	5.5	11
SEP												
02...	<0.015	0.056	0.62	0.88	1.84	0.290	0.158	0.099	4.7	45	5.2	2.5
08...	0.029	0.031	0.40	1.1	1.73	0.350	0.063	0.082	<3.0	23	4.3	2.4
16...	<0.015	<0.010	0.26	0.65	0.085	0.125	0.030	0.021	4.0	192	4.1	2.0
23...	<0.015	0.012	0.36	0.55	0.717	0.092	0.024	0.039	8.8	216	4.3	1.5

## 05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI- CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)
OCT 1996											
23...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
JAN 1997											
22...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	--	--	--	--	--	--	--	--	--	--	--
MAR											
19...	--	--	--	--	--	<0.035	<0.016	<0.016	<0.021	--	--
26...	0.010	0.007	E0.001	0.162	E0.093	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
APR											
01...	0.008	0.005	<0.003	0.133	E0.116	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
08...	0.047	E0.003	<0.003	0.198	E0.056	--	--	--	--	<0.002	<0.001
15...	0.194	0.018	<0.003	1.41	E0.140	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
22...	0.028	0.005	<0.003	0.282	E0.078	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
29...	0.047	0.015	<0.003	0.261	E0.025	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
MAY											
06...	1.12	0.011	<0.003	3.78	E0.201	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
08...	0.777	0.008	<0.003	9.30	E0.071	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
08...	1.24	0.022	<0.003	3.24	E0.051	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
09...	0.955	0.152	<0.003	0.911	E0.028	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
09...	2.13	0.020	<0.003	19.5	E0.184	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
13...	0.139	0.005	<0.003	1.09	E0.053	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
21...	0.064	0.005	<0.003	0.667	E0.051	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
28...	5.04	0.929	<0.003	E108	E0.380	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
JUN											
03...	0.156	0.005	<0.003	2.14	E0.076	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
10...	1.22	0.019	<0.003	E32.6	E0.280	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
12...	1.05	0.021	<0.003	15.8	E0.442	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
13...	1.06	0.024	<0.003	25.6	E0.774	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
16...	0.614	0.017	<0.003	9.49	E0.362	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
27...	0.048	E0.003	<0.003	1.20	E0.250	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
JUL											
03...	0.049	0.008	<0.003	1.22	E0.233	0.220	<0.016	<0.016	<0.021	<0.002	<0.001
08...	0.037	0.004	<0.003	0.705	E0.147	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
14...	0.027	<0.002	<0.003	0.570	E0.101	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
22...	0.022	<0.002	<0.003	0.486	E0.165	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
29...	0.040	0.012	<0.003	0.946	E0.149	0.130	<0.016	<0.016	<0.021	<0.002	<0.001
AUG											
05...	<0.050	<0.050	--	0.560	0.210	--	--	--	--	--	--
05...	0.017	<0.002	<0.003	0.577	E0.101	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
11...	0.012	<0.002	<0.003	0.405	E0.062	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
20...	--	--	--	--	--	--	--	--	--	--	--
26...	0.023	E0.003	<0.003	0.582	E0.086	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
SEP											
02...	0.019	<0.002	<0.003	1.07	E0.095	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
08...	0.008	<0.002	<0.003	0.497	E0.043	0.050	<0.016	<0.016	<0.021	<0.002	<0.001
16...	0.009	<0.002	<0.003	0.438	E0.040	E0.030	<0.016	<0.016	<0.021	<0.002	<0.001
23...	<0.002	<0.020	<0.003	0.323	E0.047	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001

## ILLINOIS RIVER BASIN

## 05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CAR- BARYL, WATER, FLTRD, REC (UG/L) (49310)	CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674)	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	3HYDRXY CARBO- FURAN WAT, FLTR GF 0.7U REC (UG/L) (49308)	CHLOR- AMBN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)
OCT 1996											
23...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
JAN 1997											
22...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	--	--	--	--	--	--	--	--	--	--	--
MAR											
19...	--	0.050	<0.035	<0.035	--	--	<0.008	--	<0.028	<0.014	<0.011
26...	<0.002	<0.014	<0.035	<0.035	E0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
APR											
01...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
08...	<0.002	--	--	--	<0.002	<0.003	--	<0.003	--	--	--
15...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
22...	<0.002	0.050	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
29...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.030	<0.008	<0.003	<0.028	<0.014	<0.011
MAY											
06...	<0.002	<0.014	<0.035	<0.035	E0.002	<0.003	<0.008	E0.004	<0.028	<0.014	<0.011
08...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
08...	<0.002	<0.014	<0.035	<0.035	0.037	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
09...	<0.002	<0.014	<0.035	<0.035	0.015	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
09...	<0.002	<0.014	<0.035	<0.035	0.015	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
13...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
21...	<0.002	E0.010	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
28...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	E1.01	0.550	<0.014	<0.011
JUN											
03...	<0.002	E0.020	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
10...	<0.002	E0.430	<0.035	0.100	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
12...	<0.002	E0.030	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
13...	<0.002	E0.460	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
16...	<0.002	E0.150	<0.035	<0.035	<0.002	<0.003	<0.008	E0.041	<0.028	<0.014	<0.011
27...	<0.002	E0.130	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
JUL											
03...	<0.002	E0.470	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
08...	<0.002	0.180	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
14...	<0.002	0.070	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
22...	<0.002	0.040	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
29...	<0.002	E0.120	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
AUG											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.002	0.070	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
11...	<0.002	0.050	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
20...	--	--	--	--	--	--	--	--	--	--	--
26...	<0.002	E0.030	<0.035	<0.035	<0.002	E0.014	<0.008	<0.003	<0.028	<0.014	<0.011
SEP											
02...	<0.002	0.040	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
08...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
16...	<0.002	E0.020	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
23...	<0.002	E0.010	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011



## 05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	CHLORO- THALO- NIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DACTHAL MONO- ACID, WAT, FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD GF, REC (UG/L) (82682)	P, P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOR- BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DICHLOR P, P', WATER, FLTRD, GF 0.7U REC (UG/L) (49302)
OCT 1996											
23...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
JAN 1997											
22...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	--	--	--	--	--	--	--	--	--	--	--
MAR											
19...	<0.035	--	<0.050	--	<0.017	--	--	--	<0.035	<0.020	<0.032
26...	<0.035	<0.004	<0.050	0.073	<0.017	E0.001	<0.006	<0.002	<0.035	<0.020	<0.032
APR											
01...	<0.035	<0.004	<0.050	0.040	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
08...	--	<0.004	--	0.065	--	<0.002	<0.006	<0.002	--	--	--
15...	<0.035	<0.035	<0.050	1.18	<0.017	--	<0.006	<0.002	<0.035	<0.020	<0.032
22...	<0.035	<0.004	<0.050	0.087	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
29...	<0.035	<0.004	<0.050	0.050	<0.017	0.036	<0.006	0.008	<0.035	<0.020	<0.032
MAY											
06...	<0.035	0.082	<0.050	1.91	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
08...	<0.035	E0.104	<0.050	4.12	<0.017	E0.001	<0.006	<0.002	<0.035	<0.020	<0.032
08...	<0.035	0.007	<0.050	0.179	E0.040	E0.002	<0.006	<0.002	E0.020	<0.020	<0.032
09...	<0.035	0.006	<0.050	0.029	E0.030	0.005	<0.006	<0.002	<0.035	<0.020	<0.032
09...	<0.035	0.117	<0.050	4.47	<0.017	E0.003	<0.006	0.017	<0.035	<0.020	<0.032
13...	<0.035	<0.004	<0.050	0.430	<0.017	E0.002	<0.006	<0.002	<0.035	<0.020	<0.032
21...	<0.035	<0.004	<0.050	0.259	<0.017	E0.002	<0.006	<0.002	<0.035	<0.020	<0.032
28...	<0.035	<0.004	<0.050	16.4	<0.017	E0.001	<0.006	<0.002	<0.035	<0.020	<0.032
JUN											
03...	<0.035	<0.004	<0.050	0.607	<0.017	<0.002	<0.006	<0.002	E0.170	<0.020	<0.032
10...	<0.035	<0.004	<0.050	2.60	<0.017	<0.002	<0.006	<0.002	E0.760	<0.020	<0.032
12...	<0.035	<0.004	<0.050	2.75	<0.017	<0.002	<0.006	<0.002	E0.150	<0.020	<0.032
13...	<0.035	<0.004	<0.050	5.29	E0.110	E0.001	<0.006	0.005	E0.790	<0.020	<0.032
16...	<0.035	--	<0.050	1.67	<0.017	E0.001	<0.006	<0.002	<0.035	<0.020	<0.032
27...	<0.035	--	<0.050	0.371	<0.017	E0.001	<0.006	<0.002	<0.035	<0.020	<0.032
JUL											
03...	<0.035	--	<0.050	0.375	<0.017	E0.001	<0.006	<0.002	<0.035	<0.020	<0.032
08...	<0.035	--	<0.050	0.170	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
14...	<0.035	<0.004	<0.050	0.100	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
22...	<0.035	<0.004	<0.050	0.107	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
29...	<0.035	<0.004	<0.050	0.207	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
AUG											
05...	--	--	--	0.140	--	--	--	--	--	--	--
05...	<0.035	<0.004	<0.050	0.154	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
11...	<0.035	<0.004	<0.050	0.110	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
20...	--	--	--	--	--	--	--	--	--	--	--
26...	<0.035	<0.004	<0.050	0.265	<0.017	<0.002	<0.006	<0.010	<0.035	<0.020	<0.032
SEP											
02...	<0.035	<0.004	<0.050	0.311	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
08...	<0.035	<0.004	<0.050	0.124	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
16...	<0.035	<0.004	<0.050	0.110	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
23...	<0.035	<0.004	<0.050	0.109	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032

## ILLINOIS RIVER BASIN

## 05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DISUL- FOTON WATER FLTRD GF 0.7 U GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT, FLT GF 0.7U REC (UG/L) (49299)	EPTC WATER FLTRD GF 0.7 U GF, REC (UG/L) (82668)	ESFEN- VAL- ERATE, WAT, FLT GF 0.7U REC (UG/L) (49298)	ETHAL- FLUR- ALIN WAT FLT GF 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD GF 0.7 U GF, REC (UG/L) (82672)	FEN- UROV, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)
OCT 1996											
23...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
JAN 1997											
22...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	--	--	--	--	--	--	--	--	--	--	--
MAR											
19...	--	<0.035	--	<0.020	<0.035	--	<0.019	--	--	<0.013	<0.035
26...	<0.001	<0.035	<0.017	<0.020	<0.035	E0.002	<0.019	<0.004	<0.003	<0.013	<0.035
APR											
01...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
08...	<0.001	--	<0.017	--	--	<0.002	--	<0.004	<0.003	--	--
15...	0.004	<0.035	<0.017	--	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
22...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
29...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
MAY											
06...	0.004	<0.035	<0.017	E0.005	<0.035	E0.002	<0.019	<0.004	<0.003	<0.013	<0.035
08...	<0.001	<0.035	<0.017	<0.020	<0.035	0.024	<0.019	<0.004	<0.003	<0.013	<0.035
08...	E0.004	<0.035	<0.017	<0.020	<0.035	0.006	<0.019	<0.004	<0.003	<0.013	<0.035
09...	0.004	<0.035	<0.017	E0.009	<0.035	0.009	<0.019	<0.004	<0.003	<0.013	<0.035
09...	E0.004	<0.035	<0.017	<0.020	<0.035	E0.003	<0.019	<0.004	<0.003	<0.013	<0.035
13...	<0.001	<0.035	<0.017	<0.020	<0.035	E0.003	<0.019	<0.004	<0.003	<0.013	<0.035
21...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
28...	<0.001	<0.035	<0.017	<0.020	<0.035	0.029	<0.019	<0.004	<0.003	<0.013	<0.035
JUN											
03...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
10...	0.005	<0.035	<0.017	E0.003	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
12...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
13...	0.011	<0.035	<0.017	E0.009	<0.035	E0.002	<0.019	<0.004	<0.003	<0.013	<0.035
16...	0.009	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
27...	0.004	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
JUL											
03...	0.006	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
08...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
14...	0.006	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
22...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
29...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
AUG											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
11...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
20...	--	--	--	--	--	--	--	--	--	--	--
26...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
SEP											
02...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
08...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
16...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
23...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035

## 05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DIS*OLV (UG/L) (82630)
OCT 1996											
23...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
JAN 1997											
22...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	--	--	--	--	--	--	--	--	--	--	--
MAR											
19...	--	--	--	<0.018	--	<0.035	<0.050	<0.026	<0.017	--	--
26...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.035	0.008
APR											
01...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.025	<0.004
08...	<0.003	<0.004	<0.002	--	<0.005	--	--	--	--	0.072	<0.004
15...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.366	0.090
22...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.055	<0.004
29...	<0.003	<0.004	<0.002	<0.018	0.007	<0.035	<0.050	<0.026	<0.017	0.065	<0.004
MAY											
06...	<0.003	<0.004	E0.004	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.908	0.108
08...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.66	0.042
08...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	3.71	0.034
09...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	2.40	<0.004
09...	<0.003	0.013	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	2.91	0.400
13...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.153	0.012
21...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.078	0.008
28...	<0.003	<0.010	0.032	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	3.35	0.570
JUN											
03...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.248	0.021
10...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.20	0.072
12...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.33	0.074
13...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.45	0.108
16...	<0.003	<0.004	<0.002	<0.018	0.006	<0.035	<0.050	<0.026	<0.017	0.818	0.053
27...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.105	0.008
JUL											
03...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.173	0.015
08...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.079	0.008
14...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.056	<0.004
22...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.049	<0.004
29...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.179	0.011
AUG											
05...	--	--	--	--	--	--	--	--	--	<0.050	<0.050
05...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.055	<0.004
11...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.048	<0.004
20...	--	--	--	--	--	--	--	--	--	--	--
26...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.127	0.011
SEP											
02...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.253	<0.004
08...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.115	<0.004
16...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.051	<0.004
23...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.043	<0.004

## ILLINOIS RIVER BASIN

## 05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	1-NAPH THOL, WATER, FLTRD 0.7 U GF 0.7U REC (UG/L) (49295)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD 0.7 U GF 0.7U REC (UG/L) (49294)	NORFLUR AZON, WATER, FLTRD 0.7 U GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD 0.7 U GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD 0.7 U GF 0.7U REC (UG/L) (38866)	PARA- THION, DIS- SOLVED (UG/L) (39542)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
OCT 1996											
23...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
JAN 1997											
22...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	--	--	--	--	--	--	--	--	--	--	--
MAR											
19...	--	<0.007	--	<0.015	<0.024	<0.019	<0.018	--	--	--	--
26...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
APR											
01...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
08...	<0.004	--	<0.003	--	--	--	--	<0.004	<0.006	<0.004	<0.004
15...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.007
22...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
29...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
MAY											
06...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.041
08...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.055
08...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.080
09...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.113
09...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.090
13...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.019
21...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.020
28...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.100
JUN											
03...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.015
10...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.044
12...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.090
13...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.135
16...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.110
27...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
JUL											
03...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
08...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
14...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
22...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
29...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
AUG											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
11...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
20...	--	--	--	--	--	--	--	--	--	--	--
26...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.010
SEP											
02...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
08...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
16...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
23...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004

## 05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD, 0.7U GF, REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRO- PHAM, WATER, FLTRD, 0.7U GF, REC (UG/L) (49236)	PRO- POKUR, WATER, FLTRD, 0.7U GF, REC (UG/L) (38538)	SILVEX, DIS- SOLVED (UG/L) (39762)
OCT 1996											
23...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
JAN 1997											
22...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	--	--	--	--	--	--	--	--	--	--	--
MAR											
19...	--	--	<0.050	--	--	--	--	--	<0.035	<0.035	<0.021
26...	<0.005	<0.002	<0.050	E0.006	<0.003	E0.004	<0.004	<0.013	<0.035	<0.035	<0.021
APR											
01...	<0.005	<0.002	<0.050	<0.018	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
08...	<0.005	<0.002	--	E0.010	<0.003	<0.007	<0.004	<0.013	--	--	--
15...	<0.005	<0.002	<0.050	E0.004	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
22...	<0.005	<0.002	<0.050	<0.018	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
29...	<0.005	<0.002	<0.050	E0.007	<0.003	<0.007	<0.004	0.017	<0.035	<0.035	<0.021
MAY											
06...	<0.005	<0.002	<0.050	E0.010	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
08...	<0.005	<0.002	<0.050	E0.002	<0.003	E0.002	<0.004	<0.013	<0.035	<0.035	<0.021
08...	<0.005	<0.002	<0.050	E0.011	<0.003	0.019	<0.004	<0.013	<0.035	<0.035	<0.021
09...	<0.005	<0.002	<0.050	E0.010	<0.003	E0.002	<0.004	<0.013	<0.035	<0.035	<0.021
09...	<0.005	<0.002	<0.050	E0.005	<0.003	E0.007	<0.004	<0.013	<0.035	<0.035	<0.021
13...	<0.005	<0.002	<0.050	E0.007	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
21...	<0.005	<0.002	<0.050	E0.008	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
28...	<0.005	<0.002	<0.050	E0.010	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
JUN											
03...	<0.005	<0.002	<0.050	E0.005	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
10...	<0.005	<0.002	<0.050	E0.009	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
12...	<0.005	<0.002	<0.050	<0.018	<0.003	0.022	<0.004	<0.013	<0.035	<0.035	<0.021
13...	<0.005	<0.002	<0.050	E0.015	<0.003	0.013	<0.004	<0.013	<0.035	<0.035	<0.021
16...	<0.005	<0.002	<0.050	E0.005	<0.003	E0.003	<0.004	<0.013	<0.035	<0.035	<0.021
27...	<0.005	<0.002	<0.050	E0.004	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
JUL											
03...	<0.005	<0.002	<0.050	E0.016	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
08...	<0.005	<0.002	<0.050	0.022	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
14...	<0.005	<0.002	<0.050	E0.010	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
22...	<0.005	<0.002	<0.050	E0.013	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
29...	<0.005	<0.002	<0.050	0.061	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
AUG											
05...	--	--	--	<0.050	--	<0.050	--	--	--	--	--
05...	<0.005	<0.002	<0.050	0.031	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
11...	<0.005	<0.002	<0.050	0.025	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
20...	--	--	--	--	--	--	--	--	--	--	--
26...	<0.005	<0.002	<0.050	E0.015	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
SEP											
02...	<0.005	<0.002	<0.050	E0.015	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
08...	<0.005	<0.002	<0.050	0.076	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
16...	<0.005	<0.002	<0.050	0.056	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
23...	<0.005	<0.002	<0.050	0.024	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021

## ILLINOIS RIVER BASIN

## 05584500 LAMOINE RIVER AT COLMAR, IL.--Continued

Water quality data, water year October 1996 to September 1997

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CLOPYR, WATER, FLTRD, REC (UG/L) (49235)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	2,4,5-T DIS- SOLVED (UG/L) (39742)	2,4-D, DIS- SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)
OCT 1996											
23...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	--	--	--	--	--	--	--	--	--	--
JAN 1997											
22...	--	--	--	--	--	--	--	--	--	--	--
FEB											
12...	--	--	--	--	--	--	--	--	--	--	--
MAR											
19...	--	--	--	--	--	--	<0.050	--	<0.035	<0.035	<0.035
26...	0.009	E0.011	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
APR											
01...	0.010	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
08...	0.009	<0.010	<0.007	<0.013	<0.002	<0.001	--	<0.002	--	--	--
15...	0.014	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	0.330	<0.035
22...	E0.004	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
29...	E0.004	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
MAY											
06...	0.039	E0.010	<0.007	<0.013	<0.002	<0.001	<0.050	E0.004	<0.035	E0.840	<0.035
08...	0.104	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.014	<0.035	E1.02	<0.035
08...	0.023	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.008	<0.035	E3.60	<0.035
09...	0.008	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.009	<0.035	E3.90	<0.035
09...	0.124	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.004	<0.035	E3.38	<0.035
13...	0.015	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	0.120	<0.035
21...	0.010	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	0.040	<0.035
28...	0.195	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.004	<0.035	E1.71	<0.035
JUN											
03...	0.014	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	E0.007	<0.035
10...	0.064	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	E0.002	<0.035	0.290	<0.035
12...	0.045	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.010	<0.035	<0.035	<0.035
13...	0.114	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.007	<0.035	0.240	<0.035
16...	0.144	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	0.005	<0.035	<0.035	<0.035
27...	0.026	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
JUL											
03...	0.017	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
08...	0.016	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
14...	0.011	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
22...	0.011	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
29...	0.014	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	0.120	<0.035
AUG											
05...	<0.050	--	--	--	--	--	--	--	--	--	--
05...	0.016	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
11...	0.011	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
20...	--	--	--	--	--	--	--	--	--	--	--
26...	0.008	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
SEP											
02...	0.026	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
08...	<0.005	E0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
16...	<0.005	E0.003	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
23...	E0.004	E0.004	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035

## 05585000 LA MOINE RIVER AT RIPLEY, IL

LOCATION.--Lat 40°01'31", long 90°37'55", in SW1/4NE1/4 sec.33, T.1 N., R.2 W., Brown County, Hydrologic Unit 07130010, on deck of bridge on old U.S. Highway 24, 600 ft downstream from bridge on new U.S. Highway 24, 0.2 mi east of Ripley, 2 mi upstream from Town Branch, and at mile 12.3.

DRAINAGE AREA.--1,293 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1921 to current year. Prior to October 1931, published as Crooked Creek at Ripley.

REVISED RECORDS.--WSP 975: 1936. WSP 1208: 1925, 1929, 1933. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 431.1 ft above sea level. Prior to July 28, 1926, no recording gage at site 200 ft upstream at datum 0.02 ft higher. July 28, 1926 to Jan. 11, 1935, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records fair except those for estimated daily discharges and those for periods of backwater from the Illinois River, Mar 4-25, which are poor. U. S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 25	0500	*9,910	*24.16	May 29	1600	4,540	17.84
Apr. 14	1730	5,250	18.81	Jun. 16	2315	5,240	18.79

Minimum daily discharge, 15 ft<sup>3</sup>/s, Jan. 20, 21, estimated due to backwater from ice.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	31	54	40	e80	5830	553	554	1200	1090	71	191
2	68	28	56	44	e100	6050	508	822	965	631	68	175
3	55	27	62	48	e170	5900	480	1040	814	361	65	166
4	44	28	69	52	e300	3530	461	2690	713	307	66	125
5	28	29	75	54	e450	1880	471	2230	635	285	58	101
6	25	32	71	57	e700	1450	507	1280	589	270	54	83
7	24	62	67	48	e660	1180	524	942	632	248	51	72
8	24	101	63	44	e400	946	485	884	1410	227	50	67
9	23	61	59	58	e250	2260	416	1710	1790	211	48	181
10	22	60	58	46	e190	3600	377	1260	1470	195	47	170
11	23	65	57	41	e150	3420	831	835	1040	181	46	145
12	23	63	55	e35	e130	2150	4500	695	914	171	46	113
13	24	58	53	e29	e110	1410	5000	638	2310	162	44	83
14	26	51	52	e24	e95	1120	5170	583	4160	153	49	66
15	26	48	52	e21	e85	973	4830	535	4580	145	65	57
16	26	45	51	e18	e79	805	2800	492	5030	144	60	51
17	26	46	51	e17	e74	689	1940	449	4810	137	69	48
18	26	45	45	e16	e84	672	1520	419	3890	128	66	43
19	26	45	e31	e16	e140	667	1280	458	4050	118	214	42
20	25	47	e34	e15	e250	632	1140	469	2790	113	205	94
21	25	51	e36	e15	e4000	587	1140	400	1150	108	138	90
22	29	53	e35	e25	e5600	581	1040	350	869	110	99	68
23	31	52	e34	e45	6920	539	913	320	740	118	78	57
24	32	53	e33	e60	8920	509	808	307	638	166	65	51
25	36	52	e32	e100	9630	703	724	345	560	168	58	45
26	62	48	e32	e140	8220	1290	659	537	507	126	608	44
27	57	45	e33	e190	7330	1130	603	2140	465	107	421	46
28	52	42	34	e150	6130	909	575	4320	423	97	288	45
29	48	43	36	e120	---	795	567	4500	384	89	457	42
30	40	50	36	e100	---	713	548	3460	382	81	212	38
31	34	---	38	e88	---	624	---	1700	---	75	208	---
TOTAL	1099	1461	1494	1756	61247	53544	41370	37364	49910	6522	4074	2599
MEAN	35.5	48.7	48.2	56.6	2187	1727	1379	1205	1664	210	131	86.6
MAX	89	101	75	190	9630	6050	5170	4500	5030	1090	608	191
MIN	22	27	31	15	74	509	377	307	382	75	44	38
CFSM	.03	.04	.04	.04	1.69	1.34	1.07	.93	1.29	.16	.10	.07
IN.	.03	.04	.04	.05	1.76	1.54	1.19	1.07	1.44	.19	.12	.07

e Estimated

## 05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1997, BY WATER YEAR (WY)

MEAN	445	522	504	617	1022	1307	1575	1385	1115	782	351	456
MAX	5747	5949	5060	3338	3899	5785	5678	9257	6336	5975	1591	5726
(WY)	1987	1986	1983	1946	1985	1985	1944	1995	1990	1993	1932	1961
MIN	7.06	9.08	7.92	13.2	9.96	61.4	116	21.3	42.5	16.1	11.4	5.13
(WY)	1957	1990	1990	1954	1989	1941	1934	1934	1936	1936	1936	1988

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1921 - 1997	
ANNUAL TOTAL	381662		262440			
ANNUAL MEAN	1043		719		839	
HIGHEST ANNUAL MEAN					2452	
LOWEST ANNUAL MEAN					50.2	
HIGHEST DAILY MEAN	21200	May 9	9630	Feb 25	26800	Mar 7 1985
LOWEST DAILY MEAN	22	Oct 10	15 A	Jan 20, 21	.96	Sep 25 1989
ANNUAL SEVEN-DAY MINIMUM	23	Oct 7	17 A	Jan 15	1.8	Sep 22 1989
INSTANTANEOUS PEAK FLOW			9910	Feb 25	28000 B	Mar 7 1985
INSTANTANEOUS PEAK STAGE			24.16	Feb 25	29.15 C	May 18 1995
INSTANTANEOUS LOW FLOW			D		.00	Sep 26 1989
ANNUAL RUNOFF (CFSM)	.81		.56		.65	
ANNUAL RUNOFF (INCHES)	10.98		7.55		8.82	
10 PERCENT EXCEEDS	1760		1900		2220	
50 PERCENT EXCEEDS	223		120		234	
90 PERCENT EXCEEDS	36		32		26	

A - Estimated due to backwater from ice.

B - Gage height, 29.07 ft.

C - Observed.

D - Minimum recorded, 22 ft<sup>3</sup>/s, Oct. 9-12, but may have been less during period of ice effect, Jan. 14-22.



## 05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1975 to September 1997. (Discontinued)..

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Oct. 1980 to Sept. 1981, Oct. 1994 to Sept. 1997. (Discontinued).

REMARKS.--Suspended-sediment samples were collected by a local observer once a week with additional samples collected during storm runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 7,140 mg/L, June 21, 1981; minimum daily mean, 5 mg/L, Dec. 4, 5, 1996.

SEDIMENT LOADS: Maximum daily, 212,000 tons, May 8, 1996; minimum daily, 0.87 tons, Jan. 20, 1997.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,190 mg/L, Feb. 21; minimum daily, 5 mg/L, Dec. 4, 5.

SEDIMENT LOADS: Maximum daily, 23,700 tons, Feb. 21; minimum daily, 0.87 tons, Jan. 20.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	89	67	16	31	22	1.8	54	14	2.0
2	68	60	11	28	19	1.4	56	10	1.5
3	55	54	8.0	27	19	1.4	62	7	1.1
4	44	48	5.7	28	18	1.4	69	5	.97
5	28	43	3.3	29	18	1.4	75	5	1.1
6	25	39	2.7	32	22	1.9	71	6	1.1
7	24	39	2.5	62	30	5.2	67	6	1.1
8	24	38	2.5	101	44	11	63	8	1.4
9	23	38	2.4	61	85	14	59	10	1.7
10	22	38	2.3	60	67	11	58	13	2.1
11	23	38	2.3	65	48	8.5	57	17	2.7
12	23	37	2.3	63	35	6.0	55	22	3.3
13	24	37	2.4	58	25	4.0	53	29	4.1
14	26	39	2.7	51	18	2.5	52	37	5.2
15	26	41	2.9	48	13	1.7	52	41	5.8
16	26	40	2.8	45	11	1.3	51	29	3.9
17	26	31	2.1	46	12	1.5	51	24	3.3
18	26	24	1.7	45	14	1.7	45	21	2.6
19	26	19	1.3	45	16	2.0	e31	22	1.8
20	25	15	1.0	47	19	2.4	e34	26	2.3
21	25	15	1.0	51	23	3.1	e36	26	2.6
22	29	15	1.2	53	26	3.7	e35	26	2.4
23	31	15	1.3	52	29	4.1	e34	25	2.3
24	32	15	1.3	53	27	3.9	e33	24	2.1
25	36	15	1.5	52	25	3.5	e32	23	2.0
26	62	19	3.1	48	23	3.0	e32	25	2.1
27	57	49	7.5	45	21	2.5	e33	27	2.4
28	52	42	5.9	42	19	2.2	34	30	2.8
29	48	35	4.5	43	18	2.0	36	33	3.1
30	40	30	3.3	50	16	2.2	36	36	3.5
31	34	26	2.4	---	---	---	38	39	4.0
TOTAL	1099	---	110.9	1461	---	112.3	1494	---	78.37

e Estimated

## ILLINOIS RIVER BASIN

## 05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	CONCEN-	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
JANUARY									
1	40	43	4.7	e80	45	9.8	5830	383	6030
2	44	47	5.6	e100	58	16	6050	267	4340
3	48	52	6.7	e170	86	40	5900	332	5280
4	52	55	7.8	e300	119	96	3530	341	3250
5	54	52	7.6	e450	101	122	1880	271	1380
6	57	49	7.5	e700	76	144	1450	213	832
7	48	46	6.0	e660	59	105	1180	167	531
8	44	44	5.2	e400	56	60	946	138	352
9	58	41	6.4	e250	56	38	2260	369	2250
10	46	39	4.8	e190	56	29	3600	1070	10400
11	41	37	4.1	e150	56	23	3420	941	8690
12	e35	34	3.3	e130	56	20	2150	432	2510
13	e29	32	2.5	e110	56	17	1410	299	1140
14	e24	31	2.0	e95	56	14	1120	227	685
15	e21	29	1.6	e85	56	13	973	172	452
16	e18	27	1.3	e79	56	12	805	130	283
17	e17	26	1.2	e74	56	11	689	99	184
18	e16	24	1.0	e84	85	19	672	75	136
19	e16	23	.98	e140	264	100	667	63	114
20	e15	21	.87	e250	839	566	632	72	124
21	e15	22	.90	e4000	2190	23700	587	68	108
22	e25	26	1.8	e5600	1070	16200	581	68	106
23	e45	40	4.8	6920	826	15400	539	73	106
24	e60	62	10	8920	749	18000	509	70	96
25	e100	91	25	9630	525	13700	703	195	370
26	e140	83	32	8220	338	7500	1290	378	1320
27	e190	68	35	7330	529	10400	1130	276	846
28	e150	59	24	6130	528	8750	909	180	443
29	e120	55	18	---	---	---	795	117	251
30	e100	51	14	---	---	---	713	81	157
31	e88	48	11	---	---	---	624	54	92
TOTAL	1756	---	257.65	61247	---	115104.8	53544	---	52858
e Estimated									
APRIL									
1	553	46	69	554	51	77	1200	232	757
2	508	44	60	822	132	301	965	181	473
3	480	44	57	1040	181	571	814	156	344
4	461	44	55	2690	720	5300	713	123	236
5	471	44	56	2230	545	3340	635	109	187
6	507	45	62	1280	308	1080	589	104	165
7	524	40	57	942	165	423	632	115	219
8	485	33	43	884	189	480	1410	1840	7050
9	416	32	36	1710	651	3030	1790	1670	8120
10	377	26	27	1260	466	1630	1470	830	3330
11	831	114	431	835	211	482	1040	663	1850
12	4500	810	9980	695	112	210	914	818	2030
13	5000	691	9320	638	87	150	2310	994	7490
14	5170	424	5910	583	65	103	4160	1280	14200
15	4830	359	4660	535	52	75	4580	599	7370
16	2800	388	2940	492	49	65	5030	401	5430
17	1940	301	1590	449	46	56	4810	516	6470
18	1520	227	938	419	47	53	3890	985	10300
19	1280	171	594	458	51	63	4050	834	9130
20	1140	132	407	469	54	68	2790	727	5500
21	1140	112	345	400	47	51	1150	633	1970
22	1040	92	257	350	41	39	869	551	1290
23	913	76	189	320	46	40	740	480	960
24	808	56	122	307	53	44	638	418	720
25	724	48	94	345	64	61	560	364	551
26	659	45	80	537	164	254	507	317	435
27	603	39	64	2140	814	5200	465	276	347
28	575	38	58	4320	1050	12200	423	241	275
29	567	44	67	4500	765	9300	384	210	217
30	548	39	58	3460	414	3950	382	209	219
31	---	---	---	1700	339	1560	---	---	---
TOTAL	41370	---	38626	37364	---	50256	49910	---	97635

## 05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	1090	453	1320	71	82	16	191	178	92
2	631	249	436	68	67	12	175	161	76
3	361	207	202	65	82	14	166	148	66
4	307	177	147	66	86	15	125	140	47
5	285	125	96	58	70	11	101	132	36
6	270	91	67	54	76	11	83	120	27
7	248	78	53	51	80	11	72	102	20
8	227	71	44	50	62	8.3	67	102	18
9	211	74	42	48	57	7.5	181	178	93
10	195	77	41	47	65	8.2	170	178	82
11	181	76	37	46	78	9.6	145	136	53
12	171	70	32	46	71	8.9	113	117	36
13	162	73	32	44	68	8.1	83	96	22
14	153	73	30	49	86	12	66	82	15
15	145	71	28	65	107	19	57	77	12
16	144	80	31	60	98	16	51	72	10
17	137	81	30	69	99	18	48	69	9.0
18	128	79	27	66	97	17	43	68	8.0
19	118	67	21	214	153	96	42	68	7.6
20	113	66	20	205	160	89	94	92	24
21	108	66	19	138	124	47	90	89	22
22	110	66	20	99	100	27	68	79	15
23	118	78	25	78	85	18	57	71	11
24	166	137	62	65	82	15	51	66	9.1
25	168	124	57	58	81	13	45	69	8.4
26	126	98	34	608	525	1100	44	73	8.7
27	107	90	26	421	477	578	46	74	9.3
28	97	113	30	288	350	294	45	69	8.4
29	89	98	23	457	396	500	42	65	7.4
30	81	104	23	212	251	145	38	61	6.5
31	75	103	21	208	208	116	---	---	---
TOTAL	6522	---	3076	4074	---	3260.6	2599	---	859.4
YEAR	262440		362235.12						

## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL

**LOCATION.**--Lat 39°42'12", long 90°38'43", in SE1/4NW1/4 sec.34, T.15 N., R.14 W., Scott County, Hydrologic Unit 07130011, on upstream side of Norfolk & Southern Corporation Railroad bridge at Flints Creek, 0.4 mi east of Valley City, 1.8 mi downstream from Mauvaise Terre Creek, and at mile 61.3.

**DRAINAGE AREA.**--26,743 mi<sup>2</sup>, does not include diversion from Lake Michigan through the Chicago Sanitary and Ship Canal, which has occurred since Jan. 17, 1900.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1938 to current year. Prior to October 1989, published as "at Meredosia." Records are considered equivalent.

**GAGE.**--Water-stage recorder. Datum of gage is 418.00 ft above sea level (levels by U.S. Army Corps of Engineers).

**REMARKS.**--Water-discharge records fair except those for estimated daily discharges, which are poor. Occasional regulation at low flow by navigation dam at La Grange. Since Jan. 17, 1900, flow has included diversion from Lake Michigan through Chicago Sanitary and Ship Canal. U.S. Army Corps of Engineers satellite telemeter at station. Water temperature and specific conductance continuously recorded at station for the National Water-Quality Assessment Program.

**EXTREMES FOR CURRENT YEAR.** -- Maximum discharge, 88,400 ft<sup>3</sup>/s, March 6, gage height, 21.07 ft; maximum gage height, 21.10 ft, March 7; minimum discharge, 6,380 ft<sup>3</sup>/s, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10500	8910	9170	15800	e15500	71200	38600	20100	23500	28900	13000	10200
2	9860	9890	9750	15800	e15300	76500	37100	16400	24400	28000	10400	10700
3	8580	11100	10600	15500	e15000	81400	35500	14600	24700	27400	9240	11700
4	9330	10900	12300	14800	e14500	85200	34200	15500	24700	26800	9940	13200
5	9210	9640	13100	13200	e13500	86800	33200	16800	24400	25400	12300	12300
6	8650	10000	12700	13000	e12000	87500	31700	17400	e21500	e23000	12200	9630
7	7650	10200	13300	13700	e19000	87100	30300	e19500	20800	e20600	10700	8530
8	7660	10400	13000	14500	e26000	86300	29800	21800	e22000	17700	9860	8550
9	7750	11300	13700	14800	28700	85000	28800	22200	24100	15900	8890	9810
10	7490	12500	14200	13600	29200	84500	28100	23300	25600	16000	8490	10000
11	8280	12600	12300	13200	29300	82400	28000	23900	26600	16300	9470	9430
12	8250	12800	12700	e12000	28800	80100	29700	23200	27300	16100	13000	8690
13	8060	12400	13400	e10500	27900	77900	30600	22700	29100	15700	12900	8540
14	7700	10900	14000	e11300	26800	75000	30600	e21600	31600	15400	12800	7790
15	7890	12100	14300	e12300	25300	72400	30600	e19000	33300	15700	12100	8330
16	7980	11300	14100	e10000	24100	69900	30300	17600	34300	15700	9990	7420
17	8070	9660	14700	e8000	22700	68100	29600	16600	35300	14200	11800	8310
18	7490	8080	15200	e8600	17400	65900	28500	15800	35200	12200	15300	8590
19	8120	10800	15500	e9600	14900	64100	27700	15900	35400	10700	20700	9450
20	8920	12500	15400	e9000	15700	61700	27200	16600	35600	11500	23300	9530
21	8990	12300	15200	e8500	26000	59500	27000	17900	34800	13600	23000	11200
22	8980	11200	13100	e7800	36600	57100	26800	18600	34400	15700	21600	11600
23	9310	10600	12700	e8600	37700	55300	26700	18700	33800	16000	20300	11100
24	8190	8410	11700	e7600	40300	53200	26500	18500	33300	15800	20500	10300
25	9480	8030	11800	e8400	44900	51700	26400	18100	32600	14400	22200	8390
26	9940	9870	e12000	e9900	51400	49800	25800	18800	32100	11600	19900	7760
27	9150	11200	e12700	e11500	58900	47700	25400	20500	31600	10600	14400	8000
28	8840	11000	e12900	e15000	65900	45700	24700	23900	30800	13000	12000	8430
29	10200	10200	e12700	e19000	---	43700	23900	23600	30000	15200	12200	7680
30	8580	9750	e15000	e18000	---	42000	22700	23700	29300	15700	12600	6930
31	8510	---	15500	e16000	---	40300	---	23100	---	15000	10900	---
<b>TOTAL</b>	267610	320540	408720	379500	783300	2095000	876000	605900	882100	529800	435980	282090
<b>MEAN</b>	8633	10680	13180	12240	27980	67580	29200	19550	29400	17090	14060	9403
<b>MAX</b>	10500	12800	15500	19000	65900	87500	38600	23900	35600	28900	23300	13200
<b>MIN</b>	7490	8030	9170	7600	12000	40300	22700	14600	20800	10600	8490	6930

e Estimated

## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

MEAN	12970	14590	18270	19970	23960	33610	37710	36070	29420	21270	13970	11630
MAX	54840	48900	78130	59540	67060	94940	93800	78160	87690	60820	50850	62870
(WY)	1994	1986	1983	1993	1974	1985	1979	1970	1974	1993	1981	1993
MIN	4258	5519	5923	4808	4144	10870	10010	11170	6207	6649	5709	5164
(WY)	1965	1957	1963	1963	1963	1964	1956	1988	1988	1988	1941	1976

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1939 - 1997		
ANNUAL TOTAL	8075580			7866540					
ANNUAL MEAN	22060			21550			22770		
HIGHEST ANNUAL MEAN							46810		
LOWEST ANNUAL MEAN							8977		
HIGHEST DAILY MEAN	83100			Jun 7			123000		
LOWEST DAILY MEAN	5700 A			Jan 11			1330		
ANNUAL SEVEN-DAY MINIMUM	6160			Jan 6			2290		
INSTANTANEOUS PEAK FLOW				88400 B			Mar 6		
INSTANTANEOUS PEAK STAGE				21.10E			Mar 7		
INSTANTANEOUS LOW FLOW				6380			Sep 30		
10 PERCENT EXCEEDS	57400			39300			47400		
50 PERCENT EXCEEDS	12100			15200			16200		
90 PERCENT EXCEEDS	8070			8550			6540		

A - Estimated due to backwater from ice.

B - Gage height, 21.07 ft.

C - At Meredosia.

D - May 26-28, 1943.

E - Discharge, 87,200 ft<sup>3</sup>/s.

## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Decemer 1974 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Feb. 1980 to current year.

REMARKS.--Suspended-sediment samples were collected by a local observer once weekly with additional samples collected during high runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 3,720 mg/L, Apr. 14, 1981; minimum daily, 14 mg/L, Dec. 26, 1984, July 21, 1993.

SEDIMENT LOADS: Maximum daily, 410,000 tons, June 4, 1980; minimum daily, 172 tons, Sept. 2, 1984.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 1,570 mg/L, Feb. 23; minimum daily, 25 mg/L, May 2.

SEDIMENT LOADS: Maximum daily, 161,000 tons, Feb. 23; minimum daily, 735 tons, Oct. 21.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	10500	70	2010	8910	81	1970	9170	58	1440
2	9860	76	1980	9890	82	2220	9750	69	1840
3	8580	83	1950	11100	83	2510	10600	87	2520
4	9330	85	2140	10900	85	2480	12300	110	3690
5	9210	78	1940	9640	87	2260	13100	131	4610
6	8650	71	1660	10000	90	2440	12700	129	4450
7	7650	68	1410	10200	93	2550	13300	125	4500
8	7660	72	1500	10400	93	2620	13000	121	4240
9	7750	76	1600	11300	88	2730	13700	117	4410
10	7490	81	1620	12500	85	2880	14200	115	4340
11	8280	77	1730	12600	84	2880	12300	112	3690
12	8250	58	1280	12800	84	2890	12700	109	3760
13	8060	43	937	12400	83	2750	13400	98	3540
14	7700	36	756	10900	82	2420	14000	101	3840
15	7890	39	831	12100	81	2660	14300	115	4430
16	7980	42	919	11300	78	2340	14100	142	5430
17	8070	46	1010	9660	74	1880	14700	176	7010
18	7490	47	927	8080	72	1590	15200	217	8960
19	8120	40	883	10800	70	2090	15500	268	11200
20	8920	34	812	12500	69	2350	15400	273	11400
21	8990	30	735	12300	68	2220	15200	183	7470
22	8980	32	782	11200	66	1990	13100	126	4410
23	9310	33	797	10600	65	1830	12700	113	3890
24	8190	34	762	8410	66	1470	11700	106	3330
25	9480	35	918	8030	64	1400	11800	100	3210
26	9940	37	989	9870	56	1530	e12000	96	3110
27	9150	39	951	11200	50	1510	e12700	98	3370
28	8840	43	1020	11000	44	1290	e12900	101	3520
29	10200	52	1450	10200	42	1170	e12700	104	3560
30	8580	63	1430	9750	49	1280	e15000	105	4250
31	8510	76	1770	---	---	---	15500	102	4250
TOTAL	267610	---	39499	320540	---	64200	408720	---	143670

e Estimated

## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	15800	100	4240	e15500	116	4840	71200	328	63500
2	15800	97	4130	e15300	114	4710	76500	295	61100
3	15500	95	3950	e15000	114	4620	81400	278	61300
4	14800	95	3770	e14500	114	4460	85200	243	56100
5	13200	109	3830	e13500	114	4160	86800	204	47700
6	13000	145	5090	e12000	152	4930	87500	182	42900
7	13700	155	5710	e19000	399	20500	87100	123	28900
8	14500	159	6240	e26000	494	34700	86300	136	31600
9	14800	157	6270	28700	425	33000	85000	128	29400
10	13600	155	5670	29200	323	25500	84500	121	27500
11	13200	130	4670	29300	261	20700	82400	123	27400
12	e12000	87	2820	28800	224	17400	80100	115	24800
13	e10500	57	1620	27900	195	14600	77900	110	23100
14	e11300	43	1310	26800	174	12500	75000	97	19500
15	e12300	44	1450	25300	167	11300	72400	85	16500
16	e10000	45	1220	24100	161	10400	69900	75	14100
17	e8000	47	1010	22700	156	9400	68100	72	13200
18	e8600	48	1120	17400	156	7260	65900	82	14500
19	e9600	50	1290	14900	156	6240	64100	74	12800
20	e9000	56	1360	15700	266	11700	61700	66	10900
21	e8500	73	1680	26000	631	48700	59500	67	10700
22	e7800	73	1540	36600	1440	144000	57100	69	10600
23	e8600	69	1600	37700	1570	161000	55300	72	10700
24	e7600	70	1430	40300	1280	140000	53200	80	11500
25	e8400	84	1910	44900	971	119000	51700	83	11600
26	e9900	102	2730	51400	792	111000	49800	77	10400
27	e11500	124	3860	58900	622	99400	47700	79	10100
28	e15000	137	5550	65900	338	60300	45700	79	9720
29	e19000	130	6660	---	---	---	43700	85	9940
30	e18000	123	5980	---	---	---	42000	105	11800
31	e16000	118	5080	---	---	---	40300	126	13700
TOTAL	379500	---	104790	783300	---	1146320	2095000	---	747560
APRIL			MAY			JUNE			
1	38600	115	12000	20100	38	2050	23500	293	18600
2	37100	113	11300	16400	25	1070	24400	317	20900
3	35500	131	12500	14600	41	1600	24700	287	19200
4	34200	132	12100	15500	65	2740	24700	281	18700
5	33200	136	12200	16800	86	3890	24400	244	16100
6	31700	176	14900	17400	99	4680	e21500	159	9250
7	30300	247	20300	e19500	118	6200	20800	153	8590
8	29800	268	21500	21800	153	9050	e22000	306	18200
9	28800	332	25800	22200	118	7070	24100	459	30100
10	28100	409	31000	23300	131	8310	25600	406	28200
11	28000	491	37200	23900	172	11100	26600	380	27400
12	29700	501	40400	23200	203	12700	27300	346	25500
13	30600	369	30500	22700	233	14300	29100	246	19400
14	30600	311	25700	e21600	204	11900	31600	290	25000
15	30600	254	21000	e19000	125	6420	33300	662	59800
16	30300	206	16800	17600	80	3820	34300	446	41300
17	29600	195	15500	16600	92	4080	35300	389	37100
18	28500	203	15600	15800	110	4670	35200	380	36200
19	27700	160	11900	15900	125	5360	35400	277	26500
20	27200	213	15600	16600	128	5780	35600	276	26500
21	27000	94	6900	17900	141	6820	34800	255	23900
22	26800	65	4680	18600	150	7540	34400	229	21200
23	26700	75	5390	18700	133	6710	33800	233	21300
24	26500	77	5550	18500	133	6600	33300	234	21000
25	26400	97	6870	18100	151	7390	32600	234	20500
26	25800	107	7500	18800	169	8600	32100	230	19800
27	25400	97	6680	20500	210	11900	31600	236	20200
28	24700	83	5530	23900	337	21900	30800	206	17100
29	23900	60	3860	23600	359	22900	30000	207	16800
30	22700	52	3140	23700	221	14100	29300	226	17900
31	---	---	---	23100	250	15600	---	---	---
TOTAL	876000	---	459900	605900	---	256850	882100	---	712240

e Estimated

## ILLINOIS RIVER BASIN

## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	28900	209	16300	13000	64	2240	10200	67	1860
2	28000	193	14500	10400	57	1570	10700	72	2100
3	27400	177	13100	9240	62	1570	11700	78	2490
4	26800	173	12500	9940	85	2340	13200	73	2630
5	25400	193	13200	12300	146	4930	12300	59	1940
6	e23000	216	13400	12200	110	3580	9630	55	1390
7	e20600	211	11700	10700	71	2040	8530	67	1530
8	17700	154	7290	9860	52	1370	8550	73	1690
9	15900	121	5180	8890	50	1190	9810	61	1640
10	16000	98	4230	8490	48	1100	10000	51	1390
11	16300	87	3830	9470	70	1890	9430	43	1090
12	16100	95	4140	13000	113	4010	8690	40	931
13	15700	105	4460	12900	96	3340	8540	46	1060
14	15400	107	4440	12800	80	2780	7790	53	1100
15	15700	91	3880	12100	67	2140	8330	60	1350
16	15700	77	3270	9990	60	1600	7420	64	1300
17	14200	65	2480	11800	100	3320	8310	68	1500
18	12200	58	1890	15300	169	7120	8590	72	1690
19	10700	59	1700	20700	254	14900	9450	79	2020
20	11500	75	2360	23300	444	27800	9530	92	2400
21	13600	99	3730	23000	320	19800	11200	108	3290
22	15700	127	5410	21600	241	14000	11600	114	3560
23	16000	92	3950	20300	228	12500	11100	97	2890
24	15800	59	2520	20500	217	12000	10300	81	2240
25	14400	43	1670	22200	199	12100	8390	68	1520
26	11600	44	1330	19900	167	8670	7760	62	1290
27	10600	68	1990	14400	139	5350	8000	66	1430
28	13000	110	3940	12000	116	3720	8430	70	1580
29	15200	120	4950	12200	98	3240	7680	74	1510
30	15700	97	4110	12600	84	2850	6930	74	1400
31	15000	79	3170	10900	72	2090	---	---	---
TOTAL	529800	---	180620	435980	---	187150	282090	---	53811
YEAR	7866540		4096610						
e	Estimated								



## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to 1993, 1996 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CXYGEN. DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 1996												
31...	1510	81700	80020	2.24	8620	600	10	14.0	762	8.1	--	--
NOV												
22...	1240	81700	80020	2.89	10900	660	10	5.5	1370	7.8	12.5	100
DEC												
13...	1230	81700	80020	3.55	13200	660	10	3.5	842	8.1	11.4	85
JAN 1997												
21...	1600	81700	80020	5.39	88500	750	1	0.0	922	7.8	4.6	32
FEB												
11...	1640	81700	80020	8.13	29600	900	10	0.5	929	7.7	8.7	76
MAR												
18...	1540	81700	80020	17.39	63900	1400	10	6.0	577	7.9	13.7	111
APR												
01...	1230	81700	80020	11.10	38600	750	10	11.0	714	8.1	10.2	93
15...	1420	81700	80020	10.44	30400	760	10	7.5	664	8.0	11.7	98
29...	1230	81700	80020	10.34	23500	750	10	15.5	746	8.3	9.6	97
MAY												
13...	1250	81700	80020	7.75	22800	750	10	16.0	788	8.1	9.5	96
28...	1340	81700	80020	7.52	24700	750	10	17.0	696	8.1	6.6	69
JUN												
10...	1250	81700	80020	7.74	25800	750	10	20.5	638	8.0	7.2	80
17...	1300	81700	80020	9.64	35600	800	10	23.5	512	7.9	6.8	80
26...	1300	81700	80020	9.12	32000	500	3	28.0	1070	8.0	5.7	73
JUL												
08...	1610	81700	80020	4.87	17100	760	10	25.5	638	8.1	7.2	88
22...	1440	81700	80020	4.40	15900	725	10	30.0	680	8.2	5.4	72
AUG												
05...	1350	81700	80020	3.44	12500	700	10	28.0	656	8.1	6.7	86
19...	1250	81700	80020	6.22	21800	750	10	26.0	684	7.4	4.9	61
SEP												
02...	1720	81700	80020	3.17	10700	750	10	27.5	623	8.0	6.8	60
16...	1410	81700	80020	2.17	9220	760	10	24.5	704	7.6	7.7	93

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 1996												
31...	61	25	54	5.1	184	0	225	83	86	0.50	4.1	456
NOV												
22...	65	27	52	5.2	206	0	251	70	84	0.50	4.9	457
DEC												
13...	73	29	62	5.1	200	0	244	88	93	0.50	4.8	511
JAN 1997												
21...	82	32	63	4.8	206	0	251	91	97	0.40	6.8	540
FEB												
11...	65	26	80	4.5	176	0	215	130	70	0.40	6.8	530
MAR												
18...	55	21	28	3.4	158	0	193	54	47	0.30	7.3	346
APR												
01...	67	28	31	3.3	196	0	239	59	71	0.30	6.2	435
15...	64	25	32	3.5	180	0	220	60	68	0.30	4.8	408
29...	68	31	39	3.2	204	0	249	68	74	0.32	1.8	451
MAY												
13...	66	30	48	4.0	202	0	246	83	82	0.38	1.7	488
28...	60	27	38	3.9	172	0	210	65	70	0.34	2.3	406
JUN												
10...	63	27	25	3.4	176	0	215	47	59	0.27	5.8	399
17...	54	21	18	3.5	146	0	178	32	46	0.27	6.7	316
26...	59	24	23	3.6	164	0	200	42	53	0.30	5.6	369
JUL												
08...	61	26	29	3.4	192	10	215	50	58	0.32	5.6	417
22...	67	27	37	4.2	184	0	225	62	67	0.34	1.9	409
AUG												
05...	58	23	41	4.3	166	0	203	62	68	0.40	2.4	461
19...	53	22	44	4.6	164	0	200	66	70	0.40	4.4	399
SEP												
02...	55	22	36	4.3	164	0	200	55	61	0.30	6.3	350
16...	67	25	41	4.5	188	0	229	64	73	0.37	5.4	423

## ILLINOIS RIVER BASIN

## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)
OCT 1996												
31...	0.120	0.060	0.50	1.3	2.70	0.360	0.250	0.220	<3.0	2.0	4.1	1.7
NOV												
22...	0.060	0.060	0.50	0.90	3.30	0.580	0.390	0.380	7.0	2.0	4.8	1.7
DEC												
13...	0.030	0.050	0.50	1.1	3.50	0.590	0.360	0.360	8.0	1.0	4.6	2.0
JAN 1997												
21...	0.200	0.130	0.70	1.0	5.70	0.440	0.270	0.270	9.0	34	14	1.1
FEB												
11...	0.500	0.070	1.0	1.9	4.70	0.670	0.250	0.210	14	30	4.9	3.9
MAR												
18...	0.210	0.050	0.60	0.80	5.80	0.210	0.140	0.140	8.0	5.0	4.8	1.0
APR												
01...	0.050	0.050	0.30	1.0	5.90	0.310	0.150	0.140	<3.0	2.0	4.5	2.2
15...	0.100	0.060	0.40	1.2	5.00	0.440	0.140	0.140	<3.0	<1.0	4.8	3.6
29...	0.055	0.034	0.43	0.93	4.59	0.266	0.119	0.118	3.5	<1.0	3.9	1.1
MAY												
13...	0.031	0.032	0.46	1.6	4.30	0.577	0.193	0.179	3.5	1.1	4.1	5.0
28...	0.270	0.069	0.73	1.9	3.95	0.544	0.154	0.161	<3.0	<1.0	5.1	>5.0
JUN												
10...	<0.015	0.077	0.55	0.51	6.44	0.112	0.167	0.143	<3.0	1.3	6.7	5.0
17...	0.025	0.066	0.40	1.5	6.71	0.463	0.136	0.143	5.0	1.0	4.6	3.4
26...	0.105	0.059	0.50	0.84	5.33	0.239	0.165	0.141	3.7	<1.0	110	2.4
JUL												
08...	<0.015	0.037	0.38	1.4	2.48	0.416	0.210	0.178	<3.0	<1.0	5.4	3.9
22...	0.092	0.041	0.59	1.1	1.91	0.334	0.179	0.161	<3.0	2.0	5.2	4.5
AUG												
05...	0.050	0.049	0.48	1.4	1.57	0.450	0.186	0.186	<3.0	1.2	5.1	2.0
19...	<0.015	0.185	0.46	1.0	1.98	0.496	0.219	0.205	<3.0	<1.0	4.6	4.1
SEP												
02...	0.053	0.071	0.55	0.90	1.73	0.309	0.195	0.177	<3.0	<1.0	4.9	1.9
16...	0.035	0.100	0.41	0.70	1.85	0.286	0.170	0.163	4.0	<1.0	4.4	1.6

DATE	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI- CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ALPH/ BHC DIS- SOLVER (UG/L) (34257)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)
OCT 1996											
31...	0.021	0.184	<0.003	0.112	E0.030	--	--	--	--	<0.002	<0.001
NOV											
22...	0.028	0.026	<0.003	0.165	E0.012	--	--	--	--	<0.002	<0.001
DEC											
13...	<0.002	0.037	<0.003	0.134	E0.014	--	--	--	--	<0.002	<0.001
JAN 1997											
21...	<0.002	0.005	<0.003	0.127	E0.054	--	--	--	--	<0.002	<0.001
FEB											
11...	0.075	0.006	<0.003	0.151	E0.048	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
MAR											
18...	0.021	0.015	<0.003	0.187	E0.027	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
APR											
01...	0.011	0.022	<0.003	0.166	E0.018	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
15...	--	--	--	--	--	--	--	--	--	--	--
29...	0.059	0.008	<0.003	0.360	E0.016	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
MAY											
13...	0.252	0.020	<0.003	0.800	E0.018	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
28...	1.09	0.047	<0.003	7.21	E0.130	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
JUN											
10...	0.597	0.088	<0.003	6.50	E0.161	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
17...	0.736	0.083	<0.003	7.96	E0.229	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
26...	0.393	0.037	<0.003	5.11	E0.264	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
JUL											
08...	0.073	0.016	<0.003	1.61	E0.146	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
22...	0.066	0.013	<0.003	0.765	E0.125	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
AUG											
05...	<0.010	<0.002	<0.003	0.296	E0.025	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
19...	0.007	0.006	<0.003	0.179	E0.026	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
SEP											
02...	0.008	0.005	<0.003	0.208	E0.036	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001
16...	<0.002	E0.003	<0.003	0.153	E0.025	<0.035	<0.016	<0.016	<0.021	<0.002	<0.001

## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	3HYDRXY CARBO- FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	CHLOR- AMBN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)
OCT 1996											
31...	<0.002	--	--	--	<0.002	<0.003	--	<0.003	--	--	--
NOV											
22...	<0.002	--	--	--	<0.002	<0.020	--	<0.006	--	--	--
DEC											
13...	<0.002	--	--	--	<0.002	<0.003	--	<0.003	--	--	--
JAN 1997											
21...	<0.002	--	--	--	<0.002	<0.003	--	<0.003	--	--	--
FEB											
11...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
MAR											
18...	<0.002	0.050	<0.035	<0.035	0.005	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
APR											
01...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
15...	--	--	--	--	--	--	--	--	--	--	--
29...	<0.002	<0.014	<0.035	<0.035	<0.010	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
MAY											
13...	<0.002	0.140	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
28...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
JUN											
10...	<0.002	0.100	<0.035	<0.035	<0.002	<0.003	<0.008	<0.030	<0.028	<0.014	<0.011
17...	<0.002	EO.300	<0.035	<0.035	<0.002	<0.003	<0.008	EO.028	<0.028	<0.014	<0.011
26...	<0.002	0.210	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
JUL											
08...	<0.002	0.090	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
22...	<0.002	0.070	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
AUG											
05...	<0.002	<0.014	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
19...	<0.002	0.050	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
SEP											
02...	<0.002	0.050	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
16...	<0.002	0.040	<0.035	<0.035	<0.002	<0.003	<0.008	<0.003	<0.028	<0.014	<0.011
DATE	CHLORO- THALO- NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DACTHAL MONO- ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P, P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOR- BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)
OCT 1996											
31...	--	<0.004	--	0.049	--	<0.002	<0.006	0.022	--	--	--
NOV											
22...	--	0.006	--	0.024	--	<0.002	<0.006	0.038	--	--	--
DEC											
13...	--	<0.004	--	0.078	--	<0.002	<0.006	0.036	--	--	--
JAN 1997											
21...	--	<0.004	--	0.046	--	<0.002	<0.006	0.025	--	--	--
FEB											
11...	<0.035	<0.004	<0.050	0.085	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
MAR											
18...	<0.035	EO.004	<0.050	0.040	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
APR											
01...	<0.035	EO.004	<0.050	0.024	<0.017	<0.002	<0.006	<0.010	<0.035	<0.020	<0.032
15...	--	--	--	--	--	--	--	--	--	--	--
29...	<0.035	<0.004	<0.050	0.067	<0.017	0.010	<0.006	0.019	<0.035	<0.020	<0.032
MAY											
13...	<0.035	<0.004	<0.050	0.165	<0.017	EO.003	<0.006	0.022	<0.035	<0.020	<0.032
28...	<0.035	<0.004	<0.050	2.52	<0.017	<0.002	<0.006	0.017	<0.035	<0.020	<0.032
JUN											
10...	<0.035	<0.004	<0.050	1.29	<0.017	<0.002	<0.006	0.010	EO.210	<0.020	<0.032
17...	<0.035	--	<0.050	1.68	<0.017	EO.001	<0.006	0.005	EO.200	<0.020	<0.032
26...	<0.035	--	<0.050	1.49	<0.017	EO.001	<0.006	0.007	EO.170	<0.020	<0.032
JUL											
08...	<0.035	<0.004	<0.050	0.472	<0.017	<0.002	<0.006	<0.002	<0.035	<0.020	<0.032
22...	<0.035	<0.004	<0.050	0.169	<0.017	EO.001	<0.006	<0.008	<0.035	<0.020	<0.032
AUG											
05...	<0.035	<0.004	<0.050	0.067	<0.017	<0.002	<0.006	0.014	<0.035	<0.020	<0.032
19...	<0.035	<0.004	<0.050	0.046	<0.017	<0.002	<0.006	0.013	<0.035	<0.020	<0.032
SEP											
02...	<0.035	<0.004	<0.050	0.058	<0.017	<0.002	<0.006	0.030	<0.035	<0.020	<0.032
16...	<0.035	<0.004	<0.050	0.043	<0.017	<0.002	<0.006	0.016	<0.035	<0.020	<0.032

## ILLINOIS RIVER BASIN

## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT, FLT GF 0.7U REC (UG/L) (49299)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ESFEN- VAL- ERATE, WAT, FLT GF 0.7U REC (UG/L) (49298)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)
OCT 1996											
31...	<0.001	--	<0.017	--	--	<0.002	--	<0.004	<0.003	--	--
NOV											
22...	<0.001	--	<0.017	--	--	<0.002	--	<0.004	<0.003	--	--
DEC											
13...	<0.001	--	<0.017	--	--	<0.002	--	<0.004	<0.003	--	--
JAN 1997											
21...	<0.001	--	<0.017	--	--	<0.002	--	<0.004	<0.003	--	--
FEB											
11...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
MAR											
18...	E0.003	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
APR											
01...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
15...	--	--	--	--	--	--	--	--	--	--	--
29...	<0.001	<0.035	<0.017	E0.030	<0.035	E0.002	<0.019	<0.004	<0.003	<0.013	<0.035
MAY											
13...	<0.001	<0.035	<0.017	0.110	<0.035	0.005	<0.019	<0.004	<0.003	<0.013	<0.035
28...	<0.001	<0.035	<0.017	0.110	<0.035	0.017	<0.019	<0.004	<0.003	<0.013	<0.035
JUN											
10...	<0.001	<0.035	<0.017	0.040	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
17...	E0.004	<0.035	<0.017	0.050	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
26...	<0.001	<0.035	<0.017	0.090	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
JUL											
08...	<0.001	<0.035	<0.017	0.120	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
22...	<0.001	<0.035	<0.017	0.060	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
AUG											
05...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
19...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
SEP											
02...	<0.001	<0.035	<0.017	0.060	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
16...	<0.001	<0.035	<0.017	<0.020	<0.035	<0.002	<0.019	<0.004	<0.003	<0.013	<0.035
DATE	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METO- LACHLOF WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)
OCT 1996											
31...	<0.003	<0.004	<0.002	--	<0.005	--	--	--	--	0.136	<0.004
NOV											
22...	<0.003	<0.004	<0.002	--	<0.005	--	--	--	--	0.122	<0.004
DEC											
13...	<0.003	<0.004	<0.002	--	<0.005	--	--	--	--	0.112	<0.008
JAN 1997											
21...	<0.003	<0.004	<0.002	--	<0.005	--	--	--	--	0.092	<0.010
FEB											
11...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.326	<0.010
MAR											
18...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.256	<0.004
APR											
01...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.113	<0.004
15...	--	--	--	--	--	--	--	--	--	--	--
29...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	E0.170	<0.026	<0.017	0.170	<0.004
MAY											
13...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.412	<0.004
28...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.84	0.239
JUN											
10...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.65	0.029
17...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.75	0.024
26...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	1.03	<0.010
JUL											
08...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.374	<0.004
22...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.270	<0.004
AUG											
05...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.065	<0.004
19...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.055	<0.004
SEP											
02...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.088	<0.004
16...	<0.003	<0.004	<0.002	<0.018	<0.005	<0.035	<0.050	<0.026	<0.017	0.063	<0.004

## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	1-NAPH- THOL, WATER, FLTRD, 0.7 U GF, REC (UG/L) (49295)	NAPROP- AMIDE WATER, FLTRD, 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, 0.7 U GF, REC (UG/L) (49294)	NORFLUR- AZON, WATER, FLTRD, 0.7 U GF, REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, 0.7 U GF, REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, 0.7 U GF, REC (UG/L) (38866)	PARA- THION, DIS- SOLVED (UG/L) (39542)	METHYL- PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
OCT 1996											
31...	<0.004	--	<0.003	--	--	--	--	<0.004	<0.006	<0.004	<0.004
NOV											
22...	<0.004	--	<0.003	--	--	--	--	<0.006	<0.006	<0.004	<0.004
DEC											
13...	<0.004	--	<0.003	--	--	--	--	<0.004	<0.006	<0.004	<0.004
JAN 1997											
21...	<0.004	--	<0.003	--	--	--	--	<0.004	<0.006	<0.004	<0.004
FEB											
11...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
MAR											
18...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
APR											
01...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
15...	--	--	--	--	--	--	--	--	--	--	--
29...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
MAY											
13...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
28...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
JUN											
10...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	0.016
17...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
26...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
JUL											
08...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
22...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
AUG											
05...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
19...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
SEP											
02...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
16...	<0.004	<0.007	<0.003	<0.015	<0.024	<0.019	<0.018	<0.004	<0.006	<0.004	<0.004
DATE	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD, 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD, 0.7 U GF, REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- AMIDE WATER FLTRD, 0.7 U GF, REC (UG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD, 0.7 U GF, REC (UG/L) (82679)	PRO- FARGITE WATER FLTRD, 0.7 U GF, REC (UG/L) (82685)	PRO- PHAM, WATER, FLTRD, 0.7 U GF, REC (UG/L) (49236)	PRO- FOXUR, WATER, FLTRD, 0.7 U GF, REC (UG/L) (38538)	SILVEX, DIS- SOLVED (UG/L) (39762)
OCT 1996											
31...	<0.005	<0.002	--	0.036	<0.003	<0.007	<0.004	<0.013	--	--	--
NOV											
22...	<0.005	<0.002	--	0.032	<0.003	<0.007	<0.004	<0.013	--	--	--
DEC											
13...	<0.005	<0.002	--	E0.014	<0.003	<0.007	<0.004	<0.013	--	--	--
JAN 1997											
21...	<0.005	<0.002	--	0.018	<0.003	<0.007	<0.004	<0.013	--	--	--
FEB											
11...	<0.005	<0.002	<0.050	E0.015	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
MAR											
18...	<0.005	<0.002	<0.050	E0.009	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
APR											
01...	<0.005	<0.002	<0.050	E0.008	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
15...	--	--	--	--	--	--	--	--	--	--	--
29...	<0.005	<0.002	<0.050	0.020	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
MAY											
13...	<0.005	<0.002	<0.050	0.018	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
28...	<0.005	<0.002	<0.050	0.039	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
JUN											
10...	<0.005	<0.002	<0.050	0.025	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
17...	<0.005	<0.002	<0.050	0.020	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
26...	<0.005	<0.002	<0.050	0.025	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
JUL											
08...	<0.005	<0.002	<0.050	0.025	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
22...	<0.005	<0.002	<0.050	0.029	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
AUG											
05...	<0.005	<0.002	<0.050	0.040	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
19...	<0.005	<0.002	<0.050	0.025	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
SEP											
02...	<0.005	<0.002	<0.050	0.049	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021
16...	<0.005	<0.002	<0.050	0.033	<0.003	<0.007	<0.004	<0.013	<0.035	<0.035	<0.021

## ILLINOIS RIVER BASIN

## 05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	2,4,5-T DIS- SOLVED (UG/L) (39742)	2,4-D, DIS- SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)
OCT 1996											
31...	0.015	0.019	<0.007	<0.013	<0.002	E0.002	--	<0.002	--	--	--
NOV											
22...	0.015	E0.021	E0.016	<0.013	<0.002	<0.001	--	<0.002	--	--	--
DEC											
13...	0.044	E0.008	<0.007	<0.013	<0.002	<0.001	--	<0.002	--	--	--
JAN 1997											
21...	0.006	E0.015	<0.007	<0.013	<0.002	<0.001	--	<0.002	--	--	--
FEB											
11...	0.006	E0.013	<0.015	<0.013	<0.002	E0.002	<0.050	E0.003	<0.035	<0.035	<0.035
MAR											
18...	0.005	<0.010	<0.007	<0.013	<0.002	E0.002	<0.050	<0.002	<0.035	<0.035	<0.035
APR											
01...	0.009	<0.010	<0.007	<0.013	<0.002	E0.003	<0.050	<0.002	<0.035	<0.035	<0.035
15...	--	--	--	--	--	--	--	--	--	--	--
29...	0.006	<0.010	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	<0.035	<0.035
MAY											
13...	0.039	0.020	<0.007	<0.013	<0.002	<0.001	<0.050	<0.002	<0.035	0.25 <sup>9</sup>	<0.035
28...	0.047	0.015	<0.007	<0.013	<0.002	0.008	<0.050	<0.002	<0.035	0.570	<0.035
JUN											
10...	0.072	<0.020	<0.007	<0.013	<0.002	0.010	<0.050	<0.002	<0.035	<0.035	<0.035
17...	0.061	E0.013	E0.005	<0.013	<0.002	0.009	<0.050	0.004	<0.035	0.13 <sup>9</sup>	<0.035
26...	0.049	E0.018	E0.013	<0.013	<0.002	0.008	<0.050	0.004	<0.035	<0.03 <sup>5</sup>	<0.035
JUL											
08...	0.048	<0.010	E0.010	<0.013	<0.002	0.012	<0.050	<0.002	<0.035	<0.035	<0.035
22...	0.040	E0.034	E0.022	<0.013	<0.002	0.011	<0.050	E0.004	<0.035	<0.035	<0.035
AUG											
05...	0.028	0.025	<0.007	<0.013	<0.002	0.011	<0.050	<0.002	<0.035	<0.035	<0.035
19...	0.011	<0.010	<0.007	<0.013	<0.002	0.008	<0.050	<0.002	<0.035	<0.035	<0.035
SEP											
02...	0.017	0.025	<0.007	<0.013	<0.002	0.009	<0.050	<0.002	<0.035	<0.035	<0.035
16...	0.010	E0.010	<0.007	<0.013	<0.002	0.005	<0.050	<0.002	<0.035	<0.035	<0.035

## 05587000 MACOUPIN CREEK NEAR KANE, IL

LOCATION.--Lat 39°14'03", long 90°23'40", in SE1/4SE1/4 sec.11, T.9 N., R.12 W., Greene County, Hydrologic Unit 07130012, on left bank at downstream side of bridge on State Highway 267, 1.4 mi downstream from Link Branch, 3.5 mi northwest of Kane, and at mile 16.1.

DRAINAGE AREA.--868 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1921 to November 1933, May to August 1940, October 1940 to current year.

REVISED RECORDS.--WSP 1175: 1924. WSP 1308: 1922(M), 1928(M), 1931(M). WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 426.77 ft above sea level. Prior to Oct. 1, 1928, at site 2.0 mi upstream at various datums. May 17, 1940 to May 17, 1943, water-stage recorder, and May 18, 1943 to July 19, 1970, nonrecording gage at site 800 ft downstream at present datum. July 20 to Sept. 18, 1970, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 28	2045	*9,920	*21.68	No other peak greater than base discharge.			

Minimum discharge, 6.1 ft<sup>3</sup>/s, Oct. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	7.4	209	43	e350	9440	201	115	183	51	10	16
2	14	7.1	170	43	e700	5010	180	110	149	35	10	14
3	11	6.8	151	43	e1200	1900	170	140	140	29	10	34
4	11	7.0	119	43	2060	1200	167	145	134	27	11	30
5	11	6.9	106	41	2090	889	203	140	125	25	10	20
6	10	9.9	115	36	1320	728	244	124	115	23	9.9	17
7	10	1160	126	33	685	610	196	111	108	22	9.7	16
8	10	1290	100	31	465	524	161	116	272	21	9.3	15
9	10	459	85	e30	371	891	145	111	569	20	9.0	18
10	10	194	78	e32	319	2290	143	101	376	19	9.2	23
11	10	116	73	e32	280	1840	152	92	248	18	9.3	27
12	9.7	77	66	e29	e240	965	160	86	184	17	9.8	20
13	9.4	55	58	e27	e220	803	151	82	440	17	9.5	16
14	9.3	44	52	e26	e200	3180	130	79	798	17	20	14
15	9.7	37	50	e25	e180	3200	120	71	460	18	20	13
16	9.4	32	48	e24	e165	1580	120	62	232	17	14	13
17	8.7	38	47	e23	e160	841	115	62	160	16	14	24
18	9.6	41	e42	e22	e160	682	112	62	132	16	13	16
19	9.7	36	e39	e25	e180	606	124	67	104	15	18	14
20	7.6	33	e37	e30	378	536	127	68	85	15	14	13
21	8.6	30	e35	e37	2760	479	342	61	72	18	12	13
22	14	27	e33	e550	3200	424	279	54	63	24	12	13
23	37	25	e40	e1300	1850	359	206	48	55	17	11	14
24	17	26	e54	e900	859	337	174	45	50	15	10	14
25	23	58	82	e750	560	e300	148	661	45	14	9.7	12
26	18	121	60	e580	2500	e275	130	993	43	13	10	11
27	13	120	e45	e500	9120	248	127	487	41	13	9.9	11
28	10	101	e40	e400	9750	255	129	276	39	13	10	10
29	9.4	96	e43	e350	---	260	124	193	36	12	10	9.8
30	7.9	178	47	e300	---	242	120	203	41	11	14	9.2
31	7.5	---	44	e250	---	224	---	206	---	11	23	---
TOTAL	370.5	4439.1	2294	6555	42322	41118	4900	5171	5499	599	371.3	490.0
MEAN	12.0	148	74.0	211	1512	1326	163	167	183	19.3	12.0	16.3
MAX	37	1290	209	1300	9750	9440	342	993	798	51	23	34
MIN	7.5	6.8	33	22	160	224	112	45	36	11	9.0	9.2
CFSM	.01	.17	.09	.24	1.74	1.53	.19	.19	.21	.02	.01	.02
IN.	.02	.19	.10	.28	1.81	1.76	.21	.22	.24	.03	.02	.02

e Estimated

## ILLINOIS RIVER BASIN

## 05587000 MACOUPIN CREEK NEAR KANE, IL--Continued

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1997, BY WATER YEAR (WY)

MEAN	228	324	473	539	741	895	1176	866	522	327	207	184
MAX	4037	3703	3538	3514	3358	3844	6645	5386	4060	3216	3233	3761
(WY)	1927	1947	1983	1950	1982	1978	1927	1929	1945	1981	1946	1926
MIN	2.40	4.54	1.77	.76	3.59	3.82	23.0	2.89	13.6	11.8	6.86	2.38
(WY)	1923	1953	1956	1956	1954	1954	1931	1954	1988	1988	1964	1988

## SUMMARY STATISTICS

## FOR 1996 CALENDAR YEAR

## FOR 1997 WATER YEAR

## WATER YEARS 1921 - 1997

ANNUAL TOTAL	198520.6		114128.9		539	
ANNUAL MEAN	542		313		1883	
HIGHEST ANNUAL MEAN					17.0	
LOWEST ANNUAL MEAN					1927	
HIGHEST DAILY MEAN	15500	Apr 30	9750	Feb 28	32700	May 19 1943
LOWEST DAILY MEAN	6.8	Nov 3	6.8	Nov 3	.00	A
ANNUAL SEVEN-DAY MINIMUM	7.2	Oct 30	7.2	Oct 30	.00	Oct 19 1955
INSTANTANEOUS PEAK FLOW			9920	Feb 28	40100	B Apr 12 1994
INSTANTANEOUS PEAK STAGE			21.68	Feb 28	28.50	May 18 1943
INSTANTANEOUS LOW FLOW			6.1	Oct 20		
ANNUAL RUNOFF (CFSM)	.62		.36		.62	
ANNUAL RUNOFF (INCHES)	8.51		4.89		8.43	
10 PERCENT EXCEEDS	1160		669		1150	
50 PERCENT EXCEEDS	93		50		99	
90 PERCENT EXCEEDS	13		10		7.8	

A - Oct. 19-27, 1955.

B - Gage height, 28.32 ft.



## 05587060 ILLINOIS RIVER AT HARDIN, IL

**LOCATION.**--Lat 39°07'37", long 90°36'55", in NW1/4NW1/4 sec.26, T.10 S., R.2 W., Calhoun County, Hydrologic Unit 07130011, on right bank at downstream side of bridge on State Highways 16 and 100 in Hardin, 1.6 mi downstream from Macoupin Creek and at mile 21.5.

**DRAINAGE AREA.**--28,690 mi<sup>2</sup>, does not include diversion from Lake Michigan through the Chicago Sanitary and Ship Canal, which has occurred since Jan. 17, 1900.

**PERIOD OF RECORD.**--October 1986 to current year (gage heights only). Gage-height record for February 1932 to Sept. 30, 1986, available in files of U.S. Army Corps of Engineers. Partial records from 1878 through 1880 available in files of U.S. Army Corps of Engineers.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 400.00 ft above sea level (levels by U.S. Army Corps of Engineers).

**REMARKS.**--U.S. Army Corps of Engineers satellite telemeter at station.

**EXTREMES FOR PERIOD OF RECORD.**--Maximum gage height, 42.40 ft, Aug. 3, 1993; minimum, 18.06 ft, Dec. 22, 1989.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum gage height, 38.2 ft Apr. 29, 1973; minimum observed, 7.33 ft, Oct. 7, 1879, from records of U.S. Army Corps of Engineers.

**EXTREMES FOR CURRENT YEAR.**--Maximum gage height, 30.67 ft, Mar. 2; minimum, 18.88 ft, Oct. 18.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.43	19.50	19.42	19.74	20.80	30.43	22.59	25.48	20.48	20.97	19.92	19.75
2	19.34	19.54	19.56	19.86	20.80	30.61	22.40	25.05	20.52	20.91	19.74	19.76
3	19.20	19.82	19.62	19.87	21.14	30.33	22.23	24.38	20.48	20.87	19.76	19.73
4	19.44	19.69	19.73	19.75	21.44	30.03	21.98	24.05	20.51	20.86	19.86	19.89
5	19.41	19.61	19.81	19.30	21.60	29.82	21.83	23.88	20.51	20.86	19.91	19.75
6	19.22	19.57	19.87	19.60	21.10	29.71	21.65	23.67	20.34	20.66	19.99	19.55
7	19.05	19.66	19.81	19.61	20.87	29.63	21.44	23.45	20.01	20.22	19.85	19.52
8	19.08	19.65	19.69	19.68	20.93	29.43	21.45	23.23	20.32	19.98	19.76	19.49
9	19.16	19.56	19.82	19.61	21.02	29.00	21.55	22.82	20.63	19.89	19.68	19.60
10	19.06	19.71	19.93	19.33	21.02	29.05	21.60	22.68	20.78	20.07	19.65	19.54
11	19.24	19.67	19.75	19.70	20.97	29.05	21.61	22.72	20.82	20.14	19.69	19.57
12	19.25	19.74	19.77	19.93	20.95	28.68	22.00	22.69	20.84	20.11	19.95	19.62
13	19.20	19.74	19.70	20.02	20.94	28.47	23.09	22.48	20.86	20.08	19.97	19.55
14	19.15	19.60	19.91	20.05	20.79	28.50	24.17	22.10	21.35	20.05	19.82	19.36
15	19.12	19.78	19.91	20.14	20.64	28.48	24.94	21.22	21.60	20.19	19.80	19.48
16	19.22	19.61	19.78	20.10	20.59	28.14	25.46	20.60	21.24	20.18	19.53	19.30
17	19.25	19.49	19.79	20.18	20.44	27.66	25.86	20.28	21.18	20.21	19.68	19.47
18	19.08	19.22	19.83	20.21	20.02	27.24	26.31	19.92	21.46	20.03	19.98	19.49
19	19.25	19.53	19.63	20.37	19.85	26.79	26.88	19.81	21.36	19.92	20.43	19.56
20	19.33	19.72	19.60	20.30	19.92	26.25	27.27	19.83	21.39	19.96	20.60	19.47
21	19.42	19.73	19.71	20.21	20.74	25.84	27.48	20.01	21.38	20.04	20.38	19.65
22	19.44	19.75	19.53	20.23	23.08	25.51	27.57	20.18	21.14	20.24	20.31	19.64
23	19.26	19.72	19.40	20.16	24.18	25.14	27.55	20.04	21.05	20.14	20.18	19.70
24	19.29	19.31	19.18	20.02	24.98	24.77	27.44	19.87	21.13	20.04	20.16	19.75
25	19.47	19.40	19.33	19.93	25.77	24.41	27.25	19.86	21.23	19.87	20.31	19.54
26	19.64	19.51	19.52	20.33	26.71	24.14	27.05	20.29	21.24	19.64	20.33	19.47
27	19.51	19.76	19.50	20.54	28.35	23.82	26.84	20.36	21.22	19.68	19.77	19.58
28	19.41	19.89	19.59	20.75	29.65	23.44	26.62	20.74	21.28	19.91	19.78	19.56
29	19.48	19.78	19.52	21.03	---	23.16	26.33	21.20	21.28	20.23	19.74	19.39
30	19.39	19.55	19.71	20.91	---	22.96	25.98	21.39	21.19	20.20	19.94	19.25
31	19.38	---	19.77	20.84	---	22.77	---	20.98	---	20.11	19.72	---
MEAN	19.30	19.63	19.67	20.07	22.12	27.20	24.55	21.78	20.96	20.20	19.94	19.57
MAX	19.64	19.89	19.93	21.03	29.65	30.61	27.57	25.48	21.60	20.97	20.60	19.89
MIN	19.05	19.22	19.18	19.30	19.85	22.77	21.44	19.81	20.01	19.64	19.53	19.25

WTY YR 1997 MEAN 21.24 MAX 30.61 MIN 19.05

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at miscellaneous sites are given in a separate table.

#### Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined. Datum of gage is in feet above sea level.

#### Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)	Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
ILLINOIS RIVER BASIN								
Mazon River near Coal City (05542000)	Lat 41°17'10", long 88°21'35", in SW1/4SW1/4 sec.31, T.33 N., R.8 E., Grundy County, Hydro- logic Unit 07120005, on right bank at downstream side of bridge on State Highway 113, 0.3 mi downstream from Johnny Run, 3 mi west of Coal City, and at mile 15.0. Datum of gage is 527.41 ft. Drainage area is 455 mi <sup>2</sup> .	1940-95‡, 1997	02-21-97	14.66	13,500	07-15-58 12-04-82	19.70 19.51	17,600 22,400
North Fork Vermilion River near Charlotte, Ill. (05554000)	Lat 40°50'08", long 88°17'58", in SE1/4SE1/4 sec.4, T.27 N., R.8 E., Livingston County, Hydrologic Unit 07130002, at bridge on County Highway 3, 1.2 mi northwest of Charlotte, and 5.5 mi north of Chatsworth. Datum of gage is 638.00 ft. Drainage area is 186 mi <sup>2</sup> .	1943-62‡, 1963-97	02-21-97	12.55	3,020	10-03-86 03-11-90	17.09 16.88	4,900 4,900
East Bureau Creek near Bureau, Ill. (05557500)	Lat 41°20'06", long 89°22'53", in NW1/4NE1/4 sec.31, T.16 N., R.10 E., Bureau County, Hydrologic Unit 07130001, on left bank at downstream side of bridge on County Road , 1300N, 0.5 mi downstream from Brush Creek, 2.5 mi upstream from mouth, and 3.5 mi north of Bureau. Datum of gage is 484.45 ft. Drainage area is 99.0 mi <sup>2</sup> .	1937-66‡, 1967-97	02-21-97	17.09	9,260	05-17-74 02-21-97	17.15 17.09	7,500 9,260

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)	Date	Gage height (feet)	Dis- charge (ft <sup>3</sup> /s)
ILLINOIS RIVER BASIN--Continued								
Kickapoo Creek near Kickapoo, Ill. (05563000)	Lat 40°48'00", long 89°48'00", in SW1/4SE1/4 sec.34, T.10 N., R.6 E., Peoria County, Hydrologic Unit 07130003, at bridge on U.S. Highway 150, 0.8 mi upstream from mouth of the West Fork of Kickapoo Creek and 2.5 mi northwest of Kickapoo. Datum of gage is 514.85 ft. Drainage area is 119 mi <sup>2</sup> .	1945-62‡, 1963-97	02-21-97	16.64	16,200	07-27-67	17.08	27,500
Kickapoo Creek at Peoria, Ill. (05563500)	Lat 40°40'52", long 89°39'19", in NE1/4NW1/4 sec.13, T.8 N., R.7 E., Peoria County, Hydro- logic Unit 07130003, at left bank on pier under bridge on State Highway 116, 0.5 mi west of Peoria, 1.5 mi downstream from Dry Run, and 4.0 mi up- stream from mouth. Datum of gage is 448.37 ft. Drainage area is 297 mi <sup>2</sup> .	1943-71‡, 1972-97	02-21-97	19.04	14,000	06-22-74	29.68	48,500
North Fork Mauvaise Terre Creek near Jacksonville, Ill. (05586000)	Lat 39°45'38", long 90°08'07", in SE1/4NW1/4 sec.8, T.15 N., R.9 W., Morgan County, Hydro- logic Unit 07130011, on left bank at downstream side of bridge on County Road 2550E, 2.5 mi north of Arnold, 4.5 mi upstream from mouth, 6.0 mi east of Jacksonville, and at mile 6.2. Datum of gage is 579.27 ft. Drainage area is 29.1 mi <sup>2</sup> .	1950-75‡, 1976-97	---	<7.51	<227	06-20-91 04-12-94	12.77 12.35	-- 7,160

‡ Operated as a continuous-record gaging station.

-- Not determined.

Discharge at Partial-Record Stations and Miscellaneous Sites

## Miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table.

Discharge measurements made at miscellaneous sites

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
ILLINOIS RIVER BASIN						
05551240	Fox River near Batavia, Ill	Lat 41°51'36", long 88°18'33", in NW1/4SE1/4 sec.15, T.39 N., R.8 E., Kane County, Hydrologic Unit 07120007, 0.7 mi upstream from Wilson Street Bridge at Batavia, and at mile 55.9.	1,660	1969-72	02-23-97	6,060
05551675	Blackberry Creek near Montgomery, Ill	Lat 41°44'27", long 88°22'59", in NW1/4SE1/4 sec.25, T.38 N., R.7 E., Kane County, Hydrologic Unit 07120007, at Jericho Road, near Montgomery.	not determined	1991	02-22-97	1,170
05560500	Farm Creek at Farmdale, Ill.	Lat 40°40'00", long 89°30'15", in NE1/4SE1/4 sec.36, T.26 N., R.4 W., Tazewell County, Hydrologic Unit 07130001, on left bank 200 ft downstream from bridge, 0.2 mi east of Farmdale, 0.2 mi upstream from Norfolk & Western Railway bridge, 0.3 mi downstream from Toledo, Peoria & Western RR. bridge, and at mile 5.7.	27.4	1948-85‡, 1986-96	03-11-97 05-05-97 06-20-97 08-07-97	34.6 11.8 4.56 1.32
05561500	Fondulac Creek at East Peoria, Ill.	Lat 40°40'38", long 89°31'52", on line between SW1/4 and SE1/4 sec.26, T.26 N., R.4 W., Tazewell County, Hydrologic Unit 07130001, on left bank at upstream side of bridge on State Highway 8, 0.2 mi upstream from Norfolk & Western Railway bridge, 3 mi northeast of East Peoria, and at mile 0.4.	5.54	1948-85‡, 1986-96	03-11-97 05-05-97 06-19-97 08-07-97	5.10 .31 0.0 0.0

‡ Operated as a continuous-record gaging station.

-- Not determined.

Miscellaneous Water-Quality AnalysesPRINTED OUTPUTREMARK

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Estimated

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Also published as a continuous-record station.

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Actual value is known to be less than the value shown.

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A laboratory error resulted in two composites of four specimens for this site instead of one composite of eight specimens. Length data is a composite of all eight specimens.

1

Discharge measured at time of sampling.

The water-quality data at these partial-record stations were collected as part of the National Water-Quality Assessment (NAWQA) project in the Lower Illinois River Basin. The data were collected during a low-flow water-chemistry and biological synoptic survey conducted during August 1997.

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DRAIN- AGE AREA (SQ. MI.) (81024)	DIS- <sup>1</sup>	STREAM WIDTH (FT) (00004)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)
					CHARGE, INST. CUBIC FEET PER SECOND (00061)						
		05554000	NORTH FORK VERMILION RIVER NEAR CHARLOTTE, IL (LAT 40 50 08N LONG 088 17 58W)								
AUG 1997 15...	0830	81700	80020	186	4.8	72.0	23.0	619	7.6	89	8.2
		05554490	VERMILION RIVER AT MC DOWELL, IL (LAT 40 49 50N LONG 088 34 29W)								
AUG 199 11...	1040	81700	80020	551	14	142	23.0	626	7.2	85	8.2
		05556500	BIG BUREAU CREEK AT PRINCETON, IL (LAT 41 21 55N LONG 089 29 55W)								
AUG 1997 11...	1520	81700	80020	196	18	37.0	21.5	466	6.8	77	7.8
		05559500	CROW CREEK NEAR WASHBURN, IL (LAT 40 57 15N LONG 089 18 30W)								
AUG 1997 12...	0840	81700	80020	115	6.0	24.0	21.0	1090	7.1	80	7.9
		05563000	KICKAPOO CREEK NEAR KICKAPOO, IL (LAT 40 48 00N LONG 089 48 00W)								
AUG 1997 12...	1330	81700	80020	119	26	27.0	23.0	681	7.8	92	7.9
		05564300	MACKINAW RIVER NEAR KAPPA, IL (LAT 40 40 46N LONG 088 56 26W)								
AUG 1997 14...	1030	81700	80020	309	14	24.0	22.5	613	12.1	140	8.6
		05567000	PANTHER CREEK NEAR EL PASO, IL (LAT 40 46 05N LONG 089 04 30W)								
AUG 1997 14...	1300	81700	80020	93.9	2.0	16.0	21.5	815	7.3	83	7.9
		05567500	MACKINAW RIVER NEAR CONGERVILLE, IL (LAT 40 37 25N LONG 089 14 30W)								
AUG 1997 13...	1300	81700	80020	767	47	58.0	23.5	558	8.6	101	8.1
		05568000	MACKINAW RIVER NEAR GREEN VALLEY, IL (LAT 40 27 15N LONG 089 36 22W)								
AUG 1997 13...	0830	81700	80020	1073	96	105	22.5	553	6.5	75	7.7
		05568800	INDIAN CREEK NEAR WYOMING, IL (LAT 41 01 06N LONG 089 50 07W)								
AUG 1997 04...	1040	81700	80020	62.7	8.5	14.5	26.0	663	7.6	94	8.0
		05568830	SPOON RIVER AT ELMORE, IL (LAT 40 57 25N LONG 089 58 34W)								
AUG 1997 04...	1440	81700	80020	432	50	58.0	26.5	585	9.6	119	8.2
		05569875	CEDAR CREEK NEAR ELLISVILLE, ILL (LAT 40 40 18N LONG 090 22 33W)								
AUG 1997 05...	0940	81700	80020	271	60	67.0	23.0	467	6.3	74	7.4
		05570910	SANGAMON RIVER AT FISHER, IL (LAT 40 18 40N LONG 088 19 20W)								
AUG 1997 15...	1130	81700	80020	240	9.2	34.0	23.0	774	5.2	61	7.7

## Analyses of Samples Collected at Water-Quality Miscellaneous Sites--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997.

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) CAC03 (39036)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CAC03 (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
	05554000 NORTH FORK VERMILION RIVER NEAR CHARLOTTE, IL (LAT 40 50 08N LONG 088 17 58W)										
AUG 1997 15...	53	33	24	3.1	35	89	0.3	4.0	180	184	0
	05554490 VERMILION RIVER AT MC DOWELL, IL (LAT 40 49 50N LONG 088 34 29W)										
AUG 1997 11...	58	39	22	2.3	28	110	0.2	5.1	200	198	5
	05556500 BIG BUREAU CREEK AT PRINCETON, IL (LAT 41 21 55N LONG 089 29 55W)										
AUG 1997 11...	36	19	21	3.5	34	30	0.2	6.3	140	134	0
	05559500 CROW CREEK NEAR WASHBURN, IL (LAT 40 57 15N LONG 089 18 30W)										
AUG 1997 12...	62	33	38	3.4	48	78	0.2	6.3	220	218	0
	05563000 KICKAPOO CREEK NEAR KICKAPOO, IL (LAT 40 48 00N LONG 089 48 00W)										
AUG 1997 12...	48	20	11	3.7	18	39	0.2	7.7	150	150	2
	05564300 MACKINAW RIVER NEAR KAPPA, IL (LAT 40 40 46N LONG 088 56 26W)										
AUG 1997 14...	57	35	17	2.0	27	69	0.2	3.1	220	220	26
	05567000 PANTHER CREEK NEAR EL PASO, IL (LAT 40 46 05N LONG 089 04 30W)										
AUG 1997 14...	61	31	57	4.3	93	46	0.3	11	210	210	2
	05567500 MACKINAW RIVER NEAR CONGERVILLE, IL (LAT 40 37 25N LONG 089 14 30W)										
AUG 1997 13...	59	29	16	2.3	26	37	0.2	7.6	210	212	0
	05568000 MACKINAW RIVER NEAR GREEN VALLEY, IL (LAT 40 27 15N LONG 089 36 22W)										
AUG 1997 13...	46	23	31	2.6	50	24	0.2	6.1	180	180	0
	05568800 INDIAN CREEK NEAR WYOMING, IL (LAT 41 01 06N LONG 089 50 07W)										
AUG 1997 04...	63	33	24	2.5	37	43	0.3	8.0	230	228	0
	05568830 SPOON RIVER AT ELMORE, IL (LAT 40 57 25N LONG 089 58 34W)										
AUG 1997 04...	48	29	28	4.0	42	56	0.2	0.66	350	354	2
	05569875 CEDAR CREEK NEAR ELLISVILLE, ILL (LAT 40 40 18N LONG 090 22 33W)										
AUG 1997 05...	49	22	11	4.5	21	37	0.3	5.7	160	162	10
	05570910 SANGAMON RIVER AT FISHER, IL (LAT 40 18 40N LONG 088 19 20W)										
AUG 1997 15...	54	34	51	2.7	83	73	0.3	4.1	200	204	0

Miscellaneous Water Quality Analyses

## Analyses of Samples Collected at Water-Quality Miscellaneous Sites--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997.

DATE	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) AS N (70300)	NITROGEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	NITROGEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITROGEN,AM- MONIA + ORGANIC DIS. (MG/L) AS N (00623)	NITROGEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITROGEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	PHOSPHORUS PHORUS DIS- TOTAL (MG/L) AS P (00665)	PHOSPHORUS PHORUS DIS- SOLVED (MG/L) AS P (00666)	PHOSPHORUS OTHER DIS- SOLVED (MG/L) AS P (00671)
05554000 NORTH FORK VERMILION RIVER NEAR CHARLOTTE, IL (LAT 40 50 08N LONG 088 17 58W)										
AUG 1997 15...	224	388	0.03	0.02	0.4	1.1	0.11	0.17	0.01	0.02
05554490 VERMILION RIVER AT MC DOWELL, IL (LAT 40 49 50N LONG 088 34 29W)										
AUG 1997 11...	232	408	0.02	<0.01	0.3	0.9	0.08	0.10	<0.01	0.02
05556500 BIG BUREAU CREEK AT PRINCETON, IL (LAT 41 21 55N LONG 089 29 55W)										
AUG 1997 11...	163	243	0.32	0.07	0.8	1.3	0.94	0.62	0.41	0.41
05559500 CROW CREEK NEAR WASHBURN, IL (LAT 40 57 15N LONG 089 18 30W)										
AUG 1997 12...	260	417	0.03	<0.01	0.3	0.6	0.17	0.05	<0.01	0.02
05563000 KICKAPOO CREEK NEAR KICKAPOO, IL (LAT 40 48 00N LONG 089 48 00W)										
AUG 1997 12...	178	257	0.06	0.02	0.4	0.9	0.72	0.17	0.03	0.04
05564300 MACKINAW RIVER NEAR KAPPA, IL (LAT 40 40 46N LONG 088 56 26W)										
AUG 1997 14...	215	370	<0.01	<0.01	0.3	1.3	<0.05	0.15	0.01	0.02
05567000 PANTHER CREEK NEAR EL PASO, IL (LAT 40 46 05N LONG 089 04 30W)										
AUG 1997 14...	251	501	0.15	0.08	0.9	1.2	1.3	0.21	0.14	0.13
05567500 MACKINAW RIVER NEAR CONGERVILLE, IL (LAT 40 37 25N LONG 089 14 30W)										
AUG 1997 13...	259	338	0.02	0.02	0.4	0.8	0.55	0.13	0.05	0.06
05568000 MACKINAW RIVER NEAR GREEN VALLEY, IL (LAT 40 27 15N LONG 089 36 22W)										
AUG 1997 13...	216	323	0.06	0.04	0.3	1.1	1.0	0.28	0.11	0.11
05568800 INDIAN CREEK NEAR WYOMING, IL (LAT 41 01 06N LONG 089 50 07W)										
AUG 1997 04...	274	406	0.10	0.08	0.5	0.9	2.2	0.16	0.07	0.08
05568830 SPOON RIVER AT ELMORE, IL (LAT 40 57 25N LONG 089 58 34W)										
AUG 1997 04...	427	526	0.03	0.06	0.4	1.5	0.61	0.22	<0.01	0.01
05569875 CEDAR CREEK NEAR ELLISVILLE, ILL (LAT 40 40 18N LONG 090 22 33W)										
AUG 1997 05...	176	308	0.08	0.05	0.7	1.0	2.5	0.16	0.06	0.07
05570910 SANGAMON RIVER AT FISHER, IL (LAT 40 18 40N LONG 088 19 20W)										
AUG 1997 15...	249	459	0.08	0.01	0.5	0.9	0.24	0.15	0.07	0.07



## Analyses of Samples Collected at Water-Quality Miscellaneous Sites--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997.

DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	AMETRYN WATER, DISS, REC (UG/L) (38401)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)
<b>05554000 NORTH FORK VERMILION RIVER NEAR CHARLOTTE, IL (LAT 40 50 08N LONG 088 17 58W)</b>										
AUG 1997 15...	4.4	2.5	4	<1	<0.050	<0.050	<0.050	0.950	0.140	0.130
<b>05554490 VERMILION RIVER AT MC DOWELL, IL (LAT 40 49 50N LONG 088 34 29W)</b>										
AUG 1997 11...	7.2	2.3	<3	2	<0.050	<0.050	<0.050	0.220	0.080	0.050
<b>05556500 BIG BUREAU CREEK AT PRINCETON, IL (LAT 41 21 55N LONG 089 29 55W)</b>										
AUG 1997 11...	4.5	3	16	46	0.060	<0.050	<0.050	0.730	0.360	0.100
<b>05559500 CROW CREEK NEAR WASHBURN, IL (LAT 40 57 15N LONG 089 18 30W)</b>										
AUG 1997 12...	2.9	1	4	11	<0.050	<0.050	<0.050	0.080	<0.050	<0.050
<b>05563000 KICKAPOO CREEK NEAR KICKAPOO, IL (LAT 40 48 00N LONG 089 48 00W)</b>										
AUG 1997 12...	4.1	2.2	4	13	<0.050	<0.050	<0.050	0.390	0.100	0.090
<b>05564300 MACKINAW RIVER NEAR KAPPA, IL (LAT 40 40 46N LONG 088 56 26W)</b>										
AUG 1997 14...	4	>5	12	18	<0.050	<0.050	<0.050	0.090	0.050	<0.050
<b>05567000 PANTHER CREEK NEAR EL PASO, IL (LAT 40 46 05N LONG 089 04 30W)</b>										
AUG 1997 14...	5.9	1.3	7	93	<0.050	<0.050	<0.050	0.350	<0.050	0.090
<b>05567500 MACKINAW RIVER NEAR CONGERVILLE, IL (LAT 40 37 25N LONG 089 14 30W)</b>										
AUG 1997 13...	3.9	1.9	<3	25	<0.050	<0.050	<0.050	0.190	0.070	0.070
<b>05568000 MACKINAW RIVER NEAR GREEN VALLEY, IL (LAT 40 27 15N LONG 089 36 22W)</b>										
AUG 1997 13...	3.3	2.6	5	38	<0.050	<0.050	<0.050	0.330	0.050	<0.050
<b>05568800 INDIAN CREEK NEAR WYOMING, IL (LAT 41 01 06N LONG 089 50 07W)</b>										
AUG 1997 04...	4.1	0.9	8	180	<0.050	<0.050	<0.050	0.190	0.070	0.100
<b>05568830 SPOON RIVER AT ELMORE, IL (LAT 40 57 25N LONG 089 58 34W)</b>										
AUG 1997 04...	6.1	>5	10	90	<0.050	<0.050	<0.050	0.370	0.110	0.130
<b>05569875 CEDAR CREEK NEAR ELLISVILLE, ILL (LAT 40 40 18N LONG 090 22 33W)</b>										
AUG 1997 05...	5.8	1.1	9	150	<0.050	<0.050	<0.050	0.300	0.140	0.130
<b>05570910 SANGAMON RIVER AT FISHER, IL (LAT 40 18 40N LONG 088 19 20W)</b>										
AUG 1997 15...	3.8	1.4	10	100	<0.050	<0.050	<0.050	0.130	0.050	0.050

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997.

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## Analyses of Samples Collected at Water-Quality Miscellaneous Sites--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997.

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DRAIN- AGE AREA (SQ. MI.) (81024)	DIS <sup>1</sup> - CHARGE, INST. CUBIC FEET PER SECOND (00061)	STREAM WIDTH (FT) (00004)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	
		<b>05575850 HORSE CREEK AT SPRINGFIELD, IL (LAT 39 41 46N LONG 089 34 21W)</b>									
AUG 1997 08...	0840	81700	80020	129	0.0	23.0	18.5	654	1.8	19 7.4	
		<b>05580000 KICKAPOO CREEK AT WAYNESVILLE, IL (LAT 40 15 20N LONG 089 07 40W)</b>									
AUG 1997 14...	0830	81700	80020	227	16	18.0	20.5	589	7.4	82 7.9	
		<b>05583900 SUGAR CREEK NEAR RAY, IL (LAT 40 11 45N LONG 090 27 16W)</b>									
AUG 1997 06...	0900	81700	80020	118	0.21	2.50	17.5	581	7.1	74 7.7	
		<b>05584500 LA MOINE RIVER AT COLMAR, IL (LAT 40 19 45N LONG 090 53 55W)</b>									
AUG 1997 05...	1520	81700	80020	655	22	46.0	26.5	542	10.7	132 8.0	
		<b>05585800 MC KEE CREEK NEAR VERSAILLES, IL (LAT 39 52 47N LONG 090 45 32W)</b>									
AUG 1997 06...	1110	81700	80020	306	2.0	8.00	22.0	618	6.4	73 7.9	
		<b>05586598 APPLE CREEK AT CR 675NE NR WALKERVILLE, IL (LAT 39 21 35N LONG 090 29 45W)</b>									
AUG 1997 07...	0730	81700	80020	385	3.2	7.00	20.5	614	5.9	66 7.7	
		<b>05586645 MACOUPIN CREEK NEAR CARLINVILLE, IL (LAT 39 18 16N LONG 089 47 15W)</b>									
AUG 1997 07...	1240	81700	80020	132	0.0	66.0	22.5	616	5.8	67 7.9	
		<b>05587000 MACOUPIN CREEK NEAR KANE, IL (LAT 39 14 03N LONG 090 23 40W)</b>									
AUG 1997 07...	0950	81700	80020	868	9.8	43.5	22.0	601	8.6	99 7.8	

Miscellaneous Water Quality Analyses

## Analyses of Samples Collected at Water-Quality Miscellaneous Sites--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997.

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	ALKA- LINITY WAT DIS FIX END FIELD (MG/L) CAC03 (39036)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03 (39086)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)
	<b>05575850 HORSE CREEK AT SPRINGFIELD, IL (LAT 39 41 46N LONG 089 34 21W)</b>										
AUG 1997 08...	68	28	24	2.9	49	33	0.4	12	240	240	0
	<b>05580000 KICKAPOO CREEK AT WAYNESVILLE, IL (LAT 40 15 20N LONG 089 07 40W)</b>										
AUG 1997 14...	66	30	13	2.1	26	45	0.2	5.4	240	236	19
	<b>05583900 SUGAR CREEK NEAR RAY, IL (LAT 40 11 45N LONG 090 27 16W)</b>										
AUG 1997 06...	74	30	7.9	2.9	15	22	0.3	6.6	270	272	0
	<b>05584500 LA MOINE RIVER AT COLMAR, IL (LAT 40 19 45N LONG 090 53 55W)</b>										
AUG 1997 05...	65	24	12	3.6	20	39	0.3	8.0	230	232	0
	<b>05585800 MC KEE CREEK NEAR VERSAILLES, IL (LAT 39 52 47N LONG 090 45 32W)</b>										
AUG 1997 06...	82	26	13	6.1	13	58	0.3	7.0	290	282	22
	<b>05586598 APPLE CREEK AT CR 675ME NR WALKERVILLE, IL (LAT 39 21 35N LONG 090 29 45W)</b>										
AUG 1997 07...	82	27	11	2.6	21	33	0.3	12	280	282	0
	<b>05586645 MACOUPIN CREEK NEAR CARLINVILLE, IL (LAT 39 18 16N LONG 089 47 15W)</b>										
AUG 1997 07...	69	26	22	4.6	40	33	0.5	8.1	250	250	5
	<b>05587000 MACOUPIN CREEK NEAR KANE, IL (LAT 39 14 03N LONG 090 23 40W)</b>										
AUG 1997 07...	72	28	18	2.7	19	49	0.3	7.8	250	250	0

## Analyses of Samples Collected at Water-Quality Partial-Record Stations--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997.

DATE	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L) AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	PHOS- PHORUS DIS- TOTAL (MG/L) AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P) (00671)
<b>05575850 HORSE CREEK AT SPRINGFIELD, IL (LAT 39 41 46N LONG 089 34 21W)</b>										
AUG 1997 08...	293	409	0.11	0.02	0.5	1.1	0.18	0.38	0.12	0.14
<b>05580000 KICKAPOO CREEK AT WAYNESVILLE, IL (LAT 40 15 20N LONG 089 07 40W)</b>										
AUG 1997 14...	249	359	<0.01	0.02	0.3	0.2	0.69	0.03	0.01	0.02
<b>05583900 SUGAR CREEK NEAR RAY, IL (LAT 40 11 45N LONG 090 27 16W)</b>										
AUG 1997 06...	331	361	0.06	<0.01	<0.2	0.5	0.08	0.03	<0.01	0.01
<b>05584500 LA MOYNE RIVER AT COLMAR, IL (LAT 40 19 45N LONG 090 53 55W)</b>										
AUG 1997 05...	283	337	<0.01	0.01	0.3	0.8	0.52	0.12	0.02	0.03
<b>05585800 MC KEE CREEK NEAR VERSAILLES, IL (LAT 39 52 47N LONG 090 45 32W)</b>										
AUG 1997 06...	300	396	0.01	<0.01	0.2	0.9	<0.05	0.10	0.02	0.02
<b>05586598 APPLE CREEK AT CR 675ME NR WALKERVILLE, IL (LAT 39 21 35N LONG 090 29 45W)</b>										
AUG 1997 07...	344	391	0.06	0.04	0.2	0.5	2.2	0.07	0.04	0.06
<b>05586645 MACOUPIN CREEK NEAR CARLINVILLE, IL (LAT 39 18 16N LONG 089 47 15W)</b>										
AUG 1997 07...	295	395	0.06	0.02	0.5	0.9	0.10	0.10	0.04	0.05
<b>05587000 MACOUPIN CREEK NEAR KANE, IL (LAT 39 14 03N LONG 090 23 40W)</b>										
AUG 1997 07...	305	375	0.03	<0.01	0.2	0.9	<0.05	0.13	0.02	0.03

Miscellaneous Water Quality Analyses

## Analyses of Samples Collected at Water-Quality Miscellaneous Sites--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997.

DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	AMETRYN WATER, DISS, REC (UG/L) (38401)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)
<b>05575850 HORSE CREEK AT SPRINGFIELD, IL (LAT 39 41 46N LONG 089 34 21W)</b>										
AUG 1997 08...	840	1.1	15	1000	<0.050	<0.050	<0.050	0.340	0.150	0.180
<b>05580000 KICKAPOO CREEK AT WAYNESVILLE, IL (LAT 40 15 20N LONG 089 07 40W)</b>										
AUG 1997 14...	2.6	1.3	<3	35	<0.050	<0.050	<0.050	0.560	0.070	0.110
<b>05583900 SUGAR CREEK NEAR RAY, IL (LAT 40 11 45N LONG 090 27 16W)</b>										
AUG 1997 06...	3.6	0.70	13	1000	<0.050	<0.050	<0.050	0.560	0.090	0.110
<b>05584500 LA MOINE RIVER AT COLMAR, IL (LAT 40 19 45N LONG 090 53 55W)</b>										
AUG 1997 05...	4.1	1.2	<3	260	<0.050	<0.050	<0.050	0.560	0.200	0.210
<b>05585800 MC KEE CREEK NEAR VERSAILLES, IL (LAT 39 52 47N LONG 090 45 32W)</b>										
AUG 1997 06...	4.2	2.1	5	43	<0.050	<0.050	<0.050	1.49	0.330	0.390
<b>05586598 APPLE CREEK AT CR 675NE NR WALKERVILLE, IL (LAT 39 21 35N LONG 090 29 45W)</b>										
AUG 1997 07...	3.0	1.1	3	240	<0.050	<0.050	<0.050	0.260	0.170	0.180
<b>05586645 MACOUPIN CREEK NEAR CARLINVILLE, IL (LAT 39 18 16N LONG 089 47 15W)</b>										
AUG 1997 07...	7.1	3.6	7	650	<0.050	<0.050	<0.050	<0.600	0.150	0.230
<b>05587000 MACOUPIN CREEK NEAR KAME, IL (LAT 39 14 03N LONG 090 23 40W)</b>										
AUG 1997 07...	4.3	1.3	20	2000	<0.050	<0.050	<0.050	0.280	0.090	0.080

## Analyses of Samples Collected at Water-Quality Miscellaneous Sites--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997.

DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- METRYN, WATER, DISS, REC (UG/L) (04036)	PROP- AZINE WATER DISS REC (UG/L) (38535)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
	<b>05575850 HORSE CREEK AT SPRINGFIELD, IL (LAT 39 41 46N LONG 089 34 21W)</b>									
AUG 1997 08...	<0.050	0.080	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	252	96
	<b>05580000 KICKAPOO CREEK AT WAYNESVILLE, IL (LAT 40 15 20N LONG 089 07 40W)</b>									
AUG 1997 14...	<0.050	0.080	<0.050	0.070	<0.050	<0.050	<0.050	<0.050	72	97
	<b>05583900 SUGAR CREEK NEAR RAY, IL (LAT 40 11 45N LONG 090 27 16W)</b>									
AUG 1997 06...	0.170	0.100	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	53	80
	<b>05584500 LA MOINE RIVER AT COLMAR, IL (LAT 40 19 45N LONG 090 53 55W)</b>									
AUG 1997 05...	0.140	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	59	96
	<b>05585800 MC KEE CREEK NEAR VERSAILLES, IL (LAT 39 52 47N LONG 090 45 32W)</b>									
AUG 1997 06...	0.620	0.160	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	104	61
	<b>05586598 APPLE CREEK AT CR 675NE NR WALKERVILLE, IL (LAT 39 21 35N LONG 090 29 45W)</b>									
AUG 1997 07...	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	136	61
	<b>05586645 MACOUPIN CREEK NEAR CARLINVILLE, IL (LAT 39 18 16N LONG 089 47 15W)</b>									
AUG 1997 07...	0.090	0.080	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	63	96
	<b>05587000 MACOUPIN CREEK NEAR KANE, IL (LAT 39 14 03N LONG 090 23 40W)</b>									
AUG 1997 07...	<0.050	<0.050	<0.050	<0.050	<0.050	--	<0.050	<0.050	86	74

1. Measured discharge.

## Analyses of Samples Collected at Water-Quality Miscellaneous Sites

Analyses of contaminants in streambed sediments of the lower Illinois River Basin

Streambed sediment samples were collected during low-flow conditions at 10 sites as part of the National Water-Quality Assessment (NAWQA) program, in the lower Illinois River Basin to determine the occurrence of trace elements and major metals, organic compounds, and particle size. Composite bed-sediment samples were collected at each site through collection of the top 1 to 2 cm of material from at least 5 different depositional areas. A subsample from the composite sample collected at each site was analyzed for particle size. Additionally, subsamples from the composite were: (1) processed using a 2.0 millimeter stainless-steel mesh sieve for preparation of material for organic contaminant analysis, or (2) processed using a 63-micrometer nylon-cloth sieve for preparation of material for trace element and major metals analysis. Specific details describing the guidelines used in collecting and in processing the streambed sediment samples can be found in Shelton and Capel (1994). Results of the laboratory analyses and measurements recorded at the time of sample collection are summarized in the following tables.

STATION NUMBER		STATION NAME	LATITUDE	LONGITUDE	DATE	TIME
05543500	^	Illinois River at Marseilles	41°19'37"	88°43'03"	10-15-96	1500
05558300	^	Illinois River at Henry	41°06'36"	89°21'00"	10-24-96	1100
05568000	^	Mackinaw River near Green Valley	40°27'15"	89°36'22"	07-28-97	1030
05568500	^	Illinois River at Kingston Mines	40°33'10"	89°46'40"	10-25-96	1030
05570500	^	Illinois River near Havana	40°17'34"	90°04'07"	10-23-96	1100
05580500	^	Kickapoo Creek near Lincoln	40°11'30"	89°21'40"	07-14-97	1330
05582000	^	Salt Creek near Greenview	40°08'01"	89°44'08"	07-15-97	1140
05584500	^	La Moine River at Colmar	40°19'45"	90°53'55"	07-28-97	1540
05586100	^	Illinois River at Valley City	39°42'12"	90°38'43"	10-21-96	1500
05587060	^	Illinois River at Hardin	39°07'37"	90°36'55"	10-22-96	1400

STATION NUMBER		DATE	GAGE HEIGHT (FEET) (00065)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)
05543500	^	10-15-96	--	767	7.8	--	18.5	747	10.3
05558300	^	10-24-96	--	755	7.7	--	13.0	741	8.9
05568000	^	07-28-97	--	588	8.0	29.0	27.5	749	12.5
05568500	^	10-25-96	--	756	8.1	--	--	584	9.8
05570500	^	10-23-96	--	708	7.7	--	13.0	738	8.4
05580500	^	07-14-97	--	665	8.0	33.5	26.5	745	7.6
05582000	^	07-15-97	--	636	8.5	--	27.5	--	9.7
05584500	^	07-28-97	--	453	7.7	--	28.0	--	7.3
05586100	^	10-21-96	--	707	7.6	18.0	15.5	747	8.4
05587060	^	10-22-96	--	714	7.5	--	--	738	8.2

STATION NUMBER		DATE	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	ALKALINITY WATER DIS TOT IT FIELD (MG/L AS CaCO3) (39086)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)
05543500	^	10-15-96	112	164	200	0
05558300	^	10-24-96	87	164	200	0
05568000	^	07-28-97	159	--	--	--
05568500	^	10-25-96	--	174	212	0
05570500	^	10-23-96	83	164	200	0
05580500	^	07-14-97	94	--	--	--
05582000	^	07-15-97	--	--	--	--
05584500	^	07-28-97	93	--	--	--
05586100	^	10-21-96	86	160	195	0
05587060	^	10-22-96	--	166	202	0



Analyses of contaminants in streambed sediments of the lower Illinois River Basin--Continued

STATION NUMBER	DATE	ALUMINUM, BOT MAT <63UM WS FIELD (%) (34790)	ANTIMONY, BOT MAT <63UM WS FIELD (%) (UG/G) (34795)	ARSENIC, BOT MAT <63UM WS FIELD (%) (UG/G) (34800)	BARIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34805)	BERYLLIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34810)	BISMUTH, BOT MAT <63UM WS FIELD (%) (UG/G) (34816)
05543500	^ 10-15-96	5.7	2.0	8.0	440	2	<10
05558300	^ 10-24-96	5.8	1.0	9.6	460	2	<10
05568000	^ 07-28-97	5.0	0.5	7.1	500	1	<10
05568500	^ 10-25-96	5.3	0.7	6.0	460	1	<10
05570500	^ 10-23-96	5.3	0.7	7.0	460	1	<10
05580500	^ 07-14-97	5.1	0.5	6.6	530	1	<10
05582000	^ 07-15-97	5.2	0.5	5.8	520	1	<10
05584500	^ 07-28-97	5.3	0.6	6.1	590	1	<10
05586100	^ 10-21-96	5.4	0.7	7.0	480	1	<10
05587060	^ 10-22-96	5.2	0.6	6.0	480	1	<10

STATION NUMBER	DATE	CADMIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34825)	CALCIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34830)	CERIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34835)	CHROMIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34840)	COBALT, BOT MAT <63UM WS FIELD (%) (UG/G) (34845)	COPPER, BOT MAT <63UM WS FIELD (%) (UG/G) (34850)
05543500	^ 10-15-96	3.5	4.6	66	110	15	66
05558300	^ 10-24-96	2.8	4.1	70	91	13	46
05568000	^ 07-28-97	0.3	4.9	62	45	10	12
05568500	^ 10-25-96	0.7	2.6	75	61	12	21
05570500	^ 10-23-96	0.8	2.2	72	60	11	22
05580500	^ 07-14-97	0.3	1.7	65	47	10	14
05582000	^ 07-15-97	0.4	2.2	63	47	11	20
05584500	^ 07-28-97	0.3	0.88	63	46	10	19
05586100	^ 10-21-96	0.5	1.7	83	63	12	18
05587060	^ 10-22-96	0.5	1.7	81	57	11	17

STATION NUMBER	DATE	EUROPIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34855)	GALLIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34860)	GOLD, BOT MAT <63UM WS FIELD (%) (UG/G) (34870)	HOLMIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34875)	IRON, BOT MAT <63UM WS FIELD (%) (UG/G) (34880)	LANTHANUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34885)
05543500	^ 10-15-96	<2	14	<8	<4	3.5	37
05558300	^ 10-24-96	<2	14	<8	<4	3.2	40
05568000	^ 07-28-97	<2	11	<8	<4	2.3	34
05568500	^ 10-25-96	<2	12	<8	<4	2.6	42
05570500	^ 10-23-96	<2	12	<8	<4	2.6	40
05580500	^ 07-14-97	<2	8	<8	<4	2.4	36
05582000	^ 07-15-97	<2	12	<8	<4	2.5	36
05584500	^ 07-28-97	<2	8	<8	<4	2.4	35
05586100	^ 10-21-96	<2	13	<8	<4	2.7	45
05587060	^ 10-22-96	<2	13	<8	<4	2.5	44

STATION NUMBER	DATE	LEAD, BOT MAT <63UM WS FIELD (%) (UG/G) (34890)	LITHIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34895)	MAGNESIUM, BOT MAT <63UM WS FIELD (%) (UG/G) (34900)	MANGANESE, BOT MAT <63UM WS FIELD (%) (UG/G) (34905)	MERCURY, BOT MAT <63UM WS FIELD (%) (UG/G) (34910)
05543500	^ 10-15-96	86	40	2.2	710	0.32
05558300	^ 10-24-96	60	38	1.9	640	0.30
05568000	^ 07-28-97	18	24	1.5	700	0.02
05568500	^ 10-25-96	29	30	1.4	610	0.05
05570500	^ 10-23-96	29	30	1.1	580	0.06
05580500	^ 07-14-97	19	23	0.88	680	0.02
05582000	^ 07-15-97	20	22	1.0	780	0.03
05584500	^ 07-28-97	15	22	0.50	660	0.03
05586100	^ 10-21-96	26	30	0.93	660	0.03
05587060	^ 10-22-96	24	30	0.88	640	0.03

## Analyses of contaminants in streambed sediments of the lower Illinois River Basin--Continued

STATION NUMBER	DATE	MOLYBDENUM, BOT MAT <63UM WS FIELD (UG/G) (34915)	NEODYMIUM, BOT MAT <63UM WS FIELD (UG/G) (34920)	NICKEL, BOT MAT <63UM WS FIELD (UG/G) (34925)	NIObIUM, BOT MAT <63UM WS FIELD (UG/G) (34930)	PHOSPHORUS, BOT MAT <63UM WS FIELD (%) (34935)
05543500	^ 10-15-96	<2	27	41	12	0.24
05558300	^ 10-24-96	<2	30	35	13	0.17
05568000	^ 07-28-97	<2	29	20	6	0.07
05568500	^ 10-25-96	<2	34	25	13	0.09
05570500	^ 10-23-96	<2	30	25	11	0.08
05580500	^ 07-14-97	<2	29	20	11	0.07
05582000	^ 07-15-97	<2	29	21	9	0.08
05584500	^ 07-28-97	<2	28	21	12	0.06
05586100	^ 10-21-96	<2	39	26	13	0.09
05587060	^ 10-22-96	<2	37	24	12	0.08

STATION NUMBER	DATE	POTASSIUM, BOT MAT <63UM WS FIELD (%) (34940)	SCANDIUM, BOT MAT <63UM WS FIELD (UG/G) (34945)	SELENIUM, BOT MAT <63UM WS FIELD (UG/G) (34950)	SILVER, BOT MAT <63UM WS FIELD (UG/G) (34955)	SODIUM, BOT MAT <63UM WS FIELD (%) (34960)	STRONTIUM, BOT MAT <63UM WS FIELD (UG/G) (34965)
05543500	^ 10-15-96	1.9	10	0.8	1.6	0.53	120
05558300	^ 10-24-96	1.9	10	0.8	1.1	0.59	130
05568000	^ 07-28-97	2.0	8	0.5	0.1	0.79	120
05568500	^ 10-25-96	1.7	9	0.3	0.3	0.80	120
05570500	^ 10-23-96	1.7	9	0.4	0.3	0.81	130
05580500	^ 07-14-97	1.9	8	0.4	0.1	0.75	110
05582000	^ 07-15-97	2.0	8	0.4	0.2	0.79	110
05584500	^ 07-28-97	1.7	8	0.4	0.1	0.84	120
05586100	^ 10-21-96	1.6	9	0.4	0.2	0.82	130
05587060	^ 10-22-96	1.6	9	0.3	0.2	0.85	130

STATION NUMBER	DATE	SULFUR, BOT MAT <63UM WS FIELD (UG/G) (34970)	TANTALUM, BOT MAT <63UM WS FIELD (UG/G) (34975)	THORIUM, BOT MAT <63UM WS FIELD (UG/G) (34980)	TIN, BOT MAT <63UM WS FIELD (UG/G) (34985)	URANIUM, BOT MAT <63UM WS FIELD (UG/G) (35000)	VANADIUM, BOT MAT <63UM WS FIELD (UG/G) (35005)
05543500	^ 10-15-96	0.22	<40	12	<5	4.0	81
05558300	^ 10-24-96	0.12	<40	10	<5	3.7	84
05568000	^ 07-28-97	0.05	<40	12	<5	2.5	62
05568500	^ 10-25-96	0.05	<40	14	<5	3.4	70
05570500	^ 10-23-96	<0.05	<40	12	<5	3.3	70
05580500	^ 07-14-97	<0.05	<40	9	<5	2.8	65
05582000	^ 07-15-97	<0.05	<40	12	<5	2.5	64
05584500	^ 07-28-97	<0.05	<40	13	<5	3.3	69
05586100	^ 10-21-96	<0.05	<40	15	<5	3.4	74
05587060	^ 10-22-96	<0.05	<40	11	<5	3.4	69

STATION NUMBER	DATE	YTTRIUM, BOT MAT <63UM WS FIELD (UG/G) (35010)	YTTERBIUM, BOT MAT <63UM WS FIELD (UG/G) (35015)	ZINC, BOT MAT <63UM WS FIELD (UG/G) (35020)	CARBONATE, SED, BM WS, <63UM DW, REC (%) (49269)	ORGANIC CARBON, SED, BM WS, <63UM DW, REC (%) (49266)	TOTAL CARBON, SED, BM WS, <63UM DW, REC (%) (49267)
05543500	^ 10-15-96	23	2	320	1.9	2.7	4.6
05558300	^ 10-24-96	24	2	280	1.5	2.4	3.9
05568000	^ 07-28-97	25	2	69	1.6	1.4	3.1
05568500	^ 10-25-96	23	2	110	1.0	1.1	2.1
05570500	^ 10-23-96	22	2	110	0.78	1.1	1.9
05580500	^ 07-14-97	25	2	75	0.52	1.3	1.9
05582000	^ 07-15-97	26	2	80	0.69	1.4	2.0
05584500	^ 07-28-97	26	2	67	0.15	0.92	1.1
05586100	^ 10-21-96	24	2	93	0.50	1.0	1.5
05587060	^ 10-22-96	23	2	87	0.51	0.96	1.5

## Analyses of contaminants in streambed sediments of the lower Illinois River Basin--Continued

STATION NUMBER		DATE	ALDRIN, SED, BM WS, <2MM DW, REC (UG/KG) (49319)	CIS- CHLOR- DANE, SED, BM WS, <2MM DW, REC (UG/KG) (49320)	TRANS- CHLOR- DANE, SED, BM WS, <2MM DW, REC (UG/KG) (49321)	CHLORO- NEB, SED, BM WS, <2MM DW, REC (UG/KG) (49322)	DAC- THAL, SED, BM WS, <2MM DW, REC (UG/KG) (49324)	O, P'- DDD, SED, BM WS, <2MM DW, REC (UG/KG) (49325)
05543500	^	10-15-96	<1.0	<1.0	<1.0	<5.0	<5.0	<1.2
05558300	^	10-24-96	<1.0	<1.0	EO.98	<5.0	<5.0	<1.6
05568000	^	07-28-97	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0
05568500	^	10-25-96	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0
05570500	^	10-23-96	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0
05580500	^	07-14-97	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0
05582000	^	07-15-97	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0
05584500	^	07-28-97	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0
05586100	^	10-21-96	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0
05587060	^	10-22-96	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0

STATION NUMBER		DATE	P, P'- DDD, SED, BM WS, <2MM DW, REC (UG/KG) (49326)	O, P'- DDE, SED, BM WS, <2MM DW, REC (UG/KG) (49327)	P, P'-DDE, SED, BM WS, <2MM DW, REC (UG/KG) (49328)	O, P'- DDT, SED, BM WS, <2MM DW, REC (UG/KG) (49329)	P, P'- DDT, SED, BM WS, <2MM DW, REC (UG/KG) (49330)	DIEL- DRIN, SED, BM WS, <2MM DW, REC (UG/KG) (49331)
05543500	^	10-15-96	2.4	<1.0	2.1	<2.0	<2.0	<1.0
05558300	^	10-24-96	4.1	<1.0	2.6	<2.0	<2.0	1.7
05568000	^	07-28-97	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0
05568500	^	10-25-96	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0
05570500	^	10-23-96	1.1	<1.0	1.0	<2.0	<2.0	<1.0
05580500	^	07-14-97	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0
05582000	^	07-15-97	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0
05584500	^	07-28-97	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0
05586100	^	10-21-96	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0
05587060	^	10-22-96	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0

STATION NUMBER		DATE	ENDO- SULFAN I, SED, BM WS, <2MM DW, REC (UG/KG) (49332)	ENDRIN, SED, BM WS, <2MM DW, REC (UG/KG) (49335)	HEPTA- CHLOR, SED, BM WS, <2MM DW, REC (UG/KG) (49341)	HEPTA- CHLOR EPOXIDE, SED, BM WS, <2MM DW, REC (UG/KG) (49342)
05543500	^	10-15-96	<1.0	<2.0	<1.0	<1.0
05558300	^	10-24-96	<1.0	<2.0	<1.0	<1.0
05568000	^	07-28-97	<1.0	<2.0	<1.0	<1.0
05568500	^	10-25-96	<1.0	<2.0	<1.0	<1.0
05570500	^	10-23-96	<1.0	<2.0	<1.0	<1.0
05580500	^	07-14-97	<1.0	<2.0	<1.0	<1.0
05582000	^	07-15-97	<1.0	<2.0	<1.0	<1.0
05584500	^	07-28-97	<1.0	<2.0	<1.0	<1.0
05586100	^	10-21-96	<1.0	<2.0	<1.0	<1.0
05587060	^	10-22-96	<1.0	<2.0	<1.0	<1.0

STATION NUMBER		DATE	ALPHA- HCH, SED, BM WS, <2MM DW, REC (UG/KG) (49338)	BETA- HCH, SED, BM WS, <2MM DW, REC (UG/KG) (49339)	GAMMA- HCH, (LINDANE), SED, BM WS, <2MM DW, REC (UG/KG) (49345)	ISO- DRIN SED, BM WS, <2MM DW, REC (UG/KG) (49344)	METHOXY- CHLOR, O,P'-, SED, BM WS, <2MM DW, REC (UG/KG) (49347)
05543500	^	10-15-96	<1.0	<1.0	<1.0	<1.0	<5.0
05558300	^	10-24-96	<1.0	<1.0	<1.0	<1.0	<5.0
05568000	^	07-28-97	<1.0	<1.0	<1.0	<1.0	<5.0
05568500	^	10-25-96	<1.0	<1.0	<1.0	<1.0	<5.0
05570500	^	10-23-96	<1.0	<1.0	<1.0	<1.0	<5.0
05580500	^	07-14-97	<1.0	<1.0	<1.0	<1.0	<5.0
05582000	^	07-15-97	<1.0	<1.0	<1.0	<1.0	<5.0
05584500	^	07-28-97	<1.0	<1.0	<1.0	<1.0	<5.0
05586100	^	10-21-96	<1.0	<1.0	<1.0	<1.0	<5.0
05587060	^	10-22-96	<1.0	<1.0	<1.0	<1.0	<5.0

## Analyses of contaminants in streambed sediments of the lower Illinois River Basin—Continued

STATION NUMBER	DATE	METHOXY- CHLOR P,P', SED, BM WS, <2MM DW, REC (UG/KG) (49346)	MIREX, SED, BM WS, <2MM DW, REC (UG/KG) (49348)	CIS- NON- ACHLOR, SED, BM WS, <2MM DW, REC (UG/KG) (49316)	TRANS- NON- ACHLOR, SED, BM WS, <2MM DW, REC (UG/KG) (49317)	OXY- CHLOR- DANE, SED, BM WS, <2MM DW, REC (UG/KG) (49318)	PCB, TOTAL SED, BM WS, <2MM DW, REC (UG/KG) (49459)
05543500	^	10-15-96	<5.0	<1.0	<1.0	<1.0	<50
05558300	^	10-24-96	<5.0	<1.0	<1.0	<1.0	57
05568000	^	07-28-97	<5.0	<1.0	<1.0	<1.0	<50
05568500	^	10-25-96	<5.0	<1.0	<1.0	<1.0	<50
05570500	^	10-23-96	<5.0	<1.0	<1.0	<1.0	<50
05580500	^	07-14-97	<5.0	<1.0	<1.0	<1.0	<50
05582000	^	07-15-97	<5.0	<1.0	<1.0	<1.0	<50
05584500	^	07-28-97	<5.0	<1.0	<1.0	<1.0	<50
05586100	^	10-21-96	<5.0	<1.0	<1.0	<1.0	<50
05587060	^	10-22-96	<5.0	<1.0	<1.0	<1.0	<50

STATION NUMBER	DATE	CIS- PER- METHRIN, SED, BM WS, <2MM DW, REC (UG/KG) (49349)	TRANS- PER- METHRIN, SED, BM WS, <2MM DW, REC (UG/KG) (49350)	PENTA- CHLORO- ANISOLE, SED, BM WS, <2MM DW, REC (UG/KG) (49460)	TOXA- PHENE, SED, BM WS, <2MM DW, REC (UG/KG) (49351)	ACENAPH- THENE, SED, BM WS, <2MM DW, REC (UG/KG) (49429)
05543500	^	10-15-96	<5.0	<1.0	<200	E28
05558300	^	10-24-96	<5.0	<1.0	<200	E44
05568000	^	07-28-97	<5.0	<1.0	<200	<50
05568500	^	10-25-96	<5.0	<1.0	<200	<50
05570500	^	10-23-96	<5.0	<1.0	<200	<50
05580500	^	07-14-97	<5.0	<1.0	<200	<50
05582000	^	07-15-97	<5.0	<1.0	<200	<50
05584500	^	07-28-97	<5.0	<1.0	<200	<50
05586100	^	10-21-96	<5.0	<1.0	<200	<50
05587060	^	10-22-96	<5.0	<1.0	<200	<50

STATION NUMBER	DATE	ACENAPH- THYLENE, SED, BM WS, <2MM DW, REC (UG/KG) (49428)	ACRIDINE, SED, BM WS, <2MM DW, REC (UG/KG) (49430)	C8- ALKYL- PHENOL, SED, BM WS, <2MM DW, REC (UG/KG) (49424)	ANTHRA- CENE, SED, BM WS, <2MM DW, REC (UG/KG) (49434)	ANTHRA- QUINONE, SED, BM WS, <2MM DW, REC (UG/KG) (49437)	AZO- BENZENE, SED, BM WS, <2MM DW, REC (UG/KG) (49443)	BENZO(A) ANTHRA- CENE, SED, BM WS, <2MM DW, REC (UG/KG) (49436)
05543500	^	10-15-96	61	E37	<50	100	52	320
05558300	^	10-24-96	220	E47	<50	210	120	680
05568000	^	07-28-97	<50	<50	<50	<50	<50	<50
05568500	^	10-25-96	<50	<50	<50	<50	<50	E35
05570500	^	10-23-96	E23	<50	<50	E34	E38	76
05580500	^	07-14-97	<50	<50	<50	<50	<50	<50
05582000	^	07-15-97	<50	<50	<50	<50	<50	<50
05584500	^	07-28-97	<50	<50	<50	<50	<50	<50
05586100	^	10-21-96	E18	<50	<50	E28	E36	E37
05587060	^	10-22-96	E17	<50	<50	E26	<50	E31

STATION NUMBER	DATE	BENZO(B) FLUOR- ANTHENE, SED, BM WS, <2MM DW, REC (UG/KG) (49458)	BENZO(K) FLUOR- ANTHENE, SED, BM WS, <2MM DW, REC (UG/KG) (49397)	BENZO(G,H,I) PERYLENE, SED, BM WS, <2MM DW, REC (UG/KG) (49408)	BENZO(A) PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49389)	BENZO(C) QUINOLINE, SED MAT WS <2MM DRY WGT REC (UG/KG) (49468)	2,2'- BIQUINO- LINE, SED, BM WS, <2MM DW, REC (UG/KG) (49391)	4- BROMO- PHENYL- ETHER, SED, BM WS, <2MM DW, REC (UG/KG) (49454)
05543500	^	10-15-96	330	280	190	360	<50	<50
05558300	^	10-24-96	E880	700	460	660	<50	<50
05568000	^	07-28-97	<50	<50	<50	<50	<50	<50
05568500	^	10-25-96	E46	E32	E30	E31	<50	<50
05570500	^	10-23-96	91	71	50	84	<50	<50
05580500	^	07-14-97	E12	E11	E11	E15	<50	<50
05582000	^	07-15-97	E13	E12	E11	E16	<50	<50
05584500	^	07-28-97	<50	<50	<50	<50	<50	<50
05586100	^	10-21-96	52	E34	E28	E36	<50	<50
05587060	^	10-22-96	E49	E34	<50	E36	<50	<50

Analyses of contaminants in streambed sediments of the lower Illinois River Basin--Continued

STATION NUMBER		DATE	BUTYL- BENZYL- PHTHAL- ATE, SED, BM WS, <2MM DW, REC (UG/KG) (49427)	9H- CARBAZOLE, SED, BM WS, <2MM DW, REC (UG/KG) (49449)	BIS(2- CHLORO- ETHOXY) METHANE, SED, BM WS, <2MM DW, REC (UG/KG) (49401)	4- CHLORO- 3- METHYL PHENOL, SED, BM WS, <2MM DW, REC (UG/KG) (49422)	2- CHLORO PHENOL, BED MAT WS, <2MM DRY WGT REC (UG/KG) (49467)	2- CHLORO NAPHTHA- LENE, BM SED, BM WS, <2MM DW, REC (UG/KG) (49407)	4- CHLORO PHENYL PHENYL ETHER, SED, BM WS, <2MM DW, REC (UG/KG) (49455)
05543500	^	10-15-96	E40	E29	<50	<50	<50	<50	<50
05558300	^	10-24-96	E81	E38	<50	<50	<50	<50	<50
05568000	^	07-28-97	<50	<50	<50	<50	<50	<50	E8
05568500	^	10-25-96	E40	<50	<50	<50	<50	<50	<50
05570500		10-23-96	50	E22	<50	<50	<50	<50	<50
05580500		07-14-97	E37	<50	<50	<50	<50	<50	<50
05582000	^	07-15-97	E37	<50	<50	<50	<50	<50	<50
05584500	^	07-28-97	E30	<50	E15	<50	<50	<50	<50
05586100	^	10-21-96	51	E23	<50	<50	<50	<50	<50
05587060	^	10-22-96	E42	<50	<50	<50	<50	<50	<50

STATION NUMBER		DATE	P- CRESOL, SED, BM WS, <2MM DW, REC (UG/KG) (49451)	CHRYSENE, SED, BM WS, <2MM DW, REC (UG/KG) (49450)	DIBENZO(A,H) ANTHRA- CENE, SED, BM WS, <2MM DW, REC (UG/KG) (49461)	DIBENZO THIOPHENE, SED, BM WS, <2MM DW, REC (UG/KG) (49452)	1,2- DICHLORO BENZENE, SED, BM WS, <2MM DW, REC (UG/KG) (49439)	1,3- DICHLORO BENZENE, SED, BM WS, <2MM DW, REC (UG/KG) (49441)
05543500	^	10-15-96	E28	320	81	E33	<50	<50
05558300	^	10-24-96	E46	840	140	52	<50	E12
05568000	^	07-28-97	<50	<50	<50	<50	<50	<50
05568500	^	10-25-96	<50	E45	<50	<50	<50	<50
05570500		10-23-96	<50	89	<50	<50	<50	<50
05580500		07-14-97	<50	<50	<50	<50	<50	<50
05582000	^	07-15-97	<50	<50	<50	<50	<50	<50
05584500	^	07-28-97	<50	<50	<50	<50	<50	<50
05586100	^	10-21-96	<50	E48	<50	<50	<50	<50
05587060	^	10-22-96	<50	E43	<50	<50	<50	<50

STATION NUMBER		DATE	1,4- DICHLORO BENZENE, SED, BM WS, <2MM DW, REC (UG/KG) (49442)	DIETHYL PHTHALATE, SED, BM WS, <2MM DW, REC (UG/KG) (49383)	3,5- DIMETHYL PHENOL SED, BM WS, <2MM DW, REC (UG/KG) (49421)	1,2- DIMETHYL NAPH- THALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49403)	1,6- DIMETHYL NAPH- THALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49404)	2,6- DIMETHYL NAPH- THALENE, SED, BM WS, <2MM DW, REC (UG/KG) (49406)
05543500	^	10-15-96	E11	E17	<50	E17	E33	E46
05558300	^	10-24-96	<50	<50	<50	E30	52	85
05568000	^	07-28-97	<50	<50	<50	<50	<50	<50
05568500	^	10-25-96	<50	<50	<50	<50	<50	<50
05570500		10-23-96	<50	E17	<50	E16	E25	E32
05580500		07-14-97	<50	<50	<50	<50	<50	<50
05582000	^	07-15-97	<50	E12	<50	<50	<50	E9
05584500	^	07-28-97	<50	<50	<50	<50	<50	<50
05586100	^	10-21-96	<50	E21	<50	<50	<50	<50
05587060	^	10-22-96	<50	E19	E12	<50	E20	E24

STATION NUMBER		DATE	DIMETHYL PHTHALATE, SED, BM WS, <2MM DW, REC (UG/KG) (49384)	DI-N- BUTYL PHTHALATE, SED, BM WS, <2MM DW, REC (UG/KG) (49381)	2,4- DINITRO TOLUENE, SED, BM WS, <2MM DW, REC (UG/KG) (49395)	2,6- DINITRO TOLUENE, SED, BM WS, <2MM DW, REC (UG/KG) (49396)	DI-N- OCTYL PHTHALATE, SED, BM WS, <2MM DW, REC (UG/KG) (49382)	BIS(2- ETHYL- HEXYL) PHTHALATE, SED, BM WS, <2MM DW, REC (UG/KG) (49426)
05543500	^	10-15-96	<50	53	<50	<50	<50	340
05558300	^	10-24-96	<50	E62	<50	<50	E39	E640
05568000	^	07-28-97	<50	E39	<50	<50	<50	E31
05568500	^	10-25-96	<50	E57	<50	<50	<50	75
05570500		10-23-96	<50	E57	<50	<50	<50	160
05580500		07-14-97	<50	68	<50	<50	<50	E13
05582000	^	07-15-97	<50	59	<50	<50	<50	57
05584500	^	07-28-97	<50	E43	<50	<50	<50	E32
05586100	^	10-21-96	<50	E61	<50	<50	E36	77
05587060	^	10-22-96	<50	E58	<50	<50	<50	91

## Analyses of contaminants in streambed sediments of the lower Illinois River Basin—Continued

			FLUOR- ANTHENE BED MAT WS, <2MM DRY WGT REC (UG/KG) (49466)	9H- FLUORENE SED, BM WS, <2MM DW, REC (UG/KG) (49399)	HEXA- CHLORO BENZENE SED, BM WS, <2MM DW, REC (UG/KG) (49343)	INDENO (1,2,3-CD) PYRENE SED, BM WS, <2MM DW, REC (UG/KG) (49390)	ISO- PHORONE SED, BM WS, <2MM DW, REC (UG/KG) (49400)	ISO- QUINO- LINE, SED, BM WS, <2MM DW, REC (UG/KG) (49394)
STATION NUMBER		DATE						
05543500	^	10-15-96	400	E38	<1.0	290	<50	<50
05558300	^	10-24-96	830	58	<1.0	E980	<50	<50
05568000	^	07-28-97	<50	<50	<1.0	<50	<50	<50
05568500	^	10-25-96	53	<50	<1.0	<50	<50	<50
05570500		10-23-96	100	E23	<1.0	66	<50	<50
05580500		07-14-97	E14	<50	<1.0	E9	<50	<50
05582000	^	07-15-97	E16	<50	<1.0	<50	<50	<50
05584500	^	07-28-97	E7	<50	<1.0	<50	<50	<50
05586100	^	10-21-96	73	<50	<1.0	<50	<50	<50
05587060	^	10-22-96	E45	<50	<1.0	<50	<50	<50

			2- METHYL ANTHRA- CENE, SED, BM WS, <2MM DW, REC (UG/KG) (49435)	4,5- METHYLENE- PHENAN- THRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49411)	1- METHYL -9H- FLUORENE, SED, BM WS, <2MM DW, REC (UG/KG) (49398)	1- METHYL PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49410)	1- METHYL PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49388)	NAPH- THA- LENE, SED, BM WS, <2MM DW, REC (UG/KG) (49402)	NITRO- BENZENE SED, BM WS, <2MM DW, REC (UG/KG) (49444)
05543500	^	10-15-96	67	66	E36	58	100	65	<50
05558300	^	10-24-96	120	160	51	120	210	81	<50
05568000	^	07-28-97	<50	<50	<50	<50	<50	<50	E15
05568500	^	10-25-96	E33	E22	<50	E19	52	<50	<50
05570500		10-23-96	E38	E40	<50	E27	62	E15	<50
05580500		07-14-97	<50	<50	<50	<50	<50	<50	<50
05582000	^	07-15-97	<50	<50	<50	<50	<50	<50	<50
05584500	^	07-28-97	<50	<50	<50	<50	<50	<50	<50
05586100	^	10-21-96	<50	E25	<50	E21	56	<50	<50
05587060	^	10-22-96	E34	E24	<50	E20	54	E8	<50

			N- NITROSO- DIPHENYL- AMINE, SED, BM WS, <2MM DW, REC (UG/KG) (49433)	N- NITROSO- DI-N- PROPYL AMINE, SED, BM WS, <2MM DW, REC (UG/KG) (49431)	PHENAN- THRENE SED, BM WS, <2MM DW, REC (UG/KG) (49409)	PYRENE, SED, BM WS, <2MM DW, REC (UG/KG) (49387)	PENTA- CHLORO- NITRO- BENZENE, SED, BM WS, <2MM DW, REC (UG/KG) (49446)	PHENAN- THRIDINE, SED, BM WS, <2MM DW, REC (UG/KG) (49393)	PHENOL SED, BM WS, <2MM DW, REC (UG/KG) (49413)
05543500	^	10-15-96	<50	<50	200	470	<50	E29	<50
05558300	^	10-24-96	<50	<50	370	1000	<50	<50	E38
05568000	^	07-28-97	<50	<50	<50	<50	<50	<50	E19
05568500	^	10-25-96	<50	<50	E23	62	<50	<50	<50
05570500		10-23-96	<50	<50	54	130	<50	<50	E28
05580500		07-14-97	<50	<50	<50	E6	<50	<50	<50
05582000	^	07-15-97	<50	<50	<50	E6	<50	<50	E10
05584500	^	07-28-97	<50	<50	<50	<50	<50	<50	<50
05586100	^	10-21-96	<50	<50	E30	76	<50	<50	<50
05587060	^	10-22-96	<50	<50	E20	58	<50	<50	<50

			QUINOLINE, SED, BM WS, <2MM DW, REC (UG/KG) (49392)	1,2,4- TRICHLORO- BENZENE, SED, BM WS, <2MM DW, REC (UG/KG) (49438)	2,3,6- TRIMETHYL- NAPHTHA- LENE, SED, BM WS, <2MM DW, REC (UG/KG) (49405)	CARBON ATE, SED, BM WS, <2MM DW, REC (G/KG) (49270)	ORGANIC CARBON, SED, BM WS, <2MM DW, REC (G/KG) (49271)	TOTAL CARBON, SED, BM WS, <2MM DW, REC (G/KG) (49272)
05543500	^	10-15-96	<50	E6	E36	17	11	28
05558300	^	10-24-96	<50	<50	53	20	17	37
05568000	^	07-28-97	<50	<50	<50	12	2.0	14
05568500	^	10-25-96	<50	<50	<50	8.2	4.8	13
05570500		10-23-96	<50	<50	E28	7.1	8.9	16
05580500		07-14-97	<50	<50	<50	7.3	4.7	12
05582000	^	07-15-97	<50	<50	<50	11	3.0	14
05584500	^	07-28-97	<50	E11	<50	0.5	4.4	4.9
05586100	^	10-21-96	<50	<50	<50	4.0	5.2	9.2
05587060	^	10-22-96	<50	<50	<50	4.3	5.6	9.9

Analyses of contaminants in streambed sediments of the lower Illinois River Basin--Continued

STATION NUMBER		DATE	BED MAT. FALL DIAM.DW (%) FINER THAN .002 MM (80294)	BED MAT. FALL DIAM. (%) FINER THAN .004 MM (80157)	BED MAT. FALL DIAM. DW (%) FINER THAN .008 MM (80293)	BED MAT. FALL DIAM. DW (%) FINER THAN .016 MM (80282)	BED MAT. FALL DIAM. DW (%) FINER THAN .031 MM (80283)	BED MAT. SIEVE DIAM. (%) FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. (%) FINER THAN .125 MM (80165)
05543500	^	10-15-96	4	5	5	6	8	12	100
05558300	^	10-24-96	13	15	17	21	28	45	100
05568000	^	07-28-97	10	12	13	19	30	42	100
05568500	^	10-25-96	5	6	7	9	13	21	100
05570500		10-23-96	12	14	15	17	29	47	100
05580500		07-14-97	8	10	11	15	25	32	100
05582000	^	07-15-97	5	6	6	8	13	20	100
05584500	^	07-28-97	8	9	10	15	24	31	100
05586100	^	10-21-96	7	8	9	10	16	27	100
05587060	^	10-22-96	10	11	12	15	24	42	100

## Analyses of Samples Collected at Water-Quality Miscellaneous Sites

Analysis of contaminants in fish tissue of the lower Illinois River Basin

The following results are from the second year of a survey designed to assess the occurrence and distribution of trace elements and major metals, and organochlorine compounds in fish tissue in the Lower Illinois River Basin as part of the National Water-Quality Assessment (NAWQA) program. The following fish species was collected: *Cyprinus carpio* (common carp).

*Concentrations of trace elements and major metals in fish-liver composites*

Each sample for trace elements and major metals analyses consisted of a composite of liver tissue from 8-9 fish. Laboratory procedures included (1) drying, (2) digestion, and (3) analysis by use of inductively coupled plasma emission spectrometry (Al, Ba, B, Cr, Cu, Fe, Mn, Sr, and Zn), inductively coupled plasma mass spectrometry (Sb, As, Be, Cd, Co, Pb, Mo, Ni, Se, Ag, U, and V), or cold vapor atomic absorption (Hg). Abbreviations: DW = dry weight, MM = millimeter, REC = recoverable, SDEV = standard deviation, and UG/G = microgram/gram.

STATION NUMBER	STATION NAME	DATE	SPECIES	NUMBER IN COM- POSITE	TOTAL LENGTH OF FISH			
					MEAN (MM)	SDEV (MM)	MIN (MM)	MAX (MM)
05543500	^ Illinois River at Marseilles, Ill.	10-15-1996	<i>Cyprinus carpio</i>	8	500	50	450	580
05558300	^ Illinois River at Henry, Ill.	10-24-1996	<i>Cyprinus carpio</i>	8	470	110	400	760
05568000	^ Mackinaw River near Green Valley, Ill.	07-16-1997	<i>Cyprinus carpio</i>	8	410	57	330	530
05568500	^ Illinois River at Kingston Mines, Ill.	10-25-1996	<i>Cyprinus carpio</i>	8	450	52	390	540
05570500	^ Illinois River at Havana, Ill.	10-23-1996	<i>Cyprinus carpio</i>	8	440	36	400	520
05580500	^ Kickapoo Creek near Lincoln, Ill.	07-14-1997	<i>Cyprinus carpio</i>	9	480	59	360	550
05582000	^ Salt Creek near Greenview, Ill.	07-15-1997	<i>Cyprinus carpio</i>	8	420	31	380	470
05584500	^ La Moine River at Colmar, Ill.	07-17-1997	<i>Cyprinus carpio</i>	8	480	15	450	490
05586100	^ Illinois River at Valley City, Ill.	10-21-1996	<i>Cyprinus carpio</i>	8	460	90	360	660
05587060	^ Illinois River at Hardin, Ill.	10-22-1996	<i>Cyprinus carpio</i>	8	450	54	380	560

STATION NUMBER	SPECIES	WATER PRESENT, BIOTA TISSUE, DW, REC, PERCENT (49273)	ALUMI- NUM, BIOTA TISSUE, DW, REC, (UG/G) (49237)	ANTI- MONY, BIOTA TISSUE, DW, REC, (UG/G) (49246)	ARSENIC, BIOTA TISSUE, DW, REC, (UG/G) (49247)	BARIUM, BIOTA TISSUE, DW, REC, (UG/G) (49238)	BERYL- LIUM, BIOTA TISSUE, DW, REC, (UG/G) (49248)
05543500	^ <i>Cyprinus carpio</i>	78	14	<0.2	0.2	0.4	<0.2
05558300	^ <i>Cyprinus carpio</i>	73	43	<0.2	0.2	0.5	<0.2
05568000	^ <i>Cyprinus carpio</i>	66	8.2	<0.2	0.3	<0.1	<0.2
05568500	^ <i>Cyprinus carpio</i>	71	8.7	<0.2	<0.2	0.1	<0.2
05570500	^ <i>Cyprinus carpio</i>	77	7.2	<0.3	0.3	<0.1	<0.3
05580500	^ <i>Cyprinus carpio</i>	73	11	<0.2	0.4	0.2	<0.2
05582000	^ <i>Cyprinus carpio</i>	72	9.3	<0.2	0.2	<0.1	<0.2
05584500	^ <i>Cyprinus carpio</i>	69	6.9	<0.2	<0.2	<0.1	<0.2
05586100	^ <i>Cyprinus carpio</i>	72	3.0	<0.2	0.3	<0.1	<0.2
05587060	^ <i>Cyprinus carpio</i>	77	63	<0.2	0.4	0.8	<0.2

STATION NUMBER	SPECIES	BORON, BIOTA TISSUE, DW, REC, (UG/G) (49239)	CAD- MIUM, BIOTA TISSUE, DW, REC, (UG/G) (49249)	CHRO- MIUM, BIOTA TISSUE, DW, REC, (UG/G) (49240)	COBALT, BIOTA TISSUE, DW, REC, (UG/G) (49250)	COPPER, BIOTA TISSUE, DW, REC, (UG/G) (49241)	IRON, BIOTA TISSUE, DW, REC, (UG/G) (49242)
05543500	^ <i>Cyprinus carpio</i>	0.9	30	0.8	0.3	100	1200
05558300	^ <i>Cyprinus carpio</i>	0.8	11	0.6	<0.2	74	770
05568000	^ <i>Cyprinus carpio</i>	0.6	4.1	<0.5	<0.2	97	1100
05568500	^ <i>Cyprinus carpio</i>	0.6	14	0.6	0.2	87	770
05570500	^ <i>Cyprinus carpio</i>	1.2	6.3	0.5	<0.3	190	630
05580500	^ <i>Cyprinus carpio</i>	0.5	6.1	<0.5	<0.2	130	800
05582000	^ <i>Cyprinus carpio</i>	0.6	2.9	<0.5	0.2	90	620
05584500	^ <i>Cyprinus carpio</i>	0.4	3.5	<0.5	<0.2	79	1100
05586100	^ <i>Cyprinus carpio</i>	0.7	4.8	<0.5	<0.2	38	200
05587060	^ <i>Cyprinus carpio</i>	0.6	12	0.7	0.3	120	1100



Analysis of contaminants in fish tissue of the lower Illinois River Basin--Continued*Concentrations of trace elements and major metals in fish-liver composites--Continued*

STATION NUMBER		SPECIES	LEAD, BIOTA TISSUE, DW, REC, (UG/G) (49251)	MANGA- NESE, BIOTA TISSUE, DW, REC, (UG/G) (49243)	MER- CURY, BIOTA TISSUE, DW, REC, (UG/G) (49258)	MOLYB- DENUM, BIOTA TISSUE, DW, REC, (UG/G) (49252)	NICKEL, BIOTA TISSUE, DW, REC, (UG/G) (49253)	SELE- NIUM, BIOTA TISSUE, DW, REC, (UG/G) (49254)
05543500	^	<i>Cyprinus carpio</i>	0.8	5.0	0.2	1.8	0.2	8.2
05558300	^	<i>Cyprinus carpio</i>	0.4	6.7	<0.02	1.0	0.3	6.1
05568000	^	<i>Cyprinus carpio</i>	<0.2	5.6	0.1	0.9	<0.2	5.2
05568500	^	<i>Cyprinus carpio</i>	0.4	3.9	<0.02	1.1	<0.2	3.9
05570500		<i>Cyprinus carpio</i>	0.3	7.5	0.2	1.5	<0.3	4.9
05580500		<i>Cyprinus carpio</i>	<0.2	5.2	0.3	1.2	<0.2	6.4
05582000	^	<i>Cyprinus carpio</i>	<0.2	5.9	0.1	0.9	<0.2	6.0
05584500	^	<i>Cyprinus carpio</i>	<0.2	6.6	0.2	0.9	<0.2	5.2
05586100	^	<i>Cyprinus carpio</i>	<0.2	3.9	0.2	0.9	0.3	4.2
05587060	^	<i>Cyprinus carpio</i>	0.4	11	0.4	1.7	<0.2	5.9

STATION NUMBER		SPECIES	SILVER, BIOTA TISSUE, DW, REC, (UG/G) (49255)	STRON- TIUM, BIOTA TISSUE, DW, REC, (UG/G) (49244)	URA- NIUM, BIOTA TISSUE, DW, REC, (UG/G) (49257)	VANA- DIUM, BIOTA TISSUE, DW, REC, (UG/G) (49465)	ZINC, BIOTA TISSUE, DW, REC, (UG/G) (49245)
05543500	^	<i>Cyprinus carpio</i>	0.8	1.4	<0.2	2.9	650
05558300	^	<i>Cyprinus carpio</i>	0.5	0.9	<0.2	0.9	820
05568000	^	<i>Cyprinus carpio</i>	0.4	0.2	<0.2	0.6	1100
05568500	^	<i>Cyprinus carpio</i>	0.2	0.5	<0.2	2.3	560
05570500		<i>Cyprinus carpio</i>	1.7	0.3	<0.3	1.2	1300
05580500		<i>Cyprinus carpio</i>	0.8	0.6	<0.2	0.7	560
05582000	^	<i>Cyprinus carpio</i>	0.9	0.2	<0.2	0.6	750
05584500	^	<i>Cyprinus carpio</i>	0.3	0.2	<0.2	0.8	640
05586100	^	<i>Cyprinus carpio</i>	<0.2	0.1	<0.2	1.1	600
05587060	^	<i>Cyprinus carpio</i>	0.7	1.3	<0.2	2.2	890

## Analyses of contaminants in fish tissue of the lower Illinois River Basin--Continued

## Concentrations of organochlorine compounds in whole fish

Each sample for organochlorine analyses consisted of a composite from 8 whole fish. Laboratory procedures included (1) homogenization, (2) extraction by use of methylene chloride in a soxhlet apparatus, (3) clean-up by use of gel permeation chromatography, (4) fractionation by use of alumina/silica gel, and (5) analysis by gas chromatography with two dissimilar capillary columns coupled with an electron capture detector. Constituent names are abbreviated as follows DDD, Dichlorodiphenyldichloroethane; DDE, dichlorodiphenyldichloroethene; DCPA, dimethyl tetrachloroterephthalate; DDT, dichlorodiphenyltrichloroethane; HCH, hexachlorocyclohexane; PCB, polychlorinated biphenyls. Other abbreviations include: MM = millimeter, WW = wet weight, REC = recoverable, SE = Standard Deviation, and UG/KG = microgram/kilogram.

STATION NUMBER	STATION NAME	DATE	SPECIES	NUMBER IN COM- POSITE	TOTAL LENGTH OF FISH			
					MEAN (MM)	SD:V (MM)	MIN (MM)	MAX (MM)
05543500	^ Illinois River at Marseilles, Ill.	10-15-1996	<i>Cyprinus carpio</i>	8	490	63	410	590
05558300	^ Illinois River at Henry, Ill.	10-24-1996	<i>Cyprinus carpio</i>	8	430	54	380	550
05568000	^ Mackinaw River near Green Valley, Ill.	07-16-1997	<i>Cyprinus carpio</i>	8	410	57	330	530
05568500	^ Illinois River at Kingston Mines, Ill.	10-25-1996	<i>Cyprinus carpio</i>	8	450	45	390	520
05570500	^ Illinois River at Havana, Ill.	10-23-1996	<i>Cyprinus carpio</i>	8	450	32	410	490
05580500	^ Kickapoo Creek near Lincoln, Ill.	07-14-1997	<i>Cyprinus carpio</i>	8	430	48	360	520
05582000	^ Salt Creek near Greenview, Ill.	07-15-1997	<i>Cyprinus carpio</i>	8	420	19	410	470
05584500	^ La Moine River at Colmar, Ill.	07-17-1997	<i>Cyprinus carpio</i>	8	480	15	450	490
05586100	^ Illinois River at Valley City, Ill.	10-21-1996	<i>Cyprinus carpio</i>	8	460	58	390	560
05587060	^ Illinois River at Hardin, Ill.	10-22-1996	<i>Cyprinus carpio</i>	8	430	35	400	490

STATION NUMBER	SPECIES	SAMPLE WEIGHT SCHE- DULE 2101 (GRAMS) (99852)	LIPIDS, BIOTA TISSUE, WW, REC, PERCENT (49289)	ALDRIN BIOTA TISSUE, WW, REC, (UG/KG) (49353)	CIS- CHLOR- DANE, BIOTA TISSUE, WW, REC, (UG/KG) (49380)	TRANS- CHLOR- DANE, BIOTA TISSUE, WW, REC, (UG/KG) (49379)	DACHAL, BIOTA TISSUE, WW, REC, (UG/KG) (49378)	O,P'- DDD, BIOTA TISSUE, WW, REC, (UG/KG) (49374)
05543500	^ <i>Cyprinus carpio</i>	10	7.0	<5.0	E36	E17	E5.8	E13
05558300	^ <i>Cyprinus carpio</i>	10	7.8	<5.0	E22	E12	<5.0	<5.0
05568000	^ <i>Cyprinus carpio</i>	10	4.5	<5.0	18	17	<5.0	<5.0
05568500	^ <i>Cyprinus carpio</i>	10	12	<15	E27	E14	<5.0	<5.0
05570500	^ <i>Cyprinus carpio</i>	10	10	<5.0	E36	E20	<5.0	<5.0
05580500	^ <i>Cyprinus carpio</i>	10	4.1	<5.0	41	41	<5.0	<5.0
05582000	^ <i>Cyprinus carpio</i>	10	5.0	<5.0	25	18	<5.0	<5.0
05584500	^ <i>Cyprinus carpio</i>	10	6.4	<5.0	19	19	<5.0	<5.0
05586100	^ <i>Cyprinus carpio</i>	10	15	<5.0	E27	E17	<5.0	<5.0
05587060	^ <i>Cyprinus carpio</i>	10	7.9	<5.0	E31	E21	<5.0	<5.0

STATION NUMBER	SPECIES	P,P'- DDD, BIOTA TISSUE, WW, REC, (UG/KG) (49375)	O,P'- DDE, BIOTA TISSUE, WW, REC, (UG/KG) (49373)	P,P'- DDT, BIOTA TISSUE, WW, REC, (UG/KG) (49372)	O,P'- DDT, BIOTA TISSUE, WW, REC, (UG/KG) (49377)	P,P'- DDT, BIOTA TISSUE, WW, REC, (UG/KG) (49376)	DIEL- DRIN, BIOTA TISSUE, WW, REC, (UG/KG) (49371)
05543500	^ <i>Cyprinus carpio</i>	E150	<6.0	390	<5.0	<10	E29
05558300	^ <i>Cyprinus carpio</i>	E44	<5.0	100	<5.0	<5.0	42
05568000	^ <i>Cyprinus carpio</i>	5.5	<5.0	28	<5.0	<5.0	190
05568500	^ <i>Cyprinus carpio</i>	E27	<5.0	71	<5.0	<5.0	54
05570500	^ <i>Cyprinus carpio</i>	E9.8	<5.0	64	<5.0	<5.0	60
05580500	^ <i>Cyprinus carpio</i>	<5.0	<5.0	29	<5.0	<5.0	66
05582000	^ <i>Cyprinus carpio</i>	5.9	<5.0	24	<5.0	<5.0	47
05584500	^ <i>Cyprinus carpio</i>	6.8	<5.0	31	<5.0	<5.0	200
05586100	^ <i>Cyprinus carpio</i>	E21	<5.0	65	<5.0	<5.0	E96
05587060	^ <i>Cyprinus carpio</i>	E20	<5.0	81	<5.0	<5.0	55

Analyses of contaminants in fish tissue of the lower Illinois River Basin--Continued*Concentrations of organochlorine compounds in whole fish--Continued*

STATION NUMBER		SPECIES	ENDRIN, BIOTA TISSUE, WW, REC, (UG/KG) (49370)	HEPTA- CHLOR, BIOTA TISSUE, WW, REC, (UG/KG) (49369)	HEPTA- CHLOR EPOXIDE BIOTA TISSUE, WW, REC, (UG/KG) (49368)	HEXA- CHLORO- BENZENE, BIOTA TISSUE, WW, REC, (UG/KG) (49367)	ALPHA- HCH, BIOTA TISSUE, WW, REC, (UG/KG) (49366)	BETA- HCH BIOTA TISSUE, WW, REC, (UG/KG) (49365)
05543500	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
05558300	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	--	<5.0	--
05568000	^	<i>Cyprinus carpio</i>	<5.0	<5.0	39	<5.0	<5.0	<5.0
05568500	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	--	<5.0	--
05570500	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	--	<7.0	--
05580500	^	<i>Cyprinus carpio</i>	<5.0	<5.0	15	<5.0	<5.0	<5.0
05582000	^	<i>Cyprinus carpio</i>	<5.0	<5.0	15	<5.0	<5.0	<5.0
05584500	^	<i>Cyprinus carpio</i>	<5.0	<5.0	44	<5.0	<5.0	<5.0
05586100	^	<i>Cyprinus carpio</i>	<5.0	<5.0	E16	--	<5.0	--
05587060	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	--	<5.0	--

STATION NUMBER		SPECIES	DELTA- HCH, BIOTA TISSUE, WW, REC, (UG/KG) (49364)	GAMMA- HCH, (LINDANE), BIOTA TISSUE, WW, REC, (UG/KG) (49363)	METHOXY- CHLOR, O,P'-, BIOTA TISSUE, WW, REC, (UG/KG) (49362)	METHOXY- CHLOR, P,P'-, BIOTA TISSUE, WW, REC, (UG/KG) (49361)	MIREX, BIOTA TISSUE, WW, REC, (UG/KG) (49360)	CIS, NONA- CHLOR, BIOTA TISSUE, WW, REC, (UG/KG) (49359)
05543500	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<10	<10	<5.0	<5.0
05558300	^	<i>Cyprinus carpio</i>	<5.0	<14	<5.0	<8.0	<10	7.6
05568000	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	<5.0	<5.0	8.9
05568500	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	<5.0	<10	10
05570500	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	<5.0	<10	12
05580500	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	<5.0	<5.0	18
05582000	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	<5.0	<5.0	11
05584500	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	<5.0	<5.0	9.8
05586100	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	<5.0	<10	14
05587060	^	<i>Cyprinus carpio</i>	<5.0	<5.0	<5.0	<5.0	<10	14

STATION NUMBER		SPECIES	TRANS- NONA- CHLOR, BIOTA TISSUE, WW, REC, (UG/KG) (49358)	OXY- CHLOR DANE, BIOTA TISSUE, WW, REC, (UG/KG) (49357)	PCB, TOTAL, BIOTA TISSUE, WW, REC, (UG/KG) (49354)	PENTA CHLORO ANISOLE BIOTA TISSUE, WW, REC, (UG/KG) (49356)	TOXA- PHENE, BIOTA TISSUE, WW, REC, (UG/KG) (49355)
05543500	^	<i>Cyprinus carpio</i>	E28	E6.3	4400	<5.0	<200
05558300	^	<i>Cyprinus carpio</i>	E24	E7.3	830	<5.0	<200
05568000	^	<i>Cyprinus carpio</i>	34	14	110	<5.0	<200
05568500	^	<i>Cyprinus carpio</i>	E27	E7.4	310	<5.0	<200
05570500	^	<i>Cyprinus carpio</i>	E35	<5.0	450	<6.0	<200
05580500	^	<i>Cyprinus carpio</i>	51	12	<50	<5.0	<200
05582000	^	<i>Cyprinus carpio</i>	41	12	130	<5.0	<200
05584500	^	<i>Cyprinus carpio</i>	36	17	130	5.8	<200
05586100	^	<i>Cyprinus carpio</i>	E33	E9.4	360	<10	<200
05587060	^	<i>Cyprinus carpio</i>	E41	<5.0	190	<5.0	<200



GROUND-WATER RECORDS

Ground-Water Levels

## BUREAU COUNTY

412338089280401. Local number, 16N 9E- 4.1h1.

LOCATION.--Lat 41°23'38", long 89°28'04", Hydrologic Unit 07130001, near intersection of I-80 and State Highway 26 in Princeton.

Owner: Ray Zimmerman.

AQUIFER.--Glacial Drift.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in., depth 225 ft, cased to 221 ft, 2-in. screen.

INSTRUMENTATION.--Manual steel-tape measurement made every 2 months.

DATUM.--Land-surface datum is 685 ft above sea level. Measuring point: Top of casing, 0.0 ft above land-surface datum.

PERIOD OF RECORD.--June 1993 to September 1997 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 132.18 ft below land-surface datum, Oct. 1, 1993; lowest measured, 133.69 ft below land-surface datum, Aug 4, 1997.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	133.49	DEC 09	133.41	FEB 05	133.50	MAR 31	132.98	JUN 09	132.93	AUG 04	133.69

Ground-Water Levels

341

DE KALB COUNTY

414608088375201. Local number, 38N 5E-14.4d1.

LOCATION.--Lat 41°46'08", long 88°37'52", Hydrologic Unit 07120007, Village of Hinckley, Well 3.

Owner: Village of Hinckley.

AQUIFER.--Galena, Platteville, and Ancell Groups of Ordovician age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 12 in., depth 573 ft, cased to 120 ft, open hole.

INSTRUMENTATION.--Manual steel-tape measurement made every 2 months.

DATUM.--Land-surface datum is 740 ft above sea level. Measuring point: Access hole to casing, 3.2 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown cone.

PERIOD OF RECORD.--October 1992 to September 1997 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.85 ft below land-surface datum, April 19, 1995;  
lowest measured, 31.62 ft below land-surface datum, Aug. 5, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	25.36	DEC 10	28.82	FEB 04	28.63	APR 01	28.38	JUN 10	29.28	AUG 05	31.62

### Ground-Water Levels

## DU PAGE COUNTY

414217087592801. Local number, 37N11E- 9.8c1.

**LOCATION.**--Lat 41°42'17", long 87°59'28", Hydrologic Unit 07120004, at Argonne National Laboratory.

**Owner: Argonne National Laboratory.**

**AQUIFER.--Niagara Dolomite of Middle Silurian Age.**

**WELL CHARACTERISTICS.**--Drilled unused artesian well, diameter 4.0 in., depth 140 ft, cased to 90.0 ft, open end.

**INSTRUMENTATION.**--Electronic data logger--60-minute recording.

**DATUM.**--Land-surface datum is 733 ft above sea level. Measuring point: Top of casing, 0.31 ft above land-surface datum.

REMARKS.--Water levels affected by pumping of nearby wells and regional drawdown cone.

**PERIOD OF RECORD.**--December 1948 to September 1997 (discontinued).

REVISID RECORDS.--WDR IL-79-2: 1978.

**EXTREMES FOR PERIOD OF RECORD.**--Highest water level, 88.97 ft below land-surface datum, May 27, 1951; lowest, 106.19 ft below land-surface datum, Feb. 25, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MAXIMUM VALUES

[illegible]



## GRUNDY COUNTY

412720088153201. Local number, 34N 8E- 1.3e1.

LOCATION.--Lat 41°27'20", long 88°15'32", Hydrologic Unit 07120004, Village of Minooka, Well 3.

Owner: Village of Minooka.

AQUIFER.--Ancell and Prairie du Chien Groups of Ordovician age and Ironton and Galesville Sandstones of Cambrian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 12 in., depth 1,508 ft, cased to 892 ft, open hole.

INSTRUMENTATION.--Manual steel-tape measurement made every 2 months.

DATUM.--Land-surface datum is 610 ft above sea level. Measuring point: Access hole to casing, 1.6 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown cone.

PERIOD OF RECORD.--June 1992 to September 1997 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 346.91 ft below land-surface datum, April 19, 1995;  
lowest measured, 360.18 ft below land-surface datum, Mar. 27, 1996.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	359.09	DEC 10	355.08	FEB 04	355.57	APR 01	357.02	JUN 11	362.49 R	AUG 05	P

R, Recently pumped.

P, Pumping, no water level measured

Ground-Water Levels

## KENDALL COUNTY

413152088342801. Local number, 35N 6E- 5.6a1.

LOCATION.--Lat 41°31'52", long 88°34'28", Hydrologic Unit 07120007, Village of Newark, Well 3.

Owner: Village of Newark.

AQUIFER.--Ansell and Prairie du Chien Groups of Ordovician age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 10 in., depth 336 ft, cased to 211 ft, open hole.

INSTRUMENTATION.--Manual steel-tape measurement made every 2 months.

DATUM.--Land-surface datum is 690 ft above sea level. Measuring point: Access hole at base of pump, 1.7 ft above land-surface datum.

PERIOD OF RECORD.--February 1993 to September 1997 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.64 ft below land-surface datum, June 3, 1993; lowest measured, 85.69 ft below land-surface datum, Feb 4, 1997.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	84.52	FEB 04	85.69	APR 01	85.02	JUN 10	86.15 R	AUG 05	P

## LAKE COUNTY

422803087475301. Local number, 46N12E-14.6g1.

LOCATION.--Lat 42°28'03", long 87°47'53", Hydrologic Unit 04040002, at Illinois Beach State Park, northern unit.

Owner: U.S. Geological Survey.

AQUIFER.--Galena, Platteville, and Ancell Groups of Ordovician age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 940 ft, cased to 589 ft, unscreened.

INSTRUMENTATION.--Electronic data logger--60-minute recording.

DATUM.--Land-surface datum is 586 ft above sea level. Measuring point: Top coupling on 1.25-in. plastic pipe, 2.73 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown cone. The water quality from this well is sampled about every 3 years.

PERIOD OF RECORD.--November 1988 to September 1997 (discontinued). Miscellaneous water-level measurements from December 1981 to November 1988 are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 209.20 ft below land-surface datum, July 2, 1997; lowest, 235.35 ft below land-surface datum, Oct. 30, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	212.08	211.85	211.71	211.35	211.30	210.64	210.22	210.20	209.78	209.67	210.14	210.15
10	211.99	211.95	211.68	211.25	211.16	210.58	210.60	210.25	209.85	209.80	210.08	209.94
15	211.89	212.24	211.65	211.62	211.12	210.80	210.29	210.01	209.63	209.81	209.78	210.20
20	211.81	211.77	211.80	211.59	211.05	210.37	210.06	210.10	209.48	209.96	209.96	210.28
25	211.83	211.89	211.84	211.63	211.00	210.34	210.32	209.82	209.55	209.94	210.03	210.10
EOM	212.91	212.55	211.63	211.10	210.69	210.60	210.03	209.89	209.49	210.25	210.06	210.21
WATER YEAR 1997	HIGH		209.20		JULY 2		LOW		212.27		NOV 13	

Ground-Water Levels

## LAKE COUNTY

422803087475302. Local number, 46N12E-14.6g2.

LOCATION.--Lat 42°28'03", long 87°47'53", Hydrologic Unit 04040002, at Illinois Beach State Park, northern unit.

Owner: U.S. Geological Survey.

AQUIFER.--Lower Mount Simon Sandstone of Cambrian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, one of three piezometers in 10-in. borehole, diameter 1.25 in., depth 2,264 ft, cased to 2,244 ft, 2-in. screen.

INSTRUMENTATION.--Electronic data logger--60-minute recording.

DATUM.--Land-surface datum is 586 ft above sea level. Measuring point: Top coupling on 1.25-in. plastic pipe, 2.67 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown cone. The water level recovered from pumping, done to obtain a water sample, during the period November to March. The water quality from this well is sampled about every 3 years.

PERIOD OF RECORD.--November 1988 to September 1997 (discontinued). Miscellaneous water-level measurements from December 1981 to November 1988 are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 197.88 ft below land-surface datum, Dec. 14, 1988; lowest, 208.37 ft below land-surface datum, Nov. 6, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	200.92	200.57	200.43	200.22	200.44	200.07	199.70	199.67	199.44	---	199.61	199.13
10	200.80	200.68	200.40	200.02	200.37	200.03	200.15	199.82	199.60	---	199.45	198.83
15	200.66	200.97	200.42	200.42	200.36	200.30	199.86	199.64	199.36	---	199.03	199.00
20	200.54	200.49	200.57	200.44	200.32	199.89	199.66	199.75	199.20	---	199.17	199.01
25	200.54	200.64	200.65	200.52	200.43	199.87	199.95	199.45	---	---	199.17	198.70
EOM	200.62	200.23	200.48	199.96	200.12	200.13	199.43	199.55	---	---	199.10	198.61
WATER YEAR 1997	HIGH		198.20		SEPT 29		LOW		201.00		OCT 3, NOV 12, 13	

## LAKE COUNTY

422803087475303. Local number, 46N12E-14.6g3.

LOCATION.--Lat 42°28'03", long 87°47'53", Hydrologic Unit 04040002, at Illinois Beach State Park, northern unit.

Owner: U.S. Geological Survey.

AQUIFER.--Elmhurst Sandstone member of the Eau Claire Formation and the upper Mount Simon Sandstone of Cambrian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, one of three piezometers in 10-in. borehole, diameter 1.25 in., depth 1,686 ft, cased to 1,666 ft, 2-in. screen.

INSTRUMENTATION.--Electronic data logger--60-minute recording.

DATUM.--Land-surface datum is 586 ft above sea level. Measuring point: Top coupling on 1.25-in. plastic pipe, 2.67 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown cone. The water quality from this well is sampled about every 3 years.

PERIOD OF RECORD.--November 1988 to September 1997 (discontinued). Miscellaneous water-level measurements from December 1981 to

November 1988 are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 207.70 ft below land-surface datum, July 2, 1997; lowest, 232.7 ft below land-surface datum, Oct. 18, Nov. 12, 18, 19, 28, 29, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	210.65	210.18	209.93	209.58	209.76	209.30	208.76	208.61	208.26	208.18	208.40	208.41
10	210.52	210.26	209.86	209.38	209.67	209.22	209.23	208.72	208.41	208.25	208.31	208.16
15	210.35	210.56	209.88	209.81	209.65	209.48	208.90	208.50	208.17	208.12	207.97	208.42
20	210.21	210.04	210.01	209.79	209.59	209.03	208.64	208.60	208.03	208.21	208.23	208.55
25	210.18	210.17	210.08	209.85	209.70	208.99	208.93	208.30	208.12	208.22	208.33	208.32
EOM	210.24	209.73	209.89	209.27	209.36	209.23	208.37	208.38	208.04	208.57	208.36	208.42
WATER YEAR 1997	HIGH		207.70			JULY 2		LOW		210.75		OCT 3

Ground-Water Levels

## LAKE COUNTY

422803087475304. Local number, 46N12E-14.6g4.

LOCATION.--Lat 42°28'03", long 87°47'53", Hydrologic Unit 04040002, at Illinois Beach State Park, northern unit.

Owner: U.S. Geological Survey.

AQUIFER.--Ironton and Galesville Sandstones of Cambrian age.

WELL CHARACTERISTICS.--Drilled unused artesian well, one of three piezometers in 10-in. borehole, diameter 1.25 in., depth 1,203 ft, cased to 1,183 ft, 2-in. screen.

INSTRUMENTATION.--Electronic data logger--60-minute recording.

DATUM.--Land-surface datum is 586 ft above sea level. Measuring point: Top coupling on 1.25-in. plastic pipe, 2.73 ft above land-surface datum.

REMARKS.--Water level affected by regional drawdown cone. The water quality from this well is sampled about every 2 years.

PERIOD OF RECORD.--November 1988 to September 1997 (discontinued). Miscellaneous water-level measurements from December 1981 to November 1988 are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 207.61 ft below land-surface datum, June 16, 1997; lowest, 235.66 ft below land-surface datum, Dec. 22, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	211.12	210.72	210.32	209.76	209.76	208.92	208.63	208.48	208.13	208.31	208.80	208.93
10	211.08	210.76	210.23	209.58	209.65	208.82	209.08	208.58	208.26	208.41	208.78	208.97
15	210.94	211.04	210.22	209.97	209.59	209.13	208.74	208.37	208.04	208.76	208.50	209.23
20	210.81	210.50	210.30	209.89	209.52	208.72	208.47	208.48	207.89	208.81	208.73	209.51
25	210.78	210.60	210.33	209.93	209.43	208.67	208.78	208.17	207.98	208.72	208.83	209.19
EOM	210.82	210.15	210.10	209.34	209.07	209.09	208.23	208.25	207.92	208.97	208.83	209.20
WATER YEAR 1997	HIGH			207.61	JUNE 16			LOW	211.21	OCT 3		

### Concentrations of selected chemicals in ground water - lower Illinois River Basin

Ground-water-quality samples were collected as part of the National Water Quality Assessment (NAWQA) program of the lower Illinois River Basin. These analyses were collected to determine the broad-scale ambient water quality in the Quaternary aquifer as part of the ground-water study-unit survey. A random stratified approach was used to select wells sampled. All wells are private water supplies. Specific details describing the site selection process are defined in Scott (1990) and guidelines for collecting and processing the ground-water samples are found in Koterba, Wilde, and Lapham (1995). Samples were collected and analyzed by the USGS, and are from Quaternary age aquifers.

[illegible]

TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOPHOS- PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM, DIS- SOLVED (UG/L AS CD) (01025)
------	--	---	---	--	---	--	--	---	---	---	--

		CHRISTIAN COUNTY										
10-01-96	1100	0.890	0.540	0.50	<0.010	<0.010	--	--	--	--	--	--
10-01-96	1109	--	--	--	--	--	2.00	<1	1	110	<1	<1.0
		GREENE COUNTY										
10-02-96	1300	0.140	0.320	0.30	<0.010	<0.010	--	--	--	--	--	--
10-02-96	1309	--	--	--	--	--	3.00	<1	<1	33	<1	<1.0
		PEORIA COUNTY										
11-05-96	1100	<0.050	0.300	0.30	<0.010	0.010	--	--	--	--	--	--
11-05-96	1109	--	--	--	--	--	3.00	<1	1	270	<1	<1.0
		SCHUYLER COUNTY										
10-22-96	1300	3.70	0.020	<0.20	<0.010	0.010	--	--	--	--	--	--
10-22-96	1309	--	--	--	--	--	5.00	<1	<1	61	<1	<1.0
DATE	TIME	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
		CHRISTIAN COUNTY										
10-01-96	1100	--	--	--	10	--	71	--	--	--	--	--
10-01-96	1109	2	<1	<1	--	<1	76	2	1	<1	<1.0	9
		GREENE COUNTY										
10-02-96	1300	--	--	--	510	--	86	--	--	--	--	--
10-02-96	1309	10	<1	11	--	<1	90	<1	6	<1	<1.0	17
		PEORIA COUNTY										
11-05-96	1100	--	--	--	2700	--	50	--	--	--	--	--
11-05-96	1109	6	<1	<1	--	<1	51	2	<1	<1	<1.0	34
		SCHUYLER COUNTY										
10-22-96	1300	--	--	--	<3	--	<1	--	--	--	--	--
10-22-96	1309	4	<1	5	--	<1	<1	<1	2	1	<1.0	39
DATE	TIME	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	LINDANE, DIS-SOLVED (UG/L) (39341)	MALATHION, DIS-SOLVED (UG/L) (39532)	PARATHION, DIS-SOLVED (UG/L) (39542)	PROPACHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	PRO-METON, WATER, DISS, REC (UG/L) (04037)
		CHRISTIAN COUNTY										
10-01-96	1100	--	1.2	<0.002	<0.001	<0.004	<0.005	<0.004	<0.007	<0.002	<0.005	E0.010
10-01-96	1109	<1.0	--	--	--	--	--	--	--	--	--	--
		GREENE COUNTY										
10-02-96	1300	--	2.7	<0.002	<0.001	<0.004	<0.005	<0.004	<0.007	<0.002	<0.005	<0.018
10-02-96	1309	4.0	--	--	--	--	--	--	--	--	--	--
		PEORIA COUNTY										
11-05-96	1100	--	0.90	<0.002	<0.001	<0.004	<0.005	<0.004	<0.007	<0.002	<0.005	<0.018
11-05-96	1109	<1.0	--	--	--	--	--	--	--	--	--	--
		SCHUYLER COUNTY										
10-22-96	1300	--	0.80	<0.002	<0.001	<0.004	<0.005	<0.004	<0.007	<0.002	<0.005	<0.018
10-22-96	1309	<1.0	--	--	--	--	--	--	--	--	--	--



		DEETHYL- ATRA- ZINE, DISS, REC (UG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER, DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	P. P' DDE DISSOLV (UG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CAC03 (39086)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALA- CHLO <sup>3</sup> , WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)
CHRISTIAN COUNTY												
10-01-96	1100	<0.002	<0.004	<0.003	<0.002	<0.006	<0.004	351	<0.002	<0.001	<0.002	<0.002
10-01-96	1109	--	--	--	--	--	--	--	--	--	--	--
GREENE COUNTY												
10-02-96	1300	<0.002	<0.004	<0.003	<0.002	<0.006	<0.004	--	<0.002	<0.001	<0.002	<0.002
10-02-96	1309	--	--	--	--	--	--	659	--	--	--	--
PEORIA COUNTY												
11-05-96	1100	<0.002	<0.004	<0.003	<0.002	<0.006	<0.004	397	<0.002	<0.001	<0.002	<0.002
11-05-96	1109	--	--	--	--	--	--	--	--	--	--	--
SCHUYLER COUNTY												
10-22-96	1300	<0.002	<0.004	<0.003	<0.002	<0.006	<0.004	327	<0.002	<0.001	<0.002	<0.002
10-22-96	1309	--	--	--	--	--	--	--	--	--	--	--
DATE	TIME	RADON 222 TOTAL (PCI/L) (82303)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2, 6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPIC WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)
CHRISTIAN COUNTY												
10-01-96	1100	210	<0.004	<0.003	<0.002	<0.004	<0.002	<0.007	<0.002	<0.006	<0.002	<0.004
10-01-96	1109	--	--	--	--	--	--	--	--	--	--	--
GREENE COUNTY												
10-02-96	1300	--	<0.004	<0.003	<0.002	<0.004	<0.002	<0.007	<0.002	<0.006	<0.002	<0.004
10-02-96	1309	--	--	--	--	--	--	--	--	--	--	--
PEORIA COUNTY												
11-05-96	1100	130	<0.004	<0.003	<0.002	<0.004	<0.002	<0.007	<0.002	<0.006	<0.002	<0.004
11-05-96	1109	--	--	--	--	--	--	--	--	--	--	--
SCHUYLER COUNTY												
10-22-96	1300	400	<0.004	<0.003	<0.002	<0.004	<0.002	<0.007	<0.002	<0.006	<0.002	<0.004
10-22-96	1309	--	--	--	--	--	--	--	--	--	--	--
DATE	TIME	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
CHRISTIAN COUNTY												
10-01-96	1100	<0.010	<0.004	<0.003	<0.002	<0.003	<0.013	<0.003	<0.017	<0.001	<0.004	<0.003
10-01-96	1109	--	--	--	--	--	--	--	--	--	--	--
GREENE COUNTY												
10-02-96	1300	<0.010	<0.004	<0.003	<0.002	<0.003	<0.013	<0.003	<0.017	<0.001	<0.004	<0.003
10-02-96	1309	--	--	--	--	--	--	--	--	--	--	--
PEORIA COUNTY												
11-05-96	1100	<0.010	<0.004	<0.003	<0.002</							

Quality of Ground Water

## Concentrations of selected chemicals in ground water - lower Illinois River Basin--Continued

DATE	TIME	THIO- BENCARB WATER FLTRD 0.7 U	DCPA WATER FLTRD 0.7 U	PENDI- METH- ALIN WAT FLT 0.7 U	NAPROP- AMIDE WATER FLTRD 0.7 U	PRO- PARGITE WATER FLTRD 0.7 U	METHYL AZIN- PHOS WAT FLT 0.7 U	PER- METHRIN CIS WAT FLT 0.7 U
		GF, REC (UG/L) (82681)	GF, REC (UG/L) (82682)	GF, REC (UG/L) (82683)	GF, REC (UG/L) (82684)	GF, REC (UG/L) (82685)	GF, REC (UG/L) (82686)	GF, REC (UG/L) (82687)
		CHRISTIAN COUNTY						
10-01-96	1100	<0.002	<0.002	<0.004	<0.003	<0.013	<0.001	<0.005
10-01-96	1109	--	--	--	--	--	--	--
GREENE COUNTY								
10-02-96	1300	<0.002	<0.002	<0.004	<0.003	<0.013	<0.001	<0.005
10-02-96	1309	--	--	--	--	--	--	--
PEORIA COUNTY								
11-05-96	1100	<0.002	<0.002	<0.004	<0.003	<0.013	<0.001	<0.005
11-05-96	1109	--	--	--	--	--	--	--
SCHUYLER COUNTY								
10-22-96	1300	<0.002	<0.002	<0.004	<0.003	<0.013	<0.001	<0.005
10-22-96	1309	--	--	--	--	--	--	--

## 414552087585600 CLARENDON HILLS CEMETARY AT DARIEN, IL

LOCATION.--Latitude 41°45'52", longitude 87°58'56", in NW1/4NW1/4SE1/4 sec.21, T.38 N., R.11 E., Du Page County, on the northern perimeter of the cemetery road, within Clarendon Hills Cemetery in Darien.

## PRECIPITATION RECORDS

PERIOD OF RECORD.--February 21, 1986 to current year.

GAGE.--An 8-in.-diameter, unheated, tipping-bucket rain gage

REMARKS.--Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to appreciable errors.

MAXIMUM FOR PERIOD OF RECORD.--Maximum recorded, 3.79 in., July 18, 1996.

MAXIMUM FOR WATER YEAR 1996.--Maximum recorded, 3.79 in., July 18, but may have been greater during periods of missing record.

WATER YEAR 1997.--Maximum recorded, 2.26 in., Feb. 21, but may have been greater during periods of missing record.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.63	.00	.00	.00	.00	.00	.00	.55	.00	.00	.00
2	.00	.12	.00	.00	.00	.00	.00	.00	.36	.00	.00	.00
3	.02	.00	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.01	.01	.00	.33	.00	.00	.00
5	.16	.00	.07	.00	.00	.32	.00	.02	.00	.00	.00	.00
6	1.04	.02	.00	.00	.00	.00	.00	.00	.26	.00	.00	.00
7	.00	.00	.00	.00	s.07	.00	.00	.04	.00	.00	.42	.00
8	.00	.00	.00	.00	.08	.00	.00	.03	.00	.00	.01	.34
9	.00	.00	.00	.00	.00	.00	.00	.76	.28	.00	.00	.00
10	.00	2.71	.00	.00	.00	s.03	.00	.26	.02	.00	.00	.00
11	.00	s.02	.00	.00	.00	.00	.00	.00	.08	.00	.00	.48
12	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00
13	.05	.00	s.07	s.03	.00	.00	.00	.00	.00	.00	.00	.00
14	.12	.00	s.17	.00	.00	.00	.23	.02	.00	.15	.00	.00
15	.00	---	.00	.00	.00	.00	.33	.00	.00	.02	.00	.00
16	.00	---	.00	.00	.00	.00	.00	.19	.28	.00	.00	.00
17	.00	---	.00	s.24	.00	.00	.00	.00	1.08	3.00	.00	.00
18	.00	---	.00	.99	.00	.00	.89	.00	.00	3.79	.10	.00
19	.53	.00	.00	.00	s.02	.00	.32	.00	.02	.00	.00	.00
20	.46	---	.00	.00	.00	.00	.00	.30	.00	.00	.00	---
21	.06	.00	.00	.00	.00	.00	.00	.00	.00	.26	.10	---
22	.00	.00	.00	.01	.00	.00	.20	.00	.00	.01	.43	---
23	---	.00	.00	.06	.00	.00	.00	.37	.14	.00	.00	---
24	.00	.00	.00	.00	.00	.39	.01	.78	.11	.16	.00	---
25	.00	.00	.00	.00	.00	.00	.43	.25	.00	.00	.00	---
26	.17	.00	.00	---	.25	.00	.00	.02	.00	.00	.00	---
27	.20	.18	.00	---	.33	.00	.00	.42	.00	.05	.00	---
28	.11	.00	.00	.00	.00	.00	.06	1.63	.00	.38	.00	.00
29	.04	.00	.00	.00	.00	.00	.50	.04	.00	.05	.00	.00
30	.35	s.09	.00	.00	---	.00	.00	.00	.00	.76	.00	.00
31	.21	---	s.05	.00	---	.10	---	.00	---	.00	.00	---
TOTAL	---	---	0.36	---	0.75	0.85	3.03	5.33	3.51	8.63	1.06	---

s Snowfall-affected precipitation

## ILLINOIS RIVER BASIN

414552087585600 CLARENDON HILLS CEMETARY AT DARIEN, IL--Continued

## PRECIPITATION RECORDS

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.04	.00	.21	.00	.00	---	.00
2	.00	.00	.00	.00	.00	.00	.00	.30	.06	.00	---	.00
3	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	---	.00
4	.00	.05	.00	.21	.29	.00	.04	.00	.00	.02	---	.00
5	.00	.00	.00	.28	.00	.00	.51	.08	.00	.00	---	.00
6	.00	1.00	.00	.00	.00	.00	.00	.00	.30	.00	---	.00
7	.00	.04	.00	.00	.00	.00	.00	.49	.28	.00	---	.00
8	---	.00	.00	.00	.00	.00	.00	.02	.00	.12	---	.01
9	---	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00
10	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	---	.00	.03	.00	.00	.00	.60	.02	.09	.00	.67	.00
12	---	.00	.00	.00	.00	.00	.16	.00	.00	.00	.81	.00
13	---	.00	.00	.00	.00	.08	.03	.01	.00	.00	.00	.00
14	---	.00	.00	.00	.00	.04	.00	.03	.00	.00	.00	.00
15	.00	.00	---	.00	.00	.00	.04	.00	.00	.00	.30	.00
16	.27	.00	.00	.00	s.01	.00	.01	.00	.46	.00	1.77	.91
17	.05	.30	.00	.00	s.02	.00	.00	.00	.00	.00	.78	.12
18	.00	.00	.00	.00	s.01	.00	.06	.43	.00	1.15	.00	.00
19	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.02	.05
20	.00	.00	.00	.00	.91	.00	.00	.00	.02	.00	.00	.01
21	.00	s.01	.00	s.33	2.26	.00	.00	.00	.05	.05	.00	.00
22	.24	s.00	.00	s.04	s.00	.00	.00	.00	.00	---	.00	.04
23	.04	.00	.30	.00	.00	.00	.00	.00	.00	---	.29	.07
24	.00	.05	.01	.00	.00	.12	.10	.27	.00	---	.02	.00
25	.00	.00	.00	.00	.00	.00	.00	.31	.63	---	.00	.00
26	.00	.00	.00	.00	s.31	.00	.00	.00	.00	---	.00	.00
27	.00	.00	s.03	.00	s.16	.00	.00	.00	.00	---	.00	.00
28	.00	.00	.00	.00	s.04	.63	.00	.19	.00	---	.00	.00
29	.59	.16	.00	.00	---	.00	.00	.01	.00	---	.00	.00
30	.04	.00	.00	.00	---	.06	.69	.00	1.10	---	.01	.00
31	.00	---	.00	s.25	---	.00	---	.00	---	---	.00	---
TOTAL	---	1.61	---	1.11	4.01	1.11	2.34	2.47	2.99	---	---	1.21

s Snowfall-affected precipitation

## 415457088150600 DUPAGE COUNTY AIRPORT NEAR ST CHARLES, IL

LOCATION.--Latitude 41°54'57", longitude 88°15'06", in NW1/4SW1/4SE1/4 sec.30, T.40 N., R 9 E., Du Page County, on the north side of the airport service road, approximately 0.2 mi west of Keil Street near St. Charles.

## PRECIPITATION RECORDS

PERIOD OF RECORD.--February 20, 1986 to current year.

GAGE.--A 12-in.-diameter, unheated, tipping-bucket rain gage

REMARKS.--Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to appreciable errors.

MAXIMUM FOR PERIOD OF RECORD.--Maximum recorded, 4.26 in., Aug. 14, 1987.

MAXIMUM FOR WATER YEAR 1996.--Maximum recorded, 3.57 in., July 17, but may have been greater during periods of missing record.

WATER YEAR 1997.--Maximum recorded, 1.00 in., May 18, but may have been greater during periods of missing record.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	---	---	---	.00	.00	.00	.00	.60	---	.00	.00
2	.00	---	---	---	.00	.00	.00	.00	---	---	.00	.00
3	.04	---	---	---	.00	.00	.00	.08	---	---	.00	.00
4	.00	---	---	---	.00	.04	.00	.00	---	---	.00	.00
5	.36	---	---	---	.00	.19	.00	.00	---	---	.63	.00
6	.97	---	---	---	.00	.00	.00	.00	---	---	1.13	.00
7	---	---	---	---	s.01	.00	.00	---	---	---	.04	.00
8	---	---	---	---	.03	.00	.00	.00	---	---	.00	---
9	---	---	---	---	.00	.00	.00	.77	---	---	.00	---
10	---	---	---	---	.00	.00	.00	.07	---	---	.00	---
11	---	---	---	---	.00	.00	.00	.00	---	---	.00	---
12	---	---	---	---	.00	.00	.07	.00	---	---	.00	.00
13	---	---	---	---	.00	.00	.00	.00	---	---	.00	.00
14	---	---	---	---	.00	.00	.25	.08	---	.27	.00	.00
15	---	---	---	---	.00	.00	.44	.00	---	.08	.00	.00
16	---	---	---	---	.00	.00	.00	.78	.73	.00	.00	.00
17	---	---	---	---	.00	.01	.00	.01	.66	3.57	.00	.00
18	---	---	---	---	.00	.00	.30	.00	---	1.95	.05	.00
19	---	---	---	---	.00	.00	.12	.00	---	.00	.01	.00
20	---	---	---	---	s.01	.00	.00	.57	.00	.00	.00	.01
21	---	---	---	---	.00	.00	.02	.01	.00	.10	.00	.04
22	---	---	---	---	.00	.00	.11	.00	.00	.00	.00	.00
23	---	---	---	---	.00	.01	.00	.55	---	.00	.00	.04
24	---	---	---	.00	.00	.29	.00	---	---	.02	.00	.01
25	---	---	---	.00	.02	.01	.04	---	---	.00	.00	.00
26	---	---	---	.19	.08	.00	.00	---	---	.00	.00	1.37
27	---	---	---	.00	.25	.00	.00	---	---	.07	.00	.03
28	---	---	---	.00	.00	.00	.00	1.42	---	.11	.00	.00
29	---	---	---	.00	.00	.00	.24	.00	---	.84	.00	.00
30	---	---	---	.00	---	.00	.00	.00	---	.13	.00	.00
31	---	---	---	.00	---	.02	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	0.40	0.57	1.59	---	---	---	1.86	---

s Snowfall-affected precipitation

## ILLINOIS RIVER BASIN

415457088150600 DUPAGE COUNTY AIRPORT NEAR ST CHARLES, IL--Continued

## PRECIPITATION RECORDS

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.02	.00	---	.00	.02	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	---	.00	.23	.12	.00	.00	.00
3	.00	.00	s.11	.00	.00	---	.00	.08	.00	.00	.90	.00
4	.00	.04	s.01	---	.10	---	.03	.00	.00	.01	.05	.00
5	.00	.01	s.07	.00	.00	---	.09	.00	.01	.00	.00	.00
6	.00	.40	.00	.00	.00	---	.00	.00	.55	.00	.00	.00
7	.00	.03	.00	.00	.00	---	.00	.74	.58	.00	.00	.00
8	.01	.01	.00	.00	.00	---	.00	.00	.00	.30	.00	.01
9	.00	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
10	.04	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00
11	.00	.00	.16	.00	.00	---	.38	.03	.02	.00	.84	.00
12	.00	.00	.00	.00	.00	---	.05	.00	.00	.00	.26	.00
13	.00	.00	.01	.00	.00	---	.00	.03	.00	.00	.00	.00
14	.00	.00	.01	.00	.00	---	.00	.03	.00	.00	.00	.00
15	.00	.00	.16	.00	.00	.00	.01	.00	.00	.00	.45	.00
16	.33	.00	.00	.00	.00	.00	.00	.00	.63	.00	.34	.83
17	.29	.19	.00	.00	s.06	.00	.00	.00	.00	.00	.82	.27
18	.00	.00	.00	.00	.00	.00	.03	1.00	.00	.48	.00	.00
19	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.25
20	.00	.00	.00	s.06	---	.00	.00	.00	.00	.00	.00	.00
21	.00	s.18	.00	s.07	---	.00	.03	.00	.04	.02	.00	.00
22	.28	s.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.05
23	.02	.00	.35	.00	---	.00	.00	.00	.00	.00	.03	.07
24	.00	.00	.00	.00	---	.13	.00	.26	.00	.00	.00	.00
25	.00	.00	.00	.00	---	.00	.00	.20	.98	.00	.00	.00
26	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	s.05	.00	---	.00	.01	.00	.00	.00	.00	.00
28	.00	s.04	.00	.00	---	.18	.00	.02	.00	.00	.00	.00
29	.65	.25	.00	.00	---	.00	.00	.02	.00	.00	.00	.00
30	.00	.02	.00	.00	---	.05	.69	.00	.87	.00	.01	.00
31	.00	---	.00	s.11	---	.00	---	.00	---	.00	.00	---
TOTAL	1.62	1.17	0.93	---	---	---	1.42	2.66	3.80	0.81	3.70	1.48

s Snowfall-affected precipitation

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## CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
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### *Length*

inch (in.)	$2.54 \times 10^1$	millimeter
	$2.54 \times 10^{-2}$	meter
foot (ft)	$3.048 \times 10^{-1}$	meter
mile (mi)	$1.609 \times 10^0$	kilometer

### *Area*

acre	$4.047 \times 10^3$	square meter
	$4.047 \times 10^{-1}$	square hectometer
	$4.047 \times 10^{-3}$	square kilometer
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer

### *Volume*

gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^0$	cubic decimeter
	$3.785 \times 10^{-3}$	cubic meter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeter
	$2.832 \times 10^{-2}$	cubic meter
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	$2.447 \times 10^3$	cubic meter
	$2.447 \times 10^{-3}$	cubic hectometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
	$1.233 \times 10^{-3}$	cubic hectometer
	$1.233 \times 10^{-6}$	cubic kilometer

### *Flow*

cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^1$	cubic decimeter per second
	$2.832 \times 10^{-2}$	cubic meter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-2}$	cubic decimeter per second
	$6.309 \times 10^{-5}$	cubic meter per second
million gallons per day (Mgal/d)	$4.381 \times 10^1$	cubic decimeter per second
	$4.381 \times 10^{-2}$	cubic meter per second

### *Mass*

ton (short)	$9.072 \times 10^{-1}$	megagram or metric ton
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*Sea level:* In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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